AGENDA
CITY OF GLENWOOD SPRINGS
REGULAR CITY COUNCIL MEETING
APRIL 20, 2023
101 W. 8TH STREET
6:15 p.m.

The agenda is subject to *change, including the addition of items 24 hours in advance or the deletion of items at any time. The order and times of agenda items listed are approximate and intended as a guideline for the City Council.*

ATTENTION: To ensure your written comments are included in the City Council packet, public comments must be received by 4 p.m. on the day before City Council meetings. Comments may be submitted to ryan.muse@cogs.us. Written comments may be submitted after this deadline and will be shared via email to City Council but are not guaranteed to make it into the meeting packet. Submit comments at any time directly to City Council via email at citycouncil@cogs.us.

TIME	ITEM	**WORK SESSION**	ACTION
3:30	1.	Senate Bill 2023-213	Information/Discussion
4:00	2.	North Landing Schematic Design Joint DDA Worksession	Information/Discussion
5:00	3.	Fire Mitigation Strategies	Information/Discussion

ZOOM INSTRUCTIONS

You are invited to a Zoom webinar.
When: Apr 20, 2023 06:00 PM Mountain Time (US and Canada) Topic: 2023/4/20 Regular City Council Meeting
Please click the link below to join the webinar: https://us02web.zoom.us/j/89934563123?pwd=c2wvRkZiYktTME5MM1VmZGNnTy9PZz09
Passcode: 336531 Or One tap mobile: US: +17193594580,,89934563123# or +13462487799,,89934563123#
Or Telephone: Dial(for higher quality, dial a number based on your current location): US: +1 719 359 4580 or +1 346 248 7799 or +1 669 444 9171 or +1 669 900 6833 or +1 253 205 0468 or +1 253 215 8782 or +1 309 205 3325 or +1 312 626 6799 or +1 360 209 5623 or +1 386 347 5053 or +1 507 473 4847 or +1 564 217 2000 or +1 646 931 3860 or +1 689 278 1000 or +1 929 205 6099 or +1 301 715 8592 or +1 305 224 1968 Webinar ID: 899 3456 3123 International numbers available: https://us02web.zoom.us/u/kkiS1cPi

REGULAR SESSION

6:15	4.	Roll Call	
	5.	Agenda Changes & Conflicts	
6:20	6.	Council Announcements	
6:30	7.	Citizens Appearing Before Council (for items not on the Agenda-comments limited to 3 minutes)	
	8.	Consent Agenda	Discussion and/or Action

A. Planning Item #05-23 Right of Way (ROW) Encroachment License 51579 Highway 6 & 24
B. Encroachment and Maintenance Agreement for 4106 Sky Ranch Drive
C. 2023 Intergovernmental Agreement for Mosquito Control
D. Arts and Culture Board Appointment
E. Parks and Recreation Commission Appointment
F. River Commission Appointment
G. Resolution 2023-14; Municipal Energy Agency of Nebraska (MEAN) Subscription Confirmation
H. Resolution 2023-17 Rescinding Resolution 2020-12 Authorizing Emergency Expenditures
I. Resolution 2023-18; Intergovernmental Agreement with Garfield County for Election Services

J. Award Request for Proposal 2023-08P Community Center heating, air conditioning and ventilation automation and variable air valve retrofit

K. Award Request for Proposal 2023-13P Water Treatment Plant Roof, Door, and Window Replacement

L. Award Request for Proposal (RFP) 2023-15P Citywide Crack Seal Project

M. Award Request for Quotations 2023-17Q Storage Array

N. Award Request for Proposal (RFP) 2023-19P South Canyon Landfill Seeding of Phase 5 Area.

O. Award Request for Quotations (RFQ) 2023-21Q Three Phase Electronically Controlled Reclosers

P. Letter of Support for the Roaring Fork Transportation Authority Rosebud Trailhead TAP Grant

Q. March 16, 2023 Council Minutes

6:40	9.	Proclamation for Wildfire Preparedness Month	Presentation
6:45	10.	Outgoing Council	Presentation
7:15	11.	Swearing in of New Council	Discussion and/or Action
7:30	12.	Election of Mayor and Mayor Pro-Tem	Discussion and/or Action
7:45	13.	Proclamation for Arbor Day 2023	Presentation

ACTIONS AND/OR PRESENTATIONS

7:50	14.	Recommendation from Glenwood Community Housing Coalition and Housing Commission regarding creation of a Workforce Housing Fund Advisory Board.	Discussion and/or Action
8:20	15.	Update on Glenwood Meadows Traffic Study	Discussion and/or Action
8:35	16.	Resolution 2023-12; Setting the June 13, 2023 Special Election	Discussion and/or Action
8:50	17.	Council Comments	
9:00	18.	Report from City Administration	

A. City Manager

B. City Attorney

C. Correspondence Incoming/Outgoing

9:10 19. Adjournment

City Council
STAFF REPORT
City of Glenwood Springs
April 20, 2023

Agenda Item: North Landing Schematic Design Joint DDA Worksession

Action Requested: Staff is requesting approval of general direction on the schematic design and public restroom of North Landing.

Department: Economic and Community Development

Presented By: Danielle Campbell, Downtown Development Authority

Strategic Goals:
Provide Efficient and Responsive City Government
Preserve and Improve Infrastructure
Generate Sustainable Economic Development
Ensure Public Safety
Protect and Preserve our Quality of Life

Background Info: North Landing has been a discussion for years following the 2016 6th Street Master Plan. However, the project has been put on hold due to the pandemic and Grizzly Creek Fire. The Parks and Recreation Commission has re-identified North Landing as a priority in 2022, especially with the future redevelopment of 6th Street. Understanding this cannot happen in a vacuum, the Downtown Development Authority (DDA), Parks and Recreation Commission, the Arts and Culture Board, and North Glenwood Community came to a consensus on a unified vision of North Landing.

The process included at least two representatives from the Downtown Development Authority Board, Parks and Recreation Commission, Art and Culture Board, and North Glenwood Community. Representatives participated in two public meetings facilitated by City Staff to identify the elements and aesthetics of North Landing resulting in the consensus of a conceptual look book. Look book is attached.

In July 2022, Council approved construction drawings with DHM as the consultant. Council requested staff to provide additional opportunities for engagement through the construction drawing and design process. Staff organized a public open house on January 25, 2023, and March 23, 2023. The intent of the January open house was to ask the public for feedback regarding programming and the location of programming on the site. Building upon the 2022 North Landing Look Book. An engagement summary is attached.

Based upon public feedback, design logistics, and direction from DDA and Council, DHM developed two programming concepts for the site that was presented to the public in March. A summary of Public comment was presented to the DDA in March. DDA provided directions to DHM and staff to develop the final schematic concept attached.

Brief Recap of Engagement Touchpoints:

1. Look Book
    - Public Meeting | March 23, 2022
    - Public Meeting | May 9, 2022
    - Council Worksession | June 22, 2022
    - Council Meeting | July 12, 2022
2. Design/ Construction Drawings
    - Public Meeting | January 25, 2023
    - Council and DDA Worksession | February 16, 2023
    - Public Meeting | March 13, 2023
    - DDA Meeting | March 21, 2023

Next Steps:
Task 4 | Final Design 90% | May to June 2023
Task 5 | 100% CD/BID Set | June to July 2023

Issues: North Landing is only 14,400 square feet. The site has multiple constraints including existing underground utilities, significant slope, and small square footage. Due to these constraints, there are few opportunities to develop structures requiring permanent foundations. This caused concerns in the February Council worksession due to the proposed location of a public restroom. Staff has researched a new company, Urban Blu, that designs public restrooms that do not require a permanent foundation. This new information provides North Landing with the flexibility of a public restroom location that would be preferable to the Police Department and the public. In addition, these restrooms are designed to be self-cleaning, automatically open after a set time for safety, with easy maintenance and part replacement. See additional Urban Blu material and information attached in the packet.

Taking into account the feedback from Council, DDA, and the public, DHM recommends the attached schematic design for North Landing. This design incorporates an Urban Blu restroom.

Fiscal Impact: In 2022, Council and Downtown Development Authority (DDA) approved construction drawings with DHM as a consultant, totaling $180,384. Funding was split evenly between the City and DDA.

Legal Review: N/A

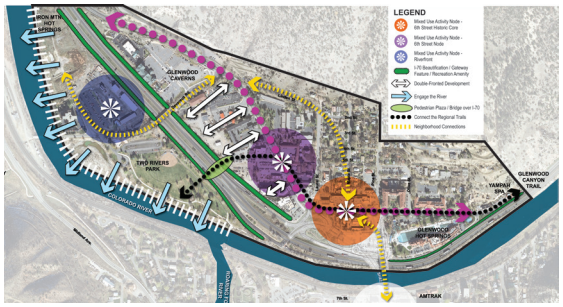
Staff Recommendation: Staff is looking for direction on schematic design and public restroom from the Downtown Development Authority and Council to move into refined construction drawings North Landing.











6th Street Corridor Master Plan

GLENWOOD SPRINGS, CO
FINAL PLAN - JUNE 1, 2017

CITY OF GLENWOOD SPRINGS COLORADO
SPA in the MOUNTAINS
1885

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Acknowledgements

CITY COUNCIL

Michael Gamba, Mayor

Stephen Bershenyi

Steve Davis

Jonathan Godes

Shelley Kaup,

Todd Leahy

Leo McKinney

Matthew Steckler

Kathryn Trauger, Mayor Pro-tem

Rick Voorhees

GLENWOOD SPRINGS STAFF

Andrew McGregor, Community Development Director

Gretchen Ricehill, Senior Planner

Dave Betley, Assistant Director, Public Works

Tom Barnes, Parks & Recreation Director

Al Laurette, Parks & Recreation Superintendent

SPECIAL THANKS

Leslie Bethel, Executive Director, Downtown Development Authority

Numerous Stakeholders and Residents that participated in Open Houses and Meetings

North Glenwood Residents and Business Owners

Drew Gorgey, Acting City Manager

Debra Figueroa, City Manager

STEERING COMMITTEE

Lee Barger (Transportation Commission)

Steve Beckley (Business/Property Owner)

Greg Boecker (Resident)

Steven Carver (Business/Property Owner)

Marco Dehm (Planning & Zoning Commission)

Marice Doll (Historic Preservation Commission)

Sheldon Emery (Parks & Recreation Commission)

Dean Gordon (Downtown Development Authority)

David Hauter, Chair (Resident)

Jeremy Heiman (River Commission)

Todd Leahy (City Council)

Deborah Lundin (Business/Property Owner)

Kjell Mitchell (Glenwood Hot Springs)

Kathy Thissen (Historic Preservation Commission)

Roland Wagner (CDOT Region 3)

Jan Ward (Transportation Commission)

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1. Introduction

6TH STREET CORRIDOR PLAN

PLAN PURPOSE

The 6th Street Corridor Plan presents both a vision and action plan for the North Glenwood neighborhood. It serves as a blueprint for both public and private investment:

- **The city will use the plan as a way to prioritize public investment** in infrastructure such as streets, parking and utility upgrades, as well as placemaking elements like streetscapes, plazas and park improvements.
- **The city will also use the plan as a tool to evaluate future development proposals** of properties within the project area.
- **Landowners contemplating new development or redevelopment should consult this plan** to ensure that development concepts are in-sync with the vision and goals of this plan.

IN THIS CHAPTER

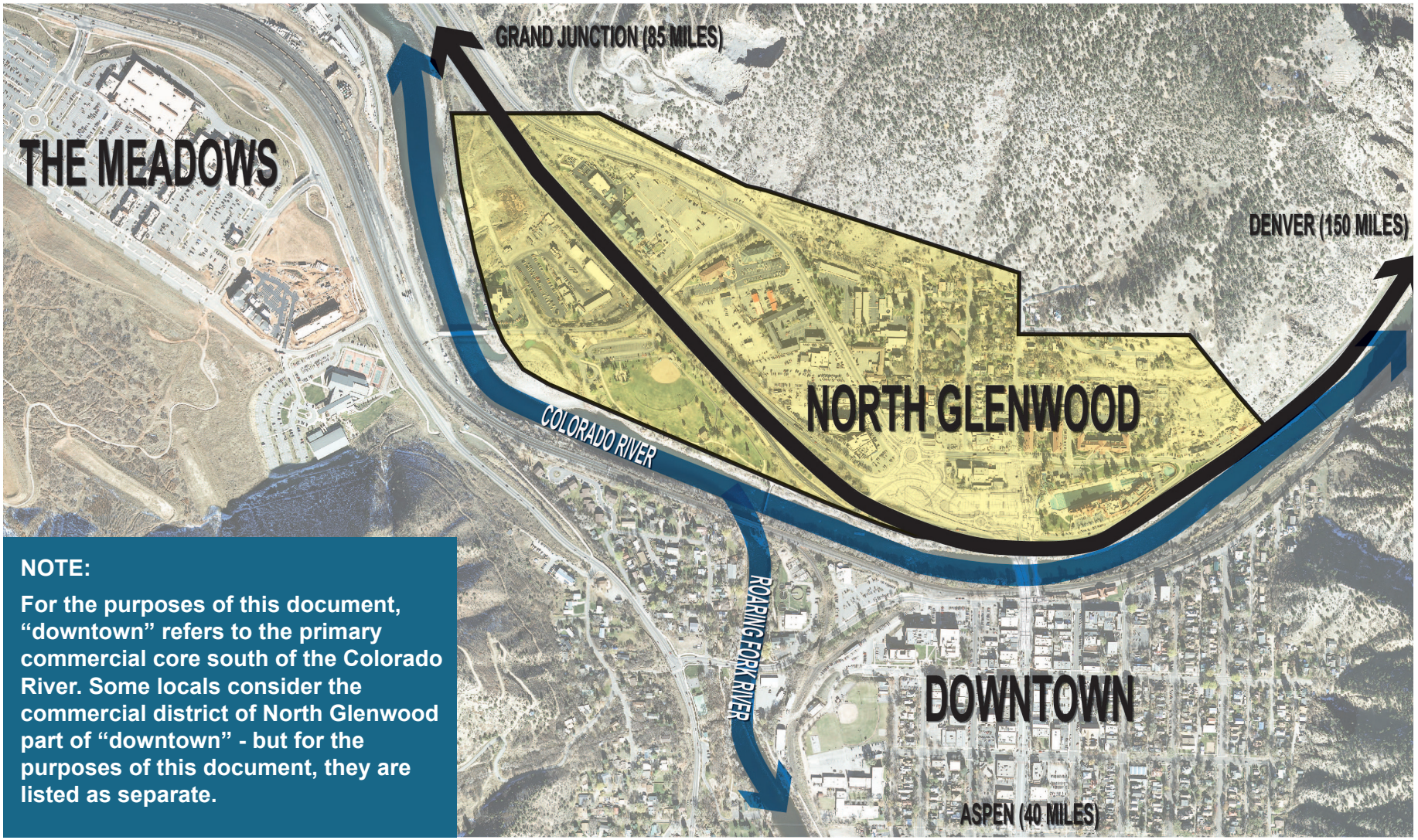
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NOTE:

For the purposes of this document, "downtown" refers to the primary commercial core south of the Colorado River. Some locals consider the commercial district of North Glenwood part of "downtown" - but for the purposes of this document, they are listed as separate.

Figure 1 - Context Map

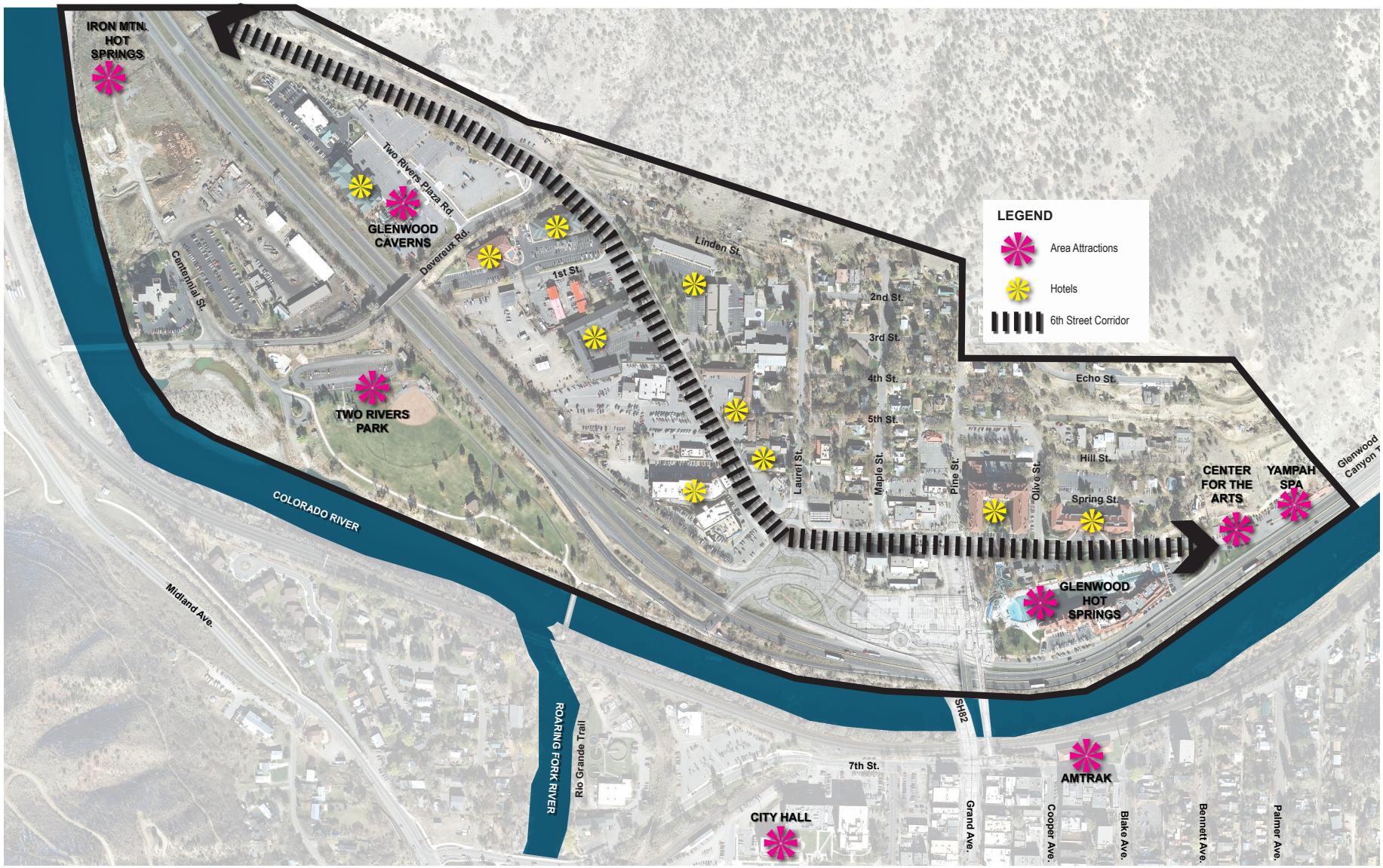


Figure 2 - 6th Street Corridor Study Area & Attractions

OUTREACH AND ENGAGEMENT

The 6th Street Corridor Plan involved extensive public and stakeholder outreach including numerous meetings with a City Council-appointed Project Steering Committee (PSC).

STAKEHOLDERS

The project kicked off with one-on-one interviews with property and business owners in the study area to learn about their long-term visions for their properties and businesses, as well as their desires for the entire corridor and surroundings.

PUBLIC ENGAGEMENT

Three public open houses were held over the course of the planning process. These sessions provided interactive exercises designed to engage and solicit feedback from the public in fun and engaging ways.

PROJECT STEERING COMMITTEE

A 16-member PSC with diverse representation from key City boards and commissions, area business owners, and neighborhood residents was appointed by City Council to serve as a sounding board for the design team. They were engaged during critical decision-making processes to help guide the plan concepts and recommendations, and to represent the various views and interests of property owners along the corridor.

CITY STAFF

The consultants worked closely with city staff, including multiple work sessions and bi-weekly team conference calls. Staff was involved in the creation of plan concepts and provided critical feedback throughout the process.

CITY COUNCIL

Finally, City Council work sessions were also held to update city leaders on the process and critical elements of the plan.



Stakeholders were engaged in one-on-one meetings with the design team.



The Project Steering Committee was engaged during critical decision-making processes.











Open Houses provided interactive excersises designed to engage and solicit feedback from the public.

EXISTING LAND USES

TOURISM-RELATED BUSINESSES

The study area includes major Glenwood Springs tourist destinations and tourist-related businesses, such as:

- Glenwood Hot Springs
- Yampah Spa & Vapor Caves
- Glenwood Caverns Adventure Park Tram
- Iron Mountain Hot Springs
- Rafting & outdoor adventure companies

LODGING

Concentrated along the 6th Street corridor, primarily west of Laurel Street, are many of Glenwood Springs' hotels and motels:

- Glenwood Hot Springs Lodge
- Hotel Colorado
- Ramada Inn
- Silver Spruce Motel
- Holiday Inn Express
- Hampton Inn Glenwood
- Hotel Glenwood Springs
- Best Western Antlers
- Glenwood Motor Inn
- Starlight Lodge



Glenwood Hot Springs is a major tourist destination.



Iron Mountain Hot Springs is located along the Colorado River on the west end of the corridor.



The Yampah Spa and Hot Springs are located at the east end of 6th Street.



The Glenwood Caverns Adventure Park is located on the mountainside above North Glenwood. It is accessed by the tramway on 6th Street.

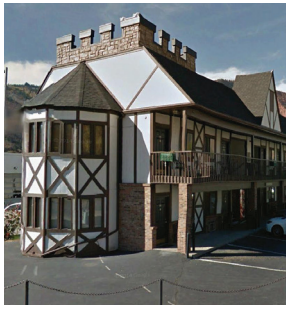


The Holiday Inn Express is located on First Street, near Highway 6 and Devereux Road.



The Ramada is located near the intersection of 6th and Laurel Streets.





Older hotels such as the Starlight Lodge and Silver Spruce Hotel are also local hotels on the corridor.

COMMERCIAL

Other commercial land uses within the study area include offices, retail, restaurants, spa and beauty salons, an automobile dealership, and automotive service and repair facilities. Like the hotels & motels, most of these businesses front onto 6th Street.

RESIDENTIAL

A compact residential neighborhood sits on the south-facing hill above 6th Street, and east of Laurel Street. The neighborhood consists of mostly single-family homes, some dating from the late 1800s and early 1990s. This section of north Glenwood was part of the originial 1885 town site, which also included the downtown area south of the Colorado River to 12th Street. Just like the downtown district, the streets in north Glenwood are aligned on a traditional north-south, east-west grid, but, unlike downtown, they are about 1/2 the width of those south of the Colorado River- which lends to the compact feel of the neighborhood.



Some mixed use buildings are present along 6th St.

VACANT LAND

One of the largest commercial parcels in the study area is the 2.8 acre former Bighorn Toyota lot which sits on the south side of West 6th Street, and which currently serves as temporary parking for the Glenwood Hot Springs and for river rafting customer pick-up and drop-off.

SERVICE PROVIDERS

CDOT and CenturyLink also own property in the area. CDOT's Region 3 offices are located on a 6-acre parcel between I-70 and the Colorado River along Devereux Road and the CenturyLink property is located at the terminus of 1st Street, adjacent to I-70. It seves as a regional hub for CenturyLink maintenance operations and the small buildings on the property are used mainly for storage.

PUBLIC OPEN SPACE

Two Rivers Park, Glenwood's largest regional park, is located within the study area at the confluence of the Colorado and Roaring Fork Rivers and serves as a major destination for events and summer river sport activities. The 22-acre park includes a baseball field, amphitheatre, sheltered picnic areas, restrooms, a playground, and a skate park.



North Glenwood neighborhood has historic character.



The former Bighorn Toyota building is vacant. The lot is currently used for Glenwood Hot Springs parking and for river rafting pick-up/drop-off.



Subway is one of two drive-through fast food services in the study area.

HISTORIC RESOURCES

North Glenwood has a rich historic fabric. The following is a summary of the historic status and/or eligibility status for buildings in the study area:

BUILDINGS ON THE STATE OR NATIONAL REGISTERS OF HISTORIC PLACES

**SRHP = State Register of Historic Places*

**NRHP = National Register of Historic Places*

115 5th Street	*Shelton-Holloway House*	*SRHP*
601 6th Street	*Glenwood Springs former Hydroelectric Plant*	*NRHP*
526 Pine Ave.	*Hotel Colorado*	*NRHP*

BUILDINGS ELIGIBLE FOR STATE OR NATIONAL REGISTERS OF HISTORIC PLACES

515 Maple Street	*Modern style residence*	*Survey 2003*

BUILDINGS ELIGIBLE FOR CONTRIBUTING TO A LOCAL HISTORIC DISTRICT

401 River Street	*Hot Springs Bathhouse, Natatorium, Yampa Spring*	*Survey 1998*
201 5th Street	*Queen Anne Cottage*	*Survey 2002*



Hotel Colorado



Hot Springs Bathhouse



Shelton-Holloway House



Former Hydroelectric Plant (Center for the Arts)



201 5th Street - Queen Anne Cottage

NOTE:

Currently, there are no registered historic districts in Glenwood Springs, although the area east of Pine Street and across the Colorado River to 7th Street has been determined eligible for inclusion on the National Register of Historic Places. It includes the Hotel Colorado, the Hot Springs, the city-owned Hydroelectric Plant and the train station.

CURRENT ZONING

The current zoning for the study area includes the following zone districts (refer to Figure 3 on page 8):

- **C/1 - Limited Commercial**
- **C/3 - General Commercial**
- **C/4 - Resort District**
- **R/1/6 - Single Family Residential**
- **R/1/20 - Single Family Residential**
- **R/2 - Limited Multifamily Residential**
- **R/3 - Multifamily Residential**
- **R/4 - Residential Transitional**
- **I/1 - General Industrial**

The area outlined with a dashed red line (C/1, C/3 and C/4) indicates the area where this plan envisions most future redevelopment occurring. Because some of the current zone district standards do not align with the redevelopment vision, this plan recommends revising existing zoning standards. The residential zoning is not envisioned as changing.

As part of this project, design standards and guidelines are being developed for the area inside the red dashed line that shall be used in cooperation with the new development code. They are provided in Appendix A.

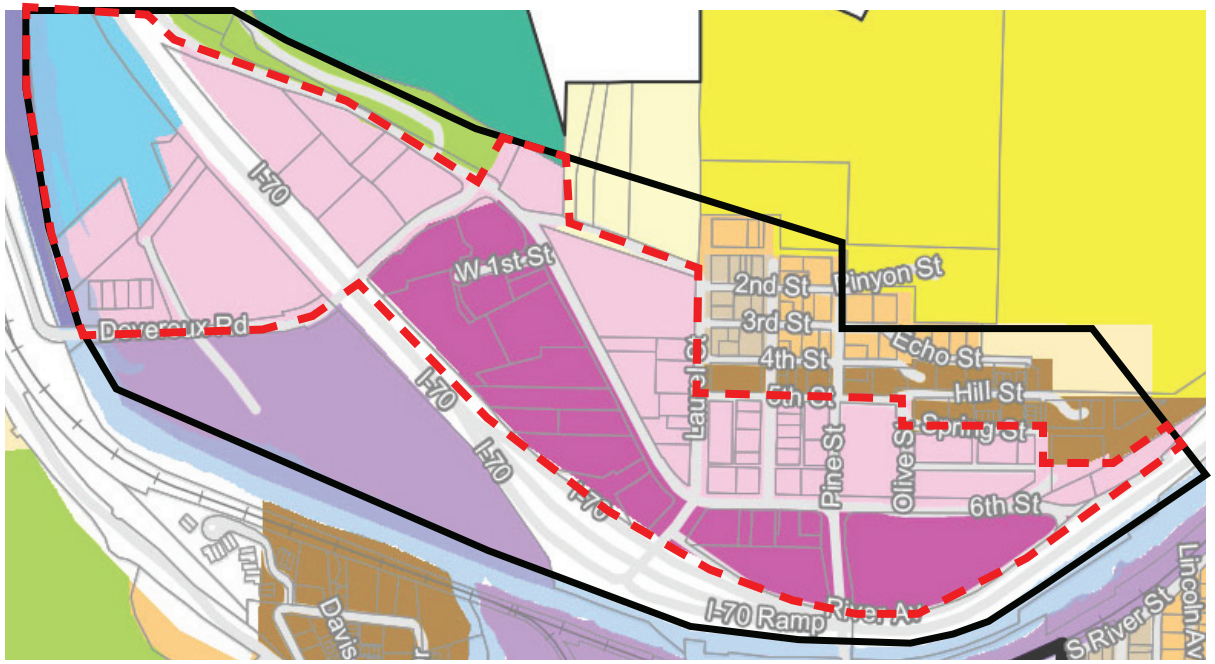


Figure 3 - Current Zoning

Zone Districts

- C/1 Limited Commercial District
- C/2 Core Commercial
- C/3 General Commercial
- C/4 Resort District
- HP Hillside Preservation
- I/1 General Industrial
- I/2 River Industrial
- I/L Light Industrial and Office
- PUD Planned Unit Development
- R/1/20 Single Family Residential
- R/1/40 Single Family Residential
- R/1/6 Single Family Residential
- R/1/7.5 Single Family Residential
- R/2 Limited Multifamily Residential
- R/3 Multifamily Residential
- R/4 Residential Transitional

NOTE:

In 2016, the City began a process to update the entire development code. This plan was completed prior to the adoption of the development code, however the plan has influence on the proposed zoning actions for the study area. For more information on how the new zoning code relates to North Glenwood and the 6th Street corridor, refer to Appendix (forthcoming).

I-70 INTERCHANGE PROJECT

Glenwood Springs' Exit 116 is undergoing a major reconfiguration, including a new Grand Avenue auto bridge, separate pedestrian bridge, and roundabout that intersects 6th Street in the project area. This major construction project is estimated to be complete in May 2018.

This project opens up both opportunities and challenges for the 6th Street corridor:

- **6th Street from Laurel to Pine Streets** will be transferred from CDOT to City ownership following completion of the Grand Avenue Bridge, which means that the City will be responsible for all future right-of-way maintenance. This provides an opportunity to transform these two blocks from a 4-lane thoroughfare into a quiet, pedestrian-oriented, "main street."
- **Traffic will decrease substantially.** CDOT estimates an 80 percent reduction in traffic between Laurel and Pine streets, as through-traffic will now cross the Grand Avenue Bridge directly from the Laurel roundabout.
- **A new public park or plaza** is proposed to replace the current Grand Avenue Bridge landing at 6th and Pine streets. This new amenity not only will help spur investment along 6th Street, it will provide the area with a prominent gathering space.
- **The new pedestrian bridge** will be separated from the Grand Avenue auto bridge, and includes viewing areas that overlook the Pool and Colorado River. This bridge will provide a pleasant pedestrian connection from downtown to 6th Street.
- **The new roundabout** occurs at the intersection of Laurel and 6th Streets. This proposes a challenge in terms of navigating the new arrangement. Signage will be very important in terms of directing visitors in automobiles to their destinations efficiently. As a pedestrian, the only way to navigate the roundabout is on the north side, so people on the south side of 6th Street trying to get to and from the east and west sides of Laurel, will need to do so by crossing to the north side of 6th and then crossing Laurel. Roundabouts are generally difficult for bicyclists to navigate, and this particular configuration is quite complicated given the amount of traffic that will use it. Therefore, considering bike routes that can bypass the roundabout will be important.
- **Construction of the new bridge** has been disruptive to businesses, as will any future improvements to 6th Street, so being considerate about phasing and timing of construction along the corridor is important.

NOTE:

For the purposes of this plan, most concepts are portrayed assuming that the new interchange is in place. This is to avoid having to update the plan once construction is complete.



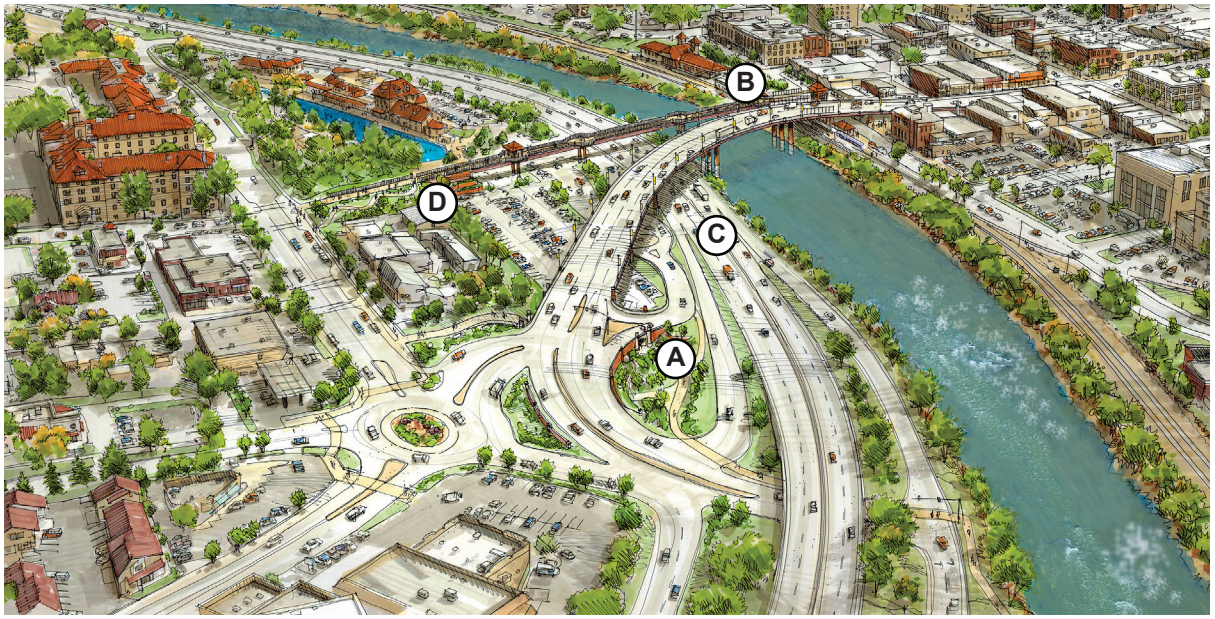
Traffic to the Pool from downtown will cross the bridge and turn right on 6th Street. To get back to downtown from the Pool, people will have to either take 6th Street back to the roundabout and over the bridge, or take River Street up the ramp and over the bridge.



To get on I-70 from the Pool, the only route is back through 6th Street.



From I-70 to Hotel Row and West 6th Street, people will have to go around the roundabout.



View from West 6th Street showing the new roundabout, Exit 116 interchange and the new bridges to downtown.



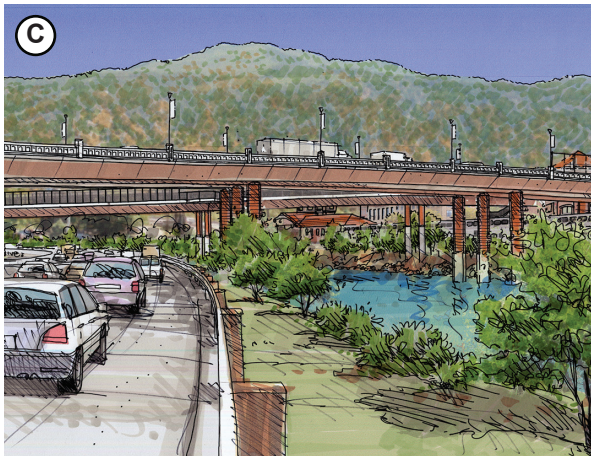
View of the new multi-use path and tunnel.



This view shows the circulation to the pedestrian bridge and restrooms along 7th Street.



This aerial view above the new park looking south toward downtown. The pedestrian bridge overlooks can be seen here. The new pool parking lot is shown in the foreground.



View from east-bound I-70 showing the new Grand Avenue Bridge and pedestrian bridge behind.

2. Vision & Primary Goals

6TH STREET CORRIDOR PLAN

6TH STREET VISION

6th Street is a unique blending of local tradition with contemporary appeal. Its historic architecture, iconic tourist destinations, affordable lodging and housing options, eclectic shopping, excellent dining, breweries, and dedication to the arts is what makes 6th Street such a desirable place to live, work and play. The unique appeal is enhanced with its public open spaces and welcoming streetscape. It provides a unique experience, different from downtown, that people of all ages enjoy.

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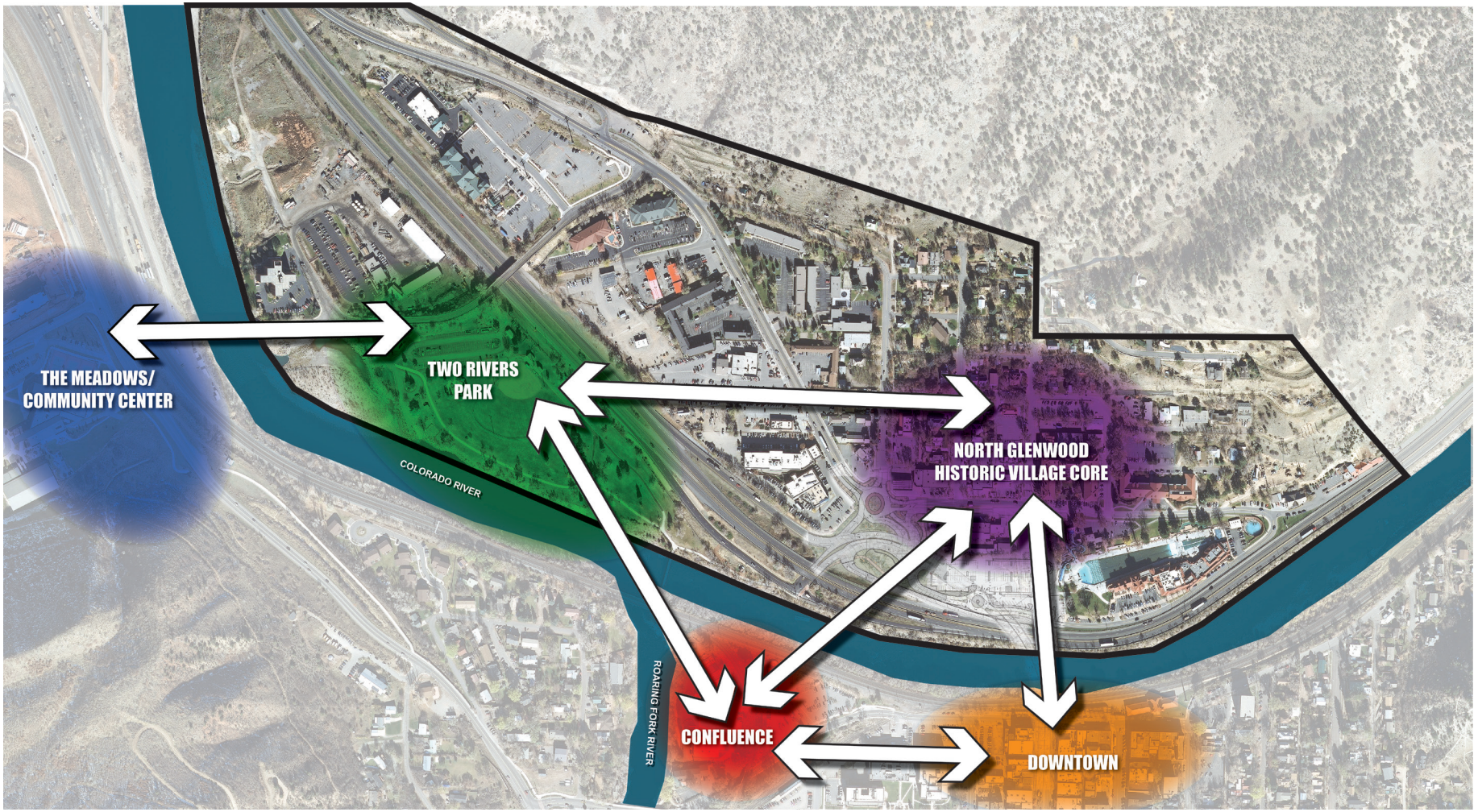


Figure 4 - Major Activity Centers

CONNECTING MAJOR ACTIVITY CENTERS

Although North Glenwood is connected to downtown by vehicular and pedestrian bridges, the neighborhood feels isolated. Interstate 70 and the Colorado River are significant barriers however, they also provide opportunities:

- I-70 provides **visibility** to businesses and attractions along the 6th Street corridor; and
- The Colorado River is an **amenity** that brings visitors to Glenwood Springs for rafting, kayaking and fishing. These visitors in-turn frequent those businesses and lodging along the 6th Street corridor.

A primary objective of this plan is to better connect the major activity centers in this area (Figure 4):

- **North Glenwood Village Core** – this section of 6th Street, primarily between Laurel and Pine, is envisioned as becoming an extension of downtown, including a mixture of old and new buildings with uses that complement downtown. This area also has significant potential for becoming a pedestrian-oriented "main street" due to a significant decrease in through-traffic from Highway 82 that will be rerouted with the new interchange by 2018. A new plaza at the north landing of the pedestrian bridge will be a focal point for this neighborhood. Once constructed, it will help spur other public and private investment along the street.
- **Two Rivers Park** – the largest park in Glenwood Springs, Two Rivers Park, is a popular destination for outdoor recreation, live music performances, and river sports. Access to the park for cars as well as pedestrians and bicyclists, is somewhat limited and difficult to navigate. This plan considers opportunities for improving connectivity, parking, and programming for the park.
- **Glenwood Meadows** – this popular shopping district has a regional draw that could bring more business into the 6th Street Corridor, if connections were improved. This plan looks at opportunities for a bridge connection (for autos or bikes) to link the two areas.
- **The Confluence** – the confluence of the Colorado and Roaring Fork rivers, and the demolition of the city's former wastewater treatment facility, offers tremendous opportunity for redevelopment in this prime location. Many land uses have been considered for this area. Whatever uses occupy the Confluence, linking the area to the 6th Street corridor is a primary goal.
- **Downtown** – providing a seamless connection between downtown and the 6th Street corridor is another important goal. It is less than a quarter-mile (or about a 3-5-minute walk) from 6th Street, across the bridge to the 7th Street shops and restaurants. This plan encourages land uses and streetscape treatments along the 6th Street corridor that coordinate with and complement the downtown.



There is significant opportunity for creating a pedestrian-oriented "main street" along E. 6th due to the decrease in traffic when the new bridge is in place.



Providing a seamless connection between the north and south sides of the river is a primary goal.

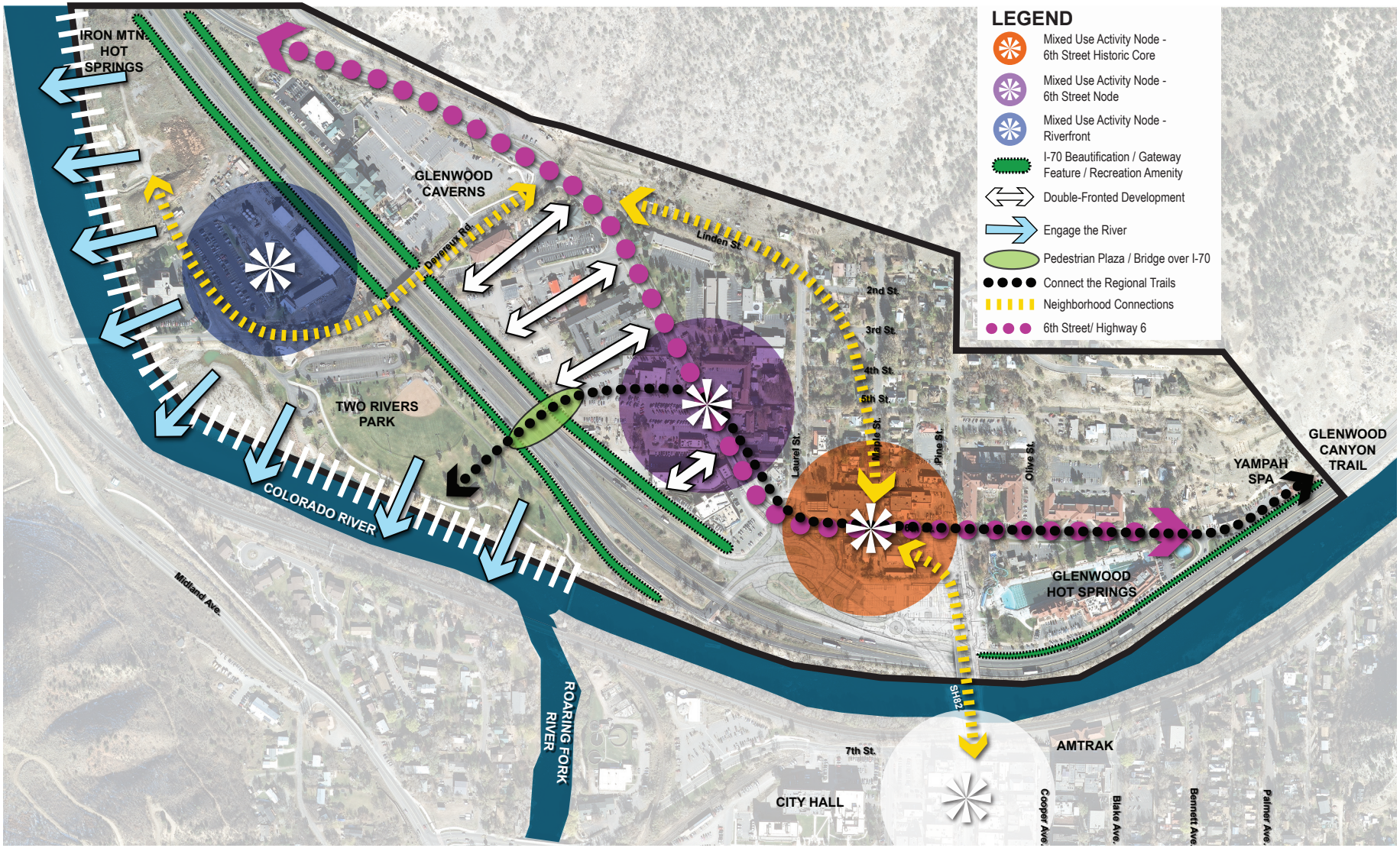


Figure 5 - Primary Goals

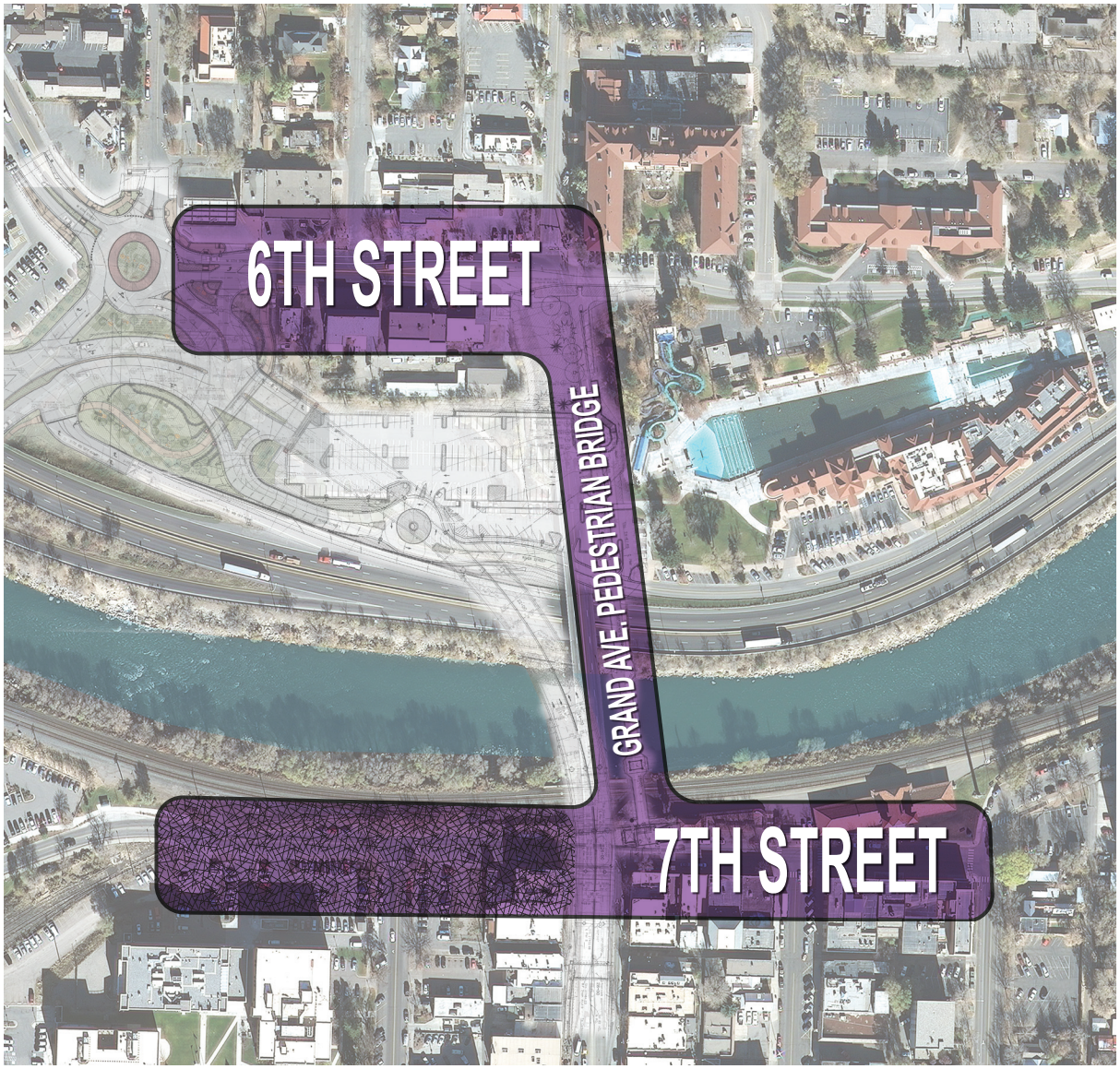
PRIMARY GOALS

Figure 5 represents the “big ideas” and primary goals that this plan addresses. The primary goals are described in more detail on the following pages.

SERVE AS AN EXTENSION OF DOWNTOWN

6th Street should operate as an extension of downtown where residents and visitors pass freely between the two areas, primarily by foot or on a bicycle. Illustrated at right is a concept where the 7th Street restaurants and existing and future uses along 6th Street are seamlessly connected by the Grand Avenue pedestrian bridge. This pleasant walk involves little interaction with cars due to the pedestrian bridge and quaint character of both 7th and 6th Streets, and therefore walking or bicycling should be an obvious choice. Both 7th and 6th Streets should support this vision by providing:

- **Continuous, wide sidewalks** that are universally accessible and provide ample room for small groups of people to walk side-by-side.
- **An inviting landscape treatment** to make the walk more pleasant.
- **Convenient bicycle parking** in highly visible locations.
- **Benches and cafe seating areas** to provide activation and eyes on the street.
- **Signage** to direct people effortlessly to their destinations.



6th Street should serve as an extension of downtown with a seamless connection via the new Grand Avenue Pedestrian Bridge. The hatched area west of the bridge will be incorporated into planning efforts for the Confluence area. Ensure that future land uses and streetscape treatments in this area provide a seamless connection to 6th Street.

ENHANCE THE IDENTITY OF 6TH STREET

Although being viewed as an extension of downtown is desirable, 6th Street should have a **unique identity**. It should offer a different experience, in terms of services and character - complementing, rather than competing with, downtown. Some principles to accommodate this vision include:

- 6th Street should be a **"complete street"** that comfortably accommodates cars, transit, bicyclists and pedestrians.
- It should be **family-friendly** and feel safe and inviting to visitors - offering an experience that is worth coming back for.
- It should present Glenwood Springs as an **outdoor recreation destination**, providing clear connections to the surrounding trails.
- Landscaping should appear more natural and buildings should **"open up" to the street** and sidewalk, with opportunities to bring the outdoors inside.
- Surrounding **views should be protected and celebrated** by incorporating rooftop decks and overlook areas.

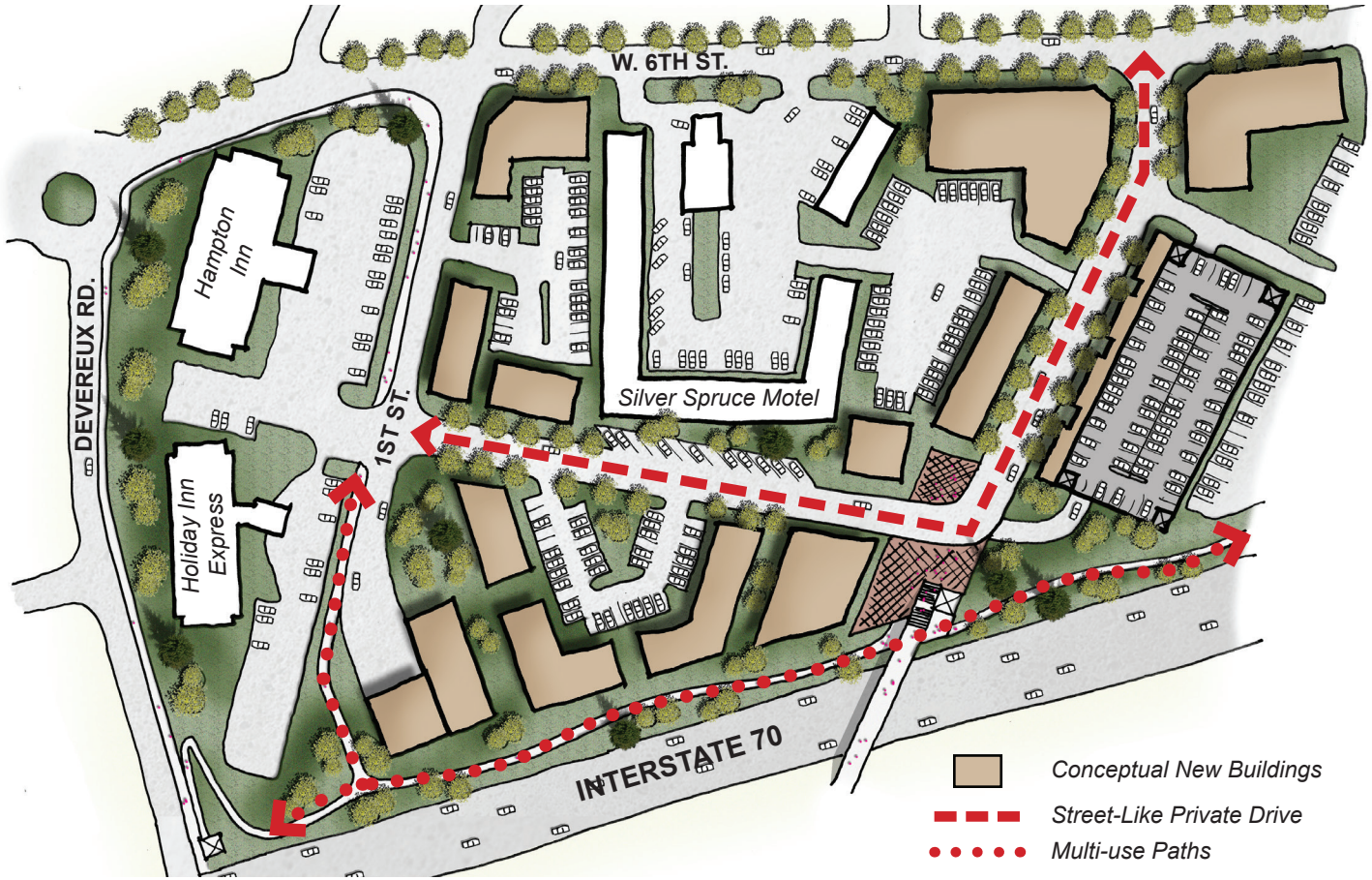


Improvements to 6th Street should enhance the identity of the area. This rendering envisions an improved streetscape and new building(s)on the south side of 6th, in the vicinity of Laurel Street.

IMPROVE CONNECTIVITY

Improved connectivity is needed both within the study area, and to link the study area to surrounding destinations. The following are principles for achieving improved connectivity:

- **Upgrade or add sidewalks** where they do not currently exist to provide a continuous pedestrian network.
- **Implement crosswalks** to facilitate movement across 6th Street, especially in West 6th Street.
- **Break up the mega-blocks.** West 6th Street from Laurel to Devereux consists of two "mega-blocks" on either side of the street with few opportunities to move through them. This can be accomplished by inviting foot and bike traffic with multi-use paths and providing street-like private drives that operate like a street and serve as access to multiple properties rather than just one. The former could be a simple agreement with the property owner and the City to provide access through their property. The latter might demand a higher degree of cooperation from the property owner, but would greatly benefit the entire area.
- **Install wayfinding signage** that clearly directs people to their destinations.
- **Implement bike facilities** and ample bike parking to encourage this mode of transportation.



A street-like private drive that includes pedestrian facilities could greatly improve the connectivity along West 6th Street and break up the "mega-blocks".

CREATE NODES OF ACTIVITY WITH A MIXTURE OF NEW USES

The long-term vision for 6th Street is to provide a mixture of uses within a short distance of one another to promote walkability, enhance the identity of the area, and increase economic viability.

It is not feasible to assume the entire mile-long corridor will redevelop with retail on the ground floor and residential or office uses above, nor would that be healthy for the local businesses. Rather, the ideal scenario is to look at "nodes" of opportunity that could support an influx of new uses, while preserving existing ones, to enliven the entire corridor. These "nodes" would likely occur in areas that are ready (or near ready) for redevelopment: for example, on vacant or underutilized land.

Desirable and appropriate new uses for the corridor, as identified by the public, stakeholders, and the Project Steering Committee include:

- **Mixed-use buildings** with retail on the ground floor and residential units or offices above.
- New **residential housing types** such as townhomes and apartments.
- **A civic use** such as a performing arts center, event center, or fire station.
- More **restaurants and nightlife.**
- **Retail** to support tourists.
- More **lodging** - potentially a high-end hotel.



Proposed "node" of mixed-use activity at the intersection of West 6th Street and proposed new street. Mixed use building is shown on existing Glenwood Motor Inn site as an example of potential development opportunity.

BEAUTIFY THE EDGES

North Glenwood and the 6th Street Corridor are highly visible from I-70, which provides fantastic opportunity to highlight all that it has to offer. Currently, this area does not appear inviting and does not have a sense of "gateway". This plan encourages beautification and activation of the I-70 corridor by:

- Incorporating **enhanced landscaping** along I-70 to improve the identity of North Glenwood.
- Incorporating **multi-use trails** in public easements along the I-70 corridor to highlight Glenwood Springs as an outdoor recreation destination.
- Expanding **new development** closer to I-70 west of the roundabout. With improved connectivity in this area, development could be "double-sided" - fronting onto both I-70 and West 6th Street.
- Developing a **sense of arrival or "gateway"** should occur near the Vapor Caves. This area is very limited in terms of space, but moving the Glenwood Canyon trailhead to the intersection with improved crossings, bike facilities, and signage and incorporating public art would be very beneficial.



A "gateway" should occur near the Vapor Caves and Center for the Arts with enhanced landscaping, public art, and by moving the Glenwood Canyon trailhead west to the North River Street intersection.

ENGAGE THE RIVER

This plan encourages new programming of Two Rivers Park to better engage and activate the river. Programming elements to improve activation of the park include:

- Incorporating a **beach island area** to encourage summertime activation and to allow people to interact with the river.
- Improving the **boat ramp area** to better facilitate river sports.
- Including **picnic areas** and shelters.
- Building **"overlook" areas** for people to watch river sport activities and enjoy the views.
- Provide **hiking and biking trails** throughout the park that connect to 6th Street and the regional trails.

Future developments such as the expansion of Iron Mountain Hot Springs, should look for opportunities to engage and activate the river. Additionally, should CDOT relocate its facility, the roughly 6 acre site could be redeveloped into a mixed use activity node with recreational uses and residential uses that help activate the park and river. A restaurant or brewpub could also benefit the recreational users, spa users, and future residents.



This plan encourages new programming of Two Rivers Park to better engage and activate the river. A shoreline enhancement project is currently underway.

3. Character Areas and Zoning

6TH STREET CORRIDOR PLAN

CHARACTER AREA GOALS

Character is often used to describe the personality of a place. The character of a place is influenced by history, architecture and how a place is used and inhabited. North Glenwood has some areas that are rich in character and others that have the potential to grow in character.

The area of North Glenwood east of Laurel Street is rich in character, as it was platted as part of the original town site in 1885. It has distinct "character areas" within it, some of which are geared towards preservation and enhancing existing character and other areas which have more flexibility.

The rest of the study area does not have a significant engrained character. The section of West 6th Street (west of Laurel Street) is commonly referred to as "Hotel Row" due to the many hotels in the area that support surrounding tourist destinations. The majority of these hotels were built mid-century and are indicative of the "motor inns" of that era. While certain elements are worth preserving/highlighting, the majority of this area does not represent the desired character for this area and new development should respond to the future vision rather than the status quo.

The study area is divided into six "character areas" (see Figure 6). As properties redevelop, the goal is to use this chapter so that new development further enhances the desired character, as portrayed on the following pages.

IN THIS CHAPTER

CHARACTER AREA GOALS 21

NORTH GLENWOOD HISTORIC VILLAGE 23

NORTH GLENWOOD VILLAGE CORE 24

WEST 6TH STREET MIXED USE CORRIDOR 25

RIVERFRONT NEIGHBORHOOD 27

NORTH GLENWOOD RESIDENTIAL NEIGHBORHOOD 28

TWO RIVERS PARK 28

ZONING RECOMMENDATIONS 29

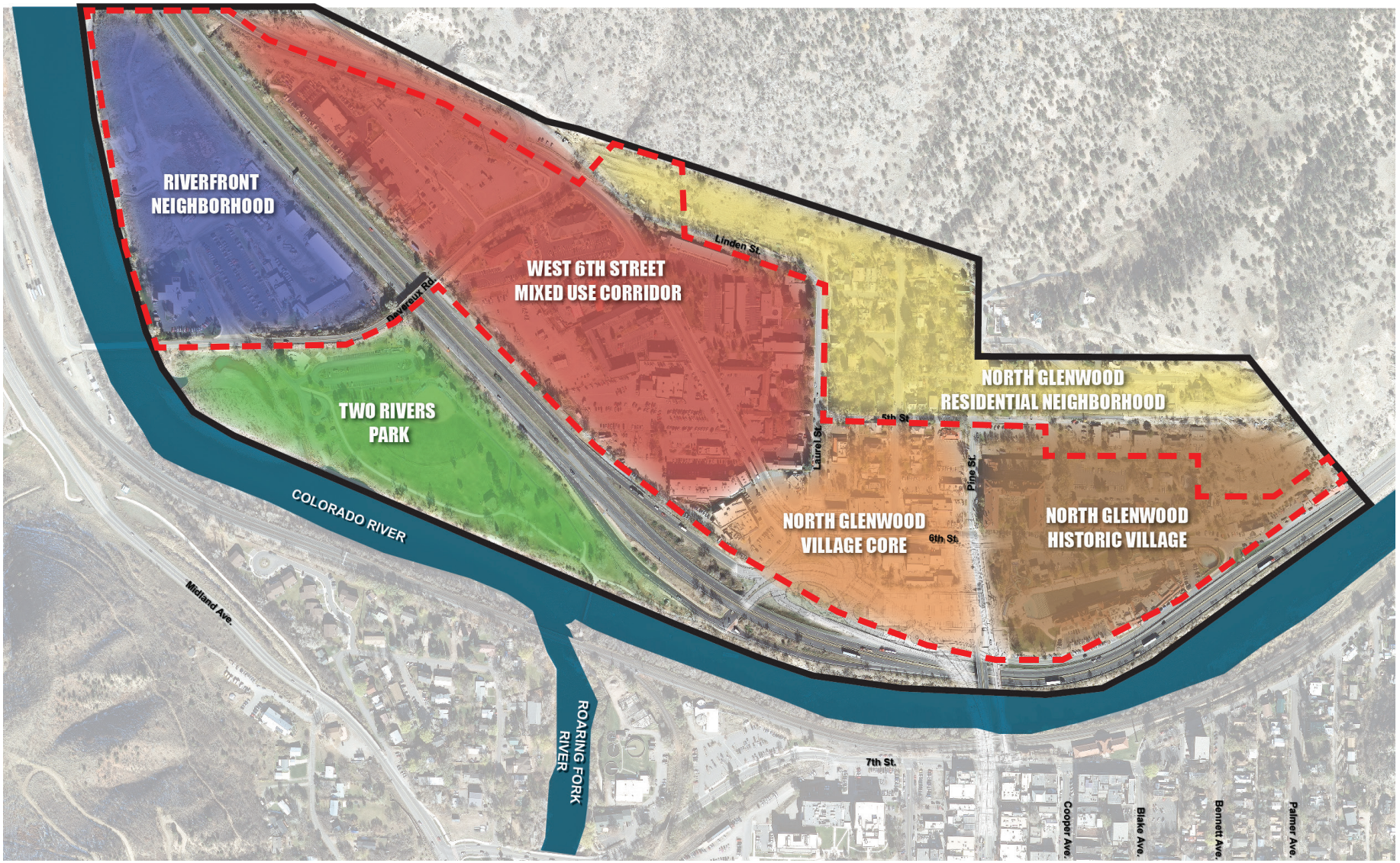
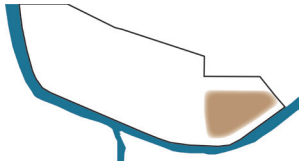


Figure 6 - Character Areas

indicates where new zoning and design standards and guidelines apply.



NORTH GLENWOOD HISTORIC VILLAGE

The area shown in brown is identified as the North Glenwood Historic Village due to the significant historic structures and character. The following goals apply for this character area:

1) This area is eligible for historic district status and should be pursued in the near term.

There are placemaking and tourism opportunities associated with creating a registered historic district. For example, a "gateway" element at Pine and 6th could serve as an entrance into the historic district. Plaques or kiosks and guided or personal walking tours in this area could help tell the history and promote the area as a place for heritage tourism.

2) New development should be sensitive to the adjacent residential neighborhood.

New buildings should be sensitive to existing, low-scale residential structures to the north by designing with the topography and stepping down in scale and intensity further north.

3) Provide more parking for existing uses.

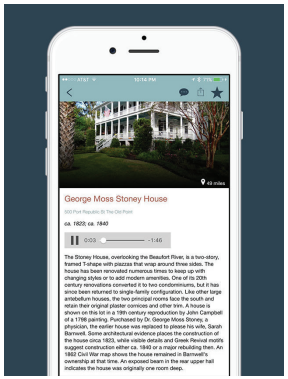
Many of the existing uses are underparked, which pushes public parking into the residential neighborhood. As redevelopment occurs, new parking facilities should be included to alleviate this burden on the existing residents and to provide a better visitor experience.

4) New development should respond to the historic character and appear subordinate.

New buildings should respond to the historic context, yet appear of their own time. For example, using similar materials such as red sandstone or red clay roof tiles would be appropriate whereas replicating the Italianate style of architecture of the Hotel Colorado is not appropriate. New buildings should be subordinate, allowing the historic structures like the Hotel Colorado and Hot Springs Bathhouse to stand out.

Another characteristic is this area's significant landscaping and space between buildings. For example, the Hotel Colorado's courtyard entry and the lawns for the Hot Springs Pool provide a more "natural" experience, as opposed to a more "urban" environment where buildings are side-by-side. New buildings should respond to this characteristic by providing ample landscaped open space.

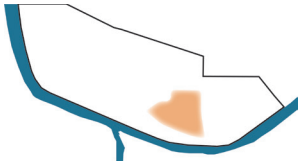




Plaques or kiosks and guided or personal walking tours in this area could help tell the history and promote the area as a place for heritage tourism.

NOTE:

Special design standards and guidelines for the area within the red dashed line are provided in Appendix A. The design standards and guidelines provide rules and expectations for new development to follow, as a means for achieving the overall vision and desired character for this area. They relate directly to the proposed zoning recommendations at the end of this chapter.



NORTH GLENWOOD VILLAGE CORE

This area is envisioned as becoming an extension of Downtown Glenwood Springs with restaurants, brewpubs, and retail businesses that support the adjacent uses, as well as draw people across the river from downtown. The following principles apply:

1) Maintain a "village-like" character.

New development should respect the quaint, village-like character of East 6th Street. This means respecting the residential neigbhorhood to the north with sensitive transitions in building mass and scale and using human-scaled design and details. Some ideas for preserving the "village-like" character include:

- Maintaining some of the existing residential structures along Maple Street, perhaps with additions to accommodate contemporary uses. Some of these structures have already converted into commercial uses, and this pattern is supported.
- Transforming the alley north of 6th Street into a pedestrian-friendly place with enhanced lighting, public art, and double-sided commercial buildings.

2) New buildings that face onto 6th Street should take on characteristics similar to downtown buildings to create a "main street" appeal.

Architecturally, new buildings facing 6th Street should take on characteristics inherent in downtown buildings, such as:

- Buildings constructed to the street edge with storefront windows on the ground floor for displaying goods or services inside.
- Usually more than one-story (but not more than three) and include offices or residential units on the upper floors (i.e. mixed use).
- Entrances to buildings are recessed and sometimes include awnings overhead to provide further protection from the elements whereas corner buildings orient to both streets, and often include a 45-degree notch in the building to address the corner.
- Masonry as a primary building material.
- Structures are built side-by-side and a repetition of unique structures can be perceived, but with aligned common elements such as floor and cornice lines.

3) Blend historic with contemporary styles.

While it is desirable for new buildings to take on similar characteristics of historic downtown buildings, they should not replicate historic styles of architecture. New buildings should appear of their time and place and respond to contemporary trends and needs. For example, a mixture of traditional materials such as masonry and stone is desired, as well as contemporary materials such as glass and steel.

Adaptive reuse of some buildings is also appropriate to achieve this goal and can help tell the story of a place.

4) Public parking is desired.

Public parking in this area is desired to support redevelopment efforts. A parking structure should be pursued, either as a public initiative or a joint partnership. Parking requirements for buildings in this area should be waived, or greatly reduced, to support new development and create a compact, "main street" and village-like appeal rather than having parking requirements take up valuable land.



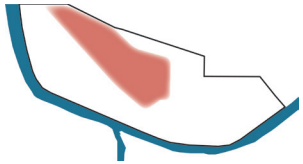
Maintaining some of the existing residential structures along Maple Street is desired.



Architecturally, new buildings facing 6th Street should take on characteristics inherent in downtown buildings.



Adaptive reuse of some buildings is appropriate to blend historic and contemporary styles.



WEST 6TH STREET MIXED USE CORRIDOR

This area is envisioned as increasing in intensity -- keeping the lodging and entertainment focus while adding in new uses for visitors and residents to enjoy and to create a more pedestrian-friendly experience along 6th Street. The following principles apply:

1) Create a pedestrian-friendly 6th Street.

The existing hotels, most of which were built in the 50s or 60s, are indicative of the "motor inns" of that era – with exterior circulation and buildings that orient to parking lots instead of the street. While there is a unique character that can be maintained or enhanced with these structures, it is also very important for this portion of 6th Street to become more pedestrian-oriented. Enhanced landscaping, street trees, lighting, and small pocket parks or plazas are desired to enliven and activate the street - as well as new uses.

2) Add new uses.

While the primary land use will remain focused on lodging, there is opportunity to mix in retail, restaurants, and perhaps even a civic use to help activate this area. Due to the location of this character area, new land uses could be more intense, perhaps with taller buildings to take advantage of views and increased density.

3) Public Parking Structure

A new public parking structure is envisioned adjacent to the interstate to support new development. This structure should be designed as integral into the fabric of West 6th Street with clear connections to it. It should serve multiple uses, including events at Two Rivers Park, as well as general activities along the 6th Street corridor. Including actives uses is important, such as retail on the ground floor or a climbing wall.

4) New development should positively contribute to the street edge.

New development should orient to 6th Street with activities that support the hotel occupants and visitors as well as residents. Providing "nodes" of activity where new buildings engage and activate the sidewalk edge is desired. In other locations, enhanced landscaping or shared open space is desired.

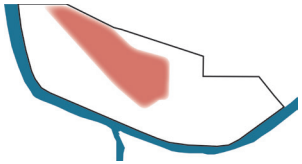
- New buildings should be placed closer to the street to better enclose the street space and make a more pleasant pedestrian experience.
- Small plazas or pocket parks, or other semi-public space adjacent to buildings is encouraged to mimic the existing "open" character. A smaller version of the parklike setting in front of the Antlers Hotel would be welcomed.
- Parking should be subordinate to new buildings, located either to the side or behind new structures.
- Where buildings are not constructed to the street edge encourage landscaped strip or street trees adjacent to the public sidewalk.
- Taller buildings are appropriate along this section of the corridor - perhaps a few more than 4 stories.



Enhanced landscaping, street trees, lighting, and small pocket parks or plazas are desired to enliven and activate the street.



Including active uses "wrapping" the parking structure is encouraged, such as retail on the ground floor or a climbing wall. This parking structure in Chattanooga, TN is wrapped with climbing wall panels that create a unique architectural appearance from afar, as well as up close.



4) Consolidate access to properties to reduce curb cuts.

Each individual parcel of property along this stretch of 6th Street includes at least one if not multiple access points. These curb cuts are convenient to automobiles, but they make walking undesirable as they interrupt sidewalks, making pedestrians feel like they have to be "on guard" at all times.

This area should seek to consolidate access along 6th Street. Wherever feasible, adjoining properties should share auto access to reduce the amount of curb cuts along the street and help create a safer and more pedestrian-friendly environment.

5) Enhance connectivity.

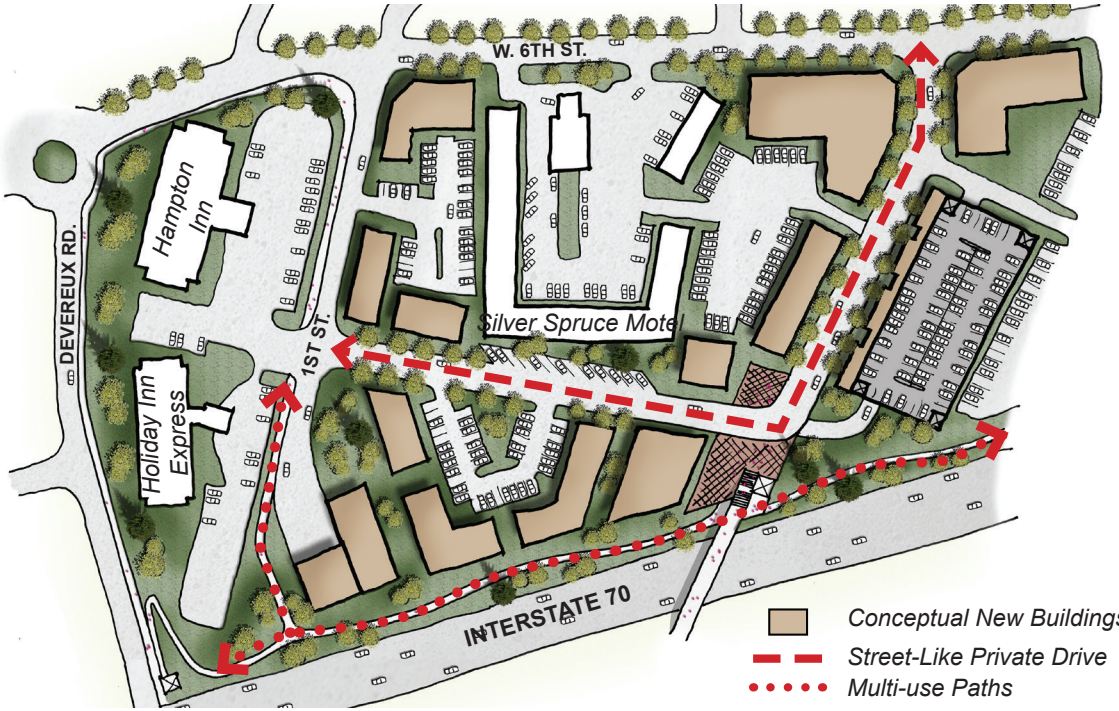
This area is made up of "mega blocks" along 6th Street from Laurel Street to Devereux Road with no dedicated public access points or permeation in between. This makes connecting to the surrounding character areas difficult, as well as simply crossing from one side of the street to the other. A pedestrian and bicycle connection is envisioned that connects from Laurel Street to 6th Street aligning with 5th Street to break up the northern mega block. On the southern mega-block, a street-like private drive and multi-use paths are envisioned to enhance connectivity and provide additional developable land. New crosswalks along 6th Street should also be implemented.

6) Provide a "gateway" feature at 6th Street and Devereux Road.

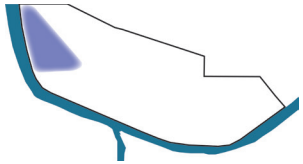
The intersection of West 6th Street and Devereux Road should include a "gateway" feature to present an entry into North Glenwood from West Glenwood. A roundabout is envisioned to better control traffic in the area coming to and from Glenwood Caverns. This could also serve as a "gateway" feature with signage, public art and enhanced landscaping.



A pedestrian and bicycle connection is envisioned that connects from Laurel Street to 6th Street aligning with 5th Street to break up the northern "mega block".



On the southern mega-block, a street-like private drive and multi-use paths are envisioned to enhance connectivity and provide additional developable land.



RIVERFRONT NEIGHBORHOOD

This area is envisioned as transforming over time into a mixed use neighborhood oriented toward the river and park. Overarching principles include:

1) New development should engage and activate the river and park.

New development should consider uses that would help activate Two Rivers Park and the Colorado River. Appropriate uses include:

- Residential units (ownership or rental) would help activate the park. Higher end units could be achieved, given the proximity to the river.
- A restaurant, brewery, or similar food and beverage facility would also be appropriate. Summer river activity users could use a business like this to patronize during their stops.
- An indoor or outdoor recreation attraction could serve as another destination for this area that complements, rather than competes with, the existing destinations (park and hot springs).

2) New development should preserve and enhance views.

New development should consider views to the river and downtown. Taller buildings would be more appropriate near the interstate with lower-scale buildings along the river's edge. Currently, buildings up to 5 stories, or 60 feet, are allowed by code.

3) Implement improvements to Centennial Drive and Devereux Road.

Iron Mountain Hot Springs has become a popular destination in the neighborhood, generating more traffic (both pedestrian and auto) in this area. The city should improve Centennial Drive and Devereux Road with sidewalks and on-street parking (on Centennial Drive). Devereux Road, due to the significant slope on either side, presents an opportunity to build up to the street on the north side (existing CDOT site and parking lot) with street-level retail while utilizing the grade change for below-grade structured parking.

4) Future redevelopment of the CDOT property should continue to be explored.

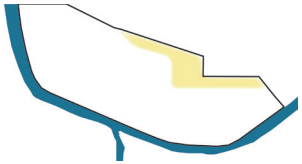
The roughly 6 acre CDOT property at the intersection of Devereux Road and Centennial Street has been discussed as a major opportunity for redevelopment. The current location is not ideal for CDOT, as it is difficult for maintenance vehicles to access the interstate. If CDOT offices relocated, it could free up the land for a higher and better use that fits the vision for this neighborhood. The visibility from I-70 provides a prime real estate opportunity and amenities nearby like the park, river, and hot springs is unprecedented in Glenwood Springs.

5) Implement a riverwalk.

A riverwalk is envisioned along the Colorado River from Iron Mountain Hot Springs through Two Rivers Park with connections to the Confluence area and downtown, as well as to 6th street via the pedestrian tunnel. New development should plan for these improvements and encourage access to the river, both private and public, where feasible.







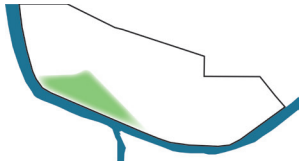
NORTH GLENWOOD RESIDENTIAL NEIGHBORHOOD

This is a neighborhood of mostly single family homes insterspersed with some multi-family units. The streets are generally very narrow, some lacking sidewalks which forces pedestrians, bicyclists, and automobiles to share the same space. The historic street and building character is envisioned as remaining. New development within proximity to this character area should take into consideration the desire to keep this neighborhood residential in nature, with quiet streets and a dark night sky.





New development within proximity to this character area should take into consideration the desire to keep this neighborhood residential.



TWO RIVERS PARK

Two Rivers Park is included as a separate character area, as it is a public amenity and regional draw. The park is highly used and could benefit from more parking (or shared parking with new development) for events. Improving the ramps for kayakers and rafters is desired, as well as making the park a destination for rafters to stop and picnic or hang out. The southern edge is envisioned as becoming a beach where people can interact with the river and a boardwalk is envisioned along the river along Two Rivers Park and over to Iron Mountain Hot Springs.



The southern edge is envisioned as becoming a beach where people can interact with the river.

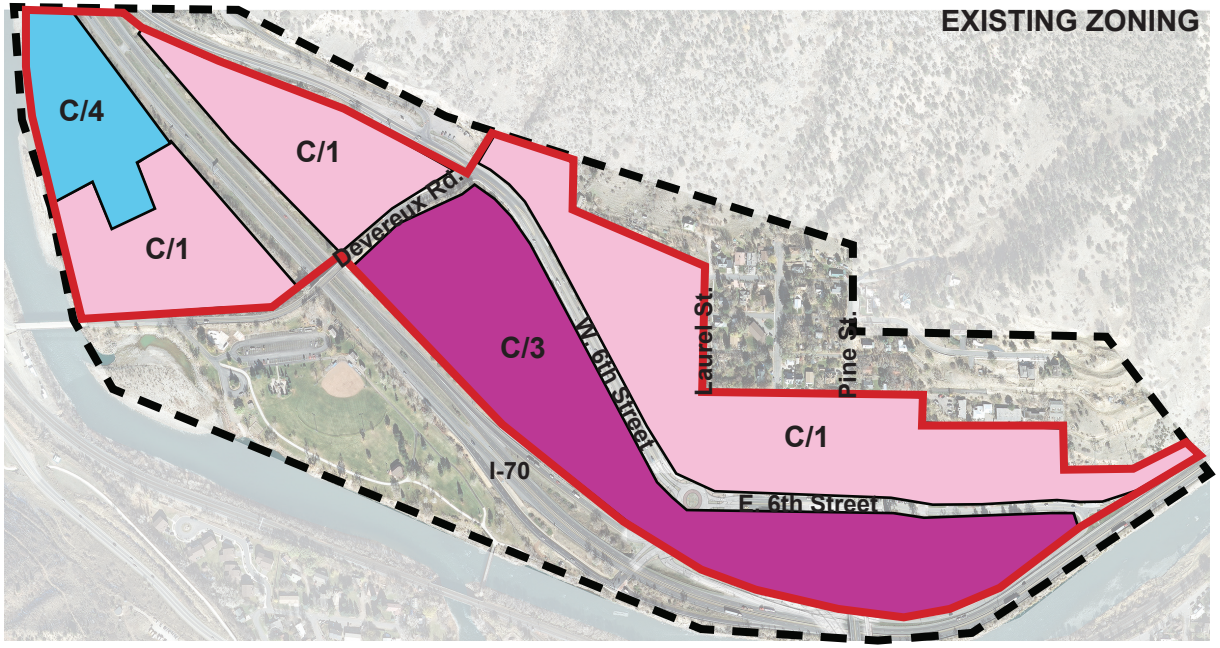


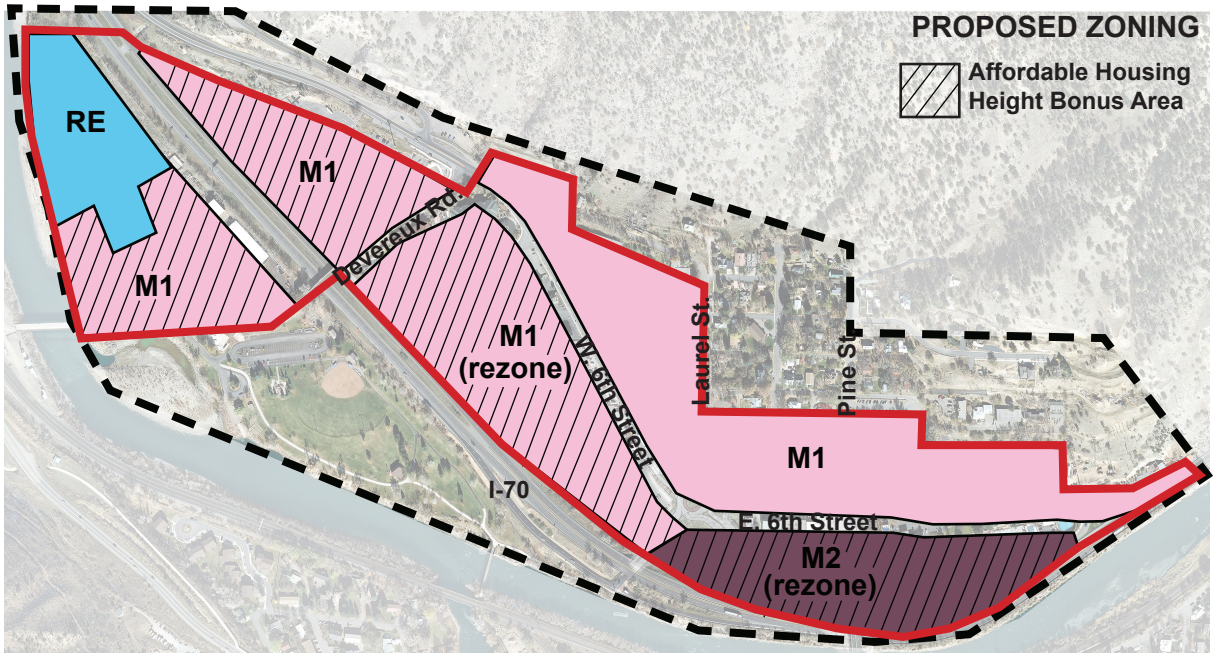
Improving the ramps for kayakers and rafters is desired, as well as making the park a destination for rafters to stop and picnic or hang out.

ZONING RECOMMENDATIONS

The Glenwood Springs Development Code Update was drafted concurrently with this plan. The new code is expected to be adopted in Winter 2017/18, following adoption of this plan. New regulations related to zoning will then be in place, along with the design standards and guidelines from this plan (Appendix A). A series of "replacement" zones are established which modify nomenclature and standards to better represent the existing zones' intents. Portions of the 6th Street Corridor study area align with the proposed "replacement" zones, while other portions are recommended to be remapped to zones that better fit the desired character. The figures to the right show the existing and proposed zoning.

- The area **north of E. 6th Street**, currently zoned C/1, within the applicable boundary (i.e. excluding residential and public park zones) will be **replaced with M1** when the new code is adopted. The new M1 standards align with the vision of this plan and therefore no map changes are recommended.
- The properties **south of E. 6th Street and east of Laurel Street** and the new roundabout are currently zoned C/3. The replacement zone (CO) does not meet the future vision for this area, and therefore this plan recommends **rezoning to M2** - the same zone as downtown.
- Properties **south of W. 6th Street**, between Laurel and Devereux Road, are currently zoned C/3. The recommendation is for this area to be **rezoned to M1**.
- The area within the **Riverfront Neighborhood character area** currently includes two zones - C/4 and C/1. This plan recommends the **replacement zones of RE and M1 remain** in place.





Listed below are the purposes and standards for each zone district, as outlined in the proposed Glenwood Springs Development Code Module 2:

M1 - MIXED USE CORRIDOR

Purpose - The M1 district is intended to accommodate mixed-use development with walkable and active streetscapes on Glenwood's primary roadways. The mix of uses in the M1 district is intended to accommodate lighter-intensity commercial districts with limited auto-oriented uses compatible with surrounding residential neighborhoods. The M1 district is also intended to offer a diverse mix of housing opportunities at varying densities.

M2 - MIXED USE CORE

Purpose - The M2 district is intended to accommodate walkable and active development within Glenwood's core commercial areas, including but not limited to central downtown. The M2 district includes the most recognizable and prominent areas of Glenwood Springs and therefore places an emphasis on high-quality building and site design, as well as the surrounding streetscape. The M2 district is intended to allow for a mix of residential and nonresidential uses while ensuring compatibility with surrounding established neighborhoods.

RE - RESORT

Purpose - The RE district is intended to accommodate high-intensity commercial development with flexibility in terms of allowable uses and dimensional standards to accommodate for primary and accessory resort development uses. The RE district is intended to apply to properties that are relatively isolated from adjacent properties due to physical and/or natural features.

The proposed standards for each district, as identified in Module 2 Public Draft ot the Code, are as follows. Recommended amendments to meet the goals of the 6th Street Corridor Plan are identified in red.

	M1	M2	RE
Lot Standards, Minimum			
Lot area	*None*	*None*	*None*
Landscaped area	*15 percent*	*None*	*10 percent*
Setbacks			
Front, minimum	*5 feet*	*None*	*5 feet*
Front, maximum (arterial streets)	*60 feet*	*40 feet*	*60 feet*
Front, maximum (other streets)	*25 feet*	*20 feet*	
Side, minimum	*5 feet*	*None*	*None*
Rear, with alley, minimum	*5 feet*	*None*	
Rear, without alley, minimum	*7.5 feet*		
Building Standards, Maximum			
Building height, Grand Avenue and E. 6th Street	--	*40 feet*	-
Building height, Other streets	**38 feet*	*50 feet*	*60 feet*
Building height for meeting affordable housing incentive in 6th Street Corridor Plan (applicable areas)	*60 feet*	*50 feet*	--

** - This plan recommends a 38-foot base height limit for M1 to allow a 3-story mixed use building of adequate floor heights and quality.*

AFFORDABLE HOUSING HEIGHT INCENTIVE

The city should consider an incentive program that encourages affordable housing (rental and for-sale) by allowing additional building height (see above table) in the targeted areas within the 6th Street Corridor Plan study area (see hatched area of the proposed zoning diagram on the previous page). Details of defining affordability thresholds and duration should be worked out by the city. The city can build on the recent ordinance that allow fee waivers in exchange for providing affordable units.

NOTE:

Refer to Appendix A for additional design standards and guidelines for applicable properties. Also reference the Glenwood Springs Development Code (anticipated adoption Winter 2017/18) for allowable uses and other dimensional and general development standards.

4. Mobility

6TH STREET CORRIDOR PLAN

MOBILITY GOALS

Currently, the primary function of 6th Street is to move cars. As currently designed, it is an inhospitable environment for pedestrians and bicyclists. Some overarching goals for improving mobility in the corridor study area include:

- To promote Glenwood Springs as an **outdoor recreation destination**.
- To **facilitate walking and biking** as viable transportation options by implementing comfortable and easy-to-use facilities.
- To **connect the major activity centers** within Glenwood Springs to one another.
- To **connect the two major regional trails** - Glenwood Canyon Trail and the Rio Grande Trail.
- To provide better circulation within the study area by **breaking up the mega-blocks** along West 6th Street with pathways, streets, or private drives.
- To supplement walking, biking and driving with an **efficient transit system**.
- To support redevelopment by implementing a **public parking structure** and other parking mechanisms.

The following pages outline a vision for enhancing mobility options and connectivity within the study area.

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PROPOSED BRIDGES 35

PEDESTRIAN AND BIKE FACILITIES 37

TRANSIT SERVICE 39

PARKING 41

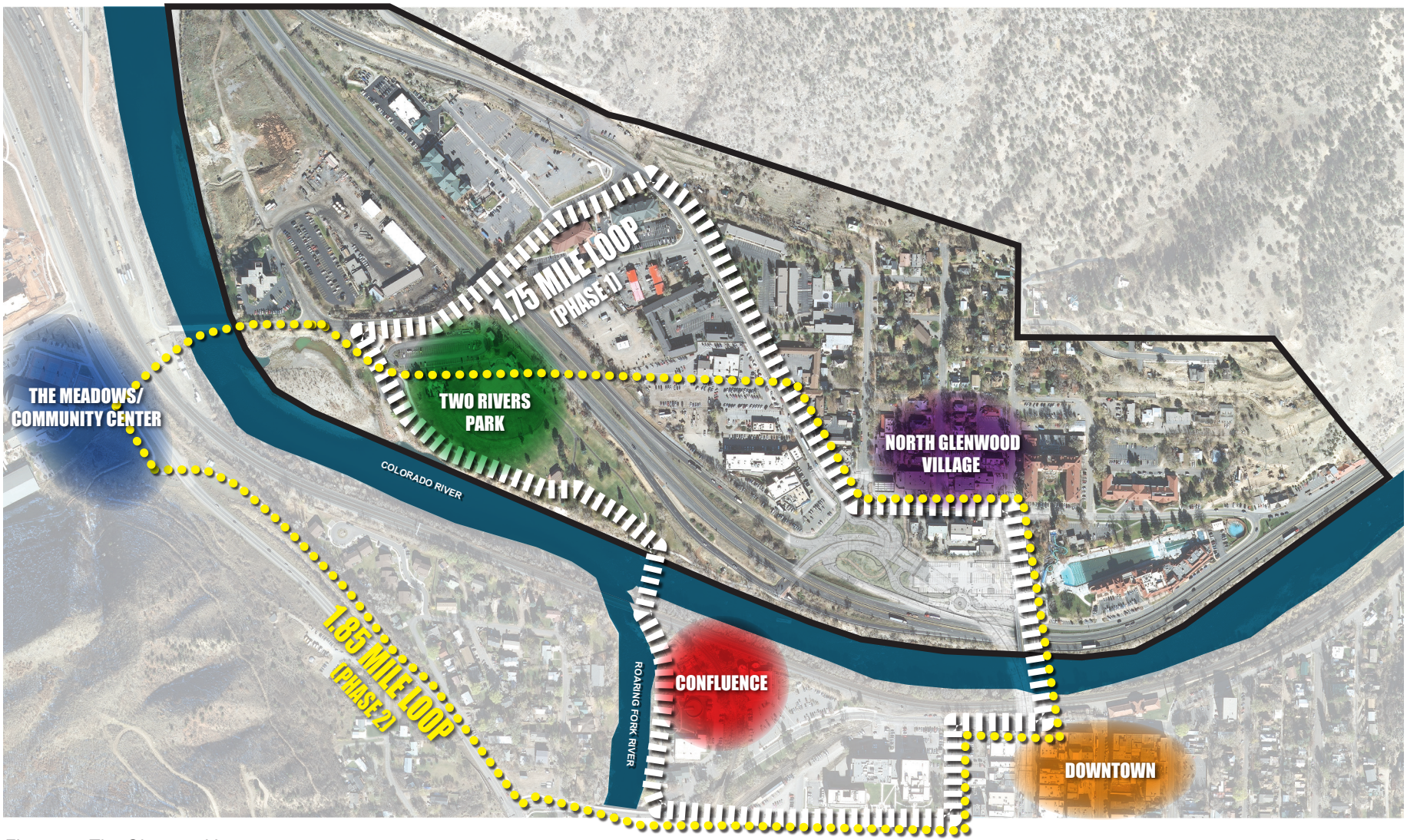


Figure 7 - The Glenwood Loop

THE GLENWOOD RIVERFRONT LOOP

In order to promote Glenwood Springs as an outdoor recreation destination and seamlessly connect the major activity centers, this Plan recommends implementing a bike/pedestrian "loop" system.

The proposed Glenwood Loop offers two phases:

- **Phase 1** - 1.75-mile hiking/biking loop connecting downtown, North Glenwood Village Core, West 6th Street corridor, Two Rivers Park, and the Confluence. This trail would include specific wayfinding signage to direct people along the route. It could also include kiosks with historical information about certain areas along the route, as well as awareness about health benefits such as estimated calories burned and distance information.
- **Phase 2** - 1.85-mile loop stretches over to the Glenwood Meadows shopping center and Midland Avenue. This extension is dependent on a new bridge connecting Devereux Road to Midland Avenue. A new pedestrian bridge across I-70 is also envisioned for this phase.

This hiking and biking trail could be promoted as both heritage and recreational tourism and include "smart technology" applications for handheld devices.

Phase 1 of the Glenwood Riverfront Loop utilizes existing trails and bridges, where feasible. In addition to new vehicular and pedestrian bridges, new improvements needed to implement the first phase include:

- **New bicycle and pedestrian facilities** along the north side of 6th Street from Pine Street to the Devereux Road. Refer to Chapter 5 and Appendix B for more information regarding streetscape design.
- **A pedestrian/bike crossing** at Devereux Road and West 6th Street.
- **A continuous multi-use path** along the south side of Devereux Road from West 6th to Centennial Street.

Phase two improvements include:

- **A signalized pedestrian crossing** on West 6th Street, approximately 350 feet west of the new Laurel Street interchange.
- **A new multi-use path** that stretches from West 6th Street to I-70 (approximately in line with 5th Street).
- **A pedestrian bridge over I-70** to connect the loop trail into Two Rivers Park.
- **A new vehicular bridge** to connect Devereux Road to Midland Avenue.

Note that for both phases, the **connection through The Confluence** depends on how that area redevelops. The trail is shown connecting via 8th Street to Colorado Avenue to 7th Street to get people back to the Grand Avenue pedestrian bridge.



The Glenwood Riverfront Loop could be "branded" and marketed in a variety of ways.



A smartphone app could be downloaded and include directions, historical information, health information, and more.



Public art and wayfinding could be incorporated along the route.

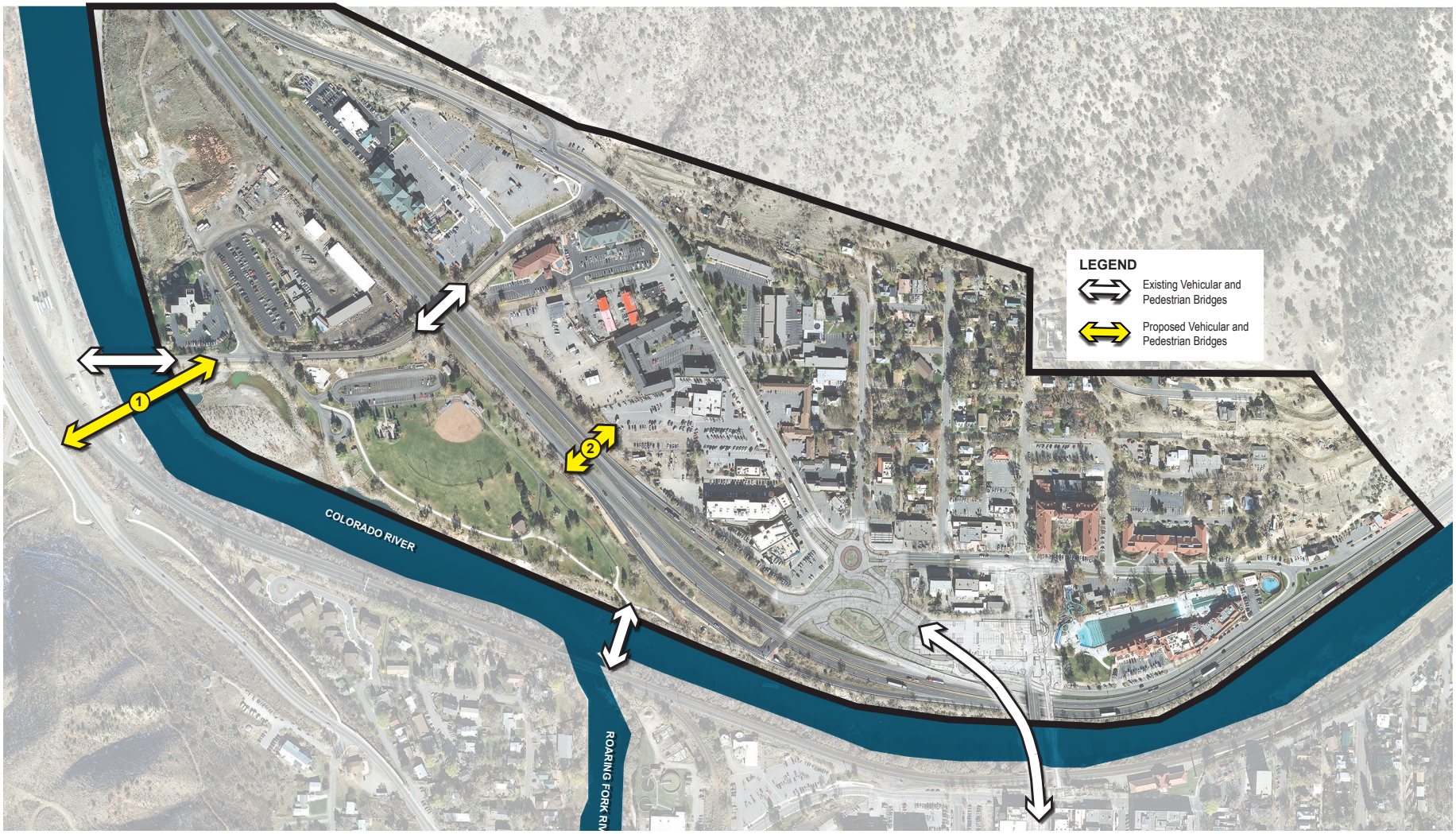


Figure 8 - Proposed Bridges

PROPOSED BRIDGES

To facilitate increased connectivity to and from North Glenwood, one pedestrian bridge and one auto bridge are desired:

#1 - DEVEREUX-MIDLAND BRIDGE

The proposed Devereux-Midland Bridge connects North Glenwood to Glenwood Meadows commercial area. The existing Devereux Road vehicular bridge over the Colorado River would remain in place to serve the south riverfront area. The new bridge would cross the railroad tracks and land at-grade with Midland Avenue near the Community Center.

This connection has been desired for many years. With new improvements and development opportunity in North Glenwood, the connection could become more feasible. The design of the bridge should include gateway features such as special structural treatment, lighting, banners, and more. It is also important that this structure not create an “under the bridge” condition where the existing kayak/raft pull-out and future beach area is to be located.

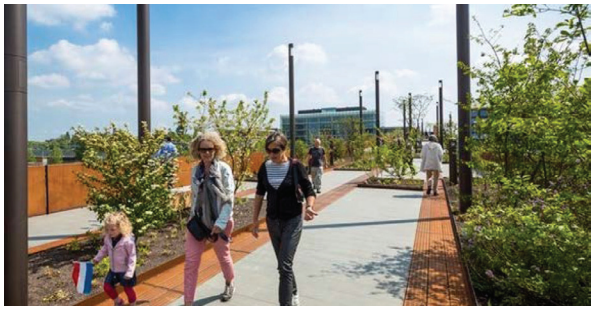
#2 - I-70 PEDESTRIAN BRIDGE

This bridge would cross I-70 midway between the Devereux Road pedestrian bridge and the new interchange. It is envisioned as becoming an extension of Two Rivers Park and connect into a new “civic spine” - a street/plaza that links directly into 6th Street. This “spine” would include a mixture of uses to activate it. It would also be connected to a public parking structure and transit center, also envisioned for this area (explained later in this chapter in more detail.)

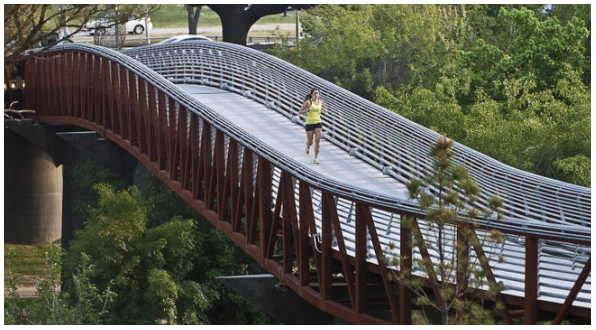
This bridge should become an iconic gateway from the interstate. It should be designed as a seamless connector between the park and North Glenwood and feel more like a grand plaza than a bridge. It could include lookout areas to view downtown and the river.



The “civic spine” concept seamlessly connects Two Rivers Park to North Glenwood.



The I-70 Pedestrian Bridge should be designed more like a grand plaza than a bridge.



The Glenwood Canyon Trail Bridge would provide additional connections to the trail and contribute to the larger Glenwood Loop concept.

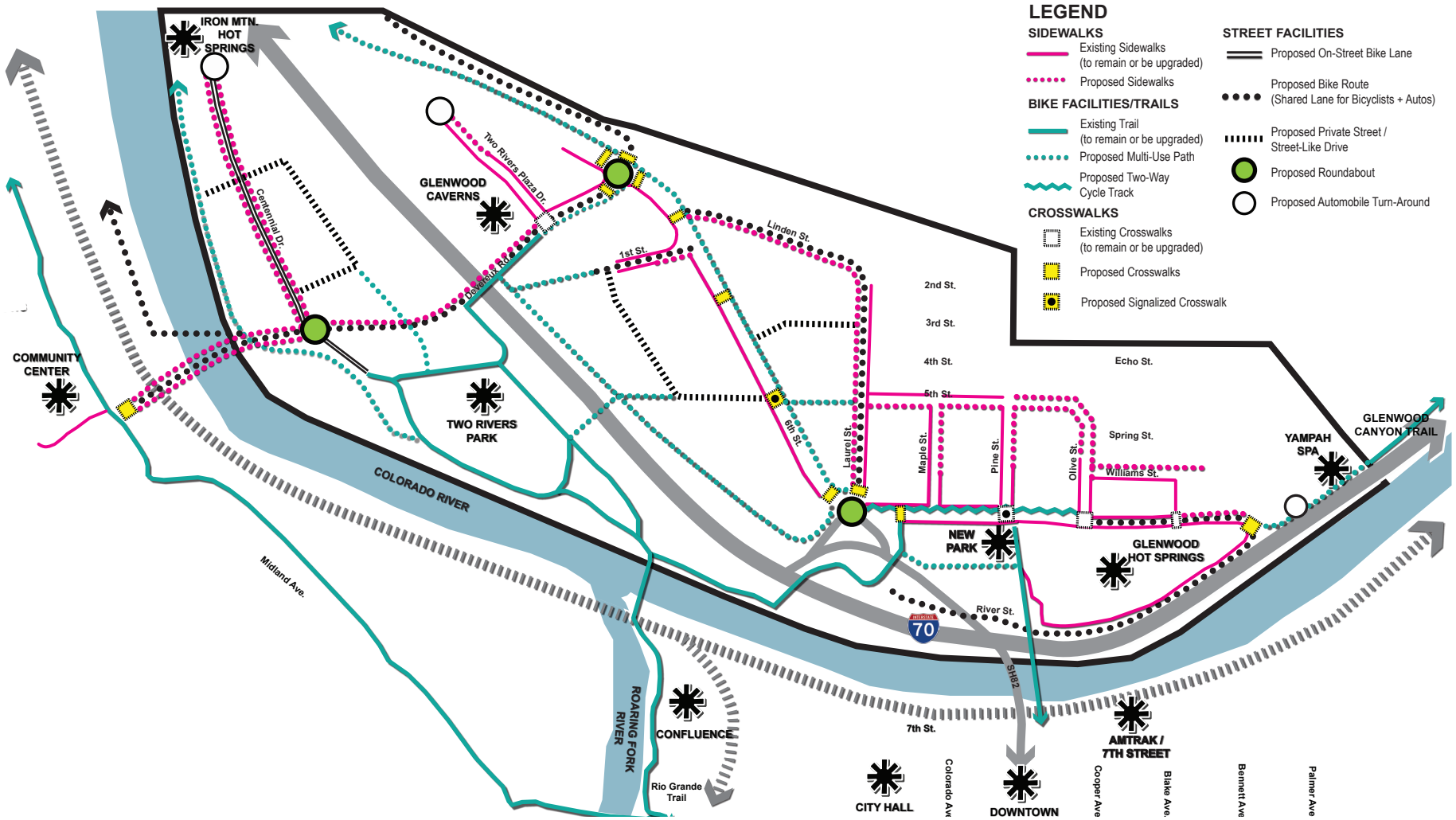


Figure 9 - Pedestrian & Bike Connectivity

NOTE:

Refer to detailed street sections in Appendix B for detailed diagrams of sidewalk, bike lane, and multi-use path recommendations.

PEDESTRIAN AND BIKE FACILITIES

Pedestrian and bike connectivity is a priority for North Glenwood and the 6th Street Corridor study area. Figure 9 shows a variety of proposed solutions for improving circulation and connectivity in this area. Explanations are as follows:

SIDEWALKS

Figure 9 shows the location of existing and proposed sidewalks (solid and dotted pink lines, respectively). Implementing a continuous network that is accessible and offers a pleasant and safe experience is important. The following guidelines relate to new sidewalks:

- Sidewalks at minimum, should be 5 feet wide, except along 6th Street where sidewalks should be a minimum of 6 feet wide (clear space). Note that the current code requires 8 feet in commercial areas.
- Where feasible, sidewalks should be buffered from the street with tree lawns, landscaping, or trees in grates.
- All streets within the "Village Core" area (between Laurel and Olive Streets from 5th to 6th Streets) should include sidewalks on both sides of the street.
- Devereux Road from Centennial Drive to Two Rivers Plaza Drive, although narrow and constrained by topography on both sides, should include a sidewalk on at least one side of the street.

CROSSWALKS

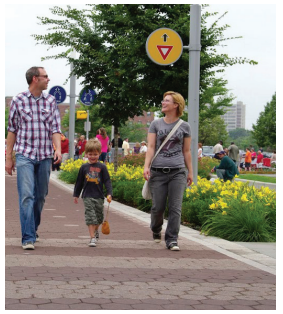
Crosswalks are essential to promoting walkability by providing multiple safe route options as a pedestrian. Crosswalks should be clearly marked so pedestrian areas are highly visible to oncoming traffic. In some locations, pedestrian signals may be desired, such as Rectangular Rapid Flashing Beacons (RRFB). In other locations, the material change and pedestrian crossing sign may be enough. And still in others, especially long-term, a full traffic signal may be appropriate. Further traffic studies will be needed to determine the need once the new interchange is in place.

Guidelines for new crosswalks are as follows:

- New crosswalks should be accented with a change in material. Laid brick pavers that match the ones specified in chapter 5 for 6th Street streetscape pallette are preferred. If not feasible due to cost or maintenance, a colored and stamped concrete in brick herringbone pattern is preferred.
- All materials and colors for crosswalks should match the overall streetscape pallette.
- Crosswalks should be at least 8 feet wide.
- Accessible ramps should be provided at the sidewalk edge.

Refer to Chapter 5 for more information on crosswalk locations.





Sidewalks should be buffered from the street to provide a safe and comfortable pedestrian experience.





Crosswalks should be accented with a change in material such as pavers or colored, stamped concrete.



The same pavers used on 7th Street downtown are the same pavers specified for 6th Street. Crosswalks should match these in color or material.

TWO-WAY PROTECTED BIKE LANE

A two-way protected bike lane is proposed along the north side of E. 6th Street from Olive to Laurel. This facility is separated, or "protected", from automobiles by being raised at curb level and buffered with bollards. Using contrasting paver colors and patterns can visually separate thh bike lane from the sidewalk. They offer many benefits in a "main street" environment:

- They are **safer** for bicyclists - reducing the number of conflicts with moving autos and parked cars opening doors (a very common bicycle conflict).
- They are **family-friendly** and even safe for small children to use.
- They contribute to **placemaking** - or making a place feel special and unique.
- They **boost economic growth**! A recent report from PeopleForBikes and Alliance for Biking & Walking suggests through various case studies that protected bike lanes have: fueled redevelopment to boost real estate values, helped companies attract workers who wish to bike to and from work, encourage workers and residents to be healthier and more productive by providing active transportation options, and increased retail visibility and sales by placing more PEOPLE closer to businesses as opposed to CARS.

MULTI-USE PATHS

Multi-use paths (MUPs) are dedicated off-street paths that are wider than sidewalks and that accommodate both pedestrians and bicyclists in the same space. During development of this plan, a voting preference exercise with the public revealed that the majority of residents preferred off-street facilities to on-street facilities (bike lanes or routes) in this area.

Some MUPs exist (Two Rivers Park, Midland Avenue, and Glenwood Canyon Trail) and new MUPs should be incorporated in key areas that connect into the existing network. Refer to Figure 9 for key locations.

The following guidelines for MUPs should be observed:

- Multi-use paths should be at least 10 feet wide. Twelve feet is preferred.
- Maintenance is essential to the use of MUPs. The City should consider snow and rock clearing and other general maintenance for these facilities.
- Lighting and signage should also be considered to ensure that the MUPs are safe and inviting at all times of day.

BIKE LANES AND ROUTES

Because MUPs are not feasible to implement everywhere due to land constraints, some on-street facilities are proposed to provide the "missing links" in the overall trail system.

This plan proposes on-street bike lanes where streets are wide enough, or could be reconstructed to accommodate them within the existing rights-of-way. Where land is more constrained, a shared facility will suffice. These are indicated with "sharrows" in the travel lane to warn automobiles to share the lane with bicyclists.



Multi-use paths are wider than sidewalks and accommodate both pedestrians and bicyclists in the same space.



Protected bike lanes provide a dedicated space for bicyclists that is buffered from cars and pedestrians.



Sharrows warn automobiles to share the lane with bicyclists.

TRANSIT SERVICE

EXISTING TRANSIT SERVICE

Ride Glenwood buses are operated by the City through a contract with RFTA and service the 6th Street corridor at 30-minute headways from 6am to 7pm. This route serves Glenwood Meadows, West Glenwood, North Glenwood, downtown and up-valley to the Roaring Fork Market Place. There are two stops within the study area along West 6th Street, but the route misses some of the major destinations such as Glenwood Hot Springs and Iron Mountain Hot Springs.

Other RFTA service includes **Local Valley Bus** (service to Aspen), **Hogback** (service to Rifle), and the **VelociRFTA** (service to Aspen). Another option is the CDOT **Bustang** (service to Denver). However, all of these buses pick up across the river from 6th Street at the West Glenwood Park & Ride. The **Colorado Mountain Express** (service to Denver International Airport) picks up at the Ramada.

PROPOSED SHUTTLE LOOP & FUTURE TRANSIT

A more localized shuttle is desired for the 6th Street corridor study area to take visitors to and from major destinations (see Figure 10). A short-term route is proposed that would begin at Iron Mountain Hot Springs and end downtown, servicing all major destinations along 6th Street in between. When the Devereux-Midland bridge is constructed, a longer route could be implemented that also services The Meadows and connects into the West Glenwood Park & Ride.

The proposed shuttle should be visibly different from Ride Glenwood to avoid route confusion and to "brand" itself as a unique transit system.

As Glenwood Springs matures, more transportation options such as car sharing and ride sharing should also be accommodated through dedicated on-street parking spaces or reserved spaces in future parking structures.

TRANSIT STOPS

The stops for the shuttles should incorporate the unique branding of the vehicles as well as signage indicating time tables, maps, and other necessary information. They should be designed as "mini plazas" where their use is flexible, blends in with the streetscape and supports interaction.

Shelters are desired to protect transit riders from the elements. The architecture of the shelters should be a blending of artistic expression and the traditional architectural character of North Glenwood. Along 6th Street, a dedicated area for buses/shuttles to pull out of the traffic lanes is desired, however this will depend on the location and right-of-way that exists.

The following guidelines for transit stops should be followed:

- Where feasible, a dedicated "pull-out" for buses should be provided so traffic can pass by.
- Consult RFTA guidelines for dimensional standards for bus pull-outs. Shuttle-only stops will depend on the size of vehicle chosen.
- Place transit shelters directly adjacent to the property line with a 6-foot minimum sidewalk in between the shelter and the curb/loading zone.
- Transit shelters should have a minimum footprint of 60 square feet and be at least 4 feet wide.
- Transit shelters are preferred at each stop, but should at least be provided every other stop.
- Where shelters are not provided, at least one bench, trash receptacle and appropriate signage should be provided.
- Traditional materials such as brick, wood, glass and metal are encouraged. Durability is important.
- Shelters should be as transparent as possible to deter negative behavior.



Ride Glenwood and the shuttle service would share stops along West 6th Street.



A pull-out for buses is desired. A 6-foot minimum sidewalk between the shelter and the curb should be provided.



The proposed shuttles should be visibly different from Ride Glenwood to avoid route confusion and to "brand" itself as a unique transit system.

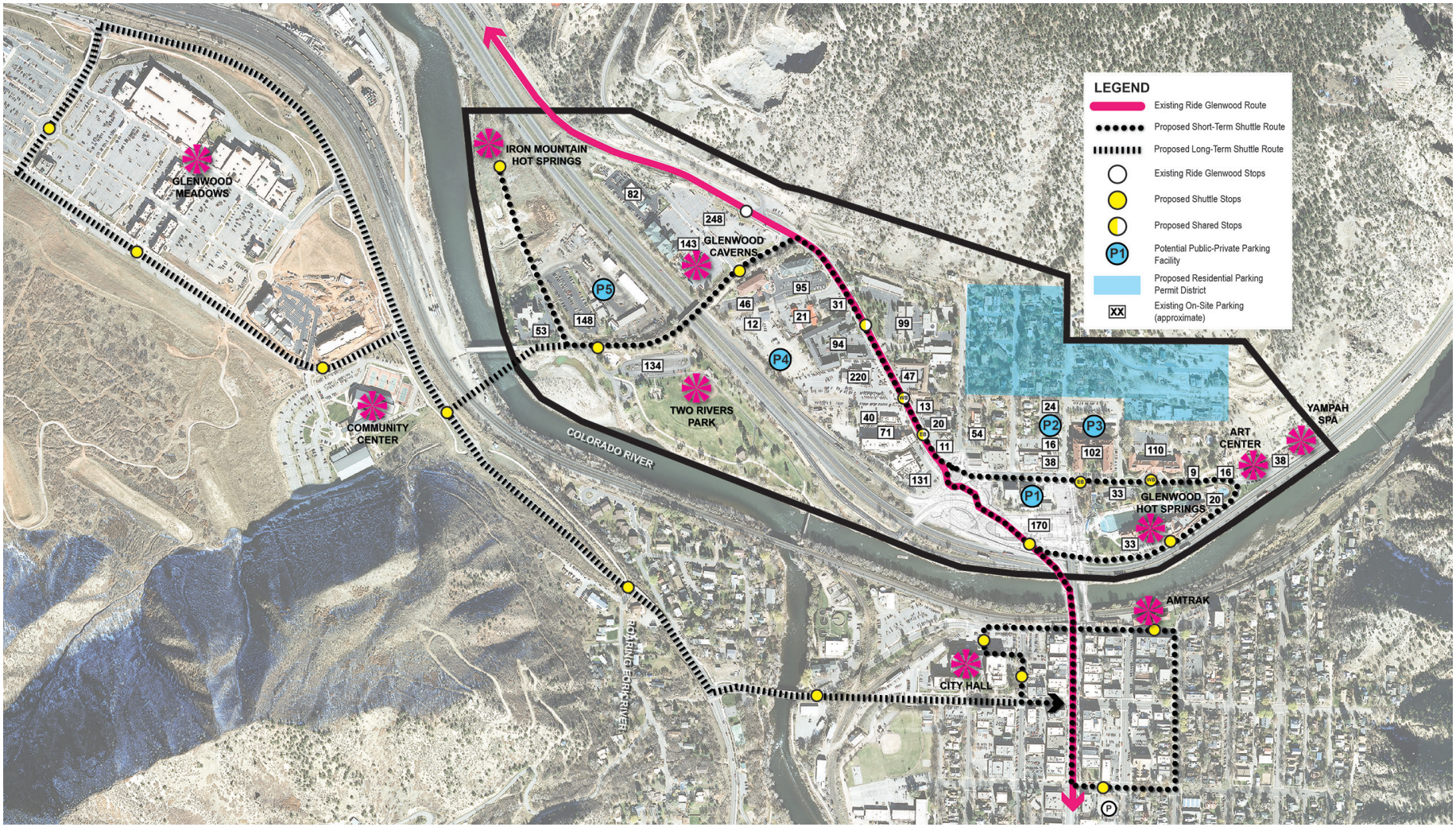


Figure 10 - Transit and Parking

PARKING

Currently, the study area lacks sufficient parking to serve existing uses, especially during the busy tourist season which is generally May through September. This is due to the small lot sizes, older buildings and infrastructure, and topography paired with existing zoning standards and lack of public parking. Providing public parking to serve multiple businesses and lessen the burden on local property owners and residents is desired. Providing public parking spaces would also free up additional developable land. Some suggested actions are listed below:

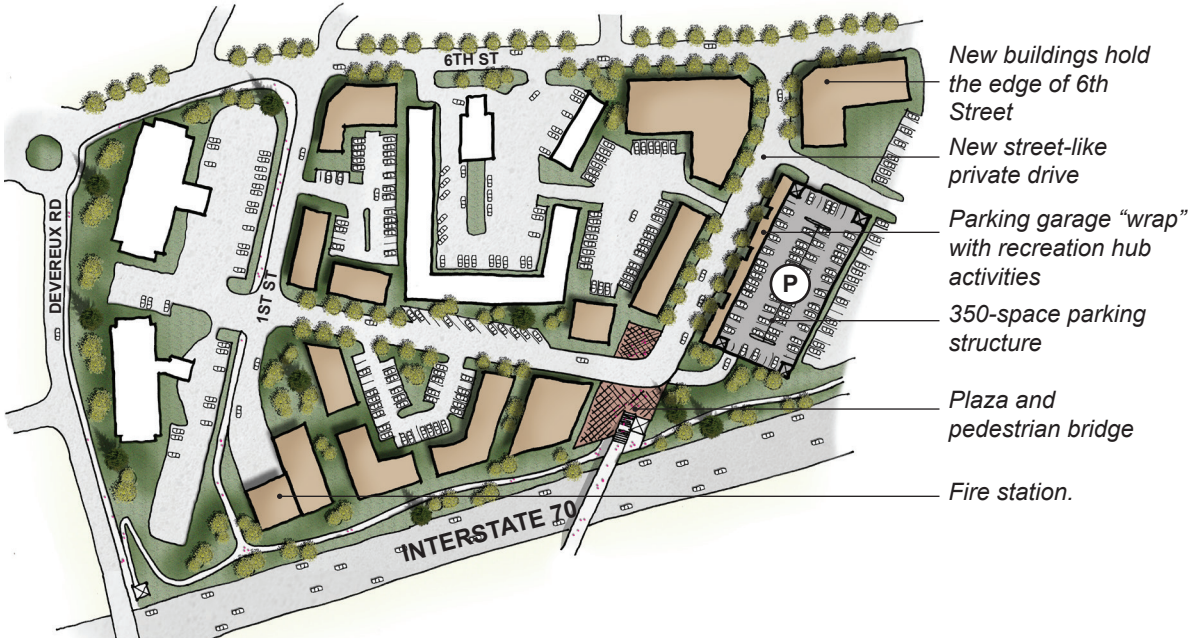
IMPLEMENT A PUBLIC PARKING STRUCTURE

A public parking structure (or structures) is a priority for supporting future redevelopment in the area, as well as to relieve existing parking pressure. Several potential locations are identified in Figure 10. This does not infer that five parking structures are feasible in this area, especially in the near term. Rather, they are shown as desired potential locations based on criteria such as: proximity to downtown and local destinations, service area, future uses, and available land.

All of the potential parking locations are shown on private land. This means that the City would either need to purchase the land in order to build a structure or partner with the existing land owner to jointly develop the structure. A joint partnership may be desired by property owners as a way to help fund their own redevelopment vision.

In particular, a structure labeled P4 in Figure 10 was considered a good location for a public parking structure, due to its proximity to and visibility from the interstate. This parking structure is envisioned as serving multiple purposes, including:

- **Public parking** to serve the 6th Street corridor as well as overflow parking for Two Rivers Park events.
- **A Park & Ride** for North Glenwood, which could be served by Ride Glenwood as well as regional transit services such as RFTA, CDOT's Bustang and Colorado Mountain Express.
- **Overflow parking for Hanging Lake** - with the current parking lot for Hanging Lake over capacity, a satellite lot with a shuttle is needed. This parking structure could be an ideal location for Hanging Lake parking spillover and transit service.
- **A Recreation Hub** - the parking structure could be "wrapped" with a Recreation Hub facility. Inside, kiosks from local tourist attractions could be available to provide a "one stop shop" for tourists to book activities. A climbing wall or other indoor (or outdoor) recreation facility could provide activities while people wait.
- **A Fire Station** - relocating the downtown fire station to North Glenwood has been discussed, as the downtown location is not ideal for these services. A fire station could be incorporated into the parking structure as well to provide an active civic use for the area. A North Glenwood location gives the fire department better immediate access to the interstate than the current 8th Street location. It would also help improve the department's response times to emergencies in Glenwood Canyon.



A conceptual plan rendering shows how a new public parking structure could be incorporated into a larger development and serve the entire 6th Street corridor, offering a "park once" strategy.

RESIDENTIAL PARKING PERMIT DISTRICT

In order to protect the residential neighborhood from spillover parking, the City should create a Residential Parking Permit District where parking would only be allowed for cars with designated stickers for certain hours. Currrently, this system is being implemented in some neighborhoods near downtown. The proposed area is shaded in Figure 10.

IN LIEU FEES FOR PARKING

The City should consider allowing "in lieu fees". These fees are paid by developers to the city when a property redevelops. The revenue is used by the city to create public parking spaces. Benefits include:

- **Flexibility** - Relieves developers from having to provide on-site parking thus giving them the opportunity to utilize valuable land area for building.
- **Shared Parking** - in lieu fees allow the city to take into consideration the peak parking demands of the various uses in the area. For example, an office and a bar would have different parking demands as they are used at different times.
- **Park Once** - providing shared, public parking in a single location encourages users to park once to visit multiple businesses, thus alleviating traffic congestion.
- **Better Urban Design** - parking requirements often result in surface parking lots servicing small buildings that cannot afford structured parking. By combining parking for multiple uses into one facility, it allows more developable land (and perhaps more sales tax revenue) to be created and fewer parking lots, which contributes more positively to a walkable, sustainable, and thriving district.

PAID PARKING

In the long-term, the City should consider creating a parking district to collect funds for parking as a source of revenue that could be used for maintenance and future parking growth. Although it might not seem feasible at the onset, as demand for parking grows, paid parking may become feasible.

Paid parking should start with on-street spaces, as there is a premium for convenience parking. This could occur along East 6th Street and along certain north-south streets between 5th and 6th. Paid parking in public structures could be feasible for special events in the short-term, and could expand into the high-season with free parking allowed when the demand is lower.

Paid parking would require a more detailed study. However, the City should be aware of the potential revenue generation for the future.

PARKING STRUCTURE DESIGN

The following general guidelines should be followed for parking structures (Refer to Appendix A for additional guidance):

- Utilize topography to mask the scale of the structure. In some locations (P1, P2, P3), there is opportunity for a two-level parking structure, with no internal ramps, which is less expensive.
- Design parking structures to be similar in mass, scale, style, and materials to existing, surrounding buildings.
- Parking structures should be extra sensitive in mass, scale, and architectural character if they abut residential properties. For instance, using a finer grain of detail and smaller scale is appropriate.
- Wrap parking structures with commercial uses whenever feasible. This will help activate the street and positively contribute to the community.



Parking structures should utilize the topography to mask the scale of the overall structure, like this parking structure in Rifle, Colorado.



Parking structures should be architecturally similar to their surroundings and "wrapped" with commercial uses whenever feasible.



A parking structure could be wrapped with unique architectural treatment and activities such as a rock climbing like "The Block" in Chattanooga, TN.

5. Streetscapes, Public Art & Signage

6TH STREET CORRIDOR PLAN

STREETSCAPE GOALS

The existing streetscape design for 6th Street was implemented in the 1980s and is outdated. The future vision for 6th Street is to become a destination for both residents and visitors by activating the street edge with desired uses such as shopping, dining and small public gathering spaces. The new streetscape should present a pedestrian-friendly, safe and welcoming experience with improved beautification including landscaping, lighting, public art, and other amenities that make walking pleasant and effortless. Traffic-calming features such as on-street parking, narrower drive lane widths, and landscaping will slow down cars. Bicycling will also be promoted with proper facilities to encourage the use of bicycles as a viable mode of transportation.

DEVOLUTION FROM CDOT

The entirety of 6th Street west of Pine Street is currently owned and maintained by CDOT and is categorized as a state highway. However, with the new I-70 interchange configuration, 6th Street from Pine to Laurel streets will be transferred to City of Glenwood Springs ownership in a process referred to as “devolution”. In the transfer, CDOT provides the City with a one-time payment to cover the costs of roadway maintenance over a 20-year period. The payment does not have to be earmarked for maintenance. In addition to devolving 6th Street between Pine and Laurel, this plan recommends devolution of Highway 6 from Laurel to Traver Trail.

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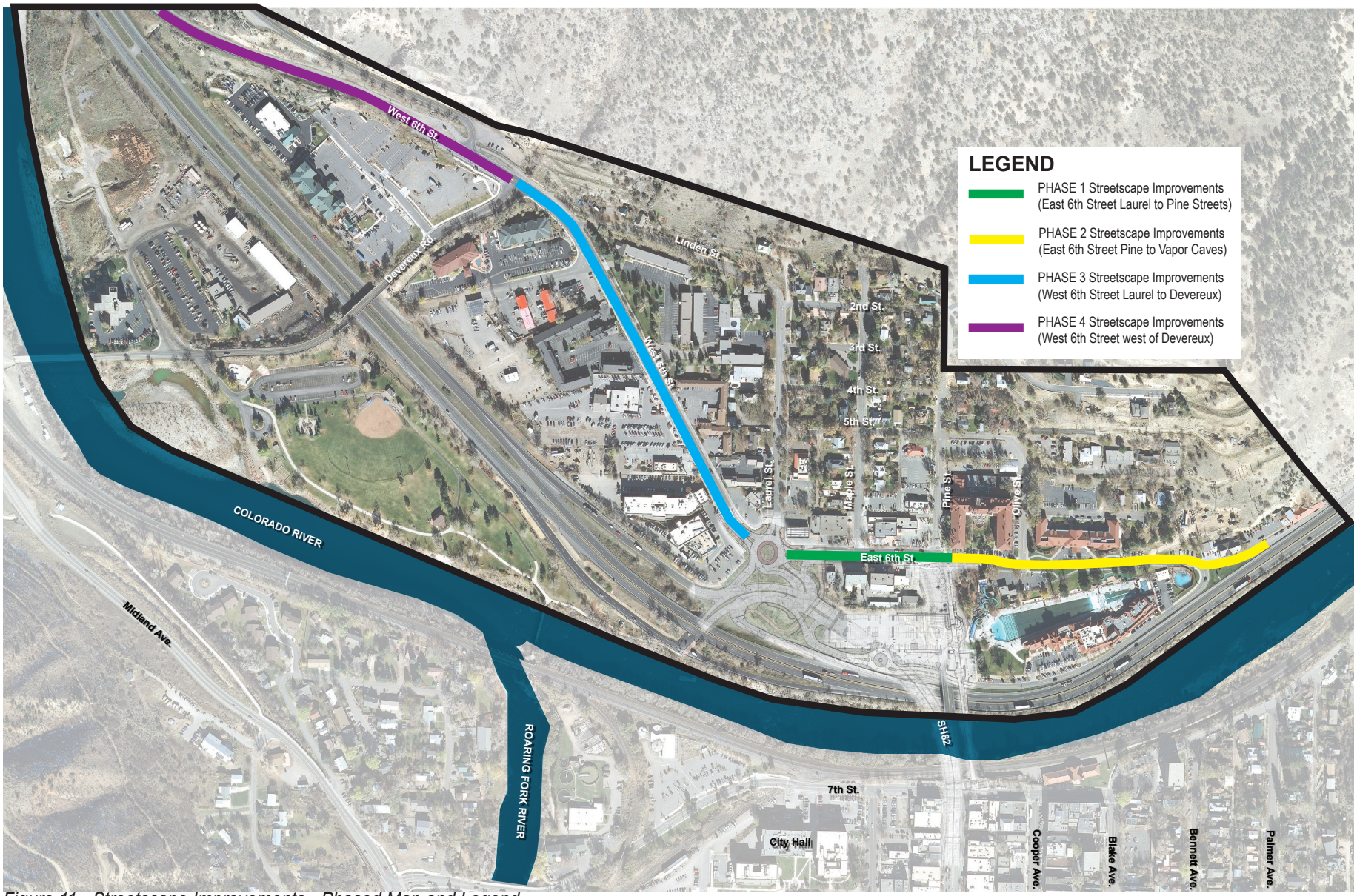


Figure 11 - Streetscape Improvements - Phased Map and Legend

STREETSCAPE PHASING

Major streetscape improvements are proposed for the entire 6th Street corridor from the Vapor Caves to West Glenwood. The following explain the anticipated phasing of improvements for 6th Street:

PHASE 1 IMPROVEMENTS

Phase 1 includes improvements to East 6th Street from Laurel Street to Pine Street (refer to Figure 11), including

- complete re-build of the street right-of-way, due to a decrease in traffic volumes once the new interchange is complete.

These improvements should be completed immediately following the construction of the new roundabout and Grand Avenue Bridge. Anticipated completion of this phase is by the end of 2018 (refer to Chapter 7 for more information).

PHASE 2 IMPROVEMENTS

Phase 2 includes East 6th Street from Pine Street to the Vapor Caves. This includes:

- continuing the same street configuration as Phase 1 in front of Hotel Colorado to Olive Street;
- minor improvements between Olive and River Drive to provide continuous sidewalks;
- intersection improvements at 6th and River Drive;
- moving the Glenwood Canyon Trailhead up to the intersection;
- new multi-use path along I-70 from the new trailhead to the regional trail;
- improvements to Yampah Spa parking area; and
- improved shared street/plaza in front of the Art Center.

These improvements should be completed immediately following Phase 1 improvements. Anticipated completion of this phase is by 2020. It is important to note that it will not be possible to undertake these improvements if this section of west 6th Street remains a state highway.

PHASE 3 IMPROVEMENTS

Phase 3 streetscape improvements includes West 6th Street from Laurel Street to Devereux Road, including:

- reconfiguration of right-of-way to provide a wide, multi-use path, or promenade" on the north side, narrower travel lanes, a wide sidewalk on the south side, new crosswalks, and the addition of street trees and landscaping, signage/wayfinding, transit stops, and other placemaking features.
- A roundabout is proposed at the intersection of West 6th and Devereux Road to better organize circulation in this area, making it safer and more efficient. It also serves as a significant gateway into the corridor from West Glenwood.

These improvements will enhance the character of the village core and should be implemented as soon as possible, but may only be feasible once the City takes over ownership and maintenance of the street from CDOT. Anticipated completion of this phase is by 2022.

PHASE 4 IMPROVEMENTS

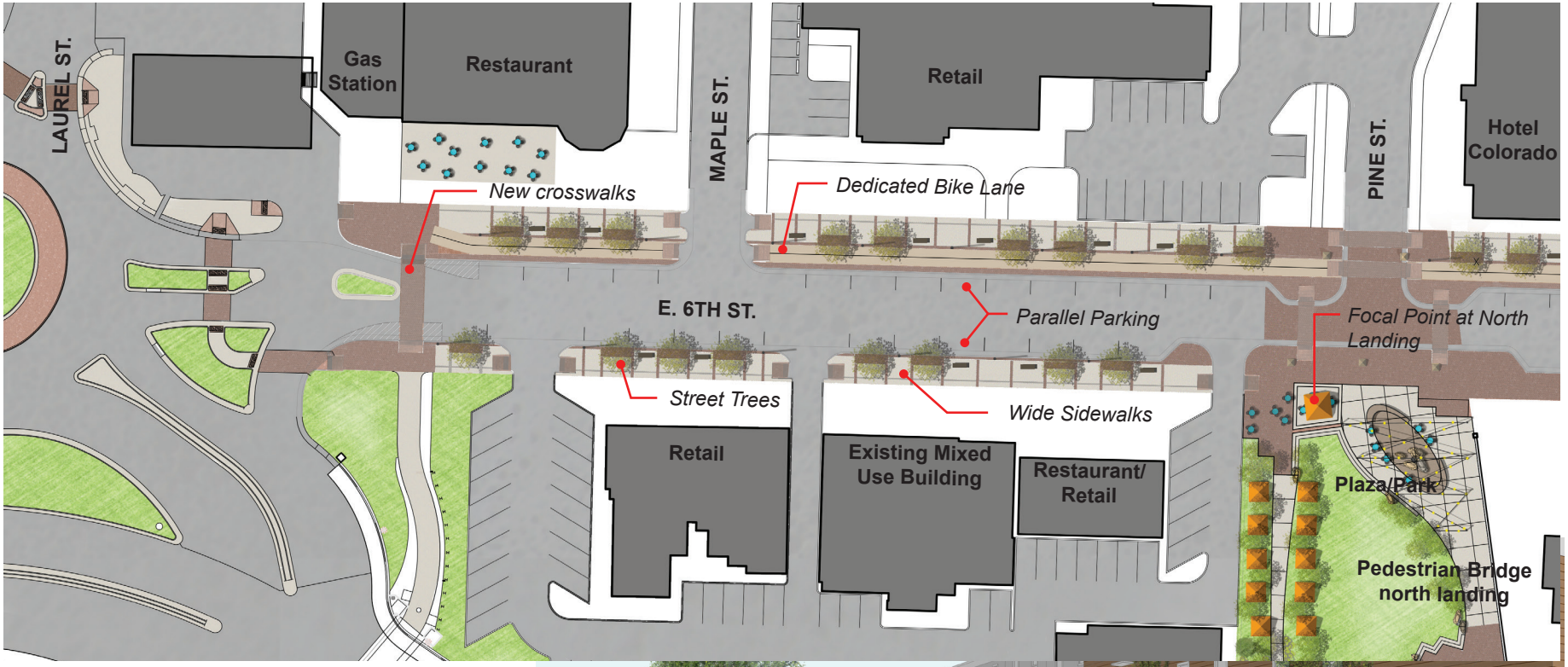
Phase 4 consists of implementing pedestrian and bike facility improvements to Highway 6 west of Devereux Road. Currently, a multi-use path exists along the north side of the road, but the pathway is not protected from the travel way and is often covered in gravel, making it unsafe to use. The proposed street section adds a curb and gutter with a landscaped median and 12-foot wide multi-use path.

These improvements will serve as a cohesive connection between North Glenwood and West Glenwood and make bicycling between the two areas a viable alternative. These enhancements should be pursued following the devolution of the street from CDOT. If improvements must be phased, this section should be last.

NOTE:

Street sections for all streets mentioned (phase 1-4) are provided in Appendix B. Please reference these for recommended improvements.

Phase 1 - East 6th Street between Pine and Laurel Streets:

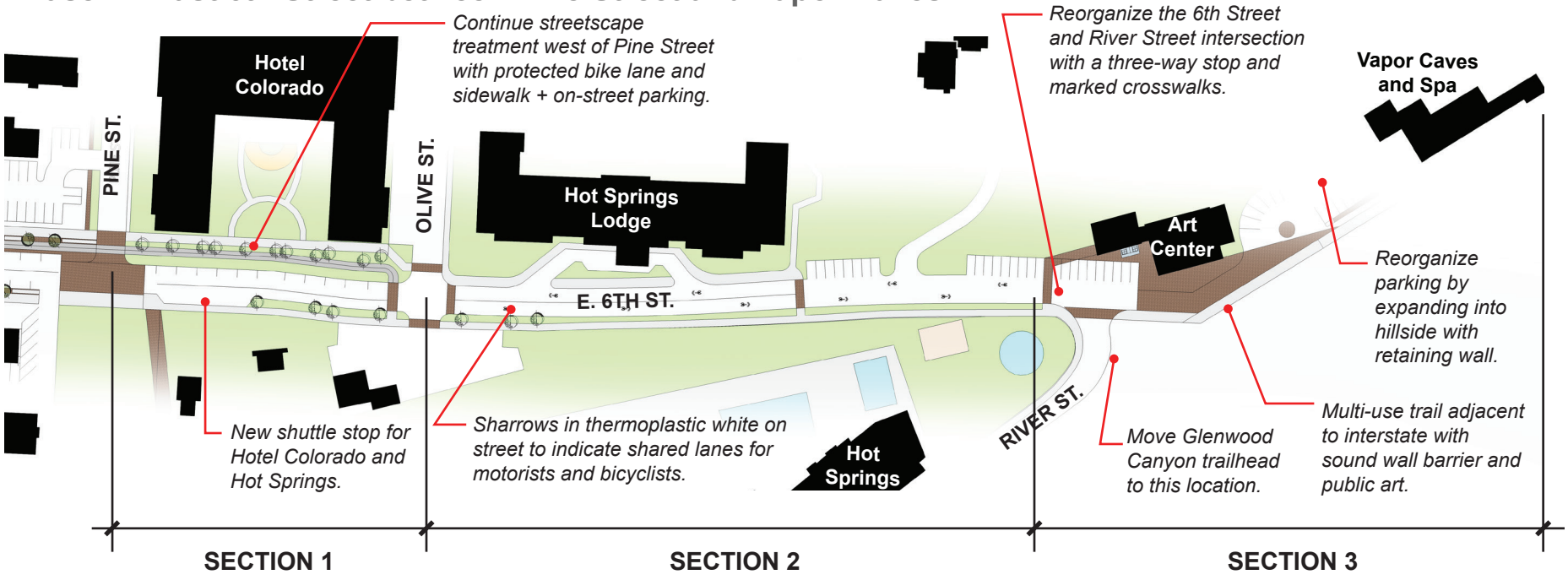


Plan Rendering for E. 6th Street from Pine to Laurel.



Perspective looking east from crosswalk in front of gas station. New development shown on south side of street is for illustrative purposes only - it is not a development proposal.

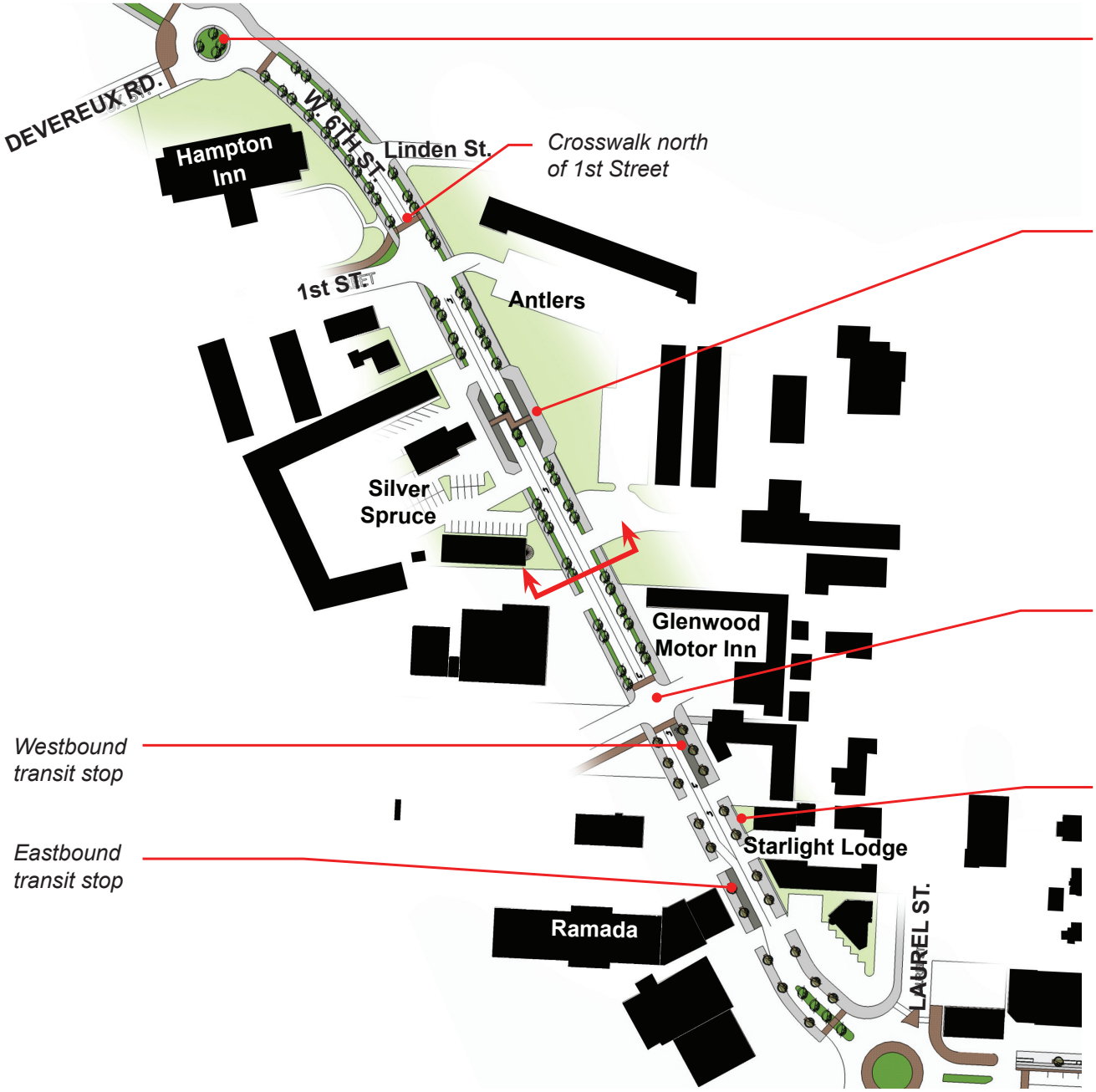
Phase 2 - East 6th Street between Pine Street and Vapor Caves:





Perspective looking east from 6th and North River streets illustrating relocated Glenwood Canyon trailhead, and new I-70 gateway entrance to the city with enhanced landscaping and public art.

Phase 3 - West 6th Street between Laurel Street and Devereux Road



New roundabout and gateway feature; move Traver Trail to intersect at roundabout.

Crosswalk north of 1st Street

Transit stop at Silver Spruce and Antlers (note: if public parking structure and transit hub is built, it would replace this stop).

Crosswalk and intersection at proposed 5th Street connection (future new street to west and pathway to east)

Westbound transit stop

Wider multi-use path (north side only)

Eastbound transit stop

NOTE:

Execution of streetscape improvements on W. 6th dependent upon devolution of Highway 6.

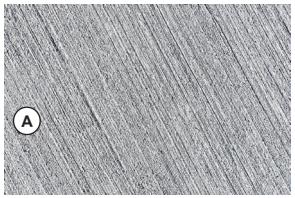
STREETSCAPE MATERIALS

Sidewalk improvements along 6th Street should include a higher degree of detail, as opposed to other streets in the study area. This is to highlight and unify the 6th Street corridor. The materials should be timeless and easy to maintain overtime.

The majority of the streetscape consists of standard gray concrete with a brush finish. In certain areas, a more detailed scoring pattern is proposed to further delineate space and function within the streetscape. Brick paver accent banding is consistent throughout the corridor from Pine Street to Devereux Road. This material is specified to use the same brick pavers from 7th Street in order to tie the two streets together aesthetically. The 6th Street pattern purposefully mimics the 7th Street pattern, but is the inverse (i.e. 6th Street uses brick pavers as the accent as opposed to 7th Street which uses brick as the primary surface material). A buff colored concrete is proposed for the protected bike lane on the north side of 6th Street from Laurel to Olive. The color differentiation will provide a visual contrast so that the bike lanes are not confused with the sidewalk. A bike symbol should also be painted onto the surface for further clarification.



The 6th Street pattern purposefully mimics the 7th Street pattern (above) but is the inverse.



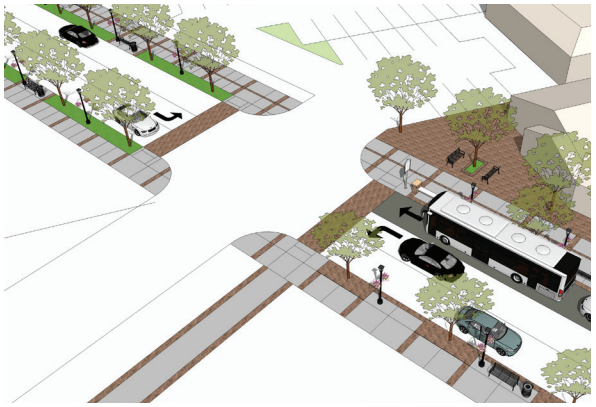
Standard Gray Concrete with a Brush Finish



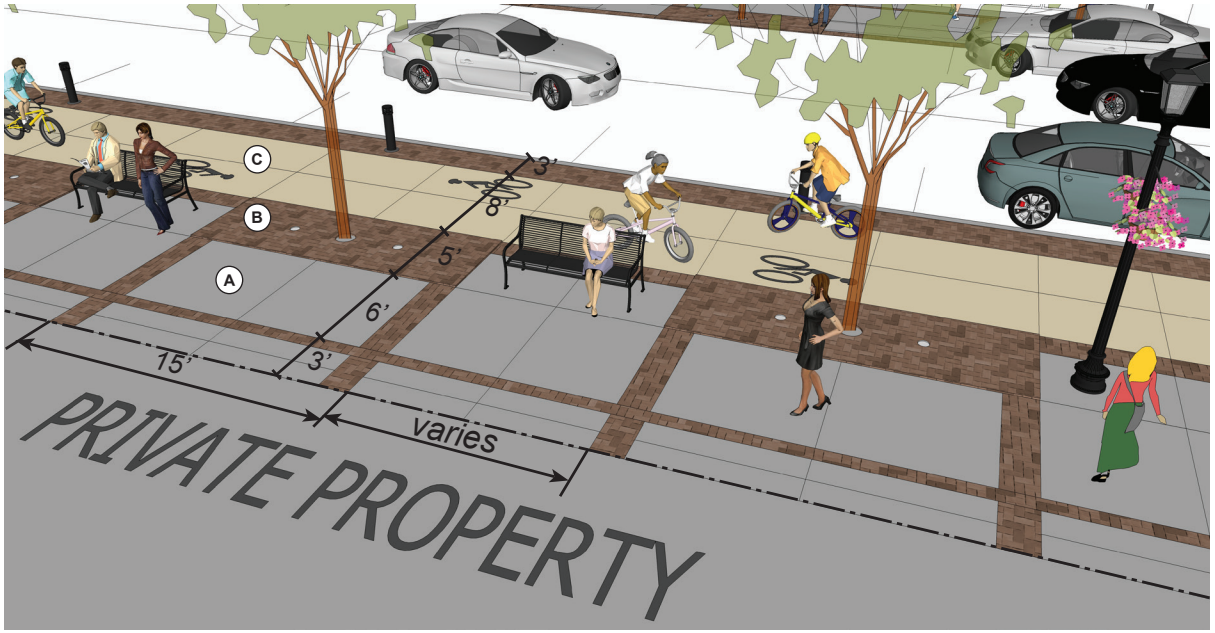
Endicott - Medium Ironspot No. 46 brick pavers (4x8) in herringbone pattern



Colored Concrete - Mesa Buff (Davis Colors)



West 6th Street paving pattern. Note the change at the future intersection in front of Rosi's where street trees transition from paver grates to tree lawns.



East 6th Street paving pattern

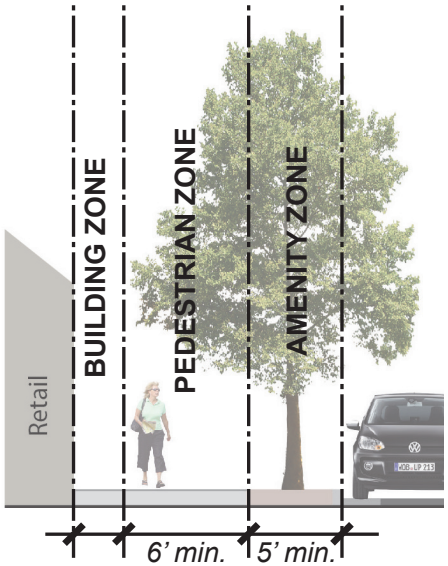
STREETSCAPE KIT OF PARTS

The streetscape "kit of parts" will tie the corridor together aesthetically by using black, powder-coated metal as the consistent color/material. The matte black color also contrasts well with the horizontal material pallette. Each of these elements should be placed within the "amenity zone" of the sidewalk as shown in the illustration below.

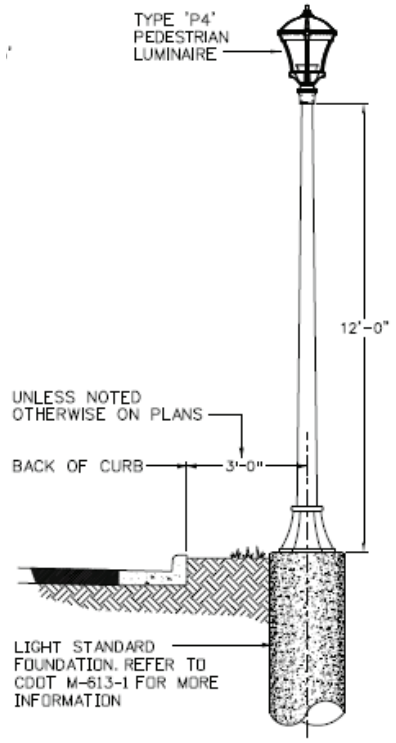
LIGHTING

New pedestrian lighting should match the light fixtures on the new Grand Avenue pedestrian bridge (see excerpt at right from lighting package). Bollards are also planned to further delineate space and to add ambient lighting, especially at the intersection of Pine and 6th and along the protected bike lane.

Pedestrian lights should be spaced approximately 40-feet apart, but no more than 75-feet.



6th Street streetscape area should be split into three "zones" whenever feasible.



The pedestrian lighting will be the same as is being used on Grand Ave. pedestrian bridge.



Architectural Area Lighting - Providence Medium LED lamp



LandscapeForms "Annapolis" Bollard - matte black powder coated metal

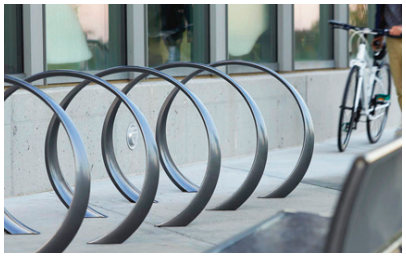
FURNISHINGS

Benches and trash receptacles should utilize existing city specifications for consistency and efficiency. Bike racks should be simple, sleek, timeless, functional, and vandal-proof.

Within the Village Core, two benches per block face is appropriate (i.e. eight benches between Pine and Laurel). Outside the Village Core, benches should be spaced a minimum of 75 feet apart. Provide one trash receptacle per block face, or a minimum of 300 feet apart. Bike racks should be strategically located to be convenient for bike traffic.



Landscape Forms Chase Park 40 gallon trash receptacle in black powder coated steel with modified bear resistant top (or other similar bear resistant style).



Landscape Forms 35 Loop Bike Rack



Landscape Forms Plainwell Bench with Ipe wood and black metal.

LANDSCAPING

A consistent landscaping treatment should be applied throughout the corridor. Street trees are desired to "soften" the streetscape and provide shade in the summer months. Another consistent landscaping treatment is the use of annuals in hanging baskets from the new pedestrian light fixtures, a feature designed to give 6th Street corridor a unique character. This landscaping treatment will be unique to North Glenwood and help contribute to it's identity.

STREET TREES

Street trees should be spaced approximately 30 to 35 feet apart and shall be planted with a 3-inch caliper. There are two conditions for planting street trees along the corridor:

- **Paver Grates** - this system includes a 5' x 15' tree pit with a suspended metal grate for placing brick pavers upon. This system allows water to permeate through the pavers into the soil and provides ample air for healthy tree growth. This system should be applied in the Village Core area.
- **Tree Lawn** - this system includes a 5' min. tree lawn. The lawn area could include sod or low native grasses and shrubs. This condition applies to everywhere except for the Village Core.

Preferred street tree species include Honeylocust variety, Littleleaf Linden, Japanese Lilacs and non-fruit bearing trees like Cleveland Select or Callery Pear. Others may be used as accents or for special circumstances.

HANGING BASKETS

Hanging flower baskets are to be applied to the lighting fixtures throughout the 6th Street corridor. A flexible fixture that allows hanging baskets or banners to be applied should be considered so that when flowers are not appropriate, banners could be hung instead.



Hanging flower baskets are to be applied to the lighting fixtures throughout the 6th Street corridor.



The Honeylocust variety is currently present on the corridor and is preferred for new street trees.

OTHER LANDSCAPING

Private properties are encouraged to contribute to the landscaping of 6th Street with planters or other moveable landscape treatments. These elements should be placed in the "building zone" and would be owned and maintained by the business or property owners. They should be similar in scale, color, material, and style as the proposed streetscape kit of parts.



Businesses on 7th Street have implemented planters that also serve as enclosures for cafe seating.



Planters adjacent to storefronts contribute to the landscaping of 6th Street.



Planters would be owned and maintained by the business. Planters should be similar in scale, materiality, and aesthetics as the proposed streetscape kit of parts.

PUBLIC ART

Public art contributes to a unique identity and is encouraged throughout the 6th Street corridor study area. Art pieces should be strategically placed for high visibility. They may be located along the street, mixed in with other streetscape elements, or in dedicated areas such as parks and plazas. They may be traditional, functional, or whimsical - but they should be scaled appropriately for the environment in which they are situated. For example, larger exhibits are more appropriate in wide-open spaces such as parks whereas smaller, more human-scaled exhibits are more appropriate within the streetscape and adjacent to buildings.

A new public gathering place proposed at the intersection of 6th and Pine, adjacent to the new pedestrian bridge, is intended to feature public sculpture. A rotating sculpture exhibit is proposed for the southwest corner of the park in an “art walk.” These pieces will be displayed on stone slabs so that when there is not an art piece present, the stone slab may serve as a bench. Additionally, a large, prominent, focal sculpture is proposed in the public gathering space near 6th Street. The sculpture will serve a dual purpose - as public art and a unique climbing feature for children.

The City should work with the Art Center and commission local artists whenever feasible for permanent sculptures or exhibits. The art walk is intended to be a dedicated space for local artists as well. Other, temporary art exhibits may also be considered for seasonal draw or special occasions.



A teddy bear sculpture is planned as a focal point for the 6th Street Park as an art piece as well as a play area for kids.







Public art may be incorporated into streetscape elements such as benches.





An art walk is proposed for the southwest corner of the park. Sculptures will be placed on large slabs of stone. When art pieces are not present, they will serve as additional seating areas.



This play on street signs is located in front of the Aspen Art Museum.



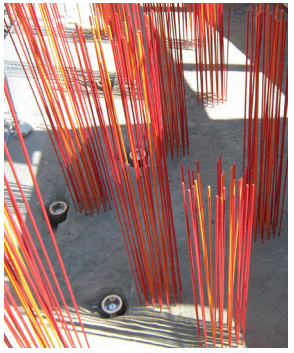
A temporary “pink balls” exhibit occurred in Montreal with pink balls strung on lines and hung over the street.



Public art can be whimsical.



Larger exhibits are appropriate in parks.



Colorful exhibits are eye catching.

SIGNAGE

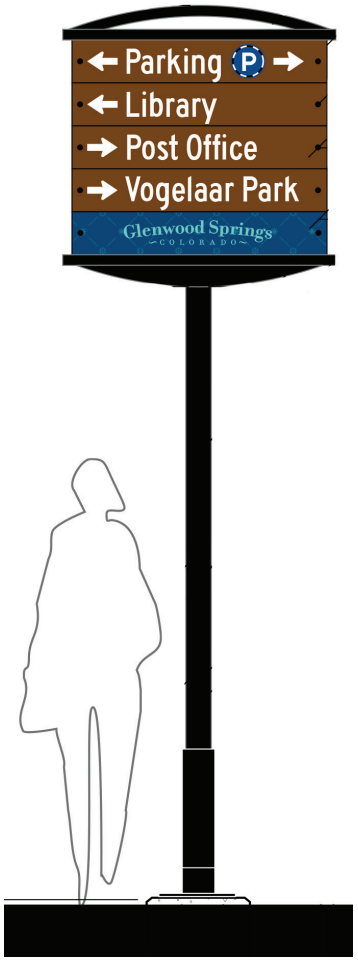
Figure 12 calls out general placement and messaging for new wayfinding signage for the 6th Street corridor. Signage should follow the City's existing Wayfinding Sign Program Standards Manual. There are seven sign types identified for the corridor:

- Type A1 - Primary Vehicular Directional
- Type B2 - Secondary Vehicular Directional
- Type F1 - Parking Lot Directional
- MUTCD - Vehicular Safety/Regulatory
- Type G - Pedestrian Directional
- Type H - Pedestrian Directory
- Type E1 - Park Identification Sign

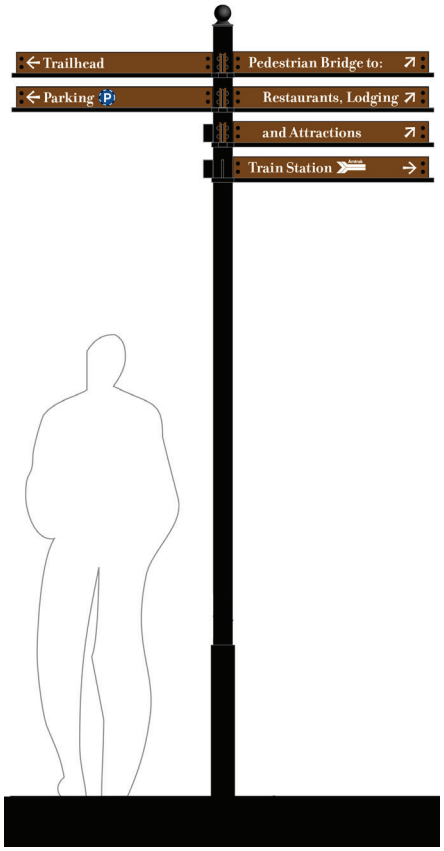
Types A1, B2, MUTCD, and G include preliminary messaging for the signs. Other types include general placement. Further development of a signage program for the corridor will be needed following adoption of this plan.



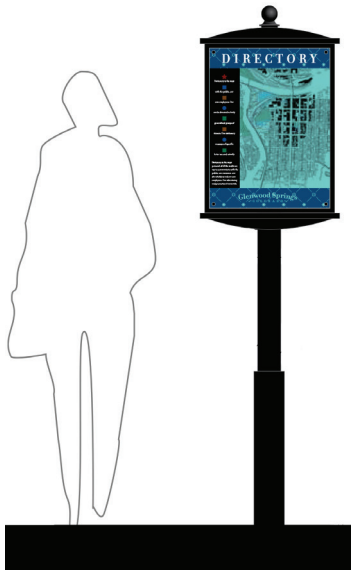
The backs of signs have a custom graphic that make them appealing to look at, even from behind, and call out to passersby that there is messaging that might be of interest



Example of sign type A1 - Primary Vehicular Directional



Example of sign type G - Pedestrian Directional



Example of sign type H - Pedestrian Directory

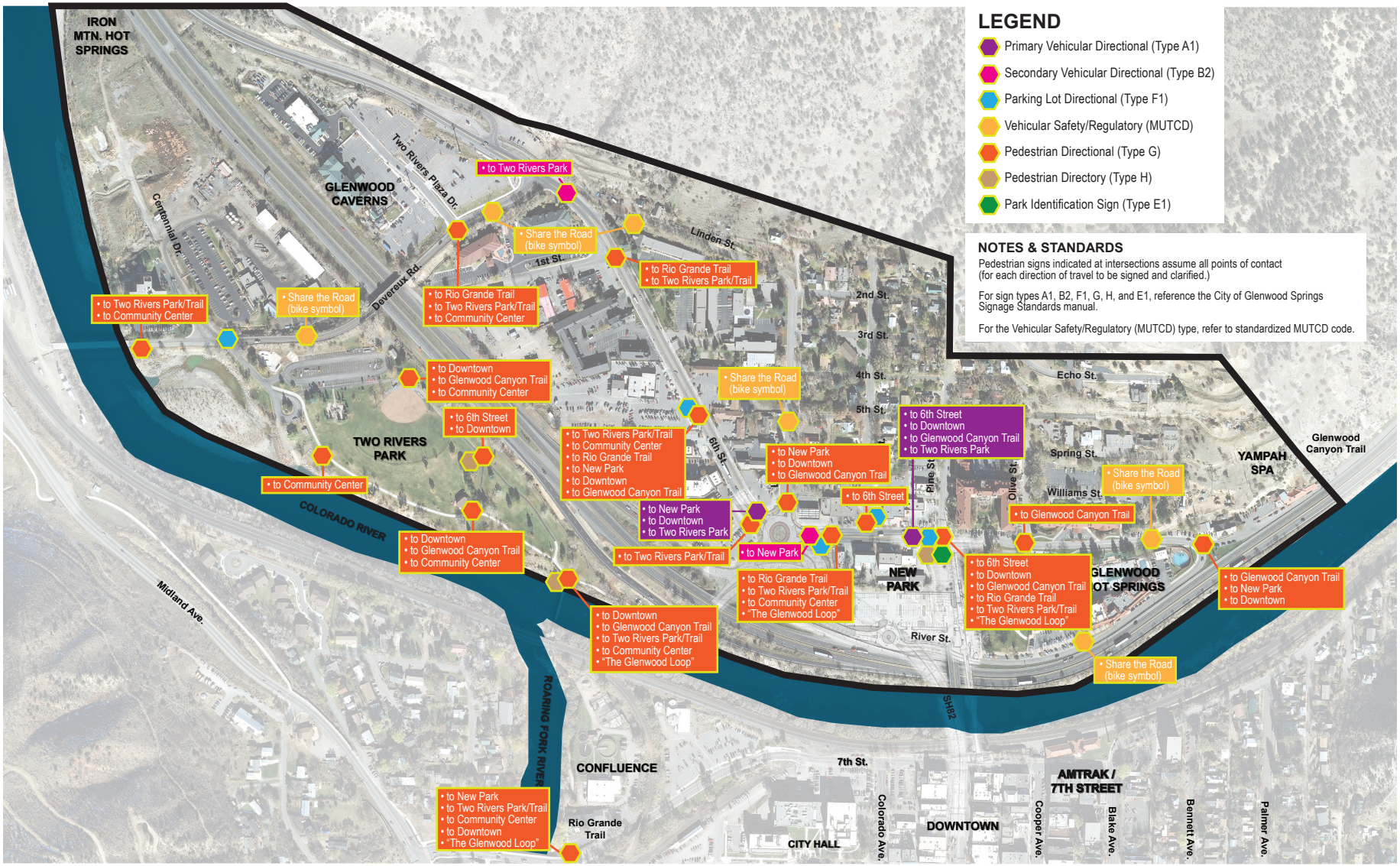


Figure 12 - Wayfinding and Messaging

6. Parks & Open Space

6TH STREET CORRIDOR PLAN

PARKS AND OPEN SPACE GOALS

Currenty, **Two Rivers Park**, the City's largest regional park, is the only public park in the study area. It includes a band shell, baseball field, boat ramp, paved multipurpose trail, skate park, sculpture memorial, and public restrooms. One of its greatest amenities is its half-mile of frontage along the Colorado River. The park is highly active in summer months with boating activities, outdoor concerts and special events, but it could use improvements to restore the river bank and to add enhancements that better connect the park and its users to the river.

Other open space within the study area, includes a few, large landscaped areas that are located on private property. These spaces are good examples of utilizing private property to provide semi-public gathering areas:

- **Antlers Best Western** has a large, green space along 6th Street. This park-like setting includes a grassy area with shade trees and a large bronze sculpture of a moose in center as a focal point..
- **Hotel Colorado** at Pine and 6th includes a large courtyard that serves as a semi-public space. The courtyard is landscaped and includes pathways from the street to the hotel, a veranda and an outdoor cafe.. This space is especially vibrant during the holidays when the hotel and trees are adorned with festive lights and people gather to watch the annual fireworks display.

Primary goals for improving parks and open space in the study area include: implementing a new public park or gathering place at the intersection of Pine and 6th Streets adjacent to the new pedestrian bridge; improving Two Rivers Park to better engage the river; and encouraging private property owners to create landscaped areas around their properties.

IN THIS CHAPTER

PARKS AND OPEN SPACE GOALS 55

NEW 6TH STREET PARK OR PLAZA 56

TWO RIVERS PARK IMPROVEMENTS 61

PRIVATE OPEN SPACE OPPORTUNITIES 62

NEW 6TH STREET PARK OR PLAZA

LOCATION

Immediately adjacent to the new pedestrian bridge north landing is a 16,300 square foot area that was the former landing of the old vehicular Grand Avenue Bridge. A key focal point, this city-owned space can be converted, in whole or in part, to a public park or plaza that would provide a much needed gathering space to serve North Glenwood residents and visitors.

The new park will be at the crossroad of major pedestrian and bicycle routes which connect the 6th Street corridor with the Glenwood Canyon Trail, downtown and the Glenwood Loop, a new trail recommended in this plan. and future Glenwood Riverfront Loop, as well as to downtown Glenwood Springs via the new pedestrian bridge.



Figure 12 - Concept Diagram showing an option for a full-sized park covering the entire 16,300 square foot area.

CONCEPT

This park/plaza will serve as a focal point and gathering place for visitors, residents, and people coming to and from downtown. The pedestrian bridge will provide a seamless and comfortable pedestrian experience from downtown to North Glenwood.

The concept for the park/plaza includes the following main objectives:

- **Connect seamlessly with the pedestrian bridge.** There should not be a hard line where the bridge ends and the park/plaza begins. Rather common elements and materials will blend the two together.
- **Expand the park/plaza into the street with a "piazza."** The intersection of 6th and Pine will integrate high-quality materials to accentuate it as a special place and to draw attention to the area. It could also be closed off for special events and truly serve as an extension of the park/plaza.
- **Activate the space!** Existing and future buildings surrounding the park or plaza should be designed to serve a mix of uses with active ground floors, such as coffee shops, cafes, restaurants or retail businesses and with upper floors devoted to housing. Small "plazas" at each of the corners of the 6th & Pine intersection are indicated on the diagram above. This simply means that when these areas redevelop, any future building should include active ground floor uses that spill outside to overlook and provide "eyes" on the park/plaza. This could include cafe seating, a small plaza with seating areas, or an expanded sidewalk area with outdoor retail or another type of active use. Housing on upper floors also would help add to the vibrancy and provide extra "eyes on the park"
- **Serve as a gathering place.** A large kiosk that includes a map of the area should be included in the park near 6th Street. It could also include advertisement space for nearby businesses. This space should serve as a place for people to meet up and make decisions about where they want to go. An iconic art piece or sign is also appropriate.



In the future, mixed use buildings with active ground floors, such as coffee shops, cafes, restaurants or retail businesses are encouraged to activate the park.



The intersection of Pine and 6th could be closed off for special events and serve as an extension of the park/plaza.



An iconic art piece or sign is appropriate to serve as a logical gathering, or "meet up" place. In Fort Collins, people gather around The Bear.



The bridge should blend into the park/plaza and the then into the street. New mixed use buildings should activate the park. Image above depicts a full-sized park option.

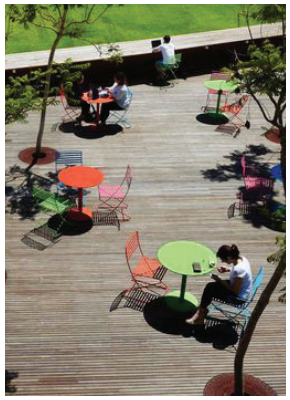
PROGRAMMING

For the park or plaza to be successful, it is essential that certain programming elements are included to keep the area active and vibrant throughout the year. This plan recommends:

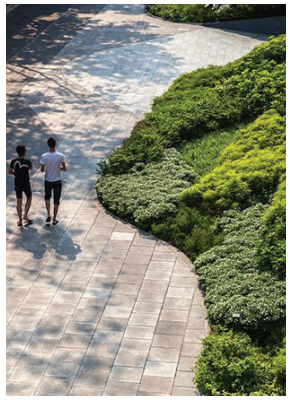
- Organic shapes
- Informal children's play area
- Signature sculpture as "go to" element
- Open lawn area for special events or lounging
- Place for festival tents
- Native landscaping integrated into southern slope
- Landscaped buffer and low site wall on west property line
- Stage area for informal performances
- Overhead festival lighting
- Steps that serve as extra seating areas
- Hanging flower baskets on light poles
- Bistro tables and chairs
- Interpretive signs about Glenwood history
- Bike racks
- Bear resistant trash receptacles, dog bag stations
- Drinking fountain
- Electrical and water service for events and maintenance
- Public art and wayfinding signage
- Natural boulders and materials
- Subsurface stormwater drainage
- Interactive water feature



Steps that serve as extra seating.



Bistro tables and chairs.



Organic shapes.



Informal play area.



Stage area for informal performances.



Open lawn for special events or lounging.



Overhead festival lighting.



Natural boulders/materials.



Public art.

FULL PARK OPTION

Working closely with Parks Department staff, stakeholders and the community, this design option utilizes the entire 16,300 square foot area that was once the north landing of the Grand Avenue Bridge. This plan, pictured at right, shapes the space to become a special gathering place for North Glenwood residents and visitors. A description of the major park elements follows:

1. **6th & Pine Intersection:** this is a traditional street intersection with sidewalks, curb and gutter. It is designed to be a visual extension of the park and could be closed occasionally for special events.
2. **Park Plaza:** the north end of the park serves as a "gateway" to the park and a transition from the "Village Core" district. This area includes a kiosk for people to orient themselves and make decisions. It also includes streetscape elements such as pedestrian lights with hanging flower baskets, benches, and a combination of boulders and planters near the street edge.
3. **Informal Stage:** a slightly elevated space for informal performances is located in the northwest corner. It will also include bistro tables and chairs for socializing or having a picnic.
4. **Children's Play Area:** the oval shape in the northeast corner of the park includes boulders and a unique sculpture for kids to play on. Bistro tables and chairs will surround the play area, as well as two low walls on either end of the oval that will serve as additional seating. This area also includes overhead festival lighting, integrated tensile shade structures, and an interactive water feature.
5. **Promenade:** the wide sidewalk and tree area on the west edge of the park serves as a place for tents to be set up during festivals or celebrations. Trees are spaced appropriately so that tents can fit in between them and electrical outlets will be incorporated into the low wall that defines the west edge of the park. The majority of the time, when tents are not present, these spaces will serve as additional leisure seating areas.
6. **The Lawn:** the lawn area serves as a flexible space for the park. It will be an area for people to hang out and relax in the grass. It will also be an area for events, both organized and informal, in the park such as: movie nights, yoga in the park, art classes, and more.
7. **Art Walk and Play Area:** the southwest corner of the park, at the terminus of the promenade, includes a "landing" area with seating and sculptures as well as an additional play area for children, which will help activate this area of the park. A pathway, or "art walk" wraps around the children's play area which will include a rotating sculpture exhibit. Other children-related events like a story walk could also occur in this space.
8. **Landing:** this area is where the bridge "lands" and the park begins. This expanded space is intended to serve as a second "gateway" with a plaza with steps down to the lawn. It also is where the steps down to the Hot Springs Pool and parking area are located. A sign will be located here to direct pedestrians.
9. **Sloped Area:** this area slopes down to the retaining wall that CDOT will put in as part of the parking lot construction. It includes native seed planting and trees, as well as some large stone slabs that reinforce the "edge" of the park.
10. **Pedestrian Bridge:** the new pedestrian bridge will continue to downtown Glenwood Springs.



Conceptual plan rendering of park.

ALTERNATIVE STUDIES

Alternative design studies were explored due to the overwhelming positive reaction to the conceptual 3-story mixed use building originally shown as a "future" development scenario to activate the park on the western edge. Sparked by City Council's curiosity, the design team explored alternative options for establishing an activating land use within the park/plaza boundaries on public property:

- **OPTION 1:** A 2-story mixed use corner building with ground floor retail and upper floor lofts is shown fronting onto the park and 6th Street. Behind that building, 4 townhomes are placed fronting the park to provide additional housing and "eyes on the park". The design was modified to respond to the more formal edge with a mixture of hard lines and the original natural forms. Program elements remain, except for the informal stage on 6th Street. This option does not allow for on-site parking, as there is no room for access.
- **OPTION 2:** A 1-story retail kiosk building is located fronting the park/plaza and 6th Street. This allows for an active use within the space while still providing ample room for a number of amenities and active uses. Refinements were made to the design to respond to this alternative configuration.

NOTE:

The feasibility of these options will be dependent upon the ability to relocate a number of utility lines which criss-cross the property. This includes water, sewer, electric, and high-pressure gas.



Original park design with existing conditions shown to the west.



Original park design with future conditions showing the existing three buildings as redeveloping into a mixed use building. Note this is a conceptual proposal and did not involve input from the property owners.







Option 1 shows a 2-story mixed use building with townhomes fronting onto the park/plaza to activate and to provide "eyes on the park."



Option2 shows a 1-story retail kiosk building to activate the space and provide ample amenities and activating uses. Refinements were made to the original, larger design to respond to this smaller alternative configuration.

TWO RIVERS PARK IMPROVEMENTS

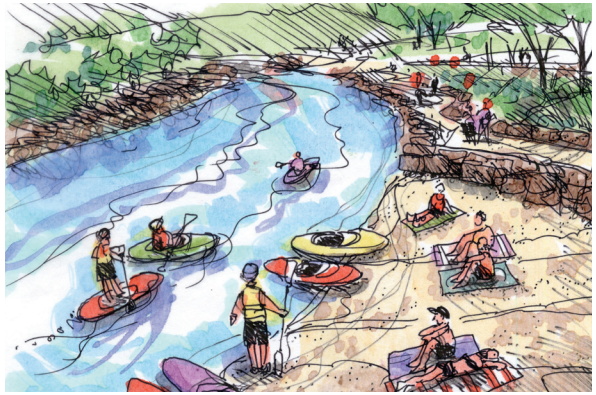
Two Rivers Park is a wonderful amenity for North Glenwood, and the entire city. In the summer months, it is highly active with river sports activities and festivals and events in the park. However, there is a desire to better connect the park to the river and celebrate the Colorado River.

Concepts for enhancements to Two Rivers Park include:

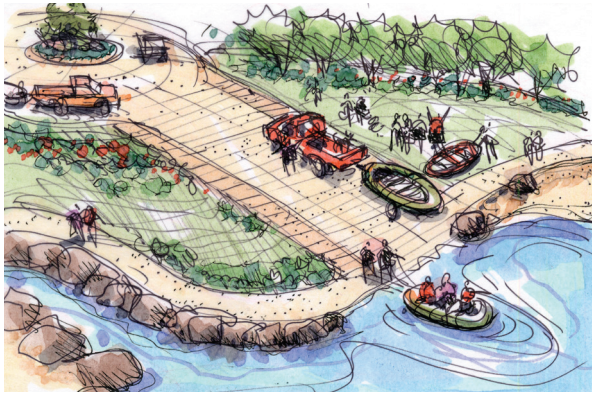
- An island **beach**
- Improved **boat ramp**
- A **riverwalk trail** along the river
- **Picnic areas** along the trail.
- In-stream **water park/surfing zone**
- Improved Two Rivers Park open space area for **special events** with new **pedestrian bridge** over I-70.

NOTE:

A separate design charrette including some members of the corridor plan design team assisted Parks and Recreation department with a visioning exercise to further develop concepts for Two Rivers Park. The sketches on this page are from that exercise.



Surfing zone and beach area.



Improved boat ramp.



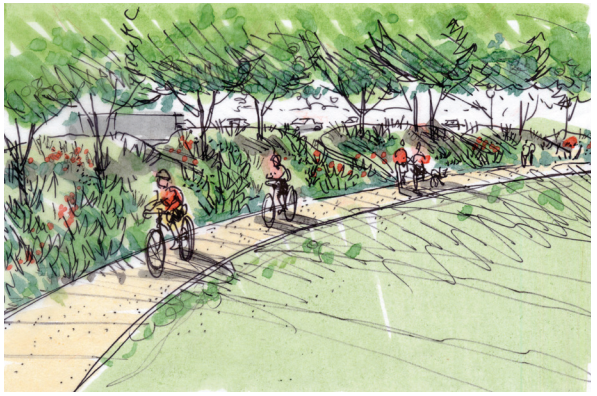
Riverwalk trail and overlook.



Boulder seating area to watch kayakers and rafters.



Picnic areas along trail.



Multi-use path connecting to Rio Grande Trail.

PRIVATE OPEN SPACE OPPORTUNITIES

Other, small open space opportunities on private property should be encouraged throughout the study area. Semi-public spaces on private property help activate and enliven the public realm especially if they occur in highly visible places such as along 6th Street.

A primary concept for enhancing the identity of 6th Street is for buildings to “open up” to the street and blend the outdoors with indoors. As properties redevelop, they should consider opportunities for blurring the line between public an private space. For example, as parcels redevelop, new buildings should be designed with large, traditional storefront windows and should include small entry plazas, courtyards, cafe seating areas, public art or other similar active spaces along the street edge.



Covered, outdoor gaming areas that can be seen from the street and sidewalk blur the line between public and private.



Cafe seating on both sides of the street provide unique experiences and activate the sidewalk.





Small seating areas or gathering spaces adjacent to a building are encouraged.



Small, semi-public plazas with landscaping and seating areas are a pleasant respite to a streetscape experience.



Opening up to the street with large garage doors and seating areas help activate the sidewalk and public realm.

7. Implementation

6TH STREET CORRIDOR PLAN

USING THIS PLAN

The City shall use this Plan as a way to carry out the vision for the 6th Street Corridor, as outlined in the past six chapters. Implementation measures include both administrative tasks as well as capital infrastructure projects. Funding sources and participation will be varied - from within the City, to quasi-governmental entities such as the Downtown Development Authority and/or a new authority, to private developers. Focusing on projects that can be leveraged through partnerships and synergies - where the priorities of this plan are met, as well as other city-wide priorities - is encouraged.

As stated in Chapter 1:

- **The city will use the plan as a way to prioritize public investment** in infrastructure such as streets, parking and utility upgrades, as well as placemaking elements like streetscapes, plazas and park improvements.
- **The city will also use the plan as a tool to evaluate future development proposals** of properties within the project area.
- **Landowners contemplating new development or redevelopment should consult this plan** to ensure that development concepts are in-sync with the vision and goals of this plan.

IN THIS CHAPTER

USING THIS PLAN 63

MONITORING SUCCESS 64

HOW TO USE THIS CHAPTER 64

LAND USE AND COMMUNITY AND ECONOMIC DEVELOPMENT PROJECTS 64

INFRASTRUCTURE PROJECTS 65

INFRASTRUCTURE PROJECTS, CONTINUED 66

MONITORING SUCCESS

The true success of this plan will be realized through implementation. Therefore, the plan shall be continually monitored to ensure projects are properly positioned for funding and to keep priorities on track. Note that there are many factors in play, and priorities may change over time. While flexibility to respond to changes is necessary, projects should always seek to respond to the vision and goals, or "spirit", of this plan.

A 6th Street Corridor Task Force should be organized, which could include members from the Steering Committee for this plan, in addition to the DDA and City staff and leadership. This task force should meet quarterly to check in on progress made, both from the private and public sectors, and discuss where partnerships make sense. This will also ensure transparency and inclusion.

HOW TO USE THIS CHAPTER

This chapter includes a master list of projects to implement, which are listed in a user-friendly spreadsheet. The spreadsheet is divided into "Administrative" and "Capital" projects, and projects are listed in order of their priority:

- Short-Term Projects (0-5 years)
- Mid-Term Projects (5-10 years)
- Long-Term Projects (10+ years)

NOTE:

Short-term projects (0-5 years) will begin after the Grand Avenue bridge project is expected to be completed, mid-year 2018.

LAND USE AND COMMUNITY AND ECONOMIC DEVELOPMENT PROJECTS

ACTION	TIMING	POTENTIAL PARTNERS	FUNDING
Rezoning			
Rezone applicable properties within study area to coordinate with Development Code re-drafting	Short-term	DDA; Community Development	General Fund
Historic District Formation			
Meet with property owners within proposed historic district.	Short-term	Historic Preservation Commission; Frontier Museum; Community Development	N/A
Constract with consultant to prepare National Register District nomination, pending approval from majority of property owners.	Mid-term	Community Development	State Historical Fund Grant / General Fund
Taxing District			
Contract with consultant to evaluate formation of a new taxing district such as a BID or GID; evaluate implementation of an Attractions Tax, or other mechanisms to finance capital improvements within the study area; to evaluate extention of the Tax Increment Finance District.	Short-term	DDA; City Manager; Community Development; Finance; Business/property owners	General Fund

INFRASTRUCTURE PROJECTS

ACTION	TIMING	POTENTIAL PARTNERS	POTENTIAL FUNDING
Devolution of 6th Street			
Devolve Laurel to Pine.	Short-term	Public Works, Engineering, City Manager, DDA, City Council, CDOT	N/A
Assess Laurel to Devereux Road maintenance issues with CDOT.	Short-term		
Consider devolution Laurel to Devereux pending outcome of road maintenance assessment.	Mid-term		
6th Street Streetscape Improvements - Devereux to Vapor Caves			
Stripe 6th Street, Laurel to Pine, for on-street parking and bike lanes.	Short-term	DDA; Engineering	TBD
Create 90% construction plans for 6th Street improvements from Devereux to Vapor Caves; include Devereux and Highway 6 roundabout; phasing plan; construction estimates per phase; identify funding sources	Mid-term	DDA; Engineering; Community Development	TBD
New Public Area at North Landing Pedestrian Bridge			
Determine extent of north landing; contract with landscape architect and civil engineer to create a design plan and cost estimates	Short-term	DDA; Engineering; Community Development; Public Works; City Manager; Parks & Recreation; Private Partnerships	TBD (utilize leftover funds reserved from this Plan)
Develop 100% construction drawings; identify funding sources; secure funding.	Mid-Term	DDA; Engineering; Community Development; Public Works; City Manager; Parks & Recreation; Private Partnerships	TBD; Public-Private Partnership
Construct improvements	Mid-term	DDA; Parks & Recreation; Engineering	TBD; Public-Private Partnership
Construct New Sidewalks			
Olive; Pine; Maple; 5th; Laurel (west side); Linden (south side); West 1st Street	Long-term	Engineering	A & I
Construct Bicycle Sharrows			
6th Street (Olive Street to Vapor Caves) and Devereux Road (Hwy 6 to Centennial)	Short-term	Engineering	Street Tax
Linden and Laurel (new interchange to Hwy 6)	Mid-term		
Devereux Road Improvements			
Develop a plan and cost estimates to complete the sidewalk/path system along Devereux Road between Highway 6 and Centennial Street	Short-term	Engineering	Street Tax
Create 70% construction drawings for Devereux Road improvements based on plan recommendations	Short-term		
Construct improvements	Mid-term		A & I
Devereux-Midland Bridge			
Create 10% construction plans; include cost estimate	Short-term	Engineering	Street Tax
Create 100% construction drawings pending Council prioritization with other infrastructure projects.	Mid-term		
Construct bridge pending Council prioritization and funding	Long-term		A & I

INFRASTRUCTURE PROJECTS, CONTINUED

ACTION	TIMING	POTENTIAL PARTNERS	POTENTIAL FUNDING
Parking Garage			
Plan for north side public garage by selecting location, identifying funding sources, and considering construction timing. Coordinate with Area Wide planning efforts.	Short-term	DDA; Community Development; Engineering; City Manager; Private property owners	Grant
Construct garage	Long-term		Public-Private Partnership
I-70 Pedestrian Bridge			
Assess feasibility of and need for constructing a new pedestrian bridge over I-70. Bridge is dependent on construction of a public parking garage south of W. 1st Street adjacent to Interstate.	Long-term	DDA; Community Development; Engineering	TBD
Bicycle/Pedestrian Loop			
Create and sign a 1.75-mile bike/ped loop utilizing existing multi-use paths and city-owned rights-of-way. Coordinate timing of infrastructure improvements along Devereux Road and Highway 6. Promote the loop in trail maps and on city website.	Short-term	Engineering; Transportation	Grant
Create a secondary outer bike/ped loop. Coordinate with timing of infrastructure improvements including Midland-Devereux Bridge; new ped bridge over I-70; extension of 5th Street	Long-term	Engineering; Transportation	TBD

2022

NORTH LANDING VISION

Process & Look Book

Engagement Summary

North Landing has been a discussion for years following the 6th Street Master Plan in 2016. The first public meeting of the North Landing occurred in March 2019. This charrette was an opportunity for attendees to provide feedback on North Landing conceptuals and National Endowment Art (N.E.A.) commissioned art piece designed for the site. Following the charrette an art piece was designed and constructed. The art piece, Tubing the Colorado, will stay on North Landing following the revitalization of the site and 6th Street.



Tubing the Colorado art piece commissioned and designed for North landing. Art piece will continue to reside on North Landing following construction.

However, the vision of North Landing has been put on a hold due to the pandemic and Grizzly Creek Fire. The Parks and Recreation Commission has re-identified North Landing as a priority this year, especially with the future redevelopment of 6th street. Understanding this cannot happen in a vacuum, the Downtown Development Authority (DDA), Parks and Recreation Commission, the Arts and Culture Board, and North Glenwood Community came to a consensus on a unified vision of North Landing.

The consensus process included at least two representatives from Glenwood Springs Downtown Development Authority Board, Parks and Recreation Commission, Art and Culture Board, and North Glenwood Community. Representatives participated in two public meetings facilitated by City Staff to identify the elements and aesthetics of North Landing. Resulting in the consensus of a conceptual look book and site bubble diagram.

Process

Elements of North Landing | 1st Joint Public Meeting

The first joint public meeting occurred on March 21st, 2022, with 16 participants. During the first half of the meeting, participants broke up into small groups including 1 representative of each board, commission, and community. Small groups identified the top 4 elements needed for North Landing to be successful. All participants came to a consensus on 4 major categories including art, seating, native plants, and flexible amenities.

ART

- Public Art, Music, Performance, Low profile stage
- Rotating Art Areas, the design fits the community
- Design that fits the community: art and building materials

SEATING

- Family-friendly seating
- Intimate seating areas

NATIVE PLANTS

- Trees
- Hardscape & water-smart landscape blend with trees
- Nature/natural landscaping, employing soft transitions
- Mix of Landscaped/hardscape xeric, native trees
- Natural Aesthetic open space

FLEXIBLE AMENITIES

- Restrooms, seating, bike parking, trash (etc.)
- Multiuse Infrastructure with user-friendly adaptions: restrooms, stage, kiosk area for rotating vendors
- Programmable space for performers and vendors
- Versatile, flexible community hub (electric hookups)
- Functioning Public bathroom

Process

Elements of North Landing | 1st Joint Public Meeting

The second portion of the meeting attendees assessed from existing concepts which one aligns best with the values and elements we all want to see on North Landing. The winning conceptual image is below.



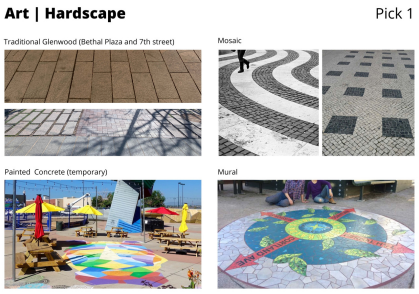
However, there are a few elements within this conceptual that did not align with participants including the following:

- Too much big open space, maybe more plaza space
- Needs for shade with a plaza space
- Soft transition space
- Avoid flat space and more utilization of native landscape
- Explore options for bathroom opportunities outside of North Landing on 6th street.

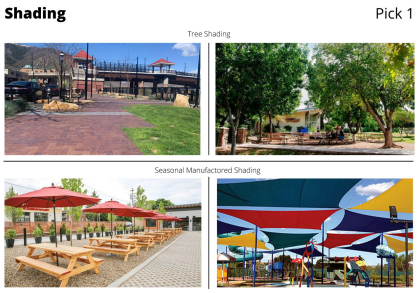
Process

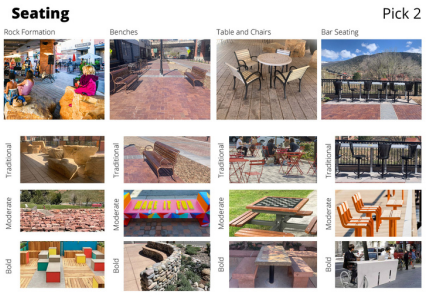
Refining the Elements | 2nd Joint Public Meeting

The second joint public North Landing meeting occurred on May 9th, 2022 with 16 participants. The purpose of this meeting was to dive deeper into what was identified in March as important elements including art, seating, native plants, and multifunctional space. During the meeting, participants broke up into small groups including 1 representative of each board, commission, and community member. The result provided consensus on what participants wanted to see for the aesthetics including hardscape, seating, bathrooms, stage, greenspace, trees and plants, vendors, and types of shading. The images below are the original posters participants were able to choose from. The following pages showcases a look book of those chosen aesthetics.

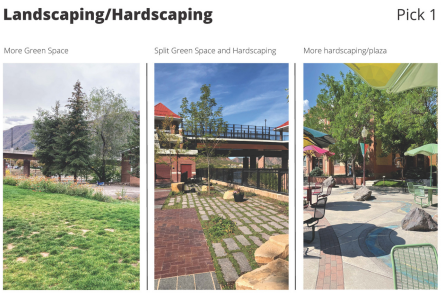


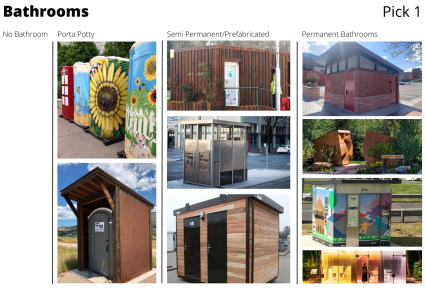


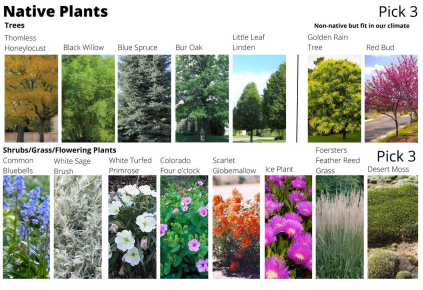






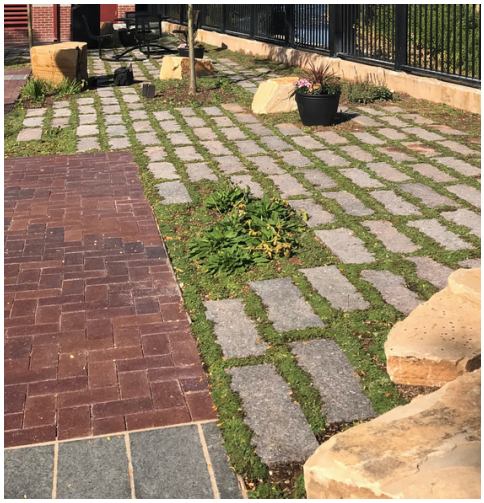






Look Book

Hardscaping | Refining the Elements










North Landing community work session attendees want to make sure that the overall hardscape design is consistent with downtown and 7th street. This should not feel like an island, and it needs to blend seamless into 6th street improvements. However, North Landing is special and will be part of an arts district. Groups felt it would be nice to have some type of mosaic design incorporated. The mosaic design needs to match color/material to be a cohesive design. The priority will be cohesive design over bold artistic design. The hardscape should not be the primary standout feature of North Landing but a nice background.

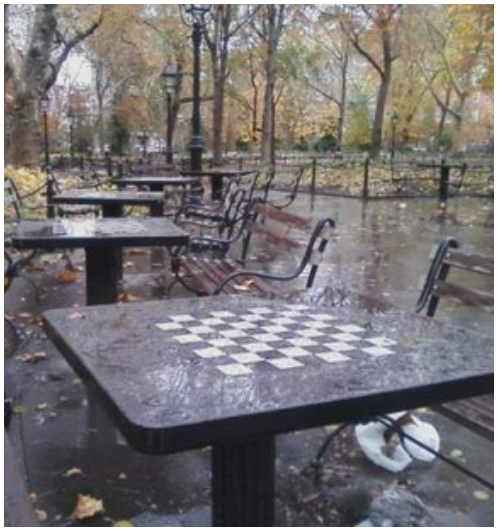
Look Book

Seating | Refining the Elements











North Landing community work session attendees want to see some type of rock, bench, and table/chairs for seating.

- Benches: attendees leaned more towards a bold type of design.
- Table and chairs: Attendees leaned more traditional. The major split between groups was if tables and chairs should be secured like 7th street or unsecured like under the bridge. There was interest in possibly having traditional seating incorporate some type of game on the table such as chess (Etc.)
- Rocks: When it comes to rocks even if attendees did not choose rocks, they really wanted to see them there and keep them traditional.

Look Book

Multipurpose Space | Refining the Elements

An overall "value" that was communicated across all was that while we would like to see space for vendors and performances, no one feature should "dominate" the majority of the Landing. It is also critical that they do not appear to be vacant or unused a majority of the time, whether through actual activation of vendors/performers or by using the space differently (like putting tables and chairs on the performance space when not being used).

Vendor

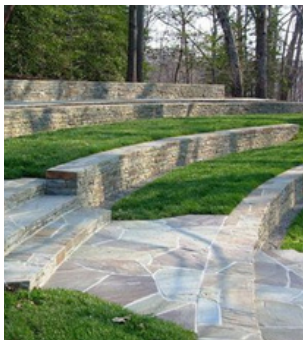




Attendees were split on whether to incorporate a permanent structure for vendor space. Those who did not like the concept's main concern was the amount of space it could take up on the Landing and were concerned that it might remain vacant for much of the year. There was a similar concern with making space to accommodate food trucks on the Landing, and most groups loved the idea instead of bringing food trucks on 6th Street for regularly scheduled events. All groups were supportive of pop-up vendor space coming onto the landing for special events.

Performance Space



Attendees felt strongly that performance space was important and should be incorporated. Most liked the tiered down stage concept but felt that this design may be impractical for the Landing due to its small size. Most liked the idea of the performance space being slightly elevated rather than at-grade, and providing shade either through tree coverage or temporary shade structures is preferred over a permanent stage cover.

Look Book

Bathrooms | Refining the Elements









All groups at the North Landing community work session strongly supported permanent bathrooms that are four-season. The groups suggested either replicating the 7th Street bathroom or creating a restroom more like Minturn's, which has a 3D printed design that mimics the interior of a mine. In terms of placement, attendees suggested the southwest or southeast corner of the Landing near the bridge. A couple additional ideas from the group follow

- Can the end of the lot on the southern end be built up so there is a walkway from the bridge (might have to remove railing on the bridge)?
- Could it be paired with the stage or another use (coffee shop/beer bar)? Bathroom on the bottom floor. Stage/vendor space/coffee shop on top?

Look Book

Landscaping | Refining the Elements

Greenspace vs. hardscape





Attendees envisioned a balance of both greenspace and hardscaping, leaning towards more greenspace over plaza space. The exact ratio varied between 50-80% being greenspace between groups. Plaza space is envisioned adjacent to the pedestrian bridge and 6th Street. Paths should consider human behavior (where are people going to cut across the parcel) and include accessible access and materials. Several mentioned that they liked the look of pavers mixed with greenspace between as seen in the plaza on 7th Street.

Shading







Shading is desired to come primarily from trees; however, there is general consensus that seasonal manufactured shade is acceptable, particularly in the plaza and near the stage area. Trees should also be utilized as informal sound barrier to the Grand Avenue Bridge and Hot Springs Pool parking lot area on the south side of the parcel. Best practices for stage orientation should be addressed during construction drawings.

Look Book

Landscaping | Refining the Elements

Plants



Conifer-style trees should be included, but only around the perimeter to avoid blocking sight lines to the multifunction stage. Shade is important throughout North Landing and should come first from trees. If there are trees dispersed in the interior areas of North Landing, they should be tall enough to comfortably sit around with the bushy areas high enough off the ground to see around. Greenspace should also be water waterwise and an example of how Xeriscaping can be functional and beautiful. Native plants are strongly preferred, but it is acceptable to include trees that are not native but are good fits for our climate to diversify canopy of the city. Shrubs, ground cover and flowers should be cohesive and vibrant. Landscaping should look nice year-round and planting choices should follow the recommendation of experts. Greenspace should consider maintenance and upkeep demands. In hardscaped areas that are built up to include green space, natural finish on the materials is preferred.

NORTH LANDING

PUBLIC OPEN HOUSE SUMMARY | JANUARY 25, 2023

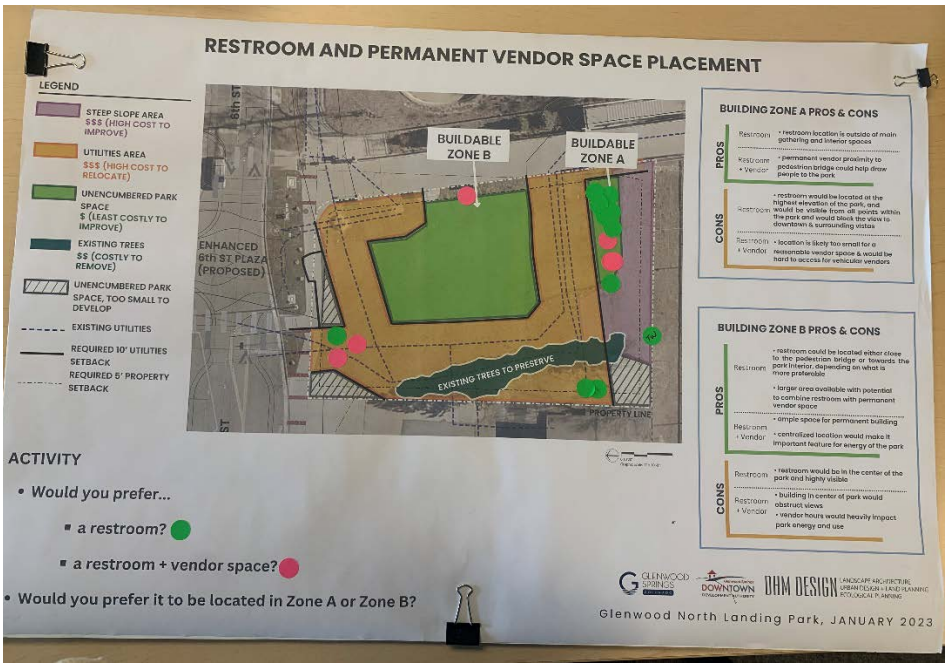
Attendees 16

Prioritization Station: Attendees ranked programming options from 1 to 6. 1 meaning the top priority program. Summary of all results below.

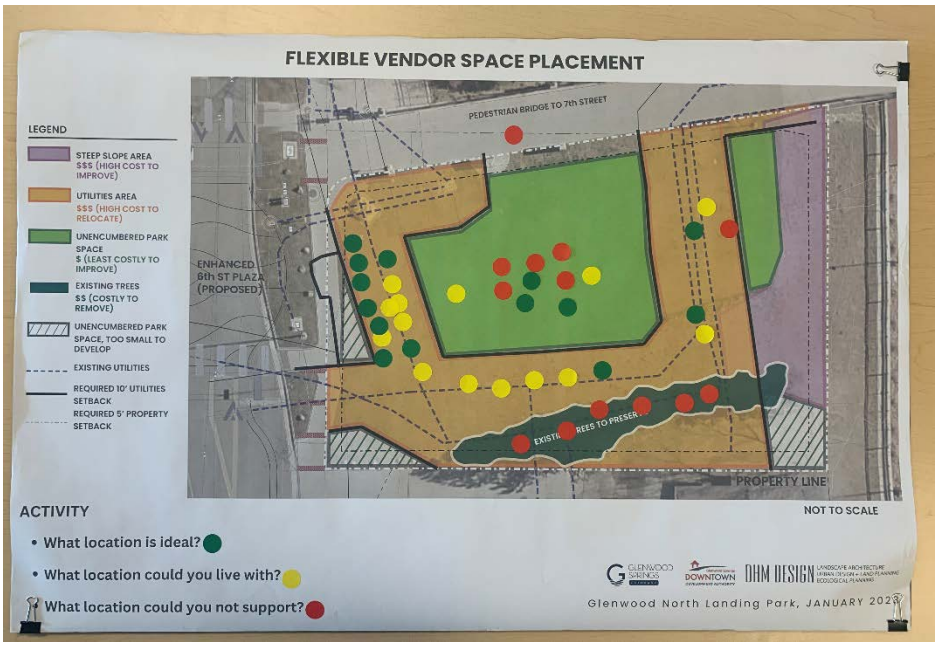


Prioritization	Programming
1	Play Space
2	Multipurpose Space
3	Art Plaza/Walk
4	Flexible Vendor
5	Tiered Seating
6	Community Building (Seating)

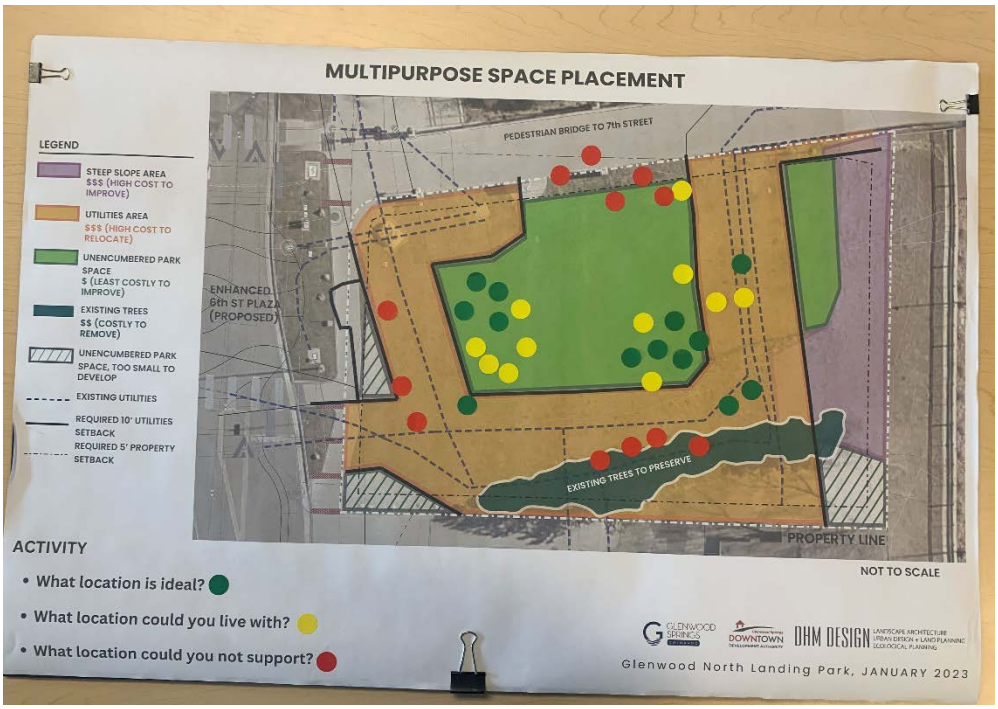
Restroom or Permanent Vendor with Restroom Station: Attendees identified the desire for a restroom or a restroom with a permanent vendor space. In addition, identified the preferred location of choice.



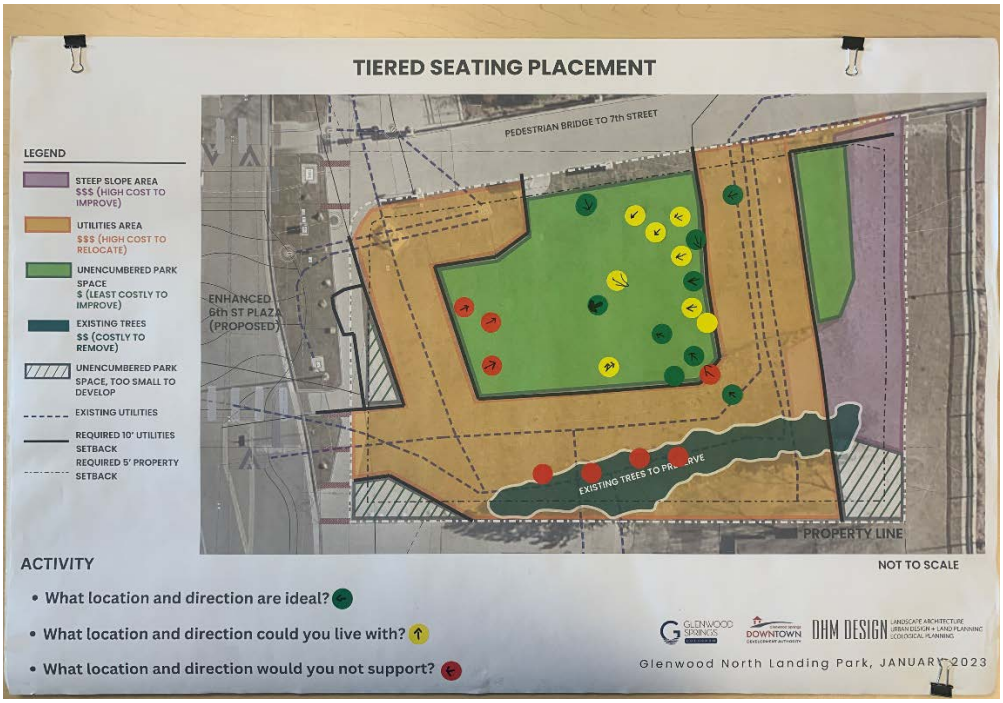
Flexible Vendor Space Station: Attendees identified the general location would prefer, could live with, and not support seeing flexible vendor space.



Multipurpose Space Station: Attendees identified the general location would prefer, could live with, and not support seeing a multipurpose space.



Tiered Seating Station: Attendees identified the general location and direction would prefer, could live with, and not support tiered seating.



NORTH LANDING ENGAGEMENT SUMMARY

OPTION 1 | RECTANGULAR PLAZA

#	Design Feature	Love It 	Like It 	Dislike 
1	Multipurpose Space (Food truck Plaza, Pop Vendors)	**33%**	**58%**	**8%**
2	Flexible Lawn and Play Space	**67%**	**33%**	**0%**
3	Serpentine Sculpture Art Walk	**62%**	**31%**	**8%**
4	Multipurpose Elevated platform with overhead trellis	**58%**	**33%**	**8%**
5	Restroom	**50%**	**36%**	**14%**
6	Boulder Play Area	**21%**	**50%**	**29%**
7	Overhead Shade Structure	**33%**	**42%**	**25%**

COMMUNITY SUMMARIZED COMMENTS
Missed opportunity/lack of activation of park space in the southwest corner.
Not enough seating dispersed throughout the park.
Incorporate trees in flexible lawn and play spaces and throughout the park for shade.
Like the seating being in direct view of the small multipurpose space in the south. Clear line of sight.
Add more art where we can.
Location of the boulder play area is too close to the south multipurpose space. Consider moving.
Concern that overhead structure will create a monolithic appearance for a park.

STAFF COMMENTS
Remove trees in the north plaza for vendors. Must meet fire safety requirements.
Remove the northeast landscape corner for snow removal ease.
Pergola is preferred for structure shading for snow and ice melt in the winter.
If moving forward with a prefab bathroom, consider the possibility in the North West corner.
Bring wave pattern/design of 6th street into North Landing.

OPTION 2 | ORGANIC PLAZA

#	Design Feature	Love It 	Like It 	Dislike 
1	Multipurpose Space (Food truck Plaza, Pop Vendors)	**31%**	**54%**	**15%**
2	Flexible Lawn and Play Space	**33%**	**58%**	**8%**
3	Sculpture Garden	**14%**	**64%**	**21%**
4	Multipurpose Elevated platform	**38%**	**38%**	**23%**
5	Restroom	**15%**	**38%**	**46%**
6	Lighted Trellis pathway	**46%**	**31%**	**23%**
7	Planter Seat Wall	**54%**	**38%**	**8%**
9	Nature Play Area	**23%**	**54%**	**23%**
11	Patio Seating Area	**38%**	**38%**	**23%**

COMMUNITY SUMMARIZED COMMENTS
Liked that seating was more dispersed throughout the site. Liked integration of planter seating.
Art to be more connected throughout the site in addition to the garden.
Consider lighted trellis being incorporated or move to east to bring people from ped bridge into the park.
Develop a stronger connection from the ped bridge into the park.
A little too busy with no direct line of sight from patio seating to south multipurpose stage.
Concern with the nature play area next to the multipurpose space for noise.
Patio does not feel well-connected.
Incorporate trees in flexible lawn and play spaces and throughout the park.
Consider swapping the garden with the multipurpose space.

STAFF COMMENTS
Remove trees in the north plaza for vendor access and set up. Must meet fire safety requirements.
Remove the northeast landscape corner for snow removal ease.
Consider shading for the patio area if kept.
If moving forward with a prefab bathroom, consider the possibility in the North West corner.
Bring wave pattern/design of 6th street into North Landing.



urbanblu®

Reinventing the smart toilet experience.

Who we are !

- Manufacturer of smart, automatic self-cleaning toilets since 2013
- Concept originally from Europe, but not adapted to the Canadian/American climate (can be used all year)
- Sole manufacturer of a product 100%

  Canadian/ North American





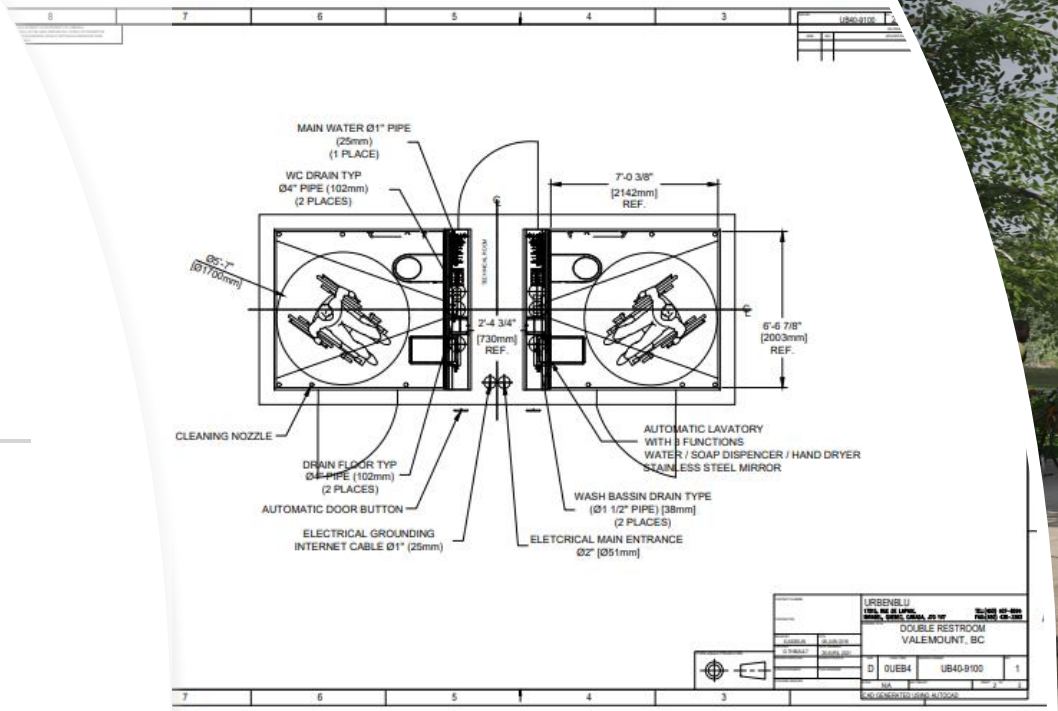






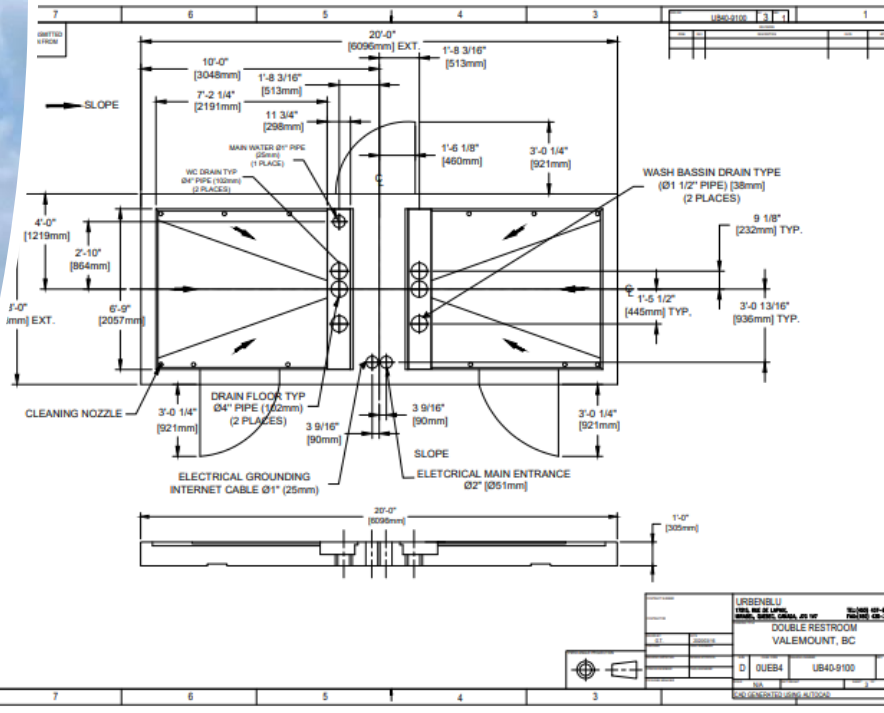
What is a self-cleaning toilet ?

- 100% prefabricated washroom
- Washroom totally finished when delivered. Delivered on a 12 inch concrete pad
- Architect and Engineer plan given for site preparation
- Can be used right after installation















Interior and exterior Finish

Interior:

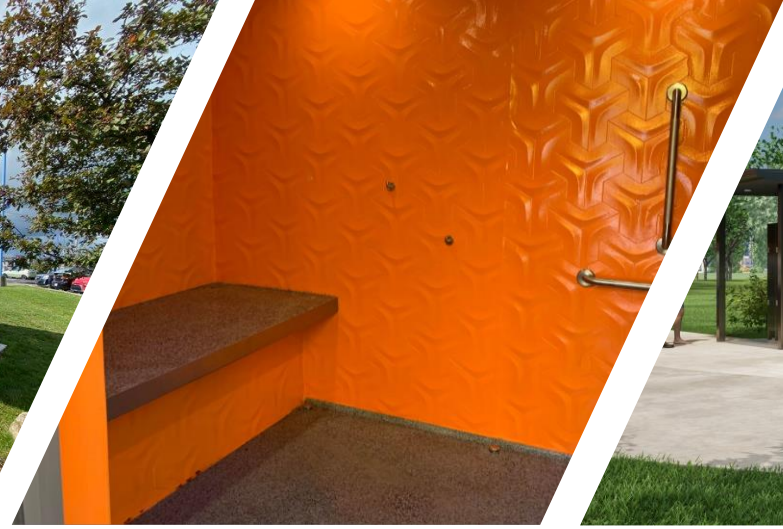
- Vandal-proof
- Anti-Ligature hooks

- Walls and floor are made of ultra high-performance fiber concrete. It is durable and easy to clean. MO fire rated.
- Galvanised Streel structure and rock wool isolation

- TDLR approved (Texas approbation for tornadoes, Earthquakes and hurricanes)









Entirely customizable

Examples:

- Indoor and outdoor showers
- Office for park manager
- Area to put ice skates, changing rooms
- Provide electricity for the park (400 amps)
- Numeric keyboard to provide access outside of the opening hours
- Equipment for Splash Pads
- Drinking fountain
- Adult Changing table
- Extensive Green Roofs







Exterior Finish

The exterior finish is at the customer's choice (Made with longboard Aluminum 1/8 inch thick. Other choices are available)

The 3 sides are corrugated finish

(Color is customer's choice also)







How it works

- Toilet Bowl cleaned, disinfected and dried after each use
- Cleaning cycle of the washroom every 10 users (recommended). The cycle takes 90 seconds to complete
- Remote control of the washroom (opening/closing hours, cleaning cycle, state of the toilet in real time



Mechanical Room



Mechanical Room





urbanblu®

is green !

Show your Citizens that you care for the environment!

- Possibility to integrate extensive green roofs
- Low water consumption
- Hot Water on demand only (no Hot water tank)
- Lighting on demand only (LED lights are on only when washroom is in use)
- Sheet by Sheet toilet dispenser
- Controlled amount of hand Soap distributed
- Use of Eco-Responsible products
- Use of a white membrane

Our washrooms are available in different sizes

Single : 1 toilet + 1 mechanical room (8x13)

Double : 2 toilets + 1 mechanical room (8x20)









Vandal-proof and anti-graffiti







All facades are covered with an anti-graffiti protection

Our washrooms are equipped with a volumetric presence detector

Finally, no parts from user side can be disassembled

- Porcelain toilet covered with a fiber glass mold
- Mirror in stainless steel
- Cement Walls and floor
- Steel Structure

Antimicrobial and anti-viral protection

The Urben Blu toilets are coated with an antimicrobial and antiviral protection, which kills 99,99% of germs and viruses, including COVID-19 and influenza.

The protection is effective for 1 year











Built to last

- Made in Canada/North America
- 3 years warranty on parts and labour
- 10 years warranty on the structure

SMART, SELF-CLEANING AND VANDALPROOF PUBLIC RESTROOM

VAGUE À GUY - SURFING SITE











SMART, SELF-CLEANING AND VANDALPROOF PUBLIC RESTROOM

JULIE HAMELIN PARK





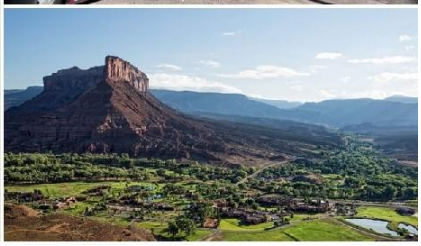
SMART, SELF-CLEANING AND VANDALPROOF RESTROOM STATIONS

PALISADE , COLORADO







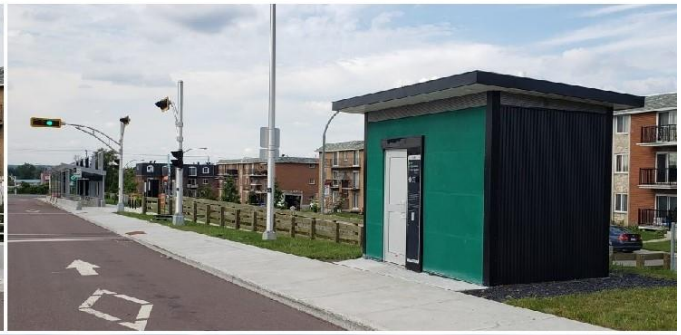


SMART, SELF-CLEANING AND VANDALPROOF PUBLIC RESTROOM

SRB PIE-IX, LAVAL

WITH SECURED ACCESS FOR BUS DRIVERS ONLY








Restrooms
Restrooms


Restrooms

SITE PLAN



LEGEND

1. Multipurpose space (food truck plaza, pop-up vendors)
2. Flexible lawn and play space
3. Sculpture garden
4. Multipurpose elevated platform
5. Restroom
6. Lighted trellis pathway
7. Planter seat wall
8. Existing trees to preserve
9. Nature play area
10. Utility cabinet/transformer
11. Patio seating area
12. Shade sails
13. Trellis structure

0 5 20
1 10
SCALE: 1"=10'-0"

GLENWOOD SPRINGS COLORADO

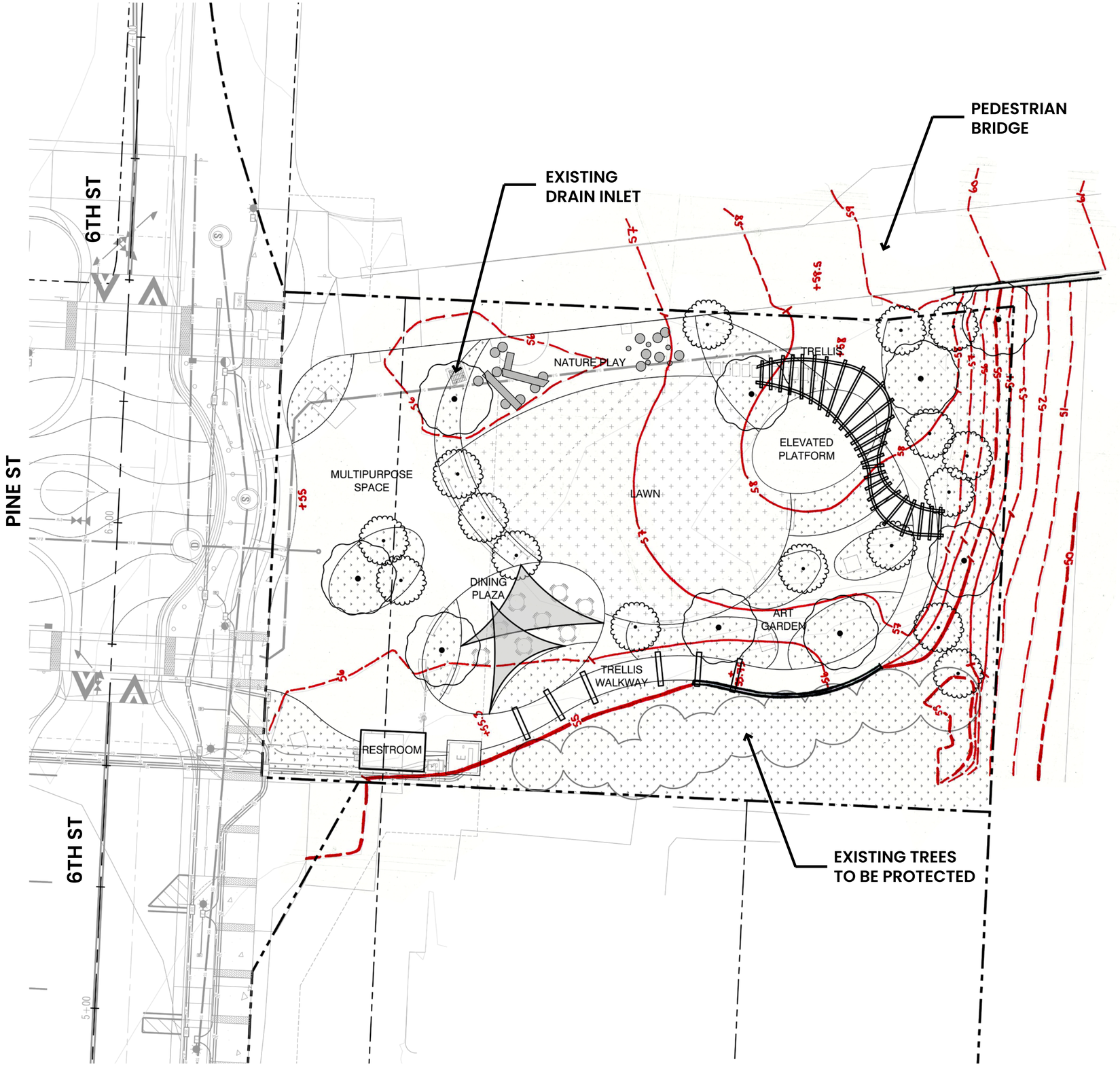
Glenwood Springs DOWNTOWN DEVELOPMENT AUTHORITY

DHM DESIGN LANDSCAPE ARCHITECTURE URBAN DESIGN + LAND PLANNING ECOLOGICAL PLANNING

Glenwood North Landing Park, APRIL 2023

SHEET 1

CONCEPTUAL GRADING PLAN



NOTE:

Conceptual grading plan only. Drainage and final design to be determined.

EXISTING GRADE

PROPOSED GRADE

0 5 20
1 10
SCALE: 1"=10'–0"

GLENWOOD SPRINGS COLORADO

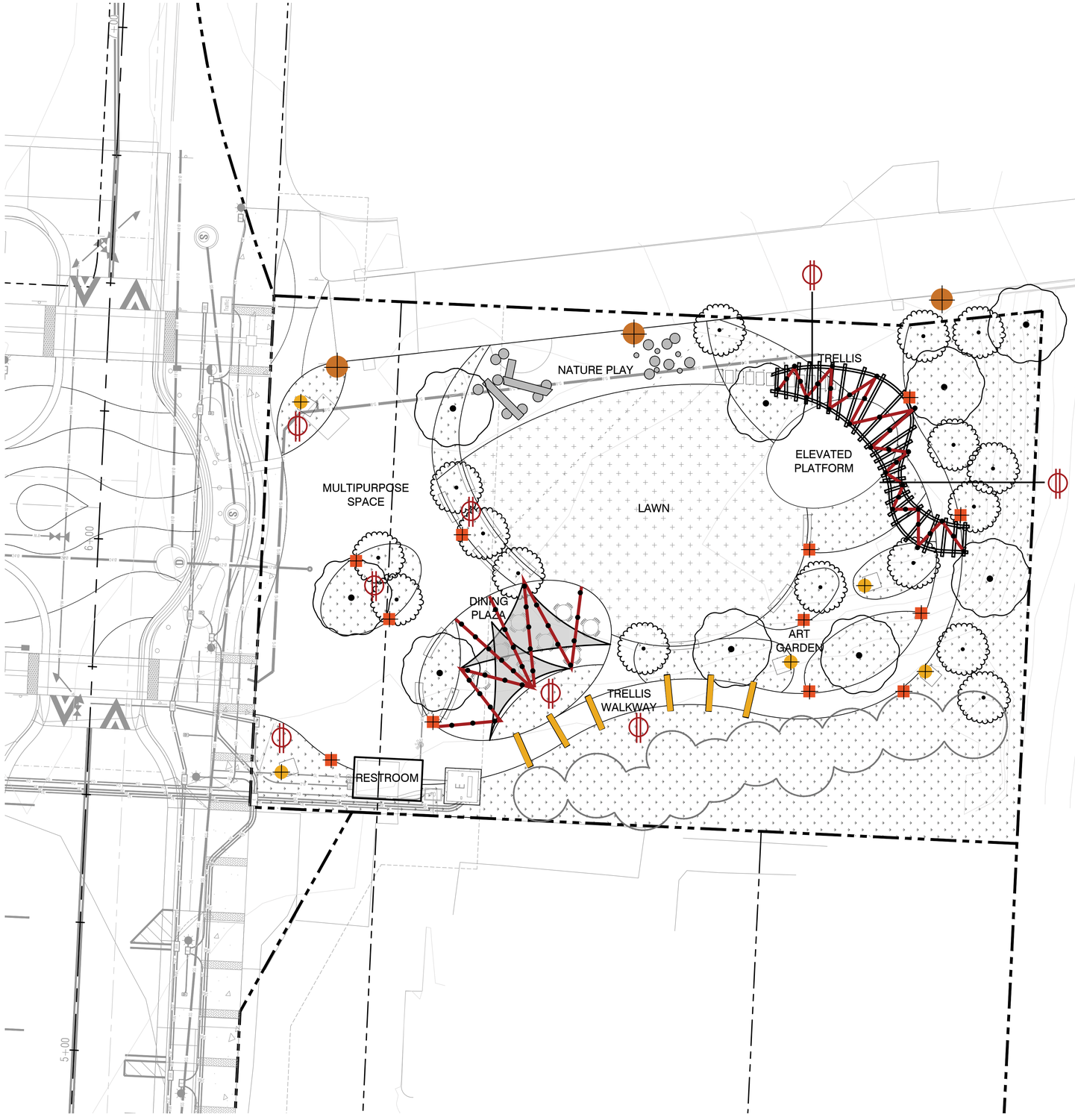
Glenwood Springs DOWNTOWN DEVELOPMENT AUTHORITY

DHM DESIGN LANDSCAPE ARCHITECTURE URBAN DESIGN + LAND PLANNING ECOLOGICAL PLANNING

Glenwood North Landing Park, APRIL 2023

SHEET 2

LIGHTING DIAGRAM



LEGEND

- OVERHEAD PEDESTRIAN LAMP
- SIGN/ART LIGHTING
- DOWNLIT ARCH LIGHT
- BOLLARD LIGHT
- STRING LIGHTS
- GFCI IN-GROUND POWER

NOTES:

1. Lighting to conform to city of Glenwood Springs outddor lighitng code.
2. Site lighting as shown is preliminary. Final location, distribution, fixture type, and number of fixtures is to be determined.

0 5 20
1 10
SCALE: 1"=10'-0"

GLENWOOD SPRINGS COLORADO

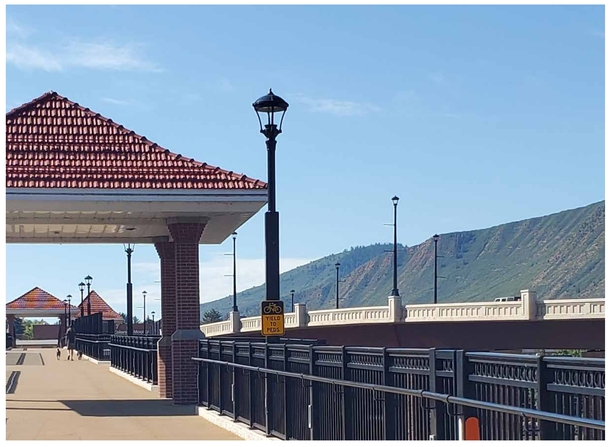
Glenwood Springs DOWNTOWN DEVELOPMENT AUTHORITY

DHM DESIGN LANDSCAPE ARCHITECTURE URBAN DESIGN + LAND PLANNING ECOLOGICAL PLANNING

OVERHEAD PEDESTRIAN LIGHTS







BOLLARD LIGHTS







PLAZA LIGHTING







ART LIGHTING







** In review for compliance of new landscaping standards.*

LAWN ALTERNATIVES STUDY



ARTIFICIAL TURF

PROS
- Very low water requirements
- Green year-round
- Made with recycled materials
- No mowing required

CONS
- Expensive to install ($15/sq ft)
- Energy intensive to produce, transport & install
- Petroleum based product
- 10 year lifespan before replacing
- Requires maintenance (raking to create upright blades, replacing infill, rinsing to clean)
- Damage to surface requires cutting & patching
- Contributes to microplastics in environment
- Ends up in landfill
- Very hot in direct sun



DOG TUFF GRASS

PROS
- Very durable, highly weed resistant, and soft cushioned feel
- Drought tolerant
- Resistant to dog urine
- Requires little mowing
- Fills into thick lawn within one season
- Less expensive ($70/flat of 70 plugs; covers 70 sq ft with plugs planted 12” apart)

CONS
- Not tolerant of shade or weed killers
- Needs frequent water to establish
- Warm season grass (turns green late, enters dormancy early)
- Requires one growing season to establish
- Sod form not available



TALL FESCUE MIX

PROS
- Drought resistant
- Requires less fertilizer
- Less insect and disease problems than Kentucky Bluegrass
- Can handle foot traffic
- Least expensive (5lb bag of seed for ~$50; covers 1,000 sq ft)
- Available in sod form

CONS
- Requires soil study on site (shallow/gravelly/heavy clay soils with poor drainage will prevent root development and may result in fescue needing more water than bluegrass)
- Requires more frequent mowing than bluegrass and is tougher on mowing blades
- Sod is not widely available and is more expensive than seed
- Does not self-repair readily

** In review for compliance of new landscaping standards.*

LAWN ALTERNATIVES STUDY



MICROCLOVER SEED MIX

PROS

- Moderate water requirements (relatively drought tolerant)
- Stands up to high traffic
- No need for fertilizers, herbicides, or pesticides
- Little mowing required
- Inexpensive (5lb bag would cover lawn area for $200
- Attracts beneficial insects
- Out-competes weeds
- Stays green all summer and into cool seasons

CONS

- Weekly mowing for minimum height, then once a month upon establishment
- Once established, requires watering every 1-3 days
- Flowers in late spring
- Possible die-back under prolonged heat and drought conditions
- Only available as seed mix, not sod



HYBRID BLUEGRASS

PROS

- Very durable to foot traffic
- More drought tolerant than traditional bluegrass
- Able to self-repair and fill in bare spots
- Shade tolerant
- Low to no mowing requirements
- Available as sod or plugs
- Gets green quicker, stays green longer
- Resistant to heat and disease
- Thrives in cool climates
- Grows in most soil types
- Relatively inexpensive (similar to Dog Tuff prices)

CONS

- Requires moderate watering for best looking grass (20-30% less water than Kentucky Bluegrass)

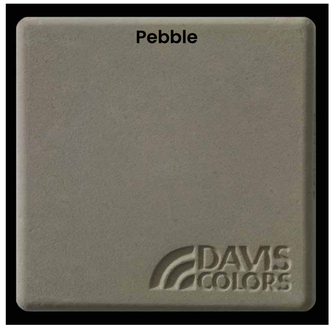
MATERIALS

CONCRETE





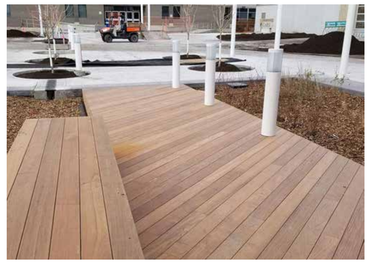




Integral Color Concrete

DECKING





Trex Decking

TURF







Lawn Alternatives:

Artificial turf
Dog tuff grass (plugs)
Tall fescue (sod)
Microclover mix (seed)
Hybid Bluegrass (sod)

CRUSHER FINES





Buff Crushed Stone

Bronze Steel Edger

SHADE STRUCTURE





Steel Frame/Connectors

Timber Beams & Rafters

SHADE SAILS





Steel Posts

Fabric Sails

TRELLIS





Corten Steel Arch

LED Downlights

Allowance for Fabrication, Power, Fixtures, and Installation

MATERIALS

NATURE PLAY STRUCTURES





BISTRO TABLES





BENCHES





BIKE RACKS







TRASH/RECYLCE





SIGNAGE







BATHROOM





Salvaged Natural Wood	Metal Bistro Tables & Chairs	Landscape Forms Plainwell Bench	Metal Bike Racks	Landscape Forms Chase Park Litter Receptacles	Entry, Regulatory, and Directional Signage	Urben Blu Delivered and Installed Not Including Pad and Utilities

City Council
STAFF REPORT
City of Glenwood Springs
April 20, 2023

Agenda Item:	Fire Mitigation Strategies
Action Requested:	NA
Department:	Fire Department
Presented By:	Gary Tillotson
Strategic Goals:	Ensure Public Safety
Background Info:	Wildfire risk continues to be a major hazzard in our area. Council will be briefed on mitigation work being carried out in the region.
Issues:	NA
Fiscal Impact:	NA
Legal Review:	NA
Staff Recommendation:	NA

City Council
STAFF REPORT
City of Glenwood Springs
April 20, 2023

Agenda Item: Planning Item #05-23 Right of Way (ROW) Encroachment License 51579 Highway 6 & 24

Action Requested: Request for a Right-of-Way Encroachment License for a portion of an existing shed in the Donegan Road right-of-way. Proposal will be considered an extension of the Right-of-Way Encroachment License approved in planning file #30-21 in 2021.

Department: Economic and Community Development

Presented By: Watkins Fulk-Gray

Strategic Goals: Provide Efficient and Responsive City Government
Ensure Public Safety
Preserve and Improve Infrastructure

Background Info: The lot at 51579 Highway 6 & 24 is going through an administrative Minor Subdivision process in which Staff identified that this encroachment needs to be removed or needs to receive a Right-of-Way Encroachment License in order to proceed with the subdivision. This encroachment is a shed that has been in place for many years. The total area of encroachment is approximately 11 square feet.

A Right-of-Way Encroachment License was approved in 2021 for separate encroachments on this parcel. These encroachments included two retaining walls and an irrigation system. Staff believes it would best serve the applicant and the City to combine these two encroachments into one ROW Encroachment License.

Issues: Section 070.060.050(f) of the Municipal Code requires that all encroachments that are permanent in nature or that encroach by one foot or more into right-of-way be reviewed and approved by City Council. In reviewing the license application, Council needs to consider whether or not the proposed encroachment:

- furthers the city's land use and utility goals and objectives;
- could be reasonably accommodated on the applicant's own property and outside of the city's right of way;
- compromises public safety, health and welfare of the community;
- compromises access to other public and/or private lands; and
- is necessary based on hardship by the applicant.

The Municipal Code does not require that all of these five criteria be met for approval of the license.

Fiscal Impact: No fiscal impact to the City is expected.

Legal Review: Legal has reviewed the Applicant's proposal.

Staff Recommendation: Staff recommends modifying the Right-of-Way Encroachment License approved in planning file #30-21 to include the request contained in planning file #05-23 with the following findings and conditions.

Findings:

- The encroachment does not compromise public safety, health, and welfare of the community;
- The encroachment does not compromise access to other public and/or private lands

Recommended conditions of approval:

1. The owner shall enter into a license agreement with the City of Glenwood Springs and provide proof of liability insurance per the requirements of Municipal Code section 070.060.050(f) within two weeks of receipt of executable license document.

LAND USE APPLICATION

City of Glenwood Springs
Economic and Community Development Dept.
101 West 8th Street
Glenwood Springs, CO 81601
970-384-6411

Ordinance Amendments		Development Permits	
☐	Rezoning		Site/Architectural Plan Review
☐	Rezoning to Planned Unit Development (PUD)		☐ Administrative
☐	Annexation		☐ Minor
☐	Condominiumization		☐ Major
☐	Annexation	☐	Master Plan
☐	Street Vacation	☐	Construction Plans
		☐	Location & Extent
Subdivisions		☑	Right of Way Encroachment License
☐	Minor Subdivision	☐	Floodplain Development Permit
☐	Preliminary Plat	☐	Special Use Permit
☐	Final Plat		**Flexibility and Relief Procedures**
☐	Vacation of Right-of-Way	☐	Variance
		☐	Administrative Adjustment
Other Land Use Applications		☐	Appeal
☐	Outdoor Seating		

Applicant/Property Owner Information:			
Hicks Properties 51579 Highway 6 LLC		Hicks Properties 51579 Highway 6 LLC	
Applicant		Owner	
Owner of property			
Relationship to Owner		Owner	
1301 South Havana Street, Aurora, CO 80012		1301 South Havana Street, Aurora, CO 80012	
Applicant Address		Owner Address	
Phone (970) 893-8242	Email Address chad@jvamlaw.com	Phone (970) 893-8242	Email Address chad@jvamlaw.com

Property Information:	
51579 Highway 6 & 24, Glenwood Springs, CO 81601	218505300030
Address	Parcel Number
NA	NA (See Vesting Deed for Legal Description)
Subdivision	Lot and Block Number
M1 - Mixed Use Corridor	Mini Golf and Residential
Zone District	Existing Land Use

General Project Description:
This application is to cure existing encroachments into the right of way for Donegan Road for a corner of a shed (see attached exhibit).

Signatures:		
The owner or applicant must be present at the hearing. All public hearings must be property noticed according to G.S.M.C. Section 070.010.030. Signatures of all owners of the property must appear before the application is accepted. Partnerships or corporations may have the authorized general partner or corporate officer sign the	Dhicks Dhicks (Jan 10, 2023 11:39 MST)	1/10/2023
	Applicant	Date
	Dhicks Dhicks (Jan 10, 2023 11:39 MST)	1/10/2023
	Owner	Date

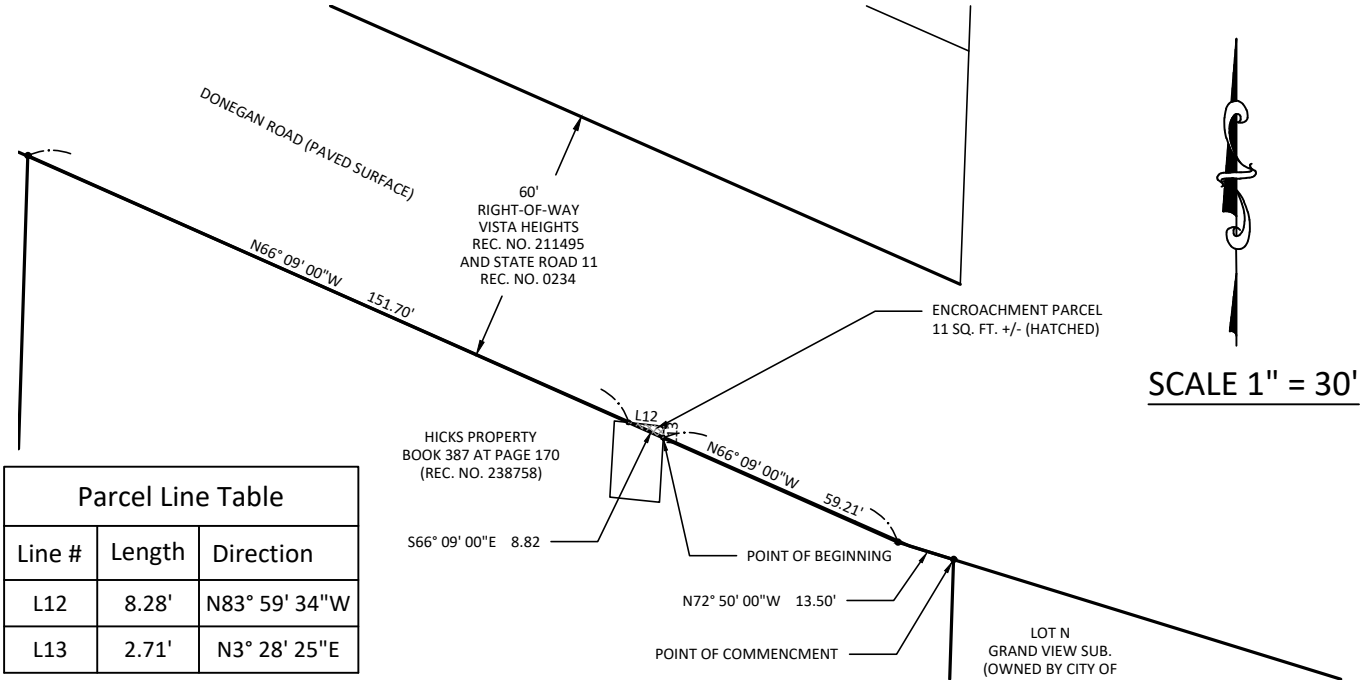
application. (Attach additional incorporation documents if necessary.) I declare under the penalty of perjury that the above information is true and correct to the best of my knowledge.		
	Owner	Date

EXHIBIT MAP OF:

SHED ENCROACHMENT

A TRACT OF LAND SITUATED IN OF SECTION 5, TOWNSHIP 6 SOUTH, RANGE 89 WEST OF THE 6TH P.M.,
CITY OF GLENWOOD SPRINGS, COUNTY OF GARFIELD, STATE OF COLORADO.

SHEET 1 OF 1



SCALE 1" = 30'

Parcel Line Table		
Line #	Length	Direction
L12	8.28'	N83° 59' 34"W
L13	2.71'	N3° 28' 25"E

SHED ENCROACHMENT PARCEL DESCRIPTION

A PARCEL OF LAND SITUATED WITHIN SECTION 5, TOWNSHIP 6 SOUTH, RANGE 89 WEST OF THE SIXTH PRINCIPAL MERIDIAN, SAID PARCEL ALSO SITUATED WITHIN THE LAND DESCRIBED IN THE DOCUMENT RECORDED AUGUST 24, 1967 AS BOOK 387 AT PAGE 170 OF THE GARFIELD COUNTY RECORDS; SAID PARCEL BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A POINT ON THE SOUTHERLY RIGHT-OF-WAY OF DONEGAN ROAD, AS SHOWN ON THE PLAT OF VISTA HEIGHTS SUBDIVISION RECORDED OCTOBER 31, 1960 AS RECEPTION NO. 211495 OF SAID COUNTY RECORDS; SAID POINT OF COMMENCEMENT IS THE CORNER COMMON TO SAID DESCRIBED LAND AND LOT N OF GRAND VIEW SUBDIVISION PER THE PLAT THEREOF RECORDED OCTOBER 20, 1947 AS RECEPTION NO. 16257 OF SAID COUNTY RECORDS; THENCE ALONG SAID SOUTHERLY RIGHT-OF-WAY N72°50'00"W, A DISTANCE OF 13.50 FEET; THENCE CONTINUING ALONG SAID RIGHT-OF-WAY N66°09'00"W, A DISTANCE OF 59.21 FEET TO THE POINT OF BEGINNING; THENCE LEAVING SAID RIGHT-OF-WAY N3°38'25"E, A DISTANCE 2.71 FEET; THENCE N83°59'34"W, A DISTANCE OF 8.28 FEET TO A POINT ON SAID RIGHT-OF-WAY; THENCE ALONG SAID SOUTHERLY RIGHT-OF-WAY S66°09'00"E, A DISTANCE OF 8.82 FEET TO THE POINT OF BEGINNING.

SAID PARCEL CONTAINS 11 SQUARE FEET, MORE OR LESS.

NOTICE: ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF CERTIFICATION SHOWN HEREON.

SOPRIS ENGINEERING LLC
502 MAIN STREET • SUITE A3•CARBONDALE CO 81623
(970) 704•0311• soprisengineering.com

GRK 16183.05
12/13/2022 16183 Plat 2022 Rev ROW.dwg

963976 09/29/2021 02:29:40 PM Page 1 of 2
Jean Alberico, Garfield County, Colorado
Rec Fee: $18.00 Doc Fee: $350.00 eRecorded

Warranty Deed

John J. Pretti Trust, hereinafter referred to as "Grantor", for and in consideration of the sum of ten dollars and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, have granted, bargained, sold and conveyed, and by these presents do grant, bargain, sell, convey and confirm unto Hicks Properties 51579 Highway 6, LLC hereinafter "Grantee", its successors and assigns forever, whose legal address is 2950 South Havana Street, Aurora, Colorado 80014, all the real property, together with improvements, if any, situate, lying and being in the County of Garfield and State of Colorado described as follows:

A parcel of land situated within the Southwest Quarter of Section 5, Township 6 South, Range 89 West of the Sixth Principal Meridian, said parcel also situated within the property described in the Document Recorded August 24, 1967 as Book 387 at Page 170 of the Garfield County records, said parcel being more particularly described as follows:

Beginning at the Northeast corner of said property from whence the Section corner common to Sections 5, 6, 7 and 8 of said Township and Range Bears S.29°04'14"W. a Distance of 2,973.78 Feet, thence along the Easterly boundary of said property S.01°36'21"W. a distance of 616.18 Feet to a point on the Northeasterly right-of-way of Highway 6 and 24; thence leaving said Easterly boundary and along said Northerly right-of-way N.81°42'13"W. a distance of 218.07 feet to a point on the boundary of said property; thence leaving said Northerly right-of-way and along said property boundary the following three courses:

1) N.01°36'21"E. 677.54 Feet;
2) S.66°16'39"E. 223.39 Feet;
3) S.72°57'09"E. 9.99 Feet to the POINT OF BEGINNING.

Also known as: 51579 Highway 6 and 24, Glenwood Springs, CO 81601

TOGETHER with all and singular the hereditaments and appurtenances thereto belonging, or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof, and all the estate, right, title, interest, claim and demand whatsoever of the grantor either in law or equity, of, in and to the above bargained premises, with the hereditaments and appurtenances.

TO HAVE AND TO HOLD the said premises above bargained and described, with the appurtenances, unto the grantee, his heirs and assigns forever. And the Grantor, for itself, its successors and assigns, does covenant, grant, bargain, and agree to and with the Grantee, its successors and assigns, that at the time of the ensealing and delivery of these presents, he is well seized of the premises above conveyed, has good, sure, perfect, absolute and indefeasible estate of inheritance, in law, in fee simple, and has good right, full power and lawful authority to grant, bargain, sell and convey the same in manner and form as aforesaid, and that the same are free

and clear from all former and other grants, bargains, sales, liens, taxes, assessments, encumbrances and restrictions of whatever kind or nature soever, except general taxes and assessments for the year 2021 and subsequent years; and "subject to statutory exceptions" as defined in § 38-30-113(5)(a), C.R.S.

The grantor shall and will WARRANT AND FOREVER DEFEND the above bargained premises in the quiet and peaceable possession of the grantee, its successors and assigns, against all and every person or persons lawfully claiming the whole or any part thereof. The singular number shall include the plural, the plural the singular, and the use of gender shall be applicable to all genders.

In Witness Whereof, John J. Pretti Trust, the said, **Grantor**, hereunto set by hands and seals this 24th day of September, 2021.

John J. Pretti Trust

By: Anne R. Luter
Anne R. Luter, Trustee

STATE OF VIRGINIA
COUNTY OF NORFOLK

The foregoing instrument was acknowledged before me this 24th day of September, 2021, by Anne R. Luter, Trustee of John J. Pretti Trust.

Notary's Official Signature

My Commission Expires: 5-31-2024

ANNA K. McNAMEE NOTARY PUBLIC MY COMMISSION NUMBER 301657 COMMONWEALTH OF VIRGINIA

HICKS PROPERTIES 51579 HIGHWAY 6, LLC
51579 HIGHWAY 6 & 24
GLENWOOD SPRINGS, CO 81601
(303) 798-2525

3/1/2023

City of Glenwood Springs
Community Development Department
101 West 8th St.
Glenwood Springs, CO 81601

Re: ***Encroachment Application***

Dear Madam or Sir,

Hicks Properties 51579 Highway 6, LLC is the owner of the real property which is the subject of the above-referenced Application. Hicks Properties 51579 Highway 6, LLC hereby authorizes Chad J. Lee, Esq. of the firm JVAM in all respects as the authorized representative of Hicks Properties 51579 Highway 6, LLC to submit and prosecute the above-referenced application. The authorization provided by this letter may be revoked at any time by a letter signed by the Manager of Hicks Properties 51579 Highway 6, LLC.

Very Truly Yours,

HICKS PROPERTIES 51579 HIGHWAY 6, LLC
A Colorado limited liability company

By: D hicks
D hicks (Mar 1, 2023 09:45 MST)
Donald Hicks, Manager

Authorization of CJL

Final Audit Report 2023-03-01

Created:	2023-03-01
By:	Genevieve LaMee (genevieve@jvamlaw.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAyEQ53M-hfFSpiaeDx7AhFl3uxJtypP9a

"Authorization of CJL" History

Document created by Genevieve LaMee (genevieve@jvamlaw.com)
2023-03-01 - 4:38:34 PM GMT

Document emailed to skiboats@shortlineauto.com for signature
2023-03-01 - 4:38:55 PM GMT

Email viewed by skiboats@shortlineauto.com
2023-03-01 - 4:44:22 PM GMT

Signer skiboats@shortlineauto.com entered name at signing as D hicks
2023-03-01 - 4:45:54 PM GMT

Document e-signed by D hicks (skiboats@shortlineauto.com)
Signature Date: 2023-03-01 - 4:45:56 PM GMT - Time Source: server

Agreement completed.
2023-03-01 - 4:45:56 PM GMT

Adobe Acrobat Sign

City Council
STAFF REPORT
City of Glenwood Springs
April 20, 2023

Agenda Item: Encroachment and Maintenance Agreement for 4106 Sky Ranch Drive

Action Requested: Approval of Encroachment and Maintenance Agreement.

Department: Engineering

Presented By: Ryan Johnson

Strategic Goals: Provide Efficient and Responsive City Government

Background Info: The single family home newly constructed at 4106 Sky Ranch Drive necessitated a drainage outfall pipe through an existing berm located along the northerly property line which abuts the city-owned conservancy park. The as-constructed survey located the pipe wholly within the city park property and extends beyond an existing drainage easement. Due to the private improvement being located on city-owned park property, the encroachment and maintenance agreement is necessary to allow the improvement to remain but maintains the city's ability to remove or adjust the pipe should future changes to the park space become necessary.

Issues: None

Fiscal Impact: None

Legal Review: Legal reviewed the agreement.

Staff Recommendation: Staff recommends approval of the encroachment agreement.

REVOCABLE LICENSE TO ENCROACH

THIS REVOCABLE LICENSE TO ENCROACH is made this __ day of April, 2023 between the **CITY OF GLENWOOD SPRINGS** ("City") and **JASON & ULLOA FRANQUEZ and VERONICA NOHEMI FRANQUEZ** , with an address of 4106 Sky Ranch Drive, Glenwood Springs, CO 80601 ("Licensee").

WHEREAS, City is the owner of certain real estate located in Glenwood Springs, Colorado, more particularly described as PARK EAST SUBDIVISION T 4 (the "Open Space"); and

WHEREAS, Licensee is the owner of certain real estate (the "Premises") located in Garfield County, Colorado, more particularly described as PARK EAST SUBDIVISION Lot: 35, as depicted on the plat recorded on September 8, 1999 at Reception No. 551751 in the City of Glenwood Springs, County of Garfield, State of Colorado; and

WHEREAS, Licensee wishes to secure a license to encroach for a into the storm drain pipe to encroach into the Open Space as depicted on **Exhibit A** attached hereto and incorporated herein (the "Encroachments"); and

WHEREAS, at a duly noticed public hearing held on April 20, 2023, the Glenwood Springs City Council determined that the Encroachments were necessary and proper and approved the Encroachments; and

WHEREAS, the Licensee has agreed to maintain the Encroachments in a functional and safe fashion.

NOW THEREFORE, in consideration of the mutual promises contained herein, the City and Licensee agree as follows:

1. City hereby grants to Licensee a revocable license to encroach into the Open Space as described and depicted on **Exhibit A**.

2. Licensee is responsible for maintaining the Encroachments in a functional and safe fashion.

3. Licensee agrees to release, indemnify, defend, and hold harmless the City, its employees, officers, officials, agents, and contractors, from any and all liability, claims, damages, expenses including attorneys' fees and litigation costs, resulting from or arising out of the Encroachments into the Open Space.

4. Licensee acknowledges and agrees that if the City, its employees, officers, officials, agents, or contractors are required to remove, alter, repair or damage any of the Encroachments described herein, the full cost of repair, alteration, or removal shall be borne by Licensee.

5. Licensee shall provide the City with a copy of an umbrella liability policy covering the encroachment area in limits of no less than $1,000,000. Such policy shall be maintained by Licensee for the life of the Encroachments, and a copy of each new policy shall be furnished to the City upon the anniversary date of this License. Failure to provide the policy on a timely basis (which shall be no later than 30 days after any anniversary date at the latest) shall automatically nullify the license to encroach without necessity of further notice and may require Licensee's removal of the Encroachments at Licensee's sole expense upon demand by the City. Should Licensee fail to remove the Encroachments within a reasonable time, the City may declare the Encroachments a public nuisance, undertake removal, and attach a lien to Licensee's property for the costs of the removal.

6. The City may revoke or amend this license upon sixty (60) days written notice if the City determines that Licensees' activities have become incompatible with any other lawful use of the Premises or if any provision of this license is materially breached by Licensee. This license is assignable to a subsequent Owner of the Premises and any assignment shall require the prior express written consent of the City which shall not be unreasonably withheld.

7. Upon execution by the parties, this Revocable License to Encroach shall be duly recorded with the Garfield County Clerk and Recorder.

CITY OF GLENWOOD SPRINGS, COLORADO

_____

ATTEST: Jonathan Godes, Mayor

_____

Ryan Muse, City Clerk

LICENSEE

_____

JASON FRANQUEZ

_____

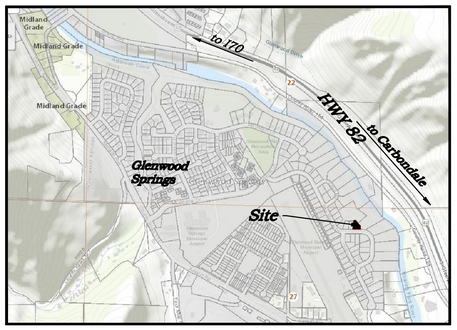
ULLOA FRANQUEZ

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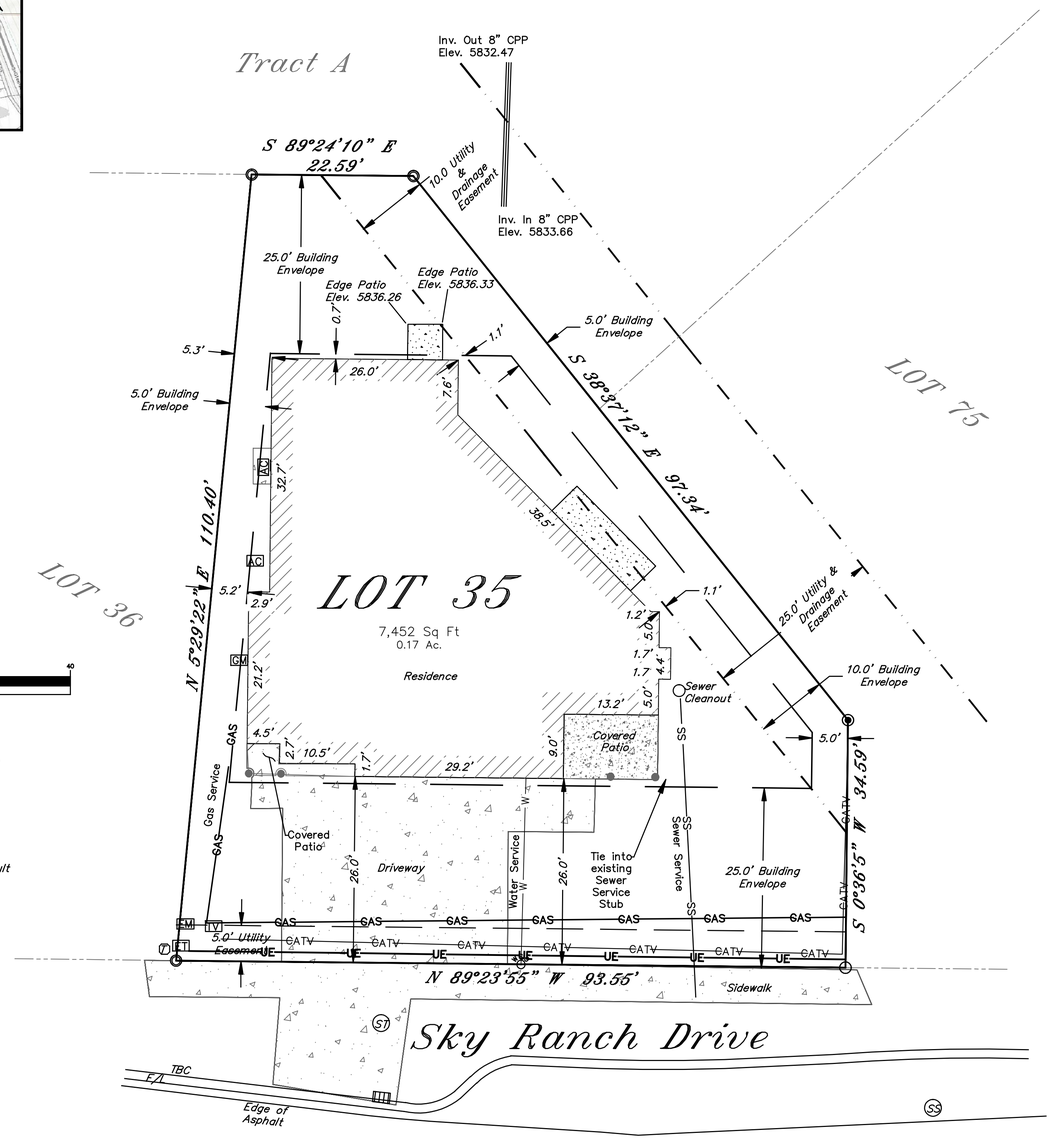
VERONICA NOHEMI FRANQUEZ

IMPROVEMENT SURVEY PLAT

Lot 35, Park East Subdivision According to the Plat Recorded at September 8, 1999 as Reception No. 551751 County of Garfield, State of Colorado



Vicinity Map
Scale 1" = 1000'



GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

Legend

- (SS) = Sanitary Sewer Manhole
- (ST) = Storm Manhole
- ▥ = Storm Drain Inlet
- EM = Electric Meter
- ET = Electric Transformer
- AC = Air Conditioner
- TV = Telecommunications Vault
- (T) = Phone Pedestal
- GM = Gas Meter
- = Water Shutoff
- ● = 1.0' ø Concrete Base

LEGEND AND NOTES:

- ◉ INDICATES SET 5/8"X 18" REBAR WITH 1 1/4" RED PLASTIC CAP MARKED LS 33638
- ◎ INDICATES FOUND 5/8" REBAR WITH 1 1/4" YELLOW PLASTIC CAP MARKED LS 28643
- ○ INDICATES FOUND 5/8" REBAR WITH 1 1/4" ORANGE PLASTIC CAP MARKED LS 28643
- DATE OF FIELD WORK: FEBRUARY 02, 2023
- UNIT OF MEASUREMENT: US SURVEY FOOT
- THIS PROPERTY IS ZONED R/1/6 PER PLAT.
- BEARINGS ARE BASED UPON A 5/8" REBAR WITH 1 1/4" YELLOW PLASTIC CAP L.S.#28643 FOUND AT THE SOUTHWEST CORNER AND THE SOUTHEAST CORNER OF LOT 66 IN SAID PARK EAST SUBDIVISION, USING A BEARING OF S84°34'10"E BETWEEN THE TWO DESCRIBED MONUMENTS. ALL BEARINGS BEING RELATIVE TO THE RECORD BEARINGS SHOWN ON SAID PLAT.
- DUE TO SNOW COVER AT THE TIME OF THIS SURVEY SOME IMPROVEMENTS MAY NOT BE SHOWN.
- THIS SURVEY DOES NOT REPRESENT A TITLE SEARCH BY THIS SURVEYOR TO DETERMINE OWNERSHIP OR TO DISCOVER EASEMENTS OR OTHER ENCUMBRANCES OF RECORD, ALL INFORMATION PERTAINING TO OWNERSHIP, EASEMENTS OR OTHER ENCUMBRANCES OF RECORD HAS BEEN TAKEN FROM A TITLE COMMITMENT ISSUED BY LAND TITLE GUARANTEE COMPANY DATED AUGUST 03, 2021 AS ORDER NO. GW63017616-2.
- UTILITY STRUCTURES ARE REFERENCED WITH AN IMPROVEMENT SURVEY PLAT PERFORMED BY BOOKCLIFF SURVEY PLAT PROJECT NO. 19002-01, DATED MARCH 23, 2021.
- UNDERGROUND UTILITY LINES REFERENCE BY BELL CONSULTANTS DATED _____

SURVEYOR'S CERTIFICATE:

I, JEFFREY ALLEN TUTTLE, HEREBY CERTIFY TO THE CITY OF GLENWOOD SPRINGS AND LAND TITLE GUARANTEE COMPANY THAT THIS IS AN "IMPROVEMENT SURVEY PLAT" AS DEFINED BY C.R.S. § 38-51-102(9) AND THAT IT IS A MONUMENTED LAND SURVEY SHOWING THE LOCATION OF ALL STRUCTURES, VISIBLE UTILITIES, FENCES, HEDGES, OR WALLS SITUATED ON THE DESCRIBED PARCEL AND WITHIN FIVE FEET OF ALL BOUNDARIES OF SUCH PARCEL, ANY CONFLICTING BOUNDARY EVIDENCE OR VISIBLE ENCROACHMENTS, AND ALL EASEMENTS, UNDERGROUND UTILITIES, AND TUNNELS DESCRIBED IN LAND TITLE GUARANTEE COMPANY FOR TITLE INSURANCE OR OTHER SOURCES AS SPECIFIED ON THE IMPROVEMENT SURVEY PLAT.

COLORADO REGISTERED 02/14/2023
JEFFREY ALLEN TUTTLE 33638
PROFESSIONAL LAND SURVEYOR

JEFFREY ALLEN TUTTLE, L.S. #33638 DATE

Notice:
According to Colorado law, you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any legal action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon.

TUTTLE SURVEYING SERVICES
P.O.BOX 983
Glenwood Springs, Colorado 81602
(970) 928-9708 (FAX 947-9007)
Email- jeff@tss-us.com

TUTTLE SURVEYING SERVICES

IMPROVEMENT SURVEY PLAT

4106 Sky Ranch Drive
Glenwood Spgs, CO 81601

Drawn by: DMC
Date: 02/04/2023
Z: \2023\ParkEastSub \ Lot35_4106SkyRanchDr.dwg

1 OF 1

City Council
STAFF REPORT
City of Glenwood Springs
April 20, 2023

Agenda Item: 2023 Intergovernmental Agreement for Mosquito Control

Action Requested: Request for approval of the 2023 Intergovernmental Agreement for Mosquito Control.

Department: Parks & Recreation

Presented By: Rod Tarullo

Strategic Goals: Ensure Public Safety

Background Info: Each year there is an Intergovernmental Agreement created between Garfield County and its municipalities for mosquito control and education programs to aid control of the mosquito species responsible for the spread of West Nile Visus.

Issues: None

Fiscal Impact: The City of Glenwood Springs is responsible for a payment of $6,200 to Garfield County for its portion of the program. The funds are budgeted in the Parks department of the general fund in professional services (01154-51710).

Legal Review: Legal has reviewed the agreement.

Staff Recommendation: Staff recommends approval of the 2023 Intergovernmental Agreement for Mosquito Control.

INTERGOVERNMENTAL AGREEMENT FOR MOSQUITO CONTROL – 2023

THE PARTIES to this Intergovernmental Agreement for Mosquito Control ("IGA") are the **BOARD OF COUNTY COMMISSIONERS OF GARFIELD COUNTY, STATE OF COLORADO,** (hereinafter referred to as "**County**"); the **CITY OF GLENWOOD SPRINGS, STATE OF COLORADO**, (hereinafter referred to as "**Glenwood**"); the **TOWN OF CARBONDALE**, **STATE OF COLORADO**,(hereinafter referred to as "**Carbondale**"); the **CITY OF RIFLE, STATE OF COLORADO**,(hereinafter referred to as "**Rifle**"); the **TOWN OF SILT, STATE OF COLORADO**,(hereinafter referred to as "**Silt**"); the **TOWN OF NEW CASTLE, STATE OF COLORADO**, (hereinafter referred to as "**New Castle**"); and the **TOWN OF PARACHUTE, STATE OF COLORADO**, (hereinafter referred to as "**Parachute**").

WHEREAS, the parties to this IGA are authorized by Section 29-1-201, *et seq.*, C.R.S., as amended, to provide for joint funding and cooperation to provide services and functions which each is otherwise lawfully authorized to provide; and

WHEREAS, the parties to this IGA desire to cooperate in funding and making available a County-wide mosquito control and education program; and

WHEREAS, a coordinated effort by the County and the municipalities within the County will permit a more effective mosquito control and education program and specifically will aid control of the mosquito species responsible for the spread of West Nile Virus.

NOW, THEREFORE, in mutual consideration of the premises and the covenants and promises set forth below, the parties to this IGA agree as follows:

1. PROJECT. The Project that is the subject of this IGA is a comprehensive integrated larval and adult mosquito control program, on public and private property throughout Garfield County that will be designed specifically for Garfield County and the municipalities by an independent contractor. The Project will provide surveillance, identifying mosquito breeding habitats and areas with high numbers of mosquito larvae and adults, with an emphasis on Culex mosquitoes. Surveillance will include the use of GIS mapping technology. The Project will include the use of chemical pesticides for adult and larval mosquito control in a manner safe to citizens, the environment and pets. Chemical applications will only be done when the elected officials of each pertinent jurisdiction, or their designated staff member, determine that mosquito levels have reached a threshold that poses a public health risk. Each jurisdiction is responsible for working with the Contractor to ensure that their jurisdiction is in compliance with the Federal Clean Water Act and the Colorado Discharge Permit System as administered by the Colorado Department of Public Health and Environment. The independent contractor will also provide community outreach and public education.

2. PROJECT COSTS. The cost for the entire Project that is the subject of this IGA shall not exceed Two Hundred Five Thousand Dollars and No Cents ($205,000.00), with each town and city contributing the amounts set forth below for a total contribution of Fifty-Nine Thousand Seven Hundred Dollars and No Cents ($59,700.00) of the Project Cost. The remainder will be contributed by the County for the twenty-nine (29) square miles of service area outside of the municipalities.

3. COUNTY RESPONSIBILITIES. The County shall be the coordinating entity and the contracting and fiscal authority for the Project. The County's responsibilities shall include the

creation of the Request For Proposals ("RFP"), management of the RFP process, selection of the contractor and management of the contract. The County shall pay an amount not to exceed One Hundred Forty-Five Thousand Three Hundred Dollars and No Cents ($145,300.00) of the total Project Cost of Two Hundred Five Thousand Dollars and No Cents ($205,00.000), unless emergency services are required.

4. GLENWOOD SPRINGS RESPONSIBILITIES. Glenwood Springs shall be responsible for payment to the County of $6,200.00.

5. CARBONDALE RESPONSIBILITIES: Carbondale shall be responsible for payment to the County of $8,200.00.

6. RIFLE RESPONSIBILITIES: Rifle shall be responsible for payment to the County of $22,250.00.

7. SILT RESPONSIBILITIES: Silt shall be responsible for payment to the County of $6,000.00.

8. NEW CASTLE RESPONSIBILITIES: New Castle shall be responsible for payment to the County of $6,750.00.

9. PARACHUTE RESPONSIBILITIES: Parachute shall be responsible for payment to the County of $10,300.00.

10. PARTY RESPONSIBILITIES: All parties to this IGA shall cooperate with and assist the independent contractor chosen by the County to perform the work of the Project.

11. REMEDIES. If any of the cities or towns, identified in Paragraphs 4 through 9 above, fails to perform their payment obligation(s), the County may assume responsibility for the defaulting payment(s), and all other obligations of this IGA shall remain in full force and effect.

12. CONTRACT AWARD. The contract anticipated to define the Scope of Work needed for the Project shall be awarded by Garfield County pursuant to the terms of its Procurement Manual. The Notice to Proceed may be awarded prior to the payment obligations of the municipalities and towns being met.

13. INDEMNIFICATION. The parties acknowledge each is subject to the constitutional prohibitions against indemnification in Colo. Const. art XI, § 1. Neither can indemnify the other.

Nothing herein shall be interpreted as a waiver of governmental immunity to which each party would otherwise be entitled under Section 24-10-101, *et seq.*, C.R.S., as amended.

14. APPROPRIATION. This IGA is contingent upon appropriation and budgeting for the costs required for the Project. Should any party fail to appropriate or have available sufficient funds to pay for the costs of its obligations set forth herein, this IGA shall be considered of no force or effect, except to the extent that the County has assumed the obligations of another party, as set forth herein. This IGA is not intended to, nor does it create a multi-year fiscal obligation as defined by Section 20, Article X of the Constitution of the State of Colorado.

15. EFFECTIVE DATE. This IGA shall be effective January 1, 2023 through December 31, 2023, no matter the date of execution.

16. AMENDMENT. This IGA may be amended by the parties solely through a written agreement signed by each.

17. FACSIMILES AND COUNTERPARTS. This IGA may be signed in counterparts, and facsimile signatures may be substituted for original signatures.

18. GOVERNING LAW. The laws of the State of Colorado shall govern the validity, performance and enforcement of this IGA. Venue for any action instituted pursuant to this IGA shall lie in Garfield County, Colorado.

19. AUTHORITY. Each person signing this IGA represents and warrants that said person is fully authorized to enter into and execute this IGA and to bind the party represented to the terms and conditions hereof.

20. NOTICE. All notices required under this IGA shall be in writing and shall be hand delivered or sent by registered or certified mail, return receipt requested, postage prepaid to the addresses of the parties set forth below. Notice addresses may be changed without amendment to this IGA.

Notice to County:	Board of County Commissioners Attn: County Manager 108 8th Street, Suite 213 Glenwood Springs, CO 81601 Phone: (970) 945-9150 Fax: (970) 384-5005
Notice to Glenwood:	City of Glenwood Springs Attn: City Manager 101 W. 8th St. Glenwood Springs, CO 81601 Phone: 384-6400
Notice to Carbondale:	Town of Carbondale Attn: Town Manager 511 Colorado Avenue Carbondale, CO 81623 Phone: (970) 963-2733 Fax: (970) 963-9140

Notice to Rifle:	City of Rifle Attn: City Manager 202 Railroad Avenue P.O. Box 1908 Rifle, CO 81650 Phone: (970) 625-2121
Notice to Silt:	Town of Silt Attn: Town Administrator 231 N. 7th St., Box 70 Silt, CO 81652 Phone: (970) 876-2353
Notice to New Castle:	Town of New Castle Attn: Town Administrator 450 W. Main P.O. Box 90 New Castle, CO 81647 Phone: (970) 984-2311
Notice to Parachute:	Town of Parachute Attn: Town Administrator 222 Grand Valley Way Box 100 Parachute, CO 81635 Phone: (970) 285-7630

REMAINDER OF THIS PAGE LEFT BLANK INTENTIONALLY

ATTEST:

BOARD OF COUNTY COMMISSIONERS OF GARFIELD COUNTY, COLORADO

_____
Clerk to the Board

By: _____
Chairman

Dated:_____

ATTEST:

CITY OF GLENWOOD SPRINGS, STATE OF COLORADO

_____
City Clerk

By: _____
Mayor

Dated:_____

ATTEST:

TOWN OF CARBONDALE STATE OF COLORADO

_____
Town Clerk

By: _____
Mayor

Dated:_____

ATTEST:

CITY OF RIFLE STATE OF COLORADO

_____
City Clerk

By: _____
Mayor

Dated:_____

ATTEST:

TOWN OF SILT STATE OF COLORADO

_____
Town Clerk

By: _____
Mayor

Dated:_____

ATTEST:

TOWN OF NEW CASTLE
STATE OF COLORADO

_____
Town Clerk

By: _____
Mayor

Dated:_____

ATTEST:

TOWN OF PARACHUTE
STATE OF COLORADO

_____
Town Clerk

By: _____
Mayor

Dated:_____

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City Council
STAFF REPORT
City of Glenwood Springs
April 20, 2023

Agenda Item: Arts and Culture Board Appointment

Action Requested: Arts and Culture Board Appointment

Department: City Administration

Presented By: Sara Weigel

Strategic Goals: Provide Efficient and Responsive City Government

Background Info:

Councilor Kaup Recommendation
Appoint Emily Fifer to a regular seat with term from April 2023 until March 2026.

Vacancies
Current Vacancies
Two regular seats with terms expiring March 2025 and March 2026.

Applicants
Emily Fifer, a city resident, has applied for appointment to a regular seat on the Arts and Culture Board. Emily was deemed eligible for appointment.

Composition of the Arts and Culture Board
Arts and Culture Board: a. Eight (8) members, at least five (5) of which are residents of the City, three (3) of which may reside outside of the City, and one (1) of which being a youth representative under the age of eighteen (18) or not having completed his or her final year of high school. Those representatives residing outside of the City must reside within the 81601 postal zip code area, own real property or a business within the City, or attend school within the City.

Issues: None.

Fiscal Impact: None.

Legal Review: None.

Staff Recommendation: Staff defers to City Council.

View results

Respondent

15 Anonymous

4295:36
Time to complete

Arts and Culture Board Application

Thank you for your interest and time commitment in serving your community. Please complete all questions on this application.

Composition of the Arts and Culture Board
(as defined in Title 020 of the Glenwood Springs Municipal Code)

- Eight (8) members, at least five (5) of which are residents of the city, three (3) of which may reside outside of the city, and one (1) of which being a youth representative under the age of eighteen (18) or not having completed his or her final year of high school. Those representatives residing outside of the city must reside within the 81601 postal zip code area, own real property or a business within the city, or attend school within the city.

Personal Information

1. Membership Qualifications *

You must qualify with one of the options below to be eligible to serve on the Arts and Culture Board. Please select the option that applies to you.

- [x] Resident of Glenwood Springs within city limits.
- [ ] Resident outside of Glenwood Springs city limits, but within the 81601 zip code.
- [ ] Owner of real property or a business within Glenwood Springs city limits.
- [ ] Youth resident (under the age of 18) within the 81601 zip code or attending school within city limits.

2. Name *

Emily Fifer

3. Home Address *

[redacted]

4. Mailing Address *

[redacted]

5. Home Phone *

[redacted]

6. Work Phone *

[redacted]

7. Mobile Phone *

[redacted]

8. Email Address *

[redacted]

9. Occupation *

Dance Artist and Self-employed at The Outpost Studio

Personal and Professional Interests

10. Why are you interested in serving on the Arts and Culture Board? *

I believe the inclusion of the arts is an indicator of a thriving and healthy community. As a citizen of Glenwood Springs, I want to see and engage with a vibrant arts and culture scene. Glenwood Springs is my hometown, and after graduating from high school, I pursued an education and career in the arts. I would like to take on an advisory role as a way to give back to my community. Art has always made me feel at home in a new place and it brings (most importantly) the residents, as well as visitors, a sense of place, cultural identity and a reason to gather together. It's important that municipalities support an active creative community, and I would very much like to be a part of that process.

11. What do you view as your role if selected as a member of the Arts and Culture Board? *

To create and promote opportunities for residents and visitors to gather and experience all forms of art in our community and to support an inclusive cultural identity in our community. It would also include elevating the work and voices of resident and regional artists, as well as advising the City on the implementation of the Public Art Plan.

12. Do you have marketing, advertising, or public relations experience or skills? *

I have experience in public relations, including writing press releases and grants.

13. Do you have Arts/Culture experience or skills? (ex. Performing arts, visual arts, public arts, museums arts, or education? *

I am a working dance artist in the Roaring Fork Valley and the Managing Director of CoMotion Dance Company. I direct, choreograph, dance and teach classes for the company. This includes collaborating with community partners in creating performances and art events in the valley. I have collaborated with Dance Initiative, Carbondale Arts, The Aspen Art Museum, the Glenwood Springs Summer of Music, The Center for the Arts (prior to it being acquired by the City), Strawberry Days and Colorado Mountain College.

14. Can you describe an experience making a decision based on public opinion? *

I worked for Utah Nonprofits Association (UNA) in Salt Lake City, UT for two years. As the program manager for UNA, I was charged with the nonprofit training program. As the program manager, I sent out surveys to participants to get feedback about the classes. This meant compiling results and translating it into meaningful data for the organization and then implementing the appropriate changes to better serve the community.

15. Can you separate yourself from your personal opinions and represent the City's goals, policies, plans, and the Glenwood Springs Municipal Code in an equitable fashion? *

Yes I can. I feel it's very important to honor and represent the vision of the City in order to most effectively reach the citizens of Glenwood Springs. In addition, as a board member, one of my goals would be to support and listen to the staff at the Community Arts Center to support their needs.

16. Do you have any existing time commitments that will hamper your ability to serve? *

No I don't.

17. What experience do you have working with people on a board, commission, or committee? *

While employed at UNA, I attended and gave reports at every board meeting as well as sat on committees to execute the organization's mission. I was also a member of Dance Initiative's advisory board for five years. This included supporting and representing the organization at events and performances, selecting local and national dance artists for residencies and scholarships and fulfilling the organization's mission within the bounds of the budget.

18. Please select today's date. *

2/24/2023

19. Have you served on the Arts and Culture Board before? *

- (●) No
- ( ) Yes

Powers and Duties of the Arts and Culture Board

(as defined in Title 020 of the Glenwood Springs Municipal Code)

(n) Arts and Culture Board. The powers and duties of the Arts and Culture Board shall be:
1) To promote awareness, access, and appreciation of the fine, performing, and practical arts for City residents and visitors.

2) To advise the City Council in connection with all matters relating to the artistic and cultural development of the City.

3) To provide opportunities for cultural and art experience and education for children and adults.

4) To promote increased interaction among artists and opportunities for growth and exposure.

5) To promote knowledge and appreciation for cultural forms of artistic expression.

6) To make recommendations to the City Council with respect to annual budget appropriations for the arts.

7) To advise and consult with local arts groups as requested by such groups or by the City Council.

Appointment, Removal, Term and Vacancies of Boards and Commissions

(Per the Glenwood Springs, CO Municipal Code 020.020.040)

(a) Appointment and term of members. Except as otherwise provided, all appointments to the boards and commissions shall be by the City Council for terms of three (3) years each, and each member shall serve until his/her successor is appointed and takes office; provided, however, that the initial terms of office may be shortened by the City Council so as to provide overlapping terms of office. Appointments shall expire the day before the first regular meeting of the City Council in each month according to the following schedule:
March:
Arts and Culture Board;

(b) Alternate members. The City Council at its discretion may appoint up to three (3) persons as alternate members for each board or commission. If a regular member of a board or commission is to be absent from a meeting, the presiding officer for the meeting may select an alternate member to fill such absence and to attend and serve at the meeting. The alternate member may exercise all powers at the meeting which the absent regular member could exercise, and the alternate's powers and privileges shall terminate at the end of the meeting attended. The presiding officer may at his/her discretion select the same alternate to serve at successive meetings in the absence of any member.

(c) Limit to term of members. No board member shall serve more than two (2) successive terms on the same board or commission.

(d) Removal of members. All appointed members of a board or commission shall be subject to removal, at any time, by the City Council. In the event an appointed member of a board or commission ceases to qualify for membership, his or her appointment is immediately terminated.

(e) Vacancies. The City Council shall fill all vacancies on boards and commissions by appointment for the unexpired term.

(Code 1971 §§ 2-63, 2-64, 2-67; 6-95 § 1; 10-07 § 2; Ord. No. 9-2018 , § 2, 4-20-2018)

020.020.020 Composition of boards and commissions.

The membership of boards and commissions shall be composed of the following persons:

(1) *Local Liquor Licensing Authority.*

a. The Local Liquor Licensing Authority shall consist of a Hearing Officer appointed by the City Council by resolution and may be removed with our without cause by a majority vote of the City Council.

(2) *Airport Board.*

a. Five (5) citizens, at least four (4) who are residents of the City and one (1) who may reside outside of the City but within the 81601 zip code area or own real property or a business within the City.

(3) *Building Board of Appeals.* The Planning and Zoning Commission shall act as the Building Board of Appeals whenever such a board is required by this Code, other ordinances of the City or State or Federal law.

(4) Finance Advisory Board:

a. Seven (7) members of which at least six (6) are City residents. One (1) member shall be employed in the finance industry; one (1) member shall be employed by the tourism industry; and one (1) member may be a non-resident, but shall own or be employed by a business within the City.

(5) *Parks and Recreation Commission.*

a. Seven (7) citizens, at least six (6) who are residents of the City and one (1) who may reside outside of the City but within the 81601 zip code area or own real property or a business within the City.

b. Reserved.

c. Reserved.

d. One (1) youth (under the age of eighteen [18] at appointment) who shall serve a one-year term from June 1 to May 31 of the following year.

(6) *Planning and Zoning Commission.*

a. Seven (7) citizens who are residents of the City.

(7) *River Commission.*

a. Seven (7) citizens, with one (1) alternate, at least six (6) who are residents of the City and one (1) who may reside outside of the City but within the 81601 zip code area or own real property or a business within the City.

(8) *Victim's and Witnesses Assistance and Law Enforcement Board.*

a. Five (5) citizens, at least four (4) who are residents of the City and one (1) who may reside outside of the City but within the 81601 zip code area or own real property or a business within the City.

b. Reserved.

c. The Chief of Police as an advisory member, but a nonvoting member of the Board.

(9) *Transportation Commission.*

a. Seven (7) citizens, at least six (6) who are residents of the City and one (1) who may reside outside of the City but within the 81601 zip code area or own real property or a business within the City.

(10) Reserved.

(11) *Glenwood Springs Housing Commission.*

a. Seven (7) citizens, at least six (6) who are residents of the City and one (1) who may reside outside of the City but within the 81601 zip code area or own real property or a business within the City.

Membership should reflect a broad representation of organizations and other entities which are related to housing, including but not limited to the financial community, the building and development community, the real estate industry, and organizations which support low-income residents of the community.

(12) *Historic Preservation Commission.*

a. Seven (7) citizens, at least six (6) who are residents of the City and one (1) who may reside outside of the City but within the 81601 zip code area or own real property or a business within the City.

(13) *Tourism Promotion Board.*

a. Two (2) representatives from the tourism related businesses located within the City;

b. Two (2) representatives from the lodging businesses located within the City;

c. One (1) representative from the restaurant or retail businesses located within the City;

d. One (1) representative from the Glenwood Springs Chamber Resort Association; and

e. Three (3) citizens, at least two (2) who are residents of the City and that shall not have a direct or indirect financial interest in a business referenced in (a), (b) or (c) above and one (1) who is a resident that may have a financial interest in a business referenced in (a), (b) or (c) above.

(14) *Arts and Culture Board.*

a. Eight (8) members, at least five (5) of which are residents of the City, three (3) of which may reside outside of the City, and one (1) of which being a youth representative under the age of eighteen (18) or not having completed his or her final year of high school. Those representatives residing outside of the City must reside within the 81601 postal zip code area, own real property or a business within the City, or attend school within the City.

(15) Council and Staff Participation on Boards and Commissions:

a. The Mayor may appoint up to two (2) members of Council to act as a liaison between Council and a Board or Commission.

b. The City Manager may appoint a member of staff to assist a Board or Commission as necessary to fulfill their duties as provided for in 020.020.030.

(Code 1971 §§ 2-61, 4-75, 4-230, 15-2; 26-84 § 1; 19-89 § 1; 12-90 § 1; 54-90 § 1; 29-91 § 1; 10-93 § 1; 29-93 § 1; 7-94 § 1; 23-94 § 1; 10-95 § 1; 19-95 §§ 1, 2; 40-95 § 1; 28-97 § 1; 29-97 § 1; 1-01 § 1; 61-01 § 2; 14-03 § 1 ; 9-04 § 1; 20-05 § 2; 7-06 § 2; 13-06, § 2; 10-07 § 2; 6-08 § 2; 12-09 § 2; 12-10 § 2; 2-12 § 2; Ord. No. 2-2016 , § 2(Exh. A), 2-4-2016; Ord. No. 16-2017 , § 3, 8-17-2017; Ord. No. 2-2018 , § 2, 1-18-2018; Ord. No. 6-2018 , § 2, 3-1-2018; Ord. No. 21-2018 , § 2, 9-20-2018; Ord. No. 2-2021 , § 2(Exh. A), 4-15-2021)

020.020.030 Powers and duties of boards and commissions.

(a) *Local Liquor Licensing Authority.*

(1) *Powers and duties of local liquor licensing authority.* The Local Liquor Licensing Authority shall have the powers granted to local licensing authorities pursuant to C.R.S. Title 12, Articles 46, 47, and 48, as amended.

(2) *Temporary permits.* The City Clerk is hereby delegated the authority to issue temporary fermented malt beverage permits to license transferees, as authorized by C.R.S. § 12-46-106.5, as amended, and temporary permits for any class of liquor license as authorized by C.R.S. § 12-47-106.5, as amended. Each temporary permit shall authorize the transferee to continue selling fermented malt beverages and other licensed beverages in accordance with state law during the period in which an application to transfer is pending. The City Clerk may issue the temporary permit if: (a) the premises shall have been previously licensed by the State and the license is valid at the time the application for transfer is filed; (b) the application appears to be in order, an application for transfer of the appropriate license has been filed, all fees have been paid, the initial background check has been successfully completed, and the fingerprint cards have been completed; and (c) the application for the temporary permit is filed no later than thirty (30) days after the filing of the application for transfer and associated fees paid. No temporary permit issued by the City Clerk shall be for a period greater than one hundred twenty (120) days from the date of its issuance.

(3) *Wine tastings.* The Local Liquor Licensing Authority is authorized to issue annual wine tasting permits pursuant to C.R.S. § 12-47-301 with the following conditions: (a) All requirements of C.R.S. § 12-47-301 have been met; and (b) Payment of an annual application fee of one hundred dollars ($100.00); and (c) No more than one hundred four (104) wine tastings may be held during the term of any permit issued pursuant to this section; and (d) Permit holders shall notify the City Clerk and Police Department at least seven (7) days prior to any wine tasting.

(4) *Rules, policies and procedures.* The Local Liquor Licensing Authority shall adopt rules, policies and procedures for the implementation of its duties and powers as those have been granted pursuant to C.R.S. Title 12, Articles 46, 47, and 48, as amended.

(5) *Report to city council.* The Local Liquor Licensing Authority shall be required to report on all actions taken with respect to the issuance of or control over liquor licenses within the City to the City Council. Reports shall be made in a timely fashion to the City Council.

(6) *Appeal to city council.* Any decision of the Local Liquor Licensing Authority may be appealed to the City Council within ten (10) calendar days, or at the next regularly scheduled meeting. City Council shall have the authority to sustain, modify or overturn the decision of the Local Liquor Licensing Authority. In any event, the City Council shall direct the Local Liquor Licensing Authority to take a particular action. The Local Liquor Licensing Authority shall conform to the written direction of the City Council within ten (10) calendar days from the date of the written directive.

(7) *Appeal to district court.* Any person applying to the District Court for review of a decision of the Local Liquor Licensing Authority shall apply for review within thirty (30) days of the decision of the Local Liquor Licensing Authority. The thirty-day period shall be inclusive of the appeal process to City Council as outlined in Subparagraph (5) above.

(b) *Powers and Duties of Airport Board.* The powers and duties of the Airport Board shall be to investigate, study and report to the City Council all matters concerning the airport facilities of the City and other matters concerning the subject of aviation which may be pertinent to the City as shall be requested of the Airport Board by the City Council; and such Board may investigate, study and report to the City Council on such other matters concerning the Municipal Airport as the Board may deem for the best interests of the City.

(c) *Powers and Duties of Building Board of Appeals.* The powers and duties of the Building Board of Appeals shall be to hear appeals in accordance with the International Building Code, International Residential Code, International Fire Code, and the other adopted codes from the International Code Council, as adopted or amended by Title 060 of this Code. Such power shall not include matters of interpretation arising under the Code.

(d) *Powers and Duties of Finance Advisory Board.* The Finance Advisory Board shall advise and assist the City Manager and Finance Director in the preparation of the City budget, the establishment of accounting systems for the City, the planning of expenses, the projection of revenues and the analysis of the other fiscal matters presented to the Board by the City Council. The Finance Advisory Board shall also be responsible for making recommendations to City Council regarding grants from the City's various grant programs as Council may establish from time to time. No decision of the Finance Advisory Board shall be binding upon the City or anyone acting on its behalf.

(e) *Powers and duties of Parks and Recreation Commission.* The powers and duties of the Parks and Recreation Commission shall be:

(1) To investigate, study and report to the City Council all matters concerning City parks and recreation within the City and other matters concerning the subject of parks and recreation which may be pertinent to the City and requested of such Commission by the City Council.

(2) To investigate, study and report to the City Council on such other matters concerning parks and recreation within the City as the Commission may deem in the best interests of the City.

(3) To provide technical assistance, advice and planning support to the Parks and Recreation Director and City Council regarding tree planting and maintenance needs in the City.

(4) To provide recommendations from time to time regarding the administration and implementation of Article 090.050 of this Code.

(5) To investigate, study and report to City Council all matters concerning the burial and internment facilities of the City and other such matters as may be requested by City Council from time to time.

(6) To investigate, study and report to City Council on such other matters concerning burial and internment facilities and such other similar matters as the Commission may deem in the best interests of the City.

(7) To investigate, study and report to City Council any and all matters concerning the use and operation of the City's Community Center.

(8) To coordinate with other City boards and commissions on any aspect of the Community Center that may relate to the powers and duties of such other boards and commissions.

(9) To investigate, study and report to City Council on grants, donations and other forms of funding to assist in the operation of the Community Center, and to otherwise advise City Council on budgetary needs related to the operation of the Community Center.

(f) *Powers and duties of Planning and Zoning Commission.* The powers and duties of the Planning and Zoning Commission shall be:

(1) To develop and recommend a master plan subject to the approval of the City Council and its environ in accordance with the provisions of this Code and the laws of the State.

(2) To recommend to the City Council boundaries of zone districts and regulations to be enforced therein, in accordance with the provisions of this Code and the laws of the State.

(3) To review proposals relating to subdivision, development and use of land and make decisions or recommendations on such proposals, in accordance with the procedures and provisions set forth in this Code.

(4) To hear and decide appeals wherein there is a question of interpretation of the zone district map, the master plan or related documents and similar questions as they may arise in the administration of this Code.

(5) The Planning and Zoning Commission shall have the duty and power to act on appeals with regard to matters arising from enforcement of provisions of Title 070 of this Code, including:

a. *Review of administrative decisions.* To hear and decide appeals where it is alleged there is error in any action, including any order, interpretation, requirement, decision or determination made by an administrative official of the city in the enforcement of Title 070 of this Code.

b. *Variances.* To hear and decide requests for variances from the zoning provisions and sign regulation provisions where there are unique, unnecessary and unreasonable hardships in the way of carrying out the strict letter of said provisions; and to hear and decide requests for variances to allow deviations from restrictions upon the construction and placement of buildings and other structures on site. Examples of such variances include, but are not limited to, modifications of minimum area requirements, building coverage and setback restrictions. Variances from permitted and special review uses in zone district text shall not be considered.

(6) To perform such other functions as required by the provisions of Title 070.

(7) To service as the Building Board of Appeals.

(g) *Powers and duties of River Commission.* The powers and duties of the River Commission shall be:

(1) To investigate, study, and report to the City Council any and all matters concerning the use, enjoyment, conservation of the, rivers and streams in the City and its environs and the open space adjacent thereto, including water quality issues, the protection of valuable riparian ecosystems, and water rights matters.

(2) To advise the City Council on public access to and use of rivers and streams in the City and the adjacent environs and maintain and update a map related thereto as necessary.

(3) To advise the City Council on the use of municipally owned property adjacent to the rivers and City construction projects in the rivers or adjacent open space.

(4) To promote and celebrate riverfront cleanup efforts and public awareness of non-point source water pollution.

(5) To investigate, study and report to the City Council on grants, donations and other forms of funding to assist in the acquisition and improvement of the rivers and adjacent open space, and to otherwise advise the City Council on budgetary needs related to preservation of open space and river improvement.

(6) To appoint subcommittees as necessary to carry out the foregoing functions.

(7) To coordinate with the Parks and Recreation Commission, Roaring Fork Conservancy, Middle Colorado Watershed Council, and other organizations, stakeholders groups, and property owners as is necessary to carry out the foregoing functions.

(8) At the request of City Council hold an annual work session with the City Council to review the actions taken by the River Commission regarding the foregoing functions and discuss future plans.

(h) *Powers and duties of the Victim's and Witnesses Assistance and Law Enforcement Board.*

(1) The Board shall designate one (1) of its members as chairman, shall establish rules of procedure and order and shall hold meetings as it might deem necessary.

(2) A surcharge equal to twenty-five (25) percent of the fine imposed for violation of all municipal ordinances, including ordinance violations under the Model Traffic Code, is hereby levied on each Municipal Court action resulting in a conviction, plea of guilty or no contest or in a deferred judgment and sentence, which municipal ordinance violation is charged pursuant to City ordinances. All calculated surcharge amounts resulting in dollars and cents shall be rounded to the nearest whole dollar. In the event a portion of the fine is suspended, the surcharge levied shall be computed based upon the original fine, regardless of whether a portion of said fine has been suspended. Said surcharges shall be paid to the Clerk of the Court by the defendant, and said Clerk shall deposit the money so received in the fund hereinafter created.

(3) The Victim's and Witnesses Assistance and Law Enforcement Fund, hereinafter referred to as the "Fund," consist of all monies paid as a surcharge as provided in Subsection (2) above. All monies deposited in the Fund shall be deposited in an interest-bearing account, and all interest earned by monies in the Fund shall be credited to the Fund. The City Manager, by and through the Finance Director, shall be responsible for establishing a separate fund for purposes of accounting for the revenues and expenditures. At the conclusion of each fiscal year, all monies remaining in the Fund shall remain in the Fund for allocation as hereinafter set forth.

(4) The Board shall disburse monies from the Fund in the following manner:

a. First, to the payment of all reasonable and necessary expenses and costs incurred by the Board in the performance of its duties, including but not limited to professional fees, office supplies and meeting expenses.

b. Second, not less than fifty (50) percent of the monies remaining in the Fund after the deduction of reasonable expenses and costs shall be allocated for the purchase of victims (and witnesses) services and reimbursements, as hereinafter set forth. No funds shall be paid except in those specific instances where a police report has been filed by the Police Department for an alleged violation of a municipal ordinance, regardless of whether the perpetrator has been identified, arrested or prosecuted.

c. Third, any remaining monies may be allocated to the Police Department for the following purposes, including, but not limited to: equipment purchases, training programs for personnel and the employment of additional personnel. Such funds shall not be used by the Police Department for defraying the costs of routine and ongoing operating expenses. No disbursement within this category of expenditure shall be made without the approval of the City Council following a written recommendation by the Board.

(5) Disbursement of funds by the Board on behalf of the victim's and witnesses assistance services may be used for the following purposes:

a. Provision of services for early crisis intervention;

b. Assistance in prompt return of victims' property;

c. Assistance to victims and witnesses in arranging transportation to and from court;

d. Provision of translator services;

e. Protection from threats of harm and other forms of intimidation;

f. Reasonable medical and hospital expenses and expenses incurred for dentures, eyeglasses, hearing aids or other prosthetic or medically necessary devices; and

g. Losses resulting from property damage, including repair or replacement of property damaged as a result of crime or payment of the deductible amount on a residential insurance policy in an amount not to exceed five hundred dollars ($500.00). Victims' recovery due to property damage shall not exceed five hundred dollars ($500.00) for any crime, but in no case shall a loss be compensable if the aggregate property damages are less than twenty-five dollars ($25.00).

(6) The Board is authorized to accept and evaluate all applications for disbursement of funds, whether emanating from victims, witnesses or law enforcement agencies. Applications for disbursement shall be made upon forms prescribed by the Board, and made available by the Municipal Court and the Police Department. The Board shall establish its own criteria for evaluating applications for disbursement, and nothing herein contained shall obligate the Board to make disbursement of any funds available to it. Upon a finding by the Board that a disbursement shall be made from the Fund, the Board shall submit a written request for payment to the Finance Department, which shall then remit payment in accordance with the request.

(7) The Board is required to submit minutes of its meetings to the City Council at the next regular Council meeting following the Board's meeting.

(i) *Powers and duties of Transportation Commission.* The powers and duties of the Transportation Commission shall be:

(1) To investigate, study and report to the City Council any and all matters concerning transportation issues which directly affect the City.

(2) To investigate, study and report to the City Council on other intergovernmental committees, boards or commissions working on transportation issues in the Tri-County (Pitkin, Garfield and Eagle) area.

(3) To meet with the City Council on an annual basis to identify which transportation issues require priority attention.

(4) To investigate, study and report to the City Council on grants, donations and other forms of funding to assist in meeting the transportation needs of the City.

(5) To perform functions concerning oversight of transportation issues or functions as delegated by the City Council.

(6) To appoint subcommittees as necessary to carry out the foregoing functions subject to the approval of the City Council.

(j) Reserved.

(k) *Powers and duties of Glenwood Springs Housing Commission.* The powers and duties of the Housing Commission shall be:

(1) To investigate, study and report to the City Council any and all matters concerning housing issues which directly affect the City, including the preparation of a Comprehensive Housing Affordability Strategy (CHAS).

(2) To assist City Council in defining the nature and scope of housing opportunities in the City.

(3) To meet with the City Council on an annual basis to identify which housing issues require priority attention.

(4) To investigate, study and report to the City Council on grants, donations and other forms of funding to assist in meeting the housing needs of the City.

(5) To perform functions concerning oversight of housing issues or functions as delegated by the City Council, including monitoring the implementation of activities as described in the CHAS.

(6) To appoint subcommittees as necessary to carry out the foregoing functions subject to the approval of the City Council.

(l) *Powers and duties of Historic Preservation Commission.* The powers and duties of the Historic Preservation Commission shall be:

(1) To recommend to City Council methods for the protection and preservation of the City's historic and cultural heritage, including, but not limited to, the designation of historic landmarks and districts by appropriate regulations.

(2) To recommend to City Council methods for enhancing property values and the stabilization of historic neighborhoods.

(3) To recommend to City Council methods for increasing economic and financial benefits, including, but not limited to, City attractions.

(4) To provide educational opportunities to increase public appreciation of the City's unique heritage.

(5) To do any other tasks related to the historic preservation of resources in the community of Glenwood Springs.

(m) *Powers and duties of Tourism Promotion Board.* The powers and duties of the Tourism Promotion Board shall be:

(1) To investigate, study and report to the City Council:

a. All matters concerning tourism marketing and promotion that pertain to the benefit of Glenwood Springs and the area within the 81601 postal zip code; and

b. Other matters concerning the subject of tourism marketing and promotion which may be pertinent to the benefit of the City and the area within the 81601 postal zip code.

(2) To coordinate with City staff, community organizations, community businesses, and other boards and commissions, when applicable to efficiently market and promote tourism to the benefit of Glenwood Springs and the area within the 81601 postal zip code.

(3) To, at its discretion, and in addition to initiatives that directly market and promote features and attractions within the City and the area within the 81601 postal zip code, market and promote the geographical proximity of Glenwood Springs to other features and attractions outside of the 81601 postal zip code in ways that could reasonably be expected to benefit the City.

(4) To establish rules of procedure and order for the Board to follow.

(5) To review tourism marketing plans; to set tourism marketing goals, to determine the methods to accomplish and measure success in accomplishing those goals; to determine the appropriate staff and marketing contractor(s)/vendor(s) resources needed; to recommend to the City Council an annual tourism marketing budget; to recommend, to the City Council, award of contract(s) for the best candidate for contract staff and marketing contractor(s)/vendor(s), deemed necessary, based upon an approved Request for Proposal, Request for Qualification or other process; and to provide oversight of performance of contract staff and marketing vendor(s)/contractor(s) contract terms to ensure the efficient and effective implementation of the marketing goals and to report problems with performance to City Council.

(6) To meet with the City Council on an annual basis, or as often as requested by the City Council, to identify marketing priorities of the City.

(7) To complete all other duties as may be directed by City Council.

(n) *Powers and duties of Arts and Culture Board.* The powers and duties of the Arts and Culture Board shall be:

(1) To promote awareness, access, and appreciation of the fine, performing, and practical arts for City residents and visitors.

(2) To advise the City Council in connection with all matters relating to the artistic and cultural development of the City.

(3) To provide opportunities for cultural and art experience and education for children and adults.

(4) To promote increased interaction and collaboration among artists, art-related organizations, and opportunities for growth and exposure.

(5) To promote knowledge and appreciation for cultural forms of artistic expression.

(6) To make recommendations to the City Council with respect to fundraising and annual budget appropriations for the arts.

(7) To advise and consult with local arts groups as requested by such groups or by the City Council.

(Code 1971 §§ 2-64.1, 2-2, 2-65[a], [b], 2-65.1, 4-78, 4-232, 4-155, 15-2; 26-84 § 3; 19-89 § 3; 12-90 § 1; 54-90 § 3; 39-91 § 3; 10-93 § 2; 29-93 § 3; 7-94 § 3; 17-94 § 1; 23-94 § 3; 10-95 § 3; 11-95; 19-95 § 3; 46-95 § 1; 55-95 § 1; 28-97 § 3; 29-97 § 5; 32-97 § 1; 42-00 § 1; 61-01 § 3, 4, 5; 61-02 § 4; 9-04 § 1; 20-04, § 1; 33-05, § 2; 7-06 § 3; 13-06, § 2; 6-08 § 2; 12-10 § 2; 2-12 § 2; Ord. No. 16-2017 , § 4, 8-17-2017; Ord. No. 2-2018 , § 3, 1-18-2018; Ord. No. 6-2018 , § 3, 3-1-2018; Ord. No. 21-2018 , § 3, 9-20-2018; Ord. No. 2-2021 , § 2(Exh. A), 4-15-2021)

020.020.040 Appointment, removal, term and vacancies of boards and commissions.

(a) *Appointment and term of members.* Except as otherwise provided, all appointments to the boards and commissions shall be by the City Council for terms of three (3) years each, and each member shall serve until his/her successor is appointed and takes office; provided, however, that the initial terms of office may be shortened by the City Council so as to provide overlapping terms of office. Appointments shall expire the day before the first regular meeting of the City Council in each month according to the following schedule:

(1) February:

Planning and Zoning Commission;

Finance Advisory Board;

Tourism Promotion Board;

Building Board of Appeals.

(2) March:

Transportation Commission;

Arts and Culture Board;

Parks and Recreation Commission;

Airport Board;

River Commission.

(3) April:

Local Liquor Licensing Authority;

Victim's Witnesses Assistance and Law Enforcement Board;

Historic Preservation Commission;

Glenwood Springs Housing Commission.

(b) *Alternate members.* The City Council at its discretion may appoint up to three (3) persons as alternate members for each board or commission. If a regular member of a board or commission is to be absent from a meeting, the presiding officer for the meeting may select an alternate member to fill such absence and to attend and serve at the meeting. The alternate member may exercise all powers at the meeting which the absent regular member could exercise, and the alternate's powers and privileges shall terminate at the end of the meeting attended. The presiding officer may at his/her discretion select the same alternate to serve at successive meetings in the absence of any member.

(c) *Limit to term of members.* No board member shall serve more than two (2) successive terms on the same board or commission.

(d) *Removal of members.* All appointed members of a board or commission shall be subject to removal, at any time, by the City Council. In the event an appointed member of a board or commission ceases to qualify for membership, his or her appointment is immediately terminated.

(e) *Vacancies.* The City Council shall fill all vacancies on boards and commissions by appointment for the unexpired term.

(Code 1971 §§ 2-63, 2-64, 2-67; 6-95 § 1; 10-07 § 2; Ord. No. 9-2018 , § 2, 4-20-2018; Ord. No. 29-2020 , § 2, 1-7-2021)

City Council
STAFF REPORT
City of Glenwood Springs
April 20, 2023

Agenda Item: Parks and Recreation Commission Appointment

Action Requested: Parks and Recreation Commission Appointment

Department: City Administration

Presented By: Sara Weigel

Strategic Goals: Provide Efficient and Responsive City Government
Protect and Preserve our Quality of Life

Background Info:

Councilor Wussow Recommendation
Reappoint Amanda Madden to the Youth Representative seat with term from June 1, 2023 until May 31, 2024.

Vacancies
Upcoming vacancy
The Youth Representative seats with a term expiring May 31, 2024.

Applicant
Amanda Madden, a Glenwood Springs High School student, has applied for reappointment to the Youth Representative seat on the Parks and Recreation Commission. Amanda was deemed eligible for reappointment.

Composition of the Parks and Recreation Commission
Seven (7) citizens, at least six (6) who are residents of the City and one (1) who may reside outside of the City but within the 81601 zip code area or own real property or a business within the City. One (1) youth (under the age of eighteen at appointment) who shall serve a one year term from June 1 to May 31 of the following year.

Issues: None.

Fiscal Impact: None.

Legal Review: None.

Staff Recommendation: Staff defers to City Council.

View results

Respondent

14 Anonymous

12:00
Time to complete

Parks and Recreation Commission Application

Thank you for your interest and time commitment in serving your community. Please complete all questions on this application.

Composition of the Parks and Recreation Commission:
(as defined in Title 020 of the Glenwood Springs Municipal Code)

(5) Parks and Recreation Commission:

- Seven (7) citizens, at least six (6) who are residents of the City and one (1) who may reside outside of the City but within the 81601 zip code area or own real property or a business within the City.
- One (1) youth (under the age of eighteen [18] at appointment) who shall serve a one-year term from June 1 to May 31 of the following year.

Personal Information

1. Membership Qualifications *

You must qualify with one of the options below to be eligible to serve on the Parks and Recreation Commission. Please select the option that applies to you.

- [ ] Resident of Glenwood Springs within city limits.
- [ ] Resident outside of Glenwood Springs city limits, but within the 81601 zip code.
- [ ] Owner of real property or a business within Glenwood Springs city limits.
- [x] Youth resident (under the age of 18) within the 81601 zip code.

2. Name *

Amanda Madden

3. Home Address *

[redacted]

4. Mailing Address *

[redacted]

5. Home Phone *

[redacted]

6. Work Phone *

[redacted]

7. Mobile Phone *

[redacted]

8. Email Address *

[redacted]

9. Occupation *

Student

Personal and Professional Interests

10. Why are you interested in serving on the Parks and Recreation Commission? *

I have served on this commission for on eyear already have learned so much about the governmental system and process. I have learned how to communicate and have my voice heard while understanding others points of view, and I hope to continue learning.

11. What do you view as your role if selected as a member of the Parks and Recreation Commission? *

I view my role as brining the voice of the youth forward. And, not just the opinions of the youth, but of the up and coming generation. I hope to ensure policy and projects are passed that help not only my generation, but those to come.

12. What experience and/or interest do you have in programming, planning, and being a part of community meetings? *

I have been on this board for a year and am in mock trial, student council and key club. I love helping the community and want to both help with policy conversations and physical volunteering as well.

13. Do you have any particular areas of interest or a particular perspective relating to parks and recreation in Glenwood Springs? *

I hope to increase safe River access and keep the ever-present problem of climate change on the forefront of decision making.

14. Can you separate yourself from your personal opinions and represent the City's goals, policies, plans, and the Glenwood Springs Municipal Code in an equitable fashion? *

Yes

15. Can you describe an experience making a decision that made people unhappy? *

On the parks and recreation commission this and last year, some decisions were made that the public was not appreciative of. For example, the youth hockey team wanted more time on the ice and presented it to the commission. The staff took this and did what they could with it. I saw open and healthy communication around a controversial topic, and a conversation towards a solution being made.

16. Do you have any existing time commitments that will hamper your ability to serve? (The Commission generally meets monthly in the evening for approximately 90 minutes, with members encouraged to participate in ad hoc projects outside of the scheduled meetings.) *

No

17. What experience do you have working with people on a board, commission, or committee? *

I have been on this board for one year working with this commission and have sat in on multiple city council meetings. I am also an officer in three school clubs.

18. Please select today's date. *

3/17/2023

19. Have you served on the Parks and Recreation Commission before? *

- [ ] No
- [x] Yes

Reappointment Applicants

20. Why do you think you should be reappointed? *

I think that I bring a unique perspective to the conversation making sure that the youth community is represented, but I also ensure that I listen to the conversation and help work towards progressive solutions.

21. Have you served two full successive terms on the Parks and Recreation Commission? *

No

Powers and Duties of the Parks and Recreation Commission

(as defined in Title 020 of the Glenwood Springs Municipal Code)

(e) Powers and duties of Parks and Recreation Commission. The powers and duties of the Parks and Recreation Commission shall be:

(1) To investigate, study and report to the City Council all matters concerning City parks and recreation within the City and other matters concerning the subject of parks and recreation which may be pertinent to the City and requested of such Commission by the City Council.

(2) To investigate, study and report to the City Council on such other matters concerning parks and recreation within the City as the Commission may deem in the best interests of the City.

(3) To provide technical assistance, advice and planning support to the Parks and Recreation Director and City Council regarding tree planting and maintenance needs in the City.

(4) To provide recommendations from time to time regarding the administration and implementation of Article 090.050 of this Code.

(5) To investigate, study and report to City Council all matters concerning the burial and internment facilities of the City and other such matters as may be requested by City Council from time to time.

(6) To investigate, study and report to City Council on such other matters concerning burial and internment facilities and such other similar matters as the Commission may deem in the best interests of the City.

(7) To investigate, study and report to City Council any and all matters concerning the use and operation of the City's Community Center.

(8) To coordinate with other City boards and commissions on any aspect of the Community Center that may relate to the powers and duties of such other boards and commissions.

(9) To investigate, study and report to City Council on grants, donations and other forms of funding to assist in the operation of the Community Center, and to otherwise advise City Council on budgetary needs related to the operation of the Community Center.

(A 61-02 §4)

Appointment, Removal, Term and Vacancies of Boards and Commissions

(Per the Glenwood Springs, CO Municipal Code 020.020.040)

(a) Appointment and term of members. Except as otherwise provided, all appointments to the boards and commissions shall be by the City Council for terms of three (3) years each, and each member shall serve until his/her successor is appointed and takes office; provided, however, that the initial terms of office may be shortened by the City Council so as to provide overlapping terms of office. Appointments shall expire the day before the first regular meeting of the City Council in each month according to the following schedule:
March:
Parks and Recreation Commission;

(b) Alternate members. The City Council at its discretion may appoint up to three (3) persons as alternate members for each board or commission. If a regular member of a board or commission is to be absent from a meeting, the presiding officer for the meeting may select an alternate member to fill such absence and to attend and serve at the meeting. The alternate member may exercise all powers at the meeting which the absent regular member could exercise, and the alternate's powers and privileges shall terminate at the end of the meeting attended. The presiding officer may at his/her discretion select the same alternate to serve at successive meetings in the absence of any member.

(c) Limit to term of members. No board member shall serve more than two (2) successive terms on the same board or commission.

(d) Removal of members. All appointed members of a board or commission shall be subject to removal, at any time, by the City Council. In the event an appointed member of a board or commission ceases to qualify for membership, his or her appointment is immediately terminated.

(e) Vacancies. The City Council shall fill all vacancies on boards and commissions by appointment for the unexpired term.

(Code 1971 §§ 2-63, 2-64, 2-67; 6-95 § 1; 10-07 § 2; Ord. No. 9-2018 , § 2, 4-20-2018)

020.020.020 Composition of boards and commissions.

The membership of boards and commissions shall be composed of the following persons:

(1) *Local Liquor Licensing Authority.*

a. The Local Liquor Licensing Authority shall consist of a Hearing Officer appointed by the City Council by resolution and may be removed with our without cause by a majority vote of the City Council.

(2) *Airport Board.*

a. Five (5) citizens, at least four (4) who are residents of the City and one (1) who may reside outside of the City but within the 81601 zip code area or own real property or a business within the City.

(3) *Building Board of Appeals.* The Planning and Zoning Commission shall act as the Building Board of Appeals whenever such a board is required by this Code, other ordinances of the City or State or Federal law.

(4) Finance Advisory Board:

a. Seven (7) members of which at least six (6) are City residents. One (1) member shall be employed in the finance industry; one (1) member shall be employed by the tourism industry; and one (1) member may be a non-resident, but shall own or be employed by a business within the City.

(5) *Parks and Recreation Commission.*

a. Seven (7) citizens, at least six (6) who are residents of the City and one (1) who may reside outside of the City but within the 81601 zip code area or own real property or a business within the City.

b. Reserved.

c. Reserved.

d. One (1) youth (under the age of eighteen [18] at appointment) who shall serve a one-year term from June 1 to May 31 of the following year.

(6) *Planning and Zoning Commission.*

a. Seven (7) citizens who are residents of the City.

(7) *River Commission.*

a. Seven (7) citizens, with one (1) alternate, at least six (6) who are residents of the City and one (1) who may reside outside of the City but within the 81601 zip code area or own real property or a business within the City.

(8) *Victim's and Witnesses Assistance and Law Enforcement Board.*

a. Five (5) citizens, at least four (4) who are residents of the City and one (1) who may reside outside of the City but within the 81601 zip code area or own real property or a business within the City.

b. Reserved.

c. The Chief of Police as an advisory member, but a nonvoting member of the Board.

(9) *Transportation Commission.*

a. Seven (7) citizens, at least six (6) who are residents of the City and one (1) who may reside outside of the City but within the 81601 zip code area or own real property or a business within the City.

(10) Reserved.

(11) *Glenwood Springs Housing Commission.*

a. Seven (7) citizens, at least six (6) who are residents of the City and one (1) who may reside outside of the City but within the 81601 zip code area or own real property or a business within the City.

Membership should reflect a broad representation of organizations and other entities which are related to housing, including but not limited to the financial community, the building and development community, the real estate industry, and organizations which support low-income residents of the community.

(12) *Historic Preservation Commission.*

a. Seven (7) citizens, at least six (6) who are residents of the City and one (1) who may reside outside of the City but within the 81601 zip code area or own real property or a business within the City.

(13) *Tourism Promotion Board.*

a. Two (2) representatives from the tourism related businesses located within the City;

b. Two (2) representatives from the lodging businesses located within the City;

c. One (1) representative from the restaurant or retail businesses located within the City;

d. One (1) representative from the Glenwood Springs Chamber Resort Association; and

e. Three (3) citizens, at least two (2) who are residents of the City and that shall not have a direct or indirect financial interest in a business referenced in (a), (b) or (c) above and one (1) who is a resident that may have a financial interest in a business referenced in (a), (b) or (c) above.

(14) *Arts and Culture Board.*

a. Eight (8) members, at least five (5) of which are residents of the City, three (3) of which may reside outside of the City, and one (1) of which being a youth representative under the age of eighteen (18) or not having completed his or her final year of high school. Those representatives residing outside of the City must reside within the 81601 postal zip code area, own real property or a business within the City, or attend school within the City.

(15) Council and Staff Participation on Boards and Commissions:

a. The Mayor may appoint up to two (2) members of Council to act as a liaison between Council and a Board or Commission.

b. The City Manager may appoint a member of staff to assist a Board or Commission as necessary to fulfill their duties as provided for in 020.020.030.

(Code 1971 §§ 2-61, 4-75, 4-230, 15-2; 26-84 § 1; 19-89 § 1; 12-90 § 1; 54-90 § 1; 29-91 § 1; 10-93 § 1; 29-93 § 1; 7-94 § 1; 23-94 § 1; 10-95 § 1; 19-95 §§ 1, 2; 40-95 § 1; 28-97 § 1; 29-97 § 1; 1-01 § 1; 61-01 § 2; 14-03 § 1 ; 9-04 § 1; 20-05 § 2; 7-06 § 2; 13-06, § 2; 10-07 § 2; 6-08 § 2; 12-09 § 2; 12-10 § 2; 2-12 § 2; Ord. No. 2-2016 , § 2(Exh. A), 2-4-2016; Ord. No. 16-2017 , § 3, 8-17-2017; Ord. No. 2-2018 , § 2, 1-18-2018; Ord. No. 6-2018 , § 2, 3-1-2018; Ord. No. 21-2018 , § 2, 9-20-2018; Ord. No. 2-2021 , § 2(Exh. A), 4-15-2021)

020.020.030 Powers and duties of boards and commissions.

(a) *Local Liquor Licensing Authority.*

(1) *Powers and duties of local liquor licensing authority.* The Local Liquor Licensing Authority shall have the powers granted to local licensing authorities pursuant to C.R.S. Title 12, Articles 46, 47, and 48, as amended.

(2) *Temporary permits.* The City Clerk is hereby delegated the authority to issue temporary fermented malt beverage permits to license transferees, as authorized by C.R.S. § 12-46-106.5, as amended, and temporary permits for any class of liquor license as authorized by C.R.S. § 12-47-106.5, as amended. Each temporary permit shall authorize the transferee to continue selling fermented malt beverages and other licensed beverages in accordance with state law during the period in which an application to transfer is pending. The City Clerk may issue the temporary permit if: (a) the premises shall have been previously licensed by the State and the license is valid at the time the application for transfer is filed; (b) the application appears to be in order, an application for transfer of the appropriate license has been filed, all fees have been paid, the initial background check has been successfully completed, and the fingerprint cards have been completed; and (c) the application for the temporary permit is filed no later than thirty (30) days after the filing of the application for transfer and associated fees paid. No temporary permit issued by the City Clerk shall be for a period greater than one hundred twenty (120) days from the date of its issuance.

(3) *Wine tastings.* The Local Liquor Licensing Authority is authorized to issue annual wine tasting permits pursuant to C.R.S. § 12-47-301 with the following conditions: (a) All requirements of C.R.S. § 12-47-301 have been met; and (b) Payment of an annual application fee of one hundred dollars ($100.00); and (c) No more than one hundred four (104) wine tastings may be held during the term of any permit issued pursuant to this section; and (d) Permit holders shall notify the City Clerk and Police Department at least seven (7) days prior to any wine tasting.

(4) *Rules, policies and procedures.* The Local Liquor Licensing Authority shall adopt rules, policies and procedures for the implementation of its duties and powers as those have been granted pursuant to C.R.S. Title 12, Articles 46, 47, and 48, as amended.

(5) *Report to city council.* The Local Liquor Licensing Authority shall be required to report on all actions taken with respect to the issuance of or control over liquor licenses within the City to the City Council. Reports shall be made in a timely fashion to the City Council.

(6) *Appeal to city council.* Any decision of the Local Liquor Licensing Authority may be appealed to the City Council within ten (10) calendar days, or at the next regularly scheduled meeting. City Council shall have the authority to sustain, modify or overturn the decision of the Local Liquor Licensing Authority. In any event, the City Council shall direct the Local Liquor Licensing Authority to take a particular action. The Local Liquor Licensing Authority shall conform to the written direction of the City Council within ten (10) calendar days from the date of the written directive.

(7) *Appeal to district court.* Any person applying to the District Court for review of a decision of the Local Liquor Licensing Authority shall apply for review within thirty (30) days of the decision of the Local Liquor Licensing Authority. The thirty-day period shall be inclusive of the appeal process to City Council as outlined in Subparagraph (5) above.

(b) *Powers and Duties of Airport Board.* The powers and duties of the Airport Board shall be to investigate, study and report to the City Council all matters concerning the airport facilities of the City and other matters concerning the subject of aviation which may be pertinent to the City as shall be requested of the Airport Board by the City Council; and such Board may investigate, study and report to the City Council on such other matters concerning the Municipal Airport as the Board may deem for the best interests of the City.

(c) *Powers and Duties of Building Board of Appeals.* The powers and duties of the Building Board of Appeals shall be to hear appeals in accordance with the International Building Code, International Residential Code, International Fire Code, and the other adopted codes from the International Code Council, as adopted or amended by Title 060 of this Code. Such power shall not include matters of interpretation arising under the Code.

(d) *Powers and Duties of Finance Advisory Board.* The Finance Advisory Board shall advise and assist the City Manager and Finance Director in the preparation of the City budget, the establishment of accounting systems for the City, the planning of expenses, the projection of revenues and the analysis of the other fiscal matters presented to the Board by the City Council. The Finance Advisory Board shall also be responsible for making recommendations to City Council regarding grants from the City's various grant programs as Council may establish from time to time. No decision of the Finance Advisory Board shall be binding upon the City or anyone acting on its behalf.

(e) *Powers and duties of Parks and Recreation Commission.* The powers and duties of the Parks and Recreation Commission shall be:

(1) To investigate, study and report to the City Council all matters concerning City parks and recreation within the City and other matters concerning the subject of parks and recreation which may be pertinent to the City and requested of such Commission by the City Council.

(2) To investigate, study and report to the City Council on such other matters concerning parks and recreation within the City as the Commission may deem in the best interests of the City.

(3) To provide technical assistance, advice and planning support to the Parks and Recreation Director and City Council regarding tree planting and maintenance needs in the City.

(4) To provide recommendations from time to time regarding the administration and implementation of Article 090.050 of this Code.

(5) To investigate, study and report to City Council all matters concerning the burial and internment facilities of the City and other such matters as may be requested by City Council from time to time.

(6) To investigate, study and report to City Council on such other matters concerning burial and internment facilities and such other similar matters as the Commission may deem in the best interests of the City.

(7) To investigate, study and report to City Council any and all matters concerning the use and operation of the City's Community Center.

(8) To coordinate with other City boards and commissions on any aspect of the Community Center that may relate to the powers and duties of such other boards and commissions.

(9) To investigate, study and report to City Council on grants, donations and other forms of funding to assist in the operation of the Community Center, and to otherwise advise City Council on budgetary needs related to the operation of the Community Center.

(f) *Powers and duties of Planning and Zoning Commission.* The powers and duties of the Planning and Zoning Commission shall be:

(1) To develop and recommend a master plan subject to the approval of the City Council and its environ in accordance with the provisions of this Code and the laws of the State.

(2) To recommend to the City Council boundaries of zone districts and regulations to be enforced therein, in accordance with the provisions of this Code and the laws of the State.

(3) To review proposals relating to subdivision, development and use of land and make decisions or recommendations on such proposals, in accordance with the procedures and provisions set forth in this Code.

(4) To hear and decide appeals wherein there is a question of interpretation of the zone district map, the master plan or related documents and similar questions as they may arise in the administration of this Code.

(5) The Planning and Zoning Commission shall have the duty and power to act on appeals with regard to matters arising from enforcement of provisions of Title 070 of this Code, including:

a. *Review of administrative decisions.* To hear and decide appeals where it is alleged there is error in any action, including any order, interpretation, requirement, decision or determination made by an administrative official of the city in the enforcement of Title 070 of this Code.

b. *Variances.* To hear and decide requests for variances from the zoning provisions and sign regulation provisions where there are unique, unnecessary and unreasonable hardships in the way of carrying out the strict letter of said provisions; and to hear and decide requests for variances to allow deviations from restrictions upon the construction and placement of buildings and other structures on site. Examples of such variances include, but are not limited to, modifications of minimum area requirements, building coverage and setback restrictions. Variances from permitted and special review uses in zone district text shall not be considered.

(6) To perform such other functions as required by the provisions of Title 070.

(7) To service as the Building Board of Appeals.

(g) *Powers and duties of River Commission.* The powers and duties of the River Commission shall be:

(1) To investigate, study, and report to the City Council any and all matters concerning the use, enjoyment, conservation of the, rivers and streams in the City and its environs and the open space adjacent thereto, including water quality issues, the protection of valuable riparian ecosystems, and water rights matters.

(2) To advise the City Council on public access to and use of rivers and streams in the City and the adjacent environs and maintain and update a map related thereto as necessary.

(3) To advise the City Council on the use of municipally owned property adjacent to the rivers and City construction projects in the rivers or adjacent open space.

(4) To promote and celebrate riverfront cleanup efforts and public awareness of non-point source water pollution.

(5) To investigate, study and report to the City Council on grants, donations and other forms of funding to assist in the acquisition and improvement of the rivers and adjacent open space, and to otherwise advise the City Council on budgetary needs related to preservation of open space and river improvement.

(6) To appoint subcommittees as necessary to carry out the foregoing functions.

(7) To coordinate with the Parks and Recreation Commission, Roaring Fork Conservancy, Middle Colorado Watershed Council, and other organizations, stakeholders groups, and property owners as is necessary to carry out the foregoing functions.

(8) At the request of City Council hold an annual work session with the City Council to review the actions taken by the River Commission regarding the foregoing functions and discuss future plans.

(h) *Powers and duties of the Victim's and Witnesses Assistance and Law Enforcement Board.*

(1) The Board shall designate one (1) of its members as chairman, shall establish rules of procedure and order and shall hold meetings as it might deem necessary.

(2) A surcharge equal to twenty-five (25) percent of the fine imposed for violation of all municipal ordinances, including ordinance violations under the Model Traffic Code, is hereby levied on each Municipal Court action resulting in a conviction, plea of guilty or no contest or in a deferred judgment and sentence, which municipal ordinance violation is charged pursuant to City ordinances. All calculated surcharge amounts resulting in dollars and cents shall be rounded to the nearest whole dollar. In the event a portion of the fine is suspended, the surcharge levied shall be computed based upon the original fine, regardless of whether a portion of said fine has been suspended. Said surcharges shall be paid to the Clerk of the Court by the defendant, and said Clerk shall deposit the money so received in the fund hereinafter created.

(3) The Victim's and Witnesses Assistance and Law Enforcement Fund, hereinafter referred to as the "Fund," consist of all monies paid as a surcharge as provided in Subsection (2) above. All monies deposited in the Fund shall be deposited in an interest-bearing account, and all interest earned by monies in the Fund shall be credited to the Fund. The City Manager, by and through the Finance Director, shall be responsible for establishing a separate fund for purposes of accounting for the revenues and expenditures. At the conclusion of each fiscal year, all monies remaining in the Fund shall remain in the Fund for allocation as hereinafter set forth.

(4) The Board shall disburse monies from the Fund in the following manner:

a. First, to the payment of all reasonable and necessary expenses and costs incurred by the Board in the performance of its duties, including but not limited to professional fees, office supplies and meeting expenses.

b. Second, not less than fifty (50) percent of the monies remaining in the Fund after the deduction of reasonable expenses and costs shall be allocated for the purchase of victims (and witnesses) services and reimbursements, as hereinafter set forth. No funds shall be paid except in those specific instances where a police report has been filed by the Police Department for an alleged violation of a municipal ordinance, regardless of whether the perpetrator has been identified, arrested or prosecuted.

c. Third, any remaining monies may be allocated to the Police Department for the following purposes, including, but not limited to: equipment purchases, training programs for personnel and the employment of additional personnel. Such funds shall not be used by the Police Department for defraying the costs of routine and ongoing operating expenses. No disbursement within this category of expenditure shall be made without the approval of the City Council following a written recommendation by the Board.

(5) Disbursement of funds by the Board on behalf of the victim's and witnesses assistance services may be used for the following purposes:

a. Provision of services for early crisis intervention;

b. Assistance in prompt return of victims' property;

c. Assistance to victims and witnesses in arranging transportation to and from court;

d. Provision of translator services;

e. Protection from threats of harm and other forms of intimidation;

f. Reasonable medical and hospital expenses and expenses incurred for dentures, eyeglasses, hearing aids or other prosthetic or medically necessary devices; and

g. Losses resulting from property damage, including repair or replacement of property damaged as a result of crime or payment of the deductible amount on a residential insurance policy in an amount not to exceed five hundred dollars ($500.00). Victims' recovery due to property damage shall not exceed five hundred dollars ($500.00) for any crime, but in no case shall a loss be compensable if the aggregate property damages are less than twenty-five dollars ($25.00).

(6) The Board is authorized to accept and evaluate all applications for disbursement of funds, whether emanating from victims, witnesses or law enforcement agencies. Applications for disbursement shall be made upon forms prescribed by the Board, and made available by the Municipal Court and the Police Department. The Board shall establish its own criteria for evaluating applications for disbursement, and nothing herein contained shall obligate the Board to make disbursement of any funds available to it. Upon a finding by the Board that a disbursement shall be made from the Fund, the Board shall submit a written request for payment to the Finance Department, which shall then remit payment in accordance with the request.

(7) The Board is required to submit minutes of its meetings to the City Council at the next regular Council meeting following the Board's meeting.

(i) *Powers and duties of Transportation Commission.* The powers and duties of the Transportation Commission shall be:

(1) To investigate, study and report to the City Council any and all matters concerning transportation issues which directly affect the City.

(2) To investigate, study and report to the City Council on other intergovernmental committees, boards or commissions working on transportation issues in the Tri-County (Pitkin, Garfield and Eagle) area.

(3) To meet with the City Council on an annual basis to identify which transportation issues require priority attention.

(4) To investigate, study and report to the City Council on grants, donations and other forms of funding to assist in meeting the transportation needs of the City.

(5) To perform functions concerning oversight of transportation issues or functions as delegated by the City Council.

(6) To appoint subcommittees as necessary to carry out the foregoing functions subject to the approval of the City Council.

(j) Reserved.

(k) *Powers and duties of Glenwood Springs Housing Commission.* The powers and duties of the Housing Commission shall be:

(1) To investigate, study and report to the City Council any and all matters concerning housing issues which directly affect the City, including the preparation of a Comprehensive Housing Affordability Strategy (CHAS).

(2) To assist City Council in defining the nature and scope of housing opportunities in the City.

(3) To meet with the City Council on an annual basis to identify which housing issues require priority attention.

(4) To investigate, study and report to the City Council on grants, donations and other forms of funding to assist in meeting the housing needs of the City.

(5) To perform functions concerning oversight of housing issues or functions as delegated by the City Council, including monitoring the implementation of activities as described in the CHAS.

(6) To appoint subcommittees as necessary to carry out the foregoing functions subject to the approval of the City Council.

(l) *Powers and duties of Historic Preservation Commission.* The powers and duties of the Historic Preservation Commission shall be:

(1) To recommend to City Council methods for the protection and preservation of the City's historic and cultural heritage, including, but not limited to, the designation of historic landmarks and districts by appropriate regulations.

(2) To recommend to City Council methods for enhancing property values and the stabilization of historic neighborhoods.

(3) To recommend to City Council methods for increasing economic and financial benefits, including, but not limited to, City attractions.

(4) To provide educational opportunities to increase public appreciation of the City's unique heritage.

(5) To do any other tasks related to the historic preservation of resources in the community of Glenwood Springs.

(m) *Powers and duties of Tourism Promotion Board.* The powers and duties of the Tourism Promotion Board shall be:

(1) To investigate, study and report to the City Council:

a. All matters concerning tourism marketing and promotion that pertain to the benefit of Glenwood Springs and the area within the 81601 postal zip code; and

b. Other matters concerning the subject of tourism marketing and promotion which may be pertinent to the benefit of the City and the area within the 81601 postal zip code.

(2) To coordinate with City staff, community organizations, community businesses, and other boards and commissions, when applicable to efficiently market and promote tourism to the benefit of Glenwood Springs and the area within the 81601 postal zip code.

(3) To, at its discretion, and in addition to initiatives that directly market and promote features and attractions within the City and the area within the 81601 postal zip code, market and promote the geographical proximity of Glenwood Springs to other features and attractions outside of the 81601 postal zip code in ways that could reasonably be expected to benefit the City.

(4) To establish rules of procedure and order for the Board to follow.

(5) To review tourism marketing plans; to set tourism marketing goals, to determine the methods to accomplish and measure success in accomplishing those goals; to determine the appropriate staff and marketing contractor(s)/vendor(s) resources needed; to recommend to the City Council an annual tourism marketing budget; to recommend, to the City Council, award of contract(s) for the best candidate for contract staff and marketing contractor(s)/vendor(s), deemed necessary, based upon an approved Request for Proposal, Request for Qualification or other process; and to provide oversight of performance of contract staff and marketing vendor(s)/contractor(s) contract terms to ensure the efficient and effective implementation of the marketing goals and to report problems with performance to City Council.

(6) To meet with the City Council on an annual basis, or as often as requested by the City Council, to identify marketing priorities of the City.

(7) To complete all other duties as may be directed by City Council.

(n) *Powers and duties of Arts and Culture Board.* The powers and duties of the Arts and Culture Board shall be:

(1) To promote awareness, access, and appreciation of the fine, performing, and practical arts for City residents and visitors.

(2) To advise the City Council in connection with all matters relating to the artistic and cultural development of the City.

(3) To provide opportunities for cultural and art experience and education for children and adults.

(4) To promote increased interaction and collaboration among artists, art-related organizations, and opportunities for growth and exposure.

(5) To promote knowledge and appreciation for cultural forms of artistic expression.

(6) To make recommendations to the City Council with respect to fundraising and annual budget appropriations for the arts.

(7) To advise and consult with local arts groups as requested by such groups or by the City Council.

(Code 1971 §§ 2-64.1, 2-2, 2-65[a], [b], 2-65.1, 4-78, 4-232, 4-155, 15-2; 26-84 § 3; 19-89 § 3; 12-90 § 1; 54-90 § 3; 39-91 § 3; 10-93 § 2; 29-93 § 3; 7-94 § 3; 17-94 § 1; 23-94 § 3; 10-95 § 3; 11-95; 19-95 § 3; 46-95 § 1; 55-95 § 1; 28-97 § 3; 29-97 § 5; 32-97 § 1; 42-00 § 1; 61-01 § 3, 4, 5; 61-02 § 4; 9-04 § 1; 20-04, § 1; 33-05, § 2; 7-06 § 3; 13-06, § 2; 6-08 § 2; 12-10 § 2; 2-12 § 2; Ord. No. 16-2017 , § 4, 8-17-2017; Ord. No. 2-2018 , § 3, 1-18-2018; Ord. No. 6-2018 , § 3, 3-1-2018; Ord. No. 21-2018 , § 3, 9-20-2018; Ord. No. 2-2021 , § 2(Exh. A), 4-15-2021)

020.020.040 Appointment, removal, term and vacancies of boards and commissions.

(a) *Appointment and term of members.* Except as otherwise provided, all appointments to the boards and commissions shall be by the City Council for terms of three (3) years each, and each member shall serve until his/her successor is appointed and takes office; provided, however, that the initial terms of office may be shortened by the City Council so as to provide overlapping terms of office. Appointments shall expire the day before the first regular meeting of the City Council in each month according to the following schedule:

(1) February:

Planning and Zoning Commission;

Finance Advisory Board;

Tourism Promotion Board;

Building Board of Appeals.

(2) March:

Transportation Commission;

Arts and Culture Board;

Parks and Recreation Commission;

Airport Board;

River Commission.

(3) April:

Local Liquor Licensing Authority;

Victim's Witnesses Assistance and Law Enforcement Board;

Historic Preservation Commission;

Glenwood Springs Housing Commission.

(b) *Alternate members.* The City Council at its discretion may appoint up to three (3) persons as alternate members for each board or commission. If a regular member of a board or commission is to be absent from a meeting, the presiding officer for the meeting may select an alternate member to fill such absence and to attend and serve at the meeting. The alternate member may exercise all powers at the meeting which the absent regular member could exercise, and the alternate's powers and privileges shall terminate at the end of the meeting attended. The presiding officer may at his/her discretion select the same alternate to serve at successive meetings in the absence of any member.

(c) *Limit to term of members.* No board member shall serve more than two (2) successive terms on the same board or commission.

(d) *Removal of members.* All appointed members of a board or commission shall be subject to removal, at any time, by the City Council. In the event an appointed member of a board or commission ceases to qualify for membership, his or her appointment is immediately terminated.

(e) *Vacancies.* The City Council shall fill all vacancies on boards and commissions by appointment for the unexpired term.

(Code 1971 §§ 2-63, 2-64, 2-67; 6-95 § 1; 10-07 § 2; Ord. No. 9-2018 , § 2, 4-20-2018; Ord. No. 29-2020 , § 2, 1-7-2021)

City Council
STAFF REPORT
City of Glenwood Springs
April 20, 2023

Agenda Item: River Commission Appointment

Action Requested: River Commission Appointment

Department: Economic and Community Development

Presented By: Jim Hardcastle

Strategic Goals: Provide Efficient and Responsive City Government
Protect and Preserve our Quality of Life

Background Info:

Current Vacancy
One regular seat with a term expiring March 2024.

Applicant

- Paula Stepp, a city resident, served as the Council Liaison to the River Commission until her City Council term expiration of April 6, 2023.

Composition of the River Commission
Seven (7) citizens, with one (1) alternate, at least six (6) who are residents of the City and one (1) who may reside outside of the City but within the 81601 zip code area or own real property or a business within the City.

Issues: Paula has not been interviewed by a City Council member for this Commission seat.

Fiscal Impact: None.

Legal Review: None.

Staff Recommendation: Staff defers to City Council.

020.020.020 Composition of boards and commissions.

The membership of boards and commissions shall be composed of the following persons:

(1) *Local Liquor Licensing Authority.*

a. The Local Liquor Licensing Authority shall consist of a Hearing Officer appointed by the City Council by resolution and may be removed with our without cause by a majority vote of the City Council.

(2) *Airport Board.*

a. Five (5) citizens, at least four (4) who are residents of the City and one (1) who may reside outside of the City but within the 81601 zip code area or own real property or a business within the City.

(3) *Building Board of Appeals.* The Planning and Zoning Commission shall act as the Building Board of Appeals whenever such a board is required by this Code, other ordinances of the City or State or Federal law.

(4) Finance Advisory Board:

a. Seven (7) members of which at least six (6) are City residents. One (1) member shall be employed in the finance industry; one (1) member shall be employed by the tourism industry; and one (1) member may be a non-resident, but shall own or be employed by a business within the City.

(5) *Parks and Recreation Commission.*

a. Seven (7) citizens, at least six (6) who are residents of the City and one (1) who may reside outside of the City but within the 81601 zip code area or own real property or a business within the City.

b. Reserved.

c. Reserved.

d. One (1) youth (under the age of eighteen [18] at appointment) who shall serve a one-year term from June 1 to May 31 of the following year.

(6) *Planning and Zoning Commission.*

a. Seven (7) citizens who are residents of the City.

(7) *River Commission.*

a. Seven (7) citizens, with one (1) alternate, at least six (6) who are residents of the City and one (1) who may reside outside of the City but within the 81601 zip code area or own real property or a business within the City.

(8) *Victim's and Witnesses Assistance and Law Enforcement Board.*

a. Five (5) citizens, at least four (4) who are residents of the City and one (1) who may reside outside of the City but within the 81601 zip code area or own real property or a business within the City.

b. Reserved.

c. The Chief of Police as an advisory member, but a nonvoting member of the Board.

(9) *Transportation Commission.*

a. Seven (7) citizens, at least six (6) who are residents of the City and one (1) who may reside outside of the City but within the 81601 zip code area or own real property or a business within the City.

(10) Reserved.

(11) *Glenwood Springs Housing Commission.*

a. Seven (7) citizens, at least six (6) who are residents of the City and one (1) who may reside outside of the City but within the 81601 zip code area or own real property or a business within the City.

Membership should reflect a broad representation of organizations and other entities which are related to housing, including but not limited to the financial community, the building and development community, the real estate industry, and organizations which support low-income residents of the community.

(12) *Historic Preservation Commission.*

a. Seven (7) citizens, at least six (6) who are residents of the City and one (1) who may reside outside of the City but within the 81601 zip code area or own real property or a business within the City.

(13) *Tourism Promotion Board.*

a. Two (2) representatives from the tourism related businesses located within the City;

b. Two (2) representatives from the lodging businesses located within the City;

c. One (1) representative from the restaurant or retail businesses located within the City;

d. One (1) representative from the Glenwood Springs Chamber Resort Association; and

e. Three (3) citizens, at least two (2) who are residents of the City and that shall not have a direct or indirect financial interest in a business referenced in (a), (b) or (c) above and one (1) who is a resident that may have a financial interest in a business referenced in (a), (b) or (c) above.

(14) *Arts and Culture Board.*

a. Eight (8) members, at least five (5) of which are residents of the City, three (3) of which may reside outside of the City, and one (1) of which being a youth representative under the age of eighteen (18) or not having completed his or her final year of high school. Those representatives residing outside of the City must reside within the 81601 postal zip code area, own real property or a business within the City, or attend school within the City.

(15) Council and Staff Participation on Boards and Commissions:

a. The Mayor may appoint up to two (2) members of Council to act as a liaison between Council and a Board or Commission.

b. The City Manager may appoint a member of staff to assist a Board or Commission as necessary to fulfill their duties as provided for in 020.020.030.

(Code 1971 §§ 2-61, 4-75, 4-230, 15-2; 26-84 § 1; 19-89 § 1; 12-90 § 1; 54-90 § 1; 29-91 § 1; 10-93 § 1; 29-93 § 1; 7-94 § 1; 23-94 § 1; 10-95 § 1; 19-95 §§ 1, 2; 40-95 § 1; 28-97 § 1; 29-97 § 1; 1-01 § 1; 61-01 § 2; 14-03 § 1 ; 9-04 § 1; 20-05 § 2; 7-06 § 2; 13-06, § 2; 10-07 § 2; 6-08 § 2; 12-09 § 2; 12-10 § 2; 2-12 § 2; Ord. No. 2-2016 , § 2(Exh. A), 2-4-2016; Ord. No. 16-2017 , § 3, 8-17-2017; Ord. No. 2-2018 , § 2, 1-18-2018; Ord. No. 6-2018 , § 2, 3-1-2018; Ord. No. 21-2018 , § 2, 9-20-2018; Ord. No. 2-2021 , § 2(Exh. A), 4-15-2021)

020.020.030 Powers and duties of boards and commissions.

(a) *Local Liquor Licensing Authority.*

(1) *Powers and duties of local liquor licensing authority.* The Local Liquor Licensing Authority shall have the powers granted to local licensing authorities pursuant to C.R.S. Title 12, Articles 46, 47, and 48, as amended.

(2) *Temporary permits.* The City Clerk is hereby delegated the authority to issue temporary fermented malt beverage permits to license transferees, as authorized by C.R.S. § 12-46-106.5, as amended, and temporary permits for any class of liquor license as authorized by C.R.S. § 12-47-106.5, as amended. Each temporary permit shall authorize the transferee to continue selling fermented malt beverages and other licensed beverages in accordance with state law during the period in which an application to transfer is pending. The City Clerk may issue the temporary permit if: (a) the premises shall have been previously licensed by the State and the license is valid at the time the application for transfer is filed; (b) the application appears to be in order, an application for transfer of the appropriate license has been filed, all fees have been paid, the initial background check has been successfully completed, and the fingerprint cards have been completed; and (c) the application for the temporary permit is filed no later than thirty (30) days after the filing of the application for transfer and associated fees paid. No temporary permit issued by the City Clerk shall be for a period greater than one hundred twenty (120) days from the date of its issuance.

(3) *Wine tastings.* The Local Liquor Licensing Authority is authorized to issue annual wine tasting permits pursuant to C.R.S. § 12-47-301 with the following conditions: (a) All requirements of C.R.S. § 12-47-301 have been met; and (b) Payment of an annual application fee of one hundred dollars ($100.00); and (c) No more than one hundred four (104) wine tastings may be held during the term of any permit issued pursuant to this section; and (d) Permit holders shall notify the City Clerk and Police Department at least seven (7) days prior to any wine tasting.

(4) *Rules, policies and procedures.* The Local Liquor Licensing Authority shall adopt rules, policies and procedures for the implementation of its duties and powers as those have been granted pursuant to C.R.S. Title 12, Articles 46, 47, and 48, as amended.

(5) *Report to city council.* The Local Liquor Licensing Authority shall be required to report on all actions taken with respect to the issuance of or control over liquor licenses within the City to the City Council. Reports shall be made in a timely fashion to the City Council.

(6) *Appeal to city council.* Any decision of the Local Liquor Licensing Authority may be appealed to the City Council within ten (10) calendar days, or at the next regularly scheduled meeting. City Council shall have the authority to sustain, modify or overturn the decision of the Local Liquor Licensing Authority. In any event, the City Council shall direct the Local Liquor Licensing Authority to take a particular action. The Local Liquor Licensing Authority shall conform to the written direction of the City Council within ten (10) calendar days from the date of the written directive.

(7) *Appeal to district court.* Any person applying to the District Court for review of a decision of the Local Liquor Licensing Authority shall apply for review within thirty (30) days of the decision of the Local Liquor Licensing Authority. The thirty-day period shall be inclusive of the appeal process to City Council as outlined in Subparagraph (5) above.

(b) *Powers and Duties of Airport Board.* The powers and duties of the Airport Board shall be to investigate, study and report to the City Council all matters concerning the airport facilities of the City and other matters concerning the subject of aviation which may be pertinent to the City as shall be requested of the Airport Board by the City Council; and such Board may investigate, study and report to the City Council on such other matters concerning the Municipal Airport as the Board may deem for the best interests of the City.

(c) *Powers and Duties of Building Board of Appeals.* The powers and duties of the Building Board of Appeals shall be to hear appeals in accordance with the International Building Code, International Residential Code, International Fire Code, and the other adopted codes from the International Code Council, as adopted or amended by Title 060 of this Code. Such power shall not include matters of interpretation arising under the Code.

(d) *Powers and Duties of Finance Advisory Board.* The Finance Advisory Board shall advise and assist the City Manager and Finance Director in the preparation of the City budget, the establishment of accounting systems for the City, the planning of expenses, the projection of revenues and the analysis of the other fiscal matters presented to the Board by the City Council. The Finance Advisory Board shall also be responsible for making recommendations to City Council regarding grants from the City's various grant programs as Council may establish from time to time. No decision of the Finance Advisory Board shall be binding upon the City or anyone acting on its behalf.

(e) *Powers and duties of Parks and Recreation Commission.* The powers and duties of the Parks and Recreation Commission shall be:

(1) To investigate, study and report to the City Council all matters concerning City parks and recreation within the City and other matters concerning the subject of parks and recreation which may be pertinent to the City and requested of such Commission by the City Council.

(2) To investigate, study and report to the City Council on such other matters concerning parks and recreation within the City as the Commission may deem in the best interests of the City.

(3) To provide technical assistance, advice and planning support to the Parks and Recreation Director and City Council regarding tree planting and maintenance needs in the City.

(4) To provide recommendations from time to time regarding the administration and implementation of Article 090.050 of this Code.

(5) To investigate, study and report to City Council all matters concerning the burial and internment facilities of the City and other such matters as may be requested by City Council from time to time.

(6) To investigate, study and report to City Council on such other matters concerning burial and internment facilities and such other similar matters as the Commission may deem in the best interests of the City.

(7) To investigate, study and report to City Council any and all matters concerning the use and operation of the City's Community Center.

(8) To coordinate with other City boards and commissions on any aspect of the Community Center that may relate to the powers and duties of such other boards and commissions.

(9) To investigate, study and report to City Council on grants, donations and other forms of funding to assist in the operation of the Community Center, and to otherwise advise City Council on budgetary needs related to the operation of the Community Center.

(f) *Powers and duties of Planning and Zoning Commission.* The powers and duties of the Planning and Zoning Commission shall be:

(1) To develop and recommend a master plan subject to the approval of the City Council and its environ in accordance with the provisions of this Code and the laws of the State.

(2) To recommend to the City Council boundaries of zone districts and regulations to be enforced therein, in accordance with the provisions of this Code and the laws of the State.

(3) To review proposals relating to subdivision, development and use of land and make decisions or recommendations on such proposals, in accordance with the procedures and provisions set forth in this Code.

(4) To hear and decide appeals wherein there is a question of interpretation of the zone district map, the master plan or related documents and similar questions as they may arise in the administration of this Code.

(5) The Planning and Zoning Commission shall have the duty and power to act on appeals with regard to matters arising from enforcement of provisions of Title 070 of this Code, including:

a. *Review of administrative decisions.* To hear and decide appeals where it is alleged there is error in any action, including any order, interpretation, requirement, decision or determination made by an administrative official of the city in the enforcement of Title 070 of this Code.

b. *Variances.* To hear and decide requests for variances from the zoning provisions and sign regulation provisions where there are unique, unnecessary and unreasonable hardships in the way of carrying out the strict letter of said provisions; and to hear and decide requests for variances to allow deviations from restrictions upon the construction and placement of buildings and other structures on site. Examples of such variances include, but are not limited to, modifications of minimum area requirements, building coverage and setback restrictions. Variances from permitted and special review uses in zone district text shall not be considered.

(6) To perform such other functions as required by the provisions of Title 070.

(7) To service as the Building Board of Appeals.

(g) *Powers and duties of River Commission.* The powers and duties of the River Commission shall be:

(1) To investigate, study, and report to the City Council any and all matters concerning the use, enjoyment, conservation of the, rivers and streams in the City and its environs and the open space adjacent thereto, including water quality issues, the protection of valuable riparian ecosystems, and water rights matters.

(2) To advise the City Council on public access to and use of rivers and streams in the City and the adjacent environs and maintain and update a map related thereto as necessary.

(3) To advise the City Council on the use of municipally owned property adjacent to the rivers and City construction projects in the rivers or adjacent open space.

(4) To promote and celebrate riverfront cleanup efforts and public awareness of non-point source water pollution.

(5) To investigate, study and report to the City Council on grants, donations and other forms of funding to assist in the acquisition and improvement of the rivers and adjacent open space, and to otherwise advise the City Council on budgetary needs related to preservation of open space and river improvement.

(6) To appoint subcommittees as necessary to carry out the foregoing functions.

(7) To coordinate with the Parks and Recreation Commission, Roaring Fork Conservancy, Middle Colorado Watershed Council, and other organizations, stakeholders groups, and property owners as is necessary to carry out the foregoing functions.

(8) At the request of City Council hold an annual work session with the City Council to review the actions taken by the River Commission regarding the foregoing functions and discuss future plans.

(h) *Powers and duties of the Victim's and Witnesses Assistance and Law Enforcement Board.*

(1) The Board shall designate one (1) of its members as chairman, shall establish rules of procedure and order and shall hold meetings as it might deem necessary.

(2) A surcharge equal to twenty-five (25) percent of the fine imposed for violation of all municipal ordinances, including ordinance violations under the Model Traffic Code, is hereby levied on each Municipal Court action resulting in a conviction, plea of guilty or no contest or in a deferred judgment and sentence, which municipal ordinance violation is charged pursuant to City ordinances. All calculated surcharge amounts resulting in dollars and cents shall be rounded to the nearest whole dollar. In the event a portion of the fine is suspended, the surcharge levied shall be computed based upon the original fine, regardless of whether a portion of said fine has been suspended. Said surcharges shall be paid to the Clerk of the Court by the defendant, and said Clerk shall deposit the money so received in the fund hereinafter created.

(3) The Victim's and Witnesses Assistance and Law Enforcement Fund, hereinafter referred to as the "Fund," consist of all monies paid as a surcharge as provided in Subsection (2) above. All monies deposited in the Fund shall be deposited in an interest-bearing account, and all interest earned by monies in the Fund shall be credited to the Fund. The City Manager, by and through the Finance Director, shall be responsible for establishing a separate fund for purposes of accounting for the revenues and expenditures. At the conclusion of each fiscal year, all monies remaining in the Fund shall remain in the Fund for allocation as hereinafter set forth.

(4) The Board shall disburse monies from the Fund in the following manner:

a. First, to the payment of all reasonable and necessary expenses and costs incurred by the Board in the performance of its duties, including but not limited to professional fees, office supplies and meeting expenses.

b. Second, not less than fifty (50) percent of the monies remaining in the Fund after the deduction of reasonable expenses and costs shall be allocated for the purchase of victims (and witnesses) services and reimbursements, as hereinafter set forth. No funds shall be paid except in those specific instances where a police report has been filed by the Police Department for an alleged violation of a municipal ordinance, regardless of whether the perpetrator has been identified, arrested or prosecuted.

c. Third, any remaining monies may be allocated to the Police Department for the following purposes, including, but not limited to: equipment purchases, training programs for personnel and the employment of additional personnel. Such funds shall not be used by the Police Department for defraying the costs of routine and ongoing operating expenses. No disbursement within this category of expenditure shall be made without the approval of the City Council following a written recommendation by the Board.

(5) Disbursement of funds by the Board on behalf of the victim's and witnesses assistance services may be used for the following purposes:

a. Provision of services for early crisis intervention;

b. Assistance in prompt return of victims' property;

c. Assistance to victims and witnesses in arranging transportation to and from court;

d. Provision of translator services;

e. Protection from threats of harm and other forms of intimidation;

f. Reasonable medical and hospital expenses and expenses incurred for dentures, eyeglasses, hearing aids or other prosthetic or medically necessary devices; and

g. Losses resulting from property damage, including repair or replacement of property damaged as a result of crime or payment of the deductible amount on a residential insurance policy in an amount not to exceed five hundred dollars ($500.00). Victims' recovery due to property damage shall not exceed five hundred dollars ($500.00) for any crime, but in no case shall a loss be compensable if the aggregate property damages are less than twenty-five dollars ($25.00).

(6) The Board is authorized to accept and evaluate all applications for disbursement of funds, whether emanating from victims, witnesses or law enforcement agencies. Applications for disbursement shall be made upon forms prescribed by the Board, and made available by the Municipal Court and the Police Department. The Board shall establish its own criteria for evaluating applications for disbursement, and nothing herein contained shall obligate the Board to make disbursement of any funds available to it. Upon a finding by the Board that a disbursement shall be made from the Fund, the Board shall submit a written request for payment to the Finance Department, which shall then remit payment in accordance with the request.

(7) The Board is required to submit minutes of its meetings to the City Council at the next regular Council meeting following the Board's meeting.

(i) *Powers and duties of Transportation Commission.* The powers and duties of the Transportation Commission shall be:

(1) To investigate, study and report to the City Council any and all matters concerning transportation issues which directly affect the City.

(2) To investigate, study and report to the City Council on other intergovernmental committees, boards or commissions working on transportation issues in the Tri-County (Pitkin, Garfield and Eagle) area.

(3) To meet with the City Council on an annual basis to identify which transportation issues require priority attention.

(4) To investigate, study and report to the City Council on grants, donations and other forms of funding to assist in meeting the transportation needs of the City.

(5) To perform functions concerning oversight of transportation issues or functions as delegated by the City Council.

(6) To appoint subcommittees as necessary to carry out the foregoing functions subject to the approval of the City Council.

(j) Reserved.

(k) *Powers and duties of Glenwood Springs Housing Commission.* The powers and duties of the Housing Commission shall be:

(1) To investigate, study and report to the City Council any and all matters concerning housing issues which directly affect the City, including the preparation of a Comprehensive Housing Affordability Strategy (CHAS).

(2) To assist City Council in defining the nature and scope of housing opportunities in the City.

(3) To meet with the City Council on an annual basis to identify which housing issues require priority attention.

(4) To investigate, study and report to the City Council on grants, donations and other forms of funding to assist in meeting the housing needs of the City.

(5) To perform functions concerning oversight of housing issues or functions as delegated by the City Council, including monitoring the implementation of activities as described in the CHAS.

(6) To appoint subcommittees as necessary to carry out the foregoing functions subject to the approval of the City Council.

(l) *Powers and duties of Historic Preservation Commission.* The powers and duties of the Historic Preservation Commission shall be:

(1) To recommend to City Council methods for the protection and preservation of the City's historic and cultural heritage, including, but not limited to, the designation of historic landmarks and districts by appropriate regulations.

(2) To recommend to City Council methods for enhancing property values and the stabilization of historic neighborhoods.

(3) To recommend to City Council methods for increasing economic and financial benefits, including, but not limited to, City attractions.

(4) To provide educational opportunities to increase public appreciation of the City's unique heritage.

(5) To do any other tasks related to the historic preservation of resources in the community of Glenwood Springs.

(m) *Powers and duties of Tourism Promotion Board.* The powers and duties of the Tourism Promotion Board shall be:

(1) To investigate, study and report to the City Council:

a. All matters concerning tourism marketing and promotion that pertain to the benefit of Glenwood Springs and the area within the 81601 postal zip code; and

b. Other matters concerning the subject of tourism marketing and promotion which may be pertinent to the benefit of the City and the area within the 81601 postal zip code.

(2) To coordinate with City staff, community organizations, community businesses, and other boards and commissions, when applicable to efficiently market and promote tourism to the benefit of Glenwood Springs and the area within the 81601 postal zip code.

(3) To, at its discretion, and in addition to initiatives that directly market and promote features and attractions within the City and the area within the 81601 postal zip code, market and promote the geographical proximity of Glenwood Springs to other features and attractions outside of the 81601 postal zip code in ways that could reasonably be expected to benefit the City.

(4) To establish rules of procedure and order for the Board to follow.

(5) To review tourism marketing plans; to set tourism marketing goals, to determine the methods to accomplish and measure success in accomplishing those goals; to determine the appropriate staff and marketing contractor(s)/vendor(s) resources needed; to recommend to the City Council an annual tourism marketing budget; to recommend, to the City Council, award of contract(s) for the best candidate for contract staff and marketing contractor(s)/vendor(s), deemed necessary, based upon an approved Request for Proposal, Request for Qualification or other process; and to provide oversight of performance of contract staff and marketing vendor(s)/contractor(s) contract terms to ensure the efficient and effective implementation of the marketing goals and to report problems with performance to City Council.

(6) To meet with the City Council on an annual basis, or as often as requested by the City Council, to identify marketing priorities of the City.

(7) To complete all other duties as may be directed by City Council.

(n) *Powers and duties of Arts and Culture Board.* The powers and duties of the Arts and Culture Board shall be:

(1) To promote awareness, access, and appreciation of the fine, performing, and practical arts for City residents and visitors.

(2) To advise the City Council in connection with all matters relating to the artistic and cultural development of the City.

(3) To provide opportunities for cultural and art experience and education for children and adults.

(4) To promote increased interaction and collaboration among artists, art-related organizations, and opportunities for growth and exposure.

(5) To promote knowledge and appreciation for cultural forms of artistic expression.

(6) To make recommendations to the City Council with respect to fundraising and annual budget appropriations for the arts.

(7) To advise and consult with local arts groups as requested by such groups or by the City Council.

(Code 1971 §§ 2-64.1, 2-2, 2-65[a], [b], 2-65.1, 4-78, 4-232, 4-155, 15-2; 26-84 § 3; 19-89 § 3; 12-90 § 1; 54-90 § 3; 39-91 § 3; 10-93 § 2; 29-93 § 3; 7-94 § 3; 17-94 § 1; 23-94 § 3; 10-95 § 3; 11-95; 19-95 § 3; 46-95 § 1; 55-95 § 1; 28-97 § 3; 29-97 § 5; 32-97 § 1; 42-00 § 1; 61-01 § 3, 4, 5; 61-02 § 4; 9-04 § 1; 20-04, § 1; 33-05, § 2; 7-06 § 3; 13-06, § 2; 6-08 § 2; 12-10 § 2; 2-12 § 2; Ord. No. 16-2017 , § 4, 8-17-2017; Ord. No. 2-2018 , § 3, 1-18-2018; Ord. No. 6-2018 , § 3, 3-1-2018; Ord. No. 21-2018 , § 3, 9-20-2018; Ord. No. 2-2021 , § 2(Exh. A), 4-15-2021)

020.020.040 Appointment, removal, term and vacancies of boards and commissions.

(a) *Appointment and term of members.* Except as otherwise provided, all appointments to the boards and commissions shall be by the City Council for terms of three (3) years each, and each member shall serve until his/her successor is appointed and takes office; provided, however, that the initial terms of office may be shortened by the City Council so as to provide overlapping terms of office. Appointments shall expire the day before the first regular meeting of the City Council in each month according to the following schedule:

(1) February:

Planning and Zoning Commission;

Finance Advisory Board;

Tourism Promotion Board;

Building Board of Appeals.

(2) March:

Transportation Commission;

Arts and Culture Board;

Parks and Recreation Commission;

Airport Board;

River Commission.

(3) April:

Local Liquor Licensing Authority;

Victim's Witnesses Assistance and Law Enforcement Board;

Historic Preservation Commission;

Glenwood Springs Housing Commission.

(b) *Alternate members.* The City Council at its discretion may appoint up to three (3) persons as alternate members for each board or commission. If a regular member of a board or commission is to be absent from a meeting, the presiding officer for the meeting may select an alternate member to fill such absence and to attend and serve at the meeting. The alternate member may exercise all powers at the meeting which the absent regular member could exercise, and the alternate's powers and privileges shall terminate at the end of the meeting attended. The presiding officer may at his/her discretion select the same alternate to serve at successive meetings in the absence of any member.

(c) *Limit to term of members.* No board member shall serve more than two (2) successive terms on the same board or commission.

(d) *Removal of members.* All appointed members of a board or commission shall be subject to removal, at any time, by the City Council. In the event an appointed member of a board or commission ceases to qualify for membership, his or her appointment is immediately terminated.

(e) *Vacancies.* The City Council shall fill all vacancies on boards and commissions by appointment for the unexpired term.

(Code 1971 §§ 2-63, 2-64, 2-67; 6-95 § 1; 10-07 § 2; Ord. No. 9-2018 , § 2, 4-20-2018; Ord. No. 29-2020 , § 2, 1-7-2021)

View results

Respondent

8 Anonymous

47:15
Time to complete

River Commission Application

Thank you for your interest and time commitment in serving your community. Please complete all questions on this application.

Composition of the River Commission:
(as defined in Title 020 of the Glenwood Springs Municipal Code)

(7) River Commission.

- Seven (7) citizens, with one (1) alternate, at least six (6) who are residents of the City and one (1) who may reside outside of the City but within the 81601 zip code area or own real property or a business within the City.

Personal Information

1. Membership Qualifications *

You must qualify with one of the options below to be eligible to serve on the Housing Commission. Please select the option that applies to you.

- [x] Resident of Glenwood Springs within city limits.
- [ ] Resident outside of Glenwood Springs city limits, but within the 81601 zip code.
- [ ] Owner of real property or a business within Glenwood Springs city limits.

2. Name *

Paula Stepp

3. Home Address *

[redacted]

4. Mailing Address *

[redacted]

5. Home Phone *

[redacted]

6. Work Phone *

[redacted]

7. Mobile Phone *

[redacted]

8. Email Address *

[redacted]

9. Occupation *

Executive Director at Middle Colorado Watershed Council

Personal and Professional Interests

10. Why are you interested in serving on the River Commission? *

With Glenwood Springs a part of the geographic region encompassed by the Middle Colorado Watershed Council (MCWC) geography, our interests overlap in regard to evaluating and protecting our water resources. As a commission member, I will be able to share information about the watershed projects that directly impact the city as well as keep the commission abreast of neighboring activities that may help in their discussions and decisions.

11. What personal or professional experience do you have relative to the mission of the River Commission (see Powers and Duties attached)? *

As executive director of MCWC, I have been involved in numerous projects that overlap with city interests regarding our rivers. MCWC is one of three voting members for the Glenwood Springs Restoration Alliance (the others being the city of Glenwood Springs and Roaring Fork Outdoor Volunteers). MCWC post Grizzly Creek fire water quality monitoring involves participation from the city's water department, and placement of rain gauges in Glenwood Canyon assists CDOT and NOA's weather monitoring network for canyon closures. The city has been included in the Glenwood Canyon USFS sign replacement project. I also have been the city council liaison on the River Commission for the past two years. MCWC will continue to work with the city and river commission on projects that are mutually beneficial to the watershed. We have been annual supports of the River Fest and the annual planting projects.

12. Do you actively participate in activities using the City's open spaces, trails or rivers? *

Yes. I am an avid outdoors person who enjoys hiking, backpacking, fishing and rafting and paddling. My employment also leads me to using these spaces.

13. Have you previously served in any policy advisory capacity relative to natural resource protection? If so, state your role. *

I am involved with Club 20 and have had previous engagement with the Associated Governments of Northwest Colorado, both policy-oriented organizations that engage with our state and federal legislative representatives. I was also a founding member of the Western and Rural Colorado Health Care Coalition. As a city councilor for Glenwood Springs, I have been involved in decisions and city support for policies protecting natural resources.

14. What do you see as the role that rivers, trails and open spaces play in the character and function of the Glenwood Springs Community? *

Glenwood Springs citizens and visitors have a strong history of participating in outdoor activities. Our outdoor amenities are knowns around the world, and protecting and enhancing these resources will be valuable to Glenwood's future economic and environmental health. These resources make Glenwood Springs a wonderful place to play and work.

15. Can you separate yourself from your personal opinions and represent the City's goals, policies, plans and the Glenwood Springs Municipal Code in an equitable fashion? *

Yes. My participation on the River Commission may be enhanced by my role with MCWC, but the city's goals, policies and plans will take precedence.

16. What experience do you have working with people on a board, commission or committee? *

I am currently on Glenwood Springs City Council finishing a four year term. I have been on numerous other boards including Healthy Mountain Communities, Junior Achievement, Cooper Corner, MCWC, Ruedi Water Power and Authority (RWAPA) and Club 20.

17. Are you able to attend a monthly meeting of the River Commission held at 7:30 a.m. on the first Wednesday of each month? *

- (●) Yes
- ( ) No

18. Please select today's date. *

2/21/2023

19. Have you served on the River Commission before? *

- (●) No
- ( ) Yes

Powers and Duties of the River Commission

(as defined in Title 020 of the Glenwood Springs Municipal Code)

(g) Powers and duties of River Commission.
The powers and duties of the River Commission shall be:

(1) To investigate, study, and report to the City Council any and all matters concerning the use, enjoyment, conservation of the, rivers and streams in the City and its environs and the open space adjacent thereto, including water quality issues, the protection of valuable riparian ecosystems, and water rights matters.

(2) To advise the City Council on public access to and use of rivers and streams in the City and the adjacent environs and maintain and update a map related thereto as necessary.

(3) To advise the City Council on the use of municipally owned property adjacent to the rivers and City construction projects in the rivers or adjacent open space.

(4) To promote and celebrate riverfront cleanup efforts and public awareness of non-point source water pollution.

(5) To investigate, study and report to the City Council on grants, donations and other forms of funding to assist in the acquisition and improvement of the rivers and adjacent open space, and to otherwise advise the City Council on budgetary needs related to preservation of open space and river improvement.

(6) To appoint subcommittees as necessary to carry out the foregoing functions.

(7) To coordinate with the Parks and Recreation Commission, Roaring Fork Conservancy, Middle Colorado Watershed Council, and other organizations, stakeholders groups, and property owners as is necessary to carry out the foregoing functions.

(8) At the request of City Council hold an annual work session with the City Council to review the actions taken by the River Commission regarding the foregoing functions and discuss future plans.

Appointment, Removal, Term and Vacancies of Boards and Commissions

(Per the Glenwood Springs, CO Municipal Code 020.020.040)

(a) Appointment and term of members. Except as otherwise provided, all appointments to the boards and commissions shall be by the City Council for terms of three (3) years each, and each member shall serve until his/her successor is appointed and takes office; provided, however, that the initial terms of office may be shortened by the City Council so as to provide overlapping terms of office. Appointments shall expire the day before the first regular meeting of the City Council in each month according to the following schedule:
March:
River Commission.

(b) Alternate members. The City Council at its discretion may appoint up to three (3) persons as alternate members for each board or commission. If a regular member of a board or commission is to be absent from a meeting, the presiding officer for the meeting may select an alternate member to fill such absence and to attend and serve at the meeting. The alternate member may exercise all powers at the meeting which the absent regular member could exercise, and the alternate's powers and privileges shall terminate at the end of the meeting attended. The presiding officer may at his/her discretion select the same alternate to serve at successive meetings in the absence of any member.

(c) Limit to term of members. No board member shall serve more than two (2) successive terms on the same board or commission.

(d) Removal of members. All appointed members of a board or commission shall be subject to removal, at any time, by the City Council. In the event an appointed member of a board or commission ceases to qualify for membership, his or her appointment is immediately terminated.

(e) Vacancies. The City Council shall fill all vacancies on boards and commissions by appointment for the unexpired term.

(Code 1971 §§ 2-63, 2-64, 2-67; 6-95 § 1; 10-07 § 2; Ord. No. 9-2018 , § 2, 4-20-2018)

City Council
STAFF REPORT
City of Glenwood Springs
April 20, 2023

Agenda Item: Resolution 2023-14; Municipal Energy Agency of Nebraska (MEAN) Subscription Confirmation

Action Requested: Approve Resolution to Confirm Municipal Energy Agency of Nebraska (MEAN) Subscription

Department: Public Works

Presented By: Matthew Langhorst

Strategic Goals: Preserve and Improve Infrastructure

Background Info: The City purchases power from the Municipal Energy Agency of Nebraska (MEAN). MEAN is combining all of the Renewable or Green energy pools into one pool of Green Renewable Power Sources with one rate associated with it. Currently, MEAN has several options for renewable power, and as the power supply portfolio expands more into the renewable and carbon-free world, it does not make sense for them to keep splitting them into different power pools. Our Wind Pool Rate will move to the Green Rate, which will increase our costs slightly. We will still be 100% renewable. We were aware that the cost increase was coming, and it was built into our recent 5.2% rate increase. The cost increase for our K contract from the Wind Rate to the Green Rate was still a smaller shift than the M contract's rate increase to the base M rate that MEAN operators on.

Issues: None

Fiscal Impact: None outside of the current budget.

Legal Review: Legal will need to put a confirmation of review (Page 6 of the attachment) on their letterhead and sign a legal opinion stating that a resolution is sufficient approval from City Council, attached as a separate document.

Staff Recommendation: Staff is Recommending Approval of Resolution 2023-14; Municipal Energy Agency of Nebraska (MEAN) Subscription Confirmation to the New Green Rate.

RESOLUTION 2023-14

A RESOLUTION OF THE CITY COUNCIL OF GLENWOOD SPRINGS COLORADO AUTHORIZING AND DIRECTING EXECUTION OF THE GREEN ENERGY PROGRAM SUBSCRIPTION CONFIRMATION BY THE CITY OF GLENWOOD SPRINGS WITH MUNICIPAL ENERGY AGENCY OF NEBRASKA ("MEAN").

WHEREAS, Section 13.7 of the Glenwood Springs Municipal Charter authorizes the City Council of the City of Glenwood Springs, by resolution to enter into agreements with other governmental units for furnishing or receiving commodities or services; and

WHEREAS, for many years the City has contracted with MEAN to provide electricity to the City under the Pooling Agreement dated May 16, 2002; and

WHEREAS, the City has undertaken appropriate review of the Green Energy Program and finds the program acceptable; and

WHEREAS, City Council believes it is in the best interest of the City to confirm its subscription to Green Energy Program.

NOW, THEREFORE, IT IS RESOLVED BY THE CITY COUNCIL OF THE CITY OF GLENWOOD SPRINGS, COLORADO, THAT:

Section 1. The forgoing recitals are incorporated herein as if set forth in full.

Section 2. The City Council hereby finds and declares it to be in the public interest and the interest of the City's electric utility that the City adopt and execute the Green Energy Program Confirmation with MEAN.

Section 3. It is hereby resolved that the Mayor or City Manager execute the Green Energy Program Subscription Confirmation, a copy of the Subscription Confirmation being attached hereto and made a part hereof.

Section 4. The City does hereby adopt and approve each of the objectives, terms and conditions set forth in the Green Energy Program Subscription Confirmation.

Section 5. This resolution shall be in full force and take effect after its passage, approval and publication as provided by law.

INTRODUCED, READ, AND PASSED THIS 20TH DAY OF APRIL 2023.

CITY OF GLENWOOD SPRINGS, COLORADO

ATTEST:

_____
Jonathan Godes, Mayor

_____
Ryan Muse, City Clerk

Karp.Neu.Hanlon PC
ATTORNEYS AT LAW
www.mountainlawfirm.com

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Partner/Shareholder

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Office: (970) 945-2261
Direct: (970) 928-2125
Fax: (970) 945-7336
Direct Mail to Glenwood Springs

April 13, 2023

Attn: Videl Sabio, Paralegal
Municipal Energy Agency of Nebraska
8377 Glynoaks Drive
Lincoln, NE 68516

RE : Green Energy Program Subscription Confirmation

Ladies and Gentlemen:

As City Attorney of the City of Glenwood Springs, Colorado (the "City"), I have examined the proceedings of the City's City Council with respect to the passage of its Resolution No. 2023-14 on April 20, 2023, relating to the Green Energy Program Subscription Confirmation (the "Subscription Confirmation"); (hereinafter, the "Resolution").

From such examination and the examination of such other proceedings, opinions, records, documents and statutes as I have deemed necessary and appropriate in rendering this opinion, I am of the opinion that:

1. The City is a municipal corporation of the State of Colorado with full power and authority under the laws of the State of Colorado to enter into the Subscription Confirmation.

2. The Resolution has been duly passed and is now in full force and effect as a Resolution of the City.

3. The Subscription Confirmation has been duly authorized, executed, and delivered by the City, and represents the valid and binding agreement of the City, enforceable in accordance with its respective terms, including without limitation the financial obligations undertaken or assumed by the City in connection with the agreement.

4. The Subscription Confirmation has been executed in compliance with or is otherwise not subject to Article X, Section 20, of the Colorado Constitution (commonly known as the Taxpayer's Bill of Rights or "TABOR").

5. To the best of my knowledge and belief, there is no litigation pending or threatened involving or challenging the adoption of the Resolution or the execution and delivery by the City of the Subscription Confirmation, or which would have a materially adverse effect on the financial condition or operations of the City or the City's electric distribution system.

The obligations of the parties and the enforceability of the provisions contained in the Subscription Confirmation relating to the parties may be subject to general principles of equity which permit the exercise of judicial discretion and are subject to bankruptcy, insolvency, reorganization, moratorium and similar laws relating to or affecting creditors' rights generally.

Very truly yours,

KARP NEU HANLON, P.C.

Karl J. Hanlon

KJH:app
cc: Dr. Beverli Marshall

City Council
STAFF REPORT
City of Glenwood Springs
April 20, 2023

Agenda Item: Resolution 2023-17 Rescinding Resolution 2020-12 Authorizing Emergency Expenditures

Action Requested: Approval of resolution to rescind the authorization of expenditures resulting from the Governor declaring a statewide emergency during the Corona Virus epidemic.

Department: Attorney

Presented By: Karl Hanlon

Strategic Goals: Provide Efficient and Responsive City Government

Background Info: During the Corona Virus pandemic Governor Jared Polis declared a statewide emergency. Council recognized that the City may need to expend resources not previously budgeted or approved quickly to support local disaster emergency relief. On March 12, 2020 Council passed Resolution 2020-12 that gave the City Manager the authority to spend up to $100,000 without prior City Council approval, and have such expenditures ratified by Council within the next thirty days. The resolution also provided the Manager the ability to suspend or modify the adopted policies of the City, including procurement or employment if necessary.

Issues: Because this emergency declaration is no longer in effect, Resolution 2020-12 is not needed and should be rescinded by resolution.

Fiscal Impact: None

Legal Review: Legal drafted the resolution.

Staff Recommendation: Staff supports approval of Resolution 2023-12

RESOLUTION 2020-12

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF GLENWOOD SPRINGS, COLORADO, IN SUPPORT OF THE GOVERNOR DECLARING A STATEWIDE EMERGENCY AND AUTHORIZING EXPENDITURES.

WHEREAS, the Governor of the State of Colorado has declared a statewide emergency regarding the occurrence or imminent threat of widespread or severe damage, injury or loss of life or property resulting from the 2019 Novel Coronavirus ("COVID-19") on March 10, 2020; and

WHEREAS, the cost and magnitude of responding to and recovery from the impact of COVID-19 may be in excess of the City's available resources; and

WHEREAS, the City may need to expend resources not previously budgeted or approved; and

WHEREAS, it is in the public interest for the City to have emergency resources available to work to safeguard the health and safety of the community; and

WHEREAS, it would be appropriate and in the interests of the public health and safety, and would further protect property, for the City to support the State and Garfield County in their efforts to respond to the emergency; and

WHEREAS, pursuant C.R.S. § 24-33.5-709 the City Council or City Manager is authorized to declare a local disaster emergency.

NOW, THEREFORE, IT IS RESOLVED BY THE CITY COUNCIL OF THE CITY OF GLENWOOD SPRINGS, COLORADO, THAT:

Section 1. This resolution shall become effective if the City Council or City Manager declares pursuant to C.R.S. § 24-33.5-709 that there is a local disaster emergency in Glenwood Springs, due to the imminent threat of widespread or severe damage, injury or loss of life or property resulting from COVID-19 requiring emergency action to respond to and protect the life, health and safety of the citizens of Glenwood Springs.

Section 2. The effect of such declaration shall be to authorize the furnishing of aid and assistance under all applicable local and interjurisdictional disaster emergency plans.

Section 3. In the event of such declaration, the City Manager is hereby authorized to expend funds in response to the emergency not to exceed $100,000 without prior City Council approval provided that such expenditures are ratified by City Council within 30 days. The City Manager is further authorized to suspend or modify the adopted policies of the City including, but not limited to, procurement and employment in order to respond to COVID-19.

BE IT FURTHER RESOLVED that such declaration shall be effective from the date of the declaration until the City Council determines an emergency no longer exists. Two copies of the declaration will be filed promptly with the Colorado Office of Emergency Management.

INTRODUCED, READ, AND PASSED THIS 12th DAY OF MARCH 2020.

CITY OF GLENWOOD SPRINGS, COLORADO



Jon Godes

Jonathan Godes, Mayor

ATTEST:

Catherine Mythen Fletcher

Catherine Mythen Fletcher, City Clerk

RESOLUTION 2023-17

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF GLENWOOD SPRINGS, COLORADO, RESCINDING RESOLUTION 2020-12 IN SUPPORT OF THE GOVERNOR DECLARING A STATEWIDE EMERGENCY AND AUTHORIZING EXPENDITURES.

WHEREAS, the Governor of the State of Colorado declared a statewide emergency regarding the occurrence or imminent threat of widespread or severe damage, injury or loss of life or property resulting from the 2019 Novel Coronavirus ("COVID-19") on March 10, 2020; and

WHEREAS, the cost and magnitude of responding to and recovery from the impact of COVID-19 may have been in excess of the City's available resources; and

WHEREAS, the City may have needed to expend resources not previously budgeted or approved; and

WHEREAS, it was in the public interest for the City to have emergency resources available to work to safeguard the health and safety of the community; and

WHEREAS, it was appropriate and in the interests of the public health and safety, and would further protect property, for the City to support the State and Garfield County in their efforts to respond to the emergency; and

WHEREAS, pursuant C.R.S. § 24-33.5-709 the City Council or City Manager was authorized to declare a local disaster emergency.

NOW, THEREFORE, IT IS RESOLVED BY THE CITY COUNCIL OF THE CITY OF GLENWOOD SPRINGS, COLORADO, THAT:

Section 1. This resolution became effective when the City Council or City Manager declared pursuant to C.R.S. § 24-33.5-709 that there was a local disaster emergency in Glenwood Springs, due to the imminent threat of widespread or severe damage, injury or loss of life or property resulting from COVID-19 requiring emergency action to respond to and protect the life, health and safety of the citizens of Glenwood Springs.

Section 2. The effect of such declaration was to authorize the furnishing of aid and assistance under all applicable local and interjurisdictional disaster emergency plans.

Section 3. With such declaration, the City Manager became authorized to expend funds in response to the emergency not to exceed $100,000 without prior City Council approval provided that such expenditures were ratified by City Council within 30 days. The City Manager was further authorized to suspend or modify the adopted policies of the City including, but not limited to, procurement and employment in order to respond to COVID-19.

BE IT FURTHER RESOLVED that such declaration of emergency no longer exists and Resolution 2020-12 is hereby rescinded.

INTRODUCED, READ, AND PASSED THIS 20th DAY OF APRIL 2023.

CITY OF GLENWOOD SPRINGS, COLORADO

_____
Jonathan Godes, Mayor

ATTEST:

_____
Ryan Muse, City Clerk

City Council
STAFF REPORT
City of Glenwood Springs
April 20, 2023

Agenda Item:	Resolution 2023-18; Intergovernmental Agreement with Garfield County for Election Services
Action Requested:	We are requesting this standard IGA for use of the 24/7 drop box and the County's ballot counting machines on election night.
Department:	City Clerk
Presented By:	Ryan Muse
Strategic Goals:	Provide Efficient and Responsive City Government
Background Info:	On April 6th, City Council voted 5-2 to hold a special election to see if the voters wanted to extend allowable marijuana hours from 7pm to 10pm.
Issues:	A compliant petition was presented to increase hours that local marijuana shops may operate. On April 6th Council voted to let the issue go to vote.
Fiscal Impact:	Approximately $1,500 that will be coded to the election line item in the clerk's department of the general fund.
Legal Review:	Legal will review the agreement.
Staff Recommendation:	Approval of agreement.

INTERGOVERNMENTAL AGREEMENT
FOR ELECTION SERVICES

This Intergovernmental Agreement for election services is entered into this ____ day of _____, 2023 by and between the, City of Glenwood Springs, a Colorado Home Rule Municipality (hereinafter the "City"), and the Garfield County Clerk & Recorder, (hereinafter the "Clerk"), collectively referred to as the "Parties".

WHEREAS the City has requested the assistance of the Clerk for a Special Election to be held on June 13, 2023 and

WHEREAS the Clerk is willing to assist the City in certain aspects of the June 13, 2023 Special Election to effectuate a smooth and efficient election process.

NOW THEREFORE, for and in consideration of the mutual covenants and agreements of the parties as set forth herein, the parties agree as follows:

1. **Term of Agreement:** This Agreement applies to the June 13, 2023 Special Election and is effective from the date of execution to the conclusion of any appeal or contest of the June 13, 2023 Special Election.

2. **Clerk's Duties:** The Clerk agrees to:
    a. Designate members of her Election Staff to assist the City with the June 13, 2023 Special Election and to provide the names of those individuals to the City.
    b. Use the ballot content provided by the City to set-up the ballot design for the June 13, 2023 Special Election and send proofs to the City by email when completed for approval.
    c. Provide an extract to the City's designated printer so ballots compatible with the Clear Ballot Voting equipment will be printed for the City's mail ballot election.
    d. Provide the City's designated printer with the ballot label extract for both the UOCAVA and main ballot mailings on the date agreed upon by the City and print vendor.
    e. Provide updated mailing labels for voters who register to vote or do a change of address after the initial voter extract is sent to the designated printer. This will allow the City to mail out ballots until the deadline specified by statute.
    f. Allow City voters to drop off voted ballots in the Garfield County 24/7 ballot drop box on 8th St. Two Clerk staff will check this drop box daily (Mon- Fri) and will take any ballots received to the ballot box inside City Hall. When City Hall is closed (Fridays), ballots will be held until the next business day that City Hall is open.
    g. Provide training to designated City staff or designated election judges on how to prepare the ballots for processing through the Clear Ballot tabulating system known as Clear Count.
    h. Provide a Clear Count Ballot Municipal Kit with Scanner for use in processing the voted ballots on June 13, 2023. Clerk Election Staff member(s) will take the Municipal Kit to City Hall on Election Day and work with election judges to scan the voted ballots.

i. Once all the voted ballots are scanned and the City's Designated Election Official is ready to issue election results, the Clerk will tabulate election results and provide reports to the City's DEO.
j. Eight days post election, scan and tabulate final results once the City provides final ballots to scan.
k. Bill the City within thirty (30) days after the election for staff time spent in setting up the ballot, logic and accuracy testing, providing the designated printer with the ballot pdf and ballot label extracts, general office supplies needed for logic and accuracy testing and supplemental ballot labels, assisting with the ballot counting and tabulation process on election night, and a $250 fee for use of the Clear Ballot Voting System owned by Garfield County. If any contest is close enough for a recount, the Clerk will additionally charge the City for staff time needed to assist with the recount process. Anticipated cost to assist the City with this election will be approximately $1000.

3. **City's Duties:** City agrees to:
   a. Provide the Clerk with certified ballot content as soon as possible once the ballot language is approved by the City Council. Please contact Edna Place at 970-384-3700 x 1804 or eplace@garfield-county.com for the format required for content certification.
   b. Proof and return signed verification that the ballot proof is acceptable by email to the Clerk (Jacklyn Harmon - jharmon@garfield-county.com) and Edna Place (eplace@garfield-county.com) as soon as possible after receipt of the ballot proof.
   c. Provide Clerk Election Staff with the name and contact information for the City's designated printer.
   d. Provide at least two staff members or election judges to assist with the logic and accuracy testing (LAT) of the election equipment. This testing will be done at the Clerk's office in Glenwood Springs. Both City and Clerk staffs will hand mark and hand tabulate ballots prior to those ballots being processed through a Clear Ballot Municipal Kit scanner. The LAT is done to verify that the electronic equipment is correctly processing the marked ballots.
   e. The City will provide a new, encrypted flash drive so all reports for the election can be downloaded from the Clear Ballot Voting System for printing.
   f. If for any reason ballots need to be picked up from the Clerk's office, send two City employees or election judges to pick up these ballots.
   g. Eight days post election, two City staff or election judges to bring any remaining ballots to scan to the Clerk's office for final scanning and tabulation.
   h. Reimburse the Clerk for staff time spent in setting up the ballot, logic and accuracy testing, providing the designated printer with the ballot pdf and ballot label extracts, general office supplies needed for logic and accuracy testing and supplemental ballot labels, assisting with the ballot counting and tabulation process on election night, and a $250 fee for use of the Clear Ballot Voting System owned by Garfield County. If any race is close enough for a recount, the City agrees to reimburse the Clerk for staff time needed to assist with the recount process.

4. **Indemnification:** The City agrees to indemnify, defend and hold harmless the Clerk from any and all loss, costs, demands or actions, arising out of or related to any actions, errors or omissions of the City in completing its responsibilities relating to the election.

5. **Integration:** The Parties acknowledge that this Agreement constitutes the complete agreement and understanding between them relating to the subject matter hereof and that no Party is relying upon any oral representations made by another Party or employee, agent or officer of the Party.

6. **Amendments:** This Agreement can be amended only in writing with signature of all Parties.

7. **Notices:** All notices, requests, demands, consents, and other communications pertaining to this Agreement shall be transmitted in writing and shall be deemed duly given when received by the Parties at their addresses below or agreed upon email addresses as provided to the other party below: City of Glenwood Springs 101 W 8th St Glenwood Springs, CO 81601 and Garfield County Clerk 109 8th St, Suite 200 Glenwood Springs, CO 81601.

IN WITNESS WHEREOF, the City and the Clerk have caused this Agreement to be full executed in an electronic format or duplicate signed originals with each party receiving a fully executed copy.

ATTEST:

_____
City Clerk

Dated: _____

Email: _____

City of Glenwood Springs

By: _____
Mayor

Garfield County Clerk & Recorder

_____
Jacklyn Harmon Dated

Email: jharmon@garfield-county.com

RESOLUTION 2023-18

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF GLENWOOD SPRINGS, COLORADO, APPROVING THE INTERGOVERNMENTAL AGREEMENT WITH THE GARFIELD COUNTY CLERK & RECORDER FOR THE ELECTION SERVICES RELATING TO THE JUNE 13, 2023 ELECTION.

WHEREAS, in Resolution 2023-18 the City Council of the City of Glenwood Springs authorized and appointed the Glenwood Springs City Clerk as the election officer for the June, 2023, special municipal election for the City of Glenwood Springs; and

WHEREAS, pursuant to the Colorado Constitution Article XIV, Section 18(2)(a) and Colorado Revised Statute Section 29-1-203, as amended, the City of Glenwood Springs and the Garfield County Clerk & Recorder may enter into an agreement to conduct an election; and

WHEREAS, the City Clerk has requested the assistance of the Garfield County Clerk & Recorder for the June 13, 2023, special municipal election and the Garfield County Clerk & Recorder is willing to assist the City Clerk in certain aspects of the election to effectuate a smooth and efficient election process; and

WHEREAS, the Intergovernmental Agreement regarding election services has been received from the Garfield County Clerk & Recorder and a copy is attached hereto and incorporated herein.

NOW, THEREFORE, IT IS RESOLVED BY THE CITY COUNCIL OF THE CITY OF GLENWOOD SPRINGS, COLORADO, THAT:

Section 1. The foregoing recitals are incorporated herein as if set forth in full.

Section 2. The City Council of the City of Glenwood Springs hereby approves and authorizes the Mayor or Mayor Pro Tem to sign the attached Intergovernmental Agreement concerning election services for the June 13, 2023, special municipal election.

INTRODUCED, READ, AND PASSED THIS 20th DAY OF APRIL 2023.

CITY OF GLENWOOD SPRINGS, COLORADO

_____

Jonathan Godes, Mayor

ATTEST:

_____

Ryan Muse, City Clerk

City Council
STAFF REPORT
City of Glenwood Springs
April 20, 2023

Agenda Item: Award Request for Proposal 2023-08P Community Center heating, air conditioning and ventilation automation and variable air valve retrofit

Action Requested: Award Request for Proposal 2023-08P Community Center HVAC Automation and Variable Air Valves (VAV) Retrofit to Northern Colorado Energy Solutions.

Department: Parks & Recreation

Presented By: Rod Tarullo

Strategic Goals: Protect and Preserve our Quality of Life

Background Info: The Community Center's air environment is out of date and needs to be replaced to adequately control temperatures. Staff has determined that we can retrofit 22 variable air valves (VAV) and modernize the building's automation controls without replacing the entire system. Request for Proposal 2023-08P closed with three proposals submitted. Northern Colorado Energy Solutions, the City's incumbent provider, submitted a compliant bid of $205,606,which is within the $300,000 that parks and recreation has approved in the 2023 budget in the capital projects fund.

Issues: None

Fiscal Impact: Budgeted expenditure in the Capital Projects fund of $205,606.

Legal Review: City's standard contract and purchase order.

Staff Recommendation: Award Request for Proposal 2023-08P Community Center HVAC Automation and VAV Retrofit to Northern Colorado Energy Solutions for $205,606.

NOCO Commercial LLC.
3665 Canal Dr. Unit B, Fort Collins, CO 80524
Phone: (970) 310-6240

CONTROLS EXPERT

CONTROLS QUOTATION

TO: **City of Glenwood Springs**
SUBJECT: **RFP 2023-08P HVAC Automation and VAV Retrofit**
DATE: **3-1-2023**

DEAR VALUED CUSTOMER:

We propose to furnish the equipment listed below at prices stated and in accordance with the terms, price and conditions which are attached to and are a part of this quotation.

This quote proposes the following:

1. Retrofit 22 existing VAV controllers with Carrier Open VAV Zone II BACnet MS/TP Controllers
2. Remove existing VAV internal dampers
3. Retrofit existing VAV's with new dampers
4. Add the boards needed for 3rd Party BACnet Integration to the 3 existing Trane RTU's
5. Retrofit existing Des Champs Dehumidifier unit. (Des Champs doesn't offer a plug n play BACnet integration. We will take over the unit for monitoring and start/stop)
6. Integrate new VAV graphics onto existing iVu front end. Located on a City of Glenwood server. There will also be a Carrier XT-LB Router installed on-site that requires an ethernet connection to communicate between the i-Vu Pro server and the building HVAC devices.
7. Recalibration, Air Test & Balance of newly installed VAV's. Air Test & Balance to be VAV total only. NOCO assumes that proportional T & B is complete.

***Note: Any issues found outside of this scope, including Trane RTU mechanical problems, and additional pricing/quotes will be given at that time.

TAG: CARRIER OPEN BAS & VAV CONTROLS SYSTEM – COMPLETE BUILDING CONTROLS UPGRADE

1) **BACnet communications backbone:** Furnish the following:
   a) New communications bus to all devices listed below BACnet MS/TP
   b) BACnet Repeater for high device count or max comm bus length
   c) BACnet End of Line Resistors

2) **(2) Rooftop units:** Furnish the following:
   a) (3) Trane integration controllers
      i) (2) BACnet kits for the 50- ton units
      ii) (1) Thermostat interface module for 25 Ton unit
   b) Labor

3) **(1) Des Champs Dehumidification unit:** Furnish the following:
   a) Monitor and Start/stop
   b) Supply air temp monitoring
   c) Supply air humidity monitoring
   d) Compressor monitoring
   e) Fan monitoring
   f) Room humidity and temp sensor
   g) Any other points needed for functionality of unit
   h) Labor

4) **(22) VAV Zones:** Furnish the following:
   a) (22) VAV Retrofit Kits - Field Control Package including Controllers, Sensors, Actuators and Relays
   b) (22) New VAV damper kits (includes removal and recycle of existing Trane screw type dampers)
   c) (22) ZS-PRO R-Net space temperature sensor with LCD display, true setpoint adjust, and communication port
   d) (22) Supply Air Temperature
   e) Labor
   f) Airside Test & Balance

5) **Graphical User Interface (GUI) Options:** Furnish the following:
   a) I-Vu Open XT-LB Router
   b) Floor Plan Graphics (1st, 2nd)
   c) Equipment Graphics
   d) Trending Set-up
   e) Alarming Set-up
   f) Scheduling Set-up
   g) Commissioning

6) Engineering: Control Drawings, Wiring Diagrams, Cut Sheets, Installation and Operation Manuals
7) Labor
8) Programming: Start-Up and Commissioning
9) Up to (16) hours of owner training on the BAS controls system provided
10) (1) year warranty from the date of startup (existing equipment remaining in place excluded. Including but not limited to existing RTU's, ductwork, etc.)
11) Complementary first year remote technical support (must have external access to i-Vu server over secure VPN or other secure method provided by building tenant/owner)

AMONG THE ITEMS NOT INCLUDED (unless specifically noted above):
Wiring, mounting, and installation
Disconnects, power transformers, starters, VFDs, smoke detectors, or installation/wiring/startup of such
Dedicated analog modem line and/or Ethernet/Internet connection shall supplied and maintained by owner
Pneumatic/poly tubing or installation of such
Interface to non-Carrier controllers/equipment, security system, life/safety system, or non-Carrier control system
Installation/startup of mechanical equipment or installation of accessories supplied with equipment

General Exclusions:
Dedicated analog modem line and/or Ethernet/Internet connection shall supplied and maintained by owner
Solenoids, louvers, dampers (back-draft, balancing, smoke/fire, etc.), or installation of such
Rigging, carting, painting, patching, test & balance, troubleshooting, repair, replacement, or demolition
Provision for working with existing asbestos
Labor overtime during construction or emergency service during warranty period

CONTROL NOTES:
1. Above price is firm and will remain in effect for 30 days from the date of this letter. Work in this proposal must proceed within 6 months of date of acceptance. Controls price is only valid with equipment specifically noted above.
2. This proposal must be signed, dated, and returned to the sender prior to submittal generation. A signed, written purchase order is also acceptable. All orders subject to credit approval and acceptance. Contact your sales representative for approximate lead-times on submittals, materials, or labor prior to acceptance of this proposal.
3. Purchaser shall provide to the above listed sales person, 2 copies of the complete plans and specifications on all installed controls projects, prior to controls submittals being completed and released. Any portion of plans or specs not provided will be excluded from the scope of work. We reserve the right to amend the quotation based on any new documents not submitted at bid time. An approved set of submittals must be returned to your assigned controls project manager prior to materials or labor being released.
4. Components are manufactured under the National Electrical Code and/or other applicable standards of care. Compliance to local codes is neither guaranteed nor implied.
5. Warranty begins immediately following the completion of owner training for the duration specified above. Any service calls received following the completion of the warranty period will be charged the standard street rate unless a signed service/maintenance contract specifies otherwise.

* * * * * * * * * * * * * * * * * * * *

DESCRIPTION:	**PRICE**
A. Base:	**$ 205,606.00**
Add Option #1 3rd Party Commissioning	**$ 12,978.43**

Approval Signature **Date:**

Desired PO/Project Name for Invoicing Statements: _____.

* * * * * * * * * * * * * * * * * * * *

Sincerely,

Dave Geist 3-1-23

Dave Geist
NOCO Commercial LLC

TERMS, PRICE, POLICY AND CONDITIONS OF
NOCO Commercial LLC

(HEREINAFTER REFERRED TO AS "NOCO")

1. Acceptance of this Quotation is limited to the terms hereof and no other terms or conditions appearing in any writing of the Buyer shall be binding upon Seller unless specifically agreed to in writing signed by an officer of NOCO.
2. Prices are subject to change without notice and do not include any applicable taxes or freight charges unless otherwise stated.
3. Unless otherwise specified on the reverse side hereof, payment shall be made net thirty days from date of invoice. Buyer agrees to make prompt payment of invoices. NOCO reserves the right to add to any account outstanding for more than 90 days a service charge of 2% of the principal amount due at the end of each month.
4. If your account is referred to a collection agency or attorney, you will be responsible for paying any costs and fees incurred by NOCO Commercial LLC. If any matter hereunder goes to litigation, Applicant agrees to the exclusive jurisdiction of the Circuit Court of Cook County.
5. All orders must be in writing and no order is binding until accepted by an authorized officer of NOCO. No sales representative has any authority to make any agreement, contract, warranty, term, promise, condition or understanding, expressed or implied, statutory or otherwise.
6. It is expressly agreed that title to all goods remains in NOCO until payment in full has been received. The Buyer agrees to perform all acts which may be necessary to protect and assure retention of unencumbered title to such goods in NOCO, except any security interest of NOCO.
7. Promises of delivery are based upon best information available from the manufacturing source and are made in good faith, but are not guaranteed. We are not liable for any delays in delivery or for any damage suffered by the Buyer or others by reason of any delay.
8. Cancellation of orders or portions thereof will not be accepted after material has been purchased or fabrication has been started.
9. Permission to return goods for credit plus shipping instructions and return tags must be secured from NOCO before returning any goods. All returned goods must be unused, in new condition, and in original crates. Goods returned without authorization will be refused and returned to shipper. Goods which are obsolete or made to special order are returnable only with prior written approval signed by an officer of NOCO and shall be conditioned upon Buyer paying a minimum restocking charge of not less than 10% of the original invoice price (not including freight and taxes).
10. All deductions from payments to NOCO Commercial LLC must include complete detail as to the reason behind the deduction. Failure to provide appropriate detail may subject your account to being placed on credit hold. No deduction older than six (6) months from last statement date will be accepted.

WARRANTY INFORMATION

1. (a) Unless otherwise provided herein, Seller warrants title and that all goods sold hereunder shall conform to this Quotation. NOCO extends only the warranties given by the Manufacture upon goods manufactured by it as those warranties are expressed in the Standard Product Warranty issued with each individual model by year of manufacture. Except as otherwise expressly stated herein, SELLER MAKES NO REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED, AS TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ANY OTHER MATTER WITH RESPECT TO THE GOODS.
2. (b) It is expressly agreed between Buyer and NOCO that NOCO SHALL NOT BE LIABLE FOR ANY SPECIAL, DIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES arising out of the failure of any of the products sold pursuant to the Quotation, including but not limited to the inability of Buyer to use any such product, equipment or material.
3. Buyer expressly agrees that NOCO DOES NOT REPRESENT OR WARRANTY that the equipment sold hereunder will comply with any applicable laws or ordinances of the governmental jurisdiction where the equipment is to be installed.
4. Under no circumstances will NOCO make or secure installations, replacements or be responsible for the costs thereof, or for any damages caused by faulty installations or repair by contractors or dealers or for improper or inadequate specifications.
5. Buyer agrees that its SOLE AND EXCLUSIVE REMEDY against NOCO in the event any product, equipment or materials sold to Buyer shall fail to conform to the terms and conditions of this Quotation or to any expressed or implied warranty set forth herein, and NOCO's sole and exclusive liability shall either be (1) to repair or (2) to replace such nonconforming part, equipment or material. NOCO shall not be responsible for labor charges for removal or reinstallation of such equipment or material or charges for transportation, handling and shipping or charges for refrigerant losses. IT IS AGREED THAT NOCO'S MAXIMUM LIABILITY SHALL NOT IN ANY CASE EXCEED THE CONTRACT PRICE FOR THE EQUIPMENT OR MATERIAL CLAIMED TO BE DEFECTIVE OR NONCONFORMING SUBJECT TO NOCO'S RIGHT OF REMOVAL AND RETURN OF SUCH EQUIPMENT OR MATERIAL. All of the foregoing shall constitute Buyer's sole and exclusive remedy and NOCO's sole and exclusive liability for supplying nonconforming or defective equipment or material.
6. No right or interest in this Agreement shall be assigned by either the Seller or Buyer without the written consent of the other.
7. Any action for breach of this Agreement, in whole or in part, not filed within two (2) years after the cause of action shall have first accrued, shall be barred.
8. Any cause of action whatsoever arising under or by virtue of this Quotation and any Agreement based therein shall be filed only in the Circuit Court of Larimer County, CO. It is the express agreement of the parties hereto that this Agreement is made and executed at the Seller's place of business; and the law of the State of CO shall govern all rights and duties of Buyer and Seller hereunder.

NOCO Commercial LLC.

3665 Canal Dr. Unit B
Fort Collins, CO 80524
(970) 310-6240

Detailed Timeline for City of Glenwood Springs RFP 2023-08P HVAC Automation and VAV Retrofit

3-1-2023

#1 Written award letter from the city.

#2 Receive signed contract from the city.

#3 Receive PO# from the city.

#4 Control equipment ordered from Carrier.

#5 Lead time from Carrier is 10-12 weeks.

#6 When all the controls are received at our office, we will put together a 3 week lookahead schedule.

#7 Installation of controls system will take about 2 weeks.

#8 At the competition of the project we will schedule with the City to have an owner training for up to 5 City employees.

#9 Carrier iVu warranty is one year from turn over, and Noco Commercials warranty is one year from turn over.

Sincerely,

Dave Geist

Commercial Estimator/Project Manager

Northern Colorado Energy Solutions LLC

3665 Canal Dr. Unit B

Fort Collins Co 80524

NOCO Commercial LLC.

3665 Canal Dr. Unit B
Fort Collins, CO 80524
(970) 310-6240

Company References

References:

1. Clearview Library District
   720 E 3rd St.
   Windsor Colo 80550
   Ann Kling
   970-686-5603
   director@clearviewlibrary.org

2. City of Loveland Colorado
   500 E. Third Street,
   Loveland, Co 80537
   Paul Foreman
   p.foreman@cityofloveland.org

3. Mountain Parks Electric
   321 West Agate Ave
   Granby, Co 80446
   Joe Palmer
   970-887-3378
   jpalmer@mpei.com

Sincerely,

Nate Gagliano/ President
NOCO Energy Solutions LLC.

NOCO Commercial LLC.

3665 Canal Dr. Unit B
Fort Collins, CO 80524
(970) 310-6240

Company Profile

NOCO was established in 2010, and Nate Gagliano has intentional slowly grown the business to ensure quality, high level of service, and to avoid company layoffs during slow times. We have handpicked employees that are a good fit and have the same values as the company. NOCO is now a full-service mechanical contractor that can do everything from small residential and commercial construction, to large facility building automation. Many of our employees have specialty training around energy savings and management.

Years in Business:

- 2010 to Current

Services offered:

- Residential and Commercial New Construction
- Residential and Commercial Retrofits
- HVAC DDC controls
- Building Automation System
- Energy Management
- Residential and Commercial Geothermal
- Residential System Design
- Blower Door Testing
- Duct Cleaning

Certifications:

- EPA 608 Certification
- NATE Certified techs (Furnace, A/C. Geothermal)
- Carrier Control experts (CS,IS,ES)
- Tridium (AX and N4 Platforms)
- Mitsubishi Diamond Contractor
- Wrightsoft Manual J,D,S

Current Jurisdiction licensing:

- City of Fort Collins
- Larimer county
- City of Greeley
- City of Windsor
- City of Loveland
- Boulder county
- City of boulder
- Town of Erie
- Town of Johnstown
- City of Laramie Wy

Current and Past Projects:

- City of Loveland
- Poudre Valley REA
- Associates in Family Medicine
- Baker Hughes
- Weld Central School District RE-3J and RE-10J
- High Plains Library District of Greeley
- Pathways Hospice
- Prairie School District RE-11J New Raymer
- Akron School District R-1
- Orthopedic Center of the Rockies
- Briggsdale High School
- Laramie Dental Arts
- Raytheon
- Mountain Parks Electric
- High Plains Library District
- Rubadue Wire
- Clearview Library

Employees:

- Nate Gagliano 23 years in HVAC and Owner of NOCO Energy Solutions – Carrier Controls Expert Certified
- Justin Howard 23 years in HVAC and Project Engineer/ Project Management
- Dave Geist- 23 Years in HVAC and Commercial Estimator/ Project Manager.
- August Comiskey – 15 years in HVAC – Lead Service Tech
- Jesus Gonzalez- 19 Years in HVAC
- Jarod Mace- 15 Years in HVAC
- Mason Ferris- 6 Years in HVAC
- Aaron Franklin- 4 Years in HVAC
- Josh Loek- 4 Years in HVAC
- Wade Lods- 12 Years in HVAC
- Lisa Gagliano- Accounting
- Khoury Luark- Administrative

Additional references available upon request.

Sincerely,

Nate Gagliano/ President
NOCO Energy Solutions LLC.

i-Vu® Building Automation System

Total Control and Comfort for Your Building



i-Vu® Building Automation System (BAS)

Comprehensive Building Management & Control







The i-Vu® building automation system from Carrier transforms equipment and controls into an optimized system that is easy to understand, monitor, regulate, and change.

- Manage your building from anywhere, at anytime.
- Gain insights with powerful graphics and dashboards.
- Proactively respond to issues with integrated alarming.
- Pinpoint anomolies with built-in trends.
- Schedule spaces to save energy when rooms are not in use.

The i-Vu BAS also offers seamless integration to third party subsystems and enterprise software applications.

- Connect lighting systems, variable speed drives, and power meters.
- Pull in weather reports, third party schedules, utility data, and more.
- Achieve centralized control through a single user interface.

Facilities staff can connect locally — through a wall-mounted touchscreen interface in the building — or remotely from any web-enabled device.

The i-Vu BAS also supports a wide variety of room sensors and occupant interfaces to sense and manage comfort in the space. Available in both wired and wireless versions, these devices:

- Feature contemporary designs and neutral colors to match any decor.
- Display current comfort conditions, including temperature, humidity, and indoor air quality.
- Allow occupants to adjust temperature setpoints or initiate occupancy overrides.



The i-Vu Building Automation System enables web-based and local access for both facilities staff and building occupants to deliver total system and comfort control.

Open and Flexible Controls

Designed to Meet Any Building Application







Total control begins with the fundamentals. Our i-Vu® controllers range from application-specific to general purpose and support plug-and-play connectivity to the i-Vu BAS.

- Flexible – can be factory-installed or field-mounted on your HVAC equipment
- Open - supports the native BACnet protocol and are BACnet Testing Laboratories (BTL) certified
- Scalable – build small or large systems easily

Our i-Vu general purpose controllers are fully programmable, and also support:

- Multiple I/O configurations for accomplishing both common and custom HVAC control strategies
- An extensive application library of control sequences for the most common applications
- Customized control logic using our SNAP graphical programming tool

i-Vu control solutions are also available for optimizing chiller and central plants. These solutions include integrated i-Vu dashboards for providing real-time and historical performance data.

Carrier® ChillerVu™ - Coordinates control of an entire chiller plant, including chillers, pumps and towers.

Chilled Water System Optimizer - Helps improve the efficiency of an entire chilled water system, including air handling units, fan coils and other chilled water distribution equipment. Energy savings in the range of 3% to over 20%[1] are possible.

Open Service

The “Carrier Controls Expert” Advantage

Protect your investment in the i-Vu building automation system by choosing a factory-authorized Carrier Controls Expert Certified Contractor.

The Carrier Controls Expert program trains and certifies an elite class of HVAC contractors who install and service the i-Vu building automation system in commercial buildings.

Through thorough training of their specialized service technicians — and ongoing testing at various Carrier Controls Expert training centers — certified contractors maintain extensive knowledge of the i-Vu building automation system and its components.

This serves to maximize the value of your systems, to optimize the performance of your facility, and to protect your investment in equipment and controls.

Select your choice of Carrier Controls Experts in your area, and you’ll be sure your installer has the expertise and backing of Carrier whenever they serve your facility.



www.carrier.com/controls-experts

[1] The Optimizer algorithm was evaluated using computer driven modeling and simulations, and at field test sites. Actual savings will vary based on local climate zone, local weather conditions, building type and envelope performance, operating schedules, air-side HVAC system type, chiller type, baseline control strategy and other variables.

i-Vu® Building Automation System

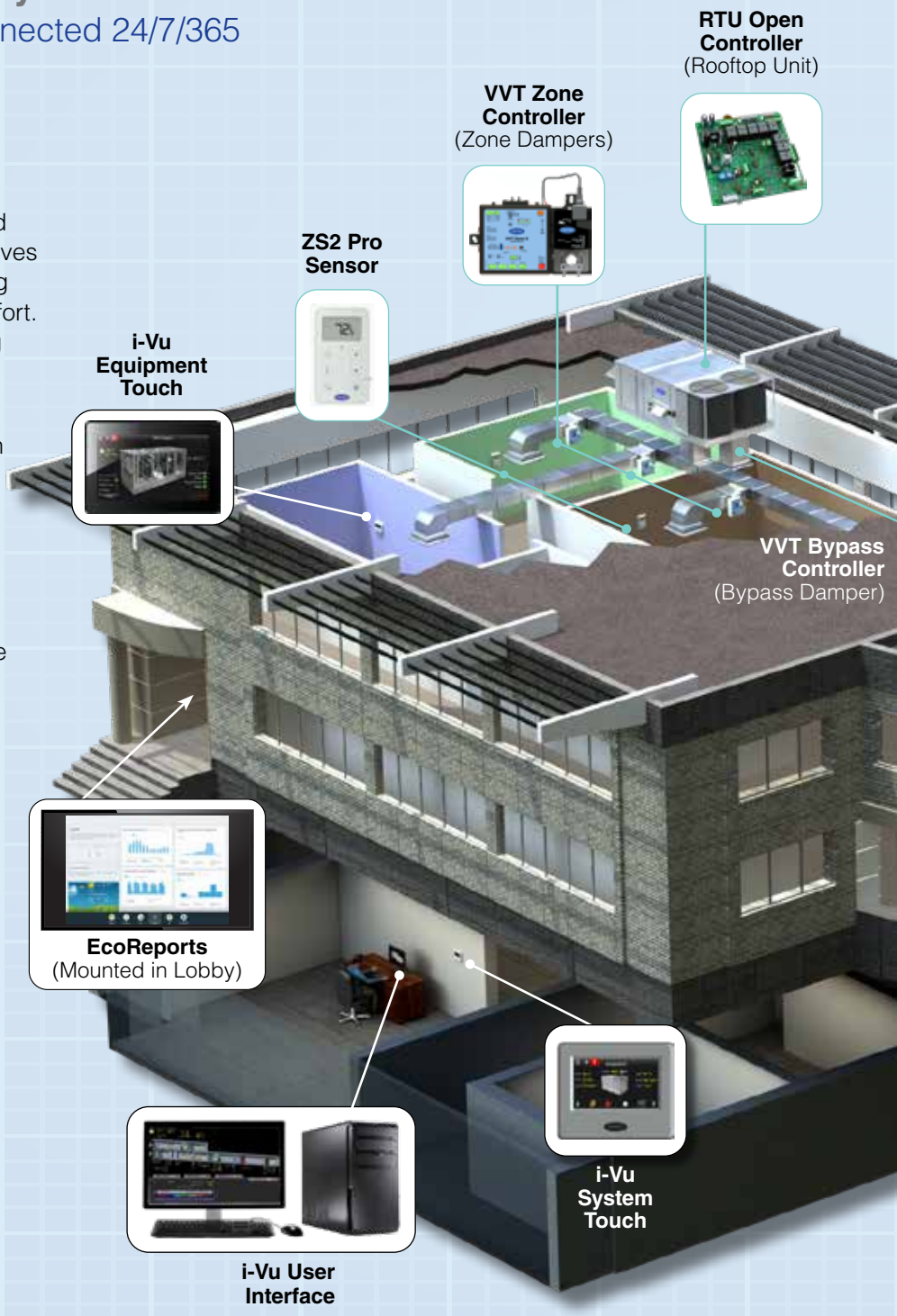
Components That Keep You Connected 24/7/365

The i-Vu® building automation system (BAS) brings the big picture into sharp focus with a 360° view of your building's entire operation.

With its ability to communicate with HVAC and ancillary system components, the i-Vu BAS gives you a real-time consolidated view of operating conditions, energy usage and occupant comfort. As a result, you'll know precisely what's going on... and why.

Regardless of the control type or equipment manufacturer, the i-Vu BAS is your connection for seamless, comprehensive and flexible control of all systems in your building.

- Easy to install and commission
- Pre-engineered control programs simplify system set-up and minimize the need for field programming
- Built-in system strategies eliminate the need for expensive system coordination modules
- Engineered for a variety of energy saving strategies
- Intuitive, graphic-rich i-Vu user interface keeps you connected to your facility from any web-enabled device or locally through a wall-mounted touchscreen
- Unique graphics for individual system components give users total insight and control
- General purpose controllers enhance flexibility and support custom graphical programming




UC Open XP
(AHU)
VAV Zone Controller
(Air Terminals)
TV-MPC XP
TV-MPC XP I/O
(AHU)
i-Vu
BACnet Link
(Lighting Integration)
ZS2 Pro
Sensor
BACnet
Thermostat
(Plus)
Carrier
CONTROLS EXPERT
Web-Enabled
Tablet
CENTRAL PLANT
Carrier® ChillerVu™
Optimizer
(Plant Optimization)
Carrier® ChillerVu™
(Plant Control)

Advanced Energy Analysis & Reporting

Carrier EcoReports™ Software Helps Increase Efficiency & Sustainability

Make energy savings and resource conservation top priorities in your building by adding EcoReports software to your i-Vu building automation system. Available in two versions, this powerful reporting package leverages data from the i-Vu system to give you an enhanced view of energy performance.

- Visualize energy usage and costs using pre-built dashboards to help identify problem areas and uncover opportunities for improvements.
- Share insights throughout your organization and deliver key findings to any stakeholder.
- Engage occupants with compelling public energy dashboards that tell your building's efficiency and sustainability story, and encourage teams across your organization to collaborate around shared sustainability goals.
- Showcase your buildings' unique green features and smart building technologies alongside live performance metrics.





Comprehensive Expertise

Carrier Equipment, Controls and Service Offer Proven Reliability





Carrier

CONTROLS EXPERT

Carrier provides a complete line of HVAC equipment for commercial buildings, as well as powerful i-Vu® controls that come factory-installed on Carrier equipment for cost savings and ease of set-up.

Our advanced i-Vu controls integrate seamlessly with Carrier HVAC equipment. They also feature built-in control programs, which are engineered by Carrier equipment experts with efficiency, energy savings, and optimum equipment performance in mind.

This helps ensure that all components work together as a complete system.

With the renowned reliability and efficiency of Carrier products, the precise and flexible capabilities of i-Vu controls, and the unparalleled access provided by the i-Vu building automation system, your facility can achieve maximum operational performance while your Carrier Controls Expert certified contractor can provide complete peace of mind.

So whatever and wherever the application, the i-Vu building automation system responds with the industry-leading excellence that is synonymous with the name Carrier.

i-Vu® Web User Interfaces



i-Vu Standard and Plus



i-Vu Pro 5, i-Vu Pro 32
i-Vu Pro 750, i-Vu Pro Unlimited

Energy Reporting



EcoReports™ Analytics and Reporting

Touchscreens



i-Vu TruVu™ ET Displays (4", 7", 10")



i-Vu Equipment Touch



i-Vu System Touch

Networking and Integration



i-Vu XT BACnet Router



i-Vu XT BACnet Link



i-Vu CCN Router



UPC Open



i-Vu CCN Link

Carrier Equipment with Factory-Installed i-Vu Control Options



48/50 Series RTUs



39 Series AHUs



40 Series Unit Ventilators



42 Series Fan Coils



50 Series WSHPs



VAV/VVT Air Terminals
35 Series (single duct)
45 Series (parallel/series fan)



30 Series Air-Cooled Chillers



19, 23, and 30 Series Water-Cooled Chillers

Communicating Space Sensors

Combination Sensing



ZS Standard | ZS Plus | ZS Pro | ZS Pro-M | ZS Pro-F



Wireless Standard | Wireless Plus | Wireless Pro-F

Application-Specific Controls

HVAC Equipment



BACnet Thermostat Standard



BACnet Thermostat Plus



Connect stat



RTU Open

Zoning



Smart Valve Pressure Independent



VAV Zoning



Smart Valve Pressure Dependent



VVT Zoning

General Purpose Controls



AppController



UC Open



UC Open XP
UC Open XP IO



TruVu MPC Processor



TruVu MPC XP Expanders

Plant Control



Carrier ChillerVu™



Chilled Water System Optimizer



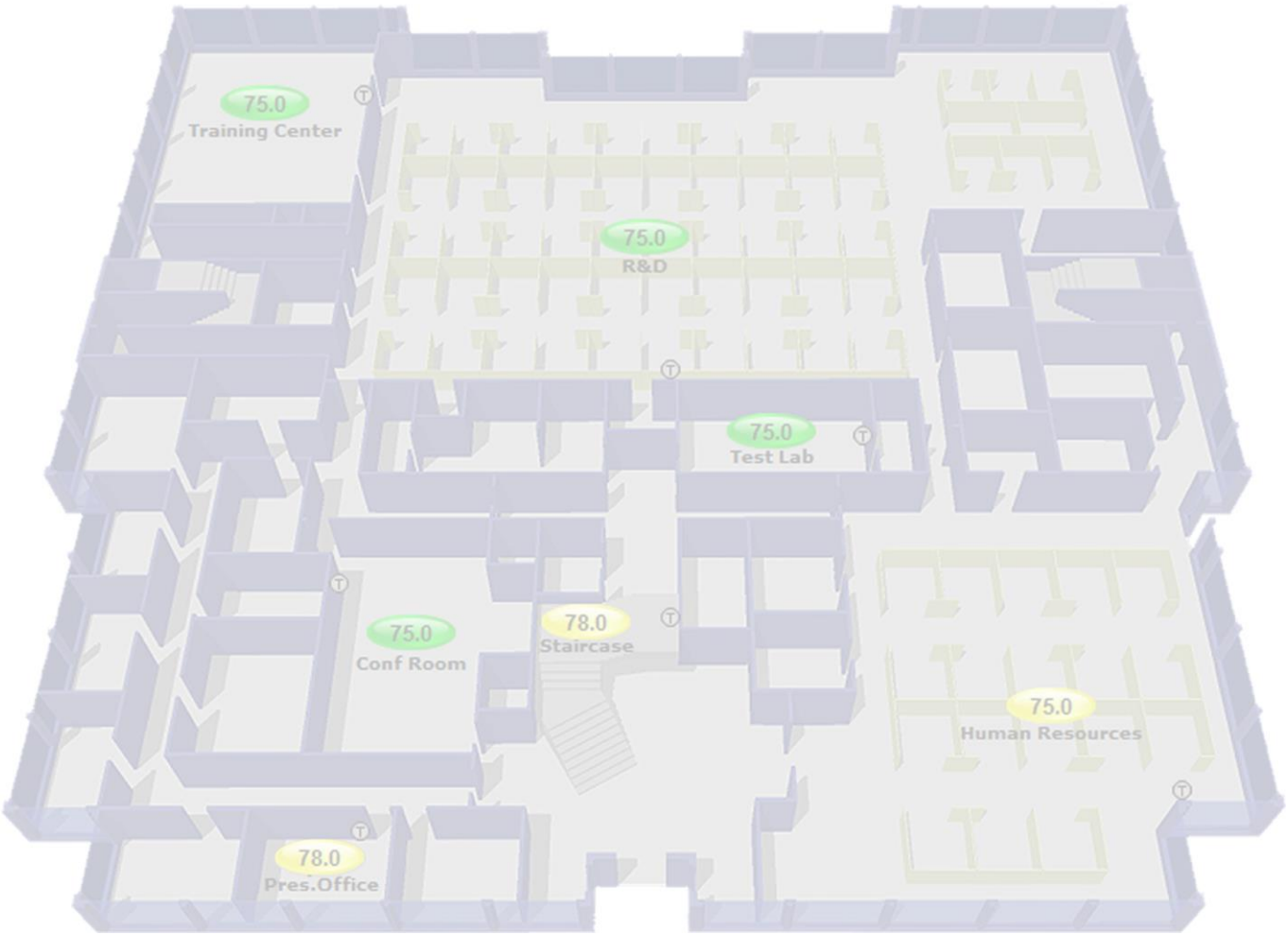
For more information, visit
www.carrier.com/ivu
or
contact your local
Carrier Controls Expert.

Controls Expert Locator:
www.carrier.com/controls-experts



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i-Vu® Pro v8.0
Owner's Guide



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 Verify that you have the most current version of this document from **www.hvacpartners.com** or **www.accounts.ivusystems.com** or your local Carrier office.

Important changes are listed in **Document revision history** at the end of this document.

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Accessing your system

Your system details

Network Name: To access the system, launch Internet Explorer and type in http://_____.

- Your Login Name is _____.
- Your Password is

  NOTE Keep this in a secure location.
- Your i-Vu®'s IP address is

  _____.

To change your password

1 Click , then select **System Options** > **My Settings** tab.

2 Click **Change password**. Enable this field, then type your current and new passwords.

3 Enter any combination of characters. Limit of 40 characters.

4 Click **Apply** or **OK**.

Add an additional operator

To keep track of your Operators, use the space provided in the back of your Owner's Manual.

1 Click , then select, select **System Options** > **Operators** tab.

2 Add additional operators with appropriate access roles.

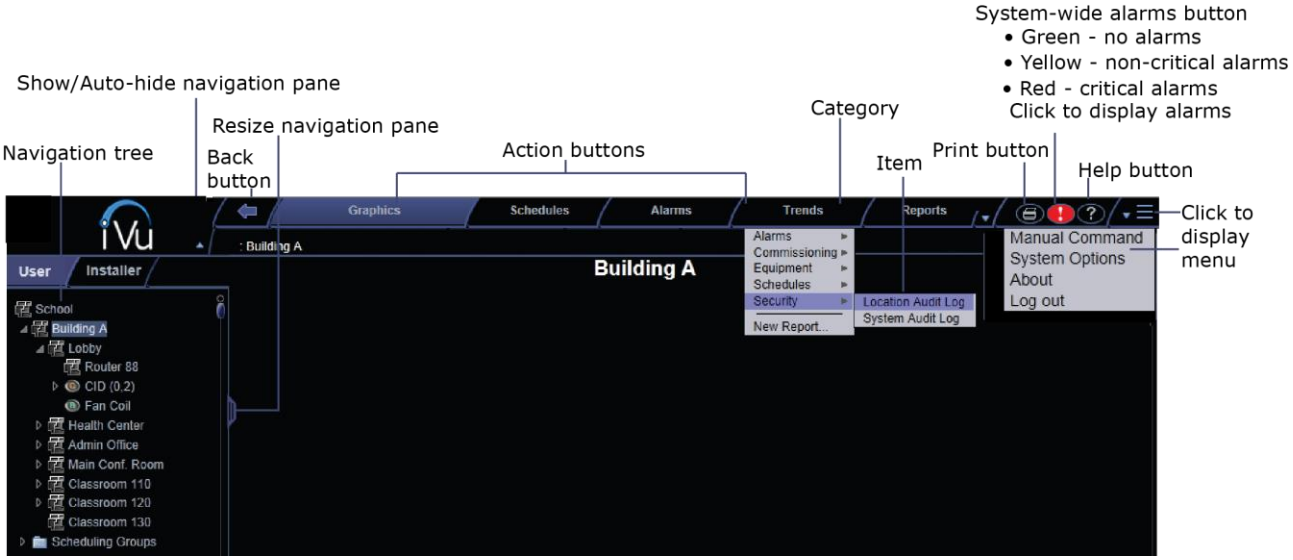
3 Keep a record of your additions and changes.

4 Click **OK** or **Apply**.

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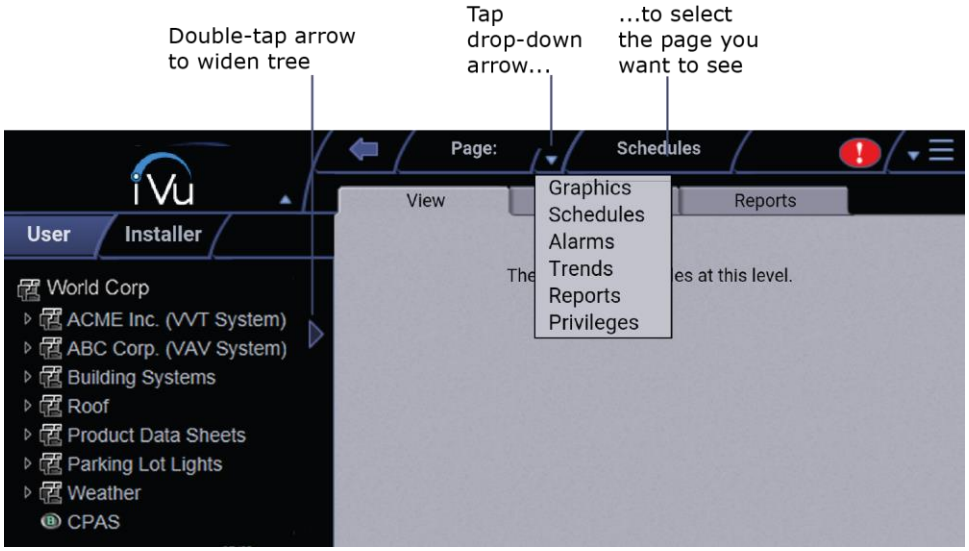
Getting to know the interface

Computer and large-screen mobile interface



Small-screen mobile interface

Most of the i-Vu® interface is the same on small-screen mobile devices except for the differences shown below.



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- When you click  to hide the tree, the button changes to .
- **Help** and **Print** are in the  menu.

NOTES

- After you log in, you will see the page defined as your starting location on the **My Settings** page. To change your opening page, see *To change My Settings* (page 17).
- Roles/privileges control what an operator can see or do in the i-Vu® system. If you cannot see or do something that you read about in Help, ask your System Administrator to check your role/privileges.
- Use only the i-Vu® interface to navigate; do not use the web browser's navigation buttons.
- Click on any tab to refresh the page.

Navigation trees

User tree

This tree lets you navigate through the i-Vu® interface using the system's geographic layout. You set this up on the Installer tab under **Arrange User View**.

Installer Tree

This tree lets users with the appropriate privileges navigate through the i-Vu® interface using the system's network layout.

Schedule Groups tree

On this tree, you can create groups that can consist of areas, equipment, or other groups. You can then assign a schedule to the entire group instead of the individual items. See *To apply a schedule to a group of items* (page 26).

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System Options tree

Click  > **System Options** (page 69) for the setup and maintenance of your system.

My Settings	Lets you change settings that are specific to you such as your password, viewing preferences and contact information. See *To change My Settings* (page 17).
System Settings	Contains the system-wide settings that control the way the i-Vu® system runs. See *System Settings* (page 70).
Operators **Privilege Sets** **Operator Groups**	Lets your system administrator define operators and what they can see and do in the i-Vu® interface. See *Operator access* (page 11).
Categories	Lets you define categories for *schedules* (page 29), alarms, *graphics* (page 38), properties, trends, and reports. Categories allow you to view or control groups of similar items.
Scheduled Reports	Shows any report that was scheduled on the report's page. See To manage scheduled reports for details.
Connections	Lets you set up, start/stop, and troubleshoot your network connections.
Services	Shows internal processes of the i-Vu® application for troubleshooting.
License Administration	Lets you update your i-Vu® license.
Update	Click **Update** to select and apply patch, service packs, drivers, language packs, graphics libraries, and Help updates.
Client Installs	Lets you install applications that are to run on client computers.

Navigating the system

To navigate in the i-Vu® interface:

1. Select the item you want in the navigation tree.
2. Select the action buttons and their drop-down menus.
3. Use the tabs to filter the information further.
4. Click links on **Graphics** and **Properties** pages to jump to related pages and open microblock popups.

   NOTE Use only the i-Vu® interface to navigate; do not use the browser's navigation buttons.
5. Click on any tab to refresh the page.

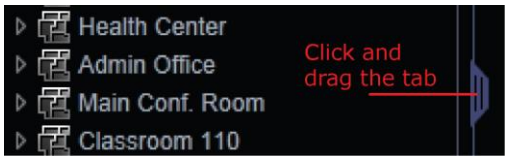
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To show, hide, or resize the navigation tree

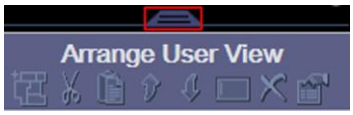
On a computer or large screen mobile device

Click  at the top of the navigation tree to hide or show the tree.

Click and drag the tab on the right side of the tree to adjust its width.



In the **Installer** view, click and drag the tab at the top of **Arrange User View** to adjust the height of the window.



On a small-screen mobile device

Touch  at the top of the navigation tree to hide the tree. Touch  to show it.

Double-tap the arrow on the right side of the tree to widen the tree. Double-tap again to return to the original size.



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Viewing vector graphics

When viewing a vector graphic of a floorplan or site map in the i-Vu® interface, you can manipulate the views using buttons on the **Graphics** page.

The buttons are only present if, in ViewBuilder, when editing the **SVG Floorplan** Control Properties > **General** tab, you select them to display.

Select in ViewBuilder...	to see this button on the i-Vu® Graphics page	Click button to...
Add 3D Toggle		See 3D walls in your floorplan.
Add Ducting Toggle		See ducting, if it was integrated into the floorplan graphic. **NOTE** When the ducting is visible, click on a solid rectangle (representing equipment) to open the corresponding equipment graphic.
Allow Zoom		Switch from a summary graphic to individual areas.
N/A		Scroll through areas one at a time.

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Zooming in and out

On a computer

- To zoom in and out on the i-Vu® interface:
  - Hold down **Ctrl** and press + or -. Press **Ctrl+0** to return to 100%.
  - Hold down **Ctrl** while rolling your mouse wheel.
  - Use your web browser's zoom functions.
- If a graphic does not fit in the action pane, right-click it and select **Scale to Fit** to make it fit the action pane. Select **Scale to Fit** again to return the graphic to its original size.

On a mobile device

Apple® iPad and iPhone

- Double-tap to zoom in/out.

Microsoft® Surface™

- Pinch-zoom works on individual frames, instead of the whole screen. So, you can zoom and scroll the navigation pane and action pane separately.
- If browser text is too small, use **Ctrl +** to increase Internet Explorer's zoom level, then reload the page.

Google™ Nexus™ and Nexus Lumia

- Pinch-zoom to zoom in/out.

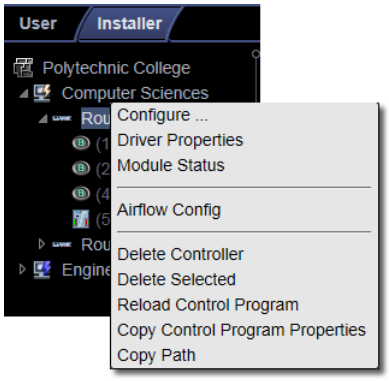
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Using right-click menus

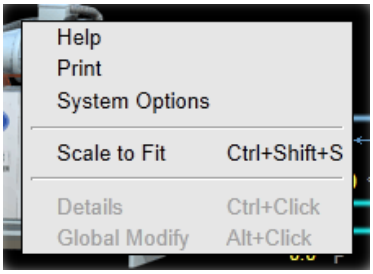
On a computer

You can right-click the following items to select options:

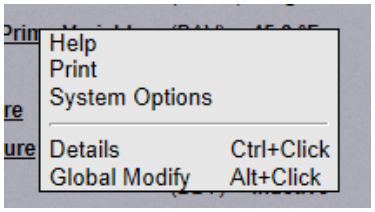
A tree item



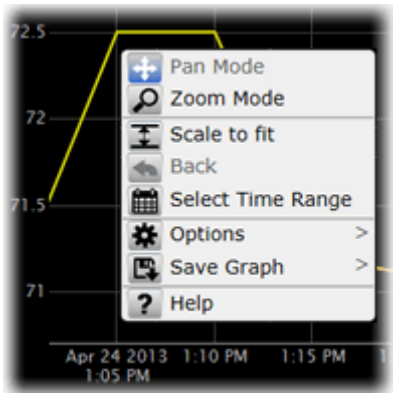
The action pane



A property



A trend



On a mobile device

To access the right-click menu for:

- A tree item–Select the item first, then touch and hold the item for several seconds.
- The action pane–Touch and hold the item for several seconds.

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To print the action pane

On a computer

Click  at the top of the page to print the contents of the action pane. Set the print orientation to **Landscape** in the **Print** dialog box.

 **TIP** To print a Graphics page that exceeds the size of the action pane, right-click the graphic and select **Scale to Fit**.

On a mobile device

Touch  and then select **Print**.

Colors and status in the i-Vu® interface v8.0

The following colors indicate equipment status the i-Vu® interface. These colors are visible on graphic pages and in the setpoint graphs.

Color	Color Name	Status Code	Condition Indicated
	Mustard	none	In equipment when running i-Vu Pro Design Server
	Purple	0 or 15	In a controller—non-operational or no communications In equipment—a hardware or software error
	Charcoal	14	In a controller—a download is required or is already in progress In equipment—a controller has stopped
	Coral	13	Control program error
	Red	2 or 9	Heating or cooling alarm
	Orange	8	Maximum cooling
	Dark blue	3	Maximum heating
	Yellow	7	Moderate cooling
	Light blue	4	Moderate heating
	Gray	1	Unoccupied/inactive
	White	10	Occupied/active
	Light green	6	Free cooling
	Green	5	In a controller—operational or operational read only In equipment—No heating or cooling

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The colors below are from the Classic SVG Floorplan Color palette. You can change the color scheme in all vector floorplans to either Modern or Color Sensitive here:

1 Browse to http://<system_name>/_svgfloorplan.

2 Click the desired color palette and close the folder.

NOTE Your selection takes affect immediately for all vector floorplans in your system and will not affect any floorplans that were not created as vector (.svg) graphics.

Colors and setpoints

Thermographic colors indicate how much a zone's actual temperature differs from its setpoints.

Five conditions may affect a zone's thermographic color:

- Setpoint adjust
- Timed local override (TLO)
- Optimal start
- Demand level
- Hysteresis

In the examples below, a zone's heating occupied setpoint is 70° and its cooling occupied setpoint is 74°.

If you normally see...	**when the zone temp is...**	**but...**	**then you will see...**
green	72.5°	someone adjusts the setpoints (for example, with a **setpoint adjust** of two degrees, the new setpoints would be 68 and 72°)	yellow
gray	73° (unoccupied)	someone presses the **Override** button on a zone sensor to use the occupied setpoints	green
gray	77° (unoccupied)	the zone is in **optimal start** and is ramping up to its occupied setpoint in the few hours before occupancy	an occupied color
yellow	75°	the zone's electric meter is in **demand level** 2 with relaxed setpoints of 68 and 76°	green
green	73.5°	cooling began when the temperature rose above 74° and the temperature has not yet dropped beyond the 1° **hysteresis** (to 73°)	yellow

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Operator access

Privileges control which parts of the i-Vu® system an operator can access. Privileges also control what an operator can do and what he can change.

To set up operator access to your system:

1 Log in to the i-Vu® application as the Administrator. See *Operators and operator groups* (page 15).

2 Define privilege sets by job function. See *Privilege sets* (page 12).

3 Enter each operator in the system by assigning him privilege sets and entering settings that apply only to him. If you need to assign the same privilege set to multiple operators, you can create an operator group and assign the privilege set to the group. See *Operators and operator groups* (page 15).

See *My Settings page* (page 17) to change the operator's settings.

To access the i-Vu® interface, an operator must enter his user name and password. See the *advanced password policy* (page 22) to change the rules for passwords.

Restricting operator access

To restrict access to your system, you can:

- Restrict an operator's privileges
- Use *location-dependent operator access* (page 19)
- Change a microblock's **Editing Privilege** from **Preset** to a specific privilege. The microblock's properties will be editable only by an operator that has that privilege.

  CAUTION Each microblock property has a default Editing Privilege (represented by the **Preset** option) that is appropriate for that property. Changing **Preset** to a specific privilege changes every property in the microblock to the same privilege which may produce undesirable results.

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Privilege sets

A privilege set is a group of one or more *privileges* (page 12). The Administrator creates privilege sets and assigns them to operators and operator groups.

Privileges

This privilege...	allows an operator to...
Installer	• Add, edit, and delete operators, operator groups, and privilege sets. • Update the i-Vu® system with service packs and patches. • Register the i-Vu® software. • Enable and set up advanced security features such as *location-dependent operator access* (page 19) and the *advanced password policy* (page 22). • Add and remove i-Vu® add-ons.

This Access privilege...	allows an operator to access (but not edit)...
Access System Tree	the Installer view pages.
Access Control Program Items	tables in the navigation tree or Properties pages.
Access Scheduling Groups	pages in the User view navigation tree for Schedule Groups.
Access System Options Items	under  > **System Options**.
Access Alarms	alarms.
Access Logic Pages	**Logic** pages.

This Parameter privilege...	allows an operator to edit properties such as...
Edit Setpoint Parameters	occupied and unoccupied heating and cooling setpoints.
Edit Setpoint Tuning Parameters	demand level setpoint offsets, color band offsets, heating and cooling capacities and design temperatures, color hysteresis, and learning adaptive optimal start capacity adjustment values.
Edit Tuning Parameters	gains, limits, trip points, hysteresis, color bandwidths, design temperatures, and optimal start/stop.
Edit Manual Override Parameters	locks on input, output, and network points.
Edit Point Setup Parameters	point number, type, range, and network source and destination.
Edit Restricted Parameters	properties the installer restricted with this privilege.
Edit Category Assignments	Alarm, Graphic, Trend, and Report category assignments.
Edit History Value Reset	elapsed active time and history resets, and runtime hours.
Edit Trend Parameters	enable trend logging, log intervals, and log start/stop times.
Edit Calibration Parameters	point calibration offsets.
Edit Hardware Controller Parameters	module driver properties.

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This Parameter privilege...	allows an operator to edit properties such as...
Edit Critical Configuration	critical properties the installer protected with this privilege.
Edit Area Name	area display names.
Edit Control Program Name	equipment display names.
Edit Alarm Configuration	enabling/disabling alarms and editing alarm messages, actions, categories, and templates.
Edit Status Display Tables	tables available under Status.
Edit Maintenance Tables	tables available under Maintenance.
Edit User Config Tables	tables available under User Config.
Edit Service Config Tables	tables available under Service Config.
Edit Setpoint Tables	tables available under Setpoint.
Edit Time Schedule data Tables	tables available under Time Schedule.

This Functional privilege...	allows an operator to...
Manage Alarm Messages and Actions	add, edit, and delete alarm messages and actions.
Maintain System Parameters	edit all properties on the System Options pages.
Maintain Schedules	add, edit, delete, and download schedules.
Maintain Schedule Group Members	add, edit, and delete schedule groups.
Maintain Categories	add, edit, and delete categories.
Acknowledge Non-Critical Alarms	acknowledge all non-critical alarms.
Acknowledge Critical Alarms	acknowledge all critical alarms.
Force Normal Non-Critical Alarms	force non-critical alarms to return to normal.
Force Normal Critical Alarms	force critical alarms to return to normal.
Delete Non-Critical Alarms	delete non-critical alarms.
Delete Critical Alarms	delete critical alarms.
Execute Audit Log Report	run the **Location Audit Log** and **System Audit Log** reports.
Download Controllers	mark equipment for download and initiate a download.
System Shutdown	issue the Shutdown manual command that shuts down i-Vu® Server.
Engineer System	• log in and make database changes in SiteBuilder. • use the copy, notify, reload, and revert manual commands. • access the navigation tree right-click menus in i-Vu®. • add text in the **Notes** field on an equipment's Properties page. • set Device Passwords in SiteBuilder, or the i-Vu® interface, to restrict access to the controller setup pages through the Service Port (applies only to routers with the drv_gen5 driver)

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This Functional privilege...	allows an operator to...
Access Commissioning Tools	access: • Equipment Checkout • Airflow Configuration • Trend, Report, and Graphic categories that require this privilege • Discovery tool
Maintain Graphs and Reports	add, edit, and delete trend graphs and reports.
Maintain Connections	edit **Connections** page properties.
Remote File Management	access files using a WebDAV utility.
Remote Data Access-SOAP	retrieve i-Vu® data through an Enterprise Data Exchange (SOAP) application.
Do not audit changes made using SOAP (Web services)	not have his SOAP (Web services) changes recorded in the Audit Log.
Manual Commands/Console Operations	access the manual command dialog box and issue basic manual commands.
Manual Commands/File IO	execute manual commands that access the server's file system.
Manual Commands/Adv Network	execute manual commands that directly access network communications.
Manual Commands/Unrestricted	execute manual commands that bypass all safeguards and may cause unpredictable results if used incorrectly.
Change My Settings	edit preferences on operator's **My Settings** page.

This Digital Signature* privilege...	allows an operator to...
Checked By	Add their e-signature to a scheduled report PDF verifying that they checked the report.
Approved By	Add their e-signature to a scheduled report PDF verifying that they approved the report.
Delete Signature	Delete all e-signatures from a scheduled report PDF.

To create a custom privilege

You can assign a privilege to a Graphic, Property, Trend, or Report category so that only operators with that privilege can access the category. You assign a category privilege on the page where you create or edit categories.

If all the other privileges are too widely used to accomplish the results you want, you can assign one of the five Access User Category privileges to the operator(s) and category.

For example, your system has 2 graphics categories, HVAC and Lighting/Security. You want HVAC technicians to see only the HVAC graphics and security personnel to see only the Lighting/Security graphics. To do this:

Assign...	To...	Results
Access User Category 1	HVAC graphics category and HVAC technicians only	The security personnel cannot see the HVAC graphics because they do not have Access User Category 1.
Access User Category 2	Lighting/Security Graphics category and Security personnel only	The HVAC technicians cannot see the Lighting/Security graphics because they do not have Access User Category 2.

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To add or edit a privilege set

1. On the **System Options** tree, select **Privilege Sets**.
2. Click **Add** to create a new privilege set, or select a privilege set to edit.
3. Type the **Name** and **Reference Name** for the privilege set.
4. Check each *privilege* (page 12) that you want to include in the privilege set.
5. Click **Accept**.

CAUTION Include all required access privileges in a privilege set. For example, if you add **Acknowledge Non-Critical Alarms** to a privilege set, also add **Access Alarms** to that privilege set.

TIP (Location-independent security only) To create a privilege set that is similar to an existing set, select the existing set, then click **Add**. The privileges that are initially selected are identical to those of the existing set.

To delete a privilege set

1. On the **System Options** tree, select **Privilege Sets**.
2. Select the privilege set to be deleted.
3. Click **Delete**.
4. Click **OK**.
5. Click **Accept**.

Operators and operator groups

When you create a new system in SiteBuilder, you assign a login name and password to the administrator operator. This administrator operator sets up each operator in the i-Vu® interface by entering the necessary settings and assigning one or more *privilege sets* (page 12) to the operator.

NOTES

- The **Installer** privilege set has more privileges than the **Administrator** privilege set and is necessary for commissioning equipment.
- For security purposes, do use `Administrator` or `Installer` as the actual **Login Name**.

Operator groups give you the ability to assign privilege sets to a group of operators instead of the individual operators. Operator groups are useful if you have multiple operators who need the same privilege set or you have positions with high turnover rates. You can assign an operator to a group when you enter the operator or when you create the operator group.

CAUTION Passwords can be forgotten. To ensure access to the i-Vu® administrative functions, assign the Installer or Administrator privilege set to at least 2 operators.

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To add or edit an operator

1. On the **System Options** tree, select **Operators**.
2. Click **Add** to enter a new operator, or select an operator to edit his settings.
3. Enter information on this page as needed. See table below.
4. Click **Accept**.

Field	Notes
Login Name	The name the operator must type to log in to the system. This name must be unique within the system. Login names of deleted operators cannot be reused.
Change password	Enable this field, then type the current and new password and then confirm. Limit is minimum of 8 and maximum 40 characters of any type. **NOTE** An operator can change his password on the *My Settings page* (page 17), unless they have the Guest System-wide Privilege Set.
Force User to Change Password at login?	Forces the operator to change his password immediately after his next login. **NOTE** Use this field with the **Change Password** field to create a temporary password that the operator must change after his next login.
Exempt From Password Policy	If **Use advanced password policy** is enabled on the **System Settings** > **Security tab** (page 73), select this option if you do not want the policy to apply to this operator.
Ready to e-sign	This checkbox indicates the operator can e-sign documents. It only appears checked when **E-signature file uploaded** and **Signing privileges granted** are checked. • **E-signature file uploaded** indicates the operator has *uploaded a valid e-signature file* (page 17). • **Signing privileges granted** indicates the operator has *e-signature signing permissions* (page 12). **NOTE** These checkboxes are read only.
Logoff options	If **Log off operators after __ of inactivity** is enabled on the **System Settings** > **Security tab** (page 73), select one of the 3 logoff options.
Personal Information	You can enter contact information for this operator. **NOTE** An operator can enter contact information on the *My Settings page* (page 17).
Starting Location and **Starting Page**	The i-Vu® location and page that will be displayed after the operator logs in.
System-wide Privilege Sets	Select the privilege set(s) that you want to assign to the operator. The **Effective System-wide Privileges** list show which privileges the operator will have. **NOTES** • Click **Show current privileges only** to see only the selected privilege sets and privileges. • A grayed out privilege set with a group name beside it indicates the operator is inheriting that privilege set from the group.

TIP To test the settings and privileges that you gave to an operator, you can open a second browser session on your computer and log in as the operator. For instructions on opening a second session in the browser you are using, see *Setting up i-Vu® client devices and web browsers* (page 64).

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To delete an operator

1. On the **System Options** tree, select **Operators**.
2. Select the operator.
3. Click **Delete**.
4. Click **Accept**.

To add or edit an operator group

1. On the **System Options** tree, select **Operator Groups**.
2. Click **Add** to create a new operator group, or select an operator group to edit it.
3. Type the **Display Name** and **Reference Name** for the operator group.
4. Under **Members**, select the operators and/or groups that you want to add to the new group.
5. Under **Privilege Sets**, select the *privilege sets* (page 12) that you want to assign to the new group.

   NOTE To see what privileges are included in a privilege set, go to the **Privilege Sets** page and then select the privilege set in the table.
6. Click **Accept**.

TIP Every operator is automatically a member of a permanent default group called **Everybody**. You can assign privilege sets to this group.

To delete an operator group

1. On the **System Options** tree, select **Operator Groups**.
2. Select the operator group.
3. Click **Delete**.
4. Click **Accept**.

CAUTION When you delete an operator group, its individual members lose the privilege sets that were assigned to the group.

To change My Settings

On the **My Settings** page, you can change settings, such as your:

- Password
- Viewing preferences
- E-signtature file
- Contact information

NOTE The System Administrator can also change these settings on the **Operators** page.

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To change your settings:

1 Click  > **System Options** > **My Settings**.

2 Make changes on the **Settings** or **Contact Info** tab. See table below.

3 Click **Accept**.

Field	Notes
Change password	Enable this field, then type your current and new password and then confirm. Limit is minimum of 8 and maximum 40 characters of any type.
Starting Location and **Starting Page**	The i-Vu® location and page that will be displayed after you log in. **NOTE** You must click **Apply** first if you have entered any other changes.
Language	The language and formatting conventions you want to see in the i-Vu® interface. **NOTES** • If you will be using a language other than English, see Setting up your system for non-English languages for additional requirements. • If support for your selected language is removed in SiteBuilder, the i-Vu® application will automatically assign the System language to you.
Automatically collapse trees	Expands only one tree branch at a time.
Automatically download schedules on each change	Select to automatically download all new schedules that you create and schedules that you change.
Play sound at browser when server receives	Check **Non-critical alarms** or **Critical alarms** if you want the system to audibly notify you when that type of alarm is received. You can specify a different sound file. • Internet Explorer®, Firefox®, and Safari® support .wav, .mp3, or .au files. • Google™ Chrome™ supports .wav or .mp3 files. 1 Put your file in the **webroot_common\lvl5\sounds** folder. 2 In the **Sound File** field, replace **normal_alarm.wav** or **critical_alarm.wav** with the name of your sound file. **NOTE** You can put your sound file anywhere under the **I-Vu_Pro_x.x** folder, but you must change the path in the **Sound File** field.
E-signature File	An e-signature file is required to add an e-signature to Scheduled Reports. 1 Click **Choose File** and select your e-signature file. 2 Click **Upload**.

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Advanced security

Location-dependent operator access

You can set up operator access to your system to be location-dependent. This type of operator access lets you assign privileges to an operator only at locations in the system where he needs them. For example, you could assign an operator mechanic privileges in one building in a system, view-only privileges in another building, and no privileges in a third building.

i-Vu® systems default to location-independent operator access in which an operator's privileges apply throughout the system. You should understand this type of operator access before switching to location-dependent. See *Operator access* (page 11) for more information on location-independent operator access.

To switch to location-dependent access

CAUTIONS

- Create a backup of your system before you begin. Switching to location-dependent operator access changes the configuration of operators and privilege sets. If you need to revert to location-independent operator access, your previous configuration cannot be automatically restored.
- If you change the policy after you create and assign privilege sets to operators, you may need to reconfigure your operators' privileges.

To switch to location-dependent operator access:

1 On the **System Options** tree, select **System Settings**.

2 On the **Security** tab under **Security Policy**, click **Change Policy**.

3 Follow the on-screen instructions.

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System-wide privileges and privilege sets

When using location-dependent operator access, privileges are either system-wide or local.

System-wide privileges allow an operator to perform functions throughout the entire system, such as performing a system shutdown.

You assign System-wide Privilege Sets to system-wide privilege sets and local privileges to local privilege sets. Use the following table in planning which privileges to assign to a privilege set. For a description of each privilege, see *Privileges* (page 12).

Check **Show current privileges only**.

System-wide Privilege Sets	Effective System-wide Privileges
Administrator Guest Installer Power User Standard User	**Access privileges** Access System Tree Access Control Program Items Access Scheduling Groups Access System Options Items Access Alarms Access Logic Pages
	Functional Privileges Manage Alarm Messages and Actions Maintain System Parameters Maintain Schedules Maintain Schedule Group Members Maintain Categories Acknowledge Non-Critical Alarms Acknowledge Critical Alarms Force Normal Non-Critical Alarms Force Normal Critical Alarms Delete Non-Critical Alarms Delete Critical Alarms Execute Audit Log Report Download Controllers System Shutdown Engineer System Access Commissioning Tools Maintain Graphs and Reports Maintain Connections Remote File Management Remote Data Access-SOAP Do not audit changes made using SOAP Manual Commands/Console Operations Manual Commands/File IO Manual Commands/Adv Network Manual Commands/Unrestricted Change My Settings

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System-wide Privilege Sets	Effective System-wide Privileges
	Parameter Privileges
	Edit Setpoint Parameters Edit Setpoint Tuning Parameters Edit Tuning Parameters Edit Manual Override Parameters Edit Point Setup Parameters Edit Restricted Parameters Edit Category Assignments Edit History Value Reset Edit Trend Parameters
	Edit Calibration Parameters Edit Hardware Controller Parameters Edit Area Name Edit Control Program Name Edit Alarm Configuration Edit Status Display Tables Edit Maintenance Tables Edit User Config Tables Edit Service Config Tables Edit Setpoint Tables Edit Time Schedule Data Tables

NOTES

- For an operator to add, edit, or delete schedule groups, he must have the system-wide privilege Maintain Schedule Group Members. He must also have the local privileges Access System Tree and Maintain Schedules at each location that is a member of the schedule group.
- If you switch to location-dependent operator access in a system that has operators and privileges set up, the i-Vu® application splits any existing privilege set containing local and system-wide privileges into 2 separate privilege sets - one local and one system-wide. Operators' system-wide privilege sets still apply throughout the system. The operators' local privilege sets are automatically assigned at the system level. You can then reassign the local privilege sets to the operators at the locations where they need them.

To add a privilege set

Adding a privilege set using location-dependent operator access is the same as using location-independent operator access except that you must select whether you are adding a system-wide or local privilege set. See *Privilege sets* (page 12).

Recording reasons for edits (21 CFR Part 11)

The i-Vu® application provides support for 21 CFR Part 11. With this feature enabled, the i-Vu® application can require an operator to record a reason for changing an equipment property, or acknowledging an alarm, before it accepts the change. The i-Vu® Audit Log report then displays the operator's name and the recorded reason for making the change.

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To set up equipment to require reasons for changes

1 On the i-Vu® navigation tree, right-click the equipment, then select **Configure**.

2 Check **Require operator to record any changes to control program**. **(Audit logging must be enabled.)**

NOTE In order to enable this feature to record changes, you must also enable **Alarm requires acknowledgment** and/or **Return requires acknowledgment** on the **Alarms** > **Enable/Disable** tab.

3 Click **Accept**.

NOTE You can also turn this setting on in SiteBuilder in the equipment's properties dialog box.

To view reasons for changing equipment properties

1 On the i-Vu® tree, select a piece of equipment that requires reasons for change.

2 Click the **Reports** button drop-down arrow, select **Security** > **Location Audit Log** or **System Audit Log.**

3 On the **Options** tab under **Display the following columns**, check **Reason**.

4 Click **Run**.

Advanced password policy

You can set up an i-Vu® Pro password policy to meet your security needs.

1 On the **System Options** tree, select **System Settings**.

2 On the **Security** tab under **Operators**, enter information in the fields described below.

NOTE See *System Settings* (page 70) for information on all the other fields.

Field	Notes
Use advanced password policy	Enable this field to put restrictions on passwords. An operator's login name and password must be different when this policy is enabled. After you change the password policy, any operator whose password doesn't meet the new requirements will not be locked out of the system, but will be prompted to create a new password.
Passwords must contain	You can specify how many characters and which of the following types of characters a password must contain: • Numbers • Special characters—any keyboard character that is not a number or letter. • Letters—uppercase, lowercase, or both.
Cannot be changed more than once every __ days.	Enter a number to limit how often users can change their passwords. When set to 0, users can change them as often as they want.
May not be reused until __ different passwords are used.	Enter a number between 1 and 20. Enter 0 to reuse passwords without a delay.
Expire after __ days	Enable to set the number of days an operator can use his password before the system requires him to change it. Enter a number between 1 and 999.
Force expiration	Click this button to force every user's password to expire. Each user will be prompted to change their password when they next attempt to log in to the i-Vu® interface.

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Schedules

Using schedules, your equipment can maintain one set of setpoints during occupied periods to provide comfort, and it can maintain a different set of setpoints during unoccupied periods to reduce energy consumption. Schedules are an i-Vu® system's most effective cost-saving strategy.

In the **User** view, you can apply a schedule to a single tree item or to a group of tree items.



When you apply a schedule to a tree item, the schedule affects equipment at and below the area or equipment where the schedule was added.



When you apply a schedule to a schedule group, the schedule affects all pieces of equipment in the group.

For example, a school board meets every third Tuesday of the month and uses the lobby, main conference room, break room, and restrooms. You can create a schedule group to control these different areas with a single schedule.

NOTES

- When multiple schedules affect a tree item, the net result is the *Effective schedule* (page 28).
- Do not include preheating or precooling time in your schedules. *Optimal Start* (page 59), another cost-saving strategy, automatically calculates and controls precise preheating and precooling routines.
- If your system has no need to run schedules, you can turn off this feature. First, delete any existing schedules. Then go to the System Options (or System Settings) > General tab, and check the box **Disable Schedules feature**.

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Creating and modifying schedules

To view schedules

1 Select a navigation tree item (site, area, or equipment).

2 Click **Schedules** > **View** tab.

3 Optional: Click a white **Effective** bar to view all the schedules that contribute to the resulting schedule. If the item has multiple schedules, the schedule closest to the **Effective** bar has the highest priority. You set a schedule's priority when you create the schedule.

NOTES

- When multiple schedules affect a single area or controller, the i-Vu® application sorts the schedules by priority - the higher the priority, the closer the schedule is to the bar. You set a schedule's priority when you add a schedule.
- You can also view schedules on the following detailed, printable schedule reports. These reports are accessible from the **Schedules** page > **Reports** tab or from the **Reports** button drop-down menu.

This report...	allows you to...
Schedule Instances	Find every schedule with its location that is entered at and below a selected tree item. This report can help you discover newly added and conflicting schedules.
Effective Schedules	View all equipment that may be scheduled and the net result of all schedules in effect for a selected date and time. See *Effective schedules* (page 28).

To print schedules

1 Select a navigation tree item and click **Reports** .

2 Click **Schedules** > **Schedule Instances** or **Effective Schedules**.

3 Click **Run**, then click **PDF**.

This report...	allows you to...
Schedule Instances	Find every schedule with its location that is entered at and below a selected tree item. This report can help you discover newly added and conflicting schedules.
Effective Schedules	View all equipment that may be scheduled and the net result of all schedules in effect for a selected date and time.

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To apply a schedule to equipment

Schedules in the i-Vu® application are typically based on zone occupancy.

1 In the User navigation tree, select the area or equipment you want to schedule.

NOTES

- To schedule all equipment in a specified area, select the area you want.
- You can schedule individual controllers from the **Installer** view, but you must be in the **User** view to schedule areas and routers

2 Click **Schedules**, then **Configure** tab.

3 Click **Add**.

4 Select a **Priority**. A schedule's priority determines whether affected zones will use occupied or unoccupied setpoints.

Select...	For...
Normal	A typical occupied period
Holiday	An unoccupied period that overrides a Normal schedule
Override	An occupied period that overrides a Holiday schedule

5 Select a **Type**. See table below.

6 Type a schedule name in the **Description** field (50 characters maximum).

7 Enter desired values in the fields below **Description**.

8 On the graph, change a time segment's **Start** and **End** times by doing one of the following:

- Click the segment, then type the times in the **Start** and **End** fields.
- Click and drag either end of the segment or the entire segment.

9 Optional: Click **Add Time Period** to add one or more segments to the schedule. Or, select a segment and click **Delete Time Period** to delete that segment.

10 Click **Accept**.

Select this Type...	To use the schedule...
Weekly	Every week on the specified days
Date	On a single, specified date
Date Range	Between 2 specified dates
Date List	On multiple, specified dates
Wildcard	According to a repeating pattern (For example, the second Tuesday of every month)
Continuous	Continuously between specified times on 2 separate dates
Dated Weekly	Weekly between a start date and an end date (For example, the summer break in the school year)

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NOTES

- To automatically download all schedules that you create or change, click  > **System Options** > **My Settings** and, under **Preferences**, select **Automatically download schedules on each change**. If you want to manually download schedules, clear the **Automatically download...** field and then see Downloading system changes to controllers.
- When you apply a schedule to an item on the navigation tree, the schedule affects that item and all children of that item. If you do not want an item to be affected by schedules from a higher level, select **Ignore Schedules above this level** on the **Schedules** > **Configure** tab.

To apply a schedule to a group of items

You must create a group, then add members (areas, equipment, or other groups) to the group before you can apply a schedule to it.

1 On the **User** navigation tree, select **Scheduling Groups**.

Optional: If you have created folders to organize your groups, select the appropriate folder. See "To organize groups using folders" below.

2 Click **Add Group**.

3 Type a name for the new schedule group in the **Name** field.

4 Optional: Change the default **Reference name**. A group's reference name must be unique throughout the system.

5 Click **Accept**.

6 Click **Add Members to Group**.

7 On the **Members** page, select the areas, equipment, or other groups that you want to add to the group from the tree on the right. Use **Ctrl+click**, **Shift+click**, or both to select multiple items.

8 Click **Add**.

 **TIP** Use the **Raise** and **Lower** buttons to reorder items in the **Members** list. Changing the order is for your viewing convenience and does not affect the system.

9 Click **Accept**.

10 You will see the question **Execute download now?**. Click **OK**.

11 Click the **Schedules** button, then **Configure**.

12 Add a schedule to the group. See *To apply a schedule to equipment* (page 25).

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To organize groups using folders

You can create folders and sort your groups into them to organize the Schedule Groups tree. For example, a large school system that has a group for each school may want to create an Elementary School folder, a Middle School folder, and a High School folder, and put the appropriate groups in each folder.

To create folders and add groups to them:

1. On the **User** tree, select **Scheduling Groups**.
2. Click **Add Folder**.
3. Type a name for the new folder in the **Name** field.
4. Optional: Change the default **Reference name**.
5. Click **Accept**.
6. Repeat steps 1–4 for each folder that you want to add.
7. Do one of the following to add a group to a folder:
   - If you have already created the group, drag and drop it into the appropriate folder in the tree on the **Scheduling Groups** page, then click **Accept**.
   - Select the folder in the tree on the **Scheduling Groups** page, then click **Add Group** to add a new group inside the folder.

NOTE You can also add a folder to a folder, or drag and drop a folder into another folder.

To edit or delete a schedule

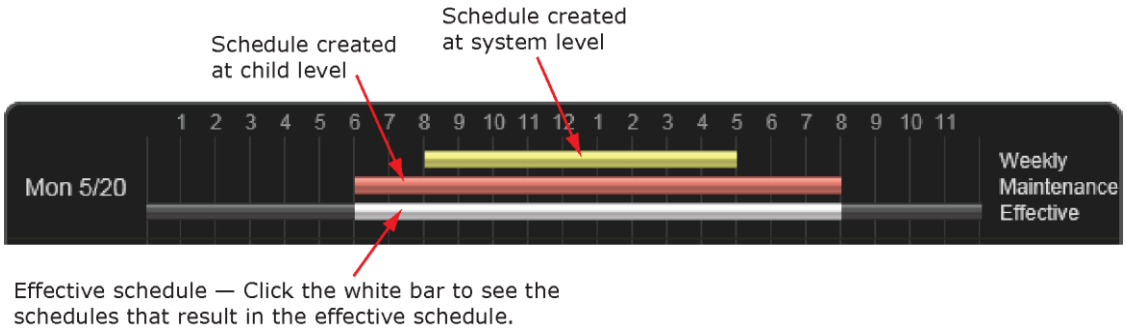
1. Do one of the following:
   - On the navigation tree, select the tree item where the schedule was defined, then select **Schedules** > **Configure** tab.
   - In the **User** tree, click **Scheduling Groups**, then select the group that has the schedule you want to edit or delete.
2. Select the schedule you want to edit or delete.
3. Edit the fields you want to change or click **Delete**.
4. Click **Accept**.

NOTE Expired dated schedules are automatically deleted from the database at 3:30 AM every day. But expired schedules remain in the controller until the next time schedules are downloaded to the controller.

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Effective schedules

The effective schedule that you see on the **Schedules** > **View** tab can be the result of multiple overlapping schedules.



The following schedule features can influence an item's effective schedule.

Feature	Description
Hierarchy	A schedule applied to an item on the i-Vu® tree affects that item and all of its children. A child item's combined schedule could be the result of multiple schedules applied at different levels above it. To change a child item's combined schedule: • Add a schedule at the child that overrides the current schedule. See the *Priority* feature below. • Set the child to ignore the parent schedules. To do this, select the child item on the tree, then go to **Schedules** > **Configure**. Select the schedule, then click **Ignore Schedules above this level**. You can then add a different schedule for the child. Any schedule change that you make to an item affects it and all of its children.
Priority	You must assign one of the following priorities to every schedule. **Use...** / **For...** **Normal** — A typical occupied period **Holiday** — An unoccupied period that overrides a Normal schedule **Override** — An occupied period that overrides a Holiday time **EXAMPLE** For a school, you define: • A **Normal** schedule that has it occupied every Monday–Friday, 6 am–5 pm • A **Holiday** (unoccupied) schedule for the week of Spring Break • An **Override** schedule on the first day of Spring Break from 9 am–1 pm for the cafeteria only where a teacher's meeting will be held.

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Feature	Description
Type	You must assign one of the following types to every schedule.* **Weekly** **Wildcard** **Date** **Continuous** **Date Range** **Dated Weekly** **Date List** See *To apply a schedule to equipment* (page 25) for a description of each type. **EXAMPLE** For a school, you define the following 3 schedules: • Full calendar year: Normal, Weekly, Monday–Friday, 6am–5pm • Summer months: Holiday, Continuous, 12am June 1st –11:59pm August 31st • Work days in summer months: Override, Dated Weekly, Monday–Thursday, 9am–2pm

Using the **Priority** and **Type** options, you can often accomplish the combined schedule you need in several different ways. For example, the combined schedule resulting from the 3 schedules described above for **Type** could also be accomplished with the following schedules:

School year: Normal, Dated Weekly, Monday–Friday, September 1st–May 31st, 6am–5pm

Summer months: Normal, Dated Weekly, Monday–Thursday, June 1st–August 31st, 9am–2pm

Using schedule categories

Occupancy is the only default schedule category. It is a binary schedule category that allows a zone or piece of equipment to be defined as On when a space is occupied and Off when it is unoccupied.

You can add custom schedule categories to handle other conditions if the equipment's control program includes one of the following microblocks:

- Carrier Schedule
- Carrier Schedule with TLO and Override Status
- BACnet Time Clock with TLO and Override Status
- BACnet Modeled Schedule

Creating a custom schedule category

1. Create the custom schedule category in the Snap application. See "To use custom alarm and schedule categories" in Snap Help.
2. In the Snap application, select the new category from the **Schedule Category** droplist in a the schedule microblock.
3. Create the same custom schedule category in the i-Vu® interface. The **Reference Name** must be identical to the category's name in the Snap application. See "To add a custom schedule category in the i-Vu® interface" below.

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To add a custom schedule category in the i-Vu® interface

TIP Study the default Occupancy category to understand the various properties you need to set when adding a new schedule category.

PREREQUISITES

- Add the custom schedule category in the Snap application. See "To use custom alarm and schedule categories" in Snap Help.
- In the Snap application, select the new category from the **Schedule Category** droplist in a Time Clock microblock.

1 On the **System Options** tree, click ▷ to the left of the **Categories** folder, then click **Schedule**.

2 Click **Add**.

3 Enter values or add items for the fields in each section of the page. See table below.

NOTE The fields that you see depend on selections you made in previous sections.

4 Click **Accept**.

Field	Notes
Category Name	The name used in the i-Vu® interface
Reference Name	• Must be unique in the database, be lowercase, and not contain any spaces. • This name must be identical to the name of the custom schedule category that you added in the Snap application. • Do not use **occupancy** as the reference name.
Allowed Type	Replace **Undefined** with one of the following: • **Boolean**: binary (on/off, true/false) condition • **Multi State**: list of integer-defined states. For example, 1=off, 2=on, 3=dim
Default Value	Displays what schedule value is in effect for times not specified by the schedule. To set this value, in the **Allowed Values** table, select the value that you want to use as the default, then click the **Make Default OK** button.
Allowed Values	If you selected **Boolean** above, select **True Value** or **False Value**. If you selected **Multi State**, click the **Add Value** button to create each schedule state.
Allowed Value Description	The name used in the i-Vu® interface.

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Field	Notes
Pattern	Type `none`, `dark`, or `/_common/lvl5/graphics/patterns/xxx.gif`, where xxx.gif is any .gif file in the **webroot_common\lvl5\graphics\patterns** folder. 
Priority Description	The name used in the i-Vu® interface.
Index	Represents this priority's relative level of importance within this schedule category. The i-Vu® application automatically assigns the priority index, which is zero for the first priority level. The higher the index value, the higher the priority of the schedule type relative to other schedules. BACnet limits the number of priority indices to 16.
Color	Color of the schedule bar on the **Schedules** page.
Schedule Types	The **Weekly** type is available for Index 0 only. The **Allow Wildcards** and **Partial Day** options affect all selected schedule types.
Default Schedule	The default schedule used when this category is selected. Create the schedule by adding segments for each state until every hour in the 24-hour schedule is covered by a segment. **EXCEPTION** If you selected **Partial Day** in the **Schedule Types** field, you do not have to add segments for the entire 24-hour period.

To view, edit, or delete a schedule category

1. On the **System Options** tree, click ▷ to the left of the **Categories** folder, then click **Schedule**.
2. In the table, select the category you want to edit or delete.
3. Edit the fields or click **Delete**.
4. Click **Accept**.

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i-Vu® CCN schedules

There are 2 types of CCN schedules:

- 1 – 64 are local schedules that reside within the equipment
- 65 – 99 are network or global schedules, which are sent over a CCN network and received by controllers that contain network schedules

The i-Vu® application supports both local and global schedules.

Most CCN equipment is shipped with the default schedule of **64**. See exceptions below.

Equipment	**i-Vu®'s default schedule number**
Comfort Controller/UC/Expansion Controllers	0
Any controllers using a custom equipment file (*.equip) created with EquipmentBuilder	0
Gen III VVT, 48/50EJ (Conquest), FSM, CSM	1
All PICs	64

CAUTION! Confirm the actual schedule numbers that are used in the controller, as they may have been changed from their programmed default settings.

In order to use i-Vu® schedules, the i-Vu® schedule number must match the CCN schedule number at the controller. This can be set in the i-Vu® interface by selecting the equipment in the navigation tree and clicking **Schedules** > **CCN** tab. It is also accessible at the area or site level.

NOTE To reduce start-up labor on a retrofit project, existing network schedules can be used by the i-Vu® application. However, switching to local schedules allows for schedule retention after a power failure and local schedule maintenance tables.

If a controller uses a different schedule number, complete the following steps.

CAUTION! Failure to follow these steps may result in unexpected equipment operation.

1 On the navigation tree, select the controller.

2 Click the **Schedules** page, then **CCN** tab.

3 Adjust the following fields:

- **Schedule number** - enter the CCN schedule number in use at the controller.
- **Override time (optional)** - enter the number of minutes of the desired override and verify that the controller override time is greater than or equal to this number
- **Override group** - enter the number of the group, if you have established one

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Working with equipment in the interface

You can view and adjust equipment operation from the following pages:

Devices pages

Select the system level on the navigation tree to view the Devices page, where you can:

- Upload source files or just parameters
- Download source files, schedules, parameters, or BBMD tables
- Check status and error messages
- View model, IP address, drivers, device ID
- Edit device names



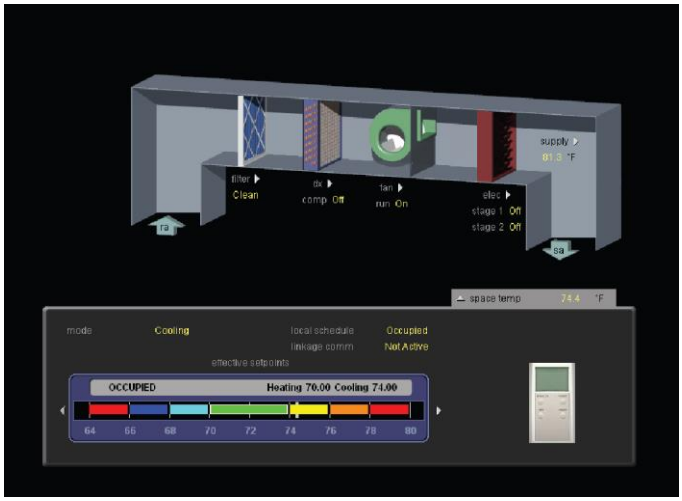
Graphics pages (page 35)

You can view and adjust your essential building controls on most Graphics pages.

Equipment drawings show the current status of mechanical equipment.

Adjust **setpoints** (page 55) on a Graphics page.

To upload a graphic from ViewBuilder, double-click the controller in the navigation tree or right-click and select **Configure**.



Logic pages (page 43)

Logic pages show the control program for a piece of equipment. Use the sequence of control and yellow status values on the Logic pages for troubleshooting your mechanical equipment.



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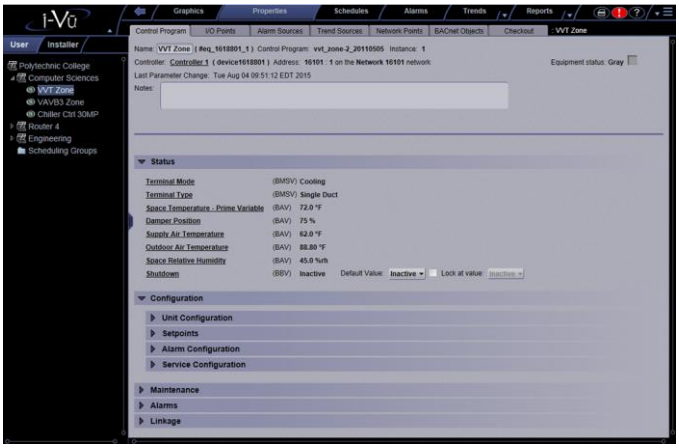
Properties pages (page 40)

You can monitor and control point sources.

1 Select the equipment in the navigation tree.

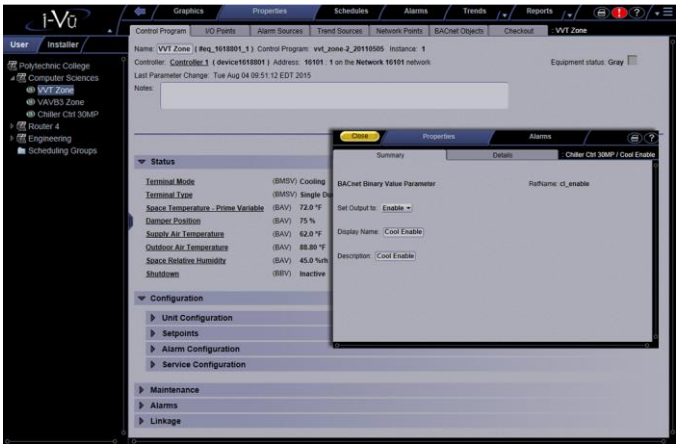
2 Click **Properties** page > **Control Program** tab.

3 Expand the plus sign next to the desired table.



Properties/Microblock popups

Click a property or point to open the microblock popup to view and change details, including forcing or locking values.



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Graphics pages

You can view and adjust your system from Graphics pages, which include navigation maps, floor plans, and equipment.



Some typical items that may appear on a graphics page are:

- Button or switch to turn equipment on or off
- Input field to set a property value
- Drop-down list to select a state
- Interactive zone sensor to override an unoccupied schedule
- Setpoint graph to adjust *setpoints* (page 55)
- Trend graph to view trend information
- Link to jump to another i-Vu® page or to the Internet
- A data table, chart, or color map that pulls information from a custom report.

NOTES

- Right-click a value, then select **Details** to view and change properties in the microblock pop-up.
- Right-click a value, then select **Global Modify** (page 45) to view and change the property in other control programs.
- A yellow dashed box around a value indicates the value is locked or forced. 

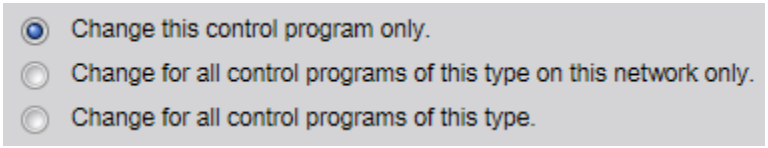
- If a graphic does not fit in the action pane, right-click it and select **Scale to Fit** to make it fit the action pane. Select **Scale to Fit** again to return the graphic to its original size.
- When a chart that is based on a report is displayed on a Graphics page, you can hover over various points on the chart to see values. You can also click on each item in the legend to turn that information on and off. See "Using a custom report as the source for a Graphics page" in i-Vu® Help for more information on a chart.

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To attach a graphic in the i-Vu® interface

1 On the navigation tree, right-click the item that you want to attach a graphic to, then select **Configure**.

2 Equipment graphic only: If the system has other control programs of this type, select which control programs you want to change.



NOTES

- If the control program is in an IP router, the second option will change the graphic for all control programs of this type only on the IP network.
- If the control program is on the network below an IP router, the second option will not change the graphic for the router's control programs of this type.

3 Do one of the following:

If the graphic is...	
In the **Views Available** list	a. Select the graphic, then click **Attach**. b. Click **Accept**.
Not in the **Views Available** list	a. Click **Add New**. b. Browse to select the view file. c. Click **Open**. d. Click **Continue**. e. Click **Close**. f. Click **Close** again.

NOTES

- Select a graphic in the **Attached** list to edit the following information for the graphic:
  - **Display Name**–The name that appears in the **Graphics** button drop-down list
  - **Category**–The name of the category that multiple graphics may be sorted into in the **Graphics** button drop-down list

    NOTE Changes to **Display Name** or **Category** apply only in the i-Vu® interface and are not retained if you export source files.
  - **Reference Name**–The name that is used to create links to the graphic in ViewBuilder
  - **Default View**–Sets the selected graphic as the default view if the tree item has multiple graphics. The default graphic is bolded in the **Attached** list.
    Included in download–Equipment graphics only. Select to have the .view file included in an **All Content** download so that it can be uploaded by Field Assistant. The graphic will have  beside it in the **Attached** list. Requires 4.x or later drivers.
- You can click **Delete Unused** at the bottom of the **Views** section to delete all unattached graphic files from your system.

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To edit a graphic from the i-Vu® application in ViewBuilder

1. In the i-Vu® interface, double-click the controller in the navigation tree or right-click and select **Configure**.
2. Click **Edit Existing** button under **Views.**
3. Click **Save as** and place the file in an appropriate folder.
4. Open ViewBuilder.
5. Select **File** > **Open.** Browse to your saved graphic and click to open.
6. Edit and save with a new name - the original system name is locked and cannot be used for an edited graphic.

   NOTE Names are case sensitive and should not have spaces and/or special characters.

To edit a graphic on an i-Vu® client

On an i-Vu® client, you can get a copy of a graphic from the server, edit it, then put it back on the server.

To get the graphic

1. On the i-Vu® navigation tree, right-click the item that the graphic is attached to, then select **Configure**.
2. At the bottom of the **Views** section, click **Edit Existing**.
3. Select the graphic you want to edit.
4. Click **Save**.
5. Browse to the folder you want to put the file in.
6. Click **Save**.
7. Click **Close**.
8. Click **Close** again.

To put the edited graphic back on the server

1. On the i-Vu® navigation tree, right-click the item that the graphic is attached to, then select **Configure**.
2. At the bottom of the **Views** section, click **Add New**.
3. Browse to select the .view file.
4. Click **Open**.
5. Click **Continue**.
6. Click **Close**.
7. Click **Close** again.

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To organize multiple graphics for a tree item

In the i-Vu® interface, you can create categories and assign graphics to them so that the **Graphics** button drop-down menu has the graphics arranged by category. This is typically done in ViewBuilder or SiteBuilder. See "To define i-Vu® navigation" in ViewBuilder Help and "To attach graphic files" in SiteBuilder Help.

To add a Graphics category in the i-Vu® interface

1 On the **System Options** tree, click ▷ to the left of the **Categories** folder, then select **Graphic**.

2 Click **Add**.

3 Type the **Category Name** and **Reference Name**.

4 Optional: Select a privilege so that only operators with that privilege can access graphics in the category.

5 Click **Accept**.

NOTES

- To edit a category, select the category, make your changes, then click **Accept**.
- To delete a category, select the category, click **Delete**, then click **Accept**.

To assign a graphic to a category in the i-Vu® interface

1 On the navigation tree, right-click the item that the graphic is attached to, then select **Configure**.

2 Under **Views**, select the graphic in the **Attached** list.

3 Select the category in the **Category** field.

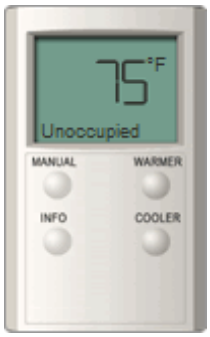
4 Click **Accept**.

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To control equipment using an interactive zone sensor

An equipment graphic may include an interactive zone sensor that provides you with the following control.

If the sensor is a...	You can...
ZS 	• Click ▲ to raise the setpoint or ▼ to lower the setpoint. • Click ⏻ to override the schedule and put the zone in an occupied state. To cancel an override, continue clicking ⏻ until the display shows 0. • See that the zone is in an occupied state when the green LED is lit.

SPT Standard, Plus, or Pro

	• Click the **WARMER** or **COOLER** button to adjust the setpoint.
	• Click the **MANUAL** button to override the schedule and put the zone in an occupied state.
	• Click the **INFO** button to cycle through the following information:
	  • Outside air temperature, if enabled in the control program
	  • Override time remaining
	  • Heating setpoint
	  • Cooling setpoint
	• See the **Occupied/Unoccupied** state in the display.

SPT Pro Plus

	• Click the **WARMER** or **COOLER** button to adjust the setpoint.
	• Click the **MANUAL** button to override the schedule and put the zone in an occupied state.
	• Click the **INFO** button to cycle through information such as:
	  • Outside air temperature
	  • Override time remaining
	  • Heating setpoint
	  • Cooling setpoint
	• Click the **FAN** button to adjust the fan speed.
	• Click the **MODE** button to perform customer-specific functions.
	• See the **Occupied/Unoccupied** state in the display.

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Properties pages

Properties pages are automatically generated from control programs. **Properties** pages show the status of a piece of equipment and the points/properties currently stored in it. See Check out point setup for details.

Use **Properties** pages to:

- View the status of a piece of equipment. See *Colors and status in the i-Vu® interface* (page 9).
- View or change the equipment point/properties currently stored in the controller.
- Commission equipment
- Set up Linkage.

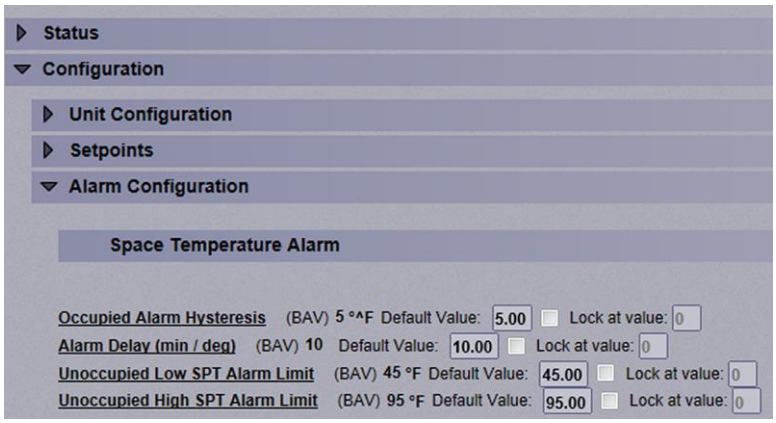
Refer to your individual controller's *Installation and Start-up Guide* for detailed explanations of the points/properties.

To view or edit properties on a Properties page

1 Select a controller on the navigation tree, click **Properties**, and then select the appropriate tab.

NOTE You must resolve any condition described in red text at the top of the page before a **Properties** page can obtain current information from its controller.

2 Click ▶ to show property details.



3 Do one of the following to change a property:

- Select or clear a checkbox
- Select an item on a drop-down list
- Change text in a text field

4 Click **Accept**.

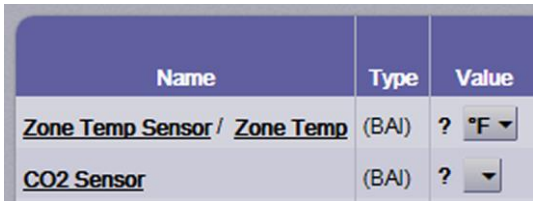
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NOTES

- Click the bold, underlined point name to open the editable microblock pop-up
- Right-click a value, then select **Details** to view and change properties in the microblock pop-up.
- Right-click a value, then select **Global Modify** (page 45) to view and change the property in other control programs.
- Use **Search/Replace** on the **Network Points** tab to replace a term in the point address with another address.
- For the legend of status colors, see Colors and status in the i-Vu® interface.
- A yellow dashed box around a value indicates the value is locked or forced.

Point types

A point name on the Properties page is followed by a code that tells you the point type. The table below describes each code.



Code	Point type
AI	Analog Input
ANI	Analog Network Input
ANI2	Analog Network Input 2
ANO	Analog Network Output
ANO2	Analog Network Output 2
AO	Analog Output
ASVI	BACnet Analog Sensed Value Input
AV	Analog Value
BAI	BACnet Analog Input
BALM	BACnet Alarm
BAO	BACnet Analog Output
BAV	BACnet Analog Value
BBI	BACnet Binary Input
BBO	BACnet Binary Output

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Code	Point type
BBV	BACnet Binary Value
BFM	Floating Motor
BI	Binary Input
BMSV	BACnet Multi-State Value
BNI	Binary Network Input
BNI2	Binary Network Input 2
BNO	Binary Network Output
BNO2	Binary Network Output 2
BO	Binary Output
BPTA	Pulse to Analog Input
BPWM	Pulse-Width Output
BRS	RS Sensor
BRSF	RS Sensor Fan
BSVI	BACnet Binary Sensed Value Input
BTLO	Timed Local Override
BTRN	Trend Log
BV	Binary Value
DI	Digital Input
DO	Digital Output
EVT	BACnet Alarm
POLLAVG	Average Analog Properties
POLLMAX	Maximum Analog Properties
POLLMIN	Minimum Analog Properties
POLLTOT	Total Analog Properties
PTA	Pulse to Analog Input
TLO	Timed Local Override

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Logic pages

The **Logic** page shows a custom control program for a programmable controller. The live data (yellow text) is updated every few seconds and when you click the **Logic** button. The control program uses exact property values for its calculations, but values are rounded to 2 decimal places when displayed on the **Logic** page.

TIP Click anywhere on the **Logic** page, then use your keyboard's Page Up, Page Down, and arrow keys to scroll through the page.

NOTE If you find an unexpected value on a **Properties** page or a **Logic** page, you can use the **Logic** page to troubleshoot.

To view a Logic page

1. Select a custom control program on the navigation tree.
2. Click **Logic**.
3. Click a microblock to view its details.

To locate a microblock, section, or label

1. Right-click the Logic page, then select **Jump To**.
2. Do one of the following:
   - On the **Microblock** or **Section** tab, select an item to have it located and highlighted.
   - On the **Label** tab, select a label to display a reduced logic page outlined in yellow that shows all instances of the label. A red box indicates an output label; a yellow box indicates an input label. Click a red or yellow box to jump to that label in the full-size logic page.

     NOTE You can also click a label on the full-size Logic page to display the reduced Logic page.

To change properties, alarms, or trends

1. Click a microblock on the equipment's **Logic** page.
2. In the microblock pop-up, click the **Properties**, **Alarms**, or **Trends** button.
3. Change properties, alarms, or trends for that microblock in the same way that you would make changes on a regular *Properties* (page 40), Alarms, or Trends page.
4. Click **Accept**.

NOTE Right-click a value, then select **Global Modify** (page 45) to view and change the property in other control programs.

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Using a Logic page to troubleshoot

The i-Vu® application monitors your system and provides feedback. If you get unexpected feedback, you can use a Logic page as a troubleshooting tool. On the Logic page, work your way backward (right to left) through the sequence in the control program to discover what caused the problem. See Microblock Reference to understand what each microblock in the sequence is doing.

Unexpected feedback	Possible cause
Space temperature reads excessively high or low	• The sensor has a short (or open) circuit. Verify wires are properly connected at the sensor and controller. • A sensor is missing or configured incorrectly. Open the sensor or input microblock from the Logic page to verify its configuration.
Equipment displays an unexpected color - effective setpoints are different than the programmed setpoints	**NOTE** Equipment operates using effective setpoints. Open the Setpoint microblock from the Logic page and check the following: • Hysteresis • Demand Level • Optimal Start • Timed Local Override (TLO) • Setpoint Adjust
Gaps in trend data on trend graph	Usually gaps result if network communication was disrupted or a point was temporarily disabled. If the gap is not the result of interrupted communication, send reports more frequently. From the Logic page, open the trend microblock that displayed the gap in data, then decrease the notification threshold so that it is approximately 40% of the buffer size (allocated memory size) for that microblock.
The i-Vu® application is not receiving alarms from a BACnet alarm microblock	Locate the microblock on the Logic page. If the color square on the microblock is black, the alarm is disabled. To enable it: **1** Click the microblock. **2** In the microblock pop-up, click the **Alarms** button. **3** On the **Enable/Disable** tab, select **Potential alarm source**.
The equipment is on when I expect it to be off, or off when I expect it to be on	Use the Logic page to determine whether the program is sending an unexpected signal and why, or if the problem is with the physical equipment. For example, the On-Off-Auto (OOA) switch on the controller for that equipment may be locked in the On (Hand) position.
Sensor value on the Properties page does not match the reading from handheld sensor	Calibrate the sensor. On the Logic page, check to see if the output point is locked on.

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Changing multiple microblock properties

Two i-Vu® features, **Global Modify** and **Global Copy**, allow you to view and change multiple microblock properties at the same time.

CAUTION Global Modify and Global Copy are convenient for making widespread changes in your system. But, because they do not take into account the operation of individual equipment, your changes could produce undesired results in your equipment or system operation. Use with caution because these features do not have an Undo function.

TIP Click  to copy a microblock's reference path to the clipboard so you can paste it into another field or application.

To use Global Modify

Use the Global Modify feature to:

- View a microblock's full path, control program name, and the privileges required to change its properties.
- View or change a single property in several control programs at one time.
- View errors on Graphics and Properties pages.

1. Browse to any page that displays the property you want to view or change.
2. Do one of the following to open Global Modify:
   - **Alt+click** the property.
   - Right-click the property and select **Global Modify.**

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3 Make changes to the **Control Program** field, if needed.

NOTES

- Use wildcards in the **Control Program** field to broaden the search.
  For example:

  `vav*` matches vav, vav**1**, vav**x**, vav**12345**

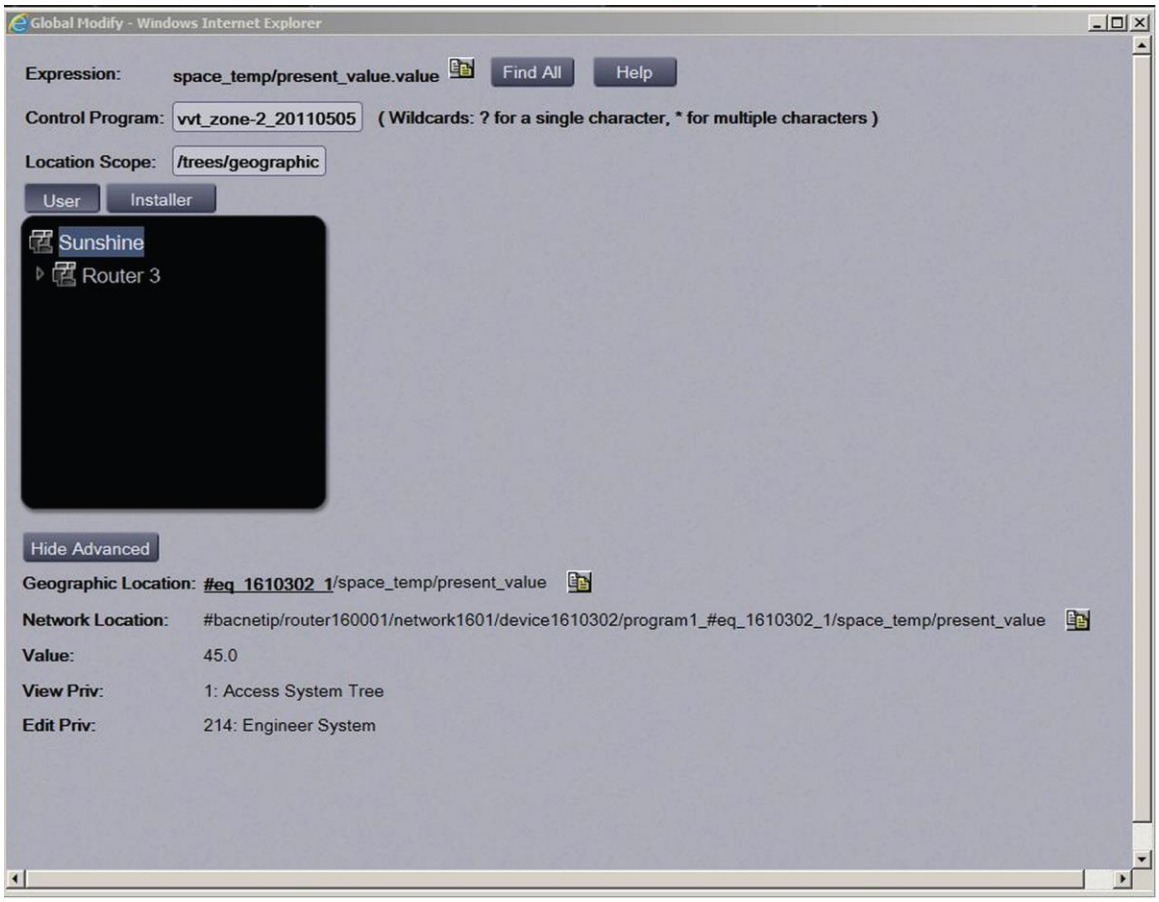
  `vav*z` matches vavz, vav**1**z, vav**x**z, vav**12345**z

  `vav*1*2` matches vav12, vav**abc**1**xyz**2

  `vav??` matches vav**11**, vav**12**, vav**zz**, but does not match vav, vav1, vav123

  `*` matches any control program

- Click **Show Advanced** to view the location, value, and privileges associated with this property.



4 Select the tree item that you want to search under for every occurrence of that microblock in other control programs.

5 Click **Find All**.

6 Select the properties in the list that you want to change.

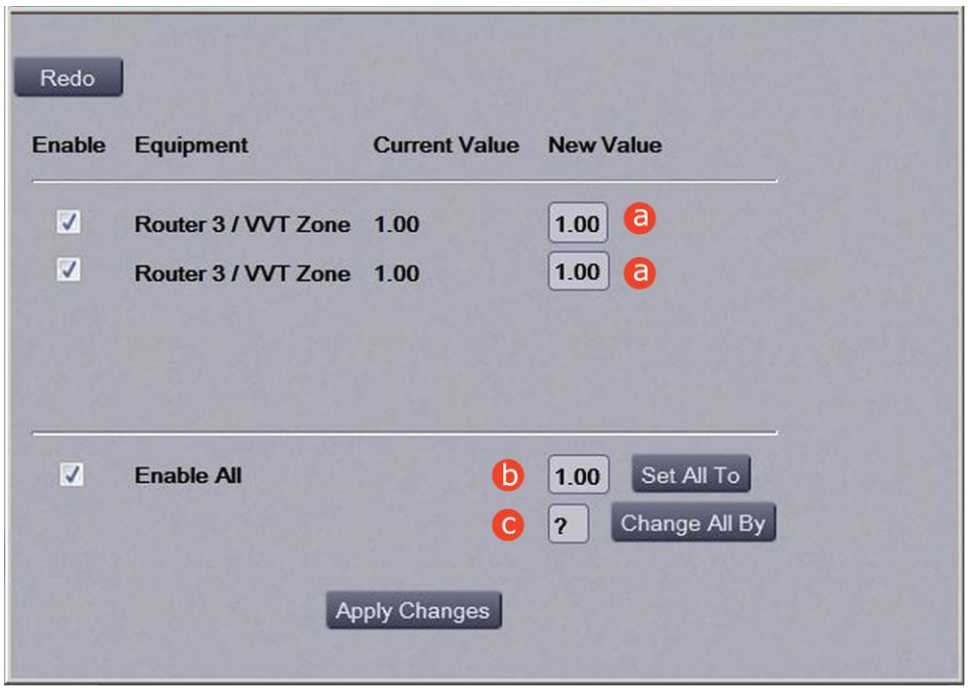
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7 Do one of the following:

a) Type a **New Value** to the right of each selected item.

b) Select **Enable All**, type a new value in b, then click **Set All To**.

c) Select **Enable All**, type a new value in c, then click **Change All By**.



8 Click **Apply Changes**.

NOTE To modify several properties in multiple control programs at the same time, use **Global Copy**.

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To use Global Copy

Use **Global Copy** to copy any or all of the following from one control program to other equipment using the same control program:

- Embedded trend graph settings
- Custom trend graphs
- Custom reports
- Other editable properties to other pieces of equipment using the same control program.

1. On the navigation tree, right-click the piece of equipment that has the properties you want to copy, then select **Copy Control Program Properties**.
2. Click **OK** when you see **This will copy this control programs properties to other control programs of the same type. Continue?**. This opens the next screen and does not lock in any changes.
3. In the **Global Copy** dialog box, select the items that you want to copy.
4. Select the area on the tree containing similar control programs that you may want to copy these properties to, then click **Search**.

   All instances at that level and below are listed in the expanded lower window.
5. Check or uncheck items as needed.
6. Do one of the following:
   - Check **Skip bad values** to copy all values except a bad value (it cannot be copied because you do not have the necessary privilege, the property to be copied is undefined, etc.).
   - Uncheck this field to prevent any values from being copied if a bad value is found.
7. Click **Apply Changes**, then close the **Global Copy** dialog box.

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Checking controller status

On the i-Vu® navigation tree, you can select a router or the system level and then click the **Devices** button to:

- *View the status of controllers* (page 50)
- View controller information such as address, model, driver, and .view files included in download
- *Download or upload to resolve a mismatch* (page 53)
- Troubleshoot network communication
- Download or upload files for Field Assistant

NOTES

- Use **Ctrl+click**, **Shift+click**, or the **Select All** checkbox to select multiple controllers.
- Click **Hold** to stop pending downloads or uploads. Active downloads or uploads cannot be stopped.
- Icons in the **Tasks** column indicate the following:

	Active—The i-Vu® application is downloading to the controller.
	Active—The i-Vu® application is uploading from the controller.
	Pending—You initiated the download, and the controller is waiting for its turn to download.
	Failed—The download failed. See If a controller fails to download.
	On Hold—Indicates you clicked **Hold** to stop a pending download.

- Click in the upper left-hand corner to view a log of activity on the **Devices** page in the current session. **Copy to Clipboard** lets you copy the text to paste it into another application.

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Status messages

On the i-Vu® navigation tree, you can select a router or the system level and select the **Devices** page to view the status of controllers. The **Status** column shows a description of the controller's current state. Hold your cursor over that description to see hover text with a more detailed description.

If multiple conditions exist, the i-Vu® interface displays the message with the highest priority.

The table below shows all possible messages. The message color indicates the following:

Black—In process
Red—An error occurred
Blue—Requires action from the user

i-Vu® Open routers/controllers

Status column message	Hover text message	Notes
Black messages:		
Downloading	The controller is downloading, communications may be disabled	
Uploading	The controller is uploading, communications may be disabled	
Pending	This controller is waiting to be processed.	
Processing Clipping	Clipping operation in progress. Do not make changes during this operation, as they may corrupt your system.	
Red messages:		
Communications Error	Cannot communicate with this controller.	
Connection Disabled	The connection for this controller has been disabled.	Occurs if someone stopped the connection.
Connection Error	The connection for this controller failed to start.	Occurs if the connection is misconstrues or failed to start.
Controller offline	The controller is offline.	This only appears for equipment controlling slave devices that it is unable to communicate with.
Download Failed	(Message depends on the cause of the failure.)	
Download Not Permitted	This controller is not permitted to download.	
Error	An unknown error has occurred.	
Missing Files	Upload failed. Server is missing the source files.	

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Status column message	Hover text message	Notes
Not Uploadable	This controller is not configured for content upload.	Occurs if you attempt to upload a controller with a pre-4.x driver.
Out of Service	This controller is out of service.	
Unsupported Controller	This controller does not support content upload.	
Upload Not Permitted	This controller is not permitted to upload.	
USB Unplugged	Cannot communicate with the controller because the USB cable is unplugged.	Applies only to the i-Vu® Standard and Plus applications.
Blue messages:		
Controller Replaced	This controller has been replaced by another controller of the same type in the field.	4.x driver only
Download All Content	Please download all content to the controller.	
Download Parameters	To download parameters, highlight row and select **Parameters** from the Download Action menu and click **Download**.	
Download Schedule	To download schedules, highlight row and select **Schedules** from the Download Action menu and click **Download**.	
Driver Parameter Mismatch	Driver parameter differences detected. Upload parameters from the controller or download parameters to the controller.	
Network Ready for Upload	To upload this network, select the router in the tree and **Find Devices**.	
Parameter Mismatch	Control program parameter differences detected. Upload parameters from the controller or download parameters to the controller.	
Program Mismatch	Content differences detected. Upload all content from the controller or download all content to the controller.	4.x driver only
Unprogrammed Controller	Applies only to a programmable controller that does not have any control programs in it.	To add control programs, click **Add Control Program**.
Upload All Content	Please upload all content from the controller.	

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Status column message	Hover text message	Notes
General messages:		
✓	This controller is ok.	
Cancelled	The last operation on this controller was cancelled	

CCN controllers/equipment

Status column message	Hover text message	Notes
<blank>	This is a known control program from a previous discovery, but communications with it has not been attempted since the user logged in.	
✓	Successful rescan.	
Downloading	Downloading changes. Communications will resume shortly.	
New Control Program	A new controller was found at the scanned address and added to the system.	
New Version Applied	This controller's program or views have been updated with a newer version.	
Red messages:		
Communications Error	Cannot communicate with this controller.	
Download Failed	<The message is specific to the failure.>	
USB Unplugged	Cannot communicate with the controller because the USB cable is unplugged.	Applies only to the i-Vu® Standard and Plus applications.
Blue messages		
Classification Mismatch	The controller at this address was previously a Bridge routing to other controllers.	
Download All Content	Please download all content to the controller.	
Model Mismatch	The controller at this address is the wrong model.	
Rescan Required	A configuration change was made to this control program therefore a rescan is required to get the correct graphic and control logic components.	

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Handling parameter mismatches

A parameter mismatch occurs when a value in a controller does not match the value in the system database. This can be a driver or control program value.

Use either of the following methods to handle mismatches in your system.

- Method 1: Check **Always resolve parameters on mismatch** on the **System Settings** > **Communications** tab to have the i-Vu® application automatically upload if a value was changed in the controller or automatically download if a value was changed in the i-Vu® interface.

- Method 2: Uncheck **Always resolve parameters on mismatch** so that you can evaluate a mismatch to determine the correct value.

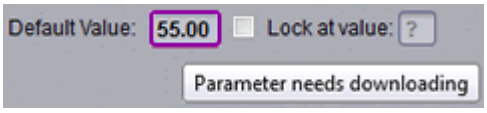
To find mismatches in your system

If your system uses Method 2, you can find mismatches in the following places:

- The **Devices** page > **Manage** tab > **Status** column will show **Parameter Mismatch.**
- The **Properties** page for a controller, driver, control program, or point will show one of the following red messages at the top of the page stating:

  Control Program parameter differences detected.
  Driver parameter differences detected.
  Parameter download required.

  The value that has a discrepancy will appear with a purple box around it. Hover your cursor over the field to see:



or



- Go to **Reports** > **Equipment** > **Parameter Mismatch**, and then click **Run** to get a report of any existing mismatches in your system.

NOTE The **Downloads** page > **Tasks** column will show **Resolve Parameters** for any mismatches that your system discovered in the 3 places listed above.

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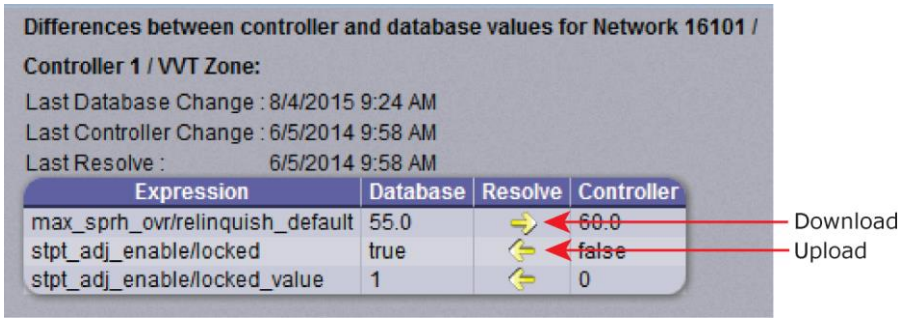
To resolve a mismatch

1 Go to one of the following:

- **Devices** page - Click the **Parameter Mismatch** link
- **Properties** page that shows one of the red messages above

2 Click one of the following:

- **Resolve** to let the i-Vu® application download changes made in the i-Vu® interface or upload changes made in the controller. Click the **Details** button to see what the discrepancy is and whether **Resolve** will download or upload parameters. See NOTE below.



- **Upload** to upload the parameters from the controller to the i-Vu® application
- **Download** to download the parameters from the i-Vu® application to the controller

NOTE On the **Devices** page with **Show Control Programs** unchecked, if a controller has simultaneous mismatches in the driver and control program, clicking **Details** will show that a control program mismatch exists but it will only show details for the driver mismatch. You must go to the control program in the tree to see details of that mismatch. However, clicking **Resolve** will resolve both mismatches.

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Managing setpoints

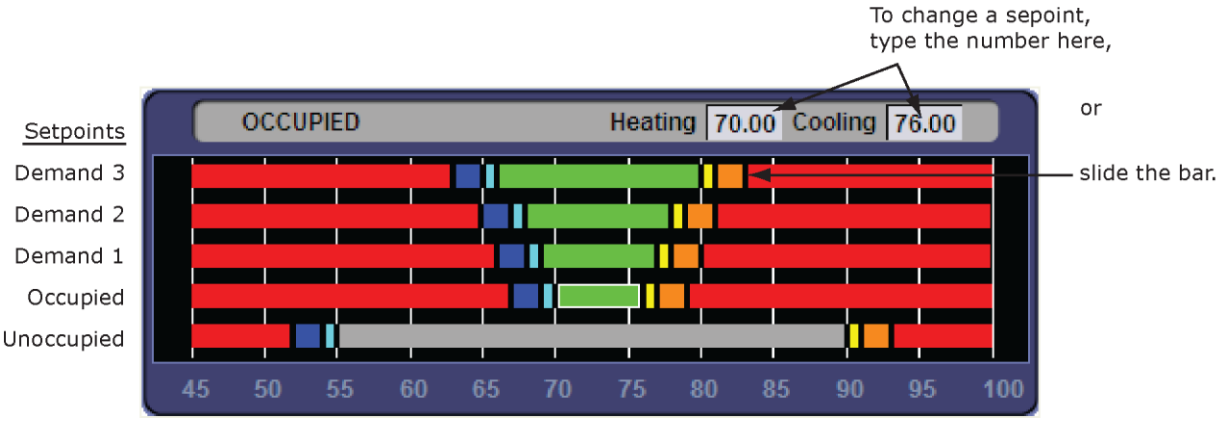
The **Setpoint** graphic shown on a standard equipment graphic indicates the base setpoint values (Occupied High/Low, Unoccupied High/Low). The i-Vu® application reads these values back periodically, typically within 10 seconds. The timing can vary based on network traffic, the number of controllers in the database, and several other variables. Setpoints that are changed in the field via another user interface are displayed in the i-Vu® interface as soon as they are detected.

You can, at any time, change the setpoints from i-Vu® graphics by using the slider or by entering numeric values directly. Updated setpoints are transmitted to the controller when you **Accept** the changes. Setpoints can also be changed on the **Properties** page > **Control Program** tab > **Space Temperature and Setpoints**. or **Configuration** > **Setpoints**.

NOTE Power and Standard operators may only edit **Occupied/Unoccupied** and **Heating/Cooling** setpoints. They cannot edit **Demand** levels or more detailed setpoint parameters.

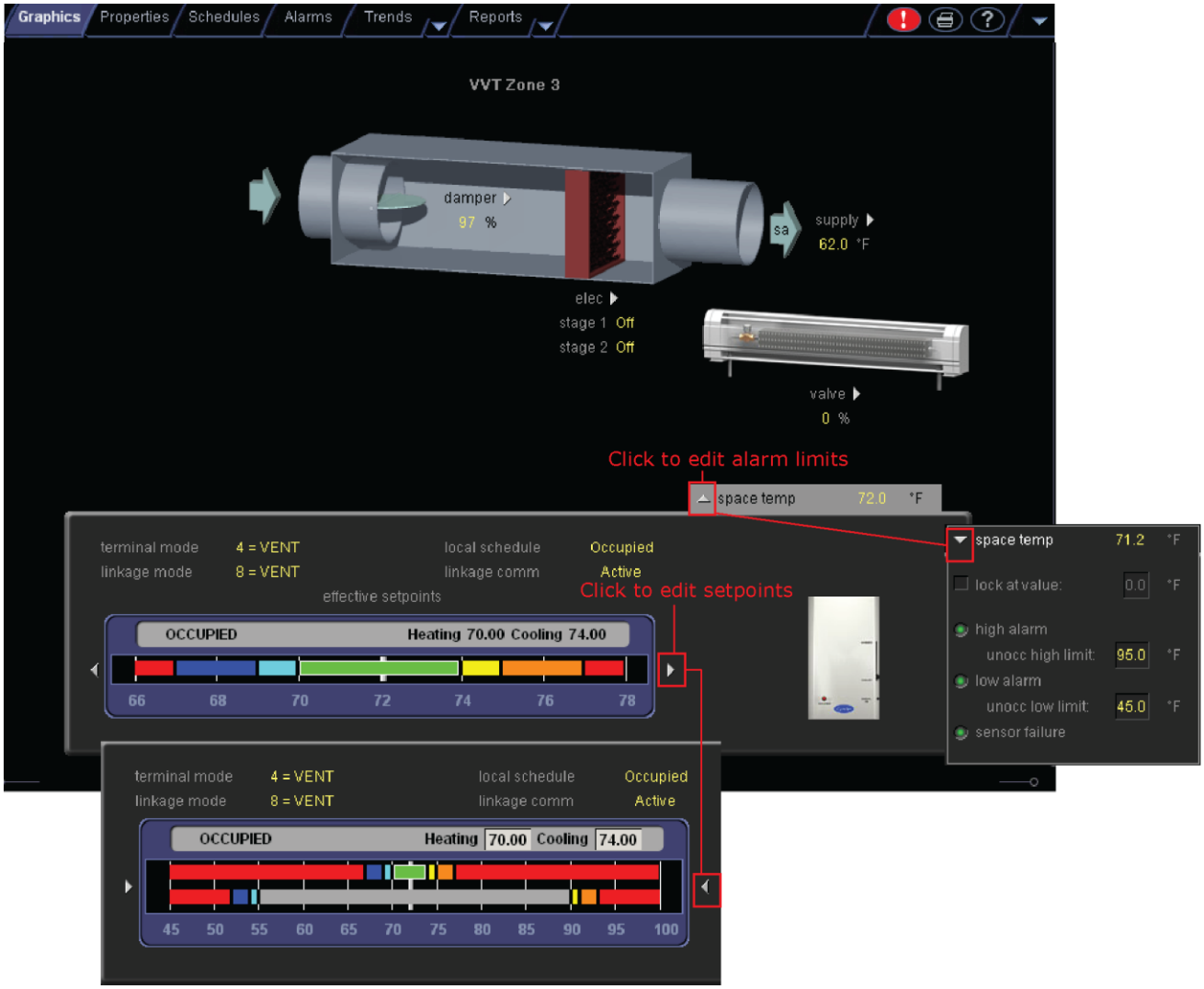
The various color bars indicate adherence to or deviation from the setpoint. You can change the current default settings for setpoint deviation. Select a color band on the setpoint graph to see the current setpoints in the **Heating** and **Cooling** fields. The values in this graphic are Fahrenheit. See setpoint descriptions below.

NOTE This graphic is an example only. Your setpoints may differ.



Color		Condition
	Green	Temperature is within the Occupied Low and High Setpoint
	Gray	Temperature is within the Unoccupied Low and High Setpoint
	Light Blue	Temperature is less than 2°F below the Occupied Low Setpoint
	Dark Blue	Temperature is more than 2°F below the effective Low Setpoint but less than 4°F below the effective Low Setpoint
	Yellow	Temperature is less than 2°F above the effective High Setpoint
	Orange	Temperature is more than 2°F above the effective High Setpoint but less than 4°F above the effective High Setpoint
	Red	Temperature is more than 4°F above or below the effective setpoints

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Adjust setpoints

- **Programmed setpoints** are set and changed by operators.
- **Effective setpoints** reflect the impact of other system conditions on the programmed setpoints, such as setpoint adjustments, and hysteresis. Effective setpoints control the equipment.

To change programmed setpoints:

1 Navigate to a setpoint control in one of the following places:
   - **Properties** page > **Control Program** tab > **Configuration** > **Setpoints**
   - The setpoint microblock pop-up on a **Logic** page
   - A **Graphics** page (Click a setpoint trend graph control to access the editable setpoint bar.)

2 Make changes on a programmed setpoint bar by either:
   - Clicking and dragging the segment or the gap between segments
   - Typing new values in the **Heating** and **Cooling** fields

3 Click **Accept**.

Demand Control

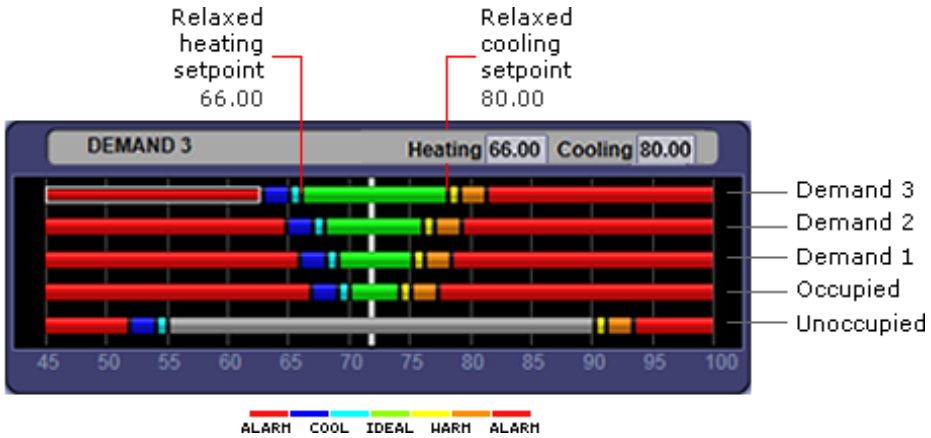
Demand Control is a cost-saving strategy that saves energy while maintaining comfort in the following ways:

- Controlling energy use to avoid peak demand, ratchet, or time of use utility charges
- Maintaining ventilation at relaxed setpoints rather than shutting down equipment (as with load shedding or duty cycling)

Before you can use Demand Control effectively, you must:

- Obtain details regarding past energy usage and peak demand, ratchet, and time of use charges from your energy provider.
- Understand the demand profiles of the zones you are controlling.

Demand Control can be customized at the zone level. For example, you may relax the setpoints in some zones, like break rooms and closets, by a few degrees, but you may not want to relax setpoints in computer rooms at all.



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To define Demand Control properties

1 On the navigation tree, select the electric meter.

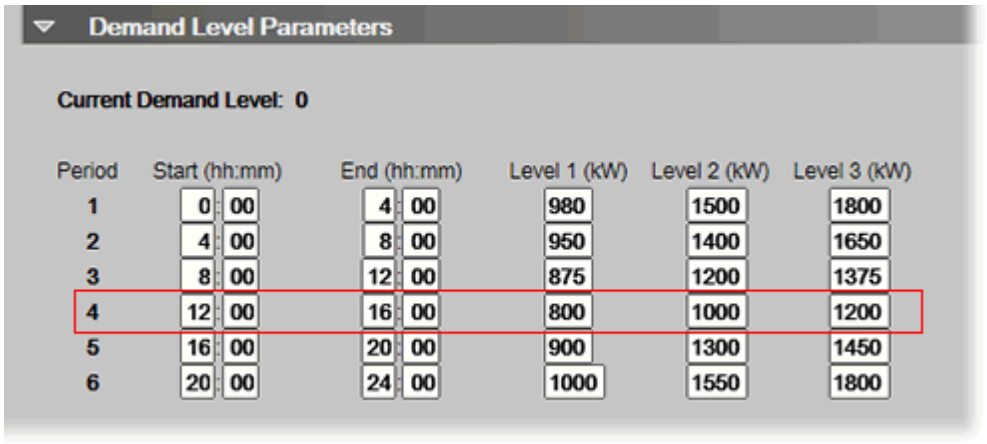
2 Select **Properties** > **Control Program** and expand the **Demand Level Parameters** section.

3 Type the **Start** and **End** time to define the time period that you want demand control to be in effect for this zone.

4 Type kilowatts per hour (kW/hr) in the **Level** columns to define the amount of power that the demand must exceed before the i-Vu® system calls for a higher demand level.

NOTE Levels are defined in the electric meter control program in the Snap application. You can test the Demand Levels by locking the meter to a value.

In the example below, during Period 4, defined as 12:00 (noon) to 16:00 (4:00 p.m.), if the demand exceeds 800 kW/hr, the i-Vu® system will use Demand Level 1 setpoints. If the demand exceeds 1000 kW/hr, the i-Vu® system will use Demand Level 2 level setpoints and so on.



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Configuring Optimal Start

Enable and configure Optimal Start on the **Properties** page > **Control Program** tab > **Configuration** > **Setpoints**. Your control program could be configured for **Optimal Start** or for both **Optimal Start** and **Optimal Start Type**.

NOTES

- The **Optimal Start** options depend on the revision date of the control program in your controller.
- Optimal Start is automatically disabled when **Properties** > **Control Program** > **Maintenance** > **Occupancy** > **BAS On/Off** is set to either **Unoccupied** or **Occupied**.

Optimal Start

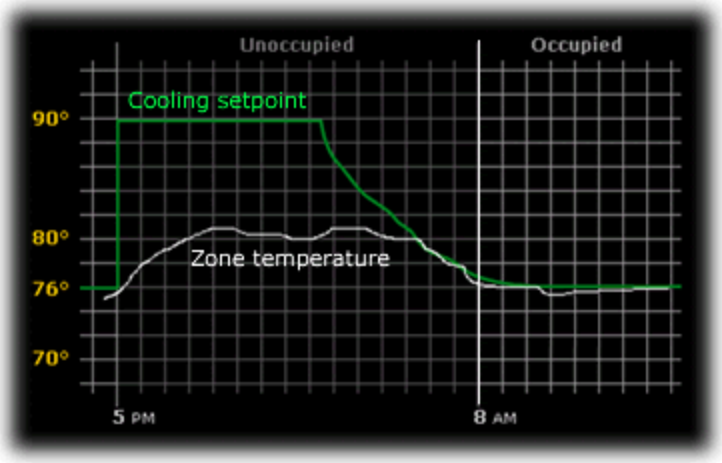
Optimal Start adjusts the effective setpoints to achieve the occupied setpoints by the time scheduled occupancy begins.The Optimal Start recovery period may begin as early as 4 hours prior to occupancy. The algorithm works by moving the unoccupied setpoints toward the occupied setpoints. The rate at which the setpoints move is based on the outside air temperature, design temperatures, and capacities.

The following conditions must be true for optimal start to operate:

- On the **Properties** page > **Control Program** tab > **Configuration** > **Setpoints** > **Optimal Start**, the **Default Value** must be set greater than **0** and less than or equal to **4** (**0.00** disables **Optimal Start**).
- The system is unoccupied

NOTE If the Open controller does not have a valid outside air temperature, then a constant of 65° F is used. This value is not adjustable.

The actual equation that the controller uses to calculate **Optimal Start** is nonlinear. An approximation of the result is shown below.



To change **Optimal Start** settings:

1. In the navigation tree, select the equipment that you want to change.
2. Select **Properties** page > **Control Program** tab > **Configuration** > **Setpoints**.

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Optimal Start Type

If you have **Optimal Start Type**, you must choose from the following:

- **None**
- **Temperature Compensated Optimal Start**
- **Learned Adaptive Optimal Start**

To select the method used to change from unoccupied to occupied setpoints:

1 In the navigation tree, select the equipment that you want to change.

2 Click **Properties** page > **Control Program** tab > **Configuration** > **Setpoints**.

3 Select option from the **Optimal Start Type** drop-down list.

4 See below to make further adjustments.

None – The unit will not start to control to the occupied setpoints until the unit goes into an occupied mode. Setpoints do not ramp, but change immediately from unoccupied to occupied values. When you select **None**, you must set all Learning Adaptive Optimal Start transition factors, identified by their themographic color, to 0. These are located directly above the **Effective Set Points** graph.

Temperature Compensated – The unit changes to occupied setpoints at some time prior to the occupied time, not to exceed the hours you set for **Optimal Start**. The start time is determined by the current error between space temperature and the appropriate heating or cooling setpoint. At that time, the setpoints do not ramp, but change immediately from unoccupied to occupied values. When selecting **Temperature Compensated**, you must set all Learning Adaptive Optimal Start transition factors, identified by their thermographic color to 0. These are located directly above the **Effective Set Points** graph.

When selecting **Temp Compensated**, you can adjust the following:

- **Heat Start K factor (min/deg)** – If **Optimal Start Type** is **Temp Compensated**, this is the time in minutes per degree that the equipment starts before the occupied period when the space temperature is below the occupied heating setpoint (including any setpoint offset).
- **Cool Start K factor (min/deg)** – If **Optimal Start Type** is **Temp Compensated**, this is the time in minutes per degree that the equipment starts before the occupied period when the space temperature is above the occupied cooling setpoint (including any setpoint offset).

  NOTE The default value for the above is 15.00 and the range is 0 to 99.

Learning Adaptive Optimal Start – This function gradually adjusts the unoccupied setpoints over a specified period of time to achieve the occupied setpoint by the time scheduled occupancy begins. This learning adaptive algorithm uses the **learned heating capacity** and **learned cooling capacity** values to calculate the effective setpoints prior to the occupied start time. The algorithm calculates a learned cooling and heating capacity during the previous unoccupied time. Set the **Learning Adaptive Optimal Start** recovery period from 1 to 4 hours in **Optimal Start**. When the **Learning Adaptive Optimal Start** routine runs, adjustments are based on the color that is achieved when occupancy begins. Adjustment amounts are defined in the thermographic color fields located directly above the **Effective Setpoints** graph under **Setpoints**.

EXAMPLE The heating capacity for a zone is 5° per hour (default). When the zone becomes occupied, the zone temperature is 1° below the occupied setpoint, indicating a need for additional heat. Because the zone temperature was low by 1°, the learned heating capacity is decreased by the value entered in the **LtBlue** thermographic color field (0.0600 default). As a result, the learned heating capacity is adjusted to 4.94° for the next optimal start period. Since the algorithm has calculated that the equipment has less capacity to bring the temperature to setpoint within the configured recovery period, the setpoint adjustment begins sooner in the next unoccupied period.

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To change the adjustment values in the **Learning Adaptive Optimal Start** routine:

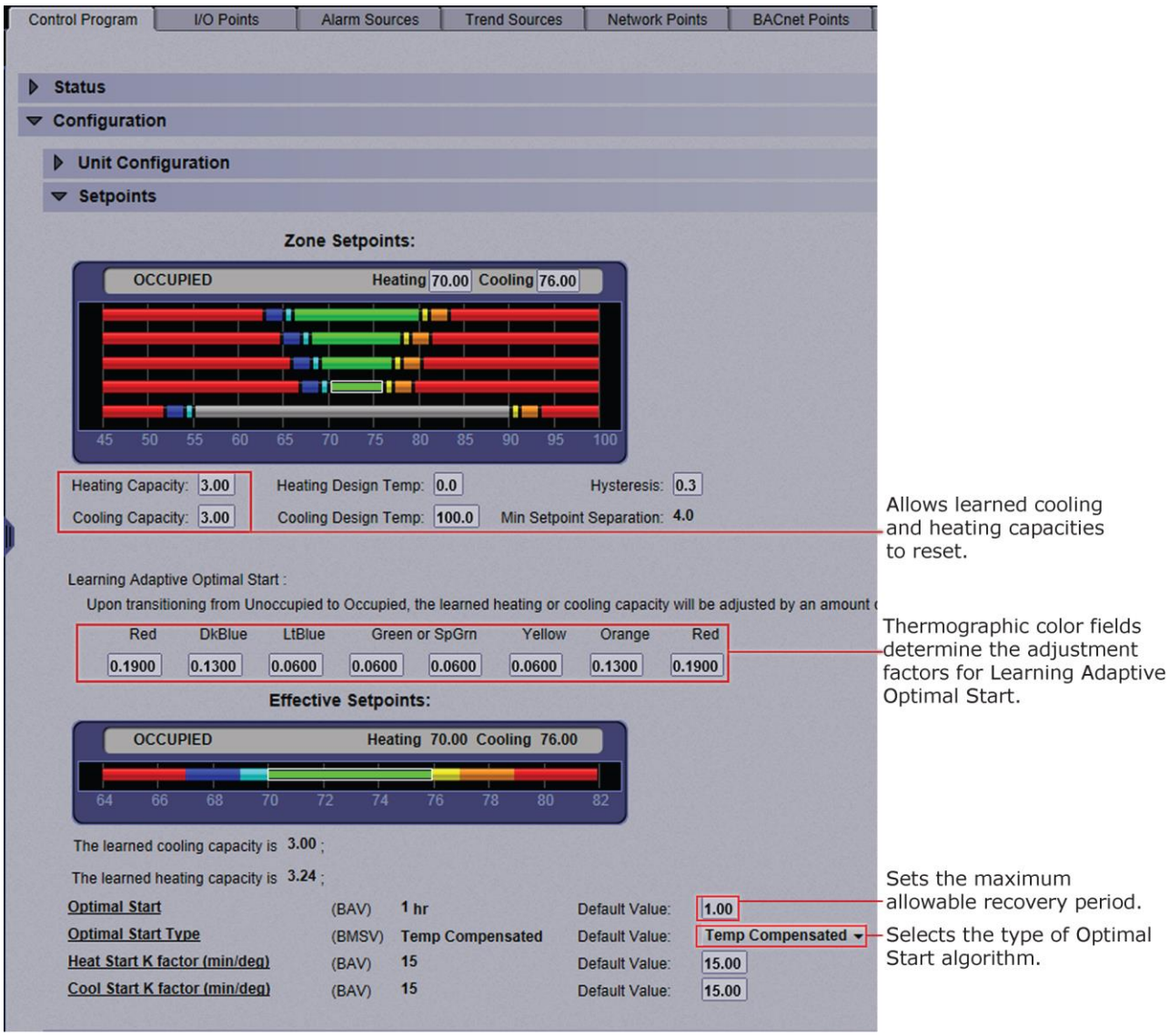
1 In the navigation tree, select the equipment that you want to change.

2 Click **Properties** page > **Control Program** tab > **Configuration** > **Setpoints**.

3 Adjust the color fields between the Zone Setpoints graph and the **Effective Setpoints** graph.

When you determine that no further start time optimization is required, you can disable **Heating** and **Cooling Capacity** adjustments by setting the color field values to 0.0.

You can reset the learned heating and cooling capacities by entering a value into either the **Heating Capacity** or **Cooling Capacity**, located beneath the **Zone Setpoints** graph.



CAUTION When using **Learning Adaptive Optimal Start**, be sure that all equipment is properly maintained so that your system does not “learn” to compensate for dirty filters or loose fan belts.

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Setting up i-Vu® client devices and web browsers

The i-Vu® system can be viewed on the following client devices and web browsers.

Computers

The client computer should have at least:
- Dual core processor
- 1.5 GB RAM
- Communications link of 10 Mbps or higher

The i-Vu® application will work with slower computers and slower links, but the results may not be satisfactory.

A computer with this operating system...	Supports these web browsers...
Windows®	Google™ Chrome™ v84.0 or later [1]
	Microsoft® Edge v84 or later
	Mozilla® Firefox® v79.0 or later
Mac® OS X® (Apple® Mac only)	Safari® v11 or later [2]
	Google Chrome v84.0 or later
	Mozilla Firefox v79.0 or later

1 Best performance

2 Best performance unless browser is running on a Mac® Mini or a MacBook:

WARNING If machine is running Mountain Lion 10.8x with an integrated Intel HD 400 graphics card, it will experience display issues. Use one of these workarounds for better performance:

- If an additional NVIDIA graphics card is available, manually switch the graphic card setting in MAC® OS X® to use that card.
- If not, use Google™ Chrome™ v66.0 or later.

Mobile devices

Device type	Platform support
Smart phone	Android™, iOS
Tablet	Android™, iOS, Surface™

NOTE Some functionality may be limited by the capability of the mobile device and operating system.

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Setting up and using a computer with the i-Vu® system

- Set the monitor's screen resolution to a minimum of 1920 x 1080 with 32-bit color quality
- You may want to disable the computer's navigation sounds.

Mac only

NOTE The instructions below are for a Mac OS X 10.8. Other versions may vary slightly. See your computer's Help if necessary.

Computer settings	To change setting...
Enable right-clicking to see right-click menus:	
On a Mac	**1** Select **System Preferences** > **Mouse**. **2** Click the drop-down list that points to the mouse's right-click button, then select **Secondary Button**.
On a MacBook	**1** Select **System Preferences** > **Trackpad**. **2** Enable **Secondary click**.

The instructions in Help are for a Windows computer. For instructions that include the **Ctrl** key, replace **Ctrl** with **Command**. For example, replace **Ctrl+click** with **Command+click**.

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Setting up and using a web browser to view the i-Vu® interface

To set up and use Microsoft Edge

The instructions below are for Microsoft® Edge.

Web browser settings	To set in Microsoft Edge...
Do not block cookies	1 Click ... to display the Actions droplist. 2 Select **Settings** > **Site Permissions** > **Cookies**.
Disable web browser's pop-up blockers *	1 Click ... to display the Actions droplist. 2 Then select **Settings** > **Site Permissions** > **Pop-ups and redirects**.

To...	Do the following...
Maximize the web browser window *	Use the minimize/maximize button in the top right corner of the browser window.
Have 2 different users logged in to the i-Vu® system on the same computer *	1 Click ... to display the Actions droplist. 2 Select **New Window**.
Clear browser cache	1 Click ... to display the Actions droplist. 2 Select **Settings** > **Privacy, Search, and Services** > **Clear browsing data**. 3 Click **Choose what to clear**. 4 Click **Clear now**.

* Does not apply to Microsoft Edge on a phone.

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To set up and use Mozilla Firefox

NOTES

- The instructions below are for Mozilla® Firefox® v60.0 on a Windows operating system. Other versions may vary slightly. See your web browser's Help if necessary.
- If the menu bar is not visible, right-click on the window's title bar, and then select **Menu bar**.
- If a message appears in the i-Vu® interface that includes the checkbox **Prevent this page from creating additional dialogs**, DO NOT check this box.

Web browser settings	To set in Firefox...
Disable Pop-up blocker	**1** Click **Tools** > **Options** > **Privacy & Security**. **2** Under **Permissions**, click **Exceptions** next to **Block pop-up windows**. **3** Type `http://` (or `https://`) and then the server name or IP address of your system. **4** Click **Allow** and then **Save Changes.**
Enable JavaScript	**1** In the address bar, type `about:config`, and then press **Enter**. **2** Click **I accept the risk**. **3** In the **Search** bar, type `javascript.enabled`. **4** If the value field shows **true**, JavaScript is enabled. If it shows **false**, right-click **javascript:enabled**, and then select **Toggle**.
Add-ons Manager	Select **Tools** > **Add-ons** > **Extensions**. On this page, you can enable/disable installed add-ons such as: • Adobe® Acrobat® Reader (to view PDF's) • QuickTime Plug-in (to play audible alarms) Only installed Firefox add-ons will show up in the list.

To...	Do the following...
Maximize the web browser window	Press **F11** to turn full-screen mode on\off.
Clear browser cache	**1** Click **Tools** > **Options** > **Privacy & Security**. **2** Under **Cookies and Site Data**, click **Clear Data**. **3** Click **Clear**.
Have 2 different users logged in to the i-Vu® system on the same computer	Start a new web browser session. Select **File** > **New Private Window**.

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To set up and use Google Chrome

NOTES

- The instructions below are for Google™ Chrome™ v66.0. Other versions may vary slightly. See your web browser's Help if necessary.
- If a message appears in the i-Vu® interface that includes the checkbox **Prevent this page from creating additional dialogs**, DO NOT check this box.

On a computer

Web browser settings	To set in Chrome...
Enable pop-ups	1 Click ⋮ on the browser toolbar. 2 Select **Settings**. 3 Click **Advanced** at the bottom of the page. 4 Under **Privacy and security**, click **Content settings**. 5 Under **Pop-ups** > **Allow**, click **ADD**, and then type http:// (or https://) and then the server name or IP address of your system.

To...	Do the following...
Clear browser cache	1 Click ⋮ on the browser toolbar. 2 Select **More tools** > **Clear browsing data**. 3 Select a time range in the drop-down list. 4 Check the types of information that you want to remove. 5 Click **CLEAR DATA**.
Maximize the web browser window	Press F11 on your keyboard to turn full-screen mode on/off.
Have 2 different users logged in to the i-Vu® system on the same computer	Start a new web browser session. Click ⋮, then select **New incognito window**.

On Chrome for Android

NOTE The following settings are based on Android v11 - options may vary with versions.

Web browser settings	In the Chrome menu...
Turn off desktop mode	Uncheck **Request desktop site**
Disable pop-up blocker	**Settings** > **Advanced** > **Site Settings** > uncheck **Block pop-ups**
Enable JavaScript	**Settings** > **Advanced** > **Site Settings** > check **Enable JavaScript**
Enable Cookies	**Settings** > **Advanced** > **Site Settings** > check **Accept Cookies**

To...	In the Chrome menu...
Clear browser cache	**Settings** > **Basics** > **Privacy** > **CLEAR BROWSING DATA**

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To set up and use Safari

NOTES

- The instructions below are for Safari® v11. Other versions may vary slightly. See your web browser's Help if necessary.
- We recommend that you do not run Safari in full-screen mode. If you do, i-Vu® pop-ups will open full-screen, covering the main application window.

On an Apple® computer (Mac®)

Web browser settings	To set in Safari...
Disable pop-up blocker	**Preferences** > **Security** > uncheck **Block pop-up windows**
Enable JavaScript	**Preferences** > **Security** > check **Enable JavaScript**
Enable Plug-ins	**Preferences** > **Security** > check **Enable plug-ins**
Prevent pop-ups from opening in a new browser tab	**Preferences** > **Tabs** > uncheck **Command-click opens a link in a new tab**
Prevent Safari from automatically opening zip files exported from the i-Vu® application	**Preferences** > **General** > uncheck **Open "safe" files after downloading**

To...	Do the following...
Clear browser cache	**History** > **Clear History**
Have 2 different users logged in to the i-Vu® system on the same computer	Start a new web browser session. Select **Safari** > **Private Browsing** > **File** > **New window**

On an Apple® iPad

Web browser settings	To set on the iPad...
Disable pop-up blocker	**Settings**> **Safari** > set **Block pop-ups** to **Off**
Enable JavaScript	**Settings** > **Safari** > set **JavaScript** to **On**

TIP Re-enable popup blocking on your device when not using our software.

To...	Do the following...
Clear browser cache	**Settings** > **Safari** > **Clear History**

TIP Re-enable popup blocking on your device when not using our software.

On an Apple® iOS 12.2

Web browser settings	To set on the iPhone...
Enable JavaScript	**Settings** > **Safari** > **Advanced**

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Using Alarms, Trends, and Reports

See i-Vu® Help for detailed information on:

- Setting up and using **Alarms**
- Viewing and customizing **Trends**
- Running standard reports and creating custom **Reports**

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Using System Options

System Options provides administrative access for the following functions:

- My Settings - user's login, navigation tree preferences, and personal contact information
- *System Settings* (page 70)
  - *General* (page 70)
  - *Security* (page 73)
  - *Communications* (page 75)
  - *Scheduled Tasks* (page 76)
  - *Daylight Saving* (page 77)
  - *Add-ons* (page 78)
- *Operators* (page 11) - operator passwords, levels of access (roles), menu starting location
- *Privilege Sets* (page 12)
- *Operator Groups* (page 15)
- *Categories* (page 29) - Schedule, Alarm, Graphic, Property, Trend, Report
- Connections - To set up a BACnet/IP connection in the i-Vu® interface
- *Services* (page 3)
- *License Administration* (page 80)
- *Update* (page 81)
- Client Installs - download Sun's Java VM. See Setting up a computer and Alarm Popup Application in the i-Vu® Help.

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System Settings

The **System Settings** page contains information that you must enter before the i-Vu® application can run properly.

1 On the **System Options** tree, select **System Settings**.

2 Click each tab, then enter the necessary information. Tab details are described below.

General tab

The **General** tab presents the following **System Information**:

- **System Directory Name**
- Path to the **Webroot Directory**
- **Database Type**
- **System Language**

You can edit or use the following fields and buttons.

Field	Notes
System Information	
System Statistics button	Click to see the following system information: • Number of controllers • Number of controllers that can run control programs • Number of points, regardless of vendor • Number of trend sources in database • Number of trend samples in database
Levels displayed in paths	The number of levels displayed in i-Vu® paths. For example, if **Node Name Display Depth** is set at: 2, a typical path might be ..\AHU-1\RA Temp 3, a typical path might be ..\Atlanta R&D\First Floor\AHU-1 **NOTE** Changing this field does not take effect until you restart the i-Vu Server application.
Use metric units for CCN tables and control	Check to use metric values.
Logs	
Select a week of logs to review	For troubleshooting, you can download a zip file that contains logs of system activity.
Time	
Time Format	Select one of the following for the system's time: • **12-hour clock** (Example: 4:34 pm) • **24-hour clock** (Example: 16:34)
Date Format	Select the format you want the system to use.

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Field	Notes
Time Sync	Click to immediately synchronize the time on all IP network controllers in the system database to the i-Vu® server's time. Check **Enable time synchronization of controllers daily at____** to set daily time synchronization occurs daily if the field on the *Scheduled Tasks tab* (page 76) is enabled. (Click this link for more information on time synchronization.) Automatically synchronizes the time on all equipment to the time on the server, adjusting for different time zones and Daylight Saving Time. We recommend that you check this field. The i-Vu® application will send a daily time sync message to each IP network device that is in the system database. IP devices not in the database will not be synchronized. For all MS/TP networks in the database, the i-Vu® application will send a broadcast time sync message. All devices on these networks will be synchronized, regardless of whether or not the devices are in the database.  **CAUTIONS** • Make sure that your server's time and time zone setting are correct. • To prevent time sync problems when the transition to and from Daylight Saving Time occurs, set the time sync to occur at least 1 hour after the last controller in the system is adjusted for DST. For example, your server and part of your system is in the Eastern Standard Time zone, but you also have controllers in the Pacific Time zone. Your server is adjusted for DST at 2:00 a.m. Eastern Standard Time, but the controllers in the Pacific Time zone are not adjusted until 3 hours later. So you would set the time sync to occur daily at 6:00 a.m. or later. **NOTES** • You can perform system-wide time synchronizations using the **Time Sync** button. • Between time sync broadcasts, Carrier routers include time sync information in each color request to the devices below the router. This ensures devices without a battery-backed clock will get the time shortly after powering up.
Alarms	
Enable support for Alarm Notification Clients to connect to this server	Check to use the Alarm Notification Client application. See Alarm Popup alarm action. **NOTE** When using location-dependent security, users only receive alarms for locations they are allowed to access.
Schedules	
Disable Schedules	If your system has no need to run schedules, check this box so that the Schedules feature is no longer visible in the i-Vu® interface.
Trends	
Keep trends for ___ days	Stores trend data in the i-Vu® database for the time you specify. This is a default setting that you can change when you set up trends for an individual point.

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Field	Notes
Display gap in graph line for missing data	Check to show a gap if trend data is missing.
Source Files	
All Source Files	Use to export source files to a .zip file that can be imported into another i-Vu® or Field Assistant system. Source files include: • Control programs (.equipment files only) • Drivers • Graphics (.view files only) • Touchscreen files • BACview® files • Report design files for Equipment Values or Trend Sample reports **NOTE** If import detects a difference between a database file and an import file with the same name, import does not overwrite the database file. A message lists any file differences so that you can resolve them. See Commissioning equipment using Field Assistant.
Download	
Optimize download for Open PIC controllers	Check to increase download speed. The full source files are not downloaded into the PIC controllers when this is checked.
Include graphics in Open programmable controller download	Uncheck to increase download speed. If you are not changing the graphics, you may not want to include them in every download.
Clippings	
Import	Click button to import clipping files, which include: • Navigation tree items including attached control programs, graphics, drivers, and screen files • Trend data • Reports • Alarm categories • Schedules and schedule group membership (including the entire schedule group and schedules, if it does not exist in the target system) • Alarm actions **NOTES** • Does not include operators or alarms • A clipping containing CCN controllers does not include the CCN tables. When importing a clipping containing CCN devices, you must re-scan the table.
Email Server Configuration	The information in this section is used by the Send email alarm action and used to email a Scheduled Report.
From	Enter a valid address if required by your mailserver.
Mail Host	The mailserver's address. This can be an IP address or a system name, such as mail.mycompany.com.
Mail Host Port	Change this field if using a port other than the default port 25.

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Field	Notes
Mail Host Security Options	Select the type of security the mailserver uses. • **Cleartext (SMTP)** – Uses the SMTP protocol to send as clear text over TCP/IP • **Secure SSL (SMTP with SSL)** – Uses SSL, a communication protocol that provides data encryption • **Secure TLS (STARTTLS)** – Uses TLS, but does not begin encryption until the i-Vu® application issues STARTTLS command
Specify Mail User for Mail Host Authentication	Select if your mailserver requires a username and password.
Test connection	Click to have the i-Vu® application try to connect to the email server. A message will appear below this button stating if the connection was successful or if it failed.

Security tab

Field	Notes
Logging	
Log audit data to file	Records operator activities and some system activities (such as opening and closing the database or automatic deletions) in a text file. The default file is **auditlog.txt** stored in **i-Vu_Pro_\webroot**<system_name>. You can change the file name and include a different path. To prevent the file from growing too large as new data is appended, you can archive the data to another text file by selecting an archive frequency in the **Archive log file contents** field. The archive file is **auditlog**_yyyy_mm_dd**.txt**, where *yyyy_mm_dd* is the creation date of the archive file. This file is created in the same location as **auditlog.txt**. **NOTE** If you do not archive the log file contents, you should manually delete the oldest entries.
Log audit data to database	Records audit data in a database named **audit.mdb** that can be accessed by third-party software. **NOTE** For Access, MSDE, and Derby, the database is automatically created. An Access database is named **audit.mdb**; a MSDE database is named **audit.mdf**. The Derby database consists of multiple files in a folder called **audit**. For MySQL, SQL Server, or PostgreSQL, you must create the database manually.
Delete database entries older than ____ days	Automatically deletes entries in the database that are older than the number of days you specify.

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Field	Notes
Log errors for invalid URLs	Check this field to write to the core.txt log any time an external source sends a request to the i-Vu® Server application. **NOTE** Regular maintenance scans by external software can cause the log files to grow large.
Security Policy	
Change Policy	See *Location-dependent operator access* (page 19) for information on **Change Policy**.
Remote Access	
Allow remote file management	Lets you access the system using WebDAV.
Operators	
Return operators to previous locations when server reconnects	Returns operators to current tree locations when the server reconnects.
Log off operators after _:_ (HH:MM) of inactivity	The system automatically logs off an operator who has had no activity in the system for the time period specified. This is a default setting for the system. The System Administrator can change this setting for an individual operator on the Operators page.
Lock out operators for __ minutes after __ failed login attempts	**Clear Lockouts** removes lockouts for all users. **NOTE** Restarting the i-Vu® Server application will remove lockouts.
Use advanced password policy	You can place specific requirements on passwords to increase security. See *Advanced password policy* (page 22).
Permissions	
Permissions	When control programs, views, touchscreen, and BACview® files are created by an original equipment manufacturer (OEM), they cannot be used in the i-Vu® system without the creator's permission. However, the creator can produce a key for a system with a different license that will grant permission to the key's recipient. If you receive a key, put it in the **i-Vu_Pro_ x.x\resources\keys** folder. The table in the **Permissions** section of the **Security** page shows all keys in the that folder. To activate a key, click **Add**, then browse to the key. To delete a key from your system, select the key in the table, then click **Delete**. Red text in the table indicates the key has a problem such as it does not apply or has expired. See the **Notes** column for an explanation.

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Communications tab

The fields on this tab let you define controller communication with the i-Vu® Server application and BACnet network communication.

Field	Notes
I-Vu Server BACnet Controller Instance and **BACnet Alarm Recipient Instance**	The BACnet identifier for the system's server and the alarm recipient. You enter these system properties in SiteBuilder.
Always upload properties from controllers to I-Vu database on mismatch	Automatic uploads are listed in the Audit Log. If you do not check this field, properties must be manually uploaded or downloaded by the operator when a mismatch occurs. **NOTE** If an automatic upload fails and the operator chooses to do nothing at that time, the upload will be attempted again when he returns to the page where he encountered the mismatch.
Ignore incoming alarms from sources not in this database	The i-Vu® application will ignore alarms from third-party devices not in the database or devices from other i-Vu® systems on the same network.
BACnet Settings	Native i-Vu® system only
Log BACnet Binding Conflicts	The i-Vu® application uses BACnet (dynamic) binding for communication between devices unless your system uses NAT routing. If using NAT, the i-Vu® application uses information in its database to bind to BACnet devices. When checked, the i-Vu® application logs binding conflicts that result from duplicate network numbers or device IDs.

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Scheduled Tasks tab

Field	Notes
Automatically delete alarm incident groups which have been closed for more than ___ days	An incident group is all alarms related to a particular incident, such as Off Normal, Fault, and Return to Normal. You can edit this on the **Devices** > **Advanced** tab. **NOTE** Alarms in an incident group are not deleted until all alarms in the group have been closed.
Archive alarm information upon alarm deletion	Writes alarm information to a text file.
Automatically delete expired schedules daily at ___	To ensure there are no time zone conflicts, the i-Vu® application waits 2 days after a schedule expires to delete it.
Remove expired historical trends daily at ____	Deletes trend data that has been in the database longer than the time specified in the **Keep historical trends for ___ days** field on the **General** tab.
Enable time synchronization of controllers daily at____	Automatically synchronizes the time on all equipment to the time on the server, adjusting for different time zones and Daylight Saving Time. We recommend that you check this field. The i-Vu® application will send a daily time sync message to each IP network device that is in the system database. IP devices not in the database will not be synchronized. For all MS/TP networks in the database, the i-Vu® application will send a broadcast time sync message. All devices on these networks will be synchronized, regardless of whether or not the devices are in the database. **CAUTIONS** • Make sure that your server's time and time zone setting are correct. • Make sure that each site's time zone setting in SiteBuilder is correct. • To prevent time sync problems when the transition to and from Daylight Saving Time occurs, set the time sync to occur at least 1 hour after the last controller in the system is adjusted for DST. For example, your server and part of your system is in the Eastern Standard Time zone, but you also have controllers in the Pacific Time zone. Your server is adjusted for DST at 2:00 a.m. Eastern Standard Time, but the controllers in the Pacific Time zone are not adjusted until 3 hours later. So you would set the time sync to occur daily at 6:00 a.m. or later. **NOTES** • You can perform system-wide time synchronizations using the **Time Sync** button on the General tab. • Between time sync broadcasts, Carrier routers include time sync information in each color request to the devices below the router. This ensures devices without a battery-backed clock will get the time shortly after powering up.

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Daylight Saving tab

On this tab, you can adjust the Daylight Saving Time settings.

Click **Update** to automatically set the table's **Begin** and **End** dates for the next 10 years based on the system's timezone. This marks all controllers for a Parameters download.

If the updated dates are incorrect

If you clicked **Update** but the dates are incorrect, your system's Java timezone data may be out-of-date. Do the following:

1. Go to the *Oracle Java SE Download site* (*http://java.sun.com/javase/downloads*).
2. Download the **JDK DST Timezone Update Tool** (**tzupdater-***version***.zip**) and unzip the file. The zip file contains 2 items:
   - tzdata.tar.gz
   - tzupdater.jar
3. In the i-Vu® interface, click , then select **System Options** > **Daylight Saving** and then click **Import**.
4. Browse to the **tzupdater.jar** file, select it, then click **Open**.
5. Click **Continue**. This restarts the i-Vu® application.
6. After the restart, in the i-Vu® interface, click , then select **System Options** > **Daylight Saving** and then click **Import**.
7. Browse to the **tzdata.tar.gz** file, select it, and then click **Open**.
8. Click **Continue**. This restarts the i-Vu® application.
9. On the **System Options** > **Daylight Saving** tab, click **Update**.

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Add-ons tab

The i-Vu® system supports add-ons, such as Tenant Billing, that retrieve and use the i-Vu® data.

Some add-ons have been updated for compatibility with the i-Vu® v7.0 application . Be sure that you have the latest version of the add-ons that were used in the previous i-Vu® version.

By default, the i-Vu® application allows only signed add-ons that have been approved by Carrier. If needed, you can override this setting in SiteBuilder by going to **Configure** > **Preferences** > **Web Server**, and checking **Allow unsigned add-ons.** However, unsigned add-ons are not supported.

To install an add-on

1 Save the add-on's file (.addon or .war) to your computer.

2 On the **System Options** > **System Settings** > **Add-ons** tab, click **Browse,** and then open the file.

3 Click **Install Add-on**. After a few seconds, the add-on will appear in the **Installed** table, and will be enabled. The table below gives a description of each column.

Column	Notes
Name	The add-on's name.
Path	To open the add-on in a web browser, append this path to your i-Vu® system's address. For example, to start Tenant Billing, enter `http://<system_name>/override`, or `http://<system_IP_address>/override`
Version	The version is shown if the author provided the information in the add-on.
Status	If this column shows: ○ **Running**, you can open the add-on in a web browser. ○ **Disabled**, click **Enable** to run the add-on. ○ **Startup error**, select the table row to see an explanation of the error under **Details**.

1 Select an add-on in the **Installed** table to disable or enable it, or to see the following **Details**.

Add-on main page	Click the main page link to open the add-on, if the author provided a main page.
Description	A description of the add-on, if the author provided one
Vendor Name	The add-on's author
Public Data Directory	This public directory contains data generated by the add-on. This data is visible in a web browser.
Private Data Directory	This private directory contains information such as configuration data.

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To back up the add-on's private and public data directories

NOTE This procedure will not back up data stored in an external database.

1 Select the add-on in the table.

2 Click **Save Data**.

3 Click **OK**.

4 Click **Save**.

5 Select the location where you want to save the data, then click **Save**.

To update an add-on

NOTE Add-ons for i-Vu® v6.0 or later systems have a different folder structure than previous versions.

1 Select the add-on in the table.

2 Click **Remove Add-on and Keep Data**

3 Follow the procedure above to install the new version of the add-on.

To uninstall an add-on

1 Select the add-on in the table.

2 Click **Remove Add-on and Data**.

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Registering and downloading your i-Vu® license

To register your software, you must obtain a license from Carrier and then apply it in the i-Vu® Pro interface.

1 Login to *i-Vu® Systems website* (*http://accounts.ivusystems.com*).

NOTES

- Only Carrier authorized personnel may access accounts.ivusystems.com. To set up your account, please contact Control Systems Support with the following information: name, phone number, e-mail address, office address, and your password of choice.
- If you are an end-user or contractor, please contact your local Carrier office to obtain your license.

2 Click the **License Manager** tab.

3 Click **i-Vu Pro License Manager link.**

4 Expand the applicable section under **Available Licenses** and select the site/project to register it.

NOTE All your Sites Names/Project Names are listed.

5 In **License Details**, fill in the Owner and Site information and click **Register License**.

6 Check **I agree to the terms of use**.

7 Click **Download License** and then save the .properties file to a convenient location to use when installing the i-Vu® Pro application.

To apply the license to the i-Vu® application

During the i-Vu® installation, in the **Setup Wizard**, on the **Product License** screen, check **Browse to a different license**, and select the site license you obtained.

NOTES

- Selecting the default license results in a prompt appearing every few minutes in the i-Vu® interface to remind you to apply your site license.
- Do not edit any part of this registered license file. Editing a license file invalidates the license.
- Store the license in a safe location.

To apply the site license after the installation:

1 In the i-Vu®interface, select **System Options** > **License Administration**.

2 Browse to the license file.

3 Click **Apply**.

4 Restart i-Vu® Server using the rebootserver manual command.

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Update

In **System Options** on the **Update** tab, click the **Update** button to install .update files (patches, service packs, drivers, language packs, graphics libraries, and help updates).

See below for details on updating the SAL library and applying it to your system.

Update the SAL library

The i-Vu® SAL files update youri-Vu® controllers. The SAL libraries contain control programs, graphics, drivers, screen files, and other important controller data.

Carrier periodically provides updates, which include enhancements and bug fixes.

NOTES

- The library update only changes **default** graphics. If you have edited your graphic in ViewBuilder, it is not updated.
- The last digits in the SAL library name are the release date of the library.
- All of the SAL files will not necessarily have the same <date> revision.
- To ensure that your installation is running the latest software, we recommend that you check *Control Systems Support http://www.hvacpartners.com/*, *https://accounts.ivusystems.com/* for updates. Download the latest SAL files and apply them to all new installations.
- If you are changing to an older SAL file than the current one being used, a warning asks you if you are sure you want to apply an older version.

NOTE Keep copies of the latest libraries in a safe place. In the event of a system restore, the updated .sal file must be reapplied.

To check current SAL library version

1 Login to the i-Vu® application.

2 Click , then select **System Options** > **Update** tab.

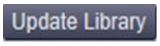
3 Click **Current Libraries (.sal)** to view the current SAL libraries and their revision date.

Step 1: Update library

1 Save the updated library (.sal file) to your computer.

2 Click , then select **System Options** > **Update** tab.

NOTE Expand **Current Libraries (.sal)** to see the current SAL libraries and their revision. Compare them to what you downloaded from the Control Systems Support to determine if any of them have been updated.

3 Click 

and browse to the updated .sal file that you have saved on your computer, select the file, and click **Open**.

4 Click **Continue**.

5 When process is complete, the message appears **File added successfully**.

6 Click **Close**.

NOTE These changes are not applied to the controllers until you have updated routers and controllers.

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Follow these steps to implement the new equipment library:

Step 2: Update the files for the routers

1 Select the router that you wish to update in the navigation tree.

2 Right-click and select **Driver Properties**.

3 Select **Properties** page > **Update** tab.

4 If the database contains two or more routers, you must check **Change for all controllers of this type?** in the **Controller** section.

5 Click **Update**. A message appears **Changes the driver and screen file to use the current library version. Continue?**

NOTE If more than one router exists, the additional routers are listed below the **Update** button.

6 Click **OK.**

7 Click **Accept.**

Step 3: Update the files for the controllers

1 Double-click the controller in the navigation tree or right-click and select **Configure**.

2 If you have multiple controllers of the same type, enable **Change for all control programs of this type?**.

3 Click **Update** under **Control Program**. A message appears **Changes the control program, view, driver, and screen file to use the current library version. Continue?**

4 Click **OK.** When the message **Updated to the library version xx.** appears, click **Close.**

5 Repeat steps 1 - 4 for any additional types of controllers.

6 Click **Close** again.

Step 4: Update the files for CCN controllers

1 In the navigation tree, select the CCN device manager associated with the controllers that are to be updated.

2 Select **Devices** > **CCN Discovery** and re-scan any controllers that need to be updated by checking **Rescan Controllers Selected Below for Configuration Changes** and clicking **Start Scan**.

Step 5: Apply the update to the routers and controllers

1 Select the **System**  in the navigation tree and then select the **Downloads** page.

2 If you wish to apply the new SAL file to your entire system, you can use this page to compare to your navigation tree and verify that you have selected all of your routers and controllers for download.

NOTE Only the CCN Gateway and device managers require download, so the CCN controllers/equipment will not be listed.

3 A network's controllers download in the order shown. To change the order, select a controller(s), then drag and drop or click **Move to Top** or **Move to Bottom**.
EXCEPTION If a controller's router requires a download, it will download first regardless of its position on the Downloads page. Click the **Start** button.

NOTES

- Use **Ctrl+click**, **Shift+click**, or the **Select All** checkbox to select multiple controllers.
- See To download from the Downloads page in Help for more details.

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Appendix: Operator Record

Name_____

Login Name_____

Assigned Role_____

Password_____

Name_____

Login Name_____

Assigned Role_____

Password_____

Name_____

Login Name_____

Assigned Role_____

Password_____

Name_____

Login Name_____

Assigned Role_____

Password_____

Name_____

Login Name_____

Assigned Role_____

Password_____

Name_____

Login Name_____

Assigned Role_____

Password_____

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Document revision history

Important changes to this document are listed below. Minor changes such as typographical or formatting errors are not listed.

Date	Topic	Change description	Code*
4/24/19	Daylight Saving Tab	Updated steps to require unzipping the file	X-AE-EH-BR-RD
11/15/18	System Settings > General tab	Added fields System Language and Levels displayed in paths.	C-R-SS-BR

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VAV Zone II Controllers
Installation and Start-up Guide



Carrier ©2022 · Catalog No. 11-808-602-01 · 1/6/2022

 Verify that you have the most current version of this document from **www.hvacpartners.com**, the **Carrier Partner Community** website, or your local Carrier office.

Important changes are listed in **Document revision history** at the end of this document.

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Introduction

What are VAV Zone II controllers?

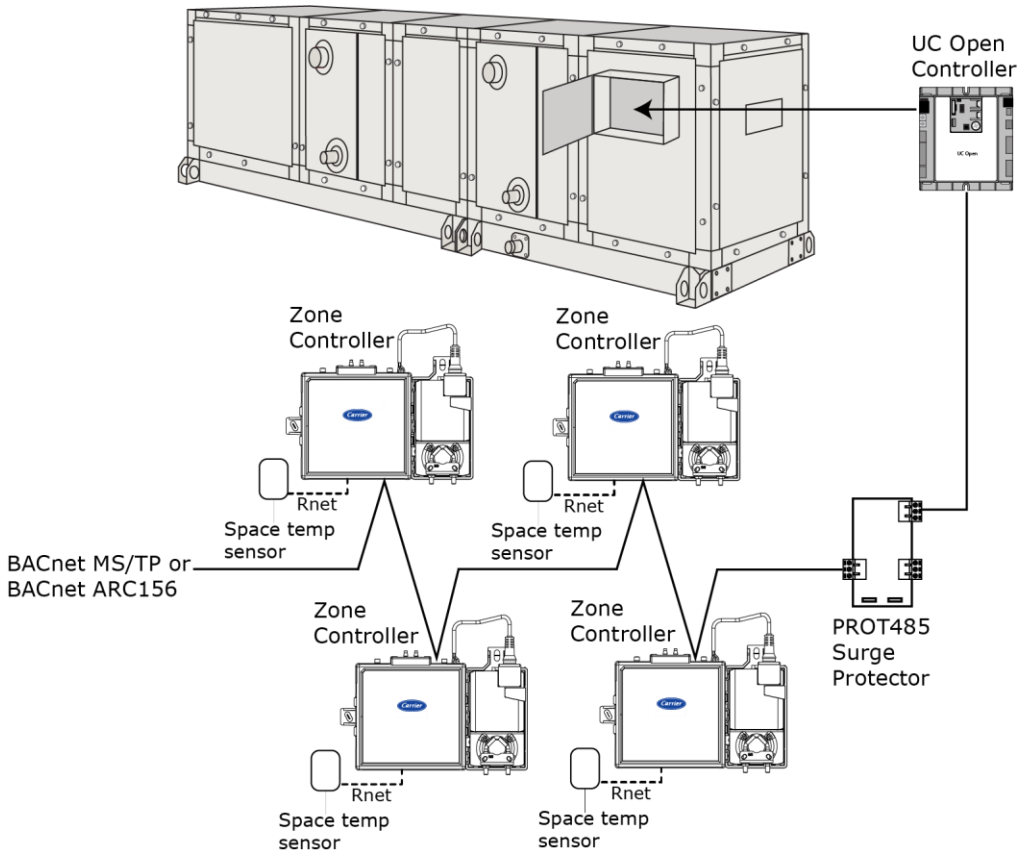
An i-Vu® Control System offers two VAV Zone II controllers, the VAV Zone II Single Duct (#OPN-VAVB1-02) and the VAV Zone II Fan Terminal (#OPN-VAVB3-02), to control zone temperature using single duct or fan-powered terminals in a Variable Air Volume (VAV®) application.

NOTE The single duct and fan terminal controllers are available in both English or Metric units. The metric version has (-M) appended to the part number. Everything in this document applies to both versions.

You can disconnect the actuator from the controller and mount them separately, connecting them with just the actuator cable or using an additional extension cable, up to a maximum distance of 300 feet.

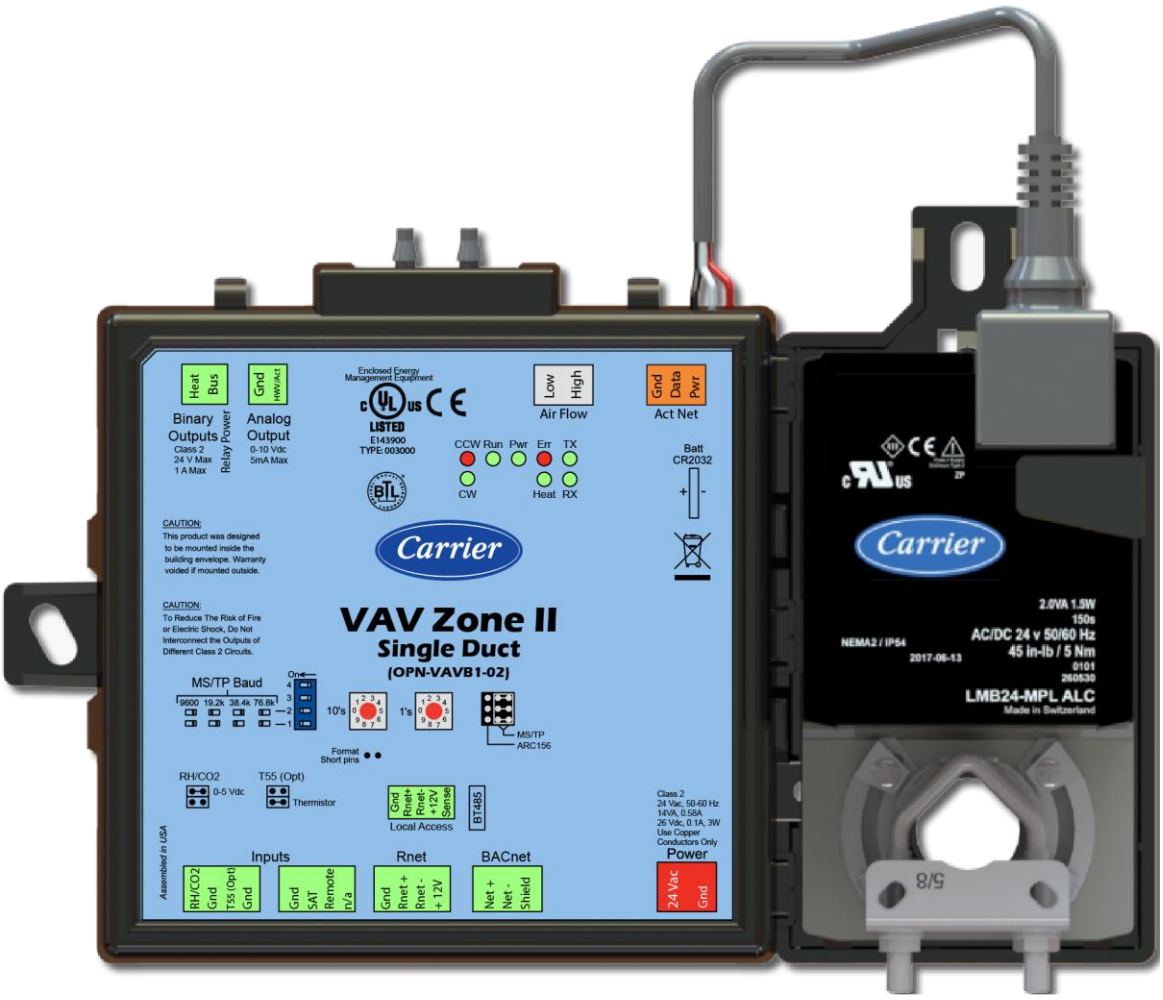
Although a VAV Zone II can be included in a VVT system, this manual focuses mainly on its usage in VAV applications.The VAV Zone II has a detachable actuator and maintains zone temperature by operating the terminal fan and regulating the flow of conditioned air into the space. Buildings with diverse loading conditions can be supported by controlling the local terminal's supplemental heat. The VAV Zone II provides dedicated control functions for single duct, parallel fan box terminals and series fan box terminals with modulating heat, up to 2 stages of ducted heat, or combination baseboard and ducted heat.

The following illustration shows the VAV Zone II in a typical i-Vu® Control System.



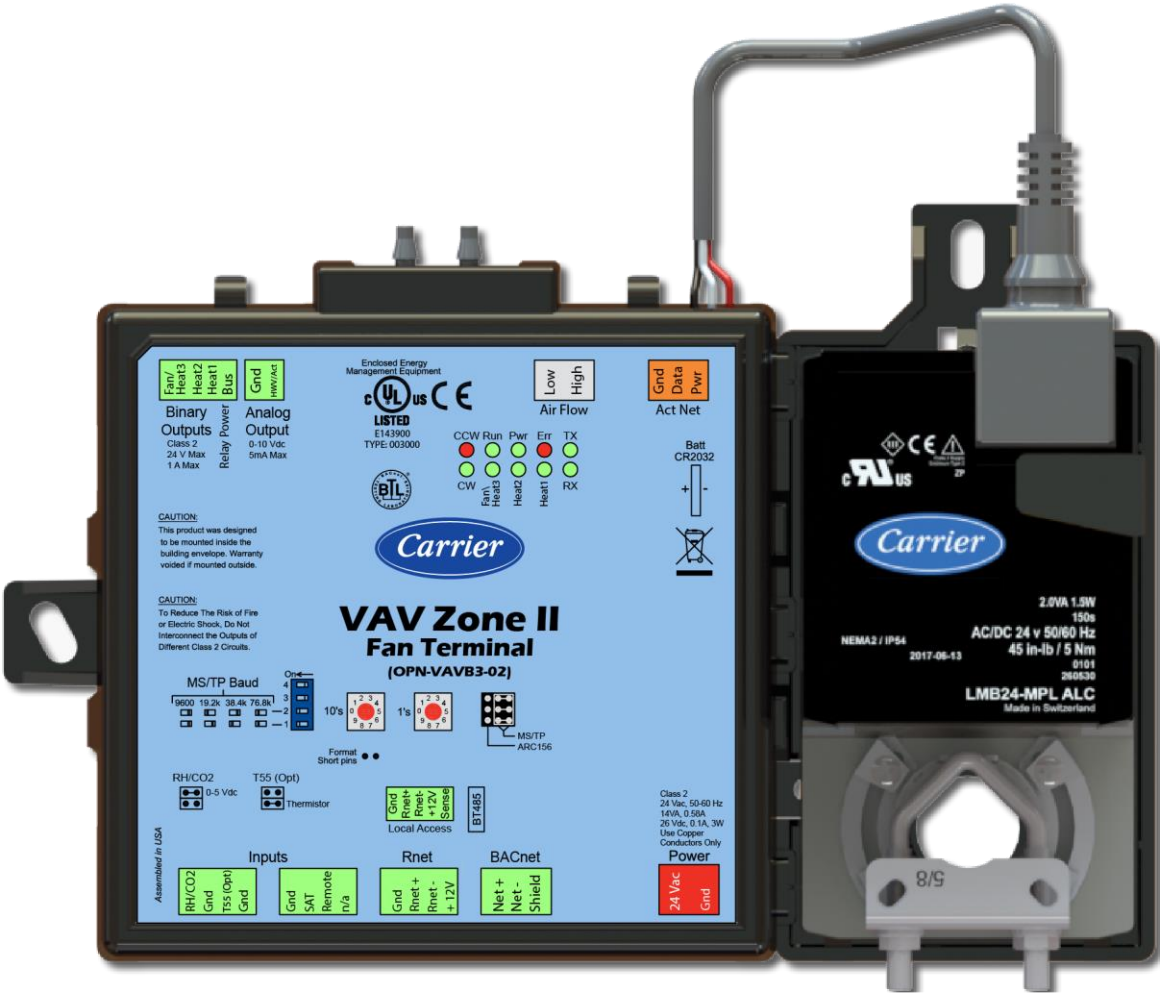
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VAV Zone II Single Duct controller (#OPN-VAVB1-02)



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VAV Zone II Fan Terminal controller (#OPN-VAVB3-02)



NOTE This document gives instructions for field-installation of a VAV Zone II in an i-Vu® System. However, VAV Zone IIs are available factory-mounted to Carrier's 35 single duct and 45 parallel and series fan terminals. All terminals require an integrated duct temperature sensor.

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Specifications

Driver	**Part number**	**Driver**
	OPN-VAVB1-02	drv_vav1opn02
	OPN-VAVB3-02	drv_vav3opn02
Power	24 Vac ±10%, 50–60 Hz 14 VA power consumption 26 Vdc (25 V min, 28.8 V max), 3W Single Class 2 source only, 100 VA or less	
Actuator	Belimo brushless DC motor, torque 45 inch-pounds (5 Nm), runtime 154 seconds	
Act Net port	To connect the actuator cable, the VAV Zone II, and up to 2 i-Vu® Smart Valves	
BACnet port	For communication with the controller network using BACnet ARC156 (156 kbps) or BACnet MS/TP (9600 bps – 76.8 kbps)	
Rnet port	• Supports up to 5 wireless and/or ZS sensors, and one Equipment Touch or TruVu™ ET Display. • Supplies 12 Vdc/200 mA power to the Rnet at an ambient temperature of 77°F (25°C) with a 24 Vac nominal power source. NOTE Ambient temperature and power source fluctuations may reduce the power supplied by the Rnet port. **NOTE** If the total power required by the sensors on the Rnet exceeds the power supplied by the Rnet port, use an external power source. The Wireless Adapter, Equipment Touch, or TruVu™ ET Display must be powered by an external power source. See the specifications in each device's Installation and Start-up Guide to determine the power required.	
Local Access port	For system start-up and troubleshooting	
Thermistor inputs	Accepts Precon type II thermistors (10kOhm at 77°F [25°C]) Range: -50°F (-45.5°C) to 250°F (121.1°C)	
Dry contact inputs	A 3.3 Vdc wetting voltage used to detect the contact position, resulting in a 0.3 mA maximum sense current when the contacts are closed.	
Voltage inputs	0-5 Vdc. Input impedance is approximately 30 kOhms	
Input resolution	10 bit A/D	
Binary outputs	#OPN-VAVB1-02: 1 binary output #OPN-VAVB3-02: 3 binary outputs • Relay contact rated at 1 A max. @ 24 Vac/Vdc. Configured normally open.	
Analog output	1 analog output, 0–10 Vdc (5 mA max). The controlled device must have a minimum of 2000 Ohms resistance measured from its input to ground and must share the same ground as the controller.	
Output resolution	8 bit D/A	
Integral airflow sensor	Precision differential pressure sensor 0–2 in. H20, sensitive down to ±0.001 in. H20. Barbed tapered airflow connections accept 3/16 in. (4.75 mm) I.D. tubing. Allows for readings across the 0–2 in. H20 range, accurate to ±5% of full flow at 2 in. H20.	

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Battery	10-year Lithium CR2032 battery retains the following data for a maximum of 10,000 hours during power outages: control programs, editable properties, schedules, and trends.
Protection	Built-in surge and transient protection for power and communications in compliance with EN61000-6-1. Incoming power and network connections are protected by non-replaceable internal solid-state polyswitches that reset themselves when the condition that causes a fault returns to normal. The power, network, input, and output connections are also protected against transient excess voltage/surge events lasting no more than 10 msec. **CAUTION** To protect against large electrical surges on serial EIA-485 networks, place a PROT485 at each place wire enters or exits the building.
BT485 connector	You attach a BT485 (not included) to a controller at the beginning and end of a network segment to add bias and to terminate a network segment.
Status indicators	LEDs indicate status of communications, running, errors, power, and digital outputs
Environmental operating range	32 to 130°F (0 to 54.4°C), 10–90% relative humidity, non-condensing
Storage temperature range	-24 to 140°F (-30 to 60°C), 0 to 90% relative humidity, non-condensing
Physical	Fire-retardant plastic ABS, UL94-5VA
Controller and actuator overall dimensions	Width: 8.9 in. (22.7 cm) Height: 5.9 in. (15.0 cm)
Controller and actuator mounting dimensions	7.1 in. (18.0 cm) from left side controller mounting hole centerline to actuator mounting hole centerline
Controller overall dimensions	Width: 6.4 in. (16.3 cm) Height: 5.7 in. (14.5 cm) Depth: 2.1 in. (5.3 cm)
Controller mounting dimensions	5.3 in. (13.4 cm) from left side controller mounting hole centerline to right side controller mounting hole centerline
Actuator overall dimensions	Width: 3.0 in. (7.6 cm) Height: 5.9 in. (15.0 cm) Depth: 2.5 in. (6.4 cm)
Actuator mounting dimensions	4.4 in. (11.2 cm) from shaft centerline to actuator mounting hole centerline
Panel depth	2.5 in. (6.4 cm) minimum
Shaft dimensions	Minimum shaft diameter: .25 in. (.64 cm) Maximum shaft diameter: .63 in. (1.59 cm) Minimum shaft length: 1.75 in. (4.45 cm)
Weight	1.8 lbs (0.82 kg)
BACnet support	Conforms to the BACnet Advanced Application Controller (B-AAC) Standard Device Profile as defined in ANSI/ASHRAE Standard 135-2012 (BACnet) Annex L, Protocol Revision 9
Listed by	UL-916 (PAZX), cUL-916 (PAZX7), FCC Part 15-Subpart B, Class B, CE

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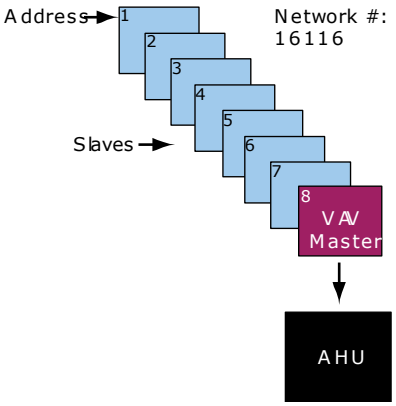
Linkage

The i-Vu® Control System uses linkage to exchange data between the zone terminals and their air source to form a coordinated HVAC system. The system's air source controller and zone controllers are linked so that their data exchange can be managed by one zone controller configured as the VAV Master.

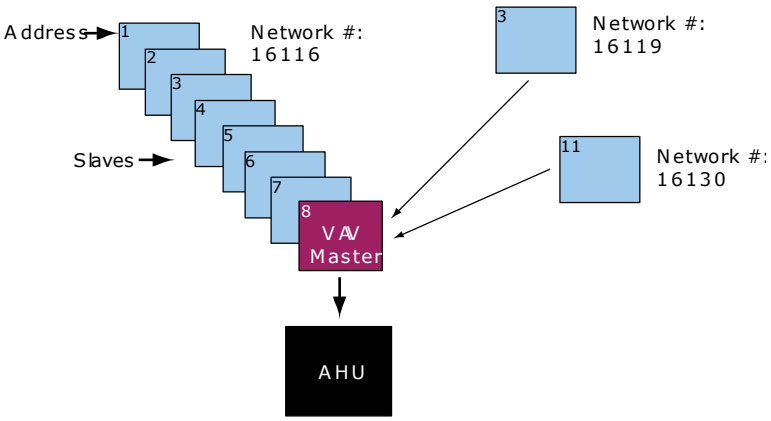
A VAV Master can have a maximum of 63 slave zone controllers reporting to it. An MS/TP network is limited to a maximum of 60 controllers, but a VAV Master can have controllers from other networks as slaves.

A linked VAV system can be as simple as a single MS/TP network with a VAV Master and slaves, or it can be as complex as multiple MS/TP networks with VAV sub-masters and slaves on other networks. See the following examples.

EXAMPLE #1: A simple network. The VAV Master exchanges data between the slave controllers and the AHU controller. The linked controllers on an MS/TP network must be sequentially addressed, and the VAV Master must have the highest address.

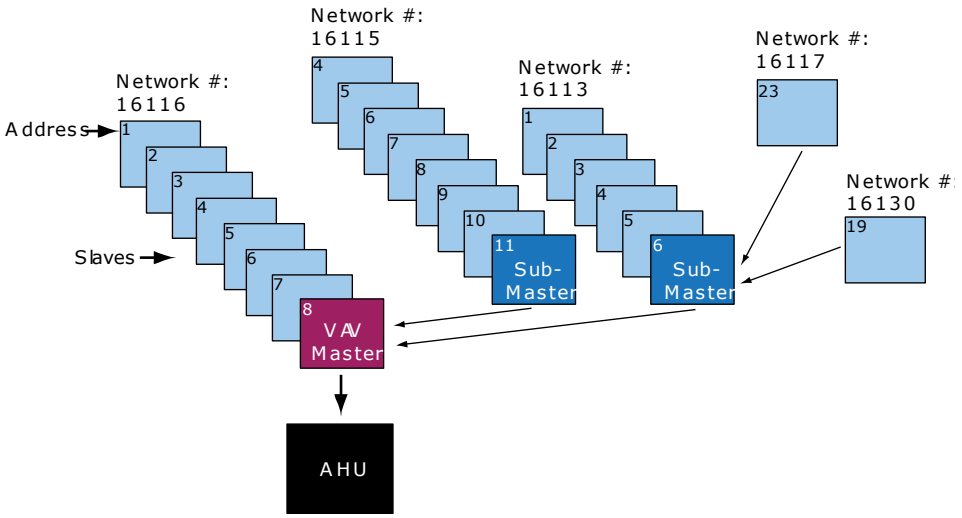


EXAMPLE #2: The above network plus slave controllers on other networks.



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EXAMPLE #3: The above network plus sub-masters and their slaves. (For VAV systems only. VVT systems do not support sub-masters.) The sub-masters exchange data between their slaves and the VAV Master, and the VAV Master handles data exchange for the whole system.



You set up linkage for the system by defining the Linkage properties for each controller. See *Linkage Properties* (page 98).

Safety Considerations

CAUTION

Air conditioning equipment will provide safe and reliable service when operated within design specifications. The equipment should be operated and serviced only by authorized personnel who have a thorough knowledge of system operation, safety devices, and emergency procedures.

Good judgment should be used in applying any manufacturer's instructions to avoid injury to personnel or damage to equipment and property.

WARNING Electrical Shock Hazard

Failure to follow this warning could cause personal injury, death, and/or equipment damage.

Disconnect all power to the unit before performing maintenance or service. Unit may automatically start if power is not disconnected.

WARNING Follow all local, state, and federal laws regarding disposal of equipment containing hazardous materials such as mercury contactors.

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Field-supplied hardware

Each zone controller installation requires the following field-supplied components:

- zone terminal unit
- round or rectangular mounting bracket
- space temperature sensor
- supply air temperature sensor
- 2 x 4 in. standard single gang electrical box
- transformer — 24 Vac, 40 VA
- two no. 10 x 1/2 in. sheet metal screws (to secure SAT sensor to duct)
- two no. 6-32 x 5/8 in. screws (to mount space temperature sensor base to electrical box)
- wiring
- bushings (required when mounting SAT sensor in a duct 6-in. (15.2 cm) or less in diameter)

Optional:

- contractors (if required for fan or electric heat)
- indoor air quality sensor
- relative humidity sensor
- 2 screws and 2 hollow wall anchors (to mount relative humidity sensor directly to wall)
- valve and actuator for hot water heat (if required)

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Installing the VAV Zone II

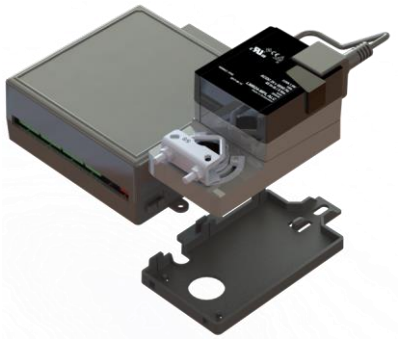
1. *Mount the controller to the VAV terminal.* (page 10)
2. *Wire the controller for power.* (page 15)
3. *Set the controller's address.* (page 16)
4. *Connect the controller to the BACnet MS/TP or BACnet ARC156 network.* (page 16)
5. *Wire devices to the Rnet port* (page 18).
6. *Wire sensor(s) to the controller.* (page 25)
7. *Wire equipment to the controller's outputs.* (page 30)

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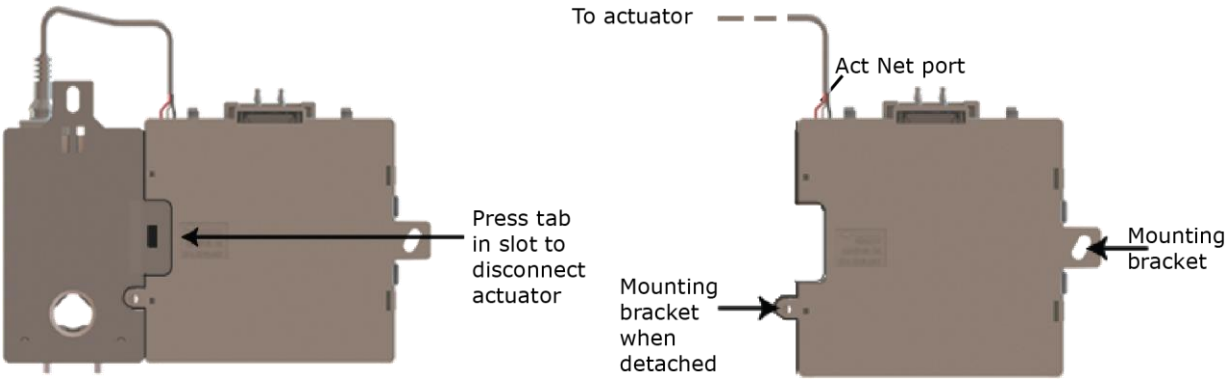
Mounting the VAV Zone II

To mount the controller and actuator

To disconnect and mount the controller and actuator separately



Disconnect the actuator from the controller by inserting a screw driver in the slot on the back of the VAV Zone II and pressing the tab. The actuator cable or an attached extension cable must connect to the controller's **Act Net** port.



Adding an extension cable

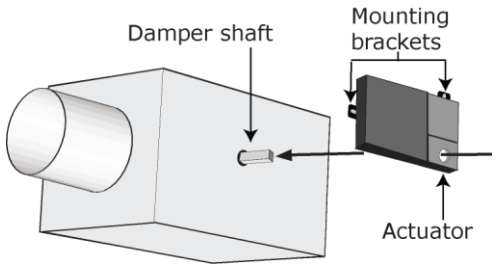
If you need to mount the actuator more than 14 in. from the controller, you can use an 18 AWG wire for an extension cable. The maximum distance that the actuator and controller can be separated is 300 feet (91.4 m). Connect the extension cable to the end of the actuator cable. You can use connectors or splice the wires. Terminate the extension cable in the **Act Net** port on the controller.

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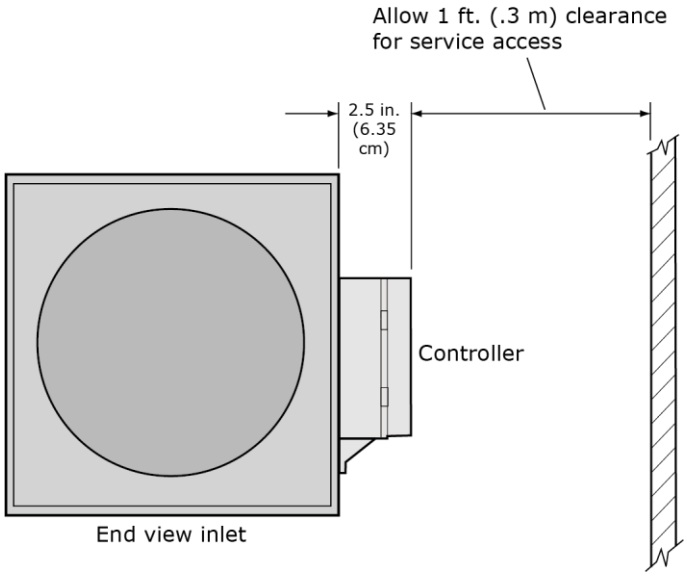
To mount the VAV Zone II

1 Turn the damper shaft to fully close the damper position. Ensure the damper is closed.

2 Mount the controller to the VAV terminal by sliding the clamp assembly onto the damper shaft.

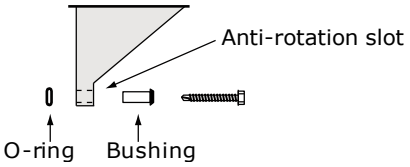


NOTE For service access, allow at least 1 foot (.3 m) of clearance between the front of the controller and adjacent surfaces.



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3 Secure the controller and the actuator by installing the screws, anti-rotation slot's bushings, and o-rings that are supplied with the VAV Zone II.

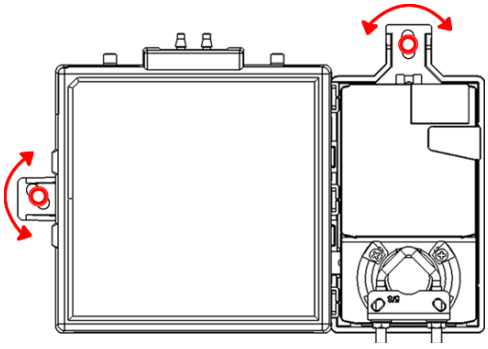


NOTES

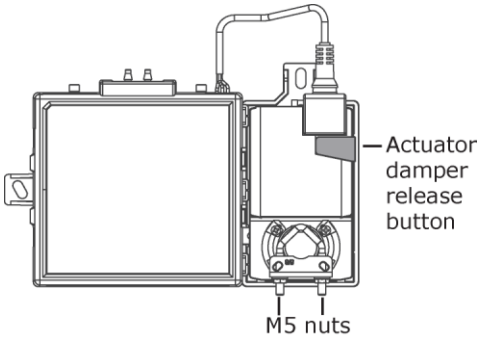
- Center the bushing in the slot. Failure to do so may cause the actuator to stick or bind.
- The VAV Zone II must be secured, but loose enough to allow movement. of the damper shaft.

CAUTIONS

- You **must** use the screws, anti-rotation slot's bushings, and o-rings that are shipped with the VAV Zone II.
- Overtightening the screws so that the controller and actuator cannot move may damage the unit.



4 Hold down the VAV Zone II's actuator release button and rotate the actuator clamp in the same direction that closed the damper. Rotate the clamp until it stops, then rotate it back one notch.



5 Release the button.

6 Tighten the actuator clamp to the damper shaft by tightening the two M5 nuts.

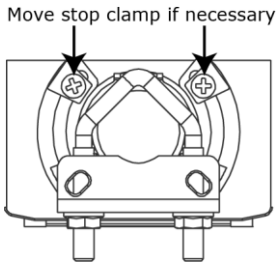
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7 Hold down the actuator damper release button and rotate the damper from fully closed to fully open. If the damper traveled less than 90 degrees, do the following to set the actuator's fully open position:

a) Loosen the appropriate stop clamp screw. See figure below.

b) Move the stop clamp until it contacts the edge of the actuator cam.

c) Tighten the screw.



8 Hold down the actuator damper release button, rotate the damper to verify that it fully opens and closes, then release the button.

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To connect duct tubes to the flow sensors

The VAV Zone II controls airflow using the actuator and flow sensor.

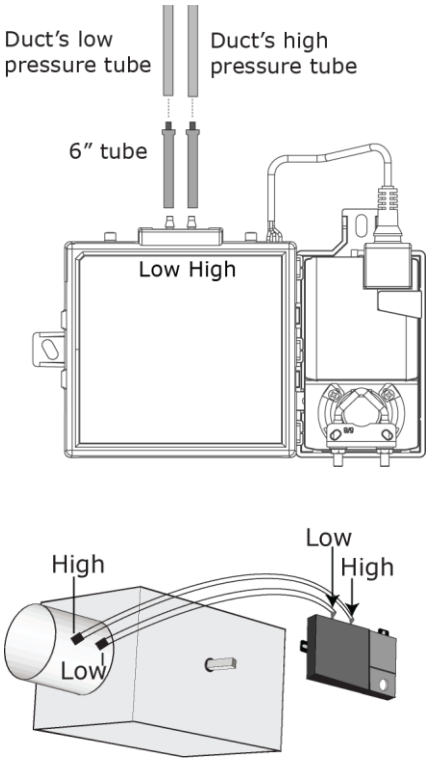
1 Turn off the VAV Zone II's power.

2 Connect the tubes to the VAV Zone II's **High** and **Low** connectors.

3 **NOTE** Tubing should be at least 2 ft. (.61 meters) long for stable airflow measurement. The combined high and low tubing length should not exceed 16.4 ft. (5 meters) in order to ensure accurate measurements.

4 Connect the other ends of the poly tubing to the airflow pickup located in the terminal's primary air inlet. Avoid sharp bends in the tubing.

5 Connect **High** to **High** and **Low** to **Low**.



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Wiring the VAV Zone II for power

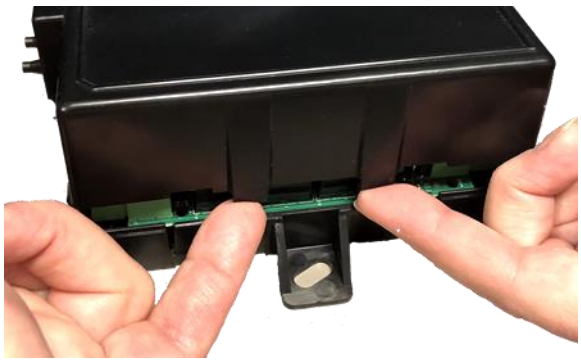
WARNING Do not apply line voltage (mains voltage) to the controller's ports and terminals.

CAUTIONS

- The VAV Zone II is powered by a Class 2 power source. Take appropriate isolation measures when mounting it in a control panel where non-Class 2 circuits are present.
- Carrier controllers can share a power supply as long as you:
  - Maintain the same polarity.
  - Use the power supply only for Carrier controllers.

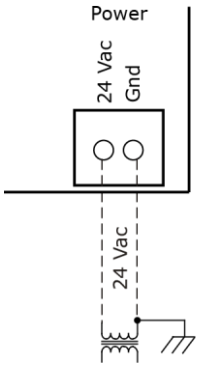
To wire the controller for power

1 To access the screw terminal connectors, lift up the controller's cover by pulling the tabs located on both sides of the controller's left mounting bracket.



2 Remove power from the power supply.

3 Pull the screw terminal connector from the controller's power terminals labeled **Gnd** and **24 Vac**.



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4 Connect the transformer wires to the screw terminal connector.

5 Apply power to the power supply.

6 Measure the voltage at the VAV Zone II's power input terminals to verify that the voltage is within the operating range of 21.6–26.4 Vac.

7 Connect a 4-inch (10.2 cm) wire from **Gnd** to the control panel.

8 Insert the screw terminal connector into the VAV Zone II's power terminals.

9 Verify that the **Power** LED is on and the **Run** LED is blinking.

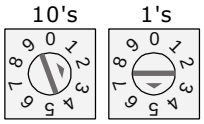
Addressing the VAV Zone II

You must give the VAV Zone II an address that is unique on the network. You can address the VAV Zone II before or after you wire it for power.

1 If the VAV Zone II has been wired for power, pull the screw terminal connector from the controller's power terminals labeled **Gnd** and **24 Vac**. The controller reads the address each time you apply power to it.

2 Using the rotary switches, set the controller's address. Set the **Tens** (**10's**) switch to the tens digit of the address, and set the **Ones** (**1's**) switch to the ones digit.

EXAMPLE If the controller's address is 25, point the arrow on the **Tens** (**10's**) switch to 2 and the arrow on the **Ones** (**1's**) switch to 5.



CAUTION The factory default setting is **00** and must be changed to successfully install your VAV Zone II.

Wiring for communications

The VAV Zone II communicates using BACnet on the following types of network segments:

- MS/TP communicating at 9600 bps, 19.2 kbps, 38.4 kbps, or 76.8 kbps
- ARC156 communicating at 156 kbps

NOTE For more networking details, see the *Open Controller Network Wiring Installation Guide*.

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Wiring specifications for BACnet MS/TP and ARC156

Cable:	22 AWG or 24 AWG, low-capacitance, twisted, stranded, shielded copper wire
Maximum length:	2000 feet (610 meters)

WARNING Do not apply line voltage (mains voltage) to the controller's ports and terminals.

To wire the controller to the BACnet network

WARNING Attaching any ARCNET or MS/TP network to the **Act Net** port damages BT485s, DIAG485s, or terminating resistors on that network.

1. Pull the screw terminal connector from the controller's power terminals labeled **Gnd** and **24 Vac**.
2. Check the communications wiring for shorts and grounds.
3. Connect the communications wiring to the controller's screw terminals labeled **Net +**, **Net -**, and **Shield**.

   NOTE Use the same polarity throughout the network segment.
4. Set the communication type and baud rate.

For...	Set BACnet ARC156 or MS/TP jumper to...	Set DIP switches 1 and 2 to...
ARC156	**ARC156**	N/A. Baud rate will be 156 kbps regardless of the DIP switch settings.
MS/TP	**MS/TP**	The appropriate baud rate. See the **MS/TP Baud** diagram on the controller.

   NOTE Use the same baud rate for all controllers on the network segment.
5. If the VAV Zone II is at either end of a network segment, connect a BT485 to the VAV Zone II.
6. Insert the power screw terminal connector into the VAV Zone II's power terminals.
7. Verify communication with the network by viewing a Module Status report in the i-Vu® interface.

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Wiring devices to the VAV Zone II's Rnet port

The Rnet communicates at a rate of 115 kbps and should be wired in a daisy-chain configuration.

Supports up to

- 5 wireless and/or ZS sensors
- One Equipment Touch
- One TruVu™ ET Display

For more detailed instructions, see the device's *Installation Guide.*

CAUTION Rnet power

The Rnet port provides 12 Vdc/200 mA* maximum at 32°F (25°C). that can be used to power zone sensors. If the total power required by the sensors on the Rnet exceeds the power supplied by the port, use an external power supply. See the sensor's Installation and Start-up Guide to determine the power required.

* These numbers will be reduced at higher temperatures.

Wiring specifications

Cable from sensor to controller:	If <100 ft (30.5 meters) If >100 ft (30.5 meters)	22 AWG, unshielded 22 AWG, shielded
Maximum length:	500 feet (152 meters)	

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To wire ZS sensors to the controller

ZS Sensors are thermistor-based temperature sensors that may optionally sense humidity, CO_2, or VOC. ZS Sensors are wired to the Rnet port on i-Vu® Open controllers.

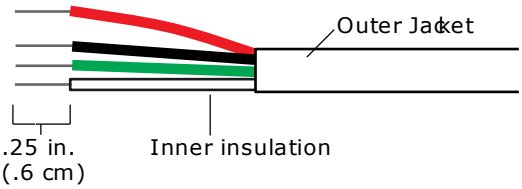
You can use the following ZS sensors:

- ZS Standard
- ZS Plus
- ZS Pro

NOTE The ZS CO2 model uses 190 mA during sample period. Use auxiliary 12 Vdc, unless it is the only device on the Rnet port.

1 Remove power from the VAV Zone II.

2 Partially cut, then bend and pull off the outer jacket of the Rnet cable(s). Do not nick the inner insulation. Strip about .25 inch (.6 cm) of the inner insulation from each wire.



3 Wire each terminal on the sensor to the same terminal on the controller. See diagram below.

NOTE Carrier recommends that you use the following Rnet wiring scheme:

Connect this wire...	To this terminal...
Red	+12V
Black	Rnet-
White	Rnet+
Green	Gnd

4 Apply power to the VAV Zone II.

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To wire the Wireless Adapter for wireless sensors

WARNING Do not apply line voltage (mains voltage) to the Wireless Adapter.

The Carrier wireless sensors are available in 868, 902, and 928 MHz radio frequency. The sensors are thermistor-based temperature sensors that may optionally sense humidity.

Wireless sensors communicate through a Wireless Adapter, which is wired to the Rnet port of the controller.

REQUIREMENTS

- A v6.5 or later i-Vu® system
- v6-xx-xxx or later controller drivers

To configure the control program for the desired user interaction with the sensor, see the *Wireless Sensors Application Guide*. For detailed instructions, see the *Wireless Sensors Installation Guide*.

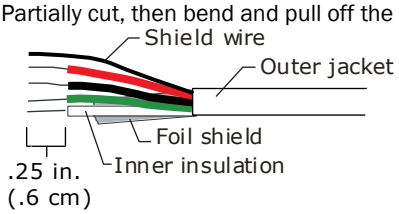
To wire, power, and mount the Wireless Adapter

NOTES

- The Wireless Adapter requires a 24 Vac power supply. It is not powered by the Rnet.
- If the Wireless Adapter will be:
  - Daisy-chained on the Rnet with ZS sensors, an Equipment Touch, or TruVu™ ET Displayuse the standard 4-conductor Rnet wiring.
  - The only device on the Rnet, you can use a 3-conductor cable instead of the standard 4-conductor Rnet cable.

1 Turn off the power to the controller that the Wireless Adapter will be wired to.

2 Partially cut, then bend and pull off the outer jacket of the Rnet cable(s). Do not nick the inner insulation.

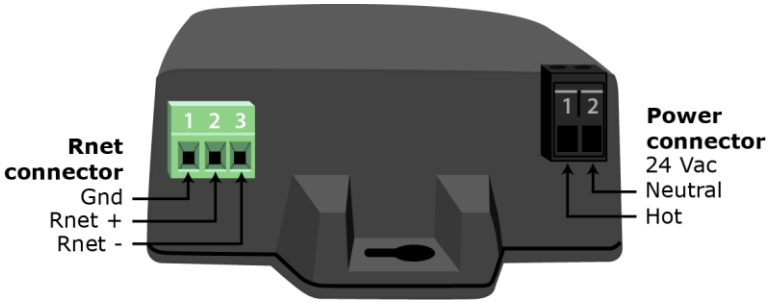


3 Strip about 0.25 inch (0.6 cm) of the inner insulation from each wire.

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4 Wire the **Rnet +**, **Rnet -**, and **Gnd** terminals on the controller's **Rnet** port to the terminals of the same name on the Wireless Adapter's Rnet connector.

NOTE If using shielded wire, connect the shield wire and the ground wire to the **Gnd** terminal.



5 Wire the 24 Vac external power supply to the Wireless Adapter's power connector.

6 Mount the Wireless Adapter by inserting 2 screws through the mounting tabs on each end of the Wireless Adapter.

7 Apply power to the external power supply.

8 Verify that the LED on top of the Wireless Adapter is blinking. See "LED" below.

9 Turn on the controller's power.

LED

The blue LED on the top of the Wireless Adapter indicates the following:

If the LED is...	Then the device...
Off	Is not powered or there is a problem.
Blinking	Is working properly.
Steadily on	Has a problem. Do one of the following: • Cycle power to the device. • Insert a small screwdriver or paper clip into the hole next to the LED to reboot the device.

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To wire an Equipment Touch to the VAV Zone II

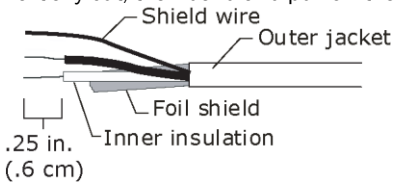
NOTES

- The Equipment Touch requires a 24 Vac power supply. It is not powered by the Rnet.
- If the Equipment Touch will be:
  - Daisy-chained on the Rnet with ZS sensors or a Wireless Adapter, use the standard 4-conductor Rnet wiring and follow the wiring instructions *To wire ZS sensors to the VAV Zone II* (page 19).
  - The only device on the Rnet, you can use a 2-conductor cable instead of the standard 4-conductor Rnet cable and follow the instructions below.
- For complete Equipment Touch installation instructions including wiring diagrams, see the *Equipment Touch Installation and Setup Guide.*

CAUTION The VAV Zone II can share a power supply with the Carrier controller as long as:

- The power supply is AC power.
- You maintain the same polarity.
- You use the power source only for Carrier controllers.

1. Turn **off** the VAV Zone II's power.
2. Partially cut, then bend and pull off the outer jacket of the cable. Do not nick the inner insulation.



3. Strip about 0.25 inch (0.6 cm) of the inner insulation from each wire.
4. Wire the VAV Zone II's **Rnet+** and **Rnet-** terminals to the terminals of the same name on the Equipment Touch's connector.

   NOTE If using shielded wire, connect the shield wire and the ground wire to the **Gnd** terminal.
5. Turn **on** the VAV Zone II's power.
6. Turn on the Equipment Touch.

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To wire the TruVu™ ET Display

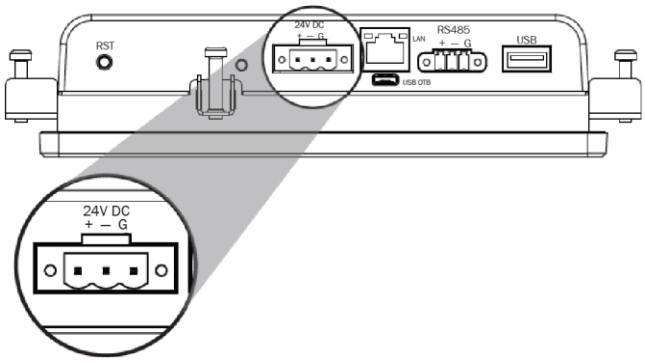
WARNING Do not apply line voltage (main) - 24 Vdc power only.

Wiring power

Wire the TruVu™ ET Display **24V DC** connector to the 24 Vdc power supply using 2-conductor 18 AWG wire. Maximum distance 100 feet (30 meters).

CAUTION The TruVu™ ET Display can share a power supply with the Carrier controller as long as:

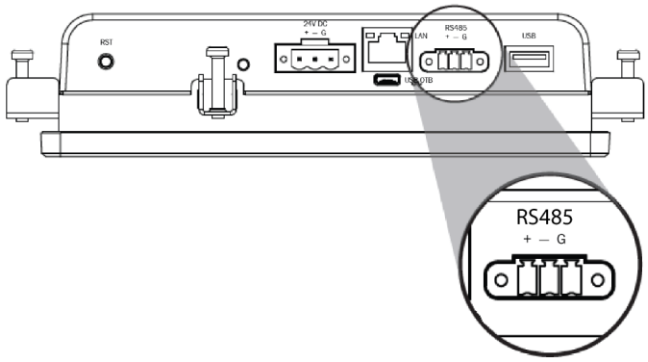
- The power supply is DC power.
- You maintain the same polarity.
- You use the power source only for Carrier controllers.



Wiring communication

1 Turn off the VAV Zone II's power.

2 Wire the TruVu™ ET Display's **RS485** connector to the controller's **Rnet** port, **G** to **Gnd**, **+** to **Rnet +**, **-** to **Rnet -** using 2-conductor 22 AWG wire with a maximum distance of 500 feet (152 meters).



3 Turn on the VAV Zone II's power.

For complete TruVu™ ET Display installation instructions, see the *TruVu™ ET Display Installation and Start-up Guide.*

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Wiring devices to the VAV Zone II's Act Net port

The VAV Zone II supports Act Net communication to the Act Net devices on a bus with a maximum length of 300 feet (91.44 meters). The bus should be wired with copper conductors of an appropriate size (18 AWG or larger) to compensate for voltage drop and ensure that bus voltage does not drop below 19.2 Vac or 21.6 Vdc.

Wire the Act Net terminals on the controller with the following color wires from the controller's actuator.

1 - Pwr - Red
2 - Data - White
3 – Gnd - Black



NOTE The controller's actuator **Data** wire is white and the i-Vu® Smart Valve's **Data** wire is orange.

i-Vu® Smart Valves

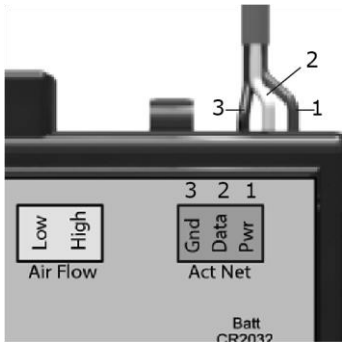
You can connect two i-Vu® Smart Valves to a VAV Zone II's Act Net port. See the *i-Vu® Smart Valve Installation Guide* for more details.

Wire the Act Net terminals on the controller with the following color wires from the valve's actuator.

1 - Pwr - Red
2 - Data - Orange
3 – Gnd - Black

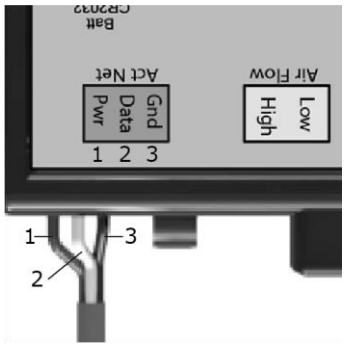


Controller mounted upright



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Controller mounted upside down



Wiring sensors to the VAV Zone II's inputs

You can wire the following sensors to the controller:

- *Alternate space temperature sensor* (page 26)
- *Supply Air Temperature sensor* (page 26)
- *CO_2 sensor* (page 27)
- *Relative Humidity sensor* (page 29)
- *Remote occupancy contact sensor* (page 30)

NOTE This document gives instructions for wiring the sensors to the VAV Zone II. For mounting and wiring the sensors, see the *Carrier Sensors Installation Guide*.

WARNING Disconnect electrical power to the VAV Zone II before wiring it. Failure to follow this warning could cause electrical shock, personal injury, or damage to the controller.

CAUTION

- Do not run sensor or relay wires in the same conduit or raceway with Class 1 AC or DC service wiring.
- Do not abrade, cut, or nick the outer jacket of the cable.
- Do not pull or draw cable with a force that may harm the physical or electrical properties.
- Avoid splices in any control wiring.

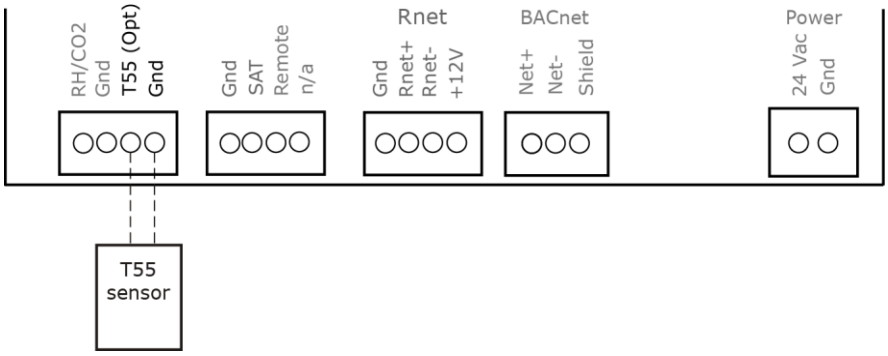
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To wire the T55 sensor to the controller

Part #33ZCT55SPT

This wall-mounted sensor monitors space temperature and can be used instead of a ZS or wireless sensors.

1. Strip the outer jacket from the cable for at least 3 inches (7.62 cm). Strip .25 inch (.6 cm) of insulation from each wire. Cut the shield and drain wire from the cable.
2. Wire the sensor to the controller, attaching the red wire to the **T55 (Opt)** terminal and the black wire to the **Gnd** terminal. See diagram below.
3. Verify that the **T55 (Opt)** jumper is in the **Thermistor** position.

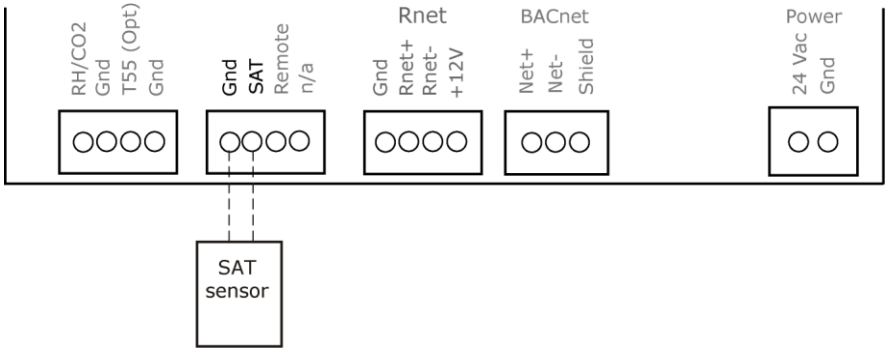


To wire the Supply Air Temperature sensor to the controller

Part #33ZCSENSAT

Each VAV Zone II requires that a temperature sensor be installed in the supply air stream. Mount the SAT sensor at least 2 feet downstream from a hot water or steam coil, or at least 4 feet downstream from an electric heating coil.

Wire the sensor to the controller. See diagram below.



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To wire the CO2 sensor to the controller

Part #33ZCSPTCO2LCD-01 (Display model)
Part #33ZCSPTCO2-01 (No display)
Part #33ZCT55CO2 (No display)

A CO_2 sensor monitors carbon dioxide levels. As CO_2 levels increase, the VAV Zone II adjusts the outside air dampers to increase ventilation and improve indoor air quality. These sensors also monitor temperature using a 10K thermistor.

A CO_2 sensor can be wall-mounted or mounted in a return air duct. (Duct installation requires an Aspirator Box Accessory - Part #33ZCASPCO2.)

The sensor has a range of 0–2000 ppm and a linear 4-20 mA output. This is converted to 1-5 Vdc by a 250 Ohm, 1/4 watt, 2% tolerance resistor connected across the zone controller's CO_2 input terminals.

NOTE Do not use a relative humidity sensor and CO_2 sensor on the same zone controller.

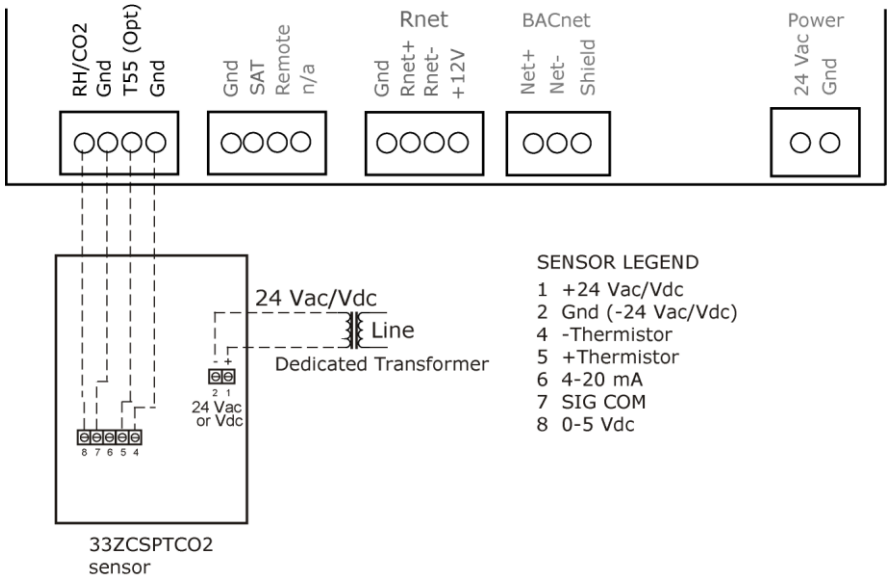
#33ZCSPTCO2

1 Wire the sensor to the controller. See appropriate diagram below.

2 Verify that the **RH/CO2** jumper is set to **0-5 Vdc** on the VAV Zone II.

3 Verify the **J7** jumper on the sensor is set to **0-5 Vdc**.

Wiring diagram for #33ZCSPTCO2:



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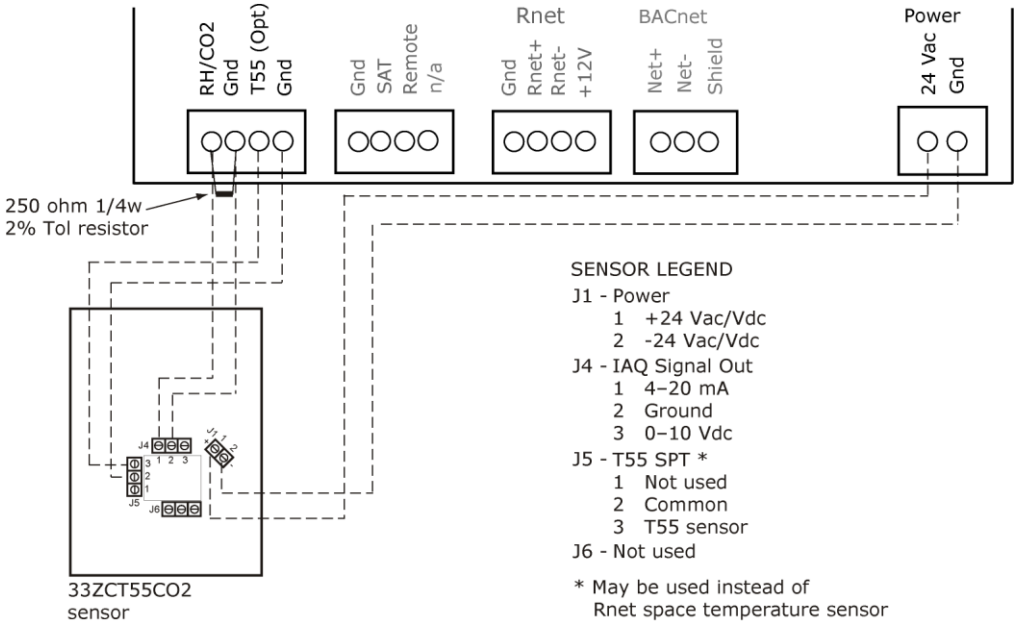
#33ZCT55CO2

1 Wire the sensor to the controller. See appropriate diagram below.

2 Install a field supplied 250 Ohm 1/4 watt 2% tolerance resistor across the controller's **RH/CO2** and **Gnd** terminals.

3 Verify that the **RH/CO2** jumper is set to **0-5Vdc** on the VAV Zone II.

Wiring diagram for #33ZCT55CO2:



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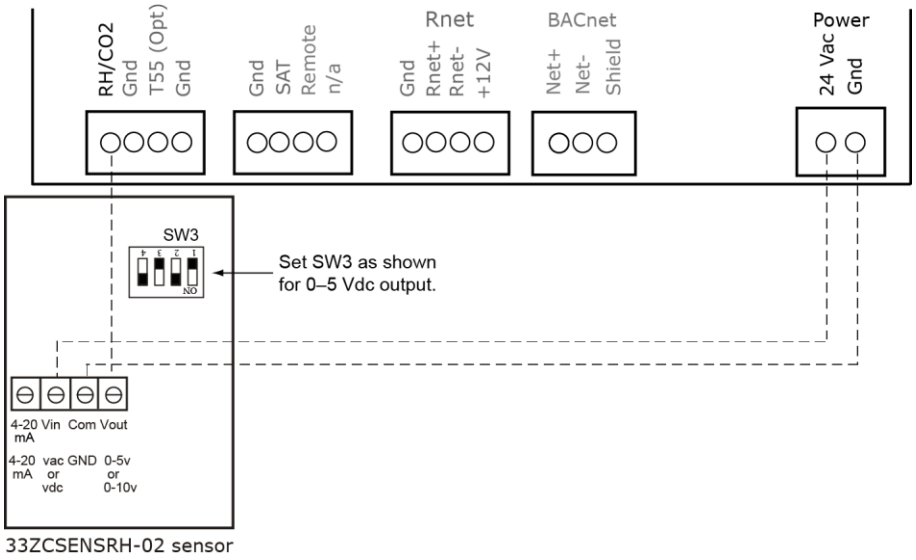
To wire the Relative Humidity sensor to the controller

Part #33ZCSENSRH-02

The Relative Humidity (RH) sensor is used for zone humidity control (dehumidification) if the rooftop unit has a dehumidification device. If not, the sensor only monitors humidity.

NOTE Do not use a relative humidity sensor and CO_2 sensor on the same zone controller.

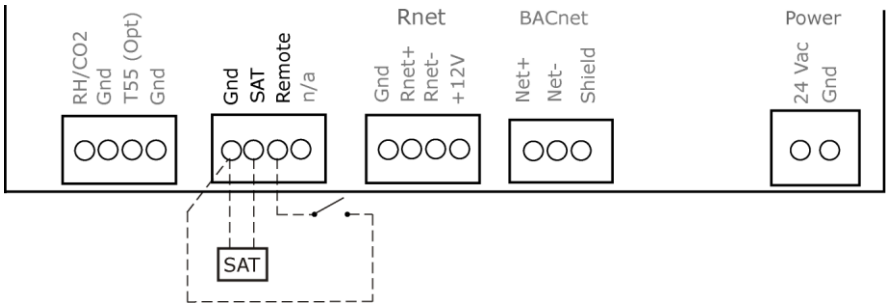
1. Strip the outer jacket from the cable for at least 4 inches (10.2 cm). Strip .25 inch (.6 cm) of insulation from each wire.
2. Wire the sensor to the controller. See diagram below.
3. Using electrical tape, insulate any exposed resistor lead to prevent shorting.
4. Verify that the **RH/CO2** jumper is set to **0-5 Vdc**.
5. Set **SW3** on the sensor as shown below.



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Wiring a remote occupancy sensor

You can wire a normally open or normally closed dry-contact occupancy sensor to the VAV Zone II's **REMOTE** input as shown below. The controller supplies the voltage needed for the input.



Wiring equipment to the VAV Zone II's outputs

Use the following wiring diagrams to wire zone terminal equipment to the VAV Zone II's outputs.

VAV Zone II Single Duct Controller or **VAV Zone II Fan Terminal Controller**

No heat - Single duct (page 32)

2-position hot water/steam heat - Single duct (ducted or baseboard) (page 32)

Modulating hot water/steam - Single duct (ducted or baseboard) (includes CV Modulating) (page 33)

Combination heat - Single duct (ducted electric heat with modulating baseboard heat) (page 34)

3-stage electric heat - Single duct (ducted or baseboard) (page 35)

SCR electric heat - Single duct (ducted or baseboard) (page 36)

VAV Zone II Fan Terminal Controller only

2-position hot water/steam - Fan box (ducted or baseboard) (page 37)

Modulating hot water/steam - Fan box (ducted or baseboard) (includes CV Modulating) (page 38)

Combination heat - Fan box (ducted electric heat with modulating baseboard heat) (page 39)

2-stage electric heat - Fan box (ducted or baseboard) (page 40)

SCR electric heat - Fan box (ducted or baseboard) (page 41)

Wiring a field-supplied high-torque actuator to the analog output (page 42)

WARNING Disconnect electrical power to the VAV Zone II before wiring it. Failure to follow this warning could cause electrical shock, personal injury, or damage to the controller.

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Wiring specifications

To size output wiring, consider the following:

- Total loop distance from the power supply to the controller, and then to the controlled device

  NOTE Include the total distance of actual wire. For 2-conductor wires, this is twice the cable length.
- Acceptable voltage drop in the wire from the controller to the controlled device
- Resistance (Ohms) of the chosen wire gauge
- Maximum current (Amps) the controlled device requires to operate

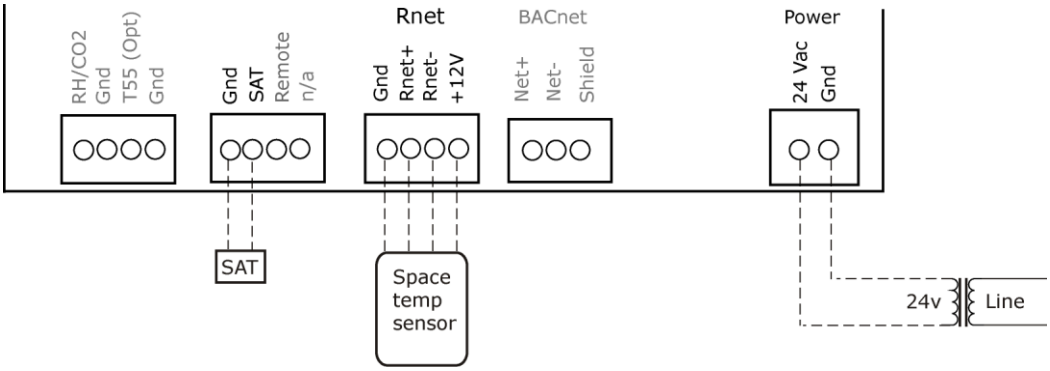
Wiring diagram legend

Gnd	=	Ground
HWV	=	Hot water valve
SAT	=	Supply air temperature sensor
SCR	=	Silicon controlled rectifier
Space temp sensor	=	ZS sensors or Wireless Adapter for wireless sensors
T55 (OPT)	=	Alternate space temperature sensor
– – –		Field-supplied wiring

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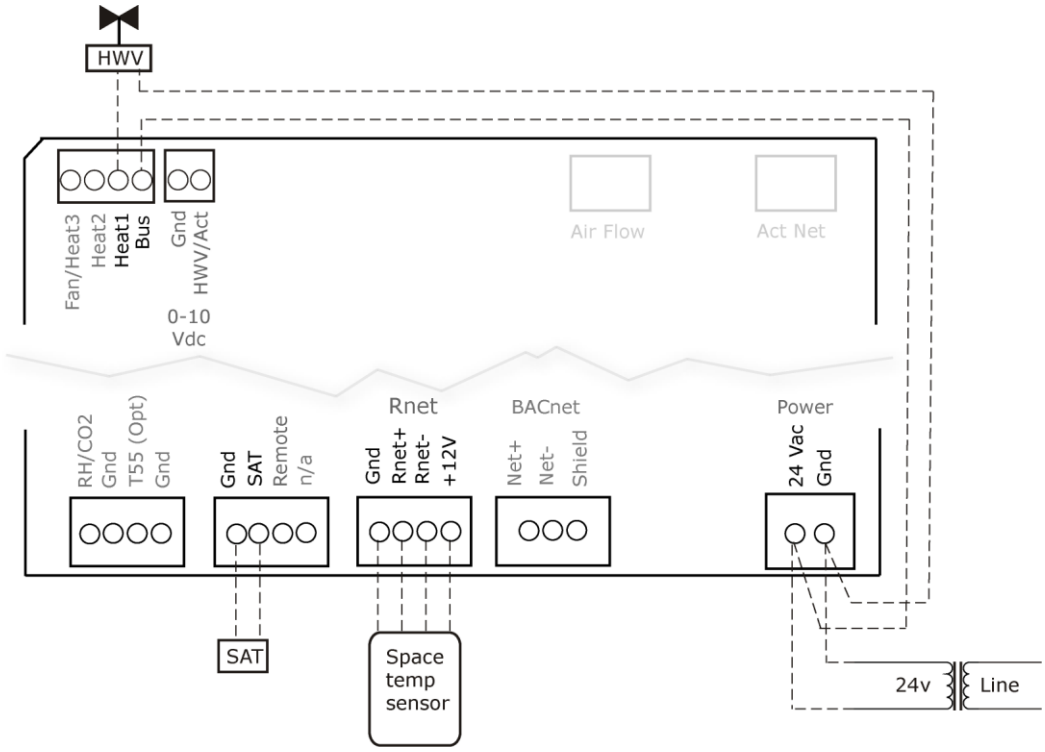
No heat - Single duct or fan box application

VAV Zone II Single Duct controller or **VAV Zone II Fan Terminal controller**



2-position hot water/steam heat - Single duct

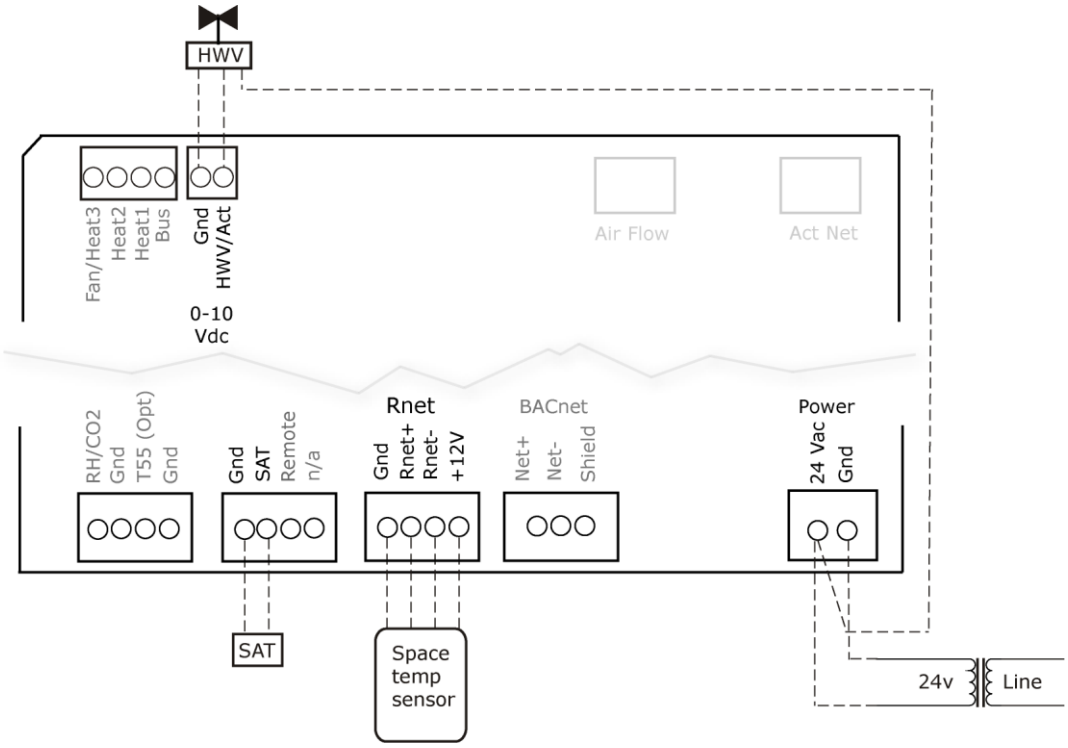
VAV Zone II Single Duct controller or **VAV Zone II Fan Terminal controller**



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Modulating hot water/steam (ducted or baseboard) - Single duct application

VAV Zone II Single Duct controller or **VAV Zone II Fan Terminal controller**

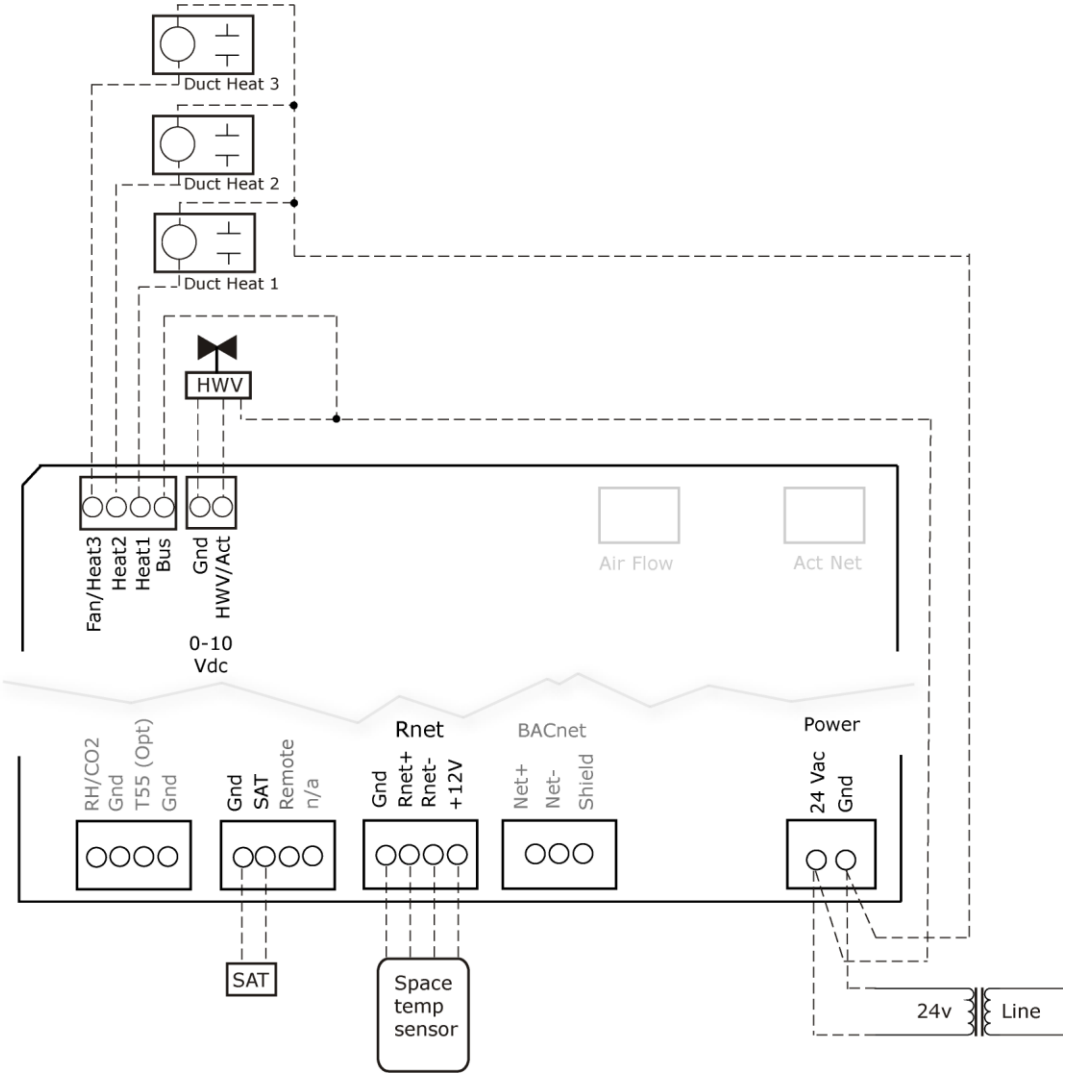


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Combination heat (ducted electric heat with modulating baseboard heat) - Single duct application

VAV Zone II Fan Terminal controller

NOTE Duct Heat 2 and Duct Heat 3 are available only with a VAV Zone II Fan Terminal Controller.

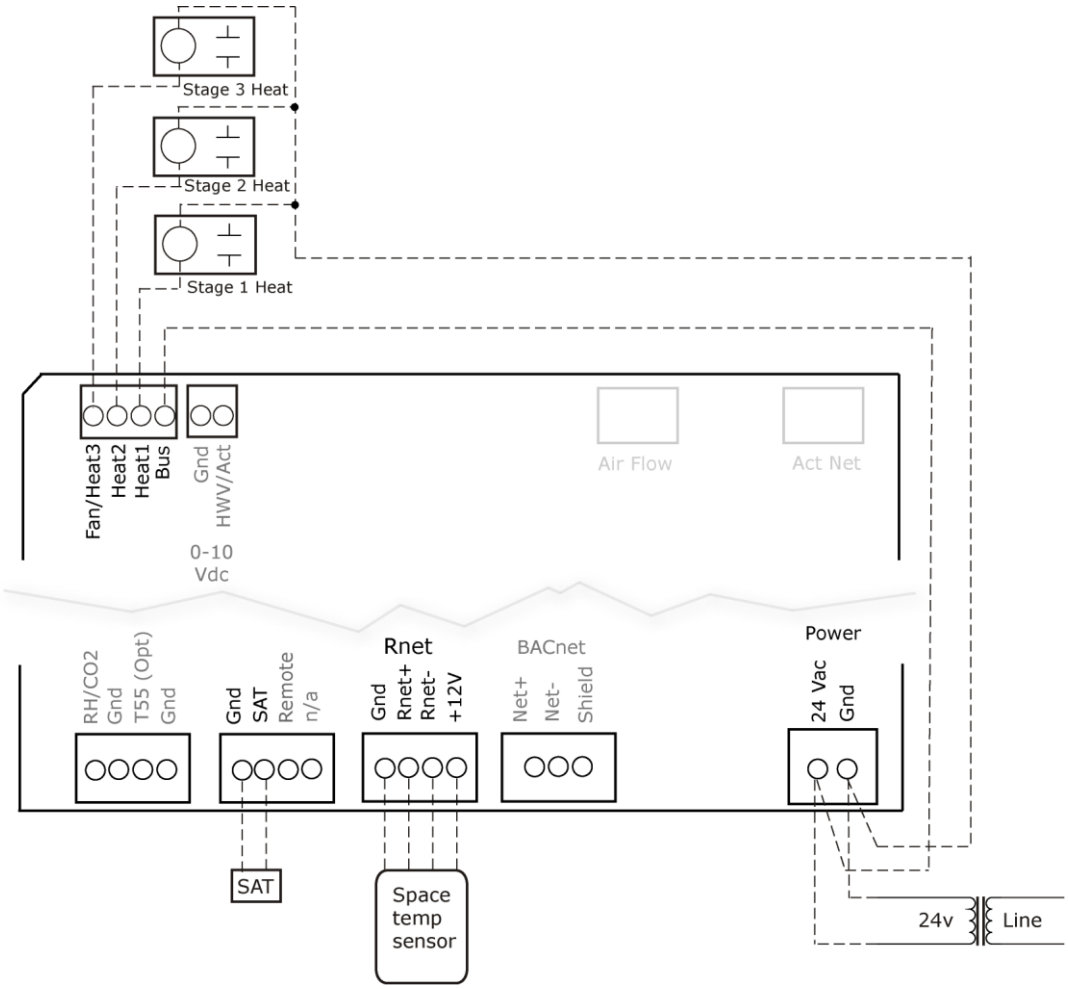


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Electric heat (ducted or baseboard) - Single duct application

VAV Zone II Fan Terminal controller

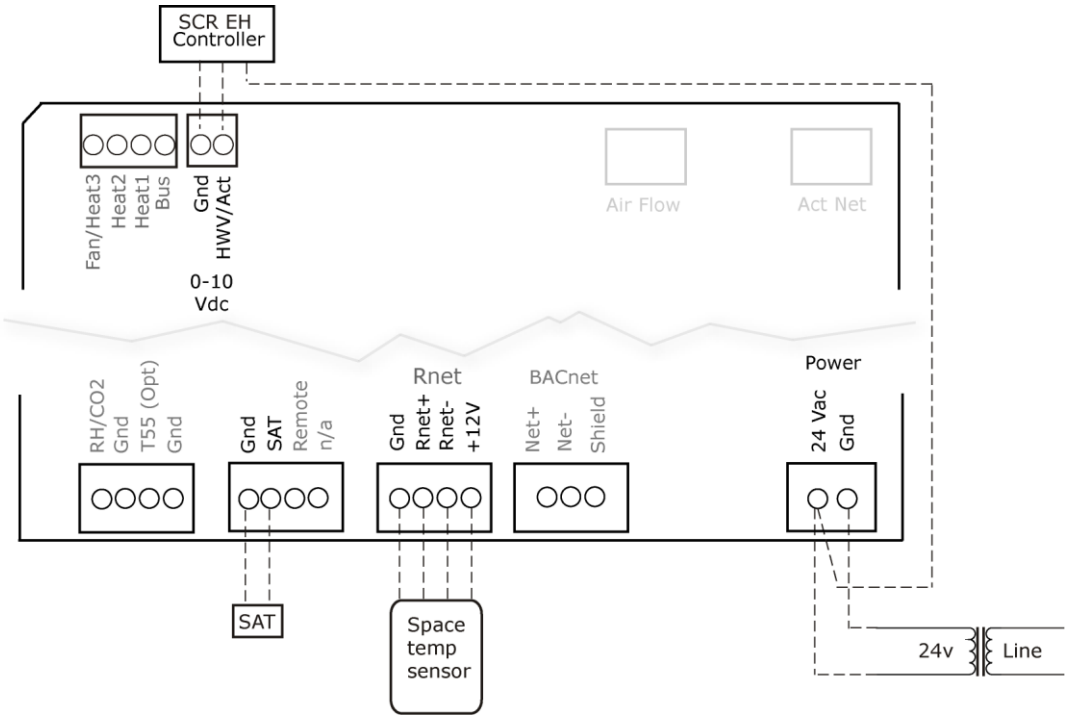
NOTE Stage Heat 2 and Stage Heat 3 are available only with a VAV Zone II Fan Terminal Controller.



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SCR electric heat (ducted or baseboard) - Single duct application

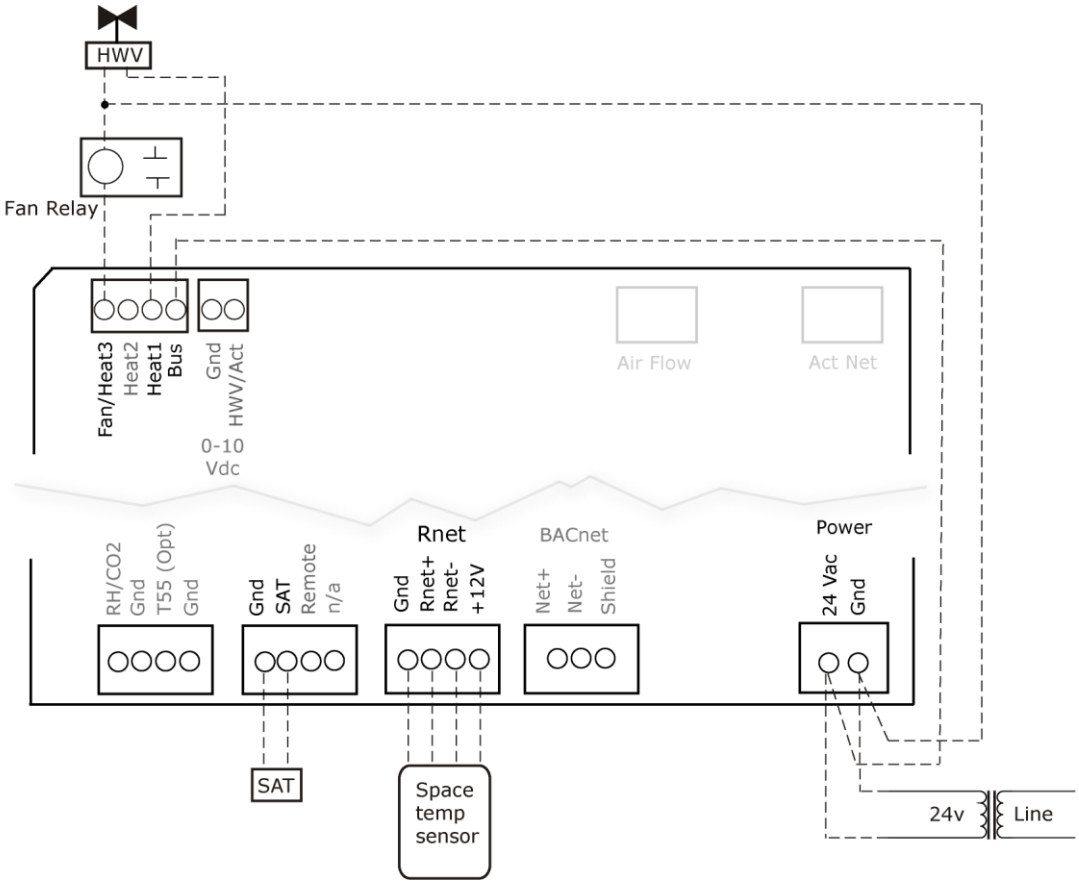
VAV Zone II Single Duct controller or **VAV Zone II Fan Terminal controller**



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2-position hot water/steam (ducted or baseboard) - Fan box application

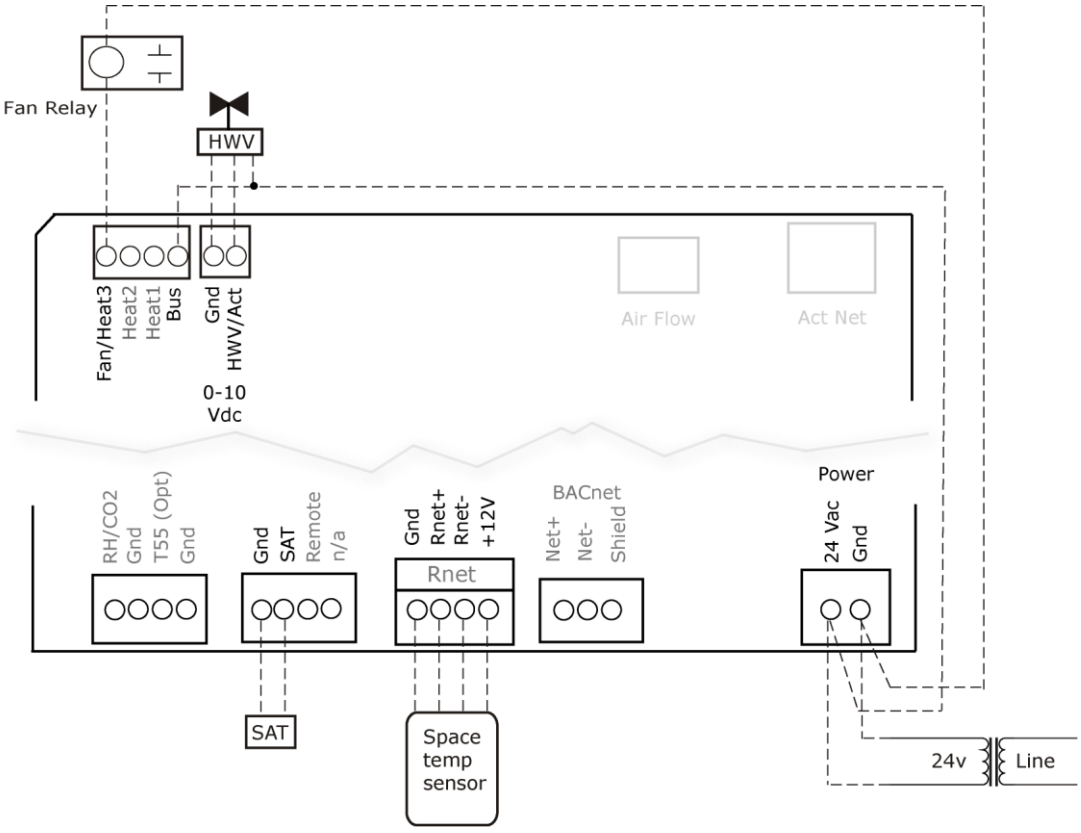
VAV Zone II Fan Terminal controller only



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Modulating hot water (ducted or baseboard) - Fan box application

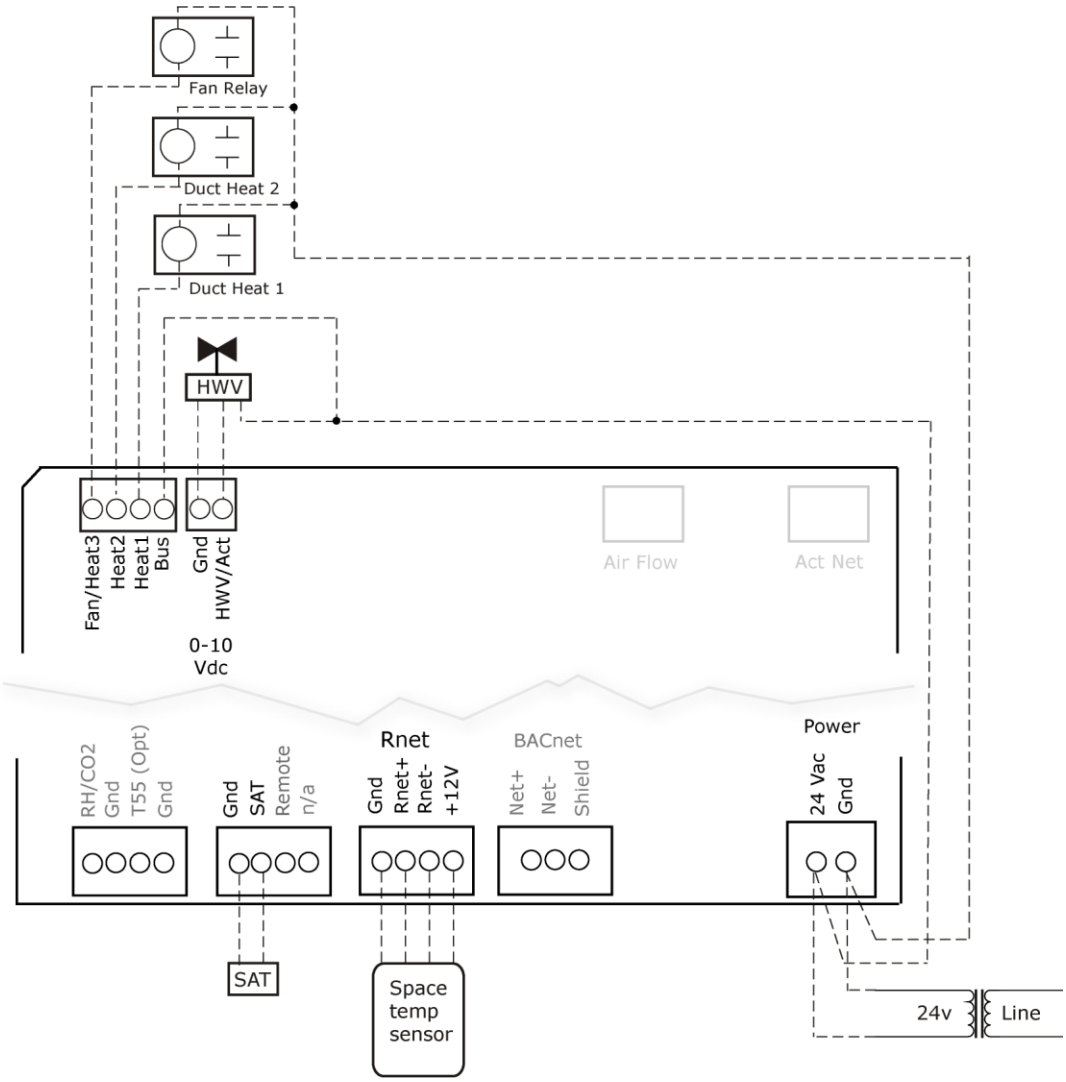
VAV Zone II Single Duct controller or **VAV Zone II Fan Terminal controller**



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Combination heat (ducted electric heat with modulating baseboard heat) - Fan box application

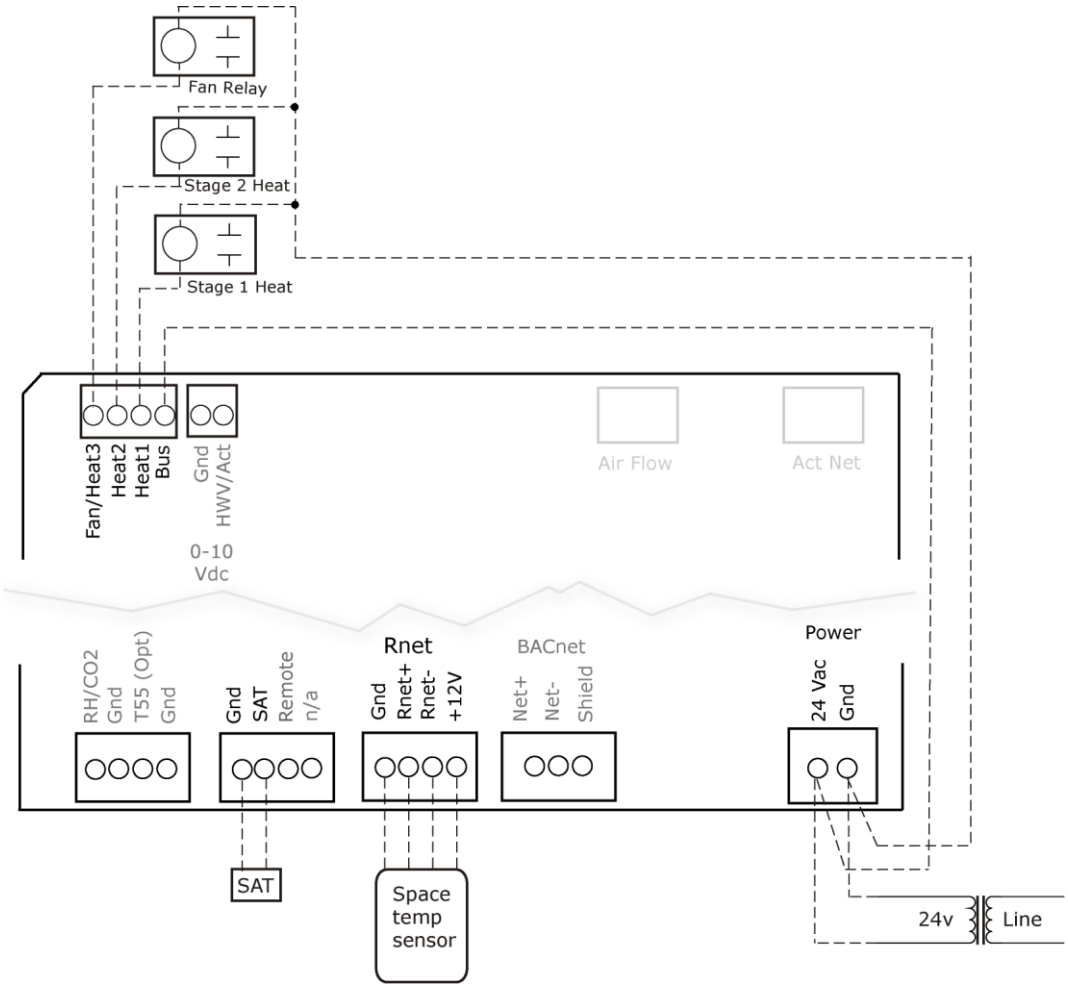
VAV Zone II Fan Terminal controller only



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2-stage electric heat (ducted or baseboard) - Fan box application

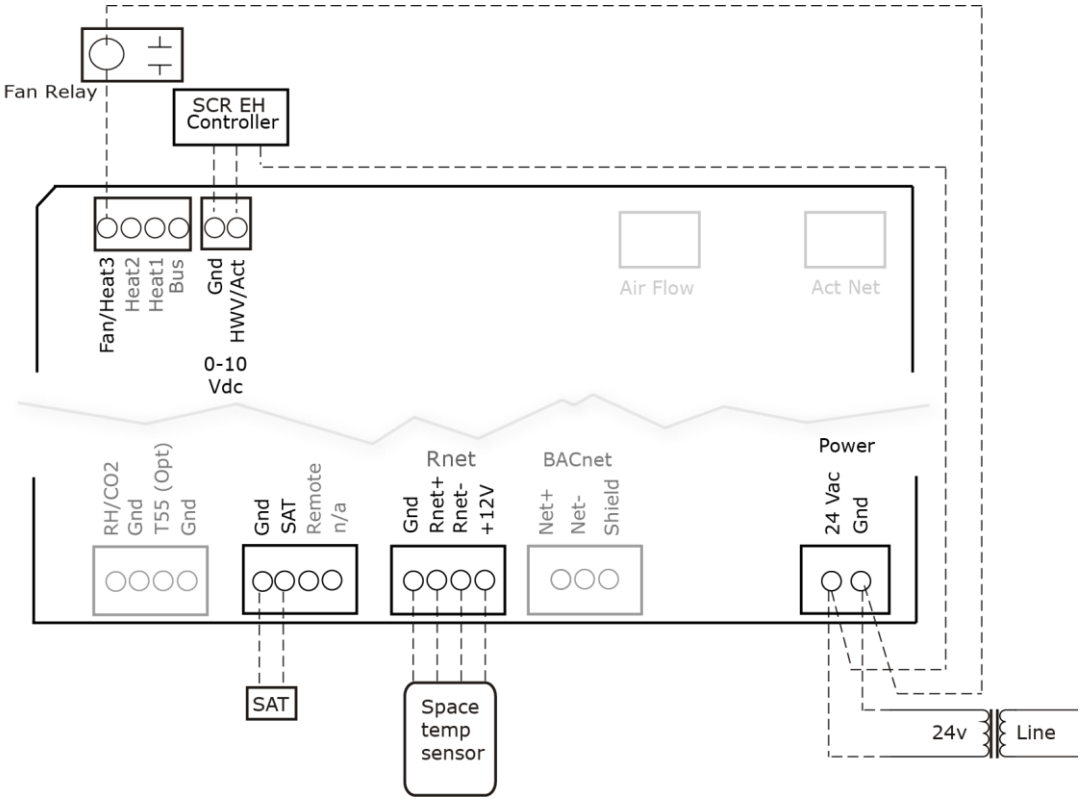
VAV Zone II Fan Terminal Controller only



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SCR electric heat (ducted or baseboard) - Fan box application

VAV Zone II Single Duct controller or **VAV Zone II Fan Terminal controller**



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Wiring a field-supplied high-torque actuator to the analog output

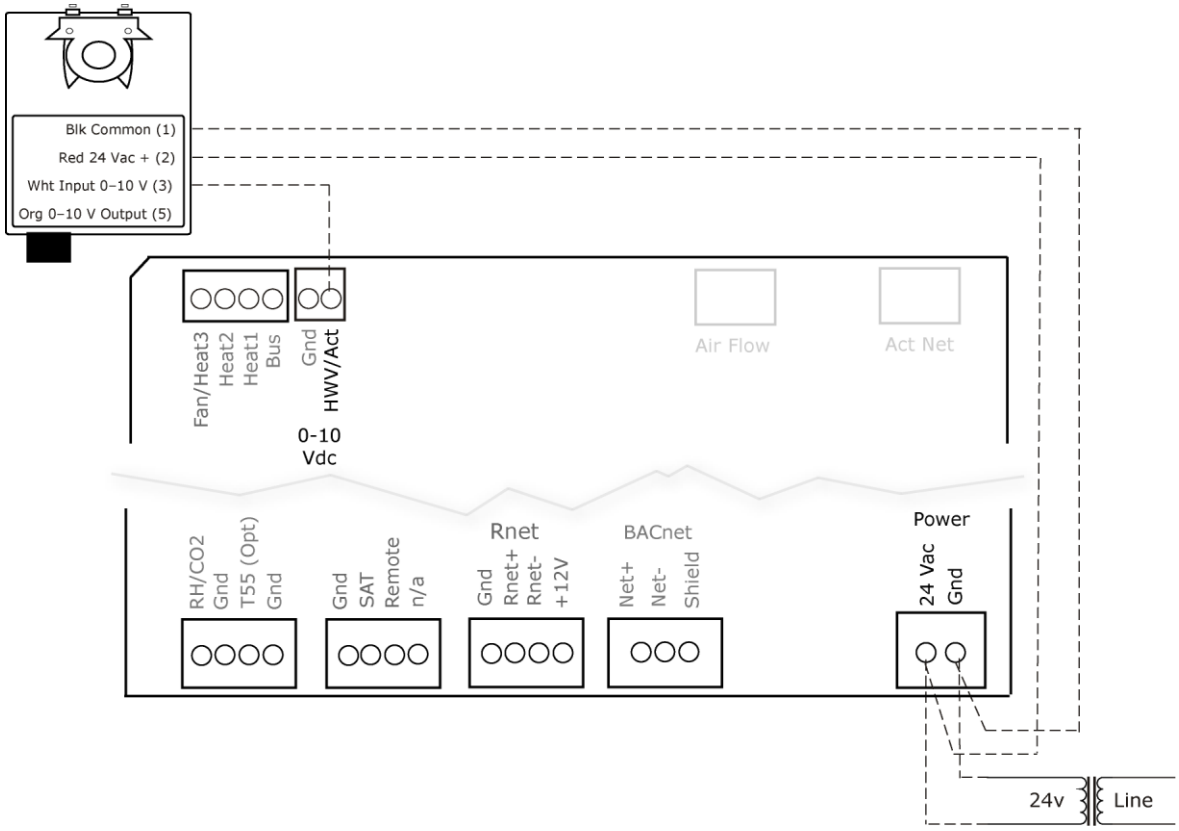
You can wire one of the following Belimo actuators to the VAV Zone II's analog output instead of using the controller's built-in, 45 in.-lb (4 Nm) actuator.

NMX24-MFT P-10028	90 in.-lb (10 Nm) actuator with 0–10 Vdc control and 0–10 Vdc feedback
AMX24-MFT P-10028	180 in.-lb (20 Nm) actuator with 0–10 Vdc control and 0–10 Vdc feedback

1 Install the actuator according to the manufacturer's instructions.

2 Wire the actuator to the controller using the diagram below.

NOTE For proper operation and to prevent damage to the devices, use the same polarity for the actuator's power and the VAV Zone II's power.



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Start-up

Use one of the following interfaces to start up, access information, read sensor values, and test the controller.

This interface...	Provides a...
Field Assistant application - Runs on a laptop that connects to controller's Local Access port [1]	Temporary interface
Equipment Touch device - Connects to controller's Rnet port [2]	Temporary or permanent interface
i-Vu® application Available for BACnet systems only	Permanent interface
System Touch device Available only for BACnet MS/TP systems. Wire to a BACnet MS/TP network connector and a 24 Vac power supply [3]	Temporary or permanent interface

[1] Requires a USB Link (Part #USB-L).
[2] See the *Equipment Touch Installation and Setup Guide* for detailed instructions.
[3] See the *System Touch Installation and Setup Guide* for detailed instructions.

CAUTION If multiple controllers share power but polarity was not maintained when they were wired, the difference between the controller's ground and the computer's AC power ground could damage the USB Link and the controller. If you are not sure of the wiring polarity, use a USB isolator between the computer and the USB Link. Purchase a USB isolator online from a third-party manufacturer.

Configuring the VAV Zone II's properties

To start up the VAV Zone II, you must configure certain points and properties. *Appendix A* (page 72) is a complete list of all the points and properties, with descriptions, defaults, and ranges. These properties affect the unit operation and/or control. Review and understand the meaning and purpose of each property before changing it.

- Unit Configuration properties
- *Setpoint Configuration properties* (page 76)
- Service Configuration properties
- *Linkage properties* (page 98)

See *Appendix A* (page 72) for a complete list of the controller's points/properties.

NOTE Engineering units shown in this document in the defaults and ranges are strictly for reference. You must enter an integer only.

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Configuring ZS Sensors

The VAV Zone II automatically detects 1 ZS temperature sensor set to address (1). This sensor is labeled **Main ZS Sensor**.

You must configure the ZS Sensor properties in the i-Vu® application or Field Assistant as follows:

- Add more ZS temperature, humidity, or CO^2 sensors in the **Properties** > **Control Program** tab > **Service Configuration** section. Ctrl+click on the property name to open the microblock popup and configure the settings on the **Details** tab.

  NOTE See Service Configuration for details.

- Configuring the **ZS Sensor Binder**, and then the following as needed:
  - **ZS Zone Temp**
  - **ZS Zone Humidity**
  - **ZS Zone CO2**
  - **ZS model to show on graphic**
- Configure **Setpoint Adjustment**. See *Setpoints* (page 76).
- Set **Occupancy** and **Override** properties. See *Maintenance* (page 93) for details.
- Alarm and Maintenance indications on the ZS Pro (display model) sensors. See *Appendix C: ZS Sensor display for VAV Zone II* (page 106).

Performing system checkout

1. Verify that all power and communication connections are correct and tight.
2. Verify that all zone terminals, ductwork, and zone controllers are properly installed and set according to installation instructions and job requirements.
3. Verify that all air duct connections are tight.
4. Verify that zone terminal fans and system controls operate properly. Verify that actuator screws are properly tightened.
5. At the zone terminals, check electrical system and connections of any optional electric reheat coil. If hot water reheat is used, check piping and valves against job drawings.
6. Verify that all zone terminal dampers are fully open.
7. If using an air source with field-installed controls, make sure controls and sensors have been installed and wired per manufacturer installation instructions.
8. Verify that the air source motor starter and, if applicable, the Hand/Off/Auto (HOA) switch are installed and wired.
9. Verify that the area around the air source is clear of construction dirt and debris.
10. Verify that final filters are installed in the air handler(s). Dust and debris can adversely affect system operation.
11. Verify that the space sensor and all optional sensors are reading correctly.

    NOTE You must use the i-Vu® application or Field Assistant to configure ZS Sensors.

CAUTION Before starting the air source fan, make sure the zone terminal dampers are not closed. Starting the fan with dampers closed will damage the system ductwork.

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Commissioning the VAV Zone II

Using Field Assistant or the i-Vu® application:

1 Set damper size. Go to **Properties** > **Configuration** > **Service Configuration** > **Flow Control** > **Details** tab > **Manufacturer's specified air flow at 1" water column** and enter the correct cfm for the damper size.

2 Calibrate the damper travel.

   a) Go to **Properties** > **Configuration** > **Service Configuration** > **Flow Control** > **Details** tab > **Test and Balance**. Click **Close Damper** and verify it goes to the closed position.

   b) Click **Dampers Full Open** and verify it goes to the full open position.

   c) Verify that the air source is off, and then calibrate the zero airflow reading at the terminal control. Click **Zero Flow** and verify the damper goes to the fully closed position and the airflow transducer is calibrated. Once the **Autozero complete** message is displayed, make sure the Measured Flow column under Calibration parameters for Zero Flow reads near zero cfm (liters/second) and the sensor reading should be less than 0.03.

   d) Click **Automatic Control** to return the damper to normal operation.

3 For Parallel or Series Fan terminals – In the **Locks** section, select the **Fan**'s **Lock value to** checkbox, then select **On** in the drop-down list. Click **Apply**. Verify the fan's operation.

4 For modulating hot water reheat – Go to **Properties** > **I/O Points** tab, then lock **Hot Water Valve** to 100%. If the controller is configured for Single Duct, make sure the air source fan is on. If ducted heat, verify the heat works by verifying that the SAT rises. For baseboard heat, physically check the heating element for proper temperature rise. Release the **Hot Water Valve**.

5 Release the fan.

6 If the controller is part of a linked system, verify **Linkage** > **Airside Linkage Status** shows **Active**.

CAUTION Pressing the actuator release button and moving the damper or disconnecting the actuator ribbon connector while the controller is powered will cause the damper position to be out of calibration. To recalibrate the damper position, you must perform steps 2a–2d above or power cycle the controller.

Balancing the system using the i-Vu®/Field Assistant applications

Most VAV system airflow designs are based on cooling requirements which require a greater cfm (liters/second) flow than heating requirements. Using this balancing procedure, you adjust the cooling airflow first. If the heating and cooling maximum airflow requirements are the same, you do not need to balance the heating airflow.

NOTE We recommend that the total heating minimum airflow settings for all the zones in the system be set to maintain the air source's design minimum heat cfm (liters/second) airflow across its heat exchanger to prevent damage to the equipment.

The following procedures instruct you to use the i-Vu® application or Field Assistant to balance the system. However, you can also use the Test & Balance tool that includes global commands to assist you in balancing the system.

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Prepare for balancing

1. Log in to the i-Vu® application with an Administrator or Installer security level, or use Field Assistant.
2. Make sure the air source and its controller have been properly started and can run as a stand-alone unit.
3. Make sure you have addressed, commissioned, and started the zone and bypass controllers, if present.
4. If a manual damper is installed upstream of the zone damper, verify that it is fully open before any balancing occurs.
5. Verify that any zone controller supplying multiple diffusers has a manual balancing damper installed on each duct for balancing the design airflow through each diffuser.
6. Disable the air source heating and cooling outputs using one of the following methods:
   - Physically disconnect the air source controller's output wiring to the unit, then enable the fan.
   - In the i-Vu® or Field Assistant tree, select the AHU controller. Go to **Properties** > **Control Program** tab > **Enable/Disable** and enable **Test and Balance Command**.
7. Verify that the air source's supply static pressure setpoint is set to the system's design specification and that it does maintain the setpoint.

Balance each zone

1. In the i-Vu® or Field Assistant tree, select the zone controller that is physically closest to the air source. Go to **Properties** > **Control Program** > **Configuration** > **Service Configuration** > **Flow Control** > **Details** tab.
2. Do one of the following:
   - Single Duct or Parallel Fan zone terminals – Click **Cool Max Airflow** to override the zone control and increase the airflow to the cooling maximum cfm (liters/second) . Check the zone for design cooling maximum airflow using certified measuring devices. Enter the measured cfm (liters/second) and click the arrow to enter the current sensor reading value.
   - Series Fan zone terminals – Click **Damper Full Close** to override the zone damper to its fully closed position. Wait 30 seconds after the damper is closed, select the **Fan**'s **Lock value to** checkbox, then select **On** in the droplist. Click **Apply**. You must follow this procedure to prevent the fan from turning backwards. Check the zone for design cooling maximum airflow using certified measuring devices. See the zone terminal manufacturer's instructions to adjust the fan speed to meet design airflow requirements. After you set the fan speed to deliver the **Cool Max Airflow**, click the **Cool Max Airflow**. Verify the airflow using a certified measuring device. Enter the measured cfm (liters/second) and press the arrow to enter the current sensor reading value. Verify that the zone terminal plenum air intakes do not have a positive airflow.
3. Check all branch duct terminal registers for design flow. If necessary, adjust the manual volume dampers in the branch ducts.
4. Single Duct or Parallel Fan zone terminals - Click **Occupied Min Airflow** to set the zone damper to its minimum airflow position. Verify the airflow using a certified measuring device. Enter the measured cfm (liters/second) and click the arrow to enter the current sensor reading value.
5. Parallel Fan Zone Terminals only - To adjust Parallel Fan airflow, make sure **Occupied Min Airflow** is selected, select the **Fan**'s **Lock value to** checkbox, then select **On** in the drop-down list. Click **Apply**. See the zone terminal manufacturer's instructions on adjusting the fan speed to meet design airflow requirements. When finished, clear the **Fan**'s **Lock value to** checkbox.
6. If the terminal has ducted reheat, select the **Flow Setpoint** in the **Locks** section and enter **Auxiliary Heat Min Airflow** if it is greater than the **Occupied Min Airflow**. Select **Auxheat** and enter 100%. Click **Apply**. Verify the supply air temperature rises for ducted heat. For non-ducted heat, physically verify that the heat is energized. Deselect a **Flow Setpoint** and **Auxheat** and click **Apply** when finished.
7. Repeat steps 1 through 6 for each zone until all zones have been balanced. Make sure that you select **Automatic Control** before moving on to the next zone.

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Balancing the system using Test & Balance tool

Use the Test & Balance tool to manipulate the controllers associated with an air source, but not the air source itself or heating and cooling equipment such as chillers and boilers. See the Test & Balance Help for more information on using the tool.

Most VAV system airflow designs are based on cooling requirements which require a greater cfm (liters/second) flow than heating requirements. Using this balancing procedure, you adjust the cooling airflow first. If the heating and cooling maximum airflow requirements are the same, you will not need to balance the heating airflow.

NOTE We recommend that the total heating minimum airflow settings for all the zones in the system be set to maintain the air source's design minimum heat cfm (liters/second) airflow across its heat exchanger to prevent damage to the equipment.

To calibrate VAV zone airflow

1 Select the VAV zone air terminal in the tree.

NOTE You can select **View** > **Device ID** or **View** > **Primary Use** to show this information next to each item in the tree.

2 Select the **Test and Balance** tab.

NOTE If  or  appear on the status bar, see Air terminal calibration status to determine what you must do before calibration can occur.

3 Verify that the air source is off and that airflow has stopped.

4 Click **Zero Calibrate**.

NOTE The table below describes each damper command. Commands with a  are required. Optional commands improve system accuracy. Do these in order from top to bottom for best results.

5 The status bar shows **Damper Moving**. Wait until it shows **Damper Ready**.

6 If the controller has an external actuator, do the following:

a) Type the **Measured Flow** in the fields beside **Zero Calibrate**.

b) Click the **Current Sensor Reading** button to copy the value to the **Sensor Reading** field, or type an adjusted value in the field.

7 Turn on the air source.

8 For each additional calibration step that you want to perform, do the following:

a) Click its Damper Command button.

b) Wait for **Damper Ready**.

c) Enter the **Measured Flow** and **Sensor Reading** as described in step 6.

9 Click **Apply** to send your changes to the controller and update the **Last Calibration Date** on the air source's page.

NOTE If desired, you can click **Apply** after each calibration step.

10 Remove any locks you have applied. See To view, lock, or unlock an air terminal function.

11 Click **Automatic** to return the controller to normal operation.

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NOTES

- For **Cool Max**, **Heat Max**, and **Occupied Min** – When the setpoint is reached and stable, you can select **Lock damper at current open position** on the **Locks** tab to prevent damper movement while you take flow readings.
- You can repeat a calibration step to further calibrate the airflow sensor.
- An airflow sensor only reports air delivered from the air source. To adjust the cfm (liters/second) of variable speed fans in parallel VAV reheat, close the primary air damper.

Damper Command	Action
Zero Calibrate ☆	Closes the damper, takes a number of flow samples, then sets the zero calibration.
Damper Open	Opens damper fully and enables the **Damper Open** calibration fields.
Cool Max ☆	Forces the damper to its maximum cooling position. Calibration fields apply only if the primary use of this damper is cooling.
Occupied Min	Forces the damper to its minimum occupied position and enables the **Occupied Min Flow** calibration fields.
Damper Close	Forces the damper to its full closed position.
Heat Max	Forces the damper to its maximum heating position. Calibration fields apply only if the primary use of the damper is heating.
Automatic	Returns control of the damper to the control program. **You must perform this step when you finish test and balance.**

Upload calibration values to the i-Vu® application

⚠ **CAUTION** If your system has an i-Vu® user interface, you **must** run the Test and Balance report in the i-Vu® application after using VAV Zone II. Running the report uploads the values from the controller to the i-Vu® application. You will lose all your calibrations if you download to the controller in the i-Vu® interface before running this report.

1 In the i-Vu® interface, select the top level in the navigation tree.

2 Click **Reports** > **Commissioning** > **Test and Balance**.

3 On the **View** tab, click **Run**.

Go to Step 4: Run a report (Optional).

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Run a report in VAV Zone II (Optional)

After balancing, you can run a report (.htm file) in Test & Balance that shows each controller's calibrated values and design values. You can view or edit the file in Microsoft Excel, Microsoft Word, or any web browser.

1 Select **Session** > **Report**.

2 Select an existing report or type a name in the **File Name** field.

3 Click **Save**.

4 If you chose an existing report in step 2, select **Append** to add to the report or **Overwrite** to replace the report.

Balancing the system

Most VAV system airflow designs are based on cooling requirements which require a greater cfm (liters/second) flow than heating requirements. Using the following balancing procedure, you adjust the cooling airflow first. If the heating and cooling maximum airflow requirements are the same, you do not need to balance the heating airflow.

Use the Test & Balance program to balance the system. Test & Balance can perform all the necessary functions, including shutting down the Linked air source and performing global commands to all zones in the system. You should do steps 1 through 4 in *Prepare for balancing* (page 49) prior to using Test & Balance. See Test & Balance's Help for details on the steps required to complete the balancing procedure.

NOTE We recommend that you set the heating minimum airflow settings for all the zones in the system to maintain the air source's design minimum heat cfm (liters/second) airflow across its heat exchanger to prevent damage to the equipment.

Prepare for balancing

1 Log in to the i-Vu® application with an Installer or Administrator role, or use Field Assistant.

2 Make sure the air source and its controller have been properly started and can run as a standalone unit.

3 Make sure you have addressed, commissioned, and started the zone and bypass controllers, if present.

4 Verify that zone controllers supplying multiple registers have manual dampers on each register branch duct for balancing the design airflow through each register.

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Sequence of operation

The VAV Zone II supports 3 types of pressure-independent terminal configurations:

- Single duct
- Series fan-powered
- Parallel fan-powered

The controller can operate as part of a linked system (VAV or VVT) or as a stand-alone controller.

Temperature sensors

The VAV Zone II supports the following temperature sensors:

Sensors	Notes
Space temperature sensors:	
• Wireless Standard or Plus[1]	You can average up to 5 wireless sensors.
• ZS Standard, Plus, Pro[2]	You can average up to 5 ZS sensors - a combination of temperature, humidity, and/or CO[2] sensors.
• T55[3]	Push the sensor's override button from 2 to 10 seconds to initiate a timed override.
	If a network space temperature value is used, that value must be written to the BACnet space temperature point (system_spt) at 1 to 5 minute intervals or on a COV of 0.1Δ°F (.06Δ°C).
Supply Air Temperature (SAT) sensor	If the zone has ducted reheat, install an SAT sensor downstream of the reheat source. The SAT is used in controlling the reheat. If heat is not supplied, install the SAT sensor in the duct on the terminal's leaving air side.
	The SAT determines the air source mode should Linkage communication fail or if the controller is stand-alone. See *Air Source Mode Determination* (page 59) for details.

[1] To configure the control program for the desired user interaction with the sensor, see the *Wireless Sensors Application Guide*. For detailed instructions, see the *Wireless Sensors Installation Guide*.

[2] For basic user instructions, see the *ZS Sensor User Guide*. For detailed installation instructions, see the *ZS Sensors Installation Guide*.

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Zone airflow control

The VAV Zone II provides pressure-independent zone temperature control by modulating its damper actuator to control the flow of primary air into the zone. The controller uses PID control to calculate the airflow setpoint based on the air source mode and the difference between the zone's temperature and setpoints.

The air source mode determines if the primary air can meet the zone's need. If the zone controller is in a linked system, the air source mode is determined by the air source. If the zone controller is stand-alone or if linkage communication fails, the mode is determined by the controller's SAT sensor. See *Air source mode determination* (page 59). If the air source mode is the same as the zone's required mode, the damper is positioned so as to modulate the airflow setpoint between the mode's configurable minimum and maximum airflow based on the occupancy status of the zone. This minimum insures sufficient minimum airflow at the air source and sufficient ventilation to the zone during occupied periods.

Single duct with reheat – The **Auxiliary Heat Min Airflow** allows an increase of primary airflow across the terminal's ducted heating coil when the terminal operates its local heat. This provides the ability to lower the cooling minimum airflow limits while providing the necessary airflow when the terminal is heating to ensure design load conditions and electric heater minimum airflow.

VAV Reheat – Applicable only to single duct terminals with modulating or SCR Electric heat, when set to enable and reheat is required, the heating device is sequenced first to obtain the **Maximum Heating SAT** before any increase in airflow. When reheat starts, airflow is maintained at the configured minimum occupied value. Once the **Maximum Heating SAT** is reached and, if a further increase in heating capacity is required, then the airflow is increased as needed up to the configured **Auxiliary Heat Min Airflow** value.

Parallel fan terminals – The controller's **Parallel Fan On Value** determines when the fan turns on to increase airflow at the zone's diffusers and prevent cold air from dumping into the zone. This is achieved by increasing the volume and temperature of the air exiting the diffusers. If the zone's airflow control setpoint falls below the **Parallel Fan On Value**, the parallel fan turns on to mix ceiling plenum air with the primary air to increase total airflow and ventilation to the zone. The fan turns off when the airflow control setpoint rises above this value. If the zone requires heat while the AHU fan is off, the damper will close while heating is active to prevent reverse flow out through the terminal inlet.

The fan also starts in Heat mode if the zone is configured for ducted heat as described in *Zone reheat control* (page 52).

Series fan terminals – The fan turns on when the air source fan is on as determined by Linkage or in stand-alone operation by airflow monitoring (the fan is determined to be ON if the measured airflow increases above 20% of the **Cooling Max Airflow** or if the measured airflow is greater than 50% of the current airflow setpoint). When the air source starts operation, there is a fan start delay on transition to occupied, based on the **Power Fail Start Delay**. The terminal's damper fully closes and, after a 15 second delay, the fan starts. This prevents the fan from rotating backwards. Therefore, each series fan box should have a unique power fail restart delay to avoid closing all dampers simultaneously.

Damper Actuator(s) – The VAV Zone II's 45 in/lb (5 Nm) actuator has a 154 second full travel time for 90° operation. For field retrofit applications, the actuator can be adjusted for a damper stroke between 30° and 90°, and it can be configured to move clockwise (default) or counterclockwise.

If the built-in actuator's torque is insufficient for large damper applications, the VAV Zone II's analog output can drive an external, 0-10 volt, high-torque actuator.

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Zone reheat control

The VAV Zone II can be configured for one of the following **Heat Types** to meet the zone's heating requirements:

- Modulating Hot Water/Steam
- Two Position Hot Water/Steam
- Staged Electric Heat (2 stages for VAVB3 with Series/Parallel Fan, 3 stages for Single duct. VAVB1 is 1 stage only.)
- Combination Modulating Baseboard/Staged Electric Heat (2 stages) (2 stages for VAVB3 with Series/Parallel Fan, 3 stages for Single Duct. VAVB1 is 1 stage only.)

All of the above except Combination Modulating Baseboard/Staged Electric Heat can be ducted or non-ducted (baseboard). For ducted type heat, the controller has a configurable **Maximum Heating SAT** for supply air temperature control. The controller monitors the SAT when the terminal's ducted heat operates.

If the network provides the OAT, heating can be disabled if the OAT rises above the configured **Heating Lockout Temperature**.

Modulating Hot Water / Steam Heating Heat – The controller modulates a normally closed or normally open hot water or steam valve connected to the discharge air heating coil. The valve opens and closes as needed to satisfy the zone's heating requirements. For ducted heat, the terminal's heat supplements any heat from the primary air source, but the terminal's SAT is controlled so that it does not exceed the **Maximum Heating SAT** (95°F [35°C] default). For baseboard heating (non-ducted heat), the valve modulates to keep the zone's temperature at the heating setpoint.

Two-Position Hot Water / Steam Heating Heat – The controller operates a normally closed or normally open hot water or steam valve connected to the discharge air heating coil. The valve opens and closes as needed to satisfy the zone's heating requirements. For ducted heat, the terminal's heat supplements any heat from the primary air source, but the terminal's SAT is controlled so that it does not exceed the **Maximum Heating SAT** (95°F [35°C] default). For non-ducted (baseboard) heating, the valve is controlled to keep the zone's temperature at the heating setpoint.

Electric Auxiliary Heat – The controller operates 1, 2, or 3 stages of electric heat. For ducted heat, the terminal's heat supplements any heat from the primary air source, but the terminal's SAT is controlled so that it does not exceed the **Maximum Heating SAT** (95°F [35°C] default). For non-ducted (baseboard) electric heat, the stages are controlled as needed to keep the zone's temperature at the heating setpoint.

SCR Electric Heat – The controller modulates an SCR heat output connected to the SCR electric heat control input. The output increases as needed to satisfy the zone's heating requirements. For ducted heat, the terminal's heat supplements heat from the primary air source, if it is in heating mode and is controlled so that the SAT does not exceed the **Maximum Heating SAT** (95°F [35°C] default). For baseboard heating (non-ducted heat), the SCR heat output modulates to keep the zone's temperature at the heating setpoint.

Combination Modulating Baseboard / Electric Heat – The controller can modulate a normally closed or normally open hot water or steam valve connected to a perimeter baseboard radiation system and control up to 2 stages of ducted electric heat. The valve modulates as needed to satisfy the zone's heating requirements. If the valve cannot meet the load, then the terminal's ducted electric heat is used. The terminal's electric heater supplements any heat from the primary air source, but the terminal's SAT is controlled so that it does not exceed the **Maximum Heating SAT** (95°F [35°C] default).

CV Modulating Heat – The controller can modulate a normally closed or normally open hot water or steam or steam valve connected to a perimeter baseboard radiation system or discharge air heating coil. The valve modulates as needed to keep the zone's temperature at the heating setpoint. For ducted applications, the terminal's SAT is controlled so that it does not exceed the **Maximum Heating SAT** (95°F [35°C] default). (Used primarily on single-duct terminals with ducted modulating hot water or steam heat in health care [hospital] applications, where discharge air temperature swings may be problematic. **CV Modulating Heat** may also be used in all non-ducted modulating heating applications.)

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Parallel Fan Heat On Delay – For Parallel Fan terminals only, the controller has a configurable **Parallel Fan Heat On Delay** to save energy. During the delay period (15 minute default), only the fan operates to recycle heat from the ceiling plenum. If the heating requirement is not met by the end of the delay, the auxiliary heat is used.

Fan Heat Off Delay – For fan-powered terminals, the controller has a configurable **Fan Off Delay**. After the heating coil is de-energized, the fan continues to run for the length of the delay to deliver to the zone any heat stored in the coil. The default delay of 120 seconds is optimal for a ducted hot water coil. For ducted electric heat coils, the nominal delay is approximately 45 seconds. For baseboard and non-ducted heat, the delay should be set at 0.

This feature applies to parallel fan terminals in both occupied and unoccupied mode and series fan terminals in the unoccupied mode if the air source fan is off.

Demand control ventilation (DCV) and dehumidification using optional sensors

The VAV Zone II's **RH/CO2** input supports an optional CO2 sensor or Relative Humidity (RH) sensor. The sensor can have a 5-volt maximum output. The range is configurable as either 0–5 or 1–5 volts (1–5 volt supports 4–20 mA sensors with a 250 ohm resistor). The controller's low and high sensor input configuration allows for a wide range of sensors.

You can also connect ZS Sensors with CO_2 and/or RH to the VAV Zone II's **Rnet**. If you have more than one sensor, the controller determines DCV and dehumidification based on the highest sensor value and not the average. You can adjust this in the i-Vu application or Field Assistant.

The controller can also support both DCV and dehumidification functions by using a system RH or CO_2 sensor input connected to another controller.

NOTE If the connected sensor and/or system sensor value are to be used by the air source through Linkage, set the appropriate control type to **Enable**. If you do not need local control at the zone, set **DCV Max Vent Airflow** or **Maximum RH Override Airflow** to 0.

Demand Control Ventilation (DCV) – Requires CO2 sensor

The zone controller monitors the CO2 sensor and can override the temperature control to respond to increasing CO2 levels when the zone is occupied. If the sensor's value remains below the **DCV Start Ctrl Setpoint**, the **Occupied Min Airflow** setpoint provides the base ventilation rate as defined by ASHRAE. As the CO2 level exceeds the **DCV Start Ctrl Setpoint** and the air source is in cooling or ventilation mode, the controller increases airflow to the zone starting at the **Occupied Min Airflow** and then proportionally increases ventilation as the CO2 level increases. If the sensor's value exceeds the **DCV Max Ctrl Setpoint**, the controller maintains the **DCV Max Vent Airflow** until the zone's CO2 level decreases.

When the zone is unoccupied, the **Unoccupied Min Airflow** provides the base ventilation as required.

If the controller is configured for auxiliary heat, the controller will maintain the zone's temperature at a heating setpoint that is temporarily increased to a value halfway between the heating and cooling setpoints when DCV is active. This prevents an excessive drop in zone temperature caused by the additional ventilation. If auxiliary heat is not available, the **DCV Max Vent Airflow** setpoint should be readjusted to prevent overcooling or set to 0 to disable DCV at the zone.

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Dehumidification – Requires RH sensor

The zone controller monitors the RH sensor and can provide dehumidification if the sensor's value exceeds the **Occupied RH Control Setpoint** and the zone is occupied. If the zone is occupied, does not require heating, and the air source is operating in a cooling mode, the controller will override the temperature control to increase airflow to the zone. The primary air must have a sufficiently low dew point for dehumidification to function properly. During the dehumidification mode, the heating setpoint is temporarily increased to a value halfway between the heating and cooling setpoints to prevent overcooling in the zone. The controller uses a PID control loop to provide dehumidification. If auxiliary heat is not available, the **Maximum RH Override Airflow** should be readjusted to prevent overcooling or set to 0 to disable Dehumidification at the zone.

NOTE If both control functions are enabled, the zone will control to the greatest calculated minimum cfm (liters/second) airflow value of the three functions (temperature, RH, or IAQ).

Occupancy

The VAV Zone II's operation depends on the zone's occupancy state as determined by occupancy schedules or a remote occupancy override.

Occupancy Schedules – An occupancy schedule can be one of the following:

- A local schedule set up directly in the controller using a touchscreen or Field Assistant.
- A network schedule from an i-Vu® internal router. The VAV Zone II must be networked to an i-Vu® Open Router or an i-Vu® internal router.
- A **System Occupancy** network point. This point links the controller occupancy to another controller in the network so that multiple zones can follow the occupancy of another VAV Zone or other controller on the network.

To set up occupancy schedules, you first define a schedule for each day of the week and then define schedules for the exceptions, such as holidays. The exceptions can be based on a date, a date range, or a week and day.

NOTES

- The **Occupancy Schedules** property must be enabled (default).
- A network schedule downloaded from the i-Vu® application will overwrite a local schedule that was set up in a touchscreen or Field Assistant.

Remote Occupancy Override – The controller monitors its **Remote** input that is typically connected to the isolated, dry contact of an occupancy sensor located in the zone. (To use the occupancy override as described here, the **Standby Offset** value must be set to zero.) The controller can override the occupancy state based on whether or not the space is actually occupied. If the occupancy sensor contact is in the same state as **Occ Override Normal Logic State** setting, the zone follows its normal occupancy schedule. If the contact is in the opposite state, it overrides the zone into the unoccupied mode. The input can be configured for normally closed or normally opened contact types and is set to Open by default so that it does not affect the controller occupancy operation if left unused.

The **Remote** input can also be used to expand the setpoints during occupied periods without affecting the occupancy status of the zone. When the zone is occupied and the **Remote** input senses the occupant has left the zone, if a value greater than zero has been entered for the **Standby Offset**, then the occupied setpoints will be expanded by that number of degrees. This provides the ability to save energy but recover more rapidly rather than having the zone go unoccupied.

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Learning Adaptive Optimal Start – This function gradually adjusts the unoccupied setpoints over a specified period of time to achieve the occupied setpoint by the time scheduled occupancy begins. This learning adaptive algorithm uses the **learned heating capacity** and **learned cooling capacity** values to calculate the effective setpoints prior to the occupied start time. The algorithm calculates a learned cooling and heating capacity during the previous unoccupied time. Set the **Learning Adaptive Optimal Start** recovery period from 1 to 4 hours in **Optimal Start**. When the **Learning Adaptive Optimal Start** routine runs, adjustments are based on the color that is achieved when occupancy begins. Adjustment amounts are defined in the thermographic color fields located directly above the **Effective Setpoints** graph under **Setpoints**.

BAS On/Off – This function allows third party control of the controller occupancy. **Occupancy Schedules** must be set to **Disable** to use this function. When set to **Occupied** or **Unoccupied**, **Optimal Start** is automatically disabled.

For additional information on ZS Sensor occupancy and override settings, see *Maintenance* (page 93) Points and Properties.

Alarms

Space Temp Sensor Alarm – The VAV Zone II monitors each space temperature sensor and the network input for space temperature. If no valid space temperature value is available, the controller generates an alarm and disables all local heating or cooling. The controller modulates the damper to the minimum heat, minimum cool, or ventilation position based on the air source mode. Normal operation resumes when the controller detects a valid sensor value.

Space Temperature Alarm – The controller generates an alarm if the space temperature exceeds the alarm setpoint. The occupied alarm setpoints are determined from the configurable **Occupied Alarm Hysteresis** (5Δ°F [2.8Δ°C) default) which is subtracted from the configured occupied heat and added to the configured occupied cool setpoints. If the space temperature rises above or falls below this value and the condition lasts for more than 15 minutes, an alarm is generated. The configurable unoccupied high and low alarm setpoints have a fixed 10 minute alarm delay. When a transition from unoccupied to occupied occurs or the occupied temperature setpoints are changed, causing an immediate alarm condition, the controller automatically calculates an additional alarm delay equal to 10 minutes for each degree of change. This additional delay is added to the 15 minute fixed delay and allows the space temperature to recover and achieve the new setpoints, preventing unnecessary alarms. The space temperature alarm returns to normal when the space temperature again falls between the current mode's alarm setpoints.

Supply Air Temperature Alarm – The controller generates an alarm if the SAT exceeds the configured **High SAT Alarm Limit** (120°F [48.9°C] default) or falls below the **Low SAT Alarm Limit** (45°F [7.2°C] default) for more than 5 minutes. The hysteresis for return to normal is 3Δ°F (1.7Δ°C). The **High SAT Alarm Limit** should be set to a value at least 15Δ°F (8.3Δ°C) above the **Maximum Heating SAT** or the maximum discharge temperature from the air source, whichever is greater.

Space Relative Humidity Alarm – If **Optional Ctrl Type** is set to **RH Control** (Space Relative Humidity (RH) sensor is installed), the controller generates an alarm if the sensor's value exceeds the **Occ High RH Alarm Limit** (100% rh default) or the **Unocc High RH Alarm Limit** (100% rh default). The controller provides a 30-minute alarm delay during unoccupied periods. During occupied periods, the controller uses the **Occ High RH Alarm Limit**. When a transition from unoccupied to occupied occurs or the occupied high alarm limit is lowered causing an alarm condition to occur, the controller automatically calculates an alarm delay equal to 5 minutes for each % RH of change. This additional delay is added to the 15 minute fixed delay and allows the space relative humidity to recover and achieve the new setpoints, preventing unnecessary alarms.

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Indoor Air Quality Alarm – If **Optional Ctrl Type** is set to **IAQ Control** (CO_2 sensor is installed), the controller generates an alarm during occupied periods if the sensor's value exceeds the **Occupied High CO2 Alarm Limit**. When a transition from unoccupied to occupied occurs, or if the occupied alarm limit is changed to a value that causes an alarm condition to occur, the controller automatically calculates an alarm delay equal to 15 seconds for each ppm of change based on the error from setpoint (15 minutes minimum, 4 hours maximum). This delay prevents unnecessary alarms and gives the zone time to correct the alarm condition. To disable the IAQ alarm, set **Occupied High CO2 Alarm Limit** to 0. The default value is 1100ppm. The hysteresis for return to normal is 100ppm.

Filter Alarm – For series or parallel fan-powered terminals, the controller monitors the accumulated hours of fan operation and generates an alarm when accumulated hours exceed the configured **Filter Service Alarm Timer** limit. The default value is 0 hours which disables the alarm. The alarm can be reset by setting **Reset Filter Alarm** to On or resetting the configured alarm limit to 0 hours.

Airside Linkage Alarm – The slave zone controller generates an alarm if it has once been linked successfully to a master zone and then it fails to receive linkage information for 5 minutes. If the controller is the VVT Master, it generates an alarm if it does not communicate with its air source for 5 minutes after having been previously communicating successfully. A return-to-normal is generated after successful Linkage communication resumes. A power cycle will reset and re-initialize the **Airside Linkage Alarm**.

The ZS Pro with display has alarm and maintenance indicators. See *Alarm Configuration* (page 83).

Demand limiting

Demand limiting is a cost-saving strategy to reduce energy consumption. The strategy expands the setpoints when the system reaches one of 3 levels of consumption. With the expanded setpoints, the equipment works less, thereby saving energy.

If the VAV Zone II receives a demand limit signal through the network, it expands its setpoints based on the demand level. The default amounts are:

- Demand Level 1: 1Δ°F (.6Δ°C)
- Demand Level 2: 2Δ°F (1.1Δ°C)
- Demand Level 3: 4Δ°F (2.2Δ°C)

Linkage

The i-Vu® Control System uses linkage to exchange data between the zone terminals and their air source to form a coordinated HVAC system. The system's air source controller, zone controllers, and bypass controller (if applicable) are linked so that their data exchange can be managed by one zone controller configured as the Master.

The basic linkage process is as follows:

1 The Master gathers data from the slave zone controllers such as occupancy status, setpoints, and space temperature.

2 The Master performs mathematical calculations and algorithms on the data.

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3 The Master sends the composite information to the air source.

4 The air source returns information such as mode, supply air temperature, and outside air temperature, if present.

5 The Master passes that information to all slave zone controllers.

The following sections detail the process for VAV Systems and VVT Systems.

VAV Systems

The VAV Master continuously scans the system and gathers the following information from each zone:

- Setpoints and space temperature
- Zone size
- Occupancy status
- Damper position
- RH and CO_2 values (if applicable)

The VAV Master then does the following calculations and sends the results to the air source.

- If any zone is occupied, the system's occupancy status is set to occupied.
- If the system is occupied, it averages the space temperatures from all occupied zones using their normal terminal size at 1" (.249 kpa) VP to apply a weighting factor to that average (OCCSPT).
- It performs this same weighted average space temperature calculation for all the zones in the system (SPT).
- If no zone is occupied, it sets the occupied space temperature to “?“. ("?" only displays on the **Details** tab of the Collector microblock and the Linkage status section of the **Properties** page.)
- It calculates 4 weighted average setpoints:
  - the occupied heating weighted average setpoint (OHSP)
  - occupied cooling weighted average setpoint (OCSP)
  - the weighted average unoccupied heating setpoint (UHSP)
  - unoccupied cooling setpoint (UCSP).
- If the zones supply CO_2 or RH values, it calculates either a maximum or average value as determined by the configuration for each.

The air source determines its operating mode from the information received, and then sends the following to the Master:

- Air source mode
- Supply air temperature
- Outside air temperature
- Static pressure (if applicable)

The air source verifies the mode by comparing its supply air temperature to the space temperature received through linkage. See the air source documentation for operation and parameters used to verify its mode. This verification allows the system to verify that the stated air source mode is actually being provided. For example, if the air source heat has failed, the air source's actual mode would not indicate heat unless that mode was verified by the equipment’s supply air temperature.

The VAV Master continuously evaluates all zones and processes their data as described above. The system switches modes only if the equipment mode changes.

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VVT Systems

A VVT Master determines system operation by prioritizing heating and cooling requirements from all the zones based on their occupancy, demand, and damper size.

The VVT Master continuously scans the system to determine if any zones are occupied. If any zones are occupied, the VVT Master evaluates the occupied zones' heating or cooling demands to determine the following:

- The system mode. The mode is:
    - Cooling if the number of occupied zones with cooling demands exceeds the number of occupied zones with heating demands, and the demand is greater than or equal to the number of configured Linkage Callers.
    - Heating if the number of occupied zones with a heating demand exceeds or is equal to the number of Linkage Callers.
- The reference zone, the zone with the greatest demand for the system mode

If no zones are occupied or no occupied zones require heating or cooling, the VVT Master performs the evaluation described above for the unoccupied zones.

The VVT Master then sends the following information to the air source:

- The setpoints and space temperature from the zone with the reference zone
- The system occupancy status
- Most open damper position from any zone
- RH and CO_2 values (if applicable)

The air source then sends to the VVT Master:

- The air source mode
- Supply air temperature
- Outside air temperature (if applicable)
- Static pressure (if applicable)

The air source verifies the mode by comparing its supply air temperature to the space temperature received through Linkage. See the air source documentation for operation and parameters used to verify its mode. This verification determines if the desired air source mode is being provided. For example, if the VVT Master requests heating but the air source does not have heat or its heat has failed, the verification indicates this. The actual current mode is sent to the zones so that they can control accordingly.

The system remains in that mode until all zones of that demand are satisfied or until the System Mode Reselect Timer (30 minute factory default) causes a forced re-evaluation of the system. If there is no demand for the opposite mode or the demand is smaller than the current mode, the reselect timer is reset to 30 and the current mode continues until all zones are satisfied or until the reselect timer expires, repeating the process. If there is a demand for the opposite mode, the VVT Master sends the new reference zone's space temperature and setpoints for the opposite mode to the air source and restarts the reselect timer. The air source re-evaluates this data and then attempts to provide the air required by the new information. The amount of time it takes to switch modes is determined by the air source’s operating parameters.

The VVT Master continuously evaluates the system and updates the air source with the most current system demand. Based on the evaluation, the reference zone can change from one zone to another. The evaluation process continues until there is no demand from any zone or the 30 minute timer causes a re-evaluation of the system conditions.

If no heating or cooling is required or the current air source mode is satisfied, the VVT Master calculates:

- The weighted average of the occupied and unoccupied heating and cooling setpoints
- A space temperature that is midway between the setpoints (occupied or unoccupied based on the system’s current occupancy status).

This information, plus the occupancy status, is sent to the air source so that its current mode is disabled and the unit ceases heating or cooling operation. If the system is occupied, the air source fan and OA damper, if applicable, operate to maintain proper ventilation.

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Linkage modes and determination

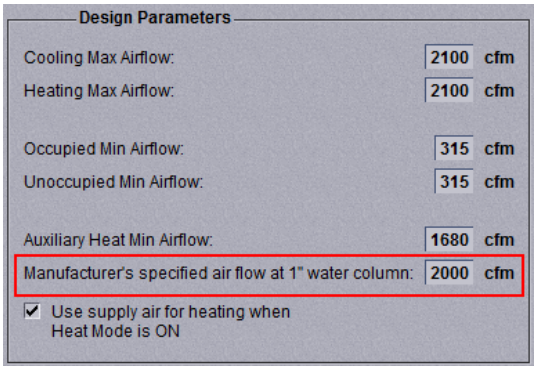
Linked air source modes – In a linked system, the air source determines its operating mode and qualifies that mode based on its own SAT. The following modes can be sent by the air source depending on its capability and configuration:

OFF	Air source fan is off. Terminal damper is positioned approximately 70% open to allow for system restart.
WARMUP	Air source fan is on and providing first cycle of heat when changing from unoccupied to occupied. It may also be used as an equipment safety to increase system airflow. The terminal's heating setpoint temporarily increases to the midpoint between the configured occupied heating and occupied cooling setpoints.
HEAT	Air source fan is on and providing heat. The terminal modulates its primary air damper to maintain the current heating setpoint.
FREECOOL	Air source fan is on and providing cooling using only the economizer and usually during an unoccupied period. The terminal modulates its primary air damper to maintain the midpoint between the configured occupied heating and occupied cooling setpoints.
COOL	Air source fan is on and providing cooling. The terminal modulates its primary air damper to maintain the current cooling setpoint.
PRESSURIZATION	Air source supply fan is on usually as a result of a fire-life safety input being active. It may also be used as an equipment safety to increase system airflow. The terminal modulates its primary air damper to provide the configured maximum cooling airflow.
EVACUATION	Evacuation is usually the result of a fire-life safety input at the air source being active. The terminal fully closes its primary air damper and disables its terminal fan, if equipped.
VENT	All terminals treat VENT mode the same as the COOL mode. For VVT terminals, VENT modes allows for an increase in airflow. VVT terminals use the greater of the configured Vent Damper Position or the Minimum Cooling Damper Position as the minimum during the VENT mode.

See the air source's installation manual for more specific operation.

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Local air source modes – If the zone controller is stand-alone or if linkage communication fails, the zone controller monitors the cfm (liters/second) for fan status and its SAT sensor to determine if the primary air source is providing heating, cooling, or recirculating air in a fan-only or ventilation mode.

HEAT	For Series or Parallel Fan controllers when the zone terminal fan is off or for single duct controllers: The zone's local heat has not operated for at least 5 minutes, and the SAT is more than 5Δ°F (2.8Δ°C) warmer than the space temperature. If the terminal fan is on, the SAT must be more than 8Δ°F (4.4Δ°C) (warmer than the space temperature. In all cases, Heat mode is maintained until the SAT drops 2Δ°F (1.1Δ°C) below the space temperature.
VENT	The zone's local heat has not operated for at least 5 minutes and the SAT is between 65°F (18.3°C) and 80°F (26.6°C).
COOL	The zone's local heat has not operated for at least 5 minutes, the current mode is not Heat, and the SAT is less than 65°F (18.3°).
OFF	Terminal airflow is used determine if the primary air source fan is on or off. If the terminal's Damper Position is greater than 95% and the cfm (liters/second) is less than 10% of **Nominal CFM*** (liters/second) at 1" (.249 kpa) Velocity Pressure for 1 minute and the cfm (liters/second) Setpoint is not equal to 0, then the fan is determined to be off. If cfm (liters/second) is greater than 20% of the **Nominal CFM*** (liters/second) at 1" (.249 kpa) Velocity Pressure, or greater than 50% of cfm (liters/second) Setpoint for 10 seconds (whichever is greater), then the fan is determined to be on. Occupied/Unoccupied Min CFM (liters/second) must be set for greater than 10% of Max Cool cfm (liters/second). * Shown on **Properties** page as **Manufacturer's specified air flow at 1" water column:** for both English and Metric applications. English: Use manufacturer's cfm at 1" water column Metric: Use manufacturer's liters/second at .249 kpa  **NOTE** A local air source fan mode of OFF usually cannot be detected on series fan boxes. This is because the terminal's series fan, when operating with the terminal damper open, usually creates enough primary airflow to prevent the control from properly detecting that the air source is off.

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Zone Environmental Index

The i-Vu® Control System uses Environmental Index (EI) to calculate a real-time numerical EI value for a zone based on ideal **Occupied** space temperature, optional relative humidity (RH) and/or CO2. Environmental Index determines the source(s) derating the EI value by continuously evaluating **Occupied** zone conditions. **EI Decreased By** displays the source(s) derating the EI value. The **EI Space Temp Setpoint Tolerance** 0.5Δ°F (0.28Δ°C) is subtracted from **Effective Heat Setpoint** and is added to **Effective Cool Setpoint**, expanding the ideal EI temperature sensitivity range. The EI is derated from the initial **Occupied** value of 100% if the space temperature deviates from the ideal EI temperature sensitivity range.

NOTE The **EI Space Temp Setpoint Tolerance** does not affect the controlling space temperature **Effective Heat Setpoint** or **Effective Cool Setpoint**.

The optional RH and/or CO2 values derate the EI value when they deviate from their setpoints.

- If **RH Control** is set to **Enable**, the EI is derated when the RH value is less than the **EI Humidity Low Limit** or when the RH value is greater than the **Occupied RH Control Setpoint**.
- If **DCV Control** is set to **Enable**, the EI is derated by CO2 if the value exceeds the **DCV Max Ctrl Setpoint**.

If a zone is **Unoccupied**, the EI will calculate a value of 0%.

EI Time Satisfied is the percentage of **Occupied** time which a zone maintains an EI value of 70% or higher.

Weighted EI determines the priority of a zone in an EI roll-up, which must be completed using a different control program. The value is determined by multiplying the real-time EI value by the **EI Weighting Factor**.

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To adjust the driver properties

Use the following if you want to change the driver's properties in the i-Vu® interface.

1 On the i-Vu® navigation tree, right-click the VAV Zone II and select **Driver Properties**.

2 Make changes as needed on the **Properties** page for **Driver** and any of its children.

Driver

On the **Driver** page > **Settings** tab, you can change the Module clock synchronization and failure. See table below.

TouchScreen Control	
TouchScreen Schedule Edit Enable	This field is checked automatically to allow a user to edit this controller's schedules from an Equipment Touch's Schedules screen. Uncheck to disable.
Module Clock	
Clock Fail Date and Time	Date and time the control program uses when controller's time is invalid.  **TIP** Use an occupied date and time (such as a Tuesday at 10 a.m.) so the equipment does not operate in unoccupied mode if the controller loses power during occupancy.
Time Synch Sensitivity (seconds)	When the controller receives a time sync request, if the difference between the controller's time and the time sync's time is greater than this field's value, the controller's time is immediately changed. If the difference is less than this field's value, the controller's time is slowly adjusted until the time is correct.
Network Microblocks	
Number of poll retries before Network Input Microblocks indicate failure	The maximum number of retries after the initial attempt that a Network microblock will attempt to communicate with its target device. If unsuccessful, the point will transition to an idle state for 30 seconds before attempting to communicate again. Change this field only if directed by Technical Support.
Periodic rebinding interval	If a microblock uses a wildcard in its address, this timer determines how often the microblock will attempt to find the nearest instance of its target. For example, if an outside air temperature address uses a wildcard, a VAV application will look for the outside air temperature on the same network segment or on the nearest device containing that object.

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BACnet COV Throttling	
Enable COV Throttling	Under normal circumstances, COV Throttling should be enabled to prevent excessive network traffic if an object's COV Increment is set too low. See EXCEPTION below. When enabled, if an object generates excessive COV broadcasts (5 updates in 3 seconds), the driver automatically throttles the broadcasts to 1 per second. Also, if the object's value updates excessively for 30 seconds, an alarm is sent to the i-Vu® application listing all objects that are updating excessively. A Return-to-normal alarm is sent only after all objects have stopped updating excessively. EXCEPTION: In rare circumstances, such as process control, a subscribing object may require COV updates more frequently than once per second. For these situations, clear this checkbox, but make sure that your network can support the increased traffic. You will also need to disable the **Excessive COV** alarms under the driver's **Common Alarms**.
Trend Sampling	
Collect a daily midnight sample for all points in this controller that are sampling on COV	For values that change infrequently, select to verify at midnight daily that the point is still able to communicate trend values.

Device

On the **Device** page, you can view the following properties:

- BACnet device object properties for the VAV Zone II
- VAV Zone II network communication

Configuration	**NOTE** The three APDU fields refer to all networks over which the VAV Zone II communicates.
Max Masters and Max Info Frames	Apply only if the VAV Zone II is on an MS/TP network.

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Notification Classes

Alarms in the i-Vu® application use Notification Class #1. A BACnet alarm's Notification Class defines:

- Alarm priority for Alarm, Fault, and Return to Normal states
- Options for BACnet alarm acknowledgment
- Where alarms should be sent (recipients)

Priorities	**NOTE** BACnet defines the following Network message priorities for Alarms and Events.	
	Priority range	**Network message priority**
	00–63	Life Safety
	64–127	Critical Equipment
	128–191	Urgent
	192–255	Normal
Priority of Off-Normal	BACnet priority for Alarms.	
Priority of Fault	BACnet priority for Fault messages.	
Priority of Normal	BACnet priority for Return-to-normal messages.	
Ack Required for Off-Normal, Fault, and Normal	Specifies whether alarms associated with this Notification Class require a BACnet Acknowledgment for Off-Normal, Fault, or Normal alarms. **TIP** You can require operator acknowledgment for an Alarm or Return-to-normal message (stored in the i-Vu® database). In the i-Vu® interface on the **Alarm** > **Enable/Disable** tab, change the acknowledgment settings for an alarm source or an alarm category.	
Recipient List		
Recipients	The first row in this list is from the i-Vu® application. Do not delete this row. Click **Add** if you want other BACnet devices to receive alarms associated with this Notification Class.	
Recipient Description	Name that appears in the **Recipients** table.	
Recipient Type	Use **Address** (static binding) for either of the following: • Third-party BACnet device recipients that do not support dynamic binding • When you want alarms to be broadcast (you must uncheck **Issue Confirmed Notifications**). This use is rare.	
Days and times	The days and times during which the recipient will receive alarms.	
Recipient Device Object Identifier	Type the **Device Instance** from the network administrator for third-party devices in the **#** field.	
Process Identifier	Change for third-party devices that use a BACnet Process Identifier other than 1. The i-Vu® application processes alarms for any 32-bit Process Identifier.	
Issue Confirmed Notifications	Select to have a device continue sending an alarm message until it receives delivery confirmation from the recipient.	
Transitions to Send	Uncheck the types of alarms you do not want the recipient to get.	

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Calendars

Calendars are provided in the driver for BACnet compatibility only. Instead, use the **Schedules** feature in the i-Vu® interface.

Common Alarms

On these pages, you can enable/disable, change BACnet alarm properties, or set delays for the following BACnet alarms:

Common alarms:

- Module Halted
- All Programs Stopped
- Duplicate Address
- Locked I/O
- Control Program
- Program Stopped
- Excessive COV

Module Generated Alarm	
Description	Short message shown on the i-Vu® **Alarms** page or in an alarm action when this type of alarm is generated.
Events	
Alarm Category and Alarm Template	See *Alarms* in i-Vu® Help.
Enable	Clear these checkboxes to disable Alarm or Return to normal messages of this type from this controller.
Notification Class	Do not change this field.

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Specific Events

On these pages, you can enable/disable, change BACnet alarm properties, or set delays for the following BACnet alarms:

Specific alarms:

- Flow Control Alarm
- Reheat Valve Alarm

NOTE To set up alarm actions for controller generated alarms, see *Alarms* in i-Vu® Help.

Controller Generated Alarm	
Description	Short message shown on the i-Vu® **Alarms** page or in an alarm action when this type of alarm is generated.
Events	
Alarm Category and Alarm Template	See *Alarms* in i-Vu® Help.
Enable	Clear these checkboxes to disable Alarm or Return to normal messages of this type from this controller.
Notification Class	Do not change this field.

Switches, Jumpers, Options

The **Switches, Jumpers, Options** page shows the current physical settings on the VAV Zone II.

Flow Calibration Archive

The **Flow Calibration Archive** page shows measured flow and sensor readings that were entered in the i-Vu® Test and Balance tool.

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Act Net Network Details

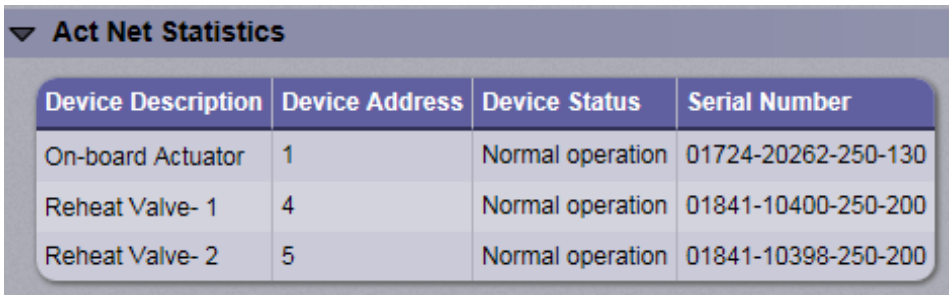
Act Net Statistics

The actuator and valve serial numbers are automatically detected and displayed in the driver properties in the i-Vu® interface when the controller is powered up. Only those devices that are physically connected or in the control program will show in the table on the Act Net Network Details page.

NOTE If an Act Net device is not detected, remove it, and reapply power to the controller.

The **Act Net** network assigns Device Address 1 to the VAV Zone II's actuator and Device Address 4 and/or 5 to i-Vu® Smart Valves.

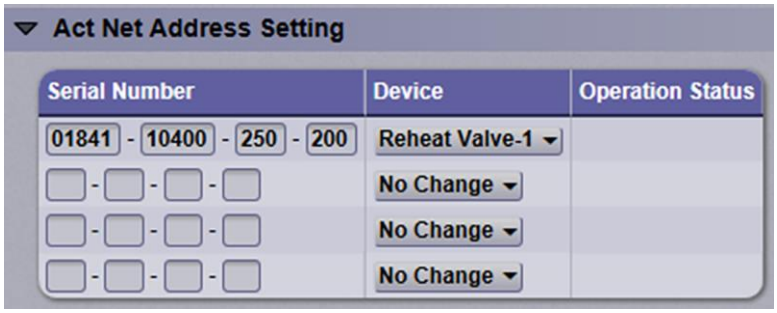
Verify communication with your actuator and valves in **Device Status** on the **Act Net Statistics** table.



To add an i-Vu® Smart Valve

1 Go to **Driver** > **Act Net Network Details** > **Properties** tab > **Act Net Address Setting** section.

2 If the serial number is not displayed, locate it on the actuator and then enter it in the **Serial Number** fields.



3 Select **Reheat Valve-1** or **Reheat Valve-2** from the **Device** drop-down list.
NOTE **Reheat Valve-1** sets to address **4** and **Reheat Valve-2** sets to address **5**.

Click **Accept**. When the changes are applied, the **Operation Status** of the **Act Net Address Setting** table displays **Success**.

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Troubleshooting

If you have problems mounting, wiring, or addressing the VAV Zone II, contact Carrier Control Systems Support.

NOTE To help you troubleshoot, obtain a Module Status (Modstat) from the controller and review the System Error and Warning details.

LED's

The LED's on the VAV Zone II show the status of certain functions. Verify the LED patterns by cycling power to the controller and noting the lights and flashes.

If this LED is on...	Status is...
Power	The VAV Zone II has power.
Rx	The VAV Zone II is receiving data from the network segment
Tx	The VAV Zone II is transmitting data over the network segment
DO#	The digital output is active
CW	The actuator motor is turning clockwise
CCW	The actuator motor is turning counterclockwise

The **Run** and **Error** LED's indicate controller and network status.

If Run LED shows...	And Error LED shows...	Status is...
1 flash per second	1 flash per second, alternating with the **Run** LED	The controller files are archiving. Archive is complete when **Error** LED stops flashing.
2 flashes per second	Off	Normal
2 flashes per second	2 flashes, alternating with **Run** LED	Five minute auto-restart delay after system error
2 flashes per second	3 flashes, then off	The controller has just been formatted
2 flashes per second	4 flashes, then pause	Two or more devices on this network have the same network address
2 flashes per second	1 flash per second	The controller is alone on the network
2 flashes per second	On	Exec halted after frequent system errors, due to: • Controller halted • Program memory corrupted • One or more programs stopped
5 flashes per second	On	Exec start-up aborted, Boot is running
5 flashes per second	Off	Firmware transfer in progress, Boot is running

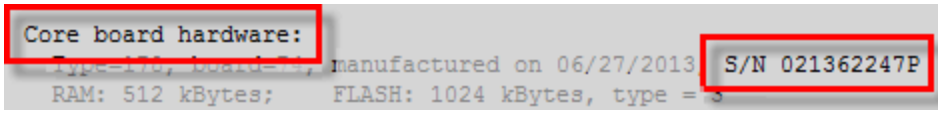
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If Run LED shows...	And Error LED shows...	Status is...
7 flashes per second	7 flashes per second, alternating with **Run** LED	Ten second recovery period after brownout
14 flashes per second	14 flashes per second, alternating with **Run** LED	Brownout
On	On	Failure. Try the following solutions: • Turn the VAV Zone II off, then on. • Download memory to the VAV Zone II. • Replace the VAV Zone II.

NOTE If you resolve the issue but the **Error** LED does not turn off, cycle power to the controller.

To get the serial number

If you need the VAV Zone II's serial number when troubleshooting, the number is on a Module Status report (Modstat) under **Core** (or **Main**) **board hardware**



To obtain a modstat in the i-Vu® interface:

1 Select the VAV Zone II in the navigation tree.

2 Right-click and select **Module Status**.

To restore factory defaults

WARNING This erases all archived information and user-configuration settings. You will have to reconfigure all custom settings. It is recommended to restore the factory defaults only under the guidance of Carrier Control Systems Support.

To erase volatile memory data and restore factory default configuration settings:

1 Pull the screw terminal connector from the controller's power terminals labeled **Gnd** and **24 Vac**. Make sure the address switches are not set to 0, 0.

2 Short the **Format Short pins** jumper's pins and maintain the short for steps 3 and 4.

3 Insert the power screw terminal connector into the VAV Zone II's power terminals.

4 Continue to short the jumper until the **Error** LED flashes three times in sync with the **Run** LED.

5 Remove the short.

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To replace the battery

If the VAV Zone II experiences a power outage and the control program stops functioning, replace the battery.

You need to replace the battery if the voltage measures below 2.9 volts when the controller is not powered.

1 Verify that the VAV Zone II's power is on.

CAUTION If the controller's power is not **on** when replacing the battery, your date, time, and trend data will be lost.

2 Remove the VAV Zone II's cover.

3 Remove the battery from the controller, making note of the battery's polarity.

4 Insert the new battery, matching the battery's polarity with the polarity indicated on the controller's cover.

5 Replace the VAV Zone II's cover.

6 Download the VAV Zone II.

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Compliance

FCC Compliance

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1 This device may not cause harmful interference.

2 This device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT Any changes or modifications not expressly approved by manufacturer could void the user's authority to operate the equipment.

NOTE This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if it is not installed and used in accordance with this document, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CE Compliance

WARNING This is a Class B product. In a light industrial environment, this product may cause radio interference in which case the user may be required to take adequate measures.

BACnet Compliance

Compliance of listed products to requirements of ASHRAE Standard 135 is the responsibility of BACnet International. BTL® is a registered trademark of BACnet International.

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Appendix A: VAV Zone II Points/Properties

NOTE Engineering units shown in this document in the defaults and ranges are strictly for reference. You must enter an integer only.

Status

Navigation: i-Vu® / Field Assistant: **Properties** > **Control Program** > **Status**

Point Name/Description	Range
Terminal Mode – The controller's current operating status.	R: Off Heating Warm-up Vent Cooling Dehumidify Reheat Pressurize Evacuate Shutdown IAQ Override Air Balancing
Terminal Type – The type of zone terminal that the controller is installed on.	R: Single Duct Parallel Fan Series Fan
Space Temperature - Prime Variable – The space temperature value currently used for control.	R: -56 to 245°F (-48.9 to 118.3°C)
Primary Airflow – The current airflow measured through the primary air damper.	R: 0 to 99999 cfm (liters/second)
Damper Position – The current damper position.	R: 0 to 100%
Supply Air Temperature – Displays the current supply air temperature.	R: -56 to 245°F (-48.9 to 118.3°C)
Heating Capacity – The current reheat capacity when the zone is configured for reheat.	R: 0 to 100%
Baseboard Heating Capacity – The current baseboard heat capacity when the zone is configured for Combination Baseboard or Non-ducted Heat.	R: 0 to 100%
Outdoor Air Temperature – The current outdoor air temperature from a linked air source, if available, or from another network source.	R: -56 to 245°F (-48.9 to 118.3°C)

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Point Name/Description	Range
Fan – The status of the terminal fan if **Term Type** is **Parallel Fan** or **Series Fan**.	R: On/Off
Space Relative Humidity – The current space relative humidity if **Service Configuration** > **Hardwired Sensor** is set to **RH Sensor** or, you have a valid ZS RH sensor.	R: 0 to 100%rh
Indoor Air Quality CO2 (ppm) – The current IAQ value if **Service Configuration** > **Hardwired Sensor** is set to **CO2 Sensor** or, you have a valid ZS CO^2 sensor.	R: 0 to 5000ppm
Shutdown – When **Active**, disables all control functions, at normal equipment time delays and maintains minimum airflow.	D: Inactive R: Inactive/Active
Hot Wtr Vlv 1 Cmd - The current commanded position of the Act Net valve.	R: 0 to 100%
Hot Wtr Vlv 1 Pos - The current position of the Act Net valve.	R: 0 to 100%

Unit Configuration

Navigation: i-Vu® / Field Assistant: **Properties** > **Control Program** > **Configuration** > **Unit Configuration**

Point Name/Description	Default/Range
Heat Enable – Enables the reheat function.	D: Enable R: Disable/Enable
Parallel Fan Heat On Delay – Parallel type terminal only. The delay before reheat is enabled after the zone has a heating demand. The terminal fan runs immediately and attempts to meet the heating demand using the heated air from the ceiling plenum.	D: 15 min R: 0 to 60 min
Fan Off Delay – Fan-type terminals only. The amount of time the terminal fan continues to operate after a heating demand is satisfied.	D: 120 seconds R: 0 to 180 seconds
Maximum Heating SAT – The maximum supply air temperature allowed while ducted heat is operating. Ducted type supplemental heat is controlled so that it will not exceed this limit or the configured **High SAT Alarm Limit**. Set the **Maximum Heating SAT** limit to 5°F (2.8°C) above the desired maximum supply air temperature you would expect. Refer to **Alarm Configuration** > **High SAT Alarm Limit** to properly set this parameter.	D: 95°F (35°C) R: 80 to 140°F (26.6 to 60°C)
Maximum RH Override Airflow – The maximum airflow allowed when the RH function overrides the temperature control. When active, the damper modulates to the temperature control requirement or the RH override airflow, whichever is greater. This value is the percentage of the **Maximum Cooling Airflow Setpoint**.	D: 60% R: 0 to 100%

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Point Name/Description	Default/Range
DCV Max Vent Airflow – The maximum airflow allowed when the IAQ function overrides the temperature control. When active, the damper modulates to the temperature control requirement or the **DCV Max Vent Airflow**, whichever is greater. This value is a percentage of the **Maximum Cooling Airflow Setpoint**.	D: 70% R: 0 to 100%
Filter Service Alarm Timer – Fan type terminals only. The amount of time the fan will run before generating a **Filter Alarm**. Set to 0 to disable the alarm.	D: 0 hr R: 0 to 9999 hr
T55 Pushbutton Override – Enables or disables the use of a pushbutton override from a local space temperature sensor.	D: Enable R: Disable/Enable
Setpoint Adjustment – Enables or disables the setpoint adjustment mechanism on the local space sensor.	D: Enable R: Disable/Enable
Setpoint Adjustment Range - The maximum amount that a user can adjust the setpoint on the local ZS or SPT sensor.	D: 2Δ°F (1.1Δ°C)
Heating Lockout Temperature – Supplemental reheat is disabled if outside air temperature exceeds this value. Supplemental reheat is enabled when the outside air temperature falls below a fixed hysteresis of 2Δ°F (1.1Δ°C). This function is active only if there is a valid network outside air temperature.	D: 70°F (21.1°C) R: 35 to 150°F (1.6 to 65.5°C)
Power Fail Restart Delay – How long the controller delays normal operation after the power is restored. This is typically used to prevent excessive demand when recovering from a power failure. Applies to Series Fan start delay when system mode transitions from unoccupied to occupied. A delay of no greater than 120 seconds is recommended for Series Fan applications.	D: 60 seconds R: 0 to 600 seconds
Occupancy Schedules – If **Enabled**, the controller stores and follows a schedule sent over the network or programmed locally through a touchscreen or Field Assistant. If **Disabled**, the controller occupancy is controlled from the **BAS On/Off** or **System Occupancy** network point.	D: Enable R: Disable/Enable
Occ Override Delay – The amount of time the controller remains occupied after the remote occupancy switch returns to the unoccupied position.	D: 15 minutes R: 0 to 240 minutes

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Point Name/Description	Default/Range
Act Net Vlv 1 Max Pos – The maximum position that the Act Net valve will control to.	D: 100% R: 0 to 100%
T55 Override Duration – The amount of time that the controller runs in the occupied mode when a user presses the T55 sensor's override button for 1 to 10 seconds. **Pushbutton Override** must be set to **Enable**.	D: 1 hr R: 1 to 4 hr
Environmental Index Enable – If enabled, when a zone is occupied, it monitors the deviation of space temperature from effective heating and cooling setpoint range. It monitors optional relative humidity if **RH Control** is set to **Enable** and/or monitors CO_2 if **DCV Control** is set to **Enable**.	D: Enable R: Disable/Enable
Local Sensor Calibration	
Space Temperature – The current space temperature.	R: -56 to 245°F (-48.9 to 118.3°C)
Space Temp Calibration – A calibration offset value to allow the local space temperature sensor to be adjusted to match a calibrated standard measuring the temperature in the same location.	D: 0Δ°F/Δ°C R: -9.9 to 10Δ°F (-5.5 to 5.5Δ°C)
Supply Air Temperature – Displays the current supply air temperature.	R: -56 to 245°F (-48.9 to 118.3°C)
Supply Air Temp Calibration – A calibration offset value to allow the supply air temperature sensor to be adjusted to match a calibrated standard measuring the temperature in the same location.	D: 0Δ°F/Δ°C R: -9.9 to 10Δ°F (-5.5 to 5.5Δ°C)
Space Relative Humidity – Displays the current value of relative humidity sensor, if present.	R: 100%0 to 100%
Relative Humidity Calibration – You can enter a calibration offset for the relative humidity. The offset is added to or subtracted from the controller's RH input value, and the calculated value is shown in the **Status** > **Space Relative Humidity**.	D: 0% R: -15 to 15%rh

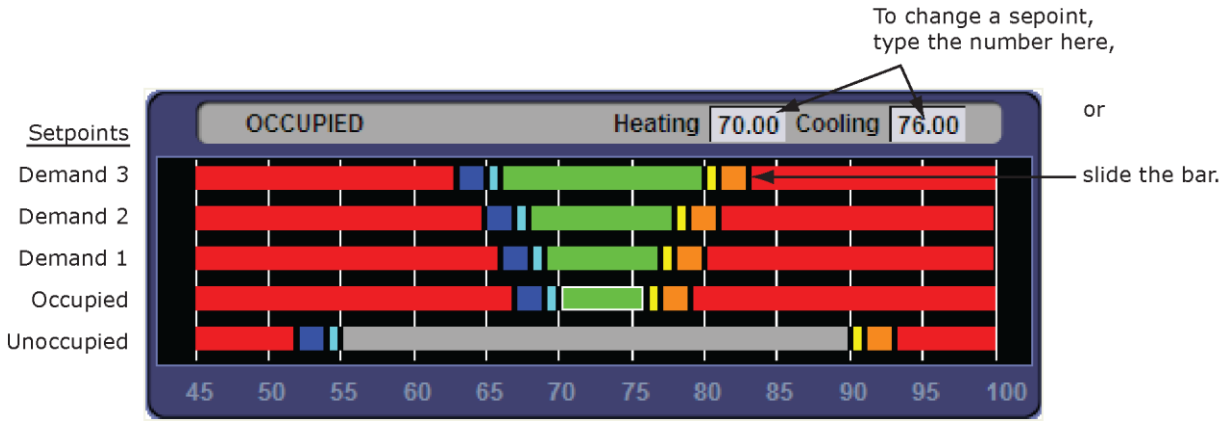
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Setpoints

Navigation: i-Vu® / Field Assistant: **Properties** > **Control Program** > **Configuration** > **Setpoints**

Select a color band on the setpoint graph to see the current setpoints in the **Heating** and **Cooling** fields. The values in this graphic are Fahrenheit. See setpoint descriptions below.

NOTE This graphic is an example only. Your setpoints may differ.



Occupied Setpoints

The occupied setpoints described below are the setpoints under normal operating conditions. The Demand Level 1–3 setpoints apply if demand limiting is used.

Demand limiting is a cost-saving strategy to reduce energy consumption. The strategy expands the occupied heating and cooling setpoints when the system reaches one of 3 levels of consumption. With the expanded setpoints, the equipment works less, thereby saving energy. By default, Demand Level 1 expands the occupied heating and cooling setpoints by 1Δ°F (Δ.5°C), Demand Level 2 by 2Δ°F (1.1Δ°C), and Demand Level 3 by 4Δ°F (2.2Δ°C). If the occupied heating or cooling setpoints change, the (effective) demand level setpoints automatically change by the same amount. See *Sequence of Operation* (page 50) for more information.

Point Name/Description	Default **Range:** -40 to 245°F (-40 to 118.3°C) Occupied		Demand Level 1	2	3
Occupied Heating – Green The heating setpoint the controller maintains while in occupied mode.	D: R:	70°F (21.1°C) 40 to 90°F (4.4 to 32.2°C)	69°F (20.5°C)	68°F (20°C)	66°F (18.9°C)
Occupied Cooling – Green The cooling setpoint the controller maintains while in occupied mode.	D: R:	76°F (24.4°C) 55 to 99°F (12.7 to 37.2°C)	77°F (25°C)	78°F (25.5°C)	80°F (26.6°C)

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Point Name/Description	Default **Range:** -40 to 245°F (-40 to 118.3°C) Occupied	Demand Level 1	2	3
Occupied Heating 1 – Light Blue The space temperature must be less than the **Occupied Heating 1** setpoint for the VVT Master to consider the zone a heating caller in a linked system. In a single-zone application, the heating requirement begins as soon as the space temperature falls below the **Occupied Heating** setpoint. We recommend that the **Occupied Heating 1** value be set no less than 0.5Δ°F (.27Δ°C) below the **Occupied Heating** setpoint.	69°F (20.5°C)	68°F (20°C)	67°F (19.4°C)	65°F (18.3°C)
Occupied Heating 2 – Dark Blue The space temperature must be less than the **Occupied Heating 2** setpoint to generate a low space temperature alarm. We recommend that this value be set no less than 0.5Δ°F (.27Δ°C) below the **Occupied Heating 1** setpoint.	67°F (19.4°C)	66°F (18.9°C)	65°F (18.3°C)	63°F (17.2°C)
Occupied Cooling 1 – Yellow The space temperature must be greater than the **Occupied Cooling 1** setpoint for the VVT Master to consider the zone a cooling caller in a linked system. In a single-zone application, the cooling requirement begins as soon as the space temperature exceeds the **Occupied Cooling** setpoint. We recommend that the **Occupied Cooling 1** value be set no less than 0.5Δ°F (.27Δ°C) above the **Occupied Cooling** setpoint.	77°F (25°C)	78°F (25.5°C)	79°F (26.1°C)	81°F (27.2°C)
Occupied Cooling 2 – Orange The space temperature must be greater than the **Occupied Cooling 2** setpoint to generate a high space temperature alarm. We recommend that this value be set no less than 0.5Δ°F (.27Δ°C) above the **Occupied Cooling 1** setpoint.	79°F (26.1°C)	80°F (26.6°C)	81°F (27.2°C)	83°F (28.3°C)

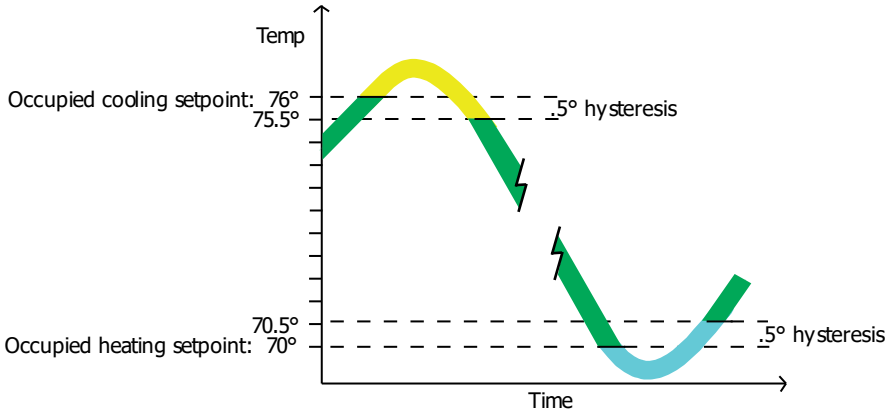
Unoccupied Setpoints	
Point Name/Description	**Default/Range**
Unoccupied Heating – Gray The heating setpoint the controller maintains while in unoccupied mode.	D: 55°F (12.7°C) R: 40 to 90°F (4.4 to 32.2°C)
Unoccupied Cooling – Gray The cooling setpoint the controller maintains while in unoccupied mode.	D: 90°F (32.2°C) R: 45 to 99°F (7.2 to 37.2°C)
Unoccupied Heating 1 – Light Blue The space temperature must be less than the **Unoccupied Heating 1** setpoint for the VVT Master to consider the zone an unoccupied heating caller in a linked system. In a single-zone application, the unoccupied heating requirement begins as soon as the space temperature falls below the **Unoccupied Heating** setpoint. We recommend that the **Unoccupied Heating 1** value be set no less than 0.5Δ°F (.27Δ°C) below the **Unoccupied Heating** setpoint.	D: 54°F (12.2°C) R: 40 to 90°F (4.4 to 32.2°C)

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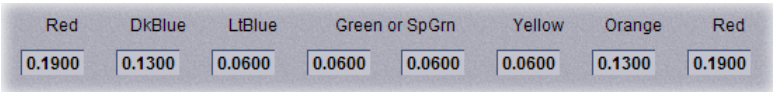
Unoccupied Heating 2 – Dark Blue The space temperature must be less than the **Unoccupied Heating 2** setpoint to generate an unoccupied low space temperature alarm. We recommend that this value be set no less than 0.5Δ°F (.27Δ°C) below the **Unoccupied Heating 1** setpoint.	D: 52°F (11.1°C) R: 40 to 90°F (4.4 to 32.2°C)
Unoccupied Cooling 1 – Yellow The space temperature must be greater than the **Unoccupied Cooling 1** setpoint for the VVT Master to consider the zone an unoccupied cooling caller in a linked system. In a single-zone application, the unoccupied cooling requirement begins as soon as the space temperature exceeds the **Unoccupied Cooling** setpoint. We recommend that the **Unoccupied Cooling 1** value be set no less than 0.5Δ°F (.27Δ°C) above the **Unoccupied Cooling** setpoint.	D: 91°F (32.7°C) R: 45 to 99°F (7.2 to 37.2°C)
Unoccupied Cooling 2 – Orange The space temperature must be greater than the **Unoccupied Cooling 2** setpoint to generate an unoccupied high space temperature alarm. We recommend that this value be set no less than 0.5Δ°F (.27Δ°C) above the **Unoccupied Cooling 1** setpoint.	D: 93°F (33.9°C) R: 45 to 99°F (7.2 to 37.2°C)

Point Name/Description	**Default/Range**
Heating Capacity – Used for Optimal Start, this is the rate at which the space temperature changes when the heating system runs at full capacity to maintain designed occupied heating setpoint.	D: 3Δ°F (1.6Δ°C)/hr R: 0 to 120Δ°F (0 to 66.6Δ°C)/hr
Heating Design Temp – The geographically-based outdoor air temperature at which the heating system must run constantly to maintain comfort. This information is available in ASHRAE publications and most design references.	D: 0°F/C R: -100 to 150°F (-73.3 to 65.5°C)
Cooling Capacity – Used for Optimal Start, this is the rate at which the space temperature changes when cooling system runs at full capacity to maintain designed occupied cooling setpoint.	D: 3Δ°F (1.6Δ°C)/hr R: 0 to 140Δ°F (0 to 77.7Δ°C)/hr
Cooling Design Temp – The geographically-based outdoor air temperature at which the cooling system must run constantly to maintain comfort. This information is available in ASHRAE publications and most design references.	D: 100°F (37.7°C) R: -100 to 150°F (-73.3 to 65.5°C)

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Hysteresis – The desired difference between the temperature at which the zone color changes as the space temperature departs from the acceptable range between the heating and cooling setpoints (green) into the Cooling 1 (yellow) or Heating 1 (light blue) and the temperature at which the zone color changes back to the acceptable range between the heating and cooling setpoints. For example, the following graph shows the zone color that results as the space temperature departs from and returns to the acceptable range in a zone with the following settings: • Color Change Hysteresis = .5Δ°F (.27Δ°C) (applies as the temperature returns to the acceptable range) • Occupied cooling setpoint = 76°F (24.4°C) • Occupied heating setpoint = 70°F (21.1°C) **NOTE** The values in the graph below are Fahrenheit.  	D: .5Δ°F (.27Δ°C) R: 0.2 to 1.0Δ°F (.1 to .5Δ°C)

Learning Adaptive Optimal Start



When the Learning Adaptive Optimal Start algorithm runs, the learned heating capacity or learned cooling capacity values are adjusted based on the color that is achieved when occupancy begins. The adjustment amounts for each color are displayed in the thermographic color fields (shown above with English default values).

Point Name/Description	Range English	Metric
Red – The amount the zone's learned heating capacity is adjusted when the Learning Adaptive Optimal Start algorithm runs, when the zone's thermographic color at occupancy is red.	D: 0.1900 R: 0 to 1	.1055
DkBlue – The amount the zone's learned heating capacity is adjusted when the Learning Adaptive Optimal Start algorithm runs, when the zone's thermographic color at occupancy is dark blue.	D: 0.1300 R: 0 to 1	.0722
LtBlue – The amount the zone's learned heating capacity is adjusted when the Learning Adaptive Optimal Start algorithm runs, when the zone's thermographic color at occupancy is light blue.	D: 0.0600 R: 0 to 1	.0333

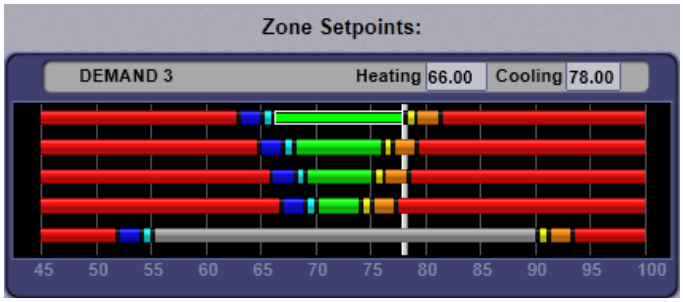
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Point Name/Description	Range English	Metric
Green – The amount the zone's learned heating capacity is adjusted when the Learning Adaptive Optimal Start algorithm runs, when the zone's thermographic color at occupancy is green.	D: 0.0600 R: 0 to 1	.0333
SpGrn – The amount the zone's learned cooling capacity is adjusted when the Learning Adaptive Optimal Start algorithm runs, when the zone's thermographic color at occupancy is green.	D: 0.0600 R: 0 to 1	.0333
Yellow – The amount the zone's learned cooling capacity is adjusted when the Learning Adaptive Optimal Start algorithm runs, when the zone's thermographic color at occupancy is yellow.	D: 0.0600 R: 0 to 1	.0333
Orange – The amount the zone's learned cooling capacity is adjusted when the Learning Adaptive Optimal Start algorithm runs, when the zone's thermographic color at occupancy is orange.	D: 0.1300 R: 0 to 1	.0722
Red – The amount the zone's learned cooling capacity is adjusted when the Learning Adaptive Optimal Start algorithm runs, when the zone's thermographic color at occupancy is red.	D: 0.1900 R: 0 to 1	.1055

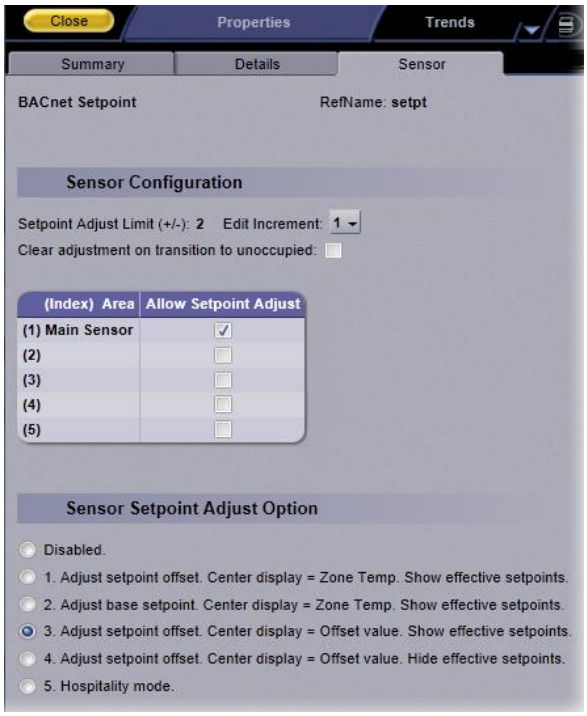
Heating – (Occupied or Unoccupied, depending on mode) The current programmed **Heating** setpoint adjusted by any offset that may be in effect.	R: 0 to 120°F (-17.7 to 48.9°C)
Cooling – (Occupied or Unoccupied, depending on mode) The current programmed **Cooling** setpoint adjusted by any offset that may be in effect.	R: 0 to 120°F (-17.7 to 48.9°C)
Learned cooling capacity – The cooling capacity learned by Learning Adaptive Optimal Start that is required to bring the space temperature down to the occupied cooling setpoint prior to the occupied time.	R: _°F/C
Learned heating capacity – The heating capacity learned by Learning Adaptive Optimal Start that is required to bring the space temperature up to the occupied heating setpoint prior to the occupied time.	R: _°F/C
Optimal Start – The number of hours prior to occupancy, at which the Optimal Start function may begin to adjust the effective setpoints to achieve the occupied setpoints by the time scheduled occupancy begins. Enter 0 to disable Optimal Start. **NOTE** Optimal Start is automatically disabled when **Properties** > **Control Program** > **Maintenance** > **Occupancy** > **BAS On/Off** is set to either **Unoccupied** or **Occupied**.	D: 1 hr R: 0 to 4 hrs
Optimal Start Type – The method used to change from unoccupied to occupied setpoint. Options: **None*** – Unit will not change to occupied setpoint until the scheduled time or the unit goes into an occupied mode. Setpoints do not ramp, but change immediately from unoccupied to occupied values. **Temp Compensated*** – Unit changes to occupied setpoints at a variable time prior to the occupied time, which is calculated by the current difference between space temperature and the appropriate heating or cooling setpoint. At that time, the setpoints do not ramp, but change immediately from unoccupied to occupied values. **Learning Adaptive Start** – Unit gradually changes to occupied setpoints by adjusting the unoccupied setpoints over a specified period of time to achieve the occupied setpoint by the time scheduled occupancy begins.	D: Temperature Compensated R: None Temperature Compensated Learning Adaptive

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Heat Start K factor (min/deg) – If **Optimal Start Type** is **Temp Compensated**, this is the time in minutes per degree that the equipment starts before the occupied period when the space temperature is below the occupied heating setpoint (including any setpoint offset).	D: 15 min/deg 27 min/deg (metric) R: 0 to 99
Cool Start K factor (min/deg) – If **Optimal Start Type** is **Temp Compensated**, this is the time in minutes per degree that the equipment starts before the occupied period when the space temperature is above the occupied cooling setpoint (including any setpoint offset).	D: 15 min/deg 27 min/deg (metric) R: 0 to 99
Standby Offset – The value by which the occupied setpoints are expanded when the space occupancy sensor indicates that a zone is unoccupied. If 0, the unoccupied setpoints are used.	D: 0Δ°F/Δ°C R: 0 to 15Δ°F (0 to 8.3Δ°C)
Occupied RH Control Setpoint – If **Optional Sensor Type** is set to **RH Sensor** and **RH Control** is set to **Enable**, this is the relative humidity setpoint during occupancy. The air source mode must be **Cool** or **Vent** and the terminal mode must be **Cooling** or **Vent** before the dehumidification function can be active.	D: 65%rh R: 0 to 100%rh
DCV Start Ctrl Setpoint – If **Optional Sensor Type** is set to **IAQ Sensor** and **DCV Control** is set to **Enable**, this is the value that the CO2 sensor must exceed to begin the DCV control function. This value should be set to approximately 75 ppm above the outdoor air CO2 level.	D: 500ppm R: 0 to 9999 ppm
DCV Max Ctrl Setpoint – If **Optional Sensor Type** is set to **IAQ Sensor** and **DCV Control** is set to **Enable**, this is the value that the CO2 level must exceed to begin the IAQ function to control the damper to **DCV MAX Vent Airflow**.	D: 1000ppm R: 0 to 9999 ppm
Parallel Fan ON Value – If **Terminal Type** is **Parallel Fan** and the zone does not require heating, when the zone's airflow control setpoint decreases below this value, the parallel fan turns on to increase airflow, ventilation, and prevent cold air dumping into the zone. If the airflow control setpoint rises above this value by more than 1 cfm (liters/sec), the parallel fan turns off. We recommend this value be set to approximately 10% above the **Occupied Min Airflow** setpoint. Set to 0 to disable this function.	D: 0 cfm (liters/sec) R: 0 to 99999 cfm (liters/second)

Setpoints for ZS Sensors	
To configure setpoint properties for ZS sensors, CTRL+click anywhere on the **Zone Setpoints:** graph at the top of the **Setpoints** section in order to access the **Properties** popup. 	

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In the popup, select the **Properties** > **Sensor** tab to configure ZS sensors for **Setpoint Adjust**. 	
Edit Increment – Amount of offset in degrees for each press of the up or down arrows on the ZS Sensor for setpoint adjustment.	D: 1 R: 0.1 0.5 1
Allow Setpoint Adjustment – Check to allow setpoint adjustments on the specified ZS sensor.	D: (1) enabled R: disabled/enabled
Sensor Setpoint Adjust Option – Check to select the ZS setpoint adjustment display.	D: 3

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Alarm Configuration

Navigation: i-Vu® / Field Assistant: **Properties** > **Control Program** > **Configuration** > **Alarm Configuration**

Point Name/Description	Default/Range
Space Temperature Alarm	
Occupied Alarm Hysteresis – This value is added to the effective cooling setpoints and subtracted from the effective heating setpoints as output from the **Setpoint** microblock. These values establish the occupied high and low limits that the space temperature must exceed before an occupied SPT alarm is generated. The alarm returns to normal when the space temperature drops below the high effective setpoint or rises above the low effective setpoint.	D: 5Δ°F (2.7Δ°C) R: 0 to 20Δ°F (0 to 11.1Δ°C)
Alarm Delay (min/deg) – Determines the amount of delay before an occupied space temperature alarm is generated when the controller transitions to the occupied mode. The delay time equals this value multiplied by the difference between the sensor temperature and occupied alarm setpoint plus 15 minutes.	D: 10 min/deg 18 min/deg (metric) R: 0 to 30 minutes
Unoccupied Low SPT Alarm Limit –The value that the space temperature must drop below to generate a **Space Temperature Alarm** in the unoccupied mode. There is a fixed hysteresis of 1Δ°F (.5Δ°C) for return to normal.	D: 45°F (7.2°C) R: 35 to 90°F (1.6 to 32.2°C)
Unoccupied High SPT Alarm Limit – The value that the space temperature must exceed to generate a **Space Temperature Alarm** in the unoccupied mode. There is a fixed hysteresis of 1Δ°F (.5Δ°C) for return to normal.	D: 95°F (35°C) R: 45 to 100°F (7.2 to 37.7°C)
Supply Air Temperature Alarm	
Low SAT Alarm Limit – The value that the supply air temperature must drop below to generate a **Supply Air Temp Alarm**. There is a fixed hysteresis of 3Δ°F (1.6Δ°C) for return to normal.	D: 45°F (7.2°C) R: 15 to 90°F (-9.4 to 32.2°C)
High SAT Alarm Limit – The value that the supply air temperature must exceed to generate a **Supply Air Temp Alarm**. There is a fixed hysteresis of 3Δ°F (1.6Δ°C) for return to normal. This should be set at least 15Δ°F (8.3Δ°C) higher than the **Maximum Heating SAT**.	D: 120°F (48.9°C) R: 90 to 175°F (32.2 to 79.4°C)
Space Humidity Alarm	
Occupied High RH Alarm Limit – The value that the relative humidity sensor must exceed to generate a **Space Humidity Alarm** in the occupied mode if **RH Control** is set to **Enable**. There is a fixed hysteresis of 5%rh for return to normal.	D: 100%rh R: 45 to 100%rh
Alarm Delay (min/%RH) – Determines the amount of delay before an occupied RH alarm is generated when the controller transitions to the occupied mode. The delay time equals this value multiplied by the difference between the sensor RH value and the occupied RH setpoint plus 15 minutes.	D: 5 minutes R: 0 to 30 minutes
Unocc High RH Alarm Limit – The value that the relative humidity sensor must exceed to generate a **Space Humidity Alarm** in the unoccupied mode if **RH Control** is set to **Enable**. There is a fixed hysteresis of 5%rh for return to normal.	D: 100%rh R: 45 to 100%rh

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Point Name/Description	Default/Range
IAQ/Ventilation Alarm	
Occupied High CO2 Alarm Limit – The value that the CO_2 sensor must exceed to generate an **Indoor Air Quality Alarm** in the occupied mode if **DCV Control** is set to **Enable**. There is a fixed hysteresis of 100ppm for return to normal.	D: 1100ppm R: 0 to 9999 ppm
Alarm Delay (min/ppm) – The fractional portion of a minute used to determine the amount of delay before an indoor air quality alarm is generated when the controller transitions to the occupied mode. The delay time equals this value multiplied by the difference between the sensor CO_2 value and the setpoint plus 15 minutes.	D: 0.25 minutes R: 0.10 to 1.00 minutes
Heating Valve Alarms	
Smart Vlv1 Alarm Diff – The difference between the Hot Water Valve output command and the feedback input must be greater than this value for 1 minute to trigger the alarm.	D: 5% R: 0 to 100%
Heating Valve Cycling Alarm – Alarm occurs if the input cycles more than __ times in a __ min period. **NOTE** The input must reverse by more than __ to be counted. __ times — D: 15; R: 0 to 999 in a __ min period — D: 60 minutes; R: 0 to 999 minutes The input must reverse by more than __ to be counted — D: 5%; R: 0 to 99%	
Heating Valve Failure Alarm – Alarm occurs if discharge air temp does not rise __ Δ°F within __ min after the heating coil valve command is > __ % Open. must not rise __Δ°F — D: 2.5Δ°F (1.4Δ°C); R: 0 to 99Δ°F (0 to 55Δ°C) within __ min — D: 15 minutes; R: 0 to 999 minutes after the heating coil valve command is > **__%Open**. — D: 80% Open; R: 0 to 100% Open	
Alarms Displayed on ZS Sensor	
Space Temperature Alarm – If set to display, shows the alarm indicator on the communicating zone sensors, if the **Space Temperature** alarm is active.	D: Ignore R: Ignore/Display
Supply Air Temp Alarm – If set to display, shows the alarm indicator on the communicating zone sensors, if the **Supply Air Temp** alarm is active.	D: Ignore R: Ignore/Display
Dirty Filter Alarm – If set to display, shows the alarm indicator on the communicating zone sensors, if a **Filter** alarm is active.	D: Display R: Ignore/Display

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Point Name/Description	Default/Range
Space High Humidity Alarm – If set to display, shows the alarm indicator on the communicating zone sensors with display, if the **Space Relative Humidity** alarm is active.	D: Ignore R: Ignore/Display
Space High CO2 Alarm – If set to display, shows the alarm indicator on the communicating zone sensors with display if the **Indoor Air Quality Alarm** is in alarm.	D: Ignore R: Ignore/Display
Maintenance Displayed on ZS Sensor	
Linkage Fault – If set to display, shows the maintenance indicator on the ZS Pro sensor if the Airside Linkage is in a Fault condition.	D: Ignore R: Ignore/Display
Net OAT Fault – If set to display, shows the maintenance indicator on the ZS Pro sensor if the Network Outside Air is not valid.	D: Ignore R: Ignore/Display
SPT Sensor Fault – If set to display, shows the maintenance indicator on the ZS Pro sensor if the space temperature sensor is not valid.	D: Ignore R: Ignore/Display

Service Configuration

Navigation: i-Vu® / Field Assistant: **Properties** > **Control Program** > **Configuration** > **Service Configuration**

Point Name/Description	Default/Range
Terminal Type – The type of zone terminal that the controller is installed on. Not available for VAVB1.	D: Single Duct R: Single Duct Parallel Series Fan
Terminal Size – Shows the value entered as the **Cooling Max Airflow** in the **Flow Control** object.	D: 2100 cfm (991.2 liters/second) R: 0 to 99999 cfm (liters/second)
Terminal Fan Airflow – Enter the terminal fan airflow in cfm (liters/second). Used in performance calculations only. Available only on fan-enabled terminal box.	D: 1000 cfm (472 liters/second) R: 0 to 99999 cfm (liters/second)
Disable Series Fan – When set to **Enable**, the controller disables the fan on a series-type terminal when the airflow setpoint equals 0. (We do not recommend configuring the minimum occupied airflow setpoint to 0, as this does not meet minimum ventilation requirements.)	D: N/A R: N/A Enable

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Point Name/Description	Default/Range
External Actuator Enable – Enable if the controller's analog output is used for an external high-torque or slave actuator. Enabling this setting disables the output for Modulating Hot Water or Combination reheat functions.	D: Disable R: Disable/Enable
Heat Type – The type of supplemental reheat that the zone controller will control. The heat may be used with system heat, depending on the space temperature demand. Options: **None** – no heat **Modulating** – ducted or baseboard modulating hot water **Two Position** – two position hot water **Staged EH** – ducted or baseboard electric heat **Combination** – combination baseboard modulating hot water and ducted staged electric heat **CV Modulating** – constant volume modulating reheat used for single duct terminal application with modulating hot water reheat (typically used in hospital applications) **SCR Electric** – modulating control for SCR-type electric heater **Modulating Smart Valve** – ducted or baseboard modulating hot water using a Smart Valve **Combination Smart Valve** – combination baseboard modulating hot water using a Smart Valve and ducted staged electric heat	D: None R: None Modulating Two Position Staged EH Combination CV Modulating SCR Electric Modulating Smart Valve Combination Smart Valve
Ducted Heat – Determines whether the zone is using ducted heat or baseboard. If **Heat Type** is **Combination**, set this field to **Yes** for ducted heat.	D: Yes R: No/Yes
VAV Reheat – If set to **Enable** and **Heat Type** is **Modulating**, a need for heat first modulates the supply air temperature up to the configured **Maximum Heating SAT** (95°F [35°C] default). A further heating demand will increase the airflow from the minimum rate up to the configured **Auxiliary Heat Min Airflow**. Applicable to single duct terminals only.	D: Enable R: Disable/Enable
CV Modulating PID – This BACnet object calculates the amount of capacity required to satisfy the current space temperature setpoint, when the terminal is heating and the **Heat Type** is set to **CV Modulating**. **CAUTION** The default values should be changed only by a technician trained in PID Loop algorithms.	D: Type = reverse Update Interval = 0:15 P = 20 (36 metric) I = 1.0 (1.8 metric) D = 0 Bias = 0 Deadband = 0
VAV Heating – Set to **Enable** to have the terminal modulate its airflow to meet a zone heating demand when the air source mode is Heating or Warm-up. Always set to **Disable** for parallel fan terminals.	D: Disable R: Disable/Enable
Number of Heat Stages – The number heat stages when the **Heat Type** is **Staged EH**. Fan-powered terminals are limited to no more than 2 stages.	D: Two stages R: One stage Two stages Three stages
Valve Type – The hot water valve's position with no power applied to the valve.	D: NC R: NC/NO (normally closed/normally open)

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Point Name/Description	Default/Range
Hardwired Sensor – The type of sensor used on the controller's **RH/CO2** hardwire input. This setting determines the control channel input function. Options: **RH Sensor –** Relative humidity for zone dehumidification **IAQ Sensor** – Indoor air quality for DCV control **NOTE** RH and IAQ are also available with communicating ZS RH and CO_2 sensors.	D: None R: None RH Sensor IAQ Sensor
RH Control – Enables or disables zone dehumidification control if valid RH sensor values are available.	D: Disable R: Disable/Enable
DCV Control – Enables or disables demand control ventilation control.	D: Disable R: Disable/Enable
Min Setpoint Separation – Minimum separation that must be maintained between the heating and cooling setpoints.	D: 4Δ°F (2.2Δ°C) R: 2 to 10Δ°F (1.1 to 5.5Δ°C)
Occ Override Normal Logic State – The normal state of the controller's **Remote Occupancy** input. If the input's contact is the same state as the configured state, the controller follows its controlling schedule. If the contact is in the opposite state of the configured state, the controller is forced into the unoccupied mode.	D: Open R: Open/Closed
RH Sensor Min Input Volts – The lowest voltage that should be read from the hardwired relative humidity (RH) sensor.	D: 0.00 V R: 0 to 5.00 V
RH Sensor Max Input Volts – The highest voltage that should be read from the hardwired RH sensor.	D: 5.00 V R: 0 to 5.00 V
RH Sensor Value @ Min Volts – The % relative humidity that correlates to the hardwired RH sensor's low voltage reading.	D: 0% R: 0 to 99%
RH Sensor Value @ Max Volts – The % relative humidity that correlates to the hardwired RH sensor's high voltage reading.	D: 100% R: 0 to 100%
CO2 Sensor Min Input Volts – The lowest voltage that should be read from the hardwired CO_2 sensor.	D: 1.00 V R: 0 to 5.00 V
CO2 Sensor Max Input Volts – The highest voltage that should be read from the hardwired CO_2 sensor.	D: 5.00 V R: 0 to 5.00 V
CO2 Sensor Value @ Min Volts – The ppm value that correlates to the hardwired CO_2 sensor's low voltage reading.	D: 0 ppm R: 0 to 9999 ppm
CO2 Sensor Value @ Max Volts – The ppm value that correlates to the hardwired CO_2 sensor's high voltage reading.	D: 2000 ppm R: 0 to 9999 ppm

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Point Name/Description	Default/Range
Min% Heat airflow when AHU Heating - Increases the airflow to the zone and overrides the configured minimum airflow value whenever the air source is in a heating mode. If set to 0%, no override is active and the **Occupied** or **Unoccupied Min Airflow** value is used. This is not a direct percentage of the Max Heat cfm. To calculate the **Min% Heat airflow when AHU Heating** configuration, when based on the Heating Max cfm, Occ Min, and the desired heat minimum airflow cfm, use the formula **Min% Heat airflow when AHU Heating = (Heat Min – Occ Min) / (Heat Max – Occ Min)**. Variables: • **Heat Min** = Desired Heating Minimum cfm when AHU Heating • **Heat Max** = Heating Maximum cfm • **Occ Min** = Occupied Minimum cfm • **Min% Heat airflow when AHU Heating** = configuration value in % to achieve min airflow in AHU heat mode **NOTE** These formulas do not generate an exact Heat Min cfm value, but will generate a value that should maintain the desired Heat Minimum Airflow, whenever the AHU is in a Heating Mode. To disable any increase in airflow during AHU Heating, set the Heat Min value to 0%. To calculate the minimum heating cfm when the AHU mode is Heat, use the formula below to get the resulting Min Heat cfm when in the occupied mode: **Heat Min = [Min% Heat airflow when AHU Heating * (Heat Max - Occ Min)] + Occ Min**	D: 0% R: 0 to 100%
Flow Control: Click **Flow Control** to access the microblock popup **Properties** page > **Summary** and **Details** tabs. See the microblock Help for more detailed explanations.	
Flow sensor - The airflow sensor type used by your equipment. Leave as **Built-in flow sensor**.	D: Built-in flow sensor
Damper Actuator - The damper type used by the equipment. Leave as **Built-in actuator**.	D: Built-in actuator
Flow Measurement Units – The flow measurement output. Do not change the default of **cfm** (liters/second).	D: cfm (liters/second)
Damper Motor Travel Time – The actuator's travel time from full closed to full open. Leave this field at 154 seconds.	D: 154 seconds
Direction Clockwise – If **Damper Actuator** is set to **Built-in actuator**, set this field to the damper's position when it rotates clockwise.	D: Open R: Close/Open
Target Damper Position - The current damper position. To override normal control for troubleshooting purposes, select **Lock value to** and then enter a value. The damper moves to that position until **Lock value to** checkbox is cleared.	R: 0 to 100%

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Point Name/Description	Default/Range
Auxheat - The current configured **Reheat Min Damper Position**. To override normal control for reheat troubleshooting purposes, select **Lock value to** and then enter a value. The damper moves to that position until **Lock value to** checkbox is cleared.	R: 0 to 100%
Fan – The current value of the fan output relay. To override normal control for troubleshooting purposes, select **Lock value to** and then enter **On** or **Off**. The relay stays in that state until the **Lock value to** checkbox is cleared.	R: Off/On
Cooling Max Airflow – The maximum airflow the terminal will supply when trying to meet a zone cooling demand when the air source mode is Cooling, Vent, or Free Cooling.	D: 2100 cfm (991.2 liters/second)0 to R: 99999 cfm (liters/second)
Heating Max Airflow – The maximum airflow the terminal will supply when trying to meet a zone heating demand when the air source mode is Heating or Warm-up and **VAV heating** has been enabled.	D: 2100 cfm (991.2 liters/second)0 to R: 99999 cfm (liters/second)
Occupied Min Airflow – The minimum airflow setpoint the terminal controls to when the air source is operating and the terminal mode is occupied.	D: 315 cfm (148.9 liters/second) R: 0 to 99999 cfm (liters/second)
Unoccupied Min Airflow – The minimum airflow setpoint the terminal controls to when the air source is operating and the terminal mode is unoccupied.	D: 315 cfm (148.9 liters/second) R: 0 to 99999 cfm (liters/second)
Auxiliary Heat Min Airflow – ONLY used for Single Duct units with ducted reheat. Set to the minimum airflow specified by the manufacturer to allow the reheat to provide optimum performance. This value is compared to the appropriate **Min Airflow** value above and the greater of the two values determines the damper position. For all other terminal types, set to 0.	D: 1680 cfm (793 liters/second) R: 0 to 99999 cfm (liters/second)
Manufacturer's specified airflow at 1" water column – The damper manufacturer's rated cfm airflow at 1" water column of velocity pressure. Refer to the manufacturer's documentation to obtain the correct value.	D: 2100 cfm (991.2 liters/second) R: 0 to 99999 cfm (liters/second)
Use supply air for heating when Heat Mode is ON — This must be checked for all applications. To only use the minimum airflow in heating, set **Service Configuration** > **VAV Heating** to **Disable**.	D: Checked R: Checked/Unchecked

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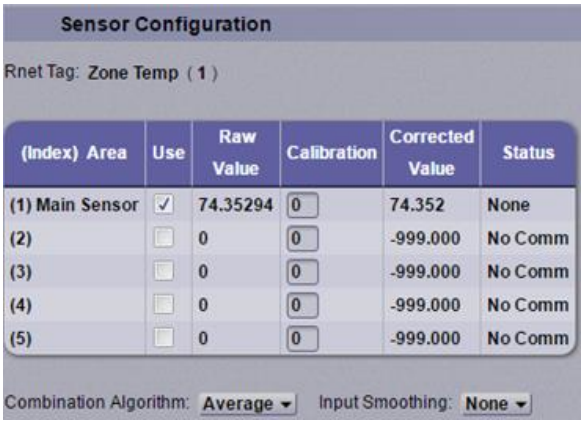
Point Name/Description	Default/Range
Test and Balance – Use the following command buttons when commissioning a zone, balancing the system, replacing the zone controller, or troubleshooting. If **Automatic Control** is not selected within 4 hours, the controller will resume normal control. **Zero Flow** – Closes the damper, takes a number of flow samples, then sets the zero calibration. **Damper Full Open** – Opens damper fully and enables the **Damper Full Open** calibration fields. **Cool Max Airflow** – Forces the damper to its maximum cooling position. Calibration fields apply only if the primary use of this damper is cooling. **Occupied Min Airflow** – Forces the damper to its maximum cooling position. Calibration fields apply only if the primary use of this damper is cooling. **Automatic Control** – Returns the damper to its normal control routines. **This must be activated when you finish using any of the other Test and Balance commands.** **Close Damper** – Forces the damper to its full closed position. **Heat Max Airflow** – Forces the damper to its maximum heating position. Calibration fields apply only if the primary use of the damper is heating.	

Sensor Binder / Zone Temp / Zone Humidity / ZS Zone CO2 **Ctrl+click** on the name of these properties to access the microblock popup **Properties** page > **Details** tab. See below for instructions on configuring your ZS or wireless sensors. See the microblock Help for more detailed explanations.	
Sensor Binder - Use the **Associated Sensors** table to configure the Rnet to use additional ZS or wireless sensors. • **Network Type** - Set to **Rnet** • **Address** - Enter the DIP switch settings that are on the additional ZS sensors (up to 5 total) or RnetID assigned to each wireless sensor in SensorBuilder • **Lock Display** - Check to make the sensor display-only	D: **(Index)** - (1) **Network Type** - Rnet **Address** - 1

Index	Area	Network Type	Address	Lock Display	Version	Status	Error
1	Main Sensor	Rnet	1			Sensor Offline	No Comm
2	Sensor 2	Unused	2			Sensor Offline	None
3	Sensor 3	Unused	3			Sensor Offline	None
4	Sensor 4	Unused	4			Sensor Offline	None
5	Sensor 5	Unused	5			Sensor Offline	None

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Zone Temp - Configure additional ZS or wireless temperature sensors used on the VAV Zone II.



- **Use** - Check to include ZS or wireless sensors' value in the **Combined Algorithm** (**Average** is the default).
- **Raw Value** - Displays sensed temperature for each ZS or wireless temperature sensor's address
- **Calibration** - If needed, enter value to adjust the **Corrected Value** from the **Raw Value**, in order to calibrate an individual ZS or wireless sensor's sensed value.
- **Combination Algorithm** - Use **Average**, **Maximum**, or **Minimum** zone temperature to calculate the **Corrected Value** for temperature control.

D: **(Index) Area** - (1) Main Sensor

Use - checked

Calibration - 0

Combination Algorithm - Average

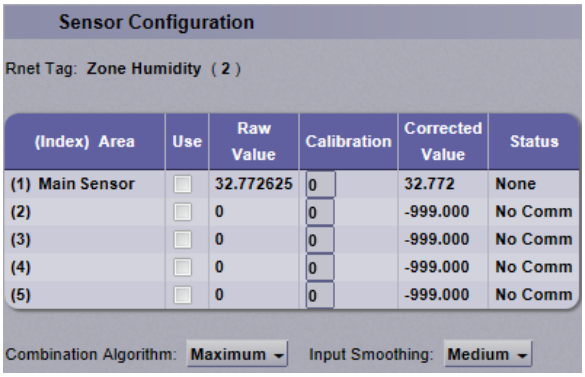
Input Smoothing - None

Show on Sensors - Calculated Value

Display Resolution - 1

COV Increment - .1

Zone Humidity - Configure additional ZS or wireless humidity sensors used on the VAV Zone II.



- **Use** - Check to include ZS or wireless sensors' value in the **Combined Algorithm** (**Maximum** is the default).
- **Raw Value** - Displays sensed humidity for each ZS or wireless humidity sensor's address
- **Calibration** - If needed, enter value to adjust the **Corrected Value** from the **Raw Value**, in order to calibrate an individual ZS or wireless sensor's sensed value.
- **Combination Algorithm** - Use **Average**, **Maximum**, or **Minimum** ZS or wireless humidity to calculate the **Corrected Value** for humidity control.

D: **(Index) Area** - (1) Main Sensor

Use - unchecked

Calibration - 0

Combination Algorithm - Maximum

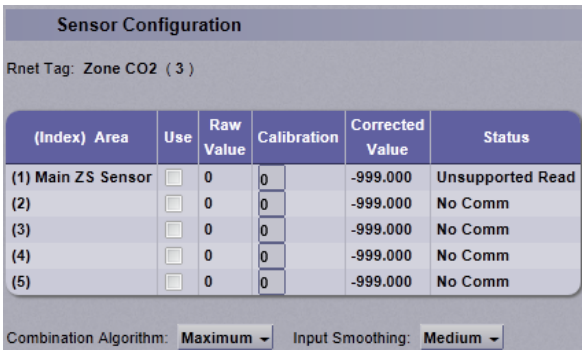
Input Smoothing - None

Show on Sensors - Calculated Value

Display Resolution - 1

COV Increment - 1

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ZS Zone CO2 - Configure additional ZS CO_2 sensors used on the VAV Zone II.  Sensor Configuration Rnet Tag: Zone CO2 (3) (Index) Area / Use / Raw Value / Calibration / Corrected Value / Status (1) Main ZS Sensor 0 0 -999.000 Unsupported Read (2) 0 0 -999.000 No Comm (3) 0 0 -999.000 No Comm (4) 0 0 -999.000 No Comm (5) 0 0 -999.000 No Comm Combination Algorithm: Maximum Input Smoothing: Medium • **Use** - Check to include ZS sensors' value in the **Combined Algorithm** (**Maximum** is the default). • **Raw Value** -Displays sensed CO_2 for each ZS CO_2 sensor's address • **Calibration** - If needed, enter value to adjust the **Corrected Value** from the **Raw Value**, in order to calibrate an individual ZS sensor's sensed value. • **Combination Algorithm** - Use **Average**, **Maximum**, or **Minimum** ZS CO^2 to calculate the **Corrected Value** for CO_2 control.	D: **(Index) Area** - (1) Main ZS Sensor **Use -** unchecked **Calibration** - 0 **Combination Algorithm** - Maximum **Input Smoothing** - Medium **Show on Sensors** - Calculated Value **Display Resolution** - 1 **COV Increment** - 10

WS Battery Strength % — Displays charge strength indicated on the wireless space temperature sensor. If there are multiple wireless sensors, it displays the lowest value.	R: _%
WS Signal Strength % — Displays radio signal strength of the wireless space temperature sensor. If there are multiple wireless sensors, it displays the lowest value.	R: _%
Rnet Sensed Occupancy – Displays occupancy status detected by wireless infrared motion sensor.	R: Off/On
ZS model to show on graphic – Select the ZS model, from the drop-down list, that you want to display on the graphic.	D: ZS Pro model R: None ZS Pro model ZS Base model ZS Plus model
WS model to show on graphic – Select the wireless model, from the drop-down list, that you want to display on the graphic.	D: WS Plus model R: WS Base model WS Plus model WS Pro model
Net Space Temp to show on graphic — Select the type of sensor to display on graphic.	D: Equipment Touch R: Network Temp Equipment Touch
System Space Temperature – The current value of the controlling space temperature received over the network from another source. -999 indicates no value has been received and it will not be used.	R: -50 to 150°F (-45.5 to 65.5°C)
System Setpoint Adjustment – The space temperature setpoint adjustment value received over the network.	R: -5 to 5Δ°F (-2.7 to 2.7Δ°C)

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System Space RH – The relative humidity received over the network. -999 indicates no value has been received and it will not be used.	R: 2 to 100%
System Space AQ – The indoor air quality received over the network. -999 indicates no value has been received and it will not be used.	R: 300 to 9999 ppm
System Cool Demand Level– The value received over the network and used by the demand limiting function to expand the cooling setpoint.	R: 0 to 3
System Heat Demand Level– The value received over the network and used by the demand limiting function to expand the heating setpoint.	R: 0 to 3
System Outdoor Air Temperature – The OAT received over the network.	R: -50 to 150°F (-45.5 to 65.5°C)
System Occupancy – The status of the **System Occupancy** network point.	D: Unoccupied R: Unoccupied/Occupied

Maintenance

Navigation: i-Vu® / Field Assistant: **Properties** > **Control Program** > **Maintenance**

Point Name/Description	Default/Range
Unit	
Occupancy Status – The controller's occupancy status as determined by a network schedule, a local schedule, or a timed override.	R: Unoccupied/Occupied
Temp Compensated Start or **Learning Adaptive Start** – Indicates the type of optimal start (if any) that is configured and whether the algorithm is active or inactive.	R: Inactive/Active
Space Temp Source – The source of the controlling space temperature value. Options: **Sensor Failure** – No valid space temperature or sensor status = failed. **SPT Sensor** – An SPT sensor is connected to the controller's Rnet port. **T55/56** – A T55, T56, or T59 sensor is connected to the controller's I/O terminals. **Network** – A network temperature sensor is bound to the controller's space temperature AV. **Airside Linkage** – The space temperature from a linked terminal. **Locked Value** – The controller's space temperature input has been manually locked at a value. **ZS Sensor** – A ZS sensor is connected to the controller's Rnet port.	R: Sensor Failure SPT Sensor T55/T56 Network Airside Linkage Locked Value ZS Sensor
Setpoint Adjustment – The amount that a user has adjusted the setpoints at a zone sensor.	R: -20 to 20Δ°F (-11.1 to 11.1Δ°C)
Effective Heat Setpoint – The current heating setpoint. May include offsets from configured occupied/unoccupied setpoints resulting from **Optimal Start** to **Demand Limit**.	R: _°F/C

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Point Name/Description	Default/Range
Effective Cool Setpoint – The current cooling setpoint. May include offsets from configured occupied/unoccupied setpoints resulting from **Optimal Start** to **Demand Limit**.	R: _°F/C
VAV Reheat Status – Provides the status of the **VAV Reheat** function. This status automatically disables if the **Terminal Type** or **Heat Type** is unsuitable or if the **VAV Reheat** function is set to **Disable**.	R: Disabled/Enabled
Primary Airflow Setpoint – The desired airflow setpoint calculated by the controller to meet the required temperature, IAQ, or dehumidification requirements.	R: 0 to 99999 cfm (liters/second)
Relative Humidity Source – The source of the relative humidity value.	R: N/A Local Network Linkage Locked Value ZS Sensor
IAQ Source – The source of the indoor air quality value.	R: N/A Local Network Linkage Locked Value ZS Sensor
Outdoor Air Temperature Source – The source of the outdoor air temperature.	R: N/A Local Network Linkage Locked Value
Cooling Demand Level – The system cool demand level received over the network.	R: 0 to 3
Heating Demand Level – The system heat demand level received over the network.	R: 0 to 3
Heat Delay – The status of the terminal heat delay.	R: Inactive/Active
Remaining Heat Delay – If **Heat Delay** is **Active**, this is the remaining delay time.	R: 0 to 60 minutes
Calculated DCV Capacity – If **DCV Control** is set to **Enable**, this is the calculated minimum airflow, expressed as a percentage, that will be maintained to satisfy the ventilation requirement.	R: 0 to 100%
Calculated Dehumidify Capacity – If **RH Control** is set to **Enable**, this is the calculated minimum airflow, expressed as a percentage, that will be maintained to satisfy the dehumidification requirement.	R: 0 to 100%
Reset Filter Alarm – Set this to **On** to reset an active **Filter Alarm** and restart the **Filter Service Alarm Timer**. After the alarm returns to normal, this automatically changes to **Off**.	D: Off R: Off/On
Occupancy Contact State - The physical state of the **Remote** input.	R: Open/Closed
Cooling BTU's – Current Cooling Energy being delivered to the space.	R: 0 to 99999 BTU (0 to 99999 KJoules)
Heating BTU's – Current Heating Energy being delivered to the space.	R: 0 to 99999 BTU (0 to 99999 KJoules)

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Point Name/Description	Default/Range
Occupancy	
BAS On/Off – Determines the occupancy state of the controller and can be set over the network by another device or third party BAS. Options: **Inactive** – Occupancy is determined by a configured schedule. **Occupied** – The controller is always in the occupied mode. **Unoccupied** – The controller is always in the unoccupied mode. **NOTE** If **BAS On/Off** is set to either **Unoccupied** or **Occupied**, the **Optimal Start** routine is automatically disabled.	D: Inactive R: Inactive Occupied Unoccupied
Schedules – The controller's occupancy status based on the local schedule.	R: Unoccupied/Occupied
Pushbutton Override – **Active** indicates if a user pushed the sensor's override button to override the occupancy state.	R: Off/Active
Override Time Remaining – The amount of time remaining in an override period.	R: 0 to 480 minutes
Occupancy Contact Status – The physical state of the controller's **Remote** input.	R: Inactive Inactive Active Unoccupied/Stdby
Global Occupancy – The **System Occupancy** network input's current state.	D: Unoccupied R: Unoccupied/Occupied

Local BACnet Schedule	R: Off/On
Configure ZS Sensors by setting the following options in the **Local BACnet Schedule** microblock popup. Click **Local BACnet Schedule** to access the microblock popup **Properties** page > **Details** tab. See the microblock Help for more detailed explanations.	
Sensor Configuration	
Allow Force Unoccupied: – Check to allow a user to save energy by forcing the zone into an unoccupied schedule on the ZS sensor. The user does this by holding the sensor's On/Off button for at least 3 seconds. This forced state remains in effect until the schedule transitions to unoccupied or until a user presses the sensor's On/Off button again.	D: Enabled R: Disabled/Enabled
Force Unoccupied without Delay: – Check to allow a user to force a zone to unoccupied immediately instead of the normal 3-second delay. **NOTE** This option is not available if **Allow TLO Set During Occupied** is checked.	D: Enabled R: Disabled/Enabled
Timed Local Override	
Increment: – Minutes that the microblock adds to the zone's occupied time for each click of the zone's local override button or switch.	D: 30:00 mm:ss
Maximum Duration: – Maximum value (up to 960 minutes) the microblock outputs, regardless of additional pulses from the controller's input.	D: 60:00 mm:ss R: 0 to 960:00 mm:ss

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Environmental Index	
Environmental Index (EI) – Initial **Occupied** value is 100%. A value of 0% means the zone is **Unoccupied**. If the space temperature deviates from **Effective Heat Setpoint** and **Effective Cool Setpoint** range, the value is derated. EI supports an optional RH and/or CO_2 sensor. The RH and/or CO_2 values could also derate an EI.	R: 0 to 100%
EI Time Satisfied – Percentage of **Occupied** time during which a zone maintains an EI of 70% or higher.	R: 0 to 100%
Weighted EI – Determines the priority of a zone in an EI roll-up, which must be completed using a different control program.	R: 0 to 100000.0
EI Total Weight – Current **EI Weighting Factor** used to scale the **Weighted EI**.	R: 0 to 1000.0
EI Decreased By – Source(s) of an EI value reduction. Options: **Temp** – EI decreased by Space Temperature **Temp & RH** – EI decreased by Space Temperature and Relative Humidity **Temp, RH, & CO2** – EI decreased by Space Temperature, Relative Humidity, and CO2 **RH** – EI decreased by Relative Humidity **RH & CO2** – EI decreased by Relative Humidity and CO2 **CO2** – EI decreased by CO2 **Temp & CO2** – EI decreased by Space Temperature and CO2 **None** – No source(s) decreasing Environmental Index value	R: Temp Temp & RH Temp, RH, & CO2 RH RH & CO2 CO2 Temp & CO2 None
EI Space Temp Setpoint Tolerance – Expands the ideal heating and cooling setpoint range for EI temperature sensitivity.	D: 0.5Δ°F (.27Δ°C) R: 0 to 5Δ°F (0 to 2.7Δ°C)
EI Humidity Low Limit – Setpoint value that relative humidity must drop below in order to decrease an EI Value.	D: 30% R: 0 to 100%
EI Weighting Factor – Creates a weighted average of a zone EI value by indicating the priority of that zone in an EI roll-up. A value of 0 disables the zone from an EI roll-up.	D: 1 R: 0 to 1000.0

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Alarms

Navigation: i-Vu® / Field Assistant: **Properties** > **Control Program** > **Alarms**

Point Name/Description	Range
Space Temperature – Indicates if the space temperature sensor exceeds the high or low alarm limit.	R: Normal/Alarm
Alarming Temperature – Indicates the space temperature value that caused the space temperature alarm. This value is only displayed when the **Space Temperature** alarm (above) is in **Alarm**.	R: -56 to 245°F (-48.9 to 118.3°C)
Alarm Limit Exceeded – Indicates the value of the space temperature alarm limit that caused the space temperature alarm condition. Value is only displayed when the **Space Temperature** alarm (above) is in **Alarm**.	R: -56 to 245°F (-48.9 to 118.3°C)
Space Temp Sensor – Indicates if the space temperature sensor fails.	R: Normal/Alarm
Wireless Battery Strength Alarm – Indicates one of the configured wireless space temperature sensors is displaying low charge strength.	R: Normal/Alarm
Wireless Signal Strength Alarm – Indicates one of the configured wireless space temperature sensors is displaying low radio signal strength.	R: Normal/Alarm
ZS/WS Sensor Configuration– Indicates if the ZS or wireless space temperature sensor is not configured correctly.	R: Normal/Alarm
Indoor Air Quality – Indicates if the occupied CO_2 level exceeds the **Occupied High CO2 Alarm Limit**.	R: Normal/Alarm
Supply Air Temperature – Indicates if the supply air temperature exceeds the high temperature alarm limit or drops below the low temperature alarm limit.	R: Normal/Alarm
Filter – Indicates if the filter's runtime hours exceeds the runtime alarm limit.	R: Clean/Dirty
Space Relative Humidity – Indicates if the relative humidity exceeds the high RH alarm limit.	R: Normal/Alarm
Network OAT - Indicates if the controller is not receiving a valid OAT value over the network.	R: Normal/Alarm
Airside Linkage Status – If the controller is the VVT Master, **Alarm** indicates that it lost Linkage communications with the air source. If the controller is a slave, **Alarm** indicates that it lost Linkage communications with the VVT master.	R: Normal/Alarm

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Linkage

Navigation: i-Vu® / Field Assistant: **Properties** > **Control Program** > **Linkage**

Point Name/Description	Default/Range
Airside Linkage	
Click **Linkage Collector/Linkage Provider** to access the microblock popup's **Summary** and **Details** tabs. See the microblock popup's Help for more detailed explanations.	
Linkage Collector – For a VAV Master, set the **Number of Providers** to the total number of controllers that will report to the Master, including the Master. For a slave, the **Number of Providers** is **1**. See *Linkage* (page 56) for additional information.	D: 1 R: 1 to 64
Linkage Provider – Depends on this controller's function.	
If the controller is... / **Enter the MS/TP network number and MAC address of...** The main VAV Master / The linked air source controller A sub-master / The main VAV Master A slave that is **not** on the same MS/TP network as its master / Its masters	
Network Number	D: 0 R: 0 to 65,535
Address	D: 0 R: 0 to 127
NOTE If you change the **Network Number** or **Address**, you must use the i-Vu® application or Field Assistant to cycle power to the controller for the changes to take effect.	
Airside Linkage Status – If **Active**, the controller is part of a linked system. If **Not Active**, the controller is a stand-alone device.	R: Not Active/Active
Linkage Zone Type – Select whether the controller is a Master or a slave. Select **VAV Master** if the controller is the Master or a sub-master in a VAV application. Select **VVT Master** only if the controller is the Master in a VVT application. VVT applications do not support sub-masters.	D: Slave R: Slave VVT Master VAV Master
Inhibit Heating Call from this zone? - VVT system only. If **Yes**, the VVT Master ignores this controller as a heating caller.	D: No R: No/Yes
Active Heating Caller? – VVT system only. Determines if the zone will be counted as a heat caller for system heating when the zone has a local demand for heat.	D: Yes R: No/Yes
Inhibit Cooling Call from this zone? - VVT system only. If **Yes**, the VVT Master ignores this controller as a cooling caller.	D: No R: No/Yes

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Point Name/Description	Default/Range
Active Cooling Caller? – VVT system only. Determines if the zone will be counted as a cool caller for system cooling when the zone has a local demand for cooling.	D: Yes R: No/Yes
Linkage Callers – VVT system only. The minimum number of zones required to make the air source go into heating or cooling mode. 1 is typical for systems with 8 zones or less. For larger systems, increase the number by 1 for each 6 zones. For example, 3 linkage callers for a 20 zone system.	D: 1 R: 1 to 32
System Mode Reselect Timer (minutes) – Applies only to a VVT master. Defines how long the system continues to operate in the current mode before it reassesses all zones while the current demand is still active.	D: 30 R: 10 to 120
Linkage RH Type – Determines if the VVT or VAV Master sends to the air source the average or maximum values of all linked zone controllers that have a relative humidity (RH) sensor.	D: Avg R: Avg/Max
Linkage IAQ Type – Determines if the Master controller sends to the air source the average or maximum values of all linked zone controllers that have a CO_2 sensor for DCV and IAQ control.	D: Max R: Avg/Max
Air Source Mode – If **Airside Linkage Status** is **Active**, this is the current mode of the linked air source. If **Airside Linkage Status** is **Not Active**, this is the mode of the air source as determined by the zone controller's SAT sensor.	R: Off Warmup Heat Cool Freecool Pressure Evac Vent
Air Source Supply Air Temp – Displays the air source's SAT when **Airside Linkage Status** is **Active**.	R: -56 to 245°F (-48.9 to 118.3°C)
Air Source Static Pressure – Displays the air source's supply static pressure when **Airside Linkage Status** is **Active**.	R: 0 to 5.0 in wc (0 to 1.245 kPa)
Air Source Outdoor Air Temp – Displays the air source's OAT when **Airside Linkage Status** is **Active**.	R: -56 to 245°F (-48.9 to 118.3°C)

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I/O Points

Navigation: i-Vu® / Field Assistant: **Properties** > **I/O Points**

WARNINGS

- Do not change the **Value**, **Offset/Polarity**, **Exp:Num**, **I/O Type**, **Sensor/Actuator Type**, **Min/Max**, or **Resolution** I/O configuration parameter for the points listed below. Changing these parameters could cause improper control and/or equipment damage.
- Use extreme caution if locking a point as this may also cause improper control and/or equipment damage.

Point Name/Description	Default/Range
SPT Sensor/Zone Temp **SPT Sensor** - (For the SPT Standard, SPT Plus, and SPT Pro sensors only). Sensor configurations on the microblock's **Properties** > **Details** tab are listed below. For more information, see the *Carrier Sensors Installation Guide*.	R: -56 to 245°F (-48.9 to 118.3°C)
Do not adjust the following settings: **Min Present Value** - Minimum present value the sensor transmits before indicating an alarm.	D: 45°F (7.2°C)
Max Present Value - Maximum present value the sensor transmits before indicating an alarm.	D: 96°F (35.5°C)
Setpoint Adjustment: **Max Adjust** – The amount that a user may adjust the setpoint at the sensors.	D: 5Δ°F (2.7Δ°C) R: 0 to 15Δ°F (0 to 8.3Δ°C)
Reset setpoint adjust to zero when unoccupied - Resets the setpoint bias to zero when the controller transitions to unoccupied..	D: Off
Timed Local Override: **Allow Continuous** (SPT Pro only) – If checked, a user can press the sensor's local override button until the **Max Accum** value is reached, then press one more time to have a continuous override until the next occupied period or until the user cancels the override. The display shows **On** during a continuous override.	D: Off R: Off/On
Each Pulse – The amount of time added to the total override time when a user pushes the sensor's override button.	D: 30:00 mm:ss R: 0:00 to 1440:00 mm:ss
Max Accum – The maximum amount of override time accumulated when a user pushes the sensor's override button.	D: 240:00 mm:ss R: 0:00 to 2000:00 mm:ss
Cancel override – How long a user must push the sensor's override button to cancel an override.	D: 3 seconds R: 0 to 60 seconds

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Point Name/Description	Default/Range
Sensor Array: **Sensor calculation method -** When using multiple SPT sensors, select the process variable to be passed to the controller..	D: Avg R: Avg, Min, Max
BACnet configuration: **Network Visible -** Must be enabled for other BACnet objects to read or write to this point, and for this point to generate alarms.	D: Enabled
Object Name - Do not change.	D: zone_temp
CO2 Sensor – The current voltage of the controller's **RH/CO2** input.	R: 0 to 5 Vdc
Flow Control / Flow Input - The current value of the controller's flow sensor input.	R: 0 to 99999 cfm (liters/second)
RH Sensor – The current voltage of the controller's **RH/CO2** input.	R: 0 to 5 Vdc
T55 Zone Temp – The value of the controller's **T55** space temperature sensor input.	R: -56 to 245°F (-48.9 to 118.3°C)
SAT Sensor – The current value of the controller's SAT input.	R: R:-56 to 140°F (-48.9 to 60°C)
WS Battery Strength % — Displays charge strength indicated on the wireless space temperature sensor. If there are multiple wireless sensors, it displays the lowest value.	R: _%
WS Signal Strength % — Displays radio signal strength of the wireless space temperature sensor. If there are multiple wireless sensors, it displays the lowest value.	R: _%
Zone Humidity – The value provided by the controller's ZS or wireless sensor (if present). See details below.	R: _%
Zone Temp – The value provided by the controller's ZS or wireless sensor (if present).	R: _F°
ZS Zone CO2 - IAQ/CO2 signal received from CO2-enabled ZS Sensor(s).	R: _ppm

ZS/WS Sensors	
The following properties apply to the ZS or wireless Standard, ZS or wireless Plus, and ZS or wireless Pro only. Sensor configurations on the microblock's **Properties** > **Details** tab are listed below for: • **Zone Humidity** • **Zone Temp** • **ZS Zone CO2**	
Default Value – The value that outputs when communication of all enabled sensors fails or during sensor startup. The default value is used for each sensor's corrected value in the i-Vu® system when the **Valid?** output is False (**Off**).	D: -999 R: -999 to 999

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Sensor Configuration table • **(Index) Area** – The Index number corresponds to the sensors defined in **Configuration** > **Service Configuration** > **Sensor Binder**. (Ctrl+click the property name. See Service Configuration.)	D: (1) Main ZS/WS Sensor R: (1) to (5)
• **Use** – Check **Enable** for each sensor that you want to include in the combination algorithm used to determine the output value.	D: Enabled index (1) R: checked or unchecked
• **Calibration** – If needed, enter a **Calculated Value** by adding the **Calibration** to the **Raw Value** for each ZS or wireless sensor.	D: 0 to 10
Combination Algorithm – If using more than one ZS or wireless sensor, select how the enabled sensors' values are to be combined to determine the output value. When the calculation is performed, only sensors with a valid value will be included.	D: Average R: Average Maximum Minimum
Input Smoothing – If the raw value from the sensor changes frequently, you can select one of the following options to send out an average of several readings on the output wire. • **None** - The raw value • **Minimum** - The average of the last 2 readings • **Medium** - The average of the last 5 readings • **Maximum** - The average of the last 9 readings	D: Medium R: None Minimum Medium Maximum
Show on sensors – Select **Local Value** to have each enabled sensor display its individual sensed value, or **Calculated Value** to have each sensor display the value determined by the **Combination Algorithm**.	D: Calculated Value R: Calculated Value Local Value
Display Resolution – Defines the resolution of the value to be displayed on the sensor. For example, 1 displays only integers (e.g., 74) and 0.5 displays values to the nearest 0.5 (e.g., 74.5).	D: 1 R: 1000 100 10 1 0.5 0.1 0.01 0.001
COV Increment – To reduce Rnet traffic, you can force the microblock to update its output only when the sensed value changes by more than the COV Increment.	D: .1 R: 0 to 100

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Occupancy Contact State – The current hardware state of the controller's **REMOTE** input.	R:	Open/Closed
Sensor Invalid – This internal input monitors the communication between the controller and the SPT sensor. **Off** indicates communication is normal.	R:	Off/On
Rnet Sensed Occupancy – Displays occupancy status detected by wireless infrared motion sensor.	R:	Off/On
Hot Water Valve - The current value of the controller's **HWV/ACT** output.	R:	0 to 100%
Heating Stage 1 - The current hardware state of the controller's **HEAT1** output.	R:	Off/On
Heating Stage 2 - The current hardware state of the controller's **HEAT2** output.	R:	Off/On
Fan S/S or EH 3 - The current hardware state of the controller's **FAN/HEAT3** output. The function of this output depends on the terminal type.	R:	Off/On

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Appendix B: VAV terminal modes

Air Source Mode	Temperature Control Requirement	Terminal Type	Aux Heat	Terminal Mode	Damper Control (Damper Setpoint used)	Heat Control	Fan Control
Off	None	All	N/A	Off	Hold Damper @ 70% (None)	Disable	Disable
	Cooling	All	N/A	Off	Hold Damper @ 70% (None)	Disable	Disable
	Heating	Single Duct	N/A	Off	Hold Damper @ 70% (None)	Disable	N/A
		Series or Parallel Fan	No	Off	Hold Damper @ 70% (None)	Disable	Disable
		Series Fan	Yes	Heating	Hold Damper @ 70% (None)	Enable	Enable
		Parallel Fan	Yes	Heating	Close Damper (None)	Enable	Enable
Vent	None	Single Duct	N/A	Heating	Minimum cfm (Vent)	Disable	N/A
		Series Fan	N/A	Vent	Minimum cfm (Vent)	Disable	Enable
		Parallel Fan	N/A	Vent	Minimum cfm (Vent)	Disable	Disable
	Cooling	Single Duct	N/A	Cooling	Modulate Min/Max cfm (Cool)	Disable	N/A
		Series Fan	N/A	Cooling	Modulate Min/Max cfm (Cool)	Disable	Enable
		Parallel Fan	N/A	Cooling	Modulate Min/Max cfm (Cool)	Disable	Disable
	Heating	Single Duct, Parallel Fan	No	Cooling	Minimum cfm (Cool)	Disable	Disable
		Series Fan	No	Heating	Minimum cfm (Cool)	Disable	Enable
		Single Duct	Yes	Reheat	Minimum cfm	Enable	N/A
		Series or Parallel Fan	Yes	Heating	Minimum cfm (Cool)	Enable	Enable
Cool, Freecool	None	Single Duct	N/A	Vent	Minimum cfm (Cool)	Disable	N/A
		Series Fan	N/A	Vent	Minimum cfm (Cool)	Disable	Enable
		Parallel Fan	N/A	Vent	Minimum cfm (Cool)	Disable	Disable
	Cooling	Single Duct	N/A	Cooling	Modulate Min/Max cfm (Cool)	Disable	Disable
		Series Fan	N/A	Cooling	Modulate Min/Max cfm (Cool)	Disable	Enable
		Parallel Fan	N/A	Cooling	Modulate Min/Max cfm (Cool)	Disable	Disable
	Heating	Single Duct, Parallel Fan	No	Cooling	Minimum cfm (Cool)	Disable	Disable
		Series Fan	No	Heating	Minimum cfm (Cool)	Disable	Enable
		Single Duct	Yes	Reheat	Minimum cfm	Enable	N/A
		Series or Parallel Fan	Yes	Heating	Minimum cfm (Cool)	Enable	Enable

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Air Source Mode	Temperature Control Requirement	Terminal Type	Aux Heat	Terminal Mode	Damper Control (Damper Setpoint used)	Heat Control	Fan Control
Heat, Warmup	None	Single Duct, Parallel Fan	N/A	Heating	Minimum cfm (Heat)	Disable	Disable
		Series Fan	N/A	Heating	Minimum cfm (Heat)	Disable	Enable
	Cooling	Single Duct, Parallel Fan	N/A	Heating	Minimum cfm (Heat)	Disable	Disable
		Series Fan	N/A	Heating	Minimum cfm (Heat)	Disable	Enable
	Heating	Single Duct	No	Heating	Modulate Min/Max cfm (Heat)	Disable	N/A
		Single Duct	Yes	Heating	Modulate Min/Max cfm (Heat)	Enable	N/A
		Series or Parallel Fan	No	Heating	Modulate Min/Max cfm (Heat)	Disable	Enable
		Series or Parallel Fan	Yes	Heating	Modulate Min/Max cfm (Heat)	Enable	Enable
Pressurization (Linked air source only)	None	Single Duct, Parallel Fan	N/A	Pressurize	Minimum cfm (Cool)	Disable	Disable
		Series Fan	N/A	Pressurize	Minimum cfm (Cool)	Disable	Enable
	Cooling	Single Duct, Parallel Fan	N/A	Pressurize	Minimum cfm (Cool)	Disable	Disable
		Series Fan	N/A	Pressurize	Minimum cfm (Cool)	Disable	Enable
	Heating	Single Duct, Parallel Fan	No	Pressurize	Minimum cfm (Cool)	Disable	Disable
		Series Fan	No	Pressurize	Maximum Cool cfm (Cool)	Disable	Enable
		Single Duct, Parallel Fan	Yes	Pressurize	Maximum Cool cfm (Cool)	Disable	Disable
		Series Fan	Yes	Pressurize	Maximum Cool cfm (Cool)	Enable	Enable
Evacuation/ Shutdown (Linked)	All	All	N/A	Evac	Close Damper	Disable	Disable

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Appendix C: ZS Sensor display for VAV Zone II

Property	ZS Screen	Rnet Tag	Rnet Text [1]	Description
Active Alarms	Diagnostic	1550	**-nonE** **StP-AL** **SPco2-AL** **SP_rH-AL** **Sat-AL**	No Active Alarms Zone Temp Alarm Zone CO2 Alarm Zone Humidity Alarm Supply Air Temp Alarm
Active Maintenance	Diagnostic	1551	**-nonE-** **SnSr-FLt** **Fltr-dtY** **LInc-FLt**	No Active Maintenance Sensor Fault Dirty Filter Linkage Fault
Active Air Source Linkage Mode	Diagnostic	1552	**OFF** **hEAt-uP** **hEAt** **cooL** **FrEEcool** **PrESSrZE** **EuAcuATE** **vEnt** **no-LInc**	Off Warm-up Heat Cool Freecool Pressurize Evacuate Vent Linkage Not Active
Supply Air Temp	Info	304		Air Source Supply Air Temp, if available
Air Flow Percentage of Nominal	Info	308		% of design air flow
Outdoor Air Temperature	Info	 F°		Outside Air Temp

[1] Rnet text is the scrolling text that appears on the ZS Pro Sensor's display.

NOTES

- To view properties on the **Diagnostic** Screen, hold the *i* button for 3 seconds. Tap the button to cycle through information to help troubleshoot your system.
- The Rnet tag is displayed on the ZS sensor display.
- To view properties on the Info Screen, press the *i* button. Tap the button to cycle through information.

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Appendix D: BACnet points list

				BACnet	
Point Name	Point Access	Units	Default Value	BACnet Point Name	BACnet Object ID
Occupied Cooling Setpoint	R/W	°F	75	occ_cl_stpt	AV:3001
Occupied Heating Setpoint	R/W	°F	70	occ_ht_stpt	AV:3002
Unoccupied Cooling Setpoint	R/W	°F	90	unocc_cl_stpt	AV:3003
Unoccupied Heating Setpoint	R/W	°F	60	unocc_ht_stpt	AV:3004
Occupancy Contact State	R	0=Open 1=Closed		occ_switch	BI:1001
Air Source Outdoor Air Temp	R	°F		link_ahu_oat	AV:2609
Air Source Static Pressure	R	in H2O		link_ahu_static	AV:2610
Air Source Supply Air Temp	R	°F		link_sat	AV:2608
Baseboard Heating Capacity	R	%		bas_bd_ht_cap	AV:2031
Cooling Demand Level	R			cool_demand_level	AV:9006
Damper Position	R	%		dpr_pos	AV:1013
Effective Cool Setpoint	R	°F		eff_cl_stpt	AV:3005
Effective Heat Setpoint	R	°F		eff_ht_stpt	AV:3006
Fan Off Delay	R/W	sec	120	fan_delay_off	AV:9024
Filter Runtime	R	hr		filter_rntm	AV:2015
Filter Service Alarm Timer	R/W	hr	0	filter_service_hrs	AV:2019
Heating Capacity	R	%		htg_cap	AV:2030
Heating Demand Level	R			heat_demand_level	AV:9036
Heating Lockout Temperature	R/W	°F	70	oat_ht_lockout	AV:9003
Indoor Air Quality CO2 (ppm)	R	ppm		iaq	AV:1009
lux sensor BACnet accessible	R			lux_bn	
Occ Override Delay	R/W	min	15	occ_ovr_delay	AV:9028
Occupied RH Control Setpoint	R/W	%rh	65	occ_dehum_stpt	AV:3011
Outdoor Air Temperature	R	°F		oa_temp	AV:1003
Override Time Remaining	R	min		ovrde_time	AV:2016
Power Fail Restart Delay	R/W	sec	60	start_delay	AV:9007
Setpoint Adjustment	R	°F		stpt_adj	AV:1006
Setpoint Adjustment Range	R/W	°^F	2	stpt_adj_range	AV:9015
Space Relative Humidity	R	%rh		space_rh	AV:1011
Space Temperature - Prime Variable	R	°F		space_temp	AV:2007

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				BACnet	
Point Name	Point Access	Units	Default Value	BACnet Point Name	BACnet Object ID
Standby Offset	R/W	°F	0	stdby_offset	AV:1017
Supply Air Temperature	R	°F		sa_temp	AV:1008
System Outdoor Air Temperature	R/W	°F	-999	system_oat	AV:1901
System Setpoint Adjustment	R/W	°F	-999	system_stpt_adj	AV:1913
System Space AQ	R/W	ppm	-999	system_iaq	AV:1903
System Space RH	R/W	%	-999	system_rh	AV:1904
System Space Temperature	R/W	°F	-999	system_spt	AV:1902
Airside Linkage Status	R	0=Not Active 1=Active		a_link_status	BV:2601
Fan	R	0=Off 1=On		sfan_status	BV:1003
Heat Enable	R/W	0=Disable 1=Enable	Active (1)	ht_enable	BV:1012
Occupancy Status	R	0=Unoccupied 1=Occupied		occ_status	BV:2008
Reset Filter Alarm	R/W	0=Off 1=On	Inactive (0)	filter_rntm_clr	BV:7517
Setpoint Adjustment	R/W	0=Disable 1=Enable	Active (1)	stpt_adj_enable	BV:1013
Shutdown	R/W	0=Inactive 1=Active	Active (1)	shutdown	BV:9001
VAV Reheat	R/W	0=Disable 1=Enable	Active (1)	vav_reheat	BV:1029
Air Source Mode	R	1=OFF 2=WARM-UP 3=HEAT 4=COOL 5=FREECOOL 6=PRESSURIZE 7=EVACUATE 8=VENT		link_ahu_mode	MSV:2005
BAS On / Off	R/W	1=Inactive 2=Occupied 3=Unoccupied	1	keypad_ovrde	MSV:1001
Optimal Start Type	R/W	1=None 2=Temp Compensated 3=Learning Adaptive	2	start_type	MSV:2009
Space Temp Source	R	1=Sensor Failure 2=SPT Sensor 3=T55 / T56 4=Network 5=Airside Linkage 6=Locked Value 7=ZS Sensor 8=Wireless Sensor		spt_status	MSV:2003
Terminal Mode	R	1=Off 2=Heating 3=Warm-Up 4=Vent 5=N/A 6=Cooling		terminal_status	MSV:2006

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				BACnet	
Point Name	Point Access	Units	Default Value	BACnet Point Name	BACnet Object ID
		7=Dehumidify 8=Reheat 9=Pressurize 10=Evacuate 11=Shutdown 12=IAQ Override 13=Air Balancing			
Terminal Type	R	1=Single Duct 2=Parallel Fan 3=Series Fan		terminal_type	MSV:2007
Zone Type	R	1=Slave 2=VVT Master 3=VAV Master		zone_type	MSV:2008
Airside Linkage Status	R	0=Normal 1=Alarm		air_linkage_fail	BV:7030
Filter	R	0=Clean 1=Dirty		filter_alarm	BV:7017
High SPT	R	0=Normal 1=Alarm		spt_hi_alarm	BV:7011
Indoor Air Quality	R	0=Normal 1=Alarm		iaq_alarm	BV:7005
Low SPT	R	0=Normal 1=Alarm		spt_lo_alarm	BV:7012
Network OAT	R	0=Normal 1=Alarm		oat_fail	BV:7029
Space Relative Humidity	R	0=Normal 1=Alarm		sprh_hi_alarm	BV:7018
Space Temp Sensor	R	0=Normal 1=Alarm		spt_fail	BV:7001
Supply Air Temperature	R	0=Normal 1=Alarm		sat_alarm	BV:7004
Wireless Battery Strength Alarm	R	0=Normal 1=Alarm		ws_batt_alarm	BV:7064
Wireless Signal Strength Alarm	R	0=Normal 1=Alarm		ws_sig_alarm	BV:7065
ZS/WS Sensor Configuration	R	0=Normal 1=Alarm		zs_config_fail	BV:7055

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Document revision history

Important changes to this document are listed below. Minor changes such as typographical or formatting errors are not listed.

Date	Topic	Change description	Code*
1/6/22	Specifications	"Physical" row changed to "Fire-retardant plastic ABS, UL94-5VA"	X-PM-BM-E
9/23/21	Appendix A > Maintenance	Added "Environmental Index" section. Under SPT Sensor/Zone Temp, "Min Present Value" default changed from 45°F+ to 45°F.	C-AE-BB-O
	Appendix A > Service Configuration	Under Flow Control, changed default value of "Damper Motor Travel Time" from 205 to 154 seconds	
	Appendix A > Alarm Configuration	Under Heating Valve Alarms, changed "Com Vlv1 Alarm Diff" to "Smart Vlv1 Alarm Diff". Changed "Heating Coil Valve Cycling Alarm" to "Heating Valve Cycling Alarm". Removed mention of SPT sensor.	
	Appendix A > Setpoints	Changed default value of "DCV Max Ctrl Setpoint" from 1050 to 1000 ppm	
	Appendix A > Unit Configuration	New rows for "Act Net Vlv 1 Max Pos" and "Environmental Index Enable"	
	Zone Environmental Index	New section	
	Wiring devices to the VAV Zone II's Rnet port	Removed hybrid wiring configuration for Rnet port	X-TS-AK-E
2/16/21	Service Configuration	Removed "Two Position hot water only" from Valve Type	C-TS-CP-E
8/14/20	Wiring equipment to the VAV Zone II's outputs: •Combination heat (ducted electric heat with modulating baseboard heat) - Single duct application •Electric heat (ducted or baseboard) - Single duct application •SCR electric heat (ducted or baseboard) - Single duct application •Modulating hot water (ducted or baseboard) - Fan box application CR electric heat (ducted or baseboard) - Fan box application •SCR electric heat (ducted or baseboard) - Fan box application	Corrected the controller used for the application	C-TS-CP-E
	Wiring equipment to the VAV Zone II's outputs> SCR electric heat (ducted or baseboard) - Fan box application	Wiring illustration corrected to show Fan relay	C-TS-CP-E
4/5/20	Wiring devices to the VAV Zone II's Act Net port	Clarified wiring guidelines.	X-TS-CP-E-EE
	To clean the airflow sensor orifice	Removed. This sensor does not require cleaning.	X-O-EH-E-RE

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Important changes to this document are listed below. Minor changes such as typographical or formatting errors are not listed.

Date	Topic	Change description	Code*
12/11/19	Appendix A > Status, Unit Configuration, Alarm Configuration, Service Configuration	New properties added for i-Vu® Smart Valves.	C-A-MM-E
	To adjust driver properties > Act Net Network Details	Added i-Vu® Smart Valve information	C-D
	Wiring devices to the VAV Zone II's Act Net port	New topic	C-D
	Specifications	Power specs expanded to include watts.	X-TS-TS-E-KC
8/30/19	Zone Airflow Control	Adjusted Damper Actuator travel time	C-TS-RD-E
	Unit Configuration	Removed limit on Setpoint Adjustment Range	C-TS-CP-E
1/25/19	Wiring devices to the VAV Zone II's Rnet port	Removed star configuration from the first paragraph	X-TS-TS-O
10/30/18	Wiring sensors to the VAV Zone II's inputs > To wire the T55 sensor to the controller	Removed reference to SPT sensors.	C-D
	Sequence of operation > Temperature sensors	Removed SPT sensors.	C-D
		Removed SPT sensors. Now shown as "Space temp sensor" in diagrams.	
	Wiring equipment to the VAV Zone II's outputs > Wiring diagram legend	Added caution stating that you must use the bushing, O-ring, and screws that are shipped with the VAV Zone II, along with applicable graphic.	C-D
8/28/18	Wiring devices to the VAV Zone II's Rnet port	Added TruVu™ ET Display. Made one topic for overview and wiring for each device. Removed SPT sensor detail.	C-D
	Specifications	Reworded Rnet port specification and added power supplied by Rnet port. Added first paragraph to Protection specification.	X-H-JS-O
8/2/18	To wire the CO2 sensor to the controller	Diagram for the #33ZCT55CO2 corrected to show wiring to J5 - 3 and 2, not 1 and 2.	C-TS-CP-E-WB

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Security Best Practices for an i-Vu® Pro v8.0 system



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 Verify that you have the most current version of this document from **www.hvacpartners.com** or **www.accounts.ivusystems.com** or your local Carrier office.

Important changes are listed in **Document revision history** at the end of this document.

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Security best practices

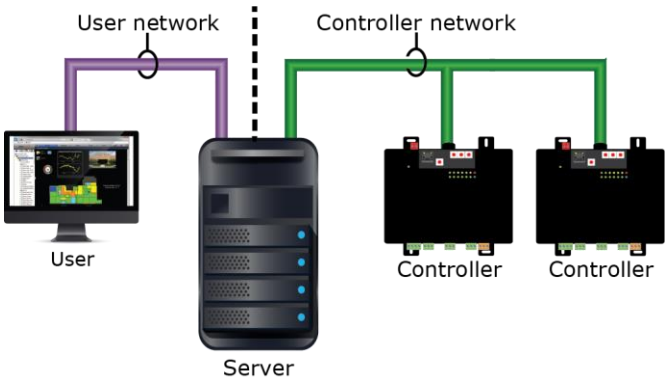
Carrier takes the security of our systems very seriously and you play the biggest part in this by installing and configuring systems in a secure manner. We encourage you to establish security policies for your own company networks and all the systems you install and service.

Follow the best practices in this document when deploying i-Vu® Pro building automation systems.

Use the Security Checklist in Appendix B to track important security steps when designing, installing and commissioning i-Vu® Pro systems.

Network separation

Standard BACnet is an intentionally open system that makes it easy to discover and control any device on its network. Because of this, you should design your system to segregate users from the controller network by having two separate networks. For example, if the users are on a company's enterprise LAN, you would not want controllers on the LAN so that they are easy targets for misuse by anyone with access. Some of the biggest risks come from insiders such as the curious tinkerer, a student on an education system's network, or a disgruntled employee.



You can physically separate the user network and the BACnet network without any IP routing between them, or you can logically separate them at a switch using a Virtual Local Area Network (VLAN).

If you have dual NICs (Network Interface Cards), the i-Vu® Pro server must have a different IP address for each network:

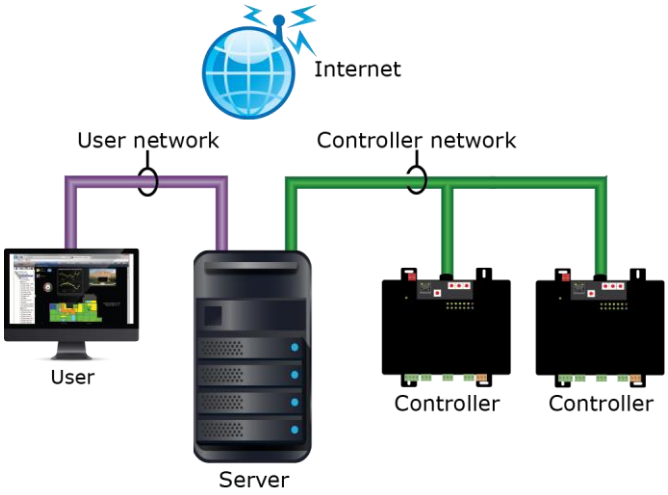
- User network - Configure this IP address and subnet mask in SiteBuilder on the **Configure** > **Preferences** > **Web Server** tab.
- BACnet network - Configure this IP address and subnet mask in the i-Vu® Pro interface on the **Driver Properties** > **Connections** page > **Configure** tab.

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Internet connectivity scenarios

The i-Vu® Pro system's connection to the Internet may vary greatly based on the client's needs and IT capabilities. The following possible network scenarios are listed in order of DECREASING security.

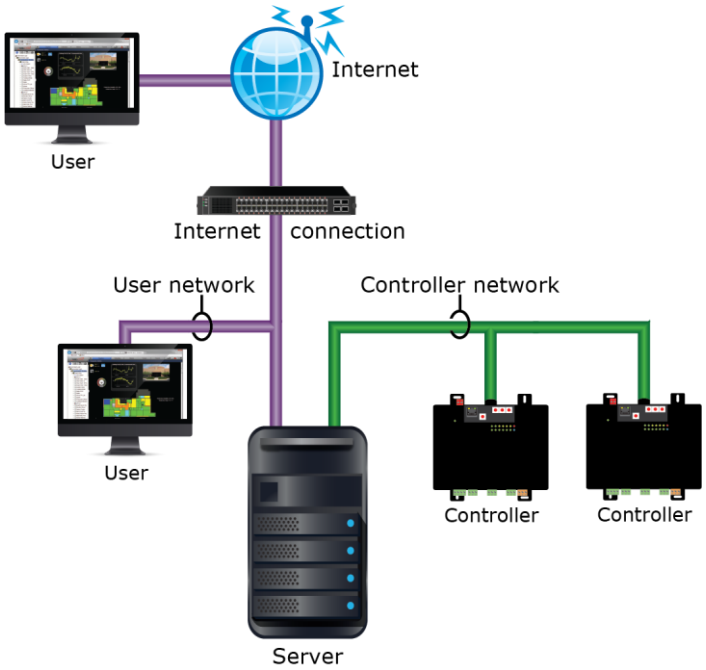
Scenario A: Isolated Network - Low risk



Do not permanently expose the i-Vu® Pro server or the BACnet network to the Internet. You can, however, allow users to access the i-Vu® Pro server through a secure VPN connection. If a NAT router or firewall is present on the LAN for other purposes, it should not have any ports forwarded to the i-Vu® Pro server or any controllers.

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Scenario B: Public Users - Medium risk

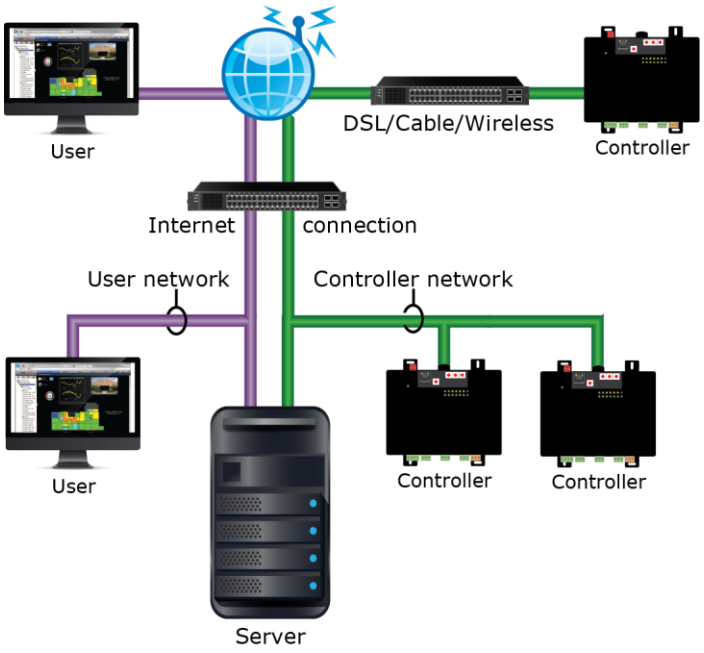


It is acceptable to permanently expose the i-Vu® Pro server on the Internet as long as:

- The BACnet network is not exposed.
- The NAT/Firewall device exposing the i-Vu® Pro system exposes only TCP ports 80 and 443 on the i-Vu® Pro server.
- BACnet traffic on UDP port 47808 is not exposed.

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Scenario C: Public Users with Distributed BACnet - High risk



In this configuration, both users and BACnet controllers use a public network/Internet. Carefully plan this configuration to maximize security.

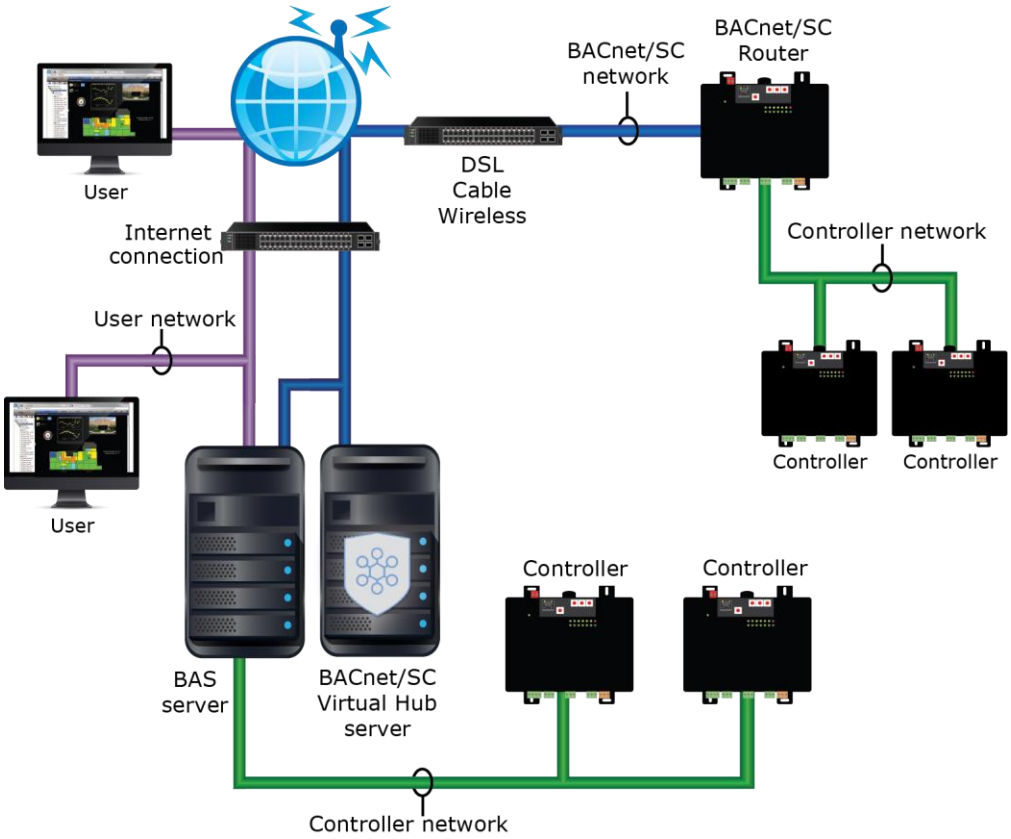
If the i-Vu® Pro server must connect to multiple sites over the Internet, connect them using a VPN to form a Wide Area Network that is secure (changing this to Scenario A).

If this is not possible, use the *BACnet Firewall feature* (page 7) in Ethernet-capable controllers, or protect controllers with a whitelist that your IT department can configure in each Internet connection device where the network connects to the Internet. The whitelist allows communication with your i-Vu® Pro system only from devices whose public IP addresses are in the list. Often, the only address controllers need to talk to is the i-Vu® Pro server. The i-Vu® Pro server firewall's whitelist will have to include the public address of all remote IP controllers.

DO NOT connect BACnet controllers to the Internet without at least whitelist protection! If you do, they could easily be discovered and modified by anyone on the Internet. If a BACnet router is connected to the Internet without protection, then the entire network connected to it is accessible.

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Scenario D: Public Users with Distributed BACnet/SC - Low risk



BACnet Secure Connect, or BACnet/SC, is an industry standard way of securing BACnet communications over the internet without the need for VPNs. A BACnet/SC network consists of multiple nodes connecting through a central hub. This hub can be located on premises or hosted on the Internet. The figure above depicts the BACnet/SC Hub installed on premises.

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Network firewall

Limit the ports opened through any firewall or NAT port forwarding to the minimum ports required. The i-Vu® Pro system uses the following ports:

Port	Transfer	Protocol/User	Use
80 (default)	TCP	http (Web server)	Client/Server
443 (default)	TCP	https (Web server)	Client/Server
443 (default)	TCP	wss (secure WebSocket for BACnet/SC)	Client
47806 (default)	TCP	Alarm Notification Client	Client/Server
47808	UDP	BACnet/IP	Server/i-Vu router
47808	TCP	Diagnostic Telnet *	Client/Server
47812	UDP	CCN/IP	i-Vu CCN router/Server
50005 50007 50008	UDP	CCN/IP	Server/i-Vu CCN router
50005 - 50008	UDP	Firmware CCN/IP	CCN router to CCN router

* This functionality is off by default. You can start it using the `telnetd` console command.

Scenarios B or C in the previous section require TCP ports 80 and 443 to be exposed to the Internet for user access.

Scenario C also requires UDP port 47808 to be exposed for both the server and the controller's firewall. If you do this, you MUST use a whitelist to limit connectivity.

Scenario D may require configuration of an outgoing port for BACnet/SC traffic and/or an incoming port protecting a BACnet/SC Hub.

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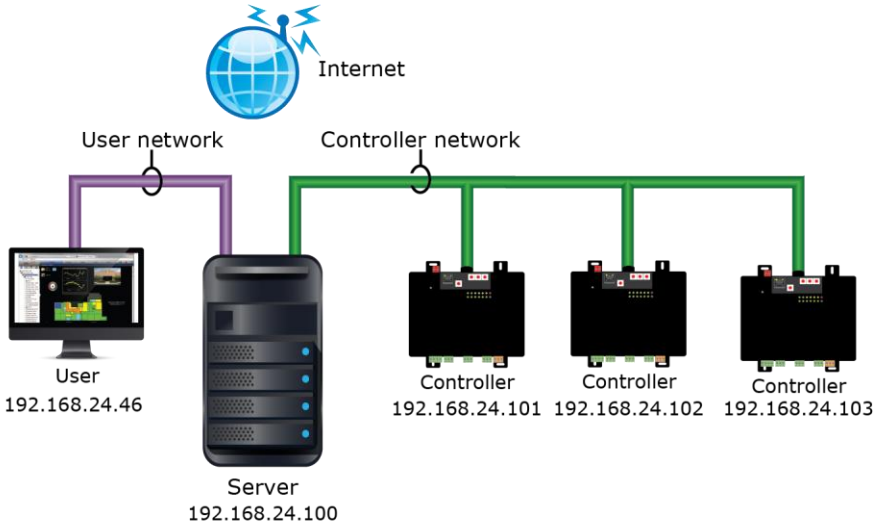
BACnet firewall

The v6-02 drivers for Carrier controllers with Ethernet capability have a BACnet firewall feature that allows you to restrict BACnet/IP communication with the controller to all private IP addresses and/or to a whitelist of IP addresses that you define. This feature provides another layer of security for your system.

The following are examples of use cases for the BACnet firewall and instructions for setting it up.

Case 1: Isolated network

While an isolated network is secure from threats on the Internet, other users or devices on the local network can potentially interfere with controllers.



In this example, each controller's BACnet firewall should allow BACnet communication from the i-Vu® Pro server's IP address and the controller's IP addresses. The user at 192.168.24.46 should not be allowed BACnet communication with the controllers.

The server and controllers addresses fall within the private IP address range of 192.168.0.0 to 192.168.255.255, but restricting BACnet communication to all private IP addresses is not sufficient since that would allow communication from the user. So a whitelist must be created in the BACnet firewall.

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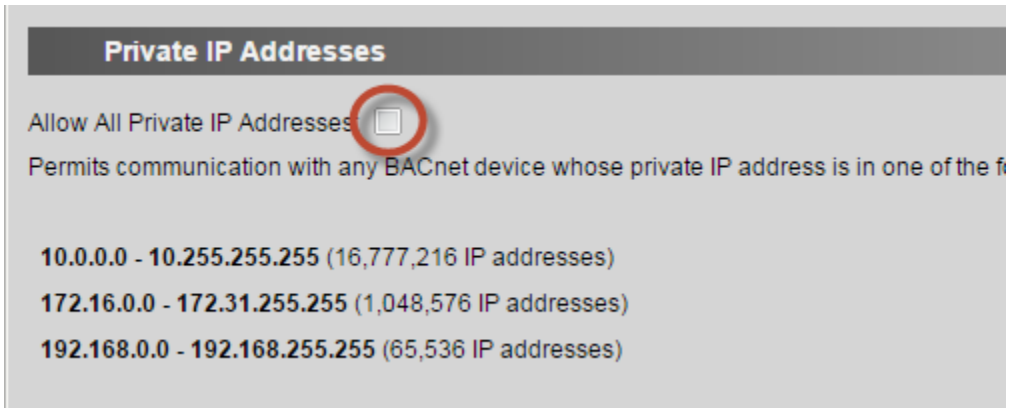
To set up the BACnet firewall:

1 In the i-Vu® Pro interface, right-click each controller and select **Driver Properties**.

2 Select **BACnet Firewall** > **Properties** tab.

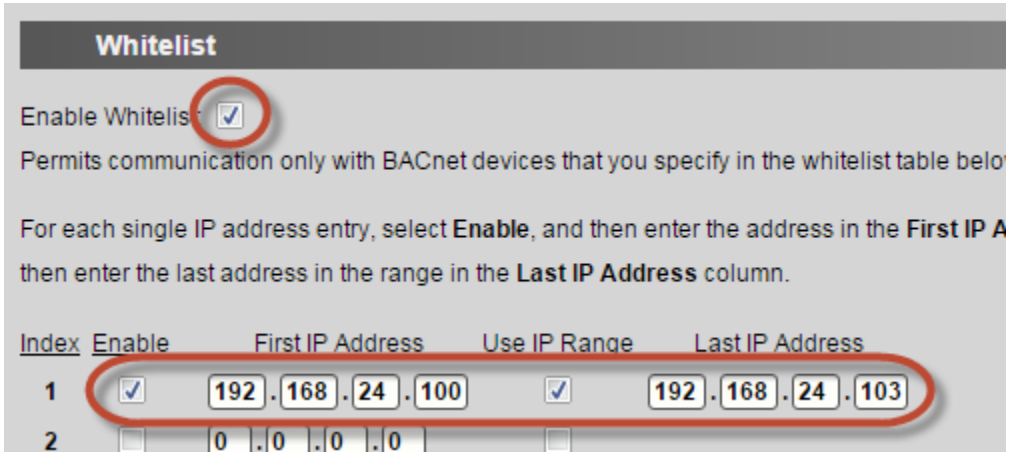
3 Check **Enable BACnet firewall**.

4 Uncheck **Allow All Private IP Addresses**.



5 Check **Enable Whitelist**.

6 On the first row, check **Enable**, check **Use IP Range**, and then enter the address range 192.168.24.100 through 192.168.24.103.



7 Click **Accept**.

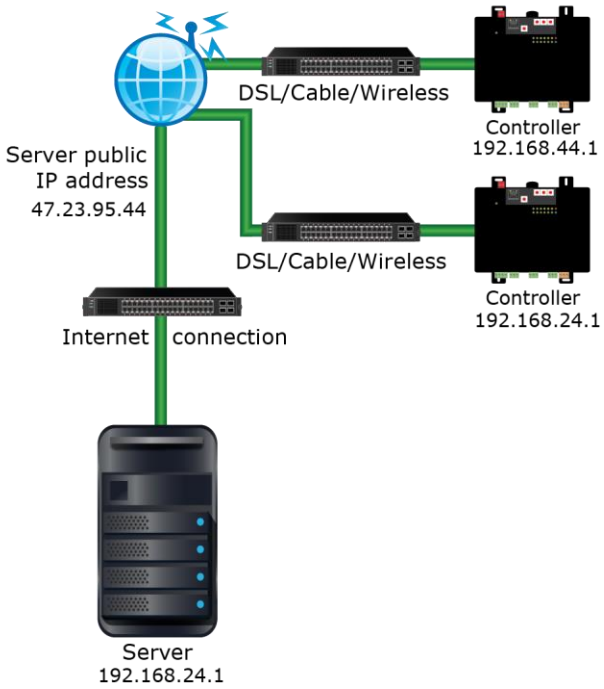
8 Wait for the page to update, and then check **Confirm firewall settings**.

NOTE In this example, the server and controllers IP addresses are sequential so the whitelist could have an address range. If you anticipate future controller expansion, reserve extra sequential addresses so that you can simply expand the range in the BACnet firewall settings. If the IP addresses are not sequential, you must enter each IP address on a separate line and check **Enable**.

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Case 2: Individual controllers exposed to the Internet

Controllers that are accessible on the Internet (for example, behind a DSL, cable, or wireless device) may not be protected by a network firewall or whitelist. This may be due to the network firewall's lack of capability or difficulty in setting it up.



In this example, each controller needs to communicate with only the i-Vu® Pro server so their BACnet firewall's whitelist should have only the server's public IP address. The controllers do not need to communicate with each other.

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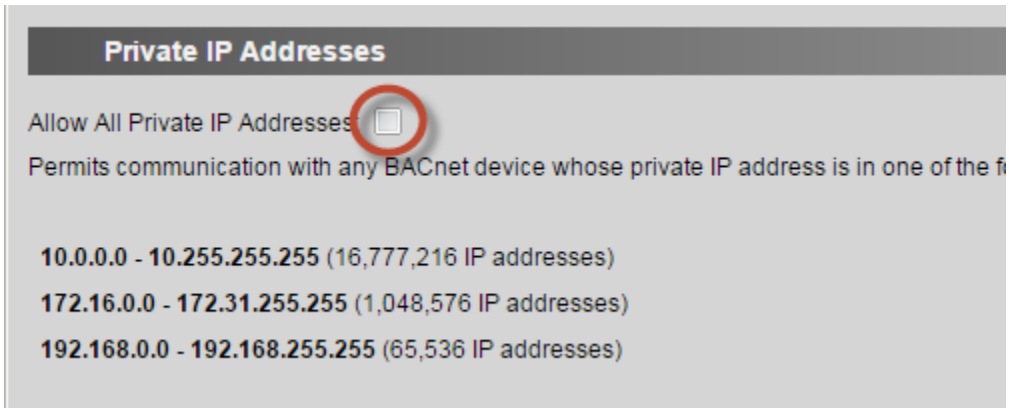
To set up the BACnet firewall:

1 In the i-Vu® Pro interface, right-click each controller and select **Driver Properties**.

2 Select **BACnet Firewall** > **Properties** tab.

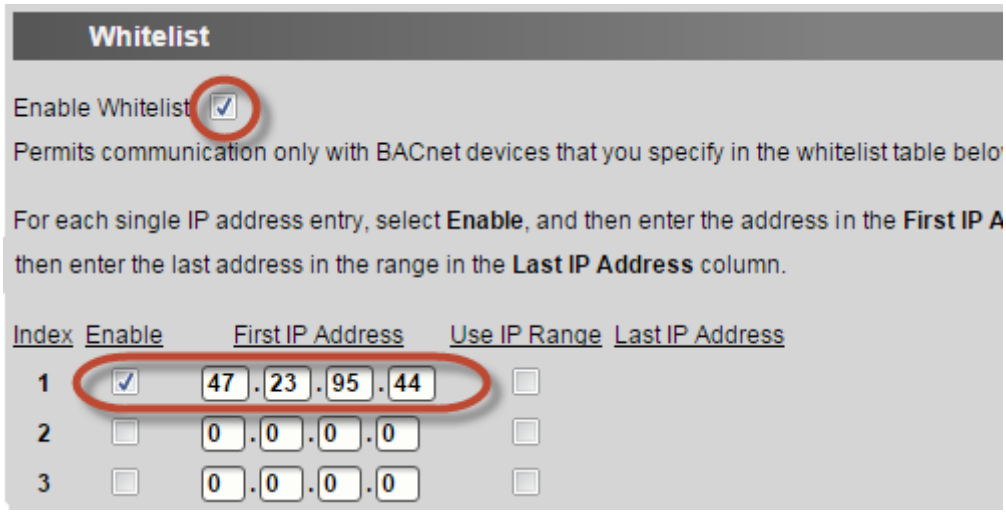
3 Check **Enable BACnet firewall**.

4 Uncheck **Allow All Private IP Addresses**.



5 Check **Enable Whitelist**.

6 On the first row, check **Enable**, and then enter the address 47.23.95.44.



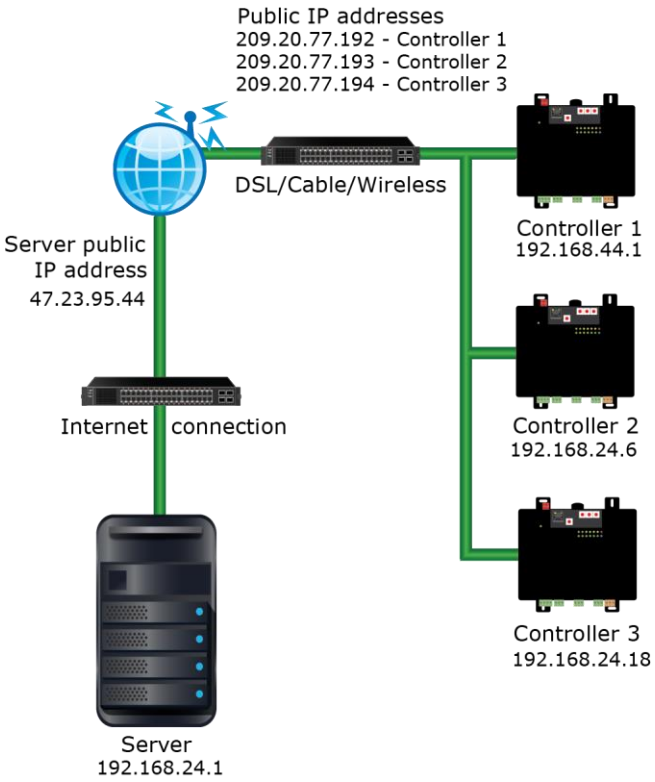
7 Click **Accept**.

8 Wait for the page to update, and then check **Confirm firewall settings**.

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Case 3: Multiple controllers exposed to the Internet at one site

Multiple controllers that are accessible on the Internet (for example, behind a DSL, cable, or wireless device) may not be protected by a network firewall or whitelist. The controllers have private IP addresses, but it is their public IP addresses that are exposed to the Internet.



In this example, the controllers need to communicate with the i-Vu® Pro server and each other. The controllers are the only devices on the site's private network, or other devices present are benign.

Each controller's BACnet firewall should allow BACnet communication with the i-Vu® Pro server's public IP address and with all private IP addresses so that the controllers can communicate with each other. The BACnet firewall prevents BACnet communication to the controller's public addresses.

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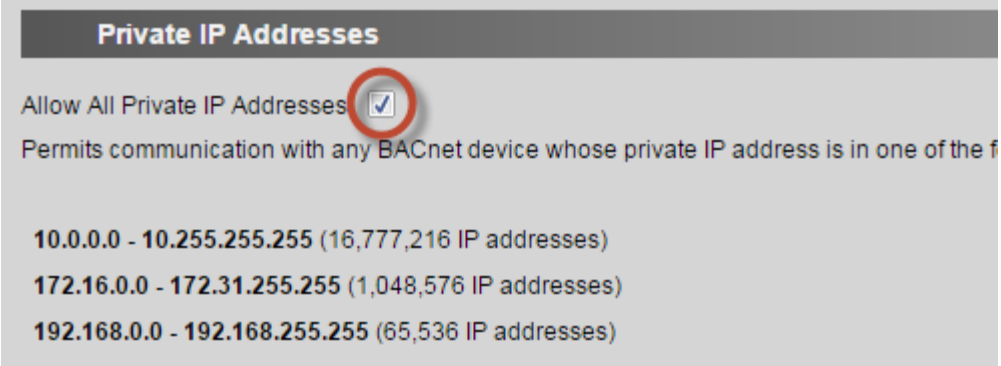
To set up the BACnet firewall:

1 In the i-Vu® Pro interface, right-click each controller and select **Driver Properties**.

2 Select **BACnet Firewall** > **Properties** tab.

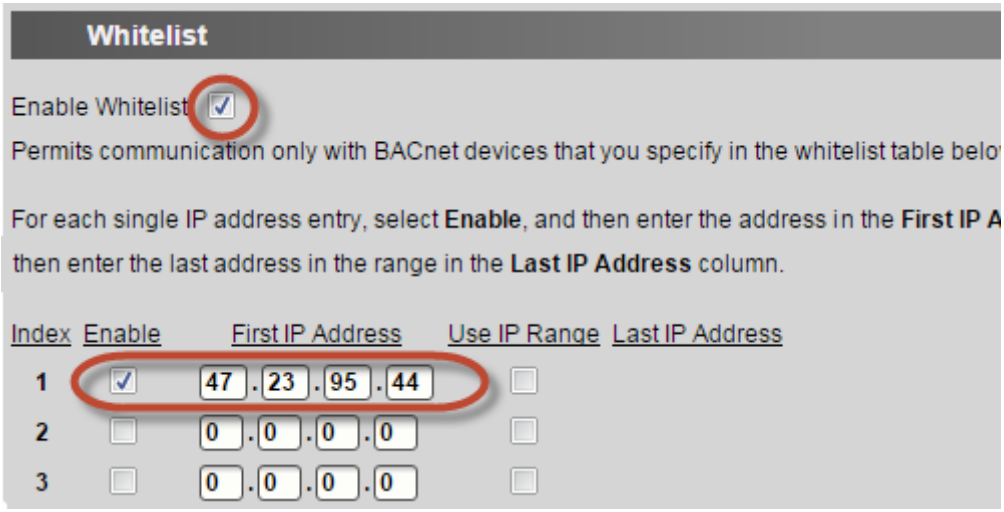
3 Check **Enable BACnet firewall**.

4 Check **Allow All Private IP Addresses**.



5 Check **Enable Whitelist**.

6 On the first row, check **Enable**, and then enter the address 47.23.95.44.



7 Click **Accept**.

8 Wait for the page to update, and then check **Confirm firewall settings**.

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Users

Follow the guidelines below to limit unauthorized user access.

- **Administrator account**—A system has a default Administrator user. If you upgraded from a pre-v6.5 system, change the Administrator's login name and add a password. DO NOT leave the password blank. DO NOT use the same password for multiple systems.
  NOTE When you create a new system in v6.5, you will be required to change the name and add a password.
- **Anonymous account**—A pre-v6.5 system had a default Anonymous user that required no user name or password. If you have not upgraded to v6.5, delete this user.
  NOTE The Anonymous user was removed from i-Vu® Pro v6.5.
- **Advanced password policy**—Enable the advanced password policy and require a minimum password length of at least 8 characters. This will disallow blank passwords.
- **No shared accounts**—Create a different account for each user. DO NOT create role-based accounts where multiple users log in with the same login name and password.
- **Delete old accounts**—Manage accounts when people no longer need access to the i-Vu® Pro system. Delete their account or change their password.
- **Auto Logoff**—Verify that **Log off operators after __ (HH:MM) of inactivity** is checked on the **System Settings** > **Security** tab.
  NOTE You can disable this for an individual user (for example, an account for a monitoring center).
- **Lock out users**—Verify that **Lock out operators for __ minutes after __ failed login attempts** is checked.
- **Location-dependent security**—Consider using the optional location-dependent security policy. For large systems with many users, you can restrict users to only the locations they should have access to.

i-Vu Pro server

Follow the guidelines below to protect the i-Vu Pro server.

- **Patches**—Keep the i-Vu Pro system and the operating system up-to-date with the latest patches.
- **Anti-virus protection—**Keep the i-Vu Pro server's anti-virus software and definitions up-to-date.
- **Single-use server**—i-Vu Pro software should be the only application running on the server. DO NOT put other applications on the same server.
- **HTTPS—**Use https:// with a certificate signed by a standard certificate authority, when possible. If using a self-signed certificate, install the server certificate on the client computers so users do not develop the bad habit of ignoring the "unsafe certificate" error.
- **Remote access**—After commissioning, uncheck **Allow remote file management** on the **System Settings** > **Security** tab.

Database server

Follow the database server vendor's best practices for a secure installation. This should include steps such as changing default accounts and passwords.

Configure the database server to accept connections only from the i-Vu® Pro system. Most database servers have a whitelist mechanism to facilitate this.

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Appendix A: Glossary

BAS—A Building Automation System is a collection of BACnet and/or CCN devices, the i-Vu Pro server, and the network(s) they reside on.

LAN—A Local Area Network is a computer network that interconnects computers/devices within a limited area such as an office building.

Firewall—A device that restricts network traffic. Firewall functionality is often combined with IP Router functionality in a single device. A firewall is configured with rules to define what kind of traffic is allowed or blocked. Personal computers and servers have firewall functionality built into them.

IP router—An IP (Internet Protocol) device that connects two or more IP networks. Typically an IP router connects a local network to the larger enterprise/Internet network.

NAT router—An IP router that remaps IP addresses from one network to one or more IP addresses on another network. A NAT router is commonly used to connect devices on a private network to the Internet or enterprise network, and it often has firewall and port forwarding capabilities.

Port—A port is a 16 bit (0-65535) number associated with an IP address that defines an endpoint of a computer network connection. There are two types of ports, TCP and UDP. BACnet uses a UDP port. HTTP, HTTPS and Alarm Notification Client use TCP ports. To manage access to a port in a firewall, you must know its number and type.

Private IP address—An IP address in one of the following ranges:
10.0.0.0 – 10.255.255.255
172.16.0.0 – 172.31.255.255
192.168.0.0 – 192.168.255.255

VLAN—A Virtual Local Area Network is partitioned and isolated by the IP network switch (or router). It is typically as effective as physically separating the network.

VPN—A Virtual Private Network is a method for extending a private network across a public network, such as the Internet. A VPN enables users to send and receive data across shared or public networks as if their computing devices were directly connected to the private network, and they benefit from the functionality, security and management policies of the private network.

Whitelist—A list of IP addresses that are the only ones allowed through a firewall. Advanced firewall devices can have different whitelists for a given port or protocol.

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Appendix B: Security checklist

Designing and Planning

- ☐ Separate user and BACnet networks either physically or with a VLAN.
- ☐ Determine the appropriate Internet connection scenario. See Internet connectivity scenarios.

Installing

If you have dual NICs:

- ☐ Enter the i-Vu Pro user network IP address and subnet mask in SiteBuilder on the **Configure** > **Preferences** > **Web Server** tab .
- ☐ Enter the i-Vu Pro BACnet network IP address and subnet mask in the i-Vu Pro interface on the **Connections** page > **Configure** tab.

If using Internet connectivity scenario A:

- ☐ Verify that IP addresses for the i-Vu Pro server and controllers are in one of the private IP address ranges.

If using Internet connectivity scenario B:

- ☐ Verify that controller IP addresses are in one of the private IP address ranges.
- ☐ Verify that the NAT router or firewall exposing the i-Vu Pro server only exposes TCP ports 80 and/or 443.

If using Internet connectivity scenario C:

- ☐ Verify that the NAT router or firewall exposing the i-Vu Pro server only exposes TCP ports 80 and/or 443, and UDP port 47808.
- ☐ Verify that each NAT router or firewall used (for both the server and each controller) has been configured with an appropriate whitelist of allowed IP addresses in your Internet connection device, or each controller is protected by its internal BACnet firewall feature.
- ☐ Test the whitelist protection from the Internet. Use a separate i-Vu Pro server on a public network by using a modstat like "modstat mac:0,b:1.2.3.4". Confirm you cannot access any of the system's controllers.
- ☐ Change the Administrator login name and add a password.
- ☐ If you are running a pre-v6.5 system, remove the Anonymous user account.
- ☐ Verify that the i-Vu Pro server's anti-virus software is up-to-date and is set to update automatically.
- ☐ Configure the database server to accept connections only from the i-Vu Pro application using a whitelist.

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After Commissioning

☐ Enable the Advanced password policy and set the minimum password length to at least 8 characters.

On the **System Options** > **System Settings** > **Security** tab, verify that:

☐ **Allow remote file management** is not checked

☐ **Log off operators after __ (HH:MM) of inactivity** is checked

☐ **Lock out operators for __ minutes after __ failed login attempts** is checked

On SiteBuilder's **Configure** > **Preferences** > **Web Server** tab, verify that the following are not checked:

☐ Any **TLS Level** below **"TLS 1.3"**

☐ **Allow SOAP applications over HTTP**

☐ **Allow unsigned add-ons**

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System Maintenance

☐ Install the latest software updates to keep the system current with the most recent security enhancements.

To quickly check security measures in place

In the i-Vu® Pro interface, use the Manual Command **sreview** to view your system's critical security compliance. These settings are described in more detail in the document above.

The **sreview** report displays the following:

Web Server	**Possible responses**	**Recommendation for the most secure system**
SSL Mode	**on**, **off**, or **both**	**on**
TLS in use	**on** or **off**	**true** (when SSL Mode is **on** or **both**)
TLS protocol	Version number	**TLS 1.3**
Allow unsigned add-ons	**true** or **false**	**false**
Allow SOAP over HTTP	**true** or **false**	**false**
Reads X-Forwarded-For Header	**true** or **false**	**false**

Certificate	**Possible responses**	**Recommendation for the most secure system**
Self-signed certificate in use	**true** or **false**	false
Certificate issued by	Distinguished Name of the certificate signer	certificate information, not a setting
Certificate expired	**true** or **false**	certificate information, not a setting
Certificate not yet valid	**true** or **false**	certificate information, not a setting
Certificate expires	date and time the certificate becomes invalid	certificate information, not a setting

	Possible responses	**Recommendation for the most secure system**
Email		
Secure SMTP enabled on email server	**true** or **false**	**true**
Passwords		
Password policy enforced	**true** or **false**	**true**
Software Updates		
Latest cumulative update applied: none or date	**none** or **date**	Keep the i-Vu® Pro system and the operating system up-to-date with the latest patches.

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Document revision history

Important changes to this document are listed below. Minor changes such as typographical or formatting errors are not listed.

Date	Topic	Change description	Code*
	Internet Connectivity Scenarios	Added Scenario D	X-PM-LO-O
	Network Firewall	Added a row for BACnet/SC, note for Scenario D	X-PM-LO-O
	All network graphics	Graphics updated to show i-Vu® XT or TruVu™ controllers	D
4/12/21		Corrected Carrier catalog number	D

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i-Vu® Building Automation System
i-Vu 8.0 Pro

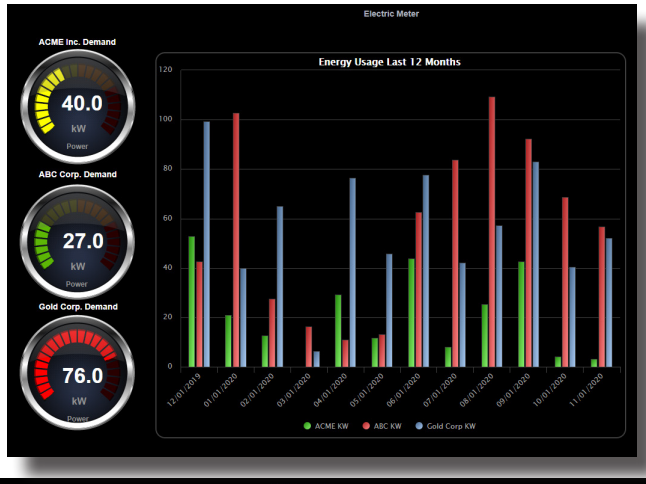


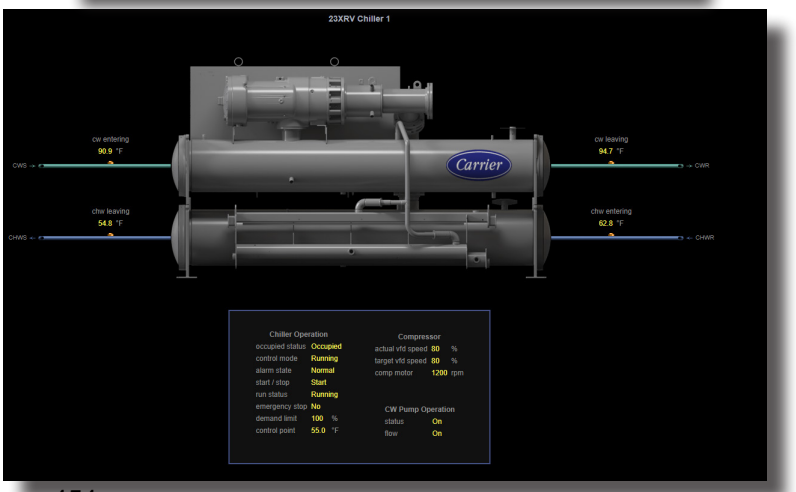
Manage your facility 24/7, 365 days a year with the powerful i-Vu web user interface that allows you to:

- Manage the HVAC equipment in your building from anywhere in the world using a standard web browser
- View and control the equipment in your building with a variety of PCs, tablets, and mobile devices
- Graphically configure and view schedules, setpoints, trends, alarms, and reports
- Integrate, monitor, and control other building systems such as lighting and meters using standard protocols

Features

- Powerful, comprehensive building management with intuitive point-and-click graphical access
- Dynamic, scalable vector floor plan graphics dynamically resize to monitor resolution and convey a quick understanding of building conditions
- Customizable graphics, schedules, trends, reports, and alarms
- Powerful reporting engine supports pre-built and customizable reports (available in Pro 750, Unlimited & Life Sciences)
- Plug and play connectivity with both factory and field-installed i-Vu®/CCN controllers
- Built-in ACxelerate™ VAV Auto-Commissioning tool
- Haystack-compatible semantic tagging automatically assigns standard reference names to equipment data
- BACnet/SC ready to support secure BAS infrastructures once BACnet/SC hardware is also available (future)
- Ready to support IPv6 once IPv6 Router is also available (future)
- Unlimited simultaneous users
- Easily integrates to third-party building systems and software using BACnet, Modbus® and LonWorks® protocols
- Multiple versions available to fit any size building or campus





i-Vu® Building Automation System
i-Vu 8.0 Pro

Client Requirements

Mobile Devices	Smart phones Android™, iOS Tablets: Android, iOS, Surface™	
Browsers	**A computer with this operating system**	**Supports these web browsers**
	Windows	Google™ Chrome™ v84.0 or later Microsoft® Edge v84 or later Mozilla® Firefox® v79.0 or later
	Mac OS	Safari® v11 or later
	(Apple Mac only)	Google Chrome v84.0 or later Mozilla Firefox v79.0 or later
	Linux	Google Chrome v84.0 or later Mozilla Firefox v79.0 or later

Server Requirements (Server sold separetely)

Specs	Quad core processor, 4G RAM, 100Mbps or higher LAN communications Supports PCs running Windows and Apple (Mac) PCs running Mac OS X	
OS	The following operating systems in 64-bit versions: Windows 10 Professional and Enterprise Windows Server 2019 Windows Server 2016 Windows Server 2012 R2	Windows 8 Professional and Enterprise
Database	The i-Vu Pro® v8.0 system supports the following and database engines are sold separately: Apache Derby (default database engine-included with purchase) SQL Server® Express 2019, 2017, 2016 SQL Server 2019, 2017, 2016 Oracle 12c MySQL 5.7.2 and 8.0 PostgreSQL 9.4 through 12	
Security	Supports TLS (Transport Layer Security) v1.3 with 256 bit encryption between client and i-Vu server Bacnet Secure Connect (BACnet/SC) secure, encrypted datalink layer	
Supports	Unlimited simultaneous users Communication to field controllers via BACnet (TCP/IP)	
Languages	International English, Brazilian Portuguese, Dutch, Finnish, French, French Canadian, German, Italian, Japanese, Korean, Norwegian, Russian, Simplified Chinese, Swedish, Thai, Traditional Chinese, Vietnamese	
BACnet	Advanced Operator Workstation (B-AWS) supporting BACnet Revision 19	
Part Numbers	CIV-OPNPR5 CIV-OPNPR32 CIV-OPNPR CIV-OPNPRUL	i-Vu 8.0 Pro-5 i-Vu 8.0 Pro-32 i-Vu 8.0 Pro-750 i-Vu 8.0 Pro Unlimited	5 Controllers Maximum 32 Controllers Maximum 750 Controllers Maximum, can create custom reports Unlimited Controllers, can create custom reports

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For more information, contact your local Carrier Controls Expert.
Controls Expert Locator:
www.carrier.com/controls-experts

i-Vu® Pro v8.0
Operating System Requirements

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i-Vu® Pro v8.0 client, server, operating system, and database requirements

i-Vu® Pro client requirements

The i-Vu® Pro system can be viewed on the following client devices and web browsers.

Computers

The client computer should have at least:
- Quad core processor
- 4 GB RAM
- Communications link of 100 Mbps or higher

The i-Vu® Pro application will work with slower computers and slower links, but the results may not be satisfactory.

A computer with this operating system...	Supports these web browsers...
Windows®	Google™ Chrome™ v84.0 or later [1]
	Microsoft® Edge v84 or later
	Mozilla® Firefox® v79.0 or later
Mac® OS X® (Apple® Mac only)	Safari® v11 or later [2]
	Google Chrome v84.0 or later
	Mozilla Firefox v79.0 or later

1 Best performance

2 Best performance unless browser is running on a Mac® Mini or a MacBook:

WARNING If machine is running Mountain Lion 10.8x with an integrated Intel HD 400 graphics card, it will experience display issues. Use one of these workarounds for better performance:

- If an additional NVIDIA graphics card is available, manually switch the graphic card setting in MAC® OS X® to use that card.
- If not, use Google™ Chrome™ v84.0 or later.

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Mobile devices

Device type	Platform support
Smart phone	Android™, iOS
Tablet	Android™, iOS, Surface™

NOTE Some functionality may be limited by the capability of the mobile device and operating system.

i-Vu® Pro server requirements

The recommended minimum for an i-Vu® Pro server:

- Dual core processor
- 4 GB RAM
- 30 Gigabyte hard drive
- Communications link of 10 Mbps or higher
- 64-bit server (See *Upgrading from a 32-bit server to a 64-bit server* (page 6).)

The i-Vu® Pro application will work with slower computers and slower links, but the results may not be satisfactory.

A i-Vu® Pro server must be 64-bit. Memory requirements vary, based on the:

- number of pieces of equipment and device instances
- size of the control programs
- number of simultaneous users logged in to the i-Vu® Pro application

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For this size system...	With this number of...		The computer should have at least a dual core processor and...				
	Instances of equipment and devices [1]	Physical Points and Display Objects	Passmark Total Score [2]	Passmark Single-threaded Score	RAM Minimum/ Recom-mended	JVM Memory Minimum/ Recom-mended	Disk Mark[4]
Small	0 - 250	0 - 1000	2000	800	4 / 4GB	1 / 1GB	3000
Medium	250 - 1000	1000 - 5000	3000	1000	4 / 8GB	2 / 4GB	5000
Large	1000 - 10,000	5000 - 50,000	5000	1400	6 / 12GB	4 / 8GB	15000
Huge	more than 10,000	more than 50,000	6500	1600	16 / 16GB [3]	12 / 12GB	30000

[1] Total number of control programs and controllers.

[2] For more information, see www.CPUbenchmark.net.

[3] For a huge system with minimal user activity, the average piece of equipment or instance device requires approximately 300KB of server RAM. Contact Technical Support for server sizing recommendations.

[4] SATA SSDs are recommended as baseline performance for i-Vu® Pro on all systems. Large systems benefit from the faster PCIe interface SSDs on both the i-Vu® Pro and database servers. Passmark's Disk Rating "Disk Mark" can be useful in gauging disk performance when designing new servers.
Rotational Drives: 900-1500
SATA SSDs: 3000-5000
PCIe SSDs: 10000-30000

Operating system and database requirements

To determine which operating system and database management system (DBMS) to use, consider:

- Operating systems and DBMS's already in use in your customer's organization
- Project size and trending requirements. See "Trend archival requirements" below.
- Project budget
- Your skill with the operating system and DBMS

The i-Vu® Pro v8.0 system use of database resources may require a moderate increase in the number of allowed connections if your database management system is set to the default value for the maximum allowed connections.

Supported operating systems and database management systems

A i-Vu® Pro v8.0 or later system is supported on the following 64-bit operating systems. The table below shows which operating systems can be used with each DBMS.

- Windows® 10 Professional and Enterprise
- Windows® 8.1 Professional and Enterprise
- Windows® Server 2020
- Windows® Server 2019
- Windows® Server 2016
- Windows® Server 2012 R2

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Database	Operating systems supported	Speed	Supports multiple servers	Dynamic defrag-mentation	Database replication	Notes
SQL Server® Express 2019, 2017, 2016	Windows®	Fast	No	Yes	Yes	Database cannot exceed 10 GB.
SQL Server® 2019, 2017, 2016	Windows®	Fast	Yes	Yes	Yes	SQL Server® 2016 Enterprise, Business Intelligence, and Standard editions can be used - only SP2 supported.
MySQL 8.0	Windows®	Fast	Yes	No	Yes	This open source database is free under the GNU Public License.
PostgreSQL 12 and 13	Windows®	Fast	Yes	Yes	Yes	This open source database is free under the BSD Public License.
Apache Derby	Windows®	Slow	No	No	Yes	• The i-Vu® Pro Installs for Windows include all the files needed to use an Apache Derby database. • Only one application can access the database at one time. Example: ViewBuilder cannot access the database if SiteBuilder is already running. • Do not use Derby if total historical trend capacity will exceed 2 GB. • Audit database cannot contain an entry of more than 32,700 characters; compact the database before migrating to Derby.

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Trend archival requirements

Trend archival (historical trending) requirements are the most significant factors in database selection. Alarms are not usually an issue unless large quantities (10,000+) will be kept for online access.

For each archived trend sample, the i-Vu® Pro application stores approximately 30 bytes of data. Disk space requirements per trended point are:

Sample interval	for 1 week	for 1 month	for 3 months	for 1 year
1 minute	300 kB	1.5 MB	5 MB	18 MB
5 minutes	60 kB	250 kB	1 MB	4 MB
15 minutes	21 kB	85 kB	250 kB	1 MB
1 hour	5 kB	20 kB	60 kB	240 kB

For example, a system with 2000 points archiving at 15 minute intervals for one year will require as much as 5.6 GB (2000 x 2.8 MB) disk space.

NOTES

- To limit disk space required for trend storage, archive trend data only for important system points.
- If your archival requirements are 5 GB or greater, you should consider using a separate server for the trend database.

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Upgrading from a 32-bit server to a 64-bit server

i-Vu® Pro v8.0 will not run on a 32-bit server. To upgrade, first install i-Vu® Pro v8.0 on a 64-bit server. The method for upgrading your system depends on the database type or size.

Derby database

1. Copy your existing system's **i-Vu Prox.x\webroot\<system name>** folder.
2. Paste the copied files into the **i-Vu Prov8.0\webroot** folder on the 64-bit server.
3. Open the system in SiteBuilder.
4. Select **File** > **Upgrade** > **i-Vu Pro system** and follow the prompts to upgrade the system.

All Non-Derby databases

1. Open your existing system in SiteBuilder.
2. Select **File** > **Manage Database** > **Migrate/Replicate**, and then select **Replicate database** to create a copy of the system in a Derby database.
3. Copy the replicate system's **i-Vu Prox.x\webroot\<system name>** folder.
4. Paste the copied files into the **i-Vu Prov8.0\webroot** folder on the 64-bit server.
5. Open the system in SiteBuilder.
6. Select **File** > **Upgrade** > **i-Vu Pro system** and follow the prompts to upgrade the system.
7. Select **File** > **Manage Database** > **Migrate/Replicate**, and then select **Migrate to a different database type** to change the system back to the original database type.

Very large databases

If you are moving a very large system to a 64-bit server, contact Carrier Control Systems Support for assistance.

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Setting up databases

The system folder must be located in the **\i-Vu_Pro_x.x\webroot** folder. The actual databases may be in another location if you are using MySQL, MS SQL Server, or PostgreSQL. See any of the following topics in the *i-Vu® Pro Installation Guide* for more information on setting up the databases:

PostgreSQL on Windows

MySQL on Windows

SQL Server and SQL Server Express on Windows

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Important changes to this document are listed below. Minor changes such as typographical or formatting errors are not listed.

Date	Topic	Change description	Code*
2/3/21	Operating system and database requirements	Added Windows 10 Enterprise to list of operating systems	C-PM-TC-E

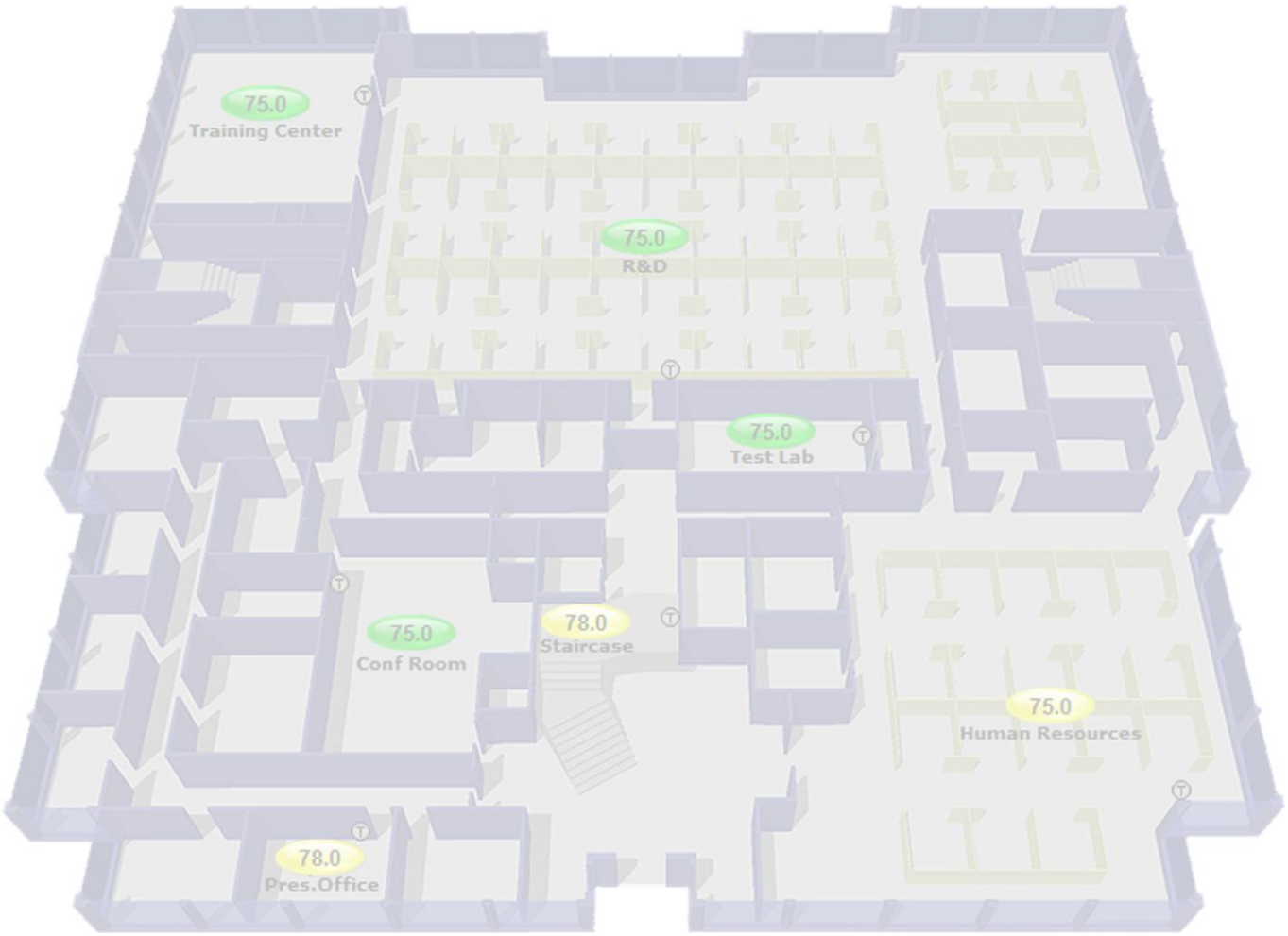
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i-Vu® Pro v8.0
Installation Guide



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What is an i-Vu® Pro system?

An i-Vu® Pro system is a web-based building automation system that can be accessed from anywhere in the world through a web browser, without the need for special software on the workstation. Through the web browser, you can perform building management functions such as:

- adjust setpoints and other control parameters
- set and change schedules
- graphically trend important building conditions
- view and acknowledge alarms
- run preconfigured and custom reports on energy usage, occupant overrides, and much more

NOTE If you are upgrading your i-Vu® Pro application from v6.0 or earlier, see the *i-Vu® Application Upgrade Guide*. You must convert your trends, which is not described in this document.

A typical i-Vu® Pro system

An i-Vu® Pro system uses a network of microprocessor-based controllers to control heating and air conditioning. A web-based server communicates with these controllers and generates the i-Vu® Pro interface that the user can access through a web browser. Through the interface, you can gather information, change operating properties, run reports, and perform other building management functions on a single building or an entire campus.

The i-Vu® Pro client uses a supported web browser to access i-Vu® Pro Server as a website.

i-Vu® Pro supports:

- Unlimited simultaneous users
- Multiple operating systems and databases
- CCN, Open, and third-party devices
- Built-in alarming, trending, and reporting
- Third-party integration
- Secure server access using TLS

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i-Vu® Pro tools

Develop and configure graphics and a system database for your i-Vu® Pro system using the following i-Vu® Pro tools.

NOTE The i-Vu® Pro v8.0 Tech Tools and Customer Tools USB drives have a built-in license that expires 2 years after the software is released. When prompted during installation, browse to the i-Vu® Pro v8.0 non-expiring license that you obtained from Carrier.

Use...	To...
ViewBuilder	Create or edit graphics
SiteBuilder	Create and modify the system database Build a system for multiple CCN Gateways

Tech tools for the Installer only:

Use...	To...
EquipmentBuilder	Build or edit control programs (.equipment files) for programmable controllers. Can also produce graphics, sequence of operation, and screen files
Alarm Notification	Receive a message on any networked computer that is running the i-Vu® Pro Alarm Notification Client application
Virtual BACview®	View and change property values and the controller's real time clock
BBMD Configuration Tool	Configure BACnet/IP Broadcast Management Devices (BBMDs) **NOTE** If your system has multiple routers that reside on different IP subnets, you must set up one router on each IP subnet as a BACnet/IP Broadcast Management Device (BBMD).
MSTP Capture Utility	Capture BACnet traffic on MS/TP. It is intended for situations where Carrier Control Systems Support needs a network capture to troubleshoot communications.
Test & Balance	• Calibrate airflow in a VAV or VVT Zone controller • Calibrate the static pressure in a VVT Bypass controller • Commission air terminals • Override reheat and terminal fans **NOTE** Use Test & Balance to manipulate the controllers associated with an air source, but not the air source itself, or heating and cooling equipment, such as chillers and boilers.
Snap	Build custom control programs using individual blocks of programming code called microblocks
LonWorks Integration Tool	Generate the microblock addresses automatically for third-party LonWorks points
AppLoader	Use to download .clipping files to restore factory defaults and check **Module Status** (Modstat) through the Rnet port
Field Assistant	Service or start up and commission a piece of equipment or a network of controllers.

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What's new in v8.0

What's new in the i-Vu® Pro v8.0 application

Feature	Improvement
Security enhancements	• Apache Tomcat web server has been upgraded to v9.0.x and TLS 1.3 • The i-Vu® Pro application has been upgraded to OpenJDK Java 11 LTS. • Acknowledge alarms with comments • Require operators to acknowledge alarms before deleting
Device Password	Supported only for controllers with a drv_gen5_<version no.>_driverx A Site-level password that restricts access to the controller setup pages when connecting through the Service Port. It can be set in SiteBuilder or the i-Vu® Pro interface from the Site level on the **Properties** page.
Connections	You can select a network connection in a new table on the **System Options** > **Connections** > **Configure** tab without having to go to the **View** tab.
Driver Properties	The following only applies to a controller with the drv_gen5 driver. The Driver Properties pages match most of the controller setup pages that you access through the Service Port. **NOTE** The Quick Setup is only available through the Service Port. In the navigation tree, right-click the controller and select **Driver Properties** > **Settings** tab to access the controller setup interface. See the controller's *Technical Instructions* for details on using the interface.
Interface	New i-Vu® logo

Reporting	• Custom reports: You can now edit custom report variables directly from a graphic.
	• Schedule reports: Add e-signatures to scheduled reports
	• Add a custom logo to reports
	• Life Sciences Reporting
	  ○ Mean Kinetic Temperature (MKT) Report
	  ○ Trend Values Report
	  ○ Out of Range Report

BACnet Rev. 19	To implement BACnet Rev. 19, the Display microblocks that are used to model a third-party BACnet device's options, have new fields on the microblock popup's **Properties** > **Details** tab.
BACnet/SC	Added support for BACnet/SC
Color groups for color maps	You can select from three color groups to enhance visibility of floorplans and color maps if using .svg floorplans.

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Feature	Improvement
Viewing vector graphics	New buttons for manipulating display options for the .svg floorplans and site graphics.
New manual command to view security settings	The new manual command **sreview** displays the application installation's security best practices compliance data. Included are web server security settings, SSL certificate details, email security settings, password policy, and the latest software updates. See Manual Commands for details.
Semantic tagging	Semantics tags and rules are included in the i-Vu® Pro v8.0 application to apply semantic meaning to locations in the system. You can use the tags that are included or create custom tags and custom rules. You can use the tags to define a path. See Using semantic tags in a path.
Add-ons	Free access to LDAP and Trend Export add-ons with purchase of Life Sciences license
Alarm Notification update	You can use an IPv6 Server address in the **Server** field. In the i-Vu® Pro interface, in **System Settings** > **General** tab > **Alarms**, you can restrict access to the IPv6 address.
ACxelerate automated commissioning	Allows you to verify and report on the health state of VAV dampers and reheat valves in your single VAV boxes.
i-Vu® XT or TruVu™ icons	New icons in the navigation trees for i-Vu® XT or TruVu™ routers, devices, drivers, and equipment.
Legacy autopilot	The legacy autopilot feature has been removed from the i-Vu® Pro application. It is replaced by an improved version available as an add-on. See the **Autopilot** add-on on the Current Products page.

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What's new in the SiteBuilder v8.0 application

Feature	Improvement
Improved security settings	To increase security, the i-Vu® Pro application defaults to the following settings: • If your system is set to use TLS, the i-Vu® Pro application automatically uses TLS 1.3. • The i-Vu® Pro application requires SOAP applications to run over HTTPS. • The i-Vu® Pro application allows only add-ons that have been approved by Carrier. **NOTE** If needed, you can override these defaults in SiteBuilder; however, doing so will lessen the security of your system.
Device Password	Supported only for a router with a drv_gen5 driver. Set this password on the **Network** tree > **Site** level to restrict access to the controller setup pages when connecting through the Service Port.
Select MS/TP port	i-Vu® XT or TruVu™ router only—On the **Add BACnet Network** dialog, when adding an MS/TP network, you can now select the physical port that the network will use.
IPv6 addressing	BACnet/IPv6 is a new Media Type when adding a BACnet Network. You can use IPv6 addresses to: ○ Automatically configure the IPv6 addresses by entering the Device Instance ○ Add BACnet/IPv6 networks ○ Add Hierarchical Systems • Restrict connections to an IPv6 address
New i-Vu® XT or TruVu™ icons	New icons in the navigation trees for i-Vu® XT or TruVu™ routers, devices, drivers, and equipment.
BACnet/SC	Added support for BACnet/SC

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What's new in the Snap v8.0 application

Feature	Improvement
New microblocks	Many new microblocks are now available. See New microblocks for Snap v8.0 in the Microblock Reference.
Tools	New menu option **Tools**. You can now add plugins. See Miscellaneous Snap menu commands and features.
Custom Microblocks	New menu option **Custom Microblocks**. See To create a custom microblock.
BACnet Rev. 19	New fields in the Property Editor have been added to implement features of BACnet Rev. 19. These fields appear in the Display microblocks used to model a third-party BACnet device.

What's new in the ViewBuilder v8.0 application

Feature	Improvement
v8.0	
SVG Floorplans	This new control allows scalable floorplans that can include the Node Name header and color bar. Also provides the ability to scale the floorplan graphic to fill the entire pane, to zoom in/out, to display the floorplan in 3D, and to toggle the ducting on/off when applicable. We recommend Inkscape™ or Adobe® Illustrator®; contact the Graphics Department for further information.
New i-Vu® XT or TruVu™ icons	New icons in the navigation trees for i-Vu® XT or TruVu™ routers, devices, drivers, and equipment.

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Before starting the i-Vu® Pro application and your system

NOTE These instructions are typically for a computer with a Microsoft® Windows operating system. If you have a different operating system, some instructions may vary slightly. See your operating system's Help for more information.

You must complete the following steps BEFORE installing i-Vu® Pro.

Step 1: Install Tools and have documentation ready

1 Follow the rest of this document to set up your entire system.

2 Insert the **Tech Tools** USB drive into your computer and wait until the Installation screen appears. If this screen does not appear, open **My Computer** and double-click **Tech Tools**.

3 Click the utilities you wish to install. Depending on how security and permissions are configured on your Windows computer, you may need to right-click the executable file and select **Run as Administrator**. For example, to install Tech Tools, right-click **i-Vu_Tools_v8.0_windows_setup.exe** and select **Run as Administrator**.

NOTE Some utilities are not copied to the hard drive. We recommend that you copy the **Tech Tools** USB contents to a folder on your hard drive. This ensures that you have the utilities when you need them.

Step 2: Install device managers and routers

- If you haven't already, download the *Installation and Start-up Guides* from the Carrier support website.
- Mount and wire your CCN device manager(s)*, Open, XT, or TruVu™ routers.
- Wire the ports for communication and set DIP switches.
- Set up IP addressing, including BACnet/IP Broadcast Management Devices (BBMDs).

  NOTE If your system has multiple routers that reside on different IP subnets, you must set up 1 router on each IP subnet as a BACnet/IP Broadcast Management Device (BBMD's). See the *BBMD Utility User Guide* for details.
- Configure BACnet device instance and network number using PuTTY or Hyperterminal connected to the Rnet or S2 port. See *Communicating using PuTTY* (page 46) or *Communicating using Hyperterminal* (page 48).

*If you have multiple CCN Gateways, you must obtain the required license and then use SiteBuilder to set up a site and BACnet/IP network per Gateway. See i-Vu®-Pro and SiteBuilder Help.

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Step 3: Use Network Service Tool V to ensure hardware is communicating on the CCN network

1 Connect the 3-terminal connector of the Network Service Tool's **USB to CCN Converter** to Port **S1** on the i-Vu® device manager.

Carrier USB to CCN converter (top CCN Port)	**i-Vu® device manager** (Port S1)
+	Net+ (Pin 1)
G	Signal Ground (Pin 5)
-	Net- (Pin 2)

2 Launch **Network Service Tool** and connect to the i-Vu® device manager. Each i-Vu® device manager defaults to Gateway functionality and has a CCN address of **0, 1**.

CAUTION Every CCN device must have a unique CCN address on the CCN network! Do not use Bus **0**, Element **238**, as it is automatically assigned to the i-Vu® Pro web server.

3 Find the device manager at 0,1 using **Address Search** and change the device manager's CCN address as desired.

NOTE We do not recommend leaving a device manager's CCN address at 0,1, because this is the address that it defaults to when formatted.

4 Upload the i-Vu® device manager.

5 Access the **Service Configuration Table** IP_CONF to enter the following configuration options:

NOTE A static IP address is required, as DHCP is not supported.

- **Host IP Address** - enter the device manager's IP address, provided by the LAN administrator (allowable entries for xxx.xxx.xxx.xxx: xxx is a decimal number between 0 - 255)
- **Subnet Mask** - enter the device manager's IP address, provided by the LAN administrator (allowable entries for xxx.xxx.xxx.xxx: xxx is a decimal number between 0 - 255)
- **Default Gateway** - enter the IP Gateway's IP address, provided by the LAN administrator (typically a router on the Ethernet LAN).

CCN ENET Configuration

Device Type

- Select **0** if this device manager is the Gateway. (**NOTE** Only 1 Gateway is permitted per system.)
- Select **1** if this device manager is the Bridge.

If using the router as a Bridge, enter **CCN/Ethernet Gateway IP** (the IP address of the i-Vu® device manager that is configured as the Gateway). This is the same address that was entered in the **Host IP address** for the CCN Gateway.

NOTE Record the IP address of the Gateway, because you need it to install your i-Vu® Pro system.

6 Repeat the above steps for every i-Vu® device manager used in the CCN system.

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Step 4: Get your systems ready

CCN

1 Have the IP address of the external Gateway.

2 Have a list of all of the devices at your job site, along with the name of each device, the bus and element numbers, and their respective locations.

3 For a retrofit project, which is already using CCN global and network schedules, you must have a list of all existing CCN schedule numbers, systems using global and network schedules, and all global schedule masters.

4 Verify that each device has a unique element number because duplicates will not install correctly.

 **CAUTION** Do not use Bus 0, Element 238. It is automatically assigned to the i-Vu® Pro web server.

BACnet

1 Create a list of all of the i-Vu® Open, XT, or TruVu™ routers and controllers at your job site, with their BACnet Device ID's, IP addresses (where applicable), BACnet network numbers, and the physical location of all devices.

2 Verify that every router has a unique address because duplicates will not install correctly.

See i-Vu® Pro Help for more information about setting schedules in the i-Vu® Pro interface.

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Setting up i-Vu® Pro client devices and web browsers

The i-Vu® Pro system can be viewed on the following client devices and web browsers.

Computers

The client computer should have at least:
- Quad core processor
- 4 GB RAM
- Communications link of 100 Mbps or higher

The i-Vu® Pro application will work with slower computers and slower links, but the results may not be satisfactory.

A computer with this operating system...	Supports these web browsers...
Windows®	Google™ Chrome™ v84.0 or later [1]
	Microsoft® Edge v84 or later
	Mozilla® Firefox® v79.0 or later
Mac® OS X® (Apple® Mac only)	Safari® v11 or later [2]
	Google Chrome v84.0 or later
	Mozilla Firefox v79.0 or later

1 Best performance

2 Best performance unless browser is running on a Mac® Mini or a MacBook:

WARNING If machine is running Mountain Lion 10.8x with an integrated Intel HD 400 graphics card, it will experience display issues. Use one of these workarounds for better performance:

- If an additional NVIDIA graphics card is available, manually switch the graphic card setting in MAC® OS X® to use that card.
- If not, use Google™ Chrome™ v84.0 or later.

Mobile devices

Device type	Platform support
Smart phone	Android™, iOS
Tablet	Android™, iOS, Surface™

NOTE Some functionality may be limited by the capability of the mobile device and operating system.

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Setting up and using a computer with the i-Vu® Pro system

- Set the monitor's screen resolution to a minimum of 1920 x 1080 with 32-bit color quality
- You may want to disable the computer's navigation sounds.

Mac only

NOTE The instructions below are for a Mac OS X 10.8. Other versions may vary slightly. See your computer's Help if necessary.

Computer settings	To change setting...
Enable right-clicking to see right-click menus:	
On a Mac	**1** Select **System Preferences** > **Mouse**. **2** Click the drop-down list that points to the mouse's right-click button, then select **Secondary Button**.
On a MacBook	**1** Select **System Preferences** > **Trackpad**. **2** Enable **Secondary click**.

The instructions in Help are for a Windows computer. For instructions that include the **Ctrl** key, replace **Ctrl** with **Command**. For example, replace **Ctrl+click** with **Command+click**.

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Setting up and using a web browser to view the i-Vu® Pro interface

To set up and use Microsoft Edge

The instructions below are for Microsoft® Edge.

Web browser settings	To set in Microsoft Edge...
Do not block cookies	**1** Click **...** to display the Actions droplist. **2** Select **Settings** > **Site Permissions** > **Cookies**.
Disable web browser's pop-up blockers *	**1** Click **...** to display the Actions droplist. **2** Then select **Settings** > **Site Permissions** > **Pop-ups and redirects**.

To...	Do the following...
Maximize the web browser window *	Use the minimize/maximize button in the top right corner of the browser window.
Have 2 different users logged in to the i-Vu® Pro system on the same computer *	**1** Click **...** to display the Actions droplist. **2** Select **New Window**.
Clear browser cache	**1** Click **...** to display the Actions droplist. **2** Select **Settings** > **Privacy, Search, and Services** > **Clear browsing data**. **3** Click **Choose what to clear**. **4** Click **Clear now**.

* Does not apply to Microsoft Edge on a phone.

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To set up and use Mozilla Firefox

NOTES

- The instructions below are for Mozilla® Firefox® v60.0 on a Windows operating system. Other versions may vary slightly. See your web browser's Help if necessary.
- If the menu bar is not visible, right-click on the window's title bar, and then select **Menu bar**.
- If a message appears in the i-Vu® Pro interface that includes the checkbox **Prevent this page from creating additional dialogs**, DO NOT check this box.

Web browser settings	To set in Firefox...
Disable Pop-up blocker	**1** Click **Tools** > **Options** > **Privacy & Security**. **2** Under **Permissions**, click **Exceptions** next to **Block pop-up windows**. **3** Type `http://` (or `https://`) and then the server name or IP address of your system. **4** Click **Allow** and then **Save Changes.**
Enable JavaScript	**1** In the address bar, type `about:config`, and then press **Enter**. **2** Click **I accept the risk**. **3** In the **Search** bar, type `javascript.enabled`. **4** If the value field shows **true**, JavaScript is enabled. If it shows **false**, right-click **javascript:enabled**, and then select **Toggle**.
Add-ons Manager	Select **Tools** > **Add-ons** > **Extensions**. On this page, you can enable/disable installed add-ons such as: • Adobe® Acrobat® Reader (to view PDF's) • QuickTime Plug-in (to play audible alarms) Only installed Firefox add-ons will show up in the list.

To...	Do the following...
Maximize the web browser window	Press **F11** to turn full-screen mode on\off.
Clear browser cache	**1** Click **Tools** > **Options** > **Privacy & Security**. **2** Under **Cookies and Site Data**, click **Clear Data**. **3** Click **Clear**.
Have 2 different users logged in to the i-Vu® Pro system on the same computer	Start a new web browser session. Select **File** > **New Private Window**.

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To set up and use Google Chrome

NOTES

- The instructions below are for Google™ Chrome™ v66.0. Other versions may vary slightly. See your web browser's Help if necessary.
- If a message appears in the i-Vu® Pro interface that includes the checkbox **Prevent this page from creating additional dialogs**, DO NOT check this box.

On a computer

Web browser settings	To set in Chrome...
Enable pop-ups	1 Click ⋮ on the browser toolbar. 2 Select **Settings**. 3 Click **Advanced** at the bottom of the page. 4 Under **Privacy and security**, click **Content settings**. 5 Under **Pop-ups** > **Allow**, click **ADD**, and then type http:// (or https://) and then the server name or IP address of your system.

To...	Do the following...
Clear browser cache	1 Click ⋮ on the browser toolbar. 2 Select **More tools** > **Clear browsing data**. 3 Select a time range in the drop-down list. 4 Check the types of information that you want to remove. 5 Click **CLEAR DATA**.
Maximize the web browser window	Press F11 on your keyboard to turn full-screen mode on/off.
Have 2 different users logged in to the i-Vu® Pro system on the same computer	Start a new web browser session. Click ⋮, then select **New incognito window**.

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On Chrome for Android

NOTE The following settings are based on Android v11 - options may vary with versions.

Web browser settings	In the Chrome menu...
Turn off desktop mode	Uncheck **Request desktop site**
Disable pop-up blocker	**Settings** > **Advanced** > **Site Settings** > uncheck **Block pop-ups**
Enable JavaScript	**Settings** > **Advanced** > **Site Settings** > check **Enable JavaScript**
Enable Cookies	**Settings** > **Advanced** > **Site Settings** > check **Accept Cookies**

To...	In the Chrome menu...
Clear browser cache	**Settings** > **Basics** > **Privacy** > **CLEAR BROWSING DATA**

To set up and use Safari

NOTES

- The instructions below are for Safari® v11. Other versions may vary slightly. See your web browser's Help if necessary.
- We recommend that you do not run Safari in full-screen mode. If you do, i-Vu® Pro pop-ups will open full-screen, covering the main application window.

On an Apple® computer (Mac®)

Web browser settings	To set in Safari...
Disable pop-up blocker	**Preferences** > **Security** > uncheck **Block pop-up windows**
Enable JavaScript	**Preferences** > **Security** > check **Enable JavaScript**
Enable Plug-ins	**Preferences** > **Security** > check **Enable plug-ins**
Prevent pop-ups from opening in a new browser tab	**Preferences** > **Tabs** > uncheck **Command-click opens a link in a new tab**
Prevent Safari from automatically opening zip files exported from the i-Vu® Pro application	**Preferences** > **General** > uncheck **Open "safe" files after downloading**

To...	Do the following...
Clear browser cache	**History** > **Clear History**
Have 2 different users logged in to the i-Vu® Pro system on the same computer	Start a new web browser session. Select **Safari** > **Private Browsing** > **File** > **New window**

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On an Apple® iPad

Web browser settings	To set on the iPad...
Disable pop-up blocker	**Settings**> **Safari** > set **Block pop-ups** to **Off**
Enable JavaScript	**Settings** > **Safari** > set **JavaScript** to **On**


TIP Re-enable popup blocking on your device when not using our software.

To...	Do the following...
Clear browser cache	**Settings** > **Safari** > **Clear History**


TIP Re-enable popup blocking on your device when not using our software.

On an Apple® iOS 12.2

Web browser settings	To set on the iPhone...
Enable JavaScript	**Settings** > **Safari** > **Advanced**

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i-Vu® Pro v8.0 client, server, operating system, and database requirements

i-Vu® Pro client requirements

The i-Vu® Pro system can be viewed on the following client devices and web browsers.

Computers

The client computer should have at least:
- Quad core processor
- 4 GB RAM
- Communications link of 100 Mbps or higher

The i-Vu® Pro application will work with slower computers and slower links, but the results may not be satisfactory.

A computer with this operating system...	Supports these web browsers...
Windows®	Google™ Chrome™ v84.0 or later [1]
	Microsoft® Edge v84 or later
	Mozilla® Firefox® v79.0 or later
Mac® OS X® (Apple® Mac only)	Safari® v11 or later [2]
	Google Chrome v84.0 or later
	Mozilla Firefox v79.0 or later

1 Best performance

2 Best performance unless browser is running on a Mac® Mini or a MacBook:

WARNING If machine is running Mountain Lion 10.8x with an integrated Intel HD 400 graphics card, it will experience display issues. Use one of these workarounds for better performance:

- If an additional NVIDIA graphics card is available, manually switch the graphic card setting in MAC® OS X® to use that card.
- If not, use Google™ Chrome™ v84.0 or later.

Mobile devices

Device type	Platform support
Smart phone	Android™, iOS
Tablet	Android™, iOS, Surface™

NOTE Some functionality may be limited by the capability of the mobile device and operating system.

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i-Vu® Pro server requirements

The recommended minimum for an i-Vu® Pro server:

- Dual core processor
- 4 GB RAM
- 30 Gigabyte hard drive
- Communications link of 10 Mbps or higher
- 64-bit server (See Upgrading from a 32-bit server to a 64-bit server.)

The i-Vu® Pro application will work with slower computers and slower links, but the results may not be satisfactory.

A i-Vu® Pro server must be 64-bit. Memory requirements vary, based on the:

- number of pieces of equipment and device instances
- size of the control programs
- number of simultaneous users logged in to the i-Vu® Pro application

For this size system...	With this number of...		The computer should have at least a dual core processor and...				
	Instances of equipment and devices [1]	Physical Points and Display Objects	Passmark Total Score [2]	Passmark Single-threaded Score	RAM Minimum/ Recom-mended	JVM Memory Minimum/ Recom-mended	Disk Mark[4]
Small	0 - 250	0 - 1000	2000	800	4 / 4GB	1 / 1GB	3000
Medium	250 - 1000	1000 - 5000	3000	1000	4 / 8GB	2 / 4GB	5000
Large	1000 - 10,000	5000 - 50,000	5000	1400	6 / 12GB	4 / 8GB	15000
Huge	more than 10,000	more than 50,000	6500	1600	16 / 16GB [3]	12 / 12GB	30000

[1] Total number of control programs and controllers.

[2] For more information, see www.CPUbenchmark.net.

[3] For a huge system with minimal user activity, the average piece of equipment or instance device requires approximately 300KB of server RAM. Contact Technical Support for server sizing recommendations.

[4] SATA SSDs are recommended as baseline performance for i-Vu® Pro on all systems. Large systems benefit from the faster PCIe interface SSDs on both the i-Vu® Pro and database servers. Passmark's Disk Rating "Disk Mark" can be useful in gauging disk performance when designing new servers.
Rotational Drives: 900-1500
SATA SSDs: 3000-5000
PCIe SSDs: 10000-30000

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Operating system and database requirements

To determine which operating system and database management system (DBMS) to use, consider:

- Operating systems and DBMS's already in use in your customer's organization
- Project size and trending requirements. See "Trend archival requirements" below.
- Project budget
- Your skill with the operating system and DBMS

The i-Vu® Pro v8.0 system use of database resources may require a moderate increase in the number of allowed connections if your database management system is set to the default value for the maximum allowed connections.

Supported operating systems and database management systems

A i-Vu® Pro v8.0 or later system is supported on the following 64-bit operating systems. The table below shows which operating systems can be used with each DBMS.

- Windows® 10 Professional and Enterprise
- Windows® 8.1 Professional and Enterprise
- Windows® Server 2019
- Windows® Server 2016
- Windows® Server 2012 R2

Database	Operating systems supported	Speed	Supports multiple servers	Dynamic defrag-mentation	Database replication	Notes
SQL Server® Express 2019, 2017, 2016	Windows®	Fast	No	Yes	Yes	Database cannot exceed 10 GB.
SQL Server® 2019, 2017, 2016	Windows®	Fast	Yes	Yes	Yes	SQL Server® 2016 Enterprise, Business Intelligence, and Standard editions can be used - only SP2 supported.
MySQL 8.0	Windows®	Fast	Yes	No	Yes	This open source database is free under the GNU Public License.
PostgreSQL 12 and 13	Windows®	Fast	Yes	Yes	Yes	This open source database is free under the BSD Public License.

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Database	Operating systems supported	Speed	Supports multiple servers	Dynamic defrag-mentation	Database replication	Notes
Apache Derby	Windows®	Slow	No	No	Yes	• The i-Vu® Pro Installs for Windows include all the files needed to use an Apache Derby database. • Only one application can access the database at one time. Example: ViewBuilder cannot access the database if SiteBuilder is already running. • Do not use Derby if total historical trend capacity will exceed 2 GB. • Audit database cannot contain an entry of more than 32,700 characters; compact the database before migrating to Derby.

Trend archival requirements

Trend archival (historical trending) requirements are the most significant factors in database selection. Alarms are not usually an issue unless large quantities (10,000+) will be kept for online access.

For each archived trend sample, the i-Vu® Pro application stores approximately 30 bytes of data. Disk space requirements per trended point are:

Sample interval	for 1 week	for 1 month	for 3 months	for 1 year
1 minute	300 kB	1.5 MB	5 MB	18 MB
5 minutes	60 kB	250 kB	1 MB	4 MB
15 minutes	21 kB	85 kB	250 kB	1 MB
1 hour	5 kB	20 kB	60 kB	240 kB

For example, a system with 2000 points archiving at 15 minute intervals for one year will require as much as 5.6 GB (2000 x 2.8 MB) disk space.

NOTES

- To limit disk space required for trend storage, archive trend data only for important system points.
- If your archival requirements are 5 GB or greater, you should consider using a separate server for the trend database.

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Installing and setting up databases

The system folder must be located in the **\i-Vu_Pro_x.x\webroot** folder. The actual databases may be located in another location if you are using MySQL, MS SQL Server, or PostgreSQL. See any of the following topics for more information:

PostgreSQL on Windows (page 21)

MySQL on Windows (page 24)

SQL Server and SQL Server Express on Windows (page 28)

PostgreSQL 13.x on Windows for the i-Vu® Pro v8.0 system

To set up the databases for a new i-Vu® Pro system, complete all 4 steps below.

Step 1: Install PostgreSQL on Windows

a Download the appropriate PostgreSQL installer from the PostgreSQL downloads page.

b Save **postgresql-<latest version>-windows.exe** to your hard drive.

c If you saved the **postgresql-<latest version>-windows.exe** file to a machine other than the PostgreSQL server, move the file to the PostgreSQL server.

d On the PostgreSQL server, run the **postgresql-<latest version>-windows.exe** file to start the PostgreSQL install.

e Accept the defaults until you are asked for a password.

f Enter a password for the service account, then retype the password.



TIP Record the password here for future reference _____.

g Enter the port number you wish to use or leave it at the default port of `5432`.

h Continue the installation process, accepting all defaults until you reach the Finish screen; then clear the checkbox regarding Stack Builder.

i Click **Finish**.

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Step 2: Create database user in PostgreSQL

a Go to **Start** > **All Programs** > **PostgreSQL 12.x** > **pgAdmin 4**.

b In the **Browser** pane, expand **Servers** and then double-click **PostgreSQL 12**.

c Type the service account password that you created in step 1f above.

d In the **Browser** pane, right-click **Login Roles/Group Roles**, then select **Create** > **Login/Group Role**.

e On the **General** tab, in the **Name** field, type a name (all lowercase) for the user, such as `xxx_user`; this will be your **Database User Login** in SiteBuilder.



TIP Record the user name here for future reference _____.

f On the **Definition** tab, in the **Password** field, type a password for the user; this will be your **Database User Password** in SiteBuilder.



TIP Record the password here for future reference _____.

g On the **Privileges** tab, enable **Can Login and Create Databases**.

NOTE Verify that **Inherit rights from the parent** is enabled (default).

h Click **Save**.

Step 3: Create database instances in PostgreSQL

a In the **Browser** pane, right-click on **Databases**, then select **Create Database**.

b In the **Database** field, type a name for the database such as `xxx_main`; this will be your **Database Connect String Instance** in SiteBuilder. Record the name below.

c In the **Owner** field, select the name that was created in Step 2e.

d On the **Security** tab, click the **Privileges** plus sign. In the **Grantee** column, select the name that was created in Step 2e.

e Click the blank space under the **Privileges** column and click the **All** checkbox.

f Click **Save**.

g Repeat steps a-f to create the **Alarms**, **Trends**, and **Audit Log** databases.

NOTE Database names are case-sensitive and must be 18 characters or less in length.



TIP Record the database names here for future reference:

Main _____

Alarms _____

Trends _____

Audit Log _____

h Close **pgAdmin 4**.

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Step 4: Set up the PostgreSQL databases in SiteBuilder

a In SiteBuilder, select **File** > **New**.

b Type a name for the system.

c Select **PostgreSQL** from the **Database Type** drop-down list.

d Select **Make this the default system for i-Vu Pro** if you want the i-Vu® Pro application to automatically run this system each time it starts.

e Complete the remaining fields, then click **Next**.

f Enter the **Database Connect String** information for each i-Vu® Pro database and the **Database User** information. See table below.

g Select your system language.

h Click **Finish**.

NOTE To change **Database Connect Strings** for an existing system, select **Modify database connection parameters** in the **File** > **Open** dialog box and then click **Next**.

Main Database Connect String:	
Server	Type one of the following: • `localhost` if the i-Vu® Pro application and the database are on the same machine • The name or IP address of the machine that the database is on if different than the i-Vu® Pro application
Port	Do one of the following: • Type the default port of `5432`. • Type the port number that the database uses for communication that you set up in step 1g if different than the database default.
Instance	The names that you gave the i-Vu® Pro databases in step 3b.
Database User:	
Login	The user name that you entered in step 2e.
Password	The password that you entered in step 2f.

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MySQL 8.0 on Windows for an i-Vu® Pro v8.0 system

To set up the databases for a new i-Vu® Pro system, complete the following steps:

Step 1: Install MySQL

a Download the appropriate **MySQL Community Server 8.0** > **MySQL Installer MSI** from the **MySQL Downloads** page.

b Save **mysql-<installer-community-latest version->msi** to your hard drive.

TIP If you saved the file to a machine other than the MySQL server, move the file to the MySQL server.

c On the MySQL server, run **mysql-<installer-community-latest version->-.msi** to start the MySQL install.

d In the **Choosing a Setup Type** window, select **Custom** and click **Next**.

e Select the following in the **Available Products** column and then click on the arrow to move them to the **Product/Features** column:

- MySQL Server 8.0 x86 or -x64 (use x86 for 32 bit operating systems)
- MySQL Workbench
- Connector/J (latest version)

f Click **Next**.

g If there are entries in the **Check Requirements** window, click **Execute** and follow the Install Wizard for each application, until all of them are completed.

NOTE When all applications are installed, the **Execute** button disappears.

h Click **Next**.

i In the **Installation** window, verify that the 3 products from step f are listed and then click **Execute**.

j When the **Status** column shows all items as **Complete**, click **Next**, then click **Next** again.

k Select **Server Computer** from the **Config Type** drop-down list.

l If the site requires a specific TCP port, enter this port number in the **Port Number** field.

m Accept defaults for the remaining configurations, then click **Next**.

n On the **Authentication Method** page choose either **Strong Password** authentication (recommended) or **Legacy Password** authentication.

o Click **Next**. Then type in a root password, confirm it, and click **Next**.

TIP Record the password here for future reference _____.

p Accept the **Windows Service** default settings.

NOTE If the site requires that the MySQL service run under a particular user account, select **Custom User** and enter in the user name and password supplied by the IT department.
The account that the MySQL service runs with can be changed later in the Windows Service Control Manager.

q Click **Next** and then click **Execute**.

r Click **Finish**.

s In the product **Configuration** window, click **Next**, and then click **Finish** to complete the MySQL installation and to launch MySQL Workbench.

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Step 2: Create i-Vu® Pro database instances

a Click **+** next to MySQL Connections and enter a connection name, such as the name of your server.



TIP Record the connection name here for future reference _____.

b Click **Test Connection** and **OK**.

c In the list of connections on the Workbench, double-click your new connection to open.

d Click **+** on the cylindrical database icon to add a new Schema (database).

e In the **Name** field, type a name for the database such as `xxxmain`, which will be your **Database Connect String Instance** in SiteBuilder. Record the name below.



TIP Record the connection name here for future reference _____.

f Click **Apply**, click **Apply** again, then click **Finish**.

g Repeat steps f-h to create the **Alarms**, **Trends**, and **Audit Log** databases.

NOTE Database names are case-sensitive and must be 18 characters or less in length.



TIP Record the database names here for future reference:

Main _____

Alarms _____

Trends _____

Audit Log _____

h Close all Schema Creation tabs.

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Step 3: Create a database user

a Click **Users and Privileges**.

b At the bottom of the window, click **Add Account**.

c On the **Login** tab, type a **Login Name** and **Password.**

NOTE These will be your **Database User Login** and **Database Password** in SiteBuilder. Record them here for future reference:
Login _____ Password _____

d Click **Apply**.

e On the **Schema Privileges** tab, select the user you created.

f Select the **Add Entry** button.

NOTE You may have to resize the window to see the button at the top-right.

g Under **Schema**, select **Selected Schema** and then select the Main database schema you added in step 2e.

h Click **OK**.

i Select the row you added in the **Users and Privileges** table, then click **Select "ALL"** under the privilege check boxes.

j Click **Apply**.

k Repeat steps g through j to give the database user privileges to the **Alarms**, **Trends**, and **Audit Log** databases.

l Close **MySQL Workbench**.

Step 4: Install a MySQL database driver

a Locate the mysql-connector-java-8.x.xx.jar file in the **Program (x86)\MySQL\Connector J 8.x** folder.

NOTE This is the default location for the JAVA connector file. Search your designated location if you changed the default.

b Copy the mysql-connector-java-8.x.xx.jar to the**i-Vu Prox.x\database-drivers** folder under the i-Vu® Pro install folder.

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Step 5: Set up the MySQL databases in SiteBuilder

a In SiteBuilder, select **File** > **New**.

b Type a name for the system.

c Select **MySQL** from the **Database Type** drop-down list.

d Select **Make this the default system for i-Vu Pro** if you want the i-Vu® Pro application to automatically run this system each time it starts.

e Complete the remaining fields, then click **Next**.

f Enter the **Database Connect String** information and the **Database User** information for each i-Vu® Pro database. See table below.

g Click **Next**.

h Select your system language.

i Click **Finish**.

NOTE To change **Database Connect Strings** for an existing system, select **Modify database connection parameters** in the **File** > **Open** dialog box and then click **Next**.

Database Connect Strings:	
Server	Type one of the following: • `localhost` if the i-Vu® Pro application and the database are on the same machine • The name or IP address of the machine that the database is on if different than the i-Vu® Pro application
Port	Type `3306`.
Instance	The name that you gave the i-Vu® Pro database in step 2e.
Database User:	
Login	The user name that you entered in step 3c.
Password	The password that you entered in step 3c.

Step 6: Disable MySQL automatic updates

1 Open the **MySQL Installer - Community** under **Start** > **All Programs** > **MySQL**.

2 Click the wrench icon at the top right.

3 Uncheck **Check for updates to the MySQL Installer product catalog**.

Click **Accept** then exit the Installer – Community window.

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SQL Server 2016, 2017, and 2019 on a Windows for the i-Vu® Pro system

SQL Server versions currently supported are 2016, 2017, and 2019.

1 If you do not already have MS SQL installed, install one of the supported versions and any applicable SQL service packs. For instructions on how to install any version of SQL Server, go to http://msdn.microsoft.com/en-us/library/default.aspx and, in the Search window, type **Install <your SQL Version >**. Select Authentication Mode - Mixed Mode during setup and enable TCP/IP on port 1433.

   NOTE As you install MS SQL Server, you must select certain options to use with i-Vu® Pro. For all other options, you may keep the defaults or select your own values. Select the following:

   - SQL Server Database Services
   - Workstation components, Books Online, and development tools
   - Authentication Mode - Mixed Mode (Windows Authentication and SQL Server Authentication)

     NOTE The password you specify grants extensive privileges.
   - Service Account for database engine – NT Authority\System
   - Enable TCP/IP on port 1433

2 If already installed, you must have selected **Authentication Mode - Mixed Mode** during setup and have TCP/IP enabled on port 1433.

If you are the database administrator and TCP/IP is not enabled on port 1433, or you are unsure of the port, follow the procedure below, 'To enable TCP/IP on port 1433' and then proceed to Step 1.

Install the program and follow the instructions below. Record your SQL Administrator information here:

Username _____

Password _____

To enable TCP/IP on port 1433

a Click **Start** > **All Programs** > **Microsoft SQL Server <your SQL version>** > **Configuration Tools** > **SQL Server Configuration Manager**.

b Expand the **SQL Server Network Configuration**.

c Select **Protocols** for <server instance> where <server instance> is the SQL Server running the i-Vu® Pro application.

d In the next window, under **Protocol Name**, double-click **TCP/IP**.

e On the **Protocol** tab, under **General**, next to **Enabled**, select **Yes**.

f On the **IP Address** tab, scroll down to the **IPAll** section.

g Clear any values from the **TCP Dynamics Port** field.

h In the **TCP Port** field, enter `1433`, then click **OK**.

i Close the **SQL Server Configuration Manager**.

j Restart the SQL Server Service.

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Step 1: Connect to the database engine for i-Vu® Pro SQL Server

a Determine if Microsoft SQL is running on the i-Vu® Pro server:

- If Microsoft SQL is running on the i-Vu® Pro server, select **Start** > **Programs** > **Microsoft SQL Server** > **SQL Server <your SQL version>** > **Management Studio**.
- If Microsoft SQL is running on a different computer, download the SQL Management Studio and install it on the i-Vu® Pro server.

b In the **Connect to Server** dialog box, select or enter the information using the table below.

c Click **Connect**.

To set up the databases for a new i-Vu® Pro system, complete steps 2, 3, and 4 below.

Field	Notes
Server type	Database engine.
Server Name	The address or name of the computer running the SQL Server service. Get from your database administrator.
Authentication	Get from your database administrator.
Username	Get from your database administrator.
Password	Get from your database administrator.

Step 2: Create a database instance

a In the **Object Explorer** pane, right-click **Databases**, then select **New Database**.

b In the **Database name** field, type a name such as `xxx_main`; this will be your **Main Database Connect String Instance** in SiteBuilder. Record the name below.

c Under **Select a Page**, select the **Options** page.

d From the **Recovery model** drop-down list, select **Simple**.

e Click **OK**.

f Repeat steps a-e to create the **Alarms**, **Trends**, and **Audit Log** databases.

NOTE Database names are case-sensitive and must be 18 characters or less in length.



TIP Record the database names here for future reference:

Main _____

Alarms _____

Trends _____

Audit Log _____

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Step 3: Create a database user

a In the **Object Explorer** pane, click the plus sign to the left of **Security**.

b Right-click **Logins**, then select **New Login**.

c In the **Login name** field, type in a login name for i-Vu® Pro, such as XXX_User; this will be your **Database User Login** in SiteBuilder.



TIP Record the **role name** here for future reference _____.

d Select **SQL Server authentication**.

e In the **Password** and **Confirm password** fields, type a password; this will be your **Database User Password** in SiteBuilder.



TIP Record the password here for future reference _____.

f Clear the following checkboxes:

- **Enforce password policy**
- **Enforce password expiration**
- **User must change password at next login**

g In the **Default database** drop-down list, select **master**.

h In the **Select a page** pane, select the **User Mapping**.

i Under **Users mapped to this login**, select the **Map** checkbox next to a database name you created in Step 2.

j Under **Database role membership for:** section, select the following checkboxes:

- **db_owner**
- **public**

k Click **OK**.

l Repeat steps i-k for each remaining database.

m Close SQL Server Management Studio.

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Step 4: Set up the SQL Server databases in SiteBuilder

a In SiteBuilder, select **File** > **New**.

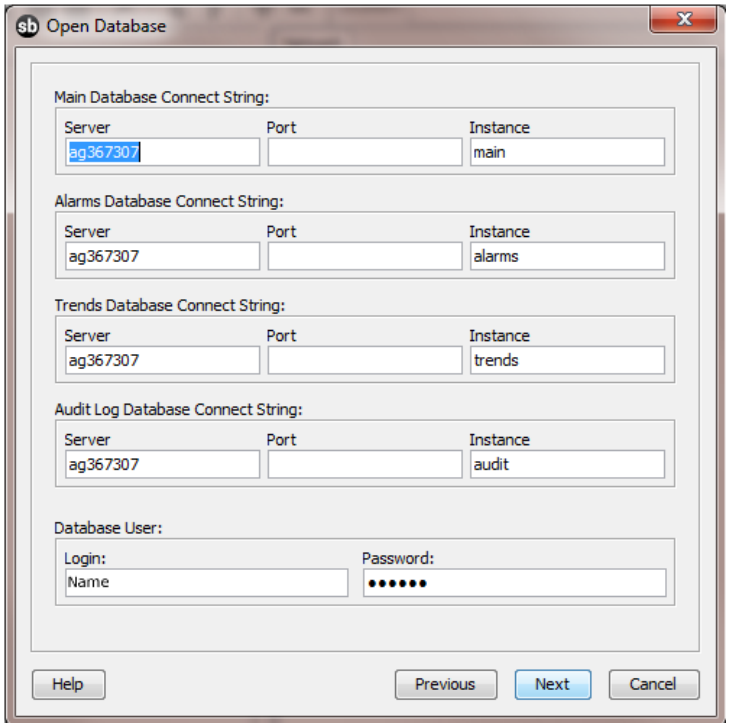
b Type a name for the system.

c Select SQL Server from the **Database Type** drop-down list.

d Select **Make this the default system for i-Vu® Pro** if you want the i-Vu® Pro application to automatically run this system each time it starts.

e Complete the remaining fields, then click **Next**.

f Enter the **Connect String** information for each i-Vu® Pro database. See below.



g Click **Finish**.

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NOTE To change **Database Connect Strings** for an existing system, select **Modify database connection parameters** in the **File** > **Open** dialog box and then click **Next**.

Database Connect Strings:	
Server	Type one of the following: • `localhost` if the i-Vu® Pro application and the database are on the same machine • The name or IP address of the machine that the database is on if different than the i-Vu® Pro application
Port	Do one of the following: • Type the default port of 1433. • Type the port number that the database uses for communication if different than the database default.
Instance	The name that you gave the i-Vu® Pro database in step 2b. **NOTE** If the 4 i-Vu® Pro databases do not reside under the default instance of SQL, then the instance name must be specified under the **Instance** column. The syntax for specifying the instance name of the SQL server is `<Database>;instance=<instance name>`. For example, if the SQL instance name is hvac, the syntax for the Instance field for the main database called i-Vu Pro_Main would be `i-Vu Pro_Main;instance=hvac`.
Database User:	
Login	The username that you entered in step 3c.
Password	The password that you entered in step 3e.

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Registering and downloading your i-Vu® Pro license

To register your software, you must obtain a license from Carrier and then apply it in the i-Vu® Pro interface.

1 Login to *i-Vu® Systems website* (*http://accounts.ivusystems.com*).

NOTES

- Only Carrier authorized personnel may access accounts.ivusystems.com. To set up your account, please contact Control Systems Support with the following information: name, phone number, e-mail address, office address, and your password of choice.
- If you are an end-user or contractor, please contact your local Carrier office to obtain your license.

2 Click the **License Manager** tab.

3 Click **i-Vu Pro License Manager link.**

4 Expand the applicable section under **Available Licenses** and select the site/project to register it.

NOTE All your Sites Names/Project Names are listed.

5 In **License Details**, fill in the Owner and Site information and click **Register License**.

6 Check **I agree to the terms of use**.

7 Click **Download License** and then save the .properties file to a convenient location to use when installing the i-Vu® Pro application.

To apply the license to the i-Vu® Pro application

During the i-Vu® Pro installation, in the **Setup Wizard**, on the **Product License** screen, check **Browse to a different license**, and select the site license you obtained.

NOTES

- Selecting the default license results in a prompt appearing every few minutes in the i-Vu® Pro interface to remind you to apply your site license.
- Do not edit any part of this registered license file. Editing a license file invalidates the license.
- Store the license in a safe location.

To apply the site license after the installation:

1 In the i-Vu® Prointerface, select **System Options** > **License Administration**.

2 Browse to the license file.

3 Click **Apply**.

4 Restart i-Vu® Pro Server using the rebootserver manual command.

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Installing the i-Vu® Pro application

PREREQUISITES

- SiteBuilder v8.0 no longer supports Access, MSDE, or SQL Server Express database types.
- Installer must have Windows Administrator-level user rights.
- Have the site's i-Vu® Pro license saved on the computer.
- USB Link driver - If your computer does not already have the CP210x driver for the USB Link, a prompt to install it will appear. You must install it before you connect the USB Link to your computer. If needed, you can get the latest driver from *http://www.silabs.com/products/mcu/Pages/USBtoUARTBridgeVCPDrivers.aspx*.
- For more technical details, see *i-Vu® Pro v8.0 client, server, operating system, and database requirements* (page 17).

Step 1: Install the i-Vu® Pro application

1 Insert the Installation USB drive into your computer and click **Install i-Vu Pro** and the Setup Wizard starts.

2 In the **Setup Wizard**, click **Next**, check **I accept the agreement** and click **Next** again.

3 On the **Product License** screen, check **Browse to a different license**, and select the site license.

NOTE You can select the default license, but it causes a prompt to appear every few minutes in the i-Vu® interface to remind you to apply your site license.

4 Continue to follow the **Setup Wizard**.

NOTE If running on Windows Server 2008 R2, verify that there are no **Failed to Update** errors in **<logs** > **launcher.txt>**.

Step 2: Install the service

NOTE We highly recommend you configure the i-Vu® Pro server to Run as a Service to ensure the i-Vu® Pro server starts after a computer reboot.

1 Click the Windows **Start** button, then select **All Programs** > **Accessories**.

2 Right-click **Command Prompt** and select **Run as Administrator**.

3 Type: `cd <path to the i-Vu install directory>`
`For example, cd c:\i-Vu_Pro_v8.0.`

4 Press **Enter**.

5 Type: `"i-Vu Pro Service.exe"` to install.

6 Press **Enter**.

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Step 3: Launch i-Vu® Pro service as Administrator

By default, the i-Vu® Pro Server Service runs under the built-in Local System account that has extensive system privileges. If the i-Vu® Pro application runs on its own computer or virtual machine, then running the i-Vu® Pro Service under the Local System is acceptable, unless local site policies restrict the Local System account from being used for running services. In this case, you can run the i-Vu® Pro application under a user account with Administrator privileges, as described below.

NOTES

- If you need the **Print Alarm Action**, the i-Vu® Pro Service must run under an Installer account, not the Local System account.
- If using an Administrator account, ensure that the password for this account does not expire.

1 Click the Windows **Start** button, then select **Control Panel**.



TIP If you do not see this option on your Control Panel, click **View by**: and select **Small icons**.

2 Select **Administrative Tools** and double-click **Services**.

3 Double-click **i-Vu Pro Service v8.0**.

4 On the **Log On** tab, select **This Account**.

5 Enter the password for a user who is a member of the **Administrator Group** on that computer.

To uninstall the service

1 Click the Windows **Start** button, then select **All Programs** > **Accessories**.

2 Right-click **Command Prompt** and select **Run as Administrator**.

3 Type: `cd <path to the i-Vu install directory>`
`For example, cd c:\i-Vu_Pro_v8.0.`

4 Press **Enter**.

5 Type: `"i-Vu Pro Service.exe"-remove.`

6 Press **Enter**.

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Using the i-Vu® Pro v8.0 application

Use SiteBuilder to begin setting up your system

Before starting the i-Vu® Pro application for the first time, you must use SiteBuilder to create a database that the i-Vu Pro Server uses to communicate with the system. Follow the steps to Create a new SiteBuilder database. The i-Vu® Pro application uses this information to scan your system and find the components.

PREREQUISITE For any database type except Apache Derby, you must install and set up the database application before creating your system database. An Apache Derby database is installed with your i-Vu® Pro system. As of v6.5, SiteBuilder no longer supports Access and MSDE database types. As of v7.0, SiteBuilder no longer supports SQL Server Express.

Follow the procedures below to create your system database in SiteBuilder.

To create a new SiteBuilder database

After you create a database in SiteBuilder, you should use the i-Vu® Pro application to automatically discover Open, XT, or TruVu™ controllers and/or a system with a single CCN Gateway. However, you must use SiteBuilder to build a system with multiple CCN Gateways.

1. Click **File** > **New**.
2. Enter appropriate values in each of the **New Database** fields. See table below.
3. Click **Next**.
4. Do one of the following:
   - If you selected a MySQL, PostgreSQL, or SQL Server® **Database Type**, enter the **Database Connect Strings**, **Login** and **Database User** info. See table below. Then click **Next**.
   - If you selected an Apache Derby, go to step 5.
5. Make language selections. See table below.
6. Click **Next**.
7. Click **File** > **Close**.
8. If you have multiple CCN Gateways, use SiteBuilder to build a Network tree for them. See *To build a Network tree for a CCN system* (page 39).
9. For BACnet, or single CCN Gateway systems, use the i-Vu® Pro interface to populate your database. You do not need to set up the information in SiteBuilder.
   a) Launch the i-Vu Pro Server. Wait for it to finish opening the database.
   b) Browse to **http://localhost** to open the i-Vu® Pro interface.
   c) Use the login and password you set up in SiteBuilder.
   d) Find your devices and networks and upload the files. See i-Vu® Pro Help for details.

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Field	Notes
System Name	Enter the name for this system that will be displayed at the top of the i-Vu® Pro navigation tree.
System Directory Name	The name of the folder that contains all the system files: **i-Vu_Pro_x.x\webroot**<system_directory_name> This name is automatically generated from the **System Name**, but it can be edited. The **System Directory Name** must have: • less than 80 characters • only alphanumeric characters, dashes, and underscores • no spaces
Administrator Login Name, Password, and **Confirm Password**	Type a Login Name and Password (8-character minimum) for the Administrator operator. **CAUTION** To increase the security of your system, do not use "Administrator" as the **Login Name**. **NOTE** You can change the password requirements in the i-Vu® Pro interface. See "Advanced password policy" in i-Vu® Pro Help.
Database Type	Select the type of database your system will use. **NOTE** If you select **Derby**, SiteBuilder automatically creates the necessary files and folder structures under the **i-Vu_Pro_x.x** folder. Do not move or rename system files or folders.
Make this the default system for iVu	Select this box to open this system when you start the i-Vu® Pro application.
Starting Base Network Number **Starting Base Device Instance Number**	SiteBuilder automatically assigns sequential numbers to BACnet networks and devices as you add them to the database. Choose starting numbers that will generate unique network and device instance numbers across all systems that this system will communicate with.
Server BACnet Device Instance	Must be unique to the BACnet network. Unique Server Device IDs are important if you are running multiple copies of the i-Vu® Pro application on the same network.
Languages	Select all languages that you want your system to support.
System	Select the language that you want to use for: • The default language for new operators • Alarms sent to the database • State text and object names downloaded to the field • The default language for the i-Vu® Pro login page. **NOTE** You can select a different language on the login page. All other information is displayed in the operator's language.

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For MySQL, PostgreSQL, or SQL Server® Database Types

Database Connect Strings:	
Server	Type one of the following: • `localhost` if the i-Vu® Pro application and the database are on the same machine • The name or IP address of the machine that the database is on if different than the i-Vu® Pro application
Port	Do one of the following: • Type the appropriate default port number from the list below. • Type the port number that the database uses for communication if different than the database default. Default ports are: MySQL 3306 PostgreSQL 5432 SQL Server 1433
Instance	The name that you gave the i-Vu® Pro database in the database application.
Database User:	
Login	The user login that you set up in the database application.
Password	The password that you set up in the database application.

NOTE To change **Database Connect Strings** for an existing system, select the **Modify database** connection parameters in the **File** > **Open** dialog box, then click **Next**.

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To build a Network tree for a CCN system

See details on the following in SiteBuilder Help and i-Vu® Pro Help.

If your CCN system has...	You must...
A single CCN Gateway	Use the i-Vu® Pro application to find and download the Gateway and system
An i-Vu® Integrator	Add it in SiteBuilder, even if it is the only CCN Gateway. See "To add an i-Vu® Integrator" in SiteBuilder Help.
Multiple CCN Gateways without a NAT router	**1** In the SiteBuilder Network tree, add one site with one BACnet/IP network for each Gateway. **2** In the i-Vu® Pro interface, discover all the Gateways, Bridges, and controllers. **NOTES** • You must have the Multi-CCN license for this feature to work. • Supports up to 50 CCN Gateways in one system • Every Gateway must be Bus 0. • Every BACnet/IP Network Number must be the same.
Multiple CCN Gateways with a NAT router	**1** In SiteBuilder, configure the NAT information. **2** In the Network tree, add one site with one BACnet/IP network per Gateway. **3** Add one CCN Gateway and all its Bridges to each site you set up. **4** In the i-Vu® Pro application, discover the rest of your controllers under the Bridges. **NOTES** • You must have the Multi-CCN license for this feature to work. • Supports up to 50 CCN Gateways in one system • Every Gateway must be Bus 0. • Every BACnet/IP Network Number must be the same.

CCN Gateways and Bridges can be any of the following:

- i-Vu® Link
- i-Vu® CCN Router
- i-Vu® Integrator
- Carrier® ChillerVu™

NOTE For your i-Vu® Control System, use the i-Vu® Pro application to find your i-Vu® Open, XT, and TruVu™ routers and controllers. You do not need to set up the information in SiteBuilder.

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Options for running the i-Vu® Pro system

Running i-Vu Pro Server without connecting to controllers

To verify links between graphics and to set up properties, schedules, alarms, and trends before you connect to the network, run **i-Vu Pro Design Server** instead of **i-Vu Pro Server**. Then view the i-Vu® Pro interface in a web browser.

NOTE Question marks indicate correct microblock paths. Missing data indicates errors.

Switching i-Vu Pro Server to a different system

Design engineers working on multiple projects can switch systems in the i-Vu Pro Server application.

1 In the i-Vu Pro Server application, select **Server** > **Change Active System**.

2 Select a different system (it must be in the **webroot** folder) and mode.

3 Click **Select**.

Running i-Vu Pro Server as a Windows® service

For Windows 8.1, 10, 2012R2, 2016, 2019, and 2020

Run i-Vu Pro Server as a Windows service if you want i-Vu Pro Server to automatically start up when the server computer is restarted.

NOTE If your i-Vu® Pro system uses a database other than Derby and the database is located on the same computer as i-Vu Pro Server, you must set up Windows to delay starting i-Vu Pro Server until the database service has started. See *"How to delay loading of specific services"* (*http://support.microsoft.com/kb/193888*) on the Microsoft® website.

To install i-Vu® Pro Server service

NOTE If you are not sure if the service was previously installed, see *To determine if i-Vu Pro Server service is installed* (page 42).

1 In the Windows **Start** menu, select **All Programs** > **Accessories**.

2 Right-click **Command Prompt**, then select **Run as administrator**.

3 Select **Yes** in the User Account Control message.

4 In the Command Prompt window, type: `cd <path to the i-Vu Pro install directory>`
For example, type: `cd c:\i-Vu_Pro_x.x`
replacing x.x with your current version number.

5 Press **Enter**.

6 Type: `"i-Vu Pro Service.exe"`

7 Press **Enter**.

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To start i-Vu® Pro Server as a Windows service

1. In the Windows **Start** menu, select **Control Panel**.
2. Select **Administrative Tools**, then double-click **Services**.
3. In the **Services (Local)** list, double-click **i-Vu Pro Service X.X**.
4. In the **Startup type** drop-down list, select **Automatic**.
5. On the **Log On** tab, do one of the following:
   - Use the defaulted **Local System account**.
   - Select **This account**, then browse to select a user who is a member of the **Administrator Group** on that computer.
6. Optional: If you selected **Local System account** in step 5 and you want to be able to access i-Vu Pro Server on the server computer's desktop, check **Allow service to interact with desktop**.

   NOTES
   - If you do not check this field, the computer screen will give no indication that i-Vu Pro Server is running; you must view the computer's Services page to see if it is running.
   - This checkbox applies only to a user logged in on the server. A Windows Remote Desktop user cannot access i-Vu Pro Server running as a service.
   - If you check this field, you cannot use the instructions below to set up printing to a network printer. Ask your Network Administrator to set up **Local System account** to use a network printer.
   - If you check this field and the i-Vu® Pro application is to run email alarm actions, ask your Network Administrator to set up **Local System account** to send emails.
7. On the **General** tab, click **Start**.
8. Click **OK**.

NOTE If i-Vu Pro Server does not start after you click **Start**, you may have a Windows permissions problem. Follow the procedure below in *To set up the i-Vu Pro service for network printing* (page 41) to set up the Windows user name and password.

To set up the service for network printing

If i-Vu Pro Server runs as a service on a computer that is using a network printer, you must set up the Windows user name and password for the service. The Print alarm action requires this setup to be able to print.

1. In the Windows **Start** menu, select **Control Panel**.
2. Select **Administrative Tools** > **Services**.
3. Double-click **i-Vu Pro Service x.x**.
4. On the **Log On** tab, select **This account**.
5. Browse to the computer's domain, then select the user that the service will log in as.

   NOTE Contact your network administrator if you need help determining the domain.
6. Type the user's password in the **Password** and **Confirm password** fields.

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To stop or uninstall i-Vu® Pro Server service

To stop i-Vu Pro Server service

1. In the Windows **Start** menu, select **Control Panel**.
2. Select **Administrative Tools**, then double-click **Services**.
3. In the **Services (Local)** list, double-click **i-Vu Pro Service X.X** (where x.x is the i-Vu Pro version number.
4. In the **i-Vu Pro Service x.x Properties** dialog box, click **Stop** on the **General** tab.
5. Click **OK**.

To uninstall i-Vu Pro Server service

1. In the Windows **Start** menu, right-click **Command Prompt**, then select **Run as administrator**.
2. Select **Yes** in the User Account Control message.
3. In the Command Prompt window, type: `cd <path to the i-Vu Pro install directory>`
   For example, type: `cd c:\i-Vu_Pro_x.x`
4. Press **Enter**.
5. Type: `"i-Vu Pro Service.exe" -remove`
6. Press **Enter**.

To determine if i-Vu® Pro Server service is installed

If you do not know if the service was previously installed, follow the appropriate steps below.

1. In the Windows **Start** menu, right-click **Command Prompt**, then select **Run as administrator**.
2. Select **Yes** in the User Account Control message.
3. In the Command Prompt window, type: `cd <path to the i-Vu Pro install directory>`
   For example, type: `cd c:\i-Vu Prox.x`
4. Press **Enter**.
5. Type: `"i-Vu Pro Service.exe" -check`
6. Press **Enter**.

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System Management

Update the SAL library

The i-Vu® Pro SAL files update youri-Vu® Pro controllers. The SAL libraries contain control programs, graphics, drivers, screen files, and other important controller data.

Carrier periodically provides updates, which include enhancements and bug fixes.

NOTES

- The library update only changes **default** graphics. If you have edited your graphic in ViewBuilder, it is not updated.
- The last digits in the SAL library name are the release date of the library.
- All of the SAL files will not necessarily have the same <date> revision.
- To ensure that your installation is running the latest software, we recommend that you check *Control Systems Support http://www.hvacpartners.com/*, *https://accounts.ivusystems.com/* for updates. Download the latest SAL files and apply them to all new installations.
- If you are changing to an older SAL file than the current one being used, a warning asks you if you are sure you want to apply an older version.

NOTE Keep copies of the latest libraries in a safe place. In the event of a system restore, the updated .sal file must be reapplied.

To check current SAL library version

1 Login to the i-Vu® Pro application.

2 Click , then select **System Options** > **Update** tab.

3 Click **Current Libraries (.sal)** to view the current SAL libraries and their revision date.

Step 1: Update library

1 Save the updated library (.sal file) to your computer.

2 Click , then select **System Options** > **Update** tab.

NOTE Expand **Current Libraries (.sal)** to see the current SAL libraries and their revision. Compare them to what you downloaded from the Control Systems Support to determine if any of them have been updated.

3 Click 

and browse to the updated .sal file that you have saved on your computer, select the file, and click **Open**.

4 Click **Continue**.

5 When process is complete, the message appears **File added successfully**.

6 Click **Close**.

NOTE These changes are not applied to the controllers until you have updated routers and controllers.

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Follow these steps to implement the new equipment library:

Step 2: Update the files for the routers

1. Select the router that you wish to update in the navigation tree.
2. Right-click and select **Driver Properties**.
3. Select **Properties** page > **Update** tab.
4. If the database contains two or more routers, you must check **Change for all controllers of this type?** in the **Controller** section.
5. Click **Update**. A message appears **Changes the driver and screen file to use the current library version. Continue?**

   NOTE If more than one router exists, the additional routers are listed below the **Update** button.
6. Click **OK.**
7. Click **Accept.**

Step 3: Update the files for the controllers

1. Double-click the controller in the navigation tree or right-click and select **Configure**.
2. If you have multiple controllers of the same type, enable **Change for all control programs of this type?**.
3. Click **Update** under **Control Program**. A message appears **Changes the control program, view, driver, and screen file to use the current library version. Continue?**
4. Click **OK.** When the message **Updated to the library version xx.** appears, click **Close.**
5. Repeat steps 1 - 4 for any additional types of controllers.
6. Click **Close** again.

Step 4: Update the files for CCN controllers

1. In the navigation tree, select the CCN device manager associated with the controllers that are to be updated.
2. Select **Devices** > **CCN Discovery** and re-scan any controllers that need to be updated by checking **Rescan Controllers Selected Below for Configuration Changes** and clicking **Start Scan**.

Step 5: Apply the update to the routers and controllers

1. Select the **System**  in the navigation tree and then select the **Downloads** page.
2. If you wish to apply the new SAL file to your entire system, you can use this page to compare to your navigation tree and verify that you have selected all of your routers and controllers for download.

   NOTE Only the CCN Gateway and device managers require download, so the CCN controllers/equipment will not be listed.
3. A network's controllers download in the order shown. To change the order, select a controller(s), then drag and drop or click **Move to Top** or **Move to Bottom**.
   EXCEPTION If a controller's router requires a download, it will download first regardless of its position on the Downloads page. Click the **Start** button.

   NOTES

   - Use **Ctrl+click**, **Shift+click**, or the **Select All** checkbox to select multiple controllers.
   - See To download from the Downloads page in Help for more details.

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To back up a system

The type of database your system uses determines the method you use to back up the system.

CAUTION Do Not use SiteBuilder's Replicate feature to back up your database.

For Apache Derby or SQL Server Express

1. Shut down the SiteBuilder and i-Vu Pro Server applications.
2. In the **I-Vu_Pro_x.x\webroot** folder, copy your system folder.
3. Paste the copy to a new location.

TIP Zip the copy before transporting it over a network or to a USB drive.

For MySQL, MS SQL Server, or PostGreSQL

1. Follow the instructions above to copy your system folder in **I-Vu_Pro_x.x\webroot.**
2. Use the database management system's backup method. See To safely shut down the i-Vu® Pro application for database server maintenance before doing any maintenance on your database server.

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Communicating using PuTTY

You can connect a computer to a controller's Local Access port and then use PuTTY, a free open source terminal emulation program, to:

- Set the baud rate for ports S1 on the i-Vu® Open Router, i-Vu® Open Link, or Carrier® ChillerVu™
- Set controller properties, such as IP address and network information
- Retrieve a Modstat

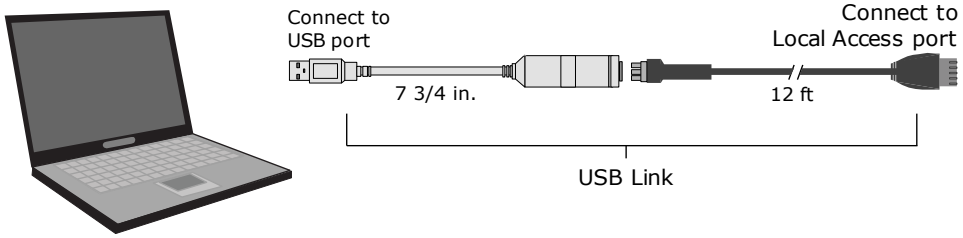
NOTE Use Network Service Tool V to set the CCN baud rate and configure IP settings for an i-Vu® CCN Router, i-Vu® Link, or Carrier® ChillerVu™.

PREREQUISITES

- A computer with a USB port
- A USB Link cable
  The USB Link driver is installed with an i-Vu® Pro v5 or later system. But if needed, you can get the latest driver from *http://www.silabs.com/products/mcu/Pages/USBtoUARTBridgeVCPDrivers.aspx*. Install the driver before you connect the USB Link to your computer.

CAUTION If multiple controllers share power but polarity was not maintained when they were wired, the difference between the controller's ground and the computer's AC power ground could damage the USB Link and the controller. If you are not sure of the wiring polarity, use a USB isolator between the computer and the USB Link. Purchase a USB isolator online from a third-party manufacturer.

1. Download and install PuTTY from the *PuTTY website* (*http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html*).
2. Connect the laptop to the local access port of the controller, ZS sensor, or an SPT sensor using the USB Link cable(s).

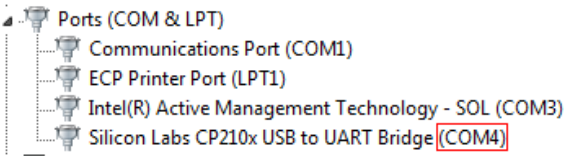


NOTE If using a USB isolator, plug the isolator into your computer's USB port, and then plug the USB Link cable into the isolator.

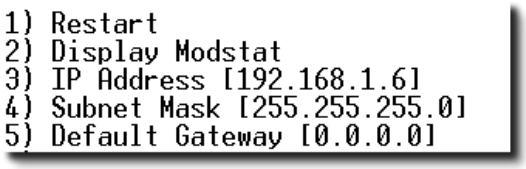
3. To change a router's IP address, subnet mask, or default gateway, set its **IP Address** DIP switch to **Assigned**.
4. Start PuTTY.
5. Under **Category** > **Connection**, select **Serial**.

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6 Under **Options controlling local serial lines**, enter the following settings:

Field	Value
Serial line to connect to	Replace X with the computer's port number that the USB Link cable is connected to. **NOTE** To find the port number, select **Start** > **Control Panel** > **System** > **Device Manager** > **Ports (Com & LPT)**. The COM port number is beside **Silicon Labs CP210x USB to UART Bridge**. 
Speed (baud)	115200
Data Bits	8
Stop Bits	1
Parity	None
Flow Control	None

7 Click **Open**. A window similar to the one below appears.



8 Do one of the following:

- To change a property value:
  a. Type the number of the property, then press **Enter**.
  b. Type the new value, then press **Enter**.
- To take an action, type number of the action, then press **Enter**.

9 If you changed a value, type `1`, then press **Enter** to restart the controller.

10 Close PuTTY.

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Communicating using HyperTerminal

You can connect a computer to a controller's Local Access port and then use HyperTerminal, an application installed with Windows XP and older operating systems, to:

- Set the baud rate for ports S1 or S2 on the i-Vu® Open Router or i-Vu® Open Link
- Set controller properties, such as IP address and network information
- Retrieve a Modstat

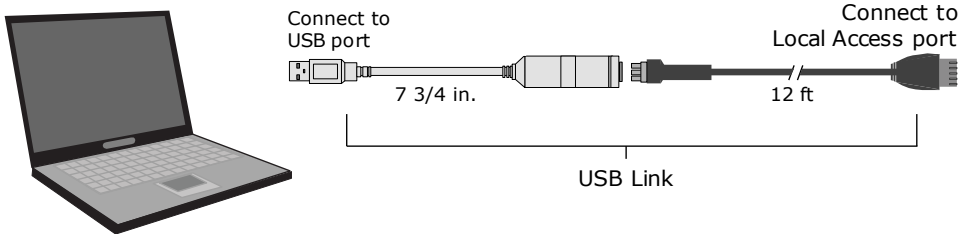
NOTE Use Network Service Tool V to set the CCN baud rate and configure IP settings for an i-Vu® CCN Router or i-Vu® Link.

PREREQUISITES

- A computer with a USB port
- A USB Link cable
  NOTE The USB Link driver is installed with an i-Vu® Pro v5 or later system. But if needed, you can get the latest driver from *http://www.silabs.com/products/mcu/Pages/USBtoUARTBridgeVCPDrivers.aspx*. Install the driver before you connect the USB Link to your computer.

CAUTION If multiple controllers share power but polarity was not maintained when they were wired, the difference between the controller's ground and the computer's AC power ground could damage the USB Link and the controller. If you are not sure of the wiring polarity, use a USB isolator between the computer and the USB Link. Purchase a USB isolator online from a third-party manufacturer.

1 Connect the computer to the local access port of the controller, ZS sensor, or an SPT sensor using the USB Link cable(s).



NOTE If using a USB isolator, plug the isolator into your computer's USB port, and then plug the USB Link cable into the isolator.

2 Verify that the baud rate is set to 115,200.

3 To change a router's IP address, subnet mask, or default gateway, set its **IP Address** DIP switch to **Assigned**.

4 Start Windows HyperTerminal located under **Start** > **Programs** > **Accessories** > **Communications**.

5 **NOTE** This option is not available in Windows v7 or later. You can download it from the Internet.

6 Select an icon for this connection file, then click **OK**.

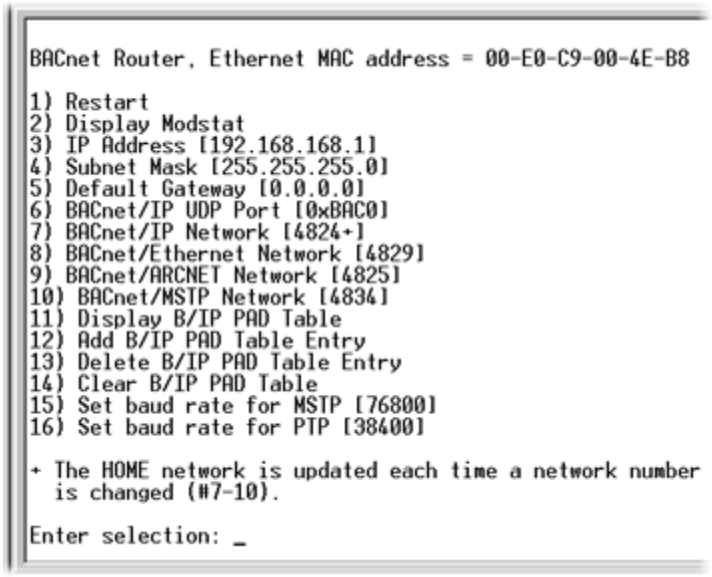
7 In the **Connect to** dialog box, set the **Connect using** field to **ComX**, where **X** is the number of the computer's Com port that the USB Link cable is connected to, then click **OK**.

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8 In the **Com Properties** dialog box, set the **Port Settings** for your local access port, then click **OK**.

Port Setting	Value	
Bits per second	i-Vu® Open Link or i-Vu® Open Router	115200
	i-Vu® Link or i-Vu® CCN Router	
Data Bits	8	
Parity	None	
Stop Bits	1	
Flow Control	None	

9 From the main HyperTerminal screen, press **Enter** to view a router configuration screen like the one below.



10 Do one of the following:

- To change a property value:
  a. Type the number of the property, then press **Enter**.
  b. Type the new value, then press **Enter**.
- To take an action, type number of the action, then press **Enter**.

11 If you changed a value, type `1`, then press **Enter** to restart the controller.

12 Close HyperTerminal.

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Document revision history

Important changes to this document are listed below. Minor changes such as typographical or formatting errors are not listed.

Date	Topic	Change description	Code*
2/22/21	MySQL 8.0 on Windows for a i-Vu® Pro system	Steps 1,2,3,4, and 6 edited for clarity	X-TS-CI-E-RB
2/16/21	MYSQL 8.0 on Windows for an i-Vu® Pro v8.0 system	Updated MySQL install instructions from v5.72 to v8.0	C-TS-CI-E
2/5/21	Operating system and database requirements	Removed Windows Server 2020 from list of operating systems	X-PM-TC-E
2/3/21	Operating system and database requirements	Added Windows 10 Enterprise to list of operating systems	X-PM-TC-E

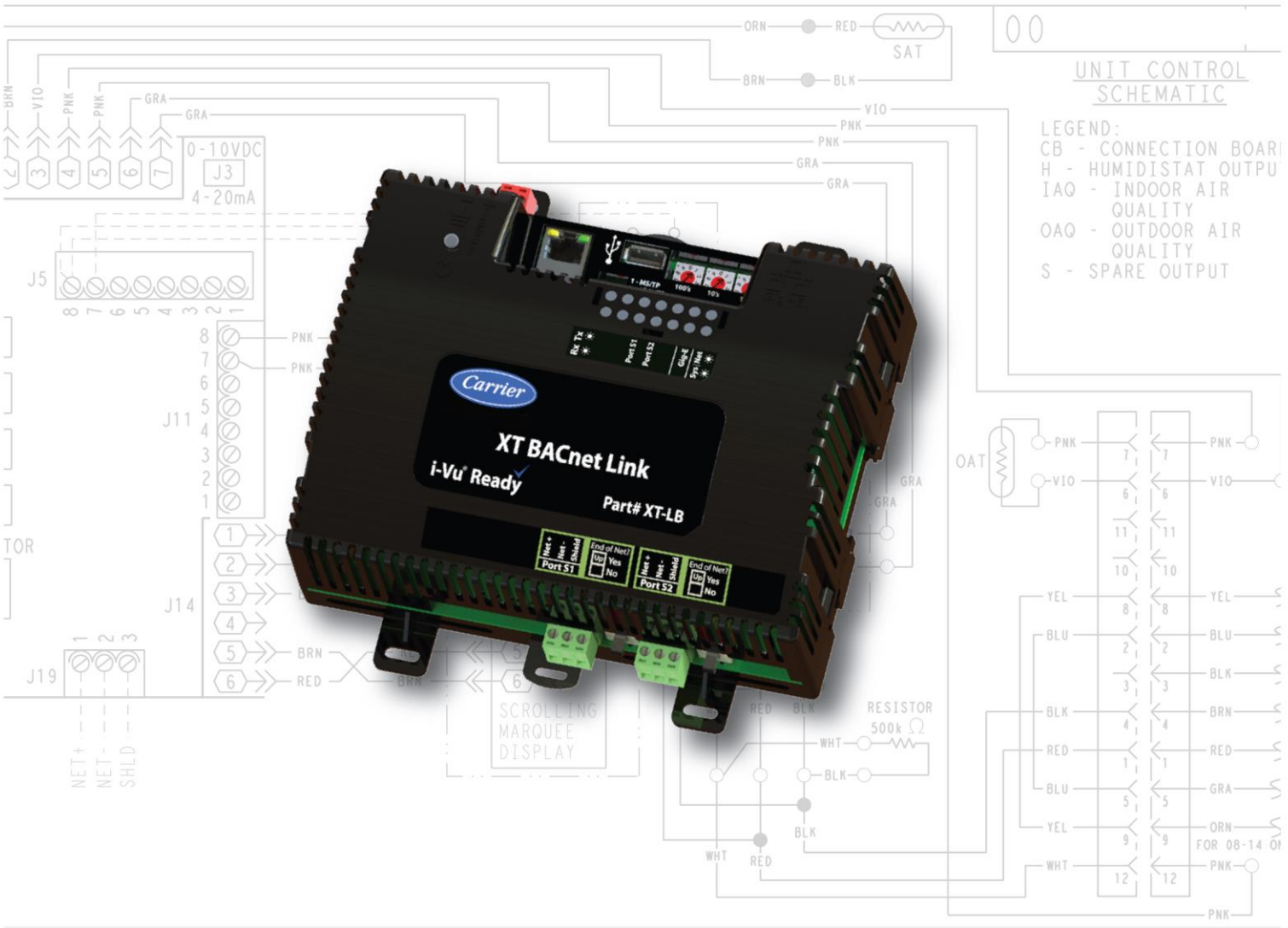
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i-Vu® XT BACnet Link
Installation and Start-up Guide



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 Verify that you have the most current version of this document from **www.hvacpartners.com**, the Carrier Partner Community website, or your local Carrier office.

Important changes are listed in **Document revision history** at the end of this document.

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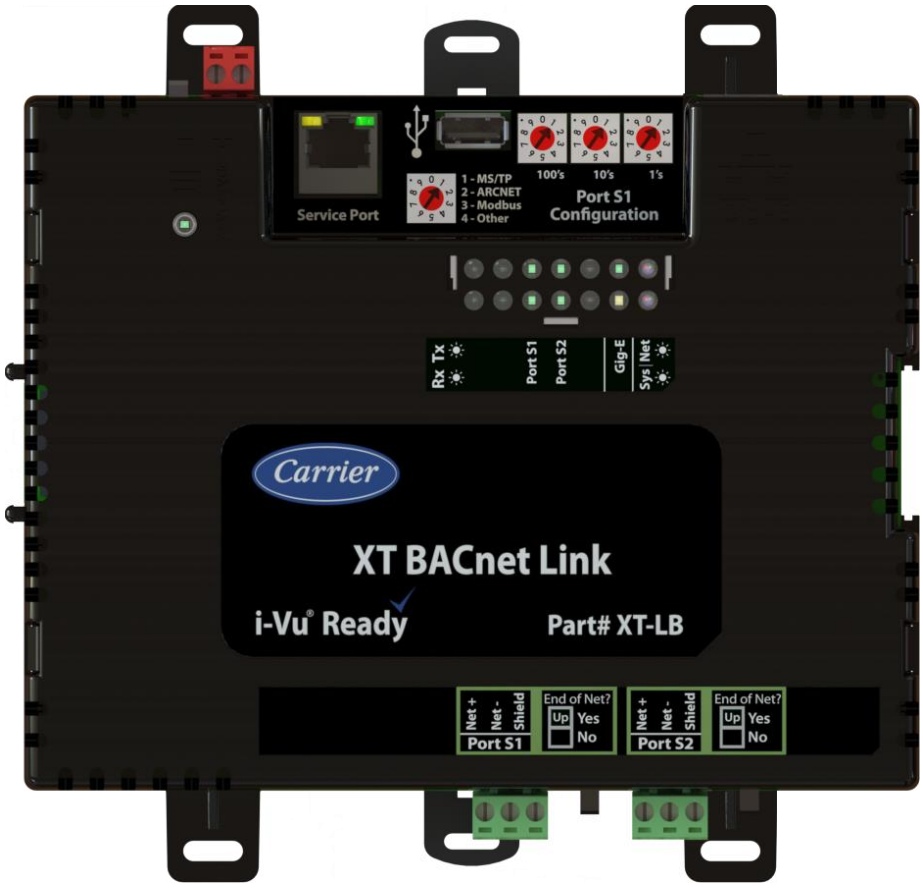
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What is the i-Vu® XT BACnet Link?

The i-Vu® XT BACnet Link (part# XT-LB) is a BACnet router that:

- Provides BACnet routing between any supported BACnet communication types
- Runs control programs
- Can have two BACnet/IP networks communicating on the Gig-E port
- Can serve as a BACnet Broadcast Management Device (BBMD) on each of the BACnet/IP networks
- Supports Foreign Device Registration (FDR)
- Supports DHCP IP addressing
- Has built-in network diagnostic capture functionality for troubleshooting
- Has network statistics that can be viewed numerically or as trend graphs
- Works with the i-Vu® v6.5 or later system with the latest cumulative patch
- Can serve as a gateway that can act as a:
  - Master or slave on a Modbus serial network
  - Server or client on a Modbus TCP/IP network



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The i-Vu® XT BACnet Link has 4 physical BACnet or Modbus communication ports:

Port	Port type	For routing this type of communication...	At...
Gig-E	10/100/1000 Mbps Ethernet	BACnet/IP, BACnet/Ethernet, and/or Modbus TCP/IP	10, 100, or 1000 Mbps (1 Gbps)
S1	High-speed EIA-485 port	BACnet/ARCNET or BACnet/MSTP or Modbus Serial	156 kbps 9.6 to 115.2 kbps 9.6 to 115.2 kbps
S2	Electrically isolated EIA-485 port	BACnet/MSTP or Modbus Serial	9.6 to 115.2 Kbps 9.6 to 115.2 kbps
Service Port	10/100 Mbps Ethernet HTTP/IP	BACnet/IP Service Port	10 or 100 Mbps

The i-Vu® XT BACnet Link also has the following ports:

- USB port for recovery
- Ethernet Service Port for connecting locally to controller setup pages and the TruVu™ ET Display

Specifications

Driver	drv_fwex_< version >.driverx
Maximum number of control programs*	999
Maximum number of BACnet objects*	
Third-party BACnet integration points	1500
Third-party Modbus integration points	500

* Depends on available memory.

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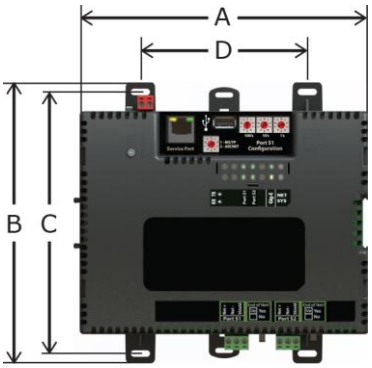
Power	24 Vac ±10%, 50–60 Hz, 50 VA 26 Vdc ±10%, 15 W
Gig-E port	10/100/1000 BaseT, full duplex, Ethernet port for BACnet/IP and/or BACnet/Ethernet, or Modbus TCP/IP communication.
Port S1	For communication with either of the following: • A BACnet ARCNET network at 156 kbps • A BACnet MS/TP network at 9600 to 115200 bps • A Modbus serial network at 9600 to 115200 bps This port's **End of Net?** switch can be set to **Yes** to terminate the network segment.
Port S2	For communication with either of the following: • A BACnet MS/TP network at 9600 to 115200 bps • A Modbus serial network at 9600 to 115200 bps This port's **End of Net?** switch can be set to **Yes** to terminate the network segment.
Service Port	Ethernet port at 10 or 100 Mbps for setting up the controller and troubleshooting through a local connection to a computer or connecting to the TruVu™ ET Display
USB port	USB 2.0 host port for device recovery
Microprocessor	32-bit ARM Cortex-A8, 600MHz, processor with multi-level cache memory
Memory	16 GBs eMMC Flash memory and 256 MB DDR3 DRAM (22 MB available to use). User data is archived to non-volatile Flash memory when parameters are changed, every 90 seconds, and when the firmware is deliberately restarted. **NOTE** When you change a parameter, you must wait 30 seconds before turning the power off, in order for the change to be saved.
Real-time clock	Real-time clock keeps track of time in the event of a power failure for up to 3 days.
Protection	Device is protected by a replaceable, fast acting, 250 Vac, 2A, 5mm x 20mm glass fuse. The power and network ports comply with the EMC requirements EN50491-5-2. **CAUTION** To protect against large electrical surges on serial EIA-485 networks, place a PROT485 at each place wire enters or exits the building.

LED status indicators	• Tricolor **NET** LED to show network status
	• Tricolor **SYS** LED to show system status
	• A **TX** (Transmit) and **RX** (Receive) LED for the following ports:
	  • Gig-E
	  • Port S1
	  • Port S2
	See *LED*s (page 39).

Environmental operating range	-40 to 158°F (-40 to 70°C), 10-95% relative humidity, non-condensing **NOTES** • The i-Vu® XT BACnet Link is suitable for installation inside or outside the building envelope. • Install in a UL Listed enclosure only. • Do not change the position of the power or **End of Net** switch at temperatures below -22°F (-30C) to ensure proper operation and electrical connectivity.
Physical	Fire-retardant plastic ABS, UL94-5VA

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Terminal blocks and connectors	Screw-type terminal blocks. 0.2 in (5.08 mm) pitch connectors	
Mounting	35mm DIN rail mounting or screw mounting	
Overall dimensions	A: B: Depth:	7.1 in. (18.03 cm) 6.95 in. (17.65 cm) 2.09 in. (5.31 cm)
Screw mounting dimensions	C: D:	6.45 in (16.38 cm) 4.1 in. (10.4 cm)
Weight	1 lb. 1 oz. (0.482 kg)	
BACnet support	Conforms to the BACnet Building Controller (B-BC) Standard Device Profile as defined in ANSI/ASHRAE Standard 135-2012 (BACnet) Annex L, Protocol Revision 14	
Compliance	United States of America: FCC compliant to Title CFR47, Chapter 1, Subchapter A, Part 15, Subpart B, Class A; UL Listed to UL 916, PAZX, Energy Management Equipment	
	Canada: Industry Canada Compliant, ICES-003, Class A cUL Listed UL 916, PAZX7, Energy Management Equipment	
	Europe: CE Mark EN50491-5-2:2009; Part 5-2: EMC requirements for HBES/BACS used in residential, commercial and light industry environment EN50491-3:2009, Part 3: Electrical safety requirements for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) Low Voltage Directive: 2014/35/EU RoHS Compliant: 2015/863/EU	
	Australia and New Zealand: C-Tick Mark, AS/NZS 61000-6-3	



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To mount the i-Vu® XT BACnet Link

The i-Vu® XT BACnet Link must be mounted in a metal enclosure or cabinet which is properly rated for the location where it is being installed.

NOTE We recommend screw mounting when installing in a high temperature and high humidity environment.

DIN rail mount

1 Push down and pull out the center tabs shown below to clear the din rail trough on the back of the controller.



2 Place the controller on the DIN rail so that the rail is in the trough on the back of the controller.



3 Push the center tabs towards the controller until you hear them click.

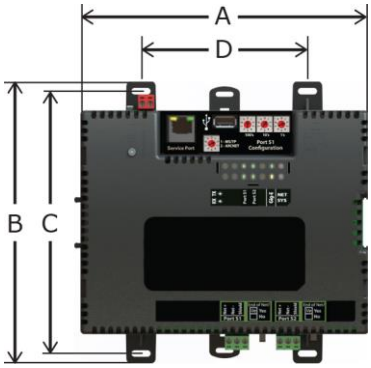
4 Pull gently on the controller to verify that it is locked in place.

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Screw Mount

Leave about 2 in. (5 cm) on each side of the controller for wiring.

Insert #6 screws through the mounting holes. Use no more than 8 in.lbs. torque to secure plastic tab to mounting surface.



A:	7.1 in. (18.03 cm)
B:	6.95 in. (17.65 cm)
C:	6.45 in. (16.38 cm)
D:	4.1 in. (10.4 cm)
Depth:	2.09 in (5.31 cm)

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Wiring for power

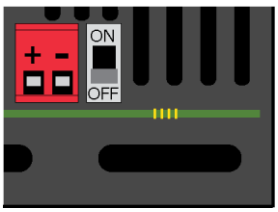
WARNING Do not apply line voltage (mains voltage) to the controller's ports and terminals.

CAUTIONS

- The i-Vu® XT BACnet Link is powered by a Class 2 power source. Take appropriate isolation measures when mounting it in a control panel where non-Class 2 circuits are present.
- Carrier controllers can share a power supply as long as you:
  - Maintain the same polarity.
  - Use the power supply only for Carrier controllers.

To wire for power

1 Make sure the i-Vu® XT BACnet Link's power switch is in the **OFF** position to prevent it from powering up before you can verify the correct voltage.



2 Remove power from the power supply.

3 Pull the red screw terminal connector from the controller's power terminals labeled **24 Vac/Vdc** (**+/-**).

4 Connect the power supply's wires to the red screw terminal connector.

5 Connect an 18 AWG or larger wire from the power supply's negative (-) terminal to earth ground. This wire must not exceed 12 in. (30.5 cm).

6 Apply power to the power supply.

7 Measure the voltage at the red screw terminal connector to verify that the voltage is within the operating range of 20 to 30 Vac or 23.4 to 30 Vdc.

8 Insert the red screw terminal connector into the controller's power terminals.

9 To verify the polarity of the wiring, measure the voltage from the negative terminal of the red screw terminal connector to a nearby ground. The reading should be 0V.

10 Turn on the expander's power switch.

11 Verify that the LED on top of the controller is on.

12 Measure the voltage at the red screw terminal connector to verify that the voltage is within the operating range of 20 to 30 Vac or 23.4 to 30 Vdc.

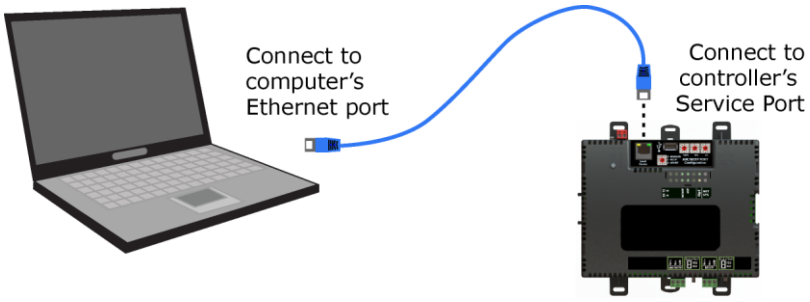
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Addressing the i-Vu® XT BACnet Link

Set this port's address ...	In this location...	See...
IP	Service Port	*To set the IP address* (page 11)
Port S1	On the controller's rotary switches	*To set the Port S1 address and baud rate* (page 13)
Port S2	Service Port	*To set the Port S2 address and baud rate* (page 13)

To access the controller setup through the **Service Port**:

1 Connect an Ethernet cable from a computer to the controller as shown below.



2 Turn off the computer's Wi-Fi if it is on.

3 If your computer uses a static IP address, use the following settings:

- Address: 169.254.1.x, where x is 2 to 7
- Subnet Mask: 255.255.255.248
- Default Gateway: 169.254.1.1

4 If it uses a DHCP address, leave the address as it is.

5 Open a web browser on the computer.

6 Navigate to http://local.access or http://169.254.1.1 to see the Service Port controller setup pages.

See *To set up the controller through the Service Port* (page 34) for general information on using the controller setup pages.

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Rotary switch settings

Rotary switch settings (see example below) are used to determine the following items in your system, so you should plan carefully before setting the switches.

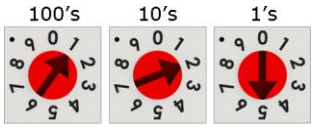
- If you use a **Default IP address**, the final octet is the number created by the three rotary switch settings (must be a unique number from 1 to 253). See *To set the IP address* (page 11).
- If you autogenerate the following:

  Device Instance, the number is automatically set to a number equal to the ((IP network number x 100) + rotary switch settings).

  BACnet Network Number for Port S1, the number is automatically set to a number equal to the ((IP network number + rotary switch settings) x 10).

  Autogenerating is set up through the *controller setup pages* (page 34).
- The rotary switch settings determine the router number in the i-Vu® interface.

EXAMPLE The switches below are set to 125.



CAUTION Do not leave the rotary switches set at 0 (the factory default). The i-Vu® XT BACnet Link cannot be discovered if the rotary switches are left at 0.

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To set up autobaud

The i-Vu® XT BACnet Link can automatically receive or establish the baud rate on a serial network. When you configure a device on the network for autobaud and then power it up, the device detects the incoming baud rate on the network and sets its baud to match.

Autobaud does not work unless there is a device on the network, whether Carrier or third party, that has the baud rate already set. You can manually set the baud rate on more than one device, as long as the rate is the same for every device.

NOTES

- The received baud rate stays intact during power cycles.
- We recommend you set the baud rate manually on the router for the network.

MS/TP

MSTP Autobaud can be configured in either the:

- **Service Port** controller setup pages > **BACnet** tab > **Port S1** or **Port S2**

  or

- The i-Vu® interface, right-click your i-Vu® XT BACnet Link on the navigation tree, and select **Driver Properties** > **BACnet Router Properties** > **MS/TP Configuration** on Port S1 or on Port S2. See *BACnet Router Properties* (page 27).

Modbus

Modbus Serial Autobaud can be configured in either the:

- **Service Port** controller setup pages > **Modbus** tab > **Modbus RS-485** > **Port Configuration**

  or

- The i-Vu® interface, right-click your i-Vu® XT BACnet Link on the navigation tree, and select to **Driver Properties** > **Communication Status** > **Modbus Serial**

NOTE See the *Modbus Integration Guide*.

NOTE If you set **Autobaud** or make other changes in the controller setup pages, you must upload the changes to the system database the first time you access the controller in the i-Vu® interface. This preserves those settings when you download memory or parameters to the controller.

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To set the IP address

You must define the i-Vu® XT BACnet Link's IP addressing (IP address, subnet mask, and default gateway) in the Service Port controller setup pages so that the controller can communicate with the i-Vu Server on the IP network.

Use one of the IP addressing schemes described below with the associated instructions that follow.

Use a...	If...
Default IP Address that your system creates	The answer to all of the above questions is no.
Custom Static IP Address from your network administrator	You do not use a DHCP server and the answer to any of the following questions is yes. Will the i-Vu® system: • Share a facility's existing IP data network? • Have 254 or more devices with static IP addresses? • Be connected to the Internet? • Have at least one device located on the other side of an IP router? • Have any third-party IP devices?
DHCP IP Address generated by a DHCP server	The IP network uses a DHCP server for IP addressing

NOTE Carefully plan your addressing scheme to avoid duplicating addresses. If third-party devices are integrated into the system, make sure your addresses do not conflict with their addresses.

To set a DHCP IP address

1. On the controller setup **Modstat** tab, find the controller's **Ethernet MAC address** and write it down.
2. On the **Ports** tab under **IP Port**, select **DHCP**.
3. Click **Save**.
4. Write down the **IP Address**.
5. Give the DHCP network administrator the IP address and Ethernet MAC address and ask him to reserve that IP address for the controller so that it always receives the same IP address from the DHCP server.

To set a custom IP address

1. Obtain the IP address, subnet mask, and default gateway address for the controller from the facility network administrator.
2. On the controller setup **Ports** tab under **IP Port**, select **Custom Static**.
3. Enter the **IP Address**, **Subnet Mask**, and **Default Gateway** addresses that the network administrator gave you.
4. Click **Save**.

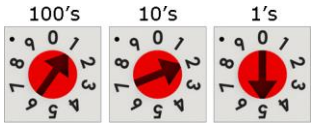
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To set a default IP address

Default IP addressing assigns the following to the controller:

- IP address = 192.168.168.**x**
  where **x** is the setting on the rotary switches in the range from 1 to 253
- Subnet Mask = 255.255.255.0
- Default Gateway = 192.168.168.254

1 Set the controller's three rotary switches to a unique address on the network. Set the left rotary switch to the hundreds digit, the middle switch to the tens digit, and the right switch to the ones digit.
EXAMPLE The switches below are set to 125.



2 On the controller setup **Ports** tab under **IP Port**, select **Default IP Address**.

3 Click **Save**.

CAUTIONS

- The Default IP address range is 1 to 253. Setting the rotary switches to 0 will set the Default IP address to 1. Setting the switches to 255 will set the Default IP to 253. Do not set the switches to 254.
- If you set the Default IP address on the controller setup **Ports** tab and then change the rotary switches, you must do one of the following to correct the IP address in the controller:
  - Go to the controller setup **Ports** tab and click the **Update IP Address**.
  - Cycle the controller's power.

  You will then need to correct the IP address in the i-Vu® application using **Find Devices** and **Upload All Content**. See the i-Vu® Help for more information.

NOTE The default address is an intranet address. Data packets from this address are not routable to the Internet.

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To set the Port S1 address and baud rate

The address should be in one of the following ranges based on the port's use.

Port address

- For ARCNET, the range is 1 to 254.
- For MS/TP, the range is 0 to 127.
- For Modbus, the range is 1 to 247.

For MS/TP, set up autobaud or the port's baud rate

1 On the controller setup **BACnet** tab under **Port S1**, select the **MSTP Baud Rate** or select **Yes** for **MSTP Autobaud**. The default is 76,800 bps.

NOTES

- See *To set up autobaud* (page 10) for details.
- If not using autobaud, enter the identical baud rate for all devices on the same MS/TP network segment.

2 Click **Save**.

Modbus

For Modbus, see the *Modbus Integration Guide*.

To set the Port S2 address and baud rate

For MS/TP, set up autobaud or the port's baud rate

1 On the controller setup **BACnet** tab under **Port S2**, type the address in the **MSTP Address** field. The address must be in the range 0 to 127.

2 Select the **MSTP Baud Rate** or select **Yes** for **MSTP Autobaud**. The default is 76,800 bps.

NOTES

- See *To set up autobaud* (page 10) for details.
- If not using autobaud, enter the same baud rate for all devices on the MS/TP network.

3 Click **Save**.

Modbus

For Modbus, see the *Modbus Integration Guide*.

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Configuring BACnet Device Instance and network number

The i-Vu® XT BACnet Link controller must have a unique Device Instance and Name. These BACnet addresses are automatically generated and usually do not require modification. However, sometimes you need to override the automatic addressing assignments.

Autogenerated addressing scheme:

The i-Vu® XT BACnet Link's rotary address setting determines the automatic BACnet addressing scheme for the connected Open network.

Legend

16 = Carrier's BACnet Vendor ID
xxx = i-Vu® XT BACnet Link's rotary switch address (See NOTES below.)
yy = Controller's rotary switch address (ARCNET/MSTP MAC address)

For the i-Vu® XT BACnet Link:

- BACnet Device Instance Number = (IP network number x 100) + rotary switch address
- BACnet Device Instance Name = the name "device" + the Device Instance
- BACnet IP Network Number = 1600
- BACnet ARC/MSTP Port S1 Network Number = ((IP network number + rotary switch address) x 10)
- Port S1 MSTP MAC Address = 0 by default (user configurable)
- Port S1 ARCNET Address = 254 by default (user configurable)
- BACnet MSTP Port S2 Network Number = ((IP network number + rotary switch address) x 10) +3
- Port S2 MSTP MAC Address = 0 by default (user configurable)

For the Open controllers connected to the i-Vu® XT BACnet Link

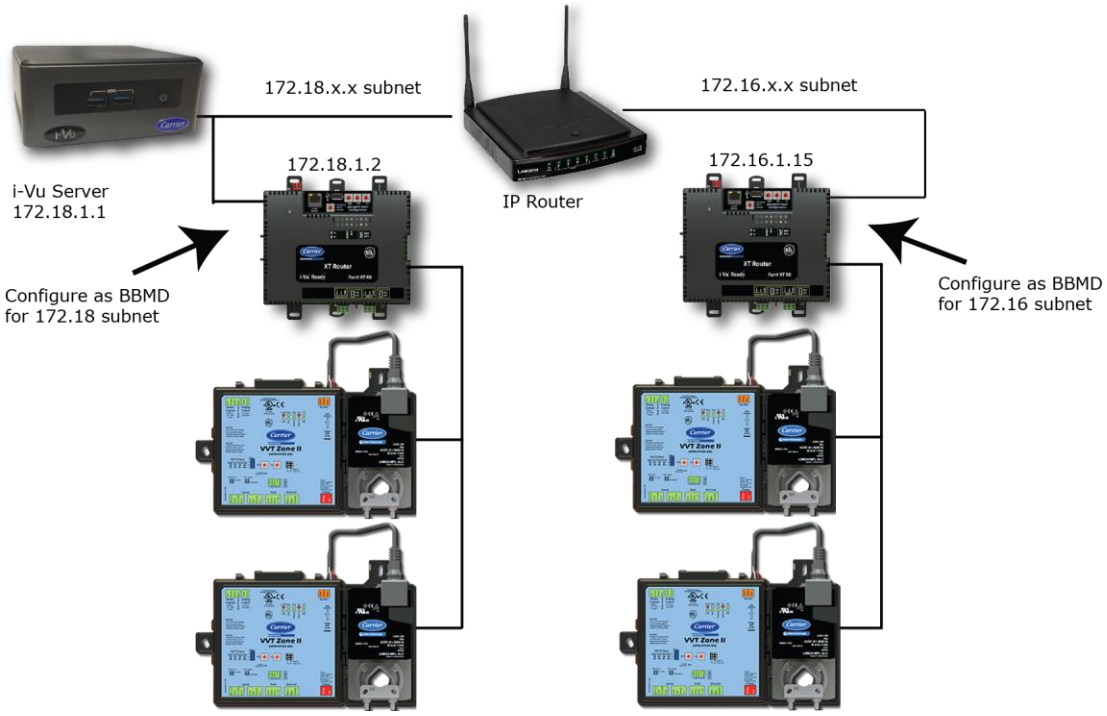
- BACnet MSTP Device Instance Number = BACnet MSTP Network Number + yy
- BACnet ARCNET Device Instance Number = BACnet ARCNET Network Number +yy
- BACnet MSTP Device Instance Name = the name "device" + Device Instance
- BACnet ARCNET Device Instance Name = the name "device" + Device Instance
- BACnet MSTP or ARCNET MAC Address = yy
- BACnet MSTP Network Number = 161xx (learned from the router, defaults to 16101 if no i-Vu® XT BACnet Link is operating)

NOTES

- Do not configure the rotary switches on the i-Vu® XT BACnet Link to a number greater than 127 unless Port S1 is enabled for ARCNET. Doing so will not allow the i-Vu® server to discover the i-Vu® XT BACnet Link. If you change the i-Vu® XT BACnet Link's switches or jumpers, you must cycle its power for the changes to take effect.
- If the BACnet automatic settings need to be changed, see *To communicate through the Local Access port* (page 34).

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To set up BACnet Broadcast Management Devices (BBMDs)



If your system has multiple routers that reside on different IP subnets, you must set up one router on each IP subnet as a BACnet/IP Broadcast Management Device (BBMD).

Every subnet with a router must have a BBMD configured in order for broadcasts from routers on that subnet to reach the rest of the routers on the network.

NOTES

- The i-Vu® Standard or Plus application - If the i-Vu® web server is on a separate subnet than the rest of the routers, the internal router must be assigned a routable IP address and configured as a BBMD.
- The i-Vu® Pro application - If the i-Vu® Pro server is on a separate subnet than the rest of the routers, you must register it as a foreign device to a router acting as a BBMD device.

Use the **BBMD Configuration Tool** to:

- Write/read the **Broadcast Distribution Table** (BDT) of each BBMD device
- Allow controllers on one subnet to communicate with controllers on other subnets
- Enable the i-Vu® application to see, upload, or configure controllers on different subnets

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To set up BBMDs using the BBMD Configuration Tool

1 Assign an IP address, subnet mask, and default gateway for each i-Vu® XT BACnet Link on the IP network. See *Addressing the i-Vu® XT BACnet Link* (page 8).

2 Acquire the **BBMD Configuration Tool** from the Tech Tools USB drive or from either of the *Carrier Control Systems Support Sites http://www.hvacpartners.com/*, *https://accounts.ivusystems.com/*. This is a stand-alone executable file and no installation is necessary.

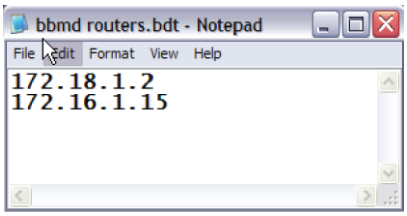
3 Make a list of the IP addresses for each router that will function as a BBMD in your system.

In the above illustration, the Carrier router, address 172.18.1.2, must be configured as a BBMD for the 172.18 subnet, while the Carrier router, address 172.16.1.15, must be configured as a BBMD for the 172.16 subnet.

CAUTIONS

- Define only one BBMD per subnet. Multiple BBMDs on an IP subnet disrupt network communications.
- Unless explicitly modified, the UDP Port for BACnet/IP is 0xBAC0 (47808). Do not change this parameter unless you made a change in the router.

4 In a text editor such as Notepad, create a list of the routers that will be BBMDs. List each IP address on a separate line. (Maximum of 50 IP addresses per file)



5 Save the file to your folder of choice with a .bdt extension instead of .txt.

NOTE ".bdt" is a **Broadcast Distribution Table** file.

6 Open the **BBMD Configuration Tool**.

7 In the **IP Address** or **Host Name** field, type the IP address of the router that functions as the BBMD (BACnet Broadcast Management Device) for its subnet.

8 To check if the router has an existing BBMD table, click the **Broadcast Distribution Table Read** button.

9 If the **Broadcast Distribution Table** contains IP addresses that are not in your .bdt file, verify that they are valid BBMDs and, if so, add them to your .bdt file.

NOTES

- The BDTs in each BBMD should be identical. Repeat this entire process whenever a BBMD is added.
- If needed, disable the checkbox next to **Show Broadcast** to limit the amount of scrolling text that is displayed.

10 Click the **Broadcast Distribution Table Browse** button and select the .bdt file that you made in step 4.

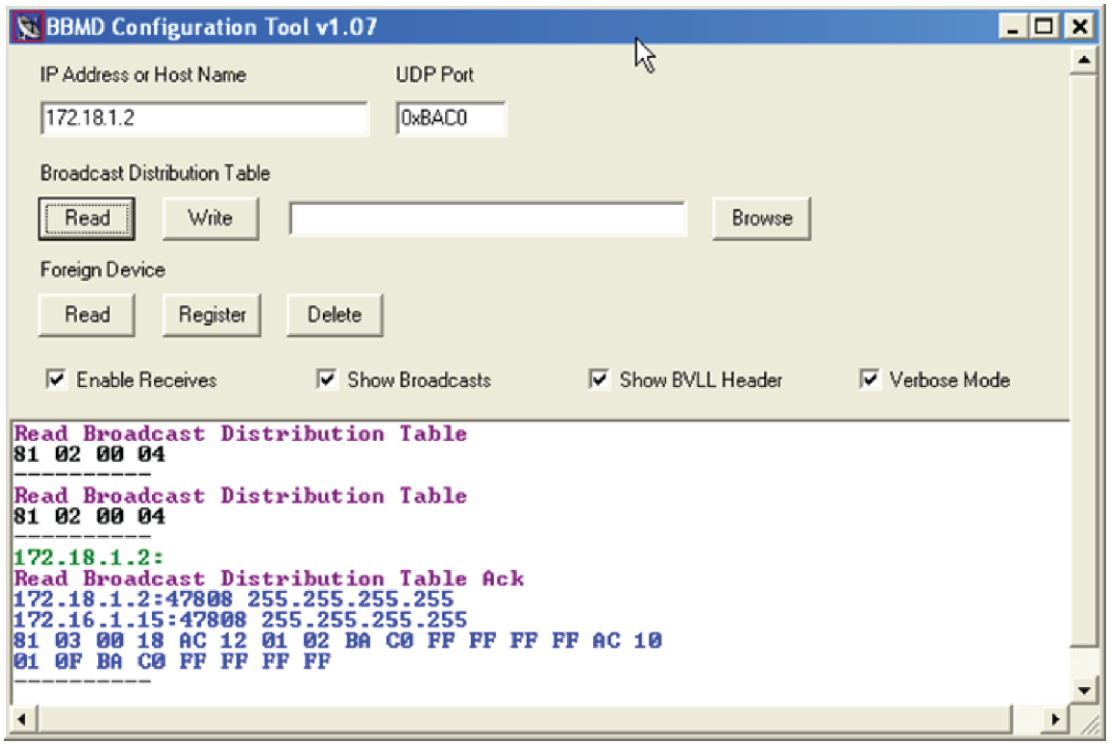
11 Verify that the appropriate IP address is still in the **IP Address** or **Host Name** field.

12 Click the **Broadcast Distribution Table Write** button.

13 Click **Read** again to verify that the new .bdt file was written to the router. See example below.

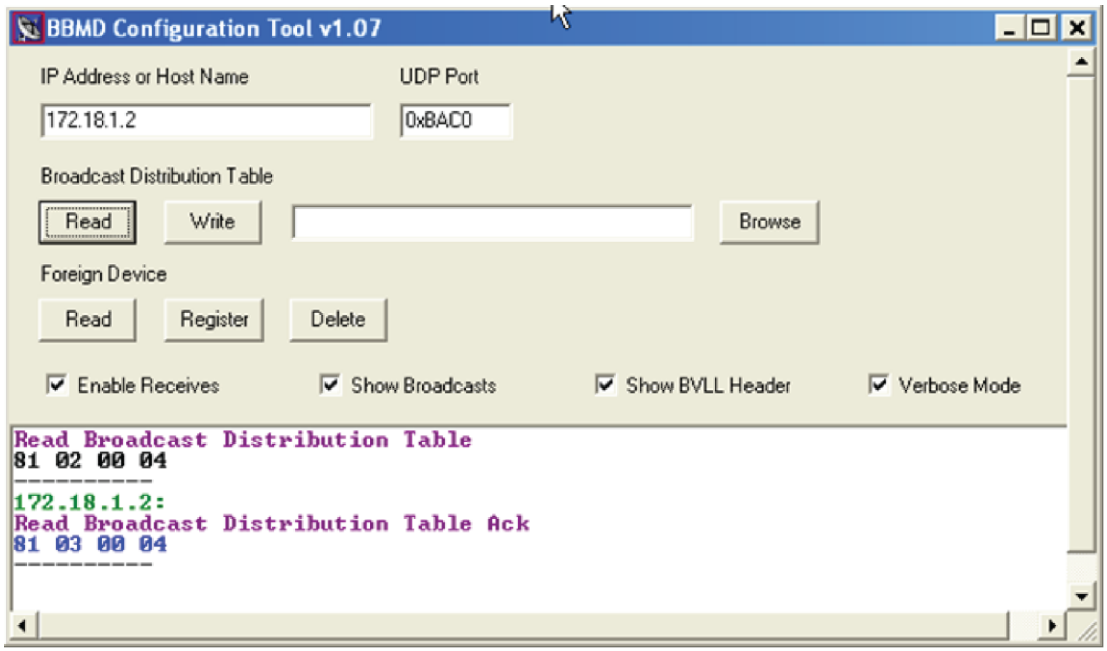
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NOTE If you have a large BDT, you may have to re-size the **BBMD Configuration Tool** window to see the **Broadcast Distribution Table**.



14 Using the next IP address in the .bdt file, repeat steps 7 through 14 until every file has been updated.

NOTE To clear the BBMD entries from a router, follow the steps above using an empty (blank) .bdt file. A cleared BBMD table contains just the router's IP address without entries in the BBMD table, as shown below.



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Wiring for communications

The i-Vu® XT BACnet Link communicates on the following ports.

Port	Protocol	Port type(s)	Speed(s)
Gig-E	BACnet/IP, BACnet/Ethernet, and/or Modbus TCP/IP	Ethernet	10, 100, or 1000 Mbps (1 Gbps)
Port S1 [1]	BACnet/ARCNET	RS485	156 kbps
Port S1 [1] or **Port S2**	BACnet/MSTP Modbus Serial	RS485	9.6 to 115.2 kbps [2] 9.6 to 115.2 kbps [2]
Service Port [3]	HTTP/IP	Ethernet	10 Mbps 100 Mbps
USB Port	USB2.0	USB	

[1] Set the **Port S1 Configuration** rotary switch to:
0 if port is not used
1 for MS/TP
2 for ARCNET
3 for Modbus
4 is for future use

[2] Default for MS/TP is 76.8 kbps.
Default for Modbus is 38.4 kbps.

[3] See To set up the controller through the Service Port.

Wiring specifications

For...	Use...	Maximum Length
BACnet/IP Ethernet	Cat5e or higher Ethernet cable	328 feet (100 meters)
MS/TP* ARCNET*	22 AWG, low-capacitance, twisted, stranded, shielded copper wire *	2000 feet (610 meters)

* For details see the *Open Controller Network Wiring Guide*.

WARNING Do not apply line voltage (mains voltage) to the controller's ports and terminals.

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To connect the i-Vu® XT BACnet Link to the Ethernet

Connect an Ethernet cable to the Gig-E Ethernet port.

If your system has multiple routers that reside on different IP subnets, you must set up one router on each IP subnet as a BACnet/IP Broadcast Management Device (BBMD).

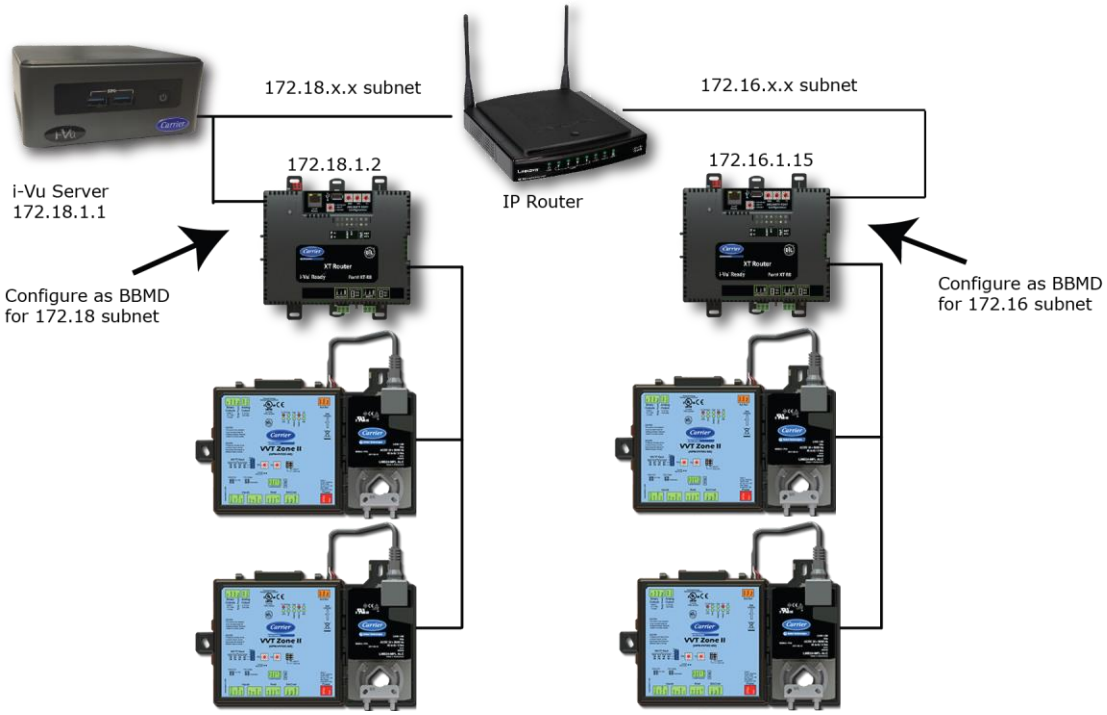
Every subnet with a router must have a BBMD configured in order for broadcasts from routers on that subnet to reach the rest of the routers on the network.

NOTES

- The i-Vu® Standard or Plus application - If the i-Vu® web server is on a separate subnet than the rest of the routers, the internal router must be assigned a routable IP address and configured as a BBMD.
- The i-Vu® Pro application - If the i-Vu® Pro server is on a separate subnet than the rest of the routers, you must register it as a foreign device to a router acting as a BBMD device.

Use the **BBMD Configuration Tool** to:

- Write/read the **Broadcast Distribution Table** (BDT) of each BBMD device
- Allow controllers on one subnet to communicate with controllers on other subnets
- Enable the i-Vu® application to see, upload, or configure controllers on different subnets



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To wire to a BACnet/ARCNET network

1. Turn **off** the i-Vu® XT BACnet Link's power.
2. Check the communications wiring for shorts and grounds.
3. Connect the communications wiring to **Port S1**'s screw terminals labeled **Net +**, **Net -**, and **Shield**.

   NOTE Use the same polarity throughout the network segment.
4. If the controller has a **Port S1 Configuration** rotary switch, set it to 2.
5. If the i-Vu® XT BACnet Link is at either end of a network segment, set the port's **End of Net** switch to **Yes**.

   NOTE The controller's **End of Net** switch applies network termination and bias. See the *Open Controller Network Wiring Guide.*
6. Turn on the controller's power.
7. To verify communication with the network, get a Module Status report in the i-Vu® interface for a controller on the ARCNET network.

   NOTE This step requires that you have discovered and uploaded the controller in the i-Vu® application.

To wire to a BACnet MS/TP network

An MS/TP network can be wired to either **Port S1** or **Port S2**.

1. Turn **on** the i-Vu® XT BACnet Link's power.
2. Check the communications wiring for shorts and grounds.
3. Connect the communications wiring to the **Port S1** or **Port S2** screw terminals labeled **Net +**, **Net -**, and **Shield**.

   NOTE Use the same polarity throughout the network segment.
4. If you are using **Port S1**, and the controller has a **Port S1 Configuration** rotary switch, set it to 1.

   NOTE If **Port S1** is not being used for any network, set this rotary switch to 0.
5. If the i-Vu® XT BACnet Link controller is at either end of a network segment, set the port's **End of Net?** switch to **Yes**.

   NOTE The controller's **End of Net** switch applies network termination and bias. See the *Open Controller Network Wiring Guide.*
6. Turn on the controller's power.
7. To verify communication with the network, get a Module Status report in the i-Vu® interface for a controller on the MS/TP network.

   NOTE This step requires that you have discovered and uploaded the controller in the i-Vu® application.

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To wire a third-party device

BACnet: You can wire a third-party BACnet device to the i-Vu® XT BACnet Link's **Gig-E** port, **Port S1**, or **Port S2**. See the *BACnet Integration Guide* for the i-Vu® XT BACnet Link.

Modbus: You can wire a third-party Modbus TCP/IP device (client or server) to the i-Vu® XT BACnet Link's **Gig-E** port or a Modbus master or slave device to **Port S1** or **Port S2**. See *Modbus Integration Guide* for the i-Vu® XT BACnet Link.

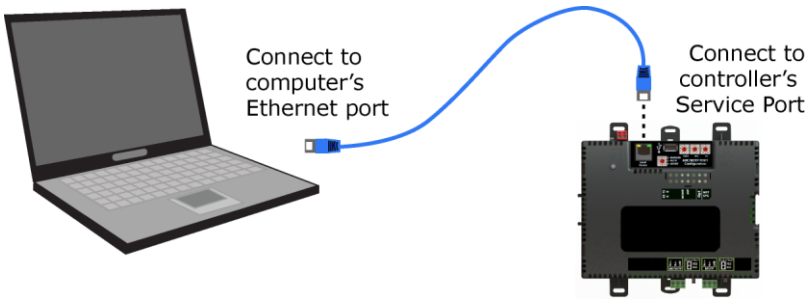
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To communicate through the BACnet/IP Service Port network

You can connect to the Service Port to access your network through the:

- i-Vu® application
- Carrier touchscreen device

1 Connect an Ethernet cable from a computer to the controller as shown below.



2 Turn off the computer's Wi-Fi if it is on.

3 If your computer uses a static IP address, use the following settings:

- Address: 169.254.1.x, where x is 2 to 7
- Subnet Mask: 255.255.255.248
- Default Gateway: 169.254.1.1

4 If it uses a DHCP address, leave the address as it is.

5 Open a web browser on the computer and login to your i-Vu® Pro application.

6 In the i-Vu® Pro interface, on the **System Options** tree, select **Connections.**

7 On the **Properties** page > **Configure** tab, Select **BACnet/IP Service Port Connection** from the drop-down list and click **Add**.

8 If needed, enter the **Service Port Network Number** as follows:

- **0** - the i-Vu® XT BACnet Link will communicate only with the computer or TruVu™ ET Display
- **1** to **65534** - the i-Vu® XT BACnet Link's network number for network communication
- **65535** - searches for an available network number from 65531 to 65534. If any of these numbers are not available, you will have to assign a network number and enter it.

9 Click **Apply**.

10 On the right of the page, in the **Networks using selected connection** table, click the checkbox next to the network you want to connect to.

11 Click **Apply**.

12 Select the **BACnet/IP Service Port Connection** and click **Start**. The status changes to **Connected**.

13 Click **Accept**.

14 On the navigation tree, right-click the controller that you are connected to and select **Module Status**. If a Modstat report appears, the i-Vu® application is communicating with the controller.

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Find and upload in the i-Vu® interface

1. In the i-Vu® interface, select the System level in the navigation tree.
2. On the **Devices** page > **Manage** tab, click **Find Devices** to discover your routers and their drivers, graphics, and touch files.
3. Once routers are found, select one or more routers in the list on the **Manage** tab and click **Upload All Content** to upload to the i-Vu® application. Use **Ctrl+click**, **Shift+click**, or both to select multiple items.
4. Click **OK** when you see the message **This will upload all content for the controller. Are you sure you want to do this?**. When complete, a check mark under **Status** indicates a successful upload.

   NOTES

   - If an error message appears, click on the message to view an explanation.
   - For details, see the i-Vu® Help.

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Adjusting the i-Vu® XT BACnet Link driver properties

After you find and upload the i-Vu® XT BACnet Link in the i-Vu® interface, you may want to customize the i-Vu® XT BACnet Link's settings for your applications. You can change settings on the **Driver Properties** page.

1 In the i-Vu® interface, right-click the i-Vu® XT BACnet Link in the navigation tree and select **Driver Properties**.

2 Adjust the driver as desired.

Driver

On the **Driver** page > **Update** tab, you can:

- Obtain information about the i-Vu® XT BACnet Link, get a Modstat and device logs
- Add, update, or delete drivers
- Add, update, or delete screen files for an Equipment Touch

The **Driver** page > **Settings** tab provides the following information plus the items described in the table below:

- The date/time of last parameter change or the last time the database was archived
- If control programs, properties, and schedules were successfully stored in memory
- Undelivered Alarm Status

TouchScreen Control	
TouchScreen Schedule Edit Enable	Check this field to allow a user to edit this controller's schedules from an Equipment Touch or System Touch Schedules screen. **NOTE** Schedules edited on an Equipment Touch or System Touch are not uploaded to the i-Vu® application. This could result in the controller operating on a schedule that differs from the one you see in the i-Vu® interface.
Controller Clock	
Clock Fail Date and **Time**	Date and time the controller uses when its real-time clock is invalid.
Time Synch Sensitivity (seconds)	When the controller receives a time sync request, if the difference between the controller's time and the time sync's time is greater than this field's value, the controller's time is immediately changed. If the difference is less than this field's value, the controller's time is slowly adjusted until the time is correct.
Network Microblocks	
BACnet third party Integration points capacity, **Integration points requested**, and **Integration points active**	Shows how many third-party BACnet points the i-Vu® XT BACnet Link allows (capacity), how many points are in the control program (requested), and how many are currently active (not disabled in i-Vu®). For example, if the i-Vu® XT BACnet Link allows 1500 points, the control program has 1450 points, and you disabled 30 points in i-Vu®, you would see: Integration points capacity: 1500 Integration points requested: 1450 Integration points active: 1420

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Modbus integration points capacity and **integration points active**	Shows how many Modbus points the i-Vu® XT BACnet Link allows (capacity) and how many are currently active.
Number of poll retries before Network Input Microblocks indicate failure	The maximum number of retries after the initial attempt that a Network microblock will attempt to communicate with its target device. If unsuccessful, the point will transition to an idle state for 30 seconds before attempting to communicate again. Change this field only if directed by Technical Support.
Periodic rebinding interval	If a microblock uses a wildcard in its address, this timer determines how often the microblock will attempt to find the nearest instance of its target. For example, if an outside air temperature address uses a wildcard, a VAV application will look for the outside air temperature on the same network segment or on the nearest device containing that object.
Debug	
Enable Debug Messages	Enable only if directed by Carrier Controls System Support.

Device

The **Device** page provides the following information plus the items described in the table below:

- BACnet device object properties for the i-Vu® XT BACnet Link
- The character sets supported by this device for BACnet communication

Configuration	
BACnet System Status	The current state of the controller: Operational Download in Progress Download Required Backup in Progress Non-Operational
The following fields refer to all networks over which the i-Vu® XT BACnet Link communicates.	
APDU Timeout	How many milliseconds the device will wait before resending a message if no response is received.
APDU Segment Timeout	How many milliseconds the device will wait before resending a message segment if no response is received.
Number of APDU Retries	The number of times the device will resend a message.
Controller Clock	
Time Broadcaster will synchronize time every ____	If you have third-party BACnet devices on one of the router's networks, you can have the router send a BACnet time sync to those devices at the interval you define in this field.
Time Synchronization Recipients	To define third-party BACnet devices as Time Synchronization Recipients: **1** Click **Add**. **2** Select **Device ID** or **Address** in the **Recipient Type** field. **3** Enter the **Device ID** or **Address** information. **4** Click **Accept**.

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Notification Classes

A BACnet alarm's Notification Class defines:

- Alarm priority for Alarm, Fault, and Return to Normal states
- Options for BACnet alarm acknowledgment
- Where alarms should be sent (recipients)

Alarms in the i-Vu® application use Notification Class #1. The i-Vu® application is automatically a recipient of these alarms.

Priorities	**NOTE** BACnet defines the following Network message priorities for Alarms and Events.	
	Priority range	**Network message priority**
	00–63	Life Safety
	64–127	Critical Equipment
	128–191	Urgent
	192–255	Normal
Priority of Off-Normal	BACnet priority for Alarms.	
Priority of Fault	BACnet priority for Fault messages.	
Priority of Normal	BACnet priority for Return-to-normal messages.	
Ack Required for Off-Normal, Fault, and Normal	Specifies whether alarms associated with this Notification Class require a BACnet Acknowledgment for Off-Normal, Fault, or Normal alarms. **TIP** You can require operator acknowledgment for an Alarm or Return-to-normal message (stored in the i-Vu® database). In the i-Vu® interface on the **Alarm** > **Enable/Disable** tab, change the acknowledgment settings for an alarm source or an alarm category.	
Recipient List		
Recipients	The first row in this list is the i-Vu® application. Do not delete this row. Click **Add** if you want other BACnet devices to receive alarms associated with this Notification Class.	
Recipient Description	Name that appears in the **Recipients** table.	
Recipient Type	Use **Address** (static binding) for either of the following: • Third-party BACnet device recipients that do not support dynamic binding • When you want alarms to be broadcast (you must uncheck **Issue Confirmed Notifications**). This use is rare.	
Days and times	The days and times during which the recipient will receive alarms.	
Recipient Device Object Identifier	Type the **Device Instance** in the **#** field.	
Process Identifier	Change for third-party devices that use a BACnet Process Identifier other than 1. The i-Vu® application processes alarms for any 32-bit Process Identifier.	
Issue Confirmed Notifications	Select to have a device continue sending an alarm message until it receives delivery confirmation from the recipient.	
Transitions to Send	Uncheck the types of alarms you do not want the recipient to get.	

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Calendars

Calendars are provided in the driver for BACnet compatibility only. Instead, use the **Schedules** feature in the i-Vu® interface.

Common and Specific Alarms

On these pages, you can enable/disable, change BACnet alarm properties, or set delays for the following BACnet alarms:

Common alarms:

- All Programs Stopped
- Excessive COV
- Program Stopped
- Locked I/O
- Controller Halted
- Control Program
- Duplicate Address

Specific alarm:

- Dead Controller Timeout

NOTE To set up alarm actions for controller generated alarms, see *Setting up alarm actions* in the i-Vu® Help.

Controller Generated Alarm	
Description	Short message shown on the **Alarms** page or in an alarm action when this type of alarm is generated.
Events	
Alarm Category and Alarm Template	See *Setting up an alarm source in the i-Vu® interface* in i-Vu® Help.
Enable	Clear these checkboxes to disable Alarm or Return to normal messages of this type from the i-Vu® XT BACnet Link.
Notification Class	In a typical i-Vu® system, the Notification Class is 1; however, if needed, you can associate a different notification class with the alarm. See *Notification Classes* (page 26) to set up alarm delivery options for a specific Notification Class.

BACnet Router Properties

CAUTION Do not change the settings on this page as it will result in communication failure. Use *the controller setup pages* (page 34) to change settings and then resolve mismatches in the i-Vu® application.

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BACnet Firewall

If this IP controller is accessible from the Internet, you can increase security by enabling its BACnet firewall. When enabled, this feature prevents the controller from responding to BACnet messages from unidentified sources and allows communication only with IP addresses that you define. These can be all private IP addresses and/or a list of IP addresses. Follow the instructions in the i-Vu® interface to set up the BACnet firewall.

Network Diagnostics - Statistics

This page shows the network statistics for each of the i-Vu® XT BACnet Link's ports that are in use. This same information is provided in a *Module Status report* (page 41).

Click the **Error Rate Trend** or **Packet Rate Trend** link at the bottom of each section to see the statistics displayed as trend graphs. You can also access these trends by clicking on the driver in the network tree, and then selecting **Trends** > **Enabled Points** > and the desired trend graph.

Click a port's **Reset** button to set all of the numbers to zero so the counting can start over.

Router Statistics	
Error Counters	**Dropped Packets**—Data packets that could not be delivered. **Route Not Found**—Packets that could not be delivered because the requested network does not exist. **Route Unreachable**—These are routed packets whose destination network is either busy or offline
Network Activity	Shows the number of incoming and outgoing unicast and broadcast packets for each of the i-Vu® XT BACnet Link's networks.
Router Sourced Packets	Shows the number of packets initiated by the i-Vu® XT BACnet Link that are not in response to a request from another device. The numbers in this table will also appear in the appropriate columns in the **Network Activity** tab.
Trends	**Error Rate Trend**—Shows the total number of errors within the trend sampling interval. **Packet Rate Trend**—Shows the total number of packets transmitted and received within the trend sampling interval.
Gig-E Port Statistics	
BACnet/IP Statistics	**BACnet/IP Rx Unicast Packets**—BACnet/IP packets received from a single BACnet device. **BACnet/IP Tx Unicast Packets**—BACnet/IP packets transmitted to a single BACnet device. **BACnet/IP Rx Broadcast Packets**—BACnet/IP broadcast packets received by the i-Vu® XT BACnet Link. **BACnet/IP Tx Broadcast Packets**—BACnet/IP broadcast packets transmitted by the i-Vu® XT BACnet Link. **Whitelist Rejections** (if *BACnet Firewall* (page 28) is enabled)—Messages blocked by the BACnet Firewall because the IP address that sent the message was not in the whitelist.

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Ethernet Statistics	**Ethernet Rx packets**—All packets (including non-BACnet packets such as a ping) received by the i-Vu® XT BACnet Link. **Ethernet Tx packets**—All packets (including non-BACnet packets such as a ping) transmitted by the i-Vu® XT BACnet Link. **Receive Errors (total)**—All errors related to received packets such as CRC errors, FIFO errors, frame errors, length errors, missed errors, and overrun errors. **Transmit Errors (total)**—All errors related to transmitted packets such as aborted errors, carrier errors, dropped errors, FIFO errors, heartbeat errors, and window errors. **Dropped Packets**—Packets dropped by the i-Vu® XT BACnet Link's Ethernet interface.
Trends	**Error Rate Trend**—Shows the total number of errors within the interval time. **Packet Rate Trend**—Shows the total number of packets transmitted and received within the trend sampling interval.
Port S1 Statistics when used for ARCNET	
Error Counters	**Node Reconfiguration**—The ARCNET reconfigurations initiated by the i-Vu® XT BACnet Link. **Bus Reconfiguration**—An ARCNET reconfiguration not generated by the i-Vu® XT BACnet Link (such as when a controller connects to the network). **Excessive NACK**—Excessive NACKs received by the i-Vu® XT BACnet Link's ARCNET chip. Excessive NACKs are usually the result of a station which is unable to process a steady stream of packets due to buffer overflows or slow responses. **Dropped Packets**—Dropped receive and transmit frames. These may be dropped due to buffer allocation failures, length errors, or NACKed transmit packets.
Activity Counters	**BACnet/ARCNET Rx Packets**—BACnet/ARCNET data packets received by the i-Vu® XT BACnet Link. **BACnet/ARCNET Tx Packets**—BACnet/ARCNET data packets transmitted by the i-Vu® XT BACnet Link.
Latency	**Average Value (milliseconds)**—The average time from when a packet is queued to be transmitted until it is actually transmitted on the bus. **Maximum Value (milliseconds)**—The maximum time from when a packet is queued to be transmitted until it is actually transmitted on the bus.
Trends	**Error Rate Trend**—Total number of errors within the interval time on this network, including break errors, framing errors, etc.. **Packet Rate Trend**—BACnet/ARCNET data packets transmitted through router, not the total utilization.

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Port S1 Statistics when used for MSTP or **Port S2 Statistics**	
Error Counters	**UART Errors**—UART receive and transmit errors such as break errors, framing errors, parity errors, and overrun errors. **Invalid Frames**—Received MS/TP frames that contain an error such as CRC. **Dropped Packets**—Dropped receive and transmit frames. These may be dropped due to buffer allocation failures, length errors, or APDU timeouts (in the case of transmit frames) **Dropped Tokens**—Dropped tokens that have been retransmitted. **No responses—**Messages that did not receive a response from the destination device.
Activity Counters	**BACnet/MSTP Rx Packets**—BACnet/MSTP data packets received by the i-Vu® XT BACnet Link. **BACnet/MSTP Tx Packets**—BACnet/MSTP data packets transmitted by the i-Vu® XT BACnet Link.
Latency	**Average Value (milliseconds)**—The average time from when a packet is queued to be transmitted until it is actually transmitted on the bus. **Maximum Value (milliseconds)**—The maximum time from when a packet is queued to be transmitted until it is actually transmitted on the bus
Trends	**Error Rate Trend**—Total number of errors within the interval time on this network, including break errors, framing errors, etc. **Packet Rate Trend**—Percentage of total bus bandwidth used to transmit data packets. **NOTE** This is for all bus traffic, not just traffic generated by the i-Vu® XT BACnet Link.

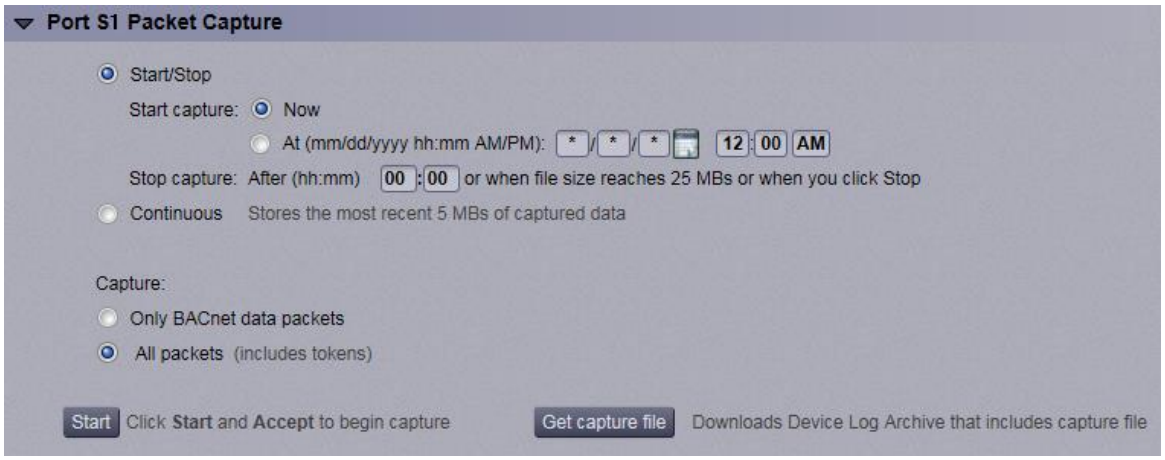
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Network Diagnostics - Packet Capture

This page allows you to capture network communication on a port and then download the capture file for troubleshooting. Choose one of the following capture options:

- **Start/Stop** - Define the start and stop criteria, and then click **Start** and **Accept** to begin the capture. When the capture stops, the capture file is generated.
  NOTE If a Start/Stop capture is running on any other port, the **Get capture file** button will be disabled until all Start/Stop captures have completed.
  - **Start capture:** - When you check **At (mm/dd/yyyy hh:mm AM/PM)**, enter the time and date, and click **Start**, the packet capture begins at the date and time you specified.

    NOTE The hours field is validated from 0 to 12, and minute field is validated from 0 to 59.
  - **Continuous** - Click **Start** and **Accept** to begin the capture. Click **Save** to momentarily stop the capture and create the capture file. The capture will automatically resume. Click on the **Start/Stop** option to end the **Continuous** capture.
  - If the port is set up for MS/TP, select an option in the **Capture** section.



To download the capture file

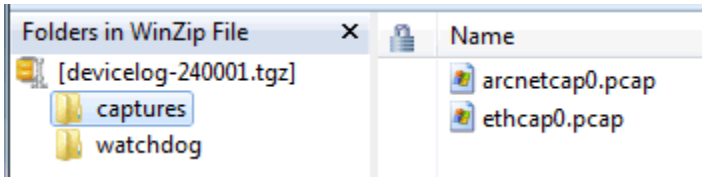
Capture files are Wireshark files that are added to the Device Log Archive .tgz file. Do the following to view the files.

1. If you do not have Wireshark installed on your computer, download the latest version from the *Wireshark website* (*http://www.wireshark.org*).
2. Run the install program, accepting all defaults. Include WinPcap in the installation.
3. On the i-Vu® **Packet Capture** page, click **Get capture file** to download the .tgz file. The message appears "Retrieving the file, this may take a little while". Click **OK**.

   NOTE If the size of the .tgz is large, there could be a considerable delay (for example, over 2 minutes) after you click **Get capture file** until your browser begins the download.

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4 Open the .tgz file. The files are in the **captures** folder.



Capture file names are based on the ports.
NOTES

- If you have an MSTP capture file for both Port S1 and Port S2, the file names will be:
  mstpcap0 for Port S1
  mstpcap1 for Port S2
- Clicking **Get capture file** generates the port's .pcap file. If the port has a .pcap file from a previous capture, that file will be overwritten.

5 Extract the .pcap file from the .tgz file.

6 Open the .pcap file in Wireshark.

Communication Status

The **Communication Status** page shows the status of the protocols currently running on the i-Vu® XT BACnet Link's ports.

Standalone Controller Detection

You can use the fields on this page with a binary input in your control program to detect when the controller does not receive a write request from the selected network within the specified amount of time. The input remains OFF as long as write requests are received, but switches to ON if the controller does not receive a request within the specified time. The binary input must have the Expander number and Input number set to **99** and the I/O Type set to **Special**.

Modbus Serial, Modbus TCP/IP, and Modbus Error Definitions pages

If the controller will be used with Modbus devices, see the *Modbus Integration Guide* for information on using these pages.

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To set up Network Statistic trends

PREREQUISITE To view Network Statistic trends, you must have a i-Vu® v6.5 or later system with the latest cumulative patch.

To view the *Network Statistics* (page 28) as trend graphs, select the controller in i-Vu®'s navigation tree and go to one of the following:

- On the **Driver Properties** > **Network Diagnostics** > **Statistics** page, click a **Trend** link at the bottom of each section.
- Click the **Trends** drop-down button, select **Enabled Points** and then the graph you want.

You can define:

- How the graph looks on the trend's **Configure** tab.
- How you want trend samples to be collected on the **Enable/Disable** tab. See table below.

Field	Notes
Sample every _:_:_ (hh:mm:ss)	(Recommended method) To record the value at a regular time interval, enter hh:mm:ss in this field.
Sample on COV (change of value)	To record the value only when the value changes by at least the amount of the **COV Increment**, set the **Sample every** field to 0:00:00 and enter a value in the **COV Increment** field.
Max samples	Network Statistic trends have a non-configurable maximum trend log buffer size of 1440. **NOTE** Trending consumes memory in the controller. Click **Reset** to delete all samples currently stored in the controller.
Stop When Full	Check this field to stop trend sampling when the maximum number of samples is reached.
Enable trend log at specific times only	Collects trend data for the specific period of time you define in the time and date fields.
Enable Trend Historian	Archives trend data to the system database.
Store Trends Now	Writes all trend data in the controller to the system database without having to enable trend historian.
Write to historian every __ trend samples	Writes all trend data in the controller to the system database each time the controller collects the number of samples that you enter in this field. This number must be greater than zero and less than the number entered in the Max samples field. The number of trends specified must be accumulated at least once before the historical trends can be viewed. **NOTE** Any trends not stored in the historian will be lost if the controller loses power.
Trend samples accumulated since last notification	Shows the number of samples stored in the controller since data was last written to the database.
Last Record Written to Historian	Shows the number of trend samples that were last written to the database.
Keep historical trends for __ days	This is based on the date that the sample was read. Select the first option to use the system default that is defined on the **System Options** > **System Settings** > **General** tab. Select the second option to set a value for this trend only.

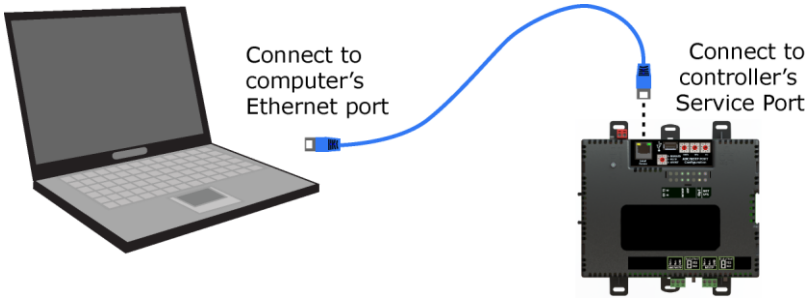
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To set up the controller through the Service Port

Using a computer and an Ethernet cable, you can communicate with the i-Vu® XT BACnet Link through a web browser to:

- View the controller's Module Status report
- View/change controller and network settings. Changes take effect immediately.
- Troubleshoot
- Use BACnet/IP Service Port to access the i-Vu® application or a touchscreen device. See *To communicate through the BACnet/IP Service Port network* (page 22).

1 Connect an Ethernet cable from a computer to the controller as shown below.



2 Turn off the computer's Wi-Fi if it is on.

3 If your computer uses a static IP address, use the following settings:

- Address: 169.254.1.x, where x is 2 to 7
- Subnet Mask: 255.255.255.248
- Default Gateway: 169.254.1.1

4 If it uses a DHCP address, leave the address as it is.

5 Open a web browser on the computer.

6 Navigate to http://local.access or http://169.254.1.1 to see the Service Port controller setup pages.

NOTE The first time you access the controller in the i-Vu® interface after you have changed settings through the Service Port, be sure to upload the changes to the system database. This will preserve those settings when you download memory or parameters to the controller.

ModStat tab

This tab provides the controller's Module Status report that gives information about the controller and network communication status. See *Appendix - Module Status field descriptions* (page 46).

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Device tab

BACnet Object	
Device Instance	**Autogenerated**—(Default) The Device ID is automatically set to a number equal to the (IP network number) x 100 + rotary switch address. **Assigned**—Lets you enter a specific number that is unique on the BACnet network.
Device Name	**Autogenerated**—(Default) The Device Name is automatically set as the word device + the Device Instance. For example, device2423911. **Assigned**—Lets you enter a specific name that is unique on the BACnet network.
Device Location	You can enter an intuitive location for the device in the i-Vu® interface.
Device Description	You can enter an intuitive description for the device in the i-Vu® interface.
Configuration	
APDU Timeout	How many milliseconds the device will wait before resending a message if no response is received.
APDU Segment Timeout	How many milliseconds the device will wait before resending a message segment if no response is received.
APDU Retries	The number of times the device will resend a message.
Controller Information	
Clear Counts/Logs	Clears Reset counters and the three message history fields from the Module Status.
Data Backup and Restore	
Backup	Displays time of the last backup. Click button to backup the controller's control programs, properties, and schedules.
Restore	Displays time of the last restore. Click button to restore the most recent backup of the controller's control programs, properties, and schedules.

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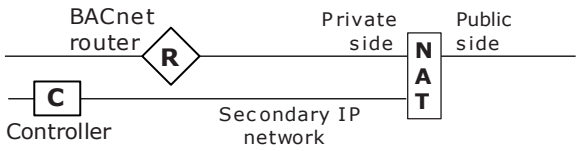
Ports tab

IP Port	
IP Addressing	Select the type of addressing the controller is to use. See *Addressing the i-Vu® XT BACnet Link* (page 8).
Port S1	
End of Network	Indicates status of the controller's **End of Net?** switch.
Active Protocol	Indicates status of the controller's **Port S1 Configuration** rotary switch. 0=Disabled 1=MS/TP 2=ARCNET 3=Modbus
Address	The address that is set on the three rotary switches. See *To set the Port S1 address and baud rate* (page 13).
Port S2	
End of Network	Indicates status of the controller's **End of Net?** switch.
Active Protocol	The protocol that has been enabled for Port S2 on the BACnet or Modbus tab.

BACnet tab

IP Port	
BACnet Network Number	**Disable Routing**—Select if the IP port is not used. **Autogenerated**—The BACnet/IP network number is automatically set to 1600. **Assigned**—Lets you enter a specific number.
BACnet UDP Port	The port that the i-Vu® application will use for BACnet communication.
Enable NAT Routing	**For future use.** Check if the i-Vu® XT BACnet Link is behind a NAT router (firewall).
Global NAT IP Address	**For future use.** Public IP address of the NAT router.
Global NAT BACnet UDP Port	**For future use.** Port number assigned to the NAT router's public interface.

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BACnet Secondary IP Net Number	If the i-Vu® XT BACnet Link has two BACnet/IP networks communicating on the Gig-E port, enter the second IP network number in this field. If the i-Vu® XT BACnet Link is behind a NAT router and there is a second network with BACnet/IP devices behind the NAT router, enter the second network number in this field to logically connect the i-Vu® XT BACnet Link to the devices on the second network. 
BACnet Secondary UDP Port	If the i-Vu® XT BACnet Link has two BACnet/IP networks communicating on the Gig-E port, enter the port number that the i-Vu® application will use for BACnet communication. This port must be different than the **BACnet UDP Port**.
Ethernet Port	
MAC Address	A factory assigned Ethernet MAC Address for the **Gig-E** port.
BACnet Network Number	Specify a number for the BACnet/Ethernet network or set to 0 if the port is not used.
Port S1	
End of Network	Indicates status of the controller's **End of Net?** switch.
Active Protocol	Indicates status of the controller's Port S1 rotary switch. 0=Disabled 1=MS/TP 2=ARCNET 3=Modbus
Address	The address that is set on the three rotary switches. See *To set the Port S1 address and baud rate* (page 13).
ARCNET Baud Rate	156000
MSTP Autobaud	Select **Yes** to enable this slave device to automatically receive its baud rate from a master on the network that has the fixed baud rate.
MSTP Baud Rate	Set this to a baud rate that all other devices on the MS/TP network are set to.
MSTP Max Master	To increase MS/TP performance, enter the highest address used on the MS/TP network for a master controller. This number must be less than or equal to 127.
MSTP Max Info Frames	This is the maximum number of information messages a controller may transmit before it must pass the token to the next controller. Valid values are 1 to 255. **TIP** Set **Max Info Frames** to a number in the range 20 to 100 so that the router does not become a bottleneck for traffic being routed from a high-speed network to the slower MS/TP network.
BACnet Network Number	Select: **Disable Routing** if Port S1 is not used. **Autogenerated** to have the network number for Port S1 automatically set to a number equal to ((IP network number + rotary switch address) x 10). **Assigned** to enter a specific number.

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Port S2	
End of Network	Indicates status of the controller's **End of Net?** switch.
Active Protocol	Shows one of the following: • **Modbus** if enabled on the **Modbus** tab • **BACnet/MSTP** if you enter a **BACnet Network Number** below for an MS/TP network • **Disabled** if neither of the above have been done
Address	The controller's unique address on the MS/TP network.
MSTP Autobaud	Select **Yes** to enable this slave device to automatically receive its baud rate from a master on the network that has the fixed baud rate.
MSTP Baud Rate	Set this to a baud rate that all other devices on the MS/TP network are set to.
MSTP Max Master	To increase MS/TP performance, enter the highest address used on the MS/TP network for a master controller. This number must be less than or equal to 127.
MSTP Max Info Frames	This is the maximum number of information messages a controller may transmit before it must pass the token to the next controller. Valid values are 1 to 255. **TIP** Set **Max Info Frames** to a number in the range 20 to 100 so that the router does not become a bottleneck for traffic being routed from a high-speed network to the slower MS/TP network.
BACnet Network Number	Select: **Disable Routing** if Port S2 is not used. **Autogenerated** to have the network number for Port S2 automatically set to a number equal to ((IP network number + rotary switch address) x 10) + 3. **Assigned** to enter a specific number.
Home Network	This is typically the network that is communicating with the building automation system's application. This sets the BACnet Address of the Device object.

Modbus tab

If the controller will be used with Modbus devices, see the *Modbus Integration Guide* for information on using this tab.

Security tab

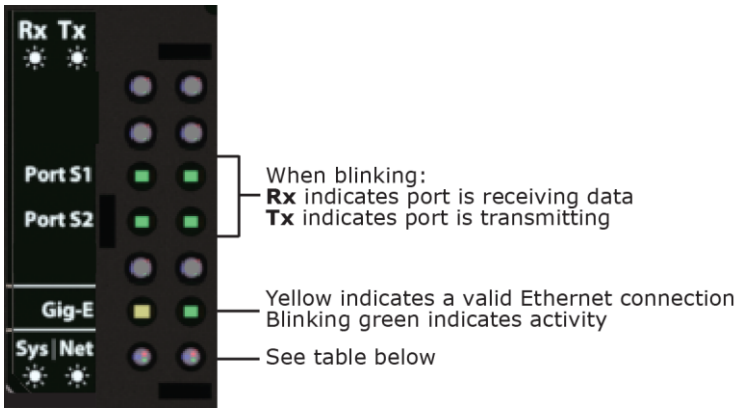
BACnet Firewall	If your BACnet Firewall configuration in the i-Vu® interface did not include the i-Vu® server IP address, thus blocking communication with the i-Vu® server, you can disable the controller's BACnet Firewall on the controller setup **Security** tab. **NOTE** You can enable the BACnet Firewall only in the i-Vu® interface.

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Troubleshooting

If you have problems mounting, wiring, or addressing the i-Vu® XT BACnet Link, contact Carrier Controls System Support.

LEDs



NET (Network Status) Tricolor LED

Color	Pattern	Condition	Message in Module Status	Possible Solutions
Red	On	Ethernet connection problem	No Ethernet Link	• Connect Ethernet Cable • Check other network components
Red	1 blink	One of the following BACnet/IP (Ethernet) DLL reporting issue: • Unable to create tasks • Unable to open socket for BACnet port	BACnet/IP error	Cycle power
Red	2 blink	Current default IP address does not match the current rotary switch setting	Default IP address mismatch	• Use the controller setup **Ports** tab to set the IP address • Cycle power to accept new IP address • Change rotary switches to match current default IP address

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NET (Network Status) Tricolor LED

Color	Pattern	Condition	Message in Module Status	Possible Solutions
Blue	On	One of the following issues: • Port communication firmware did not load properly • Port communication firmware is not running • Invalid protocol selected	ARCNET/MSTP firmware error	• Change rotary switch to select valid protocol • Cycle power
Blue	1 blink	Invalid address selected for protocol	Invalid address selection for ARCNET/MSTP	Change rotary switch to valid address
Blue	2 blink	Router has same MAC address as another connected device	Duplicate address on ARCNET/MSTP	Change rotary switch to unique address
Blue	3 blink	Router is the only device on the network	No other devices detected on ARCNET/MSTP	• Check that network cable is connected properly • Check that baud rate is correct
Blue	4 blink	Excessive errors detected over 3 second period	Excessive communication errors on ARCNET/MSTP	• Check that network cable is connected properly • Check that baud rate is correct
Blue	5 blink	ARCNET traffic overload possibly due to circular router or excessive COVs (change of values)	Event System Error - FPGA RX FIFO full	• Check the network configuration for a circular route • Increase the time between COVs to reduce excessive COV traffic
Green	On	All enabled networks are functioning properly	No errors	No action required

SYS (System Status) Tricolor LED

Color	Pattern	Condition	Message in Module Status	Possible Solution
Red	2 blink	Restarting after an abnormal exit	Auto restart delay due to system error on startup	After 5 minute delay has expired, if condition occurs again then cycle power
Red	4 blink	Firmware image is corrupt	Firmware error	Download driver again
Red	Fast blink	Firmware error has caused the firmware to exit and restart	Fatal error detected	No action required
Green	1 blink	No errors	Operational	No action required
Green	2 blink	Download of driver is in progress	Download in progress	No action required

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SYS (System Status) Tricolor LED

Color	Pattern	Condition	Message in Module Status	Possible Solution
Green	3 blink	BACnet Device ID is not set	Download required	Download the controller
Green	Fast blink	Installation of recently downloaded driver is occurring	N/A	No action required
Blue	On	Router is starting up	N/A	No action required
Blue	Slow blink	Linux (operating system) is starting up	N/A	No action required
Blue	Fast blink	Linux is running but it could not start the firmware application	N/A	Download driver

To get a Module Status report

A Module Status report provides information about the controller and verifies proper network communication with the controller. You can get this report:

- In the i-Vu® application—Right-click the controller on the navigation tree, then select **Module Status**.
- In the Field Assistant application—Right-click the controller in the navigation tree and select **Module Status**.
- On the controller setup **ModStat** tab—See *To set up the controller through the Service Port* (page 34).

See Module Status field descriptions in the Appendix.

To get a Device Log

If Carrier Controls System Support instructs you to get the controller's Device Log containing diagnostic information for troubleshooting:

1 Select the i-Vu® XT BACnet Link in the i-Vu® navigation tree.

2 On the **Properties** page, click **Device Log**.

NOTE You can click **Device Log Archive** to download a file containing multiple Device Logs to your computer. This also contains any network packet captures that have been run from the *Network Diagnostics - Packet Captures* (page 31) driver page.

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To get the i-Vu® XT BACnet Link's serial number

If you need the controller's serial number when troubleshooting, the number is on:

- A Module Status report (Modstat).
- A laser-etched number and QR code on the circuit board inside the controller.
- Some controllers have a sticker on the front with the serial number, MAC address, and a QR code.

See *To get a Module Status report* (page 41).

To replace the i-Vu® XT BACnet Link's fuse

If you turn on the controller's power switch and the LED is not lit, the fuse that protects the controller may be blown. Remove the fuse and use a multimeter to check it.

The fuse is a fast acting, 250Vac, 2A, 5mm x 20mm glass fuse that you can purchase from one of the following vendors:

Manufacturer	Mfr. Model #
Littelfuse	0217002.HXP
Bussmann	S500-2-R
Belfuse	5SF 2-R
Optifuse	FSD-2A

Before replacing the fuse, try to determine why the fuse blew. Check the power wiring polarity of the i-Vu® XT BACnet Link and any other devices that share the power supply. Use the same polarity for all of them.

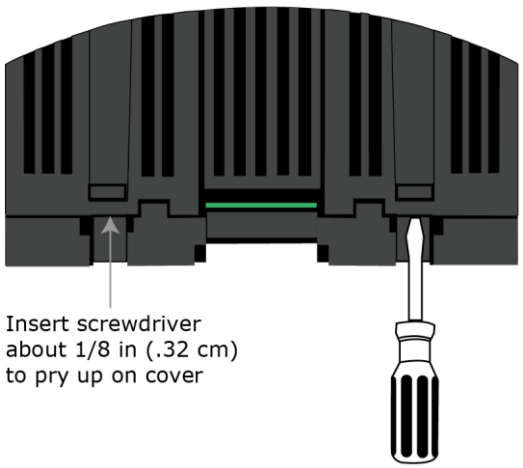
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To replace the fuse:

1 Turn off the controller's power.

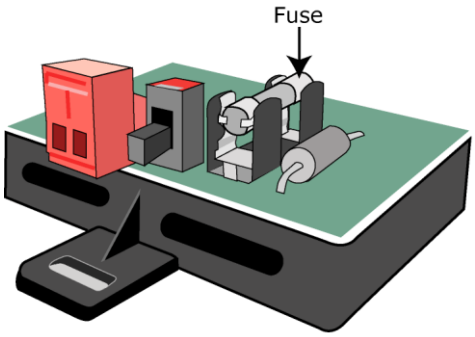
2 Remove the red power connector.

3 On both ends of the controller, insert a small flathead screwdriver as shown below, and then gently pry up the cover until it is released from the base.



4 Remove the cover from the base.

5 The fuse labeled **F1** is located near the power connector. Use a fuse puller to remove the fuse.



6 Use the fuse puller to snap the new fuse into the fuse holder.

7 Replace the controller's cover.

8 Replace the power connector.

9 Turn on the controller's power switch.

10 Verify that the ⏻ LED on top of the controller is on.

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To take the i-Vu® XT BACnet Link out of service

If needed for troubleshooting or start-up, you can prevent the i-Vu® application from communicating with the i-Vu® XT BACnet Link by shutting down communication from the i-Vu® XT BACnet Link to the i-Vu® application. When **Out of Service**, i-Vu® no longer communicates properties, colors, trends, etc.

1 On the i-Vu® navigation tree, select the i-Vu® XT BACnet Link.

2 On the **Properties** page, check **Out of Service**.

3 Click **Accept**.

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Compliance

FCC Compliance

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1 This device may not cause harmful interference.

2 This device must accept any interference received, including interference that may cause undesired operation.

NOTE This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and if it is not installed and used in accordance with this document, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

CAUTION Any modifications made to this device that are not approved by Carrier will void the authority granted to the user by the FCC to operate this equipment.

CE Compliance

WARNING This is a light industrial product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

Industry Canada Compliance

This Class A digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

BACnet Compliance

Compliance of listed products to requirements of ASHRAE Standard 135 is the responsibility of BACnet International. BTL® is a registered trademark of BACnet International.

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Appendix - Module Status field descriptions

Field	Description
Date/Time	Date and time the Modstat was run
CM	The controller's rotary switch address (MAC address)
Model Name	Model Name identifies the Product Type
Device Instance	A unique ID assigned to the controller
Driver built	When the driver was built
Downloaded by	When and where the last download was performed
Data Partition Version	Data Partition identifies the clipping used when the product was manufactured. **NOTE** This field will say **None** except for a Carrier product from the factory. If a Carrier product is subsequently downloaded in the field, then this field will say **None**.
# PRGs initialized # PRGs running	If applicable, the number of control programs that were downloaded vs. the number that are running. If these numbers are not the same, the controller has a problem such as lack of memory.
Driver version	The name, version, and date of the driver, as well as all the bundles and versions.
Reset Counters:	The number of times each of the following events have occurred since the last time the controller was commanded to clear the reset counters. See **NOTE** below this table.
Power failures	Interruption of incoming power
Commanded boots	Includes commands issued from the i-Vu® interface such as the zap manual command, plus commands issued during a memory download.
System errors	Error in the controller's firmware or hardware
S/W Watchdog timeouts	Watchdog is firmware that monitors the application firmware for normal operation. If the watchdog firmware detects a problem, it restarts the application firmware.
H/W Watchdog timeouts	H/W Watchdog will restart the controller if it detects a severe problem with the controller's operating system
System status	Gives the current status of the controller's operation. See *LEDs* (page 39) for all possible conditions.
Network status	Gives the current status of the controller's networks. See *LEDs* (page 39) for all possible conditions.
System error message history	High-severity errors since the last memory download. Shows the most recent 10 messages. See **NOTE** below this table.
Warning message history	Low-severity errors and warning messages since the last memory download. Shows the most recent 10 messages. See **NOTE** below this table.

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Field	Description
Information message history	Information-only messages since the last memory download. Shows the most recent 10 messages. See **NOTE** below this table.
ARC156 reconfigurations during the last hour	An ARCNET network normally reconfigures itself when a controller is added to or taken off the network. The **Total** field indicates the number of reconfigurations in the last hour. **Initiated by this node** indicates the number of reconfigurations initiated by this controller. Typical sources of the problem could be this controller, the controller with the next lower rotary switch address, any controller located on the network between these two controllers, or the wiring between these controllers. An excessive number in these fields indicates a problem with the network.
Core and Base board hardware	Gives the following information about the controller's boards: • Type and board numbers that are used internally by Carrier. • The manufacture date and serial number.
Number of BACnet Objects	Indicates the number of BACnet objects that were created in the device and the number of those objects that are network visible
Database Partition	**Non-Volatile** partition (16 MB maximum) contains data that needs to be preserved through a power cycle and archived to flash such as parameters and trend data. **Volatile** partition (6 MB maximum) contains data that does not need to be preserved through a power cycle such as status values that are calculated during runtime.
IP Networks - BBMDs	Shows the following information for each active IP network: **BBMD Active** shows whether the BACnet Broadcast Management Device is currently active (1) or inactive (0). **BBMD Entries**—the number of entries in the BBMD table (500 maximum). **FDT Entries**—the number of entries in the Foreign Device Table (500 maximum).
Third party integration points	Shows number of points used.
Network Information	The various network addresses for the controller. The **Current** and **Assigned** addresses will be the same unless the **Enable IP configuration changeover** on the **BACnet Router Properties** page is being implemented.
Statistics and Network Activity	Shows network communication statistics to assist with troubleshooting. See *Network Diagnostics - Statistics* (page 28) for more information.
Route Information Port Number	BACnet networks that a router is currently routing traffic to. The list changes as BACnet routers are added or removed from the system.

NOTE If you want to clear the Reset counters and the three message history fields, click the **Clear Counts/Logs** button on the controller's **Properties** page in the i-Vu® application or in the controller setup **Device** tab.

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Document revision history

Important changes to this document are listed below. Minor changes such as typographical or formatting errors are not listed.

Date	Topic	Change description	Code*
9/20/21	Specifications	Changed Real time clock specification to "up to 3 days" from "at least 3 days". Changed EU RoHS compliance code.	X-PM-BM-O
6/11/21	Specifications	Added statement that Service Port connects through a local connection to a computer or connects to the TruVu™ ET Display	X-PM-JD-E
	What is the i-Vu® XT BACnet Link?	Added statement that Ethernet Service Port connects locally to controller setup pages and the TruVu™ ET Display	
	To communicate through the BACnet/IP Service Port network	Removed statement that you can access your network using a touchscreen connected to the Service Port. Updated procedure for connecting to BACnet/IP Service Port for i-Vu® v8.0 interface	X-PM-BM-E
2/18/21	Configuring BACnet Device Instance and network number	Changed BACnet Device Instance Number formula to (IP network number x 100) + rotary switch address	C-TS-OC-E
	Specifications	Changed Real Time Clock spec to "at least 3 days" from "up to 3 days"	X-PM-BM-E
4/22/20	Wiring for communications	Port S1/S2 baud rate for Modbus changed from 1.2 to 115.2 kpbs to 9.6 to 115.2 kbps	X-D
	To set up the controller through the Service Port > BACnet tab	Added autobaud information.	X-PM-KC-O
	Addressing the i-Vu® XT BACnet Link > To set the Port S2 address and baud rate	Added autobaud information.	
	Addressing the i-Vu® XT BACnet Link > To set the Port S1 address and baud rate	Added autobaud information.	
	Addressing the i-Vu® XT BACnet Link > To set up autobaud	New topic	
	To set up the controller through the Service Port > Device tab	Added Data Backup and Restore.	
	To communicate through the BACnet/IP Service Port network	New topic	
	To set up the controller through the Service Port	Added ability to access i-Vu® application or a touchscreen device through BACnet/IP Service Port. Corrected the static IP address settings.	
	What is the i-Vu® XT BACnet Link?	Added BACnet/IP Service Port to the ports table.	
	To get the i-Vu® XT BACnet Link's serial number	A sticker is on the top of the controller and there is a laser-etched number and QR code on the inside circuit board.	X-D
10/1/19	Configuring BACnet Device Instance and network number	Changed Port S1 MSTP MAC Address and Port S1 ARCNET Address from fixed to user configurable	X-PM-KC-O
	Specifications	Updated BTL to Revision 14	
4/12/19	What is the i-Vu® XT BACnet Link?	Added Modbus to the ports table.	X-D
	Specifications To mount the i-Vu® XT BACnet Link	Changed Depth dimension from 7.09 cm to 5.31 cm.	
	Configuring BACnet Device Instance and network number To set up BACnet Broadcast Management Devices (BBMDs)	New topics	

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Important changes to this document are listed below. Minor changes such as typographical or formatting errors are not listed.

Date	Topic	Change description	Code*
	Wiring for communications	Added "NOTE 4 is for future use" to footnote 1 below table.	
	Driver	Added that you can add, update, or delete screen files for an Equipment Touch. Added description of TouchScreen Control and Network Microblocks fields.	
	BACnet firewall	Changed "controller from receiving" to "controller from responding to".	
	Network Diagnostics - Statistics	Changed names of Trend links at the bottom of each section. Added Latency under Port S1 Statistics	
10/2/18	Entire document	Major changes due to: - The addition of Modbus - Controller label changes - New and revised controller setup pages - Driver pages revisions	X-D
8/24/18	Driver	In description of "Number of integration points requested", removed "non-BACnet" from first line.	X-TS-TS-E
8/1/18	Specifications	Added Modbus functionality to several specifications.	X-D
	Wiring for communications	Added Modbus TCP/IP to Gig-E port and Modbus Serial to port S1 or S2.	
	BACnet tab Modbus tab	New topics.	
1/11/18	To set the ARC/MSTP port address and baud rate	Correction - default address for ARCNET is 254.	C-TS-CI-E

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BACnet Integration Guide for i-Vu® XT or TruVu™ controllers



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 Verify that you have the most current version of this document from **www.hvacpartners.com** or **www.accounts.ivusystems.com** or your local Carrier office.

Important changes are listed in **Document revision history** at the end of this document.

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Document revision history **31**

Overview

You can use the Carrier controllers listed below to integrate BACnet device(s) with your i-Vu® or Field Assistant system. . The Carrier controller serves as a master device.

- i-Vu® BACnet Link (part #XT-LB)
- Tru-Vu™ MPC Processor (part #TV-MPCXP)
- TruVu™ MPC Controller (part #TX-MPCXP1628)
- TruVu™ MPC Controller (part #TX-MPCXP1628-NR)

Carrier	
Read/write capability	Can read from and write to the third-party equipment
Third party	
Supported equipment	Any device that supports the BACnet MS/TP protocol
Supported media	IP, Ethernet, ARCNET, MS/TP (9600, 19200, 38400, 57600, 76800, 115200)

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Before-you-begin checklist

You need the following items, information, and skills for the integration process:

- ☐ The Carrier controller's *Installation and Start-up Guide*
- ☐ The third party device's:
  - BACnet network number and MAC address or the Device instance
  - Points list, including BACnet Object ID's (object type plus object instance)
- ☐ The BACnet network's baud rate, data bits, parity, and stop bits
  NOTE You can set the baud rate manually or by enabling autobaud.
- ☐ Verification that all communication settings have been set on the third party device
- ☐ Experience creating control programs in Snap
- ☐ Experience installing, wiring, setting up, and downloading custom control programs to the i-Vu® XT or TruVu™ controller
- ☐ The latest version of *Wireshark* (*http://www.wireshark.org*) downloaded and installed. Use this network analysis tool for troubleshooting.

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1 Connect the third-party device to the Carrier controller

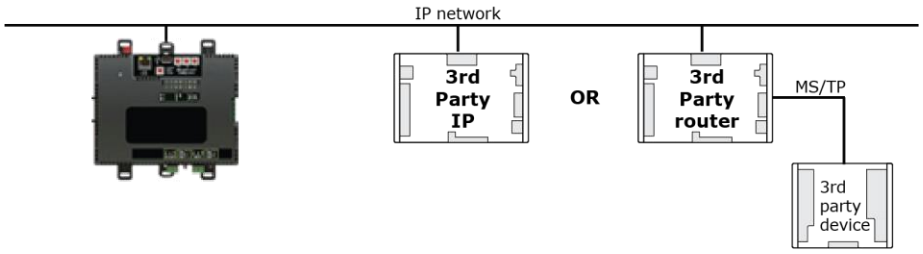
The i-Vu® XT or TruVu™ controller can reference a third-party BACnet point on any network type if a BACnet route to the point exists.

You can wire a third-party BACnet device to the i-Vu® XT or TruVu™ controller's **Gig-E** port, **Port S1**, or **Port S2**.

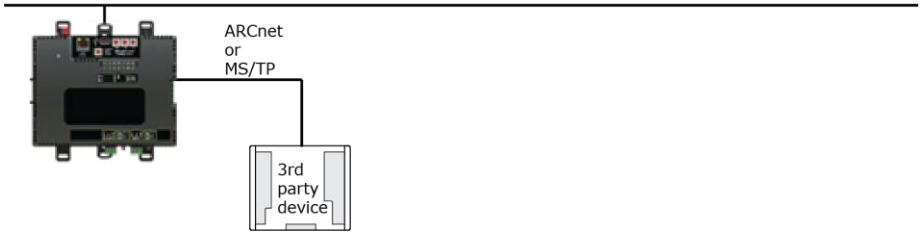
NOTES

- The non-routing controller (TV-MPCXP1628-NR) supports BACnet devices only on the **Gig-E** port and **Port S1**.
- Communication may be affected by the network bandwidth as well as the frequency and number of points communicating.

Scenario 1:



Scenario 2:



Wiring specifications

For...	Use...	Maximum Length
BACnet/IP Ethernet	CAT5e or higher Ethernet cable	328 feet (100 meters)
MS/TP* ARCNET*	22 AWG, low-capacitance, twisted, stranded, shielded copper wire *	2000 feet (610 meters)

* For details see the *Open Controller Network Wiring Guide*.

WARNING Do not apply line voltage (mains voltage) to the controller's ports and terminals.

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To connect to a BACnet/IP device

To integrate a third-party BACnet/IP device, or any device it routes to, as shown in Scenario 1:

- Make sure an IP route to the point exists.
- Connect an Ethernet cable to the i-Vu® XT or TruVu™ controller's **Gig-E** Ethernet port.
- Set **Port S1**'s rotary switch to 0 if the port is not being used for any network.

NOTE You must either have the Carrier IP device on the same IP subnet as the third-party device, or you must have BACnet Broadcast Management Devices (BBMD's) configured to communicate to the IP subnet where the third-party device lives. Do not configure more than one BBMD per subnet as this may cause circular routes. To avoid this problem:

- i-Vu® Pro - Let SiteBuilder automatically configure your BBMD tables. (SiteBuilder defines only one controller per IP subnet as a BBMD.)
- Use the BBMD Configuration Tool to make sure that a controller's BBMD table does not contain the IP addresses of other controllers on the same IP subnet.
  See *Appendix B* (page 23).

To wire to a BACnet/ARCNET network

1. Turn **off** the i-Vu® XT or TruVu™ controller's power.
2. Check the communications wiring for shorts and grounds.
3. Connect the communications wiring to **Port S1**'s screw terminals labeled **Net +**, **Net -**, and **Shield**.

   NOTE Use the same polarity throughout the network segment.
4. Set the **Port S1 Configuration** rotary switch to 2.
5. If the i-Vu® XT or TruVu™ controller is at either end of a network segment, set the port's **End of Net?** switch to **Yes**..

   NOTE The controller's **End of Net** switch applies network termination and bias. See the *Open Controller Network Wiring Guide.*
6. Turn on the controller's power.
7. To verify communication with the network, get a Module Status report in the i-Vu® or Field Assistant interface for a controller on the ARCNET network.

   NOTE This step requires that you have discovered and uploaded the controller in the i-Vu® application.

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To wire to a BACnet MS/TP network

On all i-Vu® XT or TruVu™ controllers except the non-routing controller (TV-MPCXP1628-NR), an MS/TP network can be wired to either **Port S1** or **Port S2**. On the non-routing controllers, an MS/TP network can be wired only to **Port S1**.

1. Turn **off** the i-Vu® XT or TruVu™ controller's power.
2. Check the communications wiring for shorts and grounds.
3. Connect the communications wiring to the **Port S1** or **Port S2** screw terminals labeled **Net +**, **Net -**, and **Shield**.

   NOTE Use the same polarity throughout the network segment.
4. If you are using **Port S1**, set the **Port S1 Configuration** rotary switch to 1.

   NOTE If **Port S1** is not being used for any network, set this rotary switch to 0.
5. If the i-Vu® XT or TruVu™ controller is at either end of a network segment, set the port's **End of Net?** switch to **Yes**.

   NOTE The controller's **End of Net** switch applies network termination and bias. See the *Open Controller Network Wiring Guide.*
6. Turn on the controller's power.
7. To verify communication with the network, get a Module Status report in the i-Vu® or Field Assistant interface for a controller on the MS/TP network.

   NOTE This step requires that you have discovered and uploaded the controller in the i-Vu® application.

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2 Discover BACnet networks, devices, and objects

The i-Vu® or Field Assistant **BACnet Discovery** feature locates all accessible BACnet networks, BACnet devices, and BACnet objects (including devices in your i-Vu® Plus or Pro or Field Assistant system) on a BACnet network.

NOTE BACnet Discovery is not available in the i-Vu® Standard application.

To use **BACnet Discovery**:

1 Select the **System** in the navigation tree and then the **Devices** page > **Advanced** tab.

2 Click the **BACnet Discovery Start** button to discover BACnet networks for the sites. An item called **Discovered Networks** appears in the tree.

3 To discover BACnet networks, select **Discovered Networks**, then click **Go**. A list of all BACnet networks appears in the navigation tree. After all networks are found, close the status dialog box.

TIP Run a commstat manual command to determine which device routes to each network. The **BACnet Bind Show Network** section of the Commstat window shows the IP address of the router to each network.

4 To discover BACnet devices on a network, select a network in the navigation tree, then click **Go**. After all devices are found, close the status dialog box. Click ▶ beside an item to expand the list of devices.

5 To discover BACnet objects on a device, select the device on the navigation tree, then click **Go**. After all objects are found, close the status dialog box. A list of all BACnet objects in this device appears on the navigation tree.

TIP Make sure you are discovering objects in the correct device. It may take some time to discover objects in devices with more than 100 objects.

6 Optional: Do the following to export the BACnet information so that it can be used in the Snap application:

a) On the navigation tree, select a discovered network with devices or a single device.

b) Click **Export**.

c) Name and save the .discovery file in any folder.

NOTES

- Some third-party BACnet devices may not be discovered because they do not support the BACnet methods required for auto discovery.
- If the discovery process returns ambiguous information, such as multiple points with similar names, contact the third-party manufacturer's representative for clarification.
- Device configuration or network load can prevent the i-Vu® or Field Assistant interface from showing all BACnet devices. If you do not see a BACnet device that you expect to see, check the system's BBMD configurations. If the configurations are correct, try the discovery process again.
- If a third-party device is not discoverable, you must get the device's address and point list information from the third-party vendor. See To format a BACnet address.
- Troubleshooting BBMD's. See *Appendix B - Setting up BBMDs* (page 23) or the *BBMD Utility User Guide*.

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3 Create a control program in Snap

Use Network I/O microblocks to read from or write to BACnet objects in a third-party BACnet device.

Use Network I/O microblocks if any of the following is true:

- A Carrier control program must read from or write to third-party BACnet points for automatic control.
- You want to trend values from a third-party device that does not support BACnet trends.
- You want to display third-party values that require unit conversion or other math processing.

TIP Verify the third-party manufacturer's addressing pattern by establishing communication with a few points whose values you can physically manipulate before you spend time addressing the remaining integration points.

To create a control program for multiple identical third-party devices

If you are integrating to multiple identical third-party devices, the i-Vu® or Field Assistant application can help you address the Network I/O microblocks.

1. Replicate the first device's control program for each of the other third-party devices.
2. Do one of the following:
   - If Network I/O microblocks were addressed in the Snap application, go to step 3.
   - If the Network I/O microblocks do not have addresses, enter the addresses in the i-Vu® or Field Assistant interface for one instance of the equipment. Do this on the equipment's **Properties** page > **Network Points** tab. Then use Global Copy to copy the addresses to all other instances of the equipment.
3. Go to the **Properties** page > **Network Points** tab for another instance of the equipment.
4. Click **Search/Replace** at the top of the **Address** column.
5. Replace the device identification in the addresses with the identification for the third-party device the control program will communicate with.

To edit a microblock address

You can edit a microblock address in the following places:

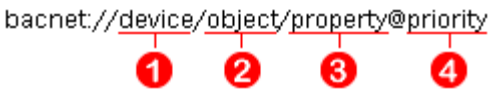
- In the Snap Property Editor
- In the i-Vu® or Field Assistant interface on the microblock's **Properties** page > **Details** tab
- In the i-Vu® or Field Assistant interface on the control program's **Properties** page > **Network Points** tab

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To format a BACnet address

The BACnet standard allows multiple formats for creating a valid address in each microblock that you use to read from or write to a third-party BACnet point. Some are shown below.

CAUTION When integrating third-party devices into your system, most communication problems are caused by incorrect data or typing errors in the microblock's Address field.



NOTE Numeric values in a BACnet address can be entered using decimal or hexadecimal notation. Type `0x` before a hexadecimal value.

1 **Device** - Use one of the following:

	EXAMPLES
Device instance number	`bacnet://2010/...`
BACnet device name	`bacnet://MyDevice/...`
Network number: MAC address (of third-party device)	`bacnet://1234:35/...` `bacnet://1234:0x23/...`
The word "this" if a network point requests a value from another control program in the same Carrier controller. Avoids network traffic. Requires v2.05 or later controller driver.	`bacnet://this/...`
A single * (wildcard) that sends out a request on the network for all devices that contain the Object specified in the address. (See **Object** below.) The microblock subscribes to the nearest responder.	`bacnet://*/...`

NOTES

- You can use an * in the address of Network Input microblock.
- An address with an * is restricted to the present_value property (the default when you do not specify a property).

2 **Object** - Use one of the following:

	EXAMPLES
Object type: Instance number (See NOTES below)	`bacnet://.../ai:2`
BACnet object name	`bacnet://.../MyObject`

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NOTES

- For object type, you may type the abbreviation (not case sensitive), the full name, or the object type number. Some standard BACnet object type numbers are listed below. See the BACnet standard for a complete list. For proprietary BACnet objects, see the object's manufacturer.

Use...	Or...	Or...
ai	analog-input	0
ao	analog-output	1
av	analog-value	2
bi	binary-input	3
bo	binary-output	4
bv	binary-value	5
dev	device	8
msi	multistate-input	13
mso	multistate-output	14
msv	multistate-value	19

- Every object in a controller has a unique instance number, regardless of its control program.

3 **Property** (optional) If you want to read or write a property other than present_value, type one of the following:

EXAMPLES

BACnet property identifier	`bacnet://…/…/cov_increment`
BACnet property identifier #	`bacnet://…/…/22`
Property identifier (with index)	`bacnet://…/…/priority-array(12)`
Property identifier # (with index)	`bacnet://…/…/87(12)`

NOTE Some standard BACnet properties are listed below. See the BACnet standard for a complete list. For proprietary BACnet objects, see the object's manufacturer.

Property identifier	Identifier #
change_of_state_count	15
cov_increment	22
derivative_constant	26
event_state	36
high_limit	45
integral_constant	49
low_limit	59
max_pres_value	65
min_pres_value	69
out-of-service	81
present_value	85
proportional_constant	93
reliability	103
relinquish_default	104
setpoint	108
system_status	112
trigger	205
units	117
vendor_identifier	120

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4 **Priority** (optional) If you want to write at a priority other than 16, type @ followed by a priority number.

Number (1–16)

EXAMPLE

`bacnet://…/…/…@9`

NOTE Priority levels 1 and 2 are reserved for manual and automatic life safety commands. For more information on reserved priority levels see the BACnet standard.

Examples of BACnet addresses:

`bacnet://MyDevice/ai:2`

`bacnet://1234:0x23/analog-input:2/priority-array(12)@8`

`bacnet://2499:0x00E0C90047CA/bi:3`

`bacnet://2436:192.168.47.36:47806/0:2`

To set up network inputs

Polling or BACnet COV

If a network input or totalizer microblock's **Address** field references a BACnet object property, the microblock reads the property's value using one of the following methods.

- Polling—The microblock reads the property at the **Refresh Time** interval using the BACnet ReadProperty or ReadPropertyMultiple service (see "Method 1: Polling" below).
- BACnet COV (Change of Value) subscription—The microblock subscribes with the target BACnet object. An analog target notifies the microblock if the target's value changes by more than the target's BACnet COV_Increment. A binary target notifies the microblock when it changes state (see "Method 2: BACnet COV subscriptions" below).

Method 1: Polling

Benefits	• Allows rapid detection of a dead device or of network problems • Does not require additional memory
Drawbacks	• Generates unnecessary network traffic if a value does not change frequently • Misses value changes that occur between pollings • Can overwhelm the target's controller if many microblocks request the same property value (such as outside air temperature). The BACnet object must send the value to each microblock that polls for that data.
To set up	Set the microblock's **Refresh Time** to 30 seconds or less.

NOTE The microblock will not poll at a **Refresh Time** interval smaller than 1 second.

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BACnet ReadProperty and ReadPropertyMultiple services

See the BACnet specification for details on the ReadProperty and ReadPropertyMultiple services.

ReadPropertyMultiple occurs if:

- two or more microblocks in a controller read more than one target in the same remote controller,
- the **Refresh Time** in two or more microblocks expires at the same time, and
- the remote controller supports the service.

Method 2: BACnet COV subscriptions

Benefits	•	Can decrease network traffic by preventing unnecessary updates if the target's COV_Increment is set appropriately. See step 2 in "To set up" below.
Drawbacks	•	Can generate excessive network traffic if the target's COV_Increment property is too small. See step 2 in "To set up" below.
	•	Can delay detection of a dead device or of network problems
To set up	**1**	Set the microblock's **Refresh Time** to 31 seconds or more.
	2	If the microblock's **Address** field references an analog property, set the target's COV_Increment property to the smallest amount by which the value must change for the target to notify its subscribers. The optimal COV_Increment is large enough to prevent unnecessary updates but small enough to be useful to the control program(s) receiving the updates.

NOTE If COV subscription fails, the microblock reads the value at the **Refresh Time** interval using the BACnet ReadProperty or ReadPropertyMultiple service. See "Method 1: Polling" above.

COV subscription details

When an input (network input or totalizer microblock) subscribes with a BACnet target (object property), the input sets a 21-minute subscription Lifetime in the target. The target responds with a COV notification that includes the target's value and time remaining from the original subscription Lifetime (TimeRemaining). The input resubscribes with the target every 10 minutes to keep the target's BACnet subscription service active. i-Vu® or Field Assistant shows the time remaining until the input's next subscription in the **Next Refresh** field on the input's i-Vu® or Field Assistant **Properties** page.

The target also sends a COV notification that includes the target's value and subscription Lifetime TimeRemaining when the target's value changes by more than the target's COV_Increment.

If the Carrier target has one subscriber, the target sends COV notifications directly to that subscriber. If the Carrier target has more than one subscriber, it broadcasts its COV notifications to optimize network traffic. A third-party subscriber can participate in this broadcast scheme by subscribing for Unconfirmed COV notifications with a Process ID of 0. Otherwise, the Carrier target maintains and responds to the third-party subscription separately with its own Lifetime timer.

The Carrier input compares the TimeRemaining value in each COV notification broadcast the target sends to its (Next Subscription time + 11) to determine whether another input has subscribed since it did. If another input has subscribed more recently, the input adds 10 minutes to its **Next Refresh** time. This allows the COV Subscription request from the last subscribing input to keep the subscription service active for all subscribers to the same data.

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EXAMPLE

Elapsed time (minutes)	**Action**	**Target** Lifetime TimeRemaining (minutes)	**Input 1** Next Subscription (minutes)	**Input 2** Next Subscription (minutes)
0	Input 1 subscribes to target	21 (Input 1)	10	
0	Target broadcasts COV notification because Input 1 subscribed	21	21 ≤ 10 + 11, so keep current value of 10	
2	Input 2 subscribes to target	21 (Input 2)	10 - 2 = 8	10
0	Target broadcasts COV notification because Input 2 subscribed	21	21 > 8 + 11, so add 10 to current value of 8 8 + 10 = 18	21 ≤ 10 + 11, so keep current value of 10
3		21 - 3 = 18	18 - 3 = 15	10 - 3 = 7
0	Target broadcasts COV notification because value changed	18	18 ≤ 15 + 11 so keep current value of 15	18 ≤ 7 + 11 so keep current value of 7
7		18 - 7 = 11	15 - 7 = 8	7 - 7 = 0 resubscribe
0	Input 2 resubscribes	21 (Input 2)	8	10
0	Target broadcasts COV notification because Input 2 subscribed	21	21 > 8 + 11, so add 10 to current value 8 + 10 = 18	21 ≤ 10 + 11, so keep current value of 10

Input 2 keeps the subscription service active at the target with a minimum of network traffic.

NOTE If an input receives COV notification with a target TimeRemaining < 11, which could happen if the last subscribing input loses communication with the target, the input resubscribes immediately.

COV notification rate

COV notifications from a BACnet object property are controlled by that property's BACnet COV_Increment. When the absolute value of the difference between the property's Present_Value and the value sent in the last COV notification is greater than the COV_Increment, the object broadcasts a COV notification. For Carrier controllers, the rate of notifications is further limited by two internal processes.

1. The control program's execution rate determines how often the check against COV_Increment is performed.
2. The controller's pending COV Notification task has built-in delays to prevent COV notifications from consuming the controller's CPU processing time.

   The built-in delays are as follows:

   If more than 15 COV notifications are pending delivery, the controller inserts a 50 millisecond delay after each set of 15 notifications. Once the entire list of pending notifications is serviced, the controller inserts another 50 millisecond delay. This results in a maximum COV notification rate of 300 COV notifications per second per Carrier controller.

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To speed detection of a dead device

If a BACnet object's device loses network communication, a network input reading the object's value does not detect the failure until:

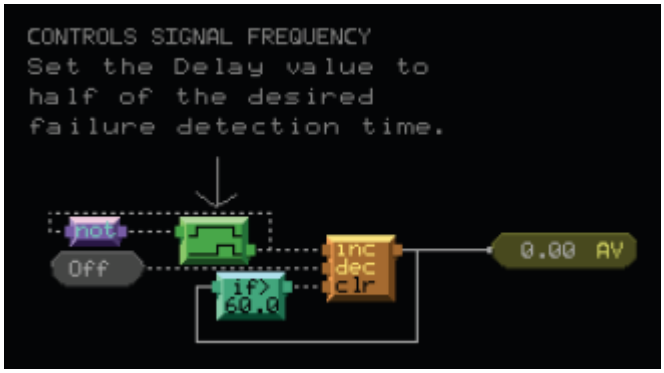
- The network input's next subscription (up to 10 minutes) if using BACnet COV subscription, or
- The **Refresh Time** expires, if polling

You can use a small **Refresh Time** to poll more often, but this can generate unnecessary network traffic under normal conditions.

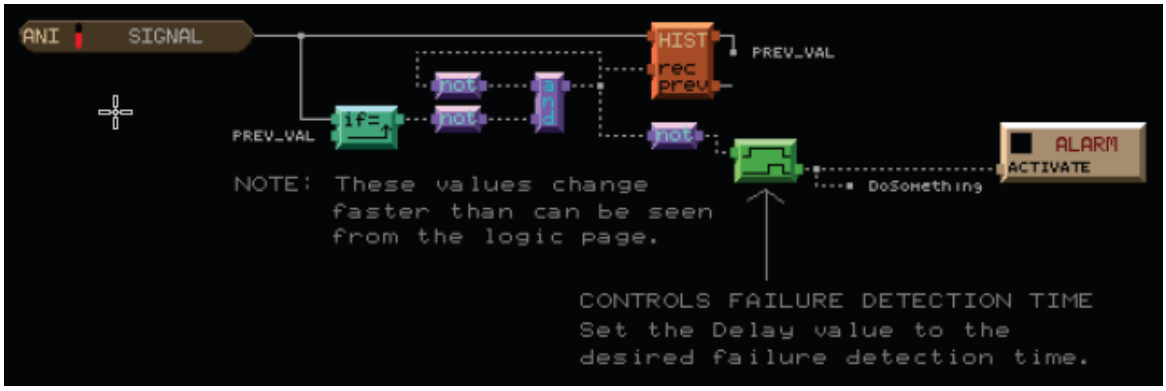
To use the benefits of BACnet COV subscription, but overcome the potential delay in detection of a dead device, send a constantly changing value from the BACnet object's control program to a network input using BACnet COV subscription. If the value stops changing, the network input's control program generates an alarm.

EXAMPLE

The logic in the BACnet object's control program that sends the value. The BACnet Analog Value microblock has a COV Increment of 0.5.



The logic in the network input's control program that receives the changing value. The SIGNAL analog network input's **Address** field contains the address of the BACnet Analog Value microblock sending the changing signal, and the network input's **Refresh Time** is 31 seconds.



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2 Download the driver and control programs

If you need an updated drv_fwex driver or the latest SAL library, go to *Carrier Control Systems Support Sites http://www.hvacpartners.com/*, *https://accounts.ivusystems.com/* and save it to your computer.

To change the driver

1 On the i-Vu® or Field Assistant navigation tree, right-click the controller that you wish to update and select **Driver Properties**.

2 Go to **Driver** > **Properties** > **Update** tab.

3 Do one of the following:

If the driver is...	
In the **Driver Version** drop-down list	a. Select the driver. b. Click **Accept**.
Not in the **Driver Version** drop-down list	Click **Update** and the driver is updated using the latest Factory SAL. or a) Click **Add**. b) Browse to select the driver. c) c. Click **Open**. d) d. Click **Continue**. e) e. Click **Close**. f) f. Click **Close** again.

4 Click the **Download All Content** button.

5 Click **OK.**

6 Click **Accept.**

To update the SAL library in the i-Vu® application

1 In the i-Vu® interface, click **System Menu** , then select **System Options** > **Update**.

NOTE Expand **Current Libraries (.sal)** to see the current SAL libraries and their revision. Compare them to what you downloaded and determine if any of them need updating.

2 Click 

and browse to the updated .sal file that you have saved on your computer, select the file, and click **Open**.

3 Click **Continue**.

4 When process is complete, the message appears **File added successfully**.

5 Click **Close**.

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6 Click **Close** again.

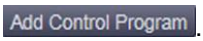
7 Click the **Download All Content** button.

8 Click **OK.**

9 Click **Accept.**

To add a control program

1 Select the router in the navigation tree and go to the **Devices** > **Manage** tab.

2 If you are adding a new control program, click the **Add Control Program** button 

. A dialog window appears.

3 Enter a name for your control program in **Display Name** and select your controller in the **Controller** drop-down list.

4 Do one of the following:

If the control program is...	
In the **Control Program** drop-down list	Select the control program.
Not in the **Control Program** drop-down list	a. Click **Add New**. b. Browse to select the control program. c. Click **Open**. d. Click **Continue**. e. Click **Close**.

5 Click **Continue**. When message appears **File added successfully**, click **Close**.

6 Click **Close** again.

7 Right-click on the controller in the list and select **Check Status** from the list. The status of the controller should say **File Mismatch**.

8 Click the **Download All Content** button.

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5 Verify the network points are operating correctly

1 On the i-Vu® or Field Assistant navigation tree, select the Carrier controller.

2 Select the **Properties** page > **Network Points** tab.

If...	Then...
You see the point value you expect with no errors in the **Error** column	You have successfully established communication with the third-party device.
All points show question marks instead of values	The i-Vu® or Field Assistant application is not communicating with the i-Vu® XT or TruVu™ controller. Troubleshoot communications. See the Carrier *controller's Installation and Start-up Guide*.
The point name is red	Look in the **Error** column for one of the following error codes and descriptions. • **1 - Communications Disabled for this Microblock** Enable the integration point's **Communications Enabled** field on the i-Vu® or Field Assistant **Network Points** tab. • **3 - Address Error - Unknown Protocol Specified** Verify that **Address** in the integration point is correct.
A value is incorrect	Verify that: • The **Address** in the integration point is correct. • The retrieved value is scaled properly, if necessary. For example, scaled from Celsius to Fahrenheit. Refer to the third-party manufacturer's documentation for scaling information.

If the above solutions do not resolve the problem, gather the following information for Technical Support:

- A diagnostic capture. See next topic.
- A screenshot of the **Driver Properties** - right-click on the third-party controller in the navigation tree, select **Driver Properties** > **Properties** page > **BACnet MS/TP** > **Properties** page
- A screenshot of the controller's **Properties** page > **Network Points** tab, showing addresses and errors

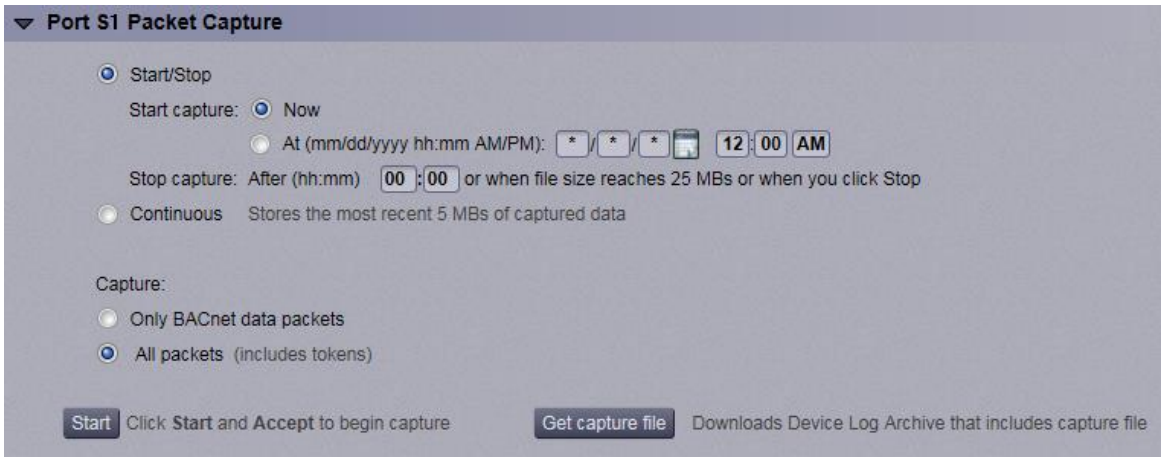
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Network Diagnostics - Packet Capture

This page allows you to capture network communication on a port and then download the capture file for troubleshooting. Choose one of the following capture options:

- **Start/Stop** - Define the start and stop criteria, and then click **Start** and **Accept** to begin the capture. When the capture stops, the capture file is generated.
  NOTE If a Start/Stop capture is running on any other port, the **Get capture file** button will be disabled until all Start/Stop captures have completed.
  - **Start capture:** - When you check **At (mm/dd/yyyy hh:mm AM/PM)**, enter the time and date, and click **Start**, the packet capture begins at the date and time you specified.

    NOTE The hours field is validated from 0 to 12, and minute field is validated from 0 to 59.
  - **Continuous** - Click **Start** and **Accept** to begin the capture. Click **Save** to momentarily stop the capture and create the capture file. The capture will automatically resume. Click on the **Start/Stop** option to end the **Continuous** capture.
  - If the port is set up for MS/TP, select an option in the **Capture** section.



To download the capture file

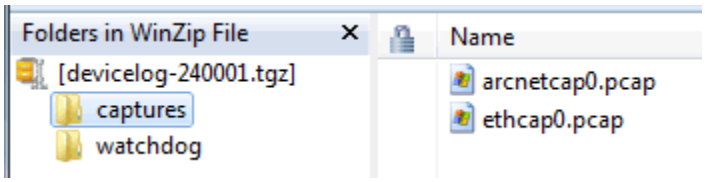
Capture files are Wireshark files that are added to the Device Log Archive .tgz file. Do the following to view the files.

1. If you do not have Wireshark installed on your computer, download the latest version from the *Wireshark website* (*http://www.wireshark.org*).
2. Run the install program, accepting all defaults. Include WinPcap in the installation.
3. On the i-Vu® or Field Assistant **Packet Capture** page, click **Get capture file** to download the .tgz file. The message appears "Retrieving the file, this may take a little while". Click **OK**.

   NOTE If the size of the .tgz is large, there could be a considerable delay (for example, over 2 minutes) after you click **Get capture file** until your browser begins the download.

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4 Open the .tgz file. The files are in the **captures** folder.



Capture file names are based on the ports.
NOTES

- If you have an MSTP capture file for both Port S1 and Port S2, the file names will be:
  mstpcap0 for Port S1
  mstpcap1 for Port S2
- Clicking **Get capture file** generates the port's .pcap file. If the port has a .pcap file from a previous capture, that file will be overwritten.

5 Extract the .pcap file from the .tgz file.

6 Open the .pcap file in Wireshark.

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Appendix A - Configuring the driver parameters by using the Service Port

You can set many driver parameters locally from the controller by using the **Service Port's** web-based controller setup interface. You can set operational parameters, such as port and communications' protocol settings, without the need to connect the i-Vu® or Field Assistant application to the i-Vu® XT or TruVu™ controller. Any parameters set locally through this interface take effect immediately.

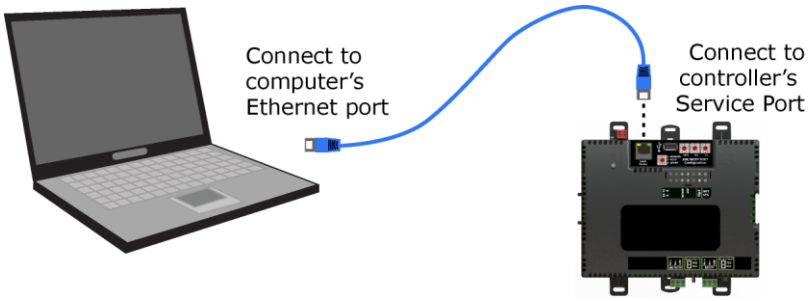
WARNING After setting parameters locally through the Service Port interface and then connecting the controller to the i-Vu® or Field Assistant application, proceed carefully, as follows:

In the i-Vu® or Field Assistant application, you must **upload** the parameters that you set locally BEFORE you **download** memory or parameters. Downloading, without uploading first, overwrites all the settings you made through the **Service Port**. Uploading first preserves those parameters.

NOTE There are a few parameters that can **only** be set through the Service Port, such as the controller's IP address, and these are not overwritten by a memory or parameter download from the i-Vu® or Field Assistant application.

To connect to the Service Port:

1. Make sure your computer is set to get its IPv4 address automatically via DHCP.
2. Connect an Ethernet cable from a computer to the controller as shown below.

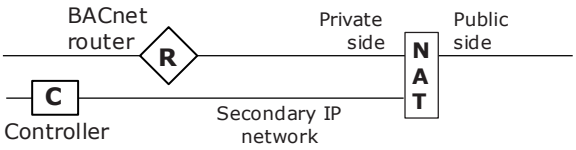


3. Turn off the computer's Wi-Fi if it is on.
4. If your computer uses a static IP address, use the following settings:
   - Address: 169.254.1.x, where x is 2 to 7
   - Subnet Mask: 255.255.255.248
   - Default Gateway: 169.254.1.1
5. If it uses a DHCP address, leave the address as it is.
6. Open a web browser on the computer.
7. Navigate to http://local.access or http://169.254.1.1 to see the Service Port controller setup pages.

CAUTION Do not connect the **Service Port** to the same network that the Gig-E port is connected to. The **Service Port** is intended for single computer access only and has a fixed IP address that is not compatible with a building network.

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The BACnet tab for all routing controllers

IP Port	
BACnet Network Number	**Disable Routing**—Select if the IP port is not used. **Autogenerated**—The BACnet/IP network number is automatically set to 00. **Assigned**—Lets you enter a specific number.
BACnet UDP Port	The port that the i-Vu® or Field Assistant application will use for BACnet communication.
Enable NAT Routing	**For future use.** Check if the i-Vu® XT or TruVu™ controller is behind a NAT router (firewall).
Global NAT IP Address	**For future use.** Public IP address of the NAT router.
Global NAT BACnet UDP Port	**For future use.** Port number assigned to the NAT router's public interface.
BACnet Secondary IP Net Number	If the i-Vu® XT or TruVu™ controller has two BACnet/IP networks communicating on the Gig-E port, enter the second IP network number in this field. If the i-Vu® XT or TruVu™ controller is behind a NAT router and there is a second network with BACnet/IP devices behind the NAT router, enter the second network number in this field to logically connect the i-Vu® XT or TruVu™ controller to the devices on the second network. 
BACnet Secondary UDP Port	If the i-Vu® XT or TruVu™ controller has two BACnet/IP networks communicating on the Gig-E port, enter the port number that the i-Vu® or Field Assistant application will use for BACnet communication. This port must be different than the **BACnet UDP Port**.
Ethernet Port	
MAC Address	A factory assigned Ethernet MAC Address for the **Gig-E** port.
BACnet Network Number	Specify a number for the BACnet/Ethernet network or set to 0 if the port is not used.
Port S1	
End of Network	Indicates status of the controller's End of Net? switch.
Active Protocol	Indicates status of the controller's Port S1 rotary switch. 0=Disabled 1=MS/TP 2=ARCNET 3=Modbus
MAC Address	When using ARCNET, the default is 254, and MSTP is 0. These addresses are hard coded and you cannot change them.
MSTP Autobaud	Select **Yes** to enable this slave device to automatically receive its baud rate from a master on the network that has the fixed baud rate.

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MSTP Baud Rate	If you have not enabled autobaud, set this to a baud rate that all other devices on the MS/TP network are set to. Default is 76800.
MSTP Max Master	To increase MS/TP performance, enter the highest address used on the MS/TP network for a master controller. This number must be less than or equal to 127.
MSTP Max Info Frames	This is the maximum number of information messages a controller may transmit before it must pass the token to the next controller. Valid values are 1 to 255.  **TIP** Set **Max Info Frames** to a number in the range 20 to 100 so that the router does not become a bottleneck for traffic being routed from a high speed network to the slower MS/TP network.
BACnet Network Number	Select: **Disable Routing** if Port S1 is not used. **Autogenerated** to have the network number for Port S1 automatically set to a number equal to ((IP network number + rotary switch address) x 10). **Assigned** to enter a specific number.
Port S2	
End of Network	Indicates status of the controller's End of Net? switch.
Active Protocol	Shows one of the following: • **Modbus** if enabled on the **Modbus** tab • **BACnet/MSTP** if you enter a **BACnet Network Number** below for an MS/TP network • **Disabled** if neither of the above have been done
MSTP Address	The controller's unique address on the MS/TP network. Default is 0.
MSTP Autobaud	Select **Yes** to enable this slave device to automatically receive its baud rate from a master on the network that has the fixed baud rate.
MSTP Baud Rate	If yoiu have not enabled autobaud, set this to a baud rate that all other devices on the MS/TP network are set to.
MSTP Max Master	To increase MS/TP performance, enter the highest address used on the MS/TP network for a master controller. This number must be less than or equal to 127.
MSTP Max Info Frames	This is the maximum number of information messages a controller may transmit before it must pass the token to the next controller. Valid values are 1 to 255.  TIP You can set Max Info Frames so that the router does not become a bottleneck for traffic being routed from a high speed network to the slower MS/TP network.
BACnet Network Number	Select: **Disable Routing** if Port S2 is not used. **Autogenerated** to have the network number for Port S2 automatically set to a number equal to ((IP network number + rotary switch address) x 10) + 3. **Assigned** to enter a specific number.
Home Network	This is typically the network that is communicating with the building automation system's application. This sets the BACnet Address of the Device object.

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The BACnet tab for non-routing controllers

NOTE The i-Vu® XT or TruVu™ can be configured for only one BACnet communication type.

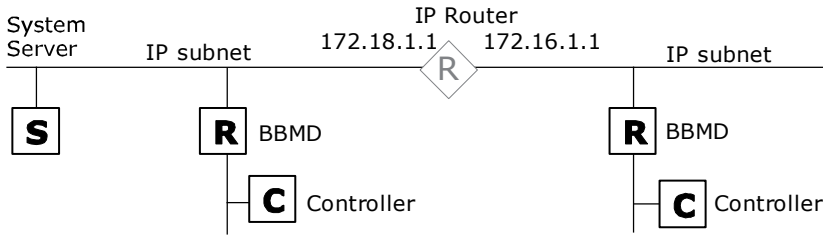
On the **BACnet** tab, you can:

- Choose to run **BACnet Over IP** or **BACnet Over Ethernet** on the **Gig-E** Port.
  If you choose **BACnet Over IP**, you can edit the **BACnet UDP Port**.
  NOTE The **Port S1 Configuration** rotary switch must be set to 0, 3, or 4 for these options to be editable.
- The **Port S1 Configuration** rotary switch must be set to 1 for MSTP or 2 for ARCNET.
- Enable or disable **MSTP Autobaud** on Port S1. This device will receive its baud rate from the master device with the fixed baud rate.
- Set **MS/TP Baud Rate** to a baud rate that all other devices on the MS/TP network are set to.

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Appendix B - Setting up BBMDs

To minimize network communications, IP routers do not pass on broadcasts that they receive. If your system has controllers on different IP subnets separated by an IP router, you must set up a BACnet router on each IP subnet as a BACnet Broadcast Management Device (BBMD). A BBMD passes BACnet/IP broadcasts across the IP router to other BBMDs.



NOTES

- The i-Vu® Standard or Plus application - If the i-Vu® web server is on a separate subnet than the rest of the routers, the internal router must be assigned an IP address and configured as a BBMD.
- The i-Vu® Pro application - If the i-Vu® Pro server is on a separate subnet than the rest of the routers, you must register it as a foreign device.

To set up BBMDs, use the appropriate method in the table below.

If your i-Vu® or Field Assistant system has...	Use this method
500 or less IP subnets with: • No third-party BACnet routers • Authority from your customer to manage all Carrier and third-party BBMDs on the network • Third-party BACnet routers that support BBMD writes from the network	• The i-Vu® Standard or Plus application - Set up BBMDs through the i-Vu® interface, or using the BBMD Configuration Tool. • The i-Vu® Pro application - Let SiteBuilder automatically configure your BBMDs.
Any of the following: • More than 500 IP subnets • Third-party BBMDs that you do not have authority to manage • Third-party BBMDs that use a non-standard port for BACnet communications	Set up custom BBMDs in the i-Vu® or Field Assistant interface or in the BBMD Configuration Tool.

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There are multiple ways for configuring BBMD's in an i-Vu system

1 In thei-Vu® or Field Assistant navigation tree, select the Carrier router that will be the BBMD.

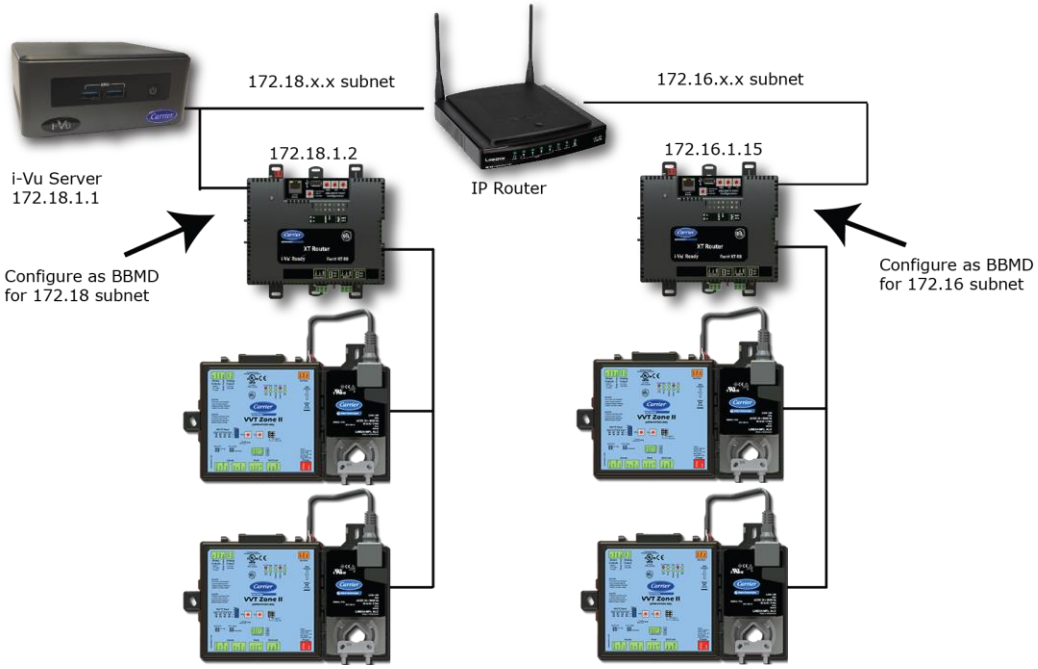
2 To check if that router has an existing BBMD table, click , select **Manual Command**, and type **bbmd read**.

NOTE If you want to read the BBMD table for a different router, select it and perform a Manual Command bbmd read x.x.x.x where x.x.x.x is the IP address of the controller you are on.

3 Click **OK**.

4 Make a list of the IP addresses for every router that will function as a BBMD in your system.

CAUTION Multiple BBMDs on an IP subnet disrupt BACnet communications. Define only one BBMD on either side of each IP router in your system.



To set up BBMDs in SiteBuilder

As you add each Carrier BACnet router to an IP network on the **Network** tree, check **Automatically Configure My BBMDs** on the **Address** tab. SiteBuilder automatically selects a router in each IP subnet as the BBMD and sets up BBMD tables appropriately.

To see which BACnet routers SiteBuilder assigned as BBMDs, select **View** > **Display** > **BBMD**. BBMDs show **B=assigned** on the **Network** tree.

To override SiteBuilder's BBMD selection, right-click a different BACnet router on the same IP subnet, then select **Force to BBMD**.

NOTE If you are managing 3rd party BBMDs, you must add every 3rd party device that could be a BBMD as a 3rd party device router in SiteBuilder.

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To create and download a .bdt table

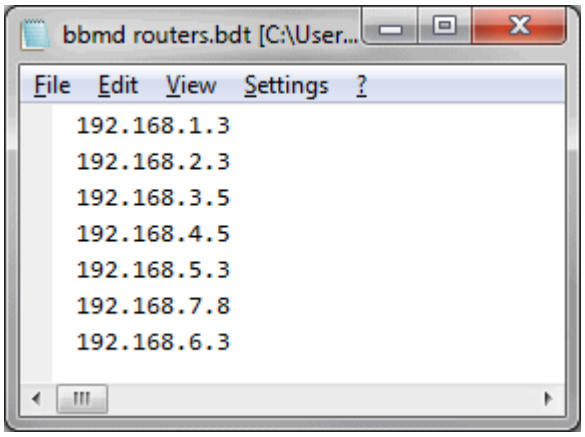
NOTE ".bdt" is a **Broadcast Distribution Table** file.

1 Make a list of the IP addresses for every controller that will function as a BBMD in your system.

CAUTION Multiple BBMDs on an IP subnet disrupt BACnet communications. Define only one BBMD on either side of each IP router in your system.

2 In Notepad, type the list putting each IP address on a separate line. (i-Vu® XT or TruVu™ routers support up to 500.)

NOTE If you must communicate with a third-party router that does not use the BACnet/IP port 47808 (0xbac0), you must include the hexadecimal port number in the IP address. For example, `172.168.23.67:0xe78a`



3 Save the file to your folder of choice or the **webroot**<system_name> folder with a .bdt extension instead of .txt.

4 On the i-Vu® or Field Assistant navigation tree, select one of the Carrier controllers that will function as a BBMD.

5 To check if the controller has an existing BBMD table, click and select **Manual Command**.

6 In the manual command field, type: `bbmd read x.x.x.x`
where x.x.x.x is the IP address of the controller you are on.

7 Click **OK**.

8 If the Broadcast Distribution Table contains IP addresses that are not in your .bdt file, add them to your .bdt file.

9 Click and select **Manual Command**.

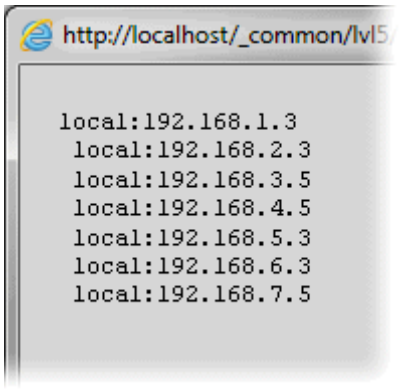
10 In the manual command field, type: `bbmd write filename.bdt x.x.x.x`
where `filename.bdt` is the .bdt file in the **webroot**<system_name> folder
and `x.x.x.x` is the IP address of the controller you are on.

11 If the **Broadcast Distribution Table** contains IP addresses that are not in your .bdt file, verify that they are valid BBMD's and, if so, add them to your .bdt file.

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12 Click **OK**.

13 Issue another bbmd read command to verify that the .bdt file was written correctly.



To set up BBMDs using the BBMD Configuration Tool

If your system has multiple routers that reside on different IP subnets, you must set up one router on each IP subnet as a BACnet/IP Broadcast Management Device (BBMD).

Every subnet with a router must have a BBMD configured in order for broadcasts from routers on that subnet to reach the rest of the routers on the network.

NOTES

- The i-Vu® Standard or Plus application - If the i-Vu® web server is on a separate subnet than the rest of the routers, the internal router must be assigned a routable IP address and configured as a BBMD.
- The i-Vu® Pro application - If the i-Vu® Pro server is on a separate subnet than the rest of the routers, you must register it as a foreign device to a router acting as a BBMD device.

Use the **BBMD Configuration Tool** to:

- Write/read the **Broadcast Distribution Table** (BDT) of each BBMD device
- Allow controllers on one subnet to communicate with controllers on other subnets
- Enable the i-Vu® application to see, upload, or configure controllers on different subnets

To set up BBMDs using the BBMD Configuration Tool

1 Assign an IP address, subnet mask, and default gateway for each Carrier router on the IP network. See Addressing the i-Vu® XT or TruVu™.

2 Acquire the **BBMD Configuration Tool** from the Tech Tools USB drive or from the *Carrier Control Systems Support Site http://www.hvacpartners.com/*, *https://accounts.ivusystems.com/*. This is a stand-alone executable file and no installation is necessary.

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3 Create a .bdt table. See above.

CAUTIONS

- Define only one BBMD per subnet. Multiple BBMDs on an IP subnet disrupt network communications.
- Unless explicitly modified, the UDP Port for BACnet/IP is 0xBAC0 (47808). Do not change this parameter unless you made a change in the router.

4 Open the **BBMD Configuration Tool**.

5 In the **IP Address** or **Host Name** field, type the IP address of the router that functions as the BBMD (BACnet Broadcast Management Device) for its subnet.

6 To check if the router has an existing BBMD table, click the Broadcast Distribution Table **Read** button.

7 If the **Broadcast Distribution Table** contains IP addresses that are not in your .bdt file, verify that they are valid BBMDs and, if so, add them to your .bdt file.

NOTES

- The BDT's in each BBMD should be identical. Repeat this entire process whenever a BBMD is added.
- If needed, disable the checkbox next to **Show Broadcast** to limit the amount of scrolling text that is displayed.

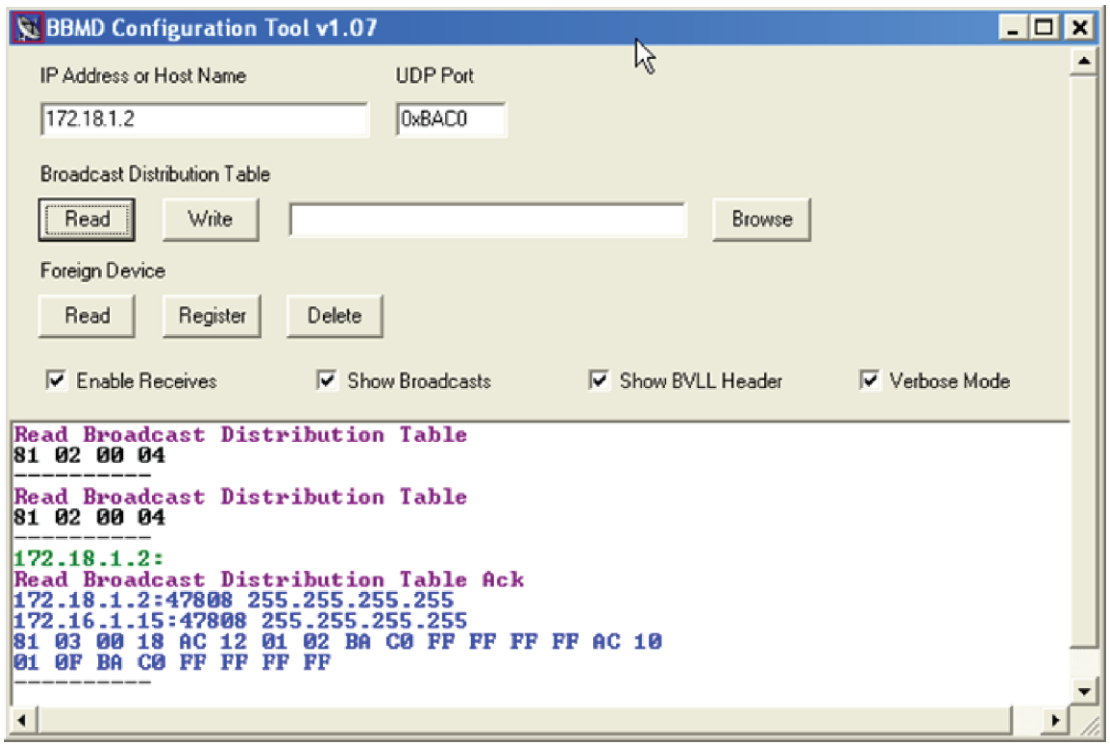
8 Click the Broadcast Distribution Table **Browse** button and select the .bdt file that you made in step 4.

9 Verify that the appropriate IP address is still in the **IP Address** or **Host Name** field.

10 Click the Broadcast Distribution Table **Write** button.

11 Click **Read** again to verify that the new .bdt file was written to the router. See example below.

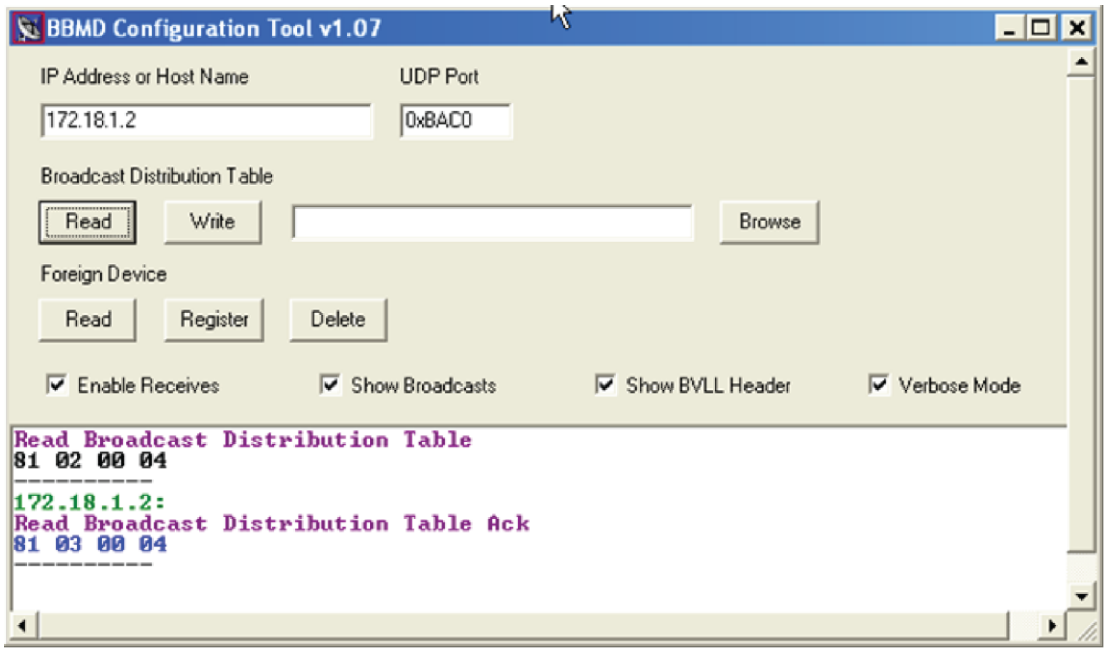
NOTE If you have a large BDT, you may have to re-size the **BBMD Configuration Tool** window to see the **Broadcast Distribution Table**.



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12 Using the next IP address in the .bdt file, repeat steps 5 through 10 until every file has been updated.

NOTE To clear the BBMD entries from a router, follow the steps above using an empty (blank) .bdt file. A cleared BBMD table contains just the router's IP address without entries in the BBMD table, as shown below.



13 Acquire the **BBMD Configuration Tool** from the Tech Tools USB drive or from either of the *Carrier Control Systems Support Sites http://www.hvacpartners.com/*, *https://accounts.ivusystems.com/*. This is a stand-alone executable file and no installation is necessary.

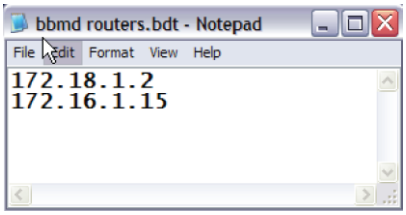
14 Make a list of the IP addresses for each router that will function as a BBMD in your system.

In the above illustration, the Carrier router, address 172.18.1.2, must be configured as a BBMD for the 172.18 subnet, while the Carrier router, address 172.16.1.15, must be configured as a BBMD for the 172.16 subnet.

CAUTIONS

- Define only one BBMD per subnet. Multiple BBMDs on an IP subnet disrupt network communications.
- Unless explicitly modified, the UDP Port for BACnet/IP is 0xBAC0 (47808). Do not change this parameter unless you made a change in the router.

15 In a text editor such as Notepad, create a list of the routers that will be BBMDs. List each IP address on a separate line. (Maximum of 50 IP addresses per file)



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16 Save the file to your folder of choice with a .bdt extension instead of .txt.

NOTE ".bdt" is a **Broadcast Distribution Table** file.

17 Open the **BBMD Configuration Tool**.

18 In the **IP Address** or **Host Name** field, type the IP address of the router that functions as the BBMD (BACnet Broadcast Management Device) for its subnet.

19 To check if the router has an existing BBMD table, click the **Broadcast Distribution Table Read** button.

20 If the **Broadcast Distribution Table** contains IP addresses that are not in your .bdt file, verify that they are valid BBMDs and, if so, add them to your .bdt file.

NOTES

- The BDTs in each BBMD should be identical. Repeat this entire process whenever a BBMD is added.
- If needed, disable the checkbox next to **Show Broadcast** to limit the amount of scrolling text that is displayed.

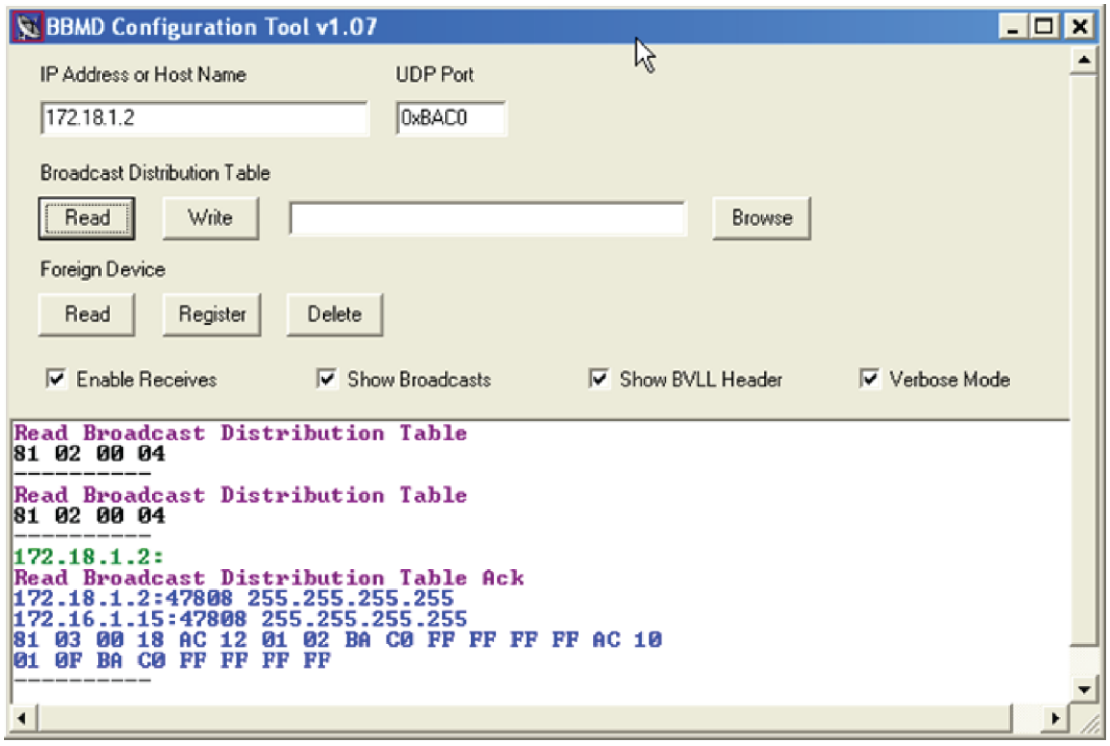
21 Click the **Broadcast Distribution Table Browse** button and select the .bdt file that you made in step 4.

22 Verify that the appropriate IP address is still in the **IP Address** or **Host Name** field.

23 Click the **Broadcast Distribution Table Write** button.

24 Click **Read** again to verify that the new .bdt file was written to the router. See example below.

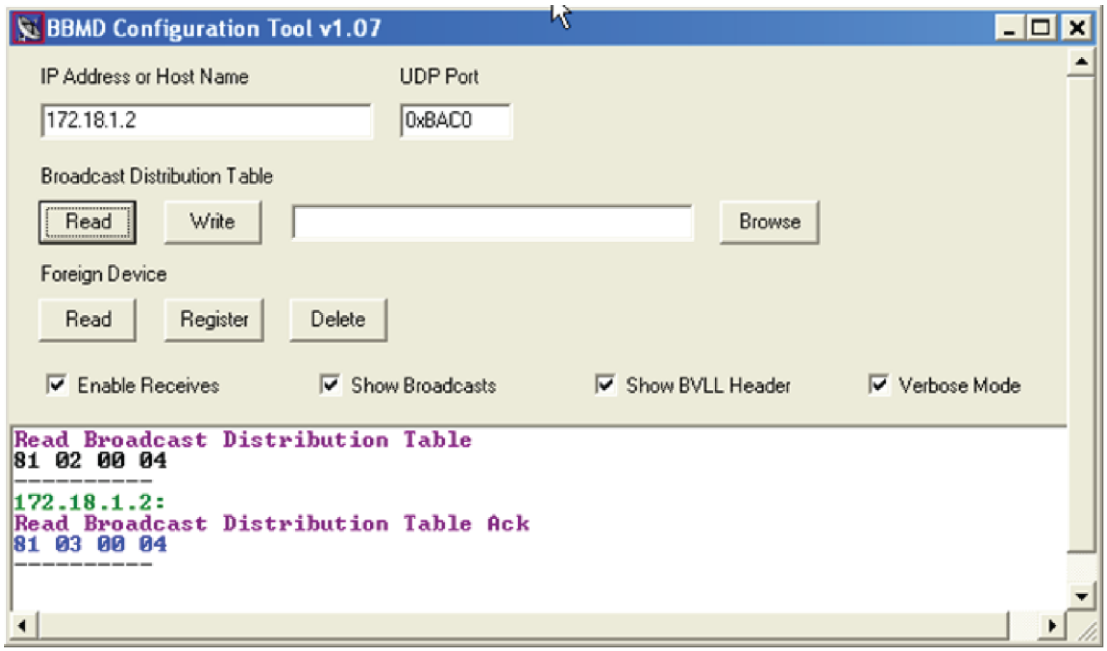
NOTE If you have a large BDT, you may have to re-size the **BBMD Configuration Tool** window to see the **Broadcast Distribution Table**.



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25 Using the next IP address in the .bdt file, repeat steps 7 through 14 until every file has been updated.

NOTE To clear the BBMD entries from a router, follow the steps above using an empty (blank) .bdt file. A cleared BBMD table contains just the router's IP address without entries in the BBMD table, as shown below.



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Document revision history

Important changes to this document are listed below. Minor changes such as typographical or formatting errors are not listed.

Date	Topic	Change description	Code*
4/6/20	Overview	Added list of all controllers that can be integrated with a BACnet device	
	Appendix A - Configuring the driver parameters by using the Service Port	Added instructions for the TVMPCXP1628-NR. Added Autobaud.	
	To wire to a BACnet MS/TP network	Changed first paragraph to include comments about the TV-MPCXP1628-NR.	
	Before-you-begin checklist	Added autobaud	
	1 Connect the third-party device to the Carrier controller	Added note regarding TV-MPCXP1628-NR	

* For internal use only

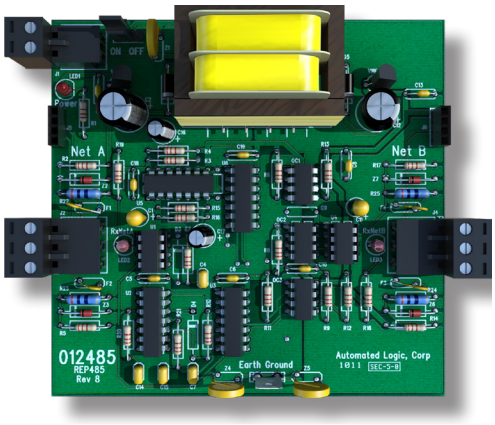
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i-Vu® Building Automation System
Network Devices

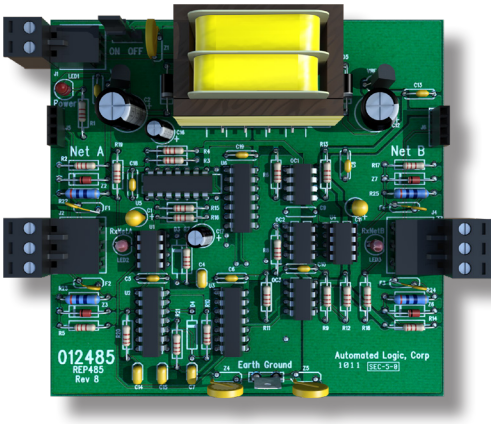
Part Numbers: REP485, PROT485, BT485



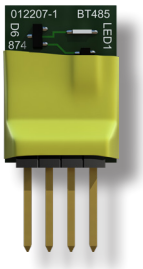
Carrier's ancillary network devices ensure optimum performance for BACnet MS/TP and other EIA-485 networks. These devices install easily and work together to amplify data signals and provide surge protection, bias, and termination to any EIA-485 network.

Key Features and Benefits

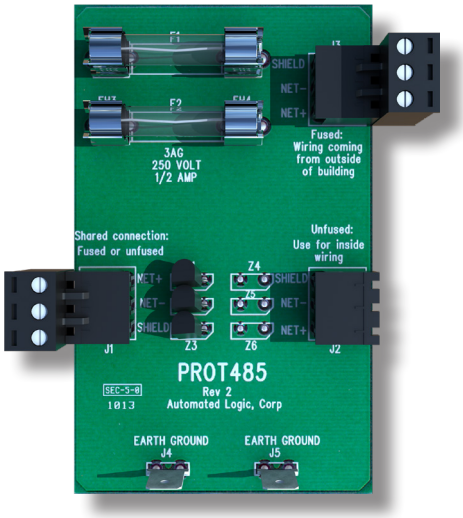
- The REP485 allows you to expand your overall network by repeating and amplifying network signals from one network segment to the next.
- The PROT485 provides electrical surge protection to controllers installed within 250 ft. (76 m).
- The BT485 prevents end-of-line reflections, noise, and signal distortion by effectively terminating and biasing each network segment.



485 Repeater
Part #REP485



Blasing Terminators (16 pack)
Part #BT485



Electrical Surge
Protection Board
Part #PROT485

i-Vu® Building Automation System

Network Devices

Part Numbers: REP485, PROT485, BT485

REP485

Power	24 VAC ± 10%, 50-60Hz, 6 VA power consumption
Mounting	4 in. Snap Track
Terminals	Removable screw terminals
Ports	Net A and Net B are both EIA-485 (optically isolated)
Network Requirement	1 after every 31 controllers, after every 2000ft. (609.6m), or at each branch of a hybrid network
Network Wiring	22/24 AWG, single twisted shielded pair, low capacitance, CL2P wire
Operating Temperature	0 to 130ºF (-17.8 to 54.4ºC), 5-95% relative humidity, non-condensing
Listed By	UL-916 (PAZX), cUL-916 (PAZX7), CE EN50082-1997
Dimensions	4 in. (width) by 4 in. (height) by 2 in. (depth) 102 mm (width) by 102 mm (height) by 51 mm (depth)

PROT485

Power	N/A
Mounting	4 in. Snap Track
Terminals	Removable screw terminals
Network Requirement	At each place wire enters or exits the building, or for maximum protection, 1 recommended within 250ft. (76m) of each controller
Network Wiring	22/24 AWG, single twisted shielded pair, low capacitance, CL2P wire
Protection	2 replaceable 0.5 A fuses protect the fused connection: F1, type 3AG, 250 Vac, 0.5 A, T (time-lag) F2, type 3AG, 250 Vac, 0.5 A, T (time-lag)
Operating Temperature	-20 to 140ºF (-29 to 60ºC), 10-90% relative humidity, non-condensing
Listed By	UL-916 (PAZX), cUL-916 (PAZX7), CE EN50082-1997
Dimensions	4 in. (width) by 4 in. (height) by 2 in. (depth); 102mm (width) by 102mm (height) by 51 mm (depth)

BT485

Network Requirement	1 at each controller that begins and ends a network segment greater than 10 ft (3 m)
Operating Temperature	-20 to 140ºF (-29 to 60ºC)
Listed By	UL-916 (PAZX), cUL-916 (PAZX7), CE EN50082-1997
Dimensions	.5 in. (width) by .6 in. (height); 12 mm (width) by 15 mm (height)

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Air Source Interface for AppController Installation and Start-up Guide



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 Verify that you have the most current version of this document from **www.hvacpartners.com**, the Carrier Partner Community website, or your local Carrier office.

Important changes are listed in **Document revision history** at the end of this document.

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ASI for AppController overview and specifications

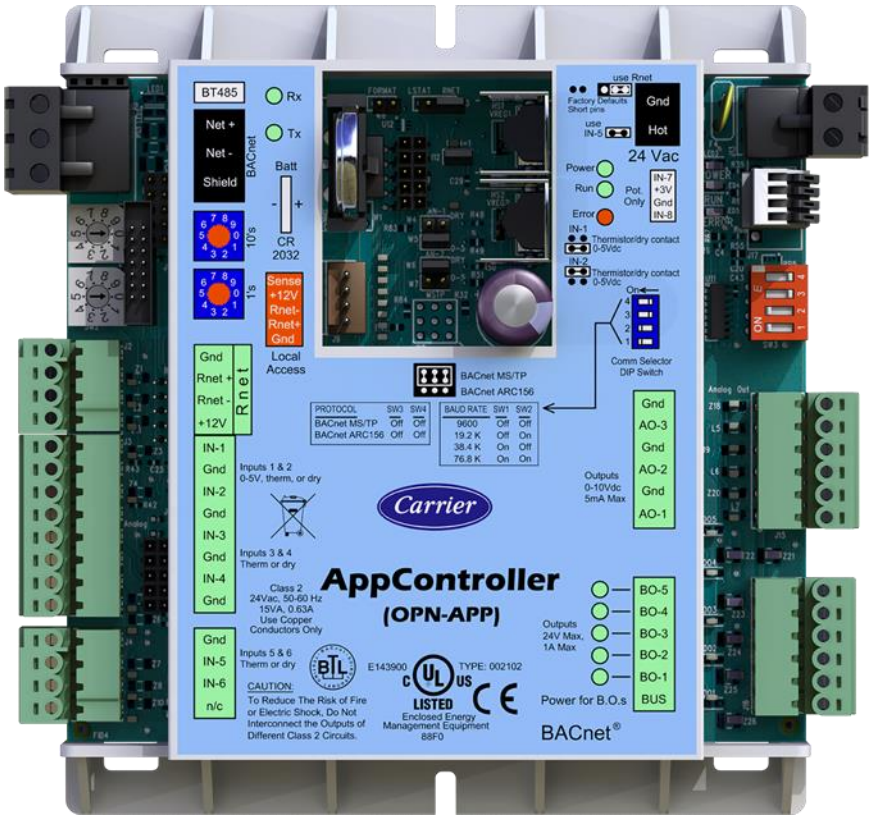
What is the Air Source Interface application?

The Air Source Interface (ASI) application for the AppController interfaces between the i-Vu® Control System (VVT Open or VAV Open) and the air source that is providing the conditioned air, in cases where the air source is NOT directly compatible and does not support Carrier Airside Linkage. These requirements are addressed through 2 different modes of operation (**Monitor** mode and **Control** mode).

NOTE The Air Source Interface application is available in both English and Metric units. The metric version is available on http://www.hvacpartners.com or *http://accounts.ivusystems.com* (*http://accounts.ivusystems.com*) > **Support** > **Download** > **Custom Applications** > **Metric Applications**.

You can use the ASI to control a 1 or 2-stage heating/cooling rooftop unit in a single zone application. The ASI interfaces with the unit's electro-mechanical thermostat terminals, enabling the unit to become a part of the i-Vu® Control System.

The AppController is a field-installed controller that mounts on the equipment. The controller must be downloaded in the field with the ASI application, available in EquipmentBuilder.

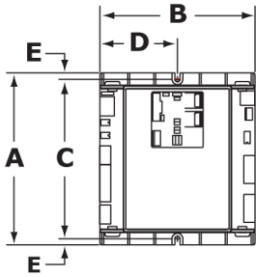


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Specifications

Power	24 Vac ±10%, 50–60 Hz 20 VA power consumption 26 Vdc (25 V min, 30 V max) Single Class 2 source only, 100 VA or less
BACnet Port	For communication with the controller network using BACnet ARC156 (156 kbps) or BACnet MS/TP (9600 bps – 76.8 kbps)
Rnet port	• Supports up to 10 wireless and/or ZS sensors, and one Equipment Touch or TruVu™ ET Display • Supplies 12 Vdc/210 mA power to the Rnet at an ambient temperature of 77°F (25°C) with a 24 Vac nominal power source. NOTE Ambient temperature and power source fluctuations may reduce the power supplied by the Rnet port. **NOTE** If the total power required by the sensors on the Rnet exceeds the power supplied by the Rnet port, use an external power source. The Wireless Adapter, Equipment Touch, or TruVu™ ET Display must be powered by an external power source. See the specifications in each device's Installation and Start-up Guide to determine the power required.
Local Access port	For system start-up and troubleshooting using Field Assistant
Inputs	6 inputs configurable for thermistor or dry contact. 1 and 2 are also configurable for 0–5 Vdc sensors. **NOTES** • Inputs 7 and 8 are unused. • Input 5 has a maximum temperature of 140°F (60°C).
Input resolution	10 bit A/D
Analog outputs	analog outputs, 0–10 Vdc (5 mA max)
Binary outputs	5 binary outputs, dry relay contacts rated at 1 A max. @ 24 Vac/Vdc. Configured normally open
Output resolution	8 bit A/D, using filtered PWM
Real time clock	Battery-backed real time clock keeps track of time in the event of a power failure
Battery	10-year Lithium CR2032 battery retains the following data for a maximum of 10,000 hours during power outages: control programs, graphics, editable properties, schedules, and trends.
Protection	Built-in surge and transient protection for power and communications in compliance with EN61000-6-1. Incoming power and network connections are protected by non-replaceable internal solid-state polyswitches that reset themselves when the condition that causes a fault returns to normal. The power, network, input, and output connections are also protected against transient excess voltage/surge events lasting no more than 10 msec. **CAUTION** To protect against large electrical surges on serial EIA-485 networks, place a PROT485 at each place wire enters or exits the building.

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Status indicators	LEDs indicate status of communications, running, errors, and power.
Environmental operating range	0 to 130°F (-18 to 54°C), 0 to 90% relative humidity, non-condensing
Storage temperature range	-24 to 140°F (-30 to 60°C), 0 to 90% relative humidity, non-condensing
Physical	Rugged GE C2950HF Cycoloy plastic
	
Overall dimensions	A: 5-5/8 in. (14.3 cm) B: 5-1/8 in. (13 cm)
Mounting dimensions	C: 5-1/4 in. (13.3 cm) D: 2-9/16 in. (6.5 cm) E: 3/16 in. (.5 cm)
Panel depth	2 in. (5.1 cm)
Weight	0.44 lbs. (0.20 kg)
BACnet support	Conforms to the BACnet Advanced Application Controller (B-AAC) Standard Device Profile as defined in ANSI/ASHRAE Standard 135-2012 (BACnet) Annex L, Protocol Revision 9
Listed by	UL-916 (PAZX), cUL-916 (PAZX7), FCC Part 15-Subpart B-Class A, CE

Safety considerations

WARNING Disconnect electrical power to the controller before wiring it. Failure to follow this warning could cause electrical shock, personal injury, or damage to the controller.

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Installing the AppController

1. *Mount the controller* (page 4).
2. *Wire the controller for power* (page 5).
3. *Set the controller's address* (page 6).
4. *Wire the controller to the BACnet MS/TP or BACnet ARC156 network* (page 6).
5. *Wire inputs and outputs* (page 8).
6. Wire devices to the controller's Rnet port.
7. *Wire equipment to outputs* (page 19).

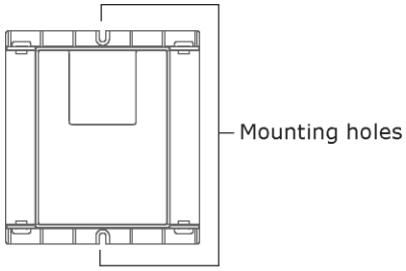
Mounting the controller

WARNING

When you handle the controller:

- Do not contaminate the printed circuit board with fingerprints, moisture, or any foreign material.
- Do not touch components or leads.
- Handle the board by its edges.
- Isolate from high voltage or electrostatic discharge.
- Ensure that you are properly grounded.

Screw the controller into an enclosed panel using the mounting slots on the coverplate. Leave about 2 in. (5 cm) on each side of the controller for wiring. Mounting hole dimensions 5 9/16" (14.1 cm) between mounting slot center lines.



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Wiring the controller for power

WARNING Do not apply line voltage (mains voltage) to the controller's ports and terminals.

CAUTIONS

- The controller is powered by a Class 2 power source. Take appropriate isolation measures when mounting it in a control panel where non-Class 2 circuits are present.
- Carrier controllers can share a power supply as long as you:
  - Maintain the same polarity.
  - Use the power supply only for Carrier controllers.

To wire for power

1. Remove power from the power supply.
2. Pull the screw terminal connector from the controller's power terminals labeled **Gnd** and **Hot**.
3. Connect the transformer wires to the screw terminal connector.

   NOTE If using a grounded transformer, connect the ungrounded lead to the **Hot** terminal to avoid damaging the transformer.
4. Apply power to the power supply.
5. Measure the voltage at the controller's power input terminals to verify that the voltage is within the operating range of 21.6–26.4 Vac.
6. Insert the screw terminal connector into the controller's power terminals.
7. Verify that the **Power** LED is on and the **Run** LED is blinking.

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Addressing the controller

You must give the controller an address that is unique on the network. You can address the controller before or after you wire it for power.

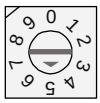
1 If the controller has been wired for power, pull the screw terminal connector from the controller power terminals labeled **Gnd** and **Hot**. The controller reads the address each time you apply power to it.

2 Using the rotary switches, set the controller address. Set the **Tens** (**10's**) switch to the tens digit of the address, and set the **Ones** (**1's**) switch to the ones digit.

EXAMPLE If the controller's address is 25, point the arrow on the **Tens** (**10's**) switch to 2 and the arrow on the **Ones** (**1's**) switch to 5.



10's



1's

CAUTION The factory default setting is **00** and must be changed to successfully install your controller.

Wiring for communications

The controller communicates using BACnet on the following types of network segments:

- MS/TP communicating at 9600 bps, 19.2 kbps, 38.4 kbps, or 76.8 kbps
- ARC156 communicating at 156 kbps

NOTE For more networking details, see the *Open Controller Network Wiring Installation Guide*.

Wiring specifications for BACnet MS/TP and ARC156

Cable:	22 AWG or 24 AWG, low-capacitance, twisted, stranded, shielded copper wire
Maximum length:	2000 feet (610 meters)

WARNING Do not apply line voltage (mains voltage) to the controller's ports and terminals.

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To wire the controller to the BACnet network

1. Pull the screw terminal connector from the controller's power terminals labeled **24 Vac** and **Gnd** (**Return**).
2. Check the communications wiring for shorts and grounds.
3. Connect the communications wiring to the controller's screw terminals labeled **Net +**, **Net -**, and **Shield**.

   NOTE Use the same polarity throughout the network segment.
4. Set the communication type and baud rate.

For...	Set Communications Selection jumper to...	Set DIP switches 1 and 2 to...	Set DIP switches 3 and 4 to...
MS/TP	**BACnet MS/TP**	The appropriate baud rate. See the **MS/TP Baud** diagram on the controller.	Off/Off
ARC156	**BACnet ARC156**	N/A. Baud rate will be 156 kbps regardless of the DIP switch settings.	Off/Off

   NOTE Use the same baud rate for all controllers on the network segment.
5. Wire the controllers on a BACnet MS/TP or BACnet ARC156 network segment in a daisy-chain configuration.
6. If the controller is at either end of a network segment, connect a BT485 to the controller.
7. Insert the power screw terminal connector into the controller's power terminals.
8. Verify communication with the network by viewing a Module Status report in the i-Vu® interface.

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Wiring inputs and outputs

WARNING Do not apply line voltage (mains voltage) to the controller's ports and terminals.

See *Appendix A* (page 41) to print a blank wire list.

Inputs and outputs table

I/O	Type	I/O Terminal	Gnd Terminal	Point Name/ Function	Hardware/ Signal	Jumper Position of Pins
Zone Temp/ Zone Temp	AI	Rnet	Gnd	Space Temperature - Prime Variable	Communicating	N/A
Fan Status	BI	IN-1	2 - Gnd	Fan Status	Dry Contact	IN-1 Top
SAT Sensor	AI	IN-2	4- Gnd	Supply Air Temperature	10K Thermistor	IN-2 Top
RAT Sensor	AI	IN-3	6- Gnd	Return Air Temperature	10K Thermistor	N/A
OAT Sensor	AI	IN-4	8- Gnd	Outdoor Air Temperature	10K Thermistor	N/A
Input Channel #5	BI	IN-5*	1- Gnd	Filter status Pressurization Input	Dry Contact	N/A
Fire / Smoke Detect Input	BI	IN-6	1 - Gnd	Fire / Smoke Detector	Dry Contact	N/A
G Fan Output	BO	BO-1	1 - Pwr	Fan Output (G)	Relay	N/A
Y1 Cooling Output	BO	BO-2	1 - Pwr	1st Stage Cooling (Y1)	Relay	N/A
Y2 Cooling Output	BO	BO-3	1 - Pwr	2nd Stage Cooling (Y2)	Relay	N/A
W1 Heating Output	BO	BO-4	1 - Pwr	1st Stage Heating (W1)	Relay	N/A
W2 Heating Output	BO	BO-5	1 - Pwr	2nd Stage Heating (W2)	Relay	N/A

Legend

AI - Analog Input
BI - Binary Input **BO** - Binary Output

* This output is configurable.

NOTE Connect SPT sensors, ZS sensors, or the Wireless Adapter for wireless sensors, to the Rnet port if Airside Linkage is not used.

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Input wiring specifications

Input	Maximum length	Minimum gauge	Shielding
0–5 Vdc	500 feet (152 meters)	22 AWG	100 feet (30.4 meters) unshielded 100 - 500 feet shielded
Thermistor Dry contact Pulse counter TLO	500 feet (152 meters)	22 AWG	100 feet (30.4 meters) unshielded 100 - 500 feet shielded
ZS sensors Wireless Adapter for wireless sensors Equipment Touch TruVu™ ET Display	See *Wiring devices to the controller's Rnet port* (page 13).		

Inputs

The controller has 6 inputs that accept the following signal types.

These inputs...	Support this signal type...	Description
All	Thermistor	Precon type 2 (10 kOhm at 77°F/25°C) Input voltage for IN-5: 1 to 2.52 Vdc Input voltage for all other inputs: 0.33 to 2.52 Vdc
All	Dry contact	A 3.3 Vdc wetting voltage detects contact position, resulting in a 0.3 mA maximum sense current when the contacts are closed.
IN-1, IN-2	0–5 Vdc	The input impedance of the controller is approximately 30 kOhm.
All	Pulse counter	Pulse counting up to 4 pulses per second. Minimum pulse width (on or off time) required for each pulse is 100 msec.

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Binary outputs

The controller has 5 binary outputs. You can connect each output to a maximum of 24 Vac/26 Vdc. Each output is a dry contact rated at 1 A, 24 V maximum and is normally open.

To size output wiring, consider the following:

- Total loop distance from the power supply to the controller, and then to the controlled device

  NOTE Include the total distance of actual wire. For 2-conductor wires, this is twice the cable length.

- Acceptable voltage drop in the wire from the controller to the controlled device
- Resistance (Ohms) of the chosen wire gauge
- Maximum current (Amps) the controlled device requires to operate

Analog outputs

The controller has analog outputs that support voltage. The controlled device must share the same ground as the controller and have the following input impedance:

0–10 Vdc	Minimum impedance 2000 Ohms, max 5 mA
	NOTE Ohm's law: -10V/.005a = 2000 Ohms

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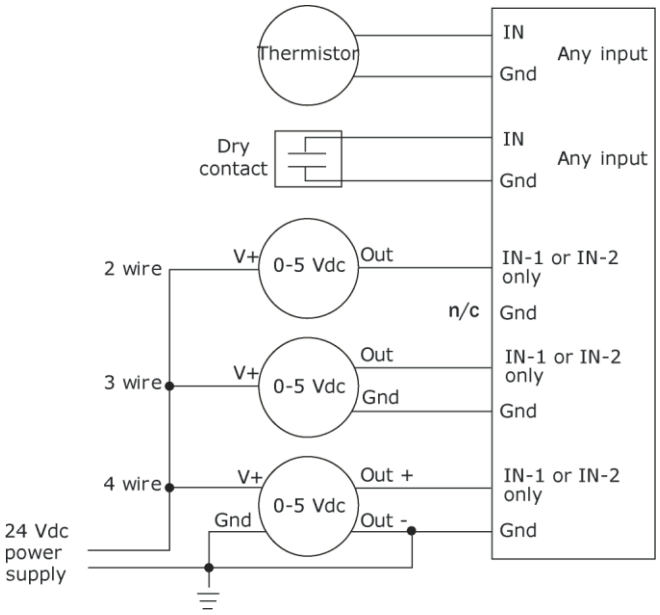
To wire inputs and outputs

Pull the screw terminal connector from the controller's power terminals labeled **Gnd** and **Hot**.

1 Connect the input wiring to the screw terminals on the controller.

NOTES

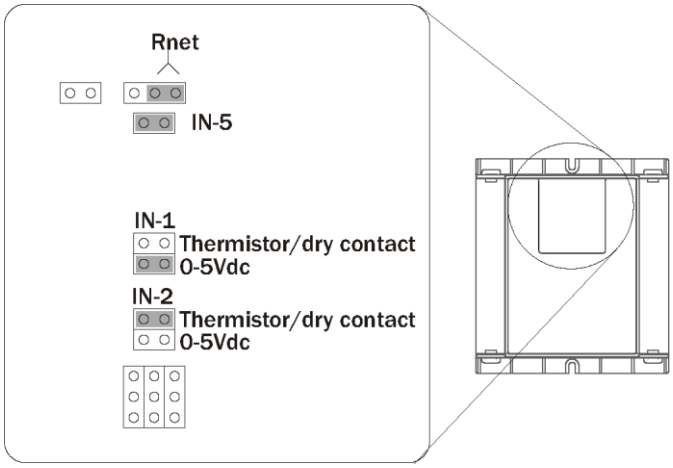
- Connect the shield wire to the **GND** terminal with the ground wire.
- **IN-5** and **IN-6** share the **GND** terminal above **IN-5**.



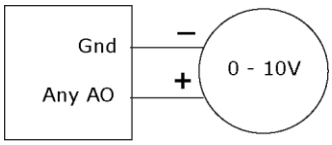
2 Set the appropriate jumpers on the controller.

To use...	For...	
IN-1	Thermistor	Set jumpers **IN-1** to the Therm position.
IN-1	0–5 Vdc	Set jumpers **IN-1** to the 0-5 Vdc position.
IN-2	Thermistor/ Dry contact	Set jumpers **IN-2** to the Thermistor/Dry contact position.
All	Thermistor Dry contact	Verify the **IN-5** jumper is on.
Rnet Port	ZS sensors Wireless Adapter for wireless sensors Equipment Touch TruVu™ ET Display	Set the **Rnet** jumper to **Rnet**.

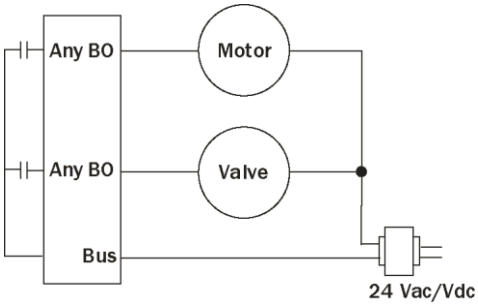
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3 Connect the analog output wiring to the screw terminals on the controller and to the controlled device.



4 Connect the binary output wiring to the screw terminals on the controller and to the controlled device.



5 Insert the power screw terminal connector into the controller's power terminals.

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Wiring devices to the controller's Rnet port

The Rnet communicates at a rate of 115 kbps and should be wired in a daisy-chain configuration.

Supports up to

- 10 wireless and/or ZS sensors (5 per control program)
- One Equipment Touch
- One TruVu™ ET Display

NOTE ZS sensors, a Wireless Adapter, and an Equipment Touch can share the Rnet, but not SPT sensors.

Rnet wiring specifications

NOTE Use the specified type of wire and cable for maximum signal integrity.

Description	4 conductor, shielded or unshielded, CMP, plenum rated cable
Conductor	22 AWG (7x0096) bare copper if Rnet has only sensors
Maximum length	500 feet (152 meters)
Insulation	Low-smoke PVC (or equivalent)
Color Code	Black, white, green, red
Shielding	If shielded, Aluminum/Mylar shield (100% coverage) with TC drain wire, terminated at controller
UL temperature rating	32–167°F (0–75°C)
Voltage	300 Vac, power limited
Listing	UL: NEC CL2P, or better

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To wire ZS sensors to the controller

ZS Sensors are thermistor-based temperature sensors that may optionally sense humidity, CO_2, or VOC. ZS Sensors are wired to the Rnet port on i-Vu® Open controllers. You can use the following ZS sensors:

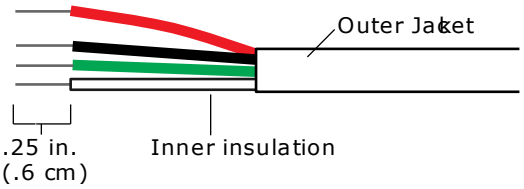
- ZS Standard
- ZS Plus
- ZS Pro
- ZS Pro-F

NOTES

- The ZS CO2 model uses 190 mA during sample period. Use auxiliary 12 Vdc, unless it is the only device on the Rnet port.
- A control program can use no more than 5 ZS Sensors
- SPT sensors cannot share the Rnet with other devices.
- For detailed instructions, see the *ZS Sensor Installation Guide*.

1 Remove power from the controller.

2 Partially cut, then bend and pull off the outer jacket of the Rnet cable(s). Do not nick the inner insulation. Strip about .25 inch (.6 cm) of the inner insulation from each wire.



3 Wire each terminal on the sensor to the same terminal on the controller. See diagram below.

NOTE Carrier recommends that you use the following Rnet wiring scheme:

Connect this wire...	To this terminal...
Red	+12V
Black	Rnet-
White	Rnet+
Green	Gnd

4 Apply power to the controller.

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To wire the Wireless Adapter for wireless sensors

WARNING Do not apply line voltage (mains voltage) to the Wireless Adapter.

The Carrier wireless sensors are available in 868, 902, and 928 MHz radio frequency. The sensors are thermistor-based temperature sensors that may optionally sense humidity.

Wireless sensors communicate through a Wireless Adapter, which is wired to the Rnet port of the controller.

REQUIREMENTS

- A v6.5 or later i-Vu® system
- v6-xx-xxx or later controller drivers

To configure the control program for the desired user interaction with the sensor, see the *Wireless Sensors Application Guide*. For detailed instructions, see the *Wireless Sensors Installation Guide*.

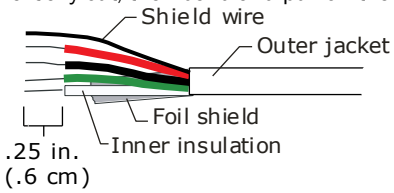
To wire, power, and mount the Wireless Adapter

NOTES

- The Wireless Adapter requires a 24 Vac power supply. It is not powered by the Rnet.
- If the Wireless Adapter will be:
  - Daisy-chained on the Rnet with ZS sensors, an Equipment Touch, or TruVu™ ET Displayuse the standard 4-conductor Rnet wiring.
  - The only device on the Rnet, you can use a 3-conductor cable instead of the standard 4-conductor Rnet cable.

1 Turn off the power to the controller that the Wireless Adapter will be wired to.

2 Partially cut, then bend and pull off the outer jacket of the Rnet cable(s). Do not nick the inner insulation.

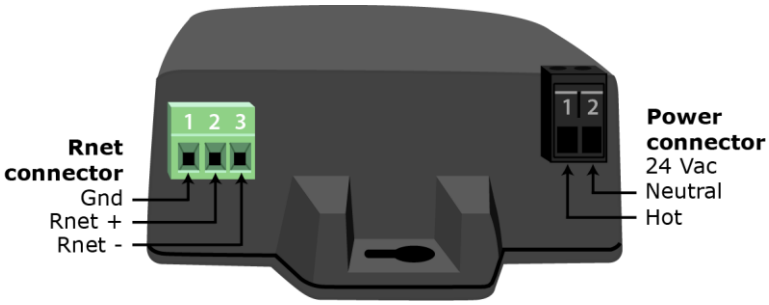


3 Strip about 0.25 inch (0.6 cm) of the inner insulation from each wire.

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4 Wire the **Rnet +**, **Rnet -**, and **Gnd** terminals on the controller's **Rnet** port to the terminals of the same name on the Wireless Adapter's Rnet connector.

NOTE If using shielded wire, connect the shield wire and the ground wire to the **Gnd** terminal.



5 Wire the 24 Vac external power supply to the Wireless Adapter's power connector.

6 Mount the Wireless Adapter by inserting 2 screws through the mounting tabs on each end of the Wireless Adapter.

7 Apply power to the external power supply.

8 Verify that the LED on top of the Wireless Adapter is blinking. See "LED" below.

9 Turn on the controller's power.

LED

The blue LED on the top of the Wireless Adapter indicates the following:

If the LED is...	Then the device...
Off	Is not powered or there is a problem.
Blinking	Is working properly.
Steadily on	Has a problem. Do one of the following: • Cycle power to the device. • Insert a small screwdriver or paper clip into the hole next to the LED to reboot the device.

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To wire an Equipment Touch to the controller

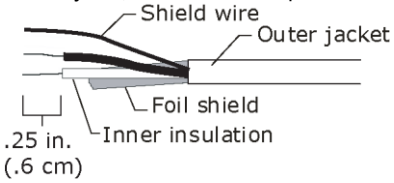
NOTES

- The Equipment Touch requires a 24 Vac power supply. It is not powered by the Rnet.
- If the Equipment Touch will be:
  - Daisy-chained on the Rnet with ZS sensors or a Wireless Adapter, use the standard 4-conductor Rnet wiring and follow the wiring instructions *To wire ZS sensors to the controller* (page 14).
  - The only device on the Rnet, you can use a 2-conductor cable instead of the standard 4-conductor Rnet cable and follow the instructions below.
- For complete Equipment Touch installation instructions including wiring diagrams, see the *Equipment Touch Installation and Setup Guide.*

CAUTION The controller can share a power supply with the Carrier controller as long as:

- The power supply is AC power.
- You maintain the same polarity.
- You use the power source only for Carrier controllers.

1. Turn **off** the controller's power.
2. Partially cut, then bend and pull off the outer jacket of the cable. Do not nick the inner insulation.



3. Strip about 0.25 inch (0.6 cm) of the inner insulation from each wire.
4. Wire the controller's **Rnet+** and **Rnet-** terminals to the terminals of the same name on the Equipment Touch's connector.

   NOTE If using shielded wire, connect the shield wire and the ground wire to the **Gnd** terminal.
5. Turn **on** the controller's power.
6. Turn on the Equipment Touch.

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To wire the TruVu™ ET Display

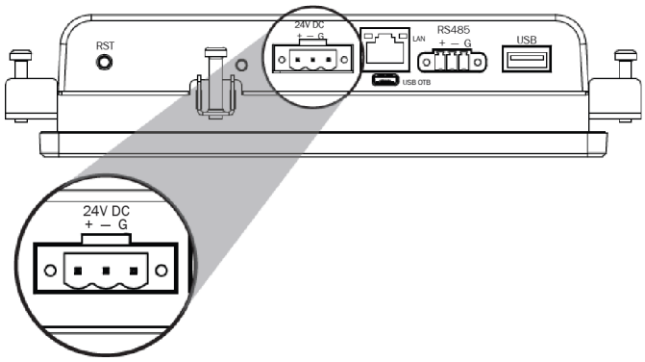
WARNING Do not apply line voltage (main) - 24 Vdc power only.

Wiring power

Wire the TruVu™ ET Display **24V DC** connector to the 24 Vdc power supply using 2-conductor 18 AWG wire. Maximum distance 100 feet (30 meters).

CAUTION The TruVu™ ET Display can share a power supply with the Carrier controller as long as:

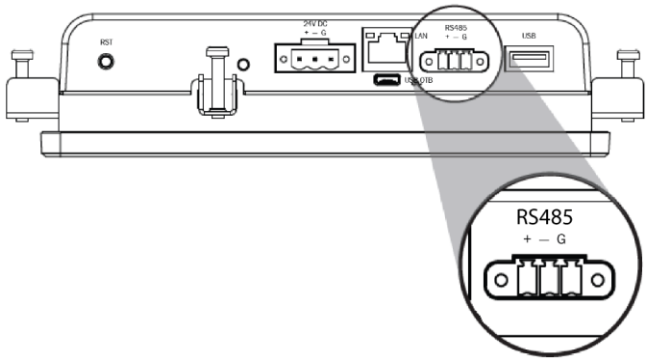
- The power supply is DC power.
- You maintain the same polarity.
- You use the power source only for Carrier controllers.



Wiring communication

1 Turn off the controller's power.

2 Wire the TruVu™ ET Display's **RS485** connector to the controller's **Rnet** port, **G** to **Gnd**, **+** to **Rnet +**, **-** to **Rnet -** using 2-conductor 22 AWG wire with a maximum distance of 500 feet (152 meters).



3 Turn on the controller's power.

For complete TruVu™ ET Display installation instructions, see the *TruVu™ ET Display Installation and Start-up Guide.*

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Wiring equipment to outputs (Control mode only)

Use the following table to wire equipment to the controller's outputs:

Wire these terminals from the thermostat connections on the equipment...	...to these terminals on the controller
R	**BUS**
G	**BO1**
Y1	**BO2**
Y2 (if applicable)	**BO3**
W1	**BO4**
W2 (if applicable)	**BO5**

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Installing the controller into the i-Vu® application

You must complete the following procedures to successfully install your controller into an i-Vu® Control System. Use the Help in the referenced software for detailed descriptions of these procedures.

EquipmentBuilder or Snap

1 Use EquipmentBuilder or Snap to create control program(s) for your controller.

2 If applicable, print the Sequence of Operation, which includes the points list.

NOTE You can create a points list under **Reports** in the i-Vu® application or Field Assistant after installing your control program.

This Installation Guide

1 Prepare a wire list using the points list. Refer to *Appendix A* (page 41).

2 Use the wire list and the following installation procedures to install and wire I/O points to your controller.

The i-Vu® or Field Assistant application

1 Upload the controller to the database by selecting the router in the navigation tree.

2 Select **Devices** > **Manage** tab.

3 Select the controller in the list on the page and click **Upload**.

4 If you are adding a new control program, click Add Control Program. A dialog window appears.

5 Enter a name for your control program in **Display Name** and select your controller in the **Controller** drop-down list.

NOTES

- If you already have the maximum number of control programs for a controller, it will not appear in the list.
- Optional: You can change the control program's **Reference Name** if needed.

6 Do one of the following:

If the control program is...	
In the **Control Program** drop-down list	Select the control program.
Not in the **Control Program** drop-down list	a. Click **Add New**. b. Browse to select the control program. c. Click **Open**. d. Click **Continue**. e. Click Close.

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7 To upload a graphic, click **Add New** under **Views** and browse to your .view file.

8 Click **Continue**. When message appears **File added successfully**, click **Close**.

9 Click **Close** again.

10 Right-click on the programmable controller in the controller list and select **Check Status** from the list. The status of the controller should say **File Mismatch**.

11 Click the **Download All Content** button.

12 Assign channel numbers to the physical points by selecting the controller in the navigation tree and going to **Properties** page > **I/O Points** tab.

13 Configure the controller on the **Properties** page > **Control Program** tab.

14 Check out and commission the equipment.

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Start-up

Use one of the following interfaces to start up, access information, read sensor values, and test the controller.

This interface...	Provides a...
Field Assistant application - Runs on a laptop that connects to controller's Local Access port [1]	Temporary interface
Equipment Touch device - Connects to controller's Rnet port [2]	Temporary or permanent interface
i-Vu® application Available for BACnet systems only	Permanent interface
System Touch device Available only for BACnet MS/TP systems. Wire to a BACnet MS/TP network connector and a 24 Vac power supply [3]	Temporary or permanent interface

[1] Requires a USB Link (Part #USB-L).
[2] See the *Equipment Touch Installation and Setup Guide* for detailed instructions.
[3] See the *System Touch Installation and Setup Guide* for detailed instructions.

CAUTION If multiple controllers share power but polarity was not maintained when they were wired, the difference between the controller's ground and the computer's AC power ground could damage the USB Link and the controller. If you are not sure of the wiring polarity, use a USB isolator between the computer and the USB Link. Purchase a USB isolator online from a third-party manufacturer.

Select or create a custom control program and graphic

The field-installed AppController does not come from the factory with a control program or graphic. You must load a control program and graphic as part of the installation/commissioning of the AppController. You can select a control program and graphic from EquipmentBuilder that has all the configurations that are currently available on a factory-installed ASI for AppController.

After creating your control program, save and download it to the AppController. If desired, create a custom graphic using ViewBuilder. See *ViewBuilder Help* for details.

NOTE Third party integration information for current Carrier PIC products, whether on a factory-installed controller or selected from EquipmentBuilder, can be found on the *Carrier Control Systems Support Site* *http://www.hvacpartners.com/*, *https://accounts.ivusystems.com/* under **Support Center** > **Controls Support** > **Controls Product Information**.

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Configure the ASI for AppController's properties

You must configure certain points and properties. *Appendix C* (page 43) is a complete list of all the points and properties, with descriptions, defaults, and ranges. These properties affect the unit operation and/or control. Review and understand the meaning and purpose of each property before changing it.

To start up the controller, configure your necessary points/properties in the following:

- *Unit Configuration* (page 44)
- *Setpoints* (page 46)
- *Service Configuration* (page 56)

Examples of some settings that you need to configure for start-up are the **Occupied** and **Unoccupied Heating** and **Cooling** setpoints, found in the **Setpoints** section of *Appendix C* (page 43).

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Sequence of Operation

The Air Source Interface (ASI) application for the AppController interfaces between the i-Vu® Control System (VVT Open or VAV Open) and the air source that is providing the conditioned air, in cases where the air source is NOT directly compatible and does not support Carrier Airside Linkage. These requirements are addressed through 2 different modes of operation (**Monitor** mode and **Control** mode).

NOTE The Air Source Interface application is available in both English and Metric units. The metric version is available on http://www.hvacpartners.com or *http://accounts.ivusystems.com* (*http://accounts.ivusystems.com*) > **Support** > **Download** > **Custom Applications** > **Metric Applications**.

You can use the ASI to control a 1 or 2-stage heating/cooling rooftop unit in a single zone application. The ASI interfaces with the unit's electro-mechanical thermostat terminals, enabling the unit to become a part of the i-Vu® Control System.

The ASI provides the following 4 separate functions, based on your configuration:

- **Monitor mode 1** – Use with Airside Linkage-equipped Open terminals to provide a system interface to monitor the operation of a third party-controlled air source (air handler or rooftop). In this application, the ASI is mounted at the air source and provides the air source operating mode and supply air temperature to the Open zoning system. It can also provide the outdoor air temperature and smoke or fire system modes if you use the optional **Fire/Smk** or **Pressurization** inputs.
- **Monitor mode 2** - Use with Airside Linkage-equipped Open terminals in retrofit/upgrade applications to provide a control interface between the Open zoning system and the air handler. The ASI uses BACnet communications to transfer data between the zoning system and the air source. The ASI provides network-accessible data, such as:
    - setpoints
    - zone temperature
    - occupancy status
    - RH and CO2 levels from the zones (optional)

  The ASI retrieves the fan status, supply air temperature, and outdoor air temperature from the air source and then determines the AHU mode to send to the zoning system. It also sends the SAT and outdoor air temperature, if available.
- **Control mode 3** - Use with Airside Linkage-equipped Open terminals in retrofit/upgrade applications to provide a system interface to control the operation of a rooftop unit, through the rooftop's thermostat terminal interface. The ASI uses the existing electromechanical or DDC controls integral to the equipment, eliminating the need to replace the equipment or its controls.
- **Control mode 4** - Use in retrofit/upgrade applications in conjunction with a zone sensor to provide Open capability to an existing single zone rooftop. The ASI interfaces to the equipment's thermostat terminals. The ASI uses the existing electromechanical or DDC controls integral to the equipment, eliminating the need to replace the equipment or its controls.

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Monitor Mode

Monitor mode 1

You can use the ASI in **Monitor mode 1** to:

- Monitor the operation of a rooftop or air handling unit that may serve multiple areas, use its own controls, and provide air to an Open VAV or VVT zoning system
- Use the fan status input to detect if the equipment is operating and then use the supply air temperature sensor to determine the operating mode of the unit
- Provide additional capabilities and functionality with optional inputs in **Monitor** mode

The minimum required inputs include:

- **Supply Air Temperature**
- **Fan Status**

The optional hardware inputs include:

- **Outdoor Air Temperature**
- **Return Air Temperature**
- **Filter Status / Pressurization**
- **Fire / Smoke Shutdown**

The ASI also provides communicating BACnet points that you can use to eliminate the hardware sensor requirements by deriving the value directly from the air source through BACnet communications. These BACnet network inputs include:

- **Supply Air Temperature**
- **Fan Status**
- **Outdoor Air temperature**
- **Static Pressure**
- **Pressurization**
- **Fire / Smoke Shutdown**

The ASI provides the equipment operating mode and supply air temperature to the Open zoning system and as well as OAT and static pressure, if available.

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Monitor mode 2

You can use the ASI in **Monitor** mode 2 to:

- Control an existing BACnet air handling or rooftop unit that provides air to an Open VAV or VVT zoning system
- Provide information to BACnet-communicating equipment
- Collect information from the Open zoning system using Airside Linkage. The information is available as BACnet-accessible points so the air source can gather and use the data to tailor its operation. This allows the air source to better satisfy the requirements of the zones. See below for the pertinent data.

Available BACnet-accessible information:

BACnet Object Name	Variable Type and Instance Number
Space Temperature	link_spt / AV: 2601
Occupancy Status	a_link_occ_status / BV:2602
Occupied Cooling Setpoint	link_ocsp / AV:2602
Occupied Heating Setpoint	link_ohsp / AV:2603
Unoccupied Cooling Setpoint	link_ucsp / AV:2604
Unoccupied Heating Setpoint	link_uhsp / AV:2605
Space RH	link_rh / AV:2606*
Indoor Air CO2	link_iaq / AV:2607*
Maximum Damper Position	link_max_dmpr / AV:2611
Airside Linkage Status	a_link_status / BV:2601

*Optional value - if unavailable, -999 default is displayed.

The ASI makes this data available for the air source equipment to use. It is the responsibility of the BACnet-capable air source to gather and use the data to properly control the supply and return fans, heating and cooling coils, outdoor air ventilation dampers, etc.. In return, so the Open zoning system can function most efficiently, the ASI determines and transmits the air source operating mode to the zoning system along with any additional optional information.

The minimum required inputs include:

- **Supply Air Temperature**
- **Fan Status**

The ASI also provides communicating BACnet points that you can configure to eliminate the hardware sensor requirements by deriving the value directly from the air source through BACnet communications.

These BACnet network inputs include:

- **Supply Air Temperature**
- **Fan Status**
- **Outdoor Air temperature**
- **Static Pressure**
- **Pressurization**
- **Fire / Smoke Shutdown**

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Monitor mode operation

You can use the ASI in the **Monitor** mode to:

- Determine the operation of an air handler or rooftop that is controlled by others and serves multiple tenants, such as an Open VVT or VAV terminal system
- Determine the fan's status by monitoring a discrete input (IN-1) or the **Network Fan Status** binary network input. The hardware input is used to monitor a current switch installed on the fan motor or a delta pressure switch that monitors the supply duct air pressure.
- Read the **Supply Air Temperature** (SAT) from a duct temperature sensor connected to a hardware input channel (IN-2) or the **Network SAT** analog network input
- Receive zone space temperature (SPT) through Airside Linkage. By comparing the SPT with the SAT, the ASI determines if the air is suitable for heating, cooling, or ventilation.
- Read the **Outdoor Air Temperature** (IN-4) through an optional input or the **System Outdoor Air Temperature** analog network input. The ASI sends the air source mode, SAT, and OAT, if applicable, to each zone.

The following additional inputs allow interface with a fire/life safety system or local smoke/fire detector:

- The **Pressurization** input (IN-5) monitors a configurable, normally open (N.O.) or normally closed (N.C.), contact or the **System Pressurization** binary network input, which may be used to detect when the system requires all zones to go to maximum airflow or pressurization mode.
- The **Fire Smoke Detector** (FSD) input (IN-6), uses a N.C. contact, or the **System Fire / Smoke** binary network input, to detect when all zone dampers should completely close and disable local terminal fans.

  NOTE The 2 modes, when detected, are sent to the zones via Airside Linkage to provide enhanced smoke control operation.

Fire/Smoke Detector

The ASI can read the status of a N.C. FSD contact input to determine if a fire or smoke detector alarm is present. If the controller determines an alarm condition is present and the ASI is in a **Control** mode, the equipment heating, cooling, and fan are immediately disabled. If connected to an Open zoning system, the **Evacuate** mode is sent out through Airside Linkage, causing all terminals to fully close their primary air dampers and stop all local terminal fans immediately.

The default state of the switch is factory-set to normally closed and cannot be changed.

A **BACnet Binary Network Input** point can read the status of a network-accessible fire/smoke detector value. There is also a third party input. Both cause the unit to respond in the same manner as the contact input described above.

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Pressurization

The ASI can read the status of a configurable contact input to determine if a fire/life safety system requires maximum airflow for smoke control.

NOTE The air source equipment MUST be controlled separately from the fire system to ensure the OA damper opens and the fan operates.

If the controller determines the alarm condition is present and connected to an Open zoning system, the **Pressurization** mode is sent to each zone through Airside Linkage, causing every terminal to open its damper to the maximum cooling position (VVT) or to its maximum cooling airflow setpoint (VAV). The normal state of the input is configurable as either normally closed or normally open.

Also, a **BACnet Binary Network Input** can read the status of a network-accessible fire/life safety smoke purge or pressurization value. There is, also, a third party input. Both inputs cause the unit to respond in the same manner as the contact input described above.

Airside Linkage

The ASI can receive information through Airside Linkage and then provide air source operational information to a zoned system using Open VVT or Open VAV terminals. The ASI becomes the equipment master and receives setpoints, occupancy, and space temperature from the zoning system. The operating mode and supply air temperature of the air source in addition to the OAT value (if available) will be sent to all the zones in the system.

The air source operating mode is determined by comparing the **SAT** to the **Space Temperature** (Prime Variable) coming from the Linkage master and dependent on the configured Monitor mode.

Monitor Mode 1 – Airside Linkage not active:

- Heating = Fan status is on and SAT>82°F (2Δ°F hysteresis) [SAT>27.8°C (1.1Δ°C hysteresis)]
- Cooling = Fan status is on and SAT<63 (2Δ°F hysteresis) [SAT>17.2°C (1.1Δ°C hysteresis)]
- Vent = Fan status is on and SAT between 65°F and 80°F (SAT between 18.3°C and 26.7°C)

Monitor Mode 2 – Airside Linkage active:

- Heating = Fan status is on and SAT>Linkage SPT+5Δ°F (5Δ°F hysteresis) [SAT>Linkage SPT+2.8Δ°C (2.8Δ°C hysteresis)]
- Cooling = Fan status is on and SAT<Linkage SPT- 2Δ°F (2Δ°F hysteresis) [SAT>Linkage SPT-1.1Δ°C (1.1Δ°C hysteresis)]
- Vent = Fan status is on and SAT Linkage SPT+/-5Δ°F (+2.8Δ°C). If previous mode, prior to fan only, was heat, then that Linkage mode remains until SAT<Linkage Space Temperature +5Δ°F (+2.8Δ°C). If previous mode, prior to fan only, was cool, then that Linkage mode remains until SAT>Linkage Space Temperature - 2Δ°F (-1.1Δ°C).

Supply Air Temperature Alarm

The ASI can generate a supply air temperature alarm when the air temperature is excessively high or low. It monitors the supply air temperature (SAT) value and compares that value to the configured **High SAT Alarm Limit** and **Low SAT Alarm Limit**. The fan must have been operating for more than 3 minutes before any alarm condition is checked. After that time, if the SAT exceeds either value for more than 2 minutes, a **Supply Air Temperature** alarm is generated. There is a 3Δ°F (1.6Δ°C) hysteresis before the alarm is reset to normal.

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Filter Status Alarm

The ASI can generate a dirty filter alarm after the number of fan run-hours exceeds a configurable filter alarm timer-limit. It monitors the fan status input, and, if the fan is operating, accumulates run time. If the fan run time hours exceed the configurable limit, an alarm is generated. A **Reset Filter Alarm** input resets the alarm timer after the alarm has been generated. Disable the filter alarm by setting the **Filter Alarm Timer Delay** to **0** (factory default).

Optional - The ASI can generate a dirty filter alarm if you configure the IN-5 input as a filter monitor. It monitors the contact state and, if in the abnormal state, indicates a dirty filter alarm.

Outdoor Air Temperature Sensor Alarm

The ASI generates an outdoor air sensor alarm when the outdoor air temperature value is invalid after previously receiving valid information. The valid sensor range is between -50°F (-45°C) and 150°F (65.5°C). If the OAT exceeds either value for more than 1 minute, the OAT sensor alarm is generated. The alarm is also generated if the **BACnet Analog Network Input** value was used and is no longer being updated. The **Outdoor Air Sensor** alarm is reset when the **Shutdown** point is set to **Active**.

Outdoor Air Temperature Alarm

The ASI can generate an outdoor air temperature alarm when a valid outdoor air temperature value has been received successfully or an **Outdoor Air Temperature** (OAT) sensor is connected and the air temperature is excessively high or low. The control monitors the OAT value and compares that value to the configured **High OAT Alarm Limit** and **Low OAT Alarm Limit**. If the OAT exceeds either value for more than 1 minute, an **Outdoor Air Temperatur**e alarm is generated. There is a 1Δ°F (.5Δ°C) hysteresis before the alarm is reset to normal.

Airside Linkage Alarm

Once Airside Linkage has been successfully established between a zone master and the ASI, if communications fail for more than 5 minutes, an Airside Linkage alarm is generated. The alarm is reset automatically when communications are re-established. Also, the alarm will be generated if more than 1 zone master sends data to the ASI. The Airside Linkage alarm will be reset when the **Shutdown** point is set to **Active**.

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Control Mode

Control mode 3

You can use the ASI in **Control** mode 3 to control an existing electromechanical or DDC-controlled rooftop unit that has a thermostat-input terminal block to provide air to an Open VVT zoning system. Used in this manner, the ASI collects information from the zoning system via Airside Linkage and calculates the required operating mode. Using PID control, the ASI calculates the stages of heating or cooling to meet the zone's load and then controls the outputs to operate the rooftop in the appropriate mode with the appropriate number of stages of capacity.

The minimum required inputs include:

- **Supply Air Temperature**
- **Fan Status**

The optional hardware inputs include:

- **Outdoor Air temperature**
- **Return Air Temperature**
- **Filter Status / Pressurization**
- **Fire / Smoke Shutdown**

In addition, the ASI provides the following outputs to control the rooftop equipment:

- **G** (fan)
- **Y1** (1st cooling stage)
- **Y2** (2nd cooling stage)
- **W1** (1st heating Stage)
- **W2** (2nd heating Stage)
- **R** (common input)

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Control mode 4

You can use the ASI in **Control** mode 4 to:

- Integrate an existing electromechanical single zone rooftop into an Open system
- Control an existing electromechanical or DDC-controlled rooftop that has a thermostat-input terminal block. Used in this manner, the ASI uses an SPT space temperature sensor mounted in the zone to replace the thermostat. The ASI has configured setpoints for both occupied and unoccupied operating conditions and also occupancy schedule capability.
- The ASI operates the fan and calculates the required operating mode and stages of heating or cooling to meet the zone's load. The ASI then controls its outputs to operate the rooftop in the appropriate mode with the appropriate number of stages of capacity.

The minimum required inputs include:

- **Supply Air Temperature**
- **SPT sensor, ZS sensor, or Wireless Adapter for wireless sensor**
- **Fan Status**

The optional hardware inputs include:

- **Outdoor Air temperature**
- **Return Air Temperature**
- **Filter Status / Pressurization**
- **Fire / Smoke Shutdown**

In addition, the ASI provides the following outputs to control the rooftop equipment:

- **G** (fan)
- **Y1** (1st cooling stage)
- **Y2** (2nd cooling stage)
- **W1** (1st heating Stage)
- **W2** (2nd heating Stage)
- **R** (common input)

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Control Mode Operation

You can use the ASI in the **Control** mode to:

- Control a 1 or 2-stage package heating/cooling unit through its thermostat terminal interface
- Provide outputs for up to 2 cooling stages, 2 heating stages, and a fan. A common terminal is connected to the unit's **R** thermostat terminal.

  NOTE The fan status input and supply duct temperature are both required to verify proper unit operation. IN-5, if not used as a pressurization input, can be reconfigured to monitor a filter differential pressure switch to indicate a dirty filter condition
- Use zone data received through Airside Linkage to control a rooftop to provide the appropriate air required to satisfy the zone's thermal load conditions (VVT Open)
- Control an electro-mechanical single zone rooftop by connecting an SPT sensor directly to the ASI. In this mode, the single zone rooftop becomes part of an i-Vu® Control System

In either of the above cases, you may install an optional return air temperature sensor connected to IN-3. The ASI displays the value read from the sensor, if available, and also uses that value in place of the zone or space temperature if Airside Linkage or the SPT sensor fail.

Airside Linkage

The ASI can receive information through Airside Linkage and then control a rooftop for a sub-zoned system using VVT Open terminals. The rooftop is the equipment master and receives its setpoints, occupancy, and space temperature from the zoning system. The ASI then uses this information and its own sensors to provide the necessary air required to satisfy the load in the zones. The operating mode and supply air temperature of the air source, in addition to the OAT value (if available), will be sent to all the zones in the system.

The air source operating mode is determined by comparing the **SAT** to the **Space Temperature** (Prime Variable).

Control mode 3 and 4

- Heating =Local equipment mode is Heating and SAT > Space Temperature + 5Δ°F (+2.8Δ°C)
- Cooling = Local equipment mode is Cooling and SAT < Space Temperature - 2Δ°F (-1.1Δ°C)
- Vent = Local equipment mode is **Fan Only**. If previous mode, prior to fan only, was heat, then that Linkage mode remains until SAT<Linkage Space Temperature +5Δ°F (+2.8Δ°C). If previous mode prior to fan only was cool, then that Linkage mode remains until SAT >Linkage Space Temperature -2Δ°F (-1.1Δ°C).

IMPORTANT! If Linkage fails, the ASI uses the SPT or the RAT sensor (in that order), if available, and also uses its local occupancy and setpoint schedules.

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Scheduling

Airside Linkage Occupancy Schedules (applicable to **Monitor** modes 1 and 2 and **Control** mode 3) — uses the occupancy status value received from the zoning system through Airside Linkage when Airside Linkage is active. This value overrides any other occupancy value derived through any other means described below.

Scheduling (applicable only to **Control** mode 4) — You must set **Occupancy Schedules** to **ENABLE** and configure time periods to schedule the transitions from occupied to unoccupied operation. The time periods control the space temperature to occupied heating and cooling setpoints. The controller operates continuously in the **Occupied** mode until you either configure a **Time Schedule** or use another method of controlling occupancy, such as a third party control system that **Enables/Disables** the **BAS On/Off** point. You must set the local time and date for these functions to operate properly.

You can change the occupancy source to one of the following (listed in order of priority):

- **BAS (Building Automation System) On/Off**

  For use with a Building Automation System that supports network scheduling, you must disable the **Occupancy Schedules** so the BAS can control the unit through a network communication and the BAS scheduling function. The BAS occupancy function overrides any schedule function (except **Airside Linkage Occupancy**) when set to either **Occupied** or **Unoccupied**.

  NOTE Scheduling can either be controlled from the unit or the BAS, but not both.

- **Occupancy Schedules**

  The controller is occupied 24/7 until you configure a time schedule using the Equipment Touch, Field Assistant, or the i-Vu® application, or until a third party control system **Enables/Disables** the **BAS On/Off** point. You can disable this by going to **Configuration** > **Unit Configuration** > **Occupancy Schedules** and changing the point from **Enable** to **Disable** and clicking **OK**.

  NOTE You must **Enable** this point in order for the Equipment Touch, Field Assistant, or the i-Vu® application to assign a time schedule to the controller.

- **Schedule**

  The unit operates according to the schedule configured and stored in the unit. The schedule is accessible in the Equipment Touch, Field Assistant, or the i-Vu® application. The daily schedule consists of a start and stop time (standard or 24 hour mode) and seven days of the week, starting with Monday and ending on Sunday.

- **System Occupancy**

  Uses the network to obtain an occupancy status value from another controller, which is read over the network and used by this controller. **Occupancy Schedules** MUST be set to **Disable** to use this function.

  NOTE Scheduling can only be controlled from one source.

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Fan

The fan operates in 1 of 3 modes. You can configure the fan as:

- **Auto -** operates intermittently during both occupied and unoccupied periods
- **Continuous -** operates intermittently during unoccupied periods and continuously during occupied periods
- **Always On -** operates continuously during both occupied and unoccupied periods

When the fan is in the default mode of **Continuous**, it is turned on when the **Fire/Smoke Shutdown** and **Shutdown** modes are inactive and any one of the following is true:

- It is in occupied mode
- There is a demand for cooling or heating in the unoccupied mode
- The **Pressurization** mode is active

When power is reapplied after a power outage, there is a configurable time delay of 5 - 600 seconds before starting the fan. You can also configure fan delays for **Fan On** and **Fan Off**.

The **Fan On Delay** defines the delay time (0 - 30 seconds, default 15) before the fan begins to operate after heating or cooling starts. The **Fan Off Delay** defines the delay time(0 - 180 seconds, default 90) the fan operates after heating or cooling is stopped.

The **Fan On Delay** is automatically overridden if you select electric heat. The fan runs as long as the cooling or heating outputs are on. If a fire/smoke mode is detected, the fan shuts down immediately, regardless of occupancy state or demand.

Fan w/Heat allows the unit to control the fan in heating mode. If set to **Disable** and the **Fan Mode** is **Auto**, the fan output is NOT energized with the **W1** or **W2** outputs.

Cooling

The ASI operates 1 or 2 stages of cooling to maintain the desired cooling setpoint. The PI (Proportional-integral) cooling loop and staging algorithm controls the outputs. It calculates when the stages should be energized or de-energized to satisfy the load, by comparing the space temperature (SPT) to the appropriate cooling setpoint.

The following conditions must be true in order for the cooling algorithm to run:

- **Cooling** is set to **Enable**
- **Fire/Smoke Shutdown** and **Shutdown** modes are inactive
- **Heat** mode is not active or has been inactive for more than 2 minutes
- Stage 1 minimum off-time has expired
- If occupied, the SPT is greater than the occupied cooling setpoint
- Space temperature reading is valid
- If unoccupied, the SPT is greater than the unoccupied cooling setpoint
- OAT is greater than the **Cooling Lockout Temperature**, if OAT is available

If all the above conditions are met, the cooling output(s) are energized as required, otherwise they are de-energized. If cooling is active and the SAT approaches the minimum SAT limit, the cooling stage(s) are reduced or disabled as needed.

You can configure the **Min SAT** parameter, as well as **Cooling Lockout Temperature**, based on outdoor air temperature (OAT). Both can be adjusted to meet various specifications.

There is a 5-minute minimum off-time for each cooling stage. It may be restarted only after the 5-minute time-guard has expired and the supply air temperature is above the minimum supply air temperature limit.

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Heating

The ASI operates 1 or 2 stages of heating to maintain the desired heating setpoint. The heating PI (Proportional-integral) loop and staging algorithm control the output(s). It is used to calculate when the stages are energized or de-energized to satisfy the load by comparing the space temperature (SPT) to the appropriate heating setpoint.

The following conditions must be true in order for the heating algorithm to run:

- **Heating** is set to **Enable**
- The **Fire/Smoke Shutdown** and **Shutdown** modes are inactive
- **Cool** mode is not active or has been inactive for more than 2 minutes
- Stage 1 minimum off-time has expired
- If occupied, the SPT is less than the occupied heating setpoint
- Space temperature reading is valid
- If unoccupied, the SPT is less than the unoccupied heating setpoint
- OAT is less than the **Heating Lockout Temperature** if OAT is available

If all the above conditions are met, the heating output(s) is energized as required, otherwise they are de-energized. If the heating is active and the SAT approaches the maximum SAT limit, the heating stage(s) are reduced or disabled as needed. You can configure the **Max SAT** parameter, as well as **Heating Lockout Temperature**, based on outdoor air temperature (OAT). Both can be adjusted to meet various specifications

There is a 2-minute minimum off-time for the gas heat and a 30-second minimum off-time for electric heat. After any stage is turned off, it may be restarted only after the off-time has expired and if the supply air temperature is below the maximum supply air temperature limit. For gas-type heat, stage one is equipped with a 2-minute minimum on-time to prevent condensation buildup in the heat exchanger.

Shutdown Input

When the ASI's shutdown input (software point) is set to its **Active** mode, it resets any alarms and then safely shuts down the outputs in a controlled fashion (applicable to the **Control** mode only). Heating and cooling are disabled after any minimum runtime conditions expire and the fan is disabled after the fan off timer expires. After the shutdown input transitions from **Active** to **Inactive**, the ASI restarts, similar to a power fail restart.

Demand Limit

The ASI has the ability to accept 3 levels of demand limit from the network. In response to a demand limit, the unit decreases its heating setpoint and increases its cooling setpoint to widen the range in order to immediately lower the electrical demand. You can configure the amount of temperature adjustment for both heating and cooling and for each demand level. The response to a particular demand level may also be set to 0.

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Power Failure Restart Delay

The ASI provides a delay when recovering from a power failure or shutdown mode in order to prevent excessive demand when many units start simultaneously. You can configure each unit for a unique delay between 0 and 600 seconds. The factory-programmed default delay is 60 seconds.

Space Temperature Alarms

The ASI can generate an alarm when the space temperature exceeds the alarm setpoint. There are separate occupied hysteresis and fixed unoccupied high and low alarm setpoints. The ASI provides a 5-minute alarm delay during unoccupied periods. During occupied periods, it uses the occupied temperature setpoint and applies the hysteresis value to determine the alarm setpoints.

When occupancy transitions from unoccupied to occupied or the occupied temperature setpoints are changed and cause an alarm condition to occur, the ASI automatically calculates an alarm delay (equivalent to the configured delay time in minutes/degrees, times the temperature error that occurred, plus a fixed 15-minute delay). This prevents nuisance alarms when there is an occupancy change and it allows time for the unit to correct an alarming temperature condition.

Fan Status Alarm

The ASI generates an alarm when the fan is commanded to run but the fan status input detects an off-state. You must configure the ASI for the **Control** mode. The controller compares the status of the fan to the desired commanded state. When the fan is commanded to run (**G** = **ON**), the fan status is checked and verified to match that state. If the fan status is not on, then a **Supply Fan** alarm is generated after 1 minute and the equipment's heating and cooling are disabled.

Return Air Temperature Alarm

The ASI can generate a **Return Air Temperature** alarm when the return air temperature is excessively high or low. It monitors the optional return air temperature (RAT) value and compares that value to the configured **High RAT Alarm Limit** and **Low RAT Alarm Limit**. The fan must have been operating for more than 3 minutes before any alarm condition is checked. After that time, if the RAT exceeds either value for more than 2 minutes, a **Return Air Temperature** alarm is generated. There is a 1Δ°F (.5Δ°C) hysteresis before the alarm is reset to normal.

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Troubleshooting

If you have problems mounting, wiring, or addressing the controller, contact Carrier Control Systems Support.

NOTE To help you troubleshoot, obtain a Module Status (Modstat) from the controller and review the System Error and Warning details.

LED's

The LED's indicate if the controller is speaking to the devices on the network. The LED's should reflect communication traffic based on the baud rate set. The higher the baud rate the more solid the LED's become.

Verify the LED patterns by cycling power to the controller and noting the lights and flashes.

LEDs	Status
Power	Lights when power is being supplied to the controller. **NOTE** The controller is protected by internal solid state Polyswitches on the incoming power and network connections. These Polyswitches are not replaceable, but they will reset themselves if the condition that caused the fault returns to normal.
Rx	Lights when the controller receives data from the network segment; there is an Rx LED for Ports 1 and 2.
Tx	Lights when the controller transmits data from the network segment; there is an Rx LED for Ports 1 and 2.
Run	Lights based on controller health.
Error	Lights based on controller health.

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The **Run** and **Error** LED's indicate controller and network status.

If Run LED shows...	And Error LED shows...	Status is...
1 flash per second	1 flash per second, alternating with the **Run** LED	The controller files are archiving. Archive is complete when **Error** LED stops flashing.
2 flashes per second	Off	Normal
2 flashes per second	2 flashes, alternating with **Run** LED	Five minute auto-restart delay after system error
2 flashes per second	3 flashes, then off	The controller has just been formatted
2 flashes per second	4 flashes, then pause	Two or more devices on this network have the same network address
2 flashes per second	1 flash per second	The controller is alone on the network
2 flashes per second	On	Exec halted after frequent system errors, due to: • Controller halted • Program memory corrupted • One or more programs stopped
5 flashes per second	On	Exec start-up aborted, Boot is running
5 flashes per second	Off	Firmware transfer in progress, Boot is running
7 flashes per second	7 flashes per second, alternating with **Run** LED	Ten second recovery period after brownout
14 flashes per second	14 flashes per second, alternating with **Run** LED	Brownout
On	On	Failure. Try the following solutions: • Turn the controller off, then on. • Download memory to the controller. • Replace the controller.

NOTE If you resolve the issue but the **Error** LED does not turn off, cycle power to the controller.

Serial number

If you need the controller's serial number when troubleshooting, the number is on a sticker on the back of the main controller board.

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To restore defaults

WARNING This erases all archived information and user-configuration settings. You will have to reconfigure all custom settings. It is recommended to restore the factory defaults only under the guidance of Carrier Control Systems Support.

To erase volatile memory data and restore factory default configuration settings:

1. Turn off the controller's power switch.
2. Put the **Factory Defaults** jumper on.
3. Turn on the controller's power switch.
4. Remove the **Factory Defaults** jumper.

To replace the controller's battery

To determine when to replace the battery, remove power and measure the voltage. If the voltage is below 2.9 volts, you need to replace the battery.

CAUTION Power must be **ON** to the controller when replacing the battery, or your date, time, and trend data will be lost.

1. Remove the battery from the controller, making note of the battery's polarity.
2. Insert the new battery, matching the battery's polarity with the polarity indicated on the controller.

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Compliance

FCC Compliance

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CAUTION Changes or modifications not expressly approved by the responsible party for compliance could void the user's authority to operate the equipment.

CE Compliance

WARNING This is a Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

BACnet Compliance

Compliance of listed products to requirements of ASHRAE Standard 135 is the responsibility of BACnet International. BTL® is a registered trademark of BACnet International.

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Appendix A: ASI for AppController wire list

Open System Network AppController	
Project Name: **Location:**	**Controller:** **Network Number:** **MAC Address:**

 Thermistor/dry contact  0-5Vdc

Point/ Cable#	Inputs (+)	(G)	Input Type	Jumper Position of Pins	I/O	Sensor code	Equipment Name	Point Name
	IN - 1	GND	Therm/Dry Contact	Upper	IN - 1			
	IN - 2	GND	Therm/Dry Contact	Upper	IN - 2			
	IN - 3	GND	Therm/Dry Contact	N/A	IN - 3			
	IN - 4	GND	Therm/Dry Contact	N/A	IN - 4			
	IN - 5	GND	Therm/Dry Contact	N/A	IN - 5			
	IN - 6	GND	Therm/Dry Contact	N/A	IN - 6			
Point/ Cable#	**Binary Outs (+)**	**COM**	**B-Output Type**	**Jumper Position of Pins**	**I/O**	**Sensor code**	**Equipment Name**	**Point Name**
	BO -1	BUS	N.O.	N/A	BO - 1			
	BO - 2	BUS	N.O.	N/A	BO - 2			
	BO - 3	BUS	N.O.	N/A	BO - 3			
	BO - 4	BUS	N.O.	N/A	BO - 4			
	BO - 5	BUS	N.O.	N/A	BO - 5			
Point/ Cable#	**Analog Outs (+)**	**COM**	**B-Output Type**	**Jumper Position of Pins**	**I/O**	**Sensor code**	**Equipment Name**	**Point Name**
	AO - 1	GND	0-10V 5mA Max	N/A	AO - 1			
	AO - 2	GND	0-10V 5mA Max	N/A	AO - 2			
	AO - 3	GND	0-10V 5mA Max	N/A	AO - 3			

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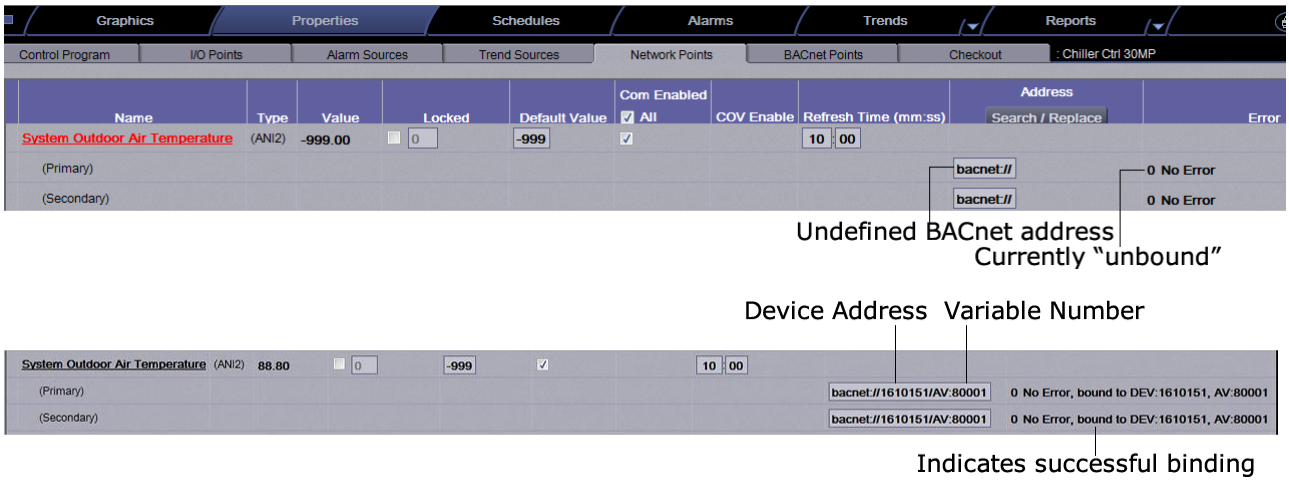
Appendix B: Device Address Binding

Device Address Binding (DAB) allows the controller to receive data from other Open controllers when they are connected by a network. The controller receives data from other Open or BACnet controllers when they are installed as part of an i-Vu® Control System. The data transfer takes the form of DAB, which you must configure.

Currently, the controller implements DAB for the following variables:

- **Network SAT**
- **Network Fan Status**
- **Network Static Pressure**
- **System Outside Air Temperature**
- **System Fire / Smoke**
- **System Pressurization**
- **System Occupancy** (Control mode 4 only)
- **System Cool Demand Level** (Control mode 4 only)
- **System Heat Demand Level** (Control mode 4 only)

You can implement DAB on network points with an undefined BACnet address, displayed in Field Assistant and the i-Vu® interface on the **Properties** page > **Network Points** tab. See example below.



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Appendix C: ASI for AppController Points/Properties

The following tables describe all of the possible settings for your controller on the i-Vu® or Field Assistant **Properties** tab.

NOTE Some of the properties are available only when other settings have been enabled. For example, **Status** > **Indoor Air Quality CO2 (ppm)** is visible only when **Configuration** > **Service Configuration** > **Optional Sensor Type** is set to **IAQ Sensor**.

NOTE Engineering units shown in this document in the defaults and ranges are strictly for reference. You must enter an integer only.

Status

Navigation: i-Vu® / Field Assistant: **Properties** > **Equipment** > **Status**

Point Name/Description	Range
System Mode – The controller's current operating mode.	R: OFF Fan Only Economize Cooling Heating Cont Fan Test Start Delay Temper SAT Fire Shutdown Shutdown IAQ Override Pressurization
Space Temperature - Prime Variable – The space temperature value currently used for control. Not displayed if **Function Type** is set to **Monitor**.	R: -56 to 245°F (-48.9 to 118.3°C)
Return Air Temperature – Displays the current return air temperature. Not displayed if optional RAT sensor is not connected.	R: -56 to 245°F (-48.9 to 118.3°C)
Supply Air Temperature – Displays the current supply air temperature.	R: -56 to 245°F (-48.9 to 118.3°C)
Fan Status – Displays the current operating status of the fan.	R: Off/On
Filter Status – Displays the current filter condition.	R: Clean/Dirty
Outdoor Air Temperature – The outdoor air temperature used for control. Not displayed if optional OAT sensor is not connected or network OAT value is unavailable.	R: -56 to 245°F (-48.9 to 118.3°C)
Fan Output – The commanded state of the G output that is used to control the equipment's fan. Not displayed if **Function Type** is set to **Monitor**.	R: On/Off

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Point Name/Description	Range
Cooling Output – Displays the current active cooling capacity as a percentage of the total available capacity. Not displayed if **Function Type** is set to **Monitor**.	R: 0 to 100%
Heating Output – Displays the current active heating capacity as a percentage of the total available capacity. Not displayed if **Function Type** is set to **Monitor**.	R: 0 to 100%
Shutdown – When **Active**, all alarms are reset. (Current active alarms are displayed.) In **Control** mode, provides a means to stop heating and cooling in an orderly manner.	R: Inactive/Active

Unit Configuration

Navigation: i-Vu® / Field Assistant: **Properties** > **Equipment** > **Configuration** > **Unit Configuration**

Point Name/Description	Default/Range
Heat Enable – Enables or disables heating operation. Not displayed if **Function Type** is set to **Monitor**.	D: Enable R: Disable/Enable
Cool Enable – Enables or disables cooling operation. Not displayed if **Function Type** is set to **Monitor**.	D: Enable R: Disable/Enable
Fan Mode – The supply fan's operating mode. Not displayed if **Function Type** is set to **Monitor**. Options: **Auto** - The fan cycles on/off in conjunction with heating or cooling. **Continuous** - The fan runs continuously during occupancy & intermittently during unoccupied periods with heating or cooling. **Always On** - The fan runs continuously regardless of occupancy or calls for heating and cooling.	D: Continuous R: Auto Continuous Always On
Fan On Delay – How long the fan should delay starting after heating or cooling starts. Automatically overridden to **0** if configured for DX cooling or electric heat is active. Not displayed if **Function Type** is set to **Monitor**.	D: 15 seconds R: 0 to 60 seconds
Fan Off Delay – The number of seconds that the fan continues to run after heating or cooling has ended. Not displayed if **Function Type** is set to **Monitor**.	D: 90 seconds R: 0 to 180 seconds
Minimum Cooling SAT – In cooling mode, the cooling outputs are controlled so that the supply air temperature does not drop below this value. Not displayed if **Function Type** is set to **Monitor**.	D: 50°F (10°C) R: 38 to 60°F (3.3 to 15.5°C)
Maximum Heating SAT – In heating mode, the heating outputs are controlled so the supply air temperature does not rise above this value. Not displayed if **Function Type** is set to **Monitor**.	D: 90°F (32.2°C) R: 80 to 180°F (26.6 to 82.2°C)
Cooling Lockout Temperature – Cooling is inhibited below this outdoor air temperature. Not displayed if **Function Type** is set to **Monitor**.	D: -65°F (-53.9°C) R: -65 to 80°F (-53.9 to 26.6°C)

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Heating Lockout Temperature – Heating is inhibited above this outdoor air temperature. Not displayed if **Function Type** is set to **Monitor**.	D: 150°F (65.5°C) R: 35 to 150°F (1.6 to 65.5°C)
Filter Service Alarm Timer – The amount of time the fan will run before generating a **Filter Alarm**. Set to 0 to disable the alarm and reset accumulated fan hours. Not displayed if **Filter Monitor Type** is set to **Switch**.	D: 0 hr R: 0 to 9999 hr
Pushbutton Override – Enables or disables the use of a pushbutton override from a local space temperature sensor. Not displayed if SPT sensor is connected.	D: Enable R: Disable/Enable
Setpoint Adjustment – Enables or disables the setpoint adjustment mechanism on the local space sensor. Not displayed unless SPT sensor is connected.	D: Enable R: Disable/Enable
Setpoint Adjustment Range - The maximum amount that a user can adjust the setpoint on the local SPT sensor. Not displayed unless SPT sensor is connected.	D: 2Δ°F (1.1Δ°C) R: 0 to 5Δ°F (0 to 2.7Δ°C)
Occupancy Schedules – Enables or disables the occupancy schedule function. Not displayed if **Function Type** is set to **Monitor**.	D: Enable R: Disable/Enable
Power Fail Restart Delay – How long the controller delays normal operation after the power is restored. Typically used to prevent excessive demand when recovering from a power failure. Not displayed if **Function Type** is set to **Monitor**.	D: 60 seconds R: 0 to 600 seconds
Sensor Calibration	
Supply Air Temperature – Displays the current supply air temperature.	R: -56 to 245°F (-48.9 to 118.3°C)
Supply Air Temp Calibration – A calibration offset value to allow the supply air temperature sensor to be adjusted to match a calibrated standard measuring the temperature in the same location.	D: 0Δ°F/C R: -9.9 to 10Δ°F (-5.5 to 5.5Δ°C)
Return Air Temperature – Displays the current return air temperature.	R: -56 to 245°F (-48.9 to 118.3°C)
Return Air Temp Calibration – A calibration offset value to allow the return air temperature sensor to be adjusted to match a calibrated standard measuring the temperature in the same location.	D: 0Δ°F/C R: -9.9 to 10Δ°F (-5.5 to 5.5Δ°C)
Outdoor Air Temperature – The current outdoor air temperature from a linked air source, if available, or from another network source.	R: -56 to 245°F (-48.9 to 118.3°C)
Outdoor Air Temp Calibration – A calibration offset value allows the outdoor air temperature sensor to be adjusted to match a calibrated standard measuring the temperature in the same location.	D: 0Δ°F/C R: -9.9 to 10Δ°F (-5.5 to 5.5Δ°C)

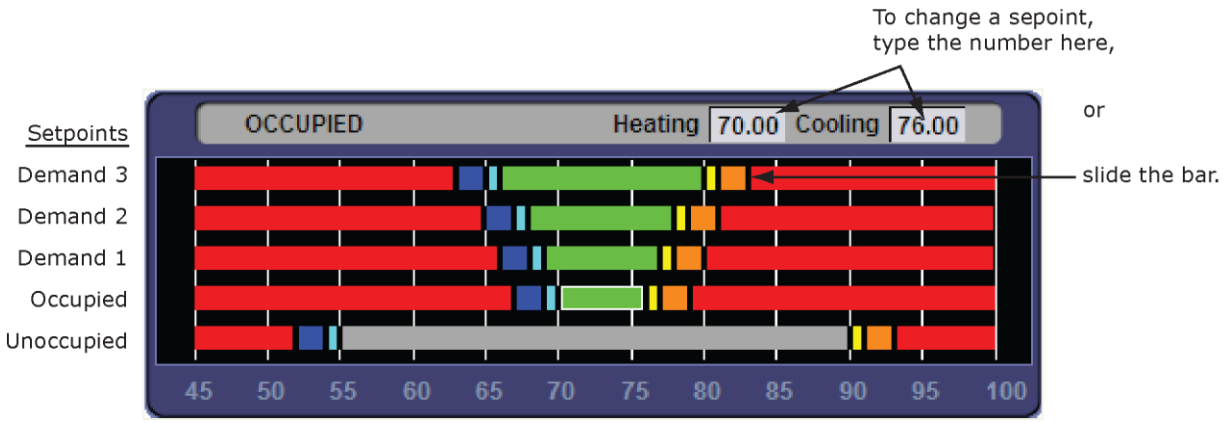
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Setpoints

Navigation: i-Vu® / Field Assistant: **Properties** > **Control Program** > **Configuration** > **Setpoints**

Select a color band on the setpoint graph to see the current setpoints in the **Heating** and **Cooling** fields. The values in this graphic are Fahrenheit. See setpoint descriptions below.

NOTE This graphic is an example only. Your setpoints may differ.



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Occupied Setpoints

The occupied setpoints described below are the setpoints under normal operating conditions. The Demand Level 1–3 setpoints apply if demand limiting is used.

Demand limiting is a cost-saving strategy to reduce energy consumption. The strategy expands the occupied heating and cooling setpoints when the system reaches one of 3 levels of consumption. With the expanded setpoints, the equipment works less, thereby saving energy. By default, Demand Level 1 expands the occupied heating and cooling setpoints by 1Δ°F (Δ.5°C), Demand Level 2 by 2Δ°F (1.1Δ°C), and Demand Level 3 by 4Δ°F (2.2Δ°C). If the occupied heating or cooling setpoints change, the (effective) demand level setpoints automatically change by the same amount. See *Sequence of Operation* (page 24) for more information.

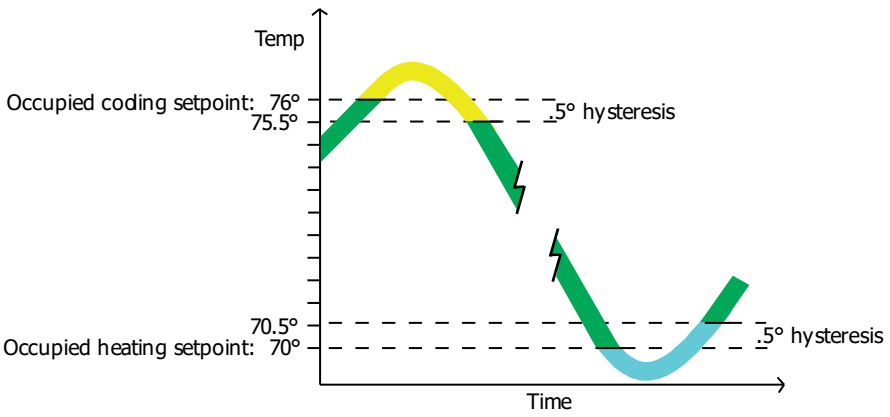
Point Name/Description	Default **Range:** -40 to 245°F (-40 to 118.3°C) Occupied	Demand Level 1	2	3
Occupied Heating – Green The heating setpoint the controller maintains while in occupied mode.	D: 70°F (21.1°C) R: 40 to 90°F (4.4 to 32.2°C)	69°F (20.5°C)	68°F (20°C)	66°F (18.9°C)
Occupied Cooling – Green The cooling setpoint the controller maintains while in occupied mode.	D: 76°F (24.4°C) R: 55 to 99°F (12.7 to 37.2°C)	77°F (25°C)	78°F (25.5°C)	80°F (26.6°C)
Occupied Heating 1 – Light Blue The space temperature must be less than the **Occupied Heating 1** setpoint for the VVT Master to consider the zone a heating caller in a linked system. In a single-zone application, the heating requirement begins as soon as the space temperature falls below the **Occupied Heating** setpoint. We recommend that the **Occupied Heating 1** value be set no less than 0.5Δ°F (.27Δ°C) below the **Occupied Heating** setpoint.	69°F (20.5°C)	68°F (20°C)	67°F (19.4°C)	65°F (18.3°C)
Occupied Heating 2 – Dark Blue The space temperature must be less than the **Occupied Heating 2** setpoint to generate a low space temperature alarm. We recommend that this value be set no less than 0.5Δ°F (.27Δ°C) below the **Occupied Heating 1** setpoint.	67°F (19.4°C)	66°F (18.9°C)	65°F (18.3°C)	63°F (17.2°C)
Occupied Cooling 1 – Yellow The space temperature must be greater than the **Occupied Cooling 1** setpoint for the VVT Master to consider the zone a cooling caller in a linked system. In a single-zone application, the cooling requirement begins as soon as the space temperature exceeds the **Occupied Cooling** setpoint. We recommend that the **Occupied Cooling 1** value be set no less than 0.5Δ°F (.27Δ°C) above the **Occupied Cooling** setpoint.	77°F (25°C)	78°F (25.5°C)	79°F (26.1°C)	81°F (27.2°C)
Occupied Cooling 2 – Orange The space temperature must be greater than the **Occupied Cooling 2** setpoint to generate a high space temperature alarm. We recommend that this value be set no less than 0.5Δ°F (.27Δ°C) above the **Occupied Cooling 1** setpoint.	79°F (26.1°C)	80°F (26.6°C)	81°F (27.2°C)	83°F (28.3°C)

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Unoccupied Setpoints

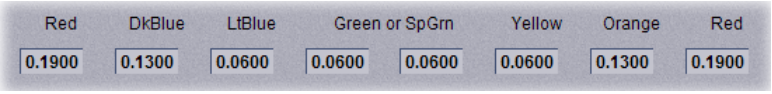
Point Name/Description	Default/Range
Unoccupied Heating – Gray The heating setpoint the controller maintains while in unoccupied mode.	D: 60°F (15.5°C) R: 40 to 90°F (4.4 to 32.2°C)
Unoccupied Cooling – Gray The cooling setpoint the controller maintains while in unoccupied mode.	D: 90°F (32.2°C) R: 45 to 99°F (7.2 to 37.2°C)
Unoccupied Heating 1 – Light Blue The space temperature must be less than the **Unoccupied Heating 1** setpoint for the VVT Master to consider the zone an unoccupied heating caller in a linked system. In a single-zone application, the unoccupied heating requirement begins as soon as the space temperature falls below the **Unoccupied Heating** setpoint. We recommend that the **Unoccupied Heating 1** value be set no less than 0.5Δ°F (.27Δ°C) below the **Unoccupied Heating** setpoint.	D: 54°F (12.2°C) R: 40 to 90°F (4.4 to 32.2°C)
Unoccupied Heating 2 – Dark Blue The space temperature must be less than the **Unoccupied Heating 2** setpoint to generate an unoccupied low space temperature alarm. We recommend that this value be set no less than 0.5Δ°F (.27Δ°C) below the **Unoccupied Heating 1** setpoint.	D: 52°F (11.1°C) R: 40 to 90°F (4.4 to 32.2°C)
Unoccupied Cooling 1 – Yellow The space temperature must be greater than the **Unoccupied Cooling 1** setpoint for the VVT Master to consider the zone an unoccupied cooling caller in a linked system. In a single-zone application, the unoccupied cooling requirement begins as soon as the space temperature exceeds the **Unoccupied Cooling** setpoint. We recommend that the **Unoccupied Cooling 1** value be set no less than 0.5Δ°F (.27Δ°C) above the **Unoccupied Cooling** setpoint.	D: 91°F (32.7°C) R: 45 to 99°F (7.2 to 37.2°C)
Unoccupied Cooling 2 – Orange The space temperature must be greater than the **Unoccupied Cooling 2** setpoint to generate an unoccupied high space temperature alarm. We recommend that this value be set no less than 0.5Δ°F (.27Δ°C) above the **Unoccupied Cooling 1** setpoint.	D: 93°F (33.9°C) R: 45 to 99°F (7.2 to 37.2°C)

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Point Name/Description	Default/Range
Heating Capacity – Used for Optimal Start, this is the rate at which the space temperature changes when the heating system runs at full capacity to maintain designed occupied heating setpoint.	D: 3Δ°F (1.6Δ°C)/hr R: 0 to 120Δ°F (0 to 66.6Δ°C)/hr
Heating Design Temp – The geographically-based outdoor air temperature at which the heating system must run constantly to maintain comfort. This information is available in ASHRAE publications and most design references.	D: 0°F/C R: -100 to 150°F (-73.3 to 65.5°C)
Cooling Capacity – Used for Optimal Start, this is the rate at which the space temperature changes when cooling system runs at full capacity to maintain designed occupied cooling setpoint.	D: 3Δ°F (1.6Δ°C)/hr R: 0 to 140Δ°F (0 to 77.7Δ°C)/hr
Cooling Design Temp – The geographically-based outdoor air temperature at which the cooling system must run constantly to maintain comfort. This information is available in ASHRAE publications and most design references.	D: 100°F (37.7°C) R: -100 to 150°F (-73.3 to 65.5°C)
Hysteresis – The desired difference between the temperature at which the zone color changes as the space temperature departs from the acceptable range between the heating and cooling setpoints (green) into the Cooling 1 (yellow) or Heating 1 (light blue) and the temperature at which the zone color changes back to the acceptable range between the heating and cooling setpoints. For example, the following graph shows the zone color that results as the space temperature departs from and returns to the acceptable range in a zone with the following settings: • Color Change Hysteresis = .5Δ°F (.27Δ°C) (applies as the temperature returns to the acceptable range) • Occupied cooling setpoint = 76°F (24.4°C) • Occupied heating setpoint = 70°F (21.1°C) **NOTE** The values in the graph below are Fahrenheit. 	D: 0.5Δ°F (.27Δ°C) R: 0 to 120Δ°F (0 to 66.6Δ°C)

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Learning Adaptive Optimal Start

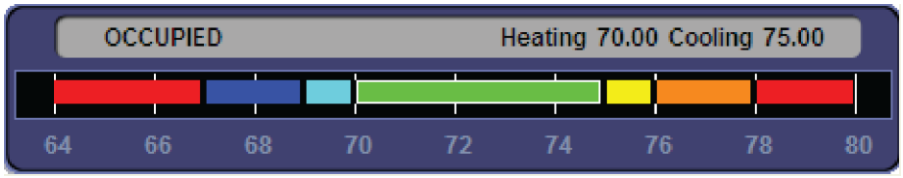


When the Learning Adaptive Optimal Start algorithm runs, the learned heating capacity or learned cooling capacity values are adjusted based on the color that is achieved when occupancy begins. The adjustment amounts for each color are displayed in the thermographic color fields (shown above with English default values).

Point Name/Description	**Range** **English**	**Metric**
Red – The amount the zone's learned heating capacity is adjusted when the Learning Adaptive Optimal Start algorithm runs, when the zone's thermographic color at occupancy is red.	D: 0.1900 R: 0 to 1	.1055
DkBlue – The amount the zone's learned heating capacity is adjusted when the Learning Adaptive Optimal Start algorithm runs, when the zone's thermographic color at occupancy is dark blue.	D: 0.1300 R: 0 to 1	.0722
LtBlue – The amount the zone's learned heating capacity is adjusted when the Learning Adaptive Optimal Start algorithm runs, when the zone's thermographic color at occupancy is light blue.	D: 0.0600 R: 0 to 1	.0333
Green – The amount the zone's learned heating capacity is adjusted when the Learning Adaptive Optimal Start algorithm runs, when the zone's thermographic color at occupancy is green.	D: 0.0600 R: 0 to 1	.0333
SpGrn – The amount the zone's learned cooling capacity is adjusted when the Learning Adaptive Optimal Start algorithm runs, when the zone's thermographic color at occupancy is green.	D: 0.0600 R: 0 to 1	.0333
Yellow – The amount the zone's learned cooling capacity is adjusted when the Learning Adaptive Optimal Start algorithm runs, when the zone's thermographic color at occupancy is yellow.	D: 0.0600 R: 0 to 1	.0333
Orange – The amount the zone's learned cooling capacity is adjusted when the Learning Adaptive Optimal Start algorithm runs, when the zone's thermographic color at occupancy is orange.	D: 0.1300 R: 0 to 1	.0722
Red – The amount the zone's learned cooling capacity is adjusted when the Learning Adaptive Optimal Start algorithm runs, when the zone's thermographic color at occupancy is red.	D: 0.1900 R: 0 to 1	.1055

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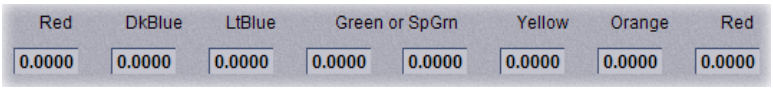
Effective Setpoints



The **Effective Setpoints** graph shows the current occupied or unoccupied setpoints. If occupied, these values are the current programmed setpoints plus the offset of any setpoint adjustment that may be in effect. If unoccupied, the values are the programmed unoccupied setpoints. The values in the above graphic are Fahrenheit.

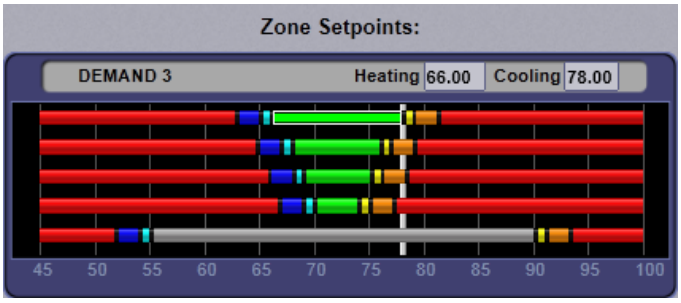
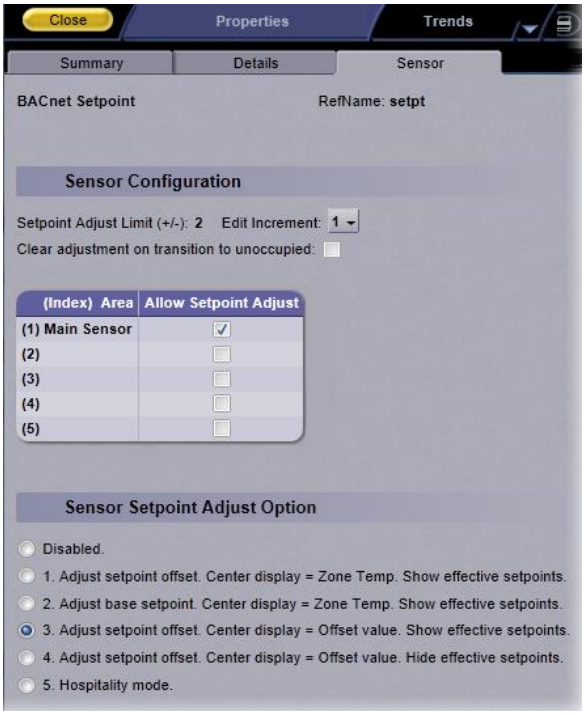
Point Name/Description	Default/Range
Heating – (Occupied or Unoccupied, depending on mode) The current programmed **Heating** setpoint adjusted by any offset that may be in effect.	R: 0 to 120°F (-17.7 to 48.9°C)
Cooling – (Occupied or Unoccupied, depending on mode) The current programmed **Cooling** setpoint adjusted by any offset that may be in effect.	R: 0 to 120°F (-17.7 to 48.9°C)
Learned cooling capacity – The cooling capacity learned by Learning Adaptive Optimal Start that is required to bring the space temperature down to the occupied cooling setpoint prior to the occupied time.	R: _°F/C
Learned heating capacity – The heating capacity learned by Learning Adaptive Optimal Start that is required to bring the space temperature up to the occupied heating setpoint prior to the occupied time.	R: _°F/C
Min Setpoint Separation – Minimum separation that must be maintained between the heating and cooling setpoints. May be adjusted at **Configuration** > **Service Configuration** > **Min Setpoint Separation**. See the *Service Configuration* (page 56) for additional detail.	R: _°F/C
Optimal Start – The number of hours prior to occupancy, at which the Optimal Start function may begin to adjust the effective setpoints to achieve the occupied setpoints by the time scheduled occupancy begins. Enter 0 to disable Optimal Start. **NOTE** Optimal Start is automatically disabled when occupancy is controlled by a network write to the controller's keypad_ovrde variable. (Display name: **BAS On/Off**, in **Properties** > **Control Program** > **Maintenance** > **Occupancy** > **BAS On/Off**. or when utilizing **Airside Linkage** or the **System Occupancy Network Variable**.	D: 1 hr R: 0 to 4 hrs

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Point Name/Description	Default/Range
Optimal Start Type – The method used to change from unoccupied to occupied setpoint. Options: **None*** – Unit will not change to occupied setpoint until the scheduled time or the unit goes into an occupied mode. Setpoints do not ramp, but change immediately from unoccupied to occupied values. **Temp Compensated*** – Unit changes to occupied setpoints at a variable time prior to the occupied time, which is calculated by the current difference between space temperature and the appropriate heating or cooling setpoint. At that time, the setpoints do not ramp, but change immediately from unoccupied to occupied values. **Learning Adaptive Start** – Unit gradually changes to occupied setpoints by adjusting the unoccupied setpoints over a specified period of time to achieve the occupied setpoint by the time scheduled occupancy begins. ***When selecting **None** or **Temp Compensated**, you should set all **Learning Adaptive Optimal Start** transition factors to **0**, as shown below. 	D: Temperature Compensated None R: Temperature Compensated Learning Adaptive
Heat Start K factor (min/deg) – If **Optimal Start Type** is **Temp Compensated**, this is the time in minutes per degree that the equipment starts before the occupied period when the space temperature is below the occupied heating setpoint (including any setpoint offset).	D: 15.00 R: 0 to 99
Cool Start K factor (min/deg) – If **Optimal Start Type** is **Temp Compensated**, this is the time in minutes per degree that the equipment starts before the occupied period when the space temperature is above the occupied cooling setpoint (including any setpoint offset).	D: 15.00 R: 0 to 99

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Setpoints for ZS and wireless sensors

Setpoints for ZS and wireless sensors	
To configure setpoint properties for ZS or wireless sensors, **Ctrl+click** anywhere on the **Zone Setpoints:** graph at the top of the **Setpoints** section in order to access the **Properties** microblock popup. 	
In the popup, on the **Properties** > **Sensor** tab, configure ZS or wireless sensors for **Setpoint Adjust**. 	
Edit Increment – Amount of offset in degrees for each press of the up or down arrows on the ZS or wireless sensor for setpoint adjustment.	D: 1 R: 0.1 0.5 1
Allow Setpoint Adjust – Check to allow setpoint adjustments on the specified ZS or Carrier wireless sensor.	D: (1) enabled R: disabled/enabled
Sensor Setpoint Adjust Option – Check to select the ZS or wireless setpoint adjustment display.	D: 3

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Alarm Configuration

Navigation: i-Vu® / Field Assistant: **Properties** > **Equipment** > **Configuration** > **Alarm Configuration**

Point Name/Description	Default/Range
Space Temperature Alarm	
Occupied Alarm Hysteresis – This value is added to the occupied high effective setpoint and subtracted from the occupied low effective setpoint to establish the occupied high and low limits that the space temperature must exceed before an occupied SPT alarm is generated. The alarm returns to normal when the space temperature drops below the high effective setpoint or rises above the low effective setpoint. Not displayed unless SPT sensor is connected.	D: 5Δ°F (2.7Δ°C) R: 2 to 20Δ°F (1.1 to 11.1Δ°C)
Alarm Delay (min/deg) – Determines the amount of delay before an occupied space temperature alarm is generated when the controller transitions to the occupied mode. The delay time equals this value multiplied by the difference between the sensor temperature and occupied alarm setpoint plus 15 minutes. Not displayed unless SPT sensor is connected.	D: 10 minutes R: 0 to 30 minutes
Unoccupied Low SPT Alarm Limit –The value that the space temperature must drop below to generate a **Space Temperature Alarm** in the unoccupied mode. There is a fixed hysteresis of 1Δ°F (.5Δ°C) for return to normal. Not displayed unless SPT sensor is connected.	D: 45°F (7.2°C) R: 35 to 90°F (1.6 to 32.2°C)
Unoccupied High SPT Alarm Limit – The value that the space temperature must exceed to generate a **Space Temperature Alarm** in the unoccupied mode. There is a fixed hysteresis of 1Δ°F (.5Δ°C) for return to normal. Not displayed unless SPT sensor is connected.	D: 95°F (35°C) R: 45 to 100°F (7.2 to 37.7°C)
Supply Air Temperature Alarm	
Low SAT Alarm Limit – The value that the supply air temperature must drop below to generate a **Supply Air Temp Alarm**. There is a fixed hysteresis of 3Δ°F (1.6Δ°C) for return to normal.	D: 40°F (4.4°C) R: 15 to 90°F (-9.4 to 32.2°C)
High SAT Alarm Limit – The value that the supply air temperature must exceed to generate a **Supply Air Temp Alarm**. There is a fixed hysteresis of 3Δ°F (1.6Δ°C) for return to normal.	D: 140°F (60°C) R: 90 to 245°F (32.2 to 118.3°C)
Return Air Temperature Alarm	
Low RAT Alarm Limit – The value that the return air temperature must drop below to generate a **Return Air Temp Alarm**. There is a fixed hysteresis of 1Δ°F (.6Δ°C) for return to normal.	D: -65°F (-53.9°C) R: -65°F to 70°F (-53.9 to 21.1°C)
High RAT Alarm Limit – The value that the return air temperature must exceed to generate a **Return Air Temp Alarm**. There is a fixed hysteresis of 1Δ°F (.5Δ°C) for return to normal.	D: 245°F (118.3°C) R: 75 to 245°F (23.9 to 118.3°C)

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Point Name/Description	Default/Range
Outdoor Air Temperature Alarm	
Low OAT Alarm Limit – The **Outdoor Air Temperature** must drop below this value to generate an **Outdoor Air Temp Alarm**. There is a fixed hysteresis of 1Δ°F (.5Δ°C) for return to normal.	D: -65°F (-53.9°C) R: -65°F to 70°F (-53.9 to 21.1°C)
High OAT Alarm Limit – The **Outdoor Air Temperature** must exceed this value to generate an **Outdoor Air Temp Alarm**. There is a fixed hysteresis of 1Δ°F (.5Δ°C) for return to normal.	D: 245°F (118.3°C) R: 75 to 245°F (23.9 to 118.3°C)
Alarms Displayed on ZS or SPT Sensor (if optional sensor is connected)	
Fire/Smk Alarm – If set to display, shows the alarm indicator on the SPT Pro and SPT Pro Plus sensors, if the **Fire/Smoke Alarm** is active.	D: Ignore R: Ignore/Display
Space Temperature Alarm – If set to display, shows the alarm indicator on the SPT Pro and SPT Pro Plus sensors if the **Space Temperature** alarm is active.	D: Ignore R: Ignore/Display
Supply Air Temp Alarm – If set to display, shows the alarm indicator on the SPT Pro and SPT Pro Plus sensors if the **Supply Air Temp** alarm is active.	D: Ignore R: Ignore/Display
Return Air Temp Alarm – If set to display, shows the alarm indicator on the SPT Pro or SPT Pro Plus sensors if the **Return Air Temp** alarm is active.	D: Ignore R: Ignore/Display
Fan Failure Alarm – If set to display, shows the alarm indicator on the SPT Pro and SPT Pro Plus sensors, if the supply fan failure alarm is active.	D: Display R: Ignore/Display
Maintenance Displayed on ZS Sensor	
ZS Config Fault – If set to display, shows the maintenance indicator on the ZS Pro Sensor, if ZS Sensor is configured incorrectly.	D: Ignore R: Ignore/Display
Air Side Linkage Fault – If set to display, shows the maintenance indicator on a ZS Sensor with display, if the Airside Linkage is in a Fault condition.	D: Ignore R: Ignore/Display
Dirty Filter Alarm – If set to display, shows the alarm indicator on the communicating zone sensors, if a **Filter** alarm is active.	D: Display R: Ignore/Display
Net OAT Fault – If set to display, shows the maintenance indicator on a ZS Sensor, if the network outside air reading is not valid.	D: Ignore R: Ignore/Display
SPT Sensor Fault – If set to display, shows the maintenance indicator on a ZS Sensor with display, if the zone temperature sensor reading is not valid.	D: Ignore R: Ignore/Display

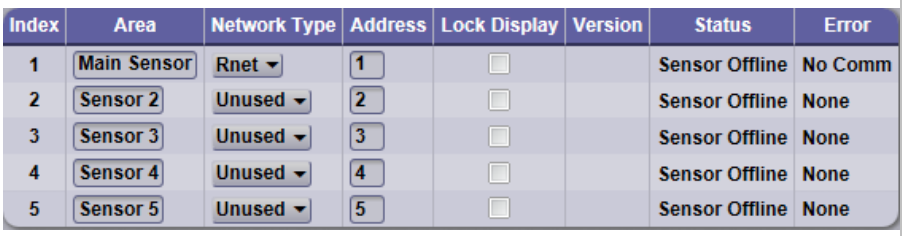
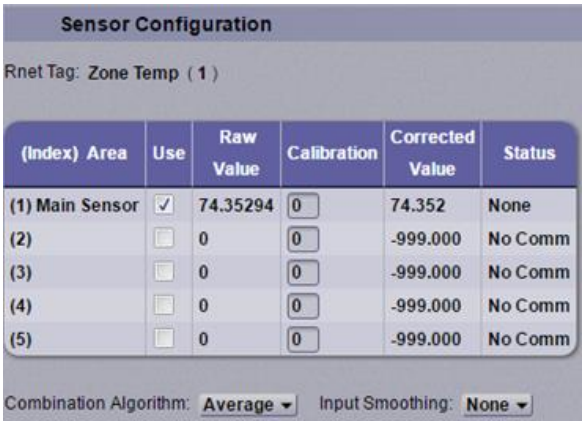
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Service Configuration

Navigation: i-Vu® / Field Assistant: **Properties** > **Equipment** > **Configuration** > **Service Configuration**

Point Name/Description	Default/Range
Function Type – Defines the type of operation for this device. **Monitor** mode uses SAT and fan status to determine and report the air source mode through Linkage to the zoning system. **Control** mode additionally provides outputs used to control a rooftop air source from information received from the zoning system through Linkage.	D: Monitor R: Monitor/Control
Fan Contact (off) State – Defines the off state for the **Fan Status Input** channel that is used to determine the state of the fan. It defines the contact state when the fan is off.	D: Open R: Open/Closed
Fan w/Heat – When set to **Enable**, the fan output is set to **On** immediately when any heat output is energized. This setting is primarily used for fan coils or residential-type electric heat equipment. Not displayed if **Function Type** is set to **Monitor**.	D: Enable R: Disable/Enable
Heat Type – The type of heating that the unit has. Not displayed if **Function Type** is set to **Monitor**.	D: Gas R: None Gas Electric
Number Of Heat Stages – The number of heat stages. Not displayed if **Function Type** is set to **Monitor**.	D: Two Stages R: One Stage Two Stages
Number Of Cool Stages – The number of cool stages. Not displayed if **Function Type** is set to **Monitor**.	D: Two Stages R: One Stage Two Stages
Min Setpoint Separation – Minimum separation that must be maintained between the heating and cooling setpoints. Not displayed if **Function Type** is set to **Monitor**.	D: 4Δ°F (2.2Δ°C) R: 2 to 10Δ°F (1.1 to 5.5Δ°C)
Fire/Smk Detector Input – Set to **Enable** to activate the fire/smoke detector contact wired to the equipment. This must be a normally closed contact input for normal operation.	D: Disable R: Disable/Enable
Input Ch #5 Function – Determines the function of the input connected to channel #5.	D: Filter Status R: Filter Status/Press Input
Press Contact (normal) State – The non-alarming state for the pressure contact.	D: Open R: Open/Closed
Filter Monitor Type – Used to select the method that determines a dirty filter if **Input Ch #5 Function** is set to **Filter Status**. Not displayed if **Input Ch #5 Function** is set to **Press Input**.	D: Timer R: Switch/Timer
Filter Switch (clean) State – The non-alarming state for the filter switch.	D: Open R: Open/Closed

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Point Name/Description	Default/Range
Sensor Binder / Zone Temp **Ctrl+click** on the name of these properties to access the microblock popup **Properties** page > **Details** tab. See below for instructions on configuring your ZS or wireless sensors. See the microblock Help for more detailed explanations.	
Sensor Binder - Use the **Associated Sensors** table to configure the Rnet to use additional ZS or wireless sensors.  • **Network Type** - Set to **Rnet** • **Address** - Enter the DIP switch settings that are on the additional ZS sensors (up to 5 total) or RnetID assigned to each wireless sensor in SensorBuilder • **Lock Display** - Check to make the sensor display-only	D: **(Index)** - (1) **Network Type** - Rnet **Address** - 1
Zone Temp - Configure additional ZS or wireless temperature sensors used on the controller.  • **Use** - Check to include ZS or wireless sensors' value in the **Combined Algorithm** (**Average** is the default). • **Raw Value** - Displays sensed temperature for each ZS or wireless temperature sensor's address • **Calibration** - If needed, enter value to adjust the **Corrected Value** from the **Raw Value**, in order to calibrate an individual ZS or wireless sensor's sensed value. • **Combination Algorithm** - Use **Average**, **Maximum**, or **Minimum** zone temperature to calculate the **Corrected Value** for temperature control.	D: **(Index) Area** - (1) Main Sensor **Use -** checked **Calibration** - 0 **Combination Algorithm** - Average **Input Smoothing** - None **Show on Sensors** - Calculated Value **Display Resolution** - 1 **COV Increment** - .1
WS Battery Strength % — Displays charge strength indicated on the wireless space temperature sensor. If there are multiple wireless sensors, it displays the lowest value.	R: _%

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Point Name/Description	Default/Range
WS Signal Strength % — Displays radio signal strength of the wireless space temperature sensor. If there are multiple wireless sensors, it displays the lowest value.	R: _%
WS Sensed Occupancy — Displays occupancy status detected by wireless infrared motion sensor.	R: Off/On
ZS model to show on graphic – Select the ZS model, from the drop-down list, that you want to display on the graphic.	D: ZS Pro-F model R: ZS Base model ZS Plus model ZS Pro model ZS Pro-F model
WS model to show on graphic – Select the wireless model, from the drop-down list, that you want to display on the graphic.	D: WS Plus model R: WS Base model WS Plus model WS Pro model
Net Space Temp to show on graphic — Select the type of sensor to display on graphic.	D: Equipment Touch R: Network Temp Equipment Touch
Network SAT — Allows a supply air temperature value from another BACnet controller to be read over the network and used by this controller. The remote controller must be equipped with a supply air temperature sensor that is network-accessible. -999 indicates no value has been received and it will not be used.	D: -999°
Network Fan Status — Allows a fan status value from another BACnet controller to be read over the network and used by this controller. The remote controller must be equipped with a fan status value that is network-accessible.	D: Off
Network Static Pressure — Allows a supply duct static pressure value from another BACnet controller to be read over the network and used by this controller. The remote controller must be equipped with a static pressure sensor value that is network-accessible. -999 indicates no value has been received and it will not be used.	D: -999°
System Cool Demand Level – The system cool demand level being received over the network. Not displayed if **Function Type** is set to **Monitor**.	D: 0.00 R: 0 to 3
System Heat Demand Level – The system heat demand level being received over the network. Not displayed if **Function Type** is set to **Monitor**.	D: 0.00 R: 0 to 3
System Outdoor Air Temperature – Allows the outdoor air temperature value to be network readable when enabled. Requires controller be equipped with an outdoor air temperature sensor.	D: -999° R: N/A
System Fire / Smoke – Allows a smoke detector or fire alarm status value from another BACnet controller to be read over the network and used by this controller. The remote controller must be equipped with a value that is network-accessible. When received, this will cause a **Linkage Evacuation** mode to be sent to all zones within the system.	D: Off R: Off/On
System Pressurization – Allows a pressurization request value from another BACnet controller to be read over the network and used by this controller. The remote controller must be equipped with a value that is network-accessible. When received, this will cause a **Linkage Pressurization** mode to be sent to all zones within the system.	D: Off R: Off/On
System Occupancy – Allows reading and using another controller's occupancy status value over the network. The remote controller must have a network-accessible Occupancy Status point.	D: Unoccupied R: Unoccupied/Occupied

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Maintenance

Navigation: i-Vu® / Field Assistant: **Properties** > **Equipment** > **Maintenance**

Point Name/Description	Default/Range
Unit	
Occupancy Status – The controller's occupancy status as determined by a network schedule, a local schedule, or a timed override. Not displayed if **Function Type** is set to **Monitor**.	R: Unoccupied/Occupied
Temp Compensated Start or **Learning Adaptive Start** – Indicates the type of optimal start (if any) that is configured and whether the algorithm is active or inactive.	R: Inactive/Active
Space Temp Source – The source of the controlling space temperature value States: **Sensor Failure** – No valid space temperature or sensor status = failed **SPT Sensor** – An SPT sensor is connected to the controller's Rnet port **RAT/T55** – Using a RAT or T55 sensor wired to I/O terminal **Network** – A network temperature sensor is bound to the controller's space temperature AV **Airside Linkage** – The space temperature is from a linked terminal **Locked Value** –The controller's space temperature input has been manually locked at a value **T-Stat Linkage** – Space temperature shared via Thermostat Linkage **ZS Sensor** - A ZS sensor is connected to the controller's Rnet port **Wireless Sensor** - A Carrier wireless sensor is connected to the controller's Wireless Adapter, which is connected to the Rnet port **NOTE Network** and **T-Stat Linkage** are not applicable to this product.	R: Sensor Failure SPT Sensor RAT/T55 Network Airside Linkage Locked Value T-Stat Linkage ZS Sensor Wireless Sensor
Setpoint Adjustment – The amount that a user has adjusted the setpoints at a zone sensor. Not displayed if **Function Type** is set to **Monitor**.	R: 0 to 5Δ°F (0 to 2.7Δ°C)
Effective Heat Setpoint – The current heating setpoint. May include offsets from configured occupied/unoccupied setpoints resulting from **Optimal Start** to **Demand Limit**. Not displayed if **Function Type** is set to **Monitor**.	R: _°F/C
Effective Cool Setpoint – The current cooling setpoint. May include offsets from configured occupied/unoccupied setpoints resulting from **Optimal Start** to **Demand Limit**. Not displayed if **Function Type** is set to **Monitor**.	R: _°F/C
Supply Air Temperature Source – The source of the Supply Air Temperature. States: **N/A** – No sensor value associated with this device **Local** – A physical sensor is wired and connected to the appropriate input channel of this controller **Network** – A network sensor value provided to this controller **Linkage** – The sensor value from an active Linkage connection, such as Airside Linkage. **Locked Value** –The controller's sensor input is manually locked to a specific value **NOTE Linkage** is not applicable to this product.	R: N/A Local Network Linkage Locked Value

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Point Name/Description	Default/Range
Fan Status Source – The source of the fan status. States: **N/A** – No sensor value associated with this device **Local** – A physical sensor is wired and connected to the appropriate input channel of this controller **Network** – A network sensor value provided to this controller **Linkage** – The sensor value from an active Linkage connection, such as Airside Linkage. **Locked Value** –The controller's sensor input is manually locked to a specific value **NOTE N/A**, **Linkage** and **Locked Value** are not applicable to this product.	R: N/A Local Network Linkage Locked Value
Outdoor Air Temperature Source – The source of the OAT value. States: **N/A** – No sensor value associated with this device **Local** – A physical sensor is wired and connected to the appropriate input channel of this controller **Network** – A network sensor value provided to this controller **Linkage** – The sensor value from an active Linkage connection, such as Airside Linkage. **Locked Value** –The controller's sensor input is manually locked to a specific value **NOTE Linkage** is not applicable to this product.	R: N/A Local Network Linkage Locked Value
Heating Demand Level – The system heat demand level received over the network. Not displayed if **Function Type** is set to **Monitor**.	R: 0 to 3
Cooling Demand Level – The system cool demand level received over the network. Not displayed if **Function Type** is set to **Monitor**.	R: 0 to 3
G Fan Output – The current value of the controller's output used to start and stop the supply fan through the equipment's G fan terminal. Not displayed if **Function Type** is set to **Monitor**.	R: Off/On
Fan Status Input – The current value of the controller's input used to detect the fan status.	R: Open/Close
Active Cooling Stages – The number of cooling stages currently operating. Not displayed if **Function Type** is set to **Monitor**.	R: 0 to 2
Y1 Cooling Output – The current value of the controller's output used to start and stop the first stage of cooling through the equipment's Y1 terminal. Not displayed if **Function Type** is set to **Monitor**.	R: Off/On
Y2 Cooling Output – The current value of the controller's output used to start and stop the second stage of cooling through the equipment's Y2 terminal. Not displayed if **Function Type** is set to **Monitor**.	R: Off/On
Time Guard Delay – When set to **Active**, indicates that the required number of cooling stages calculated by the control, is greater than the currently active number of cooling stages, but additional stages cannot be enabled due to a minimum off-time requirement that has not expired. Not displayed if **Function Type** is set to **Monitor**.	R: Inactive/Active
Min Compressor Runtime – When set to **Active**, indicates that the required number of cooling stages calculated by the control is less than the currently active number of cooling stages, but stages cannot be disabled due to a minimum on-time requirement that has not expired. Not displayed if **Function Type** is set to **Monitor**.	R: Inactive/Active
Active Heating Stages – The number of heating stages currently operating. Not displayed if **Function Type** is set to **Monitor**.	R: 0 to 2

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Point Name/Description	Default/Range
W1 Heating Output – The current value of the controller's output used to start and stop the 1st stage of heating through the equipment's W1 terminal. Not displayed if **Function Type** is set to **Monitor**.	R: Off/On
W2 Heating Output – The current value of the controller's output used to start and stop the 2nd stage of heating through the equipment's W2 terminal. Not displayed if **Function Type** is set to **Monitor**.	R: Off/On
Min Heat Runtime - When set to **Active**, indicates that the required number of heating stages calculated by the control is less than the currently active number of heating stages, but stages cannot be disabled due to a minimum on-time requirement that has not expired Not displayed if **Function Type** is set to **Monitor**.	R: Inactive/Active
Reset Filter Alarm – Set this to **On** to reset an active **Filter Alarm** and restart the **Filter Service Alarm Timer**. After the alarm returns to normal, this automatically changes to **Off**.	D: Off R: Off/On
Input Channel #5 – The current state of the input (if present) connected to channel #5.	R: Open/Closed
Smoke Detector Contact – Displays the current state of the input channel used to monitor a normally closed smoke or fire detector contact. Not displayed if **Fire / Smk Detector Input** is set to **Disable**.	R: Normal/Closed Open/Alarm
Fire/Smk Shutdown – Displays the current state of the **System Fire/Smoke** network input.	R: Normal/Alarm
Pressurization – Displays the current state of the **System Pressurization** network input and /or the input channel state if **Input Ch #5 Function** is set to **Press Input**.	
Occupancy	
BAS On/Off – Determines the occupancy state of the controller and can be set over the network by another device or third party BAS. Options: **Inactive** – Occupancy is determined by a configured schedule. **Occupied** – The controller is always in the occupied mode. **Unoccupied** – The controller is always in the unoccupied mode. **NOTE** If **BAS On/Off** is set to either **Unoccupied** or **Occupied**, the **Optimal Start** routine is automatically disabled.	D: Inactive R: Inactive Occupied Unoccupied
Schedules – The controller's occupancy status based on the local schedule.	R: Unoccupied/Occupied
Pushbutton Override – **Active** indicates if a user pushed the sensor's override button to override the occupancy state.	R: Off/Active
Global Occupancy – The **System Occupancy** network input's current state.	R: Unoccupied/Occupied

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Alarms

Navigation: i-Vu® / Field Assistant: **Properties** > **Equipment** > **Alarms**

Point Name/Description	Range
Fire / Smoke Shutdown – Indicates if the network **Fire / Smoke Shutdown** is in an alarm state.	Normal/Alarm
Pressurization – Indicates that the smoke control **Pressurization** mode is active.	Normal/Alarm
Space Temperature – Indicates if the space temperature sensor exceeds the high or low alarm limit.	Normal/Alarm
Alarming Temperature – Indicates the space temperature value that caused the space temperature alarm. Not displayed if **Space Temperature** is set to **Normal**.	Sensor's range
Alarm Limit Exceeded – Indicates the space temperature alarm limit that was exceeded and caused the space temperature alarm to occur. Not displayed if **Space Temperature** is set to **Normal**.	-60 to 250°F (-51.1 to 121.1°C)
SPT Sensor – Indicates if the SPT space temperature sensor fails to communicate with this controller after having successfully communicated previously. (Only displayed if SPT sensor is connected and has communicated successfully.)	Normal/Alarm
ZS Temp Sensor – Indicates if the ZS communicating zone temperature sensor is no longer communicating.	Normal/Alarm
ZS/WS Sensor Configuration– Indicates a configured ZS or wireless sensor is no longer communicating.	Normal/Alarm
Wireless Battery Strength – Indicates at least one Carrier wireless sensor is reporting that the remaining charge in the capacitor is low and below 5%. The wireless sensor needs more light to charge or requires an additional battery. There is a fixed hysteresis of 2% for return to normal.	Normal/Alarm
Wireless Signal Strength – Indicates that at least one Carrier wireless sensor is reporting the radio strength is less than 10%. Check the sensor or relocate to a different location for improved signal strength. There is a fixed hysteresis of 5% for return to normal.	Normal/Alarm
Space Temp Sensor – Indicates if the space temperature sensor fails.	Normal/Alarm
Supply Fan – Indicates an alarm condition if the supply fan's status fails to match the fan's commanded state when ON. (Only applicable if Input Ch#5 is set to **Fan Status**.)	Normal/Alarm
Supply Air Temperature – Indicates if the supply air temperature exceeds the high temperature alarm limit or drops below the low temperature alarm limit.	Normal/Alarm
Return Air Temperature – Displays the current return air temperature sensor exceeds the high or low alarm limit.	Normal/Alarm
Outdoor Air Temperature – Indicates if the outdoor air temperature exceeds the high temperature alarm limit or drops below the low temperature alarm limit.	Normal/Alarm
OAT Sensor – Indicates the controller is no longer receiving a valid network outdoor air temperature value.	Normal/Alarm
Filter – Indicates a dirty filter condition when the filter runtime exceeds the value of the **Filter Service Alarm Timer** or the **Input Channel#5** indicates a dirty filter is present (if configured).	Clean/Dirty
Airside Linkage – Indicates the controller is no longer actively linked to the zoning system after having previously been communicating.	Normal/Alarm

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Linkage

Navigation: i-Vu® / Field Assistant: **Properties** > **Equipment** > **Linkage**

Point Name/Description	Range
Airside Linkage	
Airside Linkage – If **Active**, the controller is part of a linked system. If **Not Active**, the controller is a stand-alone device.	R: Not Active/Active
Linkage Collector – Available to view the data received from a zoning system and the equipment information sent back to the zoning system through Linkage.	
Air Source Mode – Displays the operating mode of this equipment as reported to Linkage. **Airside Linkage** must be **Active**.	R: Off Warmup Heat Cool Freecool Pressure Evac Vent
Air Source Supply Air Temp – Displays the **Supply Air Temperature** value reported to Linkage. **Airside Linkage** must be **Active**.	R: -56 to 245°F (-48.9 to 118.3°C)
Air Source Static Pressure – Displays the air source's supply air static pressure when **Airside Linkage** is **Active** and a valid static pressure value exists.	R: 0:00 to 9.99 in H_2O (0 to 2.465 kPa)
Air Source Outdoor Air Temp – Displays the air source's OAT when **Airside Linkage Status** is **Active** and a valid outdoor air temperature value exists.	R: -56 to 245°F (-48.9 to 118.3°C)
Occupancy Status – The controller's occupancy status as received from **Airside Linkage**. **Airside Linkage** must be **Active**.	R: Unoccupied/Occupied
Linkage Optimal Start – When active, indicates that one or more of the zones connected to this equipment is in an **Optimal Start** mode. **Airside Linkage** must be **Active**.	R: Inactive/Active
Space Temperature – The value of the space temperature received from the zoning system. **Airside Linkage** must be **Active**.	R: __°F
Space Relative Humidity – The value of the space relative humidity received from the zoning system. **Airside Linkage** must be **Active**.	R: _%RH
Indoor Air CO2 – The value of the indoor air CO_2 level received from the zoning system. Linkage **Indoor Air CO2** is displayed when **Airside Linkage** is **Active** and a valid IAQ value exists in at least one zone.	R: _ppm
Occupied Cooling Setpoint – The value of the occupied cooling setpoint received from the zoning system. **Airside Linkage** must be **Active**.	R: __°F
Occupied Heating Setpoint – The value of the occupied heating setpoint received from the zoning system. **Airside Linkage** must be **Active**.	R: __°F
Unoccupied Cooling Setpoint – The value of the unoccupied cooling setpoint received from the zoning system. **Airside Linkage** must be **Active**.	R: __°F
Unoccupied Heating Setpoint – The value of the unoccupied heating setpoint received from the zoning system. **Airside Linkage** must be **Active**.	R: __°F

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I/O Points

Navigation: i-Vu / Field Assistant: **Properties** > **I/O Points**

WARNINGS

- Do not change the **Value**, **Offset/Polarity**, **Exp:Num**, **I/O Type**, **Sensor/Actuator Type**, **Min/Max**, or **Resolution** I/O configuration parameter for the points listed below. Changing these parameters could cause improper control and/or equipment damage.
- Use extreme caution if locking a point as this may also cause improper control and/or equipment damage.

Point Name/Description	Default/Range
Zone Temp / Zone Temp (SPT Standard, SPT Plus, SPT Pro, and SPT Pro Plus sensors only). Sensor configurations on the microblock's **Properties** > **Details** tab are listed below. For more information, see the *Carrier Sensors Installation Guide*. **NOTE** Do not edit settings on the **Zone Temp** microblock on the right.	R: -56 to 245°F (-48.9 to 118.3°C)
Sensor Type: **Min Present Value** - Minimum present value the sensor transmits before indicating an alarm.	D: 45°F (7.2°C)
Max Present Value - Maximum present value the sensor transmits before indicating an alarm.	D: 96°F (35.5°C)
Setpoint Adjustment: **Max Adjust** – The amount that a user may adjust the setpoint at the sensors.	D: 5Δ°F (2.7Δ°C) R: 0 to 15Δ°F (0 to 8.3Δ°C)
Reset setpoint adjust to zero when unoccupied - Resets the setpoint bias to zero when the controller transitions to unoccupied..	D: Off
Timed Local Override: **Allow Continuous** (SPT Pro only) – If checked, a user can press the sensor's local override button until the **Max Accum** value is reached, then press one more time to have a continuous override until the next occupied period or until the user cancels the override. The display shows **On** during a continuous override.	D: Off R: Off/On
Each Pulse – The amount of time added to the total override time when a user pushes the sensor's override button.	D: 30:00 mm:ss R: 0:00 to 1440:00 mm:ss
Max Accum – The maximum amount of override time accumulated when a user pushes the sensor's override button.	D: 240:00 mm:ss R: 0:00 to 2000:00 mm:ss
Cancel override – How long a user must push the sensor's override button to cancel an override.	D: 3 seconds R: 0 to 60 seconds

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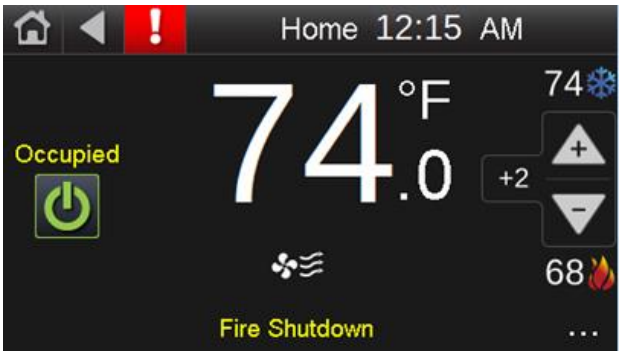
Point Name/Description	Default/Range
Sensor Array: **Sensor calculation method -** When using multiple SPT sensors, select the process variable to be passed to the controller..	D: Avg R: Avg, Min, Max
BACnet configuration: **Network Visible -** Must be enabled for other BACnet objects to read or write to this point, and for this point to generate alarms.	D: Enabled
Object Name - Do not change.	D: zone_temp
SAT Sensor – The value of the controller's supply air temperature sensor input, prior to any operator-configured **Calibration Offset**.	R: -56 to 140°F (-48.9 to 60°C)
RAT Sensor – The value of the controller's return air temperature sensor input, prior to any operator-configured **Calibration Offset**.	R: -56 to 245°F (-48.9 to 118.3°C)
OAT Sensor – The value of the controller's outdoor air temperature sensor input, prior to any operator-configured **Calibration Offset**.	R: -56 to 245°F (-48.9 to 118.3°C)
WS Battery Strength % — Displays charge strength indicated on the wireless space temperature sensor. If there are multiple wireless sensors, it displays the lowest value.	R: _%
WS Signal Strength % — Displays radio signal strength of the wireless space temperature sensor. If there are multiple wireless sensors, it displays the lowest value.	R: _%
Zone Temp – The value provided by the controller's ZS or wireless sensor (if present).	R: _F°
Fan Status Input – The current value of the controller's fan status input.	R: Open/Closed
Input Channel #5 – The current state of the input (if present) connected to channel #5.	R: normal/reversed
Fire/Smk Detect Input – The current state of the smoke detector input (if present).	R: Normal/Closed Alarm/Open
Sensor Invalid – This internal input monitors the communication between the controller and the SPT sensor. **Off** indicates communication is normal.	R: On/Off
WS Sensed Occupancy — Displays occupancy status detected by wireless infrared motion sensor.	R: normal/reversed
G Fan Output – The current value of the controller's G fan output.	R: On/Off
Y1 Cooling Output – The current value of the controller's Y1 cooling output.	R: On/Off
Y2 Cooling Output – The current value of the controller's Y2 cooling output.	R: On/Off
W1 Heating Output – The current value of the controller's W1 heating output.	R: On/Off
W2 Heating Output – The current value of the controller's W2 heating output.	R: On/Off

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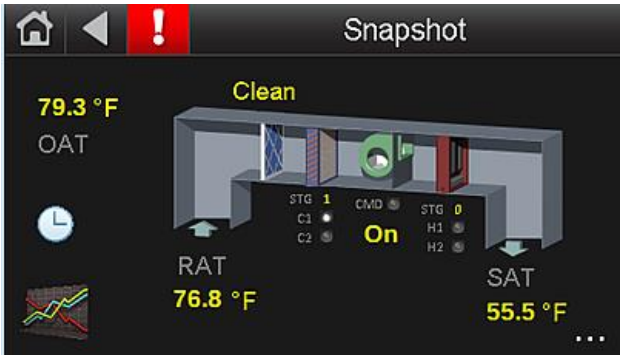
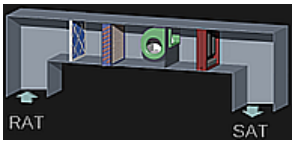
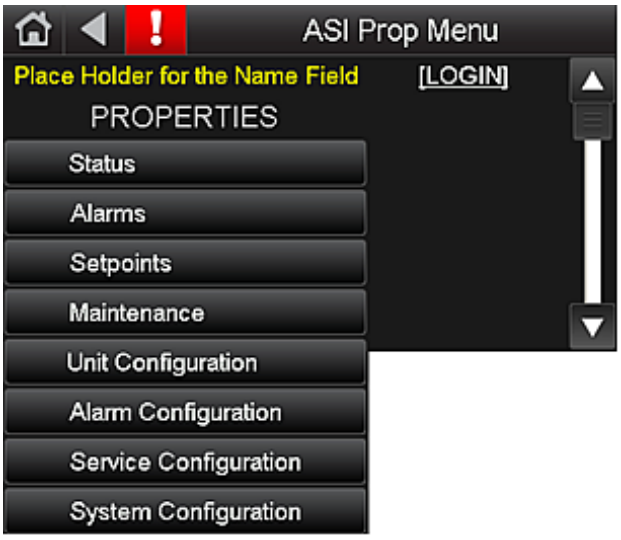
Appendix D: ASI for AppController Points/Properties on the Equipment Touch

NOTE Engineering units shown in this document in the defaults and ranges are strictly for reference. You must enter an integer only.

Navigation screens

Screen Names	Display	Details
Standby	 Not an interactive screen. Touch anywhere to advance to **Home** screen.	Screen displays after the **Inactivity Timer** expires (default is 5 minutes). Displays: • Space temperature • Current setpoints • Mode - Cooling, Fan Speed, Economizer • Occupancy
Home	 Click ... on the right to navigate to **Snapshot** screen.	Displays: • Space temperature • Current setpoints • Mode - Cooling, Fan Speed, Economizer • Occupancy Allows: • Pushbutton Override • Space Setpoint Offset Adjustment

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Screen Names	Display	Details
Snapshot	 Displays: • SAT, if allowed • OAT, if available and allowed • Coil and coil stages 	Navigates to: • Schedules • Trends • Forward to **ASI Properties Menu** screen - click ... on the right Displays: • Fan command • Filter status
ASI Properties Menu		Navigates to **Property** pages Login with one of the following passwords: ○ User level - type `user` ○ Admin level - type `admin` ○ Factory level - type `Touch` **NOTE** Only the buttons that are authorized for a specific password level are visible.

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Document revision history

Important changes to this document are listed below. Minor changes such as typographical or formatting errors are not listed.

Date	Topic	Change description	Code*
9/20/21	Wiring devices to the controller's Rnet port	Removed hybrid wiring configuration for Rnet port	X-TS-AK-E
8/19/20	Cover, What is the Air Source Interface application	Updated company logo	C-D
1/23/19	Wiring devices to the controller's Rnet port	Removed star configuration from the first paragraph.	X-TS-TS-O
	Specifications	Added surge CAUTION to Protection specification.	X-TS-AK-E-CC
10/26/18	Wiring inputs and outputs > Input wiring specifications	Removed SPT sensor from Input wiring table, added TruVu™ ET Display, and referred user to the device's Installation and Start-up Guide.	C-D
	Wiring devices to the controller's Rnet port	Combined overview and wiring on the zone sensors and touchscreen devices. Added TruVu™ ET Display.	C-D
	Specifications	Reworded Rnet port specification and added power supplied by Rnet port. Reworded Protection specification and added first paragraph. .	X-H-JS-O
3/14/18	Sequence of Operation > Supply Air Temperature Points and Properties	Hysteresis corrected	C-AE-WB-E
12/14/17	Analog outputs	New topic - analog outputs are not used in this application, but could be in a custom application.	C-AE-ZL-E-WB
2/15/17		Changed name of sensors from WS to wireless.	C-D
2/8/17		ASI application changed from using the UC Open to using the AppController. ARC156, ZS sensors, wireless sensors, and Equipment Touch capabilities added. Hardware topics and Properties updated.	C-D-WB

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City Council
STAFF REPORT
City of Glenwood Springs
April 20, 2023

Agenda Item: Award Request for Proposal 2023-13P Water Treatment Plant Roof, Door, and Window Replacement

Action Requested: Council Approval to Award the Request for Proposal 2023-13P Water Treatment Plant Roof, Door, and Window Replacement to Ford Construction

Department: Public Works

Presented By: Matthew Langhorst

Strategic Goals: Preserve and Improve Infrastructure

Background Info: The City of Glenwood Springs Water Plant has a long history of structural issues. The plant at one point in the early 80's was actually condemned due to the entire facility settling and causing major structural damage to the concrete panel construction. Staff worked with consultants and corrected the settlement issue, but the exterior of the plant was left with concrete panels that did not align correctly and with a roof that required resealing. It was determined at the time that the best way to correct the exterior issues was to spray foam over the whole exterior of the plant and then elastomeric paint the foam for an insulated "siding" of sorts. This same process was completed on the roof, which was then covered with an elastic roof membrane. This process was completed around 40 years ago and the materials held up better than expected during that time, but they are now in need of removal and replacement. Staff, along with Land and Shelter Architecture, created a plan to remove and replace the existing roof and siding with metal-clad insulated panels, replace the roof with a proper membrane material and replace all of the doors and windows in the facility. These products will improve the insulation factor of the building, provide a steel cover for the roof and siding, along with correcting several vent and electrical panel issues on the exterior of the building. RFP 2023-13P was put out to bid and one bid was received for the work. Ford Construction Company bid on the project at an overall cost of $559,984. Staff and Ford have worked on clarifications to the bid, such as how material escalations will be handled, how will asbestos removal air monitoring be accomplished, work hours for the project interior and exterior, traffic control bid price and what is the plan for removing all of the spray foam and keep it contained at the same time. Ford has answered all of the questions to the satisfaction of City staff and we would like to move forward with Ford as the awarded contractor. Staff had budgeted $500,000 in 2023 for this project, which would leave us $59,984 short of the bid, but staff also budgeted $600,000 for the 10 year maintenance of the waste water plant in 2023. With cost savings at the waste water plant, we feel comfortable moving $100,000 from the Waste Water Plant budget to the Water Plant Budget. This will give us a small cushion for cost increases and change orders that may come up during construction for unforeseen items.

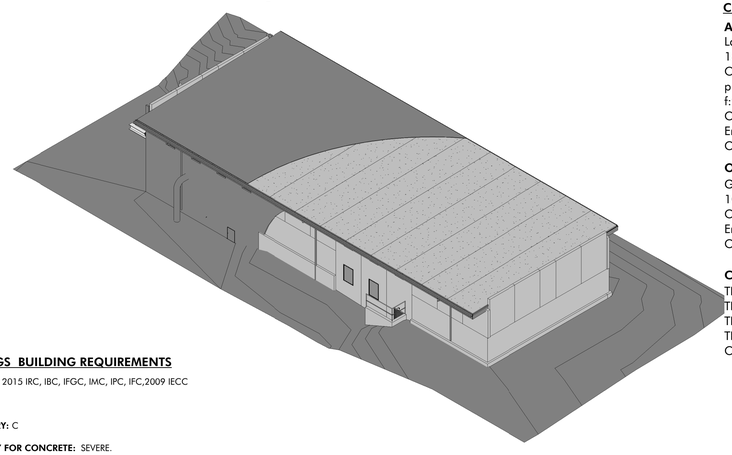
Issues: None

Fiscal Impact: Approximately $600,000 from the Water/Wastewater Enterprise Fund.

Legal Review: Legal will be involved in the agreement.

Staff Recommendation: Staff is Recommending Award of Request for Proposal 2023-13P Water Treatment Plant Roof, Door, and Window Replacement to Ford Construction Company per the Attached Bid.

GLENWOOD SPRINGS
WATER FILTER PLANT
BID/PERMIT



ABBREVIATIONS

A.F.F.	ABOVE FINISH FLOOR	INFO.	INFORMATION
ADJ.	ADJUSTABLE	INSUL.	INSULATION
ALT.	ALTERNATE	JST.	JOIST
A.B.	ANCHOR BOLTS	L.L.	LIVE LOAD
&	AND	LONGINT.	LONGITUDINAL
ARCH.	ARCHITECTURAL	N.I.C.	NOT IN CONTRACT
@	AT	O.C.	ON CENTER
BM.	BEAM	OPP.	OPPOSITE
BM. PKT.	BEAM POCKET	O/	OVER
BRG.	BEARING	PTD.	PAINTED
BLK'G.	BLOCKING	PERF.	PERFORATED
BOT.	BOTTOM	PL.	PLATE
B.F.	BOTTOM OF FOOTING	PLY.	PLYWOOD
BLDG.	BUILDING	PROP. LINE	PROPERTY LINE
B.O.	BY OWNER	REINF.	REINFORCEMENT
CAB.	CABINET	RDWD.	REDWOOD
CLG.	CEILING	REQ'D.	REQUIRED
CL.	CENTER LINE	RESIL.	RESILIENT
C.T.	CERAMIC TILE	REV.	REVISED
CLR.	CLEAR	S.M.	SHEET METAL
COL.	COLUMN	SIM.	SIMILAR
CONC.	CONCRETE	S.F. OR SQ. FT.	SQUARE FEET
CONN.	CONNECTION	STD.	STANDARD
CONT.	CONTINUOUS	STL.	STEEL
DTL.	DETAIL	STDS.	STUDS
DBL.	DOUBLE	THK.	THICK
DWL.	DOWEL	TLT.	TOILET
E.W.	EACH WAY	T.F.	TOP OF FOOTING
ELEV. OR EL.	ELEVATION	T.P.	TOP OF PLATE
EXIST'G	EXISTING	T.L.	TOP OF LEDGE
EXT.	EXTERIOR	T.W.	TOP OF WALL
F.F.	FINISHED FLOOR	TOT.	TOTAL
F.D.	FLOOR DRAIN	T.B.	TOWEL BAR
FLR.	FLOOR	TRANSV.	TRANSVERSE
FTG.	FOOTING	TYP.	TYPICAL
FND.	FOUNDATION	U.N.O.	UNLESS NOTED OTHERWISE
GA.	GAUGE	V.I.F.	VERIFY IN FIELD
G.L.	GLU-LAM	VERT.	VERTICAL
G.W.B.	GYPSUM WALL BOARD	V.W.C.	VINYL WALL COVERING
G.S.	GAS STUB	W.C.	WATER CLOSET
HB.	HOSE BIB	W.H.	WATER HEATER
HT.	HEIGHT	W.P.	WATERPROOF
HK.	HOOK	W.R.	WATER RESISTANT
HORIZ.	HORIZONTAL	WIN.	WINDOW
HYD.	HYDRANT	W/	WITH
		WD.	WOOD

GLENWOOD SPRINGS BUILDING REQUIREMENTS

CODES AND STANDARDS: 2015 IRC, IBC, IFGC, IMC, IPC, IFC,2009 IECC

ROOF SNOWLOAD: 50 PSF

SEISMIC DESIGN CATEGORY: C

WEATHERING PROBABILITY FOR CONCRETE: SEVERE.

TERMITE INFESTATION PROBABILITY: NONE TO SLIGHT.

WIND SPEED: 90MPH

DECAY PROBABILITY: SLIGHT

WIND EXPOSURE: B

FROST DEPTH: 36IN.

WINTER DESIGN TEMPERATURE: -2F

AIR FREEZING INDEX: 2500. ICE SHIELD UNDERLAYMENT REQUIRED.

MEAN ANNUAL TEMPERATURE: 48F

CLIMATE ZONE: 5B (GARFIELD COUNTY)

INSULATION:

-WINDOWS/DOORS U=.37, TBL 402.1.1, 2021 IECC.

MINIMUM R-VALUES:
-ROOF R-VALUE 30ci

PROJECT DESCRIPTION

PROJECT SCOPE: INCLUDES REMOVING EXISTING EXTERIOR SPRAY FOAM SYSTEM ON ROOF AND EXTERIOR WALL SURFACES. RE-ROOF INCLUDES TPO, HD BOARD AND REQUIRED INSULATION. ALL EXTERIOR WALLS TO RECEIVE EXTERIOR INSULATION AND METAL WALL PANEL CLADDING. EXTERIOR DOORS AND WINDOWS TO BE REPLACED.

CONTACT INFORMATION

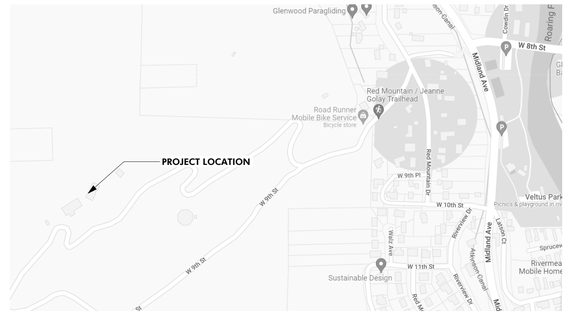
ARCHITECT:
Land+Shelter, Inc.
16TH NORTH 4TH STREET/ PO BOX 550
CARBONDALE, CO 81623
p:970-963-0201
f:970-963-0289
Contact: Andrea Korber
Email: andi@landandshelter.com
Cell Phone: 970-366-1582

OWNER :
GLENWWOD SPRINGS WATER DEPARTMENT
101 W 8th St, GLENWWOD SPRINGS,
CO 81601
Email: MATHEW.LANGHORST@COGS.US
Contact: MATHEW LANGHORST

CONTRACTOR:
TBD
TBD
TBD
TBD
Contact: TBD

DRAWING INDEX

GENERAL:		REVISION:
A1.0	COVER SHEET - PROJECT INFO./SCHEDULES	1
ARCHITECTURAL:		
A3.3	ROOF PLAN	
A4.0	ELEVATIONS	
A4.1	ELEVATIONS	
A7.0	WALL SECTIONS	
A8.1	DOOR & ROOF DETAILS	



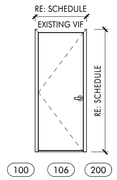
LOCATION MAP

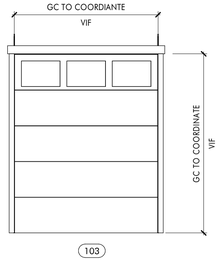
DOOR SCHEDULE

MARK	ROOM NUMBER	ROOM NAME	STYLE	NOMINAL SIZE WIDTH	NOMINAL SIZE HEIGHT	GLAZING	FIRE RATING	HARDWARE	DOOR SILL	DOOR JAMB	DOOR HEAD	NOTES
100	100	CORRIDOR	EXTERIOR SWING	4'-0"	7'-0"	NA	NA	1				VIF VERIFY OPENING SIZE TYP. FRAME AND DOOR PAINTED TO MATCH WINDOW/FASCIA AGED BRONZE.INSULATED DOOR
103	103	CHLORINE STORAGE	SECTIONAL OVERHEAD	8'-0"	10'-0"	YES		MFR				VIF VERIFY OPENING SIZE AND COORDIANTE FINAL SIZE. AGED BRONZE FINISH TO MATCH WINDOW FRAMES
106	106	MANIFOLD ROOM	EXTERIOR SWING	3'-0"	7'-0"	NA	NA	1				VIF VERIFY OPENING SIZE TYP. FRAME AND DOOR PAINTED TO MATCH WINDOW/FASCIA AGED BRONZE.INSULATED DOOR
200	200	PLANT CONTROL	EXTERIOR SWING	3'-0"	7'-0"	NA	NA	1				VIF VERIFY OPENING SIZE TYP. FRAME AND DOOR PAINTED TO MATCH WINDOW/FASCIA AGED BRONZE.INSULATED DOOR

WINDOW SCHEDULE

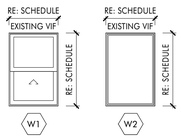
MARK	TYPE	ROOM NAME	ROOM NUMBER	FRAME SIZE FRAME WIDTH	FRAME SIZE FRAME HEIGHT	SASH OPERATION	WINDOW SILL	WINDOW JAMB	WINDOW HEAD	NOTES
36	W2			2'-9"	4'-1"	FIXED				VIF OPENING SIZE TYP. FRAME AGED BRONZE FINISH
37	W1	OFFICE	202	2'-9"	4'-1"	BOTTOM				VIF OPENING SIZE TYP. FRAME AGED BRONZE FINISH
38	W1	OFFICE	202	2'-9"	4'-1"	BOTTOM				VIF OPENING SIZE TYP. FRAME AGED BRONZE FINISH
39	W1	OFFICE	202	2'-9"	4'-1"	BOTTOM				VIF OPENING SIZE TYP. FRAME AGED BRONZE FINISH
40	W1	OFFICE	202	2'-9"	4'-1"	BOTTOM				VIF OPENING SIZE TYP. FRAME AGED BRONZE FINISH
41	W4	OFFICE	202	2'-9"	4'-6"	BOTTOM				VIF OPENING SIZE TYP. FRAME AGED BRONZE FINISH
42	W2	MANIFOLD ROOM	106	2'-9"	4'-1"	FIXED				VIF OPENING SIZE TYP. FRAME AGED BRONZE FINISH
43	W2			2'-9"	4'-1"	FIXED				VIF OPENING SIZE TYP. FRAME AGED BRONZE FINISH
44	W2	MANIFOLD ROOM	106	2'-9"	4'-1"	FIXED				VIF OPENING SIZE TYP. FRAME AGED BRONZE FINISH
45	W2	MANIFOLD ROOM	106	2'-9"	4'-1"	FIXED				VIF OPENING SIZE TYP. FRAME AGED BRONZE FINISH
46	W1	OFFICE	202	2'-9"	4'-1"	BOTTOM				VIF OPENING SIZE TYP. FRAME AGED BRONZE FINISH
47	W1	OFFICE	202	2'-9"	4'-1"	BOTTOM				VIF OPENING SIZE TYP. FRAME AGED BRONZE FINISH
48	W1	OFFICE	202	2'-9"	4'-1"	BOTTOM				VIF OPENING SIZE TYP. FRAME AGED BRONZE FINISH
49	W1	OFFICE	202	2'-9"	4'-1"	BOTTOM				VIF OPENING SIZE TYP. FRAME AGED BRONZE FINISH





DOOR HARDWARE SET #1
- 3 HINGES - BB1199, 4 1/2 4 1/2 NRP, US26D
- 1 LOCKSET - 3553 LEVER-ENTRY
- 1 CLOSER - 5100 ALM
- 1 KICKPLATE (PUSH SIDE) 190S 10"X32" US32D
- 1 WALL STOP 232 W/236W (AS REQ.) US32D
- 1 DOOR SWEEP 750S N X LAR, CLR
- 1 THRESHOLD 413S X LAR, MIL
- 1 LATCH GUARD 341C-US32D
- DOOR SILENCER 307D. GRAY (AS REQ)

HOLLOW METAL DOOR AND FRAME:
- 16 GAUGE WELDED FRAME
- 7 GAUGE HINGE REINFORCEMENT
- 12 GAUGE STRIKE PROTECTION
- 16 GAUGE DOOR LEAF
- INSULATED CORE
- FACTORY PRIMED FOR PAINT



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ARCHITECTURE AND PLANNING
16 North 4th Street, Carbondale, CO 81623
t 970.963.0201 info@landandshelter.com

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JULY 19.2022
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GLENWOOD SPRINGS
WATER FILTER PLANT
BID/PERMIT

NOT FOR CONSTRUCTION

Job Site:

GLENWOOD SPRINGS WATER
FILTER PLANT 81601

COVER SHEET - PROJECT INFO./SCHEDULES

Sheet Number:

A1.0

File: File Name.rvt 7/19/2022 9:50:06 AM

GENERAL NOTES:
1. ALL DIMENSIONS ARE TO FACE OF FRAMING UNLESS NOTED OTHERWISE
2. SNOW BREAKS SHOWN FOR GENERAL DESIGN INTENT. VERIFY FINAL PLACEMENT W/ MFR AND ARCH.
3. PROVIDE HEAT TAPE @ GUTTER, DOWNSPOUTS, & EAVES AS NECESSARY.
4. GUTTERS AND DOWNSPOTS AT EAVES, DOWNSPOUTS AS NEEDED. DOWNSPOUTS SHOWN ARE DIAGRAMATIC FOR PRICING. FINAL LOCATIONS TBD. COORDINATE FINAL DOWNSPOUT LOCATION WITH ARCHITECT.

KEY:

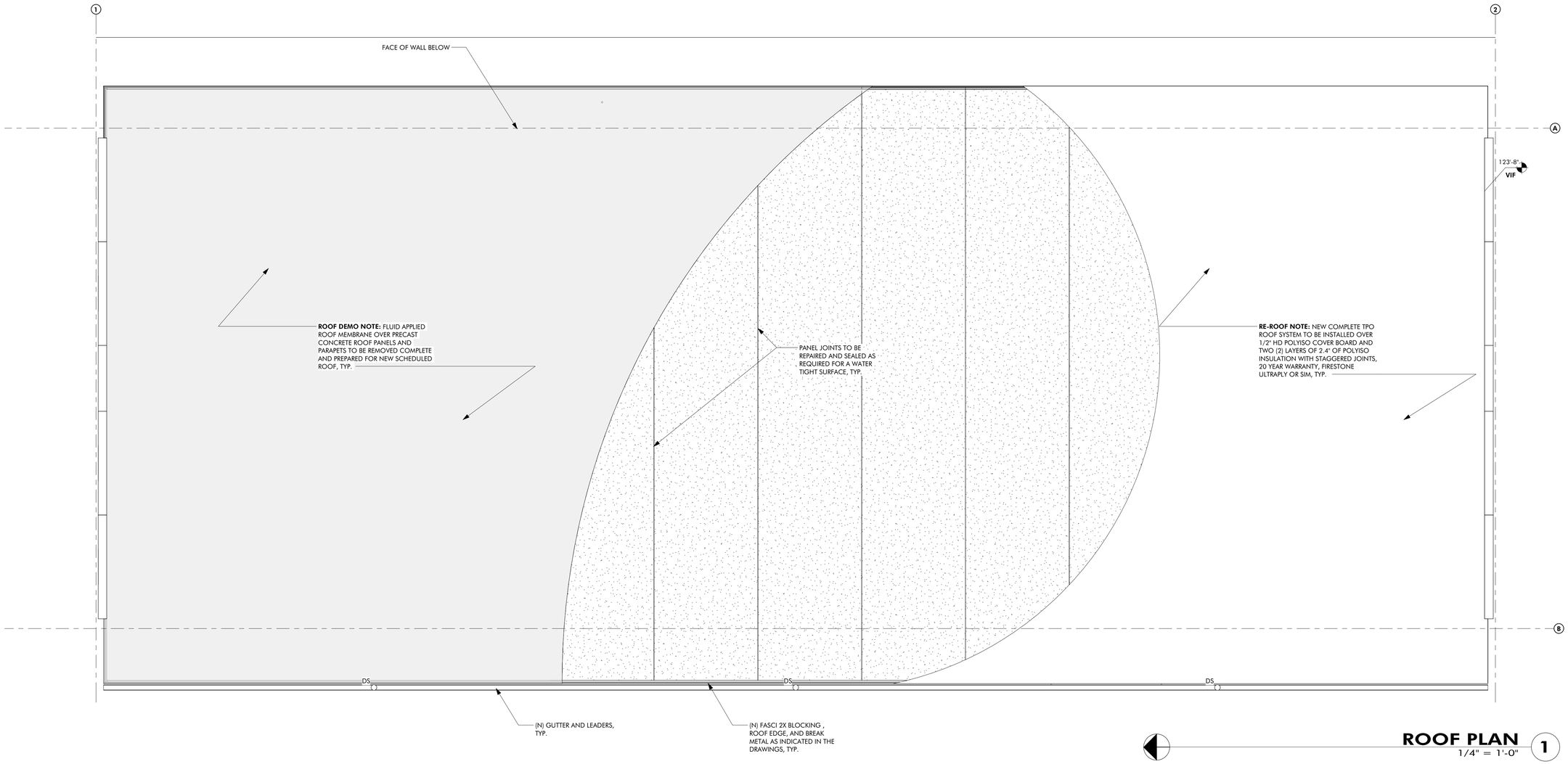
DS ○ DOWNSPOUT

MATERIAL LEGEND

(E) EXISTING SPRAY ON ROOF

(N) 60 MIL WHITE TPO ROOF

GENERAL NOTE: GC TO MAINTAIN 12'-0" CLEAR ZONE FROM FACE OF BUILDING ON ALL FOUR (4) SIDES DURING CONSTRUCTION FOR CLEAR ACCESS. THIS STRUCTURE WILL NOT STOP ACTIVITYS DURING CONSTRUCTION. ALL CUTTING AND SUCH ACTIVITIES ARE TO BE OUTSIDE THIS CLEAR ZONE.



ROOF PLAN 1
1/4" = 1'-0"

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BID/PERMIT
JULY 19.2022
Revisions

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GLENWOOD SPRINGS WATER FILTER PLANT BID/PERMIT

NOT FOR CONSTRUCTION

Job Site:

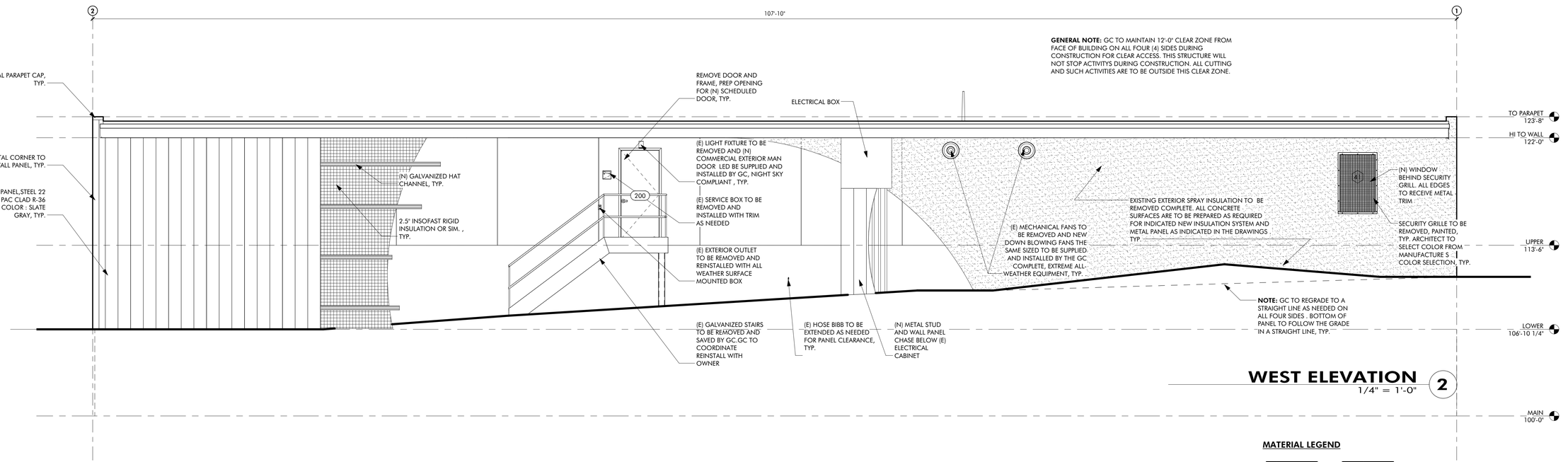
GLENWOOD SPRINGS WATER FILTER PLANT 81601

ROOF PLAN

Sheet Number:

A3.3

File: File Name.rvt 7/19/2022 9:50:07 AM



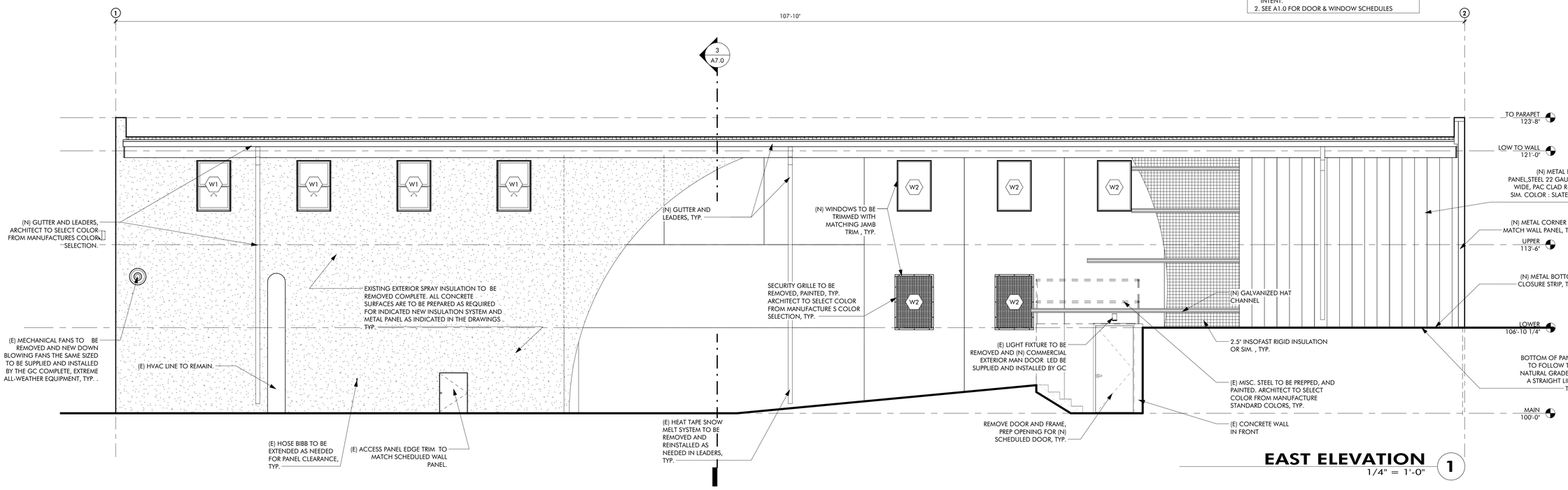
WEST ELEVATION 2

1/4" = 1'-0"

MATERIAL LEGEND

(E) SPRAY INSULATION — METAL WALL PANEL

GENERAL NOTES:
1. GC TO FIELD VERIFY ALL OPENING SIZES AND IS RESPONSIBLE FOR FINAL COORDINATON PER DESIGN INTENT.
2. SEE A1.0 FOR DOOR & WINDOW SCHEDULES



EAST ELEVATION 1

1/4" = 1'-0"

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GLENWOOD SPRINGS WATER FILTER PLANT BID/PERMIT

NOT FOR CONSTRUCTION

Job Site:

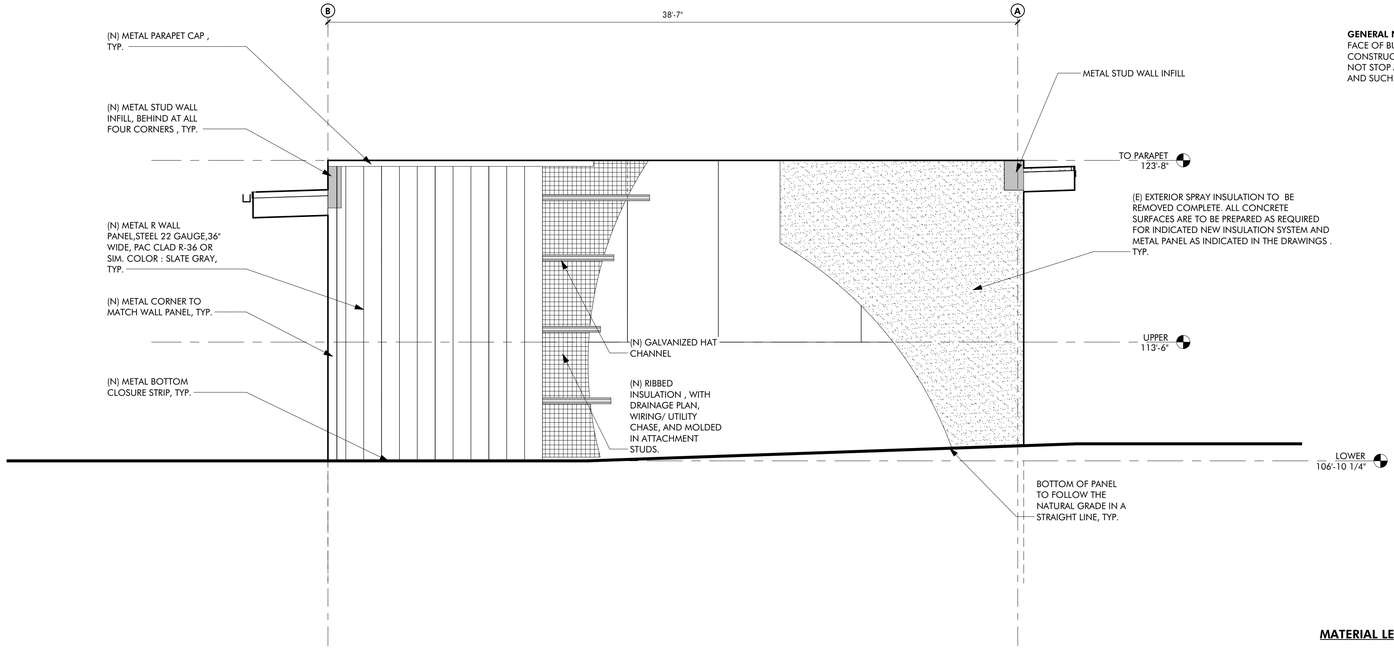
GLENWOOD SPRINGS WATER FILTER PLANT 81601

ELEVATIONS

Sheet Number:

A4.0

File: File Name.rvt 7/19/2022 9:50:08 AM



NORTH ELEVATION 2

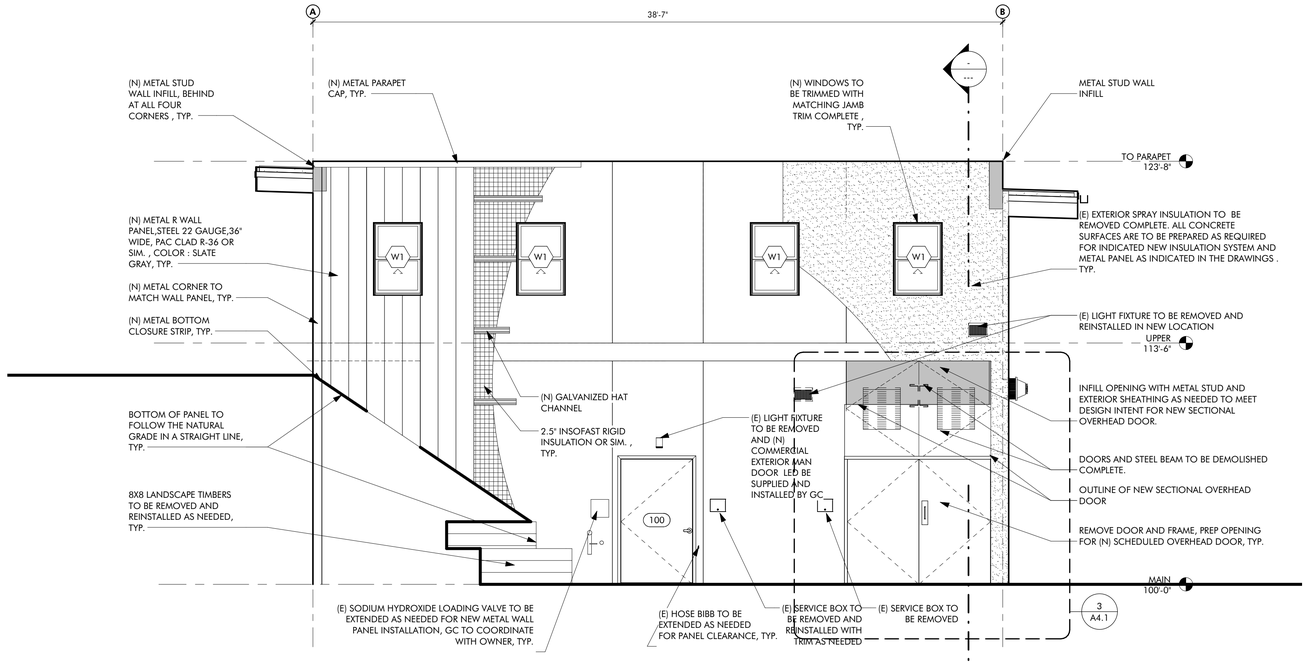
1/4" = 1'-0"

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MATERIAL LEGEND

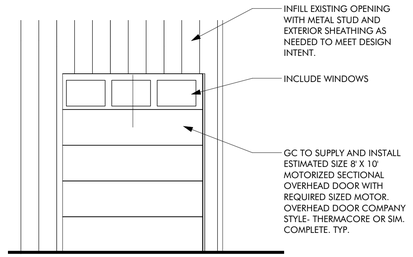
(E) SPRAY INSULATION

METAL WALL PANEL



SOUTH ELEVATION 1

1/4" = 1'-0"



OVERHEAD DOOR 3

1/4" = 1'-0"

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GLENWOOD SPRINGS WATER FILTER PLANT
BID/PERMIT

NOT FOR CONSTRUCTION

Job Site:

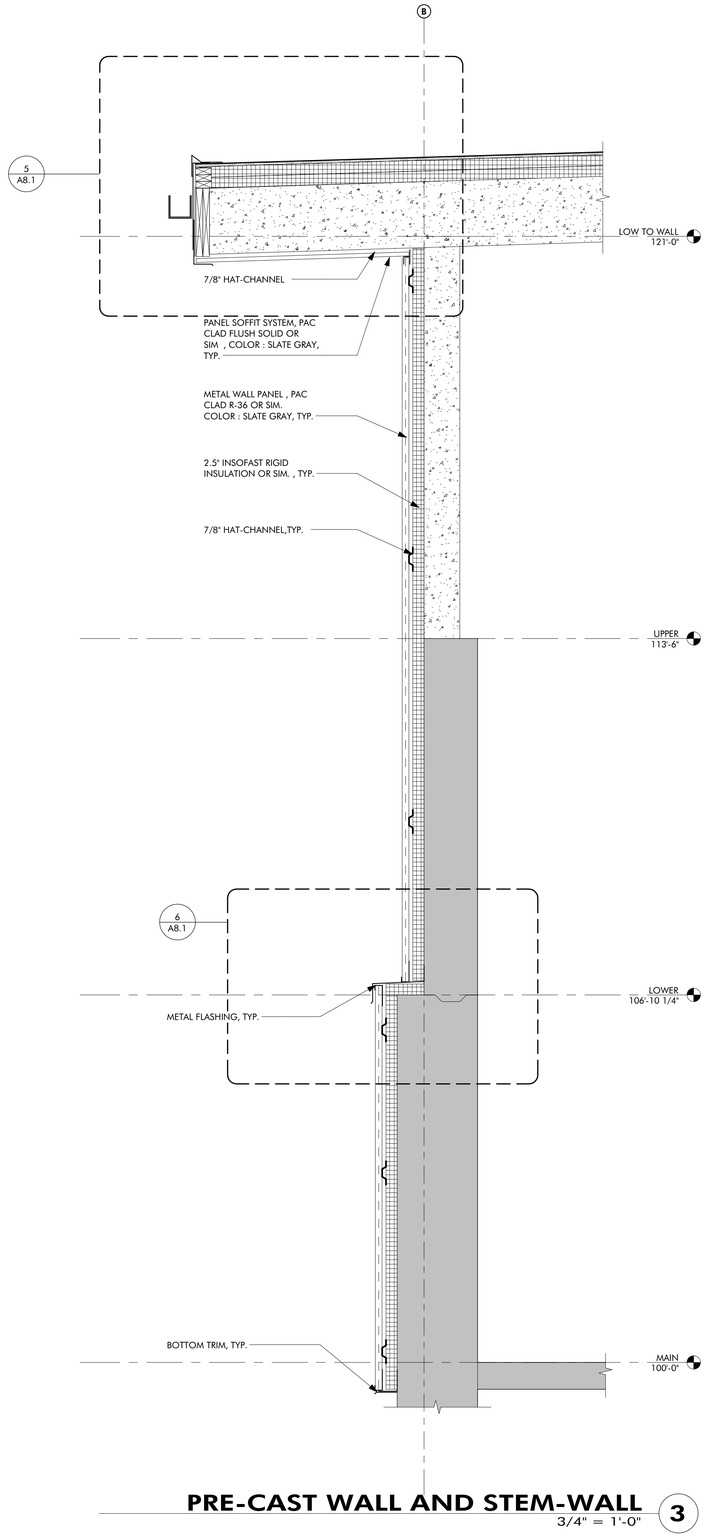
GLENWOOD SPRINGS WATER FILTER PLANT 81601

ELEVATIONS

Sheet Number:

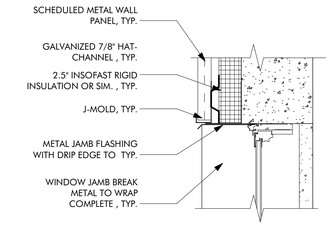
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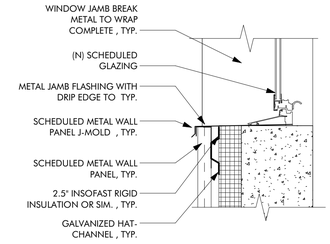
PRE-CAST WALL AND STEM-WALL 3

3/4" = 1'-0"



WINDOW HEAD DETAIL 1

1 1/2" = 1'-0"



WINDOW SILL DETAIL 2

1 1/2" = 1'-0"

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GLENWOOD SPRINGS WATER FILTER PLANT BID/PERMIT

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Job Site:

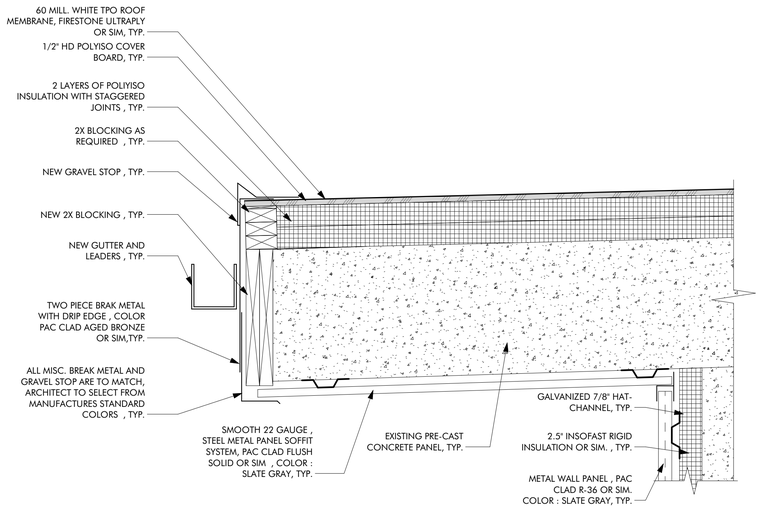
GLENWOOD SPRINGS WATER FILTER PLANT 81601

WALL SECTIONS

Sheet Number:

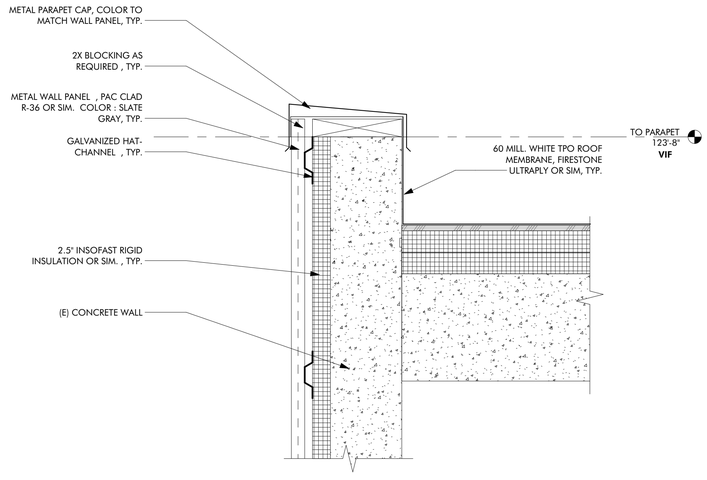
A7.0

File: File Name.rvt 7/19/2022 9:50:10 AM



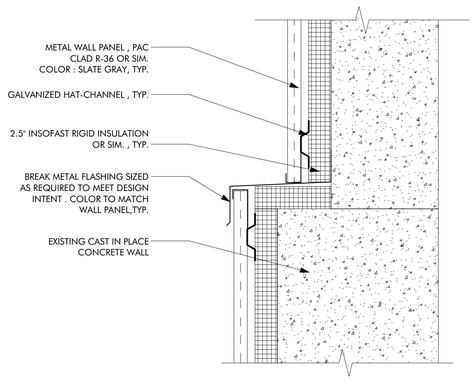
FASCIA REPAIR DETAIL 5

1 1/2" = 1'-0"



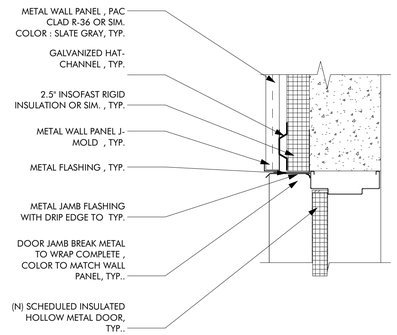
PARAPET TO ROOF DETAIL 4

1 1/2" = 1'-0"



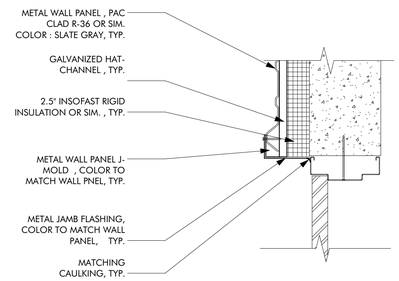
STEM-WALL CONNECTION DETAIL 6

1 1/2" = 1'-0"



HOLLOW METAL DOOR HEAD DETAIL 3

1 1/2" = 1'-0"



HM DOOR JAMB DETAIL 1

1 1/2" = 1'-0"

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GLENWOOD SPRINGS WATER FILTER PLANT
BID/PERMIT

NOT FOR CONSTRUCTION

Job Site:

GLENWOOD SPRINGS WATER FILTER PLANT 81601

DOOR & ROOF DETAILS

Sheet Number:

A8.1

File: File Name.rvt 7/19/2022 9:50:10 AM

element
ENVIRONMENTAL INC
PO Box 2043
Glenwood Springs, CO 81601
josh@elementconsults.com
(970) 274-3139

www.elementconsults.com
ASBESTOS LEAD HAZMAT RESTORATION

Asbestos Sampling Report

Date: 09/07/2022

Date of Inspection: 09/01/2022

Client:

City of Glenwood Springs

Attn:

Matthew Langhorst

Building Inspector:

James Bates

CDPHE #28136

Joshua Johnson

CDPHE #18401

Property Address
1401 W. 9th St.
Glenwood Springs, CO 81601

Element Environmental Project#:
GWS 090122 9th

Client Job Name
W. 9th St.

TABLE OF CONTENTS

1.0 - Scope of Work
2.0 - Sampling Requirements
3.0 - Sampling Methodology
4.0 - Laboratory
5.0 - Suspect Materials Sampled
6.0 - Table of Results
7.0 - Description of Sampling Area
8.0 - Conclusion
9.0 - Lab Report
10.0 - Certificates

Asbestos Samples Analyzed: ***9***
Positive Asbestos Samples: ***1***

1.0- This was an inspection for suspect ACM (Asbestos Containing Material) for an exterior remodel. Element Environmental conducted a visible inspection for visible materials that would be impacted during the remodel. This inspection was limited to the areas found in the Description of the Sampling Area 7.0. Although sampling is destructive in nature, this was a non-invasive inspection. It was of materials that were accessible. If other suspect materials become visible/apparent during demolition or construction activities, work in that area should be halted and more sampling/testing must take place, per Colorado regulations. Any suspect materials that were not tested are to be assumed to contain asbestos.

2.0- A limited bulk sampling of from all suspect materials was conducted in accordance with Colorado State Requirements. The minimum number of samples per homogenous areas are as follows:

2.1- Surfacing Materials-	<1,000 sq.ft.-	Minimum of 3 samples
	1,000 sq.ft.- 5,000sq.ft.-	Minimum of 5 samples
	>5,000 sq.ft.	Minimum of 7 samples
2.2- Miscellaneous materials-		Minimum of 2 samples
2.3- Thermal Systems Insulation (TSI)-		Minimum of 3 samples

3.0- The purpose of the inspection is to identify materials that are homogenous. A homogeneous area is defined as one which shares suspect material, texture, color, location, and/or apparent time of construction. The materials are touched to determine friability. Friable ACM is material that can be crushed or reduced to powder by hand pressure. The friable materials are segregated into separate homogenous areas. The size of the sampling area is determined. Samples are taken according to a random numerical sequence of the subareas, following guidelines per the EPA Pink Book: Asbestos in Buildings: Simplified Sampling Scheme for Friable Surfacing Materials.

4.0- James Bates, a Colorado Department of Public Health & Environment certified building inspector, certification number: 28136, performed the inspection. The findings were reviewed by Josh Johnson, a Colorado Department of Public Health & Environment certified building inspector, certification number: 18401. Samples taken were sent to CEI Labs in Cary, North Carolina. The samples were analyzed by PLM (Polarized Light Microscopy) analysis. Per the CDPHE Regulation any sample that is found by a lab to be trace, or <1% asbestos, is considered to be ACM material. This material would still be a regulated material by CDPHE. The sample must have an additional "point count" performed to be considered less than 1% and not be regulated by the CDPHE. The lab's documents with analyses and findings are found below.

5.0- SUSPECT MATERIALS SAMPLES

- Spray Foam Insulation
- Caulking

6.0- TABLE OF RESULTS

HOMOGENOUS AREA	DESCRIPTION OF AREA	ACM CATEGORY	NUMBER OF SAMPLES	APPROXIMATE SQ.FT.*	ACM ASSESSMENT CATEGORIES	% AND TYPE OF ASBESTOS FOUND
(A)	Spray Foam on Siding	**Miscellaneous**	3	~5,000 sq.ft.	Non-Friable Non-ACM	No Asbestos Detected
(B)	Spray Foam on Roof	**Miscellaneous**	3	~4,800 sq.ft.	Non-Friable Non-ACM	No Asbestos Detected
(C)	Caulking around Doors and Windows	**Miscellaneous**	3	~5 sq.ft.	Other – Non Friable Miscellaneous ACM with potential for damage	2% Chrysotile in 1 of 3 Samples

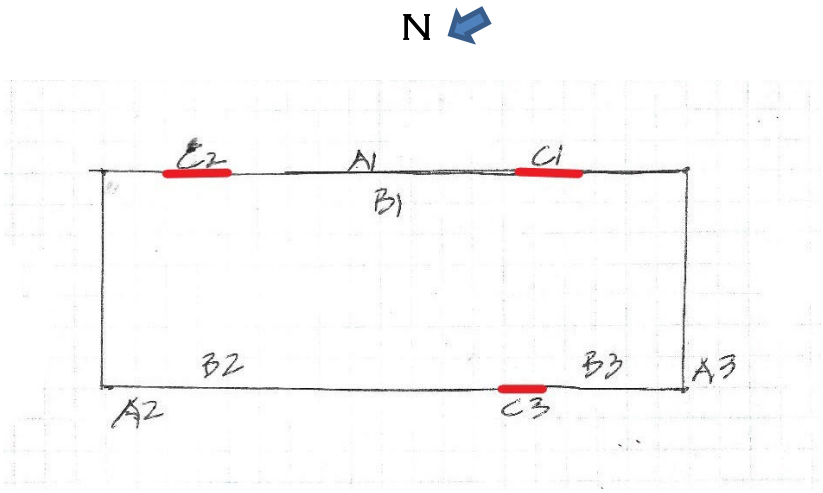
Key:
ACM Assessment Categories:

1- Damaged or significantly damaged Thermal Systems Insulation (TSI) ACM
2- Damaged friable surfacing ACM
3- Significantly damaged friable Surfacing ACM
4- Damaged or significantly damaged friable Miscellaneous ACM
5- ACM with potential for damage
6- ACM with potential for significant damage
7- Friable ACM with low potential for damage
Other- ACM not classified in the above Assessment Categories
N/A- Not Applicable
* Square footage is estimated and not for bidding purposes

7.0- DESCRIPTION OF SAMPLING AREA

- Spray foam on siding and roof
- Caulking around doors and windows

Sampling Locations



NTS

8.0- CONCLUSION

The areas on the Table of Results in **Black** did not contain asbestos.

The area on the Table of Results in **Red** contains asbestos:

- The caulking around the doors and windows. Approximately 3 doors and 12 windows.
- These materials are considered non-friable. If the caulking will be rendered friable by mechanical means, then the removal of it is regulated by the CDPHE. If not, then the removal of it is regulated by OSHA. You must consult your landfill to see if they will accept it and how it must be prepared. It may need to be segregated from the other materials so that the landfill may accept it. Element Environmental recommends that an abatement contractor remove these materials to ensure that the workers are trained and that the materials are handled correctly.

Sincerely,
Josh Johnson

9.0- LAB REPORT

eurofins | CEI

ASBESTOS ANALYTICAL REPORT
By: Polarized Light Microscopy

Prepared for

Element Environmental LLC

CLIENT PROJECT: Glenwood 090122 9th

LAB CODE: B2211125

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 09/07/22

TOTAL SAMPLES ANALYZED: 9

SAMPLES >1% ASBESTOS: 1

730 SE Maynard Road • Cary, NC 27511 • 919.481.1413

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Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: Glenwood 090122 9th **LAB CODE: B2211125**

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
1401 A1		B2211125.01	Yellow	Foam Siding	None Detected
1401 A2		B2211125.02	Yellow	Foam Siding	None Detected
1401 A3		B2211125.03	Yellow	Foam Siding	None Detected
1401 B1	Layer 1	B2211125.04	Yellow	Foam Roofing	None Detected
	Layer 2	B2211125.04	Black	Tar	None Detected
1401 B2	Layer 1	B2211125.05	Yellow	Foam Roofing	None Detected
	Layer 2	B2211125.05	Black	Tar	None Detected
1401 B3		B2211125.06	Yellow	Foam Roofing	None Detected
1401 C1		B2211125.07	Beige,Yellow	Foam	None Detected
1401 C2		B2211125.08	Beige	Paint	None Detected
1401 C3		B2211125.09	Gray	Caulking	Chrysotile 2%

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ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Element Environmental LLC
189 CR 135
Glenwood Springs, CO 81601

Lab Code: B2211125
Date Received: 09-06-22
Date Analyzed: 09-07-22
Date Reported: 09-07-22

Project: Glenwood 090122 9th

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID / Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS Fibrous		Non-Fibrous		ASBESTOS %
1401 A1 B2211125.01	Foam Siding	Heterogeneous Yellow Non-fibrous Bound			100% <1%	Foam Paint	None Detected
1401 A2 B2211125.02	Foam Siding	Heterogeneous Yellow Non-fibrous Bound			100% <1%	Foam Paint	None Detected
1401 A3 B2211125.03	Foam Siding	Heterogeneous Yellow Non-fibrous Bound			100% <1%	Foam Paint	None Detected
1401 B1 Layer 1 B2211125.04	Foam Roofing	Heterogeneous Yellow Non-fibrous Bound			100% <1%	Foam Paint	None Detected
Layer 2 B2211125.04	Tar	Heterogeneous Black Fibrous Bound	5%	Fiberglass	95%	Tar	None Detected
1401 B2 Layer 1 B2211125.05	Foam Roofing	Heterogeneous Yellow Non-fibrous Bound			100% <1%	Foam Paint	None Detected
Layer 2 B2211125.05	Tar	Heterogeneous Black Fibrous Bound	5%	Fiberglass	95%	Tar	None Detected

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ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Element Environmental LLC
189 CR 135
Glenwood Springs, CO 81601

Lab Code: B2211125
Date Received: 09-06-22
Date Analyzed: 09-07-22
Date Reported: 09-07-22

Project: Glenwood 090122 9th

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID / Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS Fibrous	Non-Fibrous		ASBESTOS %
1401 B3	Foam Roofing	Heterogeneous		100%	Foam	None Detected
B2211125.06		Yellow		<1%	Paint	
		Non-fibrous				
		Bound				
1401 C1	Foam	Heterogeneous		50%	Foam	None Detected
B2211125.07		Beige,Yellow		50%	Paint	
		Non-fibrous				
		Bound				
No caulking present. Sample appears to be paint and foam.						
1401 C2	Paint	Homogeneous		100%	Paint	None Detected
B2211125.08		Beige				
		Non-fibrous				
		Bound				
No caulking present. Sample appears to be paint.						
1401 C3	Caulking	Heterogeneous		93%	Caulk	2% Chrysotile
B2211125.09		Gray		5%	Paint	
		Fibrous				
		Bound				

eurofins | CEI

LEGEND:
Non-Anth = Non-Asbestiform Anthophyllite
Non-Trem = Non-Asbestiform Tremolite
Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation

REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

REGULATORY LIMIT: >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. *Estimated measurement of uncertainty is available on request.*

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by Eurofins CEI. Eurofins CEI makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

Information provided by customer includes customer sample ID and sample description.

ANALYST: Valerie King

APPROVED BY: Tianbao Bai, Ph.D., CIH
Laboratory Director

NVLAP® TESTING
NVLAP LAB CODE 101768-0

ASBESTOS SAMPLING FORM

CEI LABS

COMPANY CONTACT INFORMATION	
Company: Element Environmental	Job Contact: Josh Johnson
Project Name: GLENWOOD 090122 9TH	
Project ID #: 1401 W. 9TH ST, GLENWOOD SPRINGS, CO	Tel: 970-274-3139

SAMPLE ID#	DESCRIPTION / LOCATION	TE	
1401 A1	SPRAYED FOAM SIDING	PLM ☐	TEM ☐
A2	"	PLM ☐	TEM ☐
A3	"	PLM ☐	TEM ☐
B1	SPRAYED FOAM ROOFING	PLM ☐	TEM ☐
B2	"	PLM ☐	TEM ☐
B3	"	PLM ☐	TEM ☐
C1	WINDOW + DOOR CAULK	PLM ☐	TEM ☐
C2	"	PLM ☐	TEM ☐
C3	"	PLM ☑	TEM ☐
		PLM ☐	TEM ☐
		PLM ☐	TEM ☐
		PLM ☐	TEM ☐
		PLM ☐	TEM ☐
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Page_____of _____

VERSION CCOC.0215.2/2.LD
Customer COC Page 2

10.0- CERTIFICATES



Colorado Department
of Public Health
and Environment

ASBESTOS CERTIFICATION*

This certifies that

Joshua Jay Johnson

Certification No.: 18401

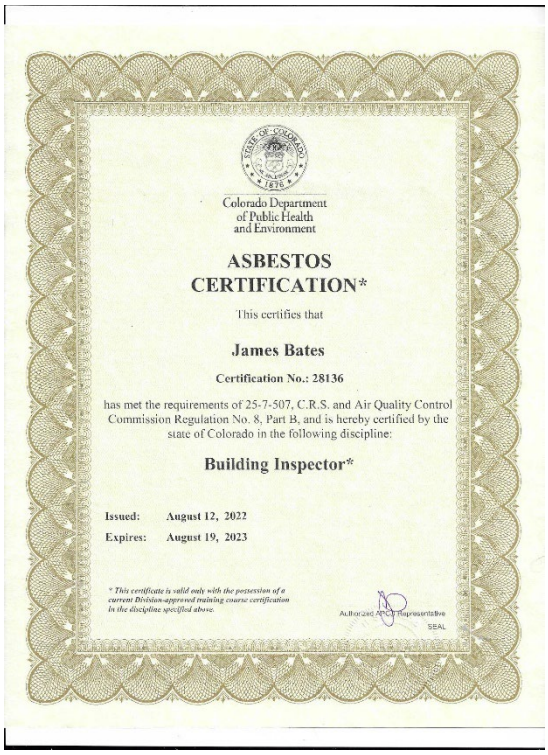
has met the requirements of 25-7-507, C.R.S. and Air Quality Control Commission Regulation No. 8, Part B, and is hereby certified by the state of Colorado in the following discipline:

Building Inspector*

Issued: August 09, 2021
Expires: August 09, 2022

* This certificate is valid only with the possession of a current Division-approved training course certification in the discipline specified above.

Authorized APCD Representative
SEAL



Colorado Department
of Public Health
and Environment

ASBESTOS CERTIFICATION*

This certifies that

James Bates

Certification No.: 28136

has met the requirements of 25-7-507, C.R.S. and Air Quality Control Commission Regulation No. 8, Part B, and is hereby certified by the state of Colorado in the following discipline:

Building Inspector*

Issued: August 12, 2022
Expires: August 19, 2023

* This certificate is valid only with the possession of a current Division-approved training course certification in the discipline specified above.

Authorized APCD Representative
SEAL



Colorado Department
of Public Health
and Environment

ASBESTOS CONSULTING FIRM

This certifies that

Element Environmental, Inc.

Registration No.: ACF - 21640

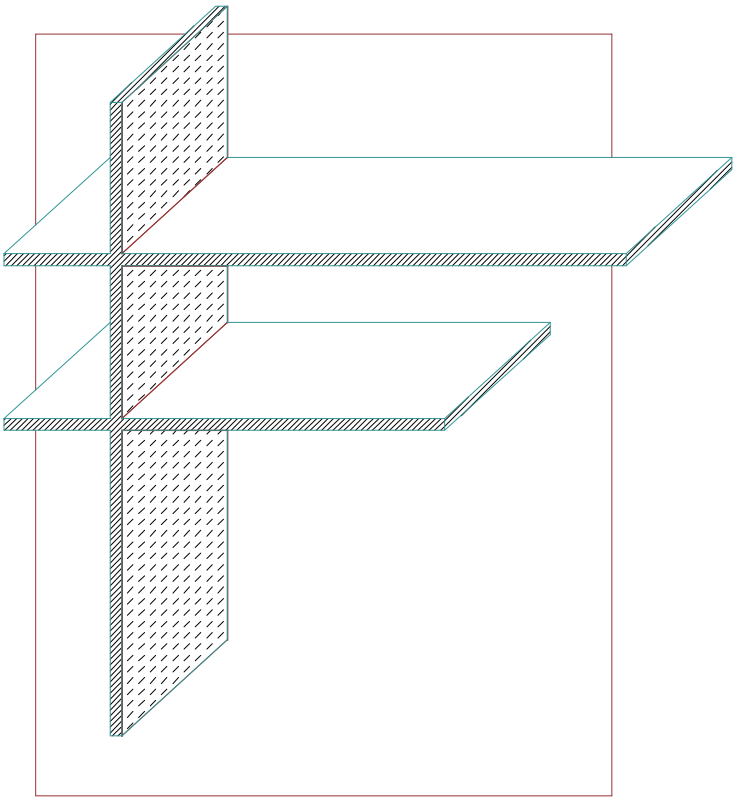
has met the registration requirements of 25-7-507, C.R.S. and the Air Quality Control Commission Regulation No. 8, Part B, and is hereby authorized to perform asbestos consulting activities as required under Regulation No 8, Part B, in the state of Colorado.

Issued: December 22, 2021
Expires: January 25, 2023

Authorized APCD Representative
SEAL

FORD CONSTRUCTION CO., INC.

560 25 Road
Grand Junction, CO. 81505
Phone (970) 245-9343 Fax (970) 245-5090



PROPOSAL PACKAGE

RFP 2023-13P, Red Mountain WTP Siding, Roof,
Door, and Window Replacement Project

Prepared For:
City of Glenwood Springs Procurement Department
101 West 8th St., Glenwood Springs, CO 81501
Attention: Ryan Muse

March 24, 2023

Ford Construction Company, Inc.
560 25 Road
Grand Junction, CO 81505
Phone: (970) 245-9343

TABLE OF CONTENTS

RFP 2023-13P

Red Mountain Water Treatment Plant Siding, Roof, Door, and Window Replacement Project

1. PROPOSAL PACKAGE
- a. Cover Letter
- b. Bid Schedule
- c. Acknowledgment of Addendums & Warranty Information
- d. Proposed Construction Schedule

2. REFERENCES
- a. Food Bank of the Rockies, Steve Kullberg
- b. Garfield County, Frank Coberly
- c. Colorado Mountain College, Sean Nesbitt

3. ABOUT FORD CONSTRUCTION COMPANY, INC.
- a. About Ford Construction Company, Inc.
- b. Strategic Project Approach
- c. Project Manager, Danny Vroman
- d. Project Estimator, Rick Roberts

Ford Construction Company, Inc.
560 25 Road
Grand Junction, CO 81505
Phone: (970) 245-9343

PROPOSAL COVER SHEET

Date: 3/24/2023

City Of Glenwood Springs

RE: RFP 2023-13P
Red Mountain Water Treatment Plant Siding, Roof, Door, & Window Replacement

Thank you for allowing Ford Construction Company, Inc. the opportunity to provide pricing for the above referenced project. Our pricing is prepared in accordance with the Request for Proposal, plans & specs dated 7/19/2022, addendums 1, 2, & 3, and the following clarifications.

Base Price: Five Hundred Fifty Nine Thousand Nine Hundred Eighty Four & 00/100 Dollars…. ($559,984.00) ……. (See WTP Project Bid Schedule For Details).

Clarifications/Summary of Base Proposal:

1. Pricing excludes: maintenance, repair or warranty on any electrical, plumbing, gas, or sewer that may exist on site; corrections for existing conditions or code violations that may be found; hazardous material testing & air monitoring during/for asbestos abatement (caulking); security system; phone/data equipment and cabling; service improvement fees; utility fees; impact fees; special taxing district fees; fire alarm; furniture moving or removal; keying of door hardware.
2. Work to be completed during normal Monday – Friday daytime working hours.
3. Complete roof removal is only possible if not completely adhered to the roof deck.
4. New roof priced as Carlisle 60 mil TPO.
5. Pricing includes abatement for the caulking.
6. Pricing includes PAC CLAD R-36 metal wall panels.
7. Pricing includes 2.5" InSoFast rigid insulation.
8. Pricing is based on current material rates. In the event of cost escalations, we will require pricing adjustments.

If after reviewing our proposal you should have any questions, please do not hesitate to call. We look forward to the interview process.

Thank you,
Rick Roberts
Estimator
rickr@fordconstruction.com

Project Bid Schedule				
Red Mountain Water Treatment Plant				
1401 West 9th Street, Glenwood Springs				
Item No.	Description	Unit (LS)	Unit Cost	Price
1	Mobilization			$ 140,074.00
2	Insurance/Bonding			$ 8,250.00
3	Traffic Control			$ 10,170.00
4	Site Preperation			$ 1,368.00
5	Project Building Demolition			$ 95,254.00
6	Windows			$ 22,018.00
7	Doors			$ 8,212.00
8	Garage Door			$ 4,803.00
9	Siding & Insulation			$ 102,815.00
10	Soffit and Facia			$ 10,905.00
11	Roofing			$ 140,564.00
12	Gutters and Downspouts			$ 3,602.00
13	Misc. Penetration Flashing/Waterproofing			$ 1,696.00
14	Onsite Portolet			$ 678.00
15	Construction Fencing			$ 2,260.00
16	Misc Painting			$ 1,034.00
17	MEP			$ 6,281.00
	Project Bid Total			$ 559,984.00
* All items noted above to include submittlas, labor, equipment, tools, materials, trash removal, demolition, preparation, stagin, traffic control, etc as need to complete the item in full.				

Ford Construction Company, Inc.
560 25 Road
Grand Junction, CO 81505
Phone: (970) 245-9343

RFP 2023-13P

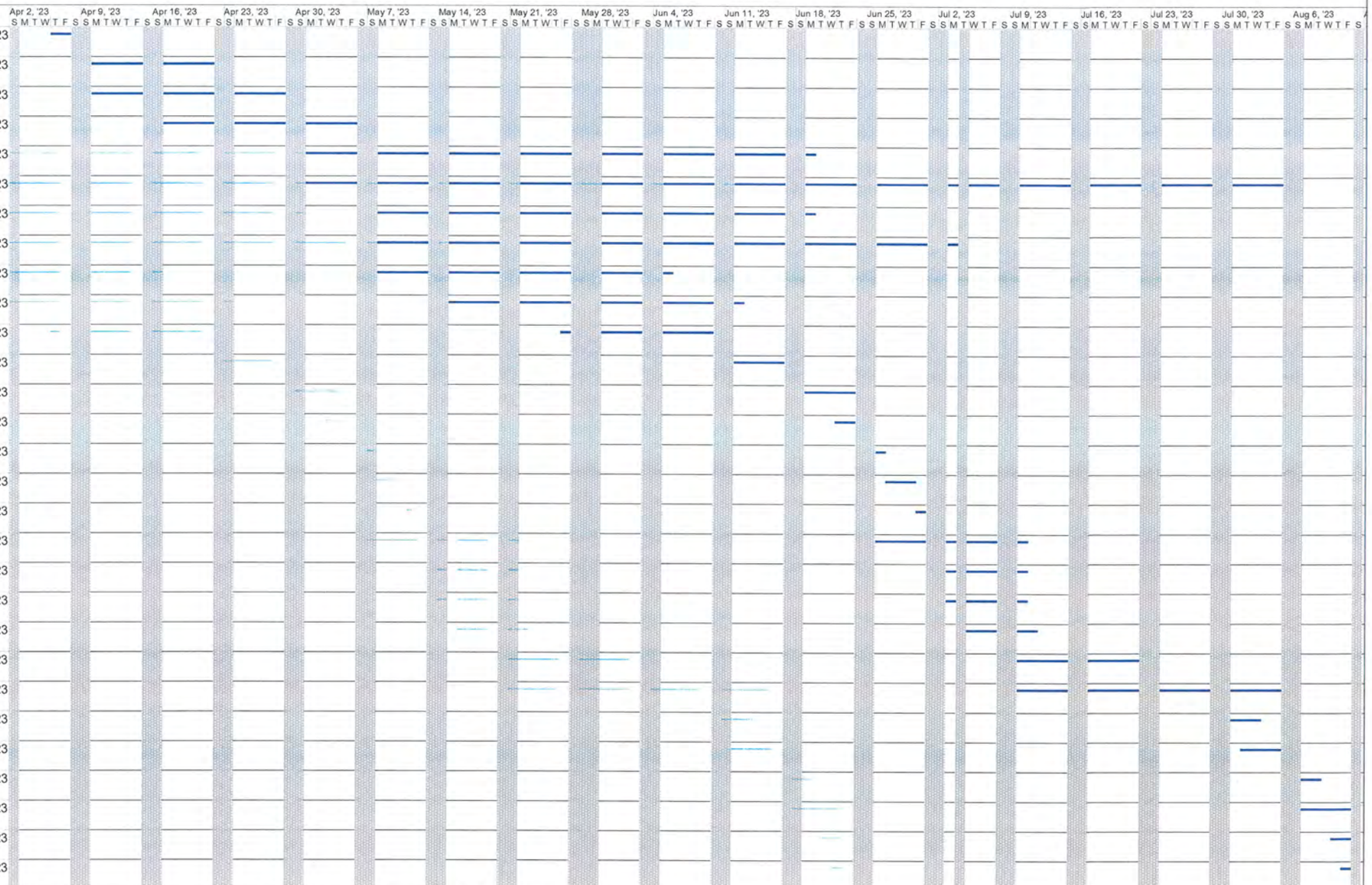
Red Mountain Water Treatment Plant Siding, Roof, Door, and Window Replacement Project

1. **Ford Construction Acknowledges Addendums**
    a. Addendums 1, 2 and 3.

2. **Warranty Information:**
    a. Roofing – Manufacturer's standard 20 year warranty.
    b. Metal Panels – Manufacture's standard 30 year warranty.
    c. Doors & frames – 1 year.
    d. Door hardware – Manufacturers standard 10 year warranty.
    e. Workmanship warranty – 1 year.

GLENWOOD SPRINGS WATER FILTER PLANT
PRELIMINARY SCHEDULE

ID	Task Name	Duration	Start	Finish
1	Project Award	2 days	Thu 4/6/23	Fri 4/7/23
2	Submittals	10 days	Mon 4/10/23	Fri 4/21/23
3	Permit Review	15 days	Mon 4/10/23	Fri 4/28/23
4	Submittal Review Time	15 days	Mon 4/17/23	Fri 5/5/23
5	Door & Frame Lead Time	35 days	Mon 5/1/23	Mon 6/19/23
6	Window Lead Time	68 days	Mon 5/1/23	Fri 8/4/23
7	Insulation Lead Time	30 days	Mon 5/8/23	Mon 6/19/23
8	Metal Panel Lead Time	40 days	Mon 5/8/23	Mon 7/3/23
9	Roofing Lead Time	20 days	Mon 5/8/23	Mon 6/5/23
10	Demo Foam Insulation	20 days	Mon 5/15/23	Mon 6/12/23
11	Abatement	10 days	Fri 5/26/23	Fri 6/9/23
12	Temporay Infils	5 days	Mon 6/12/23	Fri 6/16/23
13	Remove/Replace Man Doors	5 days	Mon 6/19/23	Fri 6/23/23
14	Secure Barrier At Double Doors	2 days	Thu 6/22/23	Fri 6/23/23
15	Remove Double Doors	1 day	Mon 6/26/23	Mon 6/26/23
16	Infill Opening/Prep For OH Doc	3 days	Tue 6/27/23	Thu 6/29/23
17	Install Overhead Door	1 day	Fri 6/30/23	Fri 6/30/23
18	Install Insulation	10 days	Mon 6/26/23	Mon 7/10/23
19	Install Hat Channel At Exterior	5 days	Mon 7/3/23	Mon 7/10/23
20	Demo Roofing	5 days	Mon 7/3/23	Mon 7/10/23
21	Misc Framing At Roof	5 days	Wed 7/5/23	Tue 7/11/23
22	Install Roofing	10 days	Mon 7/10/23	Fri 7/21/23
23	Install Siding	20 days	Mon 7/10/23	Fri 8/4/23
24	Exterior Painting	3 days	Mon 7/31/23	Wed 8/2/23
25	Electrical & Mechanical	4 days	Tue 8/1/23	Fri 8/4/23
26	Final Site Clean Up	2 days	Mon 8/7/23	Tue 8/8/23
27	Install Windows	5 days	Mon 8/7/23	Fri 8/11/23
28	Final Inspections	2 days	Thu 8/10/23	Fri 8/11/23
29	Punch List Walk Through	1 day	Fri 8/11/23	Fri 8/11/23



Ford Construction Company, Inc. 970-245-9343

For Preliminary Information Only - Subject to change based on contract/submittal timing & approval, final material lead times and agreed upon start date.

FORD CONSTRUCTION CO., INC.
560 25 Road
Grand Junction, CO 81505
Phone: (970) 245-9343



FOOD BANK OF THE ROCKIES

Address: 698 Long Acre Drive
Owner: Food Bank of The Rockies
Contact: Joshua Spencer (970) 438-4213
Steve Kullberg (405) 210-8948
Project Date: Sept 2021 – Jan 2023 Project Amount: $8,964,333.62

CM/GC – New Construction of 56,103 SF hybrid construction incorporating wood framing/trusses (offices), structural steel (offices), and Pre-Engineered Metal Building (warehouse). The new facility is equipped with full commercial kitchen (1,053 SF) for Meals on Wheels, administrative offices (8,036 SF) and warehouse with high pile storage (41,383 SF). Warehouse includes forklift accessible 24’ in height cooler (4,434 SF) and freezer (2,799 SF).

Administrative area is finished with ceramic tile, carpet, stained/polished concrete, and LVT tile. Acoustical ceilings were utilized for ceilings throughout except for restrooms.

Warehouse designed to accommodate high pile storage with 27’-3” eave height, and six (6) recessed docks for tractor trailer access.

To allow for future growth, the building is designed with expandable end wall, for future warehouse addition.

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560 25 Road
Grand Junction, CO 81505
Phone: (970) 245-9343



(Nature of project it is difficult to take photos of. The photo above is from the world wide web, and in no way reflects work completed by our team.)

GARFIELD COUNTY COURTHOUSE ELEVATOR ADDITION

Address: 109 8th Street, Glenwood Springs, CO. 81601
Owner: Garfield County
Contact: Scott Henriksen (970) 456-5593 (Procurement)
Contact: Frank Coberly (970) 625-5921 (Director)
Completed: September 15, 2022 Project Amount: $889,304.00

Competitive Bid – Modify existing building to install an additional passenger elevator (2,100 lb) in the historical Garfield County Courthouse. Work completed after hours, to deter impact to daily operations. Scope included removing concrete/steel decks and framing of 3 floors, to construct the elevator shaft/walls. Plumbing, mechanical, fire alarm, fire sprinkler and electrical were modified for the new elevator. On each floor finishes were modified for elevator entrances, and fire rated doors/hardware, while maintaining historical.
In 2015, Ford Construction also completed the DA Office Remodel in Garfield Co. Court House.

FORD CONSTRUCTION CO., INC.
560 25 Road
Grand Junction, CO 81505
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PAST PERFORMANCE



(Nature of project it is difficult to take photos of. The photo above is from the world wide web, and in no way reflects work completed by our team.)

COLORADO MOUNTAIN COLLEGE
NURSING SIMULATION LAB

Address: 3000 County Road 114, Spring Valley, Colorado
Owner: Colorado Mountain College
Owner Rep: Sean Nesbitt (970) 947-8406 scnesbitt@coloradomtn.edu
Project Date: February – December 2022 Project Amount: $1,193,866.65

Competitive Bid – Renovation of lower level in CMC's Summit Student Commons (occupied). Work included complete demolition of existing finishes and interior partitions for CMC's new Nursing Simulation Lab.

The new Nursing Sims Lab included traditional classrooms, and a total of fourteen (14) practice labs. Each (14) labs are equipped with medical equipment, headwalls, and medical grade air for student education. Six (6) of the labs were private with adjoining observation rooms (one way glazing). In each of the private labs casework with single compartment sinks were installed. The remaining eight (8) labs are open room training platform with ceiling track curtains. Work included remodel to existing restrooms, and modifications to fire sprinkler, plumbing, mechanical, electrical (Crestron controls lead time item) and fire alarm to accommodate the new floor plan. Interior finishes were upgraded in adjoining spaces to the area of work with flooring, and paint.

Our team at Ford Construction has completed projects for CMC at their Spring Valley Campus each year since 2019, including remodeling three floors of their Sopris Student Dorms.

FORD CONSTRUCTION CO., INC.

560 25 Road, Grand Junction, CO. 81505
Phone: (970) 245-9343 Fax: (970) 245-5090
Contact: Amanda Decker, President
Email: adecker@fordconstruction.org

A reputable General Contracting firm, providing professional construction services with sustainable design and showing progressive growth since it was established in 1992. Ford Construction Co., Inc. is a closely held WOSB business, owned and managed by Amanda Decker.



Providing a full range of construction services for public and private sectors including commercial and industrial buildings, construction of motels, convenience stores and office complexes. Utilizing structural steel, pre-cast/tilt-up concrete, pre-engineered metal buildings and conventional wood framed structures. Offering services from CM/GC, early conceptual Design/Build to fully designed competitive bid. Providing you with cost effective solutions to control costs of the project and ways to increase the value of your investment. Our team is here to guide you in the right direction.

MISSION STATEMENT

OUR TEAM AT FORD CONSTRUCTION DEVELOPS DREAMS WITH HEARTFELT PROFESSIONALISM AND QUALITY, BEING EVER MINDFUL THAT WE MUST BE GOOD STEWARDS OF CUSTOMER RESOURCES, DEMONSTRATING OUR FORTHRIGHT COMMITMENT TO INTEGRITY AND EXCELLENCE.

Ford Construction Company, Inc.
560 25 Road
Grand Junction, CO 81505
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STRATEGIC PROJECT APPROACH

A Solid management plan that is established within the construction firm and executed by the team is vital in achieving the optimal end result not only for the construction team, and the end users of the facility. Our team will provide project coordination through accurate information in a timely manner and manage the information to deter negative impact on the project's schedule and budget.



(Fellowship Church - Worship Center - 35,006 SF Addition
Sloped Concrete Floors in Sanctuary for Fixed Seating)

Bidding Phase, our estimating team researches manpower availability and trade coverage. After consulting our sources, subcontractors who are compatible with bidding the project will be contacted to participate in bidding. At Ford Construction we work with reputable subcontractors to ensure the highest quality results. Therefore, work is completed correctly the first time, saving the Owner money and reducing schedule setbacks.

Construction Schedule, our project schedule control system begins with the Project Manager and Superintendent's analysis of the scope of work to be completed, establishing a clear understanding of each aspect of the project. Utilizing Microsoft Office Project scheduling software, project tasks are linked using predecessor-successor relationships, identifying Critical Path and Milestones. As you know schedules are dynamic and as the project evolves the schedule will adjust accordingly. Project schedules are updated weekly by the Project Manager to reflect percent complete and provided to the Owner as the project progresses. Contentious monitoring of actual progress relative to planning progress allows Ford Construction to assess potential and actual impacts to the schedule and to determine necessary corrections.



(Fellowship Church - Worship Center - 35,006 SF Addition)

Ford Construction Company, Inc.
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STRATEGIC PROJECT APPROACH

Construction Phase, the Project Manager (PM) takes over the project from the Estimating team and works closely with the Project Superintendent and the Owner Representative. As the PM he will personally handle all correspondence to the Owner Representative, including RFI's, shop drawings and submittals, requests for deviations, and the project schedule. Change requests, dispute and claim resolutions if they arise will be generated by the PM and reviewed by Estimating Team before they are submitted to the Owner Representative.

Quality Control, procedures implemented by our Superintendent/QC Manager are designed to provide supervision, inspection and testing of all items of work, including that of suppliers and subcontractors to ensure compliance with applicable specifications and drawings.

- Preparatory Phase - Occurs days and sometimes weeks prior to commencing task
  Review requirements for the task and assess current site conditions.
- Initial Phase - Occurs just prior to the go-ahead to begin work
  Verifies all personnel, material and equipment are in place; Confirms site has passed job-ready inspection.
- Follow-Up Phase - Occurs throughout the construction task
  Monitor work on daily basis; Verify job meets all requirements and continues to stay on schedule.

Close Out & Warranty, our goal is your goal, to have a project we can all be proud of and know it was constructed with a solid team. With a proactive approach the Project Manager and Project Superintendent will ensure timely completion of punch list items and delivery of operation and maintenance manuals accompanied with as-built drawings.



(GE Oil & Gas, Grand Junction, CO., Renovation of 69,600 SF pre-engineered metal building, single story office/shop building 9,600 SF office & 60,000 SF shop. Includes two (2) 15ton overhead bridge cranes, two (2) mono-rail systems with a total of twenty 2ton hoists. Work also included 65,186 SF of concrete paving.)

DANNY VROMAN

Project Manager
Ford Construction Company, Inc.
Construction Career Began: 1975
With Ford Construction Since: 2010



Danny joined the Ford Construction team as Project Superintendent and promoted to the team's Project Manager. Managing projects from mall tenant finishes to extensive ground up facilities for WAPA. Danny has completed his OSHA 10 HR and has CPR certification keeping onsite safety a priority. Trained and experienced in Quality Control Management on Federal and private sector projects. Danny's knowledge and experience in the construction industry is why we have selected him for your project.

Projects Completed/In Progress



Food Bank of the Rockies, Grand Junction Colorado
New Const 56,103 SF Pre-engineered metal building and wood framed office

Elk Creek Visitor Center Rehabilitation, Blue Mesa, Gunnison CO
Complete Renovation and Historical Remodel, including courtyard and parking lot paving

CMC Sopris Hall Dorm Remodel 2019, 2020, 2021 Glenwood Springs CO
Remodel of existing Dorm Rooms in phases at the Spring Valley Sopris Student Hall

CDOT Rangely Office and Restroom Remodel, Rangely Colorado
240 SF office and ADA restroom remodel including electrical upgrades



Emery Telecom, Grand Junction Colorado
Office and server room remodel including fire rated assemblies

Las Colonias Amphitheater Addition, Grand Junction Colorado
830 SF Addition with new green room and restrooms.

USDA Forest Service North Delta Storage/Office Building, Delta CO
4,600 SF Pre-engineered metal building, office / shop facility, demo seven existing structures

Hotchkiss Public Works Facility, Hotchkiss Colorado
10,680 SF Pre-engineered metal building, office/shop facility, full site development



Rifle County Fair Grounds, Rifle Colorado
Replace Grandstands, New Pre-Engineered Equipment Building and Outdoor Canopies

Montrose City Annex Remodel, Grand Junction Colorado
Historical building remodel, 1st and 2nd floor, 3,500 SF, install of new/restoration of finishes

Mountain Beverage, Gypsum Colorado
Pre-Engineered metal bldg addition 17,750 with 5,200 Mezzanine and Refrigerated Storage

Mattress Firm, Grand Junction Colorado
New Construction 10,000 SF retail building including full site development





RICK ROBERTS

Project Estimator
Ford Construction Company, Inc.
Construction Career Began: 1984
With Ford Construction Since: 2022

Rick joined the Ford Construction team as Project Estimator with over 30 years in the construction industry. His experience includes management and supervision in tenant finish, high end commercial and residential projects. Rick's strengths are built from experience in owning Construction Logic, and completing projects from first initial contact through final turn over. Rick adds a high level of diverse construction experience to our team at Ford. He thrives at problem solving. He also contributes years of experience through business ownership and personal attention, building long-lasting working relationship with the Owner on every project.









Prior Project Experience

xxxxx Construction, Inc, Denver CO, 2014-2022

General Manager/Project Manager/Estimator, commercial offices, industrial, financial institutions, medical, dental and retail
-IRC, approx. 9,000 SF Renovation, $490,000, Denver CO
-Alside, approx. 21,000 SF, Tenant Improvement Office/Warehouse, Englewood CO
-SEBO, approx. 24,000 SF, Tenant Improvement Office/Warehouse, Englewood CO
-El Paso Trap & Skeet, Construction of Outdoor Shooting Facility, $435,000 Fort Carson, CO
-Metro Urgent Care, approx. 3,500 SF Renovation, Medical, $750,000, Lakewood CO
-Metro Urgent Care, approx. 7,000 SF Renovation, Medical, $450,000, Littleton CO
-CLA Tenant Improvement, approx. 30,000 SF, $1,200,000, Greenwood Village CO
-Mineral Storage, New Construction Self-Storage Facility, $8,000,000, Englewood CO

Construction Logic, Inc., Denver CO, 2003-2010

Owner/Managing Member, Project Manager, Estimator. Commercial office, medical, dental, industrial, and retail Tenant spaces, both negotiated and hard bid. $10,000 - $4,500,000
-General Dynamics, approx. 38,000 SF S.C.I.F. space, $4,500,000, Centennial CO
-EMC, approx. 90,000 SF Tenant Improvement, $2,200,000, Centennial CO
-Frontier Airlines Corporate Offices, 70,000 SF $3,500,000, Denver CO

Tenant Finish Specialties, Inc., Denver CO, 1984-2003

Vice President. Projects included building renovations, large tenant build outs (up to $6,000,000 in size), fast-track tenant space build-out, high end tenant finish, specialized S.C.I.F. spaces for defense contractors, medical, dental, financial institutions, restaurants, retail, and residential projects. Responsibilities included, estimating, project management client development, employee supervision, permits





City Council
STAFF REPORT
City of Glenwood Springs
April 20, 2023

Agenda Item: Award Request for Proposal (RFP) 2023-15P Citywide Crack Seal Project

Action Requested: Award RFP 2023-15 Citywide Crack Seal

Department: Public Works

Presented By: Matthew Langhorst

Strategic Goals: Preserve and Improve Infrastructure

Background Info: Each year the city bids out the streets that we want to crack seal with asphaltic material. This list is generated based on roads with cracks that can be sealed, new roads built in the last two years with curb and gutter that require the concrete to asphalt interface to be sealed, and any roadways that are newly overlaid and have reflexive cracking that we want to stay ahead of. The city has roadways that a crack sealing process would not improve the roadway surface or would require too much sealer to be feasible to complete. These "worse condition" roads fall under the level of replacement, overlay, or chip and seal. All roadway maintenance work increases the useful life of a roadway before the full replacement option needs to come to the table. Staff is recommending awarding the crack seal project for 2023 to the low bidder, Armor Pro Seal out of Montrose, Colorado for $81,500 for a total of 35,000lbs of crack seal placement. The 2023 budget was approved with $75,000 for crack sealing, which is $6,500 to low to cover the proposed amount. Staff has an additional $17,500 available with the savings seen on the street striping proposal award to make up for this small difference.

Issues: RFP 2023-15 closed on March 29th with four companies submitting bids ranging in price from $81,500 to $130,000. Our selection committee considered the proposed scope and methods of each, along with price, schedule and references and found the best value for the City to be Armor Pro Seal out of Montrose, Colorado.

Fiscal Impact: $75,000 is budgeted in the Street Tax Fund under the maintenance and repair line (13253-51810). The extra $6,500 will come from the same line item by way of the cost savings seen with the street striping bid.

Legal Review: NA

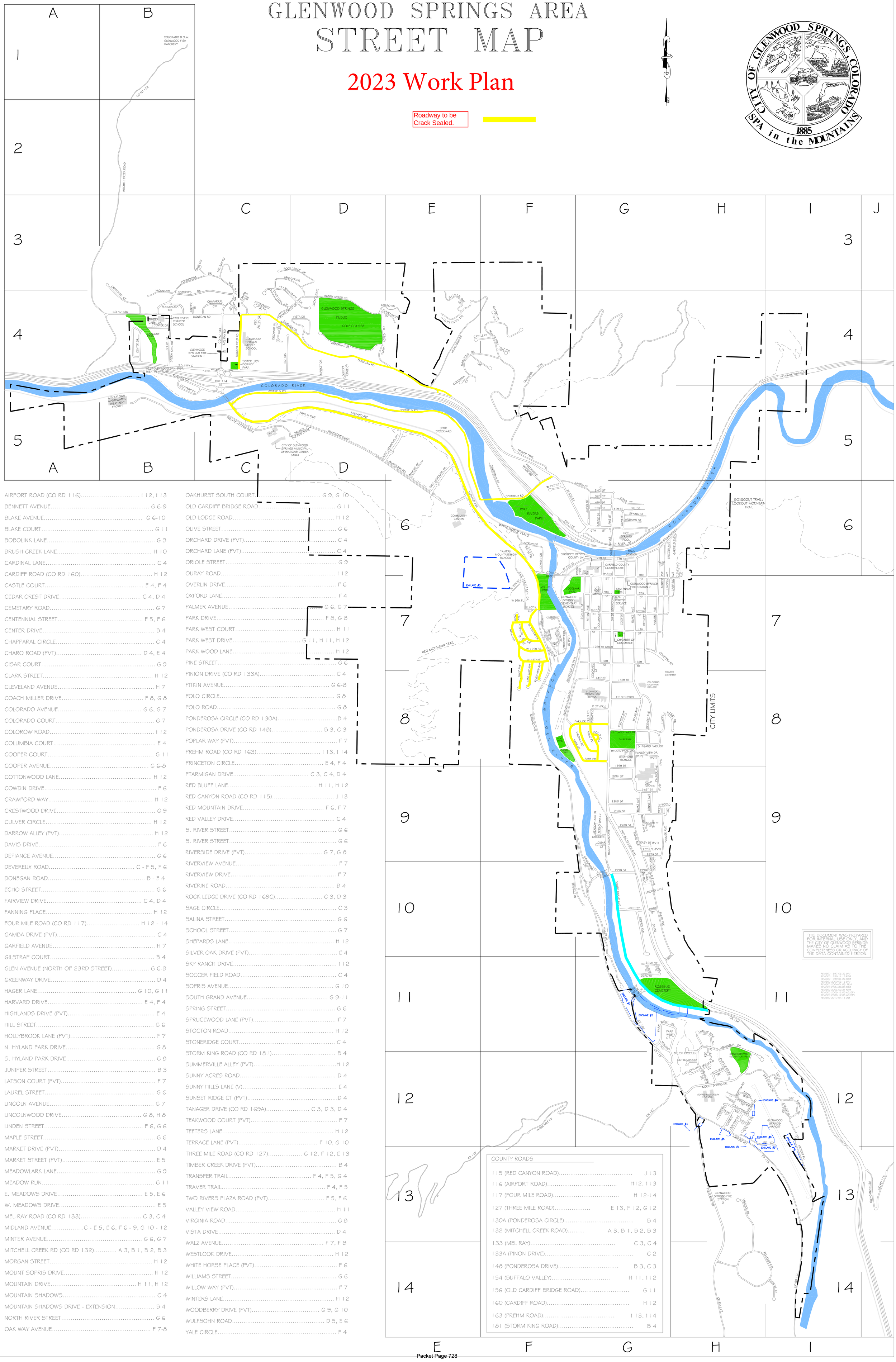
Staff Recommendation: Staff recommends award of Request for Proposal (RFP) 2023-15P Citywide Crack Seal Project to Armor Pro Seal out of Montrose, Colorado for $81,500.

GLENWOOD SPRINGS AREA
STREET MAP
2023 Work Plan

Roadway to be Crack Sealed.

CITY OF GLENWOOD SPRINGS, COLORADO
SPA in the MOUNTAINS
1885

TRUE



AIRPORT ROAD (CO RD 116)	I 12, I 13
BENNETT AVENUE	G 6-9
BLAKE AVENUE	G 6-10
BLAKE COURT	G I I
BOBOLINK LANE	G 9
BRUSH CREEK LANE	H I 0
CARDINAL LANE	C 4
CARDIFF ROAD (CO RD 160)	H I 2
CASTLE COURT	E 4, F 4
CEDAR CREST DRIVE	C 4, D 4
CEMETARY ROAD	G 7
CENTENNIAL STREET	F 5, F 6
CENTER DRIVE	B 4
CHAPPARAL CIRCLE	C 4
CHARO ROAD (PVT)	D 4, E 4
CISAR COURT	G 9
CLARK STREET	H I 2
CLEVELAND AVENUE	H 7
COACH MILLER DRIVE	F 8, G 8
COLORADO AVENUE	G 6, G 7
COLORADO COURT	G 7
COLOROW ROAD	I 12
COLUMBIA COURT	E 4
COOPER COURT	G I I
COOPER AVENUE	G 6-8
COTTONWOOD LANE	H I 2
COWDIN DRIVE	F 6
CRAWFORD WAY	H I 2
CRESTWOOD DRIVE	G 9
CULVER CIRCLE	H I 2
DARROW ALLEY (PVT)	H I 2
DAVIS DRIVE	F 6
DEFIANCE AVENUE	G 6
DEVEREUX ROAD	C - F 5, F 6
DONEGAN ROAD	B - E 4
ECHO STREET	G 6
FAIRVIEW DRIVE	C 4, D 4
FANNING PLACE	H I 2
FOUR MILE ROAD (CO RD 117)	H 12 - 14
GAMBA DRIVE (PVT)	C 4
GARFIELD AVENUE	H 7
GILSTRAP COURT	B 4
GLEN AVENUE (NORTH OF 23RD STREET)	G 6-9
GREENWAY DRIVE	D 4
HAGER LANE	G I0, G I I
HARVARD DRIVE	E 4, F 4
HIGHLANDS DRIVE (PVT)	E 4
HILL STREET	G 6
HOLLYBROOK LANE (PVT)	F 7
N. HYLAND PARK DRIVE	G 8
S. HYLAND PARK DRIVE	G 8
JUNIPER STREET	B 3
LATSON COURT (PVT)	F 7
LAUREL STREET	G 6
LINCOLN AVENUE	G 7
LINCOLNWOOD DRIVE	G 8, H 8
LINDEN STREET	F 6, G 6
MAPLE STREET	G 6
MARKET DRIVE (PVT)	D 4
MARKET STREET (PVT)	E 5
MEADOWLARK LANE	G 9
MEADOW RUN	G I I
E. MEADOWS DRIVE	E 5, E 6
W. MEADOWS DRIVE	E 5
MEL-RAY ROAD (CO RD 133)	C 3, C 4
MIDLAND AVENUE	C - E 5, E 6, F 6 - 9, G I0 - I2
MINTER AVENUE	G 6, G 7
MITCHELL CREEK RD (CO RD 132)	A 3, B I, B 2, B 3
MORGAN STREET	H I 2
MOUNT SOPRIS DRIVE	H I 2
MOUNTAIN DRIVE	H I I, H I 2
MOUNTAIN SHADOWS	C 4
MOUNTAIN SHADOWS DRIVE - EXTENSION	B 4
NORTH RIVER STREET	G 6
OAK WAY AVENUE	F 7-8
OAKHURST SOUTH COURT	G 9, G I0
OLD CARDIFF BRIDGE ROAD	G I I
OLD LODGE ROAD	H I 2
OLIVE STREET	G 6
ORCHARD DRIVE (PVT)	C 4
ORCHARD LANE (PVT)	C 4
ORIOLE STREET	G 9
OURAY ROAD	I 12
OVERLIN DRIVE	F 6
OXFORD LANE	F 4
PALMER AVENUE	G 6, G 7
PARK DRIVE	F 8, G 8
PARK WEST COURT	H I I
PARK WEST DRIVE	G I I, H I I, H I 2
PARK WOOD LANE	H I 2
PINE STREET	G 6
PINION DRIVE (CO RD 133A)	C 4
PITKIN AVENUE	G 6-8
POLO CIRCLE	G 8
POLO ROAD	G 8
PONDEROSA CIRCLE (CO RD 130A)	B 4
PONDEROSA DRIVE (CO RD 148)	B 3, C 3
POPLAR WAY (PVT)	F 7
PREHM ROAD (CO RD 163)	I 13, I 14
PRINCETON CIRCLE	E 4, F 4
PTARMIGAN DRIVE	C 3, C 4, D 4
RED BLUFF LANE	H I I, H I 2
RED CANYON ROAD (CO RD I I5)	J I 3
RED MOUNTAIN DRIVE	F 6, F 7
RED VALLEY DRIVE	C 4
S. RIVER STREET	G 6
S. RIVER STREET	G 6
RIVERSIDE DRIVE (PVT)	G 7, G 8
RIVERVIEW AVENUE	F 7
RIVERVIEW DRIVE	F 7
RIVERINE ROAD	B 4
ROCK LEDGE DRIVE (CO RD 169C)	C 3, D 3
SAGE CIRCLE	C 3
SALINA STREET	G 6
SCHOOL STREET	G 7
SHEPARDS LANE	H I 2
SILVER OAK DRIVE (PVT)	E 4
SKY RANCH DRIVE	I 12
SOCCER FIELD ROAD	C 4
SOPRIS AVENUE	G I0
SOUTH GRAND AVENUE	G 9-I I
SPRING STREET	G 6
SPRUCEWOOD LANE (PVT)	F 7
STOCTON ROAD	H I 2
STONERIDGE COURT	C 4
STORM KING ROAD (CO RD 181)	B 4
SUMMERVILLE ALLEY (PVT)	H I 2
SUNNY ACRES ROAD	D 4
SUNNY HILLS LANE (V)	E 4
SUNSET RIDGE CT (PVT)	D 4
TANAGER DRIVE (CO RD 169A)	C 3, D 3, D 4
TEAKWOOD COURT (PVT)	F 7
TEETERS LANE	H I 2
TERRACE LANE (PVT)	F I0, G I0
THREE MILE ROAD (CO RD 127)	G I2, F I2, E I3
TIMBER CREEK DRIVE (PVT)	B 4
TRANSFER TRAIL	F 4, F 5, G 4
TRAVER TRAIL	F 4, F 5
TWO RIVERS PLAZA ROAD (PVT)	F 5, F 6
VALLEY VIEW ROAD	H I I
VIRGINIA ROAD	G 8
VISTA DRIVE	D 4
WALZ AVENUE	F 7, F 8
WESTLOOK DRIVE	H I 2
WHITE HORSE PLACE (PVT)	F 6
WILLIAMS STREET	G 6
WILLOW WAY (PVT)	F 7
WINTERS LANE	H I 2
WOODBERRY DRIVE (PVT)	G 9, G I0
WULFSOHN ROAD	D 5, E 6
YALE CIRCLE	F 4

COUNTY ROADS

I I5 (RED CANYON ROAD)	J I 3
I I6 (AIRPORT ROAD)	H12, I I3
I I7 (FOUR MILE ROAD)	H I2-I4
I27 (THREE MILE ROAD)	E I3, F I2, G I2
I30A (PONDEROSA CIRCLE)	B 4
I32 (MITCHELL CREEK ROAD)	A 3, B I, B 2, B 3
I33 (MEL RAY)	C 3, C 4
I33A (PINON DRIVE)	C 2
I48 (PONDEROSA DRIVE)	B 3, C 3
I54 (BUFFALO VALLEY)	H I I, I I2
I56 (OLD CARDIFF BRIDGE ROAD)	G I I
I60 (CARDIFF ROAD)	H I 2
I63 (PREHM ROAD)	I I3, I I4
I8I (STORM KING ROAD)	B 4

THIS DOCUMENT WAS PREPARED FOR INTERNAL USE ONLY, AND THE CITY OF GLENWOOD SPRINGS MAKES NO CLAIM AS TO THE COMPLETENESS OR ACCURACY OF THE DATA CONTAINED HEREON.

REVISED 1997.03.26 SFV
REVISED 1998.11.13 RRM
REVISED 1999.01.26 RRM
REVISED 2000.03.15 SFV
REVISED 2004.01.08 RRM
REVISED 2004.06.06 RRM
REVISED 2006.02.21 RRM
REVISED 2008.12.05 ASMSFV
REVISED 2008.12.05 ASJSFV
REVISED 2017.04.13 JKB

ARMOR PROSEAL
ASPHALT SERVICES

Sealcoating, Crack Sealing, Parking Lot Striping,
Asphalt Patching, Paving

3/28/2023

City of Glenwood Springs Public Works Dept.
Glenwood Springs, CO
81601

PROPOSAL

Description:	Quantity	Unit	Total
THOUROUGHLY CLEAN AND FILL ALL MAJOR CRACKS WITH COMPRESSED AIR LANCE AND USING ASTM D6690 TYPE 2 D.O.T. APPROVED RUBBERIZED CRACK SEAL MATERIAL THIS ESTIMATE INCLUDES ALL TRAFFIC CONTROL AND MOBILIZATION FEES ASSOCIATED WITH THE PROVIDED SCOPE OF WORK	35,000	LBS	2.29/LB
THANK YOU, WE LOOK FORWARD TO SERVING YOU!	**Total:**		**$81,500.00**

NUMBERS CONTAINED IN ESTINATES ARE ONLY APPROXIMATE. THIS ESTIMATE IS GOOD FOR 30 CALENDAR DAYS FROM DAY OF DELIVERY. PAYMENTS MUST BE MADE IN FULL WITHIN 30 BUSINESS DAYS FROM DATE OF WORK COMPLETION. I UNDERSTAND THAT ADDITIONAL CHARGES MAY APPLY.

SIGNATURE & DATE _____

563 6530 Rd Montrose, CO 81401
Phone; 970-249-3050 Cell Phone; 970-901-1368
Website; armorproseal.com

City Council
STAFF REPORT
City of Glenwood Springs
April 20, 2023

Agenda Item: Award Request for Quotations 2023-17Q Storage Array

Action Requested: Approval of award to ProTech for $176,298.

Department: Information Technology

Presented By: Steve Boyd

Strategic Goals: Provide Efficient and Responsive City Government

Background Info: The City's information infrastructure includes an array of storage servers that hold, secure and back up various data. These servers need to be periodically updated on a replacement cycle to ensure we have current support from the manufacturer and adequate capacity.

Issues: We received four responses to RFQ 2023-17Q for the specified array on March 23. Pricing ranged from $176,298 to $225,820 for compliant systems. The low bid came from Pro Tech Computer who is our incumbent provider.

Fiscal Impact: This is within our budget of $200,000 in the general government section of the Capital Projects Fund (3110 - 59520 Capital Outlay).

Legal Review: NA

Staff Recommendation: Staff supports award of RFQ 2023-17Q to Pro-Tech Computers for $176,298.

PROTECH

7100 N. Broadway Bldg 3 Suite C
Denver, CO 80221
303/430-0433 303/430-4070 Fax

Sales Quote #: 23167

Salesman: BCOOPER

Sold To:	**Ship To:**
City of Glenwood Springs 101 W. 8th Street Glenwood Springs, CO 81601 Phone #: 970-384-4800 Attn: Michael Gardner	City of Glenwood Springs 101 W. 8th Street Glenwood Springs, CO 81601 Phone #: 970-384-4800 Attn: Michael Gardner

Cust PO# **HPE Nimble RFQ 2023-17Q - Item A &**
Terms: Net 30

Today's Date **23-Mar-23**
Quote Date **23-Mar-23**

Quan	Part Number	Description	Price	Extended Price
1	Q8H39A	HPE Nimble NS HF40 Hybrid CTO Base Array	$ 18,465.00	$ 18,465.00
1	Q8C17B	HPE NS 2x10GbE 4p FIO Adptr Kit	$ 2,168.00	$ 2,168.00
1	Q8B55B	HPE NS HF40/60 Hybrid 84TB FIO HDD Bundle	$ 12,899.00	$ 12,899.00
1	Q8B64B	HPE NS HF 40/60 11.52TB FIO Cache Bundle	$ 18,450.00	$ 18,450.00
2	Q8J18A	HPE NS NEMA 5-15 to C13 US FIO Power Cord		$ -
2	Q8J27A	HPE NS C13 to C14 FIO Power Cord		$ -
1	R3P91A	HPE Tier 1 Storage Array Standard		$ -
1	Q8G27B	HPE Tier 1 Storage OS Default FIO		$ -
1	HU4A6A5	HPE 5-Year Tech Care Essential SVC		$ -
1	HU4A6A5-ZG0	* HPE NS 2x10GbE 4p Adptr 5Yr Support	$ 2,995.00	$ 2,995.00
1	HU4A6A5-ZFB	* HPE NS HF 11.52TB Cache 5Yr Support	$ 8,488.00	$ 8,488.00
1	HU4A6A5-ZFG	* HPE NS HF40 Hybrid Base Array 5Yr Support	$ 16,835.00	$ 16,835.00
1	HU4A6A5-ZFR	* HPE NS HF40/60 Hybrid 84TB HDD Bndl 5YrSupp	$ 7,849.00	$ 7,849.00
				$ -
		Total Item A	$ 88,149.00	$ -
				$ -
1	Q8H39A	HPE Nimble NS HF40 Hybrid CTO Base Array	$ 18,465.00	$ 18,465.00
1	Q8C17B	HPE NS 2x10GbE 4p FIO Adptr Kit	$ 2,168.00	$ 2,168.00
1	Q8B56B	HPE NS HF40/60 Hybrid 126TB FIO HDD Bundle	$ 24,150.00	$ 24,150.00
1	R0P05A	HPE NS HF 40/60 17.28TB FIO Cache Bundle	$ 33,565.00	$ 33,565.00
2	Q8J18A	HPE NS NEMA 5-15 to C13 US FIO Power Cord		$ -
2	Q8J27A	HPE NS C13 to C14 FIO Power Cord		$ -
1	R3P91A	HPE Tier 1 Storage Array Standard		$ -
1	Q8G27B	HPE Tier 1 Storage OS Default FIO		$ -
1	HU4A6A5	HPE 5-Year Tech Care Essential SVC		$ -
1	HU4A6A5-ZG0	* HPE NS 2x10GbE 4p Adptr 5Yr Support	$ 2,995.00	$ 2,995.00
1	HU4A6A5-ZFB	* HPE NS HF 17.28TB Cache 5Yr Support	$ 14,998.00	$ 14,998.00
1	HU4A6A5-ZFG	* HPE NS HF40 Hybrid Base Array 5Yr Support	$ 16,835.00	$ 16,835.00
1	HU4A6A5-ZFR	* HPE NS HF40/60 Hybrid 126TB HDD Bndl 5YrSupp	$ 11,450.00	$ 11,450.00
				$ -
		Total Item B	$ 124,626.00	$ -
			Taxable Subtotal	$ 212,775.00

Quan	Part Number	Description	Price	Extended Price
			Nontaxable Subtotal	$ -
			Handling	$ -
			Shipping	$ -
			Sales Tax	$ -
			Service Fee	$ -
			Total	$ 212,775.00

This is a sales quote only. Final sales tax and shipping costs will be determined when you are invoiced.
Please make payment from your invoice.

Special Instructions:

Invoice # Date:

Request for Quotations 2023-17Q
Storage Array

Buyer:
City of Glenwood Procurement Department
101 West 8th St / Glenwood Springs, CO 81601 / ryan.muse@cogs.us

2023-17Q STORAGE ARRAY

Section I: Introduction

The City of Glenwood Springs uses the Rocky Mountain E-Purchasing System ("BidNet") to post solicitations and any supporting or additional information, including Addenda, Bid Sheet, and awards. Quotes must be submitted prior to close on BidNet. The City of Glenwood cannot accept a response that did not come through the right channel on time. All documents and information are available at www.bidnetdirect.com/cityofglenwoodsprings. If you require additional information regarding BidNet call Vendor Support at 800-835-4603 anytime Monday-Friday from 6:00 am to 6:00 pm Mountain Time.
Bids may ONLY be submitted electronically to BidNet: www.bidnetdirect.com/cityofglenwoodsprings no later than the required time and date. If your bid is being submitted electronically and if the bid security is in the form of certified funds, those funds MUST be received prior to the bid opening date and time.

Section II: Scope

The City of Glenwood Springs is requesting quotes from qualified firms and/or individuals for Items "A, and B"

Item A

HPE Nimble NS HF40 Hybrid CTO Base Array.
HPE NS C13 to C14 FIO Power Cord.
HPE NS 2x10GbE 4p FIO Adapter Kit.
HPE NS HF40/60 Hybrid 84TB FIO HDD Bundle.
HPE 5-Year Tech Care Essential SVC.
Implementation Services will not be needed.

Item B

A proposal for the 126TB version of the HF40 with requisite Cache and same HPE NS 2x10GbE 4p FIO Adapter Kit.

All bids must be submitted on a single PDF document to BidNet no later than the due date specified in the timeline.

Section III: Timeline

	DATE	TIME
Questions and Clarifications Due	**MARCH 14**	**5:00 p.m.**
Questions Answered	**MARCH 16**	**2:00 p.m.**
Request for Proposals (RFQ) Due http://www.bidnetdirect.com/cityofglenwoodsprings	**MARCH 23**	**2:00 p.m.**
Target Award Date (Subject to Change)	**APRIL 20**	**8:00 p.m.**

2023-17Q STORAGE ARRAY

Section IV: Selection Criteria

In evaluating proposals, the City of Glenwood Springs shall recommend for award the submittal offering the City the best value. Price is a principal consideration; however, the City may consider quality, delivery, service, warranty, past performance, and reliability among other factors when making their determination. S/He may conduct such investigations as s/he deems necessary to establish the responsibility, qualifications, and financial ability of the Proposers, proposed sub-contractors and other persons and organizations to do the Work in accordance with the Contract Documents to City's satisfaction within the prescribed time. The City reserves the right to reject the Submittal of any firm that does not pass any such evaluation to the City's satisfaction. Please include a direct link to, or a copy of the specifications of the product(s) you are bidding on with all relevant warranty information and submit your best and final offer.

Section V: Miscellaneous

Contract Terms.

Any contract resulting from a selection arising from this RFQ shall include The City of Glenwood's Terms and Conditions, and any other written requirements of the City, including but not limited to the City's Insurance Requirements, if applicable. Revisions to the City's Terms and Conditions will not be accepted.

Submission of Quotes.

By submitting a response to the RFQ, each bidder represents that they have read and completely understand the RFQ documents.

Errors.

Bidders shall promptly notify the City of Glenwood of any ambiguity, inconsistency, or error, which they may discover upon examination of the RFQ documents.

Federal and State Law.

All quotations must conform to the minimum federal and state regulations applicable to the City of Glenwood with respect to bidding, discrimination, wage rates, conflicts of interest, etc. It is the bidder's responsibility to understand the City's regulatory environment.

Rejection/Acceptance of Quote.

The City of Glenwood reserves the right to purchase none, all or part of the materials/services listed and to waive any formality associated with this proposal if it is determined to be in the best interest of the college.

Proprietary Information.

It is understood that the City is a public institution and, as such, is subject to the Colorado Open Records Act, CRS §§ 24-72-101 et. seq. ("CORA"). Any information uploaded to BidNet or otherwise submitted will become a public record and subject to inspection following the final selection of a bidder and the award of a contract. Bid tabulations and results will be posted to BidNet. Except as otherwise agreed prior to the award or finalization of any vendor transaction, the City shall provide upon request by any third party all information pertaining to such transaction which must be disclosed pursuant to CORA, and the City's obligations under CORA supersede its

obligations under any agreement, contract, purchase order or negotiated transaction. If you object to the disclosure of any confidential or privileged information as such is defined in CORA, any such pages must be marked confidential and submitted as outlined herein. If you fail to mark the documents confidential and fail to include the explanation, any objection to the release of any information will be deemed waived by the City.

2023-17Q STORAGE ARRAY

Please note that your objection will be considered but is not binding on the City. The City is required to make a determination under CORA and may only withhold documents that are confidential under the law. If the City releases documents marked as confidential in compliance with CORA, the Bidder waives any claims for liability or damages. To avoid disclosure of trade secrets, privileged information, or confidential commercial, financial, geological, or geophysical data ("Confidential Information"), the Bidder must clearly mark all Confidential Information as such and provide a written, detailed justification with its proposal of the protected nature of the Confidential Information under CORA. This justification must address, at a minimum, the specific competitive harm that may result from any disclosure, the intrinsic value of the Confidential Information to the Bidder, and any safeguards used to protect the Confidential Information from disclosure. By submitting a proposal, the firm agrees to hold the City harmless from any claim arising from the release of Confidential Information not clearly marked as such by the Bidder or lacking written, detailed justification as supported by CORA.

City Council
STAFF REPORT
City of Glenwood Springs
April 20, 2023

Agenda Item:	Award Request for Proposal (RFP) 2023-19P South Canyon Landfill Seeding of Phase 5 Area.
Action Requested:	Award RFP 2023-19P Landfill Phase 5 Seeding to Seeding the Rockies
Department:	Public Works
Presented By:	Elizabeth Mauro, Matthew Langhorst
Strategic Goals:	Protect and Preserve our Quality of Life
Background Info:	The landfill has an area of approximately 9 acres of hillside that requires intermediate cover to reduce erosion and improve stormwater quality by stabilizing the hillside with perennial vegetation. The seeding area location is attached to this staff report. RFP 2023-19P closed on April 7th with five bids being received. The selection committee was directed to give preference to proposals offering the species most specific to this environment and using the lease amount of chemical fertilizer due to stormwater concerns. The bids ranged in price from $59,850 to $139,500. Staff would like to award the contract to the low bid from Seeding the Rockies as it meets all of our requirements at $59,850.
Issues:	None
Fiscal Impact:	The project will be funded with $59,850 from the Landfill Enterprise Fund Project Line Item.
Legal Review:	NA
Staff Recommendation:	Staff is Recommending Award of RFP 2023-19P, Landfill Seeding, to Seeding the Rockies for $59,850.

Google Maps landfill map



Imagery ©2023 CNES / Airbus, Maxar Technologies, USDA/FPAC/GEO, Map data ©2023 200 ft

I appreciate the opportunity to provide this price estimate and proposal from Seeding the Rockies for reclaiming approximately 9 acres of the landfill. I have visited the area to be seeded and hydromulched and propose the following seeding plan.

1) It ***appears*** from the areas visible that the soil is fertile and rich, in comparison to most of the poor soil conditions that exist in and around the landfill. I would like to take some soil samples and send them for analysis. This is inexpensive (less than $50) and would give us an idea of the condition and composition of the soil. Additionally, the analysis will provide guidance if any amendments are required.

2) Most of the sloped area I believe can be drill seeded, a method much more successful than broadcast/hydroseeding large, non-irrigated areas. I was able to see the area without snow and believe approx. 2/3 to 3/4 of the area can be seeded with our tractor and seed drill. Improved results using a seed drill are due to better soil to seed contact than broadcasting seed on the surface of the soil. While broadcast seeding can have great results it is dependent upon soil conditions such as... how loose or compact is the soil?, how much moisture will be available?, what are the texture, nutrition & organic material components? Where safe & feasible the tractor and seed drill will traverse perpendicular to the slope. This will create small furrows across the slope that should also help reduce the small rills of erosion that are showing in some areas.

3) Finally, we will apply wood fiber hydromulch and tackifier covering the seeded areas. The rate of application will be 3,000 to 3,500 lbs / acre and we will use additional tackifier. Because the slope is not irrigated and the conditions are generally dry for most of the year this amount of hydromulch should act as cover and hold moisture for seed germination and seedling growth.

The seed mix you included in your email was from Pawnee Buttes seed and contains 3 varieties of grasses that will work. I would like to
suggest the following reclamation mix that 1) is a bit more varied 2) more drought tolerant/resistant 3) does well in fair to poor soil and 4) has shown good results in other dry condition reclamation projects.

- Western Wheatgrass
- Crested Wheatgrass
- Hard Fescue
- Sheep Fescue
- Perennial Rye Grass

During the video call Liz said that the intent of this reclamation was to "temporarily seed this capped area of the landfill" and that permanent reclamation would be completed at a later time. To me this indicated that the materials suggested by Steve of Triton Environmental might be more than required for what the landfill is looking to accomplish. Consequently I have quoted what I believe will be most cost effective and successful based on current needs.

Our deliverables include...

- Obtain soil samples and send them to a lab for analysis to determine current characteristics and if any amendments should be used to insure successful seed germination and seedling sustainability. This should take about a week to get results.
- Drill seeding the areas with an agreed upon seed mix. Broadcast or hydroseeding other areas deemed too steep or loose to access with a tractor.
- Depending on the results of a soil analysis use our organic starter fertilizer. It is low in N-P-K (5-3-2) but gives newly germinated seedlings a slow release organic "boost" for growth, if necessary.
- Apply wood fiber hydromulch and tackifier to the seeded area.
- Utilize the water from the pond located adjacent to the project area.
- Mobilization of all equipment, material and personnel
- I anticipate 3-4 days to complete restoration

The estimate for these deliverables is $6,650.00 per acre, 9 acre estimate $59,850.00. I believe the area is very close to 9 acres as you estimated. I did a similar measurement using Google Earth. The area may be slightly more simply because of the slope and terracing adding a bit more area than measuring the area assuming it is entirely flat and uniform (855' X 475' = 9.3 acres). We only charge for the amount of materials used, if the area is less we charge less. Typically we know 1,000 gallons of our wood fiber hydromulch & tackifier slurry (1 tankful) covers 9,000 square feet.

I am excited to have the opportunity to work with you and your team on this project.
Please let me know if you have any questions, require any clarifications and how you would like to move forward.

Thank you,



Steve Manente
Seeding the Rockies
970.401.1241
manstev12@gmail.com
www.seedingtherockies.com

City Council
STAFF REPORT
City of Glenwood Springs
April 20, 2023

Agenda Item: Award Request for Quotations (RFQ) 2023-21Q Three Phase Electronically Controlled Reclosers

Action Requested: Award of RFQ 2023-21Q to Border States

Department: Public Works

Presented By: Doug Hazzard, Matthew Langhorst

Strategic Goals: Preserve and Improve Infrastructure

Background Info: The City went to bid for five (5) 3-phase electronically controlled G&W Viper reclosers for the Mitchell Creek Substitution. This is our last substation with the older hydraulic oil style reclosers that require updating. The three other substations have been updated with G&W Viper reclosers already, which is why this bid package was specific to the style and manufacture. Bids were due on April 10th and we received seven responses. The bids ranged from $98,870 to $267,704. The lower bidder was not selected because they did not bid G&W Viper reclosers per the specifications. The second low bid was vague and staff could not tell if what was being bid was what was specified in the RFP. Thus, staff removed that bid from the process. The third low bidder, Border States, was only $3,747.50 higher than the second low bidder, and is being recommended for award as their bid was complete and accurate to what was requested. Borders States bid was $135,197.30 and delivery is anticipated at 33 weeks.

Issues: None at this time.

Fiscal Impact: Staff budgeted $180,000 in the 2023 budget for these materials.

Legal Review: NA

Staff Recommendation: Staff is Recommending Award of Request for Quotations (RFQ) 2023-21Q Three Phase Electronically Controlled Reclosers to Border States for $135,197.30.

Quote

BSE Quote: 26991580
Sold-To Acct #: 113008
Valid From: 03/31/2023 **To:** 04/23/2023
PO No: 2023-21Q - Three Phase Electronical
PO Date: 03/31/2023
Payment Terms: Net 25th prox

Border States Electric - DEN
10899 Havana Street Ste 1140
Commerce City CO 80022
Phone: 303-336-7360

Created By: Kenneth Dawson
Tel No: 303-336-7392
Fax No:

CITY OF GLENWOOD SPRINGS
2222 DEVEREUX RD
GLENWOOD SPGS CO 81601-8702

Inco Terms:
PPA prepaid & allow freight

Ship-to:
CITY OF GLENWOOD SPRINGS
2222 DEVEREUX RD
GLENWOOD SPGS CO 81601-8702

Order Note:
Exceptions/Clarifications:
This quotation was prepared without reference to a formal plan and specification package. G&W#s offering for this quotation is limited to the equipment and bill of materials listed in this quotation. If formal plans/specifications are available for this project, please send to G&W to evaluate and revise this quotation accordingly. All other materials are provided by others

Commercial Terms and Conditions

Lead Time
Submittal drawings (if required): Submittal drawings and wiring diagrams will be issued for approval after receipt of order
Lead time for shipment: Lead time is estimated after receipt of order and release to production.
Submittal and shipment lead time is subject to change at time of order due to dynamic component lead time and factory loading conditions
See drawing lead time tracker below for detailed information

Validity: G&W reserves the right to pass through price increases from SEL or other major suppliers

Shipping Terms: FOB-Factory

Freight: Prepaid and Allowed on a standard closed top trailer

Payment: Net 30 days from time of invoice; Payment terms are subject to G&W Finance Department approval

Purchase Order Submission: Purchase order should be addressed to:

G&W Electric Co.
305 W. Crossroads Parkway
Bolingbrook, IL 60440-4938

Terms & Conditions: Warranty and all other terms and conditions are as per SM-F-1 Rev 8

Cust Item	BSE Item	Material MFG - Description	**Quantity**	Price Per	UoM	Value
10	**000010**		**5** EA	27,039.46 / 1	EA	135,197.30
		- Catalog No. VIP376ER-12S G&W Electric Viper-S Solid Dielectric Recloser				

Standard Features:
Three (3) epoxy insulated vacuum interrupter modules
One (1) three phase magnetic actuator operator, providing three phase operation
Manual trip and lockout handle with mechanical block, capable of physically blocking electronic and manual operation
Contact position indicator

Border States Electric - DEN
10899 Havana Street Ste 1140
Commerce City CO 80022
Phone: 303-336-7360

Quote

BSE Quote: 26991580
Sold-to Acct #: 113008
Valid From: 03/31/2023 **To:** 04/23/2023

Cust Item	BSE Item	Material MFG - Description	**Quantity**	Price	Per	UoM	Value

Three (3) 400/200:1 (factory set to 200:1) current transformers, encapsulated within the solid dielectric insulation, exclusively for use with the recloser control
Operation counter

Additional Features:
L-shaped vacuum interrupter modules
Six (6) 800A deadbreak Apparatus Bushing per IEEE 386 interface 13
Aerial lugs included: NEMA 4-hole pads
o Y-Side Insulators: 38kV screw-on silicone insulators
o Z-Side Insulators: 15kV screw-on silicone insulators
Three (3) capacitively coupled voltage sensors, encapsulated within the solid dielectric insulation, exclusively for use with the recloser control (Y-Side).
Deadline operation not included
10-foot 14 pin control cable connectorized on both ends
10-foot 2 pin AC power cable, connectorized on recloser end, hardwired on control end
10-foot 8 pin voltage sensing cable connectorized on both ends
Galvanized Steel substation frame, with recloser mounting positions of 45 and 90 degrees. Shipped unassembled, with instructions for field assembly.
Control will mount to Left side of substation frame
No potential transformers included
Three externally mounted current transformers including stainless steel mounting bracket. External CTs will be mounted on the Y side and include the following specifications:
o CT Style: Single
o CT Ratio: 200:5
o CT Metering Accuracy: 0.3 B0.2
Six (6) wildlife protectors
No control included

Ratings:
Impulse level (BIL) 110kV
Continuous and load break current 630A
8 Hr. Overload at 20℃ 960A
Maximum design voltage 15.5kV
60Hz Withstand, kV rms Dry, 1 min 50kV
60Hz Withstand, kV rms Wet, 10 sec 45kV
Interrupting Rating RMS (kA) 12.5kA
Making Current, RMS, asym, KA 20kA
Peak, asym (kA) 32kA
Short Circuit Current, kA sym, 3 second 12.5kA
Mechanical Operations 10K

Operating Temperature Range: Temperature range, -40℃ to + 65℃ (-40℉ to 150℉)

Standards: Ratings per IEEE C37.60-2012 and IEC 62271-111

Border States Electric - DEN
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Commerce City CO 80022
Phone: 303-336-7360

Quote

BSE Quote: 26991580
Sold-to Acct #: 113008
Valid From: 03/31/2023 **To:** 04/23/2023

Total	$			135,197.30
State Tax	$	0.000 %	0.00	
County Tax	$	0.000 %	0.00	
Local Tax	$	0.000 %	0.00	
Other Tax1	$	0.000 %	0.00	
Other Tax2	$	0.000 %	0.00	
Other Tax3	$	0.000 %	0.00	
Tax Subtotal	$	0.000 %		0.00
Net Amount	**$**			**135,197.30**

To access BSE's Terms and Conditions of Sale, please go to
https://www.borderstateselectric.com

The quoted sales tax is an estimate only based upon the information provided in this quote and will be finalized at the time of Invoice based upon the material purchased, quantity purchased, and delivery location.

Shipping and handling fees in this quote are an estimate only and will be finalized at the time of Invoice.

All clerical errors contained herein are subject to correction. In the event of any cost or price increases from manufacturers or other suppliers, caused by, but not limited to, currency fluctuations, raw material or labor prices, fuel or transportation cost increases, and any import tariffs, taxes, fees, or surcharges, BSE reserves the exclusive right to change its pricing at the time of shipping and will provide notice of any such change to its customers prior to costs being incurred.

City Council
STAFF REPORT
City of Glenwood Springs
April 20, 2023

Agenda Item:	Letter of Support for the Roaring Fork Transportation Authority Rosebud Trailhead TAP Grant
Action Requested:	Approval for letter of support.
Department:	City Administration
Presented By:	Beverli Marshall
Strategic Goals:	Protect and Preserve our Quality of Life
Background Info:	Roaring Fork Transit Authority (RFTA) is asking for letters of support for a grant application to reconstruct the Rosebud Trailhead in South Glenwood.
Issues:	None.
Fiscal Impact:	None.
Legal Review:	NA
Staff Recommendation:	Approval of letter of support.

City of Glenwood Springs
101 West 8th Street
Glenwood Springs, CO 81601

April 11, 2023

Mr. Mark Rogers
Region 3 Planning Manager
222 South 6th Street
Grand Junction, CO 81501

RE: Rosebud Trailhead TAP Grant

Dear Mr. Rogers:

I am writing on behalf of the City of Glenwood Springs in support of the Roaring Fork Transportation Authority's (RFTA) request for $392,000 to reconstruct the Rosebud Trailhead, located on the south side of Glenwood Springs. This trailhead is an essential component of RFTA's Rio Grande Trail, a popular bicycle and pedestrian trail that extends approximately 40 miles between Aspen and Glenwood Springs. The Rio Grande Trail has connections to the Glenwood Canyon bike path that extends to Eagle County, and to the nascent Lower Valley Trail system that is envisioned to extend to the Garfield and Mesa County line.

This project will redesign the entire trailhead, including landscaping, parking, and site amenities. This will create a safer experience for trail users, improve connectivity between the trail and the road network, and will encourage active transportation by making a more functional and attractive place to begin and end the bike/ped journey.

I urge you to give this project your fullest consideration.

Respectfully,

Beverli A Marshall

Dr. Beverli A. Marshall
City Manager
City of Glenwood Springs
101 West 8th Street
Glenwood Springs, CO 81601
970.384.6401

City Council
STAFF REPORT
City of Glenwood Springs
April 20, 2023

Agenda Item: March 16, 2023 Council Minutes

Action Requested: March 16, 2023 City Council Minutes

Department: City Clerk

Presented By:

Strategic Goals:

Background Info:

Issues:

Fiscal Impact:

Legal Review:

Staff Recommendation:

MINUTES

CITY OF GLENWOOD SPRINGS

REGULAR CITY COUNCIL MEETING

MARCH 16, 2023

6:15 PM

Note: Official meeting minutes are located on the City website via YouTube video at the following link: https://www.youtube.com/user/GlenwoodSprings1885/videos. The times in agenda items indicate approximately where the item can be found on the YouTube video timeline.

REGULAR SESSION

Item 3. :12 Roll Call

Present: Mayor Godes, Mayor Pro-Tem Willman, Councilor Hershey, Councilor Kaup, Councilor Dehm, Councilor Stepp, and Councilor Wussow. Also present were; Steve Boyd, Acting City Manager; Yvette Gustad, Finance Director; Ryan Muse, City Clerk; Matt Langhorst, Director of Public Works; Terri Partch, City Engineer; Karl Hanlon, City Attorney; and Joseph Deras, Chief of Police.

Item 4. :12 Agenda changes and conflicts

None.

Item 5. :12 Council Announcements

Comments were made by Councilor Kaup.

Item 6. :14 Citizens Appearing Before Council (for items not on the agenda-comments limited to 3 minutes)

Citizen comments were made.

Item 7. :15 Consent Agenda

:15 Councilor Dehm moved, seconded by Councilor Stepp, to approve the Consent Agenda.

Comments were made by Councilor Hershey.

Motion passed unanimously.

Item 8. :16 Ordinance 2023-05; Code Changes for Waste Hauling

Matt Langhorst, Public Works Director presented.

Comments were made by Mayor Pro-Tem Willman, Public Works Director Langhorst, Councilor Stepp, and Councilor Kaup.

:30 Mayor Godes opened the item for public comment.

Public comment was made.

:34 Mayor Godes closed the item for public comment.

:34 Councilor Dehm moved, seconded by Councilor Kaup, to approve the code changes for Waste Hauling based on the staff report.

Comments were made by Councilor Wussow, Mayor Pro-Tem Willman, Councilor Stepp, and Public Works Director Langhorst.

Ayes: Willman, Wussow, Godes, Dehm, Stepp, Kaup

Nays: Hershey

Motion Passes 6-1

Item 9. :41 Blake Street Design

Matt Langhorst, Public Works Director presented.

Comments were made by Mayor Pro-Tem Willman, Public Works Director Langhorst, Councilor Wussow, City Engineer Terri Partch, Councilor Kaup, Councilor Stepp, and Mayor Godes.

1:03 Mayor Pro-Tem Willman moved, seconded by Councilor Kaup, to Award the Blake Avenue Design Project Request for Proposal 2022-36P to Kimley Horn.

Motion passed unanimously.

Comments were made by City Engineer Partch.

1:05 Councilor Kaup moved, seconded by Councilor Hershey, to approve the Mobility Reserve Grant from the Roaring Fork Transit Authority, for one hundred thousand dollars.

Comments were made by Mayor Pro-Tem Willman, City Engineer Partch, Councilor Kaup, and Public Works Director Matt Langhorst.

Motion passed unanimously.

Comments were made by Mayor Godes.

Item 10. 1:09 Resolution 2023-09; Adopting the 2023 Update to the 2011 Comprehensive Plan

Hannah Klausman, Director for Community Development presented.

1:19 Mayor Godes opened the item for public comment.

Public comment was made.

1:21 Mayor Godes closed the item for public comment.

1:21 Councilor Wussow moved, seconded by Councilor Dehm, to approve Resolution 2023-09; Adopting the 2023 Update to the 2011 Comprehensive Plan with the recommended findings on page 8 of the staff report.

Comments were made by Councilor Hershey and Mayor Pro-Tem Willman.

Motion passed unanimously.

Comments were made by Acting City Manager Steve Boyd.

Item 11. 1:25 Consideration of Ordinance 2023-06, Series of 2023; An Ordinance of the City of Glenwood Springs initiated by Citizen Petition pursuant to Glenwood Springs Municipal Charter Article V to amending the Glenwood Springs Municipal Code Section 050.080.080 and 050.090.090 expanding retail and medical marijuana sales hours from 7:00p.m. to 10:00p.m. on first reading.

Karl Hanlon, City Attorney presented.

1:27 Mayor Pro-Tem Willman moved, seconded by Councilor Hershey, to continue Consideration of Ordinance 2023-06, Series of 2023; An Ordinance of the City of Glenwood Springs initiated by Citizen Petition pursuant to Glenwood Springs Municipal Charter Article V to amending the Glenwood Springs Municipal Code Section 050.080.080 and 050.090.090 expanding retail and medical marijuana sales hours from 7:00p.m. to 10:00p.m. on first reading.

Comments were made by Councilor Hershey, Mayor Godes, City Attorney Hanlon, Councilor Wussow, Councilor Kaup, Mayor Pro-Tem Willman, Councilor Stepp, and Councilor Dehm.

Ayes: Willman, Wussow, Stepp, Hershey

Nays: Godes, Dehm, Kaup

Motion Passes 4-3

Comments were made by Mayor Godes and City Attorney Hanlon.

Item 12. 1:38 Resolution 2023-10; Cancelling the April 6, 2023 City Council Meeting

1:38 Councilor Hershey moved, seconded by Mayor Pro-Tem Willman, to have a limited agenda on April 6th with the marijuana question with extended hours and to have either Seargent Crawford or the Chief of Police Joseph Deras present.

Comments were made by Councilor Wussow, Councilor Kaup, City Attorney Karl Hanlon, Councilor Dehm, and Mayor Godes.

Motion passed unanimously.

Item 13. 1:41 Council Comments

Comments were made by Mayor Pro-Tem Willman.

Comments were made by Councilor Stepp and City Attorney Karl Hanlon.

Comments were made by Councilor Kaup.

Comments were made by Councilor Dehm.

Comments were made by Councilor Wussow, City Attorney Karl Hanlon, City Engineer Terri Partch, Councilor Kaup, and Mayor Godes.

Item 14. 1:50 Report from City Administration

Comments were made by Acting City Manager Steve Boyd and Chief of Police Joseph Deras.

Comments were made by City Attorney Karl Hanlon and Acting City Manager Steve Boyd.

Item 15. 1:54 Adjournment

1:54 Mayor Pro-Tem moved, seconded by Councilor Dehm, to adjourn.

Motion passed unanimously.

Comments were made by Councilor Stepp's husband, Frank Martin.

City Council
STAFF REPORT
City of Glenwood Springs
April 20, 2023

Agenda Item: Proclamation for Wildfire Preparedness Month

Action Requested: Read proclamation

Department: Fire Department

Presented By: Gary Tillotson

Strategic Goals:

Background Info: NA

Issues: NA

Fiscal Impact: NA

Legal Review: NA

Staff Recommendation: NA

A PROCLAMATION FOR WILDFIRE PREPARDNESS MONTH MAY 2023

WHEREAS, Twenty of Colorado's largest wildfires have occurred within the last twenty one years. Four out of the five largest fires in state history have occurred within the last five years; and

WHEREAS, The most destructive fire in state history occurred just fourteen months ago almost doubling the amount of homes lost than the previous record; and

WHEREAS, The top five most destructive fires in state history have occurred in the last eleven years; and

WHEREAS, Warmer temperatures, drought, and continued development in the wildland-urban interface have made wildfire mitigation a top priority for Glenwood Springs Rural Fire Protection District ("District"); and

WHEREAS, Wildfire Preparedness Month is focused on encouraging residents to learn about wildfire safety and take steps to reduce wildfire risk in and around their homes.

NOW, THEREFORE, I, Jonathan Godes, MAYOR of the City of Glenwood Springs, do hereby proclaim May Wildfire Preparedness Month in the year 2023.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Seal of the City of Glenwood Springs, Colorado to be affixed, this 20th day of April, in the year 2023.

_____

Jonathan Godes, Mayor
City of Glenwood Springs

City Council
STAFF REPORT
City of Glenwood Springs
April 20, 2023

Agenda Item: Outgoing Council

Action Requested: NA

Department: City Administration

Presented By: Beverli Marshall

Strategic Goals: Provide Efficient and Responsive City Government

Background Info:

Issues: NA

Fiscal Impact: NA

Legal Review: NA

Staff Recommendation: NA

City Council
STAFF REPORT
City of Glenwood Springs
April 20, 2023

Agenda Item:	Swearing in of New Council
Action Requested:	Mayor Godes will swear in three new Council members.
Department:	City Administration
Presented By:	Beverli Marshall
Strategic Goals:	Provide Efficient and Responsive City Government
Background Info:	The election on April 4 determined three Council seats.
Issues:	NA
Fiscal Impact:	NA
Legal Review:	NA
Staff Recommendation:	NA

City Council
STAFF REPORT
City of Glenwood Springs
April 20, 2023

Agenda Item:	Election of Mayor and Mayor Pro-Tem
Action Requested:	Election of Mayor and Mayor Pro-Tem
Department:	City Administration
Presented By:	Beverli Marshall
Strategic Goals:	Provide Efficient and Responsive City Government
Background Info:	When a Council is formally seated a Mayor and Mayor Pro-Tem need to be elected by a vote of no fewer than four sitting Councilors.
Issues:	NA
Fiscal Impact:	NA
Legal Review:	NA
Staff Recommendation:	NA

City Council
STAFF REPORT
City of Glenwood Springs
April 20, 2023

Agenda Item:	Proclamation for Arbor Day 2023
Action Requested:	Proclaim April 28, 2023 to be Arbor Day in the City of Glenwood Springs.
Department:	Parks & Recreation
Presented By:	Rod Tarullo
Strategic Goals:	Provide Efficient and Responsive City Government Protect and Preserve our Quality of Life Preserve and Improve Infrastructure
Background Info:	The City of Glenwood Springs has been recognized as a Tree City USA by the National Arbor Day Foundation and desires to continue its tree-planting ways. This proclamation designates April 28, 2023 as Arbor Day in the City of Glenwood Springs and urges all residents to support efforts to care for our trees and woodlands, to support our City's community forestry program, and to plant trees to gladden the hearts and promote the well-being of present and future generations.
Issues:	None
Fiscal Impact:	None
Legal Review:	None
Staff Recommendation:	Proclaim April 28, 2023 to be Arbor Day in the City of Glenwood Springs.

ARBOR DAY PROCLAMATION

WHEREAS, in 1872 J. Sterling Morton proposed to the Nebraska Board of Agriculture that a special day be set aside for the planting of trees; and

WHEREAS, this holiday, called Arbor Day, was first observed with the planting of more than a million trees in Nebraska and is now observed throughout the nation and the world; and

WHEREAS, trees can reduce the erosion of our precious topsoil by wind and water, cut heating and cooling costs, moderate the temperature, clean the air, produce oxygen and provide habitat for wildlife; and

WHEREAS, trees are a renewable resource giving us paper, wood for our homes, fuel for our fires and countless other wood products; and

WHEREAS, trees in our city increase property values, enhance the economic vitality of business areas, beautifies our community, and are a source of joy and spiritual renewal;

AND WHEREAS, once again, Glenwood Springs has been recognized as a Tree City USA by the National Arbor Day Foundation and desires to continue its tree-planting ways.

THEREFORE BE IT RESOLVED, I _____, Mayor of the City of Glenwood Springs in the State of Colorado, do hereby proclaim ***April 28th, 2023*** *to be* ***ARBOR DAY*** *in the City of Glenwood Springs.*

I urge all residents to support efforts to care for our trees and woodlands, to support our City's community forestry program, and to plant trees to gladden the hearts and promote the well-being of present and future generations.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Seal of the City of Glenwood Springs, Colorado to be affixed, this ***20th day of April*** *in the year* ***2023****.*

_____

Mayor of the City of Glenwood Springs

City Council
STAFF REPORT
City of Glenwood Springs
April 20, 2023

Agenda Item: Recommendation from Glenwood Community Housing Coalition and Housing Commission regarding creation of a Workforce Housing Fund Advisory Board.

Action Requested: Approval of recommendations for the framework of the Workforce Housing Fund Advisory Board and direction from Council on next steps.

Department: Economic and Community Development

Presented By: Watkins Fulk-Gray, Hannah Klausman

Strategic Goals: Provide Efficient and Responsive City Government
Protect and Preserve our Quality of Life
Generate Sustainable Economic Development

Background Info: In November of 2022, voters passed ballot measure 2C, a 2.5% increase to the City's lodging tax. This portion of the lodging tax is dedicated to efforts to increase workforce housing through a multitude of potential programs or actions that were elaborated in the ballot language (which is attached to this report).

Throughout 2022 the City supported a grassroots group of community members who organized themselves, sought and received education about workforce housing from regional experts, and ultimately recommended what became the 2C ballot measure to City Council. During this grassroots group's work, they eventually adopted Glenwood Community Housing Coalition as the group's name, replacing its previous informal name, the "ad hoc committee on housing." After the ballot language was approved by City Council and set for the November election, City Staff withdrew from the Coalition's work.

Upon measure 2C's approval, City Council requested City Staff work with members of the Glenwood Community Housing Coalition to craft a recommendation about how to structure the Workforce Housing Fund Advisory Board, a board that was discussed in Ordinance 22-2022, the enabling legislation for the ballot measure. Staff and the City's Housing Commission have engaged with representatives of the Coalition to create the framework of the board discussed in an attached document.

Issues: The Housing Commission and representatives of the Glenwood Community Housing Coalition have crafted a recommended framework for what has been styled the Workforce Housing Fund Advisory Board, which will play a role in overseeing the 2C funds and the uses of these funds. This framework is contained in an attached document.

Fiscal Impact: It was estimated that the 2.5% increase to lodging tax would raise approximately $1,300,000 per year, though in order to not run afoul of TABOR requirements, the ballot language stated that the amount would be up to $2,500,000 per year.

Among the recommendations discussed for how to use the 2C funds includes the idea of creating a new full-time employee dedicated to housing projects and policy. This employee could potentially be funded by the 2C monies, but would likely be managed by the City's administration.

It is not known specifically what future programs and actions the 2C funds will be used for, but some actions like grant administration, development projects, and loan programs will likely entail additional workload for City Staff.

Legal Review: Legal has reviewed the attached recommendations.

Staff Recommendation: Staff recommends adopting the recommendations from Housing Commission and the Glenwood Community Housing Coalition.

Workforce Housing Finance Advisory Board

Meetings.

- Monthly, with additional meetings as necessary for project funding timelines

One to two meetings per month. Scheduling frequent meetings could result in a more coherent and mission-oriented group, but more often than once a month may be difficult for members to commit to. The board could meet more often for parts of the year, such as when applications to programs are due. The group could also meet more often in the beginning of its existence in order to find its footing.

Size of committee.

- 7 members
- Five in-town members, two out-of-town members allowed so long as they live in Garfield County

Seven will allow for a diversity of viewpoints, which was important to Housing Commission, and could still be a functional group if members need to recuse themselves from discussions or votes. It might be difficult to find more than seven members that are qualified to serve, and could also siphon off potential City Council or Housing Commission members.

Expertise of members.

- Diverse backgrounds

The board shall seek diverse backgrounds, both in professional and lived experiences. Some of the desired professional backgrounds include real estate, development, education, medical, housing, finance, and accounting. The board's membership should be inclusive and representative of the demographics, needs, and lived experiences of the City's population.

Authority of the board.

The WHFAB's primary role will be to administer workforce housing programs and projects, as they are created and refined, consistent with the 2C ballot measure. The board will also advise City Council on the feasibility of workforce housing programs and projects and offer strategic guidance. It will have the authority to make funding decisions pursuant to the eventual programs.

- Advise City Council on the creation of workforce housing programs using 2C funds
- Evaluate eligibility of projects for 2C funding
- Make sure funding is being used as intended
- Evaluate projects for 2C funding within the approved housing plan
- Make decisions within parameters of established housing programs
- Create mission statement and goals for recommendation and approval to Council

- Reporting on expended funds and program metrics.

Possible programs to be overseen by WHFAB

- Property acquisition (including land banking)
- Property preservation (including mobile home park preservation, housing rehabs, hotel conversions, and more)
- Public private partnerships (for infrastructure, loans, incentives, cash subsidy, other gap financing, and more)
- Down payment assistance
- Buy-down programs
- Education and support to navigate programs
- Outreach and program support

These types of programs were recommended by the Glenwood Community Housing Coalition and the City's Housing Commission.

Staffing for programs funded by 2C money

The Glenwood Community Housing Coalition and the Housing Commission strongly recommend that a dedicated staff member should be funded to implement new housing programs, possibly with a title such as Housing Director. Funding could come all or in part from the 2C funds. This position should be funded no later than 2024 in order to begin utilizing the 2C funds that are being collected.

City Council
STAFF REPORT
City of Glenwood Springs
April 20, 2023

Agenda Item: Update on Glenwood Meadows Traffic Study

Action Requested: Adoption of the Glenwood Meadows Traffic Study prepared by Kimley-Horn (January 31, 2023).

Department: Engineering

Presented By: Jessica Bowser

Strategic Goals:

Background Info: The Traffic Study on file was prepared by The Mobility Group with the original Glenwood Meadows development. This study was accepted by Colorado Department of Transportation (CDOT) in 2002 as a part of the Exit 114 Access Permit and the projected buildout of Glenwood Meadows was assumed to be 10 years (2010).

City Staff felt a revised traffic study was necessary to determine what Capital Improvements may be necessary to support traffic safety through this corridor as the Meadows development continues to build out. Reasons for this update include:

- It is out of date; the study was completed from 2000-2002 with minimal changes.
- The study was only designed for 2010 traffic volume projections.
- The buildout of the Glenwood Meadows development did not occur on the timeline projected.
- Land use and proposed development have changed over time.
- Traffic has not performed in the manner assumed in the study.
- Existing and proposed operations at the West Glenwood Roaring Fork Transportation (RFTA) property have changed.
- Proposed improvements identified in the original study were outdated. Some improvements may be unnecessary or additional improvements may be identified.
- Other capital infrastructure needs, such as water, sewer, and electric demand, have been updated as the needs have changed from when this development was approved.

This study identifies improvement needs that exist currently or will be necessary in the future. It also identifies potential development triggers for those improvements. The report does suggest potential improvements, but as a design is prepared, those improvements may change based upon the constraints along the corridor or potential traffic calming and safety improvements that could be necessary and may not have been identified yet.

Adoption of this study acknowledges the need for capital improvements and will help city staff work together to prioritize the design of these improvements with other capital projects and plan for future project budgets. This adoption also sets a baseline for future developments adjacent to the area so that they are able to provide further analysis to support additional traffic impacts on the City system.

Issues: None

Fiscal Impact: None at this time. Planning in the future may require additional operations evaluation and design funds. City staff would likely continue to pursue grant funds as they relate to corridor and safety improvements and bring those back to the City Council for review.

Legal Review: N/A

Staff Recommendation: Staff recommends adoption of the study.

Master Traffic Study

Glenwood Meadows

Glenwood Springs, Colorado

Prepared for:

City of Glenwood Springs

Kimley»Horn

M A S T E R T R A F F I C S T U D Y

Glenwood Meadows

Glenwood Springs, Colorado

Prepared for
City of Glenwood Springs
101 W 8th Street
Glenwood Springs, Colorado 81601

Prepared by
Kimley-Horn and Associates, Inc.
4582 South Ulster Street
Suite 1500
Denver, Colorado 80237
(303) 228-2300



January 2023

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

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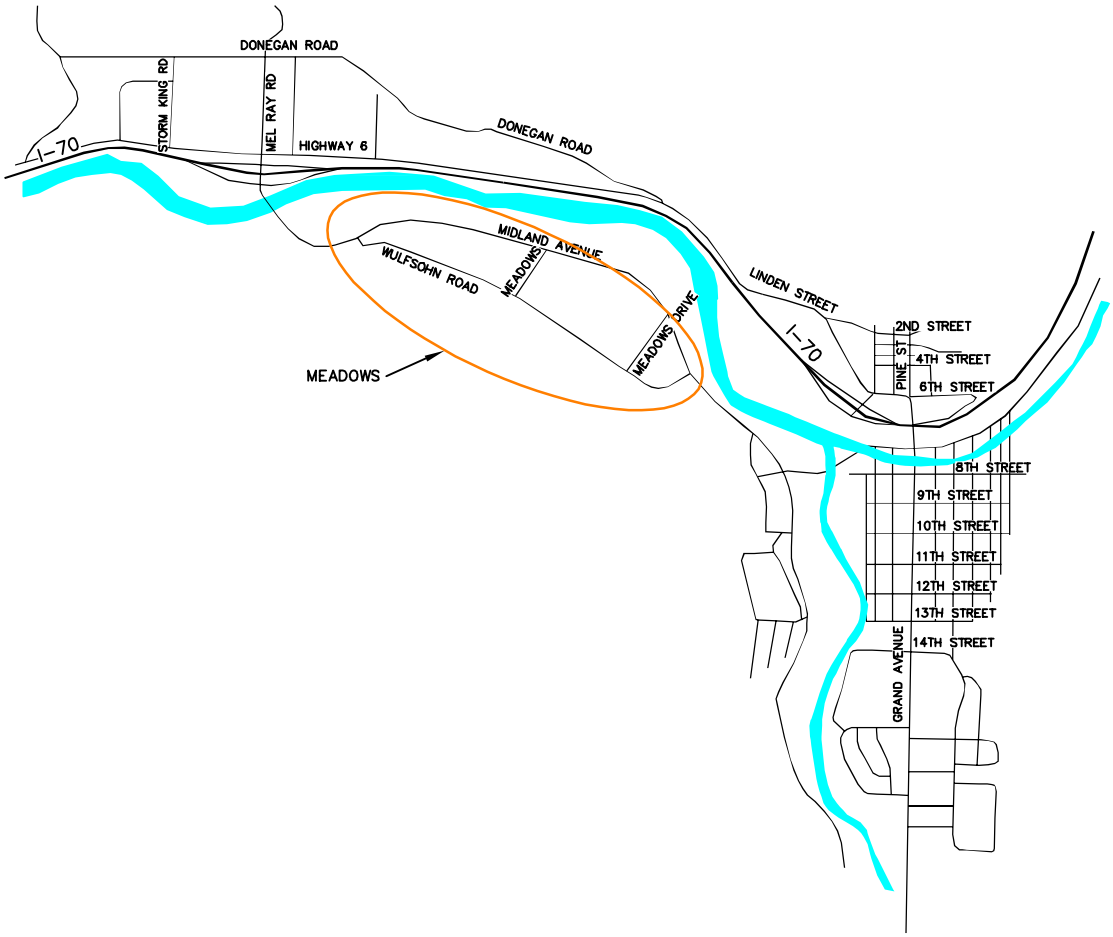
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1.0 EXECUTIVE SUMMARY

Glenwood Meadows is a large mixed-use development area located south of Interstate 70 and the Colorado River, along Midland Avenue, in Glenwood Springs, Colorado. A vicinity map illustrating the Meadows development area site location is shown in **Figure ES1**. Glenwood Meadows currently is developed with a mix of uses including retail, restaurants, hotels, and multifamily residential that are already built and occupied. Remaining development within Glenwood Meadows is currently being proposed and will continue to develop with a mix of uses. It is expected that vacant parcels within Glenwood Meadows will be developed and occupied in the next 10 years; therefore, analysis was conducted for the 2030 horizon as well as a long term 2040 twenty-year planning horizon.

The purpose of this master traffic study is to identify with full development of Glenwood Meadows the traffic related impacts on the local street system. This traffic study develops the necessary mitigation measures required for the identified traffic impacts. The following intersections were incorporated into this master traffic study based on the City of Glenwood Springs requested scope:

1. Highway 6/I-70 WB Ramps/Mel Ray Road Roundabout
2. I-70 EB Ramps/Riverine Road/Midland Avenue Roundabout
3. Devereux Road and Midland Avenue
4. Midland Avenue and Wulfsohn Road (West)
5. Midland Avenue and W Meadows Drive
6. Wulfsohn Road and W Meadows Drive
7. Wulfsohn Road and Market Street
8. Midland Avenue and E Meadows Drive
9. Wulfsohn Road and E Meadows Drive
10. Midland Avenue and Wulfsohn Road (East)
11. 8th Street and Midland Avenue
12. 8th Street and Pitkin Avenue
13. 8th Street and Colorado Avenue
14. 8th Street and Grand Avenue (SH-82)
15. 9th Street and Colorado Avenue
16. 9th Street and Grand Avenue (SH-82)



EXECUTIVE SUMMARY FIGURE 1

GLENWOOD MEADOWS
MASTER TRAFFIC STUDY
GLENWOOD SPRINGS, CO
VICINITY MAP

Regional access to Glenwood Meadows is currently provided by Interstate 70 (I-70) and State Highway 82 (SH-82). Primary access is currently provided by Midland Avenue and 8th Street. Direct access is currently provided by Midland Avenue and Wulfsohn Road.

The remining vacant parcels within the Glenwood Meadows development area are expected to generate approximately 11,774 additional weekday daily trips, with 830 of these trips occurring during the morning peak hour and 995 of these trips occurring during the afternoon peak hour.

Distribution of remaining Glenwood Meadows traffic on the street system was based on the area street system characteristics, existing traffic patterns and volumes, demographic information, and the proposed access system. Assignment of future project traffic was based upon the trip generation described previously and the distributions developed.

Based on the analysis presented in this report, Kimley-Horn has identified future roadway and intersection improvement recommendations based on remaining development of Glenwood Meadows and the associated traffic projections. Analysis of the street network and expected traffic volumes resulted in the recommended improvements summarized in the following **Table** and **Figure ES2** with additional discussion provided as follows:

- At the Highway 6/I-70 Westbound Ramp and Mel Ray Road (#1) intersection, it is recommended add an additional southbound lane for shared right/through movements would be needed. However, the north leg of the intersection will need to be widened to add the second southbound lane.

- Two improvements could be explored at the I-70 Eastbound Ramp/Riverine Road and Midland Avenue (#2) intersection to decrease the vehicle delay at the roundabout. These include, providing three lanes along the southwest side of the roundabout to accommodate a third eastbound left only lane from the I-70 eastbound offramp approach and adding a second southbound approach lane from under I-70. The third eastbound left turn lane will widen the southwest side of the roundabout to three lanes, but the outside lane would still be dropped to the southbound exit with two lanes circling the roundabout to tie into the existing two-lane northbound exit under I-70. The second southbound lane could be constructed near the base of the I-70 bridge to provide a short approach lane with a steeper embankment wall.

- It is recommended to convert Devereux Road and Midland Avenue (#3) to three-quarter movements which would restrict the westbound Devereux Road left turn movements. Drivers can reroute by traveling Devereux Road to the east or make a right turn onto Midland Avenue and use the I-70 Eastbound Ramp roundabout to U-turn and head southbound along Midland Avenue.

- The unsignalized intersection of Midland Avenue and Wulfsohn Road (West) (#4) is expected to meet the MUTCD Four-Hour Volume traffic signal warrant with the morning and afternoon peak period volumes in 2030. Therefore, it is recommended that this intersection provide signal control. The eastbound right turn lane is recommended to be lengthen to 150 feet.

- It is recommended that the Midland Avenue and W Meadows Drive (#5) signal cycle length be increased from the existing 65 seconds during the morning peak hour and 70 seconds during the afternoon peak hour to 90 seconds for both peak hours.

- It is recommended that the existing free northbound right turn movement at the eastern intersection of Midland Avenue and Wulfsohn Road (#10) be more clearly designated to fully operate as a “FREE” lane. To accomplish this, it is recommended that improved channelized striping or a raised median be provided designating the left edge for the right turning vehicles. It is also recommended to convert this intersection to three-quarter movements which would restrict the northeastbound Wulfsohn Road left turn movements. Drivers can reroute to the signalized intersections of Midland Avenue with proposed Wulfsohn Road (#4) or existing W Meadows Drive (#5) to perform northbound left turn movements.

- At the 8th Street and Midland Avenue (#11) intersection, it is recommended that the existing 125-foot southbound left turn lane be extended to 300 feet. This will require roadway widening along the southwest side of Midland Avenue to provide further distance of separation of the southbound left turn and through lanes.

- Eastbound dual left turn lanes operating with protected-only left turn phasing could be considered at the signalized intersection of 8th Street and Grand Avenue (SH-82) (#14). Due to existing geometric constraints, the dual left turn lanes would require removal of on-street parking near the intersection and likely some landscaping. Also, these dual lefts are believed

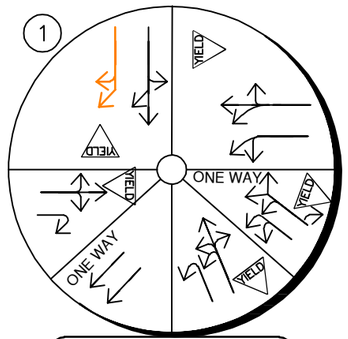
to only be able to provide 75 feet of storage prior to the existing alley intersection along 8th Street to the west of Grand Avenue (SH-82).

- At the 9th Street and Grand Avenue (SH-82) (#16) intersection, the existing 50-foot eastbound left turn lane is recommended to be restriped to provide 100 feet of length.

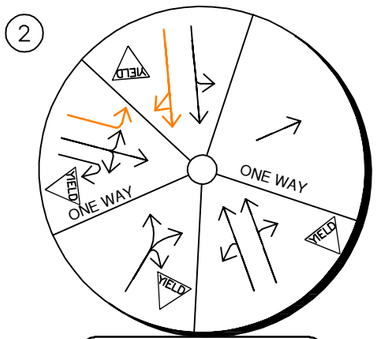
- The existing through volumes along Grand Avenue (SH-82) may be nearing capacity and approaching the need for three through lanes in the future. A reversible lane could be explored with the volumes being directional and due to the bridge only providing four-lanes. Also, the possible South Bridge will provide an additional regional roadway connection across the Roaring Fork River if the project is completed. Likewise, alternate regional roadway connections including Cottonwood Pass improvements may be beneficial to the intersections along Grand Avenue (SH-82) within Glenwood Springs.

Summary of Improvements

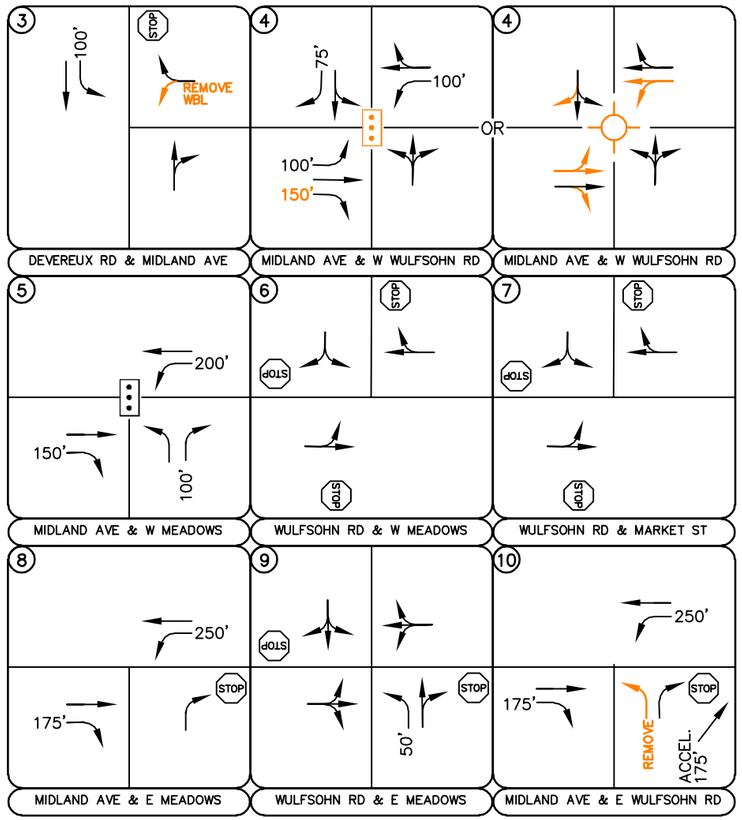
Intersection	Improvements	Threshold Needs
Highway 6/I-70 WB Ramps & Mel Ray Road (#1)	• Add second SB approach lane for shared right/through movements	SB PM Peak: = 255 vph
I-70 EB Ramps/Riverine Road & Midland Avenue (#2)	• Add third EB approach lane for EBL movement • Add second SB approach for shared through/right movements	Needed Now
Devereux Road & Midland Avenue (#3)	• Restrict to three-quarter turning movements (prohibit Devereux Road westbound left turn)	Needed Now
Midland Avenue & W Wulfsohn Road (#4)	• Signalized and Extend EB RTL from 25 feet to 150 feet	NB AM/PM Peak: = 90 vph
Midland Avenue & W Meadows Drive (#5)	• Increase observed cycle length to 90 second for both peak hours	Needed Now
Wulfsohn Road & W Meadows Drive (#6)	• No improvements found to be needed or recommended	-
Wulfsohn Road & Market Street (#7)	• No improvements found to be needed or recommended	-
Midland Avenue & E Meadows Drive (#8)	• No improvements found to be needed or recommended	-
Wulfsohn Road & E Meadows Drive (#9)	• No improvements found to be needed or recommended	-
Midland Avenue & E Wulfsohn Road (#10)	• Restrict to three-quarter turning movements (prohibit Wulfsohn Road northeastbound left turn)	WBL PM Peak: = 300 vph
8th Street & Midland Avenue (#11)	• Extend southbound left turn lane from 125 feet to 300 feet	SBL AM Peak: = 500 vph
8th Street & Pitkin Avenue (#12)	• No improvements found to be needed or recommended	-
8th Street & Colorado Avenue (#13)	• No improvements found to be needed or recommended	-
8th Street & Grand Avenue (SH-82) (#14)	• Extend southbound left turn lane from 100 feet to 150 feet • Provide dual eastbound left turn lanes • Grand Avenue (SH-82) further study recommended	Needed Now
9th Street & Colorado Avenue (#15)	• No improvements found to be needed or recommended	-
9th Street & Grand Avenue (SH-82) (#16)	• Extend eastbound left turn lane from 50 feet to 100 feet • Grand Avenue (SH-82) further study recommended	Needed Now

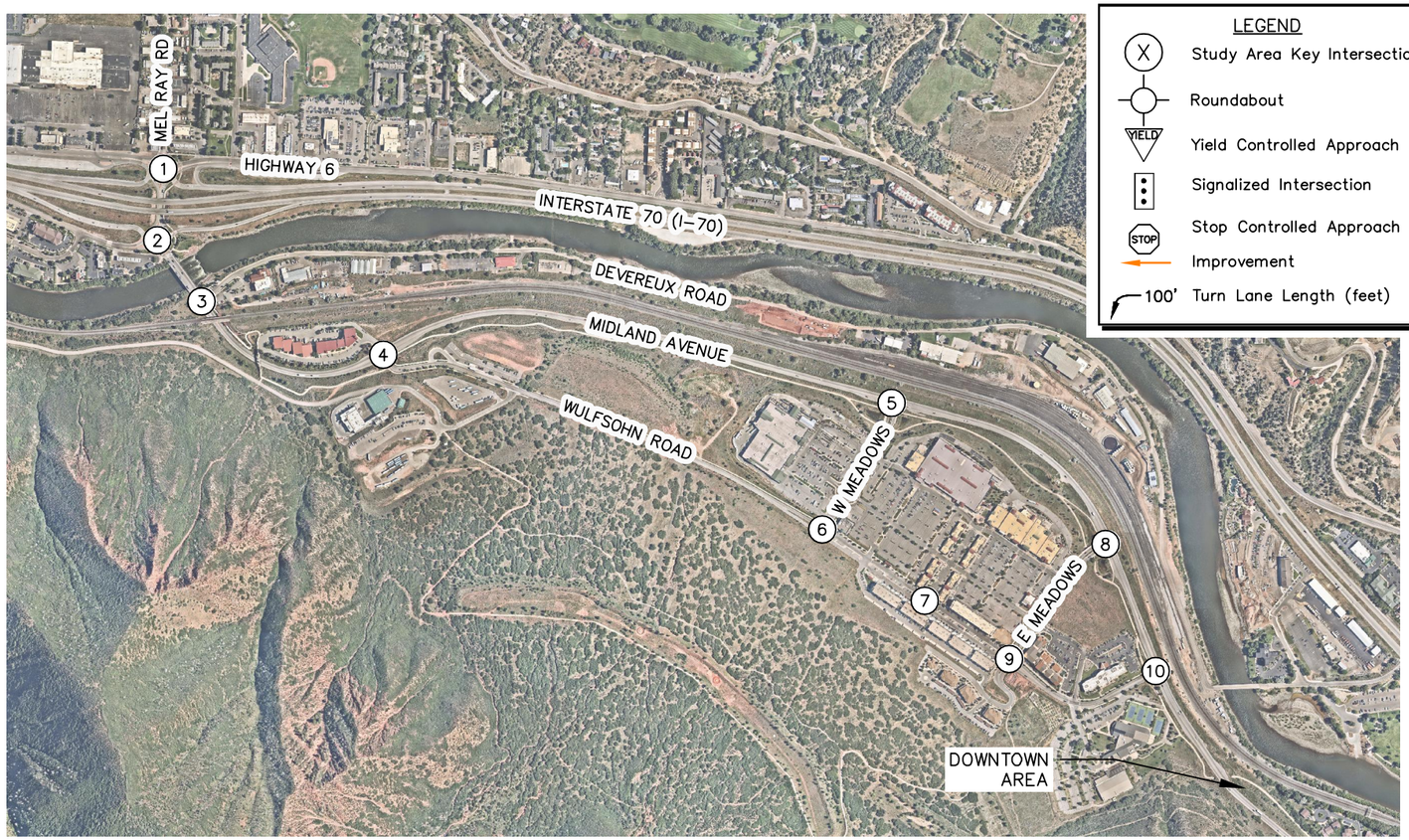


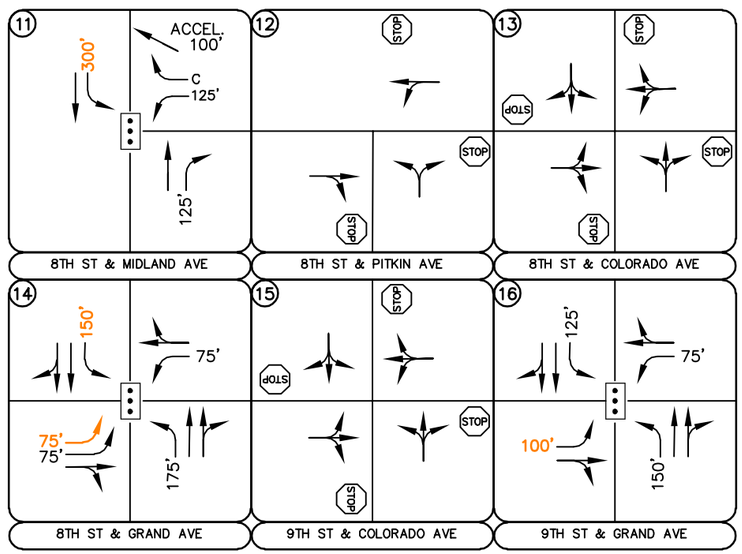
I-70 WB RAMP & MEL RAY RD



I-70 EB RAMP & MIDLAND AVE







DOWNTOWN AREA



EXECUTIVE SUMMARY FIGURE 2

GLENWOOD MEADOWS
MASTER TRAFFIC STUDY
GLENWOOD SPRINGS, CO

Kimley»Horn NORTH
NTS 096798001

RECOMMENDED LANE CONFIGURATIONS AND CONTROL

Kimley»Horn

2.0 INTRODUCTION

Kimley-Horn and Associates, Inc. has prepared this report to document the results of the Master Traffic Study for Glenwood Meadows in Glenwood Springs, Colorado. A vicinity map illustrating the Meadows development area site location is shown in **Figure 1**. Glenwood Meadows currently is developed with a mix of uses including retail, restaurants, hotels, and multifamily residential that are already built and occupied. Remaining development within Glenwood Meadows will continue to develop with a mix of uses. **Table 1** illustrates the existing occupied land uses, the proposed/approved unbuilt land uses, and vacant parcels with proposed max intensity uses.

Table 1 – Glenwood Meadows Land Uses

Address	Built/Proposed/Vacant	Building Name	Use Type
100 Midland	Built	Midland Center	Retail
130 Midland	Vacant	-	Restaurant/Retail
RFTA	Built/Proposed Expansion	RFTA	Transit
Lot 14	Vacant	-	Residential
215 W Meadows	Built	Lowe's	Retail
100 W Meadows	Built	Big 5	Retail
110 W Meadows	Built	Target	Retail
400 W Meadows	Built	Chili's	Restaurant
Market Street	Built/Some Vacant	Market Street Retailers	Retail
E Meadows	Built	Ulta/ Natural Grocers, BB&B, Petco	Retail
205 E Meadows	Built	Wells Fargo	Bank
405 E Meadows	Proposed	Red Mountain Lofts 4	Residential/Retail
253 Wulfsohn	Built	Red Mountain Lofts 3	Residential
125 Wulfsohn	Built	Sopris Suites (Residence Inn)	Hotel
105 Wulfsohn	Built	Sopris Lodging (Courtyard)	Hotel
300 Wulfsohn	Built	Red Mountain Lofts 1 & 2	Residential
100 Wulfsohn	Built	Glenwood Springs Rec Center	Other
Flat Tops View Dr	Vacant	-	Residential
220 Flat Tops View Dr	Built	Glenwood Green Apts	Residential
Wulfsohn	Proposed	Kind Castle	Dispensary
8th & Cowdin	Proposed	Affordable Housing	Residential

A conceptual land use plan is attached in **Appendix F**. In addition, a comparison of the approved uses versus the proposed uses assumed in this study from the direction of the City of Glenwood Springs in included in **Appendix G.** It is expected that vacant parcels within Glenwood Meadows will be developed and occupied in the next 10 years; therefore, analysis was conducted for the 2030 and 2040 horizons.

The purpose of this master traffic study is to identify with full development of Glenwood Meadows the traffic related impacts on the local street system. This traffic study develops the necessary mitigation measures required for the identified traffic impacts. The following intersections were incorporated into this master traffic study based on the City of Glenwood Springs requested scope:

1. Highway 6/I-70 WB Ramps/Mel Ray Road Roundabout
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8. Midland Avenue and E Meadows Drive
9. Wulfsohn Road and E Meadows Drive
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11. 8th Street and Midland Avenue
12. 8th Street and Pitkin Avenue
13. 8th Street and Colorado Avenue
14. 8th Street and Grand Avenue (SH-82)
15. 9th Street and Colorado Avenue
16. 9th Street and Grand Avenue (SH-82)

Regional access to Glenwood Meadows is currently provided by Interstate 70 (I-70) and State Highway 82 (SH-82). Primary access is currently provided by Midland Avenue and 8th Street. Direct access is currently provided by Midland Avenue and Wulfsohn Road.

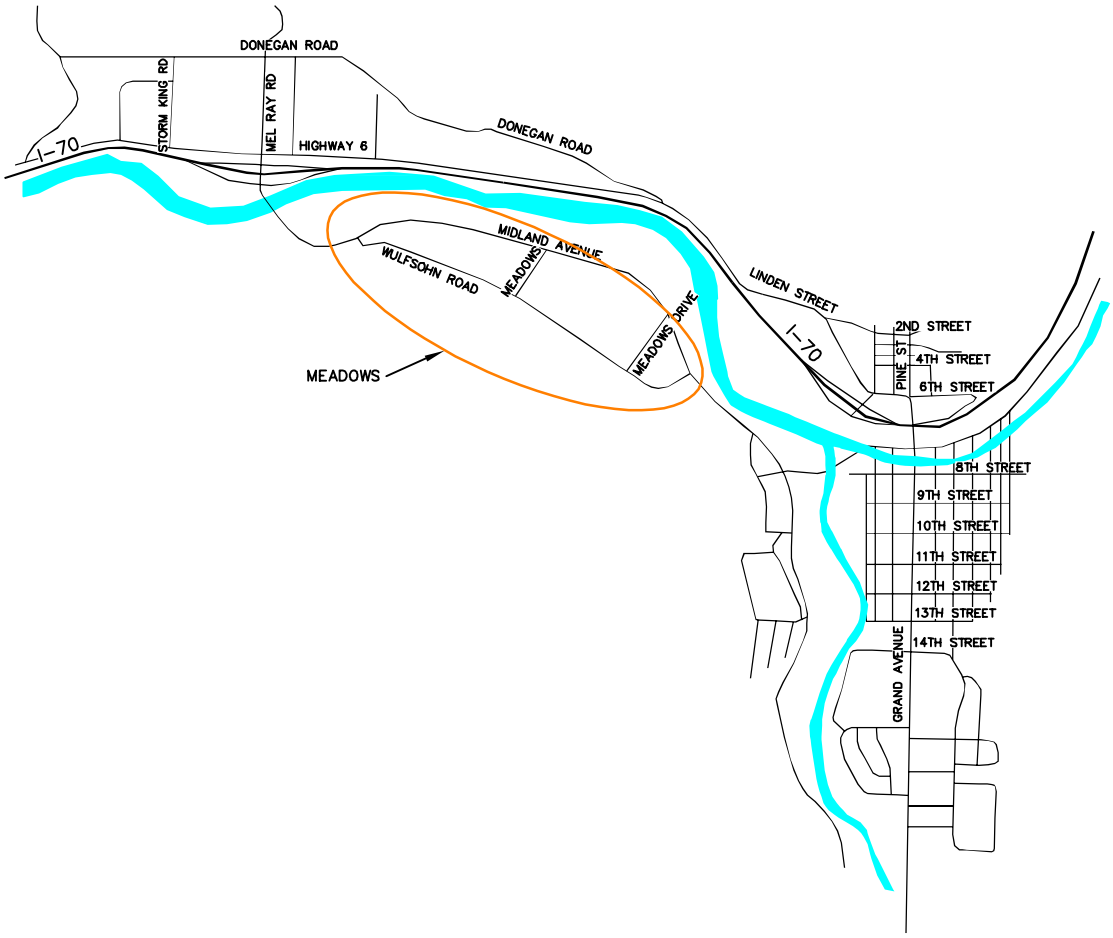


FIGURE 1
GLENWOOD MEADOWS
MASTER TRAFFIC STUDY
GLENWOOD SPRINGS, CO
VICINITY MAP

3.0 EXISTING AND FUTURE CONDITIONS

3.1 Existing Study Area/Site Visit

Glenwood Meadows currently has a mix of land uses. The Roaring Fork Transportation Authority Regional Transit Center is located in the northwest portion of the Glenwood Meadows area. Retail, restaurant, and hotel uses are currently occupied on the north side of Wulfsohn Road while residential uses and the Glenwood Springs Recreation Center are located on the south side of Wulfsohn Road. Vacant parcels are scattered within the existing area that are currently being proposed for future development.

A site visit was conducted on Sunday, April 11, 2021 to determine vacancy of the existing buildings. The vacant land uses were then added to the remaining development program because they were not accounted for in the most recent intersection counts. From the site visit, the previous Vitamin Cottage located at 100 W Meadows Drive, directly west of the Target, is currently vacant along with four storefronts in the Market Street Retailers. However, as noted in a meeting on October 13, 2022 with City of Glenwood Springs staff, the building at 100 W Meadows Drive has been replaced with a Big 5 Sports and is currently operational. Therefore, this use was accounted for in the updated turning movement counts conducted in October and November.

3.2 Existing Roadway Network

Midland Avenue is a two-lane roadway extending primarily eastbound and westbound with one through lane in each direction. The roadway has a posted speed limit ranging from 25 miles per hour to 45 miles per hour within the project study area. Wulfsohn Road extends primarily east-west with one through lane of travel in each direction while connecting with Midland Avenue to the east and west on the south end of the Glenwood Meadows property. Wulfsohn Road has a posted speed limit of 25 miles per hour. W Meadows Drive connects Wulfsohn Road and Midland Avenue on the northwest end of the Glenwood Meadows property and E Meadows Drive connects Wulfsohn Road and Midland Avenue on the southeast end of the Glenwood Meadows property.

The intersection of US-6/I-70 Westbound Ramp and Mel Ray Road (#1) is a six-legged roundabout intersection that provides access to SH-6, Mel Ray Road, and the I-70 Westbound Ramps. All legs of this roundabout provide two-lane approaches except for the southbound approach on Mel Ray Road which provides a single lane. An aerial photo of the existing intersection configuration is below (north is up).



US-6/I-70 Westbound Ramp and Mel Ray Road (#1)

The intersection of Riverine Road/I-70 Eastbound Ramp and Midland Avenue (#2) is a five-legged roundabout intersection that provides access to Riverine Road, Midland Avenue, Mel Ray Road, and the I-70 Eastbound Ramps. The southbound approach on Mel Ray Road and the eastbound approach of Riverine Road provides single-lane approaches while the I-70 Eastbound off ramp and the northbound approach of Midland Avenue provides two-lane approaches. An aerial photo of the existing intersection configuration is below (north is up).



Riverine Road/I-70 Eastbound Ramp and Midland Avenue (#2)

The unsignalized intersection of Devereux Road and Midland Avenue (#3) operates with stop control on the westbound approach of Devereux Road. The northbound approach consists of a shared-through/right turn lane while the southbound approach consists of a left turn lane and a through lane. The westbound approach provides a single shared lane for left and right turn movements. An aerial photo of the existing intersection configuration is below (north is up).



Devereux Road and Midland Avenue (#3)

The unsignalized intersection of Midland Avenue and Wulfsohn Road (#4) operates with stop control on the northbound Wulfsohn Road and southbound access approaches. The northbound approach consists of a single shared lane for all movements while the southbound approach consists of a left turn lane and a shared through/right turn lane. The eastbound approach consists of a left turn lane, one through lane, and a short right turn lane, while the westbound approach consists of a left turn lane and a shared through/right turn lane. An aerial photo of the existing intersection configuration is below (north is up).



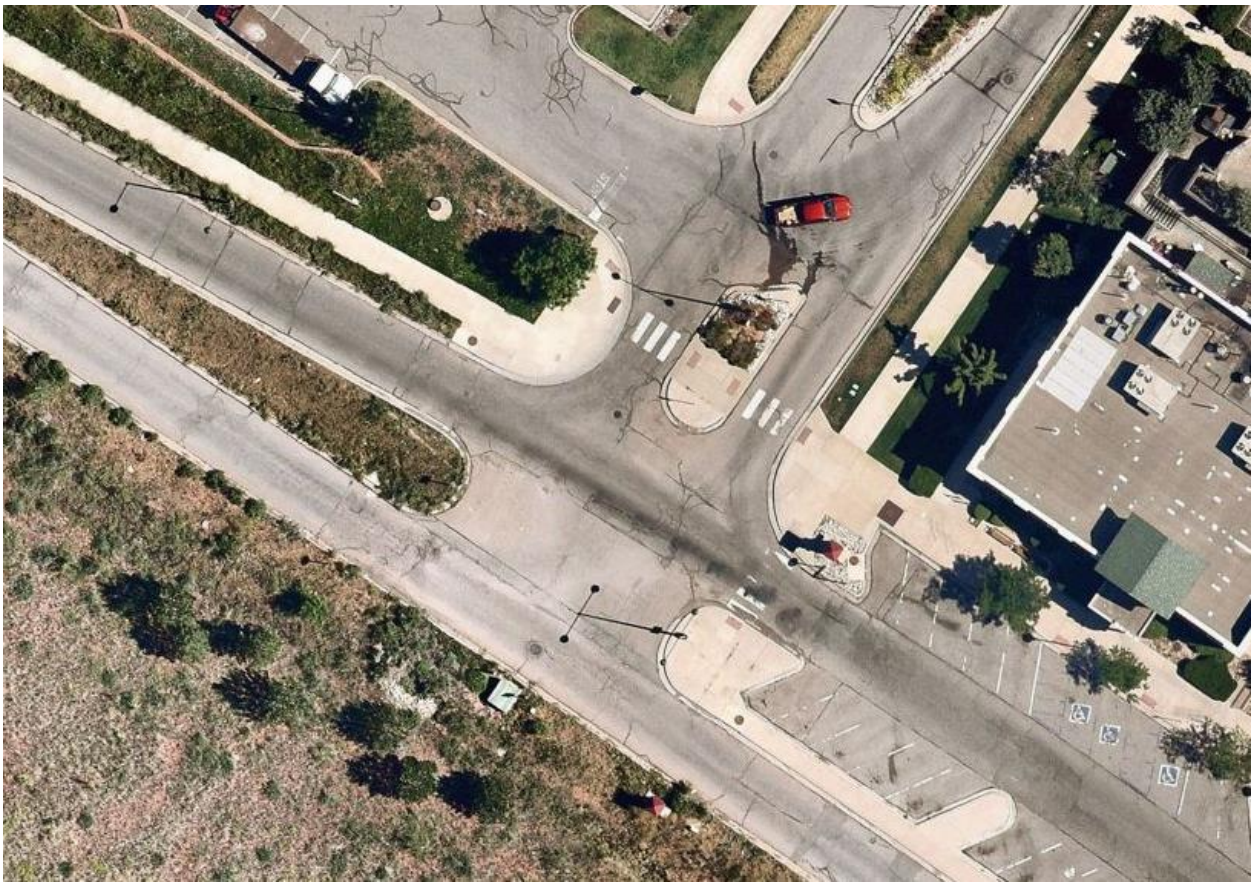
Midland Avenue and Wulfsohn Road (#4)

The intersection of Midland Avenue and W Meadows Drive (#5) is a signalized three-leg T-intersection with the westbound left turn operating under protected-permissive phasing. The eastbound approach consists of one through lane and a right turn lane while the westbound approach consists of a left turn lane and one through lane. The northbound approach consists of separate left turn and right turn lanes. An aerial photo of the existing intersection configuration is below (north is up).



Midland Avenue and W Meadows Drive (#5)

The unsignalized ‘T’ intersection of Wulfsohn Road and W Meadows Drive (#6) operates under stop control on the southbound approach of W Meadows Drive. The three approaches consist of a single lane with shared movements on each approach. An aerial photo of the existing intersection configuration is below (north is up).



Wulfsohn Road and W Meadows Drive (#6)

The unsignalized T-intersection of Wulfsohn Road and Market Street (#7) operates with all-way stop control on all three approaches. The eastbound and westbound approaches of Wulfsohn Road provide a single lane for shared movements. The southwestbound approach provides a single lane for shared left and right turn movements. An aerial photo of the existing intersection configuration is below (north is up). Of note, to keep Wulfsohn Road direction consistent throughout the report, it is identified as an east-west roadway through this intersection.



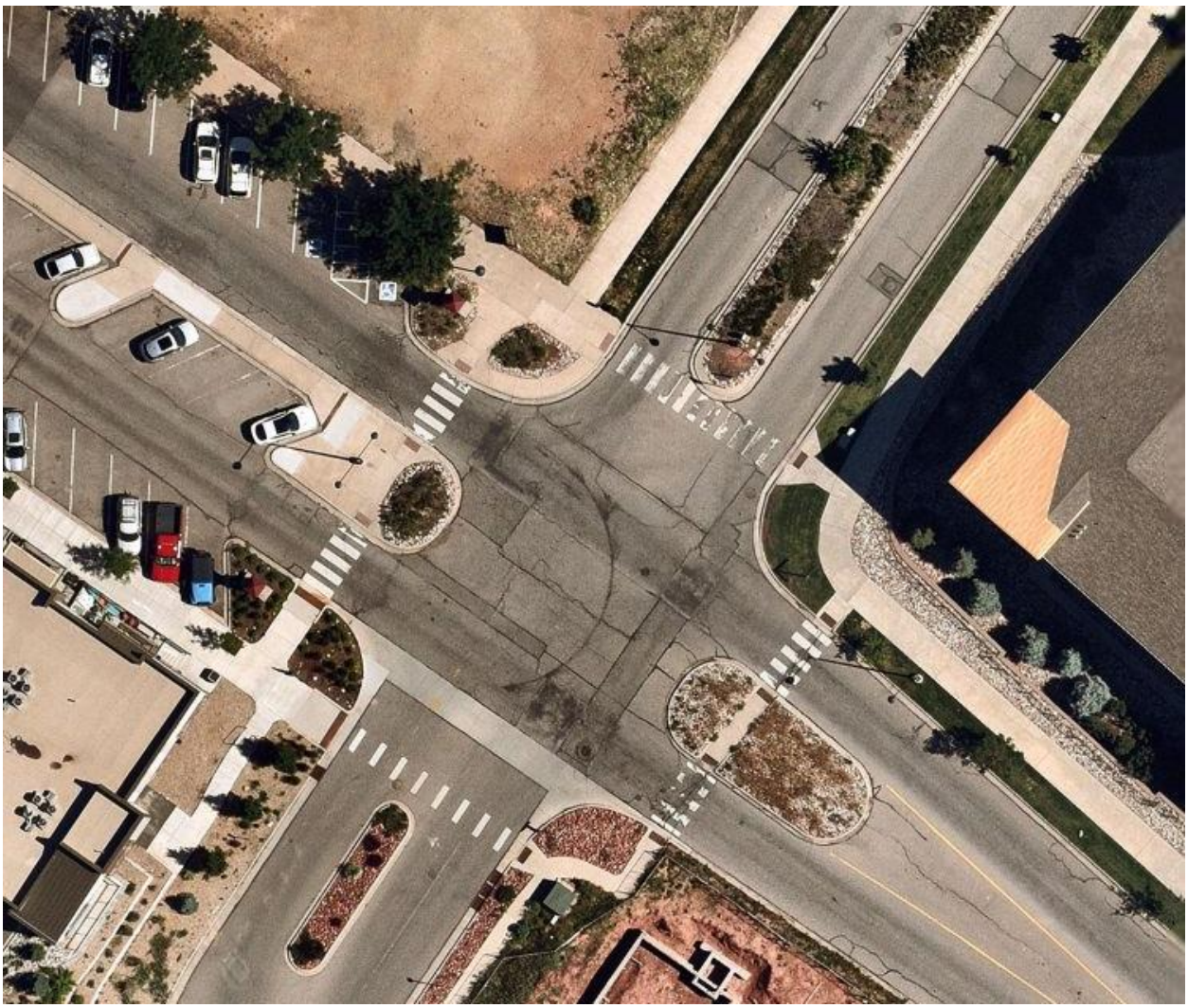
Wulfoshn Road and Market Street (#7)

The unsignalized T-intersection of E Meadows Drive and Midland Avenue (#8) operates with stop control on the northeastbound approach of E Meadows Drive. The northwestbound Midland Avenue approach consists of a left turn lane and a through lane while the southeastbound Midland Avenue approach consists of a right turn lane and a through lane. The northbound E Meadows Drive approach consists of a right-turn lane only, as this intersection is restricted to three-quarter movements with left turns prohibited from the minor street approach. An aerial photo of the existing intersection configuration is below (north is up). Of note, to keep Midland Avenue direction consistent throughout the report, it is identified as an east-west roadway through this intersection.



E Meadows Drive and Midland Avenue (#8)

The unsignalized intersection of Wulfsohn Road and E Meadows Drive (#9) operates with stop control on the northbound and southbound approaches of E Meadows Drive. The northbound approach consists of a left turn lane and a share through/right turn lane. The eastbound, westbound, and southbound approaches consist of one lane for shared movements. An aerial photo of the existing intersection configuration is below (north is up).



Wulfsohn Road and E Meadows Drive (#9)

The unsignalized T-intersection of Wulfsohn Road and Midland Avenue (#10) operates with stop control on the northeastbound approach of Wulfsohn Road. The northwestbound Midland Avenue approach consists of a left turn lane and a through lane while the southeastbound approach consists of a right turn lane and a through lane. The northeastbound Wulfsohn Road approach consists of separate right and left turn lanes. In addition, an acceleration lane has been provided for the northbound right turn movement. An aerial photo of the existing intersection configuration is below (north is up). Of note, to keep Midland Avenue direction consistent throughout the report, it is identified as an east-west roadway through this intersection.



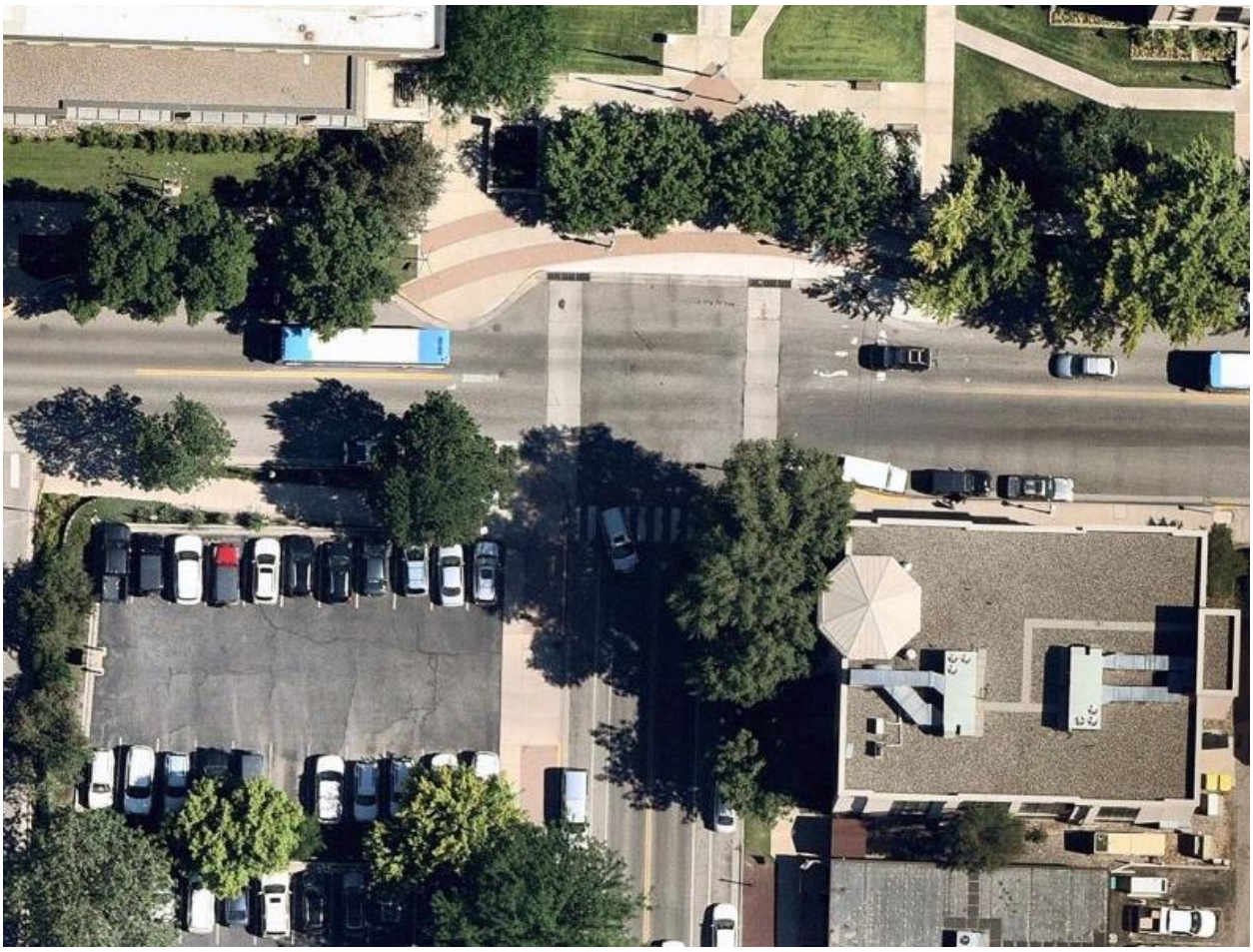
Wulfsohn Road and Midland Avenue (#10)

The intersection of 8th Street and Midland Avenue (#11) is a signalized T-intersection with the southbound left turn operating under protected-permissive phasing. The northbound approach of this intersection consists of a through lane and a right turn lane while the southbound consists of a left turn lane and a through lane. The westbound approach provides a left turn lane and a channelized right turn lane with the right turn operating with free movements. An aerial photo of the existing intersection configuration is below (north is up).



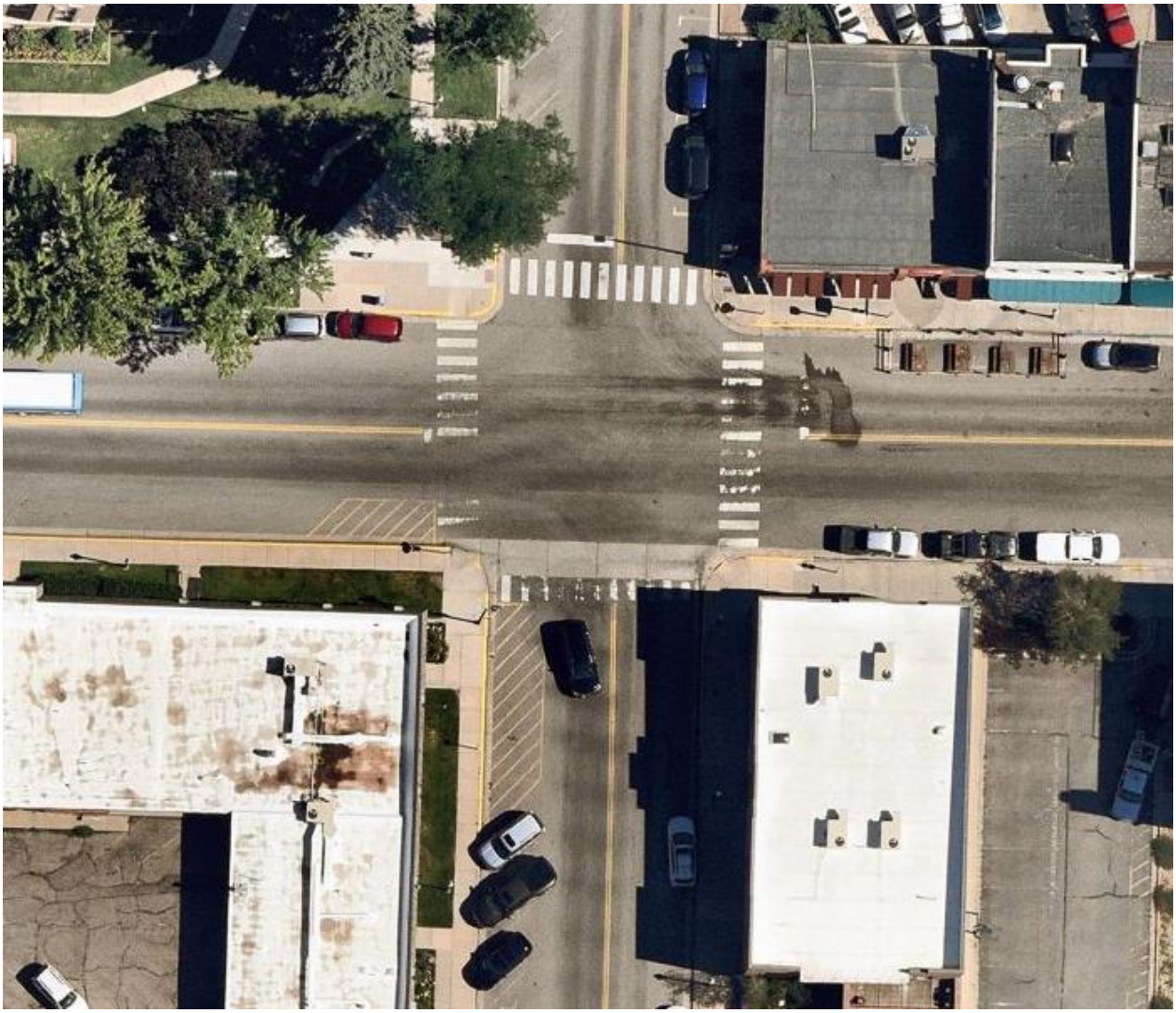
8th Street and Midland Avenue (#11)

The intersection of 8th Street and Pitkin Avenue (#12) is unsignalized with all-way stop control on all three approaches. The northbound approach of Pitkin Avenue and the eastbound and westbound approaches of 8th Street all provide a single lane for shared movements. An aerial photo of the existing intersection configuration is below (north is up).



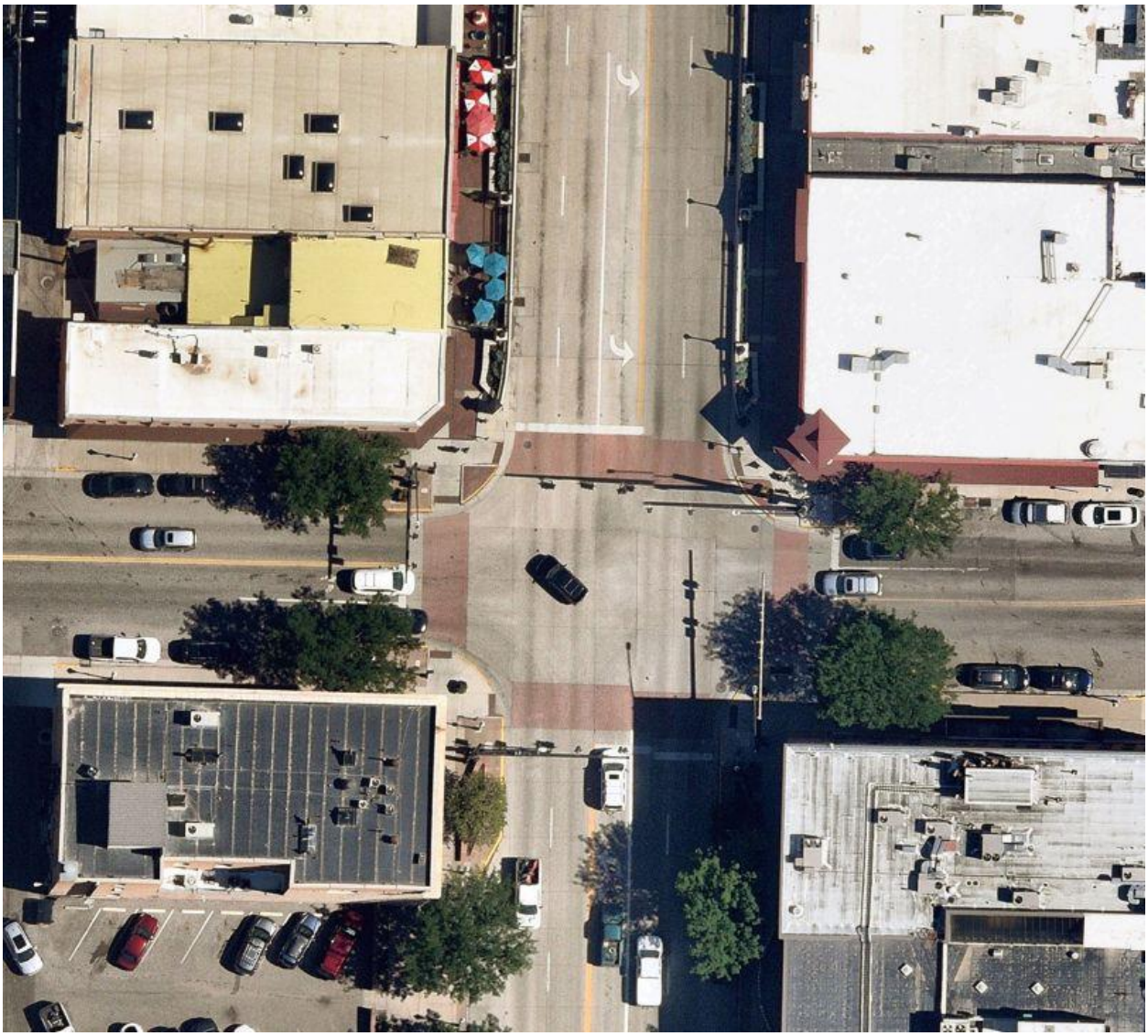
8th Street and Pitkin Avenue (#12)

The intersection of 8th Street and Colorado Avenue (#13) is unsignalized with all-way stop control on all four approaches. All four approaches provide a single lane for shared movements. An aerial photo of the existing intersection configuration is below (north is up).



8th Street and Colorado Avenue (#13)

The intersection of 8th Street and Grand Avenue (SH-82) (#14) is a signalized intersection with the eastbound and westbound left turns operating under protected-only phasing while the northbound and southbound left turns operate with protected-permissive phasing. The northbound and southbound approach consists of a left turn lane and two through lanes with the outside lane providing a shared right turn movement. The eastbound and westbound approaches consist of a left turn lane and a shared through/right turn lane. An aerial photo of the existing intersection configuration is below (north is up).



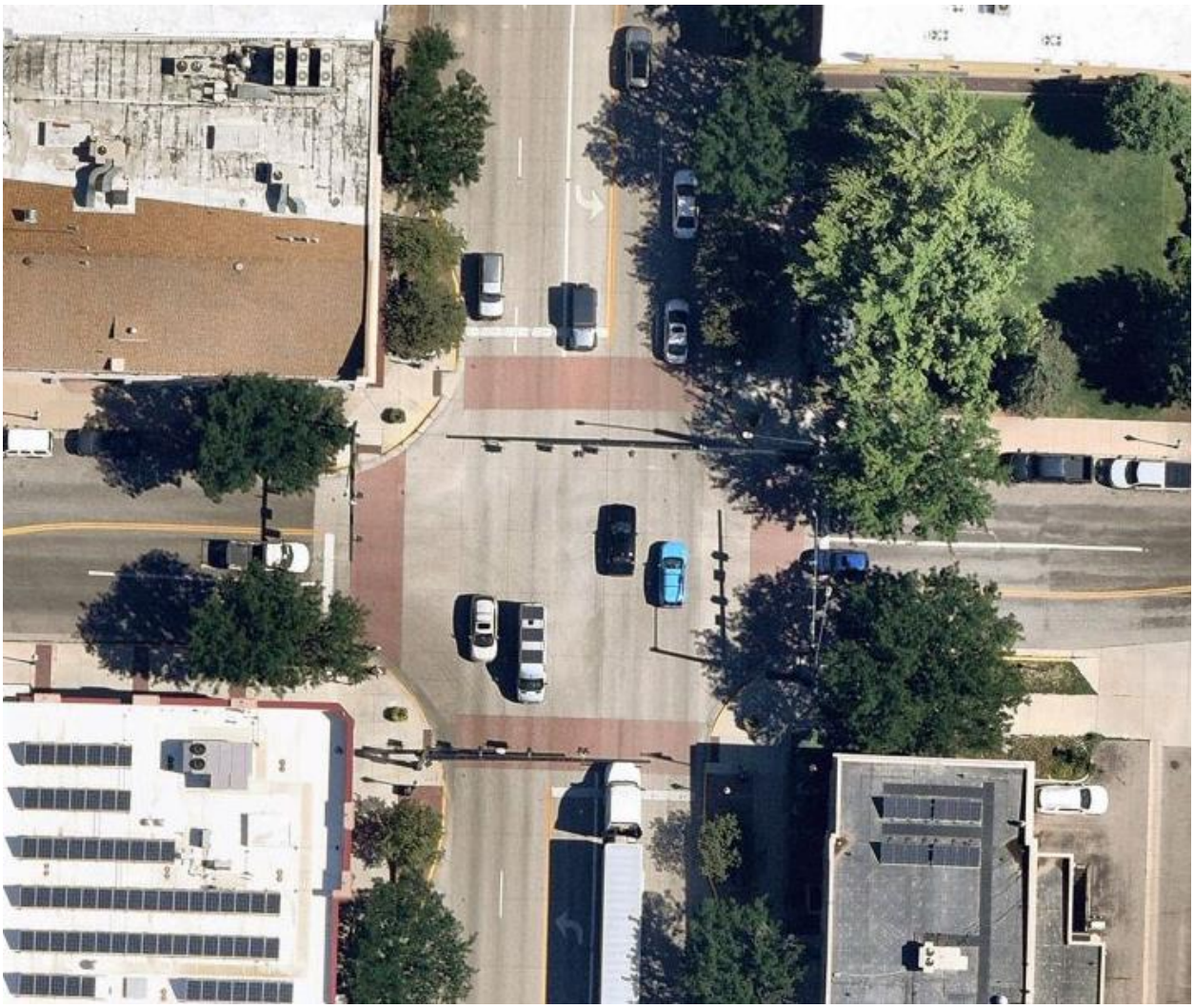
8th Street and Grand Avenue (#14)

The intersection of 9th Street and Colorado Avenue (#15) is unsignalized with all-way stop control on all four approaches. All four approaches provide a single lane for shared movements. An aerial photo of the existing intersection configuration is below (north is up).



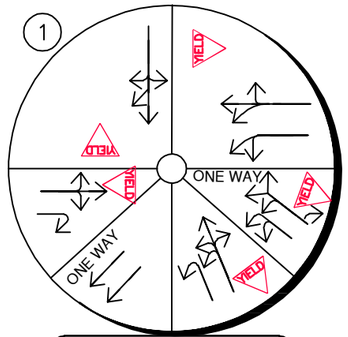
9th Street and Colorado Avenue (#15)

The intersection of 9th Street and Grand Avenue (SH-82) (#16) is a signalized intersection with the eastbound and westbound left turns operating under protected-only phasing while the northbound and southbound left turns operate with protected-permissive phasing. The northbound and southbound approach consists of a left turn lane and two through lanes with the outside lane providing a shared right turn movement. The eastbound and westbound approaches consist of a left turn lane and a shared through/right turn lane. An aerial photo of the existing intersection configuration is below (north is up).

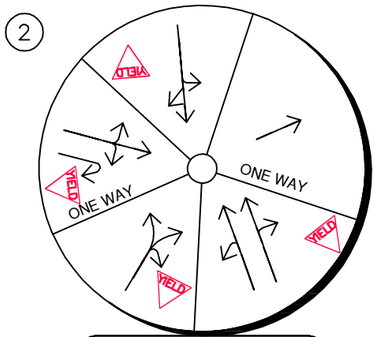


9th Street and Grand Avenue (#16)

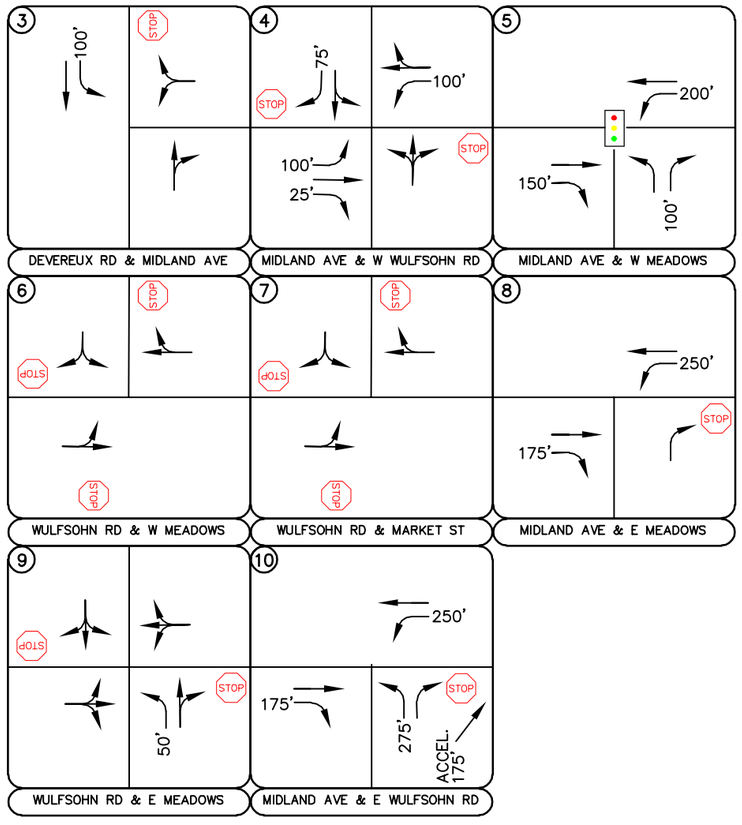
The intersection lane configuration and control for the study area intersections are shown in **Figure 2**.

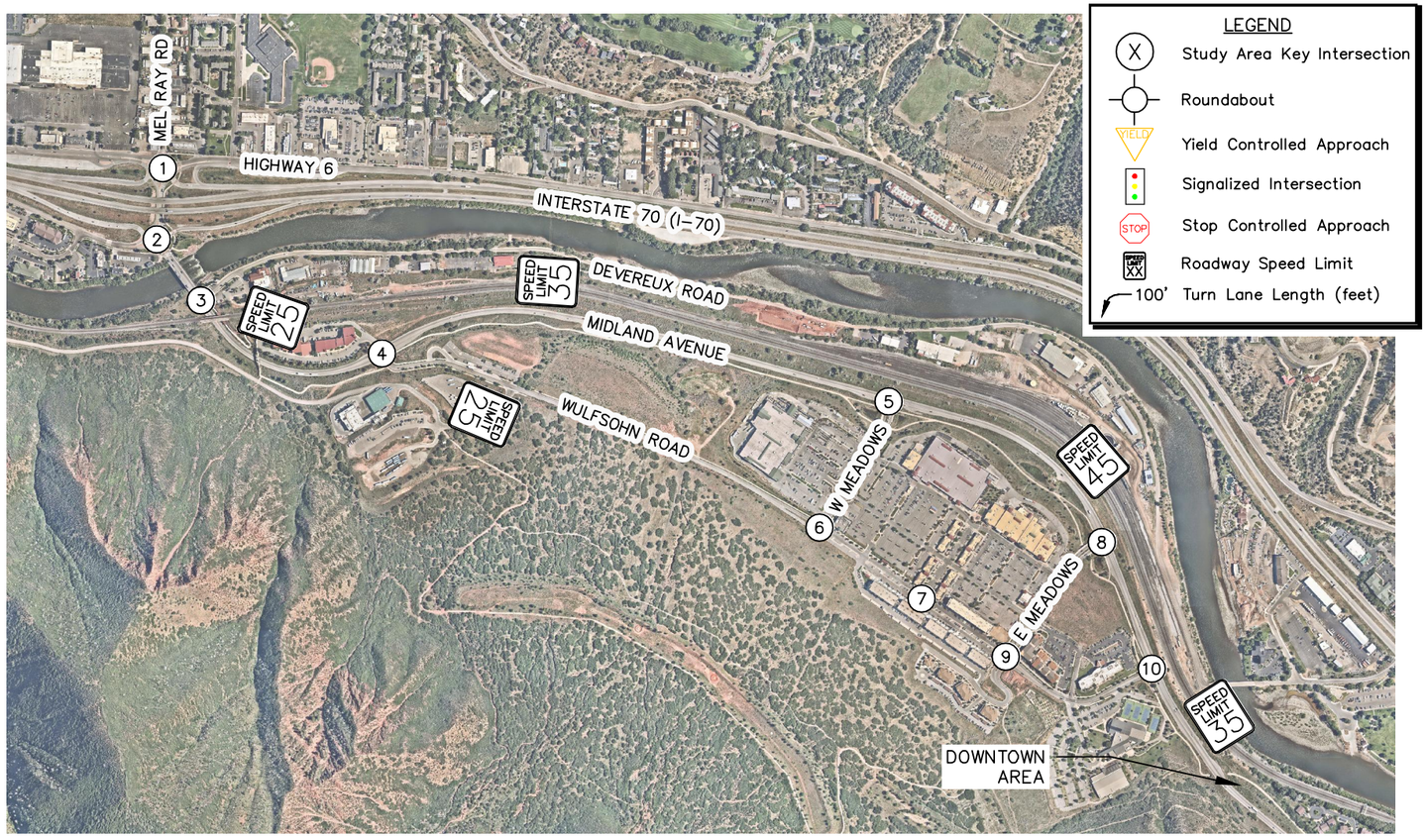


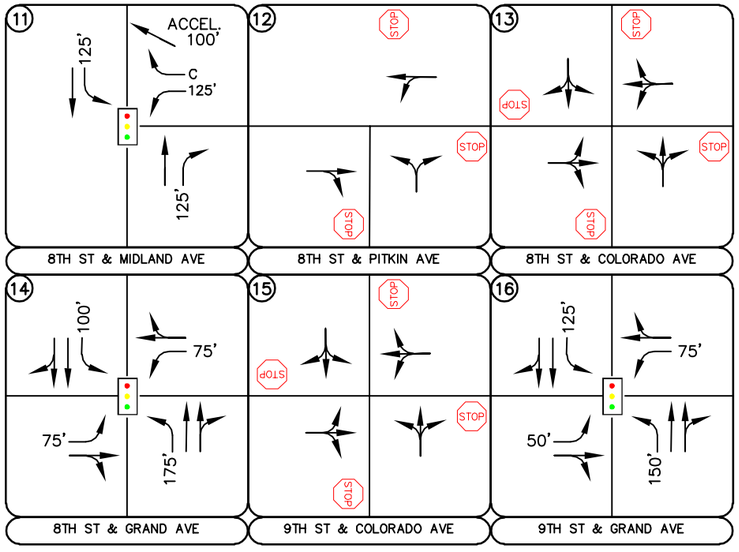
I-70 WB RAMP & MEL RAY RD



I-70 EB RAMP & MIDLAND AVE







DOWNTOWN AREA

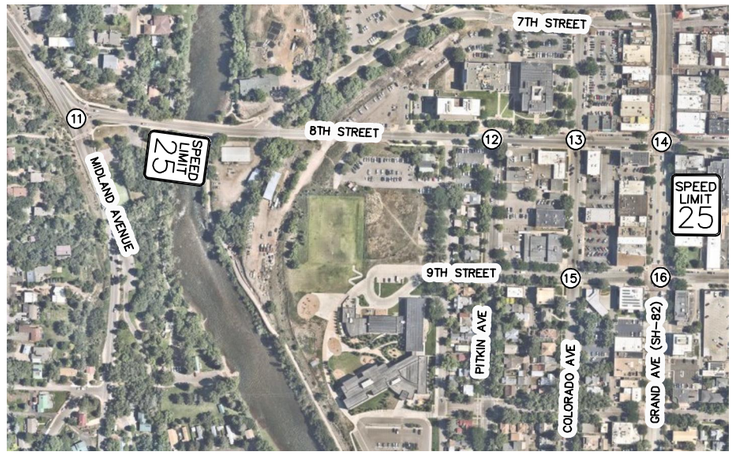


FIGURE 2

GLENWOOD MEADOWS
MASTER TRAFFIC STUDY
GLENWOOD SPRINGS, CO
EXISTING LANE CONFIGURATIONS AND CONTROL

Kimley»Horn NORTH
NTS 096798001

Kimley»Horn

3.3 Existing Traffic Volumes

Daily traffic volumes were collected at 15 locations along 8th Street, 9th Street, Colorado Avenue, Pitkin Avenue, Midland Avenue, Wulfsohn Road, E Meadows Drive, and W Meadows Drive for seven (7) consecutive days from September 17, 2022 to September 23, 2022. From the week-long counts, the highest typical peak day and morning/afternoon peak periods were determined and counted at the study intersections. From the counts, the typical weekday peak day was determined to be Thursday with some study intersections having a higher mid-day volume instead of the typical morning peak hour (7:00 to 9:00 AM) period. Existing turning movement counts were conducted at intersections on either, Thursday, September 29, 2022, Thursday, October 20, 2022, Wednesday, November 2, 2022, Thursday, November 3, 2022, Tuesday, November 8, 2022, and Wednesday, November 9, 2022. The counts were conducted during the morning and afternoon peak hours of adjacent street traffic in 15-minute intervals from 7:00 AM to 9:00 AM or 11:00 AM to 1:00 PM and 4:00 PM to 6:00 PM on these count dates. The weekday counts that were collected on Tuesday or Wednesday were adjusted and balanced to the peak day Thursday counts. A summary table of the count date and which peak hours the intersections were counted and studied is shown in **Table 2.**

Table 2 – Data Collection Summary

#	Intersection	Peak Hour Generator		
		AM (7:00 to 9:00 AM)	Midday (11:00 to 1:00 PM)	PM (4:00 to 6:00 PM)
1	**Highway 6/Mel Ray**	Thu Oct-20-2022		Thu Oct-20-2022
2	**Riverine/Mel Ray/ I-70 EB Ramp**	Thu Oct-20-2022		Thu Oct-20-2022
3	**Devereux Road & Midland**	Thu Oct-20-2022		Thu Sep-29-2022
4	**Midland & E Wulfsohn**	Thu Oct-20-2022		Thu Oct-20-2022
5	**Midland Ave & W Meadows**	Wed Nov-9-2022		Tue Nov-8-2022
6	**Wulfsohn & W Meadows**	Thu Oct-20-2022		Thu Oct-20-2022
7	**Wulfsohn & Market St**		Thu Oct-20-2022	Thu Oct-20-2022
8	**Midland Ave & E Meadows**	Thu Oct-20-2022		Thu Sep-29-2022
9	**Wulfsohn & E Meadows**		Thu Oct-20-2022	Thu Oct-20-2022
10	**Midland Ave & E Wulfsohn**	Thu Oct-20-2022		Thu Oct-20-2022
11	**8th St & Midland Ave**	Thu Nov-3-2022		Thu Nov-3-2022
12	**8th St & Pitkin Ave**		Thu Oct-20-2022	Thu Oct-20-2022
13	**8th St & Colorado Ave**		Thu Oct-20-2022	Thu Oct-20-2022
14	**8th St & Grand Ave**		Wed Nov-2-2022	Wed Nov-2-2022
15	**9th St & Colorado Ave**		Thu Oct-20-2022	Thu Oct-20-2022
16	**9th St & Grand Ave**		Thu Oct-20-2022	Thu Oct-20-2022

The existing intersection traffic volumes are shown in **Figure 3** with count sheets provided in **Appendix A**. The adjusted existing traffic volumes are shown in **Figure 4** to represent the peak day conditions during the week.

In addition to the turning movement counts collected, the average daily traffic, speed data, and vehicle type were collected at 15 locations along within the project vicinity. The typical peak weekday (Thursday) and peak weekend (Friday) counts, speed, and vehicle classification at the 15 locations are summarized in **Table 3** and **Table 4**, respectively.

Table 3 – Thursday Roadway Data Summary

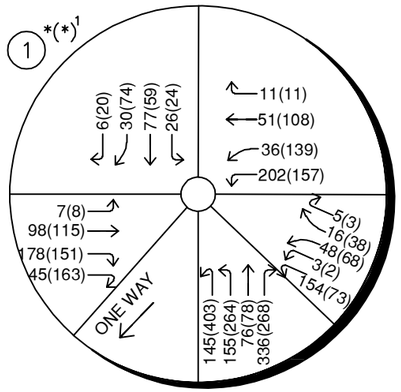
#	Segment	Peak Typical Weekday (Thursday)					
		ADT (veh)	85th Percentile Speed (mph)		Vehicle Type (%)		
			EB/NB	WB/SB	Class 1-3 (Passenger Vehicles)	Class 4 (Bus)	Class 5-13 (Heavy Vehicles)
1	8th St W/O School St	8,469	29.0	32.3	86.3%	1.0%	12.8%
2	9th St BTWN Colorado Ave & Grand Ave	2,655	14.9	17.3	91.1%	2.1%	6.8%
3	Colorado Ave BTWN 7th St & 8th St	1,627	18.2	18.7	86.0%	0.1%	13.9%
4	Pitkin Ave BTWN 8th St & 9th St	3,278	21.6	22.6	90.3%	0.0%	9.7%
5	Midland Ave BTWN 8th St & E Wulfsohn	14,374	33.7	37.1	86.4%	0.5%	13.1%
6	Midland Ave BTWN E Wulfsohn and E Meadows	7,832	43.3	48.5	87.2%	0.1%	12.7%
7	Midland Ave BTWN E Meadows & W Meadows	9,414	42.8	45.1	84.0%	0.2%	15.9%
8	Midland Ave BTWN W Meadows & W Wulfsohn	11,131	47.4	48.1	84.2%	0.2%	15.7%
9	Midland Ave BTWN W Wulfsohn & Devereux Rd	13,716	37.8	34.7	85.7%	0.2%	14.1%
10	Midland Ave BTWN Riverine & Devereux	13,635	28.5	32.4	84.6%	0.4%	15.0%
11	W Wulfsohn E/O Midland Ave	1,893	38.4	36.1	76.7%	4.1%	19.1%
12	Wulfsohn BTWN E Meadows & W Meadows	1,704	19.5	18.5	79.6%	4.3%	16.2%
13	E Wulfsohn W/O Midland Ave	2,590	28.3	25.2	87.1%	0.0%	12.9%
14	E Meadows Dr S/O Midland Ave	3,328	23.3	23.8	83.0%	2.8%	14.2%
15	W Meadows Dr S/O Midland Ave	5,733	23.0	21.5	80.8%	0.2%	18.9%

Table 4 – Friday Roadway Data Summary

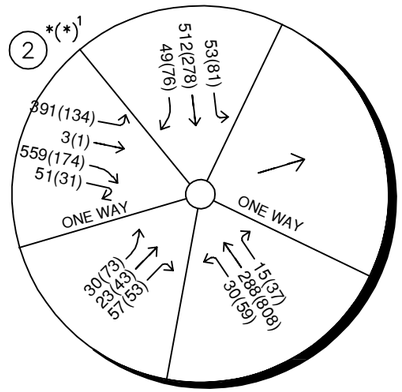
#	Segment	Peak Weekend (Friday)					
		ADT (veh)	85th Percentile Speed (mph)		Vehicle Type (%)		
			EB/NB	WB/SB	Class 1-3 (Passenger Vehicles)	Class 4 (Bus)	Class 5-13 (Heavy Vehicles)
1	8th St W/O School St	8,642	29.5	32.8	87.3%	0.7%	11.9%
2	9th St BTWN Colorado Ave & Grand Ave	2,842	15.0	17.9	90.4%	2.1%	7.5%
3	Colorado Ave BTWN 7th St & 8th St	1,797	19.2	18.9	86.4%	0.1%	13.5%
4	Pitkin Ave BTWN 8th St & 9th St	3,641	21.7	23.2	89.7%	0.0%	10.3%
5	Midland Ave BTWN 8th St & E Wulfsohn	14,591	34.1	37.5	87.3%	0.5%	12.3%
6	Midland Ave BTWN E Wulfsohn and E Meadows	12,289	43.1	47.3	83.9%	0.1%	16.0%
7	Midland Ave BTWN E Meadows & W Meadows	9,386	43.2	45.5	85.2%	0.1%	14.7%
8	Midland Ave BTWN W Meadows & W Wulfsohn	11,691	47.9	48.3	85.9%	0.1%	14.0%
9	Midland Ave BTWN W Wulfsohn & Devereux Rd	14,566	38.3	34.9	86.0%	0.2%	13.8%
10	Midland Ave BTWN Riverine & Devereux	14,372	28.4	32.5	86.0%	0.3%	13.7%
11	W Wulfsohn E/O Midland Ave	1,987	39.1	35.9	75.4%	3.7%	21.0%
12	Wulfsohn BTWN E Meadows & W Meadows	1,745	19.3	19.1	78.3%	3.8%	17.9%
13	E Wulfsohn W/O Midland Ave	2,745	28.5	25.2	87.6%	0.1%	12.4%
14	E Meadows Dr S/O Midland Ave	3,504	23.7	24.0	82.6%	2.5%	14.8%
15	W Meadows Dr S/O Midland Ave	6,117	23.3	21.6	84.0%	0.2%	15.8%

3.4 Unspecified Development Traffic Growth

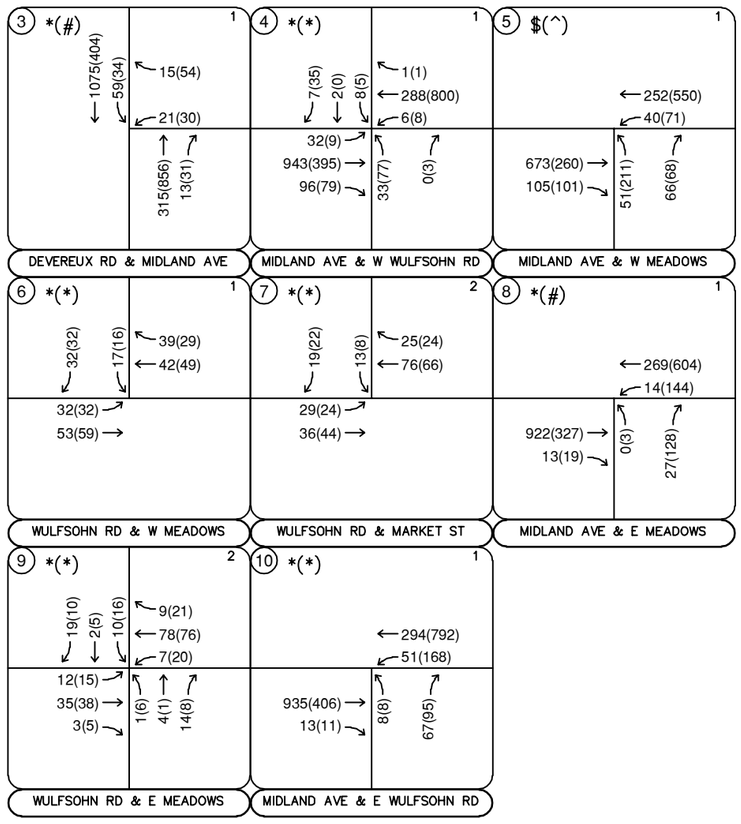
According to traffic projections from the Colorado Department of Transportation (CDOT) Online Transportation Information System (OTIS), SH-6 and SH-82 are expected to have a 20-year growth factor ranging from 1.15 to 1.2 within the vicinity of the study area. These growth factors equate to annual growth rates ranging from 0.70 percent to 0.92 percent. However, a majority of the traffic using the study intersections are on the west side of these two locations and the remaining Meadows development will account for the projected growth. Therefore, an annual growth rate of 0.5 percent was applied to existing volumes throughout the 2040 horizon prior to the addition of Meadows full buildout traffic. CDOT traffic projections are provided in **Appendix A**. The remaining developments from Meadows, project traffic from the 480 Donegan development, and the Cowdin & 8th Street Affordable Housing development were added to existing traffic volumes.

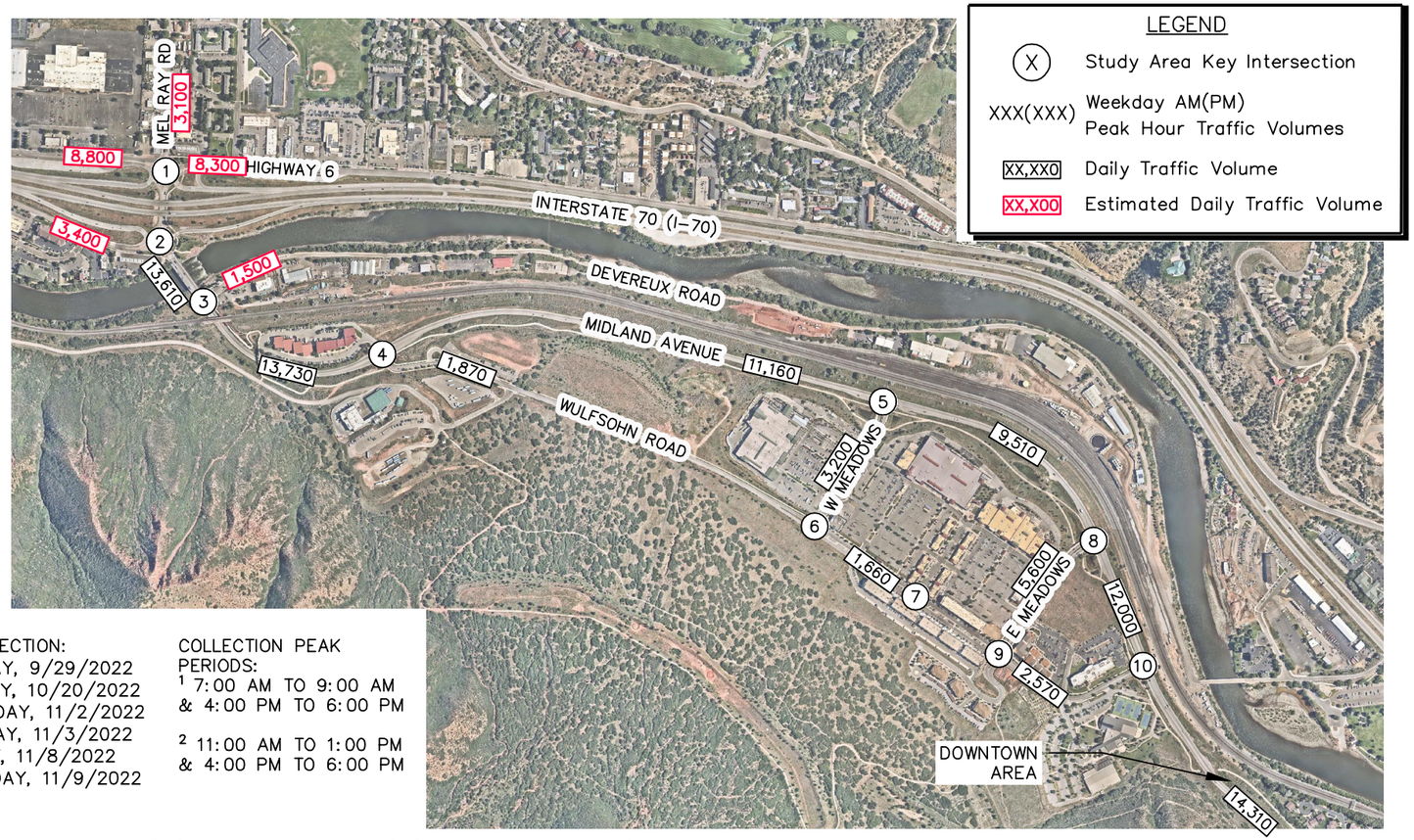


I-70 WB RAMP & MEL RAY RD



I-70 EB RAMP & MIDLAND AVE





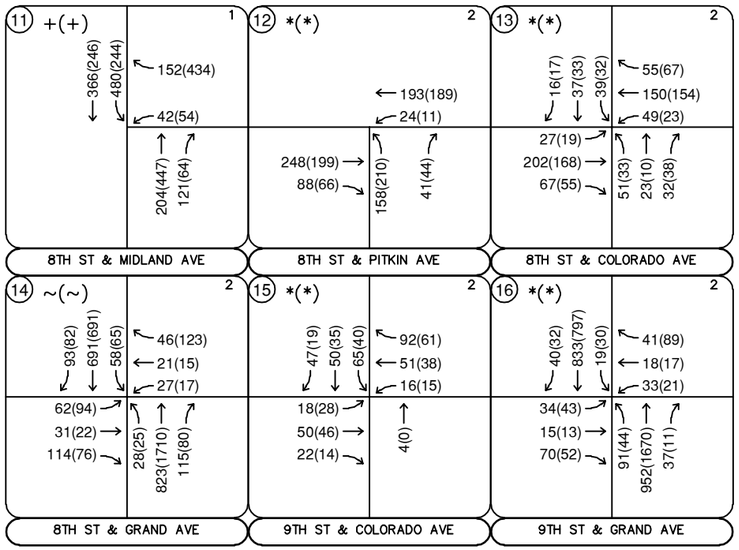
LEGEND

(X)	Study Area Key Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,XX0	Daily Traffic Volume
XX,X00	Estimated Daily Traffic Volume

DATA COLLECTION:
THURSDAY, 9/29/2022
* THURSDAY, 10/20/2022
~ WEDNESDAY, 11/2/2022
+ THURSDAY, 11/3/2022
^ TUESDAY, 11/8/2022
$ WEDNESDAY, 11/9/2022

COLLECTION PEAK PERIODS:
[1] 7:00 AM TO 9:00 AM & 4:00 PM TO 6:00 PM

[2] 11:00 AM TO 1:00 PM & 4:00 PM TO 6:00 PM



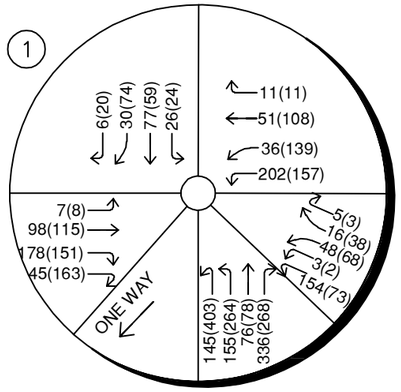
DOWNTOWN AREA



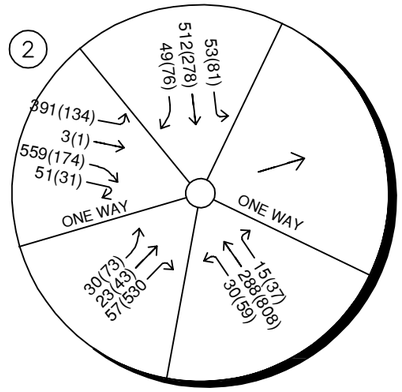
FIGURE 3
GLENWOOD MEADOWS
MASTER TRAFFIC STUDY
GLENWOOD SPRINGS, CO
2022 EXISTING TRAFFIC VOLUMES

Kimley»Horn NORTH
NTS 096798001

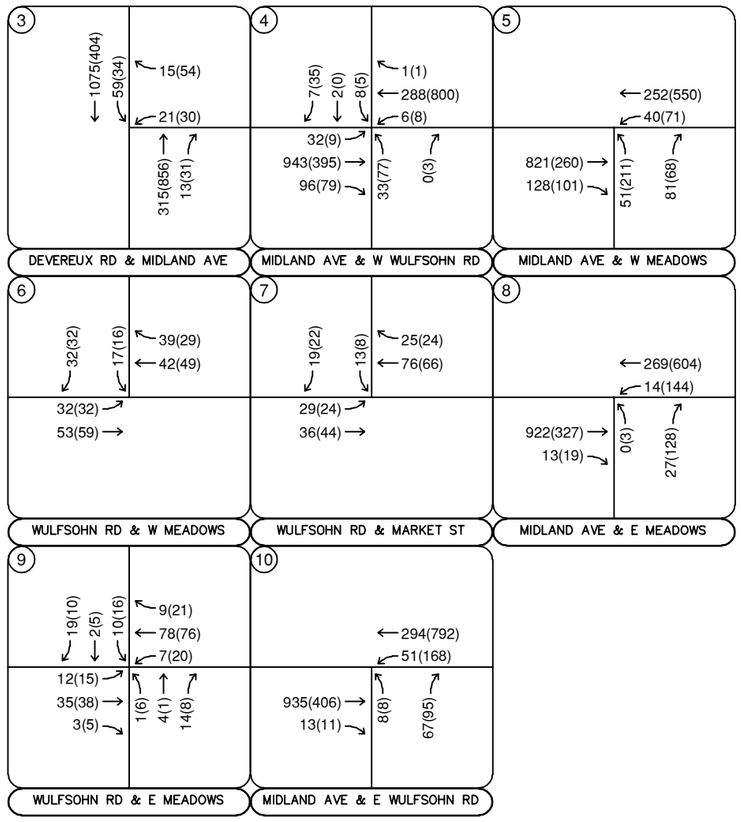
Kimley»Horn

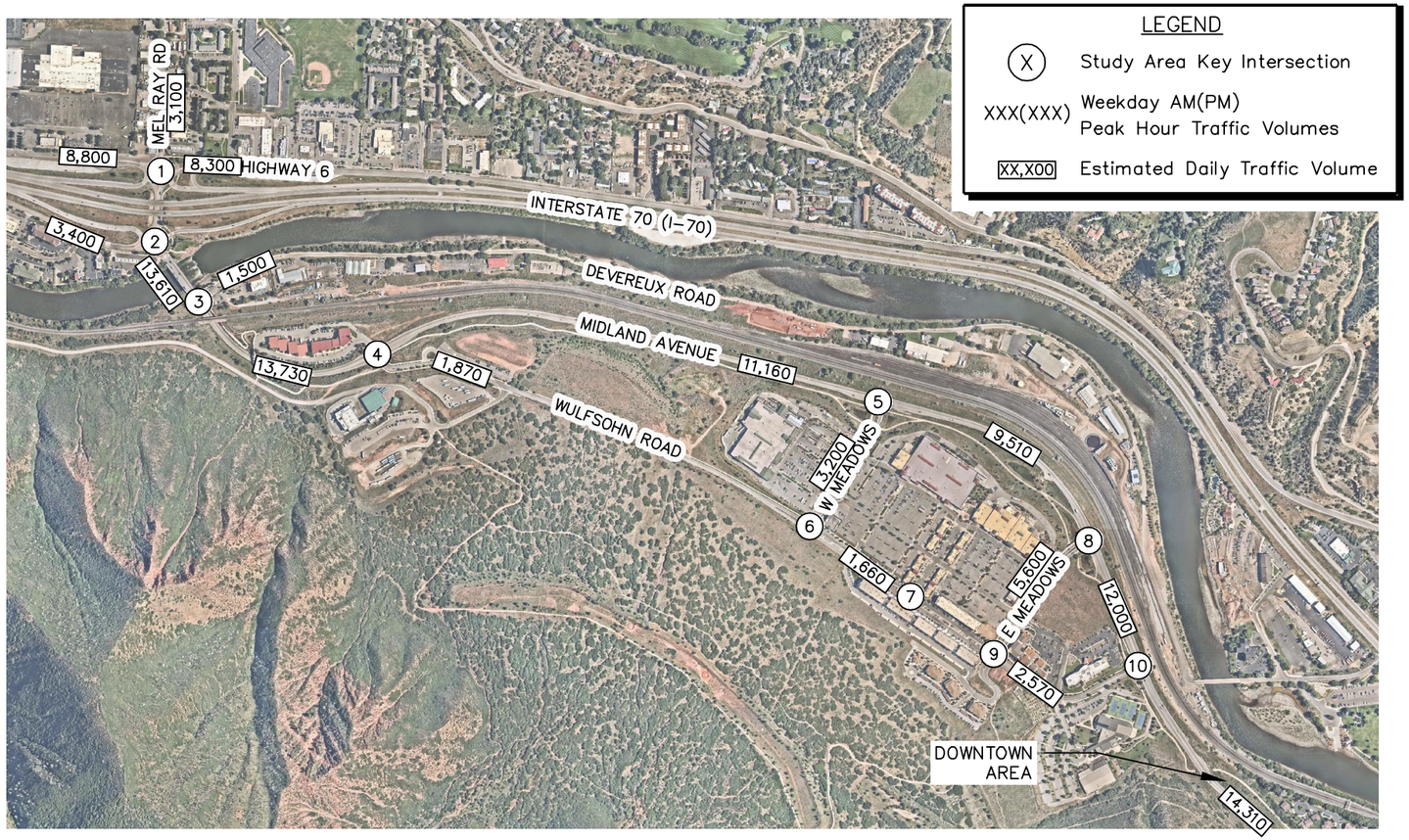


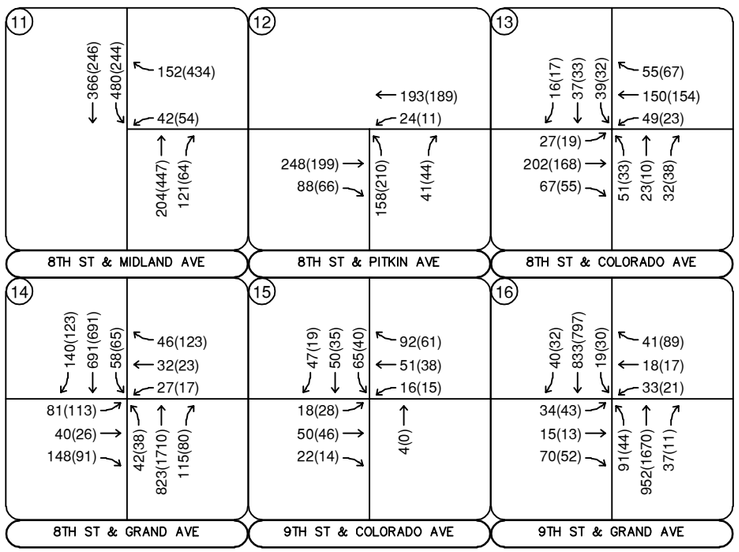
I-70 WB RAMP & MEL RAY RD



I-70 EB RAMP & MIDLAND AVE







DOWNTOWN AREA



FIGURE 4
GLENWOOD MEADOWS
MASTER TRAFFIC STUDY
GLENWOOD SPRINGS, CO
2022 ADJUSTED TRAFFIC VOLUMES

Kimley»Horn NORTH
NTS 096798001

Kimley»Horn

4.0 PROJECT TRAFFIC CHARACTERISTICS

4.1 Trip Generation

Site-generated traffic estimates are determined through a process known as trip generation. Rates and equations are applied to the proposed land use to estimate traffic generated by the development during a specific time interval. The acknowledged source for trip generation rates is the *Trip Generation Manual*[1] published by the Institute of Transportation Engineers (ITE). ITE has established trip rates in nationwide studies of similar land uses.

For this study, Kimley-Horn used the ITE Trip Generation Report and user specific data for the RFTA Transit Center to determine the traffic associated with the remaining development program. Therefore, the fitted curve and average rate equations that apply to Mid-Rise Multifamily Housing (ITE Land Use Code 221), Strip Retail Plaza (ITE 822), Marijuana Dispensary (ITE 882), and Fast Casual Restaurant (ITE Land Use Code 930) was utilized for traffic associated with the remaining development. Of note, the Lofts at Red Mountain Phase IV trips and the Roaring Fork Transportation Authority Regional Transit Center were previously studied and are included in the trip generation table separately.

The remining vacant parcels within the Glenwood Meadows development area are expected to generate approximately 11,774 additional weekday daily trips, with 830 of these trips occurring during the morning peak hour and 995 of these trips occurring during the afternoon peak hour. Calculations were based on the procedure and information provided in the ITE *Trip Generation Manual, 11th Edition – Volume 1: User's Guide and Handbook*, 2021. **Table 5a** summarizes the estimated trip generation for the Glenwood Meadows. The trip generation worksheets are included in **Appendix B**.

[1] Institute of Transportation Engineers, *Trip Generation Manual*, Eleventh Edition, Washington DC, 2021.

Table 5a – Glenwood Meadows Traffic Generation

Land Use and Size	Weekday Vehicle Trips						
	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Mid-Rise Housing (ITE 221) – 1,340 Dwelling Units	6,086	14	383	497	318	205	523
Strip Retail Plaza (822) – 18,000 Square Feet	980	26	16	42	58	60	118
Marijuana Dispensary (882) – 4,504 Square Feet	950	24	23	57	43	42	85
Fast Casual Restaurant (930) – 5,000 Square Feet	486	4	3	7	35	28	63
Lofts at Red Mountain Phase IV	2,072	11	14	25	56	45	101
RFTA RTC Expansion	1,200	170	32	202	26	79	105
Total Project Trips	**11,774**	**349**	**471**	**830**	**536**	**459**	**995**

A comparison of peak hour traffic volumes between the approved Glenwood Meadows and the existing built traffic volumes was conducted. The approved Glenwood Meadows peak hour volumes were obtained from the Glenwood Meadows Project Transportation Improvements Plan prepared by the Mobility Group in September 2001 for purposes of CDOT permitting. The existing traffic volumes associated with the existing development area were derived from the entering and exiting movements at the Glenwood Meadows accesses. **Table 5b** summarizes the approved vs the existing vs the proposed total morning and afternoon peak hour trips for Glenwood Meadows project trips only.

Table 6b – Overall Meadows Approved vs Proposed Traffic Generation

Scenario	AM Peak Hour Total	PM Peak Hour Total
Approved (from CDOT permit)	1,700	2,098
Existing (from counts)	645	1,244
Proposed (yet to be developed)	830	995
Total Trip Differential (Proposed-Approved)	**-225**	**+141**

The morning peak hour is anticipated to generate 225 less trips while the afternoon peak hour is anticipated to generate 141 more trips compared to the approved master development plan of Glenwood Meadows.

However, Glenwood Meadows has evolved with specific users and recently approved traffic impact studies that are more recent than the overall Glenwood Meadows approved project trips.

Therefore, an additional comparison of each lot and the approved use versus what is proposed is shown in **Table 5c.**

Table 7c – Remaining Developments Approved vs Proposed Traffic Generation

Address	Land Use	Intensity	Unit	Vehicle Trips	
				AM Peak Hour	PM Peak Hour
				Total	Total
130 Midland	Unknown				
	Retail	9,000	SF	21	59
	Fast Causal	5,000	SF	7	63
Trip Differential of 130 Midland				**28**	**122**
Lot 14	Retail	15,000	SF	15	60
	Office	15,000	SF	20	20
	MOB	15,000	SF	40	50
	Mid-Rise	550	DU	204	215
Trip Differential of Lot 14				**129**	**85**
Lot 10C	Department Store	68,320	SF	22	104
	Retail	20,050	SF	8	42
	High Turnover	6,000	SF	44	52
	Mid-Rise	280	DU	104	109
Trip Differential of Lot 10C				**30**	**-89**
405 E Meadows	Lofts at Red Mountain 4			25	101
	Lofts at Red Mountain 4			25	101
Trip Differential of Lot 10C				**0**	**0**
Market St Retailers	Retail	9,000	SF	21	59
	Retail	9,000	SF	21	59
Trip Differential of Market St Retailers				**0**	**0**
Flat Tops View Dr	Mid-Rise	300	DU	108	132
	Townhomes	175	DU	61	77
	Mid-Rise	510	DU	189	199
Trip Differential of Flat Top View Dr				**20**	**-10**
150 Wulfsohn	Marijuana Dispensary	2,400	SF	0	72
	Marijuana Dispensary	4,504	SF	57	85
Trip Differential of 150 Wulfsohn				**57**	**13**
2307 Wulfsohn Rd	RFTA Expansion			202	105
	RFTA Expansion			202	105
Trip Differential of 2307 Wulfsohn Rd				**0**	**0**
Total Trip Differential (Proposed-Approved)				**264**	**121**

Approved Traffic Study; Proposed Development

From the approved individual traffic studies versus what is newly proposed, the overall Glenwood Meadows development is proposed to increase by 264 morning peak hour trips and 121 afternoon peak hour trips. Additional information regarding the traffic report and the trip generation is attached in **Appendix B.**

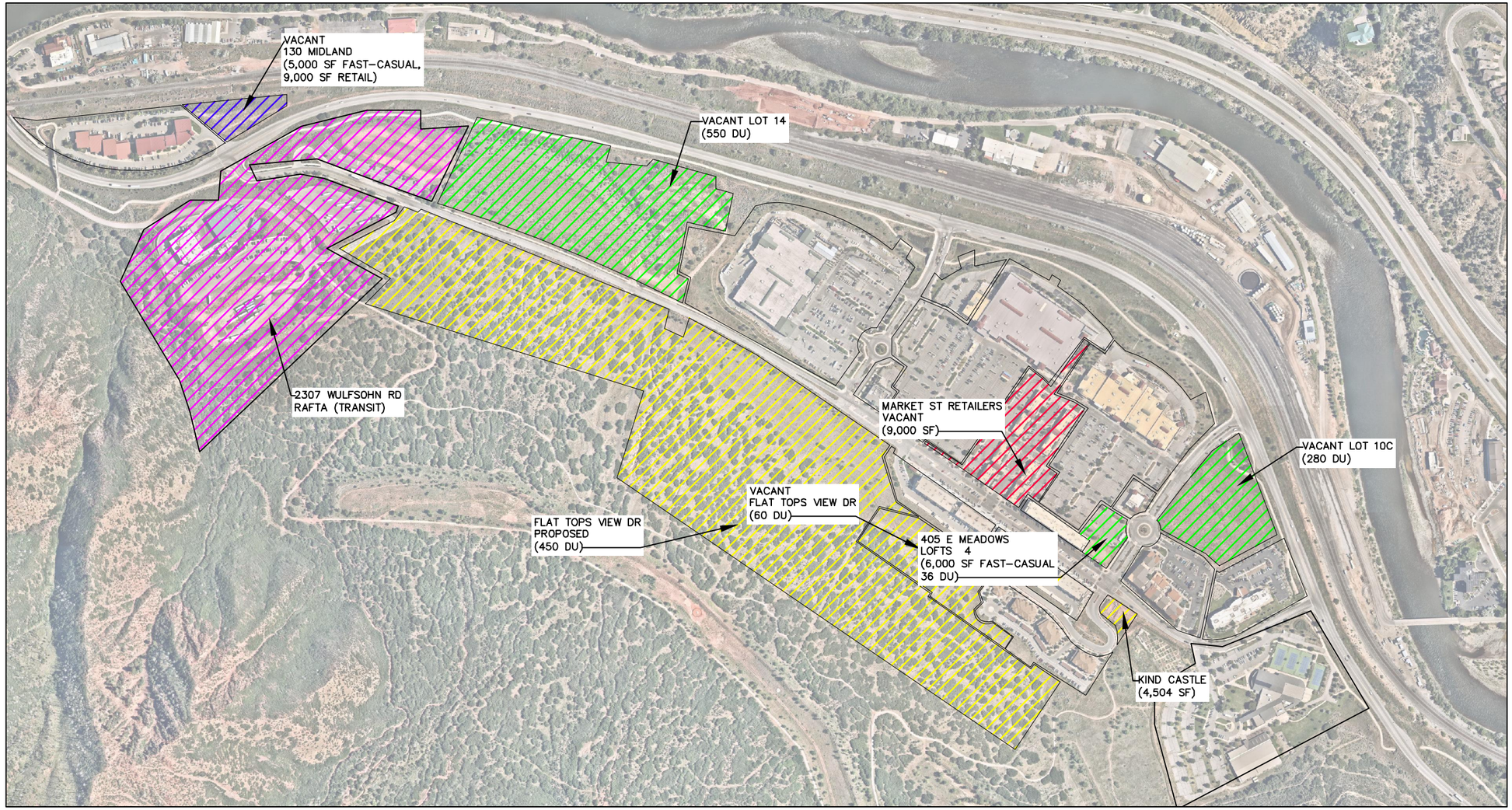
4.2 Trip Distribution

Distribution of remaining Glenwood Meadows traffic on the street system was based on the area street system characteristics, existing traffic patterns and volumes, demographic information, and the proposed access system. The directional distribution of traffic is a means to quantify the percentage of site-generated traffic that approaches the site from a given direction and departs the site back to the original source. **Figure 5** illustrates the zones in which the remaining development was divided into to provide a comprehensive analysis based on trips to each zone. Therefore, **Figures 6, 7, 8, 9,** and **10** illustrate trip distribution to Zones 1-5, respectively. **Table 6** summarizes the land uses and intensities associated with each zone.

Table 8 – Glenwood Meadows Zones

Zone	Land Use	Intensity
1	Retail	9,000 SF
1	Fast Casual Restaurant	5,000 SF
2	Mid-Rise Multifamily	830 DU
2	Lofts at Red Mountain 4	5,950 SF Restaurant, 36 DU
3	Retail	9,000 SF
4	Mid-Rise Multifamily	510 DU
4	Marijuana Dispensary	4,504 SF
5	RFTA Expansion	Expansion

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NTS 096798001

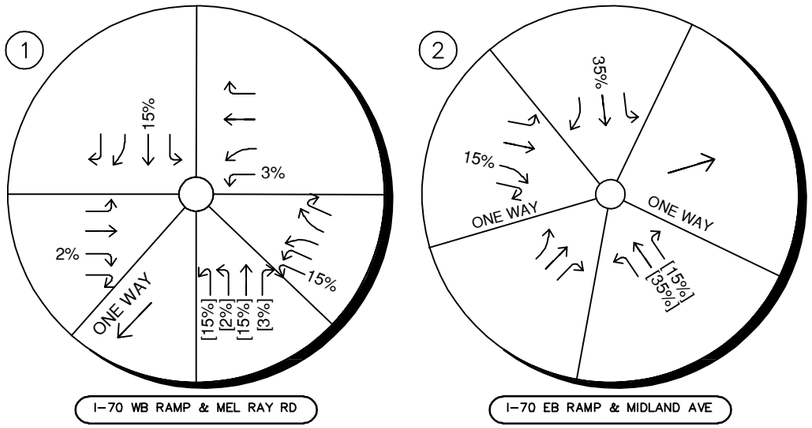


LEGEND

- Zone 1
- Zone 2
- Zone 3
- Zone 4
- Zone 5

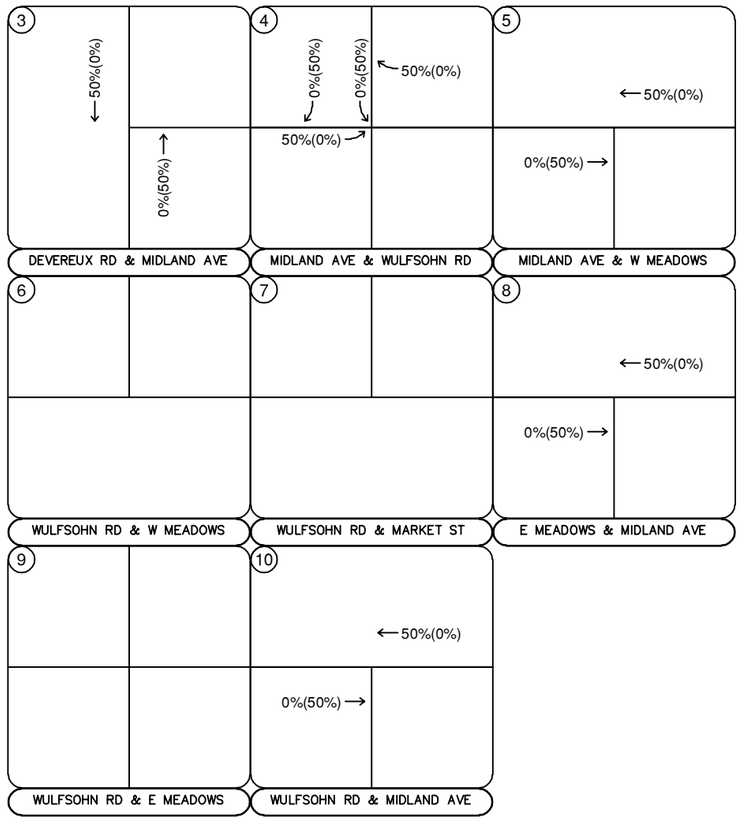
FIGURE 5
GLENWOOD MEADOWS
MASTER TRAFFIC STUDY
GLENWOOD SPRINGS, CO
ZONE LOCATIONS

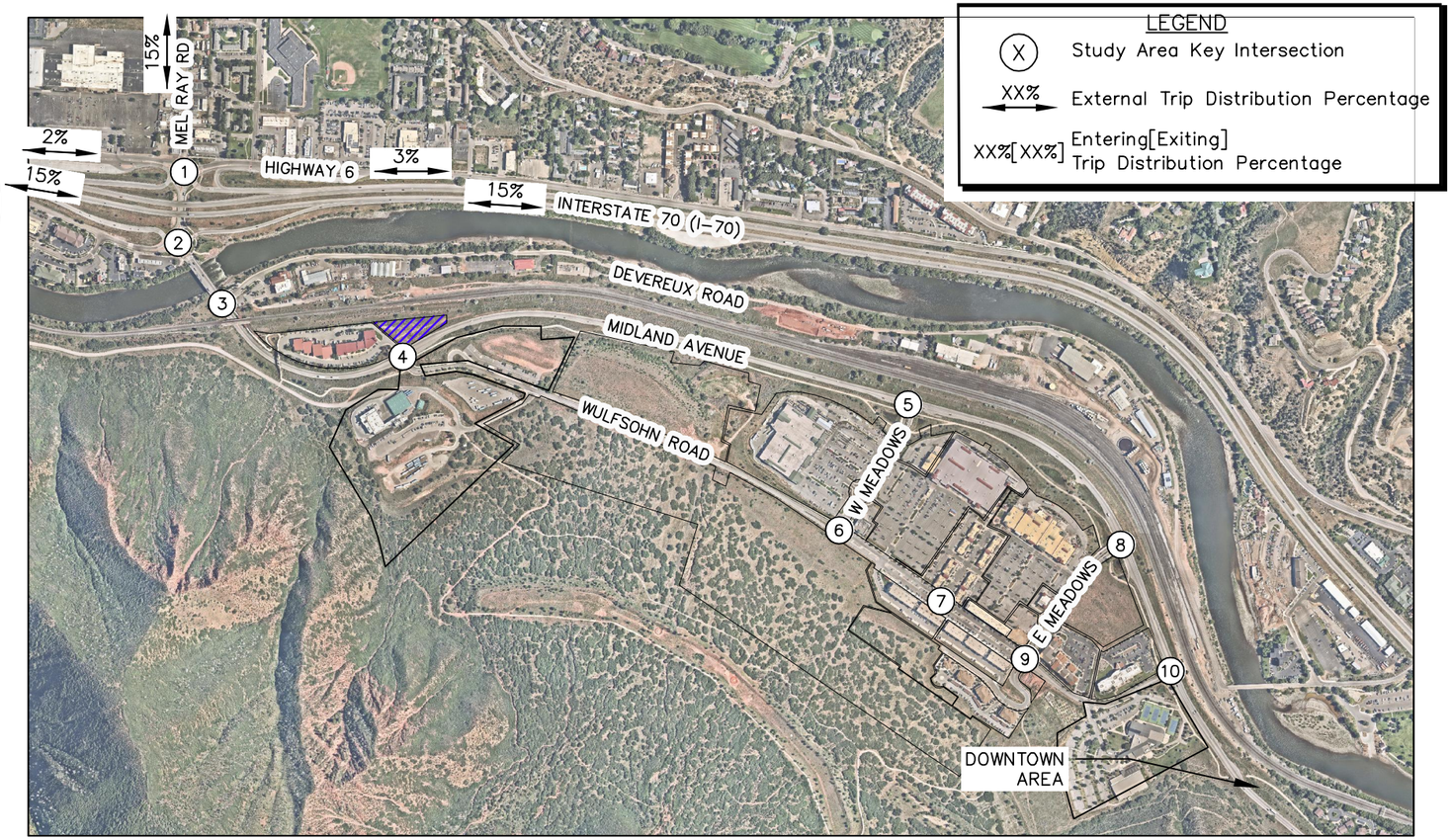
Kimley»Horn



I-70 WB RAMP & MEL RAY RD

I-70 EB RAMP & MIDLAND AVE



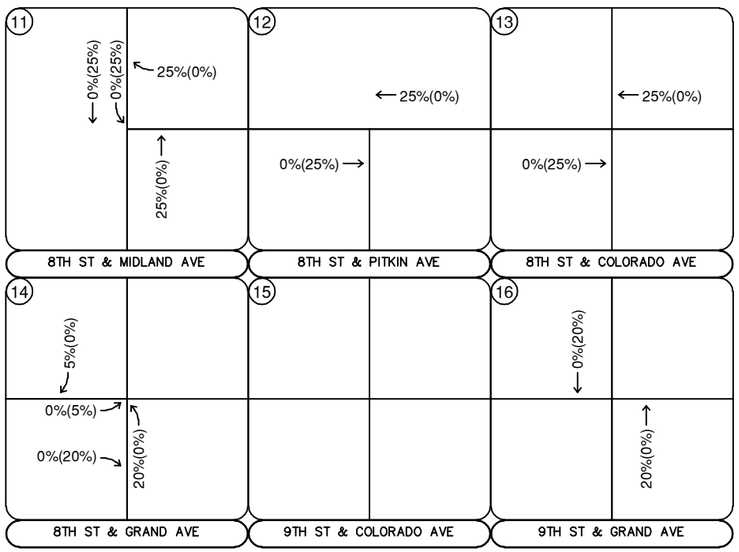


LEGEND

X — Study Area Key Intersection

XX% — External Trip Distribution Percentage

XX%[XX%] — Entering[Exiting] Trip Distribution Percentage



DOWNTOWN AREA

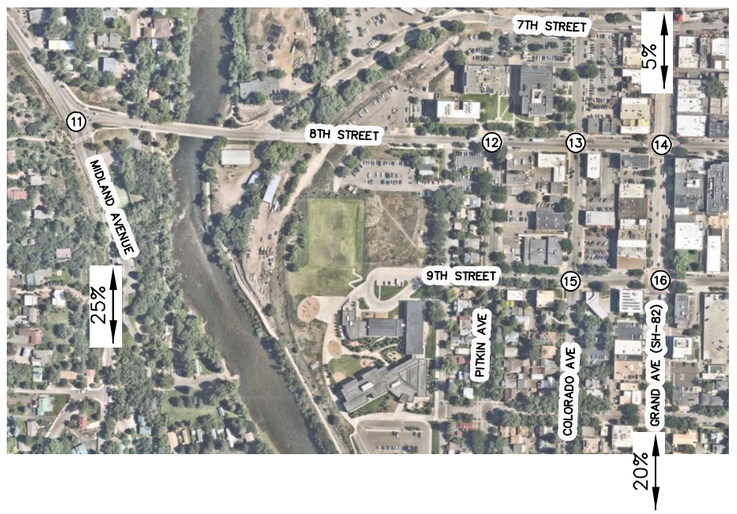
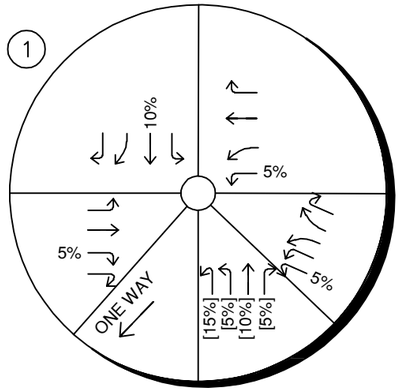


FIGURE 6

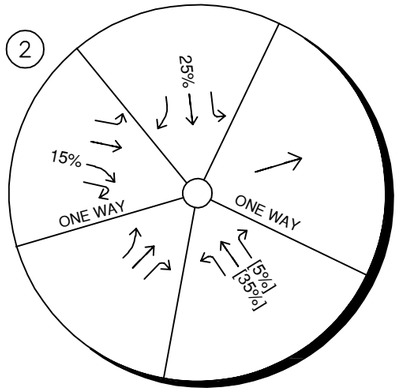
GLENWOOD MEADOWS
MASTER TRAFFIC STUDY
GLENWOOD SPRINGS, CO
ZONE 1 TRIP DISTRIBUTION

Kimley»Horn NORTH
NTS 096798001

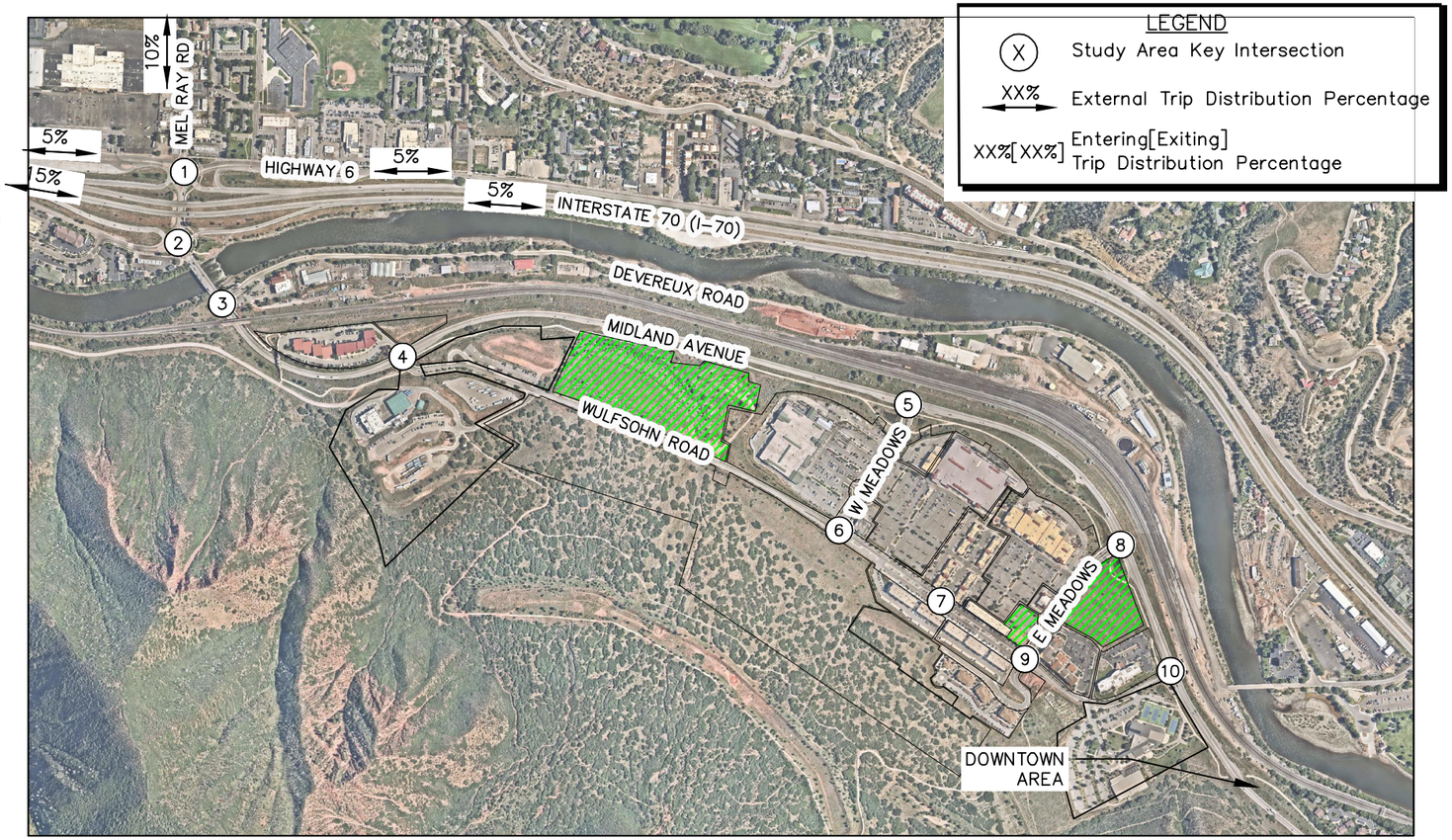
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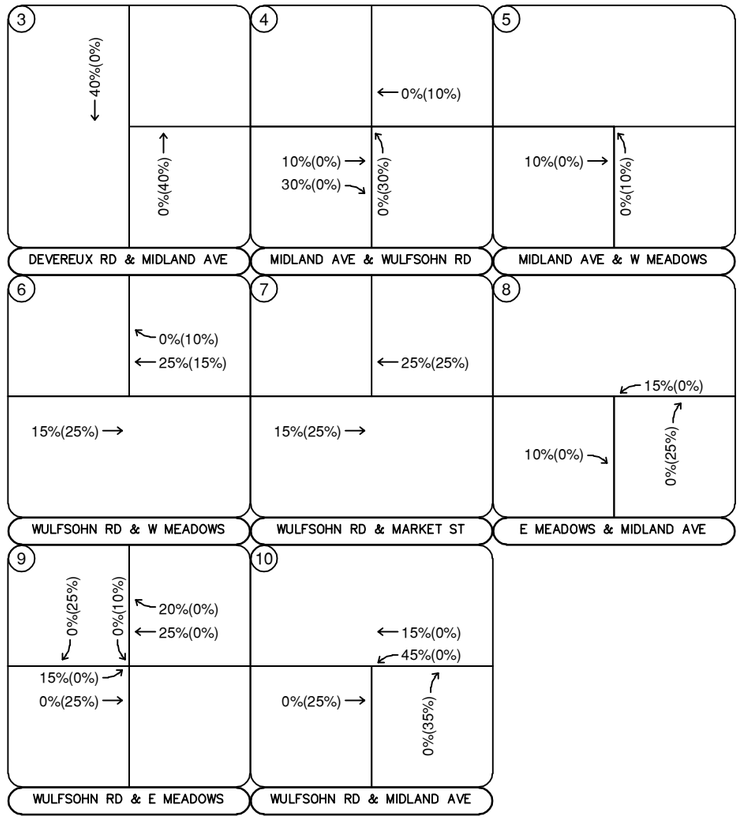


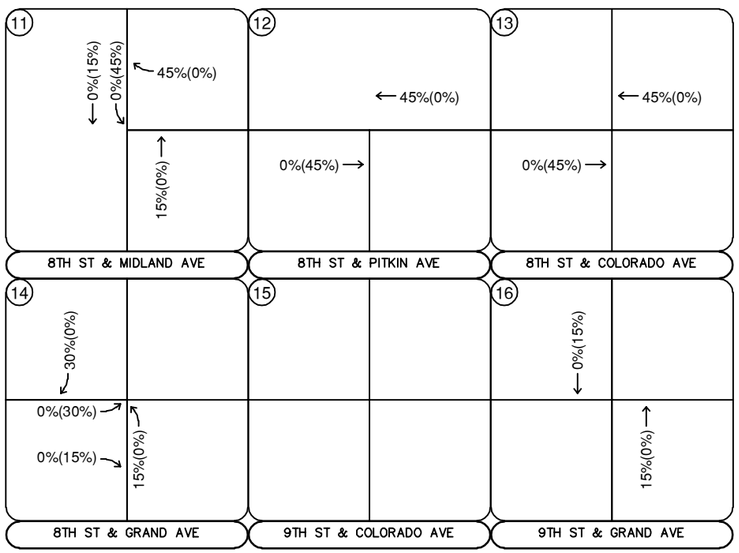
I-70 WB RAMP & MEL RAY RD



I-70 EB RAMP & MIDLAND AVE







DOWNTOWN AREA

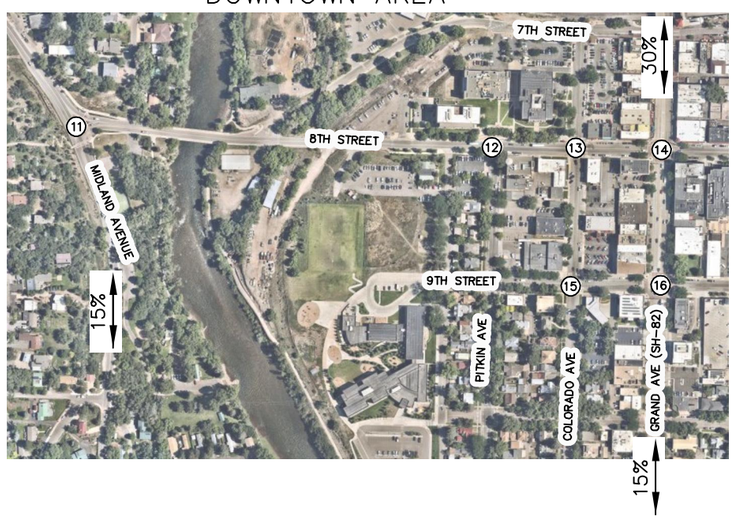
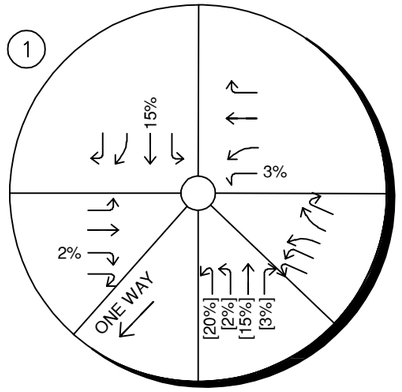


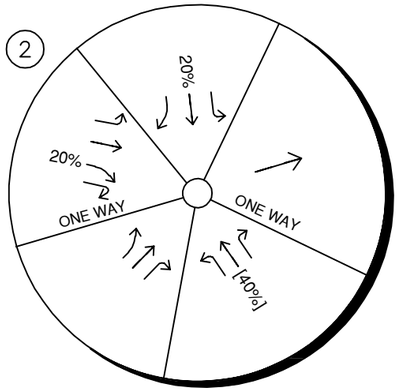
FIGURE 7
GLENWOOD MEADOWS
MASTER TRAFFIC STUDY
GLENWOOD SPRINGS, CO
ZONE 2 TRIP DISTRIBUTION

Kimley»Horn NORTH
NTS 096798001

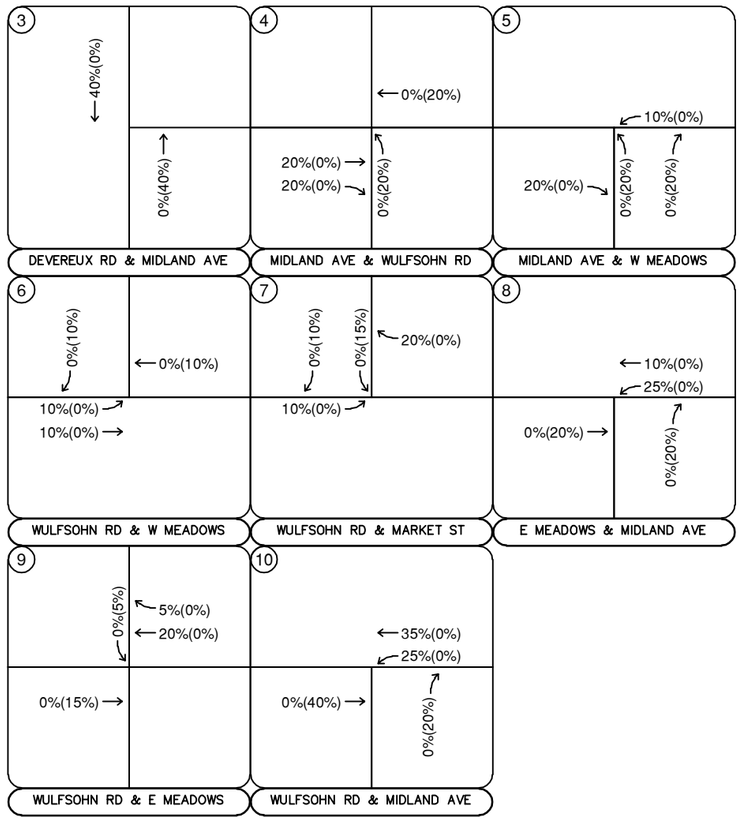
Kimley»Horn

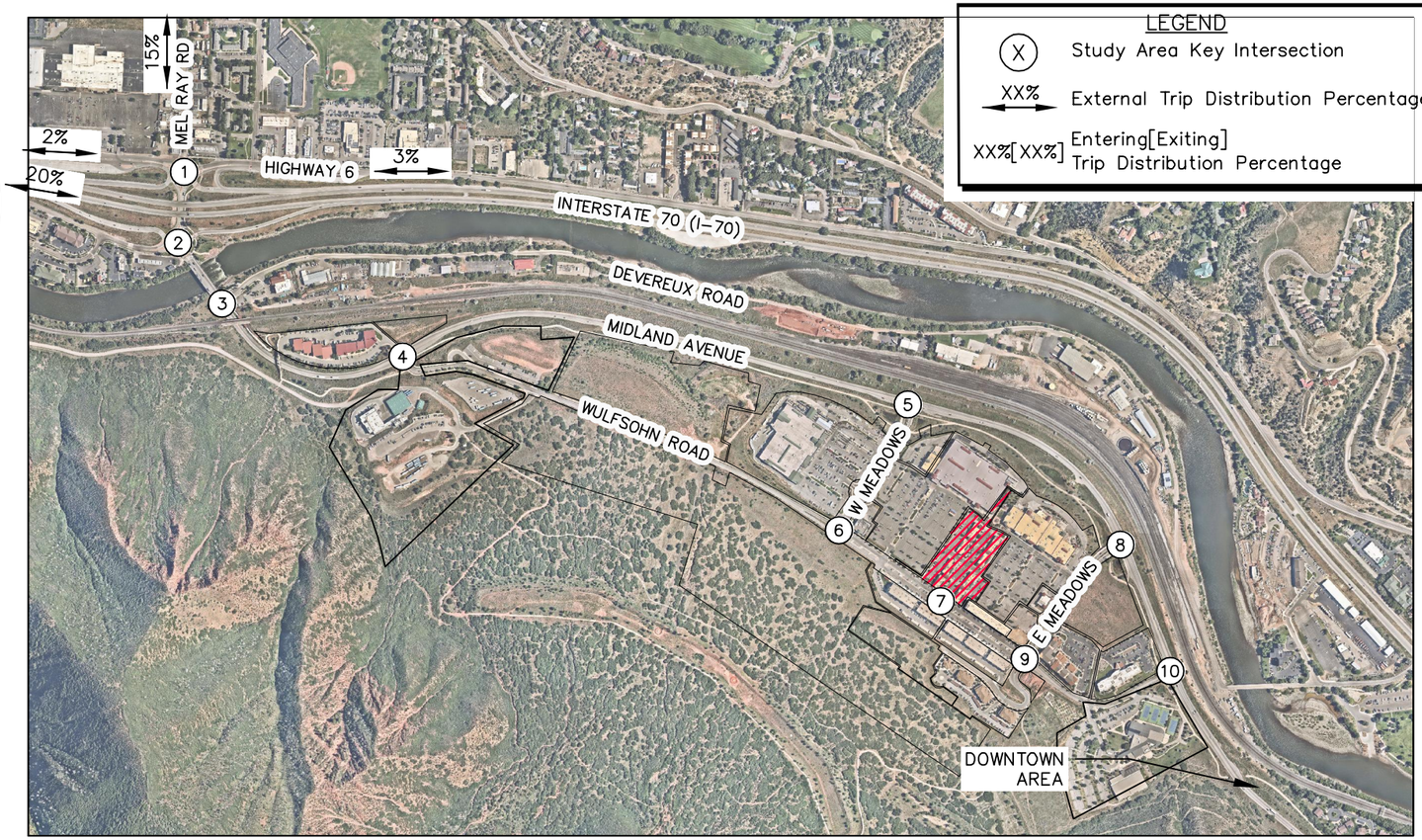


I-70 WB RAMP & MEL RAY RD



I-70 EB RAMP & MIDLAND AVE



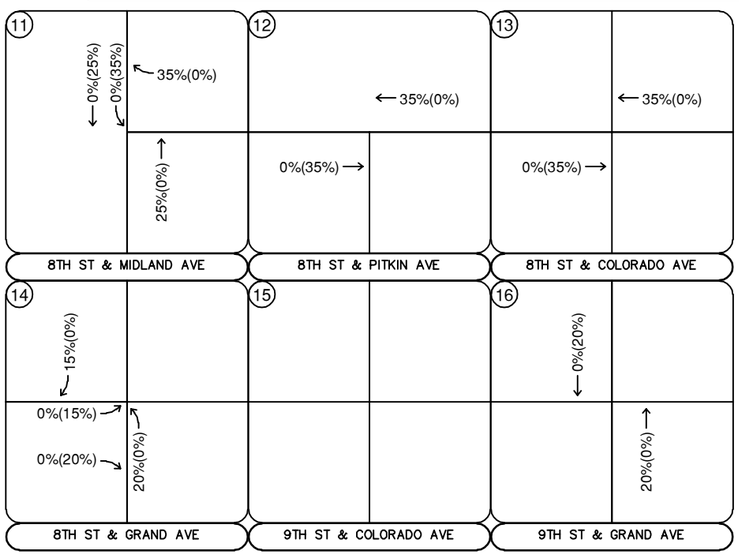


LEGEND

X — Study Area Key Intersection

XX% — External Trip Distribution Percentage

XX%[XX%] — Entering[Exiting] Trip Distribution Percentage



DOWNTOWN AREA

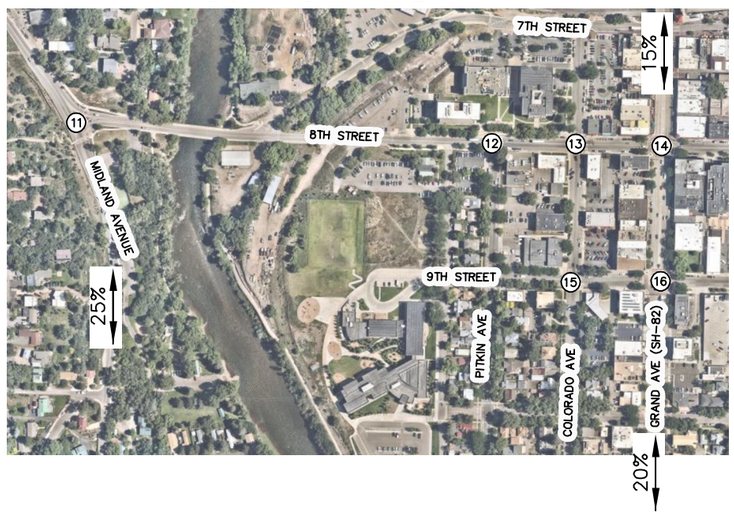
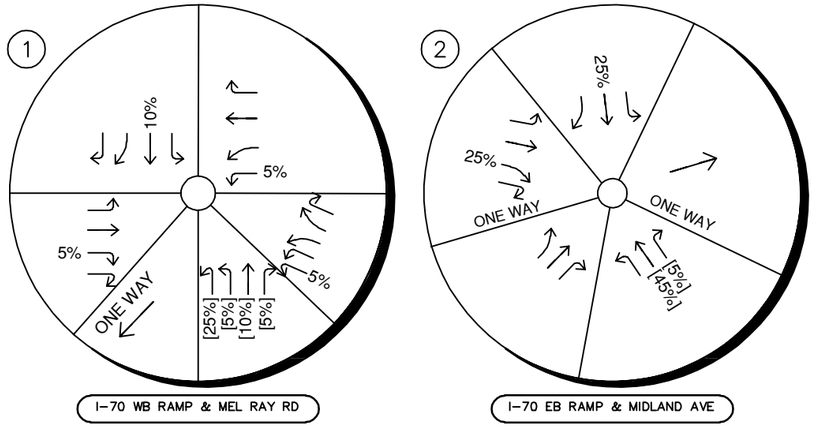


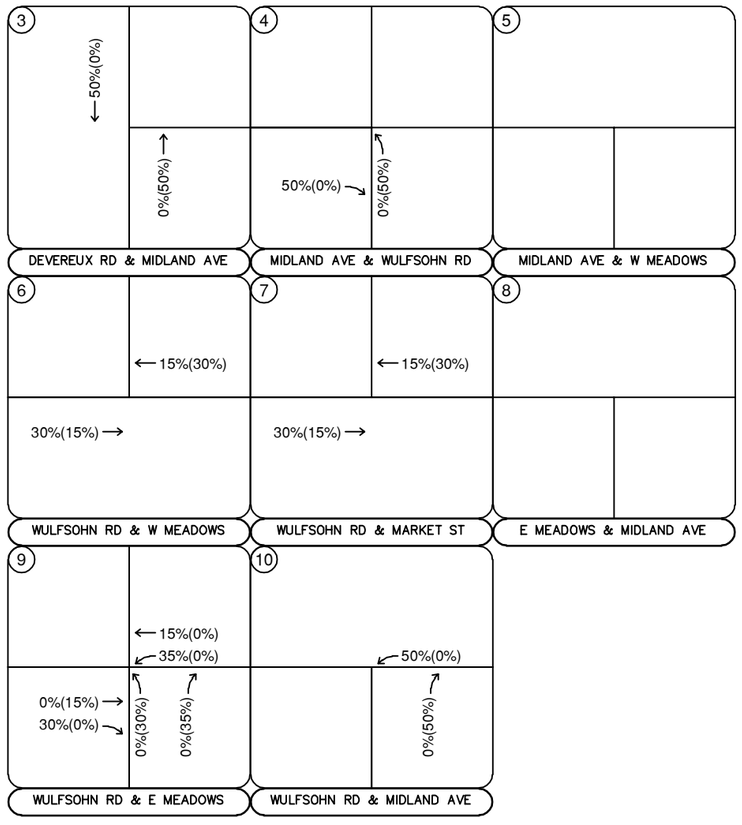
FIGURE 8

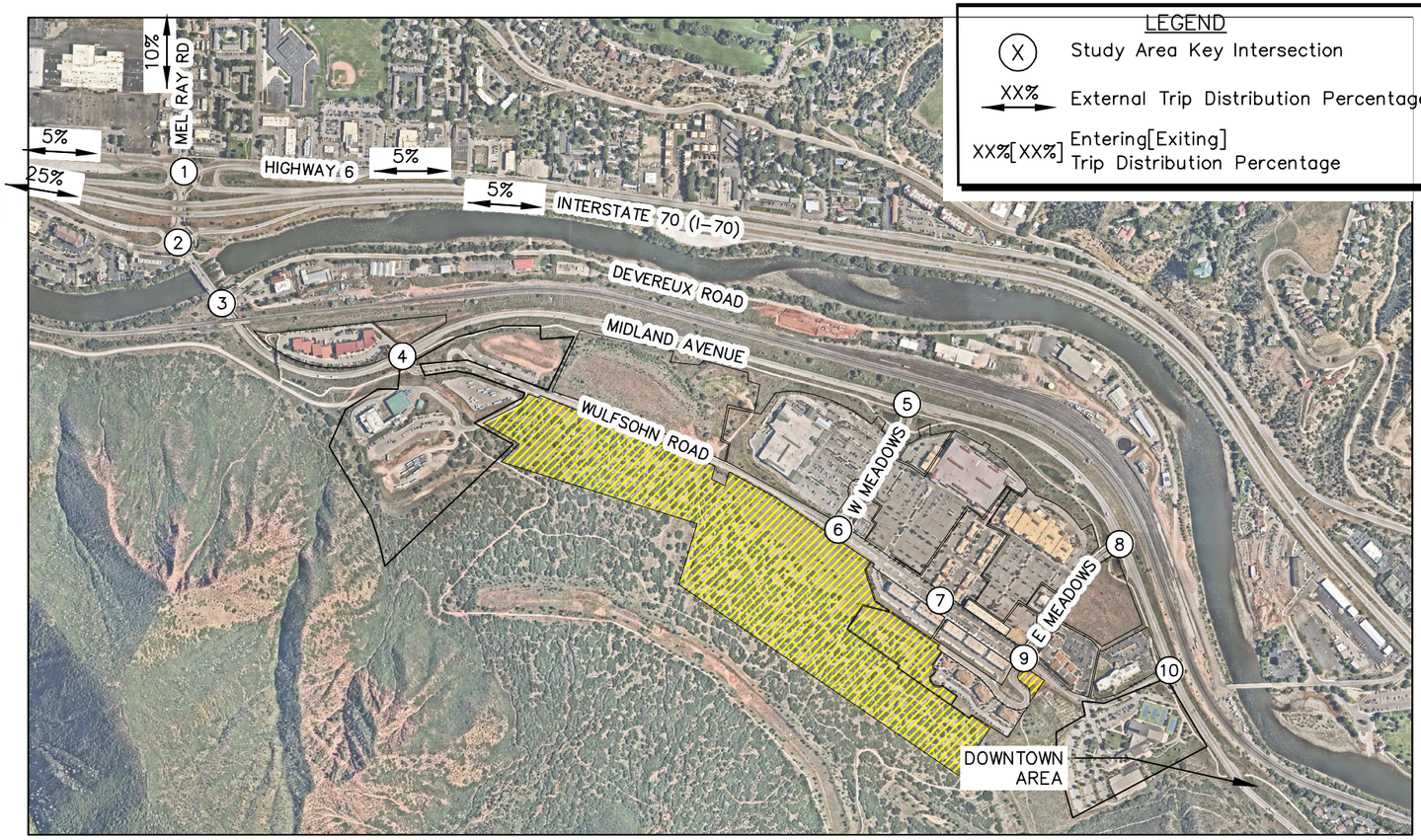
GLENWOOD MEADOWS
MASTER TRAFFIC STUDY
GLENWOOD SPRINGS, CO
ZONE 3 TRIP DISTRIBUTION

Kimley»Horn NORTH
NTS 096798001

Kimley»Horn





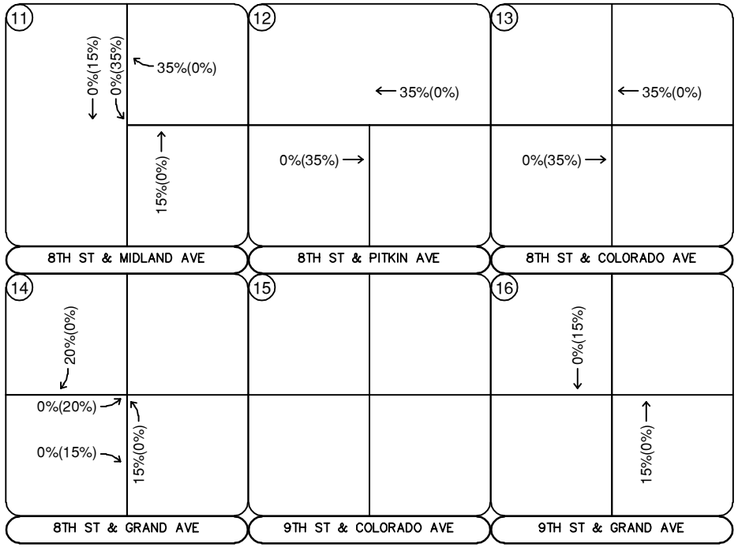


LEGEND

X — Study Area Key Intersection

XX% — External Trip Distribution Percentage

XX%[XX%] — Entering[Exiting] Trip Distribution Percentage



DOWNTOWN AREA

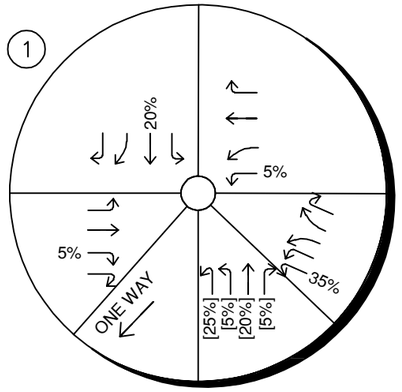


FIGURE 9

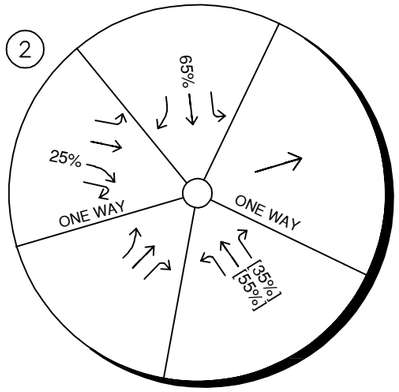
GLENWOOD MEADOWS
MASTER TRAFFIC STUDY
GLENWOOD SPRINGS, CO
ZONE 4 TRIP DISTRIBUTION

Kimley»Horn NORTH
NTS 096798001

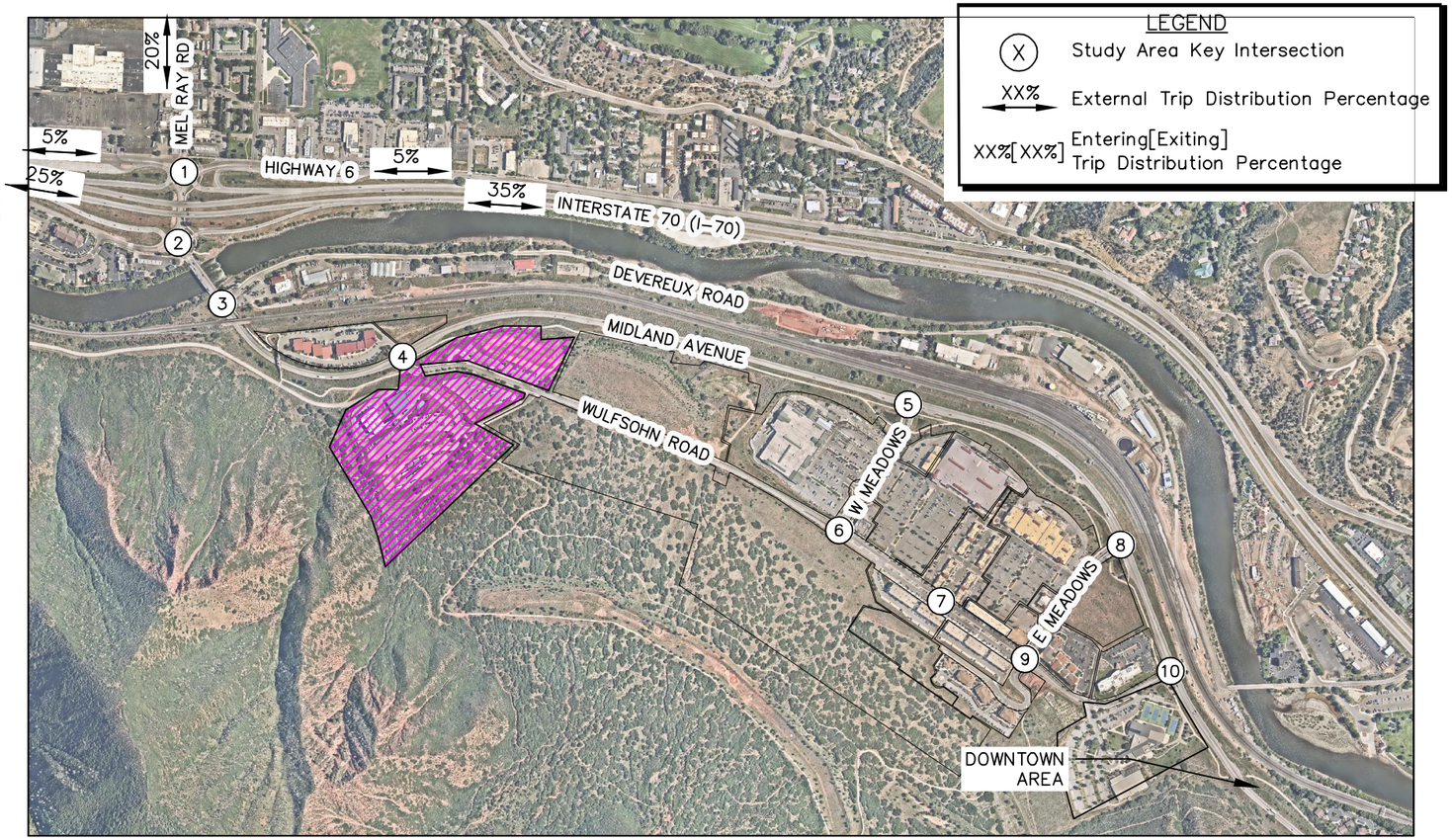
Kimley»Horn

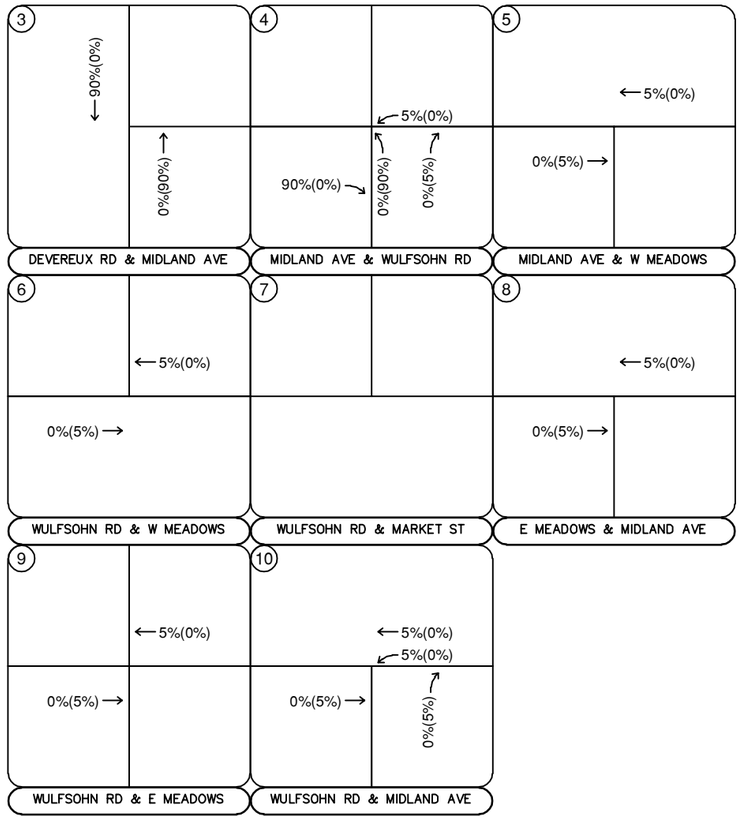


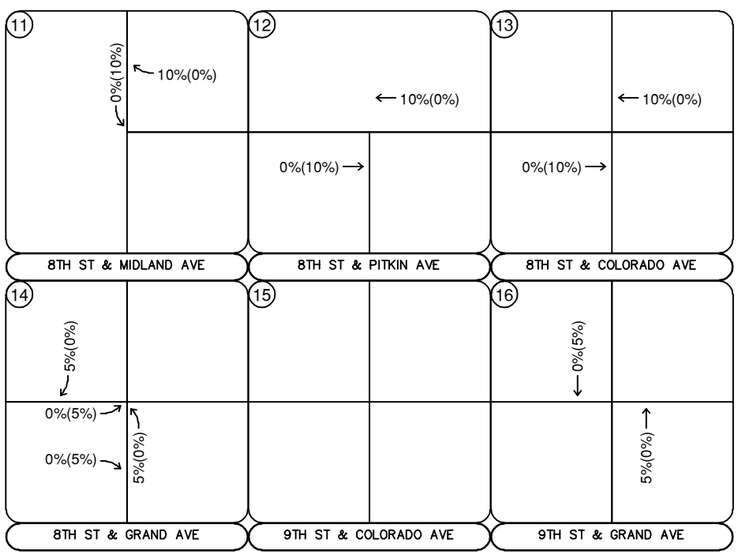
I-70 WB RAMP & MEL RAY RD



I-70 EB RAMP & MIDLAND AVE







DOWNTOWN AREA

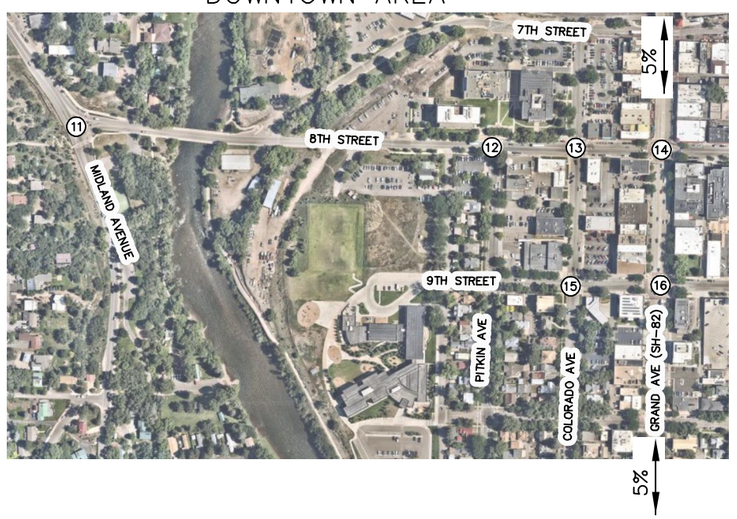


FIGURE 10
GLENWOOD MEADOWS
MASTER TRAFFIC STUDY
GLENWOOD SPRINGS, CO
ZONE 5 TRIP DISTRIBUTION

Kimley»Horn
NORTH
NTS 096798001

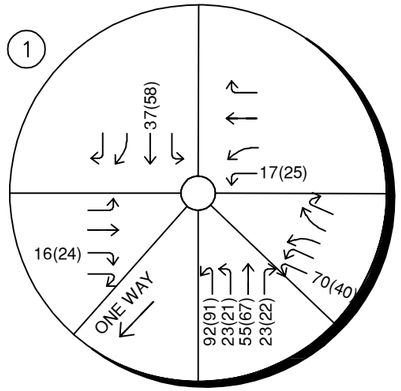
Kimley»Horn

4.3 Traffic Assignment

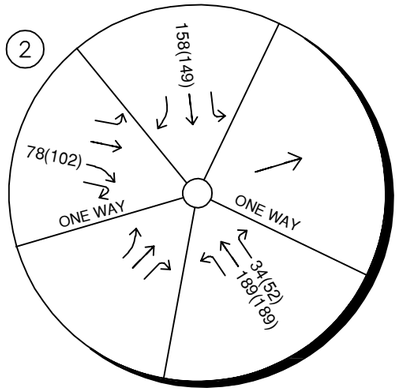
Glenwood Meadows traffic assignment was obtained by applying the project trip distribution to the estimated traffic generation of the development shown in **Table 5**. Traffic assignment is shown in **Figure 11.**

4.4 Total (Background Plus Project) Traffic

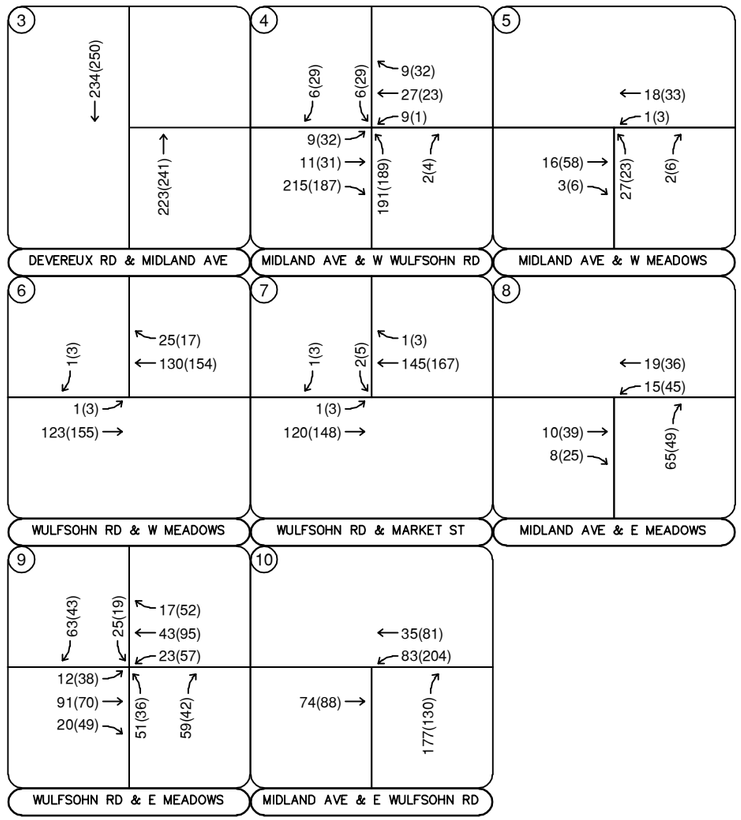
Site traffic volumes were added to the background volumes to represent estimated traffic conditions for the short-term 2030 buildout horizon and long-term 2040 twenty-year planning horizon. These total traffic volumes for the study area are illustrated for the 2030 and 2040 horizon years in **Figures 12** and **13**, respectively.

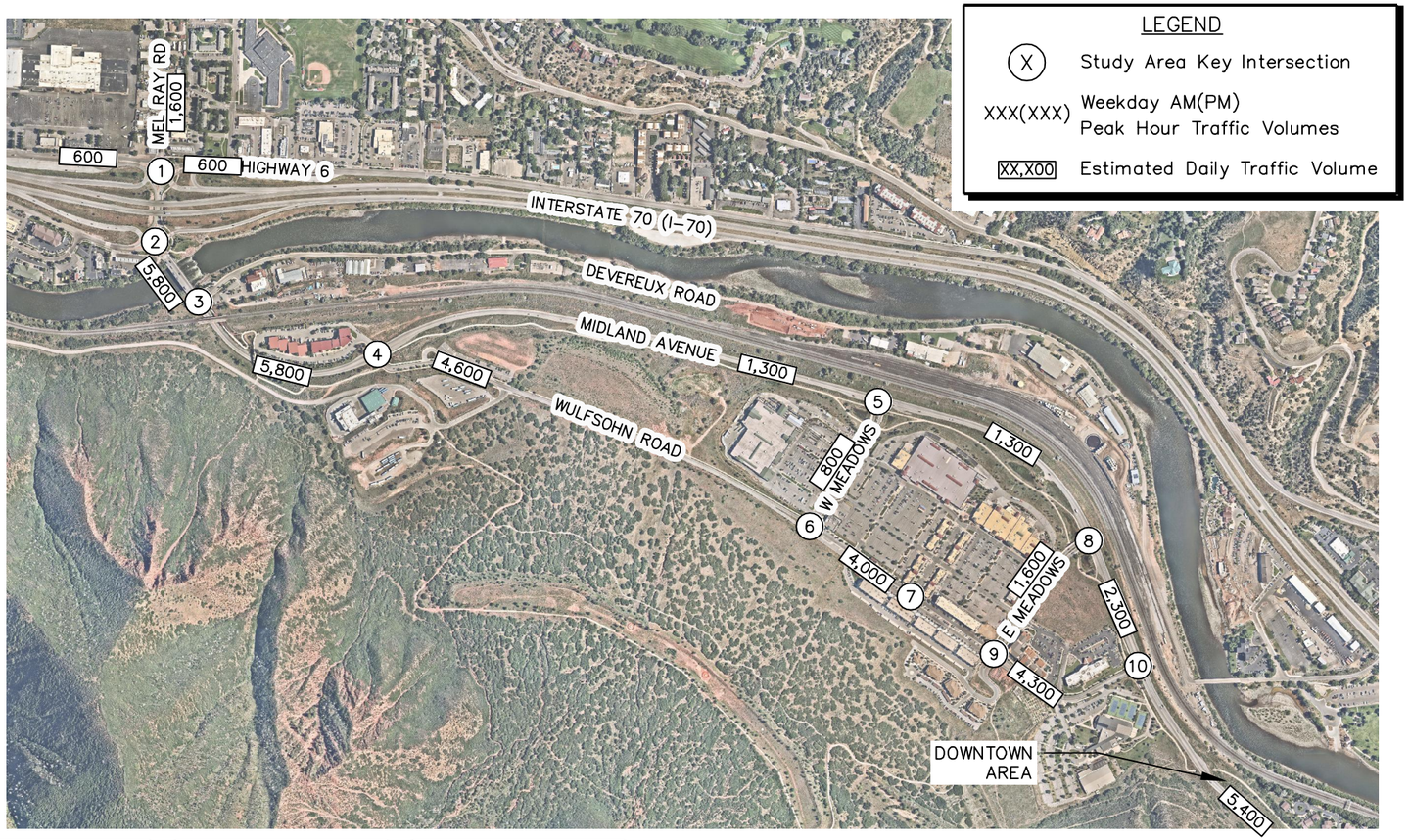


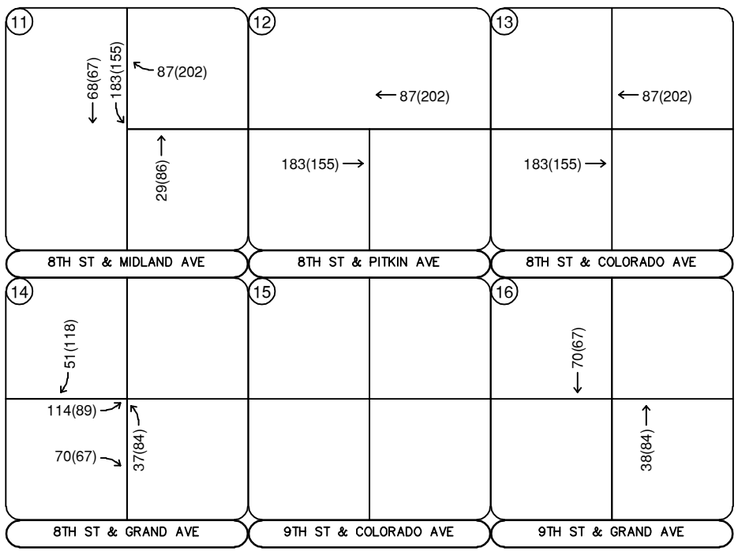
I-70 WB RAMP & MEL RAY RD



I-70 EB RAMP & MIDLAND AVE







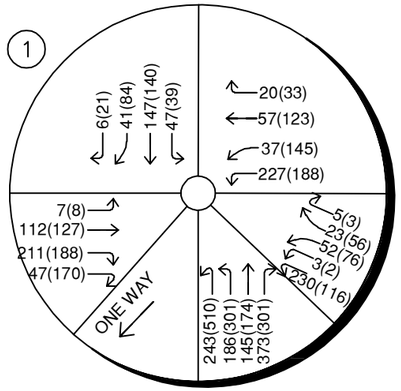
DOWNTOWN AREA



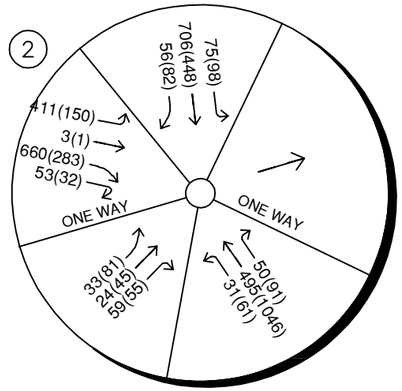
FIGURE 11
GLENWOOD MEADOWS
MASTER TRAFFIC STUDY
GLENWOOD SPRINGS, CO
PROJECT TRAFFIC ASSIGNMENT

Kimley»Horn NORTH
NTS 096798001

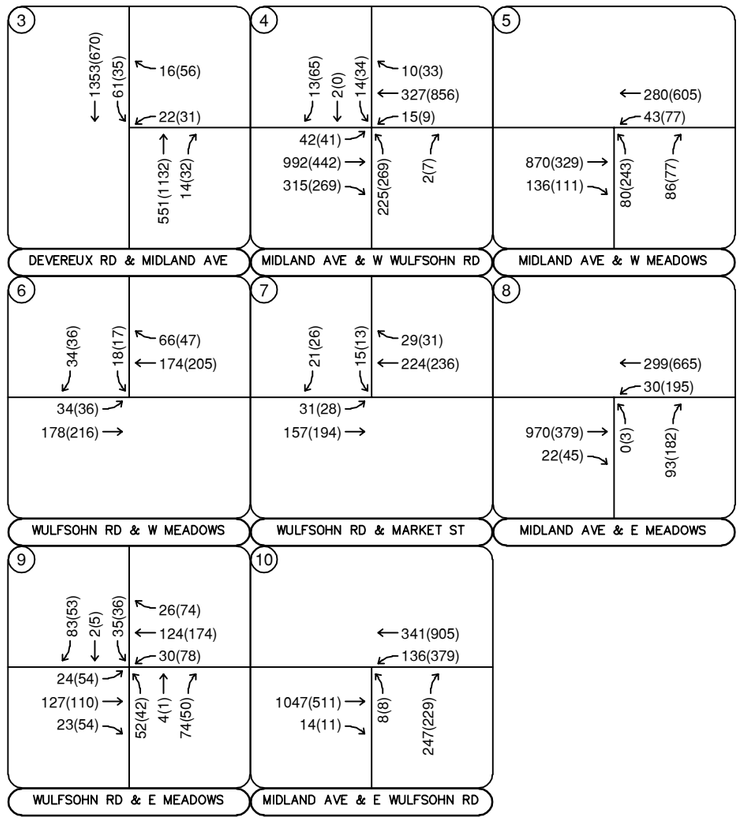
Kimley»Horn



I-70 WB RAMP & MEL RAY RD



I-70 EB RAMP & MIDLAND AVE



DEVEREUX RD & MIDLAND AVE

MIDLAND AVE & W WULFSOHN RD

MIDLAND AVE & W MEADOWS

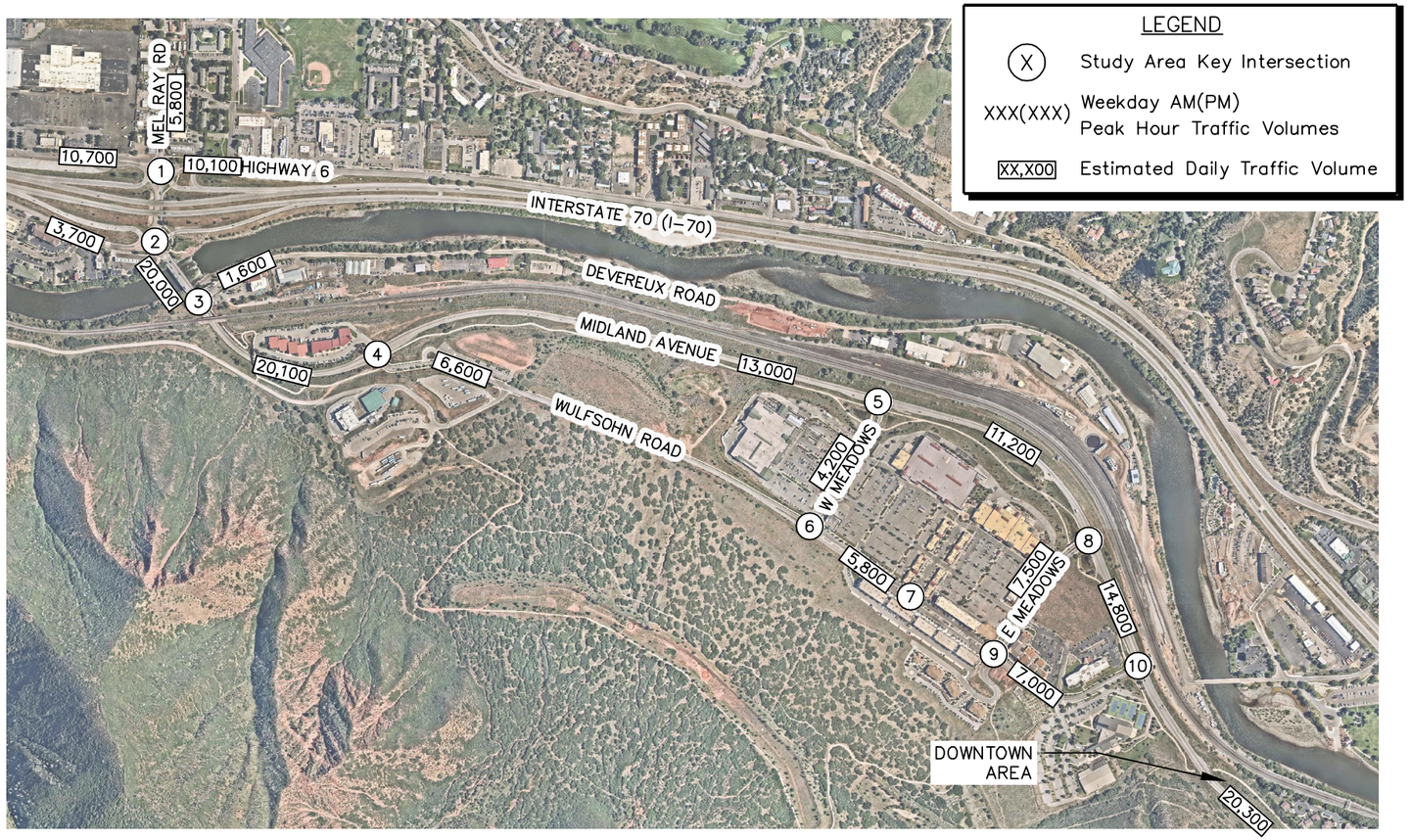
WULFSOHN RD & W MEADOWS

WULFSOHN RD & MARKET ST

MIDLAND AVE & E MEADOWS

WULFSOHN RD & E MEADOWS

MIDLAND AVE & E WULFSOHN RD

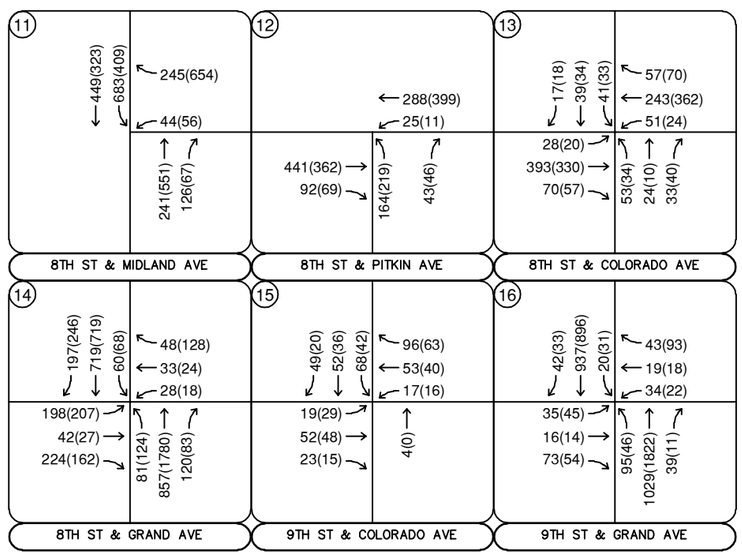


LEGEND

(X) Study Area Key Intersection

XXX(XXX) Weekday AM(PM) Peak Hour Traffic Volumes

[XX,X00] Estimated Daily Traffic Volume



8TH ST & MIDLAND AVE

8TH ST & PITKIN AVE

8TH ST & COLORADO AVE

8TH ST & GRAND AVE

9TH ST & COLORADO AVE

9TH ST & GRAND AVE

DOWNTOWN AREA

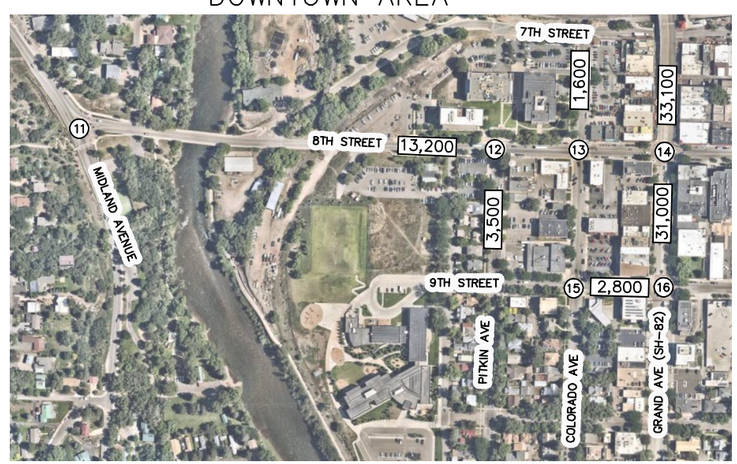
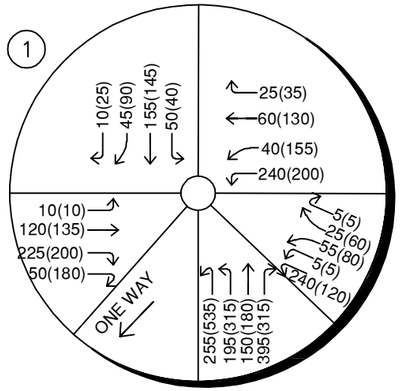


FIGURE 12

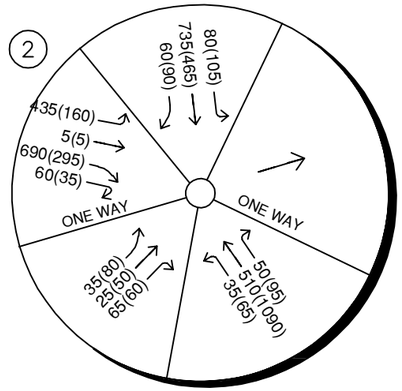
GLENWOOD MEADOWS
MASTER TRAFFIC STUDY
GLENWOOD SPRINGS, CO
2030 TOTAL TRAFFIC VOLUMES

Kimley»Horn NORTH
NTS 096798001

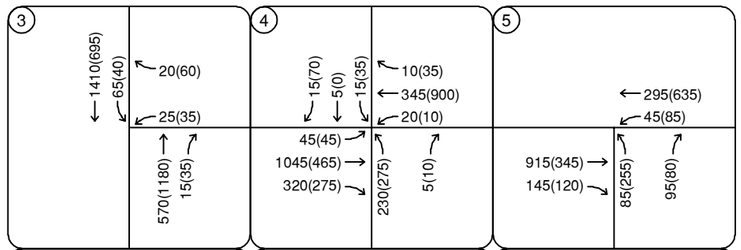
Kimley»Horn

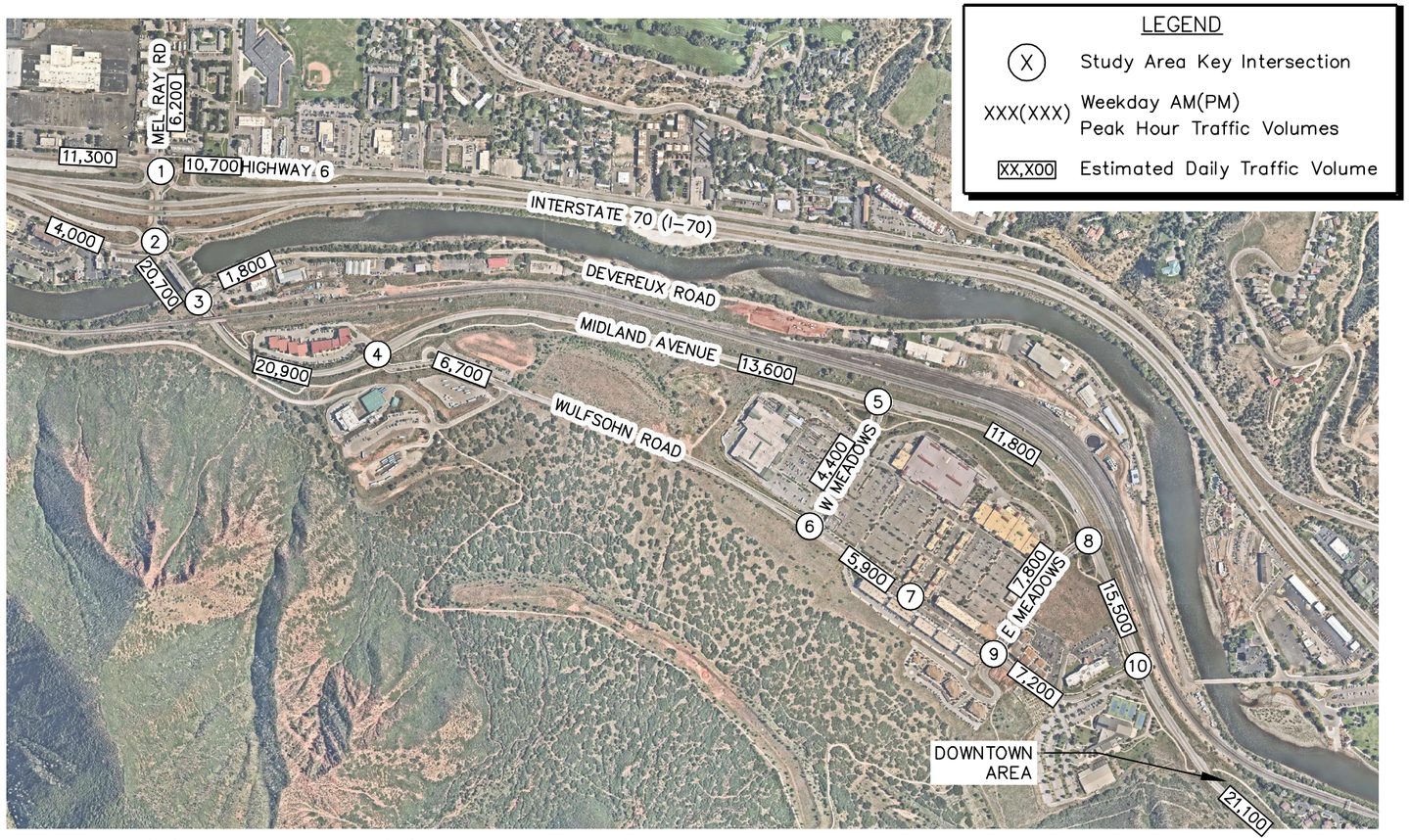


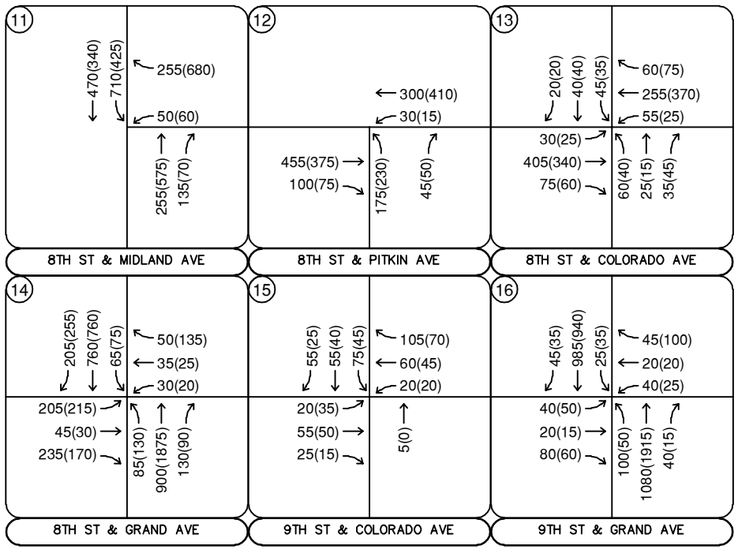
I-70 WB RAMP & MEL RAY RD



I-70 EB RAMP & MIDLAND AVE







DOWNTOWN AREA



FIGURE 13
GLENWOOD MEADOWS
MASTER TRAFFIC STUDY
GLENWOOD SPRINGS, CO
2040 TOTAL TRAFFIC VOLUMES

Kimley»Horn NORTH
NTS 096798001

Kimley»Horn

5.0 TRAFFIC OPERATIONS ANALYSIS

Kimley-Horn's analysis of traffic operations in the site vicinity was conducted to determine potential capacity deficiencies in the 2030 and 2040 development horizons at the identified key intersections. The acknowledged source for determining overall capacity is the *Highway Capacity Manual (HCM)*[2].

5.1 Analysis Methodology

Capacity analysis results are listed in terms of Level of Service (LOS). LOS is a qualitative term describing operating conditions a driver will experience while traveling on a particular street or highway during a specific time interval. It ranges from A (very little delay) to F (long delays and congestion). The City of Glenwood Springs has adopted LOS D as the minimum acceptable level of service for all movements and approaches when evaluating intersection operations. **Table 7** shows the definition of level of service for signalized and unsignalized intersections.

Table 9 – Level of Service Definitions

Level of Service	Signalized Intersection Average Total Delay (sec/veh)	Unsignalized Intersection Average Total Delay (sec/veh)
A	≤ 10	≤ 10
B	> 10 and ≤ 20	> 10 and ≤ 15
C	> 20 and ≤ 35	> 15 and ≤ 25
D	> 35 and ≤ 55	> 25 and ≤ 35
E	> 55 and ≤ 80	> 35 and ≤ 50
F	> 80	> 50

Definitions provided from the Highway Capacity Manual, Sixth Edition, Transportation Research Board, 2016.

Study area intersections were analyzed based on average total delay analysis for signalized and unsignalized intersections. Under the unsignalized analysis, the LOS for a two-way stop-controlled intersection is determined by the computed or measured control delay and is defined for each minor movement. LOS for a two-way stop-controlled intersection is not defined for the intersection as a whole. LOS for signalized, roundabout, and all-way stop controlled intersections are defined for each approach and for the overall intersection.

[2] Transportation Research Board, *Highway Capacity Manual*, Sixth Edition, Washington DC, 2016.

5.2 Key Intersection Operational Analysis

Calculations for the level of service at the key intersections for the study area are provided in **Appendix C**. The existing year analysis is based on the lane geometry and intersection control shown in **Figure 3.** The existing peak hour factors were utilized for existing and short-term analysis years and 0.92 for long-term 2040 analysis. Synchro traffic analysis software was used to analyze the signalized, and unsignalized key intersections for level of service. Sidra software was used to evaluate the I-70 ramp roundabout intersections at SH-6 and Mel Ray Road (#1) and Riverine Road and Midland Avenue (#2). **Table 8** provides the level of service operational results of all the study area intersections with the existing configuration and control. Recommended improvements to mitigate current or future unacceptable operations were also incorporated into the analysis results and identified in more detail later in **Table 9**.

Table 10 – Existing and Future Level of Service Results

Intersection	Control	Movement	2022 Existing		2030 Total		2040 Total	
			AM	PM	AM	PM	AM	PM
			Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)
Highway 6/I-70WB Ramps & Mel Ray Road (#1)		**Overall**	**9.3 (A)**	**11.8 (B)**	**16.8 (C)**	**25.9 (D)**	**20.9 (C)**	**35.0 (D)**
		Worst Approach	11.7 (B)	17.2 (C)	27.3 (D)	64.7 (F)	38.8 (E)	51.9 (F)
Riverine Rd/I-70 EB Ramp & Midland Avenue (#2)		**Overall**	54.2 (F)	**9.8 (A)**	121.4 (F)	**15.8 (C)**	148.4 (F)	**18.4 (C)**
		Worst Approach	96.6 (F)	10.4 (B)	260.8 (F)	17.2 (C)	320.1 (F)	20.9 (C)
Devereux Road & Midland Avenue (#3)		Westbound Approach	20.4 (C)	23.0 (C)	30.5 (D)	41.0 (E)	32.1 (D)	48.4 (E)
		Southbound Left	8.2 (A)	10.4 (B)	9.1 (A)	12.2 (B)	9.1 (A)	12.5 (B)
Midland Avenue & Wulfsohn Road (#4)		Northbound Approach	28.7 (D)	34.6 (D)	339.6 (F)	683.7 (F)	351.2 (F)	772.8 (F)
		Eastbound Left	8.0 (A)	9.8 (A)	8.2 (A)	10.6 (B)	8.2 (A)	10.7 (B0
		Westbound Left	11.2 (B)	8.5 (A)	13.3 (B)	9.4 (A)	13.3 (B)	9.5 (A)
		Southbound Left/Through	26.9 (D)	21.1 (C)	39.6 (E)	32.0 (D)	43.5 (E)	33.5 (D)
		Southbound Right	10.1 (B)	17.1 (C)	10.5 (B)	20.7 (C)	10.5 (B)	21.3 (C)

Intersection	Control	Movement	2022 Existing		2030 Total		2040 Total	
			AM	PM	AM	PM	AM	PM
			Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)
Midland Avenue & W Meadows Drive (#5)		**Overall**	**51.2 (D)**	**14.8 (B)**	**65.7 (E)**	**15.3 (B)**	**67.2 (E)**	**15.6 (B)**
		Worst Approach	69.1 (E)	17.5 (B)	92.1 (F)	17.8 (B)	94.4 (F)	17.6 (B)
Wulfsohn Road & W Meadows Drive (#6)		**Overall**	**7.5 (A)**	**7.5 (A)**	**9.0 (A)**	**9.4 (A)**	**9.1 (A)**	**9.5 (A)**
		Eastbound Approach	7.7 (A)	7.8 (A)	9.2 (A)	9.7 (A)	9.3 (A)	9.8 (A)
		Westbound Approach	7.3 (A)	7.3 (A)	9.1 (A)	9.4 (A)	9.1 (A)	9.4 (A)
		Southbound Approach	7.3 (A)	7.2 (A)	8.1 (A)	8.2 (A)	8.2 (A)	8.3 (A)
Wulfsohn Road & Market Street (#7)		**Overall**	**7.5 (A)**	**7.4 (A)**	**9.0 (A)**	**9.3 (A)**	**9.0 (A)**	**9.3 (A)**
		Eastbound Approach	7.6 (A)	7.6 (A)	8.9 (A)	9.3 (A)	8.9 (A)	9.3 (A)
		Westbound Approach	7.5 (A)	7.4 (A)	9.2 (A)	9.5 (A)	9.3 (A)	9.5 (A)
		Southbound Approach	7.2 (A)	7.1 (A)	8.0 (A)	8.1 (A)	8.1 (A)	8.1 (A)
Midland Avenue & E Meadows Drive (#8)		Northbound Right	19.1 (C)	11.2 (B)	26.9 (D)	12.5 (B)	28.4 (D)	12.9 (B)
		Westbound Left	10.5 (B)	8.4 (A)	11.0 (B)	8.9 (A)	11.2 (B)	9.0 (A)
Wulfsohn Road & E Meadows Drive (#9)		Northbound Left	9.9 (A)	10.4 (B)	14.9 (B)	21.8 (C)	15.3 (C)	20.7 (C)
		Northbound Through/Right	9.0 (A)	8.9 (A)	9.8 (A)	9.6 (A)	9.8 (A)	10.2 (B)
		Eastbound Left	7.5 (A)	7.5 (A)	7.6 (A)	8.0 (A)	7.6 (A)	7.9 (A)
		Westbound Left	7.3 (A)	7.4 (A)	7.6 (A)	7.8 (A)	7.7 (A)	7.8 (A)
		Southbound Approach	9.4 (A)	10.1 (B)	11.8 (B)	16.0 (C)	12.3 (B)	15.9 (C)
Midland Avenue & Wulfsohn Road (#10)		Northbound Left	19.5 (C)	25.9 (D)	25.4 (D)	64.7 (F)	27.3 (D)	72.4 (F)
		Westbound Left	10.8 (B)	8.9 (A)	12.8 (B)	11.2 (B)	13.5 (B)	11.5 (B)

Intersection	Control	Movement	2022 Existing		2030 Total		2040 Total	
			AM	PM	AM	PM	AM	PM
			Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)
8th Street & Midland Avenue (#11)		**Overall**	**5.7 (A)**	**6.4 (A)**	**11.2 (B)**	**8.5 (A)**	**10.8 (B)**	**9.4 (A)**
		Worst Approach	36.9 (D)	37.1 (D)	36.9 (D)	37.1 (D)	37.0 (D)	37.3 (D)
8th Street & Pitkin Avenue (#12)	STOP	**Overall**	**11.2 (B)**	**11.4 (B)**	**19.7 (C)**	**22.5 (C)**	**22.9 (C)**	**22.3 (C)**
		Northbound Approach	10.9 (B)	12.1 (B)	13.1 (B)	17.0 (C)	13.9 (B)	17.1 (C)
		Eastbound Approach	11.8 (B)	11.3 (B)	25.6 (D)	24.7 (C)	30.9 (D)	24.6 (C)
		Westbound Approach	10.4 (B)	10.6 (B)	14.1 (B)	23.7 (C)	15.3 (C)	23.4 (C)
8th Street & Colorado Avenue (#13)	STOP	**Overall**	**10.7 (B)**	**10.0 (A)**	**18.2 (C)**	**19.6 (C)**	**21.1 (C)**	**18.8 (C)**
		Northbound Approach	9.7 (A)	9.1 (A)	11.3 (B)	11.0 (B)	11.9 (B)	11.1 (B)
		Eastbound Approach	11.3 (B)	10.3 (B)	23.2 (C)	19.4 (C)	28.0 (D)	19.0 (C)
		Westbound Approach	10.7 (B)	10.3 (B)	15.4 (C)	23.0 (C)	17.2 (C)	21.8 (C)
		Southbound Approach	9.6 (A)	9.3 (A)	11.2 (B)	11.2 (B)	11.7 (B)	11.2 (B)
8th Street & Grand Avenue (SH-82) (#14)		**Overall**	**14.4 (B)**	**31.0 (C)**	**20.6 (C)**	**47.3 (D)**	**22.3 (C)**	**51.7 (D)**
		Worst Approach	47.4 (D)	125.9 (F)	58.9 (E)	199.6 (F)	66.0 (E)	220.2 (F)
9th Street & Colorado Avenue (#15)	STOP	**Overall**	**8.3 (A)**	**7.9 (A)**	**8.4 (A)**	**8.0 (A)**	**8.7 (A)**	**8.0 (A)**
		Northbound Approach	7.8 (A)	7.6 (A)	7.8 (A)	7.6 (A)	7.9 (A)	7.6 (A)
		Eastbound Approach	8.0 (A)	7.9 (A)	8.1 (A)	7.9 (A)	8.3 (A)	8.0 (A)
		Westbound Approach	8.2 (A)	7.7 (A)	8.3 (A)	7.8 (A)	8.5 (A)	7.9 (A)
		Southbound Approach	8.7 (A)	8.1 (A)	8.8 (A)	8.2 (A)	9.1 (A)	8.2 (A)
9th Street & Grand Avenue (SH-82) (#16)		**Overall**	**10.6 (B)**	**20.9 (C)**	**10.8 (B)**	**22.5 (C)**	**11.7 (B)**	**24.9 (C)**
		Worst Approach	44.3 (D)	89.2 (F)	44.2 (D)	91.7 (F)	44.2 (D)	95.8 (F)

As shown in **Table 8**, the intersections will operate acceptably through 2040 with the exception of the following intersections:

- US-6/I-70 WB Ramp & Mel Ray Road (#1)
- Riverine Road/I-70 EB Ramp & Midland Avenue (#2)
- Midland Avenue & Wulfsohn Road (West) (#4)
- Midland Avenue & W Meadows Drive (#5)
- Midland Avenue & Wulfsohn Road (East) (#10)
- 8th Street & Grand Avenue (SH-82) (#14)
- 9th Street & Grand Avenue (SH-82) (#16)

The following section provides further intersection recommendations to mitigate the short-term 2030 horizon and long-term 2040 horizon deficiencies.

US-6/I-70 WB Ramp & Mel Ray Road (#1)

Even though the overall roundabout operates with an acceptable level of service, the southbound approach experiences higher delays and a failing level of service. To mitigate the southbound approach, adding an additional lane for shared right turn/through movements would be needed. However, the north leg of the intersection will need to be widened to add the second southbound approach lane.

Riverine Road/I-70 EB Ramp & Midland Avenue (#2)

The overall roundabout operates at LOS F during the morning peak hour based on existing traffic volumes. With future traffic projections the overall intersection is anticipated to operate with higher delays. Therefore, two possible improvements include providing three lanes along the southwest side of the roundabout to accommodate a third eastbound left only lane from the I-70 eastbound offramp approach and adding a second southbound approach lane from under I-70. The third eastbound left turn lane will widen the southwest side of the roundabout to three lanes, but the outside lane would still be dropped to the southbound exit with two lanes circling the roundabout to tie into the existing two-lane northbound exit under I-70. The second southbound lane could be constructed near the base of the I-70 bridge to provide a short approach lane with a steeper embankment wall.

Devereux Road & Midland Avenue (#3)

The intersection movements are anticipated to operate with LOS E or better through 2040. However, the City has identified safety concerns for the westbound left turn movement with the limited sight distance and vehicles traveling at higher speeds along Midland Avenue. Therefore, an analysis was prepared to restrict the westbound left turn movement from this intersection with a three-quarter movement restriction. Drivers wishing to make a left turn at this intersection from Devereaux Road to Midland Avenue can re-route to the east or make a right turn and use the roundabout to U-turn and head southeastbound on Midland Avenue.

Midland Avenue & Wulfsohn Road (West) (#4)

The western intersection of Midland Avenue and Wulfsohn Road currently operates with stop control on the northbound and southbound minor approaches of Wulfsohn Road/Private Driveway. It is understood that the City has concerns with the high vehicle speeds along Midland Avenue through this intersection. Likewise, the safety of pedestrians crossing at the marked crosswalks is a core concern as it was noted that a pedestrian fatality occurred at this intersection. To address controlling vehicle speeds and the projected traffic volumes on the northbound approach, three scenarios were taken into consideration.

The south leg is projected to have more than 200 vehicles during the peak hour with the full buildout of the Glenwood Meadows development. Therefore, the intersection was evaluated to determine if the Manual on Uniform Traffic Control Devices (MUTCD) Four-Hour Vehicular Volume (Warrant 2) warrant would be met for signalization. The intersection of Midland Avenue and Wulfsohn Road (West) (#4) is expected to meet four-hour vehicular volume warrants for signalization with 2030 traffic volume projections. As such, it is recommended that the intersection of Midland Avenue and Wulfsohn Road (#4) be considered for signal control as additional development occurs within Glenwood Meadows. The analysis kept the same geometry with permissive-only left turn phasing on all four approaches and a cycle length of 90 seconds. Signalization will help decrease traffic speeds along Midland Avenue by making drivers aware of the potential to stop at the intersection and it will provide safe connectivity between the two Glenwood Meadows parcels on the north and south side of Midland Avenue with a signalized pedestrian crossing phase.

In addition, to address speed concerns and future traffic volumes, a roundabout configuration was also considered at this intersection. A roundabout intersection can operate acceptably with the

north and south minor legs having one single lane for shared movements, but the eastbound and westbound approaches would require two approach lanes. These second outside through lanes could taper to the existing single through lane beyond the roundabout, but this is likely not desired and will cause issues for east/west traffic through the roundabout. Therefore, roundabout control was not preferred.

The third option that was considered would be restricting movements on the minor approaches. This could include restricting to right-in/right-out or three-quarter movements on the northbound and southbound approaches. However, after further review, this would not prevent drivers from speeding along Midland Avenue and may actually have the opposite result. If movements are restricted, then the conflict of left turning vehicles is removed causing faster travel speeds along this roadway. In addition, the least intrusive restriction at the intersection would be the three-quarter movements. However, if that restriction were in place, 200 peak hour vehicles would be added to the full movement access at W Meadows, which already has a high northbound left turn volume. This would end up requiring dual northbound left turn lanes at the W Meadows and Midland Avenue intersection, which would also require two receiving lanes on Midland Avenue. Therefore, it is not recommended to consider restricting movements at this intersection. A traffic signal is believed to be the preferred configuration, which will move vehicles to desired destinations most efficiently while adding traffic calming and safety measures along Midland Avenue.

Midland Avenue & W Meadows Drive (#5)

The northbound approach currently operates with higher delays during the morning peak hour. It is recommended that the Midland Avenue and W Meadows Drive (#5) signal cycle length be increased from the existing 65 seconds during the morning peak hour and 70 seconds during the afternoon peak hour to 90 seconds for both peak hours. With this change, the intersection and the approaches operate acceptably.

Midland Avenue & Wulfsohn Road (East) (#10)

This eastern intersection of Midland Avenue and Wulfsohn Road currently operates with stop control on the ‘northbound’ approach of Wulfsohn Road. Separate northbound left and right turn lanes are provided; however, the northbound left movement operates with high delays. As shown from the existing traffic patterns, the northbound left movement is not being utilized with only eight (8) left turns during each peak hour. Therefore, restricting the intersection to three-quarter

movements with this northbound left turn restricted could be explored. Furthermore, the northbound right movement is recommended to be more clearly designated to fully operate as a "FREE" lane. To accomplish this, it is recommended that improved channelized striping or a raised median be provided designating the left edge for the right turning vehicles

8th Street & Grand Avenue (SH-82) (#14)

The intersection of 8th Street and Grand Avenue (SH-88) (#14) operates with split phasing on the eastbound and westbound approaches to accommodate pedestrian crossings. However, this control type decreases the green time available for the eastbound and westbound traffic. In addition, the eastbound traffic is anticipated to double with the expansion of Glenwood Meadows. Therefore, exploring dual eastbound left turn lanes and allowing dual entry on the eastbound and westbound approaches will minimize delays on the eastbound approach. To accommodate dual eastbound left turn lanes, the existing bulb outs and trips will need to be removed. However, with this improvement it is anticipated that some approaches may still operate with failing LOS. This is mainly due to the heavy northbound and southbound traffic being over capacity and the green time being allotted to the major roadway. Further, this analysis illustrates the need for the South Bridge to be completed for additional regional roadway connections between the east and west side of Roaring Fork River.

9th Street & Grand Avenue (SH-82) (#16)

As mentioned at the 8th Street/Grand Avenue (SH-88) (#14) intersection, the northbound and southbound through volumes at the 9th Street/Grand Avenue (SH-82) (#16) intersection is also over capacity and is approaching the need for three through lanes. A reversible lane could be explored with the volumes being directional and the bridge only providing four-lanes. A reversible lane or other regional connections study (Cottonwood Pass for example) may be beneficial. As stated previously, the South Bridge will provide an additional regional roadway connection if the project is completed.

The level of service results for these recommendations are shown below in **Table 9.**

Table 11 – Future Recommendation Level of Service Results

Intersection	Control	Movement	Improvement Description	2030 Total		2040 Total	
				AM	PM	AM	PM
				Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)
Highway 6/I-70WB Ramps & Mel Ray Road (#1)		**Overall**	Add second SB approach lane for shared right/through	**16.3 (C)**	**21.9 (C)**	**20.0 (C)**	**28.2 (D)**
		Worst Approach		27.3 (D)	36.1 (E)	38.8 (E)	52.8 (F)
Riverine Rd/I-70 EB Ramp & Midland Avenue (#2)		**Overall**	Add third EB approach lane for EBL and a second SB approach for shared through/right	**32.6 (D)**	**13.0 (B)**	**44.3 (E)**	**15.2 (C)**
		Worst Approach		59.7 (F)	17.2 (C)	84.9 (F)	20.9 (C)
Devereux Road & Midland Avenue (#3)		Westbound Right	Convert to a three-quarter access	12.7 B	29.6 D	12.8 B	32.3 D
		Southbound Left		9.1 A	12.2 B	9.1 A	12.5 B
Midland Avenue & Wulfsohn Road (#4)		**Overall**	Signalized with 90 sec cycle length	**17.5 (B)**	**19.7 (B)**	17.5 (B)	**20.3 (C)**
		Worst Approach		40.6 (D)	38.3 (D)	42.6 (D)	39.8 (D)
		**Overall**	Roundabout with two lane EB/WB approach and one lane NB/SB approach	**10.9 (B)**	**8.8 (A)**	**10.9 (B)**	**8.9 (A)**
		Worst Approach		30.2 (D)	16.9 (C)	30.5 (D)	17.2 (C)
Midland Avenue & W Meadows Drive (#5)		**Overall**	Increase cycle length from the observed 65sec/75sec to 90 sec	**20.5 (C)**	**15.3 (B)**	**20.8 (C)**	**17.6 (B)**
		Worst Approach		28.7 (C)	17.8 (B)	29.1 (C)	19.8 (B)
Midland Avenue & Wulfsohn Road (#10)		Northbound Right	Convert to a three-quarter access	0.0 (A)	0.0 (A)	0.0 (A)	0.0 (A)
		Westbound Left		12.8 (B)	11.2 (B)	13.5 (B)	11.5 (B)
8th Street & Grand Avenue (SH-82) (#14)		**Overall**	Dual EBL turn lanes and convert minor approach split phasing to dual entry	**18.8 (B)**	**32.7 (C)**	**20.1 (C)**	**35.0 (D)**
		Worst Approach		58.9 (E)	118.2 (F)	65.0 (E)	102.3 (F)

5.3 Vehicle Queuing Analysis

A vehicle queuing analysis was conducted for the study area intersections. The queuing analysis was performed using Synchro presenting the results of the 95th percentile queue lengths with the recommended improvements. Results are shown in the following **Table 10** with calculations

provided within the level of service operational sheets of **Appendix C** for unsignalized intersections and **Appendix D** for signalized intersections.

Table 12 – Turn Lane Queuing Analysis Results

Intersection Turn Lane	Existing Turn Lane Length (feet)	2030 Calculated Queue (feet)	2030 Recommended Length (feet)	2040 Calculated Queue (feet)	2040 Recommended Length (feet)
Devereaux & Midland (#3)					
Southbound Left	100’	25’	100’	25’	100’
Midland Ave & Wulfsohn Rd W (#4)					
Eastbound Left	100’	41’	100’	48’	100’
Eastbound Right	25’	**88’**	**150’**	**84’**	**150’**
Westbound Left	100’	12’	100’	15’	100’
Southbound Right	75’	30’	75’	32’	75’
Midland Ave & W Meadows (#5)					
Eastbound Right	150’	33’	150’	35’	150’
Westbound Left	200’	39’	200’	41’	200’
Northbound Left	C	172’	C	191’	C
Northbound Right	100’	38’	100’	41’	100’
Midland Ave & E Meadows (#8)					
Westbound Left	250’	25’	250’	50’	250’
Wulfsohn Rd & E Meadows (#9)					
Northbound Left	50’	25’	50’	25’	50’
Midland Ave & Wulfsohn Rd (#10)					
Northbound Left	275’	Remove	Remove	Remove	Remove
Westbound Left	250’	50’	250’	50’	250’
8th St & Midland Ave (#11)					
Westbound Left	125’	63’	125’	67’	125’
Westbound Right	C	0’	C	0’	C
Northbound Right	125’	26’	125’	27’	125’
Southbound Left	125’	**279’**	**300’**	**310’**	**300’**
8th St & Grand Ave (#14)					
Eastbound Left	75’	**168’ DL**	**75’ DL**	**207’ DL**	**75’ DL**
Westbound Left	75’	46’	75’	50’	75’
Northbound Left	175’	74’	175’	78’	175’
Southbound Left	100’	79’	100’	**134’**	**150’**
9th St & Grand Ave (#16)					
Eastbound Left	50’	**96’**	**100’**	**106’**	**100’**
Westbound Left	75’	57’	75’	63’	75’
Northbound Left	150’	39’	150’	42’	150’
Southbound Left	125’	18’	125’	20’	125’

DNE = Does Not Exist; C = Continuous; **Red** Text = Storage Deficiency; **Blue** Text = Recommendation

If the intersection of Midland Avenue and Wulfsohn Road (#4) is signalized, the existing 25-foot eastbound right turn lane should be extended to provide 150 feet of storage.

It is recommended that the southbound left turn lane at the 8th Street and Midland Avenue (#11) intersection be extended from 125 feet to 300 feet of length.

The eastbound left turn vehicle queues at the intersection of 8th Street and Grand Avenue (#14) currently exceed the provided storage. It is recommended that dual eastbound left turn lanes operating with protected only left turn phasing be provided at this intersection. Due to existing geometric constraints, the dual left turn lanes would require removal of on-street parking near the intersection and likely some landscaping and the bulb outs. Also, these dual lefts are believed to only be able to provide 75 feet of storage prior to the existing alley intersection along 8th Street to the west of Grand Avenue (SH-82). By 2040, the southbound left turn lane may need to be extended to 150 feet by providing a shorter taper length of 50 feet.

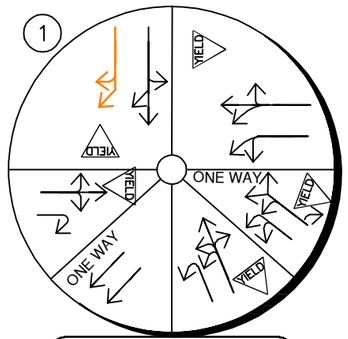
At the 9th Street and Grand Avenue (SH-82) (#16) intersection, the existing 50-foot eastbound left turn lane is recommended to be restriped to provide 100 feet of length.

5.4 Signal Warrant Evaluation

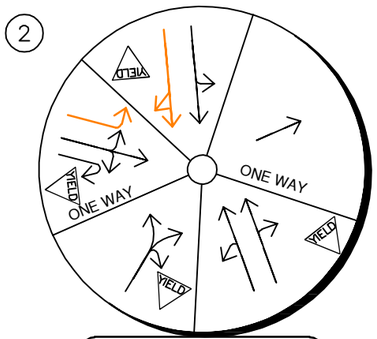
The intersections of Devereux Road/Midland Avenue (#3) and Midland Avenue/Wulfsohn Road (West) (#4) were evaluated to determine if the Manual on Uniform Traffic Control Devices (MUTCD) Four-Hour Vehicular Volume (Warrant 2) warrant would be met for signalization. The intersection of Devereux Road and Midland Avenue (#3) is not anticipated to meet four-hour signal warrants with future 2030 and 2040 traffic volume projections. However, as mentioned in the previous section, the intersection of Midland Avenue and Wulfsohn Road (West) (#4) is expected to meet four-hour vehicular volume warrants for signalization with 2030 traffic volume projections. As such, it is recommended that the intersection of Midland Avenue and Wulfsohn Road (West) (#4) be considered for signal control as additional development occurs within Glenwood Meadows. Signal warrant figures for these two intersections are included in **Appendix E**.

5.5 Improvement Summary

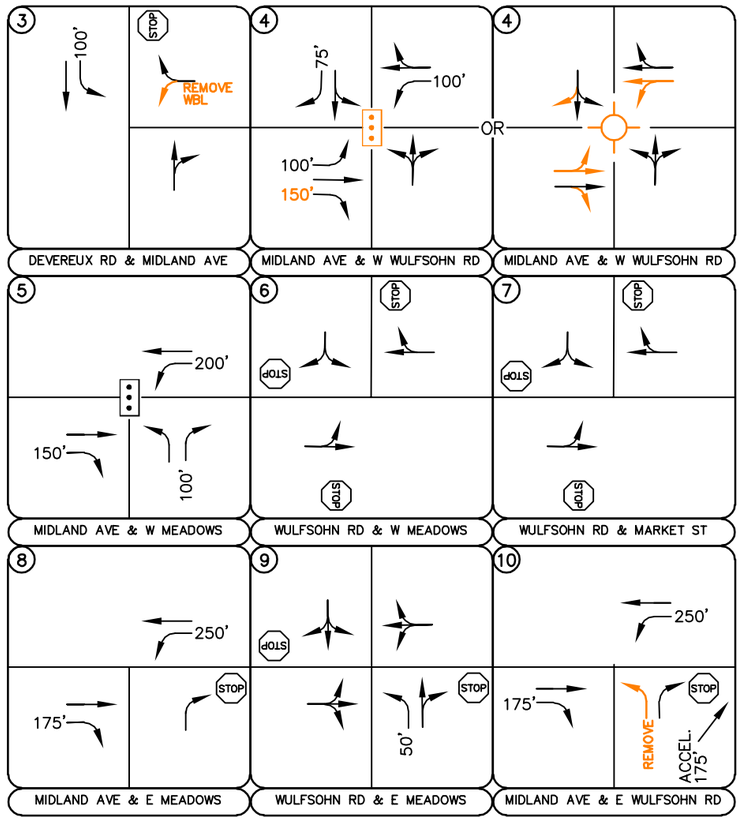
Based on the results of the intersection operational and vehicle queuing analysis, the key intersection recommended improvements and control are shown in **Figure 14**.

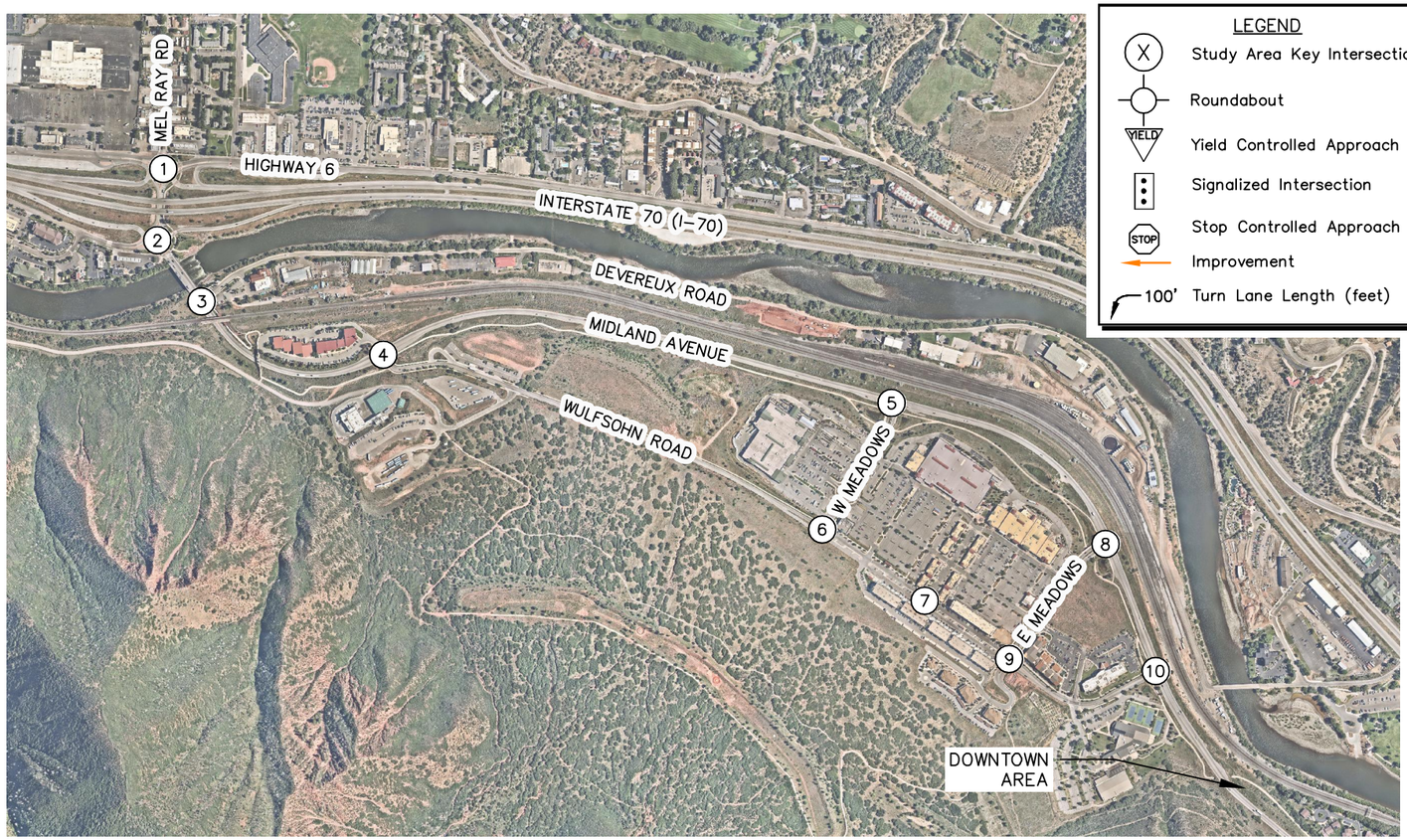


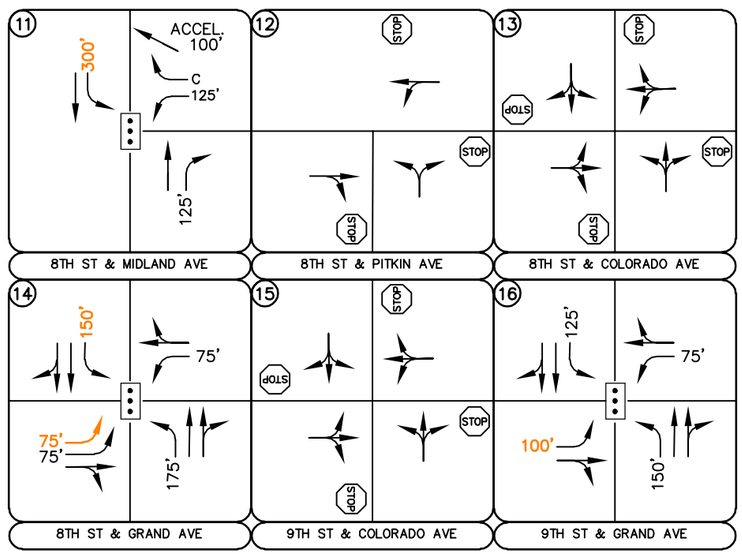
I-70 WB RAMP & MEL RAY RD



I-70 EB RAMP & MIDLAND AVE







DOWNTOWN AREA



FIGURE 14
GLENWOOD MEADOWS
MASTER TRAFFIC STUDY
GLENWOOD SPRINGS, CO
RECOMMENDED LANE CONFIGURATIONS AND CONTROL

Kimley»Horn NORTH
NTS 096798001

Kimley»Horn

6.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the analysis presented in this report, Kimley-Horn has identified future roadway and intersection improvement recommendations based on remaining development of Glenwood Meadows and the associated traffic projections. Analysis of the street network and expected traffic volumes resulted in the recommended improvements summarized in the following **Table 11** with additional discussion provided following. **Table 11** also provides the peak hour volume threshold warrants for the intersection recommended improvements.

Table 13 – Summary of Improvements

Intersection	Improvements	Threshold Needs
Highway 6/I-70 WB Ramps & Mel Ray Road (#1)	• Add second SB approach lane for shared right/through movements	SB PM Peak: = 255 vph
I-70 EB Ramps/Riverine Road & Midland Avenue (#2)	• Add third EB approach lane for EBL movement • Add second SB approach for shared through/right movements	Needed Now
Devereux Road & Midland Avenue (#3)	• Restrict to three-quarter turning movements (prohibit Devereux Road westbound left turn)	Needed Now
Midland Avenue & W Wulfsohn Road (#4)	• Signalized and Extend EB RTL from 25 feet to 150 feet	NB AM/PM Peak: = 90 vph
Midland Avenue & W Meadows Drive (#5)	• Increase observed cycle length to 90 second for both peak hours	Needed Now
Wulfsohn Road & W Meadows Drive (#6)	• No improvements found to be needed or recommended	-
Wulfsohn Road & Market Street (#7)	• No improvements found to be needed or recommended	-
Midland Avenue & E Meadows Drive (#8)	• No improvements found to be needed or recommended	-
Wulfsohn Road & E Meadows Drive (#9)	• No improvements found to be needed or recommended	-
Midland Avenue & E Wulfsohn Road (#10)	• Restrict to three-quarter turning movements (prohibit Wulfsohn Road northeastbound left turn)	WBL PM Peak: = 300 vph
8th Street & Midland Avenue (#11)	• Extend southbound left turn lane from 125 feet to 300 feet	SBL AM Peak: = 500 vph
8th Street & Pitkin Avenue (#12)	• No improvements found to be needed or recommended	-
8th Street & Colorado Avenue (#13)	• No improvements found to be needed or recommended	-
8th Street & Grand Avenue (SH-82) (#14)	• Extend southbound left turn lane from 100 feet to 150 feet • Provide dual eastbound left turn lanes • Grand Avenue (SH-82) further study recommended	Needed Now
9th Street & Colorado Avenue (#15)	• No improvements found to be needed or recommended	-
9th Street & Grand Avenue (SH-82) (#16)	• Extend eastbound left turn lane from 50 feet to 100 feet • Grand Avenue (SH-82) further study recommended	Needed Now

- At the Highway 6/I-70 Westbound Ramp and Mel Ray Road (#1) intersection, it is recommended add an additional southbound lane for shared right/through movements would be needed. However, the north leg of the intersection will need to be widened to add the second southbound lane.

- Two improvements could be explored at the I-70 Eastbound Ramp/Riverine Road and Midland Avenue (#2) intersection to decrease the vehicle delay at the roundabout. These include, providing three lanes along the southwest side of the roundabout to accommodate a third eastbound left only lane from the I-70 eastbound offramp approach and adding a second southbound approach lane from under I-70. The third eastbound left turn lane will widen the southwest side of the roundabout to three lanes, but the outside lane would still be dropped to the southbound exit with two lanes circling the roundabout to tie into the existing two-lane northbound exit under I-70. The second southbound lane could be constructed near the base of the I-70 bridge to provide a short approach lane with a steeper embankment wall.

- It is recommended to convert Devereux Road and Midland Avenue (#3) to three-quarter movements which would restrict the westbound Devereux Road left turn movements. Drivers can reroute by traveling Devereux Road to the east or make a right turn onto Midland Avenue and use the I-70 Eastbound Ramp roundabout to U-turn and head southbound along Midland Avenue.

- The unsignalized intersection of Midland Avenue and Wulfsohn Road (West) (#4) is expected to meet the MUTCD Four-Hour Volume traffic signal warrant with the morning and afternoon peak period volumes in 2030. Therefore, it is recommended that this intersection provide signal control. The eastbound right turn lane is recommended to be lengthen to 150 feet.

- It is recommended that the Midland Avenue and W Meadows Drive (#5) signal cycle length be increased from the existing 65 seconds during the morning peak hour and 70 seconds during the afternoon peak hour to 90 seconds for both peak hours.

- It is recommended that the existing free northbound right turn movement at the eastern intersection of Midland Avenue and Wulfsohn Road (#10) be more clearly designated to fully operate as a “FREE” lane. To accomplish this, it is recommended that improved channelized

striping or a raised median be provided designating the left edge for the right turning vehicles. It is also recommended to convert this intersection to three-quarter movements which would restrict the northeastbound Wulfsohn Road left turn movements. Drivers can reroute to the signalized intersections of Midland Avenue with proposed Wulfsohn Road (#4) or existing W Meadows Drive (#5) to perform northbound left turn movements.

- At the 8th Street and Midland Avenue (#11) intersection, it is recommended that the existing 125-foot southbound left turn lane be extended to 300 feet. This will require roadway widening along the southwest side of Midland Avenue to provide further distance of separation of the southbound left turn and through lanes.

- Eastbound dual left turn lanes operating with protected-only left turn phasing could be considered at the signalized intersection of 8th Street and Grand Avenue (SH-82) (#14). Due to existing geometric constraints, the dual left turn lanes would require removal of on-street parking near the intersection and likely some landscaping. Also, these dual lefts are believed to only be able to provide 75 feet of storage prior to the existing alley intersection along 8th Street to the west of Grand Avenue (SH-82).

- At the 9th Street and Grand Avenue (SH-82) (#16) intersection, the existing 50-foot eastbound left turn lane is recommended to be restriped to provide 100 feet of length.

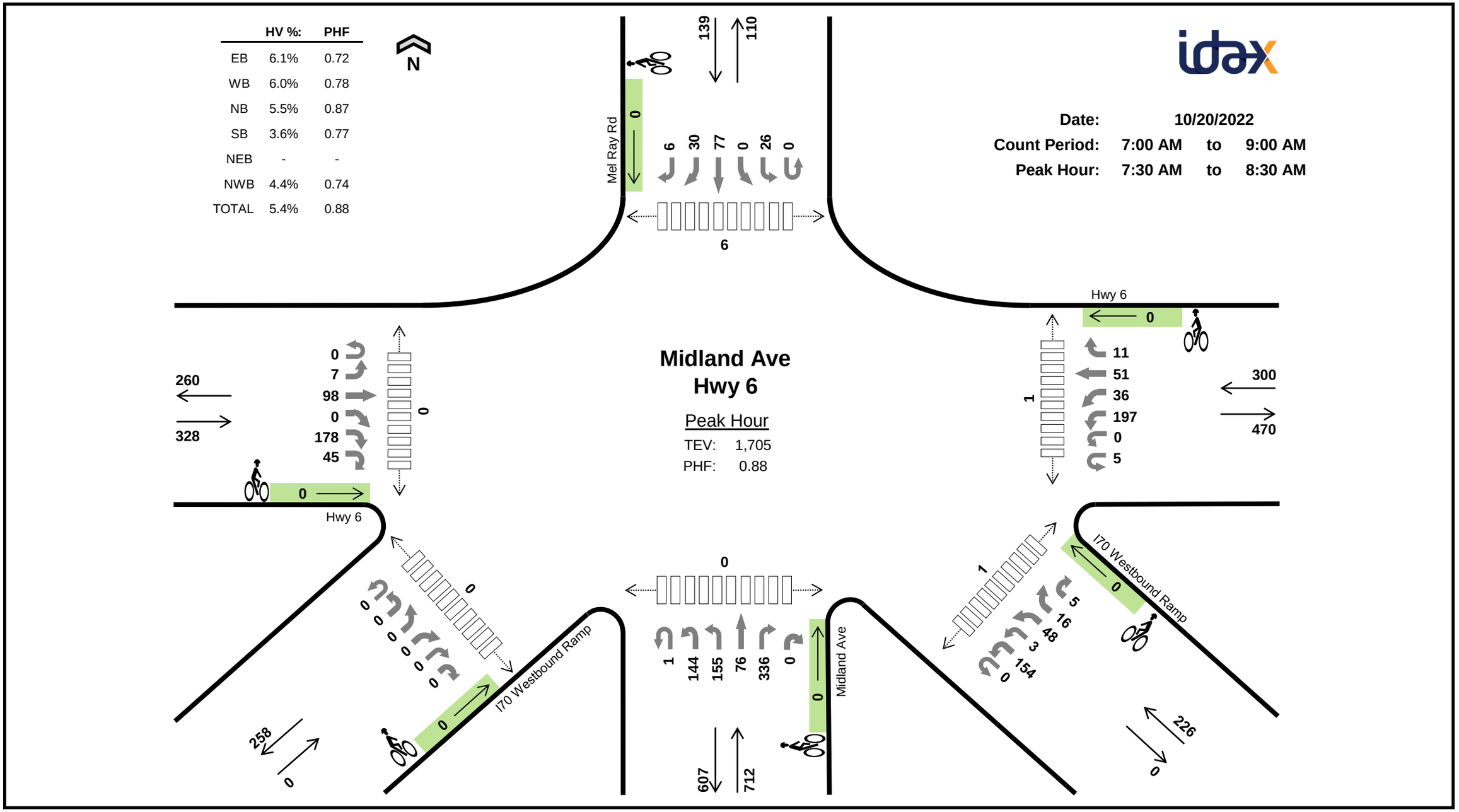
- The existing through volumes along Grand Avenue (SH-82) may be nearing capacity and approaching the need for three through lanes in the future. A reversible lane could be explored with the volumes being directional and due to the bridge only providing four-lanes. Also, the possible South Bridge will provide an additional regional roadway connection across the Roaring Fork River if the project is completed. Likewise, alternate regional roadway connections including Cottonwood Pass improvements may be beneficial to the intersections along Grand Avenue (SH-82) within Glenwood Springs.

APPENDICES

APPENDIX A

Intersection Count Sheets

Future Traffic Projections



Project Manager: (415) 310-6469

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Two-Hour Count Summaries

Interval Start		Hwy 6 Eastbound						Hwy 6 Westbound						Midland Ave Northbound						Mel Ray Rd Southbound						I70 Westbound Ramp Northeastbound						I70 Westbound Ramp Northwestbound						15-min Total	Rolling One Hour
		UT	LT	TH	BR	RT	HR	UT	HL	LT	BL	TH	RT	UT	HL	LT	TH	RT	HR	UT	LT	BL	TH	BR	RT	UT	HL	BL	BR	RT	HR	UT	HL	LT	BL	BR	HR		
7:00 AM		0	2	12	0	16	4	2	0	19	4	4	0	0	17	23	9	44	0	0	5	0	19	8	1	0	0	0	0	0	0	0	4	0	0	0	1	194	0
7:15 AM		0	1	16	0	25	4	0	0	20	6	5	2	0	18	20	12	41	0	0	4	0	11	4	2	0	0	0	0	0	0	0	8	0	3	2	0	204	0
7:30 AM		**0**	**1**	**17**	**0**	**25**	**7**	**1**	**0**	**41**	**12**	**12**	**1**	**1**	**30**	**29**	**9**	**85**	**0**	**0**	**5**	**0**	**22**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**61**	**2**	**9**	**4**	**0**	**386**	0
7:45 AM		**0**	**1**	**24**	**0**	**41**	**5**	**0**	**0**	**68**	**6**	**16**	**6**	**0**	**35**	**42**	**33**	**94**	**0**	**0**	**6**	**0**	**29**	**6**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**30**	**0**	**16**	**3**	**1**	**466**	1,250
8:00 AM		**0**	**2**	**27**	**0**	**74**	**11**	**2**	**0**	**57**	**6**	**12**	**2**	**0**	**38**	**42**	**24**	**89**	**0**	**0**	**9**	**0**	**15**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**50**	**1**	**8**	**5**	**2**	**483**	1,539
8:15 AM		**0**	**3**	**30**	**0**	**38**	**22**	**2**	**0**	**31**	**12**	**11**	**2**	**0**	**41**	**42**	**10**	**68**	**0**	**0**	**6**	**0**	**11**	**5**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**13**	**0**	**15**	**4**	**2**	**370**	**1,705**
8:30 AM		1	0	24	0	35	12	1	0	22	7	14	0	0	29	30	19	55	0	0	5	0	15	6	1	0	0	0	0	0	0	0	10	0	10	5	0	301	1,620
8:45 AM		0	1	16	0	19	9	1	0	10	4	17	3	1	27	27	11	33	0	0	4	0	18	4	2	0	0	0	0	0	0	0	8	0	8	6	0	229	1,383
Count Total		1	11	166	0	273	74	9	0	268	57	91	16	2	235	255	127	509	0	0	44	0	140	52	12	0	0	0	0	0	0	0	184	3	69	29	6	2,633	0
Peak Hour	**All**	**0**	**7**	**98**	**0**	**178**	**45**	**5**	**0**	**197**	**36**	**51**	**11**	**1**	**144**	**155**	**76**	**336**	**0**	**0**	**26**	**0**	**77**	**30**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**154**	**3**	**48**	**16**	**5**	**1,705**	**0**
	HV	**0**	**0**	**5**	**0**	**8**	**7**	**1**	**0**	**7**	**5**	**5**	**0**	**0**	**11**	**9**	**2**	**17**	**0**	**0**	**1**	**0**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**1**	**2**	**4**	**0**	**92**	**0**
	HV%	**-**	**0%**	**5%**	**-**	**4%**	**16%**	**20%**	**-**	**4%**	**14%**	**10%**	**0%**	**0%**	**8%**	**6%**	**3%**	**5%**	**-**	**-**	**4%**	**-**	**4%**	**3%**	**0%**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**2%**	**33%**	**4%**	**25%**	**0%**	**5%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

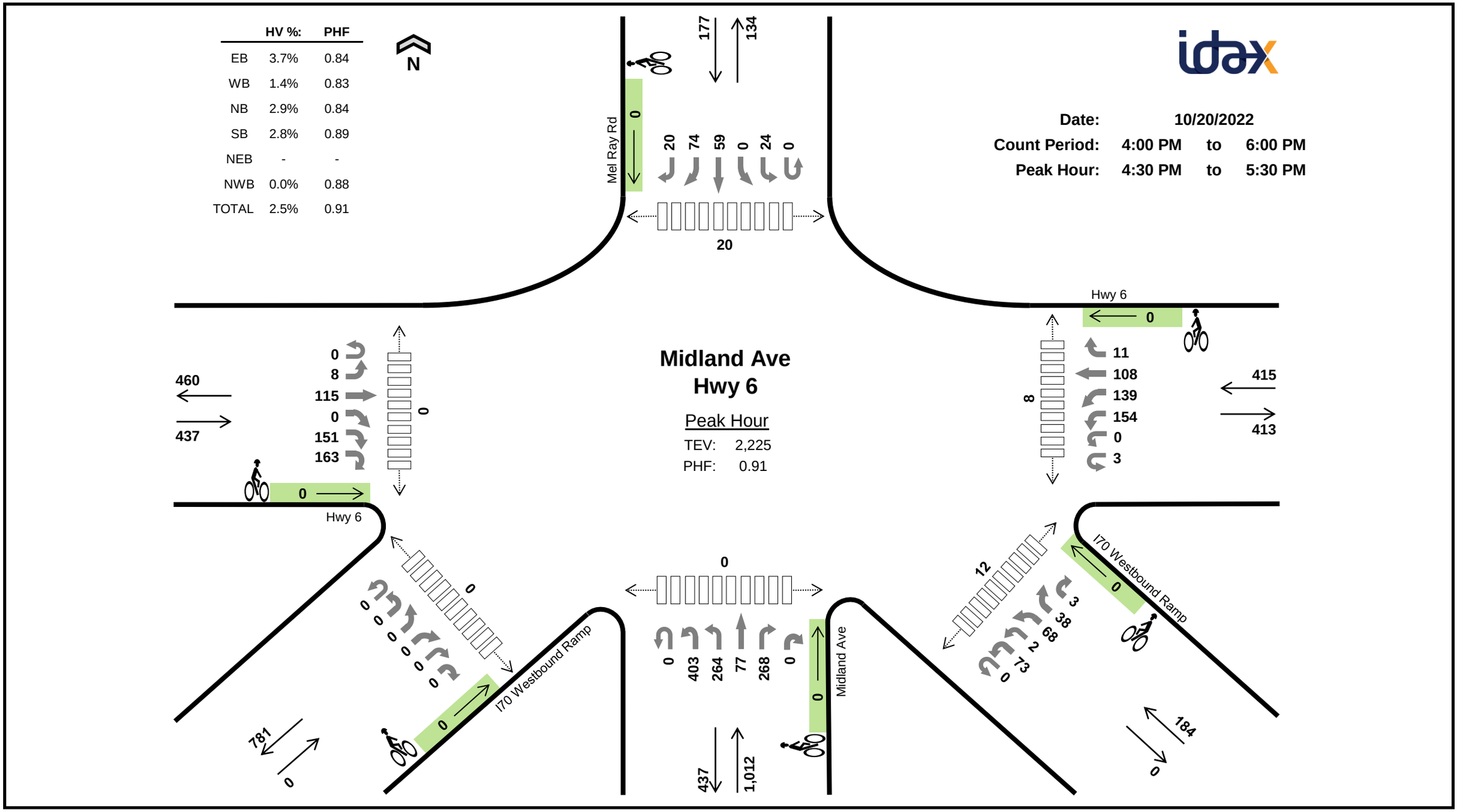
Interval Start	Heavy Vehicle Totals							Bicycles							Pedestrians (Crossing Leg)						
	EB	WB	NB	SB	NEB	NWB	Total	EB	WB	NB	SB	NEB	NWB	Total	East	West	North	South	SE	SW	Total
7:00 AM	1	2	5	1	0	0	*9*	0	0	0	0	0	0	*0*	0	0	2	0	2	0	*4*
7:15 AM	4	2	5	1	0	0	*12*	0	0	0	0	0	0	*0*	0	0	1	0	2	0	*3*
7:30 AM	**5**	**3**	**11**	**1**	**0**	**2**	***22***	**0**	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	**0**	**0**	***0***
7:45 AM	**5**	**4**	**9**	**2**	**0**	**0**	***20***	**0**	**0**	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**4**	**0**	**1**	**0**	***6***
8:00 AM	**3**	**2**	**10**	**2**	**0**	**3**	***20***	**0**	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	**0**	**0**	***0***
8:15 AM	**7**	**9**	**9**	**0**	**0**	**5**	***30***	**0**	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**2**	**0**	**0**	**0**	***2***
8:30 AM	7	2	7	1	0	0	*17*	0	0	0	0	0	0	*0*	0	0	1	0	0	0	*1*
8:45 AM	3	1	17	2	0	0	*23*	0	0	0	0	0	0	*0*	1	0	1	0	3	0	*5*
Count Total	35	25	73	10	0	10	*153*	0	0	0	0	0	0	*0*	2	0	11	0	8	0	*21*
Peak Hr	**20**	**18**	**39**	**5**	**0**	**10**	***92***	**0**	**0**	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**6**	**0**	**1**	**0**	***8***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start		Hwy 6 Eastbound						Hwy 6 Westbound						Midland Ave Northbound						Mel Ray Rd Southbound						I70 Westbound Ramp Northeastbound						I70 Westbound Ramp Northwestbound						15-min Total	Rolling One Hour
		UT	LT	TH	BR	RT	HR	UT	HL	LT	BL	TH	RT	UT	HL	LT	TH	RT	HR	UT	LT	BL	TH	BR	RT	UT	HL	BL	BR	RT	HR	UT	HL	LT	BL	BR	HR		
7:00 AM		0	0	0	0	1	0	0	0	2	0	0	0	0	1	3	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0
7:15 AM		0	0	2	0	0	2	0	0	2	0	0	0	0	3	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	12	0
7:30 AM		**0**	**0**	**1**	**0**	**3**	**1**	**0**	**0**	**2**	**0**	**1**	**0**	**0**	**5**	**1**	**0**	**5**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**22**	0
7:45 AM		**0**	**0**	**2**	**0**	**2**	**1**	**0**	**0**	**2**	**0**	**2**	**0**	**0**	**2**	**4**	**1**	**2**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**20**	63
8:00 AM		**0**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**0**	**1**	**7**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**20**	74
8:15 AM		**0**	**0**	**2**	**0**	**2**	**3**	**1**	**0**	**1**	**5**	**2**	**0**	**0**	**2**	**4**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**2**	**0**	**30**	**92**
8:30 AM		0	0	1	0	5	1	0	0	2	0	0	0	0	1	2	1	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	87
8:45 AM		0	0	1	0	2	0	0	0	0	0	1	0	0	8	5	2	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	90
Count Total		0	0	9	0	16	10	1	0	13	5	6	0	0	24	21	5	23	0	0	1	0	6	2	1	0	0	0	0	0	0	0	3	1	2	4	0	153	0
Peak Hour		**0**	**0**	**5**	**0**	**8**	**7**	**1**	**0**	**7**	**5**	**5**	**0**	**0**	**11**	**9**	**2**	**17**	**0**	**0**	**1**	**0**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**1**	**2**	**4**	**0**	92	**0**

Two-Hour Count Summaries - Bikes

Interval Start		Hwy 6 Eastbound						Hwy 6 Westbound						Midland Ave Northbound						Mel Ray Rd Southbound						I70 Westbound Ramp Northeastbound						I70 Westbound Ramp Northwestbound						15-min Total	Rolling One Hour
		UT	LT	TH	BR	RT	HR	UT	HL	LT	BL	TH	RT	UT	HL	LT	TH	RT	HR	UT	LT	BL	TH	BR	RT	UT	HL	BL	BR	RT	HR	UT	HL	LT	BL	BR	HR		
7:00 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0	**0**



Project Manager: (415) 310-6469

project.manager.ca@idaxdata.com

Two-Hour Count Summaries

Interval Start	Hwy 6 Eastbound						Hwy 6 Westbound						Midland Ave Northbound						Mel Ray Rd Southbound						I70 Westbound Ramp Northeastbound						I70 Westbound Ramp Northwestbound						15-min Total	Rolling One Hour
	UT	LT	TH	BR	RT	HR	UT	HL	LT	BL	TH	RT	UT	HL	LT	TH	RT	HR	UT	LT	BL	TH	BR	RT	UT	HL	BL	BR	RT	HR	UT	HL	LT	BL	BR	HR		
4:00 PM	0	2	20	0	31	31	0	0	32	25	20	3	0	82	44	23	64	0	0	7	0	20	11	4	0	0	0	0	0	0	0	15	0	16	6	1	457	0
4:15 PM	0	1	14	0	27	24	1	0	28	20	21	8	0	78	56	27	54	0	0	5	0	14	17	2	0	0	0	0	0	0	0	20	1	13	18	3	452	0
4:30 PM	**0**	**3**	**26**	**0**	**38**	**34**	**1**	**0**	**25**	**24**	**31**	**3**	**0**	**88**	**69**	**21**	**60**	**0**	**0**	**6**	**0**	**16**	**17**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**18**	**0**	**18**	**7**	**1**	**512**	0
4:45 PM	**0**	**0**	**26**	**0**	**29**	**37**	**1**	**0**	**48**	**21**	**35**	**3**	**0**	**100**	**55**	**13**	**66**	**0**	**0**	**7**	**0**	**16**	**16**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**15**	**1**	**20**	**14**	**2**	**528**	1,949
5:00 PM	**0**	**2**	**40**	**0**	**38**	**50**	**0**	**0**	**43**	**53**	**26**	**3**	**0**	**107**	**53**	**17**	**63**	**0**	**0**	**6**	**0**	**15**	**15**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**18**	**0**	**14**	**7**	**0**	**574**	2,066
5:15 PM	**0**	**3**	**23**	**0**	**46**	**42**	**1**	**0**	**38**	**41**	**16**	**2**	**0**	**108**	**87**	**26**	**79**	**0**	**0**	**5**	**0**	**12**	**26**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**22**	**1**	**16**	**10**	**0**	**611**	**2,225**
5:30 PM	0	3	24	0	41	43	0	0	27	45	15	9	0	98	60	18	54	0	1	2	0	11	14	4	0	0	0	0	0	0	0	15	0	10	8	1	503	2,216
5:45 PM	0	1	17	0	33	38	1	0	28	42	39	6	0	92	51	12	69	0	0	12	0	8	18	2	0	0	0	0	0	0	0	10	1	10	12	1	503	2,191
Count Total	0	15	190	0	283	299	5	0	269	271	203	37	0	753	475	157	509	0	1	50	0	112	134	32	0	0	0	0	0	0	0	133	4	117	82	9	4,140	0
Peak Hour All	**0**	**8**	**115**	**0**	**151**	**163**	**3**	**0**	**154**	**139**	**108**	**11**	**0**	**403**	**264**	**77**	**268**	**0**	**0**	**24**	**0**	**59**	**74**	**20**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**73**	**2**	**68**	**38**	**3**	**2,225**	**0**
Peak Hour HV	**0**	**1**	**5**	**0**	**8**	**2**	**0**	**0**	**1**	**2**	**3**	**0**	**0**	**12**	**9**	**5**	**3**	**0**	**0**	**2**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**56**	**0**
Peak Hour HV%	**-**	**13%**	**4%**	**-**	**5%**	**1%**	**0%**	**-**	**1%**	**1%**	**3%**	**0%**	**-**	**3%**	**3%**	**6%**	**1%**	**-**	**-**	**8%**	**-**	**3%**	**1%**	**0%**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**0%**	**0%**	**0%**	**0%**	**0%**	**3%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals							Bicycles							Pedestrians (Crossing Leg)						
	EB	WB	NB	SB	NEB	NWB	Total	EB	WB	NB	SB	NEB	NWB	Total	East	West	North	South	SE	SW	Total
4:00 PM	3	2	5	2	0	1	*13*	0	0	0	0	0	0	*0*	0	0	3	0	1	0	*4*
4:15 PM	3	4	9	1	0	2	*19*	0	0	0	0	0	0	*0*	0	0	2	0	1	0	*3*
4:30 PM	**7**	**2**	**8**	**1**	**0**	**0**	***18***	**0**	**0**	**0**	**0**	**0**	**0**	***0***	**5**	**0**	**11**	**0**	**5**	**0**	***21***
4:45 PM	**3**	**2**	**7**	**1**	**0**	**0**	***13***	**0**	**0**	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**3**	**0**	**4**	**0**	***9***
5:00 PM	**2**	**1**	**8**	**1**	**0**	**0**	***12***	**0**	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**4**	**0**	**2**	**0**	***6***
5:15 PM	**4**	**1**	**6**	**2**	**0**	**0**	***13***	**0**	**0**	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**2**	**0**	**1**	**0**	***4***
5:30 PM	1	0	3	0	0	1	*5*	0	0	0	0	0	0	*0*	1	0	1	0	1	0	*3*
5:45 PM	3	2	3	0	0	3	*11*	0	0	0	0	0	0	*0*	4	0	4	0	1	0	*9*
Count Total	26	14	49	8	0	7	*104*	0	0	0	0	0	0	*0*	13	0	30	0	16	0	*59*
Peak Hr	**16**	**6**	**29**	**5**	**0**	**0**	***56***	**0**	**0**	**0**	**0**	**0**	**0**	***0***	**8**	**0**	**20**	**0**	**12**	**0**	***40***

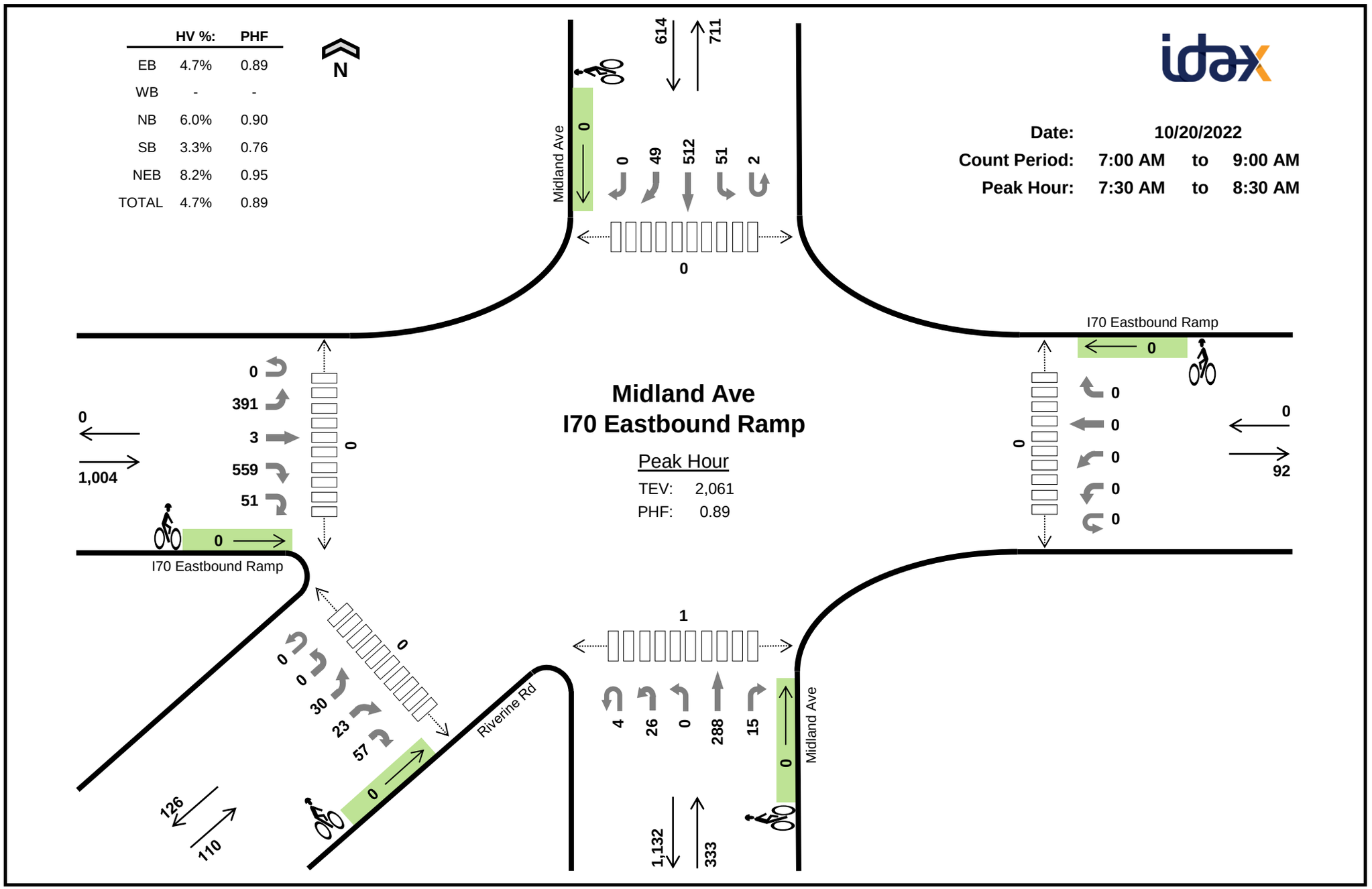
Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Hwy 6 Eastbound						Hwy 6 Westbound						Midland Ave Northbound						Mel Ray Rd Southbound						I70 Westbound Ramp Northeastbound						I70 Westbound Ramp Northwestbound						15-min Total	Rolling One Hour
	UT	LT	TH	BR	RT	HR	UT	HL	LT	BL	TH	RT	UT	HL	LT	TH	RT	HR	UT	LT	BL	TH	BR	RT	UT	HL	BL	BR	RT	HR	UT	HL	LT	BL	BR	HR		
4:00 PM	0	0	2	0	0	1	0	0	0	1	1	0	0	3	1	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	13	0
4:15 PM	0	0	0	0	2	1	0	0	0	1	1	2	0	2	4	1	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	19	0
4:30 PM	**0**	**1**	**3**	**0**	**3**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**3**	**1**	**3**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**18**	0
4:45 PM	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**2**	**3**	**1**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**13**	63
5:00 PM	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**5**	**1**	**1**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	62
5:15 PM	**0**	**0**	**1**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**13**	**56**
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	5	43
5:45 PM	0	0	0	0	3	0	0	0	0	0	2	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	11	41
Count Total	0	1	8	0	13	4	0	0	1	4	7	2	0	17	17	6	9	0	0	3	0	2	3	0	0	0	0	0	0	0	0	3	0	3	1	0	104	0
Peak Hour	**0**	**1**	**5**	**0**	**8**	**2**	**0**	**0**	**1**	**2**	**3**	**0**	**0**	**12**	**9**	**5**	**3**	**0**	**0**	**2**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	56	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Hwy 6 Eastbound						Hwy 6 Westbound						Midland Ave Northbound						Mel Ray Rd Southbound						I70 Westbound Ramp Northeastbound						I70 Westbound Ramp Northwestbound						15-min Total	Rolling One Hour
	UT	LT	TH	BR	RT	HR	UT	HL	LT	BL	TH	RT	UT	HL	LT	TH	RT	HR	UT	LT	BL	TH	BR	RT	UT	HL	BL	BR	RT	HR	UT	HL	LT	BL	BR	HR		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0	**0**

	HV %:	PHF
EB	4.7%	0.89
WB	-	-
NB	6.0%	0.90
SB	3.3%	0.76
NEB	8.2%	0.95
TOTAL	4.7%	0.89

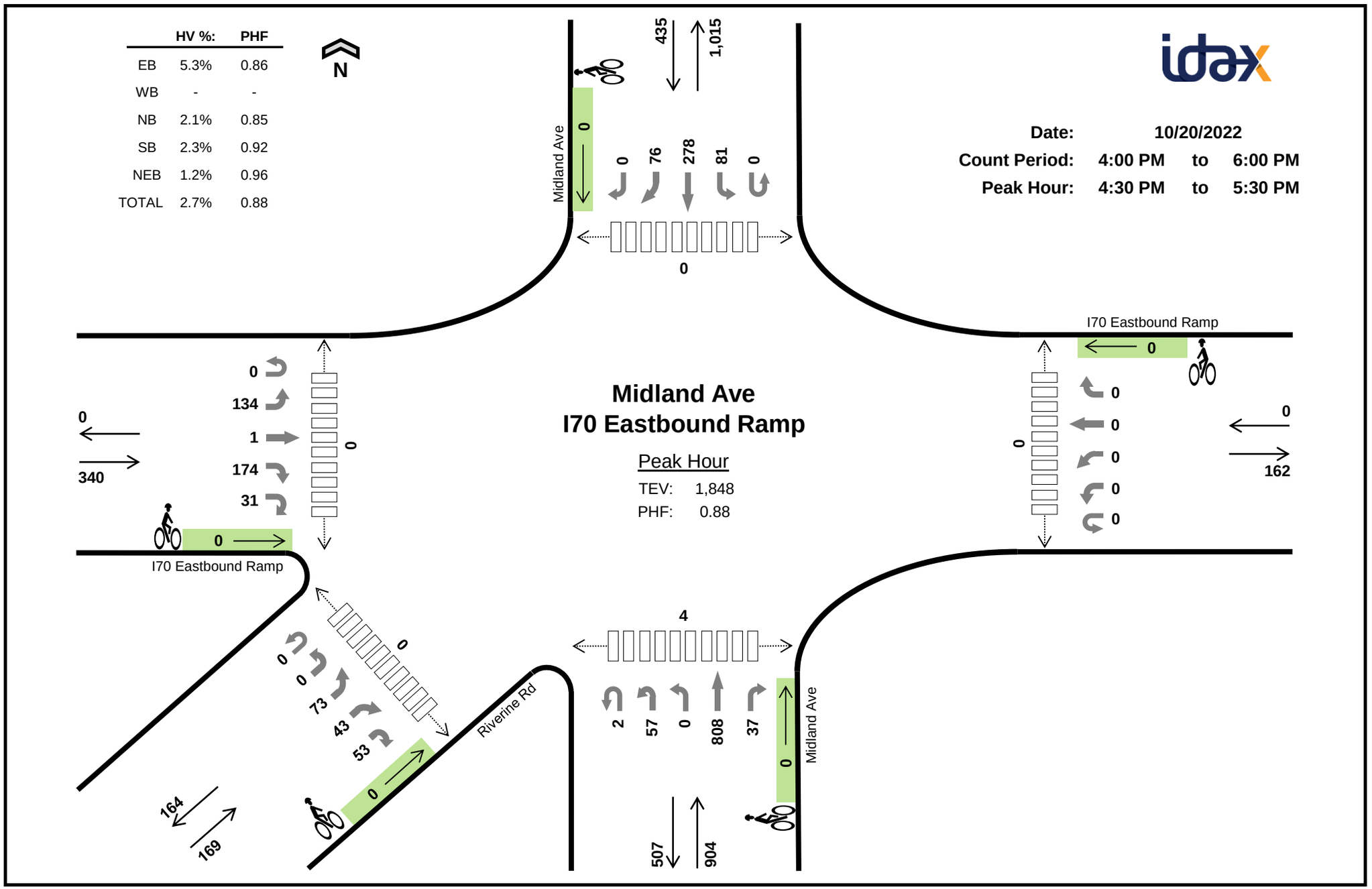


Two-Hour Count Summaries

Interval Start		I70 Eastbound Ramp Eastbound					I70 Eastbound Ramp Westbound					Midland Ave Northbound					Midland Ave Southbound					Riverine Rd Northeastbound					15-min Total	Rolling One Hour
		UT	LT	TH	RT	HR	UT	LT	BL	TH	RT	UT	HL	LT	TH	RT	UT	LT	TH	BR	RT	UT	HL	BL	BR	HR		
7:00 AM		0	57	0	89	8	0	0	0	0	0	0	5	0	31	3	0	19	31	11	0	0	0	5	9	8	276	0
7:15 AM		0	59	0	127	21	0	0	0	0	0	0	3	0	28	2	0	17	38	8	0	0	0	6	9	15	333	0
7:30 AM		**0**	**96**	**0**	**137**	**14**	**0**	**0**	**0**	**0**	**0**	**1**	**4**	**0**	**53**	**4**	**0**	**9**	**133**	**6**	**0**	**0**	**0**	**5**	**10**	**13**	**485**	0
7:45 AM		**0**	**117**	**0**	**150**	**16**	**0**	**0**	**0**	**0**	**0**	**1**	**8**	**0**	**77**	**6**	**0**	**7**	**156**	**13**	**0**	**0**	**0**	**9**	**6**	**11**	**577**	1,671
8:00 AM		**0**	**102**	**1**	**119**	**10**	**0**	**0**	**0**	**0**	**0**	**2**	**5**	**0**	**82**	**2**	**0**	**25**	**163**	**15**	**0**	**0**	**0**	**9**	**2**	**18**	**555**	1,950
8:15 AM		**0**	**76**	**2**	**153**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**0**	**76**	**3**	**2**	**10**	**60**	**15**	**0**	**0**	**0**	**7**	**5**	**15**	**444**	**2,061**
8:30 AM		0	57	1	127	16	0	0	0	0	0	0	13	0	67	3	0	15	57	9	0	0	0	10	3	13	391	1,967
8:45 AM		0	39	2	76	13	0	0	0	0	0	1	6	0	56	3	0	6	37	7	0	0	0	4	12	10	272	1,662
Count Total		0	603	6	978	109	0	0	0	0	0	5	53	0	470	26	2	108	675	84	0	0	0	55	56	103	3,333	0
Peak Hour	**All**	**0**	**391**	**3**	**559**	**51**	**0**	**0**	**0**	**0**	**0**	**4**	**26**	**0**	**288**	**15**	**2**	**51**	**512**	**49**	**0**	**0**	**0**	**30**	**23**	**57**	**2,061**	**0**
	HV	**0**	**19**	**1**	**22**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**16**	**2**	**0**	**1**	**17**	**2**	**0**	**0**	**0**	**4**	**3**	**2**	**96**	**0**
	HV%	**-**	**5%**	**33%**	**4%**	**10%**	**-**	**-**	**-**	**-**	**-**	**0%**	**8%**	**-**	**6%**	**13%**	**0%**	**2%**	**3%**	**4%**	**-**	**-**	**-**	**13%**	**13%**	**4%**	**5%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals						Bicycles						Pedestrians (Crossing Leg)					
	EB	WB	NB	SB	NEB	Total	EB	WB	NB	SB	NEB	Total	East	West	North	South	Southwest	Total
7:00 AM	9	0	3	3	2	*17*	0	0	0	0	0	*0*	0	0	0	0	0	*0*
7:15 AM	7	0	5	2	2	*16*	0	0	0	0	0	*0*	0	0	0	0	0	*0*
7:30 AM	**12**	**0**	**6**	**6**	**2**	***26***	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	**0**	***0***
7:45 AM	**10**	**0**	**5**	**5**	**1**	***21***	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	**0**	***1***
8:00 AM	**13**	**0**	**4**	**6**	**3**	***26***	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	**0**	***0***
8:15 AM	**12**	**0**	**5**	**3**	**3**	***23***	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	**0**	***0***
8:30 AM	11	0	4	6	1	*22*	0	0	0	0	0	*0*	0	1	0	0	0	*1*
8:45 AM	6	0	14	4	1	*25*	0	0	0	0	0	*0*	0	0	0	0	0	*0*
Count Total	80	0	46	35	15	*176*	0	0	0	0	0	*0*	0	1	0	1	0	*2*
Peak Hr	**47**	**0**	**20**	**20**	**9**	***96***	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	**0**	*1*


HV %: PHF
EB 5.3% 0.86
WB - -
NB 2.1% 0.85
SB 2.3% 0.92
NEB 1.2% 0.96
TOTAL 2.7% 0.88
N
Date: 10/20/2022
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM
Midland Ave
I70 Eastbound Ramp
Riverine Rd
Midland Ave
Peak Hour
TEV: 1,848
PHF: 0.88
435
1,015
0 76 278 81 0
0
0 134 1 174 31
0
340
0
0 0 73 43 53
0
164
169
2 57 0 808 37
4
0
507
904
0 0 0 0 0
0
162
0

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	I70 Eastbound Ramp					I70 Eastbound Ramp					Midland Ave					Midland Ave					Riverine Rd					15-min Total	Rolling One Hour
	Eastbound					Westbound					Northbound					Southbound					Northeastbound						
	UT	LT	TH	RT	HR	UT	LT	BL	TH	RT	UT	HL	LT	TH	RT	UT	LT	TH	BR	RT	UT	HL	BL	BR	HR		
7:00 AM	0	3	0	5	1	0	0	0	0	0	0	0	0	2	1	0	0	3	0	0	0	0	0	2	0	17	0
7:15 AM	0	1	0	4	2	0	0	0	0	0	0	1	0	4	0	0	0	2	0	0	0	0	1	0	1	16	0
7:30 AM	**0**	**5**	**0**	**6**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**1**	**0**	**1**	**5**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**26**	0
7:45 AM	**0**	**5**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**3**	**0**	**0**	**0**	**4**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**21**	80
8:00 AM	**0**	**5**	**0**	**4**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**26**	89
8:15 AM	**0**	**4**	**1**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**1**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**1**	**2**	**0**	**23**	**96**
8:30 AM	0	2	0	9	0	0	0	0	0	0	0	0	0	4	0	0	1	5	0	0	0	0	1	0	0	22	92
8:45 AM	0	4	0	2	0	0	0	0	0	0	0	1	0	12	1	0	1	3	0	0	0	0	1	0	0	25	96
Count Total	0	29	1	42	8	0	0	0	0	0	0	4	0	38	4	0	3	30	2	0	0	0	7	5	3	176	0
Peak Hour	**0**	**19**	**1**	**22**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**16**	**2**	**0**	**1**	**17**	**2**	**0**	**0**	**0**	**4**	**3**	**2**	96	**0**

Two-Hour Count Summaries - Bikes

Interval Start	I70 Eastbound Ramp					I70 Eastbound Ramp					Midland Ave					Midland Ave					Riverine Rd					15-min Total	Rolling One Hour
	Eastbound					Westbound					Northbound					Southbound					Northeastbound						
	UT	LT	TH	RT	HR	UT	LT	BL	TH	RT	UT	HL	LT	TH	RT	UT	LT	TH	BR	RT	UT	HL	BL	BR	HR		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0	**0**

Two-Hour Count Summaries

Interval Start		I70 Eastbound Ramp					I70 Eastbound Ramp					Midland Ave					Midland Ave					Riverine Rd					15-min Total	Rolling One Hour
		Eastbound					Westbound					Northbound					Southbound					Northeastbound						
		UT	LT	TH	RT	HR	UT	LT	BL	TH	RT	UT	HL	LT	TH	RT	UT	LT	TH	BR	RT	UT	HL	BL	BR	HR		
4:00 PM		0	22	1	35	8	0	0	0	0	0	0	17	0	168	12	0	21	60	19	0	0	0	23	7	6	399	0
4:15 PM		0	42	2	23	8	0	0	0	0	0	0	15	0	148	6	0	13	61	16	0	0	0	25	8	17	384	0
4:30 PM		**0**	**33**	**0**	**48**	**12**	**0**	**0**	**0**	**0**	**0**	**1**	**10**	**0**	**189**	**7**	**0**	**16**	**65**	**18**	**0**	**0**	**0**	**17**	**9**	**16**	**441**	0
4:45 PM		**0**	**33**	**1**	**38**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**0**	**183**	**8**	**0**	**22**	**70**	**18**	**0**	**0**	**0**	**22**	**7**	**15**	**436**	1,660
5:00 PM		**0**	**31**	**0**	**37**	**3**	**0**	**0**	**0**	**0**	**0**	**1**	**19**	**0**	**194**	**13**	**0**	**25**	**71**	**12**	**0**	**0**	**0**	**14**	**15**	**12**	**447**	1,708
5:15 PM		**0**	**37**	**0**	**51**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**0**	**242**	**9**	**0**	**18**	**72**	**28**	**0**	**0**	**0**	**20**	**12**	**10**	**524**	**1,848**
5:30 PM		0	21	0	34	9	0	0	0	0	0	2	10	0	190	7	0	11	69	13	0	0	0	17	10	7	400	1,807
5:45 PM		0	31	0	31	9	0	0	0	0	0	0	12	0	178	8	0	13	50	17	0	0	0	16	7	12	384	1,755
Count Total		0	250	4	297	65	0	0	0	0	0	4	111	0	1,492	70	0	139	518	141	0	0	0	154	75	95	3,415	0
Peak Hour	**All**	**0**	**134**	**1**	**174**	**31**	**0**	**0**	**0**	**0**	**0**	**2**	**57**	**0**	**808**	**37**	**0**	**81**	**278**	**76**	**0**	**0**	**0**	**73**	**43**	**53**	**1,848**	**0**
	HV	**0**	**11**	**0**	**6**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**18**	**1**	**0**	**4**	**5**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**49**	**0**
	HV%	**-**	**8%**	**0%**	**3%**	**3%**	**-**	**-**	**-**	**-**	**-**	**0%**	**0%**	**-**	**2%**	**3%**	**-**	**5%**	**2%**	**1%**	**-**	**-**	**-**	**0%**	**0%**	**4%**	**3%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals						Bicycles						Pedestrians (Crossing Leg)					
	EB	WB	NB	SB	NEB	Total	EB	WB	NB	SB	NEB	Total	East	West	North	South	Southwest	Total
4:00 PM	1	0	5	0	0	*6*	0	0	0	0	0	*0*	0	0	0	0	0	*0*
4:15 PM	8	0	6	3	1	*18*	0	0	0	0	0	*0*	0	0	0	3	0	*3*
4:30 PM	**7**	**0**	**3**	**3**	**0**	***13***	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	**0**	***1***
4:45 PM	**3**	**0**	**5**	**3**	**2**	***13***	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**2**	**0**	***2***
5:00 PM	**6**	**0**	**6**	**1**	**0**	***13***	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	**0**	***0***
5:15 PM	**2**	**0**	**5**	**3**	**0**	***10***	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	**0**	***1***
5:30 PM	3	0	1	0	1	*5*	0	0	0	0	0	*0*	0	0	0	2	0	*2*
5:45 PM	1	0	3	5	1	*10*	0	0	0	0	0	*0*	0	0	0	3	0	*3*
Count Total	31	0	34	18	5	*88*	0	0	0	0	0	*0*	0	0	0	12	0	*12*
Peak Hr	**18**	**0**	**19**	**10**	**2**	***49***	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**4**	**0**	*4*

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	I70 Eastbound Ramp					I70 Eastbound Ramp					Midland Ave					Midland Ave					Riverine Rd					15-min Total	Rolling One Hour
	Eastbound					Westbound					Northbound					Southbound					Northeastbound						
	UT	LT	TH	RT	HR	UT	LT	BL	TH	RT	UT	HL	LT	TH	RT	UT	LT	TH	BR	RT	UT	HL	BL	BR	HR		
4:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	6	0
4:15 PM	0	3	2	3	0	0	0	0	0	0	0	1	0	5	0	0	0	2	1	0	0	0	1	0	0	18	0
4:30 PM	**0**	**5**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**13**	0
4:45 PM	**0**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**13**	50
5:00 PM	**0**	**3**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**13**	57
5:15 PM	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**49**
5:30 PM	0	2	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	5	41
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	1	0	2	0	0	1	3	1	0	0	0	0	0	1	10	38
Count Total	0	17	2	11	1	0	0	0	0	0	0	2	0	31	1	0	5	10	3	0	0	0	1	1	3	88	0
Peak Hour	**0**	**11**	**0**	**6**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**18**	**1**	**0**	**4**	**5**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	49	**0**

Two-Hour Count Summaries - Bikes

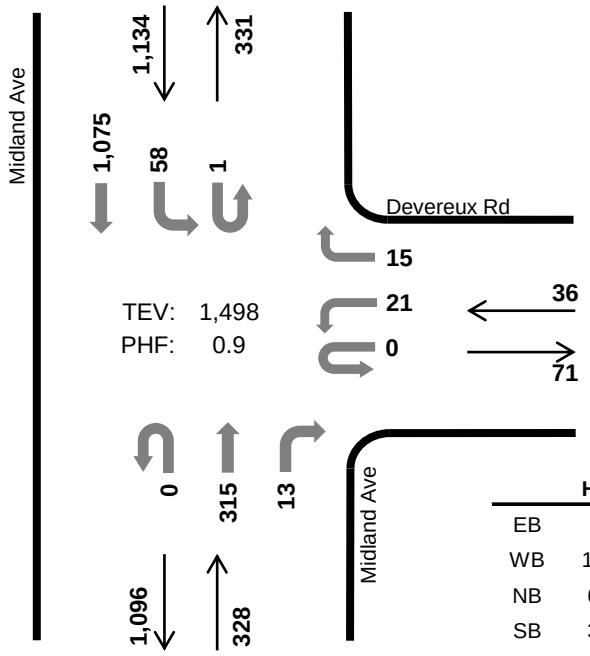
Interval Start	I70 Eastbound Ramp					I70 Eastbound Ramp					Midland Ave					Midland Ave					Riverine Rd					15-min Total	Rolling One Hour
	Eastbound					Westbound					Northbound					Southbound					Northeastbound						
	UT	LT	TH	RT	HR	UT	LT	BL	TH	RT	UT	HL	LT	TH	RT	UT	LT	TH	BR	RT	UT	HL	BL	BR	HR		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0	**0**

Midland Ave
Devereux Rd

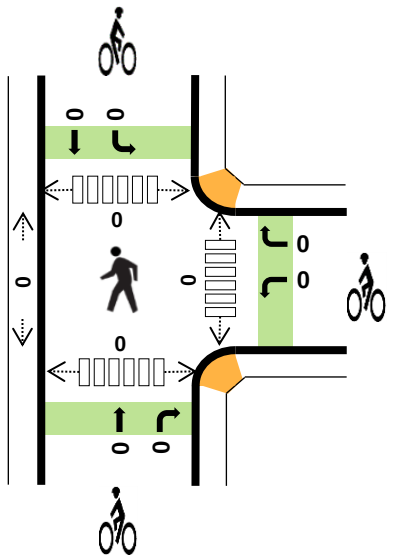
Date: 10/20/2022
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM

N

Peak Hour



	HV %:	PHF
EB	-	-
WB	11.1%	0.82
NB	6.1%	0.90
SB	3.7%	0.90
TOTAL	4.4%	0.90



Two-Hour Count Summaries

Interval Start	N/A				Devereux Rd				Midland Ave				Midland Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	2	0	0	38	2	0	4	122	0	168	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	32	5	0	9	171	0	218	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**3**	**0**	**0**	**58**	**2**	**0**	**14**	**271**	**0**	**351**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**4**	**0**	**0**	**88**	**3**	**0**	**14**	**301**	**0**	**417**	1,154
8:00 AM	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**5**	**0**	**0**	**84**	**6**	**0**	**13**	**288**	**0**	**400**	1,386
8:15 AM	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**3**	**0**	**0**	**85**	**2**	**1**	**17**	**215**	**0**	**330**	**1,498**
8:30 AM	0	0	0	0	0	4	0	4	0	0	80	4	0	11	188	0	291	1,438
8:45 AM	0	0	0	0	0	3	0	3	0	0	61	10	0	14	105	0	196	1,217
Count Total	0	0	0	0	0	28	0	25	0	0	526	34	1	96	1,661	0	2,371	0
Peak Hour All	**0**	**0**	**0**	**0**	**0**	**21**	**0**	**15**	**0**	**0**	**315**	**13**	**1**	**58**	**1,075**	**0**	**1,498**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	**0**	**0**	**19**	**1**	**0**	**2**	**40**	**0**	**66**	**0**
Peak Hour HV%	**-**	**-**	**-**	**-**	**-**	**10%**	**-**	**13%**	**-**	**-**	**6%**	**8%**	**0%**	**3%**	**4%**	**-**	**4%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	4	8	*12*	0	0	0	1	*1*	0	0	0	0	*0*
7:15 AM	0	0	5	7	*12*	0	0	0	1	*1*	0	1	0	0	*1*
7:30 AM	**0**	**2**	**5**	**11**	***18***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**0**	**1**	**5**	**9**	***15***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**0**	**1**	**4**	**13**	***18***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**0**	**0**	**6**	**9**	***15***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:30 AM	0	1	6	15	*22*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	0	2	15	5	*22*	0	0	0	0	*0*	0	3	0	0	*3*
Count Total	0	7	50	77	*134*	0	0	0	2	*2*	0	4	0	0	*4*
Peak Hr	**0**	**4**	**20**	**42**	***66***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	N/A				Devereux Rd				Midland Ave				Midland Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	8	0	12	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	7	0	12	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**5**	**0**	**0**	**1**	**10**	**0**	**18**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**1**	**8**	**0**	**15**	57
8:00 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**13**	**0**	**18**	63
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**9**	**0**	**15**	**66**
8:30 AM	0	0	0	0	0	1	0	0	0	0	6	0	0	0	15	0	22	70
8:45 AM	0	0	0	0	0	0	0	2	0	0	13	2	0	1	4	0	22	77
Count Total	0	0	0	0	0	3	0	4	0	0	47	3	0	3	74	0	134	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	**0**	**0**	**19**	**1**	**0**	**2**	**40**	**0**	**66**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	N/A			Devereux Rd			Midland Ave			Midland Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	2	0	0	2	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

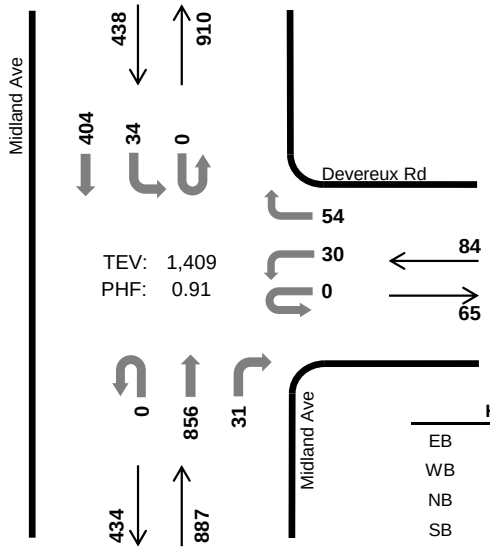
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Midland Ave
Devereux Rd

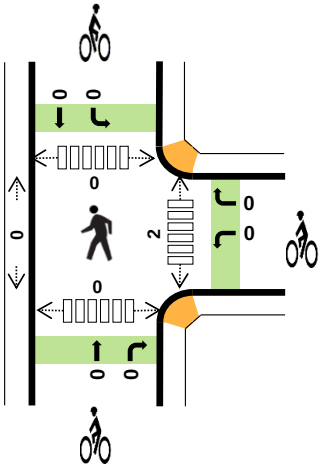
Date: 09/29/2022
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM

N

Peak Hour



	HV %:	PHF
EB	-	-
WB	0.0%	0.68
NB	0.9%	0.97
SB	2.1%	0.82
TOTAL	1.2%	0.91



Two-Hour Count Summaries

Interval Start	n/a				Devereux Rd				Midland Ave				Midland Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	4	0	5	0	0	161	5	0	7	113	0	295	0
4:15 PM	0	0	0	0	0	7	0	18	0	0	182	8	0	12	90	0	317	0
4:30 PM	0	0	0	0	0	11	0	13	0	0	181	4	0	9	99	0	317	0
4:45 PM	0	0	0	0	0	5	0	15	0	0	168	5	0	8	118	0	319	1,248
5:00 PM	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**21**	**0**	**0**	**220**	**3**	**0**	**5**	**129**	**0**	**388**	1,341
5:15 PM	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**7**	**0**	**0**	**220**	**9**	**0**	**8**	**114**	**0**	**362**	1,386
5:30 PM	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**13**	**0**	**0**	**205**	**9**	**0**	**13**	**80**	**0**	**327**	1,396
5:45 PM	**0**	**0**	**0**	**0**	**0**	**9**	**0**	**13**	**0**	**0**	**211**	**10**	**0**	**8**	**81**	**0**	**332**	**1,409**
Count Total	0	0	0	0	0	57	0	105	0	0	1,548	53	0	70	824	0	2,657	0
Peak Hour All	**0**	**0**	**0**	**0**	**0**	**30**	**0**	**54**	**0**	**0**	**856**	**31**	**0**	**34**	**404**	**0**	**1,409**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**9**	**0**	**17**	**0**
Peak Hour HV%	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**0%**	**-**	**-**	**1%**	**0%**	**-**	**0%**	**2%**	**-**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	2	4	4	*10*	0	0	0	0	*0*	1	0	0	0	*1*
4:15 PM	0	0	5	6	*11*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	0	0	4	5	*9*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	0	0	1	7	*8*	0	0	0	0	*0*	0	0	0	0	*0*
5:00 PM	**0**	**0**	**2**	**2**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**0**	**0**	**2**	**3**	***5***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	*1*
5:30 PM	**0**	**0**	**4**	**1**	***5***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	*1*
5:45 PM	**0**	**0**	**0**	**3**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
Count Total	0	2	22	31	*55*	0	0	0	0	*0*	3	0	0	0	*3*
Peak Hr	**0**	**0**	**8**	**9**	***17***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**0**	**0**	***2***

Project Manager: (720) 646-1008
project.manager.co@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	n/a				Devereux Rd				Midland Ave				Midland Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	1	0	1	0	0	4	0	0	0	4	0	10	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	4	1	0	2	4	0	11	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	5	0	9	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	6	0	8	38
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**4**	32
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**3**	**0**	**5**	26
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**1**	**0**	**5**	22
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**3**	**17**
Count Total	0	0	0	0	0	1	0	1	0	0	21	1	0	3	28	0	55	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**9**	**0**	**17**	**0**

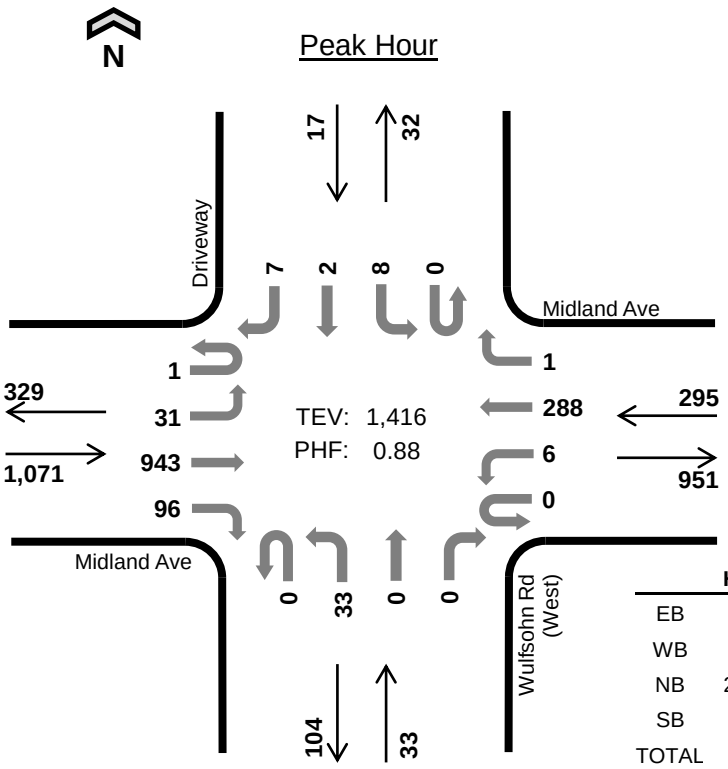
Two-Hour Count Summaries - Bikes

Interval Start	n/a			Devereux Rd			Midland Ave			Midland Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

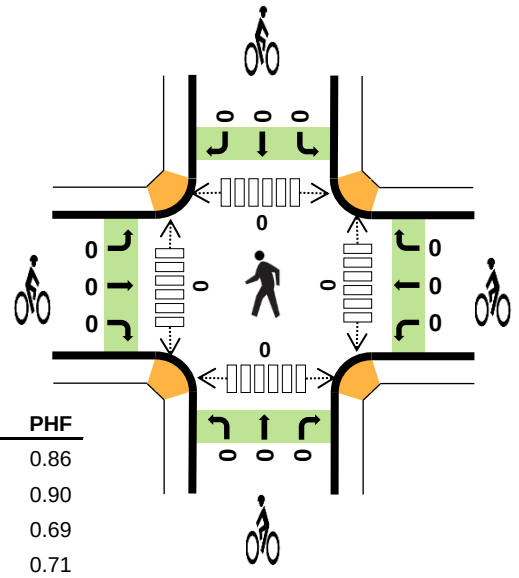
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Wulfsohn Rd (West)
Midland Ave

Date: 10/20/2022
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	4.0%	0.86
WB	4.1%	0.90
NB	27.3%	0.69
SB	0.0%	0.71
TOTAL	4.5%	0.88



Two-Hour Count Summaries

Interval Start	Midland Ave Eastbound				Midland Ave Westbound				Wulfsohn Rd (West) Northbound				Driveway Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	13	94	17	0	2	37	0	0	2	0	0	0	0	0	0	165	0
7:15 AM	0	10	141	18	0	4	28	1	0	8	0	0	0	2	1	1	214	0
7:30 AM	**0**	**8**	**244**	**18**	**0**	**1**	**54**	**0**	**0**	**5**	**0**	**0**	**0**	**2**	**0**	**2**	**334**	0
7:45 AM	**0**	**9**	**275**	**27**	**0**	**1**	**78**	**0**	**0**	**12**	**0**	**0**	**0**	**0**	**1**	**1**	**404**	1,117
8:00 AM	**0**	**7**	**230**	**27**	**0**	**1**	**80**	**1**	**0**	**8**	**0**	**0**	**0**	**1**	**1**	**3**	**359**	1,311
8:15 AM	**1**	**7**	**194**	**24**	**0**	**3**	**76**	**0**	**0**	**8**	**0**	**0**	**0**	**5**	**0**	**1**	**319**	**1,416**
8:30 AM	0	7	161	23	0	2	68	0	0	12	0	0	0	4	1	3	281	1,363
8:45 AM	0	5	93	14	0	4	56	0	0	12	0	0	0	5	1	2	192	1,151
Count Total	1	66	1,432	168	0	18	477	2	0	67	0	0	0	19	5	13	2,268	0
Peak Hour All	**1**	**31**	**943**	**96**	**0**	**6**	**288**	**1**	**0**	**33**	**0**	**0**	**0**	**8**	**2**	**7**	**1,416**	**0**
Peak Hour HV	**0**	**1**	**34**	**8**	**0**	**0**	**12**	**0**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**64**	**0**
Peak Hour HV%	**0%**	**3%**	**4%**	**8%**	**-**	**0%**	**4%**	**0%**	**-**	**27%**	**-**	**-**	**-**	**0%**	**0%**	**0%**	**5%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	8	4	0	0	*12*	0	0	0	0	*0*	1	0	0	0	*1*
7:15 AM	6	3	2	0	*11*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	**12**	**5**	**1**	**0**	***18***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**10**	**1**	**4**	**0**	***15***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**13**	**2**	**2**	**0**	***17***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**8**	**4**	**2**	**0**	***14***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:30 AM	15	4	1	0	*20*	0	0	0	0	*0*	0	1	0	0	*1*
8:45 AM	5	13	2	1	*21*	0	0	0	0	*0*	0	1	2	0	*3*
Count Total	77	36	14	1	*128*	0	0	0	0	*0*	1	2	2	0	*5*
Peak Hour	**43**	**12**	**9**	**0**	***64***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Midland Ave Eastbound				Midland Ave Westbound				Wulfsohn Rd (West) Northbound				Driveway Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	5	3	0	0	4	0	0	0	0	0	0	0	0	0	12	0
7:15 AM	0	0	4	2	0	0	3	0	0	2	0	0	0	0	0	0	11	0
7:30 AM	**0**	**0**	**9**	**3**	**0**	**0**	**5**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**18**	0
7:45 AM	**0**	**0**	**8**	**2**	**0**	**0**	**1**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**15**	56
8:00 AM	**0**	**0**	**12**	**1**	**0**	**0**	**2**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**17**	61
8:15 AM	**0**	**1**	**5**	**2**	**0**	**0**	**4**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**64**
8:30 AM	0	0	13	2	0	0	4	0	0	1	0	0	0	0	0	0	20	66
8:45 AM	0	0	5	0	0	0	13	0	0	2	0	0	0	1	0	0	21	72
Count Total	0	1	61	15	0	0	36	0	0	14	0	0	0	1	0	0	128	0
Peak Hour	**0**	**1**	**34**	**8**	**0**	**0**	**12**	**0**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**64**	**0**

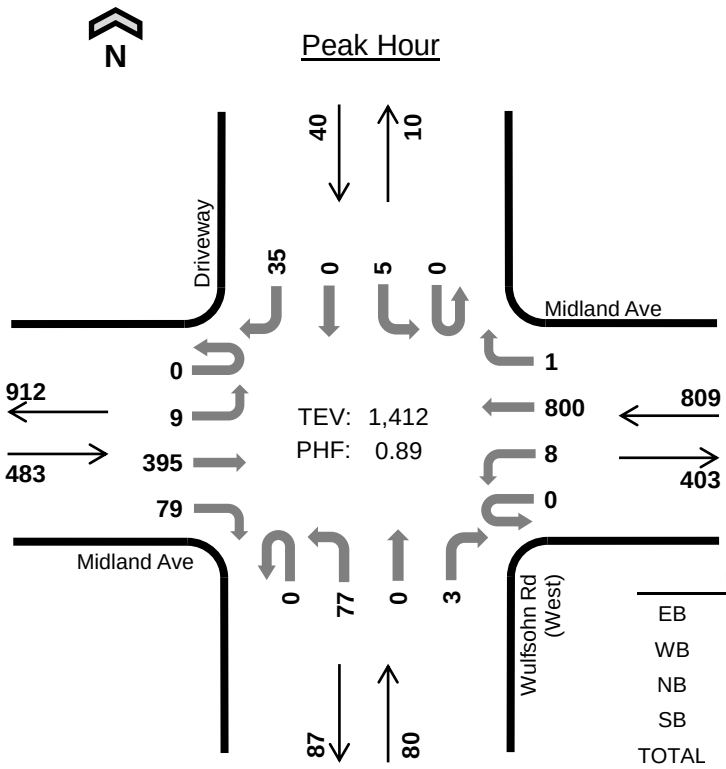
Two-Hour Count Summaries - Bikes

Interval Start	Midland Ave Eastbound			Midland Ave Westbound			Wulfsohn Rd (West) Northbound			Driveway Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

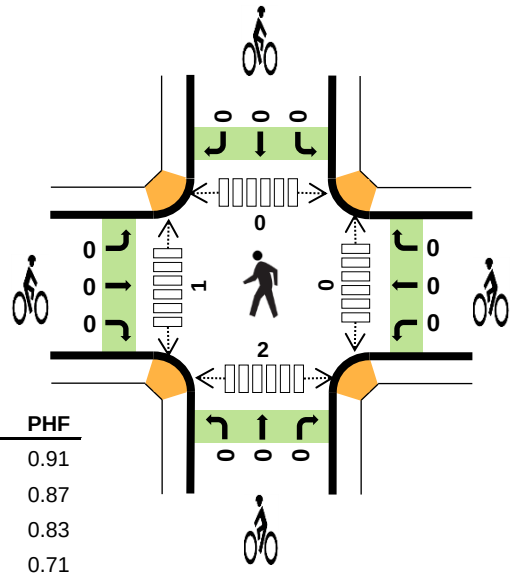
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Wulfsohn Rd (West)
Midland Ave

Peak Hour



Date: 10/20/2022
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM



	HV %:	PHF
EB	2.1%	0.91
WB	1.5%	0.87
NB	8.8%	0.83
SB	0.0%	0.71
TOTAL	2.1%	0.89

Two-Hour Count Summaries

Interval Start	Midland Ave Eastbound				Midland Ave Westbound				Wulfsohn Rd (West) Northbound				Driveway Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	5	96	17	0	4	152	1	0	18	1	2	0	3	1	8	308	0
4:15 PM	0	3	76	19	0	5	162	1	0	12	0	1	0	3	2	7	291	0
4:30 PM	0	2	93	25	0	2	160	0	0	22	0	1	0	9	0	6	320	0
4:45 PM	**0**	**4**	**98**	**19**	**0**	**5**	**168**	**0**	**0**	**17**	**0**	**0**	**0**	**3**	**0**	**5**	**319**	1,238
5:00 PM	**0**	**0**	**96**	**22**	**0**	**2**	**221**	**0**	**0**	**23**	**0**	**1**	**0**	**1**	**0**	**9**	**375**	1,305
5:15 PM	**0**	**1**	**112**	**20**	**0**	**1**	**231**	**1**	**0**	**15**	**0**	**1**	**0**	**0**	**0**	**14**	**396**	1,410
5:30 PM	**0**	**4**	**89**	**18**	**0**	**0**	**180**	**0**	**0**	**22**	**0**	**1**	**0**	**1**	**0**	**7**	**322**	**1,412**
5:45 PM	0	0	81	17	0	0	180	0	0	13	0	1	0	3	1	3	299	1,392
Count Total	0	19	741	157	0	19	1,454	3	0	142	1	8	0	23	4	59	2,630	0
Peak Hour All	**0**	**9**	**395**	**79**	**0**	**8**	**800**	**1**	**0**	**77**	**0**	**3**	**0**	**5**	**0**	**35**	**1,412**	**0**
Peak Hour HV	**0**	**1**	**7**	**2**	**0**	**0**	**12**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**29**	**0**
Peak Hour HV%	**-**	**11%**	**2%**	**3%**	**-**	**0%**	**2%**	**0%**	**-**	**9%**	**-**	**0%**	**-**	**0%**	**-**	**0%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	8	4	2	0	*14*	0	0	0	0	*0*	0	0	1	0	*1*
4:15 PM	5	3	2	0	*10*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	3	2	1	0	*6*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	**6**	**3**	**2**	**0**	***11***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**1**	**6**	**2**	**0**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**1**	*2*
5:15 PM	**2**	**3**	**1**	**0**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:30 PM	**1**	**0**	**2**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***
5:45 PM	4	3	2	0	*9*	0	0	0	0	*0*	0	0	0	1	*1*
Count Total	30	24	14	0	*68*	0	0	0	0	*0*	0	1	1	3	*5*
Peak Hour	**10**	**12**	**7**	**0**	***29***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**2**	***3***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Midland Ave Eastbound				Midland Ave Westbound				Wulfsohn Rd (West) Northbound				Driveway Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	8	0	0	0	4	0	0	2	0	0	0	0	0	0	14	0
4:15 PM	0	0	4	1	0	0	3	0	0	2	0	0	0	0	0	0	10	0
4:30 PM	0	0	3	0	0	0	2	0	0	1	0	0	0	0	0	0	6	0
4:45 PM	**0**	**0**	**5**	**1**	**0**	**0**	**3**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	41
5:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**6**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	36
5:15 PM	**0**	**0**	**1**	**1**	**0**	**0**	**3**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	32
5:30 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**29**
5:45 PM	0	0	3	1	0	0	3	0	0	2	0	0	0	0	0	0	9	27
Count Total	0	1	25	4	0	0	24	0	0	14	0	0	0	0	0	0	68	0
Peak Hour	**0**	**1**	**7**	**2**	**0**	**0**	**12**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**29**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Midland Ave Eastbound			Midland Ave Westbound			Wulfsohn Rd (West) Northbound			Driveway Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

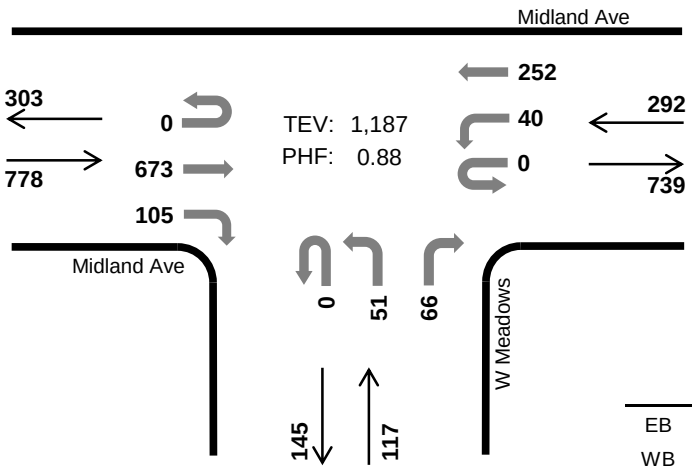
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

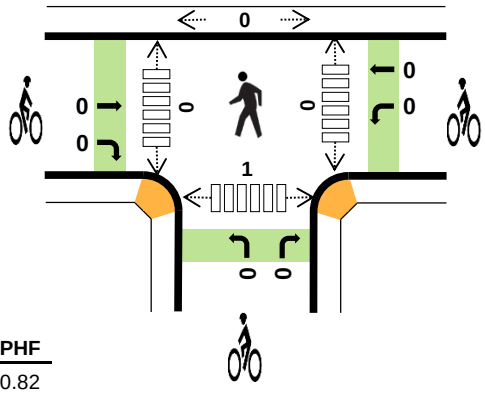
W Meadows
Midland Ave

N

Peak Hour

Date: 11/09/2022
Count Period: 6:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM





	HV %:	PHF
EB	3.1%	0.82
WB	2.7%	0.78
NB	5.1%	0.86
SB	-	-
TOTAL	3.2%	0.88

Three-Hour Count Summaries

Interval Start		Midland Ave Eastbound				Midland Ave Westbound				W Meadows Northbound				n/a Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:30 AM		0	0	164	20	0	6	56	0	0	12	0	19	0	0	0	0	277	0
7:45 AM		0	0	191	18	0	6	62	0	0	11	0	11	0	0	0	0	299	0
8:00 AM		0	0	199	39	0	12	57	0	0	15	0	15	0	0	0	0	337	0
8:15 AM		0	0	119	28	0	16	77	0	0	13	0	21	0	0	0	0	274	1,187
Peak Hour	All	0	0	673	105	0	40	252	0	0	51	0	66	0	0	0	0	1,187	0
	HV	0	0	21	3	0	2	6	0	0	5	0	1	0	0	0	0	38	0
	HV%	-	-	3%	3%	-	5%	2%	-	-	10%	-	2%	-	-	-	-	3%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:30 AM	6	2	2	0	*10*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	4	4	1	0	*9*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 AM	4	1	2	0	*7*	0	0	0	0	*0*	0	0	0	1	*1*
8:15 AM	10	1	1	0	*12*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	24	8	6	0	*38*	0	0	0	0	*0*	0	0	0	1	*1*

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Three-Hour Count Summaries

Interval Start		Midland Ave Eastbound				Midland Ave Westbound				W Meadows Northbound				n/a Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM		0	0	39	8	0	6	14	0	0	3	0	3	0	0	0	0	73	0
6:15 AM		0	0	42	14	0	7	8	0	0	2	0	6	0	0	0	0	79	0
6:30 AM		0	0	68	19	0	4	24	0	0	2	0	9	0	0	0	0	126	0
6:45 AM		0	0	77	20	0	3	25	0	0	10	0	18	0	0	0	0	153	431
7:00 AM		0	0	79	14	0	3	23	0	0	10	0	21	0	0	0	0	150	508
7:15 AM		0	0	96	19	0	6	43	0	0	10	0	17	0	0	0	0	191	620
7:30 AM		**0**	**0**	**164**	**20**	**0**	**6**	**56**	**0**	**0**	**12**	**0**	**19**	**0**	**0**	**0**	**0**	**277**	771
7:45 AM		**0**	**0**	**191**	**18**	**0**	**6**	**62**	**0**	**0**	**11**	**0**	**11**	**0**	**0**	**0**	**0**	**299**	917
8:00 AM		**0**	**0**	**199**	**39**	**0**	**12**	**57**	**0**	**0**	**15**	**0**	**15**	**0**	**0**	**0**	**0**	**337**	1,104
8:15 AM		**0**	**0**	**119**	**28**	**0**	**16**	**77**	**0**	**0**	**13**	**0**	**21**	**0**	**0**	**0**	**0**	**274**	**1,187**
8:30 AM		0	0	86	21	0	6	34	0	0	15	0	18	0	0	0	0	180	1,090
8:45 AM		0	0	87	20	0	12	33	0	0	8	0	14	0	0	0	0	174	965
Count Total		0	0	1,247	240	0	87	456	0	0	111	0	172	0	0	0	0	2,313	0
Peak Hour	**All**	**0**	**0**	**673**	**105**	**0**	**40**	**252**	**0**	**0**	**51**	**0**	**66**	**0**	**0**	**0**	**0**	**1,187**	**0**
	HV	**0**	**0**	**21**	**3**	**0**	**2**	**6**	**0**	**0**	**5**	**0**	**1**	**0**	**0**	**0**	**0**	**38**	**0**
	HV%	**-**	**-**	**3%**	**3%**	**-**	**5%**	**2%**	**-**	**-**	**10%**	**-**	**2%**	**-**	**-**	**-**	**-**	**3%**	**0**

Note: Three-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
6:00 AM	2	1	0	0	*3*	0	0	0	0	*0*	0	0	0	0	*0*
6:15 AM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
6:30 AM	2	1	0	0	*3*	0	0	0	0	*0*	0	0	0	0	*0*
6:45 AM	2	1	4	0	*7*	0	0	0	0	*0*	0	0	0	0	*0*
7:00 AM	5	2	3	0	*10*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	3	2	2	0	*7*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	**6**	**2**	**2**	**0**	***10***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**4**	**4**	**1**	**0**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**4**	**1**	**2**	**0**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	*1*
8:15 AM	**10**	**1**	**1**	**0**	***12***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:30 AM	6	2	0	0	*8*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	5	1	0	0	*6*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	50	18	15	0	*83*	0	0	0	0	*0*	0	0	0	1	*1*
Peak Hr	**24**	**8**	**6**	**0**	***38***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***

Three-Hour Count Summaries - Heavy Vehicles

Interval Start	Midland Ave				Midland Ave				W Meadows				n/a				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	3	0
6:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
6:30 AM	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	3	0
6:45 AM	0	0	2	0	0	0	1	0	0	3	0	1	0	0	0	0	7	14
7:00 AM	0	0	4	1	0	0	2	0	0	0	0	3	0	0	0	0	10	21
7:15 AM	0	0	2	1	0	0	2	0	0	1	0	1	0	0	0	0	7	27
7:30 AM	**0**	**0**	**6**	**0**	**0**	**0**	**2**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	34
7:45 AM	**0**	**0**	**4**	**0**	**0**	**1**	**3**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	36
8:00 AM	**0**	**0**	**4**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**7**	33
8:15 AM	**0**	**0**	**7**	**3**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	**38**
8:30 AM	0	0	4	2	0	0	2	0	0	0	0	0	0	0	0	0	8	36
8:45 AM	0	0	5	0	0	0	1	0	0	0	0	0	0	0	0	0	6	33
Count Total	0	0	41	9	0	3	15	0	0	9	0	6	0	0	0	0	83	0
Peak Hour	**0**	**0**	**21**	**3**	**0**	**2**	**6**	**0**	**0**	**5**	**0**	**1**	**0**	**0**	**0**	**0**	**38**	**0**

Three-Hour Count Summaries - Bikes

Interval Start	Midland Ave			Midland Ave			W Meadows			n/a			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Project Manager: (720) 646-1008

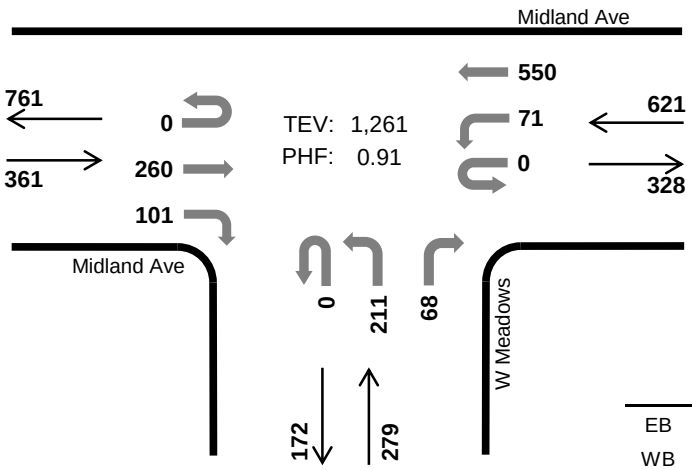
project.manager.co@idaxdata.com

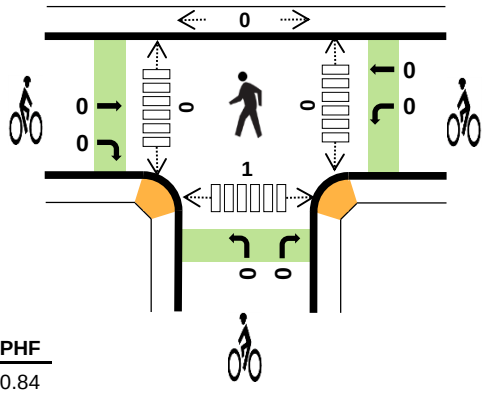
W Meadows
Midland Ave

N

Peak Hour

Date: 11/08/2022
Count Period: 3:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM





	HV %:	PHF
EB	1.4%	0.84
WB	1.8%	0.94
NB	0.7%	0.87
SB	-	-
TOTAL	1.4%	0.91

Three-Hour Count Summaries

Interval Start		Midland Ave Eastbound				Midland Ave Westbound				W Meadows Northbound				n/a Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:30 PM		0	0	51	29	0	19	118	0	0	51	0	15	0	0	0	0	283	0
4:45 PM		0	0	65	24	0	23	137	0	0	45	0	19	0	0	0	0	313	0
5:00 PM		0	0	78	29	0	11	148	0	0	62	0	18	0	0	0	0	346	0
5:15 PM		0	0	66	19	0	18	147	0	0	53	0	16	0	0	0	0	319	1,261
Peak Hour	All	0	0	260	101	0	71	550	0	0	211	0	68	0	0	0	0	1,261	0
	HV	0	0	5	0	0	3	8	0	0	2	0	0	0	0	0	0	18	0
	HV%	-	-	2%	0%	-	4%	1%	-	-	1%	-	0%	-	-	-	-	1%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:30 PM	0	3	1	0	*4*	0	0	0	0	*0*	0	0	0	1	*1*
4:45 PM	3	5	0	0	*8*	0	0	0	0	*0*	0	0	0	0	*0*
5:00 PM	1	1	1	0	*3*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	1	2	0	0	*3*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	5	11	2	0	*18*	0	0	0	0	*0*	0	0	0	1	*1*

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Three-Hour Count Summaries

Interval Start	Midland Ave Eastbound				Midland Ave Westbound				W Meadows Northbound				n/a Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	0	61	17	0	28	58	0	0	69	0	21	0	0	0	0	254	0
3:15 PM	0	0	81	40	0	17	70	0	0	45	0	15	0	0	0	0	268	0
3:30 PM	0	0	80	30	0	22	80	0	0	72	0	20	0	0	0	0	304	0
3:45 PM	0	0	60	23	0	18	86	0	0	60	0	17	0	0	0	0	264	1,090
4:00 PM	0	0	56	28	0	26	94	0	0	55	0	25	0	0	0	0	284	1,120
4:15 PM	0	0	60	15	0	18	106	0	0	48	0	13	0	0	0	0	260	1,112
4:30 PM	**0**	**0**	**51**	**29**	**0**	**19**	**118**	**0**	**0**	**51**	**0**	**15**	**0**	**0**	**0**	**0**	**283**	1,091
4:45 PM	**0**	**0**	**65**	**24**	**0**	**23**	**137**	**0**	**0**	**45**	**0**	**19**	**0**	**0**	**0**	**0**	**313**	1,140
5:00 PM	**0**	**0**	**78**	**29**	**0**	**11**	**148**	**0**	**0**	**62**	**0**	**18**	**0**	**0**	**0**	**0**	**346**	1,202
5:15 PM	**0**	**0**	**66**	**19**	**0**	**18**	**147**	**0**	**0**	**53**	**0**	**16**	**0**	**0**	**0**	**0**	**319**	**1,261**
5:30 PM	0	0	46	17	0	14	132	0	0	44	0	7	0	0	0	0	260	1,238
5:45 PM	0	0	32	25	0	15	126	0	0	43	0	17	0	0	0	0	258	1,183
Count Total	0	0	736	296	0	229	1,302	0	0	647	0	203	0	0	0	0	3,413	0
Peak Hour All	**0**	**0**	**260**	**101**	**0**	**71**	**550**	**0**	**0**	**211**	**0**	**68**	**0**	**0**	**0**	**0**	**1,261**	**0**
Peak Hour HV	**0**	**0**	**5**	**0**	**0**	**3**	**8**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**18**	**0**
Peak Hour HV%	**-**	**-**	**2%**	**0%**	**-**	**4%**	**1%**	**-**	**-**	**1%**	**-**	**0%**	**-**	**-**	**-**	**-**	**1%**	**0**

Note: Three-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:00 PM	1	1	2	0	*4*	0	0	0	0	*0*	0	0	0	1	*1*
3:15 PM	6	4	1	0	*11*	0	0	0	0	*0*	0	0	0	1	*1*
3:30 PM	4	0	1	0	*5*	0	0	0	0	*0*	0	0	0	0	*0*
3:45 PM	2	4	0	0	*6*	0	0	0	0	*0*	0	0	0	0	*0*
4:00 PM	1	2	2	0	*5*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	4	5	1	0	*10*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	**0**	**3**	**1**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	*1*
4:45 PM	**3**	**5**	**0**	**0**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**1**	**1**	**1**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**1**	**2**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:30 PM	1	3	0	0	*4*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	2	0	1	0	*3*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	26	30	10	0	*66*	0	0	0	0	*0*	0	0	0	3	*3*
Peak Hr	**5**	**11**	**2**	**0**	***18***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***

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Three-Hour Count Summaries - Heavy Vehicles

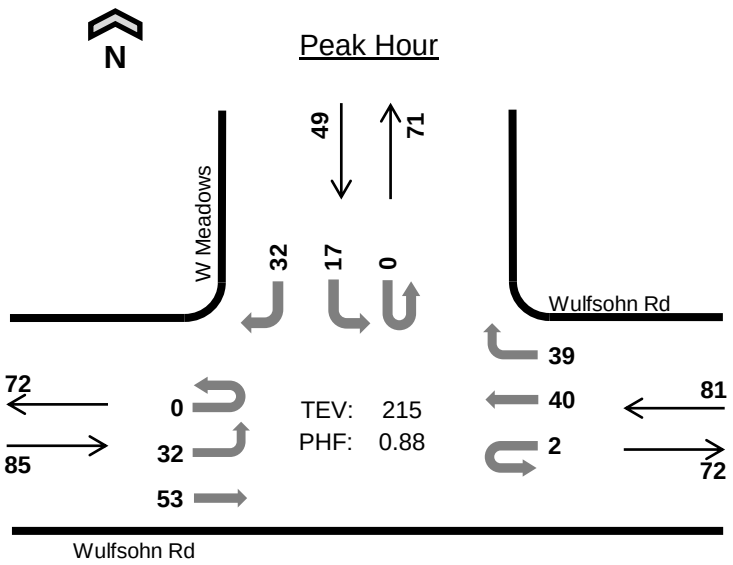
Interval Start	Midland Ave				Midland Ave				W Meadows				n/a				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	0	1	0	0	1	0	0	0	1	0	1	0	0	0	0	4	0
3:15 PM	0	0	4	2	0	0	4	0	0	1	0	0	0	0	0	0	11	0
3:30 PM	0	0	4	0	0	0	0	0	0	1	0	0	0	0	0	0	5	0
3:45 PM	0	0	2	0	0	1	3	0	0	0	0	0	0	0	0	0	6	26
4:00 PM	0	0	1	0	0	0	2	0	0	1	0	1	0	0	0	0	5	27
4:15 PM	0	0	4	0	0	0	5	0	0	1	0	0	0	0	0	0	10	26
4:30 PM	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	25
4:45 PM	**0**	**0**	**3**	**0**	**0**	**1**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	27
5:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	25
5:15 PM	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**18**
5:30 PM	0	0	0	1	0	0	3	0	0	0	0	0	0	0	0	0	4	18
5:45 PM	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	3	13
Count Total	0	0	22	4	0	5	25	0	0	8	0	2	0	0	0	0	66	0
Peak Hour	**0**	**0**	**5**	**0**	**0**	**3**	**8**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**18**	**0**

Three-Hour Count Summaries - Bikes

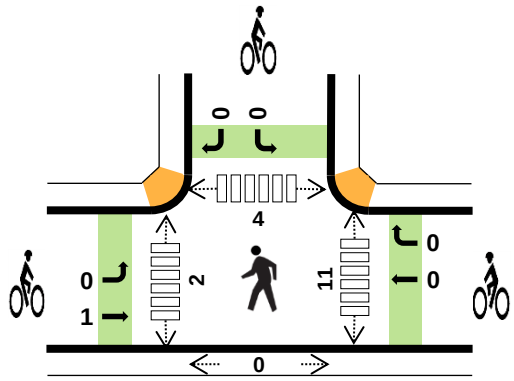
Interval Start	Midland Ave			Midland Ave			W Meadows			n/a			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

W Meadows
Wulfsohn Rd



Date: 10/20/2022
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 12:00 PM to 1:00 PM



	HV %:	PHF
EB	3.5%	0.89
WB	8.6%	0.72
NB	-	-
SB	4.1%	0.77
TOTAL	5.6%	0.88

Two-Hour Count Summaries

Interval Start	Wulfsohn Rd Eastbound				Wulfsohn Rd Westbound				n/a Northbound				W Meadows Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
11:00 AM	0	10	12	0	0	0	2	5	0	0	0	0	0	8	0	3	40	0
11:15 AM	0	8	12	0	0	0	14	3	0	0	0	0	0	2	0	7	46	0
11:30 AM	0	11	10	0	0	0	5	8	0	0	0	0	0	3	0	6	43	0
11:45 AM	0	5	14	0	0	0	12	11	0	0	0	0	0	4	0	6	52	181
12:00 PM	**0**	**4**	**17**	**0**	**0**	**0**	**10**	**9**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**5**	**49**	190
12:15 PM	**0**	**8**	**16**	**0**	**2**	**0**	**8**	**5**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**11**	**55**	199
12:30 PM	**0**	**9**	**11**	**0**	**0**	**0**	**7**	**12**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**6**	**50**	206
12:45 PM	**0**	**11**	**9**	**0**	**0**	**0**	**15**	**13**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**10**	**61**	**215**
Count Total	0	66	101	0	2	0	73	66	0	0	0	0	0	34	0	54	396	0
Peak Hour All	**0**	**32**	**53**	**0**	**2**	**0**	**40**	**39**	**0**	**0**	**0**	**0**	**0**	**17**	**0**	**32**	**215**	**0**
Peak Hour HV	**0**	**0**	**3**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**12**	**0**
Peak Hour HV%	**-**	**0%**	**6%**	**-**	**0%**	**-**	**18%**	**0%**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**6%**	**6%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	2	1	0	0	*3*	0	0	0	0	*0*	0	0	0	0	*0*
11:15 AM	0	4	0	0	*4*	0	0	0	0	*0*	0	0	2	0	*2*
11:30 AM	0	0	0	0	*0*	0	1	0	0	*1*	0	0	0	0	*0*
11:45 AM	2	3	0	1	*6*	0	0	0	0	*0*	6	0	0	0	*6*
12:00 PM	**1**	**2**	**0**	**1**	***4***	**0**	**0**	**0**	**0**	***0***	**2**	**2**	**2**	**0**	*6*
12:15 PM	**0**	**2**	**0**	**1**	***3***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**1**	**0**	*2*
12:30 PM	**2**	**1**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**4**	**0**	**1**	**0**	*5*
12:45 PM	**0**	**2**	**0**	**0**	***2***	**1**	**0**	**0**	**0**	***1***	**4**	**0**	**0**	**0**	***4***
Count Total	7	15	0	3	*25*	1	1	0	0	*2*	17	2	6	0	*25*
Peak Hr	**3**	**7**	**0**	**2**	***12***	**1**	**0**	**0**	**0**	***1***	**11**	**2**	**4**	**0**	***17***

Two-Hour Count Summaries - Heavy Vehicles

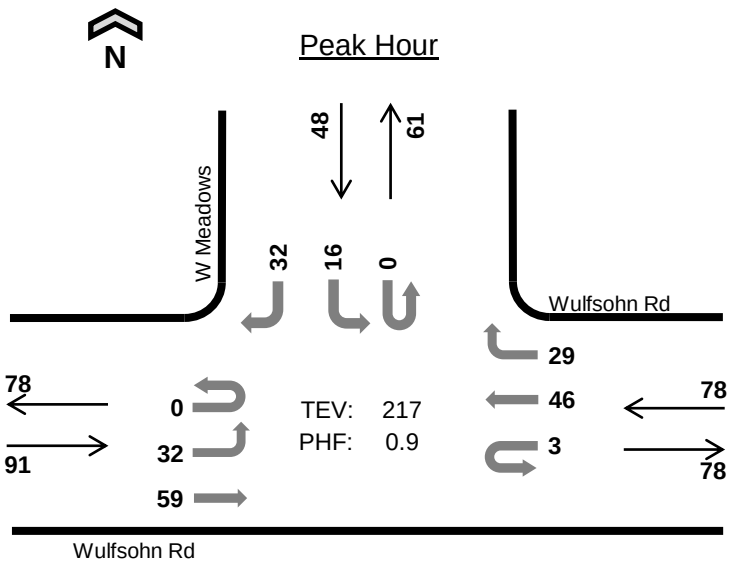
Interval Start	Wulfsohn Rd				Wulfsohn Rd				n/a				W Meadows				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
11:00 AM	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0
11:15 AM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	4	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	1	6	13
12:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**4**	14
12:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	13
12:30 PM	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	16
12:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**12**
Count Total	0	0	7	0	0	0	15	0	0	0	0	0	0	0	0	3	25	0
Peak Hour	**0**	**0**	**3**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**12**	**0**

Two-Hour Count Summaries - Bikes

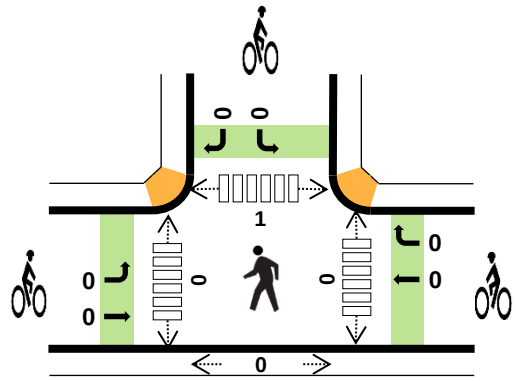
Interval Start	Wulfsohn Rd			Wulfsohn Rd			n/a			W Meadows			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	1	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
12:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
12:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
12:45 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**
Count Total	0	1	0	0	0	1	0	0	0	0	0	0	2	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

W Meadows
Wulfsohn Rd



Date: 10/20/2022
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV %:	PHF
EB	4.4%	0.91
WB	6.4%	0.89
NB	-	-
SB	0.0%	0.86
TOTAL	4.1%	0.90

Two-Hour Count Summaries

Interval Start	Wulfsohn Rd Eastbound				Wulfsohn Rd Westbound				n/a Northbound				W Meadows Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	7	9	0	0	0	9	3	0	0	0	0	0	2	0	3	33	0
4:15 PM	0	9	12	0	0	0	9	6	0	0	0	0	0	3	0	3	42	0
4:30 PM	**0**	**7**	**18**	**0**	**1**	**0**	**13**	**8**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**9**	**60**	0
4:45 PM	**0**	**7**	**13**	**0**	**0**	**0**	**10**	**7**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**8**	**48**	183
5:00 PM	**0**	**6**	**18**	**0**	**2**	**0**	**13**	**6**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**7**	**59**	209
5:15 PM	**0**	**12**	**10**	**0**	**0**	**0**	**10**	**8**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**8**	**50**	**217**
5:30 PM	0	8	12	0	1	0	7	5	0	0	0	0	0	5	0	3	41	198
5:45 PM	0	7	14	0	1	0	10	4	0	0	0	0	0	5	0	9	50	200
Count Total	0	63	106	0	5	0	81	47	0	0	0	0	0	31	0	50	383	0
Peak Hour All	**0**	**32**	**59**	**0**	**3**	**0**	**46**	**29**	**0**	**0**	**0**	**0**	**0**	**16**	**0**	**32**	**217**	**0**
Peak Hour HV	**0**	**0**	**4**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**0**
Peak Hour HV%	**-**	**0%**	**7%**	**-**	**0%**	**-**	**11%**	**0%**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**0%**	**4%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	1	0	*1*
4:15 PM	1	4	0	0	*5*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**1**	**3**	**0**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	*1*
5:15 PM	**1**	**2**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:30 PM	1	1	0	0	*2*	1	0	0	0	*1*	2	0	3	0	*5*
5:45 PM	1	3	0	1	*5*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	8	13	0	1	*22*	1	0	0	0	*1*	2	0	5	0	*7*
Peak Hr	**4**	**5**	**0**	**0**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	***1***

Two-Hour Count Summaries - Heavy Vehicles

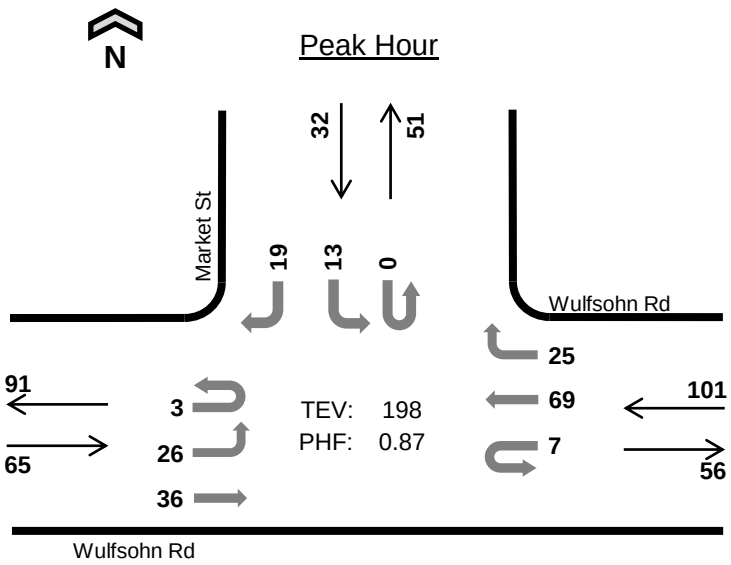
Interval Start	Wulfsohn Rd				Wulfsohn Rd				n/a				W Meadows				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:15 PM	0	0	1	0	0	0	3	1	0	0	0	0	0	0	0	0	5	0
4:30 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
4:45 PM	**0**	**0**	**1**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	11
5:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	11
5:15 PM	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**9**
5:30 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	10
5:45 PM	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	1	5	11
Count Total	0	0	8	0	0	0	12	1	0	0	0	0	0	0	0	1	22	0
Peak Hour	**0**	**0**	**4**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**0**

Two-Hour Count Summaries - Bikes

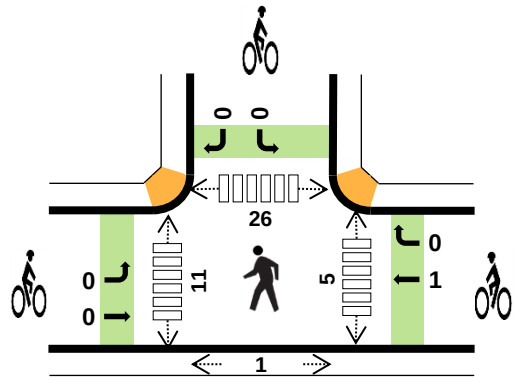
Interval Start	Wulfsohn Rd			Wulfsohn Rd			n/a			W Meadows			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	1	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	1	0	0	0	0	0	0	0	0	0	0	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Market St
Wulfsohn Rd



Date: 10/20/2022
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 11:30 AM to 12:30 PM



	HV %:	PHF
EB	4.6%	0.86
WB	6.9%	0.79
NB	-	-
SB	0.0%	0.89
TOTAL	5.1%	0.87

Two-Hour Count Summaries

Interval Start	Wulfsohn Rd Eastbound				Wulfsohn Rd Westbound				N/A Northbound				Market St Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
11:00 AM	0	5	14	0	1	0	10	4	0	0	0	0	0	0	0	2	36	0
11:15 AM	0	5	6	0	0	0	12	2	0	0	0	0	0	0	0	5	30	0
11:30 AM	**0**	**6**	**6**	**0**	**2**	**0**	**20**	**9**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**3**	**51**	0
11:45 AM	**3**	**6**	**9**	**0**	**1**	**0**	**22**	**9**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**6**	**57**	174
12:00 PM	**0**	**8**	**8**	**0**	**2**	**0**	**13**	**4**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**7**	**43**	181
12:15 PM	**0**	**6**	**13**	**0**	**2**	**0**	**14**	**3**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**3**	**47**	**198**
12:30 PM	3	4	13	0	3	0	9	7	0	0	0	0	0	2	0	5	46	193
12:45 PM	0	1	10	0	2	0	17	3	0	0	0	0	0	6	0	4	43	179
Count Total	6	41	79	0	13	0	117	41	0	0	0	0	0	21	0	35	353	0
Peak Hour All	**3**	**26**	**36**	**0**	**7**	**0**	**69**	**25**	**0**	**0**	**0**	**0**	**0**	**13**	**0**	**19**	**198**	**0**
Peak Hour HV	**0**	**0**	**3**	**0**	**0**	**0**	**6**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**0**
Peak Hour HV%	**0%**	**0%**	**8%**	**-**	**0%**	**-**	**9%**	**4%**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**0%**	**5%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	1	1	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
11:15 AM	0	4	0	0	*4*	0	0	0	0	*0*	1	3	1	0	*5*
11:30 AM	**0**	**1**	**0**	**0**	***1***	**0**	**1**	**0**	**0**	***1***	**2**	**1**	**12**	**0**	*15*
11:45 AM	**2**	**3**	**0**	**0**	***5***	**0**	**0**	**0**	**0**	***0***	**3**	**4**	**6**	**0**	*13*
12:00 PM	**1**	**1**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**5**	**4**	**1**	*10*
12:15 PM	**0**	**2**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**4**	**0**	***5***
12:30 PM	1	1	0	0	*2*	0	0	0	0	*0*	0	0	2	0	*2*
12:45 PM	0	2	0	0	*2*	0	0	0	0	*0*	1	0	10	0	*11*
Count Total	5	15	0	0	*20*	0	1	0	0	*1*	7	14	39	1	*61*
Peak Hr	**3**	**7**	**0**	**0**	***10***	**0**	**1**	**0**	**0**	***1***	**5**	**11**	**26**	**1**	***43***

Two-Hour Count Summaries - Heavy Vehicles

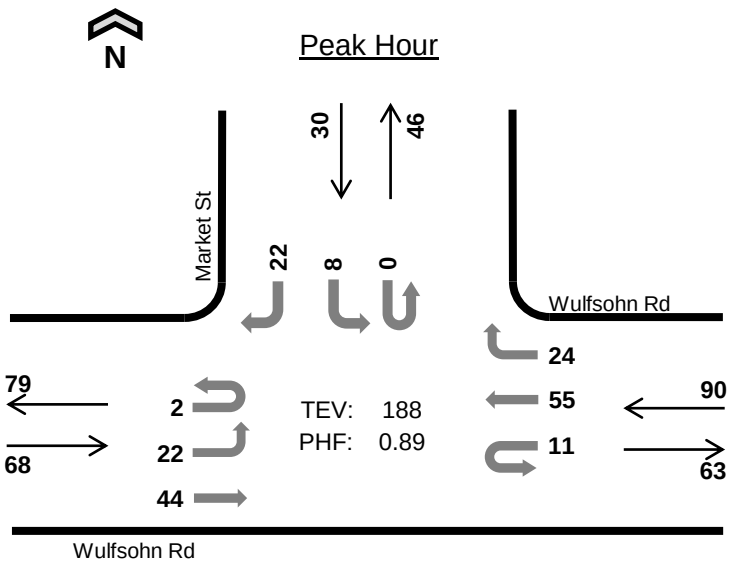
Interval Start	Wulfsohn Rd				Wulfsohn Rd				N/A				Market St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
11:00 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0
11:15 AM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	4	0
11:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
11:45 AM	**0**	**0**	**2**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	12
12:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	12
12:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**10**
12:30 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	11
12:45 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	8
Count Total	0	0	5	0	0	0	14	1	0	0	0	0	0	0	0	0	20	0
Peak Hour	**0**	**0**	**3**	**0**	**0**	**0**	**6**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**0**

Two-Hour Count Summaries - Bikes

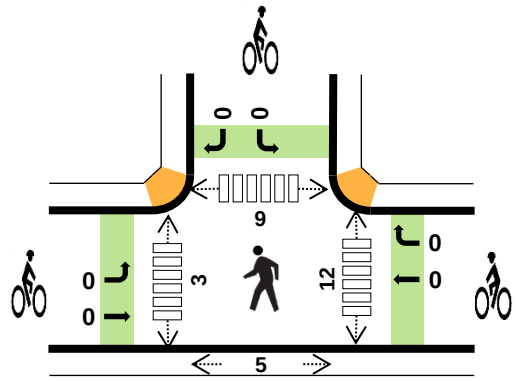
Interval Start	Wulfsohn Rd			Wulfsohn Rd			N/A			Market St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
11:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
12:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
12:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Market St
Wulfsohn Rd



Date: 10/20/2022
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV %:	PHF
EB	4.4%	0.71
WB	6.7%	0.98
NB	-	-
SB	0.0%	0.68
TOTAL	4.8%	0.89

Two-Hour Count Summaries

Interval Start	Wulfsohn Rd Eastbound				Wulfsohn Rd Westbound				N/A Northbound				Market St Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	4	6	0	4	0	9	3	0	0	0	0	0	1	0	4	31	0
4:15 PM	1	0	9	0	0	0	11	3	0	0	0	0	0	3	0	5	32	0
4:30 PM	**1**	**8**	**10**	**0**	**3**	**0**	**15**	**5**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**8**	**53**	0
4:45 PM	**0**	**6**	**10**	**0**	**3**	**0**	**12**	**7**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**5**	**45**	161
5:00 PM	**1**	**7**	**16**	**0**	**3**	**0**	**15**	**5**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**4**	**52**	182
5:15 PM	**0**	**1**	**8**	**0**	**2**	**0**	**13**	**7**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**5**	**38**	**188**
5:30 PM	1	6	10	0	2	0	14	6	0	0	0	0	0	3	0	3	45	180
5:45 PM	1	6	9	0	2	0	10	4	0	0	0	0	1	4	0	7	44	179
Count Total	5	38	78	0	19	0	99	40	0	0	0	0	1	19	0	41	340	0
Peak Hour All	**2**	**22**	**44**	**0**	**11**	**0**	**55**	**24**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**22**	**188**	**0**
Peak Hour HV	**0**	**0**	**3**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**0**
Peak Hour HV%	**0%**	**0%**	**7%**	**-**	**0%**	**-**	**11%**	**0%**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**0%**	**5%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	2	0	0	0	*2*	0	0	0	0	*0*	5	3	4	0	*12*
4:15 PM	1	4	0	0	*5*	0	0	0	0	*0*	3	0	4	2	*9*
4:30 PM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**1**	**0**	*3*
4:45 PM	**0**	**3**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**4**	**0**	**3**	**0**	*7*
5:00 PM	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**2**	**3**	**2**	**5**	*12*
5:15 PM	**0**	**3**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**4**	**0**	**3**	**0**	***7***
5:30 PM	2	0	0	0	*2*	0	0	0	0	*0*	2	4	3	1	*10*
5:45 PM	0	3	0	0	*3*	0	0	0	0	*0*	5	2	2	1	*10*
Count Total	8	13	0	0	*21*	0	0	0	0	*0*	27	12	22	9	*70*
Peak Hr	**3**	**6**	**0**	**0**	***9***	**0**	**0**	**0**	**0**	***0***	**12**	**3**	**9**	**5**	***29***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Wulfsohn Rd				Wulfsohn Rd				N/A				Market St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
4:15 PM	0	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	5	0
4:30 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	11
5:00 PM	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	11
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**9**
5:30 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	10
5:45 PM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3	10
Count Total	0	0	8	0	0	0	13	0	0	0	0	0	0	0	0	0	21	0
Peak Hour	**0**	**0**	**3**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**0**

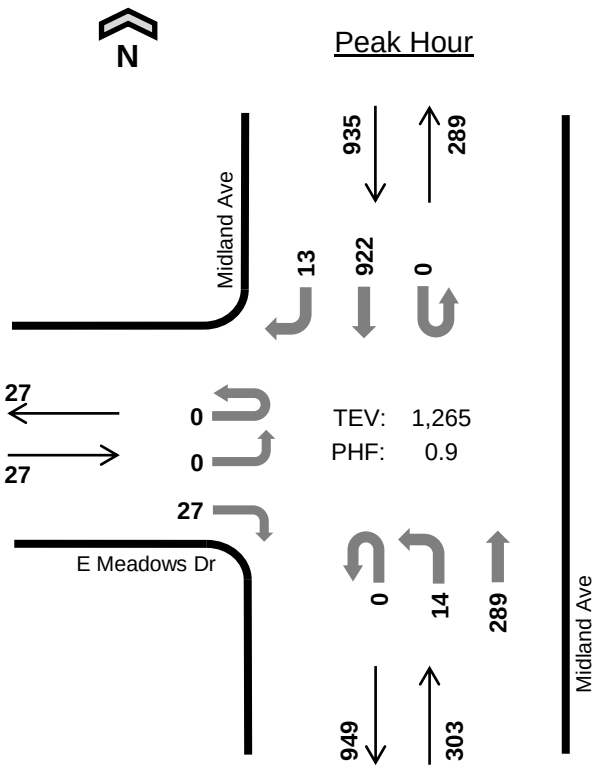
Two-Hour Count Summaries - Bikes

Interval Start	Wulfsohn Rd			Wulfsohn Rd			N/A			Market St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

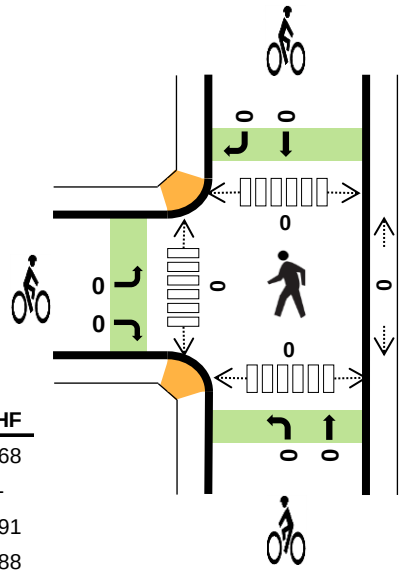
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Midland Ave
E Meadows Dr

Peak Hour



Date: 10/20/2022
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	0.0%	0.68
WB	-	-
NB	2.6%	0.91
SB	2.1%	0.88
TOTAL	2.2%	0.90

Two-Hour Count Summaries

Interval Start	E Meadows Dr				n/a				Midland Ave				Midland Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	1	0	0	0	0	0	3	31	0	0	0	86	1	122	0
7:15 AM	0	0	0	4	0	0	0	0	0	3	33	0	0	0	136	1	177	0
7:30 AM	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**3**	**57**	**0**	**0**	**0**	**220**	**2**	**287**	0
7:45 AM	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**3**	**75**	**0**	**0**	**0**	**262**	**5**	**351**	937
8:00 AM	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**2**	**80**	**0**	**0**	**0**	**240**	**4**	**332**	1,147
8:15 AM	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**0**	**0**	**6**	**77**	**0**	**0**	**0**	**200**	**2**	**295**	**1,265**
8:30 AM	0	0	0	9	0	0	0	0	0	12	63	0	0	0	160	1	245	1,223
8:45 AM	0	1	0	11	0	0	0	0	0	15	49	0	0	0	98	1	175	1,047
Count Total	0	1	0	52	0	0	0	0	0	47	465	0	0	0	1,402	17	1,984	0
Peak Hour All	**0**	**0**	**0**	**27**	**0**	**0**	**0**	**0**	**0**	**14**	**289**	**0**	**0**	**0**	**922**	**13**	**1,265**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**5**	**0**	**0**	**0**	**20**	**0**	**28**	**0**
Peak Hour HV%	**-**	**-**	**-**	**0%**	**-**	**-**	**-**	**-**	**-**	**21%**	**2%**	**-**	**-**	**-**	**2%**	**0%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	1	2	*3*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	1	0	3	2	*6*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	**0**	**0**	**3**	**4**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**0**	**0**	**1**	**5**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**0**	**0**	**1**	**7**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**0**	**0**	**3**	**4**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:30 AM	1	0	3	7	*11*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	1	0	3	5	*9*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	3	0	18	36	*57*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hr	**0**	**0**	**8**	**20**	***28***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Meadows Dr				n/a				Midland Ave				Midland Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	0
7:15 AM	0	0	0	1	0	0	0	0	0	1	2	0	0	0	2	0	6	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**4**	**0**	**7**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**5**	**0**	**6**	22
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**7**	**0**	**8**	27
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**4**	**0**	**7**	**28**
8:30 AM	0	0	0	1	0	0	0	0	0	0	3	0	0	0	7	0	11	32
8:45 AM	0	0	0	1	0	0	0	0	0	0	3	0	0	0	5	0	9	35
Count Total	0	0	0	3	0	0	0	0	0	4	14	0	0	0	36	0	57	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**5**	**0**	**0**	**0**	**20**	**0**	**28**	**0**

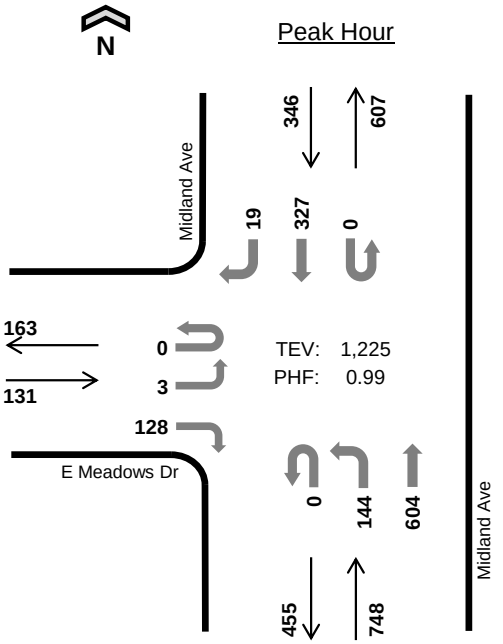
Two-Hour Count Summaries - Bikes

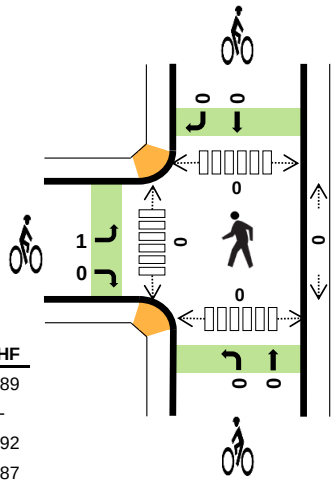
Interval Start	E Meadows Dr			n/a			Midland Ave			Midland Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Midland Ave
E Meadows Dr

Date: 09/29/2022
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM





	HV %:	PHF
EB	0.0%	0.89
WB	-	-
NB	1.3%	0.92
SB	3.5%	0.87
TOTAL	1.8%	0.99

Two-Hour Count Summaries

Interval Start	E Meadows Dr Eastbound				n/a Westbound				Midland Ave Northbound				Midland Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	4	0	29	0	0	0	0	0	41	111	0	0	0	72	7	264	0
4:15 PM	0	1	0	46	0	0	0	0	0	45	140	0	0	0	73	10	315	0
4:30 PM	0	0	0	35	0	0	0	0	0	33	125	0	0	0	82	2	277	0
4:45 PM	**0**	**1**	**0**	**32**	**0**	**0**	**0**	**0**	**0**	**40**	**132**	**0**	**0**	**0**	**93**	**7**	**305**	1,161
5:00 PM	**0**	**0**	**0**	**25**	**0**	**0**	**0**	**0**	**0**	**32**	**161**	**0**	**0**	**0**	**86**	**4**	**308**	1,205
5:15 PM	**0**	**1**	**0**	**36**	**0**	**0**	**0**	**0**	**0**	**37**	**142**	**0**	**0**	**0**	**87**	**4**	**307**	1,197
5:30 PM	**0**	**1**	**0**	**35**	**0**	**0**	**0**	**0**	**0**	**35**	**169**	**0**	**0**	**0**	**61**	**4**	**305**	**1,225**
5:45 PM	0	0	0	23	0	0	0	0	0	25	169	0	0	0	58	1	276	1,196
Count Total	0	8	0	261	0	0	0	0	0	288	1,149	0	0	0	612	39	2,357	0
Peak Hour All	**0**	**3**	**0**	**128**	**0**	**0**	**0**	**0**	**0**	**144**	**604**	**0**	**0**	**0**	**327**	**19**	**1,225**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**12**	**0**	**22**	**0**
Peak Hour HV%	**-**	**0%**	**-**	**0%**	**-**	**-**	**-**	**-**	**-**	**0%**	**2%**	**-**	**-**	**-**	**4%**	**0%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	4	3	*7*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	0	0	2	1	*3*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	0	0	2	5	*7*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	**0**	**0**	**1**	**4**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**0**	**0**	**4**	**4**	***8***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**0**	**0**	**2**	**2**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:30 PM	**0**	**0**	**3**	**2**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:45 PM	1	0	0	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	1	0	18	22	*41*	1	0	0	0	*1*	0	0	0	0	*0*
Peak Hr	**0**	**0**	**10**	**12**	***22***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Meadows Dr				n/a				Midland Ave				Midland Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	2	7	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	5	0	7	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**4**	**0**	**5**	22
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**4**	**0**	**8**	23
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**4**	24
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**2**	**0**	**5**	**22**
5:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	2	19
Count Total	0	0	0	1	0	0	0	0	0	0	18	0	0	0	20	2	41	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**12**	**0**	**22**	**0**

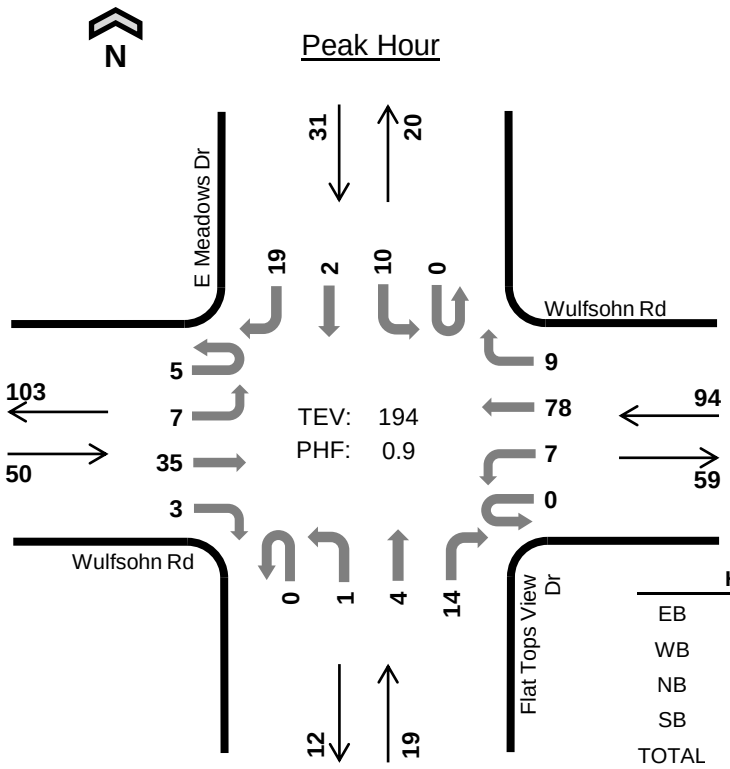
Two-Hour Count Summaries - Bikes

Interval Start	E Meadows Dr			n/a			Midland Ave			Midland Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	1
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	1	0	0	0	0	0	0	0	0	0	0	0	1	0
Peak Hour	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

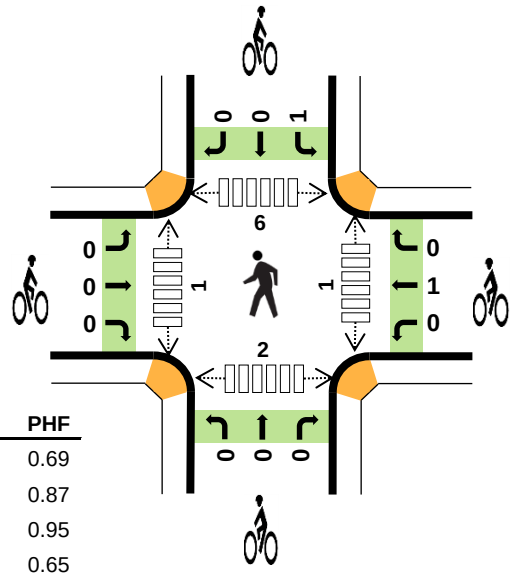
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Flat Tops View Dr
Wulfsohn Rd

Date: 10/20/2022
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 11:30 AM to 12:30 PM



	HV %:	PHF
EB	6.0%	0.69
WB	8.5%	0.87
NB	0.0%	0.95
SB	3.2%	0.65
TOTAL	6.2%	0.90



Two-Hour Count Summaries

Interval Start	Wulfsohn Rd Eastbound				Wulfsohn Rd Westbound				Flat Tops View Dr Northbound				E Meadows Dr Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
11:00 AM	2	6	9	0	0	0	6	4	0	2	0	0	0	1	0	2	32	0
11:15 AM	0	0	5	2	0	1	13	0	0	0	1	2	0	6	0	4	34	0
11:30 AM	**1**	**2**	**10**	**1**	**0**	**1**	**23**	**2**	**0**	**0**	**1**	**4**	**0**	**3**	**1**	**5**	**54**	0
11:45 AM	**2**	**1**	**6**	**1**	**0**	**2**	**24**	**1**	**0**	**0**	**1**	**4**	**0**	**3**	**0**	**9**	**54**	174
12:00 PM	**0**	**1**	**7**	**0**	**0**	**1**	**14**	**3**	**0**	**0**	**2**	**3**	**0**	**2**	**0**	**3**	**36**	178
12:15 PM	**2**	**3**	**12**	**1**	**0**	**3**	**17**	**3**	**0**	**1**	**0**	**3**	**0**	**2**	**1**	**2**	**50**	**194**
12:30 PM	2	2	14	0	0	2	14	6	0	0	0	0	0	1	0	3	44	184
12:45 PM	0	7	12	1	0	1	17	5	0	2	2	1	0	1	0	3	52	182
Count Total	9	22	75	6	0	11	128	24	0	5	7	17	0	19	2	31	356	0
Peak Hour All	**5**	**7**	**35**	**3**	**0**	**7**	**78**	**9**	**0**	**1**	**4**	**14**	**0**	**10**	**2**	**19**	**194**	**0**
Peak Hour HV	**0**	**0**	**3**	**0**	**0**	**0**	**7**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**12**	**0**
Peak Hour HV%	**0%**	**0%**	**9%**	**0%**	**-**	**0%**	**9%**	**11%**	**-**	**0%**	**0%**	**0%**	**-**	**10%**	**0%**	**0%**	**6%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	1	1	0	0	*2*	0	0	0	0	*0*	1	1	1	1	*4*
11:15 AM	0	4	1	0	*5*	0	0	0	0	*0*	0	2	4	1	*7*
11:30 AM	**0**	**2**	**0**	**1**	***3***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**2**	**0**	*2*
11:45 AM	**2**	**3**	**0**	**0**	***5***	**0**	**0**	**0**	**1**	***1***	**1**	**1**	**2**	**1**	*5*
12:00 PM	**1**	**1**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	*1*
12:15 PM	**0**	**2**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**2**	**0**	***2***
12:30 PM	1	1	0	0	*2*	0	0	0	0	*0*	1	0	0	2	*3*
12:45 PM	0	2	1	1	*4*	0	0	0	0	*0*	2	1	0	0	*3*
Count Total	5	16	2	2	*25*	0	1	0	1	*2*	5	5	11	6	*27*
Peak Hour	**3**	**8**	**0**	**1**	***12***	**0**	**1**	**0**	**1**	***2***	**1**	**1**	**6**	**2**	***10***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Wulfsohn Rd Eastbound				Wulfsohn Rd Westbound				Flat Tops View Dr Northbound				E Meadows Dr Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
11:00 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0
11:15 AM	0	0	0	0	0	0	4	0	0	0	1	0	0	0	0	0	5	0
11:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**3**	0
11:45 AM	**0**	**0**	**2**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	15
12:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	15
12:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**12**
12:30 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	11
12:45 PM	0	0	0	0	0	0	2	0	0	0	1	0	0	1	0	0	4	10
Count Total	0	0	5	0	0	0	15	1	0	0	2	0	0	2	0	0	25	0
Peak Hour	**0**	**0**	**3**	**0**	**0**	**0**	**7**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**12**	**0**

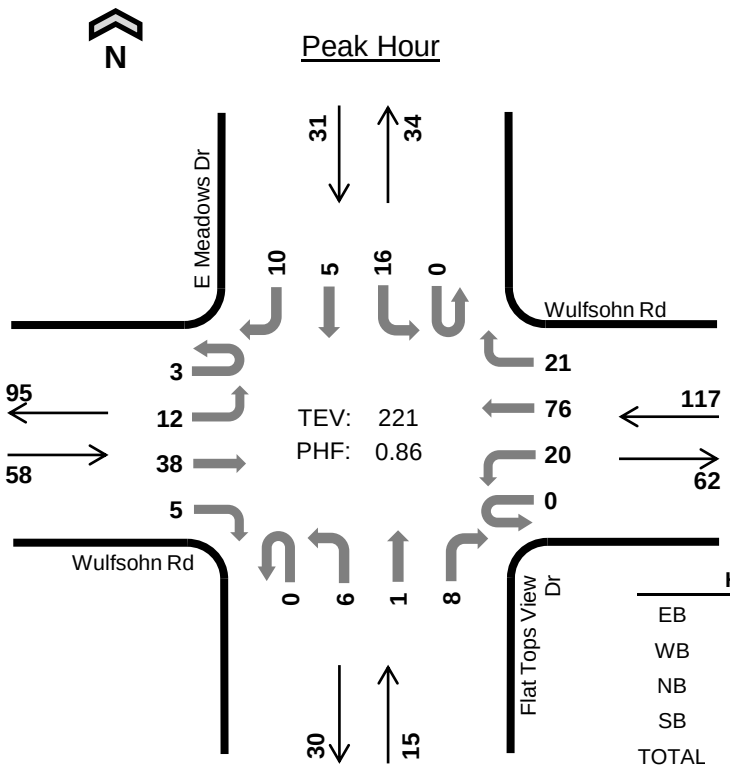
Two-Hour Count Summaries - Bikes

Interval Start	Wulfsohn Rd Eastbound			Wulfsohn Rd Westbound			Flat Tops View Dr Northbound			E Meadows Dr Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
11:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	2
12:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
12:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	1	0	0	0	0	1	0	0	2	0
Peak Hour	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**

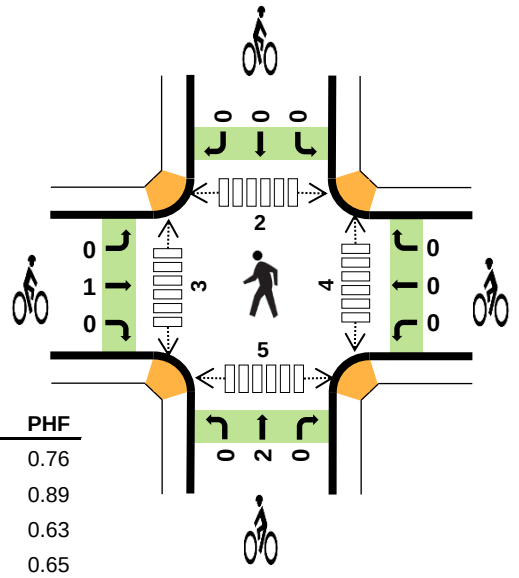
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Flat Tops View Dr
Wulfsohn Rd

Date: 10/20/2022
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV %:	PHF
EB	5.2%	0.76
WB	5.1%	0.89
NB	0.0%	0.63
SB	0.0%	0.65
TOTAL	4.1%	0.86



Two-Hour Count Summaries

Interval Start	Wulfsohn Rd Eastbound				Wulfsohn Rd Westbound				Flat Tops View Dr Northbound				E Meadows Dr Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	9	0	0	5	15	5	0	1	0	3	0	3	0	1	42	0
4:15 PM	0	1	10	1	0	6	12	4	0	2	1	2	0	2	1	2	44	0
4:30 PM	**0**	**7**	**7**	**1**	**0**	**7**	**17**	**9**	**0**	**3**	**1**	**2**	**0**	**3**	**2**	**5**	**64**	0
4:45 PM	**1**	**2**	**8**	**1**	**0**	**2**	**17**	**3**	**0**	**2**	**0**	**2**	**0**	**7**	**1**	**4**	**50**	200
5:00 PM	**1**	**1**	**15**	**2**	**0**	**5**	**21**	**4**	**0**	**0**	**0**	**1**	**0**	**4**	**0**	**0**	**54**	212
5:15 PM	**1**	**2**	**8**	**1**	**0**	**6**	**21**	**5**	**0**	**1**	**0**	**3**	**0**	**2**	**2**	**1**	**53**	**221**
5:30 PM	2	3	10	0	0	2	20	6	0	0	0	5	0	2	0	2	52	209
5:45 PM	2	0	8	1	0	4	21	5	0	0	0	1	0	5	2	1	50	209
Count Total	7	16	75	7	0	37	144	41	0	9	2	19	0	28	8	16	409	0
Peak Hour All	**3**	**12**	**38**	**5**	**0**	**20**	**76**	**21**	**0**	**6**	**1**	**8**	**0**	**16**	**5**	**10**	**221**	**0**
Peak Hour HV	**0**	**0**	**3**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**0**
Peak Hour HV%	**0%**	**0%**	**8%**	**0%**	**-**	**0%**	**8%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**4%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	2	0	0	0	*2*	0	0	0	0	*0*	0	0	0	2	*2*
4:15 PM	1	4	0	0	*5*	0	0	0	0	*0*	5	1	1	3	*10*
4:30 PM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	*1*
4:45 PM	**0**	**3**	**0**	**0**	***3***	**1**	**0**	**1**	**0**	***2***	**1**	**2**	**0**	**0**	*3*
5:00 PM	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**1**	**0**	***1***	**2**	**0**	**0**	**2**	*4*
5:15 PM	**0**	**3**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**1**	**1**	**1**	**3**	***6***
5:30 PM	2	0	0	0	*2*	0	0	0	0	*0*	0	0	2	0	*2*
5:45 PM	0	3	0	0	*3*	0	0	0	0	*0*	0	1	4	3	*8*
Count Total	8	13	0	0	*21*	1	0	2	0	*3*	9	5	9	13	*36*
Peak Hour	**3**	**6**	**0**	**0**	***9***	**1**	**0**	**2**	**0**	***3***	**4**	**3**	**2**	**5**	***14***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Wulfsohn Rd				Wulfsohn Rd				Flat Tops View Dr				E Meadows Dr				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
4:15 PM	0	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	5	0
4:30 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	11
5:00 PM	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	11
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**9**
5:30 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	10
5:45 PM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3	10
Count Total	0	0	8	0	0	0	13	0	0	0	0	0	0	0	0	0	21	0
Peak Hour	**0**	**0**	**3**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**0**

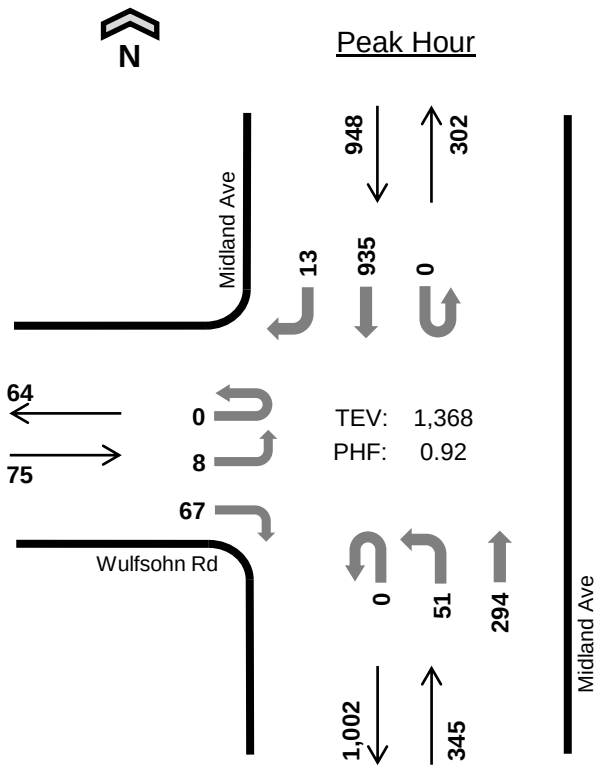
Two-Hour Count Summaries - Bikes

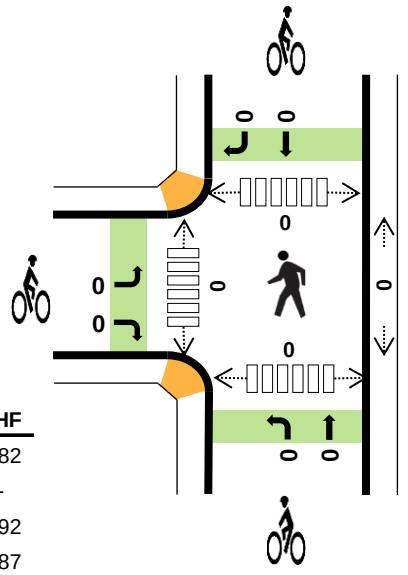
Interval Start	Wulfsohn Rd			Wulfsohn Rd			Flat Tops View Dr			E Meadows Dr			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	2
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	3
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	1	0	0	0	0	0	2	0	0	0	0	3	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**3**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Midland Ave
Wulfsohn Rd

Date: 10/20/2022
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM





	HV %:	PHF
EB	8.0%	0.82
WB	-	-
NB	3.5%	0.92
SB	1.9%	0.87
TOTAL	2.6%	0.92

Two-Hour Count Summaries

Interval Start	Wulfsohn Rd				n/a				Midland Ave				Midland Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	4	0	18	0	0	0	0	0	5	30	0	0	0	83	3	143	0
7:15 AM	0	4	0	14	0	0	0	0	0	14	33	0	0	0	139	1	205	0
7:30 AM	**0**	**0**	**0**	**15**	**0**	**0**	**0**	**0**	**0**	**14**	**63**	**0**	**0**	**0**	**213**	**3**	**308**	0
7:45 AM	**0**	**2**	**0**	**17**	**0**	**0**	**0**	**0**	**0**	**9**	**72**	**0**	**0**	**0**	**268**	**5**	**373**	1,029
8:00 AM	**0**	**1**	**0**	**22**	**0**	**0**	**0**	**0**	**0**	**13**	**81**	**0**	**0**	**0**	**237**	**4**	**358**	1,244
8:15 AM	**0**	**5**	**0**	**13**	**0**	**0**	**0**	**0**	**0**	**15**	**78**	**0**	**0**	**0**	**217**	**1**	**329**	**1,368**
8:30 AM	0	1	0	11	0	0	0	0	0	15	77	0	0	0	167	5	276	1,336
8:45 AM	0	1	0	13	0	0	0	0	0	16	62	0	0	0	107	3	202	1,165
Count Total	0	18	0	123	0	0	0	0	0	101	496	0	0	0	1,431	25	2,194	0
Peak Hour All	**0**	**8**	**0**	**67**	**0**	**0**	**0**	**0**	**0**	**51**	**294**	**0**	**0**	**0**	**935**	**13**	**1,368**	**0**
Peak Hour HV	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**4**	**8**	**0**	**0**	**0**	**16**	**2**	**36**	**0**
Peak Hour HV%	**-**	**0%**	**-**	**9%**	**-**	**-**	**-**	**-**	**-**	**8%**	**3%**	**-**	**-**	**-**	**2%**	**15%**	**3%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	2	0	2	2	*6*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	2	0	4	3	*9*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	**2**	**0**	**4**	**2**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**1**	**0**	**2**	**6**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**2**	**0**	**2**	**6**	***10***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**1**	**0**	**4**	**4**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:30 AM	2	0	5	8	*15*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	0	0	3	6	*9*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	12	0	26	37	*75*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hr	**6**	**0**	**12**	**18**	***36***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Wulfsohn Rd				n/a				Midland Ave				Midland Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	2	0	0	0	0	0	1	1	0	0	0	2	0	6	0
7:15 AM	0	1	0	1	0	0	0	0	0	2	2	0	0	0	3	0	9	0
7:30 AM	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**2**	**0**	**8**	0
7:45 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**5**	**1**	**9**	32
8:00 AM	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**6**	**0**	**10**	36
8:15 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**3**	**1**	**9**	**36**
8:30 AM	0	0	0	2	0	0	0	0	0	1	4	0	0	0	7	1	15	43
8:45 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	5	1	9	43
Count Total	0	1	0	11	0	0	0	0	0	8	18	0	0	0	33	4	75	0
Peak Hour	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**4**	**8**	**0**	**0**	**0**	**16**	**2**	**36**	**0**

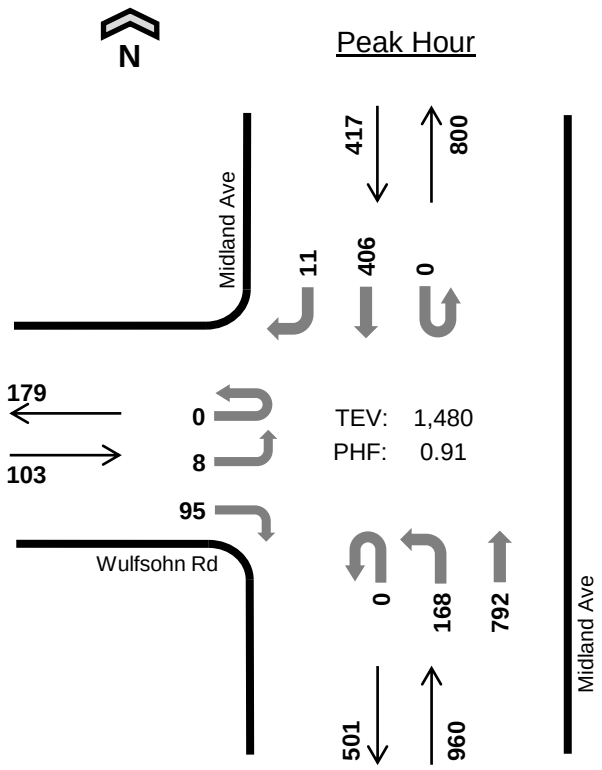
Two-Hour Count Summaries - Bikes

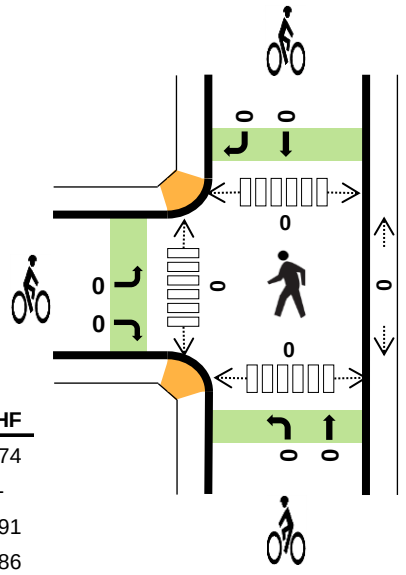
Interval Start	Wulfsohn Rd			n/a			Midland Ave			Midland Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Midland Ave
Wulfsohn Rd

Date: 10/20/2022
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM





	HV %:	PHF
EB	3.9%	0.74
WB	-	-
NB	1.3%	0.91
SB	0.7%	0.86
TOTAL	1.3%	0.91

Two-Hour Count Summaries

Interval Start	Wulfsohn Rd				n/a				Midland Ave				Midland Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	4	0	24	0	0	0	0	1	39	146	0	0	0	104	6	324	0
4:15 PM	0	7	0	32	0	0	0	0	0	29	173	0	0	0	103	8	352	0
4:30 PM	0	4	0	13	0	0	0	0	0	36	161	0	0	0	94	3	311	0
4:45 PM	0	2	0	14	0	0	0	0	0	25	158	0	0	0	113	2	314	1,301
5:00 PM	**0**	**1**	**0**	**20**	**0**	**0**	**0**	**0**	**0**	**44**	**221**	**0**	**0**	**0**	**120**	**1**	**407**	1,384
5:15 PM	**0**	**0**	**0**	**26**	**0**	**0**	**0**	**0**	**0**	**48**	**215**	**0**	**0**	**0**	**103**	**5**	**397**	1,429
5:30 PM	**0**	**3**	**0**	**32**	**0**	**0**	**0**	**0**	**0**	**37**	**182**	**0**	**0**	**0**	**95**	**4**	**353**	1,471
5:45 PM	**0**	**4**	**0**	**17**	**0**	**0**	**0**	**0**	**0**	**39**	**174**	**0**	**0**	**0**	**88**	**1**	**323**	**1,480**
Count Total	0	25	0	178	0	0	0	0	1	297	1,430	0	0	0	820	30	2,781	0
Peak Hour All	**0**	**8**	**0**	**95**	**0**	**0**	**0**	**0**	**0**	**168**	**792**	**0**	**0**	**0**	**406**	**11**	**1,480**	**0**
Peak Hour HV	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**4**	**8**	**0**	**0**	**0**	**1**	**2**	**19**	**0**
Peak Hour HV%	**-**	**0%**	**-**	**4%**	**-**	**-**	**-**	**-**	**-**	**2%**	**1%**	**-**	**-**	**-**	**0%**	**18%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	3	0	4	2	*9*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	2	0	5	4	*11*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	1	0	1	1	*3*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	0	0	4	5	*9*	0	0	0	0	*0*	0	0	0	0	*0*
5:00 PM	**2**	**0**	**4**	**0**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**0**	**0**	**5**	**2**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:30 PM	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:45 PM	**0**	**0**	**3**	**1**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
Count Total	10	0	26	15	*51*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hr	**4**	**0**	**12**	**3**	***19***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Wulfsohn Rd				n/a				Midland Ave				Midland Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	3	0	0	0	0	0	1	3	0	0	0	2	0	9	0
4:15 PM	0	0	0	2	0	0	0	0	0	3	2	0	0	0	3	1	11	0
4:30 PM	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	3	0
4:45 PM	0	0	0	0	0	0	0	0	0	2	2	0	0	0	4	1	9	32
5:00 PM	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**6**	29
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**3**	**0**	**0**	**0**	**1**	**1**	**7**	25
5:30 PM	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	24
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**1**	**4**	**19**
Count Total	0	0	0	10	0	0	0	0	0	10	16	0	0	0	11	4	51	0
Peak Hour	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**4**	**8**	**0**	**0**	**0**	**1**	**2**	**19**	**0**

Two-Hour Count Summaries - Bikes

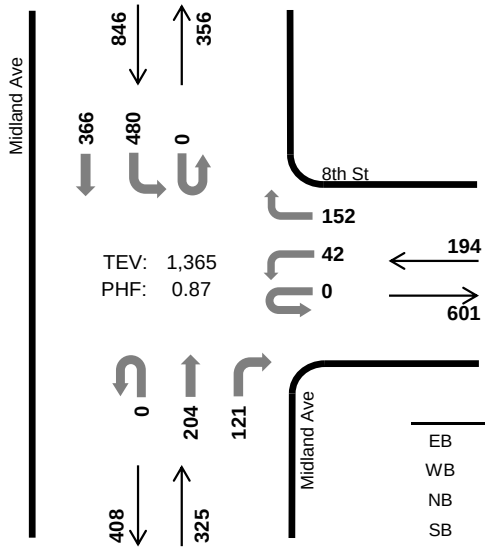
Interval Start	Wulfsohn Rd			n/a			Midland Ave			Midland Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

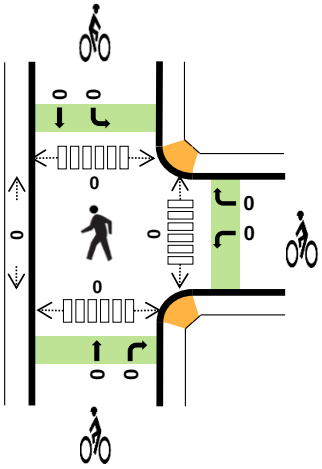
Midland Ave
8th St



Peak Hour



	HV %:	PHF
EB	-	-
WB	5.2%	0.73
NB	1.2%	0.86
SB	2.2%	0.84
TOTAL	2.4%	0.87



Date: 11/03/2022
Count Period: 6:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM

Three-Hour Count Summaries

Interval Start		n/a				8th St				Midland Ave				Midland Ave				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:30 AM		0	0	0	0	0	5	0	26	0	0	46	22	0	86	89	0	274	0
7:45 AM		0	0	0	0	0	9	0	34	0	0	67	27	0	108	101	0	346	0
8:00 AM		0	0	0	0	0	14	0	40	0	0	48	40	0	154	98	0	394	0
8:15 AM		0	0	0	0	0	14	0	52	0	0	43	32	0	132	78	0	351	1,365
Peak Hour	All	0	0	0	0	0	42	0	152	0	0	204	121	0	480	366	0	1,365	0
	HV	0	0	0	0	0	0	0	10	0	0	3	1	0	9	10	0	33	0
	HV%	-	-	-	-	-	0%	-	7%	-	-	1%	1%	-	2%	3%	-	2%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:30 AM	0	3	1	5	*9*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	0	3	1	2	*6*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 AM	0	3	2	7	*12*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	0	1	0	5	*6*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	0	10	4	19	*33*	0	0	0	0	*0*	0	0	0	0	*0*

Three-Hour Count Summaries

Interval Start	n/a				8th St				Midland Ave				Midland Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	0	0	2	0	14	0	0	7	2	0	21	19	0	65	0
6:15 AM	0	0	0	0	0	1	0	7	0	0	16	4	0	11	33	0	72	0
6:30 AM	0	0	0	0	0	4	0	13	0	0	20	6	0	32	51	0	126	0
6:45 AM	0	0	0	0	0	4	0	14	0	0	21	7	0	34	67	0	147	410
7:00 AM	0	0	0	0	0	2	0	20	0	0	19	12	0	53	55	0	161	506
7:15 AM	0	0	0	0	0	5	0	20	0	0	22	10	0	54	104	0	215	649
7:30 AM	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**26**	**0**	**0**	**46**	**22**	**0**	**86**	**89**	**0**	**274**	797
7:45 AM	**0**	**0**	**0**	**0**	**0**	**9**	**0**	**34**	**0**	**0**	**67**	**27**	**0**	**108**	**101**	**0**	**346**	996
8:00 AM	**0**	**0**	**0**	**0**	**0**	**14**	**0**	**40**	**0**	**0**	**48**	**40**	**0**	**154**	**98**	**0**	**394**	1,229
8:15 AM	**0**	**0**	**0**	**0**	**0**	**14**	**0**	**52**	**0**	**0**	**43**	**32**	**0**	**132**	**78**	**0**	**351**	**1,365**
8:30 AM	0	0	0	0	0	11	0	35	0	0	37	13	0	70	73	0	239	1,330
8:45 AM	0	0	0	0	0	4	0	38	0	0	30	14	0	61	58	0	205	1,189
Count Total	0	0	0	0	0	75	0	313	0	0	376	189	0	816	826	0	2,595	0
Peak Hour All	**0**	**0**	**0**	**0**	**0**	**42**	**0**	**152**	**0**	**0**	**204**	**121**	**0**	**480**	**366**	**0**	**1,365**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**3**	**1**	**0**	**9**	**10**	**0**	**33**	**0**
Peak Hour HV%	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**7%**	**-**	**-**	**1%**	**1%**	**-**	**2%**	**3%**	**-**	**2%**	**0**

Note: Three-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
6:00 AM	0	1	0	3	*4*	0	0	0	0	*0*	0	0	0	0	*0*
6:15 AM	0	1	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
6:30 AM	0	1	1	2	*4*	0	0	0	0	*0*	0	0	0	0	*0*
6:45 AM	0	0	0	2	*2*	0	0	0	0	*0*	0	0	0	0	*0*
7:00 AM	0	4	1	3	*8*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	4	0	6	*10*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	**0**	**3**	**1**	**5**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**0**	**3**	**1**	**2**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**0**	**3**	**2**	**7**	***12***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**0**	**1**	**0**	**5**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:30 AM	0	2	1	9	*12*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	0	1	0	2	*3*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	24	7	46	*77*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hr	**0**	**10**	**4**	**19**	***33***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Project Manager: (720) 646-1008

project.manager.co@idaxdata.com

Three-Hour Count Summaries - Heavy Vehicles

Interval Start	n/a				8th St				Midland Ave				Midland Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	3	0	0	4	0
6:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0
6:30 AM	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0	0	4	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	11
7:00 AM	0	0	0	0	0	0	0	4	0	0	1	0	0	2	1	0	8	15
7:15 AM	0	0	0	0	0	0	0	4	0	0	0	0	0	2	4	0	10	24
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**1**	**0**	**0**	**2**	**3**	**0**	**9**	29
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**0**	**6**	33
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**1**	**1**	**0**	**3**	**4**	**0**	**12**	37
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	**2**	**0**	**6**	**33**
8:30 AM	0	0	0	0	0	0	0	2	0	0	0	1	0	4	5	0	12	36
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	3	33
Count Total	0	0	0	0	0	0	0	24	0	0	4	3	0	24	22	0	77	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**3**	**1**	**0**	**9**	**10**	**0**	**33**	**0**

Three-Hour Count Summaries - Bikes

Interval Start	n/a			8th St			Midland Ave			Midland Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

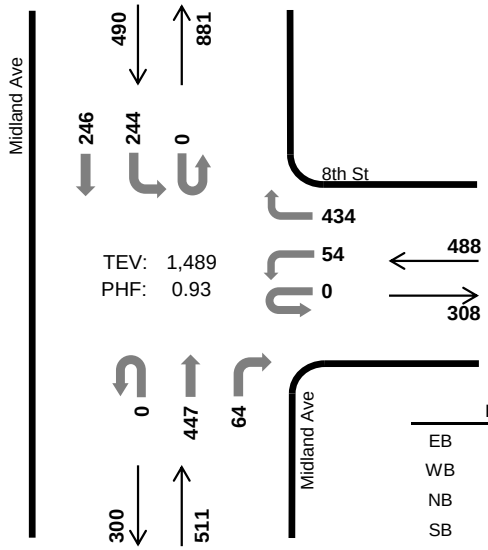
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Midland Ave
8th St

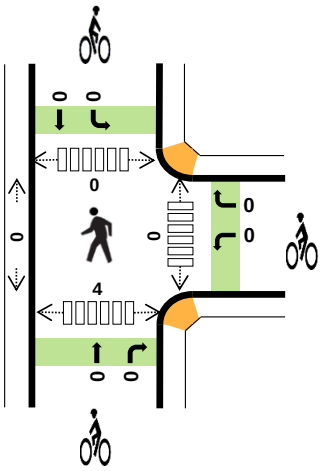
Date: 11/03/2022
Count Period: 3:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM

N

Peak Hour



	HV %:	PHF
EB	-	-
WB	1.4%	0.84
NB	0.4%	0.86
SB	2.7%	0.82
TOTAL	1.5%	0.93



Three-Hour Count Summaries

Interval Start		n/a Eastbound				8th St Westbound				Midland Ave Northbound				Midland Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:45 PM		0	0	0	0	0	7	0	108	0	0	73	13	0	56	45	0	302	0
5:00 PM		0	0	0	0	0	16	0	129	0	0	119	17	0	56	58	0	395	0
5:15 PM		0	0	0	0	0	18	0	109	0	0	133	15	0	60	66	0	401	0
5:30 PM		0	0	0	0	0	13	0	88	0	0	122	19	0	72	77	0	391	1,489
Peak Hour	All	0	0	0	0	0	54	0	434	0	0	447	64	0	244	246	0	1,489	0
	HV	0	0	0	0	0	0	0	7	0	0	2	0	0	8	5	0	22	0
	HV%	-	-	-	-	-	0%	-	2%	-	-	0%	0%	-	3%	2%	-	1%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:45 PM	0	1	0	1	*2*	0	0	0	0	*0*	0	0	0	1	*1*
5:00 PM	0	0	1	4	*5*	0	0	0	0	*0*	0	0	0	1	*1*
5:15 PM	0	4	0	4	*8*	0	0	0	0	*0*	0	0	0	2	*2*
5:30 PM	0	2	1	4	*7*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	0	7	2	13	*22*	0	0	0	0	*0*	0	0	0	4	*4*

Three-Hour Count Summaries

Interval Start	n/a				8th St				Midland Ave				Midland Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	0	0	0	0	12	0	74	0	0	44	15	0	68	60	0	273	0
3:15 PM	0	0	0	0	0	12	0	85	0	0	63	21	0	95	46	0	322	0
3:30 PM	0	0	0	0	0	18	0	113	0	0	67	22	0	77	49	0	346	0
3:45 PM	0	0	0	0	0	23	0	123	0	0	81	17	0	63	55	0	362	1,303
4:00 PM	0	0	0	0	0	16	0	89	0	0	78	14	0	57	69	0	323	1,353
4:15 PM	0	0	0	0	0	12	0	79	0	0	85	14	0	57	65	0	312	1,343
4:30 PM	0	0	0	0	0	22	0	118	0	0	94	11	0	52	72	0	369	1,366
4:45 PM	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**108**	**0**	**0**	**73**	**13**	**0**	**56**	**45**	**0**	**302**	1,306
5:00 PM	**0**	**0**	**0**	**0**	**0**	**16**	**0**	**129**	**0**	**0**	**119**	**17**	**0**	**56**	**58**	**0**	**395**	1,378
5:15 PM	**0**	**0**	**0**	**0**	**0**	**18**	**0**	**109**	**0**	**0**	**133**	**15**	**0**	**60**	**66**	**0**	**401**	1,467
5:30 PM	**0**	**0**	**0**	**0**	**0**	**13**	**0**	**88**	**0**	**0**	**122**	**19**	**0**	**72**	**77**	**0**	**391**	**1,489**
5:45 PM	0	0	0	0	0	16	0	66	0	0	93	14	0	57	36	0	282	1,469
Count Total	0	0	0	0	0	185	0	1,181	0	0	1,052	192	0	770	698	0	4,078	0
Peak Hour All	**0**	**0**	**0**	**0**	**0**	**54**	**0**	**434**	**0**	**0**	**447**	**64**	**0**	**244**	**246**	**0**	**1,489**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**2**	**0**	**0**	**8**	**5**	**0**	**22**	**0**
Peak Hour HV%	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**2%**	**-**	**-**	**0%**	**0%**	**-**	**3%**	**2%**	**-**	**1%**	**0**

Note: Three-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:00 PM	0	2	2	5	*9*	0	0	0	0	*0*	0	0	0	0	*0*
3:15 PM	0	7	2	3	*12*	0	0	0	0	*0*	1	0	0	0	*1*
3:30 PM	0	3	1	4	*8*	0	0	0	0	*0*	1	0	0	0	*1*
3:45 PM	0	1	1	2	*4*	0	0	0	0	*0*	4	0	0	1	*5*
4:00 PM	0	4	1	5	*10*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	0	5	2	4	*11*	0	0	0	0	*0*	0	0	0	3	*3*
4:30 PM	0	4	0	6	*10*	0	0	0	0	*0*	1	0	0	0	*1*
4:45 PM	**0**	**1**	**0**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	*1*
5:00 PM	**0**	**0**	**1**	**4**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	*1*
5:15 PM	**0**	**4**	**0**	**4**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**2**	*2*
5:30 PM	**0**	**2**	**1**	**4**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:45 PM	0	2	0	1	*3*	0	0	0	0	*0*	4	0	0	0	*4*
Count Total	0	35	11	43	*89*	0	0	0	0	*0*	11	0	0	8	*19*
Peak Hr	**0**	**7**	**2**	**13**	***22***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**4**	***4***

Three-Hour Count Summaries - Heavy Vehicles

Interval Start	n/a				8th St				Midland Ave				Midland Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	0	0	0	0	0	0	2	0	0	1	1	0	4	1	0	9	0
3:15 PM	0	0	0	0	0	0	0	7	0	0	1	1	0	2	1	0	12	0
3:30 PM	0	0	0	0	0	0	0	3	0	0	1	0	0	3	1	0	8	0
3:45 PM	0	0	0	0	0	0	0	1	0	0	1	0	0	1	1	0	4	33
4:00 PM	0	0	0	0	0	1	0	3	0	0	1	0	0	3	2	0	10	34
4:15 PM	0	0	0	0	0	0	0	5	0	0	2	0	0	1	3	0	11	33
4:30 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	4	2	0	10	35
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	33
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**2**	**0**	**5**	28
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	**0**	**8**	25
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**4**	**0**	**0**	**7**	**22**
5:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	3	23
Count Total	0	0	0	0	0	1	0	34	0	0	9	2	0	27	16	0	89	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**2**	**0**	**0**	**8**	**5**	**0**	**22**	**0**

Three-Hour Count Summaries - Bikes

Interval Start	n/a			8th St			Midland Ave			Midland Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

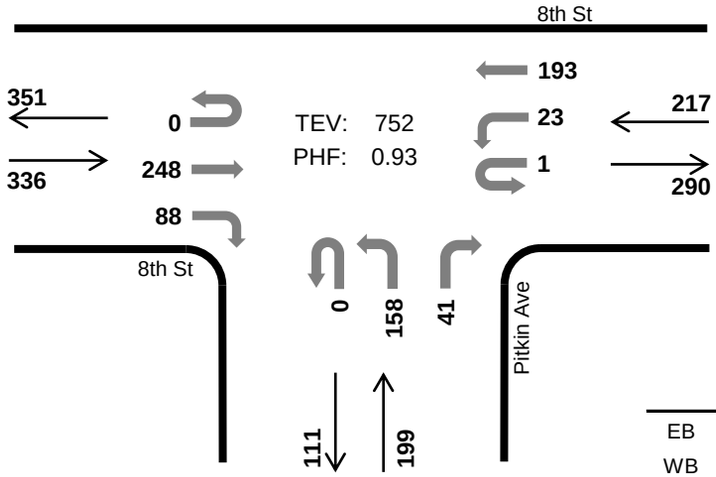
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

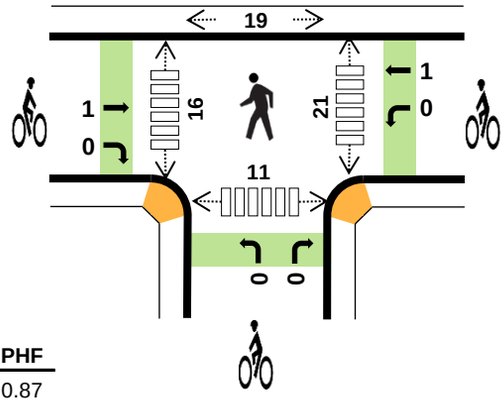
Pitkin Ave
8th St

N

Peak Hour

Date: 10/20/2022
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 11:45 AM to 12:45 PM





	HV %:	PHF
EB	1.8%	0.87
WB	3.2%	0.95
NB	0.5%	0.89
SB	-	-
TOTAL	1.9%	0.93

Two-Hour Count Summaries

Interval Start		8th St Eastbound				8th St Westbound				Pitkin Ave Northbound				N/A Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
11:00 AM		0	0	56	16	0	3	33	0	0	27	0	6	0	0	0	0	141	0
11:15 AM		0	0	56	16	0	4	39	0	0	20	0	8	0	0	0	0	143	0
11:30 AM		0	0	58	26	0	5	52	0	0	28	0	9	0	0	0	0	178	0
11:45 AM		**0**	**0**	**59**	**25**	**0**	**5**	**44**	**0**	**0**	**38**	**0**	**7**	**0**	**0**	**0**	**0**	**178**	640
12:00 PM		**0**	**0**	**59**	**18**	**1**	**6**	**48**	**0**	**0**	**44**	**0**	**12**	**0**	**0**	**0**	**0**	**188**	687
12:15 PM		**0**	**0**	**77**	**20**	**0**	**7**	**49**	**0**	**0**	**37**	**0**	**12**	**0**	**0**	**0**	**0**	**202**	746
12:30 PM		**0**	**0**	**53**	**25**	**0**	**5**	**52**	**0**	**0**	**39**	**0**	**10**	**0**	**0**	**0**	**0**	**184**	**752**
12:45 PM		0	0	51	22	0	5	42	0	0	30	0	12	0	0	0	0	162	736
Count Total		0	0	469	168	1	40	359	0	0	263	0	76	0	0	0	0	1,376	0
Peak Hour	**All**	**0**	**0**	**248**	**88**	**1**	**23**	**193**	**0**	**0**	**158**	**0**	**41**	**0**	**0**	**0**	**0**	**752**	**0**
	HV	**0**	**0**	**6**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**14**	**0**
	HV%	**-**	**-**	**2%**	**0%**	**0%**	**0%**	**4%**	**-**	**-**	**0%**	**-**	**2%**	**-**	**-**	**-**	**-**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	4	3	0	0	*7*	0	0	0	0	*0*	0	2	4	0	*6*
11:15 AM	0	4	0	0	*4*	0	0	0	0	*0*	4	5	8	3	*20*
11:30 AM	2	2	0	0	*4*	0	0	0	0	*0*	1	2	8	11	*22*
11:45 AM	**1**	**2**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**6**	**3**	**1**	**4**	*14*
12:00 PM	**3**	**4**	**0**	**0**	***7***	**1**	**1**	**0**	**0**	***2***	**5**	**3**	**4**	**2**	*14*
12:15 PM	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**7**	**4**	**3**	**3**	*17*
12:30 PM	**0**	**1**	**1**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**3**	**6**	**11**	**2**	***22***
12:45 PM	3	4	1	0	*8*	1	0	0	0	*1*	3	8	15	8	*34*
Count Total	15	20	2	0	*37*	2	1	0	0	*3*	29	33	54	33	*149*
Peak Hr	**6**	**7**	**1**	**0**	***14***	**1**	**1**	**0**	**0**	***2***	**21**	**16**	**19**	**11**	***67***

Project Manager: (415) 310-6469 project.manager.ca@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	8th St				8th St				Pitkin Ave				N/A				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
11:00 AM	0	0	4	0	0	0	3	0	0	0	0	0	0	0	0	0	7	0
11:15 AM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	4	0
11:30 AM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4	0
11:45 AM	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	18
12:00 PM	**0**	**0**	**3**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	18
12:15 PM	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	16
12:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**14**
12:45 PM	0	0	2	1	0	0	4	0	0	0	0	1	0	0	0	0	8	19
Count Total	0	0	14	1	0	0	20	0	0	0	0	2	0	0	0	0	37	0
Peak Hour	**0**	**0**	**6**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**14**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	8th St			8th St			Pitkin Ave			N/A			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
12:00 PM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	2
12:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
12:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
12:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	3
Count Total	0	2	0	0	1	0	0	0	0	0	0	0	3	0
Peak Hour	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**

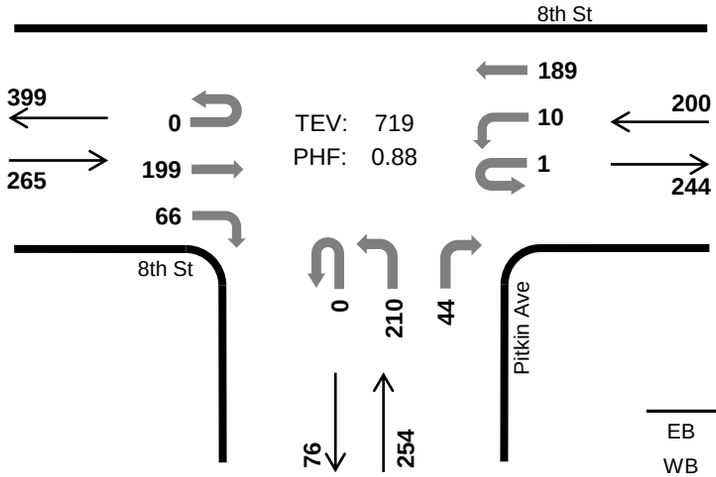
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

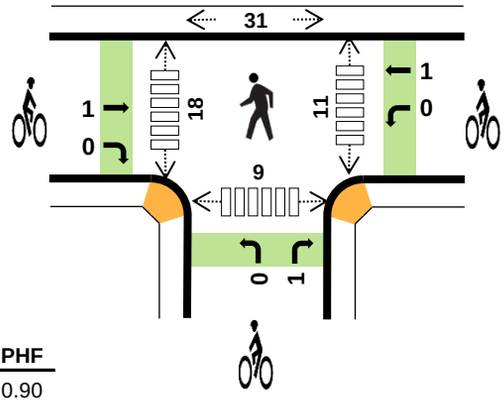
Pitkin Ave
8th St

N

Peak Hour

Date: 10/20/2022
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM





	HV %:	PHF
EB	2.3%	0.90
WB	3.0%	0.88
NB	0.8%	0.84
SB	-	-
TOTAL	1.9%	0.88

Two-Hour Count Summaries

Interval Start		8th St Eastbound				8th St Westbound				Pitkin Ave Northbound				N/A Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	60	21	2	1	51	0	0	33	0	9	0	0	0	0	177	0
4:15 PM		0	0	48	16	0	5	54	0	0	41	0	8	0	0	0	0	172	0
4:30 PM		**0**	**0**	**51**	**17**	**1**	**1**	**45**	**0**	**0**	**46**	**0**	**14**	**0**	**0**	**0**	**0**	**175**	0
4:45 PM		**0**	**0**	**43**	**14**	**0**	**3**	**38**	**0**	**0**	**40**	**0**	**8**	**0**	**0**	**0**	**0**	**146**	670
5:00 PM		**0**	**0**	**50**	**16**	**0**	**4**	**53**	**0**	**0**	**62**	**0**	**8**	**0**	**0**	**0**	**0**	**193**	686
5:15 PM		**0**	**0**	**55**	**19**	**0**	**2**	**53**	**0**	**0**	**62**	**0**	**14**	**0**	**0**	**0**	**0**	**205**	**719**
5:30 PM		0	0	55	20	0	4	45	0	0	31	0	8	0	0	0	0	163	707
5:45 PM		0	0	43	29	0	1	40	0	0	34	0	9	0	0	0	0	156	717
Count Total		0	0	405	152	3	21	379	0	0	349	0	78	0	0	0	0	1,387	0
Peak Hour	**All**	**0**	**0**	**199**	**66**	**1**	**10**	**189**	**0**	**0**	**210**	**0**	**44**	**0**	**0**	**0**	**0**	**719**	**0**
	HV	**0**	**0**	**6**	**0**	**0**	**0**	**6**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**0**
	HV%	**-**	**-**	**3%**	**0%**	**0%**	**0%**	**3%**	**-**	**-**	**1%**	**-**	**0%**	**-**	**-**	**-**	**-**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	2	1	0	*4*	0	0	0	0	*0*	2	1	5	2	*10*
4:15 PM	1	1	3	0	*5*	0	0	0	0	*0*	2	2	8	7	*19*
4:30 PM	**3**	**0**	**0**	**0**	***3***	**0**	**1**	**0**	**0**	***1***	**2**	**4**	**18**	**0**	*24*
4:45 PM	**0**	**3**	**0**	**0**	***3***	**1**	**0**	**0**	**0**	***1***	**6**	**2**	**3**	**6**	*17*
5:00 PM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**1**	**0**	***1***	**3**	**10**	**2**	**3**	*18*
5:15 PM	**2**	**3**	**2**	**0**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**8**	**0**	***10***
5:30 PM	1	0	0	0	*1*	0	0	0	0	*0*	5	5	5	0	*15*
5:45 PM	1	2	2	0	*5*	0	0	0	0	*0*	0	5	9	8	*22*
Count Total	10	11	8	0	*29*	1	1	1	0	*3*	20	31	58	26	*135*
Peak Hr	**6**	**6**	**2**	**0**	***14***	**1**	**1**	**1**	**0**	***3***	**11**	**18**	**31**	**9**	***69***

Project Manager: (415) 310-6469 project.manager.ca@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	8th St Eastbound				8th St Westbound				Pitkin Ave Northbound				N/A Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	1	0	0	0	2	0	0	1	0	0	0	0	0	0	4	0
4:15 PM	0	0	1	0	0	0	1	0	0	2	0	1	0	0	0	0	5	0
4:30 PM	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	15
5:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	12
5:15 PM	**0**	**0**	**2**	**0**	**0**	**0**	**3**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**14**
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	12
5:45 PM	0	0	1	0	0	0	2	0	0	1	0	1	0	0	0	0	5	14
Count Total	0	0	10	0	0	0	11	0	0	6	0	2	0	0	0	0	29	0
Peak Hour	**0**	**0**	**6**	**0**	**0**	**0**	**6**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**0**

Two-Hour Count Summaries - Bikes

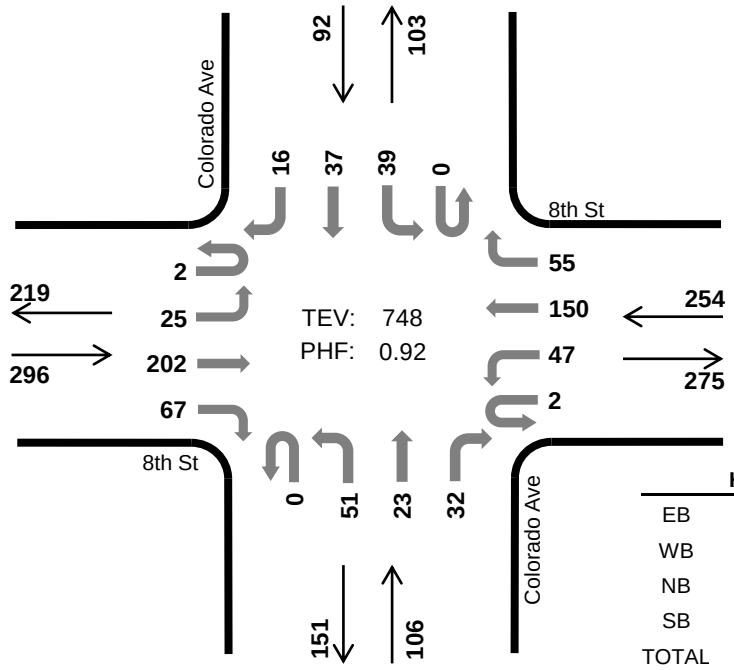
Interval Start	8th St Eastbound			8th St Westbound			Pitkin Ave Northbound			N/A Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
4:45 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	2
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	3
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	1	0	0	1	0	0	0	1	0	0	0	3	0
Peak Hour	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	**0**

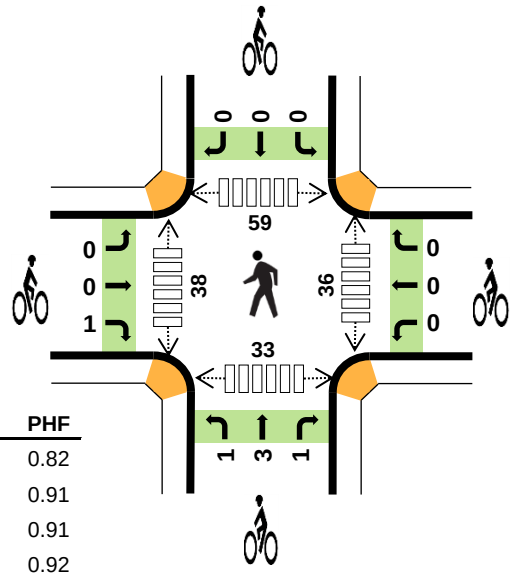
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Colorado Ave
8th St

Peak Hour

Date: 10/20/2022
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 11:45 AM to 12:45 PM





	HV %:	PHF
EB	2.4%	0.82
WB	0.8%	0.91
NB	4.7%	0.91
SB	0.0%	0.92
TOTAL	1.9%	0.92

Two-Hour Count Summaries

Interval Start	8th St Eastbound				8th St Westbound				Colorado Ave Northbound				Colorado Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
11:00 AM	0	4	46	13	1	5	24	9	0	9	3	4	0	13	4	4	139	0
11:15 AM	0	8	42	12	1	5	28	22	0	8	8	4	0	7	5	8	158	0
11:30 AM	0	7	41	18	0	9	38	15	0	13	3	6	0	5	12	6	173	0
11:45 AM	**0**	**6**	**50**	**13**	**0**	**12**	**34**	**8**	**0**	**12**	**4**	**11**	**0**	**10**	**9**	**3**	**172**	642
12:00 PM	**1**	**7**	**46**	**20**	**1**	**12**	**39**	**13**	**0**	**15**	**4**	**7**	**0**	**11**	**10**	**2**	**188**	691
12:15 PM	**1**	**5**	**64**	**20**	**0**	**9**	**39**	**17**	**0**	**13**	**6**	**5**	**0**	**11**	**10**	**4**	**204**	737
12:30 PM	**0**	**7**	**42**	**14**	**1**	**14**	**38**	**17**	**0**	**11**	**9**	**9**	**0**	**7**	**8**	**7**	**184**	**748**
12:45 PM	0	5	44	16	0	11	37	12	0	8	6	8	0	7	7	2	163	739
Count Total	2	49	375	126	4	77	277	113	0	89	43	54	0	71	65	36	1,381	0
Peak Hour All	**2**	**25**	**202**	**67**	**2**	**47**	**150**	**55**	**0**	**51**	**23**	**32**	**0**	**39**	**37**	**16**	**748**	**0**
Peak Hour HV	**0**	**0**	**4**	**3**	**0**	**0**	**2**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**0**
Peak Hour HV%	**0%**	**0%**	**2%**	**4%**	**0%**	**0%**	**1%**	**0%**	**-**	**10%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	6	0	2	0	*8*	0	0	0	0	*0*	7	10	6	1	*24*
11:15 AM	0	2	2	1	*5*	0	0	0	0	*0*	23	8	6	2	*39*
11:30 AM	2	1	3	1	*7*	0	0	0	0	*0*	10	1	12	17	*40*
11:45 AM	**1**	**0**	**2**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**5**	**13**	**7**	**8**	*33*
12:00 PM	**3**	**2**	**2**	**0**	***7***	**1**	**0**	**1**	**0**	***2***	**8**	**8**	**16**	**4**	*36*
12:15 PM	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**11**	**11**	**19**	**15**	*56*
12:30 PM	**1**	**0**	**1**	**0**	***2***	**0**	**0**	**4**	**0**	***4***	**12**	**6**	**17**	**6**	***41***
12:45 PM	2	4	0	0	*6*	0	0	0	0	*0*	18	20	28	13	*79*
Count Total	17	9	12	2	*40*	1	0	5	0	*6*	94	77	111	66	*348*
Peak Hour	**7**	**2**	**5**	**0**	***14***	**1**	**0**	**5**	**0**	***6***	**36**	**38**	**59**	**33**	***166***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	8th St Eastbound				8th St Westbound				Colorado Ave Northbound				Colorado Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
11:00 AM	0	0	4	2	0	0	0	0	0	2	0	0	0	0	0	0	8	0
11:15 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	1	0	0	5	0
11:30 AM	0	0	2	0	0	0	0	1	0	2	1	0	0	0	1	0	7	0
11:45 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	23
12:00 PM	**0**	**0**	**2**	**1**	**0**	**0**	**2**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	22
12:15 PM	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	19
12:30 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**14**
12:45 PM	0	0	0	2	0	0	4	0	0	0	0	0	0	0	0	0	6	17
Count Total	0	0	10	7	0	0	8	1	0	11	1	0	0	1	1	0	40	0
Peak Hour	**0**	**0**	**4**	**3**	**0**	**0**	**2**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**0**

Two-Hour Count Summaries - Bikes

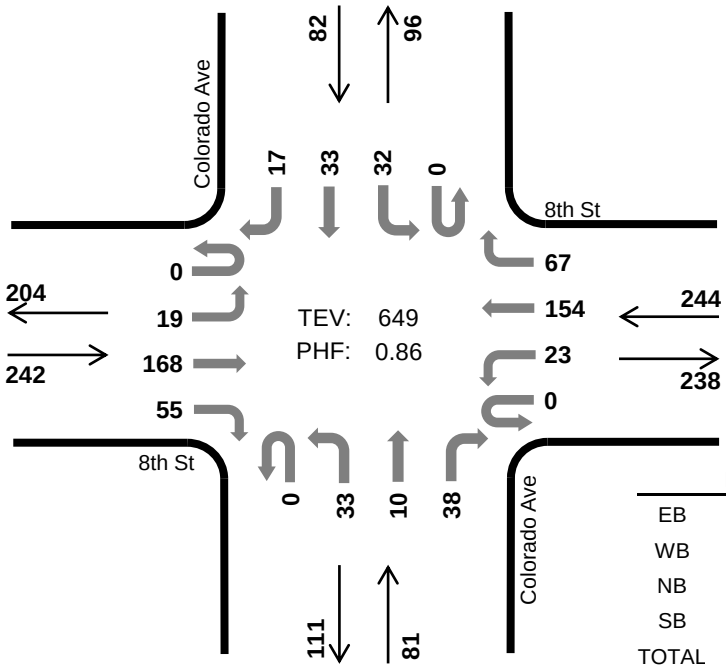
Interval Start	8th St Eastbound			8th St Westbound			Colorado Ave Northbound			Colorado Ave Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
12:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	2
12:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
12:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**4**	**6**
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Count Total	0	0	1	0	0	0	1	3	1	0	0	0	6	0
Peak Hour	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**3**	**1**	**0**	**0**	**0**	**6**	**0**

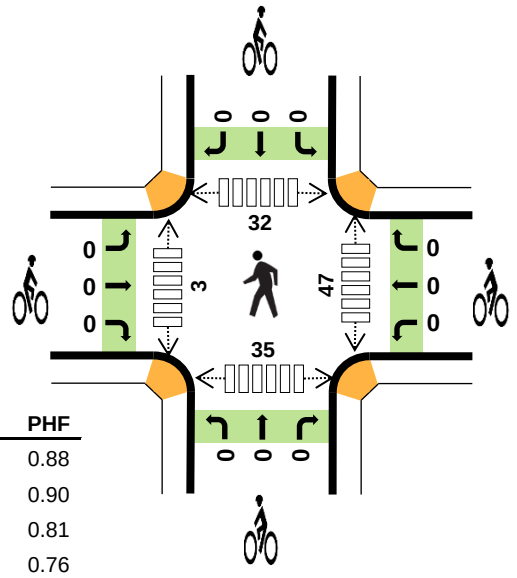
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Colorado Ave
8th St

Peak Hour

Date: 10/20/2022
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM





	HV %:	PHF
EB	2.5%	0.88
WB	0.4%	0.90
NB	8.6%	0.81
SB	0.0%	0.76
TOTAL	2.2%	0.86

Two-Hour Count Summaries

Interval Start	8th St Eastbound				8th St Westbound				Colorado Ave Northbound				Colorado Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	6	49	17	0	4	42	15	0	10	1	11	0	8	5	4	172	0
4:15 PM	0	6	38	10	1	4	37	10	0	18	2	12	0	4	5	3	150	0
4:30 PM	0	7	42	17	0	12	31	13	0	11	1	8	0	12	5	1	160	0
4:45 PM	0	6	35	10	1	10	34	8	0	6	3	6	0	11	1	3	134	616
5:00 PM	**0**	**2**	**43**	**15**	**0**	**5**	**40**	**14**	**0**	**13**	**1**	**8**	**0**	**6**	**6**	**6**	**159**	603
5:15 PM	**0**	**7**	**47**	**15**	**0**	**5**	**39**	**24**	**0**	**11**	**2**	**12**	**0**	**13**	**11**	**3**	**189**	642
5:30 PM	**0**	**6**	**41**	**13**	**0**	**10**	**40**	**15**	**0**	**4**	**4**	**11**	**0**	**6**	**6**	**6**	**162**	644
5:45 PM	**0**	**4**	**37**	**12**	**0**	**3**	**35**	**14**	**0**	**5**	**3**	**7**	**0**	**7**	**10**	**2**	**139**	**649**
Count Total	0	44	332	109	2	53	298	113	0	78	17	75	0	67	49	28	1,265	0
Peak Hour All	**0**	**19**	**168**	**55**	**0**	**23**	**154**	**67**	**0**	**33**	**10**	**38**	**0**	**32**	**33**	**17**	**649**	**0**
Peak Hour HV	**0**	**0**	**0**	**6**	**0**	**1**	**0**	**0**	**0**	**6**	**0**	**1**	**0**	**0**	**0**	**0**	**14**	**0**
Peak Hour HV%	**-**	**0%**	**0%**	**11%**	**-**	**4%**	**0%**	**0%**	**-**	**18%**	**0%**	**3%**	**-**	**0%**	**0%**	**0%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	0	2	1	*4*	0	0	0	0	*0*	6	4	6	7	*23*
4:15 PM	1	0	1	1	*3*	0	0	0	0	*0*	13	11	7	15	*46*
4:30 PM	2	3	2	0	*7*	0	0	2	0	*2*	13	5	15	1	*34*
4:45 PM	1	1	2	1	*5*	1	0	1	0	*2*	4	0	7	2	*13*
5:00 PM	**1**	**1**	**3**	**0**	***5***	**0**	**0**	**0**	**0**	***0***	**7**	**2**	**1**	**6**	*16*
5:15 PM	**2**	**0**	**2**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**13**	**0**	**12**	**7**	*32*
5:30 PM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**7**	**1**	**6**	**14**	*28*
5:45 PM	**2**	**0**	**2**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**20**	**0**	**13**	**8**	***41***
Count Total	11	5	14	3	*33*	1	0	3	0	*4*	83	23	67	60	*233*
Peak Hour	**6**	**1**	**7**	**0**	***14***	**0**	**0**	**0**	**0**	***0***	**47**	**3**	**32**	**35**	***117***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	8th St Eastbound				8th St Westbound				Colorado Ave Northbound				Colorado Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	1	0	0	0	0	0	2	0	0	0	0	1	0	4	0
4:15 PM	0	0	0	1	0	0	0	0	0	1	0	0	0	0	1	0	3	0
4:30 PM	0	0	0	2	0	1	0	2	0	1	0	1	0	0	0	0	7	0
4:45 PM	0	0	0	1	0	0	0	1	0	2	0	0	0	1	0	0	5	19
5:00 PM	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**5**	20
5:15 PM	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	21
5:30 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	15
5:45 PM	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**14**
Count Total	0	0	0	11	0	2	0	3	0	12	0	2	0	1	2	0	33	0
Peak Hour	**0**	**0**	**0**	**6**	**0**	**1**	**0**	**0**	**0**	**6**	**0**	**1**	**0**	**0**	**0**	**0**	**14**	**0**

Two-Hour Count Summaries - Bikes

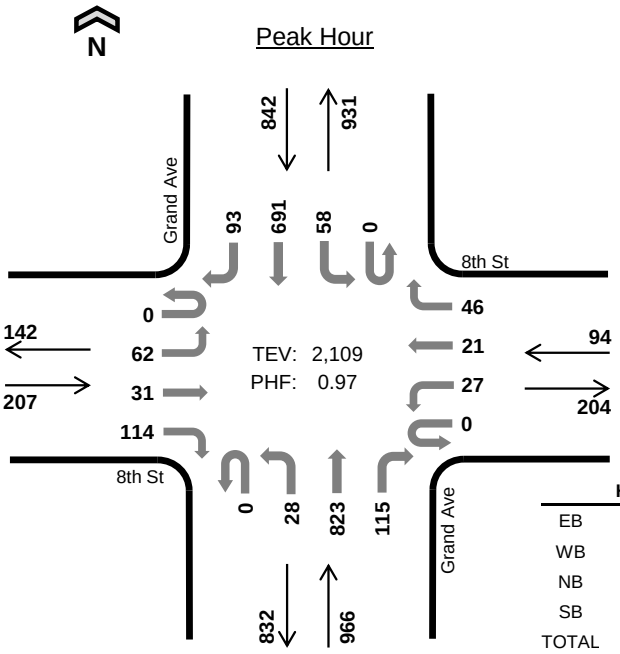
Interval Start	8th St Eastbound			8th St Westbound			Colorado Ave Northbound			Colorado Ave Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	1	1	0	0	0	0	2	0
4:45 PM	0	1	0	0	0	0	0	1	0	0	0	0	2	4
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	4
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	4
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	0	1	0	0	0	0	1	2	0	0	0	0	4	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

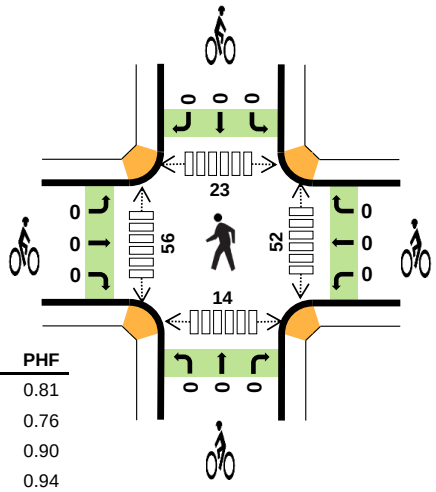
Grand Ave
8th St

Peak Hour

Date: 11/02/2022
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 12:00 PM to 1:00 PM



	HV %:	PHF
EB	0.5%	0.81
WB	3.2%	0.76
NB	5.5%	0.90
SB	6.8%	0.94
TOTAL	5.4%	0.97



Two-Hour Count Summaries

Interval Start	8th St Eastbound				8th St Westbound				Grand Ave Northbound				Grand Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
11:00 AM	0	17	8	28	0	4	4	13	0	18	187	12	0	8	147	15	461	0
11:15 AM	0	17	5	29	0	7	8	12	0	6	187	17	0	8	175	18	489	0
11:30 AM	0	24	10	34	0	6	1	13	0	10	201	23	0	14	149	19	504	0
11:45 AM	0	22	8	33	0	3	3	6	0	10	178	26	0	15	164	22	490	1,944
12:00 PM	**0**	**14**	**6**	**28**	**0**	**5**	**4**	**10**	**0**	**7**	**194**	**35**	**0**	**11**	**183**	**21**	**518**	2,001
12:15 PM	**0**	**19**	**6**	**27**	**0**	**7**	**4**	**7**	**0**	**7**	**205**	**19**	**0**	**12**	**170**	**24**	**507**	2,019
12:30 PM	**0**	**11**	**5**	**27**	**0**	**11**	**6**	**14**	**0**	**8**	**231**	**28**	**0**	**16**	**162**	**20**	**539**	2,054
12:45 PM	**0**	**18**	**14**	**32**	**0**	**4**	**7**	**15**	**0**	**6**	**193**	**33**	**0**	**19**	**176**	**28**	**545**	**2,109**
Count Total	0	142	62	238	0	47	37	90	0	72	1,576	193	0	103	1,326	167	4,053	0
Peak Hour **All**	**0**	**62**	**31**	**114**	**0**	**27**	**21**	**46**	**0**	**28**	**823**	**115**	**0**	**58**	**691**	**93**	**2,109**	**0**
Peak Hour **HV**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**2**	**0**	**1**	**52**	**0**	**0**	**0**	**55**	**2**	**114**	**0**
Peak Hour **HV%**	**-**	**2%**	**0%**	**0%**	**-**	**4%**	**0%**	**4%**	**-**	**4%**	**6%**	**0%**	**-**	**0%**	**8%**	**2%**	**5%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	1	1	20	14	*36*	0	0	0	0	*0*	4	6	2	0	*12*
11:15 AM	0	0	16	11	*27*	0	0	0	0	*0*	4	12	6	5	*27*
11:30 AM	1	0	16	10	*27*	0	0	0	0	*0*	7	10	12	5	*34*
11:45 AM	1	2	16	16	*35*	0	0	0	0	*0*	6	14	2	3	*25*
12:00 PM	**0**	**0**	**9**	**15**	***24***	**0**	**0**	**0**	**0**	***0***	**8**	**16**	**1**	**2**	*27*
12:15 PM	**0**	**3**	**18**	**11**	***32***	**0**	**0**	**0**	**0**	***0***	**20**	**13**	**0**	**5**	*38*
12:30 PM	**0**	**0**	**16**	**17**	***33***	**0**	**0**	**0**	**0**	***0***	**11**	**14**	**6**	**4**	*35*
12:45 PM	**1**	**0**	**10**	**14**	***25***	**0**	**0**	**0**	**0**	***0***	**13**	**13**	**16**	**3**	***45***
Count Total	4	6	121	108	*239*	0	0	0	0	*0*	73	98	45	27	*243*
Peak Hour	**1**	**3**	**53**	**57**	***114***	**0**	**0**	**0**	**0**	***0***	**52**	**56**	**23**	**14**	***145***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	8th St Eastbound				8th St Westbound				Grand Ave Northbound				Grand Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
11:00 AM	0	0	0	1	0	0	0	1	0	1	19	0	0	1	12	1	36	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	16	0	0	0	11	0	27	0
11:30 AM	0	1	0	0	0	0	0	0	0	0	16	0	0	0	9	1	27	0
11:45 AM	0	0	0	1	0	1	0	1	0	1	15	0	0	0	16	0	35	125
12:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**15**	**0**	**24**	113
12:15 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**0**	**1**	**17**	**0**	**0**	**0**	**11**	**0**	**32**	118
12:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**16**	**0**	**0**	**0**	**17**	**0**	**33**	124
12:45 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**12**	**2**	**25**	**114**
Count Total	0	2	0	2	0	2	0	4	0	3	118	0	0	1	103	4	239	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**2**	**0**	**1**	**52**	**0**	**0**	**0**	**55**	**2**	**114**	**0**

Two-Hour Count Summaries - Bikes

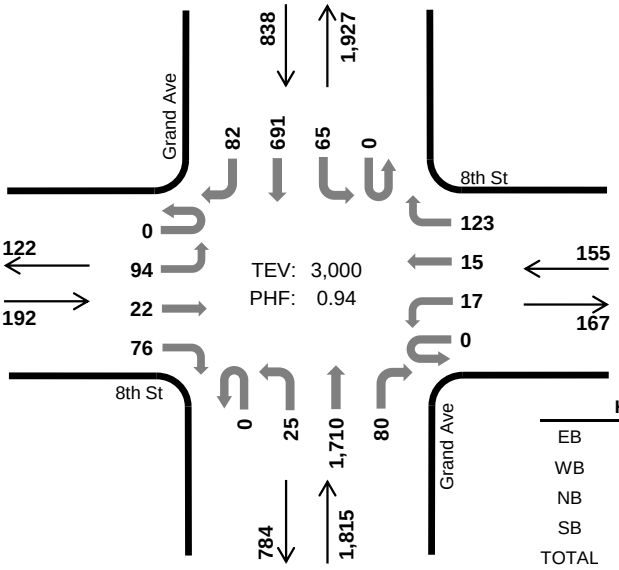
Interval Start	8th St Eastbound			8th St Westbound			Grand Ave Northbound			Grand Ave Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
12:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
12:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
12:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

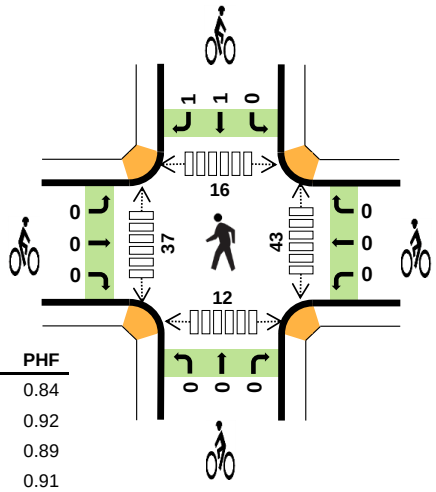
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Grand Ave
8th St

Date: 11/02/2022
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM

Peak Hour





	HV %:	PHF
EB	0.0%	0.84
WB	1.3%	0.92
NB	1.9%	0.89
SB	3.7%	0.91
TOTAL	2.2%	0.94

Two-Hour Count Summaries

Interval Start		8th St Eastbound				8th St Westbound				Grand Ave Northbound				Grand Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	24	8	26	0	5	9	19	0	3	326	39	0	11	143	21	634	0
4:15 PM		0	20	8	24	0	7	4	18	0	10	367	32	0	11	146	20	667	0
4:30 PM		0	29	3	14	0	2	4	21	0	5	413	23	0	16	160	21	711	0
4:45 PM		0	31	6	26	0	5	4	18	0	2	388	27	0	18	154	20	699	2,711
5:00 PM		**0**	**20**	**8**	**16**	**0**	**7**	**3**	**32**	**0**	**5**	**489**	**17**	**0**	**15**	**171**	**18**	**801**	2,878
5:15 PM		**0**	**25**	**3**	**27**	**0**	**2**	**2**	**33**	**0**	**5**	**413**	**19**	**0**	**11**	**171**	**19**	**730**	2,941
5:30 PM		**0**	**16**	**5**	**15**	**0**	**5**	**5**	**30**	**0**	**8**	**436**	**17**	**0**	**20**	**182**	**27**	**766**	2,996
5:45 PM		**0**	**33**	**6**	**18**	**0**	**3**	**5**	**28**	**0**	**7**	**372**	**27**	**0**	**19**	**167**	**18**	**703**	**3,000**
Count Total		0	198	47	166	0	36	36	199	0	45	3,204	201	0	121	1,294	164	5,711	0
Peak Hour	**All**	**0**	**94**	**22**	**76**	**0**	**17**	**15**	**123**	**0**	**25**	**1,710**	**80**	**0**	**65**	**691**	**82**	**3,000**	**0**
	HV	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**1**	**33**	**0**	**0**	**0**	**30**	**1**	**67**	**0**
	HV%	**-**	**0%**	**0%**	**0%**	**-**	**6%**	**0%**	**1%**	**-**	**4%**	**2%**	**0%**	**-**	**0%**	**4%**	**1%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	9	8	*17*	0	0	0	0	*0*	11	6	9	4	*30*
4:15 PM	0	1	12	8	*21*	0	0	0	0	*0*	12	6	9	5	*32*
4:30 PM	0	0	9	11	*20*	0	0	0	0	*0*	13	13	6	6	*38*
4:45 PM	0	0	10	6	*16*	0	0	0	0	*0*	7	12	4	3	*26*
5:00 PM	**0**	**0**	**7**	**8**	***15***	**0**	**0**	**0**	**0**	***0***	**14**	**12**	**9**	**6**	*41*
5:15 PM	**0**	**0**	**12**	**10**	***22***	**0**	**0**	**0**	**0**	***0***	**9**	**12**	**7**	**2**	*30*
5:30 PM	**0**	**2**	**8**	**9**	***19***	**0**	**0**	**0**	**0**	***0***	**8**	**9**	**0**	**1**	*18*
5:45 PM	**0**	**0**	**7**	**4**	***11***	**0**	**0**	**0**	**2**	***2***	**12**	**4**	**0**	**3**	***19***
Count Total	0	3	74	64	*141*	0	0	0	2	*2*	86	74	44	30	*234*
Peak Hour	**0**	**2**	**34**	**31**	***67***	**0**	**0**	**0**	**2**	***2***	**43**	**37**	**16**	**12**	***108***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	8th St Eastbound				8th St Westbound				Grand Ave Northbound				Grand Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	9	0	0	0	8	0	17	0
4:15 PM	0	0	0	0	0	1	0	0	0	1	11	0	0	0	7	1	21	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	9	0	0	1	10	0	20	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	10	0	0	0	6	0	16	74
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**8**	**0**	**15**	72
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	**0**	**0**	**0**	**10**	**0**	**22**	73
5:30 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**1**	**7**	**0**	**0**	**0**	**8**	**1**	**19**	72
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**4**	**0**	**11**	**67**
Count Total	0	0	0	0	0	2	0	1	0	2	72	0	0	1	61	2	141	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**1**	**33**	**0**	**0**	**0**	**30**	**1**	**67**	**0**

Two-Hour Count Summaries - Bikes

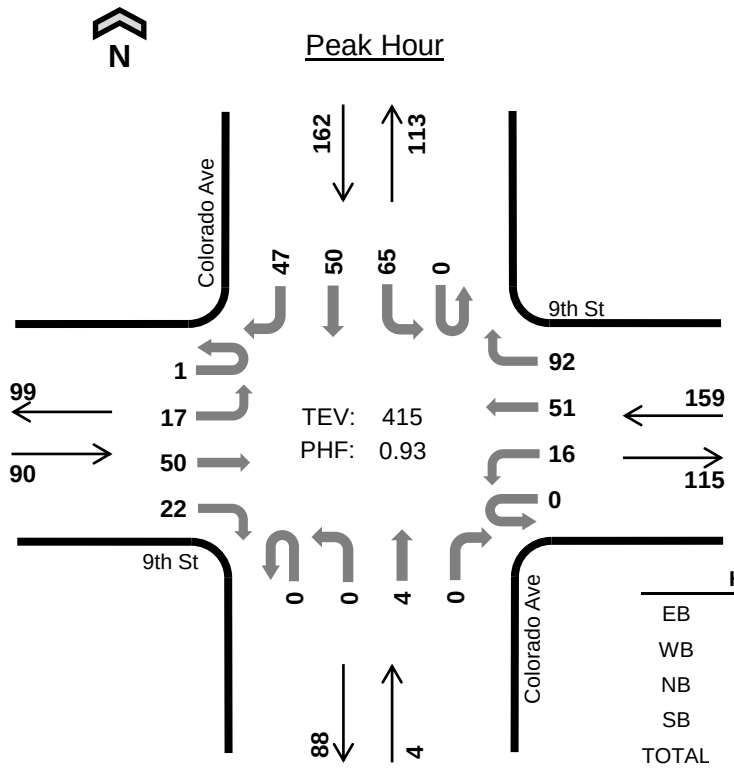
Interval Start	8th St Eastbound			8th St Westbound			Grand Ave Northbound			Grand Ave Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**2**	**2**
Count Total	0	0	0	0	0	0	0	0	0	0	1	1	2	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**2**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

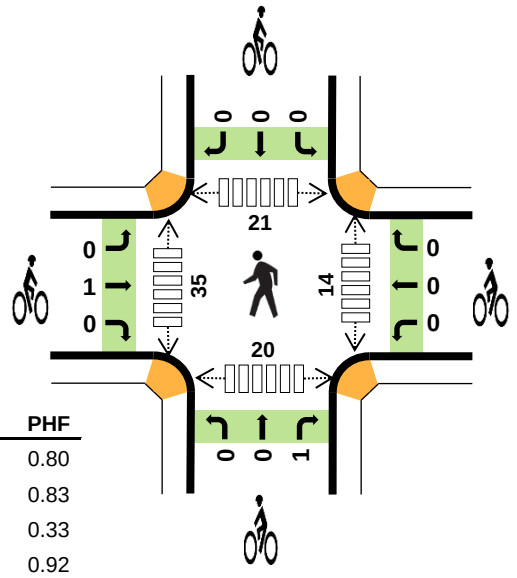
Colorado Ave
9th St

Peak Hour

Date: 10/20/2022
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 11:45 AM to 12:45 PM



	HV %:	PHF
EB	0.0%	0.80
WB	3.1%	0.83
NB	0.0%	0.33
SB	2.5%	0.92
TOTAL	2.2%	0.93



Two-Hour Count Summaries

Interval Start	9th St Eastbound				9th St Westbound				Colorado Ave Northbound				Colorado Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
11:00 AM	0	2	7	4	1	2	10	15	0	0	0	0	0	10	13	5	69	0
11:15 AM	0	3	7	3	0	2	9	16	0	0	0	0	0	8	4	8	60	0
11:30 AM	0	5	9	3	0	6	5	15	0	0	1	0	2	11	11	11	79	0
11:45 AM	**1**	**4**	**15**	**8**	**0**	**2**	**16**	**21**	**0**	**0**	**1**	**0**	**0**	**17**	**11**	**11**	**107**	315
12:00 PM	**0**	**6**	**15**	**5**	**0**	**4**	**10**	**21**	**0**	**0**	**0**	**0**	**0**	**14**	**17**	**13**	**105**	351
12:15 PM	**0**	**4**	**12**	**6**	**0**	**9**	**12**	**27**	**0**	**0**	**0**	**0**	**0**	**20**	**10**	**11**	**111**	402
12:30 PM	**0**	**3**	**8**	**3**	**0**	**1**	**13**	**23**	**0**	**0**	**3**	**0**	**0**	**14**	**12**	**12**	**92**	**415**
12:45 PM	0	4	4	4	0	3	14	14	0	0	0	0	0	15	22	9	89	397
Count Total	1	31	77	36	1	29	89	152	0	0	5	0	2	109	100	80	712	0
Peak Hour **All**	**1**	**17**	**50**	**22**	**0**	**16**	**51**	**92**	**0**	**0**	**4**	**0**	**0**	**65**	**50**	**47**	**415**	**0**
Peak Hour **HV**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**1**	**9**	**0**
Peak Hour **HV%**	**0%**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**5%**	**-**	**-**	**0%**	**-**	**-**	**5%**	**0%**	**2%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	1	2	0	2	*5*	0	0	0	0	*0*	7	11	2	7	*27*
11:15 AM	0	2	0	0	*2*	0	0	0	0	*0*	15	6	4	4	*29*
11:30 AM	0	3	0	0	*3*	0	1	0	0	*1*	3	5	7	3	*18*
11:45 AM	**0**	**2**	**0**	**1**	***3***	**0**	**0**	**0**	**0**	***0***	**1**	**14**	**3**	**4**	*22*
12:00 PM	**0**	**3**	**0**	**1**	***4***	**1**	**0**	**0**	**0**	***1***	**4**	**6**	**10**	**6**	*26*
12:15 PM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**7**	**1**	**5**	*13*
12:30 PM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**1**	**0**	***1***	**9**	**8**	**7**	**5**	***29***
12:45 PM	0	1	0	2	*3*	0	0	0	0	*0*	1	10	19	4	*34*
Count Total	1	13	0	8	*22*	1	1	1	0	*3*	40	67	53	38	*198*
Peak Hour	**0**	**5**	**0**	**4**	***9***	**1**	**0**	**1**	**0**	***2***	**14**	**35**	**21**	**20**	***90***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	9th St Eastbound				9th St Westbound				Colorado Ave Northbound				Colorado Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
11:00 AM	0	0	1	0	0	0	0	2	0	0	0	0	0	2	0	0	5	0
11:15 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0
11:30 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	0
11:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**3**	13
12:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**4**	12
12:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	11
12:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**9**
12:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	3	9
Count Total	0	0	1	0	0	0	1	12	0	0	0	0	0	7	0	1	22	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**1**	**9**	**0**

Two-Hour Count Summaries - Bikes

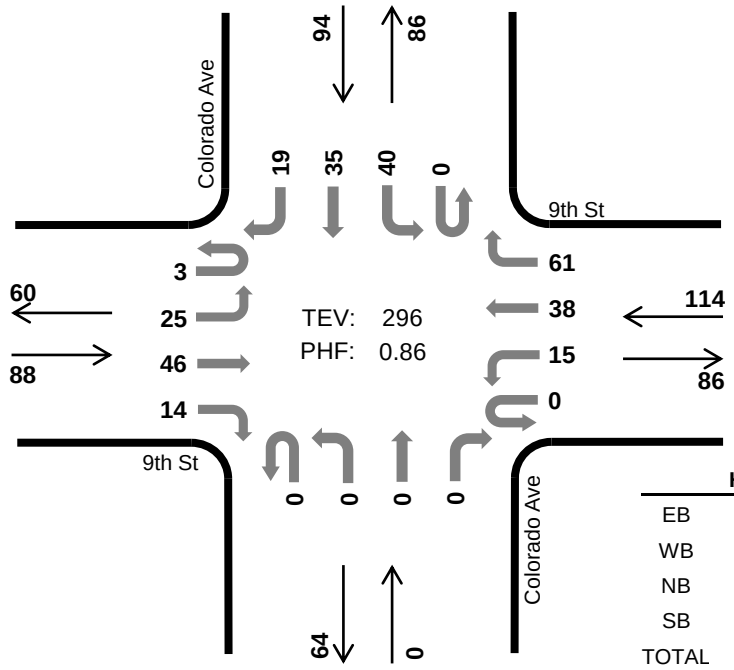
Interval Start	9th St Eastbound			9th St Westbound			Colorado Ave Northbound			Colorado Ave Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
11:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
12:00 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	2
12:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
12:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**2**
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	0	1	0	0	1	0	0	0	1	0	0	0	3	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

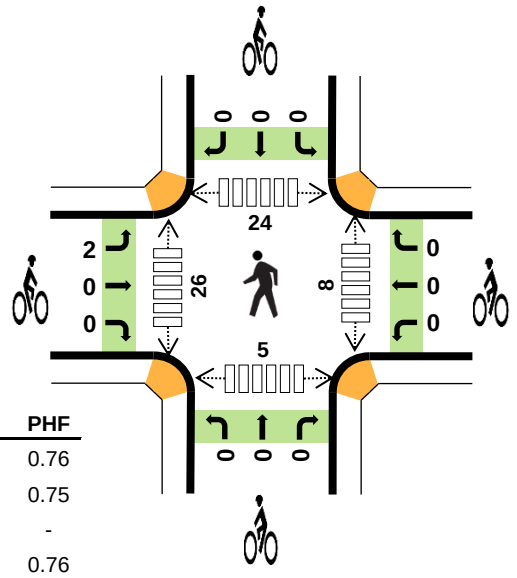
Colorado Ave
9th St

Peak Hour

Date: 10/20/2022
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM



	HV %:	PHF
EB	2.3%	0.76
WB	6.1%	0.75
NB	-	-
SB	6.4%	0.76
TOTAL	5.1%	0.86



Two-Hour Count Summaries

Interval Start	9th St Eastbound				9th St Westbound				Colorado Ave Northbound				Colorado Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	3	12	2	0	3	5	18	0	0	1	0	1	11	11	5	72	0
4:15 PM	**2**	**7**	**14**	**6**	**0**	**6**	**10**	**22**	**0**	**0**	**0**	**0**	**0**	**7**	**6**	**6**	**86**	0
4:30 PM	**1**	**7**	**7**	**2**	**0**	**4**	**7**	**11**	**0**	**0**	**0**	**0**	**0**	**15**	**9**	**7**	**70**	0
4:45 PM	**0**	**4**	**8**	**1**	**0**	**4**	**13**	**11**	**0**	**0**	**0**	**0**	**0**	**11**	**9**	**1**	**62**	290
5:00 PM	**0**	**7**	**17**	**5**	**0**	**1**	**8**	**17**	**0**	**0**	**0**	**0**	**0**	**7**	**11**	**5**	**78**	**296**
5:15 PM	0	3	14	5	0	5	10	13	0	0	0	0	0	21	9	3	83	293
5:30 PM	0	1	10	3	0	1	2	15	0	0	0	0	0	15	9	3	59	282
5:45 PM	0	3	16	4	0	4	8	10	0	0	0	0	0	15	11	1	72	292
Count Total	3	35	98	28	0	28	63	117	0	0	1	0	1	102	75	31	582	0
Peak Hour All	**3**	**25**	**46**	**14**	**0**	**15**	**38**	**61**	**0**	**0**	**0**	**0**	**0**	**40**	**35**	**19**	**296**	**0**
Peak Hour HV	**0**	**0**	**1**	**1**	**0**	**0**	**1**	**6**	**0**	**0**	**0**	**0**	**0**	**3**	**1**	**2**	**15**	**0**
Peak Hour HV%	**0%**	**0%**	**2%**	**7%**	**-**	**0%**	**3%**	**10%**	**-**	**-**	**-**	**-**	**-**	**8%**	**3%**	**11%**	**5%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	2	0	1	*4*	0	0	0	0	*0*	3	6	4	3	*16*
4:15 PM	**0**	**1**	**0**	**2**	***3***	**0**	**0**	**0**	**0**	***0***	**2**	**11**	**1**	**2**	*16*
4:30 PM	**0**	**1**	**0**	**2**	***3***	**1**	**0**	**0**	**0**	***1***	**4**	**4**	**5**	**2**	*15*
4:45 PM	**1**	**2**	**0**	**1**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**3**	**5**	**0**	*8*
5:00 PM	**1**	**3**	**0**	**1**	***5***	**1**	**0**	**0**	**0**	***1***	**2**	**8**	**13**	**1**	***24***
5:15 PM	0	1	0	2	*3*	0	0	0	0	*0*	3	0	1	2	*6*
5:30 PM	0	1	0	1	*2*	0	0	0	0	*0*	2	3	0	0	*5*
5:45 PM	2	1	0	2	*5*	0	0	0	0	*0*	3	0	7	1	*11*
Count Total	5	12	0	12	*29*	2	0	0	0	*2*	19	35	36	11	*101*
Peak Hour	**2**	**7**	**0**	**6**	***15***	**2**	**0**	**0**	**0**	***2***	**8**	**26**	**24**	**5**	***63***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	9th St Eastbound				9th St Westbound				Colorado Ave Northbound				Colorado Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	1	0	0	0	0	2	0	0	0	0	0	1	0	0	4	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**3**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**3**	0
4:45 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**4**	14
5:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**5**	**15**
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	1	3	15
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2	14
5:45 PM	0	0	1	1	0	0	0	1	0	0	0	0	0	1	1	0	5	15
Count Total	0	0	3	2	0	0	1	11	0	0	0	0	0	7	2	3	29	0
Peak Hour	**0**	**0**	**1**	**1**	**0**	**0**	**1**	**6**	**0**	**0**	**0**	**0**	**0**	**3**	**1**	**2**	**15**	**0**

Two-Hour Count Summaries - Bikes

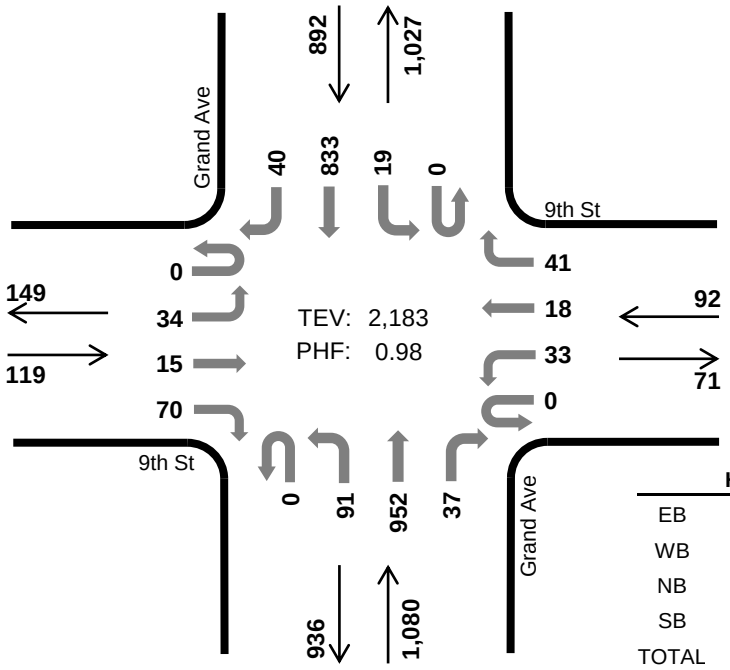
Interval Start	9th St Eastbound			9th St Westbound			Colorado Ave Northbound			Colorado Ave Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:30 PM	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:00 PM	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	2	0	0	0	0	0	0	0	0	0	0	0	2	0
Peak Hour	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

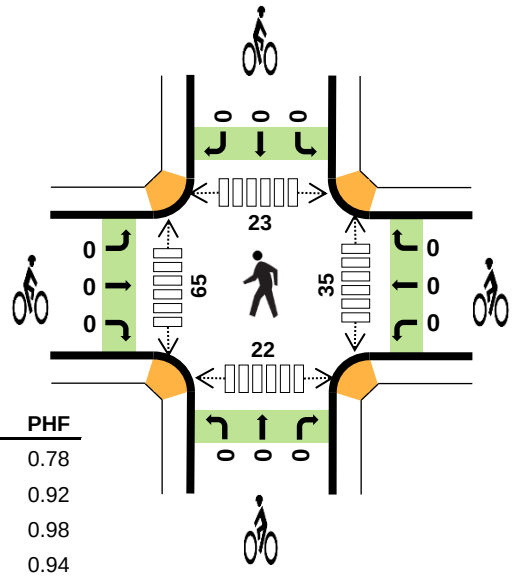
Grand Ave
9th St

Peak Hour

Date: 10/20/2022
Count Period: 11:00 AM to 1:00 PM
Peak Hour: 11:45 AM to 12:45 PM



	HV %:	PHF
EB	2.5%	0.78
WB	0.0%	0.92
NB	6.9%	0.98
SB	6.1%	0.94
TOTAL	6.0%	0.98



Two-Hour Count Summaries

Interval Start	9th St Eastbound				9th St Westbound				Grand Ave Northbound				Grand Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
11:00 AM	0	4	0	11	0	11	2	10	0	20	197	4	0	6	221	6	492	0
11:15 AM	0	5	0	13	0	8	2	6	0	15	225	6	0	2	186	6	474	0
11:30 AM	0	8	2	13	0	8	4	6	0	13	194	7	0	6	181	8	450	0
11:45 AM	**0**	**9**	**2**	**18**	**0**	**6**	**5**	**10**	**0**	**19**	**234**	**16**	**0**	**2**	**211**	**14**	**546**	1,962
12:00 PM	**0**	**7**	**5**	**16**	**0**	**14**	**2**	**6**	**0**	**21**	**244**	**6**	**0**	**5**	**221**	**10**	**557**	2,027
12:15 PM	**0**	**11**	**3**	**24**	**0**	**7**	**7**	**11**	**0**	**27**	**228**	**9**	**0**	**3**	**204**	**9**	**543**	2,096
12:30 PM	**0**	**7**	**5**	**12**	**0**	**6**	**4**	**14**	**0**	**24**	**246**	**6**	**0**	**9**	**197**	**7**	**537**	**2,183**
12:45 PM	0	4	1	15	0	4	3	8	0	22	229	10	0	7	209	8	520	2,157
Count Total	0	55	18	122	0	64	29	71	0	161	1,797	64	0	40	1,630	68	4,119	0
Peak Hour All	**0**	**34**	**15**	**70**	**0**	**33**	**18**	**41**	**0**	**91**	**952**	**37**	**0**	**19**	**833**	**40**	**2,183**	**0**
Peak Hour HV	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**7**	**67**	**0**	**0**	**0**	**54**	**0**	**131**	**0**
Peak Hour HV%	**-**	**0%**	**0%**	**4%**	**-**	**0%**	**0%**	**0%**	**-**	**8%**	**7%**	**0%**	**-**	**0%**	**6%**	**0%**	**6%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:00 AM	3	2	19	20	*44*	0	0	0	0	*0*	13	12	4	9	*38*
11:15 AM	0	0	31	18	*49*	0	0	0	0	*0*	8	15	2	3	*28*
11:30 AM	0	0	20	17	*37*	0	1	0	0	*1*	11	4	16	3	*34*
11:45 AM	**1**	**0**	**20**	**18**	***39***	**0**	**0**	**0**	**0**	***0***	**7**	**5**	**3**	**2**	*17*
12:00 PM	**1**	**0**	**19**	**11**	***31***	**0**	**0**	**0**	**0**	***0***	**8**	**17**	**6**	**1**	*32*
12:15 PM	**1**	**0**	**15**	**15**	***31***	**0**	**0**	**0**	**0**	***0***	**8**	**21**	**6**	**5**	*40*
12:30 PM	**0**	**0**	**20**	**10**	***30***	**0**	**0**	**0**	**0**	***0***	**12**	**22**	**8**	**14**	***56***
12:45 PM	2	1	29	15	*47*	0	0	0	0	*0*	8	17	11	6	*42*
Count Total	8	3	173	124	*308*	0	1	0	0	*1*	75	113	56	43	*287*
Peak Hour	**3**	**0**	**74**	**54**	***131***	**0**	**0**	**0**	**0**	***0***	**35**	**65**	**23**	**22**	***145***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	9th St Eastbound				9th St Westbound				Grand Ave Northbound				Grand Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
11:00 AM	0	1	0	2	0	1	0	1	0	2	17	0	0	0	20	0	44	0
11:15 AM	0	0	0	0	0	0	0	0	0	3	28	0	0	0	18	0	49	0
11:30 AM	0	0	0	0	0	0	0	0	0	2	18	0	0	0	16	1	37	0
11:45 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	**17**	**0**	**0**	**0**	**18**	**0**	**39**	169
12:00 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	**16**	**0**	**0**	**0**	**11**	**0**	**31**	156
12:15 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**15**	**0**	**0**	**0**	**15**	**0**	**31**	138
12:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**19**	**0**	**0**	**0**	**10**	**0**	**30**	**131**
12:45 PM	0	0	0	2	0	0	0	1	0	1	27	1	0	0	14	1	47	139
Count Total	0	1	0	7	0	1	0	2	0	15	157	1	0	0	122	2	308	0
Peak Hour	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**7**	**67**	**0**	**0**	**0**	**54**	**0**	**131**	**0**

Two-Hour Count Summaries - Bikes

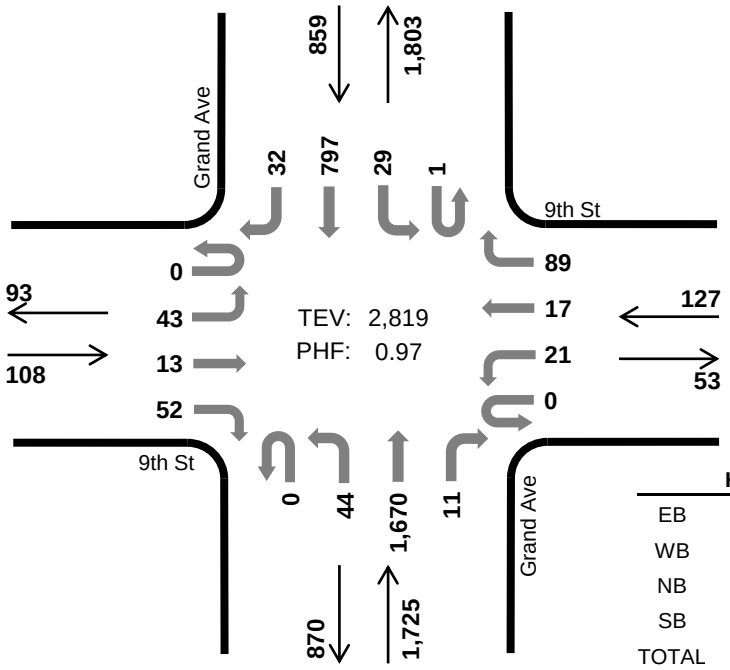
Interval Start	9th St Eastbound			9th St Westbound			Grand Ave Northbound			Grand Ave Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
11:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
12:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
12:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
12:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

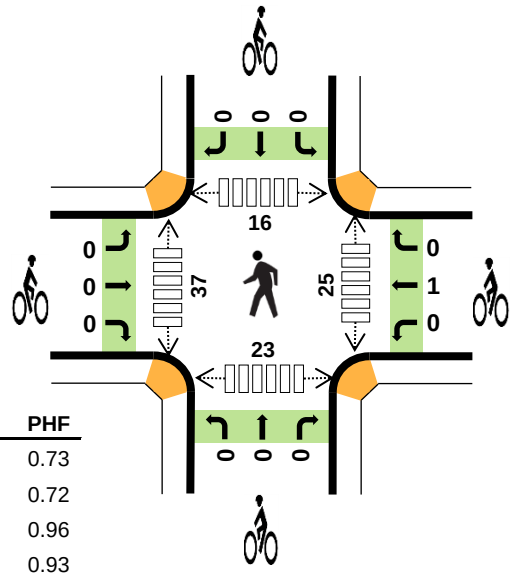
Grand Ave
9th St

Peak Hour

Date: 10/20/2022
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV %:	PHF
EB	3.7%	0.73
WB	0.0%	0.72
NB	4.8%	0.96
SB	3.3%	0.93
TOTAL	4.1%	0.97



Two-Hour Count Summaries

Interval Start	9th St Eastbound				9th St Westbound				Grand Ave Northbound				Grand Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	10	2	11	0	6	3	23	0	11	347	7	0	8	190	6	624	0
4:15 PM	0	8	2	10	0	5	2	14	0	22	394	2	0	4	191	8	662	0
4:30 PM	**0**	**8**	**2**	**13**	**0**	**3**	**2**	**16**	**0**	**13**	**431**	**4**	**0**	**5**	**190**	**4**	**691**	0
4:45 PM	**0**	**11**	**3**	**7**	**0**	**6**	**5**	**18**	**0**	**15**	**422**	**2**	**0**	**12**	**191**	**8**	**700**	2,677
5:00 PM	**0**	**12**	**4**	**11**	**0**	**7**	**5**	**21**	**0**	**9**	**425**	**3**	**0**	**2**	**221**	**9**	**729**	2,782
5:15 PM	**0**	**12**	**4**	**21**	**0**	**5**	**5**	**34**	**0**	**7**	**392**	**2**	**1**	**10**	**195**	**11**	**699**	**2,819**
5:30 PM	0	12	1	13	0	6	2	24	0	7	408	4	0	7	179	13	676	2,804
5:45 PM	0	11	4	17	0	7	3	23	0	6	387	1	0	3	136	15	613	2,717
Count Total	0	84	22	103	0	45	27	173	0	90	3,206	25	1	51	1,493	74	5,394	0
Peak Hour All	**0**	**43**	**13**	**52**	**0**	**21**	**17**	**89**	**0**	**44**	**1,670**	**11**	**1**	**29**	**797**	**32**	**2,819**	**0**
Peak Hour HV	**0**	**1**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**6**	**77**	**0**	**0**	**0**	**27**	**1**	**115**	**0**
Peak Hour HV%	**-**	**2%**	**0%**	**6%**	**-**	**0%**	**0%**	**0%**	**-**	**14%**	**5%**	**0%**	**0%**	**0%**	**3%**	**3%**	**4%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	2	0	25	14	*41*	0	0	0	0	*0*	4	11	13	7	*35*
4:15 PM	1	0	18	16	*35*	0	0	0	0	*0*	1	5	11	0	*17*
4:30 PM	**0**	**0**	**21**	**13**	***34***	**0**	**0**	**0**	**0**	***0***	**1**	**5**	**3**	**3**	*12*
4:45 PM	**1**	**0**	**27**	**3**	***31***	**0**	**0**	**0**	**0**	***0***	**1**	**7**	**4**	**4**	*16*
5:00 PM	**2**	**0**	**20**	**9**	***31***	**0**	**0**	**0**	**0**	***0***	**11**	**8**	**1**	**6**	*26*
5:15 PM	**1**	**0**	**15**	**3**	***19***	**0**	**1**	**0**	**0**	***1***	**12**	**17**	**8**	**10**	***47***
5:30 PM	1	1	16	6	*24*	0	1	0	0	*1*	8	11	5	4	*28*
5:45 PM	2	0	14	3	*19*	0	0	0	0	*0*	1	2	11	0	*14*
Count Total	10	1	156	67	*234*	0	2	0	0	*2*	39	66	56	34	*195*
Peak Hour	**4**	**0**	**83**	**28**	***115***	**0**	**1**	**0**	**0**	***1***	**25**	**37**	**16**	**23**	***101***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	9th St Eastbound				9th St Westbound				Grand Ave Northbound				Grand Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	1	0	1	0	0	0	0	0	2	23	0	0	0	14	0	41	0
4:15 PM	0	0	0	1	0	0	0	0	0	1	17	0	0	0	16	0	35	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**20**	**0**	**0**	**0**	**13**	**0**	**34**	0
4:45 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**25**	**0**	**0**	**0**	**3**	**0**	**31**	141
5:00 PM	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**18**	**0**	**0**	**0**	**8**	**1**	**31**	131
5:15 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**14**	**0**	**0**	**0**	**3**	**0**	**19**	**115**
5:30 PM	0	0	0	1	0	0	0	1	0	1	15	0	0	0	5	1	24	105
5:45 PM	0	1	0	1	0	0	0	0	0	1	13	0	0	0	3	0	19	93
Count Total	0	3	0	7	0	0	0	1	0	11	145	0	0	0	65	2	234	0
Peak Hour	**0**	**1**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**6**	**77**	**0**	**0**	**0**	**27**	**1**	**115**	**0**

Two-Hour Count Summaries - Bikes

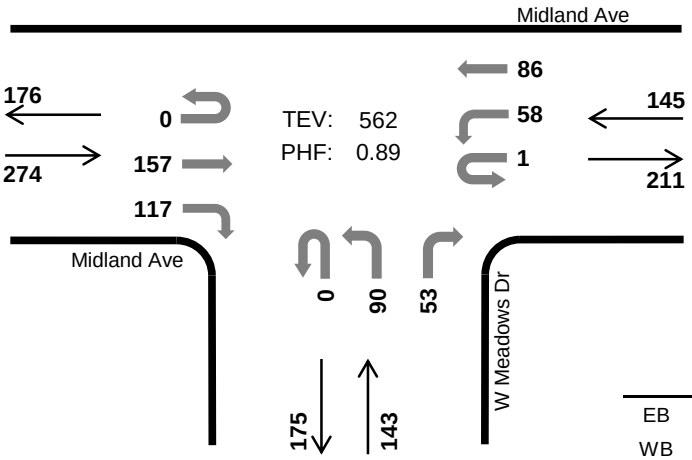
Interval Start	9th St Eastbound			9th St Westbound			Grand Ave Northbound			Grand Ave Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**
5:30 PM	0	0	0	1	0	0	0	0	0	0	0	0	1	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	0	0	0	1	1	0	0	0	0	0	0	0	2	0
Peak Hour	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

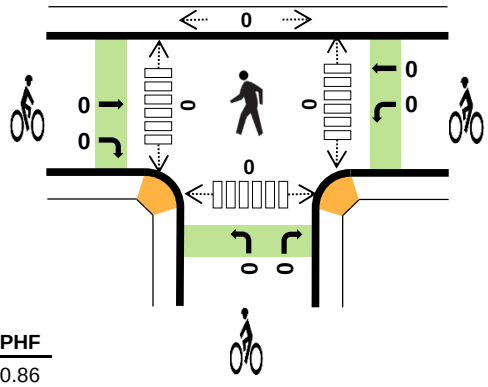
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

W Meadows Dr
Midland Ave

Peak Hour

Date: 09/17/2022
Count Period: 6:00 AM to 10:00 AM
Peak Hour: 9:00 AM to 10:00 AM





	HV %:	PHF
EB	1.5%	0.86
WB	0.7%	0.88
NB	1.4%	0.81
SB	-	-
TOTAL	1.2%	0.89

Four-Hour Count Summaries

Interval Start		Midland Ave Eastbound				Midland Ave Westbound				W Meadows Dr Northbound				n/a Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
9:00 AM		0	0	26	31	0	16	25	0	0	15	0	13	0	0	0	0	126	0
9:15 AM		0	0	37	30	0	18	20	0	0	15	0	14	0	0	0	0	134	0
9:30 AM		0	0	46	24	1	11	18	0	0	29	0	15	0	0	0	0	144	0
9:45 AM		0	0	48	32	0	13	23	0	0	31	0	11	0	0	0	0	158	562
Peak Hour	All	0	0	157	117	1	58	86	0	0	90	0	53	0	0	0	0	562	0
	HV	0	0	2	2	0	0	1	0	0	1	0	1	0	0	0	0	7	0
	HV%	-	-	1%	2%	0%	0%	1%	-	-	1%	-	2%	-	-	-	-	1%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
9:00 AM	2	1	1	0	*4*	0	0	0	0	*0*	0	0	0	0	*0*
9:15 AM	1	0	1	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
9:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
9:45 AM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	4	1	2	0	*7*	0	0	0	0	*0*	0	0	0	0	*0*

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Four-Hour Count Summaries

Interval Start	Midland Ave				Midland Ave				W Meadows Dr				n/a				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	4	3	0	1	13	0	0	3	0	1	0	0	0	0	25	0
6:15 AM	0	0	11	6	0	1	7	0	0	1	0	1	0	0	0	0	27	0
6:30 AM	0	0	10	6	0	1	6	0	0	1	0	3	0	0	0	0	27	0
6:45 AM	0	0	20	9	0	5	12	0	0	4	0	7	0	0	0	0	57	136
7:00 AM	0	0	29	14	0	4	24	0	0	6	0	4	0	0	0	0	81	192
7:15 AM	0	0	23	3	0	5	18	0	0	5	0	8	0	0	0	0	62	227
7:30 AM	0	0	28	11	0	7	10	0	0	5	0	6	0	0	0	0	67	267
7:45 AM	0	0	38	18	0	7	12	0	0	2	0	5	0	0	0	0	82	292
8:00 AM	0	0	26	17	0	8	12	0	0	9	0	11	0	0	0	0	83	294
8:15 AM	0	0	29	16	0	11	20	0	0	8	0	11	0	0	0	0	95	327
8:30 AM	0	0	38	19	0	12	18	0	0	13	0	13	0	0	0	0	113	373
8:45 AM	0	0	28	30	0	9	21	0	0	17	0	13	0	0	0	0	118	409
9:00 AM	**0**	**0**	**26**	**31**	**0**	**16**	**25**	**0**	**0**	**15**	**0**	**13**	**0**	**0**	**0**	**0**	**126**	452
9:15 AM	**0**	**0**	**37**	**30**	**0**	**18**	**20**	**0**	**0**	**15**	**0**	**14**	**0**	**0**	**0**	**0**	**134**	491
9:30 AM	**0**	**0**	**46**	**24**	**1**	**11**	**18**	**0**	**0**	**29**	**0**	**15**	**0**	**0**	**0**	**0**	**144**	522
9:45 AM	**0**	**0**	**48**	**32**	**0**	**13**	**23**	**0**	**0**	**31**	**0**	**11**	**0**	**0**	**0**	**0**	**158**	**562**
Count Total	0	0	441	269	1	129	259	0	0	164	0	136	0	0	0	0	1,399	0
Peak Hour All	**0**	**0**	**157**	**117**	**1**	**58**	**86**	**0**	**0**	**90**	**0**	**53**	**0**	**0**	**0**	**0**	**562**	**0**
Peak Hour HV	**0**	**0**	**2**	**2**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**7**	**0**
Peak Hour HV%	**-**	**-**	**1%**	**2%**	**0%**	**0%**	**1%**	**-**	**-**	**1%**	**-**	**2%**	**-**	**-**	**-**	**-**	**1%**	**0**

Note: Four-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
6:00 AM	0	1	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
6:15 AM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
6:30 AM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
6:45 AM	0	2	1	0	*3*	0	0	0	0	*0*	0	0	0	0	*0*
7:00 AM	2	0	1	0	*3*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	1	1	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	4	0	1	0	*5*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	1	*1*
8:00 AM	4	0	1	0	*5*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	2	2	0	0	*4*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	0	1	2	0	*3*	0	0	0	0	*0*	0	0	0	0	*0*
9:00 AM	**2**	**1**	**1**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
9:15 AM	**1**	**0**	**1**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
9:30 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
9:45 AM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
Count Total	19	8	9	0	*36*	0	0	0	0	*0*	0	0	0	1	*1*
Peak Hr	**4**	**1**	**2**	**0**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

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Four-Hour Count Summaries - Heavy Vehicles

Interval Start	Midland Ave				Midland Ave				W Meadows Dr				n/a				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
6:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
6:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
6:45 AM	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	3	6
7:00 AM	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	3	8
7:15 AM	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	2	9
7:30 AM	0	0	2	2	0	0	0	0	0	0	0	1	0	0	0	0	5	13
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
8:00 AM	0	0	2	2	0	0	0	0	0	1	0	0	0	0	0	0	5	12
8:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	11
8:30 AM	0	0	1	1	0	1	1	0	0	0	0	0	0	0	0	0	4	10
8:45 AM	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	0	3	13
9:00 AM	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	12
9:15 AM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	13
9:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	9
9:45 AM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**7**
Count Total	0	0	11	8	0	2	6	0	0	4	0	5	0	0	0	0	36	0
Peak Hour	**0**	**0**	**2**	**2**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**7**	**0**

Four-Hour Count Summaries - Bikes

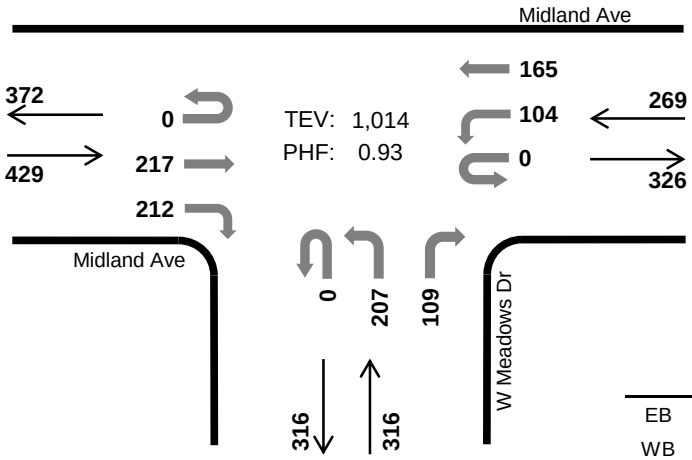
Interval Start	Midland Ave			Midland Ave			W Meadows Dr			n/a			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
9:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
9:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
9:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

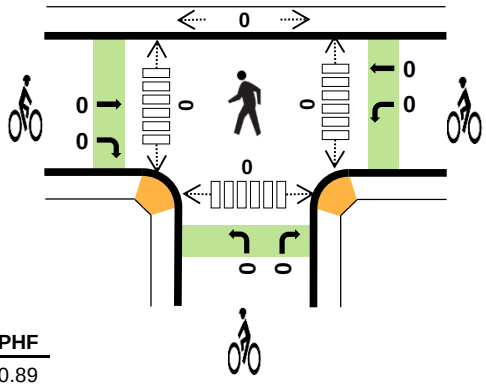
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

W Meadows Dr
Midland Ave

Peak Hour

Date: 09/17/2022
Count Period: 10:00 AM to 3:00 PM
Peak Hour: 12:15 PM to 1:15 PM





	HV %:	PHF
EB	2.1%	0.89
WB	1.1%	0.80
NB	0.0%	0.77
SB	-	-
TOTAL	1.2%	0.93

Five-Hour Count Summaries

Interval Start		Midland Ave Eastbound				Midland Ave Westbound				W Meadows Dr Northbound				n/a Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
12:15 PM		0	0	50	54	0	34	50	0	0	48	0	26	0	0	0	0	262	0
12:30 PM		0	0	57	48	0	24	43	0	0	65	0	37	0	0	0	0	274	0
12:45 PM		0	0	48	51	0	25	44	0	0	49	0	22	0	0	0	0	239	0
1:00 PM		0	0	62	59	0	21	28	0	0	45	0	24	0	0	0	0	239	1,014
Peak Hour	All	0	0	217	212	0	104	165	0	0	207	0	109	0	0	0	0	1,014	0
	HV	0	0	9	0	0	0	3	0	0	0	0	0	0	0	0	0	12	0
	HV%	-	-	4%	0%	-	0%	2%	-	-	0%	-	0%	-	-	-	-	1%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
12:15 PM	2	2	0	0	*4*	0	0	0	0	*0*	0	0	0	0	*0*
12:30 PM	2	0	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
12:45 PM	4	0	0	0	*4*	0	0	0	0	*0*	0	0	0	0	*0*
1:00 PM	1	1	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	9	3	0	0	*12*	0	0	0	0	*0*	0	0	0	0	*0*

Five-Hour Count Summaries

Interval Start	Midland Ave Eastbound				Midland Ave Westbound				W Meadows Dr Northbound				n/a Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
10:00 AM	0	0	51	25	0	22	35	0	0	31	0	15	0	0	0	0	179	0
10:15 AM	0	0	44	32	0	21	28	0	0	27	0	20	0	0	0	0	172	0
10:30 AM	0	0	40	36	0	28	47	0	0	27	0	39	0	0	0	0	217	0
10:45 AM	0	0	42	44	0	27	28	0	0	38	0	43	0	0	0	0	222	790
11:00 AM	0	0	41	54	0	19	25	0	0	36	0	22	0	0	0	0	197	808
11:15 AM	0	0	42	44	0	29	41	0	0	43	0	24	0	0	0	0	223	859
11:30 AM	0	0	53	54	0	27	42	0	0	53	0	30	0	0	0	0	259	901
11:45 AM	0	0	41	32	0	33	38	0	0	53	0	27	0	0	0	0	224	903
12:00 PM	0	0	41	42	0	31	49	0	0	48	0	24	0	0	0	0	235	941
12:15 PM	**0**	**0**	**50**	**54**	**0**	**34**	**50**	**0**	**0**	**48**	**0**	**26**	**0**	**0**	**0**	**0**	**262**	980
12:30 PM	**0**	**0**	**57**	**48**	**0**	**24**	**43**	**0**	**0**	**65**	**0**	**37**	**0**	**0**	**0**	**0**	**274**	995
12:45 PM	**0**	**0**	**48**	**51**	**0**	**25**	**44**	**0**	**0**	**49**	**0**	**22**	**0**	**0**	**0**	**0**	**239**	1,010
1:00 PM	**0**	**0**	**62**	**59**	**0**	**21**	**28**	**0**	**0**	**45**	**0**	**24**	**0**	**0**	**0**	**0**	**239**	**1,014**
1:15 PM	0	0	42	53	0	30	40	0	0	61	0	25	0	0	0	0	251	1,003
1:30 PM	0	0	49	52	0	25	37	0	0	64	0	24	0	0	0	0	251	980
1:45 PM	0	0	41	49	0	14	26	0	0	60	0	32	0	0	0	0	222	963
2:00 PM	0	0	41	33	0	23	36	0	0	54	0	22	0	0	0	0	209	933
2:15 PM	0	0	58	46	0	21	58	0	0	49	0	28	0	0	0	0	260	942
2:30 PM	0	0	41	53	0	23	35	0	0	52	0	21	0	0	0	0	225	916
2:45 PM	0	0	37	48	0	20	44	0	0	66	0	29	0	0	0	0	244	938
Count Total	0	0	921	909	0	497	774	0	0	969	0	534	0	0	0	0	4,604	0
Peak Hour All	**0**	**0**	**217**	**212**	**0**	**104**	**165**	**0**	**0**	**207**	**0**	**109**	**0**	**0**	**0**	**0**	**1,014**	**0**
Peak Hour HV	**0**	**0**	**9**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	**0**
Peak Hour HV%	**-**	**-**	**4%**	**0%**	**-**	**0%**	**2%**	**-**	**-**	**0%**	**-**	**0%**	**-**	**-**	**-**	**-**	**1%**	**0**

Note: Five-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
10:00 AM	2	2	1	0	*5*	0	0	0	0	*0*	0	0	0	0	*0*
10:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
10:30 AM	0	1	1	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
10:45 AM	4	1	2	0	*7*	0	0	0	0	*0*	0	0	0	0	*0*
11:00 AM	1	1	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
11:15 AM	2	0	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
11:30 AM	0	0	2	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
11:45 AM	4	2	1	0	*7*	0	0	0	0	*0*	0	0	0	0	*0*
12:00 PM	1	1	1	0	*3*	0	0	0	0	*0*	0	0	0	0	*0*
12:15 PM	**2**	**2**	**0**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
12:30 PM	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
12:45 PM	**4**	**0**	**0**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
1:00 PM	**1**	**1**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
1:15 PM	3	1	0	0	*4*	0	0	0	0	*0*	0	0	0	0	*0*
1:30 PM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
1:45 PM	2	1	0	0	*3*	0	0	0	0	*0*	0	0	0	0	*0*
2:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
2:15 PM	2	1	0	0	*3*	0	0	0	0	*0*	0	0	0	0	*0*
2:30 PM	1	1	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
2:45 PM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	32	15	9	0	*56*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hr	**9**	**3**	**0**	**0**	***12***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Project Manager: (415) 310-6469

project.manager.ca@idaxdata.com

Five-Hour Count Summaries - Heavy Vehicles

Interval Start	Midland Ave				Midland Ave				W Meadows Dr				n/a				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
10:00 AM	0	0	2	0	0	1	1	0	0	1	0	0	0	0	0	0	5	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	2	0
10:45 AM	0	0	3	1	0	0	1	0	0	1	0	1	0	0	0	0	7	14
11:00 AM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2	11
11:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	13
11:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2	13
11:45 AM	0	0	4	0	0	0	2	0	0	1	0	0	0	0	0	0	7	13
12:00 PM	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	3	14
12:15 PM	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	16
12:30 PM	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	16
12:45 PM	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	13
1:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**12**
1:15 PM	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4	12
1:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	11
1:45 PM	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	10
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
2:15 PM	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	7
2:30 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	8
2:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6
Count Total	0	0	29	3	0	2	13	0	0	6	0	3	0	0	0	0	56	0
Peak Hour	**0**	**0**	**9**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	**0**

Five-Hour Count Summaries - Bikes

Interval Start	Midland Ave			Midland Ave			W Meadows Dr			n/a			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
12:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
12:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
1:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

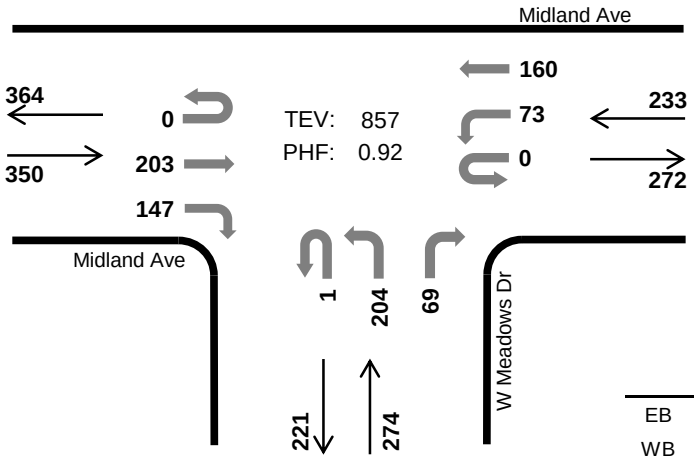
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

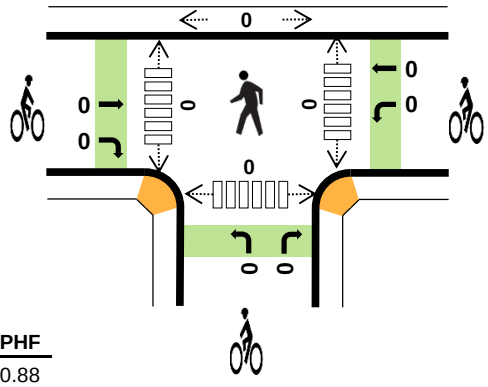
Project Manager: (415) 310-6469 project.manager.ca@idaxdata.com

W Meadows Dr
Midland Ave

Peak Hour

Date: 09/17/2022
Count Period: 3:00 PM to 8:00 PM
Peak Hour: 4:15 PM to 5:15 PM





	HV %:	PHF
EB	1.7%	0.88
WB	0.9%	0.91
NB	0.0%	0.91
SB	-	-
TOTAL	0.9%	0.92

Five-Hour Count Summaries

Interval Start		Midland Ave Eastbound				Midland Ave Westbound				W Meadows Dr Northbound				n/a Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:15 PM		0	0	47	37	0	12	48	0	0	56	0	14	0	0	0	0	214	0
4:30 PM		0	0	47	34	0	24	33	0	1	55	0	19	0	0	0	0	213	0
4:45 PM		0	0	58	28	0	16	36	0	0	41	0	18	0	0	0	0	197	0
5:00 PM		0	0	51	48	0	21	43	0	0	52	0	18	0	0	0	0	233	857
Peak Hour	All	0	0	203	147	0	73	160	0	1	204	0	69	0	0	0	0	857	0
	HV	0	0	5	1	0	2	0	0	0	0	0	0	0	0	0	0	8	0
	HV%	-	-	2%	1%	-	3%	0%	-	0%	0%	-	0%	-	-	-	-	1%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:15 PM	2	0	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	1	1	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
5:00 PM	2	1	0	0	*3*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	6	2	0	0	*8*	0	0	0	0	*0*	0	0	0	0	*0*

Project Manager: (415) 310-6469
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Five-Hour Count Summaries

Interval Start	Midland Ave Eastbound				Midland Ave Westbound				W Meadows Dr Northbound				n/a Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	0	41	34	0	26	38	0	0	64	0	28	0	0	0	0	231	0
3:15 PM	0	0	33	33	0	19	30	0	0	58	0	23	0	0	0	0	196	0
3:30 PM	0	0	48	36	0	20	35	0	0	53	0	26	0	0	0	0	218	0
3:45 PM	0	0	37	32	0	17	42	0	0	52	0	23	0	0	0	0	203	848
4:00 PM	0	0	51	42	0	18	25	0	0	56	0	15	0	0	0	0	207	824
4:15 PM	**0**	**0**	**47**	**37**	**0**	**12**	**48**	**0**	**0**	**56**	**0**	**14**	**0**	**0**	**0**	**0**	**214**	842
4:30 PM	**0**	**0**	**47**	**34**	**0**	**24**	**33**	**0**	**1**	**55**	**0**	**19**	**0**	**0**	**0**	**0**	**213**	837
4:45 PM	**0**	**0**	**58**	**28**	**0**	**16**	**36**	**0**	**0**	**41**	**0**	**18**	**0**	**0**	**0**	**0**	**197**	831
5:00 PM	**0**	**0**	**51**	**48**	**0**	**21**	**43**	**0**	**0**	**52**	**0**	**18**	**0**	**0**	**0**	**0**	**233**	**857**
5:15 PM	0	0	53	27	0	7	35	0	0	46	0	34	0	0	0	0	202	845
5:30 PM	0	0	33	33	0	17	39	0	0	45	0	24	0	0	0	0	191	823
5:45 PM	0	0	35	30	0	9	52	0	0	33	0	13	0	0	0	0	172	798
6:00 PM	0	0	42	37	0	17	42	0	0	38	0	16	0	0	0	0	192	757
6:15 PM	0	0	42	27	0	15	39	0	0	43	0	13	0	0	0	0	179	734
6:30 PM	0	0	44	15	0	3	35	0	0	38	0	19	0	0	0	0	154	697
6:45 PM	0	0	40	39	0	14	25	0	0	32	0	8	0	0	0	0	158	683
7:00 PM	0	0	25	17	0	9	29	0	0	41	0	7	0	0	0	0	128	619
7:15 PM	0	0	30	19	0	8	34	0	0	43	0	15	0	0	0	0	149	589
7:30 PM	0	0	27	15	0	6	29	0	0	31	0	15	0	0	0	0	123	558
7:45 PM	0	0	22	13	0	17	26	0	0	33	0	10	0	0	0	0	121	521
Count Total	0	0	806	596	0	295	715	0	1	910	0	358	0	0	0	0	3,681	0
Peak Hour All	**0**	**0**	**203**	**147**	**0**	**73**	**160**	**0**	**1**	**204**	**0**	**69**	**0**	**0**	**0**	**0**	**857**	**0**
Peak Hour HV	**0**	**0**	**5**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**
Peak Hour HV%	**-**	**-**	**2%**	**1%**	**-**	**3%**	**0%**	**-**	**0%**	**0%**	**-**	**0%**	**-**	**-**	**-**	**-**	**1%**	**0**

Note: Five-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
3:15 PM	2	0	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
3:30 PM	1	1	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
3:45 PM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
4:00 PM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:30 PM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**1**	**1**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**2**	**1**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:15 PM	2	4	1	0	*7*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	2	1	0	0	*3*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	4	1	0	0	*5*	0	0	0	0	*0*	0	0	0	0	*0*
6:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
6:15 PM	3	1	0	0	*4*	0	0	0	0	*0*	0	0	0	0	*0*
6:30 PM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
6:45 PM	1	0	1	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
7:00 PM	1	1	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 PM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 PM	1	1	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 PM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	27	12	3	0	*42*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hr	**6**	**2**	**0**	**0**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Five-Hour Count Summaries - Heavy Vehicles

Interval Start	Midland Ave				Midland Ave				W Meadows Dr				n/a				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
3:30 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0
3:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6
4:15 PM	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	6
4:30 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	5
4:45 PM	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	6
5:00 PM	**0**	**0**	**1**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**8**
5:15 PM	0	0	2	0	0	1	3	0	0	0	0	1	0	0	0	0	7	13
5:30 PM	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	15
5:45 PM	0	0	3	1	0	0	1	0	0	0	0	0	0	0	0	0	5	18
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
6:15 PM	0	0	1	2	0	0	1	0	0	0	0	0	0	0	0	0	4	12
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	10
6:45 PM	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	2	7
7:00 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	9
7:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6
7:30 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2	7
7:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6
Count Total	0	0	23	4	0	4	8	0	0	1	0	2	0	0	0	0	42	0
Peak Hour	**0**	**0**	**5**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**

Five-Hour Count Summaries - Bikes

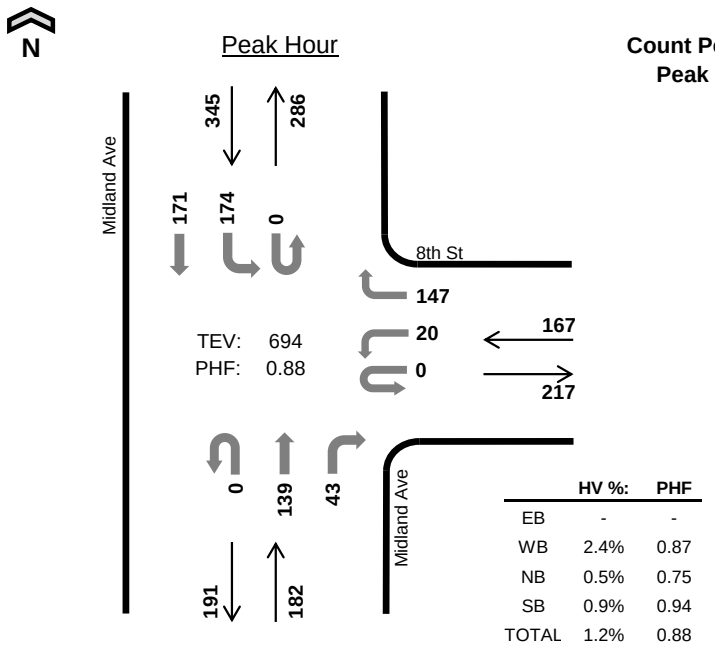
Interval Start	Midland Ave			Midland Ave			W Meadows Dr			n/a			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

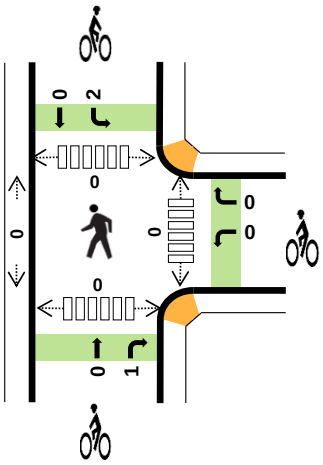
Project Manager: (415) 310-6469 project.manager.ca@idaxdata.com

Midland Ave
8th St

Date: 09/17/2022
Count Period: 6:00 AM to 10:00 AM
Peak Hour: 9:00 AM to 10:00 AM



	HV %:	PHF
EB	-	-
WB	2.4%	0.87
NB	0.5%	0.75
SB	0.9%	0.94
TOTAL	1.2%	0.88



Four-Hour Count Summaries

Interval Start		n/a Eastbound				8th St Westbound				Midland Ave Northbound				Midland Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
9:00 AM		0	0	0	0	0	3	0	33	0	0	33	6	0	41	38	0	154	0
9:15 AM		0	0	0	0	0	5	0	34	0	0	30	9	0	41	48	0	167	0
9:30 AM		0	0	0	0	0	8	0	40	0	0	30	13	0	41	44	0	176	0
9:45 AM		0	0	0	0	0	4	0	40	0	0	46	15	0	51	41	0	197	694
Peak Hour	All	0	0	0	0	0	20	0	147	0	0	139	43	0	174	171	0	694	0
	HV	0	0	0	0	0	0	0	4	0	0	1	0	0	3	0	0	8	0
	HV%	-	-	-	-	-	0%	-	3%	-	-	1%	0%	-	2%	0%	-	1%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
9:00 AM	0	1	1	0	*2*	0	0	1	0	*1*	0	0	0	0	*0*
9:15 AM	0	0	0	2	*2*	0	0	0	0	*0*	0	0	0	0	*0*
9:30 AM	0	2	0	1	*3*	0	0	0	2	*2*	0	0	0	0	*0*
9:45 AM	0	1	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	0	4	1	3	*8*	0	0	1	2	*3*	0	0	0	0	*0*

Four-Hour Count Summaries

Interval Start	n/a				8th St				Midland Ave				Midland Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	0	0	1	0	10	0	0	7	3	0	7	7	0	35	0
6:15 AM	0	0	0	0	0	1	0	7	0	0	3	6	0	7	10	0	34	0
6:30 AM	0	0	0	0	0	1	0	4	0	0	3	4	0	10	13	0	35	0
6:45 AM	0	0	0	0	0	1	0	14	0	0	9	4	0	18	25	0	71	175
7:00 AM	0	0	0	0	0	3	0	13	0	0	18	6	0	17	26	0	83	223
7:15 AM	0	0	0	0	0	2	0	13	0	0	15	6	0	18	25	0	79	268
7:30 AM	0	0	0	0	0	0	0	10	0	0	13	4	0	19	23	0	69	302
7:45 AM	0	0	0	0	0	1	0	16	0	0	18	8	0	34	24	0	101	332
8:00 AM	0	0	0	0	0	3	0	13	0	0	15	7	0	30	31	0	99	348
8:15 AM	0	0	0	0	0	4	0	23	0	0	28	10	0	23	25	0	113	382
8:30 AM	0	0	0	0	0	3	0	37	0	0	25	9	0	29	38	0	141	454
8:45 AM	0	0	0	0	0	7	0	21	0	0	32	11	0	28	46	0	145	498
9:00 AM	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**33**	**0**	**0**	**33**	**6**	**0**	**41**	**38**	**0**	**154**	553
9:15 AM	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**34**	**0**	**0**	**30**	**9**	**0**	**41**	**48**	**0**	**167**	607
9:30 AM	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**40**	**0**	**0**	**30**	**13**	**0**	**41**	**44**	**0**	**176**	642
9:45 AM	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**40**	**0**	**0**	**46**	**15**	**0**	**51**	**41**	**0**	**197**	**694**
Count Total	0	0	0	0	0	47	0	328	0	0	325	121	0	414	464	0	1,699	0
Peak Hour All	**0**	**0**	**0**	**0**	**0**	**20**	**0**	**147**	**0**	**0**	**139**	**43**	**0**	**174**	**171**	**0**	**694**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**1**	**0**	**0**	**3**	**0**	**0**	**8**	**0**
Peak Hour HV%	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**3%**	**-**	**-**	**1%**	**0%**	**-**	**2%**	**0%**	**-**	**1%**	**0**

Note: Four-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
6:00 AM	0	0	1	3	*4*	0	0	0	0	*0*	0	0	0	0	*0*
6:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
6:30 AM	0	1	0	3	*4*	0	0	0	0	*0*	0	0	0	0	*0*
6:45 AM	0	2	0	3	*5*	0	0	0	0	*0*	0	0	0	0	*0*
7:00 AM	0	1	0	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	2	1	2	*5*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	0	1	0	5	*6*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	0	2	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 AM	0	2	0	2	*4*	0	0	0	0	*0*	1	0	0	0	*1*
8:15 AM	0	1	0	1	*2*	0	0	0	0	*0*	1	0	0	0	*1*
8:30 AM	0	0	1	3	*4*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	0	1	1	1	*3*	0	0	0	0	*0*	1	0	0	0	*1*
9:00 AM	**0**	**1**	**1**	**0**	***2***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
9:15 AM	**0**	**0**	**0**	**2**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
9:30 AM	**0**	**2**	**0**	**1**	***3***	**0**	**0**	**0**	**2**	***2***	**0**	**0**	**0**	**0**	*0*
9:45 AM	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
Count Total	0	17	5	27	*49*	0	0	1	2	*3*	3	0	0	0	*3*
Peak Hr	**0**	**4**	**1**	**3**	***8***	**0**	**0**	**1**	**2**	***3***	**0**	**0**	**0**	**0**	***0***

Four-Hour Count Summaries - Heavy Vehicles

Interval Start	n/a				8th St				Midland Ave				Midland Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	3	0	0	4	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	2	1	0	4	0
6:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	2	1	0	5	13
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2	11
7:15 AM	0	0	0	0	0	0	0	2	0	0	1	0	0	1	1	0	5	16
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	5	0	0	6	18
7:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2	15
8:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	0	4	17
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2	14
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	3	0	0	4	12
8:45 AM	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	3	13
9:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	11
9:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**2**	11
9:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**3**	10
9:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**8**
Count Total	0	0	0	0	0	2	0	15	0	0	5	0	0	24	3	0	49	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**1**	**0**	**0**	**3**	**0**	**0**	**8**	**0**

Four-Hour Count Summaries - Bikes

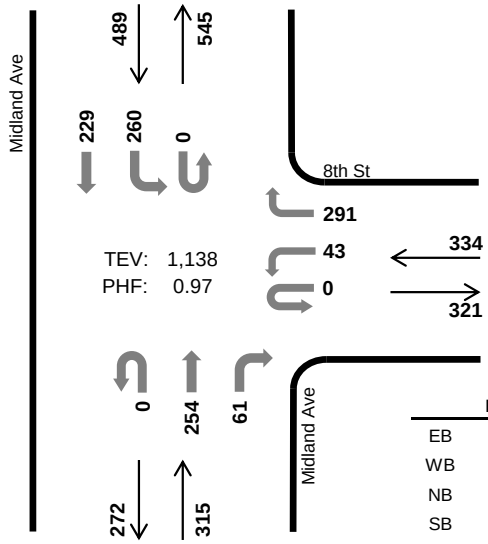
Interval Start	n/a			8th St			Midland Ave			Midland Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	1
9:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
9:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**2**	3
9:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
Count Total	0	0	0	0	0	0	0	0	1	2	0	0	3	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**3**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

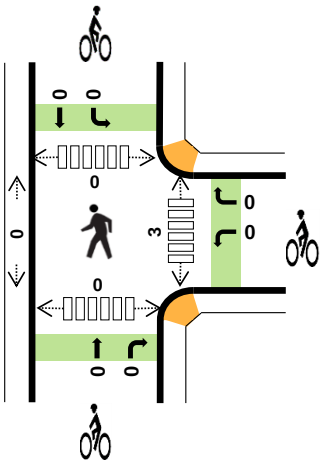
Midland Ave
8th St

Date: 09/17/2022
Count Period: 10:00 AM to 3:00 PM
Peak Hour: 11:30 AM to 12:30 PM

Peak Hour



	HV %:	PHF
EB	-	-
WB	2.1%	0.91
NB	0.6%	0.97
SB	1.2%	0.96
TOTAL	1.3%	0.97



Five-Hour Count Summaries

Interval Start		n/a Eastbound				8th St Westbound				Midland Ave Northbound				Midland Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
11:30 AM		0	0	0	0	0	7	0	74	0	0	70	11	0	68	54	0	284	0
11:45 AM		0	0	0	0	0	18	0	56	0	0	59	22	0	65	52	0	272	0
12:00 PM		0	0	0	0	0	8	0	84	0	0	63	10	0	69	59	0	293	0
12:15 PM		0	0	0	0	0	10	0	77	0	0	62	18	0	58	64	0	289	1,138
Peak Hour	All	0	0	0	0	0	43	0	291	0	0	254	61	0	260	229	0	1,138	0
	HV	0	0	0	0	0	0	0	7	0	0	2	0	0	6	0	0	15	0
	HV%	-	-	-	-	-	0%	-	2%	-	-	1%	0%	-	2%	0%	-	1%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
11:30 AM	0	2	0	0	*2*	0	0	0	0	*0*	2	0	0	0	*2*
11:45 AM	0	2	0	4	*6*	0	0	0	0	*0*	0	0	0	0	*0*
12:00 PM	0	2	1	2	*5*	0	0	0	0	*0*	0	0	0	0	*0*
12:15 PM	0	1	1	0	*2*	0	0	0	0	*0*	1	0	0	0	*1*
Peak Hour	0	7	2	6	*15*	0	0	0	0	*0*	3	0	0	0	*3*

Five-Hour Count Summaries

Interval Start	n/a				8th St				Midland Ave				Midland Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
10:00 AM	0	0	0	0	0	7	0	49	0	0	52	7	0	52	40	0	207	0
10:15 AM	0	0	0	0	0	10	0	70	0	0	32	8	0	52	47	0	219	0
10:30 AM	0	0	0	0	0	9	0	68	0	0	49	7	0	51	52	0	236	0
10:45 AM	0	0	0	0	0	8	0	53	0	0	51	7	0	55	50	0	224	886
11:00 AM	0	0	0	0	0	9	0	54	0	0	37	9	0	57	42	0	208	887
11:15 AM	0	0	0	0	0	13	0	77	0	0	54	12	1	49	53	0	259	927
11:30 AM	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**74**	**0**	**0**	**70**	**11**	**0**	**68**	**54**	**0**	**284**	975
11:45 AM	**0**	**0**	**0**	**0**	**0**	**18**	**0**	**56**	**0**	**0**	**59**	**22**	**0**	**65**	**52**	**0**	**272**	1,023
12:00 PM	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**84**	**0**	**0**	**63**	**10**	**0**	**69**	**59**	**0**	**293**	1,108
12:15 PM	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**77**	**0**	**0**	**62**	**18**	**0**	**58**	**64**	**0**	**289**	**1,138**
12:30 PM	0	0	0	0	0	14	0	75	0	0	44	11	0	79	61	0	284	1,138
12:45 PM	0	0	0	0	0	9	0	72	0	0	52	10	0	64	50	0	257	1,123
1:00 PM	0	0	0	0	0	10	0	55	0	0	59	14	0	59	75	0	272	1,102
1:15 PM	0	0	0	0	0	11	0	65	0	0	70	14	0	50	63	0	273	1,086
1:30 PM	0	0	0	0	0	6	0	83	0	0	42	5	0	75	56	0	267	1,069
1:45 PM	0	0	0	0	0	7	0	68	0	0	40	11	0	71	67	0	264	1,076
2:00 PM	0	0	0	0	0	7	0	57	0	0	60	6	0	64	46	0	240	1,044
2:15 PM	0	0	0	0	0	11	0	81	0	0	54	19	0	74	69	0	308	1,079
2:30 PM	0	0	0	0	0	4	0	67	0	0	64	11	0	63	62	0	271	1,083
2:45 PM	0	0	0	0	0	13	0	72	0	0	55	13	0	66	67	0	286	1,105
Count Total	0	0	0	0	0	191	0	1,357	0	0	1,069	225	1	1,241	1,129	0	5,213	0
Peak Hour All	**0**	**0**	**0**	**0**	**0**	**43**	**0**	**291**	**0**	**0**	**254**	**61**	**0**	**260**	**229**	**0**	**1,138**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**2**	**0**	**0**	**6**	**0**	**0**	**15**	**0**
Peak Hour HV%	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**2%**	**-**	**-**	**1%**	**0%**	**-**	**2%**	**0%**	**-**	**1%**	**0**

Note: Five-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
10:00 AM	0	4	0	3	*7*	0	0	0	0	*0*	1	0	0	0	*1*
10:15 AM	0	1	1	1	*3*	0	0	0	0	*0*	1	0	0	0	*1*
10:30 AM	0	4	0	1	*5*	0	0	0	1	*1*	0	0	0	0	*0*
10:45 AM	0	0	0	3	*3*	0	0	0	0	*0*	2	0	0	0	*2*
11:00 AM	0	4	1	2	*7*	0	0	0	0	*0*	0	0	0	0	*0*
11:15 AM	0	1	0	1	*2*	0	0	0	0	*0*	1	0	0	0	*1*
11:30 AM	**0**	**2**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**0**	**0**	*2*
11:45 AM	**0**	**2**	**0**	**4**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
12:00 PM	**0**	**2**	**1**	**2**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
12:15 PM	**0**	**1**	**1**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	***1***
12:30 PM	0	2	1	1	*4*	0	0	0	0	*0*	0	0	0	0	*0*
12:45 PM	0	0	0	2	*2*	0	0	0	2	*2*	2	0	0	0	*2*
1:00 PM	0	1	1	4	*6*	0	1	0	0	*1*	2	0	0	0	*2*
1:15 PM	0	2	1	3	*6*	0	0	0	0	*0*	1	0	0	0	*1*
1:30 PM	0	0	0	2	*2*	0	0	0	1	*1*	1	0	0	0	*1*
1:45 PM	0	1	1	3	*5*	0	0	0	0	*0*	1	0	0	0	*1*
2:00 PM	0	3	0	4	*7*	0	0	0	0	*0*	0	0	0	0	*0*
2:15 PM	0	1	0	1	*2*	0	0	0	0	*0*	1	0	0	0	*1*
2:30 PM	0	2	1	3	*6*	0	0	0	0	*0*	0	0	0	0	*0*
2:45 PM	0	1	0	1	*2*	0	0	0	0	*0*	2	0	0	0	*2*
Count Total	0	34	9	41	*84*	0	1	0	4	*5*	18	0	0	0	*18*
Peak Hr	**0**	**7**	**2**	**6**	***15***	**0**	**0**	**0**	**0**	***0***	**3**	**0**	**0**	**0**	***3***

Five-Hour Count Summaries - Heavy Vehicles

Interval Start	n/a				8th St				Midland Ave				Midland Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
10:00 AM	0	0	0	0	0	0	0	4	0	0	0	0	0	2	1	0	7	0
10:15 AM	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	3	0
10:30 AM	0	0	0	0	0	1	0	3	0	0	0	0	0	1	0	0	5	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	18
11:00 AM	0	0	0	0	0	0	0	4	0	0	1	0	0	2	0	0	7	18
11:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	2	17
11:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	14
11:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**6**	17
12:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**5**	15
12:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**15**
12:30 PM	0	0	0	0	0	0	0	2	0	0	1	0	0	1	0	0	4	17
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	13
1:00 PM	0	0	0	0	0	0	0	1	0	0	1	0	0	4	0	0	6	14
1:15 PM	0	0	0	0	0	0	0	2	0	0	1	0	0	2	1	0	6	18
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	16
1:45 PM	0	0	0	0	0	0	0	1	0	0	1	0	0	2	1	0	5	19
2:00 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	3	1	0	7	20
2:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2	16
2:30 PM	0	0	0	0	0	0	0	2	0	0	1	0	0	2	1	0	6	20
2:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2	17
Count Total	0	0	0	0	0	1	0	33	0	0	8	1	0	33	8	0	84	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**2**	**0**	**0**	**6**	**0**	**0**	**15**	**0**

Five-Hour Count Summaries - Bikes

Interval Start	n/a			8th St			Midland Ave			Midland Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
11:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
12:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
12:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	2	2
1:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	1	3
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
1:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	4
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	1	0	0	0	0	0	0	4	0	5	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

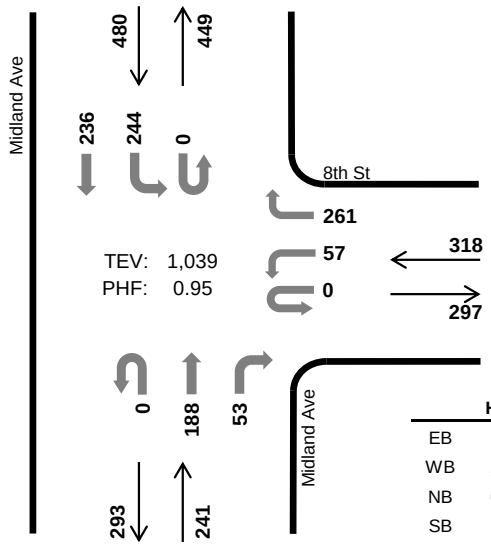
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Midland Ave
8th St

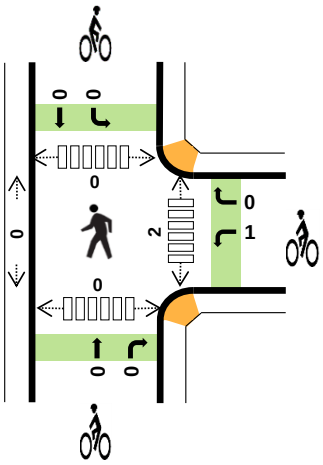
Date: 09/17/2022
Count Period: 3:00 PM to 8:00 PM
Peak Hour: 4:00 PM to 5:00 PM

N

Peak Hour



	HV %:	PHF
EB	-	-
WB	2.2%	0.80
NB	0.8%	0.89
SB	1.0%	0.98
TOTAL	1.3%	0.95



Five-Hour Count Summaries

Interval Start		n/a Eastbound				8th St Westbound				Midland Ave Northbound				Midland Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	0	0	0	10	0	64	0	0	56	12	0	58	63	0	263	0
4:15 PM		0	0	0	0	0	14	0	62	0	0	54	13	0	64	59	0	266	0
4:30 PM		0	0	0	0	0	12	0	56	0	0	42	13	0	64	51	0	238	0
4:45 PM		0	0	0	0	0	21	0	79	0	0	36	15	0	58	63	0	272	1,039
Peak Hour	All	0	0	0	0	0	57	0	261	0	0	188	53	0	244	236	0	1,039	0
	HV	0	0	0	0	0	1	0	6	0	0	1	1	0	4	1	0	14	0
	HV%	-	-	-	-	-	2%	-	2%	-	-	1%	2%	-	2%	0%	-	1%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	3	0	0	*3*	0	0	0	0	*0*	2	0	0	0	*2*
4:15 PM	0	0	1	2	*3*	0	1	0	0	*1*	0	0	0	0	*0*
4:30 PM	0	2	0	2	*4*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	0	2	1	1	*4*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	0	7	2	5	*14*	0	1	0	0	*1*	2	0	0	0	*2*

Project Manager: (415) 310-6469
project.manager.ca@idaxdata.com

Five-Hour Count Summaries

Interval Start	n/a				8th St				Midland Ave				Midland Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	0	0	0	0	15	0	57	0	0	65	14	0	62	77	0	290	0
3:15 PM	0	0	0	0	0	6	0	61	0	0	40	11	0	59	43	0	220	0
3:30 PM	0	0	0	0	0	8	0	58	0	0	48	12	0	53	60	0	239	0
3:45 PM	0	0	0	0	0	10	0	51	0	0	37	11	0	53	50	0	212	961
4:00 PM	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**64**	**0**	**0**	**56**	**12**	**0**	**58**	**63**	**0**	**263**	934
4:15 PM	**0**	**0**	**0**	**0**	**0**	**14**	**0**	**62**	**0**	**0**	**54**	**13**	**0**	**64**	**59**	**0**	**266**	980
4:30 PM	**0**	**0**	**0**	**0**	**0**	**12**	**0**	**56**	**0**	**0**	**42**	**13**	**0**	**64**	**51**	**0**	**238**	979
4:45 PM	**0**	**0**	**0**	**0**	**0**	**21**	**0**	**79**	**0**	**0**	**36**	**15**	**0**	**58**	**63**	**0**	**272**	**1,039**
5:00 PM	0	0	0	0	0	14	0	52	0	0	44	6	0	64	57	0	237	1,013
5:15 PM	0	0	0	0	0	5	0	56	0	0	48	7	0	72	55	0	243	990
5:30 PM	0	0	0	0	0	8	0	71	0	0	39	10	0	54	54	0	236	988
5:45 PM	0	0	0	0	0	5	0	52	0	0	46	10	0	38	41	0	192	908
6:00 PM	0	0	0	0	0	7	0	52	0	0	36	8	0	58	44	0	205	876
6:15 PM	0	0	0	0	0	10	0	46	0	0	40	9	0	52	46	0	203	836
6:30 PM	0	0	0	0	0	16	0	50	0	0	29	16	0	52	54	0	217	817
6:45 PM	0	0	0	0	0	9	0	55	0	0	31	13	0	41	34	0	183	808
7:00 PM	0	0	0	0	0	9	0	46	0	0	32	10	0	41	37	0	175	778
7:15 PM	0	0	0	0	0	15	0	44	0	0	40	9	0	33	35	0	176	751
7:30 PM	0	0	0	0	0	11	0	39	0	0	28	19	0	34	36	0	167	701
7:45 PM	0	0	0	0	0	9	0	41	0	0	22	8	0	37	24	0	141	659
Count Total	0	0	0	0	0	214	0	1,092	0	0	813	226	0	1,047	983	0	4,375	0
Peak Hour All	**0**	**0**	**0**	**0**	**0**	**57**	**0**	**261**	**0**	**0**	**188**	**53**	**0**	**244**	**236**	**0**	**1,039**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**6**	**0**	**0**	**1**	**1**	**0**	**4**	**1**	**0**	**14**	**0**
Peak Hour HV%	**-**	**-**	**-**	**-**	**-**	**2%**	**-**	**2%**	**-**	**-**	**1%**	**2%**	**-**	**2%**	**0%**	**-**	**1%**	**0**

Note: Five-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:00 PM	0	2	0	4	*6*	0	1	0	0	*1*	2	0	0	0	*2*
3:15 PM	0	1	0	2	*3*	0	0	0	0	*0*	2	0	0	0	*2*
3:30 PM	0	4	0	3	*7*	0	0	0	0	*0*	0	0	0	0	*0*
3:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	3	0	0	0	*3*
4:00 PM	**0**	**3**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**0**	**0**	*2*
4:15 PM	**0**	**0**	**1**	**2**	***3***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
4:30 PM	**0**	**2**	**0**	**2**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**0**	**2**	**1**	**1**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:00 PM	0	1	0	1	*2*	0	0	0	0	*0*	3	0	0	0	*3*
5:15 PM	0	4	0	5	*9*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	0	3	1	1	*5*	0	0	0	0	*0*	1	0	0	0	*1*
5:45 PM	0	0	0	3	*3*	0	0	0	0	*0*	0	0	0	0	*0*
6:00 PM	0	1	0	2	*3*	0	0	0	0	*0*	0	0	0	0	*0*
6:15 PM	0	2	0	0	*2*	0	0	0	0	*0*	2	0	0	0	*2*
6:30 PM	0	3	1	3	*7*	0	0	0	0	*0*	1	0	0	0	*1*
6:45 PM	0	0	0	1	*1*	0	0	0	0	*0*	2	0	0	0	*2*
7:00 PM	0	3	0	1	*4*	0	0	0	0	*0*	2	0	0	0	*2*
7:15 PM	0	2	0	1	*3*	0	0	0	0	*0*	1	0	0	0	*1*
7:30 PM	0	3	2	2	*7*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 PM	0	0	0	2	*2*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	36	6	36	*78*	0	2	0	0	*2*	21	0	0	0	*21*
Peak Hr	**0**	**7**	**2**	**5**	***14***	**0**	**1**	**0**	**0**	***1***	**2**	**0**	**0**	**0**	***2***

Five-Hour Count Summaries - Heavy Vehicles

Interval Start	n/a				8th St				Midland Ave				Midland Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	2	2	0	6	0
3:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	3	0
3:30 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	3	0	0	7	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
4:00 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	13
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**1**	**0**	**3**	13
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**4**	10
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**4**	**14**
5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2	13
5:15 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	3	2	0	9	19
5:30 PM	0	0	0	0	0	0	0	3	0	0	1	0	0	1	0	0	5	20
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	19
6:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	3	20
6:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	13
6:30 PM	0	0	0	0	0	1	0	2	0	0	1	0	0	2	1	0	7	15
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	13
7:00 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	1	0	4	14
7:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	3	15
7:30 PM	0	0	0	0	0	1	0	2	0	0	1	1	0	2	0	0	7	15
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	16
Count Total	0	0	0	0	0	3	0	33	0	0	4	2	0	27	9	0	78	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**6**	**0**	**0**	**1**	**1**	**0**	**4**	**1**	**0**	**14**	**0**

Five-Hour Count Summaries - Bikes

Interval Start	n/a			8th St			Midland Ave			Midland Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
3:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	1	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:15 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	1
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	1	0	1	0	0	0	0	0	0	2	0
Peak Hour	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Vehicle Classification Report Summary

Location: 8th St W/O School St

Count Direction: Eastbound / Westbound

Date Range: 9/17/2022 to 9/23/2022

Site Code: 01

	FHWA Vehicle Classification													Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
Study Total														
Eastbound	165	20,879	5,510	266	2,629	38	0	7	10	2	1	0	2	29,509
Percent	0.6%	70.8%	18.7%	0.9%	8.9%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Westbound	175	16,929	5,366	268	4,212	34	0	16	13	0	0	0	0	27,013
Percent	0.6%	62.7%	19.9%	1.0%	15.6%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	340	37,808	10,876	534	6,841	72	0	23	23	2	1	0	2	56,522
Percent	0.6%	66.9%	19.2%	0.9%	12.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%

FHWA Vehicle Classification	
Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Saturday, September 17, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	10	1	0	2	0	0	0	0	0	0	0	0	**13**
1:00 AM	0	10	1	0	0	0	0	0	0	0	0	0	0	**11**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	4	1	0	1	0	0	0	0	0	0	0	0	**6**
4:00 AM	0	6	3	3	3	0	0	0	0	0	0	0	0	**15**
5:00 AM	1	14	4	4	7	0	0	0	0	0	0	0	0	**30**
6:00 AM	0	34	14	4	13	0	0	0	0	0	0	0	0	**65**
7:00 AM	1	75	33	2	12	0	0	0	0	0	0	0	0	**123**
8:00 AM	0	97	32	1	16	0	0	0	0	0	0	0	0	**146**
9:00 AM	5	142	60	0	16	0	0	0	0	0	0	0	0	**223**
10:00 AM	4	165	48	1	19	0	0	0	0	0	0	0	0	**237**
11:00 AM	1	202	55	1	24	0	0	0	0	0	0	0	0	**283**
12:00 PM	1	224	59	1	25	1	0	0	0	0	0	0	0	**311**
1:00 PM	1	203	63	3	21	0	0	0	0	0	0	0	0	**291**
2:00 PM	1	232	46	2	21	0	0	0	0	0	0	0	0	**302**
3:00 PM	0	199	49	3	17	1	0	0	0	0	0	0	0	**269**
4:00 PM	4	214	50	1	22	0	0	1	0	0	0	0	0	**292**
5:00 PM	2	184	36	3	20	0	0	0	1	0	0	0	0	**246**
6:00 PM	1	186	39	3	14	0	0	0	0	0	0	0	0	**243**
7:00 PM	0	137	30	2	22	0	0	0	0	0	0	0	0	**191**
8:00 PM	0	86	13	3	4	0	0	0	0	0	0	0	0	**106**
9:00 PM	0	71	25	1	8	0	0	0	0	0	0	0	0	**105**
10:00 PM	1	28	6	1	4	0	0	0	0	0	0	0	0	**40**
11:00 PM	1	22	6	2	1	0	0	0	0	0	0	0	0	**32**
Total	**24**	**2,546**	**674**	**41**	**292**	**2**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**3,581**
Percent	**0.7%**	**71.1%**	**18.8%**	**1.1%**	**8.2%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Saturday, September 17, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	12	3	3	4	0	0	0	0	0	0	0	0	**22**
1:00 AM	0	14	2	1	6	0	0	0	0	0	0	0	0	**23**
2:00 AM	0	6	3	2	4	0	0	0	0	0	0	0	0	**15**
3:00 AM	0	6	2	0	5	0	0	0	0	0	0	0	0	**13**
4:00 AM	0	5	1	0	1	0	0	0	0	0	0	0	0	**7**
5:00 AM	1	3	1	1	2	1	0	0	0	0	0	0	0	**9**
6:00 AM	0	11	10	1	13	0	0	0	0	0	0	0	0	**35**
7:00 AM	0	34	7	2	13	0	0	0	0	0	0	0	0	**56**
8:00 AM	0	68	20	1	25	0	0	0	0	0	0	0	0	**114**
9:00 AM	5	107	37	2	21	0	0	0	0	0	0	0	0	**172**
10:00 AM	0	170	55	2	50	0	0	0	0	0	0	0	0	**277**
11:00 AM	2	198	58	3	47	1	0	0	0	0	0	0	0	**309**
12:00 PM	1	223	65	1	51	1	0	0	0	0	0	0	0	**342**
1:00 PM	4	198	55	3	50	0	0	0	0	0	0	0	0	**310**
2:00 PM	3	194	62	2	29	0	0	0	0	0	0	0	0	**290**
3:00 PM	5	156	52	2	34	0	0	0	0	0	0	0	0	**249**
4:00 PM	4	196	54	4	47	0	0	0	0	0	0	0	0	**305**
5:00 PM	7	153	59	2	39	0	0	1	0	0	0	0	0	**261**
6:00 PM	4	147	45	1	36	0	0	0	1	0	0	0	0	**234**
7:00 PM	1	140	37	1	33	0	0	0	0	0	0	0	0	**212**
8:00 PM	0	106	31	4	22	0	0	0	0	0	0	0	0	**163**
9:00 PM	1	75	12	4	13	0	0	0	0	0	0	0	0	**105**
10:00 PM	0	37	5	1	9	0	0	0	0	0	0	0	0	**52**
11:00 PM	2	29	7	2	10	0	0	0	0	0	0	0	0	**50**
Total	**40**	**2,288**	**683**	**45**	**564**	**3**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**3,625**
Percent	**1.1%**	**63.1%**	**18.8%**	**1.2%**	**15.6%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Sunday, September 18, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	10	8	1	0	0	0	0	0	0	0	0	0	**19**
1:00 AM	0	11	1	0	1	0	0	0	0	0	0	0	0	**13**
2:00 AM	0	7	2	0	0	0	0	0	0	0	0	0	0	**9**
3:00 AM	0	8	1	0	1	0	0	0	0	0	0	0	0	**10**
4:00 AM	0	3	3	3	3	0	0	0	0	0	0	0	0	**12**
5:00 AM	1	10	4	4	4	0	0	0	0	0	0	0	0	**23**
6:00 AM	1	22	9	2	8	0	0	0	0	0	0	0	0	**42**
7:00 AM	0	37	14	2	11	0	0	0	0	0	0	0	0	**64**
8:00 AM	0	78	26	1	10	0	0	0	0	0	0	0	0	**115**
9:00 AM	1	119	37	0	19	0	0	0	0	0	0	0	0	**176**
10:00 AM	0	150	38	1	16	0	0	0	0	0	0	0	0	**205**
11:00 AM	1	191	52	2	14	0	0	0	0	0	0	0	0	**260**
12:00 PM	1	180	44	2	18	0	0	0	0	0	0	0	0	**245**
1:00 PM	7	183	50	5	22	0	0	0	0	0	0	0	0	**267**
2:00 PM	1	166	52	3	17	0	0	0	0	0	0	0	0	**239**
3:00 PM	4	219	59	1	20	0	0	0	0	0	0	0	0	**303**
4:00 PM	0	194	47	1	17	0	0	0	0	0	0	0	0	**259**
5:00 PM	1	176	24	2	14	0	0	0	0	0	0	0	0	**217**
6:00 PM	1	153	39	2	26	0	0	0	0	0	0	0	0	**221**
7:00 PM	1	124	29	1	13	0	0	0	0	0	0	0	0	**168**
8:00 PM	1	87	9	3	6	0	0	0	0	0	0	0	0	**106**
9:00 PM	1	41	11	1	6	0	0	0	0	0	0	0	0	**60**
10:00 PM	0	21	5	1	1	0	0	0	0	0	0	0	0	**28**
11:00 PM	1	9	1	0	1	0	0	0	0	0	0	0	0	**12**
Total	**23**	**2,199**	**565**	**38**	**248**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3,073**
Percent	**0.7%**	**71.6%**	**18.4%**	**1.2%**	**8.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Sunday, September 18, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	11	3	2	2	0	0	0	0	0	0	0	0	**18**
1:00 AM	0	13	0	1	3	0	0	0	0	0	0	0	0	**17**
2:00 AM	0	12	3	1	5	0	0	0	0	0	0	0	0	**21**
3:00 AM	0	8	2	2	2	0	0	0	0	0	0	0	0	**14**
4:00 AM	0	6	0	0	0	0	0	0	0	0	0	0	0	**6**
5:00 AM	0	2	0	1	1	0	0	0	0	0	0	0	0	**4**
6:00 AM	2	10	6	0	1	0	0	0	0	0	0	0	0	**19**
7:00 AM	0	21	11	1	7	0	0	0	0	0	0	0	0	**40**
8:00 AM	0	39	14	1	13	0	0	0	0	0	0	0	0	**67**
9:00 AM	0	86	45	2	32	0	0	0	0	0	0	0	0	**165**
10:00 AM	0	125	34	2	22	0	0	0	0	0	0	0	0	**183**
11:00 AM	2	171	50	4	35	0	0	0	0	0	0	0	0	**262**
12:00 PM	1	161	55	0	32	0	0	0	0	0	0	0	0	**249**
1:00 PM	2	185	49	1	44	0	0	0	0	0	0	0	0	**281**
2:00 PM	1	173	58	2	45	0	0	0	0	0	0	0	0	**279**
3:00 PM	1	168	48	1	33	0	0	0	0	0	0	0	0	**251**
4:00 PM	4	143	48	2	33	0	0	0	0	0	0	0	0	**230**
5:00 PM	3	121	55	3	27	0	0	0	0	0	0	0	0	**209**
6:00 PM	1	130	30	1	18	0	0	0	0	0	0	0	0	**180**
7:00 PM	1	120	28	4	23	0	0	0	0	0	0	0	0	**176**
8:00 PM	0	96	24	2	19	0	0	0	0	0	0	0	0	**141**
9:00 PM	0	41	22	4	10	0	0	0	0	0	0	0	0	**77**
10:00 PM	0	33	6	0	5	0	0	0	0	0	0	0	0	**44**
11:00 PM	0	10	4	1	2	0	0	0	0	0	0	0	0	**17**
Total	**18**	**1,885**	**595**	**38**	**414**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2,950**
Percent	**0.6%**	**63.9%**	**20.2%**	**1.3%**	**14.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Monday, September 19, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	1	8	0	0	0	0	0	0	0	0	0	0	0	**9**
1:00 AM	1	9	1	0	0	0	0	0	0	0	0	0	0	**11**
2:00 AM	0	3	2	0	0	0	0	0	0	0	0	0	0	**5**
3:00 AM	0	2	2	0	0	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	5	1	3	2	0	0	0	0	0	0	0	0	**11**
5:00 AM	0	25	11	4	10	1	0	0	0	0	0	0	0	**51**
6:00 AM	3	70	30	4	22	1	0	0	0	0	0	0	0	**130**
7:00 AM	0	242	83	3	42	0	0	0	0	0	0	0	0	**370**
8:00 AM	0	346	92	1	47	0	0	0	0	0	0	0	0	**486**
9:00 AM	0	174	59	0	25	2	0	0	0	0	0	0	0	**260**
10:00 AM	2	183	46	4	27	0	0	0	0	0	0	0	0	**262**
11:00 AM	2	281	63	1	55	0	0	0	0	0	0	0	0	**402**
12:00 PM	3	335	68	3	41	0	0	0	1	0	0	0	0	**451**
1:00 PM	3	381	109	6	51	4	0	0	0	0	0	0	0	**554**
2:00 PM	3	316	91	2	26	0	0	0	0	1	0	0	0	**439**
3:00 PM	0	352	84	2	33	1	0	0	0	0	0	0	1	**473**
4:00 PM	1	245	54	2	27	2	0	1	0	0	0	0	0	**332**
5:00 PM	2	232	54	2	24	0	0	0	0	0	0	0	1	**315**
6:00 PM	5	173	44	2	20	0	0	0	0	0	0	0	0	**244**
7:00 PM	2	117	43	0	11	0	0	0	0	0	0	0	0	**173**
8:00 PM	1	70	22	3	14	0	0	0	0	0	0	0	0	**110**
9:00 PM	0	45	13	1	6	0	0	0	0	0	0	0	0	**65**
10:00 PM	0	27	6	1	3	0	0	0	0	0	0	0	0	**37**
11:00 PM	0	8	1	0	3	0	0	0	0	0	0	0	0	**12**
Total	**29**	**3,649**	**979**	**44**	**489**	**11**	**0**	**1**	**1**	**1**	**0**	**0**	**2**	**5,206**
Percent	**0.6%**	**70.1%**	**18.8%**	**0.8%**	**9.4%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Monday, September 19, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	6	1	1	3	0	0	0	0	0	0	0	0	**11**
1:00 AM	2	4	1	1	0	0	0	0	0	0	0	0	0	**8**
2:00 AM	0	3	2	0	0	0	0	0	0	0	0	0	0	**5**
3:00 AM	0	3	1	1	1	0	0	0	0	0	0	0	0	**6**
4:00 AM	0	2	4	0	0	0	0	0	0	0	0	0	0	**6**
5:00 AM	1	9	7	1	1	1	0	0	0	0	0	0	0	**20**
6:00 AM	0	14	8	1	12	0	0	0	0	0	0	0	0	**35**
7:00 AM	1	51	22	0	19	1	0	0	0	0	0	0	0	**94**
8:00 AM	1	129	51	2	28	1	0	0	0	0	0	0	0	**212**
9:00 AM	2	104	43	2	23	0	0	0	0	0	0	0	0	**174**
10:00 AM	0	142	53	2	41	0	0	0	0	0	0	0	0	**238**
11:00 AM	4	204	53	3	48	1	0	0	0	0	0	0	0	**313**
12:00 PM	3	246	62	2	55	0	0	0	0	0	0	0	0	**368**
1:00 PM	4	182	42	1	44	0	0	0	1	0	0	0	0	**274**
2:00 PM	2	243	76	2	57	0	0	0	0	0	0	0	0	**380**
3:00 PM	1	265	73	2	72	0	0	0	0	0	0	0	0	**413**
4:00 PM	2	257	78	4	80	1	0	0	0	0	0	0	0	**422**
5:00 PM	2	278	87	2	53	0	0	1	0	0	0	0	0	**423**
6:00 PM	1	184	61	2	58	0	0	0	1	0	0	0	0	**307**
7:00 PM	0	132	45	0	37	0	0	0	1	0	0	0	0	**215**
8:00 PM	2	70	27	3	27	0	0	0	0	0	0	0	0	**129**
9:00 PM	2	43	16	2	16	0	0	0	0	0	0	0	0	**79**
10:00 PM	0	27	3	0	7	0	0	0	0	0	0	0	0	**37**
11:00 PM	0	8	2	1	1	0	0	0	0	0	0	0	0	**12**
Total	**30**	**2,606**	**818**	**35**	**683**	**5**	**0**	**1**	**3**	**0**	**0**	**0**	**0**	**4,181**
Percent	**0.7%**	**62.3%**	**19.6%**	**0.8%**	**16.3%**	**0.1%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Tuesday, September 20, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	1	5	1	1	0	0	0	0	0	0	0	0	0	**8**
1:00 AM	0	3	0	0	1	0	0	0	0	0	0	0	0	**4**
2:00 AM	1	2	0	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	1	3	1	0	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	11	3	3	4	0	0	0	0	0	0	0	0	**21**
5:00 AM	0	26	13	4	11	0	0	0	0	0	0	0	0	**54**
6:00 AM	0	83	35	5	25	0	0	0	0	0	0	0	0	**148**
7:00 AM	1	239	72	2	35	0	0	0	0	0	0	0	0	**349**
8:00 AM	1	340	106	2	49	0	0	0	0	0	0	0	0	**498**
9:00 AM	3	187	53	1	30	0	0	0	0	0	0	0	0	**274**
10:00 AM	1	181	57	1	21	0	0	0	0	0	0	0	0	**261**
11:00 AM	1	203	43	0	24	1	0	0	1	0	0	0	0	**273**
12:00 PM	1	249	69	0	24	0	0	1	0	0	0	0	0	**344**
1:00 PM	1	223	55	7	35	1	0	0	0	0	0	0	0	**322**
2:00 PM	3	200	49	0	26	0	0	0	0	1	0	0	0	**279**
3:00 PM	1	261	60	2	21	0	0	0	1	0	0	0	0	**346**
4:00 PM	5	212	62	2	23	0	0	0	0	0	0	0	0	**304**
5:00 PM	3	230	55	0	17	1	0	0	0	0	0	0	0	**306**
6:00 PM	1	172	42	2	22	0	0	0	0	0	0	0	0	**239**
7:00 PM	0	110	27	2	12	0	0	0	0	0	0	0	0	**151**
8:00 PM	1	76	15	1	6	0	0	0	0	0	0	0	0	**99**
9:00 PM	0	33	10	2	3	0	0	0	0	0	0	0	0	**48**
10:00 PM	0	27	2	0	5	0	0	0	0	0	0	0	0	**34**
11:00 PM	0	10	2	2	1	0	0	0	0	0	0	0	0	**15**
Total	**26**	**3,086**	**832**	**39**	**395**	**3**	**0**	**1**	**2**	**1**	**0**	**0**	**0**	**4,385**
Percent	**0.6%**	**70.4%**	**19.0%**	**0.9%**	**9.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Tuesday, September 20, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	9	2	1	1	0	0	0	0	0	0	0	0	**13**
1:00 AM	1	2	1	2	0	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	**4**
3:00 AM	0	3	3	1	3	0	0	0	0	0	0	0	0	**10**
4:00 AM	1	3	2	0	2	0	0	0	0	0	0	0	0	**8**
5:00 AM	0	10	6	1	0	0	0	0	0	0	0	0	0	**17**
6:00 AM	0	19	14	1	12	1	0	0	0	0	0	0	0	**47**
7:00 AM	1	51	17	1	29	1	0	0	0	0	0	0	0	**100**
8:00 AM	0	111	37	2	29	0	0	0	0	0	0	0	0	**179**
9:00 AM	2	122	31	2	27	0	0	0	0	0	0	0	0	**184**
10:00 AM	2	126	49	2	40	0	0	0	1	0	0	0	0	**220**
11:00 AM	7	182	40	1	45	2	0	0	0	0	0	0	0	**277**
12:00 PM	4	200	59	1	41	1	0	1	0	0	0	0	0	**307**
1:00 PM	0	199	70	3	60	0	0	0	0	0	0	0	0	**332**
2:00 PM	0	197	60	2	49	2	0	0	0	0	0	0	0	**310**
3:00 PM	6	289	76	2	45	1	0	0	0	0	0	0	0	**419**
4:00 PM	5	271	75	2	51	0	0	0	0	0	0	0	0	**404**
5:00 PM	1	302	77	3	51	0	0	1	0	0	0	0	0	**435**
6:00 PM	5	179	43	1	62	0	0	0	0	0	0	0	0	**290**
7:00 PM	2	142	46	2	45	0	0	0	0	0	0	0	0	**237**
8:00 PM	0	81	25	2	16	0	0	0	0	0	0	0	0	**124**
9:00 PM	0	37	17	2	10	0	0	0	0	0	0	0	0	**66**
10:00 PM	0	23	3	1	6	0	0	0	0	0	0	0	0	**33**
11:00 PM	0	8	4	2	1	0	0	0	0	0	0	0	0	**15**
Total	**37**	**2,568**	**757**	**37**	**627**	**8**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**4,037**
Percent	**0.9%**	**63.6%**	**18.8%**	**0.9%**	**15.5%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Wednesday, September 21, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	7	0	1	1	0	0	0	0	0	0	0	0	**9**
1:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	1	3	0	0	0	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	3	2	2	5	0	0	0	0	0	0	0	0	**12**
5:00 AM	1	26	10	4	10	0	0	0	0	0	0	0	0	**51**
6:00 AM	0	86	43	4	32	0	0	0	0	0	0	0	0	**165**
7:00 AM	1	220	91	3	36	0	0	0	0	0	0	0	0	**351**
8:00 AM	1	328	90	2	53	1	0	0	0	0	0	0	0	**475**
9:00 AM	0	183	48	0	27	1	0	0	0	0	0	0	0	**259**
10:00 AM	1	207	55	2	30	1	0	0	0	0	0	0	0	**296**
11:00 AM	0	228	56	0	28	1	0	0	0	0	0	0	0	**313**
12:00 PM	1	222	49	0	29	1	0	0	1	0	0	0	0	**303**
1:00 PM	4	236	47	4	28	0	0	1	0	0	0	0	0	**320**
2:00 PM	0	250	54	1	26	2	0	0	1	0	0	0	0	**334**
3:00 PM	0	247	47	3	27	0	0	0	0	0	0	0	0	**324**
4:00 PM	1	200	58	1	28	0	0	0	0	0	0	0	0	**288**
5:00 PM	2	210	54	1	23	0	0	0	0	0	0	0	0	**290**
6:00 PM	0	172	38	0	18	0	0	0	0	0	0	0	0	**228**
7:00 PM	0	120	31	1	14	0	0	1	0	0	0	0	0	**167**
8:00 PM	1	68	12	2	10	0	0	0	0	0	0	0	0	**93**
9:00 PM	0	40	6	1	5	0	0	0	0	0	0	0	0	**52**
10:00 PM	0	23	3	0	3	0	0	0	0	0	0	0	0	**29**
11:00 PM	0	7	3	1	1	0	0	0	0	0	0	0	0	**12**
Total	**14**	**3,090**	**798**	**33**	**434**	**7**	**0**	**2**	**2**	**0**	**0**	**0**	**0**	**4,380**
Percent	**0.3%**	**70.5%**	**18.2%**	**0.8%**	**9.9%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Wednesday, September 21, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	9	2	2	2	0	0	0	0	0	0	0	0	**15**
1:00 AM	0	4	1	0	3	0	0	0	0	0	0	0	0	**8**
2:00 AM	0	0	1	1	1	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	2	1	3	1	0	0	0	0	0	0	0	0	**7**
4:00 AM	0	2	4	0	3	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	9	7	1	3	1	0	0	0	0	0	0	0	**21**
6:00 AM	0	20	12	1	12	0	0	0	1	0	0	0	0	**46**
7:00 AM	1	51	16	1	33	2	0	0	0	0	0	0	0	**104**
8:00 AM	0	114	47	1	42	0	0	0	0	0	0	0	0	**204**
9:00 AM	0	102	30	2	27	0	0	0	0	0	0	0	0	**161**
10:00 AM	2	138	57	1	42	0	0	0	0	0	0	0	0	**240**
11:00 AM	1	171	59	3	41	0	0	0	0	0	0	0	0	**275**
12:00 PM	1	196	53	1	54	1	0	0	0	0	0	0	0	**306**
1:00 PM	3	203	61	2	29	0	0	0	0	0	0	0	0	**298**
2:00 PM	1	286	72	2	58	1	0	0	0	0	0	0	0	**420**
3:00 PM	0	190	57	1	43	1	0	0	0	0	0	0	0	**292**
4:00 PM	4	231	72	4	71	0	0	0	0	0	0	0	0	**382**
5:00 PM	3	276	81	1	55	0	0	0	0	0	0	0	0	**416**
6:00 PM	2	174	54	3	46	1	0	0	0	0	0	0	0	**280**
7:00 PM	0	145	54	2	49	0	0	0	0	0	0	0	0	**250**
8:00 PM	0	69	27	3	21	0	0	0	0	0	0	0	0	**120**
9:00 PM	2	40	13	1	12	0	0	0	0	0	0	0	0	**68**
10:00 PM	0	26	12	1	8	0	0	0	0	0	0	0	0	**47**
11:00 PM	0	15	3	1	2	0	0	0	0	0	0	0	0	**21**
Total	**20**	**2,473**	**796**	**38**	**658**	**7**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**3,993**
Percent	**0.5%**	**61.9%**	**19.9%**	**1.0%**	**16.5%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Thursday, September 22, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	4	0	0	2	0	0	0	0	0	0	0	0	**6**
1:00 AM	0	3	2	0	0	0	0	0	0	0	0	0	0	**5**
2:00 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	**5**
3:00 AM	0	3	2	0	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	11	2	2	5	0	0	0	0	0	0	0	0	**20**
5:00 AM	0	24	13	4	12	0	0	0	0	0	0	0	0	**53**
6:00 AM	0	70	43	6	22	0	0	0	0	0	0	0	0	**141**
7:00 AM	2	231	60	3	40	0	0	0	0	0	0	0	0	**336**
8:00 AM	1	298	90	3	34	0	0	0	1	0	0	0	0	**427**
9:00 AM	0	194	56	0	24	0	0	0	0	0	0	0	0	**274**
10:00 AM	4	186	59	2	20	0	0	0	0	0	0	0	0	**271**
11:00 AM	5	214	65	1	36	0	0	0	0	0	0	0	0	**321**
12:00 PM	0	218	56	3	26	1	0	0	0	0	0	0	0	**304**
1:00 PM	2	223	53	3	34	0	0	0	0	0	0	0	0	**315**
2:00 PM	0	227	53	1	21	1	0	0	0	0	0	0	0	**303**
3:00 PM	0	306	82	3	25	0	0	0	0	0	0	0	0	**416**
4:00 PM	1	204	53	3	18	0	0	0	0	0	0	0	0	**279**
5:00 PM	4	232	49	2	19	0	0	0	1	0	0	0	0	**307**
6:00 PM	1	161	43	1	18	0	0	0	0	0	0	0	0	**224**
7:00 PM	0	155	35	3	11	0	0	0	0	0	0	0	0	**204**
8:00 PM	0	85	17	1	11	0	0	0	0	0	0	0	0	**114**
9:00 PM	1	59	6	1	9	0	0	0	0	0	0	0	0	**76**
10:00 PM	0	22	10	0	2	0	0	0	0	0	0	0	0	**34**
11:00 PM	0	9	0	2	0	0	0	0	0	0	0	0	0	**11**
Total	**21**	**3,144**	**849**	**44**	**389**	**2**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**4,451**
Percent	**0.5%**	**70.6%**	**19.1%**	**1.0%**	**8.7%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Thursday, September 22, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	9	1	0	4	0	0	0	0	0	0	0	0	**14**
1:00 AM	0	2	1	0	2	0	0	0	0	0	0	0	0	**5**
2:00 AM	0	0	2	1	1	0	0	0	0	0	0	0	0	**4**
3:00 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	7	2	0	1	0	0	0	0	0	0	0	0	**10**
5:00 AM	0	6	8	1	5	0	0	0	0	0	0	0	0	**20**
6:00 AM	0	18	8	3	13	0	0	0	1	0	0	0	0	**43**
7:00 AM	0	50	20	1	14	0	0	0	2	0	0	0	0	**87**
8:00 AM	0	106	44	0	32	0	0	0	0	0	0	0	0	**182**
9:00 AM	0	105	37	2	31	0	0	0	0	0	0	0	0	**175**
10:00 AM	1	129	59	1	41	0	0	0	0	0	0	0	0	**231**
11:00 AM	0	163	63	5	46	1	0	0	0	0	0	0	0	**278**
12:00 PM	3	214	82	1	50	0	0	0	0	0	0	0	0	**350**
1:00 PM	0	180	61	1	52	0	0	1	0	0	0	0	0	**295**
2:00 PM	0	215	69	2	44	0	0	3	0	0	0	0	0	**333**
3:00 PM	2	284	95	3	60	0	0	1	0	0	0	0	0	**445**
4:00 PM	1	233	68	3	60	1	0	2	0	0	0	0	0	**368**
5:00 PM	0	269	76	2	59	0	0	3	0	0	0	0	0	**409**
6:00 PM	1	163	53	2	54	0	0	0	1	0	0	0	0	**274**
7:00 PM	0	116	36	3	29	1	0	0	0	0	0	0	0	**185**
8:00 PM	0	83	23	3	22	0	0	0	0	0	0	0	0	**131**
9:00 PM	0	50	30	2	21	0	0	0	0	0	0	0	0	**103**
10:00 PM	0	29	8	1	9	0	0	0	0	0	0	0	0	**47**
11:00 PM	0	18	3	1	3	0	0	0	0	0	0	0	0	**25**
Total	**8**	**2,451**	**849**	**38**	**655**	**3**	**0**	**10**	**4**	**0**	**0**	**0**	**0**	**4,018**
Percent	**0.2%**	**61.0%**	**21.1%**	**0.9%**	**16.3%**	**0.1%**	**0.0%**	**0.2%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Friday, September 23, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	6	0	0	2	0	0	0	0	0	0	0	0	**8**
1:00 AM	1	5	4	0	0	0	0	0	0	0	0	0	0	**10**
2:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	3	3	3	3	0	0	0	0	0	0	0	0	**12**
5:00 AM	0	20	10	3	9	1	0	0	0	0	0	0	0	**43**
6:00 AM	0	65	37	2	19	0	0	0	0	0	0	0	0	**123**
7:00 AM	0	189	61	1	40	1	0	0	0	0	0	0	0	**292**
8:00 AM	2	261	82	0	24	0	0	0	0	0	0	0	0	**369**
9:00 AM	0	198	60	1	25	1	0	0	0	0	0	0	0	**285**
10:00 AM	3	238	67	1	31	2	0	0	0	0	0	0	0	**342**
11:00 AM	3	200	53	1	22	0	0	0	1	0	0	0	0	**280**
12:00 PM	4	227	58	0	31	0	0	0	0	0	0	0	0	**320**
1:00 PM	0	213	47	2	27	1	0	1	0	0	0	0	0	**291**
2:00 PM	3	214	53	2	31	3	0	0	0	0	0	0	0	**306**
3:00 PM	3	276	61	1	18	2	0	0	0	0	0	0	0	**361**
4:00 PM	0	217	32	2	21	2	0	1	0	0	0	0	0	**275**
5:00 PM	3	217	38	2	21	0	0	0	1	0	1	0	0	**283**
6:00 PM	3	229	53	2	21	0	0	0	0	0	0	0	0	**308**
7:00 PM	1	150	39	0	11	0	0	0	0	0	0	0	0	**201**
8:00 PM	2	108	26	3	5	0	0	0	0	0	0	0	0	**144**
9:00 PM	0	66	17	1	6	0	0	0	0	0	0	0	0	**90**
10:00 PM	0	49	8	0	11	0	0	0	0	0	0	0	0	**68**
11:00 PM	0	10	4	0	4	0	0	0	0	0	0	0	0	**18**
Total	**28**	**3,165**	**813**	**27**	**382**	**13**	**0**	**2**	**2**	**0**	**1**	**0**	**0**	**4,433**
Percent	**0.6%**	**71.4%**	**18.3%**	**0.6%**	**8.6%**	**0.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Friday, September 23, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	10	3	1	3	0	0	0	0	0	0	0	0	**17**
1:00 AM	0	4	0	1	1	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	2	3	1	1	0	0	0	0	0	0	0	0	**7**
3:00 AM	0	3	0	1	1	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	7	5	0	6	0	0	0	0	0	0	0	0	**18**
6:00 AM	1	27	7	1	17	0	0	0	1	0	0	0	0	**54**
7:00 AM	0	41	19	1	17	2	0	0	0	0	0	0	0	**80**
8:00 AM	0	113	58	0	32	1	0	0	0	0	0	0	0	**204**
9:00 AM	0	102	29	1	25	1	0	0	1	0	0	0	0	**159**
10:00 AM	2	148	47	2	34	1	0	1	0	0	0	0	0	**235**
11:00 AM	3	194	74	2	39	0	0	0	0	0	0	0	0	**312**
12:00 PM	0	220	65	1	54	0	0	0	0	0	0	0	0	**340**
1:00 PM	3	187	60	2	53	1	0	0	0	0	0	0	0	**306**
2:00 PM	0	187	58	3	48	1	0	0	0	0	0	0	0	**297**
3:00 PM	1	324	90	2	37	1	0	0	0	0	0	0	0	**455**
4:00 PM	2	234	87	3	56	0	0	0	0	0	0	0	0	**382**
5:00 PM	2	237	63	2	50	0	0	1	0	0	0	0	0	**355**
6:00 PM	4	179	64	1	31	0	0	0	1	0	0	0	0	**280**
7:00 PM	3	149	45	4	40	0	0	0	0	0	0	0	0	**241**
8:00 PM	0	100	26	4	20	0	0	0	0	0	0	0	0	**150**
9:00 PM	0	93	44	3	23	0	0	0	0	0	0	0	0	**163**
10:00 PM	0	73	16	0	19	0	0	0	0	0	0	0	0	**108**
11:00 PM	1	24	5	1	4	0	0	0	0	0	0	0	0	**35**
Total	**22**	**2,658**	**868**	**37**	**611**	**8**	**0**	**2**	**3**	**0**	**0**	**0**	**0**	**4,209**
Percent	**0.5%**	**63.2%**	**20.6%**	**0.9%**	**14.5%**	**0.2%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Total Study Average
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	7	1	0	1	0	0	0	0	0	0	0	0	**9**
1:00 AM	0	6	1	0	0	0	0	0	0	0	0	0	0	**7**
2:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	**4**
3:00 AM	0	4	1	0	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	6	2	3	4	0	0	0	0	0	0	0	0	**15**
5:00 AM	0	21	9	4	9	0	0	0	0	0	0	0	0	**43**
6:00 AM	1	61	30	4	20	0	0	0	0	0	0	0	0	**116**
7:00 AM	1	176	59	2	31	0	0	0	0	0	0	0	0	**269**
8:00 AM	1	250	74	1	33	0	0	0	0	0	0	0	0	**359**
9:00 AM	1	171	53	0	24	1	0	0	0	0	0	0	0	**250**
10:00 AM	2	187	53	2	23	0	0	0	0	0	0	0	0	**267**
11:00 AM	2	217	55	1	29	0	0	0	0	0	0	0	0	**304**
12:00 PM	2	236	58	1	28	0	0	0	0	0	0	0	0	**325**
1:00 PM	3	237	61	4	31	1	0	0	0	0	0	0	0	**337**
2:00 PM	2	229	57	2	24	1	0	0	0	0	0	0	0	**315**
3:00 PM	1	266	63	2	23	1	0	0	0	0	0	0	0	**356**
4:00 PM	2	212	51	2	22	1	0	0	0	0	0	0	0	**290**
5:00 PM	2	212	44	2	20	0	0	0	0	0	0	0	0	**280**
6:00 PM	2	178	43	2	20	0	0	0	0	0	0	0	0	**245**
7:00 PM	1	130	33	1	13	0	0	0	0	0	0	0	0	**178**
8:00 PM	1	83	16	2	8	0	0	0	0	0	0	0	0	**110**
9:00 PM	0	51	13	1	6	0	0	0	0	0	0	0	0	**71**
10:00 PM	0	28	6	0	4	0	0	0	0	0	0	0	0	**38**
11:00 PM	0	11	2	1	2	0	0	0	0	0	0	0	0	**16**
Total	**24**	**2,982**	**786**	**37**	**375**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4,209**
Percent	**0.6%**	**70.8%**	**18.7%**	**0.9%**	**8.9%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Total Study Average
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	9	2	1	3	0	0	0	0	0	0	0	0	**15**
1:00 AM	0	6	1	1	2	0	0	0	0	0	0	0	0	**10**
2:00 AM	0	4	2	1	2	0	0	0	0	0	0	0	0	**9**
3:00 AM	0	4	1	1	2	0	0	0	0	0	0	0	0	**8**
4:00 AM	0	4	2	0	1	0	0	0	0	0	0	0	0	**7**
5:00 AM	0	7	5	1	3	0	0	0	0	0	0	0	0	**16**
6:00 AM	0	17	9	1	11	0	0	0	0	0	0	0	0	**38**
7:00 AM	0	43	16	1	19	1	0	0	0	0	0	0	0	**80**
8:00 AM	0	97	39	1	29	0	0	0	0	0	0	0	0	**166**
9:00 AM	1	104	36	2	27	0	0	0	0	0	0	0	0	**170**
10:00 AM	1	140	51	2	39	0	0	0	0	0	0	0	0	**233**
11:00 AM	3	183	57	3	43	1	0	0	0	0	0	0	0	**290**
12:00 PM	2	209	63	1	48	0	0	0	0	0	0	0	0	**323**
1:00 PM	2	191	57	2	47	0	0	0	0	0	0	0	0	**299**
2:00 PM	1	214	65	2	47	1	0	0	0	0	0	0	0	**330**
3:00 PM	2	239	70	2	46	0	0	0	0	0	0	0	0	**359**
4:00 PM	3	224	69	3	57	0	0	0	0	0	0	0	0	**356**
5:00 PM	3	234	71	2	48	0	0	1	0	0	0	0	0	**359**
6:00 PM	3	165	50	2	44	0	0	0	1	0	0	0	0	**265**
7:00 PM	1	135	42	2	37	0	0	0	0	0	0	0	0	**217**
8:00 PM	0	86	26	3	21	0	0	0	0	0	0	0	0	**136**
9:00 PM	1	54	22	3	15	0	0	0	0	0	0	0	0	**95**
10:00 PM	0	35	8	1	9	0	0	0	0	0	0	0	0	**53**
11:00 PM	0	16	4	1	3	0	0	0	0	0	0	0	0	**24**
Total	**23**	**2,420**	**768**	**39**	**603**	**3**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**3,858**
Percent	**0.6%**	**62.7%**	**19.9%**	**1.0%**	**15.6%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

3-Day (Tuesday - Thursday) Average
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	5	0	1	1	0	0	0	0	0	0	0	0	**8**
1:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	1	3	1	0	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	8	2	2	5	0	0	0	0	0	0	0	0	**18**
5:00 AM	0	25	12	4	11	0	0	0	0	0	0	0	0	**53**
6:00 AM	0	80	40	5	26	0	0	0	0	0	0	0	0	**151**
7:00 AM	1	230	74	3	37	0	0	0	0	0	0	0	0	**345**
8:00 AM	1	322	95	2	45	0	0	0	0	0	0	0	0	**467**
9:00 AM	1	188	52	0	27	0	0	0	0	0	0	0	0	**269**
10:00 AM	2	191	57	2	24	0	0	0	0	0	0	0	0	**276**
11:00 AM	2	215	55	0	29	1	0	0	0	0	0	0	0	**302**
12:00 PM	1	230	58	1	26	1	0	0	0	0	0	0	0	**317**
1:00 PM	2	227	52	5	32	0	0	0	0	0	0	0	0	**319**
2:00 PM	1	226	52	1	24	1	0	0	0	0	0	0	0	**305**
3:00 PM	0	271	63	3	24	0	0	0	0	0	0	0	0	**362**
4:00 PM	2	205	58	2	23	0	0	0	0	0	0	0	0	**290**
5:00 PM	3	224	53	1	20	0	0	0	0	0	0	0	0	**301**
6:00 PM	1	168	41	1	19	0	0	0	0	0	0	0	0	**230**
7:00 PM	0	128	31	2	12	0	0	0	0	0	0	0	0	**174**
8:00 PM	1	76	15	1	9	0	0	0	0	0	0	0	0	**102**
9:00 PM	0	44	7	1	6	0	0	0	0	0	0	0	0	**59**
10:00 PM	0	24	5	0	3	0	0	0	0	0	0	0	0	**32**
11:00 PM	0	9	2	2	1	0	0	0	0	0	0	0	0	**13**
Total	**20**	**3,107**	**826**	**39**	**406**	**4**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**4,405**
Percent	**0.5%**	**70.5%**	**18.8%**	**0.9%**	**9.2%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

3-Day (Tuesday - Thursday) Average
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	9	2	1	2	0	0	0	0	0	0	0	0	**14**
1:00 AM	0	3	1	1	2	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	1	1	1	1	0	0	0	0	0	0	0	0	**4**
3:00 AM	0	2	1	1	2	0	0	0	0	0	0	0	0	**7**
4:00 AM	0	4	3	0	2	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	8	7	1	3	0	0	0	0	0	0	0	0	**19**
6:00 AM	0	19	11	2	12	0	0	0	1	0	0	0	0	**45**
7:00 AM	1	51	18	1	25	1	0	0	1	0	0	0	0	**97**
8:00 AM	0	110	43	1	34	0	0	0	0	0	0	0	0	**188**
9:00 AM	1	110	33	2	28	0	0	0	0	0	0	0	0	**173**
10:00 AM	2	131	55	1	41	0	0	0	0	0	0	0	0	**230**
11:00 AM	3	172	54	3	44	1	0	0	0	0	0	0	0	**277**
12:00 PM	3	203	65	1	48	1	0	0	0	0	0	0	0	**321**
1:00 PM	1	194	64	2	47	0	0	0	0	0	0	0	0	**308**
2:00 PM	0	233	67	2	50	1	0	1	0	0	0	0	0	**354**
3:00 PM	3	254	76	2	49	1	0	0	0	0	0	0	0	**385**
4:00 PM	3	245	72	3	61	0	0	1	0	0	0	0	0	**385**
5:00 PM	1	282	78	2	55	0	0	1	0	0	0	0	0	**420**
6:00 PM	3	172	50	2	54	0	0	0	0	0	0	0	0	**281**
7:00 PM	1	134	45	2	41	0	0	0	0	0	0	0	0	**224**
8:00 PM	0	78	25	3	20	0	0	0	0	0	0	0	0	**125**
9:00 PM	1	42	20	2	14	0	0	0	0	0	0	0	0	**79**
10:00 PM	0	26	8	1	8	0	0	0	0	0	0	0	0	**42**
11:00 PM	0	14	3	1	2	0	0	0	0	0	0	0	0	**20**
Total	**22**	**2,497**	**801**	**38**	**647**	**6**	**0**	**4**	**2**	**0**	**0**	**0**	**0**	**4,016**
Percent	**0.5%**	**62.2%**	**19.9%**	**0.9%**	**16.1%**	**0.1%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Vehicle Speed Report Summary

Location: 8th St W/O School St

Count Direction: Eastbound / Westbound

Date Range: 9/17/2022 to 9/23/2022

Site Code: 01

	Speed Range (mph)																	Total
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
Study Total																		
Eastbound	110	163	1,699	10,477	13,731	3,041	271	16	1	0	0	0	0	0	0	0	0	29,509
Percent	0.4%	0.6%	5.8%	35.5%	46.5%	10.3%	0.9%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Westbound	25	119	641	3,539	12,792	8,487	1,254	133	19	3	1	0	0	0	0	0	0	27,013
Percent	0.1%	0.4%	2.4%	13.1%	47.4%	31.4%	4.6%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	135	282	2,340	14,016	26,523	11,528	1,525	149	20	3	1	0	0	0	0	0	0	56,522
Percent	0.2%	0.5%	4.1%	24.8%	46.9%	20.4%	2.7%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%

Total Study Percentile Speed Summary			Total Study Speed Statistics		
Eastbound			**Eastbound**		
50th Percentile (Median)	25.7	mph	Mean (Average) Speed	25.6	mph
85th Percentile	29.3	mph	10 mph Pace	20.7 - 30.7	mph
95th Percentile	31.7	mph	Percent in Pace	82.7	%
Westbound			**Westbound**		
50th Percentile (Median)	28.7	mph	Mean (Average) Speed	28.6	mph
85th Percentile	32.5	mph	10 mph Pace	23.7 - 33.7	mph
95th Percentile	35.1	mph	Percent in Pace	80.6	%

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Saturday, September 17, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	7	3	2	0	0	0	0	0	0	0	0	0	0	0	**13**
1:00 AM	0	0	4	5	2	0	0	0	0	0	0	0	0	0	0	0	0	**11**
2:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
4:00 AM	0	0	4	6	5	0	0	0	0	0	0	0	0	0	0	0	0	**15**
5:00 AM	0	1	0	14	12	2	1	0	0	0	0	0	0	0	0	0	0	**30**
6:00 AM	0	0	2	14	35	11	3	0	0	0	0	0	0	0	0	0	0	**65**
7:00 AM	0	1	0	27	60	27	7	1	0	0	0	0	0	0	0	0	0	**123**
8:00 AM	0	0	2	36	75	29	4	0	0	0	0	0	0	0	0	0	0	**146**
9:00 AM	2	0	6	71	107	30	5	2	0	0	0	0	0	0	0	0	0	**223**
10:00 AM	0	1	8	70	132	22	4	0	0	0	0	0	0	0	0	0	0	**237**
11:00 AM	0	2	10	90	139	39	3	0	0	0	0	0	0	0	0	0	0	**283**
12:00 PM	0	0	18	86	174	28	5	0	0	0	0	0	0	0	0	0	0	**311**
1:00 PM	0	2	12	64	163	48	2	0	0	0	0	0	0	0	0	0	0	**291**
2:00 PM	1	0	24	87	143	43	4	0	0	0	0	0	0	0	0	0	0	**302**
3:00 PM	0	0	6	91	137	34	1	0	0	0	0	0	0	0	0	0	0	**269**
4:00 PM	0	2	11	76	172	26	5	0	0	0	0	0	0	0	0	0	0	**292**
5:00 PM	0	1	13	74	121	32	5	0	0	0	0	0	0	0	0	0	0	**246**
6:00 PM	0	1	20	95	101	23	3	0	0	0	0	0	0	0	0	0	0	**243**
7:00 PM	0	0	7	89	78	16	1	0	0	0	0	0	0	0	0	0	0	**191**
8:00 PM	0	0	9	39	47	10	1	0	0	0	0	0	0	0	0	0	0	**106**
9:00 PM	0	0	5	39	53	8	0	0	0	0	0	0	0	0	0	0	0	**105**
10:00 PM	0	0	5	9	14	7	4	1	0	0	0	0	0	0	0	0	0	**40**
11:00 PM	0	0	4	10	12	5	1	0	0	0	0	0	0	0	0	0	0	**32**
Total	**3**	**11**	**171**	**1,105**	**1,786**	**442**	**59**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3,581**
Percent	**0.1%**	**0.3%**	**4.8%**	**30.9%**	**49.9%**	**12.3%**	**1.6%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	26.3	mph	Mean (Average) Speed	26.2	mph
85th Percentile	29.9	mph	10 mph Pace	21.6 - 31.6	mph
95th Percentile	32.3	mph	Percent in Pace	82.9	%

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Saturday, September 17, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	4	9	7	1	1	0	0	0	0	0	0	0	0	0	**22**
1:00 AM	0	0	1	5	10	6	1	0	0	0	0	0	0	0	0	0	0	**23**
2:00 AM	0	0	1	5	6	2	0	1	0	0	0	0	0	0	0	0	0	**15**
3:00 AM	0	0	0	3	9	1	0	0	0	0	0	0	0	0	0	0	0	**13**
4:00 AM	0	0	0	0	1	6	0	0	0	0	0	0	0	0	0	0	0	**7**
5:00 AM	0	0	0	2	5	2	0	0	0	0	0	0	0	0	0	0	0	**9**
6:00 AM	0	0	1	3	19	8	4	0	0	0	0	0	0	0	0	0	0	**35**
7:00 AM	0	0	1	7	20	20	6	2	0	0	0	0	0	0	0	0	0	**56**
8:00 AM	0	0	2	6	53	41	10	2	0	0	0	0	0	0	0	0	0	**114**
9:00 AM	0	2	3	17	92	45	13	0	0	0	0	0	0	0	0	0	0	**172**
10:00 AM	0	0	2	16	146	101	11	1	0	0	0	0	0	0	0	0	0	**277**
11:00 AM	0	1	9	23	123	136	16	1	0	0	0	0	0	0	0	0	0	**309**
12:00 PM	0	3	3	30	161	128	17	0	0	0	0	0	0	0	0	0	0	**342**
1:00 PM	1	2	4	31	127	122	22	1	0	0	0	0	0	0	0	0	0	**310**
2:00 PM	0	2	6	36	132	95	15	3	1	0	0	0	0	0	0	0	0	**290**
3:00 PM	0	1	9	14	90	118	17	0	0	0	0	0	0	0	0	0	0	**249**
4:00 PM	1	0	1	23	145	113	20	2	0	0	0	0	0	0	0	0	0	**305**
5:00 PM	0	3	7	14	105	105	24	3	0	0	0	0	0	0	0	0	0	**261**
6:00 PM	0	0	9	29	114	75	7	0	0	0	0	0	0	0	0	0	0	**234**
7:00 PM	2	1	7	36	101	61	4	0	0	0	0	0	0	0	0	0	0	**212**
8:00 PM	0	0	6	42	78	32	5	0	0	0	0	0	0	0	0	0	0	**163**
9:00 PM	0	0	2	17	65	19	2	0	0	0	0	0	0	0	0	0	0	**105**
10:00 PM	0	0	1	14	26	9	2	0	0	0	0	0	0	0	0	0	0	**52**
11:00 PM	0	0	2	5	26	13	4	0	0	0	0	0	0	0	0	0	0	**50**
Total	**4**	**15**	**77**	**382**	**1,663**	**1,265**	**201**	**17**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3,625**
Percent	**0.1%**	**0.4%**	**2.1%**	**10.5%**	**45.9%**	**34.9%**	**5.5%**	**0.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	29.2	mph	Mean (Average) Speed	29.1	mph
85th Percentile	33.0	mph	10 mph Pace	24.2 - 34.2	mph
95th Percentile	35.5	mph	Percent in Pace	81.68	%

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Sunday, September 18, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	2	10	4	1	2	0	0	0	0	0	0	0	0	0	0	**19**
1:00 AM	0	1	1	8	2	1	0	0	0	0	0	0	0	0	0	0	0	**13**
2:00 AM	0	0	0	4	3	2	0	0	0	0	0	0	0	0	0	0	0	**9**
3:00 AM	0	0	0	2	1	3	4	0	0	0	0	0	0	0	0	0	0	**10**
4:00 AM	0	0	0	2	7	3	0	0	0	0	0	0	0	0	0	0	0	**12**
5:00 AM	0	1	1	5	11	3	2	0	0	0	0	0	0	0	0	0	0	**23**
6:00 AM	0	0	2	11	18	8	2	1	0	0	0	0	0	0	0	0	0	**42**
7:00 AM	0	0	1	12	38	9	4	0	0	0	0	0	0	0	0	0	0	**64**
8:00 AM	0	0	0	16	65	30	4	0	0	0	0	0	0	0	0	0	0	**115**
9:00 AM	1	1	7	39	95	28	5	0	0	0	0	0	0	0	0	0	0	**176**
10:00 AM	0	1	6	41	114	40	3	0	0	0	0	0	0	0	0	0	0	**205**
11:00 AM	0	1	9	57	150	41	2	0	0	0	0	0	0	0	0	0	0	**260**
12:00 PM	0	2	15	71	112	43	2	0	0	0	0	0	0	0	0	0	0	**245**
1:00 PM	0	1	7	91	122	42	4	0	0	0	0	0	0	0	0	0	0	**267**
2:00 PM	0	0	10	57	126	42	3	1	0	0	0	0	0	0	0	0	0	**239**
3:00 PM	1	1	16	67	164	51	3	0	0	0	0	0	0	0	0	0	0	**303**
4:00 PM	0	1	9	61	154	33	1	0	0	0	0	0	0	0	0	0	0	**259**
5:00 PM	0	1	18	69	101	25	3	0	0	0	0	0	0	0	0	0	0	**217**
6:00 PM	0	0	19	72	102	26	2	0	0	0	0	0	0	0	0	0	0	**221**
7:00 PM	0	0	14	56	73	23	2	0	0	0	0	0	0	0	0	0	0	**168**
8:00 PM	0	0	7	37	52	10	0	0	0	0	0	0	0	0	0	0	0	**106**
9:00 PM	0	0	0	26	25	9	0	0	0	0	0	0	0	0	0	0	0	**60**
10:00 PM	0	0	0	12	12	3	1	0	0	0	0	0	0	0	0	0	0	**28**
11:00 PM	0	0	4	4	3	1	0	0	0	0	0	0	0	0	0	0	0	**12**
Total	**2**	**11**	**148**	**830**	**1,554**	**477**	**49**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3,073**
Percent	**0.1%**	**0.4%**	**4.8%**	**27.0%**	**50.6%**	**15.5%**	**1.6%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	26.6	mph	Mean (Average) Speed	26.5	mph
85th Percentile	30.3	mph	10 mph Pace	22.0 - 32.0	mph
95th Percentile	32.9	mph	Percent in Pace	82.7	%

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Sunday, September 18, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	4	8	4	0	1	0	0	0	0	0	0	0	0	0	**18**
1:00 AM	0	0	1	4	7	4	1	0	0	0	0	0	0	0	0	0	0	**17**
2:00 AM	0	0	0	6	7	7	1	0	0	0	0	0	0	0	0	0	0	**21**
3:00 AM	0	0	0	1	8	3	1	0	1	0	0	0	0	0	0	0	0	**14**
4:00 AM	0	0	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	**6**
5:00 AM	0	1	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	**4**
6:00 AM	0	0	1	1	11	3	3	0	0	0	0	0	0	0	0	0	0	**19**
7:00 AM	0	0	0	3	22	11	3	0	0	1	0	0	0	0	0	0	0	**40**
8:00 AM	0	0	0	1	30	29	7	0	0	0	0	0	0	0	0	0	0	**67**
9:00 AM	0	1	6	22	70	60	6	0	0	0	0	0	0	0	0	0	0	**165**
10:00 AM	0	0	3	11	86	63	18	2	0	0	0	0	0	0	0	0	0	**183**
11:00 AM	0	1	3	19	114	109	15	0	1	0	0	0	0	0	0	0	0	**262**
12:00 PM	0	2	5	16	98	104	20	4	0	0	0	0	0	0	0	0	0	**249**
1:00 PM	0	1	3	27	121	110	18	1	0	0	0	0	0	0	0	0	0	**281**
2:00 PM	0	0	0	27	113	110	27	2	0	0	0	0	0	0	0	0	0	**279**
3:00 PM	0	0	2	21	92	109	23	2	2	0	0	0	0	0	0	0	0	**251**
4:00 PM	0	1	3	15	98	91	18	4	0	0	0	0	0	0	0	0	0	**230**
5:00 PM	0	2	5	29	102	57	11	3	0	0	0	0	0	0	0	0	0	**209**
6:00 PM	0	0	5	21	87	55	11	1	0	0	0	0	0	0	0	0	0	**180**
7:00 PM	0	1	7	26	78	52	12	0	0	0	0	0	0	0	0	0	0	**176**
8:00 PM	0	0	3	28	68	39	3	0	0	0	0	0	0	0	0	0	0	**141**
9:00 PM	0	0	0	21	37	18	1	0	0	0	0	0	0	0	0	0	0	**77**
10:00 PM	0	0	0	6	30	4	3	1	0	0	0	0	0	0	0	0	0	**44**
11:00 PM	0	0	1	0	10	5	1	0	0	0	0	0	0	0	0	0	0	**17**
Total	**0**	**10**	**49**	**310**	**1,304**	**1,048**	**203**	**21**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2,950**
Percent	**0.0%**	**0.3%**	**1.7%**	**10.5%**	**44.2%**	**35.5%**	**6.9%**	**0.7%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	29.4	mph	Mean (Average) Speed	29.4	mph
85th Percentile	33.4	mph	10 mph Pace	24.4 - 34.4	mph
95th Percentile	36.1	mph	Percent in Pace	80.27	%

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Monday, September 19, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	1	0	3	3	1	0	1	0	0	0	0	0	0	0	0	0	**9**
1:00 AM	0	0	0	6	3	1	1	0	0	0	0	0	0	0	0	0	0	**11**
2:00 AM	0	0	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	**5**
3:00 AM	0	0	1	0	2	0	0	1	0	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	0	0	6	3	1	1	0	0	0	0	0	0	0	0	0	0	**11**
5:00 AM	0	0	1	13	25	10	2	0	0	0	0	0	0	0	0	0	0	**51**
6:00 AM	1	2	0	36	70	21	0	0	0	0	0	0	0	0	0	0	0	**130**
7:00 AM	0	2	14	141	173	35	5	0	0	0	0	0	0	0	0	0	0	**370**
8:00 AM	48	25	64	126	187	31	5	0	0	0	0	0	0	0	0	0	0	**486**
9:00 AM	0	0	6	84	133	36	1	0	0	0	0	0	0	0	0	0	0	**260**
10:00 AM	0	1	11	74	138	33	5	0	0	0	0	0	0	0	0	0	0	**262**
11:00 AM	0	0	27	153	179	39	4	0	0	0	0	0	0	0	0	0	0	**402**
12:00 PM	0	2	49	216	155	29	0	0	0	0	0	0	0	0	0	0	0	**451**
1:00 PM	42	38	99	223	128	23	1	0	0	0	0	0	0	0	0	0	0	**554**
2:00 PM	0	0	19	191	188	40	1	0	0	0	0	0	0	0	0	0	0	**439**
3:00 PM	1	2	45	220	176	29	0	0	0	0	0	0	0	0	0	0	0	**473**
4:00 PM	0	1	18	155	132	25	1	0	0	0	0	0	0	0	0	0	0	**332**
5:00 PM	0	1	18	127	141	24	4	0	0	0	0	0	0	0	0	0	0	**315**
6:00 PM	0	1	17	75	126	23	2	0	0	0	0	0	0	0	0	0	0	**244**
7:00 PM	0	0	9	75	71	15	3	0	0	0	0	0	0	0	0	0	0	**173**
8:00 PM	0	0	4	46	51	7	1	1	0	0	0	0	0	0	0	0	0	**110**
9:00 PM	0	0	5	25	22	13	0	0	0	0	0	0	0	0	0	0	0	**65**
10:00 PM	0	0	2	12	19	4	0	0	0	0	0	0	0	0	0	0	0	**37**
11:00 PM	0	1	0	10	0	1	0	0	0	0	0	0	0	0	0	0	0	**12**
Total	**92**	**77**	**409**	**2,018**	**2,128**	**442**	**37**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5,206**
Percent	**1.8%**	**1.5%**	**7.9%**	**38.8%**	**40.9%**	**8.5%**	**0.7%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	25.1	mph	Mean (Average) Speed	24.7	mph
85th Percentile	29.0	mph	10 mph Pace	20.1 - 30.1	mph
95th Percentile	31.4	mph	Percent in Pace	79.4	%

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Monday, September 19, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	4	5	1	1	0	0	0	0	0	0	0	0	0	0	**11**
1:00 AM	0	1	2	0	1	4	0	0	0	0	0	0	0	0	0	0	0	**8**
2:00 AM	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	**5**
3:00 AM	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	**6**
4:00 AM	0	0	0	2	2	1	1	0	0	0	0	0	0	0	0	0	0	**6**
5:00 AM	0	0	0	3	8	8	1	0	0	0	0	0	0	0	0	0	0	**20**
6:00 AM	0	0	1	4	19	8	2	1	0	0	0	0	0	0	0	0	0	**35**
7:00 AM	0	1	2	5	40	30	15	1	0	0	0	0	0	0	0	0	0	**94**
8:00 AM	1	0	3	14	94	83	15	2	0	0	0	0	0	0	0	0	0	**212**
9:00 AM	0	3	3	16	81	64	6	1	0	0	0	0	0	0	0	0	0	**174**
10:00 AM	0	1	4	32	100	88	12	1	0	0	0	0	0	0	0	0	0	**238**
11:00 AM	0	2	2	44	155	100	9	1	0	0	0	0	0	0	0	0	0	**313**
12:00 PM	0	1	5	49	179	119	13	1	1	0	0	0	0	0	0	0	0	**368**
1:00 PM	1	3	16	41	124	79	9	1	0	0	0	0	0	0	0	0	0	**274**
2:00 PM	0	1	13	48	183	119	16	0	0	0	0	0	0	0	0	0	0	**380**
3:00 PM	0	0	8	40	227	122	16	0	0	0	0	0	0	0	0	0	0	**413**
4:00 PM	0	2	19	50	207	126	17	1	0	0	0	0	0	0	0	0	0	**422**
5:00 PM	0	1	18	46	221	117	18	2	0	0	0	0	0	0	0	0	0	**423**
6:00 PM	0	0	1	58	139	97	12	0	0	0	0	0	0	0	0	0	0	**307**
7:00 PM	0	0	7	54	92	50	12	0	0	0	0	0	0	0	0	0	0	**215**
8:00 PM	1	0	6	16	78	24	3	1	0	0	0	0	0	0	0	0	0	**129**
9:00 PM	0	1	2	13	35	21	6	1	0	0	0	0	0	0	0	0	0	**79**
10:00 PM	0	0	1	8	17	7	2	2	0	0	0	0	0	0	0	0	0	**37**
11:00 PM	0	0	0	2	5	4	1	0	0	0	0	0	0	0	0	0	0	**12**
Total	**3**	**17**	**113**	**549**	**2,017**	**1,278**	**187**	**16**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4,181**
Percent	**0.1%**	**0.4%**	**2.7%**	**13.1%**	**48.2%**	**30.6%**	**4.5%**	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	28.7	mph	Mean (Average) Speed	28.5	mph
85th Percentile	32.3	mph	10 mph Pace	23.4 - 33.4	mph
95th Percentile	35.0	mph	Percent in Pace	80.63	%

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Tuesday, September 20, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	1	0	2	4	1	0	0	0	0	0	0	0	0	0	0	0	**8**
1:00 AM	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	1	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	0	0	11	10	0	0	0	0	0	0	0	0	0	0	0	0	**21**
5:00 AM	0	0	1	14	22	15	2	0	0	0	0	0	0	0	0	0	0	**54**
6:00 AM	0	0	2	38	75	31	2	0	0	0	0	0	0	0	0	0	0	**148**
7:00 AM	0	1	14	139	170	21	4	0	0	0	0	0	0	0	0	0	0	**349**
8:00 AM	0	6	69	232	162	26	3	0	0	0	0	0	0	0	0	0	0	**498**
9:00 AM	1	1	9	76	147	37	2	1	0	0	0	0	0	0	0	0	0	**274**
10:00 AM	0	2	6	82	140	31	0	0	0	0	0	0	0	0	0	0	0	**261**
11:00 AM	0	1	12	100	131	27	2	0	0	0	0	0	0	0	0	0	0	**273**
12:00 PM	0	3	11	146	157	24	3	0	0	0	0	0	0	0	0	0	0	**344**
1:00 PM	0	1	38	128	132	22	1	0	0	0	0	0	0	0	0	0	0	**322**
2:00 PM	0	1	12	90	144	31	1	0	0	0	0	0	0	0	0	0	0	**279**
3:00 PM	0	2	17	146	157	23	1	0	0	0	0	0	0	0	0	0	0	**346**
4:00 PM	6	5	23	87	145	37	1	0	0	0	0	0	0	0	0	0	0	**304**
5:00 PM	1	0	18	105	147	34	1	0	0	0	0	0	0	0	0	0	0	**306**
6:00 PM	0	0	9	79	112	38	0	1	0	0	0	0	0	0	0	0	0	**239**
7:00 PM	0	1	14	55	71	10	0	0	0	0	0	0	0	0	0	0	0	**151**
8:00 PM	0	0	6	47	34	11	1	0	0	0	0	0	0	0	0	0	0	**99**
9:00 PM	0	1	2	17	21	7	0	0	0	0	0	0	0	0	0	0	0	**48**
10:00 PM	0	0	2	11	14	4	3	0	0	0	0	0	0	0	0	0	0	**34**
11:00 PM	0	0	0	7	6	2	0	0	0	0	0	0	0	0	0	0	0	**15**
Total	**8**	**27**	**265**	**1,615**	**2,007**	**434**	**27**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4,385**
Percent	**0.2%**	**0.6%**	**6.0%**	**36.8%**	**45.8%**	**9.9%**	**0.6%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	25.5	mph	Mean (Average) Speed	25.5	mph
85th Percentile	29.2	mph	10 mph Pace	20.7 - 30.7	mph
95th Percentile	31.5	mph	Percent in Pace	83.4	%

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Tuesday, September 20, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	2	1	1	4	5	0	0	0	0	0	0	0	0	0	0	0	**13**
1:00 AM	0	0	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	**4**
3:00 AM	0	0	0	3	6	1	0	0	0	0	0	0	0	0	0	0	0	**10**
4:00 AM	0	0	0	3	1	2	2	0	0	0	0	0	0	0	0	0	0	**8**
5:00 AM	0	0	0	2	8	6	1	0	0	0	0	0	0	0	0	0	0	**17**
6:00 AM	0	0	0	6	20	18	3	0	0	0	0	0	0	0	0	0	0	**47**
7:00 AM	0	2	2	10	59	25	1	1	0	0	0	0	0	0	0	0	0	**100**
8:00 AM	0	0	5	21	88	53	12	0	0	0	0	0	0	0	0	0	0	**179**
9:00 AM	0	0	4	9	67	88	11	4	1	0	0	0	0	0	0	0	0	**184**
10:00 AM	2	1	1	21	104	74	16	0	1	0	0	0	0	0	0	0	0	**220**
11:00 AM	1	8	11	33	132	80	10	2	0	0	0	0	0	0	0	0	0	**277**
12:00 PM	0	2	16	33	141	104	11	0	0	0	0	0	0	0	0	0	0	**307**
1:00 PM	0	3	5	48	163	101	11	0	1	0	0	0	0	0	0	0	0	**332**
2:00 PM	0	0	3	38	152	101	15	0	1	0	0	0	0	0	0	0	0	**310**
3:00 PM	3	10	18	64	190	119	15	0	0	0	0	0	0	0	0	0	0	**419**
4:00 PM	0	2	11	48	209	120	13	1	0	0	0	0	0	0	0	0	0	**404**
5:00 PM	0	0	0	50	228	142	14	1	0	0	0	0	0	0	0	0	0	**435**
6:00 PM	0	0	3	28	134	108	15	2	0	0	0	0	0	0	0	0	0	**290**
7:00 PM	0	1	5	48	130	45	7	1	0	0	0	0	0	0	0	0	0	**237**
8:00 PM	0	0	2	34	59	25	4	0	0	0	0	0	0	0	0	0	0	**124**
9:00 PM	0	0	3	13	36	12	2	0	0	0	0	0	0	0	0	0	0	**66**
10:00 PM	0	0	3	8	16	6	0	0	0	0	0	0	0	0	0	0	0	**33**
11:00 PM	0	0	0	5	7	3	0	0	0	0	0	0	0	0	0	0	0	**15**
Total	**6**	**31**	**94**	**527**	**1,960**	**1,239**	**164**	**12**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4,037**
Percent	**0.1%**	**0.8%**	**2.3%**	**13.1%**	**48.6%**	**30.7%**	**4.1%**	**0.3%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	28.7	mph	Mean (Average) Speed	28.5	mph
85th Percentile	32.3	mph	10 mph Pace	23.6 - 33.6	mph
95th Percentile	34.8	mph	Percent in Pace	81.5	%

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Wednesday, September 21, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	4	2	3	0	0	0	0	0	0	0	0	0	0	0	**9**
1:00 AM	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	1	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	0	1	4	7	0	0	0	0	0	0	0	0	0	0	0	0	**12**
5:00 AM	0	0	1	7	33	10	0	0	0	0	0	0	0	0	0	0	0	**51**
6:00 AM	0	0	2	48	84	28	2	1	0	0	0	0	0	0	0	0	0	**165**
7:00 AM	0	0	8	122	178	38	5	0	0	0	0	0	0	0	0	0	0	**351**
8:00 AM	1	1	14	175	239	42	3	0	0	0	0	0	0	0	0	0	0	**475**
9:00 AM	0	2	10	86	130	28	3	0	0	0	0	0	0	0	0	0	0	**259**
10:00 AM	0	0	11	137	125	23	0	0	0	0	0	0	0	0	0	0	0	**296**
11:00 AM	0	1	22	131	141	16	2	0	0	0	0	0	0	0	0	0	0	**313**
12:00 PM	0	1	30	114	140	17	1	0	0	0	0	0	0	0	0	0	0	**303**
1:00 PM	0	1	21	143	141	14	0	0	0	0	0	0	0	0	0	0	0	**320**
2:00 PM	0	2	35	155	124	18	0	0	0	0	0	0	0	0	0	0	0	**334**
3:00 PM	0	0	33	136	125	30	0	0	0	0	0	0	0	0	0	0	0	**324**
4:00 PM	0	0	12	95	151	27	3	0	0	0	0	0	0	0	0	0	0	**288**
5:00 PM	0	0	17	102	144	24	3	0	0	0	0	0	0	0	0	0	0	**290**
6:00 PM	0	0	5	78	112	31	2	0	0	0	0	0	0	0	0	0	0	**228**
7:00 PM	0	0	3	73	77	13	1	0	0	0	0	0	0	0	0	0	0	**167**
8:00 PM	0	1	9	33	49	1	0	0	0	0	0	0	0	0	0	0	0	**93**
9:00 PM	0	0	2	23	21	6	0	0	0	0	0	0	0	0	0	0	0	**52**
10:00 PM	0	0	3	13	10	2	1	0	0	0	0	0	0	0	0	0	0	**29**
11:00 PM	0	0	1	5	5	1	0	0	0	0	0	0	0	0	0	0	0	**12**
Total	**2**	**9**	**240**	**1,687**	**2,039**	**376**	**26**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4,380**
Percent	**0.0%**	**0.2%**	**5.5%**	**38.5%**	**46.6%**	**8.6%**	**0.6%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	25.4	mph	Mean (Average) Speed	25.4	mph
85th Percentile	28.7	mph	10 mph Pace	20.7 - 30.7	mph
95th Percentile	31.2	mph	Percent in Pace	85.7	%

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Wednesday, September 21, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	6	5	3	1	0	0	0	0	0	0	0	0	0	0	**15**
1:00 AM	0	0	0	0	3	3	1	1	0	0	0	0	0	0	0	0	0	**8**
2:00 AM	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	0	0	3	4	0	0	0	0	0	0	0	0	0	0	0	0	**7**
4:00 AM	0	0	1	1	3	2	2	0	0	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	0	0	1	10	9	0	1	0	0	0	0	0	0	0	0	0	**21**
6:00 AM	0	0	1	2	21	19	3	0	0	0	0	0	0	0	0	0	0	**46**
7:00 AM	0	0	1	10	44	39	9	1	0	0	0	0	0	0	0	0	0	**104**
8:00 AM	0	0	3	14	95	81	10	1	0	0	0	0	0	0	0	0	0	**204**
9:00 AM	0	0	3	21	77	51	7	1	1	0	0	0	0	0	0	0	0	**161**
10:00 AM	0	0	2	30	125	75	6	2	0	0	0	0	0	0	0	0	0	**240**
11:00 AM	0	3	4	37	145	70	15	1	0	0	0	0	0	0	0	0	0	**275**
12:00 PM	0	0	12	52	152	84	6	0	0	0	0	0	0	0	0	0	0	**306**
1:00 PM	0	1	5	49	152	81	8	1	1	0	0	0	0	0	0	0	0	**298**
2:00 PM	0	2	19	70	205	111	12	0	0	0	1	0	0	0	0	0	0	**420**
3:00 PM	0	1	6	48	151	83	2	1	0	0	0	0	0	0	0	0	0	**292**
4:00 PM	1	0	10	43	208	106	12	2	0	0	0	0	0	0	0	0	0	**382**
5:00 PM	0	0	6	41	243	110	16	0	0	0	0	0	0	0	0	0	0	**416**
6:00 PM	0	0	6	40	132	87	14	1	0	0	0	0	0	0	0	0	0	**280**
7:00 PM	0	0	8	60	127	50	4	1	0	0	0	0	0	0	0	0	0	**250**
8:00 PM	0	0	2	34	70	14	0	0	0	0	0	0	0	0	0	0	0	**120**
9:00 PM	0	0	1	25	32	10	0	0	0	0	0	0	0	0	0	0	0	**68**
10:00 PM	0	0	1	8	19	16	2	1	0	0	0	0	0	0	0	0	0	**47**
11:00 PM	0	0	2	1	11	6	1	0	0	0	0	0	0	0	0	0	0	**21**
Total	**1**	**7**	**93**	**597**	**2,036**	**1,110**	**131**	**15**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**3,993**
Percent	**0.0%**	**0.2%**	**2.3%**	**15.0%**	**51.0%**	**27.8%**	**3.3%**	**0.4%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	28.3	mph	Mean (Average) Speed	28.2	mph
85th Percentile	31.9	mph	10 mph Pace	23.6 - 33.6	mph
95th Percentile	34.4	mph	Percent in Pace	82.42	%

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Thursday, September 22, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	0	3	2	0	0	0	0	0	0	0	0	0	0	0	**6**
1:00 AM	0	0	0	4	0	1	0	0	0	0	0	0	0	0	0	0	0	**5**
2:00 AM	0	0	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	**5**
3:00 AM	0	0	1	1	1	2	0	0	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	0	3	7	10	0	0	0	0	0	0	0	0	0	0	0	0	**20**
5:00 AM	0	0	1	9	33	8	2	0	0	0	0	0	0	0	0	0	0	**53**
6:00 AM	0	0	1	44	70	26	0	0	0	0	0	0	0	0	0	0	0	**141**
7:00 AM	0	1	7	150	151	25	2	0	0	0	0	0	0	0	0	0	0	**336**
8:00 AM	0	5	60	183	157	21	1	0	0	0	0	0	0	0	0	0	0	**427**
9:00 AM	0	1	18	114	126	14	1	0	0	0	0	0	0	0	0	0	0	**274**
10:00 AM	0	1	10	109	131	17	3	0	0	0	0	0	0	0	0	0	0	**271**
11:00 AM	0	2	16	137	140	25	1	0	0	0	0	0	0	0	0	0	0	**321**
12:00 PM	0	0	31	119	136	17	1	0	0	0	0	0	0	0	0	0	0	**304**
1:00 PM	0	1	22	134	139	17	2	0	0	0	0	0	0	0	0	0	0	**315**
2:00 PM	0	0	9	117	139	36	2	0	0	0	0	0	0	0	0	0	0	**303**
3:00 PM	0	3	35	177	177	21	3	0	0	0	0	0	0	0	0	0	0	**416**
4:00 PM	1	1	14	79	143	38	3	0	0	0	0	0	0	0	0	0	0	**279**
5:00 PM	0	3	5	103	148	43	5	0	0	0	0	0	0	0	0	0	0	**307**
6:00 PM	1	0	12	63	125	22	1	0	0	0	0	0	0	0	0	0	0	**224**
7:00 PM	0	0	9	76	102	17	0	0	0	0	0	0	0	0	0	0	0	**204**
8:00 PM	0	1	4	43	58	6	2	0	0	0	0	0	0	0	0	0	0	**114**
9:00 PM	0	0	3	37	29	6	1	0	0	0	0	0	0	0	0	0	0	**76**
10:00 PM	0	0	1	13	18	1	1	0	0	0	0	0	0	0	0	0	0	**34**
11:00 PM	0	0	0	5	3	2	1	0	0	0	0	0	0	0	0	0	0	**11**
Total	**2**	**19**	**263**	**1,725**	**2,041**	**369**	**32**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4,451**
Percent	**0.0%**	**0.4%**	**5.9%**	**38.8%**	**45.9%**	**8.3%**	**0.7%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	25.4	mph	Mean (Average) Speed	25.4	mph
85th Percentile	29.0	mph	10 mph Pace	20.5 - 30.5	mph
95th Percentile	31.2	mph	Percent in Pace	84.5	%

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Thursday, September 22, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	3	8	2	0	1	0	0	0	0	0	0	0	0	0	**14**
1:00 AM	0	0	0	0	3	1	1	0	0	0	0	0	0	0	0	0	0	**5**
2:00 AM	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	**4**
3:00 AM	0	0	0	2	1	0	1	0	0	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	0	0	1	7	2	0	0	0	0	0	0	0	0	0	0	0	**10**
5:00 AM	0	0	0	1	11	4	4	0	0	0	0	0	0	0	0	0	0	**20**
6:00 AM	0	0	1	9	21	8	4	0	0	0	0	0	0	0	0	0	0	**43**
7:00 AM	0	0	1	8	43	31	4	0	0	0	0	0	0	0	0	0	0	**87**
8:00 AM	0	1	15	43	74	46	3	0	0	0	0	0	0	0	0	0	0	**182**
9:00 AM	1	6	22	44	77	24	1	0	0	0	0	0	0	0	0	0	0	**175**
10:00 AM	0	0	11	57	115	41	6	1	0	0	0	0	0	0	0	0	0	**231**
11:00 AM	1	3	4	48	135	77	8	2	0	0	0	0	0	0	0	0	0	**278**
12:00 PM	0	0	15	68	172	83	11	1	0	0	0	0	0	0	0	0	0	**350**
1:00 PM	0	0	11	48	147	77	9	2	1	0	0	0	0	0	0	0	0	**295**
2:00 PM	0	2	9	36	158	111	14	2	1	0	0	0	0	0	0	0	0	**333**
3:00 PM	3	4	15	50	228	122	21	1	0	1	0	0	0	0	0	0	0	**445**
4:00 PM	0	1	3	51	154	134	21	3	0	1	0	0	0	0	0	0	0	**368**
5:00 PM	0	6	9	48	183	147	14	2	0	0	0	0	0	0	0	0	0	**409**
6:00 PM	0	1	7	23	113	112	17	1	0	0	0	0	0	0	0	0	0	**274**
7:00 PM	0	0	4	28	104	41	7	1	0	0	0	0	0	0	0	0	0	**185**
8:00 PM	0	0	2	19	69	36	4	0	1	0	0	0	0	0	0	0	0	**131**
9:00 PM	0	0	0	19	51	28	3	2	0	0	0	0	0	0	0	0	0	**103**
10:00 PM	0	0	0	5	21	17	4	0	0	0	0	0	0	0	0	0	0	**47**
11:00 PM	0	0	1	5	8	8	3	0	0	0	0	0	0	0	0	0	0	**25**
Total	**5**	**24**	**130**	**618**	**1,904**	**1,153**	**160**	**19**	**3**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4,018**
Percent	**0.1%**	**0.6%**	**3.2%**	**15.4%**	**47.4%**	**28.7%**	**4.0%**	**0.5%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	28.4	mph	Mean (Average) Speed	28.2	mph
85th Percentile	32.3	mph	10 mph Pace	23.5 - 33.5	mph
95th Percentile	34.8	mph	Percent in Pace	79.32	%

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Friday, September 23, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	5	2	1	0	0	0	0	0	0	0	0	0	0	0	**8**
1:00 AM	0	0	0	4	5	0	0	0	1	0	0	0	0	0	0	0	0	**10**
2:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	1	7	4	0	0	0	0	0	0	0	0	0	0	0	0	**12**
5:00 AM	0	0	3	16	13	8	3	0	0	0	0	0	0	0	0	0	0	**43**
6:00 AM	0	0	2	28	60	30	3	0	0	0	0	0	0	0	0	0	0	**123**
7:00 AM	0	0	8	98	142	42	2	0	0	0	0	0	0	0	0	0	0	**292**
8:00 AM	0	0	12	114	186	53	2	2	0	0	0	0	0	0	0	0	0	**369**
9:00 AM	0	2	8	65	158	44	8	0	0	0	0	0	0	0	0	0	0	**285**
10:00 AM	0	0	13	113	170	44	2	0	0	0	0	0	0	0	0	0	0	**342**
11:00 AM	0	0	6	83	153	35	3	0	0	0	0	0	0	0	0	0	0	**280**
12:00 PM	0	0	19	128	148	24	1	0	0	0	0	0	0	0	0	0	0	**320**
1:00 PM	0	2	10	91	159	29	0	0	0	0	0	0	0	0	0	0	0	**291**
2:00 PM	1	0	18	94	153	39	1	0	0	0	0	0	0	0	0	0	0	**306**
3:00 PM	0	2	33	161	132	30	3	0	0	0	0	0	0	0	0	0	0	**361**
4:00 PM	0	0	11	68	152	40	4	0	0	0	0	0	0	0	0	0	0	**275**
5:00 PM	0	2	12	103	131	30	5	0	0	0	0	0	0	0	0	0	0	**283**
6:00 PM	0	0	21	122	148	17	0	0	0	0	0	0	0	0	0	0	0	**308**
7:00 PM	0	1	13	81	91	15	0	0	0	0	0	0	0	0	0	0	0	**201**
8:00 PM	0	0	5	41	85	10	3	0	0	0	0	0	0	0	0	0	0	**144**
9:00 PM	0	0	5	33	46	5	1	0	0	0	0	0	0	0	0	0	0	**90**
10:00 PM	0	0	2	32	28	5	0	1	0	0	0	0	0	0	0	0	0	**68**
11:00 PM	0	0	1	9	7	0	0	1	0	0	0	0	0	0	0	0	0	**18**
Total	**1**	**9**	**203**	**1,497**	**2,176**	**501**	**41**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4,433**
Percent	**0.0%**	**0.2%**	**4.6%**	**33.8%**	**49.1%**	**11.3%**	**0.9%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	25.9	mph	Mean (Average) Speed	26.0	mph
85th Percentile	29.5	mph	10 mph Pace	21.0 - 31.0	mph
95th Percentile	31.8	mph	Percent in Pace	84.6	%

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Friday, September 23, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	3	10	3	0	0	0	0	0	0	0	0	0	0	0	**17**
1:00 AM	0	0	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	0	1	1	4	0	1	0	0	0	0	0	0	0	0	0	0	**7**
3:00 AM	0	0	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	0	0	6	4	7	1	0	0	0	0	0	0	0	0	0	0	**18**
6:00 AM	0	0	2	8	24	19	1	0	0	0	0	0	0	0	0	0	0	**54**
7:00 AM	0	0	3	2	37	33	4	1	0	0	0	0	0	0	0	0	0	**80**
8:00 AM	0	0	0	23	82	88	9	1	1	0	0	0	0	0	0	0	0	**204**
9:00 AM	1	1	5	17	76	49	7	2	1	0	0	0	0	0	0	0	0	**159**
10:00 AM	2	2	3	27	102	86	12	1	0	0	0	0	0	0	0	0	0	**235**
11:00 AM	1	1	8	22	122	135	21	2	0	0	0	0	0	0	0	0	0	**312**
12:00 PM	0	0	5	29	147	131	23	5	0	0	0	0	0	0	0	0	0	**340**
1:00 PM	0	1	6	22	143	107	24	3	0	0	0	0	0	0	0	0	0	**306**
2:00 PM	0	1	7	27	135	108	16	3	0	0	0	0	0	0	0	0	0	**297**
3:00 PM	0	3	14	91	203	118	20	6	0	0	0	0	0	0	0	0	0	**455**
4:00 PM	1	2	5	33	157	158	20	5	1	0	0	0	0	0	0	0	0	**382**
5:00 PM	0	2	5	41	159	128	19	0	1	0	0	0	0	0	0	0	0	**355**
6:00 PM	1	1	7	44	135	80	11	1	0	0	0	0	0	0	0	0	0	**280**
7:00 PM	0	0	5	57	126	45	7	1	0	0	0	0	0	0	0	0	0	**241**
8:00 PM	0	0	4	36	86	19	5	0	0	0	0	0	0	0	0	0	0	**150**
9:00 PM	0	0	2	29	86	41	3	2	0	0	0	0	0	0	0	0	0	**163**
10:00 PM	0	0	2	28	45	30	3	0	0	0	0	0	0	0	0	0	0	**108**
11:00 PM	0	1	0	7	18	8	1	0	0	0	0	0	0	0	0	0	0	**35**
Total	**6**	**15**	**85**	**556**	**1,908**	**1,394**	**208**	**33**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4,209**
Percent	**0.1%**	**0.4%**	**2.0%**	**13.2%**	**45.3%**	**33.1%**	**4.9%**	**0.8%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	28.9	mph	Mean (Average) Speed	28.8	mph
85th Percentile	32.8	mph	10 mph Pace	24.0 - 34.0	mph
95th Percentile	35.3	mph	Percent in Pace	80.19	%

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Total Study Average
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	4	3	2	0	0	0	0	0	0	0	0	0	0	0	**10**
1:00 AM	0	0	1	4	2	1	0	0	0	0	0	0	0	0	0	0	0	**8**
2:00 AM	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	**4**
3:00 AM	0	0	0	2	1	1	1	0	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	0	1	6	7	1	0	0	0	0	0	0	0	0	0	0	0	**15**
5:00 AM	0	0	1	11	21	8	2	0	0	0	0	0	0	0	0	0	0	**43**
6:00 AM	0	0	2	31	59	22	2	0	0	0	0	0	0	0	0	0	0	**116**
7:00 AM	0	1	7	98	130	28	4	0	0	0	0	0	0	0	0	0	0	**268**
8:00 AM	7	5	32	126	153	33	3	0	0	0	0	0	0	0	0	0	0	**359**
9:00 AM	1	1	9	76	128	31	4	0	0	0	0	0	0	0	0	0	0	**250**
10:00 AM	0	1	9	89	136	30	2	0	0	0	0	0	0	0	0	0	0	**267**
11:00 AM	0	1	15	107	148	32	2	0	0	0	0	0	0	0	0	0	0	**305**
12:00 PM	0	1	25	126	146	26	2	0	0	0	0	0	0	0	0	0	0	**326**
1:00 PM	6	7	30	125	141	28	1	0	0	0	0	0	0	0	0	0	0	**338**
2:00 PM	0	0	18	113	145	36	2	0	0	0	0	0	0	0	0	0	0	**314**
3:00 PM	0	1	26	143	153	31	2	0	0	0	0	0	0	0	0	0	0	**356**
4:00 PM	1	1	14	89	150	32	3	0	0	0	0	0	0	0	0	0	0	**290**
5:00 PM	0	1	14	98	133	30	4	0	0	0	0	0	0	0	0	0	0	**280**
6:00 PM	0	0	15	83	118	26	1	0	0	0	0	0	0	0	0	0	0	**243**
7:00 PM	0	0	10	72	80	16	1	0	0	0	0	0	0	0	0	0	0	**179**
8:00 PM	0	0	6	41	54	8	1	0	0	0	0	0	0	0	0	0	0	**110**
9:00 PM	0	0	3	29	31	8	0	0	0	0	0	0	0	0	0	0	0	**71**
10:00 PM	0	0	2	15	16	4	1	0	0	0	0	0	0	0	0	0	0	**38**
11:00 PM	0	0	1	7	5	2	0	0	0	0	0	0	0	0	0	0	0	**15**
Total	**15**	**20**	**242**	**1,496**	**1,962**	**437**	**38**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4,210**
Percent	**0.4%**	**0.5%**	**5.7%**	**35.5%**	**46.6%**	**10.4%**	**0.9%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	25.7	mph	Mean (Average) Speed	25.6	mph
85th Percentile	29.3	mph	10 mph Pace	20.7 - 30.7	mph
95th Percentile	31.7	mph	Percent in Pace	82.7	%

Location: 8th St W/O School St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 01

Total Study Average
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	4	7	4	0	0	0	0	0	0	0	0	0	0	0	**15**
1:00 AM	0	0	1	2	5	3	1	0	0	0	0	0	0	0	0	0	0	**12**
2:00 AM	0	0	0	2	3	2	0	0	0	0	0	0	0	0	0	0	0	**7**
3:00 AM	0	0	0	2	5	1	0	0	0	0	0	0	0	0	0	0	0	**8**
4:00 AM	0	0	0	1	3	2	1	0	0	0	0	0	0	0	0	0	0	**7**
5:00 AM	0	0	0	2	7	5	1	0	0	0	0	0	0	0	0	0	0	**15**
6:00 AM	0	0	1	5	19	12	3	0	0	0	0	0	0	0	0	0	0	**40**
7:00 AM	0	0	1	6	38	27	6	1	0	0	0	0	0	0	0	0	0	**79**
8:00 AM	0	0	4	17	74	60	9	1	0	0	0	0	0	0	0	0	0	**165**
9:00 AM	0	2	7	21	77	54	7	1	0	0	0	0	0	0	0	0	0	**169**
10:00 AM	1	1	4	28	111	75	12	1	0	0	0	0	0	0	0	0	0	**233**
11:00 AM	0	3	6	32	132	101	13	1	0	0	0	0	0	0	0	0	0	**288**
12:00 PM	0	1	9	40	150	108	14	2	0	0	0	0	0	0	0	0	0	**324**
1:00 PM	0	2	7	38	140	97	14	1	0	0	0	0	0	0	0	0	0	**299**
2:00 PM	0	1	8	40	154	108	16	1	0	0	0	0	0	0	0	0	0	**328**
3:00 PM	1	3	10	47	169	113	16	1	0	0	0	0	0	0	0	0	0	**360**
4:00 PM	0	1	7	38	168	121	17	3	0	0	0	0	0	0	0	0	0	**355**
5:00 PM	0	2	7	38	177	115	17	2	0	0	0	0	0	0	0	0	0	**358**
6:00 PM	0	0	5	35	122	88	12	1	0	0	0	0	0	0	0	0	0	**263**
7:00 PM	0	0	6	44	108	49	8	1	0	0	0	0	0	0	0	0	0	**216**
8:00 PM	0	0	4	30	73	27	3	0	0	0	0	0	0	0	0	0	0	**137**
9:00 PM	0	0	1	20	49	21	2	1	0	0	0	0	0	0	0	0	0	**94**
10:00 PM	0	0	1	11	25	13	2	1	0	0	0	0	0	0	0	0	0	**53**
11:00 PM	0	0	1	4	12	7	2	0	0	0	0	0	0	0	0	0	0	**26**
Total	**2**	**16**	**90**	**507**	**1,828**	**1,213**	**176**	**19**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3,851**
Percent	**0.1%**	**0.4%**	**2.3%**	**13.2%**	**47.5%**	**31.5%**	**4.6%**	**0.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	28.7	mph	Mean (Average) Speed	28.6	mph
85th Percentile	32.5	mph	10 mph Pace	23.7 - 33.7	mph
95th Percentile	35.1	mph	Percent in Pace	80.6	%

Location: 8th St W/O School St
Date Range: 9/17/2022 - 9/23/2022
Site Code: 01

	Saturday			Sunday			Monday			Tuesday			Wednesday			Thursday			Friday			Mid-Week Average		
	9/17/2022			9/18/2022			9/19/2022			9/20/2022			9/21/2022			9/22/2022			9/23/2022					
Time	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total
12:00 AM	13	22	35	19	18	37	9	11	20	8	13	21	9	15	24	6	14	20	8	17	25	8	14	22
1:00 AM	11	23	34	13	17	30	11	8	19	4	6	10	4	8	12	5	5	10	10	6	16	4	6	11
2:00 AM	1	15	16	9	21	30	5	5	10	3	4	7	1	3	4	5	4	9	2	7	9	3	4	7
3:00 AM	6	13	19	10	14	24	4	6	10	5	10	15	4	7	11	5	4	9	2	5	7	5	7	12
4:00 AM	15	7	22	12	6	18	11	6	17	21	8	29	12	9	21	20	10	30	12	0	12	18	9	27
5:00 AM	30	9	39	23	4	27	51	20	71	54	17	71	51	21	72	53	20	73	43	18	61	53	19	72
6:00 AM	65	35	100	42	19	61	130	35	165	148	47	195	165	46	211	141	43	184	123	54	177	151	45	197
7:00 AM	123	56	179	64	40	104	370	94	464	349	100	449	351	104	455	336	87	423	292	80	372	345	97	442
8:00 AM	146	114	260	115	67	182	486	212	698	498	179	677	475	204	679	427	182	609	369	204	573	467	188	655
9:00 AM	223	172	395	176	165	341	260	174	434	274	184	458	259	161	420	274	175	449	285	159	444	269	173	442
10:00 AM	237	277	514	205	183	388	262	238	500	261	220	481	296	240	536	271	231	502	342	235	577	276	230	506
11:00 AM	283	309	592	260	262	522	402	313	715	273	277	550	313	275	588	321	278	599	280	312	592	302	277	579
12:00 PM	311	342	653	245	249	494	451	368	819	344	307	651	303	306	609	304	350	654	320	340	660	317	321	638
1:00 PM	291	310	601	267	281	548	554	274	828	322	332	654	320	298	618	315	295	610	291	306	597	319	308	627
2:00 PM	302	290	592	239	279	518	439	380	819	279	310	589	334	420	754	303	333	636	306	297	603	305	354	660
3:00 PM	269	249	518	303	251	554	473	413	886	346	419	765	324	292	616	416	445	861	361	455	816	362	385	747
4:00 PM	292	305	597	259	230	489	332	422	754	304	404	708	288	382	670	279	368	647	275	382	657	290	385	675
5:00 PM	246	261	507	217	209	426	315	423	738	306	435	741	290	416	706	307	409	716	283	355	638	301	420	721
6:00 PM	243	234	477	221	180	401	244	307	551	239	290	529	228	280	508	224	274	498	308	280	588	230	281	512
7:00 PM	191	212	403	168	176	344	173	215	388	151	237	388	167	250	417	204	185	389	201	241	442	174	224	398
8:00 PM	106	163	269	106	141	247	110	129	239	99	124	223	93	120	213	114	131	245	144	150	294	102	125	227
9:00 PM	105	105	210	60	77	137	65	79	144	48	66	114	52	68	120	76	103	179	90	163	253	59	79	138
10:00 PM	40	52	92	28	44	72	37	37	74	34	33	67	29	47	76	34	47	81	68	108	176	32	42	75
11:00 PM	32	50	82	12	17	29	12	12	24	15	15	30	12	21	33	11	25	36	18	35	53	13	20	33
Total	**3,581**	**3,625**	**7,206**	**3,073**	**2,950**	**6,023**	**5,206**	**4,181**	**9,387**	**4,385**	**4,037**	**8,422**	**4,380**	**3,993**	**8,373**	**4,451**	**4,018**	**8,469**	**4,433**	**4,209**	**8,642**	**4,405**	**4,016**	**8,421**
Percent	**50%**	**50%**	-	**51%**	**49%**	-	**55%**	**45%**	-	**52%**	**48%**	-	**52%**	**48%**	-	**53%**	**47%**	-	**51%**	**49%**	-	**52%**	**48%**	-

1. Mid-week average includes data between Tuesday and Thursday.

Vehicle Classification Report Summary

Location: 9th St BTWN Colorado Ave & Grand Ave

Count Direction: Eastbound / Westbound

Date Range: 9/17/2022 to 9/23/2022

Site Code: 02

	FHWA Vehicle Classification													Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
Study Total														
Eastbound	98	5,730	971	220	841	48	0	3	1	0	0	0	0	7,912
Percent	1.2%	72.4%	12.3%	2.8%	10.6%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Westbound	135	6,961	1,491	134	888	190	0	1	3	1	0	0	0	9,804
Percent	1.4%	71.0%	15.2%	1.4%	9.1%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	233	12,691	2,462	354	1,729	238	0	4	4	1	0	0	0	17,716
Percent	1.3%	71.6%	13.9%	2.0%	9.8%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%

FHWA Vehicle Classification	
Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Saturday, September 17, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	6	0	0	1	0	0	0	0	0	0	0	0	**7**
1:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	1	1	2	2	0	0	0	0	0	0	0	0	**6**
5:00 AM	0	4	1	4	5	0	0	0	0	0	0	0	0	**14**
6:00 AM	0	6	0	4	7	0	0	0	0	0	0	0	0	**17**
7:00 AM	0	12	3	3	5	0	0	0	0	0	0	0	0	**23**
8:00 AM	0	14	7	2	9	0	0	0	0	0	0	0	0	**32**
9:00 AM	2	37	8	0	8	0	0	0	0	0	0	0	0	**55**
10:00 AM	1	39	17	2	12	0	0	0	0	0	0	0	0	**71**
11:00 AM	0	48	15	1	13	0	0	0	0	0	0	0	0	**77**
12:00 PM	5	55	12	1	5	0	0	0	0	0	0	0	0	**78**
1:00 PM	2	55	11	3	8	1	0	1	0	0	0	0	0	**81**
2:00 PM	1	48	16	1	11	0	0	0	0	0	0	0	0	**77**
3:00 PM	3	47	9	1	14	0	0	0	0	0	0	0	0	**74**
4:00 PM	0	47	9	2	18	0	0	0	0	0	0	0	0	**76**
5:00 PM	3	42	9	4	8	2	0	1	0	0	0	0	0	**69**
6:00 PM	1	41	14	3	3	1	0	0	0	0	0	0	0	**63**
7:00 PM	2	29	6	2	5	0	0	0	0	0	0	0	0	**44**
8:00 PM	0	32	8	3	1	1	0	0	0	0	0	0	0	**45**
9:00 PM	0	26	7	2	5	1	0	0	0	0	0	0	0	**41**
10:00 PM	0	11	2	1	4	0	0	0	0	0	0	0	0	**18**
11:00 PM	0	3	1	2	1	0	0	0	0	0	0	0	0	**7**
Total	**20**	**611**	**157**	**43**	**145**	**6**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**984**
Percent	**2.0%**	**62.1%**	**16.0%**	**4.4%**	**14.7%**	**0.6%**	**0.0%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Saturday, September 17, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	6	1	2	1	0	0	0	0	0	0	0	0	**10**
1:00 AM	2	4	2	0	2	1	0	0	0	0	0	0	0	**11**
2:00 AM	0	3	4	1	2	0	0	0	0	0	0	0	0	**10**
3:00 AM	1	0	0	1	2	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	4	1	0	2	1	0	0	0	0	0	0	0	**8**
6:00 AM	0	4	3	1	4	0	0	0	0	0	0	0	0	**12**
7:00 AM	0	11	2	0	4	0	0	0	0	0	0	0	0	**17**
8:00 AM	1	22	6	1	4	1	0	0	0	0	0	0	0	**35**
9:00 AM	1	53	13	1	9	1	0	0	0	0	0	0	0	**78**
10:00 AM	0	54	16	1	16	1	0	0	0	0	0	0	0	**88**
11:00 AM	0	78	26	3	11	0	0	0	0	0	0	0	0	**118**
12:00 PM	2	86	31	0	14	0	0	0	0	0	0	0	0	**133**
1:00 PM	1	77	17	0	13	0	0	0	0	0	0	0	0	**108**
2:00 PM	2	70	11	1	12	0	0	0	0	0	0	0	0	**96**
3:00 PM	8	67	24	0	10	0	0	0	0	0	0	0	0	**109**
4:00 PM	0	88	14	1	8	1	0	0	0	0	0	0	0	**112**
5:00 PM	1	70	19	1	12	0	0	0	0	0	0	0	0	**103**
6:00 PM	2	54	11	2	9	0	0	0	0	0	0	0	0	**78**
7:00 PM	0	54	8	2	5	0	0	0	0	0	0	0	0	**69**
8:00 PM	1	34	4	1	4	0	0	0	0	0	0	0	0	**44**
9:00 PM	0	24	2	1	1	0	0	0	0	0	0	0	0	**28**
10:00 PM	0	9	6	1	2	1	0	0	0	0	0	0	0	**19**
11:00 PM	0	9	4	1	4	0	0	0	0	0	0	0	0	**18**
Total	**22**	**881**	**225**	**22**	**152**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,309**
Percent	**1.7%**	**67.3%**	**17.2%**	**1.7%**	**11.6%**	**0.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Sunday, September 18, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	3	0	1	0	0	0	0	0	0	0	0	0	**4**
1:00 AM	0	5	2	0	0	0	0	0	0	0	0	0	0	**7**
2:00 AM	0	5	0	0	1	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	3	1	0	0	0	0	0	0	0	0	**4**
5:00 AM	1	1	0	2	5	0	0	0	0	0	0	0	0	**9**
6:00 AM	0	4	2	2	6	0	0	0	0	0	0	0	0	**14**
7:00 AM	0	10	1	2	6	0	0	0	0	0	0	0	0	**19**
8:00 AM	0	13	3	1	5	0	0	0	0	0	0	0	0	**22**
9:00 AM	1	20	8	0	6	0	0	0	0	0	0	0	0	**35**
10:00 AM	1	27	5	1	8	0	0	0	0	0	0	0	0	**42**
11:00 AM	0	30	7	1	3	0	0	0	0	0	0	0	0	**41**
12:00 PM	1	46	9	0	7	0	0	0	0	0	0	0	0	**63**
1:00 PM	1	43	11	4	8	0	0	0	0	0	0	0	0	**67**
2:00 PM	2	38	8	2	15	0	0	0	0	0	0	0	0	**65**
3:00 PM	1	40	13	1	9	0	0	0	0	0	0	0	0	**64**
4:00 PM	0	36	5	2	9	0	0	0	0	0	0	0	0	**52**
5:00 PM	0	43	4	2	10	0	0	0	0	0	0	0	0	**59**
6:00 PM	1	39	9	1	8	0	0	0	0	0	0	0	0	**58**
7:00 PM	0	21	8	1	8	0	0	0	0	0	0	0	0	**38**
8:00 PM	0	23	3	2	1	0	0	0	0	0	0	0	0	**29**
9:00 PM	0	13	2	1	6	0	0	0	0	0	0	0	0	**22**
10:00 PM	0	2	0	1	1	0	0	0	0	0	0	0	0	**4**
11:00 PM	0	3	1	0	1	0	0	0	0	0	0	0	0	**5**
Total	**9**	**465**	**101**	**30**	**124**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**729**
Percent	**1.2%**	**63.8%**	**13.9%**	**4.1%**	**17.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Sunday, September 18, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	1	0	0	2	2	1	0	0	0	0	0	0	0	**6**
1:00 AM	0	7	3	0	3	0	0	0	0	0	0	0	0	**13**
2:00 AM	1	5	1	0	2	1	0	0	0	0	0	0	0	**10**
3:00 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	**5**
6:00 AM	0	4	1	0	2	0	0	0	0	0	0	0	0	**7**
7:00 AM	0	6	1	0	3	0	0	0	0	0	0	0	0	**10**
8:00 AM	0	19	3	2	3	0	0	0	0	0	0	0	0	**27**
9:00 AM	0	33	11	1	7	0	0	0	0	0	0	0	0	**52**
10:00 AM	0	35	10	0	4	0	0	0	0	0	0	0	0	**49**
11:00 AM	0	63	16	3	10	0	0	0	0	0	0	0	0	**92**
12:00 PM	1	41	22	1	13	0	0	0	0	0	0	0	0	**78**
1:00 PM	2	60	12	0	9	1	0	0	0	0	0	0	0	**84**
2:00 PM	2	51	11	0	5	0	0	0	0	0	0	0	0	**69**
3:00 PM	0	46	12	1	6	0	0	0	0	0	0	0	0	**65**
4:00 PM	1	44	12	1	10	0	0	0	0	0	0	0	0	**68**
5:00 PM	0	50	11	2	1	0	0	0	0	0	0	0	0	**64**
6:00 PM	0	38	6	0	5	0	0	0	0	0	0	0	0	**49**
7:00 PM	0	43	10	2	7	0	0	0	0	0	0	0	0	**62**
8:00 PM	0	32	4	1	3	0	0	0	0	0	0	0	0	**40**
9:00 PM	0	17	1	1	3	0	0	0	0	0	0	0	0	**22**
10:00 PM	0	6	2	0	2	0	0	0	0	0	0	0	0	**10**
11:00 PM	1	3	2	0	2	0	0	0	0	0	0	0	0	**8**
Total	**9**	**614**	**151**	**17**	**102**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**896**
Percent	**1.0%**	**68.5%**	**16.9%**	**1.9%**	**11.4%**	**0.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Monday, September 19, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	3	2	0	0	0	0	0	0	0	0	**5**
5:00 AM	2	9	0	3	6	0	0	0	0	0	0	0	0	**20**
6:00 AM	0	11	1	4	10	1	0	0	0	0	0	0	0	**27**
7:00 AM	0	39	13	0	16	0	0	0	0	0	0	0	0	**68**
8:00 AM	0	44	11	2	16	0	0	0	0	0	0	0	0	**73**
9:00 AM	1	43	20	0	8	2	0	0	0	0	0	0	0	**74**
10:00 AM	3	41	10	2	19	0	0	0	0	0	0	0	0	**75**
11:00 AM	1	82	20	0	8	0	0	0	0	0	0	0	0	**111**
12:00 PM	4	92	17	0	20	1	0	0	0	0	0	0	0	**134**
1:00 PM	3	102	22	2	18	2	0	0	0	0	0	0	0	**149**
2:00 PM	3	89	19	1	6	0	0	0	0	0	0	0	0	**118**
3:00 PM	5	69	21	1	13	1	0	0	0	0	0	0	0	**110**
4:00 PM	1	85	10	2	11	0	0	0	0	0	0	0	0	**109**
5:00 PM	3	87	12	1	13	0	0	0	0	0	0	0	0	**116**
6:00 PM	0	49	16	1	10	0	0	0	0	0	0	0	0	**76**
7:00 PM	0	32	9	0	4	0	0	0	0	0	0	0	0	**45**
8:00 PM	0	9	4	3	5	0	0	0	0	0	0	0	0	**21**
9:00 PM	0	8	3	1	1	0	0	0	0	0	0	0	0	**13**
10:00 PM	1	7	1	1	2	1	0	0	0	0	0	0	0	**13**
11:00 PM	0	1	0	0	2	0	0	0	0	0	0	0	0	**3**
Total	**27**	**901**	**209**	**27**	**190**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,363**
Percent	**2.0%**	**66.1%**	**15.3%**	**2.0%**	**13.9%**	**0.7%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Monday, September 19, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	2	1	0	4	0	0	0	0	0	0	0	0	**7**
1:00 AM	0	2	0	1	0	0	0	0	1	0	0	0	0	**4**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	1	0	0	1	0	2	0	0	0	0	0	0	0	**4**
4:00 AM	0	2	1	0	3	0	0	0	0	0	0	0	0	**6**
5:00 AM	0	3	0	1	2	1	0	0	0	0	0	0	0	**7**
6:00 AM	0	13	1	0	3	0	0	0	0	0	0	0	0	**17**
7:00 AM	1	28	8	1	6	1	0	0	0	0	0	0	0	**45**
8:00 AM	0	55	16	0	11	1	0	0	0	0	0	0	0	**83**
9:00 AM	0	61	19	2	9	1	0	0	0	0	0	0	0	**92**
10:00 AM	0	68	20	1	19	0	0	0	0	0	0	0	0	**108**
11:00 AM	2	89	25	3	21	1	0	0	0	0	0	0	0	**141**
12:00 PM	2	135	24	1	13	0	0	0	0	0	0	0	0	**175**
1:00 PM	4	93	23	0	10	0	0	0	0	0	0	0	0	**130**
2:00 PM	2	112	34	1	14	2	0	0	0	0	0	0	0	**165**
3:00 PM	0	89	29	0	16	1	0	0	0	0	0	0	0	**135**
4:00 PM	1	68	25	1	20	2	0	0	0	0	0	0	0	**117**
5:00 PM	1	70	20	1	7	0	0	0	0	0	0	0	0	**99**
6:00 PM	2	65	11	0	15	0	0	0	0	0	0	0	0	**93**
7:00 PM	0	36	13	1	8	0	0	0	0	0	0	0	0	**58**
8:00 PM	0	20	5	1	6	0	0	0	0	0	0	0	0	**32**
9:00 PM	1	16	5	1	2	0	0	0	0	0	0	0	0	**25**
10:00 PM	0	3	2	0	2	0	0	0	0	0	0	0	0	**7**
11:00 PM	0	4	0	0	1	0	0	0	0	0	0	0	0	**5**
Total	**17**	**1,035**	**282**	**17**	**192**	**12**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1,556**
Percent	**1.1%**	**66.5%**	**18.1%**	**1.1%**	**12.3%**	**0.8%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Tuesday, September 20, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	4	0	2	2	1	0	0	0	0	0	0	0	**9**
5:00 AM	2	4	2	4	6	0	0	0	0	0	0	0	0	**18**
6:00 AM	1	16	4	2	12	1	0	0	0	0	0	0	0	**36**
7:00 AM	0	31	12	2	10	2	0	0	0	0	0	0	0	**57**
8:00 AM	0	50	16	2	13	0	0	0	0	0	0	0	0	**81**
9:00 AM	1	45	7	0	16	0	0	0	0	0	0	0	0	**69**
10:00 AM	2	69	9	2	12	0	0	0	0	0	0	0	0	**94**
11:00 AM	0	61	10	1	9	0	0	0	0	0	0	0	0	**81**
12:00 PM	2	74	15	0	13	0	0	0	0	0	0	0	0	**104**
1:00 PM	1	73	19	5	11	0	0	0	0	0	0	0	0	**109**
2:00 PM	0	61	16	1	19	0	0	0	0	0	0	0	0	**97**
3:00 PM	1	88	9	2	10	1	0	0	0	0	0	0	0	**111**
4:00 PM	1	67	15	2	12	1	0	0	0	0	0	0	0	**98**
5:00 PM	0	87	14	0	12	0	0	0	0	0	0	0	0	**113**
6:00 PM	1	48	9	1	11	0	0	0	0	0	0	0	0	**70**
7:00 PM	0	35	6	2	8	0	0	0	0	0	0	0	0	**51**
8:00 PM	0	19	4	3	4	0	0	0	0	0	0	0	0	**30**
9:00 PM	0	11	1	1	3	0	0	0	0	0	0	0	0	**16**
10:00 PM	0	6	2	0	2	0	0	0	0	0	0	0	0	**10**
11:00 PM	0	2	1	2	0	0	0	0	0	0	0	0	0	**5**
Total	**12**	**853**	**171**	**35**	**185**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,262**
Percent	**1.0%**	**67.6%**	**13.5%**	**2.8%**	**14.7%**	**0.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Tuesday, September 20, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	1	4	0	0	1	1	0	0	0	0	0	0	0	**7**
1:00 AM	1	4	0	0	1	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	0	0	0	2	0	0	0	0	0	0	0	0	**2**
3:00 AM	1	4	0	0	2	0	0	0	0	0	0	0	0	**7**
4:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	7	0	0	4	0	0	0	0	0	0	0	0	**11**
6:00 AM	1	11	3	0	7	0	0	0	0	0	0	0	0	**22**
7:00 AM	0	29	3	0	4	0	0	0	0	0	0	0	0	**36**
8:00 AM	1	60	11	0	13	0	0	0	0	0	0	0	0	**85**
9:00 AM	0	58	14	2	19	0	0	0	0	0	0	0	0	**93**
10:00 AM	1	69	21	2	13	1	0	0	0	0	0	0	0	**107**
11:00 AM	1	108	13	1	14	0	0	0	0	0	0	0	0	**137**
12:00 PM	0	80	28	0	15	2	0	0	0	0	0	0	0	**125**
1:00 PM	1	98	26	1	17	0	0	0	0	0	0	0	0	**143**
2:00 PM	1	94	20	0	17	1	0	0	0	0	0	0	0	**133**
3:00 PM	0	99	26	0	10	0	0	0	0	0	0	0	0	**135**
4:00 PM	0	93	19	1	10	1	0	0	0	0	0	0	0	**124**
5:00 PM	0	77	20	1	13	0	0	0	0	0	0	0	0	**111**
6:00 PM	0	51	11	1	10	1	0	0	0	0	0	0	0	**74**
7:00 PM	1	34	16	0	9	0	0	1	0	0	0	0	0	**61**
8:00 PM	0	29	5	1	7	0	0	0	0	0	0	0	0	**42**
9:00 PM	1	17	4	0	4	2	0	0	0	0	0	0	0	**28**
10:00 PM	0	9	2	1	3	0	0	0	0	0	0	0	0	**15**
11:00 PM	0	5	2	1	0	0	0	0	0	0	0	0	0	**8**
Total	**11**	**1,041**	**245**	**12**	**195**	**9**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1,514**
Percent	**0.7%**	**68.8%**	**16.2%**	**0.8%**	**12.9%**	**0.6%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Wednesday, September 21, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	1	1	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	4	0	0	0	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	1	0	3	3	0	0	0	0	0	0	0	0	**7**
5:00 AM	0	8	1	2	2	0	0	0	0	0	0	0	0	**13**
6:00 AM	0	22	8	3	10	0	0	0	0	0	0	0	0	**43**
7:00 AM	0	44	11	0	11	2	0	0	0	0	0	0	0	**68**
8:00 AM	0	42	11	1	9	2	0	0	0	0	0	0	0	**65**
9:00 AM	1	56	8	0	4	0	0	0	0	0	0	0	0	**69**
10:00 AM	1	63	9	2	1	0	0	0	0	0	0	0	0	**76**
11:00 AM	0	77	10	1	3	0	0	0	0	0	0	0	0	**91**
12:00 PM	0	75	12	0	2	0	0	0	0	0	0	0	0	**89**
1:00 PM	1	82	9	4	6	1	0	0	0	0	0	0	0	**103**
2:00 PM	1	81	8	2	5	0	0	0	0	0	0	0	0	**97**
3:00 PM	2	82	11	0	3	0	0	0	0	0	0	0	0	**98**
4:00 PM	0	72	13	0	4	0	0	0	0	0	0	0	0	**89**
5:00 PM	1	93	6	1	4	2	0	0	0	0	0	0	0	**107**
6:00 PM	1	42	5	0	3	0	0	0	0	0	0	0	0	**51**
7:00 PM	0	26	4	1	1	0	0	0	0	0	0	0	0	**32**
8:00 PM	0	21	0	0	3	0	0	0	0	0	0	0	0	**24**
9:00 PM	0	19	1	0	3	0	0	0	0	0	0	0	0	**23**
10:00 PM	0	5	1	1	2	0	0	0	0	0	0	0	0	**9**
11:00 PM	0	4	0	1	1	0	0	0	0	0	0	0	0	**6**
Total	**8**	**921**	**128**	**23**	**81**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,168**
Percent	**0.7%**	**78.9%**	**11.0%**	**2.0%**	**6.9%**	**0.6%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Wednesday, September 21, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	10	0	0	1	1	0	0	0	0	0	0	0	**12**
1:00 AM	1	0	0	0	3	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	2	0	0	1	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	5	0	1	0	0	0	0	0	0	0	0	0	**6**
4:00 AM	0	2	0	0	1	0	0	0	0	0	0	0	0	**3**
5:00 AM	0	4	0	0	3	1	0	0	1	0	0	0	0	**9**
6:00 AM	0	10	3	0	5	0	0	0	0	0	0	0	0	**18**
7:00 AM	0	25	5	0	6	0	0	0	0	0	0	0	0	**36**
8:00 AM	2	47	20	0	13	0	0	0	0	0	0	0	0	**82**
9:00 AM	0	35	13	0	7	1	0	0	0	0	0	0	0	**56**
10:00 AM	2	80	24	1	11	1	0	0	0	0	0	0	0	**119**
11:00 AM	2	113	17	1	13	3	0	0	0	0	0	0	0	**149**
12:00 PM	4	104	18	1	10	2	0	0	0	0	0	0	0	**139**
1:00 PM	3	87	20	0	3	2	0	0	0	0	0	0	0	**115**
2:00 PM	2	104	18	0	4	1	0	0	0	0	0	0	0	**129**
3:00 PM	0	99	19	0	5	4	0	0	0	0	0	0	0	**127**
4:00 PM	4	102	13	1	6	9	0	0	0	1	0	0	0	**136**
5:00 PM	2	81	11	2	4	4	0	0	0	0	0	0	0	**104**
6:00 PM	1	50	6	2	4	3	0	0	0	0	0	0	0	**66**
7:00 PM	0	43	7	2	1	1	0	0	0	0	0	0	0	**54**
8:00 PM	1	21	5	2	2	0	0	0	0	0	0	0	0	**31**
9:00 PM	0	21	2	1	1	0	0	0	0	0	0	0	0	**25**
10:00 PM	0	5	0	1	1	1	0	0	0	0	0	0	0	**8**
11:00 PM	0	4	1	1	1	0	0	0	0	0	0	0	0	**7**
Total	**24**	**1,054**	**202**	**16**	**106**	**34**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**1,438**
Percent	**1.7%**	**73.3%**	**14.0%**	**1.1%**	**7.4%**	**2.4%**	**0.0%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Thursday, September 22, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	2	0	0	1	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	6	0	2	3	0	0	0	0	0	0	0	0	**11**
5:00 AM	0	11	1	3	5	0	0	0	0	0	0	0	0	**20**
6:00 AM	0	17	7	4	4	1	0	0	0	0	0	0	0	**33**
7:00 AM	0	37	3	2	5	2	0	0	0	0	0	0	0	**49**
8:00 AM	2	52	10	1	1	1	0	0	0	0	0	0	0	**67**
9:00 AM	0	62	9	1	4	1	0	0	0	0	0	0	0	**77**
10:00 AM	0	52	4	2	1	0	0	0	0	0	0	0	0	**59**
11:00 AM	0	79	5	1	1	0	0	0	0	0	0	0	0	**86**
12:00 PM	0	73	9	0	1	1	0	1	0	0	0	0	0	**85**
1:00 PM	0	67	9	3	5	1	0	0	1	0	0	0	0	**86**
2:00 PM	1	74	1	2	6	0	0	0	0	0	0	0	0	**84**
3:00 PM	0	105	11	1	2	2	0	0	0	0	0	0	0	**121**
4:00 PM	4	92	6	0	1	3	0	0	0	0	0	0	0	**106**
5:00 PM	0	102	9	2	3	0	0	0	0	0	0	0	0	**116**
6:00 PM	0	54	2	1	3	0	0	0	0	0	0	0	0	**60**
7:00 PM	0	43	2	1	0	0	0	0	0	0	0	0	0	**46**
8:00 PM	0	30	3	1	1	0	0	0	0	0	0	0	0	**35**
9:00 PM	2	11	1	1	2	0	0	0	0	0	0	0	0	**17**
10:00 PM	0	5	0	1	1	0	0	0	0	0	0	0	0	**7**
11:00 PM	0	3	1	2	0	0	0	0	0	0	0	0	0	**6**
Total	**9**	**978**	**93**	**31**	**50**	**12**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**1,175**
Percent	**0.8%**	**83.2%**	**7.9%**	**2.6%**	**4.3%**	**1.0%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Thursday, September 22, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	1	1	0	2	0	1	0	0	0	0	0	0	0	**5**
1:00 AM	1	1	0	1	2	0	0	0	0	0	0	0	0	**5**
2:00 AM	0	3	0	1	0	0	0	0	0	0	0	0	0	**4**
3:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	2	4	2	0	3	1	0	0	0	0	0	0	0	**12**
6:00 AM	0	13	5	0	4	0	0	0	1	0	0	0	0	**23**
7:00 AM	0	26	3	2	4	2	0	0	0	0	0	0	0	**37**
8:00 AM	1	52	15	0	4	1	0	0	0	0	0	0	0	**73**
9:00 AM	2	61	20	0	2	1	0	0	0	0	0	0	0	**86**
10:00 AM	2	80	19	5	5	5	0	0	0	0	0	0	0	**116**
11:00 AM	2	95	23	2	8	7	0	0	0	0	0	0	0	**137**
12:00 PM	2	108	15	1	9	8	0	0	0	0	0	0	0	**143**
1:00 PM	2	103	19	0	4	5	0	0	0	0	0	0	0	**133**
2:00 PM	2	104	12	1	5	2	0	0	0	0	0	0	0	**126**
3:00 PM	2	87	24	1	3	2	0	0	0	0	0	0	0	**119**
4:00 PM	0	108	9	0	2	5	0	0	0	0	0	0	0	**124**
5:00 PM	2	79	11	0	4	2	0	0	0	0	0	0	0	**98**
6:00 PM	1	71	6	2	1	4	0	0	0	0	0	0	0	**85**
7:00 PM	2	49	9	0	1	5	0	0	0	0	0	0	0	**66**
8:00 PM	1	23	4	1	2	0	0	0	0	0	0	0	0	**31**
9:00 PM	1	22	4	1	2	2	0	0	0	0	0	0	0	**32**
10:00 PM	0	10	2	0	2	0	0	0	0	0	0	0	0	**14**
11:00 PM	1	5	1	0	0	0	0	0	0	0	0	0	0	**7**
Total	**27**	**1,105**	**204**	**22**	**68**	**53**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1,480**
Percent	**1.8%**	**74.7%**	**13.8%**	**1.5%**	**4.6%**	**3.6%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Friday, September 23, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	1	0	3	2	0	0	0	0	0	0	0	0	**6**
5:00 AM	0	6	1	3	5	0	0	0	0	0	0	0	0	**15**
6:00 AM	0	17	4	2	6	0	0	0	0	0	0	0	0	**29**
7:00 AM	0	36	14	0	4	2	0	0	0	0	0	0	0	**56**
8:00 AM	0	54	7	0	2	1	0	0	0	0	0	0	0	**64**
9:00 AM	0	45	8	2	4	2	0	0	0	0	0	0	0	**61**
10:00 AM	0	63	9	2	3	1	0	0	0	0	0	0	0	**78**
11:00 AM	2	78	6	1	1	0	0	0	0	0	0	0	0	**88**
12:00 PM	1	76	12	2	5	0	0	0	0	0	0	0	0	**96**
1:00 PM	4	79	11	2	6	0	0	0	0	0	0	0	0	**102**
2:00 PM	1	78	10	2	4	0	0	0	0	0	0	0	0	**95**
3:00 PM	1	69	6	2	6	1	0	0	0	0	0	0	0	**85**
4:00 PM	2	91	5	1	4	0	0	0	0	0	0	0	0	**103**
5:00 PM	1	80	5	2	4	0	0	0	0	0	0	0	0	**92**
6:00 PM	0	62	4	2	2	0	0	0	0	0	0	0	0	**70**
7:00 PM	1	63	5	0	2	0	0	0	0	0	0	0	0	**71**
8:00 PM	0	41	1	4	0	1	0	0	0	0	0	0	0	**47**
9:00 PM	0	42	2	1	1	0	0	0	0	0	0	0	0	**46**
10:00 PM	0	14	2	0	2	0	0	0	0	0	0	0	0	**18**
11:00 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	**4**
Total	**13**	**1,001**	**112**	**31**	**66**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,231**
Percent	**1.1%**	**81.3%**	**9.1%**	**2.5%**	**5.4%**	**0.6%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Friday, September 23, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	1	4	1	0	2	0	0	0	0	0	0	0	0	**8**
1:00 AM	0	3	0	2	0	0	0	0	0	0	0	0	0	**5**
2:00 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	**2**
3:00 AM	0	2	1	1	0	1	0	0	0	0	0	0	0	**5**
4:00 AM	1	0	0	1	1	0	0	0	0	0	0	0	0	**3**
5:00 AM	0	3	2	0	2	0	0	0	0	0	0	0	0	**7**
6:00 AM	1	9	5	3	1	1	0	0	0	0	0	0	0	**20**
7:00 AM	0	27	9	1	3	0	0	0	0	0	0	0	0	**40**
8:00 AM	2	64	8	3	4	1	0	0	0	0	0	0	0	**82**
9:00 AM	1	60	13	3	2	2	0	0	0	0	0	0	0	**81**
10:00 AM	3	73	12	2	5	5	0	0	0	0	0	0	0	**100**
11:00 AM	3	129	14	0	9	5	0	0	0	0	0	0	0	**160**
12:00 PM	0	95	20	0	11	4	0	0	0	0	0	0	0	**130**
1:00 PM	1	101	11	1	5	9	0	0	0	0	0	0	0	**128**
2:00 PM	1	114	16	0	5	7	0	0	0	0	0	0	0	**143**
3:00 PM	2	117	15	1	3	13	0	0	0	0	0	0	0	**151**
4:00 PM	0	117	14	1	3	9	0	0	0	0	0	0	0	**144**
5:00 PM	1	78	7	2	2	9	0	0	0	0	0	0	0	**99**
6:00 PM	1	80	14	1	5	1	0	0	0	0	0	0	0	**102**
7:00 PM	3	73	6	1	0	3	0	0	0	0	0	0	0	**86**
8:00 PM	0	33	6	4	2	1	0	0	0	0	0	0	0	**46**
9:00 PM	4	30	3	0	5	0	0	0	0	0	0	0	0	**42**
10:00 PM	0	14	4	1	1	0	0	0	0	0	0	0	0	**20**
11:00 PM	0	5	0	0	2	0	0	0	0	0	0	0	0	**7**
Total	**25**	**1,231**	**182**	**28**	**73**	**72**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,611**
Percent	**1.6%**	**76.4%**	**11.3%**	**1.7%**	**4.5%**	**4.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Total Study Average
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	2	0	0	1	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	2	0	3	2	0	0	0	0	0	0	0	0	**7**
5:00 AM	1	6	1	3	5	0	0	0	0	0	0	0	0	**16**
6:00 AM	0	13	4	3	8	0	0	0	0	0	0	0	0	**28**
7:00 AM	0	30	8	1	8	1	0	0	0	0	0	0	0	**48**
8:00 AM	0	38	9	1	8	1	0	0	0	0	0	0	0	**57**
9:00 AM	1	44	10	0	7	1	0	0	0	0	0	0	0	**63**
10:00 AM	1	51	9	2	8	0	0	0	0	0	0	0	0	**71**
11:00 AM	0	65	10	1	5	0	0	0	0	0	0	0	0	**81**
12:00 PM	2	70	12	0	8	0	0	0	0	0	0	0	0	**92**
1:00 PM	2	72	13	3	9	1	0	0	0	0	0	0	0	**100**
2:00 PM	1	67	11	2	9	0	0	0	0	0	0	0	0	**90**
3:00 PM	2	71	11	1	8	1	0	0	0	0	0	0	0	**94**
4:00 PM	1	70	9	1	8	1	0	0	0	0	0	0	0	**90**
5:00 PM	1	76	8	2	8	1	0	0	0	0	0	0	0	**96**
6:00 PM	1	48	8	1	6	0	0	0	0	0	0	0	0	**64**
7:00 PM	0	36	6	1	4	0	0	0	0	0	0	0	0	**47**
8:00 PM	0	25	3	2	2	0	0	0	0	0	0	0	0	**32**
9:00 PM	0	19	2	1	3	0	0	0	0	0	0	0	0	**25**
10:00 PM	0	7	1	1	2	0	0	0	0	0	0	0	0	**11**
11:00 PM	0	3	1	1	1	0	0	0	0	0	0	0	0	**6**
Total	**13**	**820**	**136**	**30**	**120**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,126**
Percent	**1.2%**	**72.8%**	**12.1%**	**2.7%**	**10.7%**	**0.6%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Total Study Average
Westbound

	FHWA Vehicle Classification													Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	1	4	0	1	2	1	0	0	0	0	0	0	0	**9**
1:00 AM	1	3	1	1	2	0	0	0	0	0	0	0	0	**8**
2:00 AM	0	2	1	0	1	0	0	0	0	0	0	0	0	**4**
3:00 AM	0	2	0	1	1	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	4	1	0	2	1	0	0	0	0	0	0	0	**8**
6:00 AM	0	9	3	1	4	0	0	0	0	0	0	0	0	**17**
7:00 AM	0	22	4	1	4	0	0	0	0	0	0	0	0	**31**
8:00 AM	1	46	11	1	7	1	0	0	0	0	0	0	0	**67**
9:00 AM	1	52	15	1	8	1	0	0	0	0	0	0	0	**78**
10:00 AM	1	66	17	2	10	2	0	0	0	0	0	0	0	**98**
11:00 AM	1	96	19	2	12	2	0	0	0	0	0	0	0	**132**
12:00 PM	2	93	23	1	12	2	0	0	0	0	0	0	0	**133**
1:00 PM	2	88	18	0	9	2	0	0	0	0	0	0	0	**119**
2:00 PM	2	93	17	0	9	2	0	0	0	0	0	0	0	**123**
3:00 PM	2	86	21	0	8	3	0	0	0	0	0	0	0	**120**
4:00 PM	1	89	15	1	8	4	0	0	0	0	0	0	0	**118**
5:00 PM	1	72	14	1	6	2	0	0	0	0	0	0	0	**96**
6:00 PM	1	58	9	1	7	1	0	0	0	0	0	0	0	**77**
7:00 PM	1	47	10	1	4	1	0	0	0	0	0	0	0	**64**
8:00 PM	0	27	5	2	4	0	0	0	0	0	0	0	0	**38**
9:00 PM	1	21	3	1	3	1	0	0	0	0	0	0	0	**30**
10:00 PM	0	8	3	1	2	0	0	0	0	0	0	0	0	**14**
11:00 PM	0	5	1	0	1	0	0	0	0	0	0	0	0	**7**
Total	**19**	**994**	**211**	**20**	**127**	**26**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,397**
Percent	**1.4%**	**71.2%**	**15.1%**	**1.4%**	**9.1%**	**1.9%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

3-Day (Tuesday - Thursday) Average
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	1	1	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	4	0	2	3	0	0	0	0	0	0	0	0	**9**
5:00 AM	1	8	1	3	4	0	0	0	0	0	0	0	0	**17**
6:00 AM	0	18	6	3	9	1	0	0	0	0	0	0	0	**37**
7:00 AM	0	37	9	1	9	2	0	0	0	0	0	0	0	**58**
8:00 AM	1	48	12	1	8	1	0	0	0	0	0	0	0	**71**
9:00 AM	1	54	8	0	8	0	0	0	0	0	0	0	0	**72**
10:00 AM	1	61	7	2	5	0	0	0	0	0	0	0	0	**76**
11:00 AM	0	72	8	1	4	0	0	0	0	0	0	0	0	**86**
12:00 PM	1	74	12	0	5	0	0	0	0	0	0	0	0	**93**
1:00 PM	1	74	12	4	7	1	0	0	0	0	0	0	0	**99**
2:00 PM	1	72	8	2	10	0	0	0	0	0	0	0	0	**93**
3:00 PM	1	92	10	1	5	1	0	0	0	0	0	0	0	**110**
4:00 PM	2	77	11	1	6	1	0	0	0	0	0	0	0	**98**
5:00 PM	0	94	10	1	6	1	0	0	0	0	0	0	0	**112**
6:00 PM	1	48	5	1	6	0	0	0	0	0	0	0	0	**60**
7:00 PM	0	35	4	1	3	0	0	0	0	0	0	0	0	**43**
8:00 PM	0	23	2	1	3	0	0	0	0	0	0	0	0	**30**
9:00 PM	1	14	1	1	3	0	0	0	0	0	0	0	0	**19**
10:00 PM	0	5	1	1	2	0	0	0	0	0	0	0	0	**9**
11:00 PM	0	3	1	2	0	0	0	0	0	0	0	0	0	**6**
Total	**10**	**917**	**131**	**30**	**105**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,202**
Percent	**0.8%**	**76.3%**	**10.9%**	**2.5%**	**8.8%**	**0.7%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

idax DATA SOLUTIONS

3-Day (Tuesday - Thursday) Average
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	1	5	0	1	1	1	0	0	0	0	0	0	0	**8**
1:00 AM	1	2	0	0	2	0	0	0	0	0	0	0	0	**5**
2:00 AM	0	2	0	0	1	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	3	0	1	1	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	1	5	1	0	3	1	0	0	0	0	0	0	0	**11**
6:00 AM	0	11	4	0	5	0	0	0	0	0	0	0	0	**21**
7:00 AM	0	27	4	1	5	1	0	0	0	0	0	0	0	**36**
8:00 AM	1	53	15	0	10	0	0	0	0	0	0	0	0	**80**
9:00 AM	1	51	16	1	9	1	0	0	0	0	0	0	0	**78**
10:00 AM	2	76	21	3	10	2	0	0	0	0	0	0	0	**114**
11:00 AM	2	105	18	1	12	3	0	0	0	0	0	0	0	**141**
12:00 PM	2	97	20	1	11	4	0	0	0	0	0	0	0	**136**
1:00 PM	2	96	22	0	8	2	0	0	0	0	0	0	0	**130**
2:00 PM	2	101	17	0	9	1	0	0	0	0	0	0	0	**129**
3:00 PM	1	95	23	0	6	2	0	0	0	0	0	0	0	**127**
4:00 PM	1	101	14	1	6	5	0	0	0	0	0	0	0	**128**
5:00 PM	1	79	14	1	7	2	0	0	0	0	0	0	0	**104**
6:00 PM	1	57	8	2	5	3	0	0	0	0	0	0	0	**75**
7:00 PM	1	42	11	1	4	2	0	0	0	0	0	0	0	**60**
8:00 PM	1	24	5	1	4	0	0	0	0	0	0	0	0	**35**
9:00 PM	1	20	3	1	2	1	0	0	0	0	0	0	0	**28**
10:00 PM	0	8	1	1	2	0	0	0	0	0	0	0	0	**12**
11:00 PM	0	5	1	1	0	0	0	0	0	0	0	0	0	**7**
Total	**21**	**1,067**	**217**	**17**	**123**	**32**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1,477**
Percent	**1.4%**	**72.2%**	**14.7%**	**1.1%**	**8.3%**	**2.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Vehicle Speed Report Summary

Location: 9th St BTWN Colorado Ave & Grand Ave

Count Direction: Eastbound / Westbound

Date Range: 9/17/2022 to 9/23/2022

Site Code: 02

	Speed Range (mph)																	Total
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
Study Total																		
Eastbound	858	3,797	2,755	472	30	0	0	0	0	0	0	0	0	0	0	0	0	7,912
Percent	10.8%	48.0%	34.8%	6.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Westbound	719	3,229	5,103	730	23	0	0	0	0	0	0	0	0	0	0	0	0	9,804
Percent	7.3%	32.9%	52.1%	7.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	1,577	7,026	7,858	1,202	53	0	0	0	0	0	0	0	0	0	0	0	0	17,716
Percent	8.9%	39.7%	44.4%	6.8%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%

Total Study Percentile Speed Summary			Total Study Speed Statistics		
Eastbound			**Eastbound**		
50th Percentile (Median)	14.2	mph	Mean (Average) Speed	14.3	mph
85th Percentile	18.0	mph	10 mph Pace	8.9 - 18.9	mph
95th Percentile	20.6	mph	Percent in Pace	83.4	%
Westbound			**Westbound**		
50th Percentile (Median)	15.8	mph	Mean (Average) Speed	15.4	mph
85th Percentile	18.8	mph	10 mph Pace	10.6 - 20.6	mph
95th Percentile	20.7	mph	Percent in Pace	85.5	%

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Saturday, September 17, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
1:00 AM	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
5:00 AM	0	5	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**14**
6:00 AM	0	8	8	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**17**
7:00 AM	0	5	16	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**23**
8:00 AM	2	11	15	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**32**
9:00 AM	1	16	33	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**55**
10:00 AM	1	18	42	10	0	0	0	0	0	0	0	0	0	0	0	0	0	**71**
11:00 AM	9	25	37	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**77**
12:00 PM	7	22	42	6	1	0	0	0	0	0	0	0	0	0	0	0	0	**78**
1:00 PM	10	31	37	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**81**
2:00 PM	2	24	40	10	1	0	0	0	0	0	0	0	0	0	0	0	0	**77**
3:00 PM	4	30	35	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**74**
4:00 PM	4	31	34	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**76**
5:00 PM	6	29	29	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**69**
6:00 PM	9	31	19	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**63**
7:00 PM	3	20	20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**44**
8:00 PM	2	20	19	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**45**
9:00 PM	1	16	19	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**41**
10:00 PM	0	7	8	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**18**
11:00 PM	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
Total	**61**	**361**	**477**	**80**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**984**
Percent	**6.2%**	**36.7%**	**48.5%**	**8.1%**	**0.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	15.5	mph	Mean (Average) Speed	15.5	mph
85th Percentile	18.9	mph	10 mph Pace	10.6 - 20.6	mph
95th Percentile	21.2	mph	Percent in Pace	86.1	%

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Saturday, September 17, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	1	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**10**
1:00 AM	1	7	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**11**
2:00 AM	0	2	7	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**10**
3:00 AM	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**8**
6:00 AM	0	0	9	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**12**
7:00 AM	0	0	9	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**17**
8:00 AM	2	5	25	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**35**
9:00 AM	4	16	43	14	1	0	0	0	0	0	0	0	0	0	0	0	0	**78**
10:00 AM	1	15	53	18	1	0	0	0	0	0	0	0	0	0	0	0	0	**88**
11:00 AM	4	27	77	10	0	0	0	0	0	0	0	0	0	0	0	0	0	**118**
12:00 PM	4	43	80	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**133**
1:00 PM	3	31	61	13	0	0	0	0	0	0	0	0	0	0	0	0	0	**108**
2:00 PM	3	22	58	12	1	0	0	0	0	0	0	0	0	0	0	0	0	**96**
3:00 PM	10	17	62	19	1	0	0	0	0	0	0	0	0	0	0	0	0	**109**
4:00 PM	3	25	67	17	0	0	0	0	0	0	0	0	0	0	0	0	0	**112**
5:00 PM	13	36	47	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**103**
6:00 PM	3	26	42	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**78**
7:00 PM	3	19	43	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**69**
8:00 PM	2	9	28	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**44**
9:00 PM	2	10	15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**28**
10:00 PM	0	8	8	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**19**
11:00 PM	3	3	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**18**
Total	**63**	**326**	**761**	**153**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,309**
Percent	**4.8%**	**24.9%**	**58.1%**	**11.7%**	**0.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	16.7	mph	Mean (Average) Speed	16.4	mph
85th Percentile	19.7	mph	10 mph Pace	11.5 - 21.5	mph
95th Percentile	21.6	mph	Percent in Pace	86.63	%

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Sunday, September 18, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
1:00 AM	0	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
2:00 AM	1	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
5:00 AM	0	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
6:00 AM	0	3	9	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**14**
7:00 AM	0	4	13	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**19**
8:00 AM	0	4	14	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**22**
9:00 AM	0	6	19	9	1	0	0	0	0	0	0	0	0	0	0	0	0	**35**
10:00 AM	3	7	28	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**42**
11:00 AM	2	12	24	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**41**
12:00 PM	3	16	38	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**63**
1:00 PM	3	13	44	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**67**
2:00 PM	1	19	32	13	0	0	0	0	0	0	0	0	0	0	0	0	0	**65**
3:00 PM	0	15	40	9	0	0	0	0	0	0	0	0	0	0	0	0	0	**64**
4:00 PM	0	12	32	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**52**
5:00 PM	1	16	32	10	0	0	0	0	0	0	0	0	0	0	0	0	0	**59**
6:00 PM	6	17	27	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**58**
7:00 PM	1	14	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**38**
8:00 PM	0	8	16	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**29**
9:00 PM	0	10	10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**22**
10:00 PM	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
11:00 PM	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
Total	**22**	**195**	**415**	**96**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**729**
Percent	**3.0%**	**26.7%**	**56.9%**	**13.2%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	16.4	mph	Mean (Average) Speed	16.5	mph
85th Percentile	19.7	mph	10 mph Pace	11.9 - 21.9	mph
95th Percentile	21.9	mph	Percent in Pace	88.2	%

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Sunday, September 18, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
1:00 AM	1	4	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**13**
2:00 AM	1	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**10**
3:00 AM	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
6:00 AM	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
7:00 AM	0	0	4	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**10**
8:00 AM	0	4	15	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**27**
9:00 AM	2	8	34	7	1	0	0	0	0	0	0	0	0	0	0	0	0	**52**
10:00 AM	1	7	32	9	0	0	0	0	0	0	0	0	0	0	0	0	0	**49**
11:00 AM	3	18	60	10	1	0	0	0	0	0	0	0	0	0	0	0	0	**92**
12:00 PM	4	20	46	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**78**
1:00 PM	4	28	42	10	0	0	0	0	0	0	0	0	0	0	0	0	0	**84**
2:00 PM	4	10	40	15	0	0	0	0	0	0	0	0	0	0	0	0	0	**69**
3:00 PM	2	10	42	10	1	0	0	0	0	0	0	0	0	0	0	0	0	**65**
4:00 PM	1	13	42	11	1	0	0	0	0	0	0	0	0	0	0	0	0	**68**
5:00 PM	1	13	41	9	0	0	0	0	0	0	0	0	0	0	0	0	0	**64**
6:00 PM	2	11	34	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**49**
7:00 PM	3	19	32	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**62**
8:00 PM	1	10	21	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**40**
9:00 PM	0	4	16	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**22**
10:00 PM	0	2	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**10**
11:00 PM	1	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**8**
Total	**32**	**198**	**530**	**132**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**896**
Percent	**3.6%**	**22.1%**	**59.2%**	**14.7%**	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	17.1	mph	Mean (Average) Speed	16.8	mph
85th Percentile	20.0	mph	10 mph Pace	12.2 - 22.2	mph
95th Percentile	21.7	mph	Percent in Pace	88.28	%

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Monday, September 19, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
5:00 AM	3	4	12	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**20**
6:00 AM	0	11	12	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**27**
7:00 AM	0	28	29	9	2	0	0	0	0	0	0	0	0	0	0	0	0	**68**
8:00 AM	5	29	32	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**73**
9:00 AM	6	25	35	7	1	0	0	0	0	0	0	0	0	0	0	0	0	**74**
10:00 AM	2	32	32	8	1	0	0	0	0	0	0	0	0	0	0	0	0	**75**
11:00 AM	8	45	45	11	2	0	0	0	0	0	0	0	0	0	0	0	0	**111**
12:00 PM	5	46	71	12	0	0	0	0	0	0	0	0	0	0	0	0	0	**134**
1:00 PM	7	50	63	26	3	0	0	0	0	0	0	0	0	0	0	0	0	**149**
2:00 PM	11	35	62	9	1	0	0	0	0	0	0	0	0	0	0	0	0	**118**
3:00 PM	12	50	38	9	1	0	0	0	0	0	0	0	0	0	0	0	0	**110**
4:00 PM	11	33	55	10	0	0	0	0	0	0	0	0	0	0	0	0	0	**109**
5:00 PM	13	53	43	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**116**
6:00 PM	1	38	28	8	1	0	0	0	0	0	0	0	0	0	0	0	0	**76**
7:00 PM	1	18	21	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**45**
8:00 PM	0	8	11	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**21**
9:00 PM	0	4	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**13**
10:00 PM	1	4	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**13**
11:00 PM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
Total	**86**	**520**	**608**	**137**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,363**
Percent	**6.3%**	**38.2%**	**44.6%**	**10.1%**	**0.9%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	15.4	mph	Mean (Average) Speed	15.5	mph
85th Percentile	19.2	mph	10 mph Pace	10.8 - 20.8	mph
95th Percentile	21.6	mph	Percent in Pace	82.8	%

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Monday, September 19, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
1:00 AM	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
4:00 AM	1	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
5:00 AM	0	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
6:00 AM	0	1	13	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**17**
7:00 AM	2	9	28	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**45**
8:00 AM	6	19	41	17	0	0	0	0	0	0	0	0	0	0	0	0	0	**83**
9:00 AM	4	21	57	10	0	0	0	0	0	0	0	0	0	0	0	0	0	**92**
10:00 AM	10	25	60	12	1	0	0	0	0	0	0	0	0	0	0	0	0	**108**
11:00 AM	6	42	78	15	0	0	0	0	0	0	0	0	0	0	0	0	0	**141**
12:00 PM	9	67	89	10	0	0	0	0	0	0	0	0	0	0	0	0	0	**175**
1:00 PM	18	29	72	11	0	0	0	0	0	0	0	0	0	0	0	0	0	**130**
2:00 PM	14	55	83	12	1	0	0	0	0	0	0	0	0	0	0	0	0	**165**
3:00 PM	7	34	79	15	0	0	0	0	0	0	0	0	0	0	0	0	0	**135**
4:00 PM	11	28	69	9	0	0	0	0	0	0	0	0	0	0	0	0	0	**117**
5:00 PM	4	21	61	11	2	0	0	0	0	0	0	0	0	0	0	0	0	**99**
6:00 PM	3	27	58	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**93**
7:00 PM	3	14	34	6	1	0	0	0	0	0	0	0	0	0	0	0	0	**58**
8:00 PM	0	3	19	10	0	0	0	0	0	0	0	0	0	0	0	0	0	**32**
9:00 PM	1	6	14	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**25**
10:00 PM	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
11:00 PM	1	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
Total	**102**	**409**	**879**	**161**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,556**
Percent	**6.6%**	**26.3%**	**56.5%**	**10.3%**	**0.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	16.3	mph	Mean (Average) Speed	16	mph
85th Percentile	19.3	mph	10 mph Pace	11.0 - 21.0	mph
95th Percentile	21.4	mph	Percent in Pace	84.51	%

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Tuesday, September 20, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
5:00 AM	2	4	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**18**
6:00 AM	1	17	13	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**36**
7:00 AM	2	14	31	8	2	0	0	0	0	0	0	0	0	0	0	0	0	**57**
8:00 AM	3	21	42	13	2	0	0	0	0	0	0	0	0	0	0	0	0	**81**
9:00 AM	3	21	34	11	0	0	0	0	0	0	0	0	0	0	0	0	0	**69**
10:00 AM	4	42	37	10	1	0	0	0	0	0	0	0	0	0	0	0	0	**94**
11:00 AM	6	27	41	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**81**
12:00 PM	13	34	47	8	2	0	0	0	0	0	0	0	0	0	0	0	0	**104**
1:00 PM	11	44	49	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**109**
2:00 PM	10	37	48	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**97**
3:00 PM	6	51	43	11	0	0	0	0	0	0	0	0	0	0	0	0	0	**111**
4:00 PM	7	44	41	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**98**
5:00 PM	6	46	48	13	0	0	0	0	0	0	0	0	0	0	0	0	0	**113**
6:00 PM	9	25	31	3	2	0	0	0	0	0	0	0	0	0	0	0	0	**70**
7:00 PM	1	20	26	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**51**
8:00 PM	3	13	13	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**30**
9:00 PM	0	3	11	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**16**
10:00 PM	0	5	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**10**
11:00 PM	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
Total	**87**	**475**	**581**	**109**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,262**
Percent	**6.9%**	**37.6%**	**46.0%**	**8.6%**	**0.8%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	15.4	mph	Mean (Average) Speed	15.4	mph
85th Percentile	18.9	mph	10 mph Pace	10.4 - 20.4	mph
95th Percentile	21.6	mph	Percent in Pace	83.8	%

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Tuesday, September 20, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	1	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
1:00 AM	1	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
4:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	0	8	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**11**
6:00 AM	2	3	15	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**22**
7:00 AM	1	7	21	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**36**
8:00 AM	5	13	61	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**85**
9:00 AM	5	25	52	11	0	0	0	0	0	0	0	0	0	0	0	0	0	**93**
10:00 AM	6	35	59	6	1	0	0	0	0	0	0	0	0	0	0	0	0	**107**
11:00 AM	6	47	74	10	0	0	0	0	0	0	0	0	0	0	0	0	0	**137**
12:00 PM	15	36	68	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**125**
1:00 PM	15	52	66	10	0	0	0	0	0	0	0	0	0	0	0	0	0	**143**
2:00 PM	5	36	81	11	0	0	0	0	0	0	0	0	0	0	0	0	0	**133**
3:00 PM	8	42	70	13	2	0	0	0	0	0	0	0	0	0	0	0	0	**135**
4:00 PM	5	35	78	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**124**
5:00 PM	11	43	49	7	1	0	0	0	0	0	0	0	0	0	0	0	0	**111**
6:00 PM	8	24	35	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**74**
7:00 PM	3	17	35	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**61**
8:00 PM	1	18	20	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**42**
9:00 PM	1	9	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**28**
10:00 PM	1	3	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**15**
11:00 PM	2	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**8**
Total	**102**	**457**	**835**	**116**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,514**
Percent	**6.7%**	**30.2%**	**55.2%**	**7.7%**	**0.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	16.1	mph	Mean (Average) Speed	15.7	mph
85th Percentile	18.9	mph	10 mph Pace	11.2 - 21.2	mph
95th Percentile	20.6	mph	Percent in Pace	86.46	%

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Wednesday, September 21, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
4:00 AM	1	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
5:00 AM	0	4	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**13**
6:00 AM	1	11	29	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**43**
7:00 AM	0	12	38	17	1	0	0	0	0	0	0	0	0	0	0	0	0	**68**
8:00 AM	1	19	33	12	0	0	0	0	0	0	0	0	0	0	0	0	0	**65**
9:00 AM	1	34	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**69**
10:00 AM	10	44	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**76**
11:00 AM	11	54	24	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**91**
12:00 PM	20	51	17	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**89**
1:00 PM	23	68	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**103**
2:00 PM	14	60	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**97**
3:00 PM	14	63	20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**98**
4:00 PM	14	64	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**89**
5:00 PM	26	60	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**107**
6:00 PM	13	27	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**51**
7:00 PM	9	21	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**32**
8:00 PM	1	19	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**24**
9:00 PM	4	17	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**23**
10:00 PM	1	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
11:00 PM	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
Total	**164**	**640**	**326**	**37**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,168**
Percent	**14.0%**	**54.8%**	**27.9%**	**3.2%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	13.4	mph	Mean (Average) Speed	13.4	mph
85th Percentile	17.0	mph	10 mph Pace	8.3 - 18.3	mph
95th Percentile	19.0	mph	Percent in Pace	86.5	%

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Wednesday, September 21, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	1	1	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**12**
1:00 AM	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
4:00 AM	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
5:00 AM	0	1	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
6:00 AM	0	2	10	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**18**
7:00 AM	1	2	23	10	0	0	0	0	0	0	0	0	0	0	0	0	0	**36**
8:00 AM	3	21	45	13	0	0	0	0	0	0	0	0	0	0	0	0	0	**82**
9:00 AM	4	12	35	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**56**
10:00 AM	9	37	65	7	1	0	0	0	0	0	0	0	0	0	0	0	0	**119**
11:00 AM	6	80	59	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**149**
12:00 PM	15	65	53	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**139**
1:00 PM	5	50	57	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**115**
2:00 PM	5	60	56	7	1	0	0	0	0	0	0	0	0	0	0	0	0	**129**
3:00 PM	12	40	69	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**127**
4:00 PM	20	62	53	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**136**
5:00 PM	10	37	56	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**104**
6:00 PM	4	31	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**66**
7:00 PM	4	26	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**54**
8:00 PM	2	10	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**31**
9:00 PM	1	6	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**25**
10:00 PM	1	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**8**
11:00 PM	0	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
Total	**104**	**552**	**707**	**73**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,438**
Percent	**7.2%**	**38.4%**	**49.2%**	**5.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	15.3	mph	Mean (Average) Speed	15	mph
85th Percentile	18.2	mph	10 mph Pace	10.4 - 20.4	mph
95th Percentile	20.1	mph	Percent in Pace	88.11	%

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Thursday, September 22, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**11**
5:00 AM	1	15	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**20**
6:00 AM	8	19	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**33**
7:00 AM	5	35	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**49**
8:00 AM	1	51	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**67**
9:00 AM	10	55	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**77**
10:00 AM	7	40	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**59**
11:00 AM	20	52	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**86**
12:00 PM	11	64	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**85**
1:00 PM	18	55	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**86**
2:00 PM	18	53	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**84**
3:00 PM	16	93	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**121**
4:00 PM	16	75	14	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**106**
5:00 PM	40	63	12	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**116**
6:00 PM	6	47	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**60**
7:00 PM	7	34	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**46**
8:00 PM	5	27	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**35**
9:00 PM	3	8	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**17**
10:00 PM	2	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
11:00 PM	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
Total	**197**	**807**	**166**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,175**
Percent	**16.8%**	**68.7%**	**14.1%**	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	12.3	mph	Mean (Average) Speed	12.3	mph
85th Percentile	14.9	mph	10 mph Pace	7.6 - 17.6	mph
95th Percentile	16.7	mph	Percent in Pace	93.6	%

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Thursday, September 22, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
1:00 AM	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
2:00 AM	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
3:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	2	8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**12**
6:00 AM	0	8	14	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**23**
7:00 AM	4	9	21	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**37**
8:00 AM	5	23	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**73**
9:00 AM	3	34	49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**86**
10:00 AM	12	43	60	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**116**
11:00 AM	26	66	44	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**137**
12:00 PM	15	64	62	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**143**
1:00 PM	10	57	62	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**133**
2:00 PM	11	57	55	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**126**
3:00 PM	12	48	56	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**119**
4:00 PM	15	55	52	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**124**
5:00 PM	16	36	44	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**98**
6:00 PM	14	36	33	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**85**
7:00 PM	4	40	19	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**66**
8:00 PM	1	11	17	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**31**
9:00 PM	4	12	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**32**
10:00 PM	2	10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**14**
11:00 PM	0	1	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
Total	**159**	**625**	**666**	**30**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,480**
Percent	**10.7%**	**42.2%**	**45.0%**	**2.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	14.8	mph	Mean (Average) Speed	14.3	mph
85th Percentile	17.3	mph	10 mph Pace	9.1 - 19.1	mph
95th Percentile	18.9	mph	Percent in Pace	88.38	%

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Friday, September 23, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
5:00 AM	1	12	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**15**
6:00 AM	2	18	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**29**
7:00 AM	8	33	14	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**56**
8:00 AM	3	45	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**64**
9:00 AM	9	37	13	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**61**
10:00 AM	8	55	14	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**78**
11:00 AM	14	53	19	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**88**
12:00 PM	20	59	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**96**
1:00 PM	26	67	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**102**
2:00 PM	20	63	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**95**
3:00 PM	22	49	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**85**
4:00 PM	31	63	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**103**
5:00 PM	17	61	12	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**92**
6:00 PM	15	51	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**70**
7:00 PM	19	47	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**71**
8:00 PM	13	29	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**47**
9:00 PM	11	29	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**46**
10:00 PM	0	15	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**18**
11:00 PM	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
Total	**241**	**799**	**182**	**8**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,231**
Percent	**19.6%**	**64.9%**	**14.8%**	**0.6%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	12.3	mph	Mean (Average) Speed	12.3	mph
85th Percentile	15.0	mph	10 mph Pace	6.6 - 16.6	mph
95th Percentile	17.0	mph	Percent in Pace	91.1	%

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Friday, September 23, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**8**
1:00 AM	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
2:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
5:00 AM	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
6:00 AM	3	10	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**20**
7:00 AM	0	4	31	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**40**
8:00 AM	2	20	49	11	0	0	0	0	0	0	0	0	0	0	0	0	0	**82**
9:00 AM	10	32	38	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**81**
10:00 AM	9	29	59	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**100**
11:00 AM	16	75	65	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**160**
12:00 PM	21	63	43	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**130**
1:00 PM	13	49	61	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**128**
2:00 PM	19	71	49	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**143**
3:00 PM	12	70	59	10	0	0	0	0	0	0	0	0	0	0	0	0	0	**151**
4:00 PM	15	48	72	9	0	0	0	0	0	0	0	0	0	0	0	0	0	**144**
5:00 PM	8	44	46	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**99**
6:00 PM	11	46	43	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**102**
7:00 PM	11	45	28	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**86**
8:00 PM	3	20	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**46**
9:00 PM	2	16	22	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**42**
10:00 PM	0	3	16	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**20**
11:00 PM	0	3	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
Total	**157**	**662**	**725**	**65**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,611**
Percent	**9.7%**	**41.1%**	**45.0%**	**4.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	14.9	mph	Mean (Average) Speed	14.6	mph
85th Percentile	17.9	mph	10 mph Pace	10.1 - 20.1	mph
95th Percentile	19.7	mph	Percent in Pace	85.97	%

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Total Study Average
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
5:00 AM	1	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**15**
6:00 AM	2	12	12	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**28**
7:00 AM	2	19	21	6	1	0	0	0	0	0	0	0	0	0	0	0	0	**49**
8:00 AM	2	26	24	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**58**
9:00 AM	4	28	26	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**63**
10:00 AM	5	34	27	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**71**
11:00 AM	10	38	29	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**81**
12:00 PM	11	42	34	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**92**
1:00 PM	14	47	32	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**99**
2:00 PM	11	42	33	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**91**
3:00 PM	11	50	29	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**95**
4:00 PM	12	46	28	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**91**
5:00 PM	16	47	28	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**96**
6:00 PM	8	34	18	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**63**
7:00 PM	6	25	15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**47**
8:00 PM	3	18	10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**33**
9:00 PM	3	12	9	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**26**
10:00 PM	1	6	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**12**
11:00 PM	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
Total	**122**	**543**	**394**	**68**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,128**
Percent	**10.8%**	**48.1%**	**34.9%**	**6.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	14.2	mph	Mean (Average) Speed	14.3	mph
85th Percentile	18.0	mph	10 mph Pace	8.9 - 18.9	mph
95th Percentile	20.6	mph	Percent in Pace	83.4	%

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 02

Total Study Average
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	1	2	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**8**
1:00 AM	1	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
2:00 AM	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
3:00 AM	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	2	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**8**
6:00 AM	1	4	10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**17**
7:00 AM	1	4	20	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**31**
8:00 AM	3	15	40	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**66**
9:00 AM	5	21	44	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**77**
10:00 AM	7	27	55	8	1	0	0	0	0	0	0	0	0	0	0	0	0	**98**
11:00 AM	10	51	65	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**134**
12:00 PM	12	51	63	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**132**
1:00 PM	10	42	60	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**120**
2:00 PM	9	44	60	9	0	0	0	0	0	0	0	0	0	0	0	0	0	**122**
3:00 PM	9	37	62	11	1	0	0	0	0	0	0	0	0	0	0	0	0	**120**
4:00 PM	10	38	62	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**118**
5:00 PM	9	33	49	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**96**
6:00 PM	6	29	39	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**78**
7:00 PM	4	26	31	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**65**
8:00 PM	1	12	21	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**38**
9:00 PM	2	9	17	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**29**
10:00 PM	1	4	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**14**
11:00 PM	1	3	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
Total	**104**	**461**	**726**	**105**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,398**
Percent	**7.4%**	**33.0%**	**51.9%**	**7.5%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	15.8	mph	Mean (Average) Speed	15.4	mph
85th Percentile	18.8	mph	10 mph Pace	10.6 - 20.6	mph
95th Percentile	20.7	mph	Percent in Pace	85.5	%

Location: 9th St BTWN Colorado Ave & Grand Ave
Date Range: 9/17/2022 - 9/23/2022
Site Code: 02

	Saturday			Sunday			Monday			Tuesday			Wednesday			Thursday			Friday			Mid-Week Average		
	9/17/2022			9/18/2022			9/19/2022			9/20/2022			9/21/2022			9/22/2022			9/23/2022					
Time	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total
12:00 AM	7	10	17	4	6	10	0	7	7	2	7	9	3	12	15	3	5	8	2	8	10	3	8	11
1:00 AM	4	11	15	7	13	20	1	4	5	0	6	6	0	4	4	1	5	6	3	5	8	0	5	5
2:00 AM	3	10	13	6	10	16	1	1	2	1	2	3	1	3	4	0	4	4	0	2	2	1	3	4
3:00 AM	2	4	6	0	5	5	1	4	5	0	7	7	4	6	10	0	2	2	0	5	5	1	5	6
4:00 AM	6	1	7	4	1	5	5	6	11	9	2	11	7	3	10	11	2	13	6	3	9	9	2	11
5:00 AM	14	8	22	9	5	14	20	7	27	18	11	29	13	9	22	20	12	32	15	7	22	17	11	28
6:00 AM	17	12	29	14	7	21	27	17	44	36	22	58	43	18	61	33	23	56	29	20	49	37	21	58
7:00 AM	23	17	40	19	10	29	68	45	113	57	36	93	68	36	104	49	37	86	56	40	96	58	36	94
8:00 AM	32	35	67	22	27	49	73	83	156	81	85	166	65	82	147	67	73	140	64	82	146	71	80	151
9:00 AM	55	78	133	35	52	87	74	92	166	69	93	162	69	56	125	77	86	163	61	81	142	72	78	150
10:00 AM	71	88	159	42	49	91	75	108	183	94	107	201	76	119	195	59	116	175	78	100	178	76	114	190
11:00 AM	77	118	195	41	92	133	111	141	252	81	137	218	91	149	240	86	137	223	88	160	248	86	141	227
12:00 PM	78	133	211	63	78	141	134	175	309	104	125	229	89	139	228	85	143	228	96	130	226	93	136	228
1:00 PM	81	108	189	67	84	151	149	130	279	109	143	252	103	115	218	86	133	219	102	128	230	99	130	230
2:00 PM	77	96	173	65	69	134	118	165	283	97	133	230	97	129	226	84	126	210	95	143	238	93	129	222
3:00 PM	74	109	183	64	65	129	110	135	245	111	135	246	98	127	225	121	119	240	85	151	236	110	127	237
4:00 PM	76	112	188	52	68	120	109	117	226	98	124	222	89	136	225	106	124	230	103	144	247	98	128	226
5:00 PM	69	103	172	59	64	123	116	99	215	113	111	224	107	104	211	116	98	214	92	99	191	112	104	216
6:00 PM	63	78	141	58	49	107	76	93	169	70	74	144	51	66	117	60	85	145	70	102	172	60	75	135
7:00 PM	44	69	113	38	62	100	45	58	103	51	61	112	32	54	86	46	66	112	71	86	157	43	60	103
8:00 PM	45	44	89	29	40	69	21	32	53	30	42	72	24	31	55	35	31	66	47	46	93	30	35	64
9:00 PM	41	28	69	22	22	44	13	25	38	16	28	44	23	25	48	17	32	49	46	42	88	19	28	47
10:00 PM	18	19	37	4	10	14	13	7	20	10	15	25	9	8	17	7	14	21	18	20	38	9	12	21
11:00 PM	7	18	25	5	8	13	3	5	8	5	8	13	6	7	13	6	7	13	4	7	11	6	7	13
Total	**984**	**1,309**	**2,293**	**729**	**896**	**1,625**	**1,363**	**1,556**	**2,919**	**1,262**	**1,514**	**2,776**	**1,168**	**1,438**	**2,606**	**1,175**	**1,480**	**2,655**	**1,231**	**1,611**	**2,842**	**1,202**	**1,477**	**2,679**
Percent	**43%**	**57%**	-	**45%**	**55%**	-	**47%**	**53%**	-	**45%**	**55%**	-	**45%**	**55%**	-	**44%**	**56%**	-	**43%**	**57%**	-	**45%**	**55%**	-

1. Mid-week average includes data between Tuesday and Thursday.

Vehicle Classification Report Summary

Location: Colorado Ave BTWN 7th St & 8th St

Count Direction: Northbound / Southbound

Date Range: 9/17/2022 to 9/23/2022

Site Code: 03

	FHWA Vehicle Classification													Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
Study Total														
Northbound	69	3,856	929	3	505	100	0	1	2	1	0	0	1	5,467
Percent	1.3%	70.5%	17.0%	0.1%	9.2%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Southbound	29	3,117	879	2	447	174	0	0	0	1	0	0	0	4,649
Percent	0.6%	67.0%	18.9%	0.0%	9.6%	3.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	98	6,973	1,808	5	952	274	0	1	2	2	0	0	1	10,116
Percent	1.0%	68.9%	17.9%	0.0%	9.4%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%

FHWA Vehicle Classification	
Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Saturday, September 17, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	6	1	0	0	0	0	0	0	0	0	0	0	**7**
1:00 AM	0	8	1	0	0	0	0	0	0	0	0	0	0	**9**
2:00 AM	0	4	1	0	0	0	0	0	0	0	0	0	0	**5**
3:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	2	0	0	1	1	0	0	0	0	0	0	0	**4**
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
7:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
8:00 AM	0	3	2	0	1	0	0	0	0	0	0	0	0	**6**
9:00 AM	0	12	3	0	2	0	0	0	0	0	0	0	0	**17**
10:00 AM	0	16	4	0	1	0	0	0	0	0	0	0	0	**21**
11:00 AM	2	27	4	0	2	0	0	0	0	0	0	0	0	**35**
12:00 PM	0	39	6	0	8	1	0	0	0	0	0	0	0	**54**
1:00 PM	0	53	11	0	4	0	0	0	0	0	0	0	0	**68**
2:00 PM	0	50	11	0	4	2	0	0	0	0	0	0	0	**67**
3:00 PM	1	39	9	0	6	0	0	0	0	0	0	0	0	**55**
4:00 PM	1	47	10	0	10	0	0	0	0	0	0	0	0	**68**
5:00 PM	0	54	17	0	6	1	0	0	0	0	0	0	0	**78**
6:00 PM	2	53	16	0	8	1	0	0	0	0	0	0	0	**80**
7:00 PM	2	56	6	0	7	1	0	0	0	0	0	0	0	**72**
8:00 PM	0	32	2	0	5	1	0	0	0	0	0	0	0	**40**
9:00 PM	0	13	2	0	1	0	0	0	0	0	0	0	0	**16**
10:00 PM	0	9	0	0	3	0	0	0	0	0	0	0	0	**12**
11:00 PM	0	11	3	0	0	0	0	0	0	0	0	0	0	**14**
Total	**8**	**537**	**112**	**0**	**69**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**734**
Percent	**1.1%**	**73.2%**	**15.3%**	**0.0%**	**9.4%**	**1.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Saturday, September 17, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	**4**
1:00 AM	0	4	0	0	0	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	1	4	0	0	1	0	0	0	0	0	0	0	**6**
6:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	**3**
7:00 AM	0	6	1	0	0	0	0	0	0	0	0	0	0	**7**
8:00 AM	0	15	0	0	1	0	0	0	0	0	0	0	0	**16**
9:00 AM	0	17	4	0	5	0	0	0	0	0	0	0	0	**26**
10:00 AM	0	21	7	0	1	0	0	0	0	0	0	0	0	**29**
11:00 AM	2	30	6	0	1	0	0	0	0	0	0	0	0	**39**
12:00 PM	0	27	4	0	4	2	0	0	0	0	0	0	0	**37**
1:00 PM	0	34	4	0	6	3	0	0	0	0	0	0	0	**47**
2:00 PM	1	43	7	0	2	1	0	0	0	0	0	0	0	**54**
3:00 PM	1	45	8	0	3	2	0	0	0	0	0	0	0	**59**
4:00 PM	0	23	10	0	12	2	0	0	0	0	0	0	0	**47**
5:00 PM	0	31	12	0	6	4	0	0	0	0	0	0	0	**53**
6:00 PM	0	39	17	0	4	2	0	0	0	0	0	0	0	**62**
7:00 PM	0	33	15	0	6	1	0	0	0	0	0	0	0	**55**
8:00 PM	0	37	10	0	4	0	0	0	0	0	0	0	0	**51**
9:00 PM	0	23	4	0	1	1	0	0	0	0	0	0	0	**29**
10:00 PM	0	13	1	0	0	1	0	0	0	0	0	0	0	**15**
11:00 PM	0	10	2	0	0	1	0	0	0	0	0	0	0	**13**
Total	**4**	**460**	**118**	**0**	**56**	**21**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**659**
Percent	**0.6%**	**69.8%**	**17.9%**	**0.0%**	**8.5%**	**3.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Sunday, September 18, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	4	3	0	2	0	0	0	0	0	0	0	0	**9**
1:00 AM	0	3	3	0	0	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	5	2	0	0	1	0	0	0	0	0	0	0	**8**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	2	0	0	1	0	0	0	0	0	0	0	0	**3**
6:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
7:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	**3**
8:00 AM	0	5	2	0	0	0	0	0	0	0	0	0	0	**7**
9:00 AM	1	12	8	0	1	0	0	0	0	0	0	0	0	**22**
10:00 AM	1	26	1	1	6	1	0	0	0	0	0	0	0	**36**
11:00 AM	0	30	9	0	3	0	0	0	0	0	0	0	0	**42**
12:00 PM	4	48	11	0	6	1	0	0	0	0	0	0	0	**70**
1:00 PM	0	29	13	0	1	1	0	0	0	0	0	0	0	**44**
2:00 PM	0	41	5	0	3	2	0	0	0	0	0	0	0	**51**
3:00 PM	1	34	7	0	2	0	0	0	0	0	0	0	0	**44**
4:00 PM	2	23	5	0	4	1	0	0	0	0	0	0	0	**35**
5:00 PM	0	32	6	0	3	2	0	0	0	0	0	0	0	**43**
6:00 PM	1	20	10	0	6	1	0	0	0	0	0	0	0	**38**
7:00 PM	0	24	10	0	2	0	0	0	0	0	0	0	0	**36**
8:00 PM	0	6	1	0	1	0	0	0	0	0	0	0	0	**8**
9:00 PM	1	1	3	0	1	0	0	0	0	0	0	0	0	**6**
10:00 PM	0	2	1	0	1	0	0	0	0	0	0	0	0	**4**
11:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
Total	**11**	**353**	**101**	**1**	**43**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**519**
Percent	**2.1%**	**68.0%**	**19.5%**	**0.2%**	**8.3%**	**1.9%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Sunday, September 18, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	3	2	0	0	0	0	0	0	0	0	0	0	**5**
1:00 AM	0	4	2	0	0	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	2	2	0	0	0	0	0	0	0	0	0	0	**4**
3:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
6:00 AM	0	3	2	0	1	0	0	0	0	0	0	0	0	**6**
7:00 AM	0	4	0	0	0	0	0	0	0	0	0	0	0	**4**
8:00 AM	0	7	2	0	1	0	0	0	0	0	0	0	0	**10**
9:00 AM	0	20	4	0	0	0	0	0	0	0	0	0	0	**24**
10:00 AM	1	15	4	0	0	1	0	0	0	0	0	0	0	**21**
11:00 AM	0	27	8	0	2	1	0	0	0	0	0	0	0	**38**
12:00 PM	3	23	10	0	2	1	0	0	0	0	0	0	0	**39**
1:00 PM	0	36	13	0	8	1	0	0	0	0	0	0	0	**58**
2:00 PM	0	24	8	0	0	1	0	0	0	0	0	0	0	**33**
3:00 PM	0	28	8	0	3	0	0	0	0	0	0	0	0	**39**
4:00 PM	2	20	7	0	1	1	0	0	0	0	0	0	0	**31**
5:00 PM	0	26	7	0	4	2	0	0	0	0	0	0	0	**39**
6:00 PM	0	24	5	0	1	0	0	0	0	0	0	0	0	**30**
7:00 PM	0	17	7	0	2	0	0	0	0	0	0	0	0	**26**
8:00 PM	0	12	2	0	1	0	0	0	0	0	0	0	0	**15**
9:00 PM	0	6	3	0	2	0	0	0	0	0	0	0	0	**11**
10:00 PM	0	4	1	0	1	0	0	0	0	0	0	0	0	**6**
11:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
Total	**6**	**307**	**101**	**0**	**29**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**451**
Percent	**1.3%**	**68.1%**	**22.4%**	**0.0%**	**6.4%**	**1.8%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Monday, September 19, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	3	0	0	2	0	0	0	0	0	0	0	0	**5**
6:00 AM	0	6	2	0	0	0	0	0	0	0	0	0	0	**8**
7:00 AM	0	11	6	0	2	1	0	0	0	0	0	0	0	**20**
8:00 AM	0	27	6	0	4	1	0	0	0	0	0	0	0	**38**
9:00 AM	0	15	6	0	6	3	0	0	1	0	0	0	0	**31**
10:00 AM	0	29	7	0	5	0	0	0	0	0	0	0	0	**41**
11:00 AM	1	43	10	0	9	1	0	0	0	0	0	0	0	**64**
12:00 PM	2	81	14	0	3	2	0	0	0	0	0	0	0	**102**
1:00 PM	1	54	11	1	6	0	0	0	0	0	0	0	0	**73**
2:00 PM	0	48	11	0	8	2	0	0	0	1	0	0	0	**70**
3:00 PM	1	53	8	0	2	1	0	0	0	0	0	0	0	**65**
4:00 PM	0	54	5	0	2	1	0	0	0	0	0	0	0	**62**
5:00 PM	2	41	8	0	4	2	0	0	0	0	0	0	0	**57**
6:00 PM	2	44	7	0	3	1	0	0	0	0	0	0	0	**57**
7:00 PM	1	24	6	0	2	1	0	0	0	0	0	0	0	**34**
8:00 PM	0	17	7	0	1	0	0	0	0	0	0	0	0	**25**
9:00 PM	1	6	1	0	1	0	0	0	0	0	0	0	0	**9**
10:00 PM	0	5	2	0	0	0	0	0	0	0	0	0	0	**7**
11:00 PM	0	4	0	0	0	0	0	0	0	0	0	0	0	**4**
Total	**11**	**569**	**118**	**1**	**61**	**16**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**778**
Percent	**1.4%**	**73.1%**	**15.2%**	**0.1%**	**7.8%**	**2.1%**	**0.0%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Monday, September 19, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	1	0	0	1	0	0	0	0	0	0	0	**3**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	**4**
6:00 AM	0	9	2	0	0	1	0	0	0	0	0	0	0	**12**
7:00 AM	0	26	5	0	2	3	0	0	0	0	0	0	0	**36**
8:00 AM	1	42	11	0	6	5	0	0	0	0	0	0	0	**65**
9:00 AM	1	19	5	1	0	0	0	0	0	0	0	0	0	**26**
10:00 AM	0	6	8	0	4	2	0	0	0	0	0	0	0	**20**
11:00 AM	2	22	8	0	8	4	0	0	0	0	0	0	0	**44**
12:00 PM	1	41	12	0	2	3	0	0	0	0	0	0	0	**59**
1:00 PM	0	29	8	0	12	3	0	0	0	0	0	0	0	**52**
2:00 PM	0	31	20	0	7	4	0	0	0	0	0	0	0	**62**
3:00 PM	0	37	9	0	2	3	0	0	0	0	0	0	0	**51**
4:00 PM	0	49	10	0	2	1	0	0	0	0	0	0	0	**62**
5:00 PM	1	39	13	0	3	5	0	0	0	0	0	0	0	**61**
6:00 PM	0	24	7	0	1	3	0	0	0	0	0	0	0	**35**
7:00 PM	0	23	10	0	0	2	0	0	0	0	0	0	0	**35**
8:00 PM	0	17	4	0	1	0	0	0	0	0	0	0	0	**22**
9:00 PM	0	19	4	0	0	0	0	0	0	0	0	0	0	**23**
10:00 PM	0	4	0	0	0	1	0	0	0	0	0	0	0	**5**
11:00 PM	0	6	1	0	0	0	0	0	0	0	0	0	0	**7**
Total	**6**	**449**	**140**	**1**	**51**	**41**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**688**
Percent	**0.9%**	**65.3%**	**20.3%**	**0.1%**	**7.4%**	**6.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

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Tuesday, September 20, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	2	2	0	0	0	0	0	0	0	0	0	0	**4**
5:00 AM	0	4	0	0	3	0	0	0	0	0	0	0	0	**7**
6:00 AM	0	6	1	0	2	0	0	0	0	0	0	0	0	**9**
7:00 AM	1	27	5	0	3	2	0	0	0	0	0	0	0	**38**
8:00 AM	1	21	6	0	2	1	0	0	0	0	0	0	0	**31**
9:00 AM	0	22	6	0	7	0	0	0	0	0	0	0	0	**35**
10:00 AM	0	29	10	0	2	0	0	0	0	0	0	0	0	**41**
11:00 AM	0	43	13	0	5	1	0	0	0	0	0	0	0	**62**
12:00 PM	0	40	13	0	7	1	0	0	0	0	0	0	0	**61**
1:00 PM	2	60	14	0	5	0	0	0	0	0	0	0	0	**81**
2:00 PM	0	46	8	0	2	1	0	0	0	0	0	0	0	**57**
3:00 PM	2	32	8	0	5	2	0	0	0	0	0	0	0	**49**
4:00 PM	1	35	9	0	4	0	0	0	0	0	0	0	0	**49**
5:00 PM	1	50	11	0	3	1	0	0	0	0	0	0	0	**66**
6:00 PM	0	35	8	0	5	0	0	0	0	0	0	0	0	**48**
7:00 PM	0	32	9	0	3	1	0	0	0	0	0	0	0	**45**
8:00 PM	0	19	6	0	1	1	0	0	0	0	0	0	0	**27**
9:00 PM	0	8	2	0	1	1	0	0	0	0	0	0	0	**12**
10:00 PM	0	6	1	0	1	0	0	0	0	0	0	0	0	**8**
11:00 PM	0	4	0	0	0	1	0	0	0	0	0	0	0	**5**
Total	**8**	**523**	**133**	**0**	**62**	**13**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**739**
Percent	**1.1%**	**70.8%**	**18.0%**	**0.0%**	**8.4%**	**1.8%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Tuesday, September 20, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	6	0	0	0	0	0	0	0	0	0	0	0	**6**
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
6:00 AM	0	5	1	0	1	1	0	0	0	0	0	0	0	**8**
7:00 AM	0	22	3	0	2	2	0	0	0	0	0	0	0	**29**
8:00 AM	0	23	3	0	4	1	0	0	0	0	0	0	0	**31**
9:00 AM	1	11	3	0	3	1	0	0	0	0	0	0	0	**19**
10:00 AM	0	21	6	0	8	1	0	0	0	0	0	0	0	**36**
11:00 AM	0	24	13	0	3	0	0	0	0	0	0	0	0	**40**
12:00 PM	0	32	7	0	8	3	0	0	0	0	0	0	0	**50**
1:00 PM	2	48	15	0	9	1	0	0	0	0	0	0	0	**75**
2:00 PM	0	31	9	0	10	0	0	0	0	0	0	0	0	**50**
3:00 PM	2	42	8	0	9	1	0	0	0	0	0	0	0	**62**
4:00 PM	0	38	9	0	4	2	0	0	0	0	0	0	0	**53**
5:00 PM	2	39	14	0	6	1	0	0	0	0	0	0	0	**62**
6:00 PM	0	29	9	0	7	1	0	0	0	0	0	0	0	**46**
7:00 PM	0	26	9	0	2	1	0	0	0	0	0	0	0	**38**
8:00 PM	0	10	7	0	3	1	0	0	0	0	0	0	0	**21**
9:00 PM	0	8	4	0	0	1	0	0	0	0	0	0	0	**13**
10:00 PM	0	4	0	0	1	1	0	0	0	0	0	0	0	**6**
11:00 PM	0	2	1	0	0	0	0	0	0	0	0	0	0	**3**
Total	**7**	**421**	**122**	**0**	**80**	**19**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**649**
Percent	**1.1%**	**64.9%**	**18.8%**	**0.0%**	**12.3%**	**2.9%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Wednesday, September 21, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	5	1	0	1	0	0	0	0	0	0	0	0	**7**
6:00 AM	0	3	2	0	1	0	0	0	0	0	0	0	0	**6**
7:00 AM	0	14	4	0	2	0	0	0	0	0	0	0	0	**20**
8:00 AM	0	15	6	0	2	0	0	0	0	0	0	0	0	**23**
9:00 AM	0	17	8	0	5	0	0	0	0	0	0	0	0	**30**
10:00 AM	0	26	6	0	2	1	0	0	0	0	0	0	0	**35**
11:00 AM	0	59	11	0	10	2	0	0	0	0	0	0	0	**82**
12:00 PM	3	68	23	0	9	0	0	0	0	0	0	0	0	**103**
1:00 PM	0	41	10	0	7	0	0	0	0	0	0	0	0	**58**
2:00 PM	0	48	7	0	9	1	0	0	0	0	0	0	0	**65**
3:00 PM	0	46	9	0	4	3	0	0	0	0	0	0	0	**62**
4:00 PM	0	39	13	0	5	2	0	0	0	0	0	0	0	**59**
5:00 PM	0	76	13	0	8	1	0	0	0	0	0	0	0	**98**
6:00 PM	2	42	12	0	5	0	0	0	0	0	0	0	0	**61**
7:00 PM	0	41	11	0	5	2	0	0	0	0	0	0	0	**59**
8:00 PM	0	9	2	0	1	0	0	0	0	0	0	0	0	**12**
9:00 PM	0	7	6	0	0	0	0	0	0	0	0	0	0	**13**
10:00 PM	1	6	1	0	1	0	0	0	0	0	0	0	0	**9**
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**6**	**565**	**148**	**0**	**77**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**808**
Percent	**0.7%**	**69.9%**	**18.3%**	**0.0%**	**9.5%**	**1.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Wednesday, September 21, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
6:00 AM	0	5	2	0	2	0	0	0	0	0	0	0	0	**9**
7:00 AM	0	26	6	0	1	4	0	0	0	0	0	0	0	**37**
8:00 AM	0	24	5	0	3	0	0	0	0	0	0	0	0	**32**
9:00 AM	0	8	4	0	5	0	0	0	0	0	0	0	0	**17**
10:00 AM	0	15	5	0	3	4	0	0	0	0	0	0	0	**27**
11:00 AM	0	29	11	0	6	3	0	0	0	0	0	0	0	**49**
12:00 PM	0	43	11	0	3	3	0	0	0	0	0	0	0	**60**
1:00 PM	0	44	14	0	5	0	0	0	0	0	0	0	0	**63**
2:00 PM	0	31	13	0	7	0	0	0	0	0	0	0	0	**51**
3:00 PM	0	48	7	0	5	6	0	0	0	0	0	0	0	**66**
4:00 PM	0	39	5	0	3	0	0	0	0	0	0	0	0	**47**
5:00 PM	0	35	12	0	6	4	0	0	0	0	0	0	0	**57**
6:00 PM	0	37	13	0	3	2	0	0	0	0	0	0	0	**55**
7:00 PM	1	28	7	0	4	1	0	0	0	0	0	0	0	**41**
8:00 PM	0	14	8	0	3	0	0	0	0	0	0	0	0	**25**
9:00 PM	0	10	4	0	3	0	0	0	0	0	0	0	0	**17**
10:00 PM	0	1	2	0	0	0	0	0	0	0	0	0	0	**3**
11:00 PM	0	5	1	0	0	0	0	0	0	0	0	0	0	**6**
Total	**1**	**444**	**133**	**0**	**62**	**27**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**667**
Percent	**0.1%**	**66.6%**	**19.9%**	**0.0%**	**9.3%**	**4.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Thursday, September 22, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	4	0	0	0	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	**4**
6:00 AM	0	8	5	0	1	0	0	0	0	0	0	0	0	**14**
7:00 AM	0	17	6	0	5	1	0	0	0	0	0	0	0	**29**
8:00 AM	0	27	6	0	2	0	0	0	0	0	0	0	0	**35**
9:00 AM	1	15	4	0	5	0	0	0	0	0	0	0	0	**25**
10:00 AM	3	55	7	0	4	1	0	0	0	0	0	0	0	**70**
11:00 AM	1	52	18	0	6	0	0	0	1	0	0	0	0	**78**
12:00 PM	1	73	12	0	13	1	0	0	0	0	0	0	0	**100**
1:00 PM	1	46	12	0	7	0	0	0	0	0	0	0	0	**66**
2:00 PM	0	56	12	0	8	2	0	0	0	0	0	0	0	**78**
3:00 PM	1	38	9	0	6	1	0	0	0	0	0	0	0	**55**
4:00 PM	1	54	12	0	6	1	0	0	0	0	0	0	0	**74**
5:00 PM	0	58	8	0	8	3	0	0	0	0	0	0	0	**77**
6:00 PM	1	60	18	0	4	2	0	0	0	0	0	0	0	**85**
7:00 PM	4	25	6	0	3	0	0	1	0	0	0	0	0	**39**
8:00 PM	0	26	6	0	7	1	0	0	0	0	0	0	0	**40**
9:00 PM	0	8	4	0	1	0	0	0	0	0	0	0	0	**13**
10:00 PM	0	3	1	0	0	0	0	0	0	0	0	0	0	**4**
11:00 PM	0	3	1	0	0	0	0	0	0	0	0	0	0	**4**
Total	**14**	**634**	**149**	**0**	**88**	**13**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**900**
Percent	**1.6%**	**70.4%**	**16.6%**	**0.0%**	**9.8%**	**1.4%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Thursday, September 22, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
6:00 AM	0	8	1	1	6	0	0	0	0	0	0	0	0	**16**
7:00 AM	0	25	4	0	3	1	0	0	0	0	0	0	0	**33**
8:00 AM	0	26	11	0	3	2	0	0	0	0	0	0	0	**42**
9:00 AM	0	14	5	0	6	2	0	0	0	1	0	0	0	**28**
10:00 AM	0	33	4	0	7	4	0	0	0	0	0	0	0	**48**
11:00 AM	1	39	10	0	5	2	0	0	0	0	0	0	0	**57**
12:00 PM	0	40	13	0	13	1	0	0	0	0	0	0	0	**67**
1:00 PM	0	34	13	0	8	2	0	0	0	0	0	0	0	**57**
2:00 PM	0	31	10	0	8	0	0	0	0	0	0	0	0	**49**
3:00 PM	0	35	10	0	8	0	0	0	0	0	0	0	0	**53**
4:00 PM	0	41	5	0	6	3	0	0	0	0	0	0	0	**55**
5:00 PM	0	44	12	0	7	2	0	0	0	0	0	0	0	**65**
6:00 PM	0	46	7	0	3	2	0	0	0	0	0	0	0	**58**
7:00 PM	0	29	4	0	3	3	0	0	0	0	0	0	0	**39**
8:00 PM	0	26	5	0	5	1	0	0	0	0	0	0	0	**37**
9:00 PM	0	12	3	0	1	0	0	0	0	0	0	0	0	**16**
10:00 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	**2**
11:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**1**	**487**	**119**	**1**	**92**	**26**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**727**
Percent	**0.1%**	**67.0%**	**16.4%**	**0.1%**	**12.7%**	**3.6%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Friday, September 23, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	1	2	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	3	0	0	1	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	0	2	0	1	0	0	0	0	0	0	0	0	**3**
5:00 AM	0	3	2	0	1	0	0	0	0	0	0	0	0	**6**
6:00 AM	0	4	6	0	3	0	0	0	0	0	0	0	0	**13**
7:00 AM	0	15	2	1	3	1	0	0	0	0	0	0	0	**22**
8:00 AM	2	16	4	0	1	1	0	0	0	0	0	0	0	**24**
9:00 AM	1	13	2	0	3	0	0	0	0	0	0	0	0	**19**
10:00 AM	1	30	5	0	4	1	0	0	0	0	0	0	0	**41**
11:00 AM	0	37	7	0	9	4	0	0	0	0	0	0	0	**57**
12:00 PM	1	55	16	0	7	5	0	0	0	0	0	0	0	**84**
1:00 PM	0	65	11	0	13	6	0	0	0	0	0	0	0	**95**
2:00 PM	2	43	11	0	8	3	0	0	0	0	0	0	0	**67**
3:00 PM	1	67	15	0	2	2	0	0	0	0	0	0	0	**87**
4:00 PM	0	34	14	0	8	3	0	0	0	0	0	0	0	**59**
5:00 PM	1	75	16	0	16	0	0	0	0	0	0	0	1	**109**
6:00 PM	0	83	12	0	9	1	0	0	0	0	0	0	0	**105**
7:00 PM	0	48	16	0	4	0	0	0	0	0	0	0	0	**68**
8:00 PM	1	37	6	0	7	1	0	0	0	0	0	0	0	**52**
9:00 PM	1	11	8	0	4	0	0	0	0	0	0	0	0	**24**
10:00 PM	0	23	5	0	0	0	0	0	0	0	0	0	0	**28**
11:00 PM	0	12	4	0	1	0	0	0	0	0	0	0	0	**17**
Total	**11**	**675**	**168**	**1**	**105**	**28**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**989**
Percent	**1.1%**	**68.3%**	**17.0%**	**0.1%**	**10.6%**	**2.8%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**	

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Friday, September 23, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	1	4	0	0	1	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
6:00 AM	0	7	3	0	1	0	0	0	0	0	0	0	0	**11**
7:00 AM	0	21	1	0	2	5	0	0	0	0	0	0	0	**29**
8:00 AM	0	26	7	0	6	2	0	0	0	0	0	0	0	**41**
9:00 AM	0	13	2	0	2	1	0	0	0	0	0	0	0	**18**
10:00 AM	0	24	5	0	3	0	0	0	0	0	0	0	0	**32**
11:00 AM	0	27	15	0	3	3	0	0	0	0	0	0	0	**48**
12:00 PM	0	45	12	0	5	0	0	0	0	0	0	0	0	**62**
1:00 PM	0	43	18	0	7	3	0	0	0	0	0	0	0	**71**
2:00 PM	1	38	17	0	8	4	0	0	0	0	0	0	0	**68**
3:00 PM	0	43	5	0	6	2	0	0	0	0	0	0	0	**56**
4:00 PM	0	32	6	0	6	2	0	0	0	0	0	0	0	**46**
5:00 PM	0	53	14	0	6	3	0	0	0	0	0	0	0	**76**
6:00 PM	1	48	15	0	6	2	0	0	0	0	0	0	0	**72**
7:00 PM	1	31	14	0	1	1	0	0	0	0	0	0	0	**48**
8:00 PM	0	35	3	0	6	2	0	0	0	0	0	0	0	**46**
9:00 PM	0	16	4	0	2	0	0	0	0	0	0	0	0	**22**
10:00 PM	0	24	2	0	4	1	0	0	0	0	0	0	0	**31**
11:00 PM	0	14	2	0	2	1	0	0	0	0	0	0	0	**19**
Total	**4**	**549**	**146**	**0**	**77**	**32**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**808**
Percent	**0.5%**	**67.9%**	**18.1%**	**0.0%**	**9.5%**	**4.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Total Study Average
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	3	0	0	2	0	0	0	0	0	0	0	0	**5**
6:00 AM	0	4	2	0	1	0	0	0	0	0	0	0	0	**7**
7:00 AM	0	12	4	0	2	1	0	0	0	0	0	0	0	**19**
8:00 AM	0	16	5	0	2	0	0	0	0	0	0	0	0	**23**
9:00 AM	0	15	5	0	4	0	0	0	0	0	0	0	0	**24**
10:00 AM	1	30	6	0	3	1	0	0	0	0	0	0	0	**41**
11:00 AM	1	42	10	0	6	1	0	0	0	0	0	0	0	**60**
12:00 PM	2	58	14	0	8	2	0	0	0	0	0	0	0	**84**
1:00 PM	1	50	12	0	6	1	0	0	0	0	0	0	0	**70**
2:00 PM	0	47	9	0	6	2	0	0	0	0	0	0	0	**64**
3:00 PM	1	44	9	0	4	1	0	0	0	0	0	0	0	**59**
4:00 PM	1	41	10	0	6	1	0	0	0	0	0	0	0	**59**
5:00 PM	1	55	11	0	7	1	0	0	0	0	0	0	0	**75**
6:00 PM	1	48	12	0	6	1	0	0	0	0	0	0	0	**68**
7:00 PM	1	36	9	0	4	1	0	0	0	0	0	0	0	**51**
8:00 PM	0	21	4	0	3	1	0	0	0	0	0	0	0	**29**
9:00 PM	0	8	4	0	1	0	0	0	0	0	0	0	0	**13**
10:00 PM	0	8	2	0	1	0	0	0	0	0	0	0	0	**11**
11:00 PM	0	5	1	0	0	0	0	0	0	0	0	0	0	**6**
Total	**10**	**550**	**132**	**0**	**72**	**14**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**778**
Percent	**1.3%**	**70.7%**	**17.0%**	**0.0%**	**9.3%**	**1.8%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Total Study Average
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	**3**
6:00 AM	0	6	2	0	2	0	0	0	0	0	0	0	0	**10**
7:00 AM	0	19	3	0	1	2	0	0	0	0	0	0	0	**25**
8:00 AM	0	23	6	0	3	1	0	0	0	0	0	0	0	**33**
9:00 AM	0	15	4	0	3	1	0	0	0	0	0	0	0	**23**
10:00 AM	0	19	6	0	4	2	0	0	0	0	0	0	0	**31**
11:00 AM	1	28	10	0	4	2	0	0	0	0	0	0	0	**45**
12:00 PM	1	36	10	0	5	2	0	0	0	0	0	0	0	**54**
1:00 PM	0	38	12	0	8	2	0	0	0	0	0	0	0	**60**
2:00 PM	0	33	12	0	6	1	0	0	0	0	0	0	0	**52**
3:00 PM	0	40	8	0	5	2	0	0	0	0	0	0	0	**55**
4:00 PM	0	35	7	0	5	2	0	0	0	0	0	0	0	**49**
5:00 PM	0	38	12	0	5	3	0	0	0	0	0	0	0	**58**
6:00 PM	0	35	10	0	4	2	0	0	0	0	0	0	0	**51**
7:00 PM	0	27	9	0	3	1	0	0	0	0	0	0	0	**40**
8:00 PM	0	22	6	0	3	1	0	0	0	0	0	0	0	**32**
9:00 PM	0	13	4	0	1	0	0	0	0	0	0	0	0	**18**
10:00 PM	0	7	1	0	1	1	0	0	0	0	0	0	0	**10**
11:00 PM	0	5	1	0	0	0	0	0	0	0	0	0	0	**6**
Total	**2**	**446**	**126**	**0**	**63**	**25**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**662**
Percent	**0.3%**	**67.4%**	**19.0%**	**0.0%**	**9.5%**	**3.8%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

3-Day (Tuesday - Thursday) Average
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	1	2	0	0	0	0	0	0	0	0	0	0	**3**
5:00 AM	0	4	0	0	2	0	0	0	0	0	0	0	0	**6**
6:00 AM	0	6	3	0	1	0	0	0	0	0	0	0	0	**10**
7:00 AM	0	19	5	0	3	1	0	0	0	0	0	0	0	**29**
8:00 AM	0	21	6	0	2	0	0	0	0	0	0	0	0	**30**
9:00 AM	0	18	6	0	6	0	0	0	0	0	0	0	0	**30**
10:00 AM	1	37	8	0	3	1	0	0	0	0	0	0	0	**49**
11:00 AM	0	51	14	0	7	1	0	0	0	0	0	0	0	**74**
12:00 PM	1	60	16	0	10	1	0	0	0	0	0	0	0	**88**
1:00 PM	1	49	12	0	6	0	0	0	0	0	0	0	0	**68**
2:00 PM	0	50	9	0	6	1	0	0	0	0	0	0	0	**67**
3:00 PM	1	39	9	0	5	2	0	0	0	0	0	0	0	**55**
4:00 PM	1	43	11	0	5	1	0	0	0	0	0	0	0	**61**
5:00 PM	0	61	11	0	6	2	0	0	0	0	0	0	0	**80**
6:00 PM	1	46	13	0	5	1	0	0	0	0	0	0	0	**65**
7:00 PM	1	33	9	0	4	1	0	0	0	0	0	0	0	**48**
8:00 PM	0	18	5	0	3	1	0	0	0	0	0	0	0	**26**
9:00 PM	0	8	4	0	1	0	0	0	0	0	0	0	0	**13**
10:00 PM	0	5	1	0	1	0	0	0	0	0	0	0	0	**7**
11:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	**3**
Total	**9**	**574**	**143**	**0**	**76**	**13**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**816**
Percent	**1.1%**	**70.4%**	**17.6%**	**0.0%**	**9.3%**	**1.6%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

idax DATA SOLUTIONS

3-Day (Tuesday - Thursday) Average
Southbound

	FHWA Vehicle Classification													Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
6:00 AM	0	6	1	0	3	0	0	0	0	0	0	0	0	**11**
7:00 AM	0	24	4	0	2	2	0	0	0	0	0	0	0	**33**
8:00 AM	0	24	6	0	3	1	0	0	0	0	0	0	0	**35**
9:00 AM	0	11	4	0	5	1	0	0	0	0	0	0	0	**21**
10:00 AM	0	23	5	0	6	3	0	0	0	0	0	0	0	**37**
11:00 AM	0	31	11	0	5	2	0	0	0	0	0	0	0	**49**
12:00 PM	0	38	10	0	8	2	0	0	0	0	0	0	0	**59**
1:00 PM	1	42	14	0	7	1	0	0	0	0	0	0	0	**65**
2:00 PM	0	31	11	0	8	0	0	0	0	0	0	0	0	**50**
3:00 PM	1	42	8	0	7	2	0	0	0	0	0	0	0	**60**
4:00 PM	0	39	6	0	4	2	0	0	0	0	0	0	0	**52**
5:00 PM	1	39	13	0	6	2	0	0	0	0	0	0	0	**61**
6:00 PM	0	37	10	0	4	2	0	0	0	0	0	0	0	**53**
7:00 PM	0	28	7	0	3	2	0	0	0	0	0	0	0	**39**
8:00 PM	0	17	7	0	4	1	0	0	0	0	0	0	0	**28**
9:00 PM	0	10	4	0	1	0	0	0	0	0	0	0	0	**15**
10:00 PM	0	2	1	0	0	1	0	0	0	0	0	0	0	**4**
11:00 PM	0	3	1	0	0	0	0	0	0	0	0	0	0	**3**
Total	**3**	**451**	**125**	**0**	**78**	**24**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**681**
Percent	**0.4%**	**66.2%**	**18.3%**	**0.0%**	**11.5%**	**3.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Vehicle Speed Report Summary

Location: Colorado Ave BTWN 7th St & 8th St

Count Direction: Northbound / Southbound

Date Range: 9/17/2022 to 9/23/2022

Site Code: 03

	Speed Range (mph)																	Total
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
Study Total																		
Northbound	900	2,266	1,846	443	12	0	0	0	0	0	0	0	0	0	0	0	0	5,467
Percent	16.5%	41.4%	33.8%	8.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Southbound	858	1,497	1,736	530	26	2	0	0	0	0	0	0	0	0	0	0	0	4,649
Percent	18.5%	32.2%	37.3%	11.4%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	1,758	3,763	3,582	973	38	2	0	0	0	0	0	0	0	0	0	0	0	10,116
Percent	17.4%	37.2%	35.4%	9.6%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%

Total Study Percentile Speed Summary			Total Study Speed Statistics		
Northbound			**Northbound**		
50th Percentile (Median)	14.1	mph	Mean (Average) Speed	14.1	mph
85th Percentile	18.7	mph	10 mph Pace	9.7 - 19.7	mph
95th Percentile	20.8	mph	Percent in Pace	75.3	%
Southbound			**Southbound**		
50th Percentile (Median)	14.9	mph	Mean (Average) Speed	14.7	mph
85th Percentile	19.5	mph	10 mph Pace	9.3 - 19.3	mph
95th Percentile	21.9	mph	Percent in Pace	69.9	%

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Saturday, September 17, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	1	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
1:00 AM	2	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
2:00 AM	0	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
3:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
7:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
8:00 AM	0	1	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
9:00 AM	2	3	10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**17**
10:00 AM	3	3	12	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**21**
11:00 AM	5	14	14	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**35**
12:00 PM	15	27	10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**54**
1:00 PM	1	46	20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**68**
2:00 PM	9	33	24	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**67**
3:00 PM	6	30	16	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**55**
4:00 PM	19	32	16	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**68**
5:00 PM	18	46	12	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**78**
6:00 PM	17	44	16	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**80**
7:00 PM	14	38	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**72**
8:00 PM	4	21	13	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**40**
9:00 PM	3	4	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**16**
10:00 PM	0	5	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**12**
11:00 PM	2	5	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**14**
Total	**121**	**358**	**222**	**33**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**734**
Percent	**16.5%**	**48.8%**	**30.2%**	**4.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	13.5	mph	Mean (Average) Speed	13.6	mph
85th Percentile	17.6	mph	10 mph Pace	9.1 - 19.1	mph
95th Percentile	19.9	mph	Percent in Pace	82.6	%

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Saturday, September 17, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**4**
1:00 AM	0	1	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
6:00 AM	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
7:00 AM	0	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
8:00 AM	0	4	7	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**16**
9:00 AM	2	2	12	9	1	0	0	0	0	0	0	0	0	0	0	0	0	**26**
10:00 AM	2	5	15	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**29**
11:00 AM	3	6	17	12	1	0	0	0	0	0	0	0	0	0	0	0	0	**39**
12:00 PM	10	10	12	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**37**
1:00 PM	15	20	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**47**
2:00 PM	10	23	18	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**54**
3:00 PM	11	13	29	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**59**
4:00 PM	10	14	17	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**47**
5:00 PM	11	22	15	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**53**
6:00 PM	13	20	26	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**62**
7:00 PM	15	22	17	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**55**
8:00 PM	6	16	27	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**51**
9:00 PM	2	7	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**29**
10:00 PM	2	4	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**15**
11:00 PM	2	2	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**13**
Total	**114**	**197**	**264**	**79**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**659**
Percent	**17.3%**	**29.9%**	**40.1%**	**12.0%**	**0.8%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	15.4	mph	Mean (Average) Speed	15	mph
85th Percentile	19.6	mph	10 mph Pace	10.1 - 20.1	mph
95th Percentile	21.9	mph	Percent in Pace	69.8	%

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Sunday, September 18, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	2	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
1:00 AM	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
2:00 AM	2	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**8**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
6:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
7:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
8:00 AM	0	1	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**7**
9:00 AM	4	2	10	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**22**
10:00 AM	8	9	11	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**36**
11:00 AM	3	7	28	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**42**
12:00 PM	10	36	17	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**70**
1:00 PM	3	10	24	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**44**
2:00 PM	6	27	15	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**51**
3:00 PM	6	24	13	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**44**
4:00 PM	7	10	17	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**35**
5:00 PM	9	7	20	6	1	0	0	0	0	0	0	0	0	0	0	0	0	**43**
6:00 PM	4	22	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**38**
7:00 PM	12	13	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**36**
8:00 PM	0	0	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**8**
9:00 PM	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
10:00 PM	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
11:00 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Total	**78**	**180**	**205**	**54**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**519**
Percent	**15.0%**	**34.7%**	**39.5%**	**10.4%**	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	15.0	mph	Mean (Average) Speed	14.8	mph
85th Percentile	19.3	mph	10 mph Pace	11.6 - 21.6	mph
95th Percentile	21.4	mph	Percent in Pace	76.5	%

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Sunday, September 18, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
1:00 AM	1	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	**6**
2:00 AM	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
3:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
6:00 AM	0	0	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**6**
7:00 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
8:00 AM	0	1	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**10**
9:00 AM	3	2	7	12	0	0	0	0	0	0	0	0	0	0	0	0	0	**24**
10:00 AM	2	2	8	7	2	0	0	0	0	0	0	0	0	0	0	0	0	**21**
11:00 AM	6	8	20	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**38**
12:00 PM	6	7	16	8	2	0	0	0	0	0	0	0	0	0	0	0	0	**39**
1:00 PM	6	15	31	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**58**
2:00 PM	11	7	11	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**33**
3:00 PM	4	15	13	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**39**
4:00 PM	4	4	17	5	1	0	0	0	0	0	0	0	0	0	0	0	0	**31**
5:00 PM	6	8	16	9	0	0	0	0	0	0	0	0	0	0	0	0	0	**39**
6:00 PM	7	10	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**30**
7:00 PM	2	10	11	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**26**
8:00 PM	1	4	7	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**15**
9:00 PM	1	3	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**11**
10:00 PM	2	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
11:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**63**	**103**	**190**	**87**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**451**
Percent	**14.0%**	**22.8%**	**42.1%**	**19.3%**	**1.8%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	16.6	mph	Mean (Average) Speed	16.1	mph
85th Percentile	20.8	mph	10 mph Pace	12.5 - 22.5	mph
95th Percentile	22.4	mph	Percent in Pace	72.51	%

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Monday, September 19, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
6:00 AM	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**8**
7:00 AM	0	4	11	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**20**
8:00 AM	5	14	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**38**
9:00 AM	5	13	11	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**31**
10:00 AM	2	18	18	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**41**
11:00 AM	21	33	8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**64**
12:00 PM	34	42	20	5	1	0	0	0	0	0	0	0	0	0	0	0	0	**102**
1:00 PM	15	39	18	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**73**
2:00 PM	12	28	27	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**70**
3:00 PM	11	21	26	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**65**
4:00 PM	18	23	13	7	1	0	0	0	0	0	0	0	0	0	0	0	0	**62**
5:00 PM	10	21	24	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**57**
6:00 PM	16	26	12	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**57**
7:00 PM	10	14	8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**34**
8:00 PM	3	7	13	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**25**
9:00 PM	1	1	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
10:00 PM	1	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
11:00 PM	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
Total	**165**	**312**	**245**	**52**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**778**
Percent	**21.2%**	**40.1%**	**31.5%**	**6.7%**	**0.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	13.8	mph	Mean (Average) Speed	13.7	mph
85th Percentile	18.6	mph	10 mph Pace	8.9 - 18.9	mph
95th Percentile	20.8	mph	Percent in Pace	72.4	%

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Monday, September 19, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
6:00 AM	0	3	3	5	1	0	0	0	0	0	0	0	0	0	0	0	0	**12**
7:00 AM	2	9	12	13	0	0	0	0	0	0	0	0	0	0	0	0	0	**36**
8:00 AM	7	16	23	17	1	1	0	0	0	0	0	0	0	0	0	0	0	**65**
9:00 AM	5	10	7	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**26**
10:00 AM	3	4	10	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**20**
11:00 AM	14	10	15	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**44**
12:00 PM	17	25	13	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**59**
1:00 PM	6	20	21	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**52**
2:00 PM	12	27	15	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**62**
3:00 PM	9	19	18	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**51**
4:00 PM	4	31	22	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**62**
5:00 PM	13	30	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**61**
6:00 PM	10	14	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**35**
7:00 PM	10	11	11	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**35**
8:00 PM	2	5	12	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**22**
9:00 PM	1	2	17	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**23**
10:00 PM	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
11:00 PM	1	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
Total	**117**	**240**	**237**	**89**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**688**
Percent	**17.0%**	**34.9%**	**34.4%**	**12.9%**	**0.6%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	14.9	mph	Mean (Average) Speed	14.8	mph
85th Percentile	19.8	mph	10 mph Pace	10.8 - 20.8	mph
95th Percentile	22.5	mph	Percent in Pace	70.49	%

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Tuesday, September 20, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
5:00 AM	0	0	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
6:00 AM	0	1	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
7:00 AM	2	4	23	9	0	0	0	0	0	0	0	0	0	0	0	0	0	**38**
8:00 AM	2	5	21	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**31**
9:00 AM	1	12	15	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**35**
10:00 AM	2	17	18	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**41**
11:00 AM	8	26	27	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**62**
12:00 PM	5	40	14	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**61**
1:00 PM	22	39	15	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**81**
2:00 PM	12	30	13	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**57**
3:00 PM	8	17	19	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**49**
4:00 PM	8	24	15	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**49**
5:00 PM	11	34	15	5	1	0	0	0	0	0	0	0	0	0	0	0	0	**66**
6:00 PM	11	25	10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**48**
7:00 PM	5	18	18	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**45**
8:00 PM	5	2	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	**27**
9:00 PM	6	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**12**
10:00 PM	0	0	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**8**
11:00 PM	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
Total	**110**	**299**	**255**	**73**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**739**
Percent	**14.9%**	**40.5%**	**34.5%**	**9.9%**	**0.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	14.5	mph	Mean (Average) Speed	14.4	mph
85th Percentile	18.8	mph	10 mph Pace	9.5 - 19.5	mph
95th Percentile	20.9	mph	Percent in Pace	76.7	%

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Tuesday, September 20, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
6:00 AM	1	1	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**8**
7:00 AM	3	15	9	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**29**
8:00 AM	5	8	11	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**31**
9:00 AM	3	7	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**19**
10:00 AM	7	5	18	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**36**
11:00 AM	2	16	17	3	2	0	0	0	0	0	0	0	0	0	0	0	0	**40**
12:00 PM	10	19	18	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**50**
1:00 PM	10	34	28	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**75**
2:00 PM	9	23	15	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**50**
3:00 PM	11	14	26	10	1	0	0	0	0	0	0	0	0	0	0	0	0	**62**
4:00 PM	5	13	27	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**53**
5:00 PM	7	24	23	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**62**
6:00 PM	5	22	14	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**46**
7:00 PM	7	17	13	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**38**
8:00 PM	3	6	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**21**
9:00 PM	4	3	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**13**
10:00 PM	1	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
11:00 PM	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
Total	**95**	**230**	**255**	**66**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**649**
Percent	**14.6%**	**35.4%**	**39.3%**	**10.2%**	**0.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	15.0	mph	Mean (Average) Speed	14.9	mph
85th Percentile	19.1	mph	10 mph Pace	9.4 - 19.4	mph
95th Percentile	22.3	mph	Percent in Pace	75.65	%

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Wednesday, September 21, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	0	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
6:00 AM	0	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
7:00 AM	0	0	13	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**20**
8:00 AM	4	6	10	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**23**
9:00 AM	2	12	14	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**30**
10:00 AM	4	13	16	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**35**
11:00 AM	20	30	29	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**82**
12:00 PM	14	59	25	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**103**
1:00 PM	10	29	15	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**58**
2:00 PM	9	33	17	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**65**
3:00 PM	12	33	14	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**62**
4:00 PM	16	24	18	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**59**
5:00 PM	13	30	51	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**98**
6:00 PM	5	22	28	5	1	0	0	0	0	0	0	0	0	0	0	0	0	**61**
7:00 PM	11	28	16	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**59**
8:00 PM	2	1	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**12**
9:00 PM	0	2	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**13**
10:00 PM	1	0	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**123**	**322**	**297**	**64**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**808**
Percent	**15.2%**	**39.9%**	**36.8%**	**7.9%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	14.4	mph	Mean (Average) Speed	14.2	mph
85th Percentile	18.5	mph	10 mph Pace	9.7 - 19.7	mph
95th Percentile	21.1	mph	Percent in Pace	76.7	%

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Wednesday, September 21, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
6:00 AM	0	2	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
7:00 AM	4	11	17	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**37**
8:00 AM	6	7	13	5	1	0	0	0	0	0	0	0	0	0	0	0	0	**32**
9:00 AM	2	5	7	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**17**
10:00 AM	7	9	7	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**27**
11:00 AM	14	26	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**49**
12:00 PM	18	22	16	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**60**
1:00 PM	11	27	20	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**63**
2:00 PM	6	20	22	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**51**
3:00 PM	13	22	25	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**66**
4:00 PM	11	15	14	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**47**
5:00 PM	14	11	25	6	1	0	0	0	0	0	0	0	0	0	0	0	0	**57**
6:00 PM	18	16	18	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**55**
7:00 PM	12	16	11	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**41**
8:00 PM	2	8	13	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**25**
9:00 PM	2	7	6	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**17**
10:00 PM	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
11:00 PM	3	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
Total	**143**	**227**	**229**	**65**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**667**
Percent	**21.4%**	**34.0%**	**34.3%**	**9.7%**	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	14.4	mph	Mean (Average) Speed	14.3	mph
85th Percentile	19.3	mph	10 mph Pace	8.8 - 18.8	mph
95th Percentile	21.5	mph	Percent in Pace	70.16	%

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Thursday, September 22, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
6:00 AM	0	1	9	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**14**
7:00 AM	0	1	15	13	0	0	0	0	0	0	0	0	0	0	0	0	0	**29**
8:00 AM	6	11	14	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**35**
9:00 AM	3	8	11	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**25**
10:00 AM	19	29	19	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**70**
11:00 AM	17	47	13	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**78**
12:00 PM	14	58	26	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**100**
1:00 PM	15	35	14	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**66**
2:00 PM	10	30	30	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**78**
3:00 PM	5	17	25	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**55**
4:00 PM	7	37	28	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**74**
5:00 PM	10	33	31	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**77**
6:00 PM	18	43	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**85**
7:00 PM	2	22	14	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**39**
8:00 PM	5	18	14	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**40**
9:00 PM	2	3	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**13**
10:00 PM	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
11:00 PM	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
Total	**136**	**397**	**307**	**60**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**900**
Percent	**15.1%**	**44.1%**	**34.1%**	**6.7%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	14.0	mph	Mean (Average) Speed	14.0	mph
85th Percentile	18.2	mph	10 mph Pace	10.0 - 20.0	mph
95th Percentile	20.7	mph	Percent in Pace	78.3	%

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Thursday, September 22, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
6:00 AM	0	3	9	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**16**
7:00 AM	2	15	9	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**33**
8:00 AM	10	9	19	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**42**
9:00 AM	3	15	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**28**
10:00 AM	16	12	19	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**48**
11:00 AM	19	16	15	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**57**
12:00 PM	12	23	25	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**67**
1:00 PM	16	21	19	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**57**
2:00 PM	7	17	23	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**49**
3:00 PM	5	16	26	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**53**
4:00 PM	11	17	20	6	1	0	0	0	0	0	0	0	0	0	0	0	0	**55**
5:00 PM	20	8	29	7	0	1	0	0	0	0	0	0	0	0	0	0	0	**65**
6:00 PM	21	23	12	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**58**
7:00 PM	6	12	19	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**39**
8:00 PM	8	5	20	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**37**
9:00 PM	2	2	10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**16**
10:00 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
11:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**159**	**216**	**284**	**66**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**727**
Percent	**21.9%**	**29.7%**	**39.1%**	**9.1%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	14.8	mph	Mean (Average) Speed	14.3	mph
85th Percentile	18.7	mph	10 mph Pace	9.5 - 19.5	mph
95th Percentile	21.3	mph	Percent in Pace	72.21	%

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Friday, September 23, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
5:00 AM	0	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
6:00 AM	1	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**13**
7:00 AM	0	2	15	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**22**
8:00 AM	4	2	7	11	0	0	0	0	0	0	0	0	0	0	0	0	0	**24**
9:00 AM	1	5	10	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**19**
10:00 AM	10	11	14	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**41**
11:00 AM	11	30	12	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**57**
12:00 PM	21	41	18	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**84**
1:00 PM	17	46	24	7	1	0	0	0	0	0	0	0	0	0	0	0	0	**95**
2:00 PM	15	30	18	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**67**
3:00 PM	10	41	26	10	0	0	0	0	0	0	0	0	0	0	0	0	0	**87**
4:00 PM	13	15	28	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**59**
5:00 PM	11	55	36	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**109**
6:00 PM	23	51	23	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**105**
7:00 PM	7	28	24	9	0	0	0	0	0	0	0	0	0	0	0	0	0	**68**
8:00 PM	12	23	13	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**52**
9:00 PM	3	1	16	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**24**
10:00 PM	3	13	10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**28**
11:00 PM	3	4	7	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**17**
Total	**167**	**398**	**315**	**107**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**989**
Percent	**16.9%**	**40.2%**	**31.9%**	**10.8%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	14.1	mph	Mean (Average) Speed	14.2	mph
85th Percentile	19.2	mph	10 mph Pace	10.6 - 20.6	mph
95th Percentile	21.3	mph	Percent in Pace	73.0	%

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Friday, September 23, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
6:00 AM	1	0	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**11**
7:00 AM	4	8	9	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**29**
8:00 AM	0	11	21	9	0	0	0	0	0	0	0	0	0	0	0	0	0	**41**
9:00 AM	0	8	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**18**
10:00 AM	6	13	8	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**32**
11:00 AM	12	18	13	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**48**
12:00 PM	14	26	18	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**62**
1:00 PM	27	23	19	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**71**
2:00 PM	21	23	21	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**68**
3:00 PM	10	25	15	5	1	0	0	0	0	0	0	0	0	0	0	0	0	**56**
4:00 PM	8	17	18	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**46**
5:00 PM	14	39	20	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**76**
6:00 PM	19	28	22	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**72**
7:00 PM	9	11	25	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**48**
8:00 PM	10	17	16	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**46**
9:00 PM	0	5	14	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**22**
10:00 PM	8	6	11	5	1	0	0	0	0	0	0	0	0	0	0	0	0	**31**
11:00 PM	2	4	4	9	0	0	0	0	0	0	0	0	0	0	0	0	0	**19**
Total	**167**	**284**	**277**	**78**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**808**
Percent	**20.7%**	**35.1%**	**34.3%**	**9.7%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	14.4	mph	Mean (Average) Speed	14.1	mph
85th Percentile	18.9	mph	10 mph Pace	9.1 - 19.1	mph
95th Percentile	21.6	mph	Percent in Pace	70.17	%

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Total Study Average
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
1:00 AM	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
6:00 AM	0	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
7:00 AM	0	2	11	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**19**
8:00 AM	3	6	11	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**24**
9:00 AM	3	8	12	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**27**
10:00 AM	7	14	15	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**40**
11:00 AM	12	27	19	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**60**
12:00 PM	16	43	19	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**82**
1:00 PM	12	35	19	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**70**
2:00 PM	10	30	21	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**65**
3:00 PM	8	26	20	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**59**
4:00 PM	13	24	19	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**58**
5:00 PM	12	32	27	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**75**
6:00 PM	13	33	18	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**67**
7:00 PM	9	23	16	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**51**
8:00 PM	4	10	11	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**28**
9:00 PM	2	2	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**13**
10:00 PM	1	3	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**10**
11:00 PM	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
Total	**127**	**323**	**265**	**63**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**778**
Percent	**16.3%**	**41.5%**	**34.1%**	**8.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	14.1	mph	Mean (Average) Speed	14.1	mph
85th Percentile	18.7	mph	10 mph Pace	9.7 - 19.7	mph
95th Percentile	20.8	mph	Percent in Pace	75.3	%

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 03

Total Study Average
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
6:00 AM	0	1	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**8**
7:00 AM	2	9	9	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**25**
8:00 AM	4	8	14	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**33**
9:00 AM	3	7	9	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**23**
10:00 AM	6	7	12	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**30**
11:00 AM	10	14	15	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**44**
12:00 PM	12	19	17	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**53**
1:00 PM	13	23	21	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**60**
2:00 PM	11	20	18	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**53**
3:00 PM	9	18	22	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**55**
4:00 PM	8	16	19	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**49**
5:00 PM	12	20	21	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**58**
6:00 PM	13	19	16	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**50**
7:00 PM	9	14	15	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**40**
8:00 PM	5	9	15	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**32**
9:00 PM	2	4	11	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**19**
10:00 PM	2	2	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**10**
11:00 PM	1	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
Total	**122**	**214**	**248**	**74**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**658**
Percent	**18.5%**	**32.5%**	**37.7%**	**11.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	14.9	mph	Mean (Average) Speed	14.7	mph
85th Percentile	19.5	mph	10 mph Pace	9.3 - 19.3	mph
95th Percentile	21.9	mph	Percent in Pace	69.9	%

Location: Colorado Ave BTWN 7th St & 8th St
Date Range: 9/17/2022 - 9/23/2022
Site Code: 03

	Saturday			Sunday			Monday			Tuesday			Wednesday			Thursday			Friday			Mid-Week Average		
	9/17/2022			9/18/2022			9/19/2022			9/20/2022			9/21/2022			9/22/2022			9/23/2022					
Time	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total
12:00 AM	7	4	11	9	5	14	2	3	5	2	1	3	1	1	2	3	0	3	2	2	4	2	1	3
1:00 AM	9	4	13	6	6	12	1	0	1	1	0	1	2	2	4	1	0	1	3	6	9	1	1	2
2:00 AM	5	3	8	8	4	12	1	2	3	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
3:00 AM	2	0	2	0	1	1	1	0	1	1	0	1	1	0	1	4	1	5	4	1	5	2	0	2
4:00 AM	2	0	2	1	2	3	1	2	3	4	6	10	2	1	3	2	0	2	3	0	3	3	2	5
5:00 AM	4	6	10	3	2	5	5	4	9	7	0	7	7	1	8	4	2	6	6	3	9	6	1	7
6:00 AM	0	3	3	1	6	7	8	12	20	9	8	17	6	9	15	14	16	30	13	11	24	10	11	21
7:00 AM	2	7	9	3	4	7	20	36	56	38	29	67	20	37	57	29	33	62	22	29	51	29	33	62
8:00 AM	6	16	22	7	10	17	38	65	103	31	31	62	23	32	55	35	42	77	24	41	65	30	35	65
9:00 AM	17	26	43	22	24	46	31	26	57	35	19	54	30	17	47	25	28	53	19	18	37	30	21	51
10:00 AM	21	29	50	36	21	57	41	20	61	41	36	77	35	27	62	70	48	118	41	32	73	49	37	86
11:00 AM	35	39	74	42	38	80	64	44	108	62	40	102	82	49	131	78	57	135	57	48	105	74	49	123
12:00 PM	54	37	91	70	39	109	102	59	161	61	50	111	103	60	163	100	67	167	84	62	146	88	59	147
1:00 PM	68	47	115	44	58	102	73	52	125	81	75	156	58	63	121	66	57	123	95	71	166	68	65	133
2:00 PM	67	54	121	51	33	84	70	62	132	57	50	107	65	51	116	78	49	127	67	68	135	67	50	117
3:00 PM	55	59	114	44	39	83	65	51	116	49	62	111	62	66	128	55	53	108	87	56	143	55	60	116
4:00 PM	68	47	115	35	31	66	62	62	124	49	53	102	59	47	106	74	55	129	59	46	105	61	52	112
5:00 PM	78	53	131	43	39	82	57	61	118	66	62	128	98	57	155	77	65	142	109	76	185	80	61	142
6:00 PM	80	62	142	38	30	68	57	35	92	48	46	94	61	55	116	85	58	143	105	72	177	65	53	118
7:00 PM	72	55	127	36	26	62	34	35	69	45	38	83	59	41	100	39	39	78	68	48	116	48	39	87
8:00 PM	40	51	91	8	15	23	25	22	47	27	21	48	12	25	37	40	37	77	52	46	98	26	28	54
9:00 PM	16	29	45	6	11	17	9	23	32	12	13	25	13	17	30	13	16	29	24	22	46	13	15	28
10:00 PM	12	15	27	4	6	10	7	5	12	8	6	14	9	3	12	4	2	6	28	31	59	7	4	11
11:00 PM	14	13	27	2	1	3	4	7	11	5	3	8	0	6	6	4	1	5	17	19	36	3	3	6
Total	**734**	**659**	**1,393**	**519**	**451**	**970**	**778**	**688**	**1,466**	**739**	**649**	**1,388**	**808**	**667**	**1,475**	**900**	**727**	**1,627**	**989**	**808**	**1,797**	**816**	**681**	**1,497**
Percent	**53%**	**47%**	-	**54%**	**46%**	-	**53%**	**47%**	-	**53%**	**47%**	-	**55%**	**45%**	-	**55%**	**45%**	-	**55%**	**45%**	-	**54%**	**46%**	-

1. Mid-week average includes data between Tuesday and Thursday.

Vehicle Classification Report Summary

Location: Pitkin Ave BTWN 8th St & 9th St

Count Direction: Northbound / Southbound

Date Range: 9/17/2022 to 9/23/2022

Site Code: 04

	FHWA Vehicle Classification													Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
Study Total														
Northbound	47	8,812	2,126	3	754	29	0	14	12	0	0	0	0	11,797
Percent	0.4%	74.7%	18.0%	0.0%	6.4%	0.2%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	100%
Southbound	57	5,838	1,669	3	1,023	37	0	1	0	0	0	0	0	8,628
Percent	0.7%	67.7%	19.3%	0.0%	11.9%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	104	14,650	3,795	6	1,777	66	0	15	12	0	0	0	0	20,425
Percent	0.5%	71.7%	18.6%	0.0%	8.7%	0.3%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	100%

FHWA Vehicle Classification	
Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Saturday, September 17, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	2	2	0	0	0	0	0	0	0	0	0	0	**4**
1:00 AM	0	4	0	0	0	0	0	1	1	0	0	0	0	**6**
2:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	**2**
5:00 AM	1	2	1	0	1	1	0	0	0	0	0	0	0	**6**
6:00 AM	0	2	1	0	1	0	0	0	0	0	0	0	0	**4**
7:00 AM	0	15	4	0	1	0	0	0	0	0	0	0	0	**20**
8:00 AM	0	32	5	0	2	0	0	0	1	0	0	0	0	**40**
9:00 AM	0	47	13	0	2	0	0	0	0	0	0	0	0	**62**
10:00 AM	0	60	22	0	7	0	0	0	0	0	0	0	0	**89**
11:00 AM	4	84	18	0	7	0	0	0	0	0	0	0	0	**113**
12:00 PM	0	92	25	0	4	1	0	0	0	0	0	0	0	**122**
1:00 PM	0	79	21	0	5	0	0	0	0	0	0	0	0	**105**
2:00 PM	1	76	14	0	2	0	0	0	0	0	0	0	0	**93**
3:00 PM	0	51	20	0	3	0	0	0	0	0	0	0	0	**74**
4:00 PM	1	78	15	0	1	0	0	0	0	0	0	0	0	**95**
5:00 PM	1	56	18	0	6	0	0	1	0	0	0	0	0	**82**
6:00 PM	0	44	15	0	6	0	0	0	1	0	0	0	0	**66**
7:00 PM	1	35	8	0	6	0	0	0	0	0	0	0	0	**50**
8:00 PM	0	18	4	0	1	0	0	0	0	0	0	0	0	**23**
9:00 PM	0	17	0	1	0	0	0	0	0	0	0	0	0	**18**
10:00 PM	0	3	1	0	0	0	0	0	0	0	0	0	0	**4**
11:00 PM	0	4	1	0	2	0	0	0	0	0	0	0	0	**7**
Total	**10**	**804**	**208**	**1**	**58**	**2**	**0**	**2**	**3**	**0**	**0**	**0**	**0**	**1,088**
Percent	**0.9%**	**73.9%**	**19.1%**	**0.1%**	**5.3%**	**0.2%**	**0.0%**	**0.2%**	**0.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Saturday, September 17, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	**3**
5:00 AM	0	0	2	0	1	0	0	0	0	0	0	0	0	**3**
6:00 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	**5**
7:00 AM	0	16	7	0	5	0	0	0	0	0	0	0	0	**28**
8:00 AM	0	15	8	0	2	0	0	0	0	0	0	0	0	**25**
9:00 AM	0	27	10	0	4	0	0	0	0	0	0	0	0	**41**
10:00 AM	0	25	10	0	7	0	0	0	0	0	0	0	0	**42**
11:00 AM	0	45	14	0	8	0	0	0	0	0	0	0	0	**67**
12:00 PM	0	66	12	0	7	0	0	0	0	0	0	0	0	**85**
1:00 PM	0	45	17	0	10	0	0	0	0	0	0	0	0	**72**
2:00 PM	0	50	10	0	8	1	0	0	0	0	0	0	0	**69**
3:00 PM	0	38	7	0	2	1	0	0	0	0	0	0	0	**48**
4:00 PM	0	34	11	0	2	0	0	0	0	0	0	0	0	**47**
5:00 PM	0	42	7	0	6	0	0	0	0	0	0	0	0	**55**
6:00 PM	0	39	5	0	3	2	0	0	0	0	0	0	0	**49**
7:00 PM	0	33	6	0	6	0	0	0	0	0	0	0	0	**45**
8:00 PM	0	13	3	0	2	0	0	0	0	0	0	0	0	**18**
9:00 PM	0	11	3	0	2	0	0	0	0	0	0	0	0	**16**
10:00 PM	0	3	2	0	1	0	0	0	0	0	0	0	0	**6**
11:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**0**	**514**	**136**	**0**	**76**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**730**
Percent	**0.0%**	**70.4%**	**18.6%**	**0.0%**	**10.4%**	**0.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Sunday, September 18, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	1	0	1	0	0	0	0	0	**3**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	2	2	0	0	0	0	0	0	0	0	0	0	**4**
3:00 AM	1	1	0	0	0	1	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
6:00 AM	1	2	0	0	0	0	0	0	0	0	0	0	0	**3**
7:00 AM	0	7	1	0	2	0	0	0	0	0	0	0	0	**10**
8:00 AM	0	12	5	0	2	0	0	0	0	0	0	0	0	**19**
9:00 AM	0	38	8	0	0	0	0	0	0	0	0	0	0	**46**
10:00 AM	0	37	5	0	1	0	0	0	0	0	0	0	0	**43**
11:00 AM	0	52	19	0	1	0	0	0	0	0	0	0	0	**72**
12:00 PM	0	55	16	0	3	0	0	0	0	0	0	0	0	**74**
1:00 PM	1	63	11	0	7	0	0	0	0	0	0	0	0	**82**
2:00 PM	0	63	12	1	5	0	0	0	0	0	0	0	0	**81**
3:00 PM	0	53	17	0	0	0	0	0	0	0	0	0	0	**70**
4:00 PM	0	52	7	0	7	0	0	0	0	0	0	0	0	**66**
5:00 PM	1	41	12	0	1	0	0	0	0	0	0	0	0	**55**
6:00 PM	0	45	10	0	1	0	0	0	0	0	0	0	0	**56**
7:00 PM	0	43	5	0	0	0	0	0	0	0	0	0	0	**48**
8:00 PM	0	19	4	0	0	0	0	0	0	0	0	0	0	**23**
9:00 PM	0	5	3	0	0	0	0	0	0	0	0	0	0	**8**
10:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
11:00 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	**2**
Total	**4**	**596**	**138**	**1**	**30**	**3**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**773**
Percent	**0.5%**	**77.1%**	**17.9%**	**0.1%**	**3.9%**	**0.4%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Sunday, September 18, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	2	0	0	1	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	1	1	0	1	0	0	0	0	0	0	0	0	**3**
6:00 AM	1	3	1	0	1	0	0	0	0	0	0	0	0	**6**
7:00 AM	0	5	3	0	1	0	0	0	0	0	0	0	0	**9**
8:00 AM	0	10	4	0	2	0	0	0	0	0	0	0	0	**16**
9:00 AM	0	14	14	0	5	0	0	0	0	0	0	0	0	**33**
10:00 AM	0	34	7	0	6	0	0	0	0	0	0	0	0	**47**
11:00 AM	0	35	14	0	2	0	0	0	0	0	0	0	0	**51**
12:00 PM	1	41	7	0	8	0	0	0	0	0	0	0	0	**57**
1:00 PM	1	34	13	0	8	0	0	0	0	0	0	0	0	**56**
2:00 PM	2	27	10	0	6	0	0	0	0	0	0	0	0	**45**
3:00 PM	0	40	14	0	4	0	0	0	0	0	0	0	0	**58**
4:00 PM	1	31	10	0	3	1	0	0	0	0	0	0	0	**46**
5:00 PM	0	19	9	0	6	1	0	0	0	0	0	0	0	**35**
6:00 PM	0	25	6	0	9	0	0	0	0	0	0	0	0	**40**
7:00 PM	0	20	5	0	3	0	0	0	0	0	0	0	0	**28**
8:00 PM	0	16	1	0	2	0	0	0	0	0	0	0	0	**19**
9:00 PM	0	7	1	0	1	0	0	0	0	0	0	0	0	**9**
10:00 PM	0	3	2	0	0	0	0	0	0	0	0	0	0	**5**
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**6**	**372**	**122**	**0**	**69**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**571**
Percent	**1.1%**	**65.1%**	**21.4%**	**0.0%**	**12.1%**	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Monday, September 19, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	**1**
2:00 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	**2**
3:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	1	0	0	0	0	1	1	0	0	0	0	**3**
5:00 AM	1	2	0	0	1	1	0	0	0	0	0	0	0	**5**
6:00 AM	0	13	3	0	0	0	0	0	0	0	0	0	0	**16**
7:00 AM	0	53	7	0	6	0	0	0	0	0	0	0	0	**66**
8:00 AM	0	120	23	0	7	1	0	0	0	0	0	0	0	**151**
9:00 AM	1	58	18	0	3	0	0	0	0	0	0	0	0	**80**
10:00 AM	0	71	16	0	10	0	0	0	0	0	0	0	0	**97**
11:00 AM	0	114	23	1	9	0	0	0	0	0	0	0	0	**147**
12:00 PM	0	142	28	0	14	0	0	0	0	0	0	0	0	**184**
1:00 PM	2	93	22	0	6	2	0	0	0	0	0	0	0	**125**
2:00 PM	1	145	28	0	10	0	0	0	0	0	0	0	0	**184**
3:00 PM	0	148	33	0	10	0	0	0	0	0	0	0	0	**191**
4:00 PM	1	148	40	0	25	2	0	0	0	0	0	0	0	**216**
5:00 PM	1	162	47	0	11	0	0	1	0	0	0	0	0	**222**
6:00 PM	1	105	34	0	15	1	0	0	0	0	0	0	0	**156**
7:00 PM	0	64	13	0	7	0	0	0	0	0	0	0	0	**84**
8:00 PM	0	23	9	0	1	0	0	0	0	0	0	0	0	**33**
9:00 PM	0	8	1	0	0	0	0	0	0	0	0	0	0	**9**
10:00 PM	0	7	1	0	0	0	0	0	0	0	0	0	0	**8**
11:00 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
Total	**8**	**1,483**	**347**	**1**	**136**	**8**	**0**	**3**	**1**	**0**	**0**	**0**	**0**	**1,987**
Percent	**0.4%**	**74.6%**	**17.5%**	**0.1%**	**6.8%**	**0.4%**	**0.0%**	**0.2%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Monday, September 19, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	5	3	0	1	0	0	0	0	0	0	0	0	**9**
6:00 AM	0	7	5	0	7	0	0	0	0	0	0	0	0	**19**
7:00 AM	0	62	25	0	14	1	0	0	0	0	0	0	0	**102**
8:00 AM	0	126	44	0	23	0	0	0	0	0	0	0	0	**193**
9:00 AM	0	53	14	0	13	1	0	0	0	0	0	0	0	**81**
10:00 AM	0	48	15	0	9	0	0	0	0	0	0	0	0	**72**
11:00 AM	1	84	30	1	16	0	0	0	0	0	0	0	0	**132**
12:00 PM	3	108	25	0	11	3	0	0	0	0	0	0	0	**150**
1:00 PM	2	126	35	1	27	0	0	0	0	0	0	0	0	**191**
2:00 PM	3	96	36	0	17	0	0	0	0	0	0	0	0	**152**
3:00 PM	4	92	16	0	18	0	0	0	0	0	0	0	0	**130**
4:00 PM	0	88	26	0	25	1	0	0	0	0	0	0	0	**140**
5:00 PM	2	84	20	0	20	2	0	0	0	0	0	0	0	**128**
6:00 PM	0	49	12	0	9	0	0	0	0	0	0	0	0	**70**
7:00 PM	1	22	9	0	4	0	0	0	0	0	0	0	0	**36**
8:00 PM	0	10	5	0	2	0	0	0	0	0	0	0	0	**17**
9:00 PM	0	10	2	0	0	0	0	0	0	0	0	0	0	**12**
10:00 PM	0	9	2	0	0	0	0	0	0	0	0	0	0	**11**
11:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**16**	**1,083**	**324**	**2**	**216**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,649**
Percent	**1.0%**	**65.7%**	**19.6%**	**0.1%**	**13.1%**	**0.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Tuesday, September 20, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	1	2	0	0	1	0	0	0	1	0	0	0	0	**5**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	1	0	0	0	0	1	0	0	0	0	0	**2**
5:00 AM	0	3	1	0	1	0	0	0	0	0	0	0	0	**5**
6:00 AM	0	10	5	0	1	0	0	0	1	0	0	0	0	**17**
7:00 AM	0	44	14	0	3	0	0	0	0	0	0	0	0	**61**
8:00 AM	0	101	19	0	6	0	0	0	0	0	0	0	0	**126**
9:00 AM	0	60	17	0	8	0	0	0	0	0	0	0	0	**85**
10:00 AM	0	62	13	0	8	1	0	0	0	0	0	0	0	**84**
11:00 AM	1	104	18	0	9	0	0	0	0	0	0	0	0	**132**
12:00 PM	1	125	23	0	6	0	0	0	0	0	0	0	0	**155**
1:00 PM	0	113	26	0	11	2	0	0	0	0	0	0	0	**152**
2:00 PM	0	124	24	0	6	0	0	0	0	0	0	0	0	**154**
3:00 PM	0	178	31	0	14	0	0	0	0	0	0	0	0	**223**
4:00 PM	1	149	27	0	17	1	0	0	0	0	0	0	0	**195**
5:00 PM	0	175	31	0	18	0	0	0	0	0	0	0	0	**224**
6:00 PM	0	130	38	0	9	0	0	0	1	0	0	0	0	**178**
7:00 PM	0	105	22	0	9	0	0	0	0	0	0	0	0	**136**
8:00 PM	0	41	12	0	3	0	0	0	0	0	0	0	0	**56**
9:00 PM	0	15	3	0	0	0	0	0	1	0	0	0	0	**19**
10:00 PM	0	8	2	0	1	0	0	0	0	0	0	0	0	**11**
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**4**	**1,552**	**327**	**0**	**131**	**4**	**0**	**1**	**4**	**0**	**0**	**0**	**0**	**2,023**
Percent	**0.2%**	**76.7%**	**16.2%**	**0.0%**	**6.5%**	**0.2%**	**0.0%**	**0.0%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Tuesday, September 20, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	**4**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	2	0	0	3	0	0	0	0	0	0	0	0	**5**
5:00 AM	0	2	0	0	1	0	0	0	0	0	0	0	0	**3**
6:00 AM	0	10	9	0	3	0	0	0	0	0	0	0	0	**22**
7:00 AM	0	62	21	0	9	1	0	0	0	0	0	0	0	**93**
8:00 AM	1	141	43	0	18	1	0	0	0	0	0	0	0	**204**
9:00 AM	0	44	12	1	14	1	0	0	0	0	0	0	0	**72**
10:00 AM	0	48	16	0	12	1	0	0	0	0	0	0	0	**77**
11:00 AM	0	67	19	0	16	0	0	0	0	0	0	0	0	**102**
12:00 PM	0	88	30	0	6	0	0	0	0	0	0	0	0	**124**
1:00 PM	0	55	12	0	11	0	0	0	0	0	0	0	0	**78**
2:00 PM	2	77	12	0	6	0	0	0	0	0	0	0	0	**97**
3:00 PM	1	84	27	0	6	3	0	0	0	0	0	0	0	**121**
4:00 PM	2	75	16	0	6	1	0	0	0	0	0	0	0	**100**
5:00 PM	2	93	23	0	7	0	0	0	0	0	0	0	0	**125**
6:00 PM	1	57	14	0	9	0	0	0	0	0	0	0	0	**81**
7:00 PM	0	26	6	0	4	0	0	0	0	0	0	0	0	**36**
8:00 PM	0	20	5	0	6	1	0	0	0	0	0	0	0	**32**
9:00 PM	0	4	4	0	3	0	0	0	0	0	0	0	0	**11**
10:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
11:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
Total	**9**	**964**	**270**	**1**	**140**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,393**
Percent	**0.6%**	**69.2%**	**19.4%**	**0.1%**	**10.1%**	**0.6%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Wednesday, September 21, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	1	1	0	0	1	0	0	1	0	0	0	0	0	**4**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	6	3	0	1	0	0	0	0	0	0	0	0	**10**
6:00 AM	1	15	2	0	0	1	0	0	0	0	0	0	0	**19**
7:00 AM	1	40	13	0	1	0	0	0	0	0	0	0	0	**55**
8:00 AM	0	109	23	0	9	0	0	0	0	0	0	0	0	**141**
9:00 AM	1	55	12	0	3	0	0	0	0	0	0	0	0	**71**
10:00 AM	0	82	24	0	9	0	0	0	0	0	0	0	0	**115**
11:00 AM	0	107	25	0	13	0	0	0	0	0	0	0	0	**145**
12:00 PM	0	121	16	0	13	0	0	0	0	0	0	0	0	**150**
1:00 PM	0	104	18	0	3	0	0	0	0	0	0	0	0	**125**
2:00 PM	0	145	39	0	14	0	0	0	0	0	0	0	0	**198**
3:00 PM	1	107	30	0	7	0	0	0	0	0	0	0	0	**145**
4:00 PM	0	117	29	0	10	0	0	0	0	0	0	0	0	**156**
5:00 PM	0	174	39	0	11	0	0	1	0	0	0	0	0	**225**
6:00 PM	1	117	41	0	10	0	0	0	1	0	0	0	0	**170**
7:00 PM	0	90	23	0	8	0	0	0	0	0	0	0	0	**121**
8:00 PM	0	15	4	0	1	0	0	0	0	0	0	0	0	**20**
9:00 PM	0	10	1	0	2	0	0	0	0	0	0	0	0	**13**
10:00 PM	0	1	2	0	0	0	0	0	0	0	0	0	0	**3**
11:00 PM	0	1	1	0	0	1	0	0	0	0	0	0	0	**3**
Total	**6**	**1,420**	**346**	**0**	**116**	**2**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**1,893**
Percent	**0.3%**	**75.0%**	**18.3%**	**0.0%**	**6.1%**	**0.1%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Wednesday, September 21, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	1	2	0	1	0	0	0	0	0	0	0	0	**4**
6:00 AM	0	10	9	0	7	0	0	0	0	0	0	0	0	**26**
7:00 AM	1	64	24	0	11	0	0	0	0	0	0	0	0	**100**
8:00 AM	0	136	38	0	22	2	0	0	0	0	0	0	0	**198**
9:00 AM	0	45	10	0	13	0	0	0	0	0	0	0	0	**68**
10:00 AM	0	58	17	0	7	1	0	0	0	0	0	0	0	**83**
11:00 AM	0	88	21	0	13	1	0	0	0	0	0	0	0	**123**
12:00 PM	0	76	14	0	17	0	0	0	0	0	0	0	0	**107**
1:00 PM	2	86	8	0	11	2	0	0	0	0	0	0	0	**109**
2:00 PM	0	94	20	0	10	0	0	0	0	0	0	0	0	**124**
3:00 PM	0	87	15	0	13	0	0	0	0	0	0	0	0	**115**
4:00 PM	0	65	25	0	11	0	0	0	0	0	0	0	0	**101**
5:00 PM	0	68	21	0	7	0	0	0	0	0	0	0	0	**96**
6:00 PM	0	36	13	0	12	0	0	0	0	0	0	0	0	**61**
7:00 PM	0	30	8	0	6	0	0	0	0	0	0	0	0	**44**
8:00 PM	0	12	4	0	4	0	0	0	0	0	0	0	0	**20**
9:00 PM	0	5	1	0	3	0	0	0	0	0	0	0	0	**9**
10:00 PM	0	2	4	0	0	0	0	0	0	0	0	0	0	**6**
11:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**3**	**966**	**255**	**0**	**169**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,399**
Percent	**0.2%**	**69.0%**	**18.2%**	**0.0%**	**12.1%**	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Thursday, September 22, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	1	1	0	0	1	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	1	2	0	0	0	0	1	0	0	0	0	0	**4**
6:00 AM	0	14	4	0	0	0	0	0	1	0	0	0	0	**19**
7:00 AM	0	37	11	0	4	0	0	0	0	0	0	0	0	**52**
8:00 AM	0	117	27	0	6	0	0	0	0	0	0	0	0	**150**
9:00 AM	0	55	15	0	3	1	0	0	0	0	0	0	0	**74**
10:00 AM	0	85	28	0	7	1	0	0	0	0	0	0	0	**121**
11:00 AM	0	87	26	0	13	0	0	0	0	0	0	0	0	**126**
12:00 PM	0	112	34	0	16	0	0	0	0	0	0	0	0	**162**
1:00 PM	0	102	20	0	11	0	0	0	1	0	0	0	0	**134**
2:00 PM	1	120	31	0	14	0	0	0	0	0	0	0	0	**166**
3:00 PM	0	124	33	0	14	0	0	0	0	0	0	0	0	**171**
4:00 PM	0	150	34	0	13	1	0	0	0	0	0	0	0	**198**
5:00 PM	0	169	40	0	15	0	0	1	0	0	0	0	0	**225**
6:00 PM	1	108	31	0	11	0	0	0	1	0	0	0	0	**152**
7:00 PM	0	53	17	0	2	0	0	0	0	0	0	0	0	**72**
8:00 PM	0	26	4	0	1	0	0	0	0	0	0	0	0	**31**
9:00 PM	0	25	5	0	3	0	0	0	0	0	0	0	0	**33**
10:00 PM	1	7	2	0	1	1	0	0	0	0	0	0	0	**12**
11:00 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
Total	**4**	**1,400**	**364**	**0**	**135**	**4**	**0**	**2**	**3**	**0**	**0**	**0**	**0**	**1,912**
Percent	**0.2%**	**73.2%**	**19.0%**	**0.0%**	**7.1%**	**0.2%**	**0.0%**	**0.1%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Thursday, September 22, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	2	0	0	1	0	0	0	0	0	0	0	0	**3**
5:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
6:00 AM	0	11	8	0	3	0	0	0	0	0	0	0	0	**22**
7:00 AM	0	65	24	0	9	0	0	0	0	0	0	0	0	**98**
8:00 AM	1	116	39	0	22	0	0	0	0	0	0	0	0	**178**
9:00 AM	0	42	19	0	11	0	0	0	0	0	0	0	0	**72**
10:00 AM	0	51	16	0	14	2	0	0	0	0	0	0	0	**83**
11:00 AM	2	53	20	0	17	0	0	0	0	0	0	0	0	**92**
12:00 PM	0	74	23	0	4	0	0	0	0	0	0	0	0	**101**
1:00 PM	0	64	18	0	10	1	0	0	0	0	0	0	0	**93**
2:00 PM	0	87	22	0	14	0	0	0	0	0	0	0	0	**123**
3:00 PM	3	86	19	0	12	0	0	0	0	0	0	0	0	**120**
4:00 PM	1	79	17	0	11	0	0	0	0	0	0	0	0	**108**
5:00 PM	4	75	20	0	13	0	0	0	0	0	0	0	0	**112**
6:00 PM	1	51	16	0	7	0	0	0	0	0	0	0	0	**75**
7:00 PM	0	32	5	0	6	0	0	0	0	0	0	0	0	**43**
8:00 PM	0	15	3	0	2	0	0	0	0	0	0	0	0	**20**
9:00 PM	0	7	5	0	2	0	0	0	0	0	0	0	0	**14**
10:00 PM	0	2	1	0	0	0	0	0	0	0	0	0	0	**3**
11:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
Total	**12**	**916**	**277**	**0**	**158**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,366**
Percent	**0.9%**	**67.1%**	**20.3%**	**0.0%**	**11.6%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Friday, September 23, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	2	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	1	0	0	0	0	0	2	0	0	0	0	0	**3**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	1	1	0	0	1	0	0	0	0	0	0	0	0	**3**
5:00 AM	0	1	1	0	0	1	0	0	0	0	0	0	0	**3**
6:00 AM	1	11	4	0	2	0	0	0	0	0	0	0	0	**18**
7:00 AM	0	26	10	0	4	0	0	0	0	0	0	0	0	**40**
8:00 AM	0	112	33	0	11	1	0	0	0	0	0	0	0	**157**
9:00 AM	1	56	9	0	4	0	0	0	0	0	0	0	0	**70**
10:00 AM	0	79	14	0	8	0	0	0	0	0	0	0	0	**101**
11:00 AM	1	120	31	0	6	0	0	0	0	0	0	0	0	**158**
12:00 PM	1	132	26	0	23	0	0	0	0	0	0	0	0	**182**
1:00 PM	1	115	32	0	13	1	0	0	0	0	0	0	0	**162**
2:00 PM	0	85	23	0	8	1	0	0	0	0	0	0	0	**117**
3:00 PM	1	178	36	0	9	1	0	0	0	0	0	0	0	**225**
4:00 PM	0	141	45	0	13	0	0	0	0	0	0	0	0	**199**
5:00 PM	2	156	36	0	17	0	0	0	0	0	0	0	0	**211**
6:00 PM	1	107	25	0	13	1	0	0	0	0	0	0	0	**147**
7:00 PM	0	85	28	0	6	0	0	0	0	0	0	0	0	**119**
8:00 PM	1	38	8	0	1	0	0	0	0	0	0	0	0	**48**
9:00 PM	0	67	23	0	6	0	0	0	0	0	0	0	0	**96**
10:00 PM	0	35	9	0	3	0	0	1	0	0	0	0	0	**48**
11:00 PM	0	8	1	0	0	0	0	0	0	0	0	0	0	**9**
Total	**11**	**1,557**	**396**	**0**	**148**	**6**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**2,121**
Percent	**0.5%**	**73.4%**	**18.7%**	**0.0%**	**7.0%**	**0.3%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Friday, September 23, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	1	2	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	2	1	0	1	0	0	0	0	0	0	0	0	**4**
6:00 AM	0	9	8	0	7	0	0	0	0	0	0	0	0	**24**
7:00 AM	0	53	20	0	8	0	0	0	0	0	0	0	0	**81**
8:00 AM	0	91	34	0	16	0	0	0	0	0	0	0	0	**141**
9:00 AM	0	58	18	0	19	0	0	0	0	0	0	0	0	**95**
10:00 AM	0	65	22	0	11	0	0	0	0	0	0	0	0	**98**
11:00 AM	0	85	20	0	11	0	0	1	0	0	0	0	0	**117**
12:00 PM	1	73	17	0	16	0	0	0	0	0	0	0	0	**107**
1:00 PM	1	73	22	0	15	0	0	0	0	0	0	0	0	**111**
2:00 PM	0	63	14	0	16	1	0	0	0	0	0	0	0	**94**
3:00 PM	4	95	16	0	11	1	0	0	0	0	0	0	0	**127**
4:00 PM	0	74	22	0	13	1	0	0	0	0	0	0	0	**110**
5:00 PM	2	60	13	0	9	1	0	0	0	0	0	0	0	**85**
6:00 PM	2	98	27	0	16	1	0	0	0	0	0	0	0	**144**
7:00 PM	1	56	11	0	10	0	0	0	0	0	0	0	0	**78**
8:00 PM	0	39	6	0	3	0	0	0	0	0	0	0	0	**48**
9:00 PM	0	18	8	0	7	0	0	0	0	0	0	0	0	**33**
10:00 PM	0	5	2	0	5	0	0	0	0	0	0	0	0	**12**
11:00 PM	0	2	2	0	1	0	0	0	0	0	0	0	0	**5**
Total	**11**	**1,023**	**285**	**0**	**195**	**5**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1,520**
Percent	**0.7%**	**67.3%**	**18.8%**	**0.0%**	**12.8%**	**0.3%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Total Study Average
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	1	0	0	0	0	0	1	0	0	0	0	0	**2**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	2	1	0	1	0	0	0	0	0	0	0	0	**4**
6:00 AM	0	10	3	0	1	0	0	0	0	0	0	0	0	**14**
7:00 AM	0	32	9	0	3	0	0	0	0	0	0	0	0	**44**
8:00 AM	0	86	19	0	6	0	0	0	0	0	0	0	0	**111**
9:00 AM	0	53	13	0	3	0	0	0	0	0	0	0	0	**69**
10:00 AM	0	68	17	0	7	0	0	0	0	0	0	0	0	**92**
11:00 AM	1	95	23	0	8	0	0	0	0	0	0	0	0	**127**
12:00 PM	0	111	24	0	11	0	0	0	0	0	0	0	0	**146**
1:00 PM	1	96	21	0	8	1	0	0	0	0	0	0	0	**127**
2:00 PM	0	108	24	0	8	0	0	0	0	0	0	0	0	**140**
3:00 PM	0	120	29	0	8	0	0	0	0	0	0	0	0	**157**
4:00 PM	0	119	28	0	12	1	0	0	0	0	0	0	0	**160**
5:00 PM	1	133	32	0	11	0	0	1	0	0	0	0	0	**178**
6:00 PM	1	94	28	0	9	0	0	0	1	0	0	0	0	**133**
7:00 PM	0	68	17	0	5	0	0	0	0	0	0	0	0	**90**
8:00 PM	0	26	6	0	1	0	0	0	0	0	0	0	0	**33**
9:00 PM	0	21	5	0	2	0	0	0	0	0	0	0	0	**28**
10:00 PM	0	9	2	0	1	0	0	0	0	0	0	0	0	**12**
11:00 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
Total	**4**	**1,258**	**302**	**0**	**105**	**2**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**1,674**
Percent	**0.2%**	**75.1%**	**18.0%**	**0.0%**	**6.3%**	**0.1%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Total Study Average
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	2	1	0	1	0	0	0	0	0	0	0	0	**4**
6:00 AM	0	8	6	0	4	0	0	0	0	0	0	0	0	**18**
7:00 AM	0	47	18	0	8	0	0	0	0	0	0	0	0	**73**
8:00 AM	0	91	30	0	15	0	0	0	0	0	0	0	0	**136**
9:00 AM	0	40	14	0	11	0	0	0	0	0	0	0	0	**65**
10:00 AM	0	47	15	0	9	1	0	0	0	0	0	0	0	**72**
11:00 AM	0	65	20	0	12	0	0	0	0	0	0	0	0	**97**
12:00 PM	1	75	18	0	10	0	0	0	0	0	0	0	0	**104**
1:00 PM	1	69	18	0	13	0	0	0	0	0	0	0	0	**101**
2:00 PM	1	71	18	0	11	0	0	0	0	0	0	0	0	**101**
3:00 PM	2	75	16	0	9	1	0	0	0	0	0	0	0	**103**
4:00 PM	1	64	18	0	10	1	0	0	0	0	0	0	0	**94**
5:00 PM	1	63	16	0	10	1	0	0	0	0	0	0	0	**91**
6:00 PM	1	51	13	0	9	0	0	0	0	0	0	0	0	**74**
7:00 PM	0	31	7	0	6	0	0	0	0	0	0	0	0	**44**
8:00 PM	0	18	4	0	3	0	0	0	0	0	0	0	0	**25**
9:00 PM	0	9	3	0	3	0	0	0	0	0	0	0	0	**15**
10:00 PM	0	4	2	0	1	0	0	0	0	0	0	0	0	**7**
11:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**8**	**837**	**237**	**0**	**146**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,232**
Percent	**0.6%**	**67.9%**	**19.2%**	**0.0%**	**11.9%**	**0.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

3-Day (Tuesday - Thursday) Average
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	1	1	0	0	1	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	3	2	0	1	0	0	0	0	0	0	0	0	**6**
6:00 AM	0	13	4	0	0	0	0	0	1	0	0	0	0	**18**
7:00 AM	0	40	13	0	3	0	0	0	0	0	0	0	0	**56**
8:00 AM	0	109	23	0	7	0	0	0	0	0	0	0	0	**139**
9:00 AM	0	57	15	0	5	0	0	0	0	0	0	0	0	**77**
10:00 AM	0	76	22	0	8	1	0	0	0	0	0	0	0	**107**
11:00 AM	0	99	23	0	12	0	0	0	0	0	0	0	0	**134**
12:00 PM	0	119	24	0	12	0	0	0	0	0	0	0	0	**156**
1:00 PM	0	106	21	0	8	1	0	0	0	0	0	0	0	**137**
2:00 PM	0	130	31	0	11	0	0	0	0	0	0	0	0	**173**
3:00 PM	0	136	31	0	12	0	0	0	0	0	0	0	0	**180**
4:00 PM	0	139	30	0	13	1	0	0	0	0	0	0	0	**183**
5:00 PM	0	173	37	0	15	0	0	1	0	0	0	0	0	**225**
6:00 PM	1	118	37	0	10	0	0	0	1	0	0	0	0	**167**
7:00 PM	0	83	21	0	6	0	0	0	0	0	0	0	0	**110**
8:00 PM	0	27	7	0	2	0	0	0	0	0	0	0	0	**36**
9:00 PM	0	17	3	0	2	0	0	0	0	0	0	0	0	**22**
10:00 PM	0	5	2	0	1	0	0	0	0	0	0	0	0	**9**
11:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	**2**
Total	**5**	**1,457**	**346**	**0**	**127**	**3**	**0**	**2**	**3**	**0**	**0**	**0**	**0**	**1,943**
Percent	**0.2%**	**75.0%**	**17.8%**	**0.0%**	**6.6%**	**0.2%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

3-Day (Tuesday - Thursday) Average
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	**3**
5:00 AM	0	1	1	0	1	0	0	0	0	0	0	0	0	**3**
6:00 AM	0	10	9	0	4	0	0	0	0	0	0	0	0	**23**
7:00 AM	0	64	23	0	10	0	0	0	0	0	0	0	0	**97**
8:00 AM	1	131	40	0	21	1	0	0	0	0	0	0	0	**193**
9:00 AM	0	44	14	0	13	0	0	0	0	0	0	0	0	**71**
10:00 AM	0	52	16	0	11	1	0	0	0	0	0	0	0	**81**
11:00 AM	1	69	20	0	15	0	0	0	0	0	0	0	0	**106**
12:00 PM	0	79	22	0	9	0	0	0	0	0	0	0	0	**111**
1:00 PM	1	68	13	0	11	1	0	0	0	0	0	0	0	**93**
2:00 PM	1	86	18	0	10	0	0	0	0	0	0	0	0	**115**
3:00 PM	1	86	20	0	10	1	0	0	0	0	0	0	0	**119**
4:00 PM	1	73	19	0	9	0	0	0	0	0	0	0	0	**103**
5:00 PM	2	79	21	0	9	0	0	0	0	0	0	0	0	**111**
6:00 PM	1	48	14	0	9	0	0	0	0	0	0	0	0	**72**
7:00 PM	0	29	6	0	5	0	0	0	0	0	0	0	0	**41**
8:00 PM	0	16	4	0	4	0	0	0	0	0	0	0	0	**24**
9:00 PM	0	5	3	0	3	0	0	0	0	0	0	0	0	**11**
10:00 PM	0	2	2	0	0	0	0	0	0	0	0	0	0	**4**
11:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**8**	**949**	**267**	**0**	**156**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,386**
Percent	**0.6%**	**68.4%**	**19.3%**	**0.0%**	**11.2%**	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Vehicle Speed Report Summary

Location: Pitkin Ave BTWN 8th St & 9th St

Count Direction: Northbound / Southbound

Date Range: 9/17/2022 to 9/23/2022

Site Code: 04

	Speed Range (mph)																	Total
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
Study Total																		
Northbound	383	1,391	5,927	3,879	213	3	0	1	0	0	0	0	0	0	0	0	0	11,797
Percent	3.2%	11.8%	50.2%	32.9%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Southbound	205	741	3,657	3,566	432	23	4	0	0	0	0	0	0	0	0	0	0	8,628
Percent	2.4%	8.6%	42.4%	41.3%	5.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	588	2,132	9,584	7,445	645	26	4	1	0	0	0	0	0	0	0	0	0	20,425
Percent	2.9%	10.4%	46.9%	36.5%	3.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%

Total Study Percentile Speed Summary			Total Study Speed Statistics		
Northbound			**Northbound**		
50th Percentile (Median)	18.8	mph	Mean (Average) Speed	18.4	mph
85th Percentile	21.8	mph	10 mph Pace	13.8 - 23.8	mph
95th Percentile	23.6	mph	Percent in Pace	85.3	%
Southbound			**Southbound**		
50th Percentile (Median)	19.7	mph	Mean (Average) Speed	19.4	mph
85th Percentile	22.9	mph	10 mph Pace	14.8 - 24.8	mph
95th Percentile	25.2	mph	Percent in Pace	83.7	%

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Saturday, September 17, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
1:00 AM	1	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	1	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**6**
6:00 AM	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
7:00 AM	0	2	5	12	1	0	0	0	0	0	0	0	0	0	0	0	0	**20**
8:00 AM	1	3	10	21	5	0	0	0	0	0	0	0	0	0	0	0	0	**40**
9:00 AM	0	4	32	24	2	0	0	0	0	0	0	0	0	0	0	0	0	**62**
10:00 AM	1	5	41	38	4	0	0	0	0	0	0	0	0	0	0	0	0	**89**
11:00 AM	0	2	51	55	5	0	0	0	0	0	0	0	0	0	0	0	0	**113**
12:00 PM	0	4	58	56	4	0	0	0	0	0	0	0	0	0	0	0	0	**122**
1:00 PM	1	13	45	43	3	0	0	0	0	0	0	0	0	0	0	0	0	**105**
2:00 PM	1	5	47	37	3	0	0	0	0	0	0	0	0	0	0	0	0	**93**
3:00 PM	0	2	36	32	3	1	0	0	0	0	0	0	0	0	0	0	0	**74**
4:00 PM	1	5	43	44	2	0	0	0	0	0	0	0	0	0	0	0	0	**95**
5:00 PM	0	3	44	32	3	0	0	0	0	0	0	0	0	0	0	0	0	**82**
6:00 PM	5	10	26	24	1	0	0	0	0	0	0	0	0	0	0	0	0	**66**
7:00 PM	0	5	23	21	1	0	0	0	0	0	0	0	0	0	0	0	0	**50**
8:00 PM	2	1	11	8	1	0	0	0	0	0	0	0	0	0	0	0	0	**23**
9:00 PM	0	2	11	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**18**
10:00 PM	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
11:00 PM	0	0	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
Total	**15**	**71**	**493**	**469**	**39**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,088**
Percent	**1.4%**	**6.5%**	**45.3%**	**43.1%**	**3.6%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	19.8	mph	Mean (Average) Speed	19.6	mph
85th Percentile	22.8	mph	10 mph Pace	14.9 - 24.9	mph
95th Percentile	24.6	mph	Percent in Pace	88.6	%

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Saturday, September 17, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
5:00 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
6:00 AM	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
7:00 AM	0	3	15	6	4	0	0	0	0	0	0	0	0	0	0	0	0	**28**
8:00 AM	0	0	8	15	2	0	0	0	0	0	0	0	0	0	0	0	0	**25**
9:00 AM	1	1	14	19	2	3	1	0	0	0	0	0	0	0	0	0	0	**41**
10:00 AM	1	2	19	19	1	0	0	0	0	0	0	0	0	0	0	0	0	**42**
11:00 AM	0	0	19	44	4	0	0	0	0	0	0	0	0	0	0	0	0	**67**
12:00 PM	0	5	35	41	4	0	0	0	0	0	0	0	0	0	0	0	0	**85**
1:00 PM	2	4	30	30	5	1	0	0	0	0	0	0	0	0	0	0	0	**72**
2:00 PM	1	5	37	21	5	0	0	0	0	0	0	0	0	0	0	0	0	**69**
3:00 PM	0	3	21	22	2	0	0	0	0	0	0	0	0	0	0	0	0	**48**
4:00 PM	1	2	12	28	4	0	0	0	0	0	0	0	0	0	0	0	0	**47**
5:00 PM	1	3	21	27	3	0	0	0	0	0	0	0	0	0	0	0	0	**55**
6:00 PM	2	5	20	21	1	0	0	0	0	0	0	0	0	0	0	0	0	**49**
7:00 PM	0	1	19	19	6	0	0	0	0	0	0	0	0	0	0	0	0	**45**
8:00 PM	0	3	10	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**18**
9:00 PM	0	1	11	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**16**
10:00 PM	0	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
11:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**9**	**39**	**307**	**325**	**45**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**730**
Percent	**1.2%**	**5.3%**	**42.1%**	**44.5%**	**6.2%**	**0.5%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	20.1	mph	Mean (Average) Speed	20	mph
85th Percentile	23.3	mph	10 mph Pace	15.0 - 25.0	mph
95th Percentile	25.7	mph	Percent in Pace	86.71	%

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Sunday, September 18, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
3:00 AM	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
6:00 AM	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
7:00 AM	0	1	4	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**10**
8:00 AM	0	0	4	14	1	0	0	0	0	0	0	0	0	0	0	0	0	**19**
9:00 AM	0	1	20	22	3	0	0	0	0	0	0	0	0	0	0	0	0	**46**
10:00 AM	0	2	15	23	3	0	0	0	0	0	0	0	0	0	0	0	0	**43**
11:00 AM	1	1	30	37	3	0	0	0	0	0	0	0	0	0	0	0	0	**72**
12:00 PM	0	3	29	37	5	0	0	0	0	0	0	0	0	0	0	0	0	**74**
1:00 PM	0	7	39	32	4	0	0	0	0	0	0	0	0	0	0	0	0	**82**
2:00 PM	0	6	36	37	2	0	0	0	0	0	0	0	0	0	0	0	0	**81**
3:00 PM	1	4	28	36	1	0	0	0	0	0	0	0	0	0	0	0	0	**70**
4:00 PM	0	4	24	36	2	0	0	0	0	0	0	0	0	0	0	0	0	**66**
5:00 PM	0	2	22	27	4	0	0	0	0	0	0	0	0	0	0	0	0	**55**
6:00 PM	0	1	25	29	1	0	0	0	0	0	0	0	0	0	0	0	0	**56**
7:00 PM	0	0	25	22	1	0	0	0	0	0	0	0	0	0	0	0	0	**48**
8:00 PM	0	0	9	12	2	0	0	0	0	0	0	0	0	0	0	0	0	**23**
9:00 PM	0	0	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**8**
10:00 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
11:00 PM	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Total	**6**	**33**	**322**	**379**	**33**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**773**
Percent	**0.8%**	**4.3%**	**41.7%**	**49.0%**	**4.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	20.2	mph	Mean (Average) Speed	20.0	mph
85th Percentile	22.9	mph	10 mph Pace	14.9 - 24.9	mph
95th Percentile	24.7	mph	Percent in Pace	90.3	%

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Sunday, September 18, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
6:00 AM	0	0	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**6**
7:00 AM	0	0	3	5	1	0	0	0	0	0	0	0	0	0	0	0	0	**9**
8:00 AM	0	1	2	10	3	0	0	0	0	0	0	0	0	0	0	0	0	**16**
9:00 AM	0	1	11	17	4	0	0	0	0	0	0	0	0	0	0	0	0	**33**
10:00 AM	0	2	18	24	3	0	0	0	0	0	0	0	0	0	0	0	0	**47**
11:00 AM	0	3	16	32	0	0	0	0	0	0	0	0	0	0	0	0	0	**51**
12:00 PM	0	1	20	34	2	0	0	0	0	0	0	0	0	0	0	0	0	**57**
1:00 PM	1	1	19	33	2	0	0	0	0	0	0	0	0	0	0	0	0	**56**
2:00 PM	2	3	20	17	3	0	0	0	0	0	0	0	0	0	0	0	0	**45**
3:00 PM	0	1	28	27	2	0	0	0	0	0	0	0	0	0	0	0	0	**58**
4:00 PM	0	2	16	25	3	0	0	0	0	0	0	0	0	0	0	0	0	**46**
5:00 PM	1	4	9	18	3	0	0	0	0	0	0	0	0	0	0	0	0	**35**
6:00 PM	0	0	13	21	6	0	0	0	0	0	0	0	0	0	0	0	0	**40**
7:00 PM	0	0	16	12	0	0	0	0	0	0	0	0	0	0	0	0	0	**28**
8:00 PM	1	0	7	10	1	0	0	0	0	0	0	0	0	0	0	0	0	**19**
9:00 PM	1	1	2	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**9**
10:00 PM	1	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**7**	**23**	**208**	**296**	**37**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**571**
Percent	**1.2%**	**4.0%**	**36.4%**	**51.8%**	**6.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	20.7	mph	Mean (Average) Speed	20.4	mph
85th Percentile	23.7	mph	10 mph Pace	15.7 - 25.7	mph
95th Percentile	25.4	mph	Percent in Pace	89.14	%

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Monday, September 19, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
5:00 AM	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
6:00 AM	1	0	8	6	1	0	0	0	0	0	0	0	0	0	0	0	0	**16**
7:00 AM	4	2	32	24	4	0	0	0	0	0	0	0	0	0	0	0	0	**66**
8:00 AM	2	7	86	54	2	0	0	0	0	0	0	0	0	0	0	0	0	**151**
9:00 AM	1	11	34	31	3	0	0	0	0	0	0	0	0	0	0	0	0	**80**
10:00 AM	3	12	42	39	1	0	0	0	0	0	0	0	0	0	0	0	0	**97**
11:00 AM	6	29	64	47	1	0	0	0	0	0	0	0	0	0	0	0	0	**147**
12:00 PM	17	41	83	40	3	0	0	0	0	0	0	0	0	0	0	0	0	**184**
1:00 PM	8	12	49	52	4	0	0	0	0	0	0	0	0	0	0	0	0	**125**
2:00 PM	4	26	93	60	1	0	0	0	0	0	0	0	0	0	0	0	0	**184**
3:00 PM	43	42	55	51	0	0	0	0	0	0	0	0	0	0	0	0	0	**191**
4:00 PM	2	28	116	66	4	0	0	0	0	0	0	0	0	0	0	0	0	**216**
5:00 PM	10	31	116	63	2	0	0	0	0	0	0	0	0	0	0	0	0	**222**
6:00 PM	3	16	67	66	4	0	0	0	0	0	0	0	0	0	0	0	0	**156**
7:00 PM	1	2	39	39	3	0	0	0	0	0	0	0	0	0	0	0	0	**84**
8:00 PM	1	4	18	10	0	0	0	0	0	0	0	0	0	0	0	0	0	**33**
9:00 PM	0	0	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
10:00 PM	0	1	2	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**8**
11:00 PM	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
Total	**107**	**267**	**915**	**663**	**35**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,987**
Percent	**5.4%**	**13.4%**	**46.0%**	**33.4%**	**1.8%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	18.7	mph	Mean (Average) Speed	18.1	mph
85th Percentile	21.8	mph	10 mph Pace	13.8 - 23.8	mph
95th Percentile	23.6	mph	Percent in Pace	81.6	%

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Monday, September 19, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	1	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
6:00 AM	0	0	9	9	1	0	0	0	0	0	0	0	0	0	0	0	0	**19**
7:00 AM	0	8	44	46	4	0	0	0	0	0	0	0	0	0	0	0	0	**102**
8:00 AM	4	16	71	92	10	0	0	0	0	0	0	0	0	0	0	0	0	**193**
9:00 AM	1	7	24	43	6	0	0	0	0	0	0	0	0	0	0	0	0	**81**
10:00 AM	2	7	25	29	9	0	0	0	0	0	0	0	0	0	0	0	0	**72**
11:00 AM	7	15	53	48	8	1	0	0	0	0	0	0	0	0	0	0	0	**132**
12:00 PM	9	13	68	50	9	1	0	0	0	0	0	0	0	0	0	0	0	**150**
1:00 PM	3	14	83	78	12	1	0	0	0	0	0	0	0	0	0	0	0	**191**
2:00 PM	1	9	60	71	11	0	0	0	0	0	0	0	0	0	0	0	0	**152**
3:00 PM	14	8	56	50	2	0	0	0	0	0	0	0	0	0	0	0	0	**130**
4:00 PM	3	5	59	62	10	1	0	0	0	0	0	0	0	0	0	0	0	**140**
5:00 PM	6	21	49	49	3	0	0	0	0	0	0	0	0	0	0	0	0	**128**
6:00 PM	0	1	25	38	6	0	0	0	0	0	0	0	0	0	0	0	0	**70**
7:00 PM	0	3	15	16	2	0	0	0	0	0	0	0	0	0	0	0	0	**36**
8:00 PM	0	1	7	9	0	0	0	0	0	0	0	0	0	0	0	0	0	**17**
9:00 PM	0	3	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**12**
10:00 PM	0	1	4	5	1	0	0	0	0	0	0	0	0	0	0	0	0	**11**
11:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**51**	**133**	**662**	**705**	**94**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,649**
Percent	**3.1%**	**8.1%**	**40.1%**	**42.8%**	**5.7%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	19.9	mph	Mean (Average) Speed	19.4	mph
85th Percentile	23.0	mph	10 mph Pace	15.3 - 25.3	mph
95th Percentile	25.3	mph	Percent in Pace	82.96	%

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Tuesday, September 20, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
6:00 AM	2	4	6	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**17**
7:00 AM	1	7	36	16	1	0	0	0	0	0	0	0	0	0	0	0	0	**61**
8:00 AM	4	10	78	34	0	0	0	0	0	0	0	0	0	0	0	0	0	**126**
9:00 AM	1	9	36	38	1	0	0	0	0	0	0	0	0	0	0	0	0	**85**
10:00 AM	2	8	43	30	1	0	0	0	0	0	0	0	0	0	0	0	0	**84**
11:00 AM	2	10	73	46	1	0	0	0	0	0	0	0	0	0	0	0	0	**132**
12:00 PM	3	34	75	43	0	0	0	0	0	0	0	0	0	0	0	0	0	**155**
1:00 PM	3	19	91	38	1	0	0	0	0	0	0	0	0	0	0	0	0	**152**
2:00 PM	3	32	79	39	1	0	0	0	0	0	0	0	0	0	0	0	0	**154**
3:00 PM	16	36	125	43	3	0	0	0	0	0	0	0	0	0	0	0	0	**223**
4:00 PM	11	35	99	47	2	1	0	0	0	0	0	0	0	0	0	0	0	**195**
5:00 PM	15	41	102	65	1	0	0	0	0	0	0	0	0	0	0	0	0	**224**
6:00 PM	2	16	90	62	8	0	0	0	0	0	0	0	0	0	0	0	0	**178**
7:00 PM	0	12	86	37	1	0	0	0	0	0	0	0	0	0	0	0	0	**136**
8:00 PM	0	3	33	19	1	0	0	0	0	0	0	0	0	0	0	0	0	**56**
9:00 PM	0	3	5	9	2	0	0	0	0	0	0	0	0	0	0	0	0	**19**
10:00 PM	0	0	4	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**11**
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**65**	**284**	**1,068**	**581**	**24**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2,023**
Percent	**3.2%**	**14.0%**	**52.8%**	**28.7%**	**1.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	18.5	mph	Mean (Average) Speed	18.1	mph
85th Percentile	21.5	mph	10 mph Pace	13.2 - 23.2	mph
95th Percentile	23.3	mph	Percent in Pace	85.9	%

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Tuesday, September 20, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
1:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
5:00 AM	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
6:00 AM	0	2	11	6	2	1	0	0	0	0	0	0	0	0	0	0	0	**22**
7:00 AM	1	9	40	38	5	0	0	0	0	0	0	0	0	0	0	0	0	**93**
8:00 AM	5	16	95	78	10	0	0	0	0	0	0	0	0	0	0	0	0	**204**
9:00 AM	1	6	26	35	4	0	0	0	0	0	0	0	0	0	0	0	0	**72**
10:00 AM	2	8	37	28	2	0	0	0	0	0	0	0	0	0	0	0	0	**77**
11:00 AM	1	10	44	43	4	0	0	0	0	0	0	0	0	0	0	0	0	**102**
12:00 PM	4	12	66	38	4	0	0	0	0	0	0	0	0	0	0	0	0	**124**
1:00 PM	1	10	36	28	3	0	0	0	0	0	0	0	0	0	0	0	0	**78**
2:00 PM	3	15	40	38	1	0	0	0	0	0	0	0	0	0	0	0	0	**97**
3:00 PM	2	7	64	43	4	1	0	0	0	0	0	0	0	0	0	0	0	**121**
4:00 PM	1	8	56	33	2	0	0	0	0	0	0	0	0	0	0	0	0	**100**
5:00 PM	4	10	49	60	2	0	0	0	0	0	0	0	0	0	0	0	0	**125**
6:00 PM	0	5	28	37	9	2	0	0	0	0	0	0	0	0	0	0	0	**81**
7:00 PM	0	3	15	17	1	0	0	0	0	0	0	0	0	0	0	0	0	**36**
8:00 PM	2	4	12	12	2	0	0	0	0	0	0	0	0	0	0	0	0	**32**
9:00 PM	0	0	6	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**11**
10:00 PM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
11:00 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Total	**27**	**129**	**632**	**546**	**55**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,393**
Percent	**1.9%**	**9.3%**	**45.4%**	**39.2%**	**3.9%**	**0.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	19.6	mph	Mean (Average) Speed	19.2	mph
85th Percentile	22.6	mph	10 mph Pace	14.7 - 24.7	mph
95th Percentile	24.6	mph	Percent in Pace	85.14	%

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Wednesday, September 21, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	0	3	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**10**
6:00 AM	1	3	5	10	0	0	0	0	0	0	0	0	0	0	0	0	0	**19**
7:00 AM	5	2	22	24	2	0	0	0	0	0	0	0	0	0	0	0	0	**55**
8:00 AM	2	7	70	59	3	0	0	0	0	0	0	0	0	0	0	0	0	**141**
9:00 AM	3	7	40	21	0	0	0	0	0	0	0	0	0	0	0	0	0	**71**
10:00 AM	3	27	61	21	3	0	0	0	0	0	0	0	0	0	0	0	0	**115**
11:00 AM	3	30	76	34	2	0	0	0	0	0	0	0	0	0	0	0	0	**145**
12:00 PM	4	14	78	52	2	0	0	0	0	0	0	0	0	0	0	0	0	**150**
1:00 PM	1	18	70	35	1	0	0	0	0	0	0	0	0	0	0	0	0	**125**
2:00 PM	3	45	109	38	3	0	0	0	0	0	0	0	0	0	0	0	0	**198**
3:00 PM	6	16	86	35	2	0	0	0	0	0	0	0	0	0	0	0	0	**145**
4:00 PM	1	15	96	42	2	0	0	0	0	0	0	0	0	0	0	0	0	**156**
5:00 PM	5	24	126	67	3	0	0	0	0	0	0	0	0	0	0	0	0	**225**
6:00 PM	3	10	85	70	2	0	0	0	0	0	0	0	0	0	0	0	0	**170**
7:00 PM	2	6	79	33	1	0	0	0	0	0	0	0	0	0	0	0	0	**121**
8:00 PM	0	2	12	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**20**
9:00 PM	0	0	4	9	0	0	0	0	0	0	0	0	0	0	0	0	0	**13**
10:00 PM	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
11:00 PM	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
Total	**44**	**227**	**1,025**	**570**	**27**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,893**
Percent	**2.3%**	**12.0%**	**54.1%**	**30.1%**	**1.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	18.6	mph	Mean (Average) Speed	18.3	mph
85th Percentile	21.5	mph	10 mph Pace	14.0 - 24.0	mph
95th Percentile	23.2	mph	Percent in Pace	87.8	%

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Wednesday, September 21, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
6:00 AM	0	2	10	12	2	0	0	0	0	0	0	0	0	0	0	0	0	**26**
7:00 AM	0	7	42	44	6	0	1	0	0	0	0	0	0	0	0	0	0	**100**
8:00 AM	2	8	93	80	14	0	1	0	0	0	0	0	0	0	0	0	0	**198**
9:00 AM	2	5	23	35	2	1	0	0	0	0	0	0	0	0	0	0	0	**68**
10:00 AM	3	10	43	23	3	1	0	0	0	0	0	0	0	0	0	0	0	**83**
11:00 AM	4	11	62	40	5	1	0	0	0	0	0	0	0	0	0	0	0	**123**
12:00 PM	1	11	58	34	3	0	0	0	0	0	0	0	0	0	0	0	0	**107**
1:00 PM	5	15	49	37	3	0	0	0	0	0	0	0	0	0	0	0	0	**109**
2:00 PM	3	12	66	41	2	0	0	0	0	0	0	0	0	0	0	0	0	**124**
3:00 PM	1	7	52	47	8	0	0	0	0	0	0	0	0	0	0	0	0	**115**
4:00 PM	2	3	40	48	7	1	0	0	0	0	0	0	0	0	0	0	0	**101**
5:00 PM	1	9	40	39	6	1	0	0	0	0	0	0	0	0	0	0	0	**96**
6:00 PM	1	3	20	32	4	1	0	0	0	0	0	0	0	0	0	0	0	**61**
7:00 PM	0	4	19	17	4	0	0	0	0	0	0	0	0	0	0	0	0	**44**
8:00 PM	0	4	7	6	3	0	0	0	0	0	0	0	0	0	0	0	0	**20**
9:00 PM	3	1	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
10:00 PM	0	1	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**6**
11:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**28**	**113**	**631**	**546**	**73**	**6**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,399**
Percent	**2.0%**	**8.1%**	**45.1%**	**39.0%**	**5.2%**	**0.4%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	19.7	mph	Mean (Average) Speed	19.5	mph
85th Percentile	22.8	mph	10 mph Pace	14.4 - 24.4	mph
95th Percentile	25.3	mph	Percent in Pace	84.7	%

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Thursday, September 22, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
6:00 AM	0	3	7	6	2	1	0	0	0	0	0	0	0	0	0	0	0	**19**
7:00 AM	4	3	21	23	1	0	0	0	0	0	0	0	0	0	0	0	0	**52**
8:00 AM	8	10	88	44	0	0	0	0	0	0	0	0	0	0	0	0	0	**150**
9:00 AM	2	7	42	23	0	0	0	0	0	0	0	0	0	0	0	0	0	**74**
10:00 AM	9	29	57	26	0	0	0	0	0	0	0	0	0	0	0	0	0	**121**
11:00 AM	5	15	81	24	1	0	0	0	0	0	0	0	0	0	0	0	0	**126**
12:00 PM	11	33	94	24	0	0	0	0	0	0	0	0	0	0	0	0	0	**162**
1:00 PM	3	30	74	24	3	0	0	0	0	0	0	0	0	0	0	0	0	**134**
2:00 PM	3	23	92	46	2	0	0	0	0	0	0	0	0	0	0	0	0	**166**
3:00 PM	24	23	82	41	1	0	0	0	0	0	0	0	0	0	0	0	0	**171**
4:00 PM	2	28	107	60	1	0	0	0	0	0	0	0	0	0	0	0	0	**198**
5:00 PM	4	32	121	63	5	0	0	0	0	0	0	0	0	0	0	0	0	**225**
6:00 PM	6	13	70	59	4	0	0	0	0	0	0	0	0	0	0	0	0	**152**
7:00 PM	1	2	30	37	2	0	0	0	0	0	0	0	0	0	0	0	0	**72**
8:00 PM	0	0	11	19	1	0	0	0	0	0	0	0	0	0	0	0	0	**31**
9:00 PM	0	1	18	12	2	0	0	0	0	0	0	0	0	0	0	0	0	**33**
10:00 PM	3	0	3	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**12**
11:00 PM	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
Total	**85**	**256**	**1,000**	**544**	**25**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,912**
Percent	**4.4%**	**13.4%**	**52.3%**	**28.5%**	**1.3%**	**0.1%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	18.5	mph	Mean (Average) Speed	18.0	mph
85th Percentile	21.6	mph	10 mph Pace	13.3 - 23.3	mph
95th Percentile	23.3	mph	Percent in Pace	84.6	%

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Thursday, September 22, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
5:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
6:00 AM	0	4	7	10	1	0	0	0	0	0	0	0	0	0	0	0	0	**22**
7:00 AM	0	4	53	38	3	0	0	0	0	0	0	0	0	0	0	0	0	**98**
8:00 AM	5	11	71	84	7	0	0	0	0	0	0	0	0	0	0	0	0	**178**
9:00 AM	0	9	32	27	4	0	0	0	0	0	0	0	0	0	0	0	0	**72**
10:00 AM	5	13	41	24	0	0	0	0	0	0	0	0	0	0	0	0	0	**83**
11:00 AM	4	15	45	26	2	0	0	0	0	0	0	0	0	0	0	0	0	**92**
12:00 PM	4	8	54	30	5	0	0	0	0	0	0	0	0	0	0	0	0	**101**
1:00 PM	1	12	53	26	1	0	0	0	0	0	0	0	0	0	0	0	0	**93**
2:00 PM	6	27	44	42	3	1	0	0	0	0	0	0	0	0	0	0	0	**123**
3:00 PM	7	25	46	39	3	0	0	0	0	0	0	0	0	0	0	0	0	**120**
4:00 PM	2	8	53	44	1	0	0	0	0	0	0	0	0	0	0	0	0	**108**
5:00 PM	1	13	33	57	8	0	0	0	0	0	0	0	0	0	0	0	0	**112**
6:00 PM	0	8	27	33	7	0	0	0	0	0	0	0	0	0	0	0	0	**75**
7:00 PM	1	3	24	14	1	0	0	0	0	0	0	0	0	0	0	0	0	**43**
8:00 PM	0	1	8	10	1	0	0	0	0	0	0	0	0	0	0	0	0	**20**
9:00 PM	0	7	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**14**
10:00 PM	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
11:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**37**	**170**	**599**	**511**	**48**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,366**
Percent	**2.7%**	**12.4%**	**43.9%**	**37.4%**	**3.5%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	19.2	mph	Mean (Average) Speed	18.8	mph
85th Percentile	22.6	mph	10 mph Pace	14.4 - 24.4	mph
95th Percentile	24.6	mph	Percent in Pace	81.84	%

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Friday, September 23, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**3**
5:00 AM	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
6:00 AM	0	1	6	11	0	0	0	0	0	0	0	0	0	0	0	0	0	**18**
7:00 AM	0	4	17	17	2	0	0	0	0	0	0	0	0	0	0	0	0	**40**
8:00 AM	7	13	93	42	2	0	0	0	0	0	0	0	0	0	0	0	0	**157**
9:00 AM	0	4	37	29	0	0	0	0	0	0	0	0	0	0	0	0	0	**70**
10:00 AM	0	8	57	32	4	0	0	0	0	0	0	0	0	0	0	0	0	**101**
11:00 AM	2	15	88	50	3	0	0	0	0	0	0	0	0	0	0	0	0	**158**
12:00 PM	1	22	94	63	2	0	0	0	0	0	0	0	0	0	0	0	0	**182**
1:00 PM	3	12	81	62	4	0	0	0	0	0	0	0	0	0	0	0	0	**162**
2:00 PM	2	17	60	36	2	0	0	0	0	0	0	0	0	0	0	0	0	**117**
3:00 PM	28	61	93	41	2	0	0	0	0	0	0	0	0	0	0	0	0	**225**
4:00 PM	3	18	105	71	2	0	0	0	0	0	0	0	0	0	0	0	0	**199**
5:00 PM	6	37	116	52	0	0	0	0	0	0	0	0	0	0	0	0	0	**211**
6:00 PM	2	18	89	37	1	0	0	0	0	0	0	0	0	0	0	0	0	**147**
7:00 PM	2	10	57	49	1	0	0	0	0	0	0	0	0	0	0	0	0	**119**
8:00 PM	3	4	22	19	0	0	0	0	0	0	0	0	0	0	0	0	0	**48**
9:00 PM	1	4	60	29	2	0	0	0	0	0	0	0	0	0	0	0	0	**96**
10:00 PM	0	1	24	21	2	0	0	0	0	0	0	0	0	0	0	0	0	**48**
11:00 PM	0	0	1	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
Total	**61**	**253**	**1,104**	**673**	**30**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2,121**
Percent	**2.9%**	**11.9%**	**52.1%**	**31.7%**	**1.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	18.8	mph	Mean (Average) Speed	18.4	mph
85th Percentile	21.7	mph	10 mph Pace	13.8 - 23.8	mph
95th Percentile	23.4	mph	Percent in Pace	86.3	%

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Friday, September 23, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
6:00 AM	0	2	5	14	3	0	0	0	0	0	0	0	0	0	0	0	0	**24**
7:00 AM	1	7	34	39	0	0	0	0	0	0	0	0	0	0	0	0	0	**81**
8:00 AM	0	7	50	71	13	0	0	0	0	0	0	0	0	0	0	0	0	**141**
9:00 AM	2	7	36	39	11	0	0	0	0	0	0	0	0	0	0	0	0	**95**
10:00 AM	0	5	33	52	6	2	0	0	0	0	0	0	0	0	0	0	0	**98**
11:00 AM	3	13	51	43	7	0	0	0	0	0	0	0	0	0	0	0	0	**117**
12:00 PM	7	10	46	40	3	1	0	0	0	0	0	0	0	0	0	0	0	**107**
1:00 PM	6	12	55	33	5	0	0	0	0	0	0	0	0	0	0	0	0	**111**
2:00 PM	8	22	41	22	1	0	0	0	0	0	0	0	0	0	0	0	0	**94**
3:00 PM	8	15	60	39	5	0	0	0	0	0	0	0	0	0	0	0	0	**127**
4:00 PM	2	5	40	57	6	0	0	0	0	0	0	0	0	0	0	0	0	**110**
5:00 PM	3	4	35	40	3	0	0	0	0	0	0	0	0	0	0	0	0	**85**
6:00 PM	4	12	59	63	6	0	0	0	0	0	0	0	0	0	0	0	0	**144**
7:00 PM	1	5	30	36	5	1	0	0	0	0	0	0	0	0	0	0	0	**78**
8:00 PM	1	3	18	23	3	0	0	0	0	0	0	0	0	0	0	0	0	**48**
9:00 PM	0	4	13	14	2	0	0	0	0	0	0	0	0	0	0	0	0	**33**
10:00 PM	0	0	6	5	1	0	0	0	0	0	0	0	0	0	0	0	0	**12**
11:00 PM	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
Total	**46**	**134**	**618**	**637**	**80**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,520**
Percent	**3.0%**	**8.8%**	**40.7%**	**41.9%**	**5.3%**	**0.3%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	19.8	mph	Mean (Average) Speed	19.4	mph
85th Percentile	23.2	mph	10 mph Pace	14.9 - 24.9	mph
95th Percentile	25.2	mph	Percent in Pace	82.57	%

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Total Study Average
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
6:00 AM	1	2	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**14**
7:00 AM	2	3	20	17	2	0	0	0	0	0	0	0	0	0	0	0	0	**44**
8:00 AM	3	7	61	38	2	0	0	0	0	0	0	0	0	0	0	0	0	**111**
9:00 AM	1	6	34	27	1	0	0	0	0	0	0	0	0	0	0	0	0	**69**
10:00 AM	3	13	45	30	2	0	0	0	0	0	0	0	0	0	0	0	0	**93**
11:00 AM	3	15	66	42	2	0	0	0	0	0	0	0	0	0	0	0	0	**128**
12:00 PM	5	22	73	45	2	0	0	0	0	0	0	0	0	0	0	0	0	**147**
1:00 PM	3	16	64	41	3	0	0	0	0	0	0	0	0	0	0	0	0	**127**
2:00 PM	2	22	74	42	2	0	0	0	0	0	0	0	0	0	0	0	0	**142**
3:00 PM	17	26	72	40	2	0	0	0	0	0	0	0	0	0	0	0	0	**157**
4:00 PM	3	19	84	52	2	0	0	0	0	0	0	0	0	0	0	0	0	**160**
5:00 PM	6	24	92	53	3	0	0	0	0	0	0	0	0	0	0	0	0	**178**
6:00 PM	3	12	65	50	3	0	0	0	0	0	0	0	0	0	0	0	0	**133**
7:00 PM	1	5	48	34	1	0	0	0	0	0	0	0	0	0	0	0	0	**89**
8:00 PM	1	2	17	13	1	0	0	0	0	0	0	0	0	0	0	0	0	**34**
9:00 PM	0	1	15	10	1	0	0	0	0	0	0	0	0	0	0	0	0	**27**
10:00 PM	0	0	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**11**
11:00 PM	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
Total	**55**	**197**	**845**	**554**	**29**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,680**
Percent	**3.3%**	**11.7%**	**50.3%**	**33.0%**	**1.7%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	18.8	mph	Mean (Average) Speed	18.4	mph
85th Percentile	21.8	mph	10 mph Pace	13.8 - 23.8	mph
95th Percentile	23.6	mph	Percent in Pace	85.3	%

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 to 9/23/2022
Site Code: 04

Total Study Average
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
6:00 AM	0	1	7	8	1	0	0	0	0	0	0	0	0	0	0	0	0	**17**
7:00 AM	0	5	33	31	3	0	0	0	0	0	0	0	0	0	0	0	0	**72**
8:00 AM	2	8	56	61	8	0	0	0	0	0	0	0	0	0	0	0	0	**135**
9:00 AM	1	5	24	31	5	1	0	0	0	0	0	0	0	0	0	0	0	**67**
10:00 AM	2	7	31	28	3	0	0	0	0	0	0	0	0	0	0	0	0	**71**
11:00 AM	3	10	41	39	4	0	0	0	0	0	0	0	0	0	0	0	0	**97**
12:00 PM	4	9	50	38	4	0	0	0	0	0	0	0	0	0	0	0	0	**105**
1:00 PM	3	10	46	38	4	0	0	0	0	0	0	0	0	0	0	0	0	**101**
2:00 PM	3	13	44	36	4	0	0	0	0	0	0	0	0	0	0	0	0	**100**
3:00 PM	5	9	47	38	4	0	0	0	0	0	0	0	0	0	0	0	0	**103**
4:00 PM	2	5	39	42	5	0	0	0	0	0	0	0	0	0	0	0	0	**93**
5:00 PM	2	9	34	41	4	0	0	0	0	0	0	0	0	0	0	0	0	**90**
6:00 PM	1	5	27	35	6	0	0	0	0	0	0	0	0	0	0	0	0	**74**
7:00 PM	0	3	20	19	3	0	0	0	0	0	0	0	0	0	0	0	0	**45**
8:00 PM	1	2	10	11	2	0	0	0	0	0	0	0	0	0	0	0	0	**26**
9:00 PM	1	2	6	5	1	0	0	0	0	0	0	0	0	0	0	0	0	**15**
10:00 PM	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
11:00 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Total	**30**	**104**	**522**	**509**	**61**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,227**
Percent	**2.4%**	**8.5%**	**42.5%**	**41.5%**	**5.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	19.7	mph	Mean (Average) Speed	19.4	mph
85th Percentile	22.9	mph	10 mph Pace	14.8 - 24.8	mph
95th Percentile	25.2	mph	Percent in Pace	83.7	%

Location: Pitkin Ave BTWN 8th St & 9th St
Date Range: 9/17/2022 - 9/23/2022
Site Code: 04

	Saturday			Sunday			Monday			Tuesday			Wednesday			Thursday			Friday			Mid-Week Average		
	9/17/2022			9/18/2022			9/19/2022			9/20/2022			9/21/2022			9/22/2022			9/23/2022					
Time	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total
12:00 AM	4	2	6	3	3	6	2	1	3	2	4	6	1	2	3	1	1	2	3	2	5	1	2	4
1:00 AM	6	1	7	1	3	4	1	0	1	5	1	6	4	0	4	3	0	3	3	3	6	4	0	4
2:00 AM	2	1	3	4	1	5	2	0	2	0	0	0	0	0	0	0	2	2	1	1	2	0	1	1
3:00 AM	1	1	2	3	1	4	2	1	3	1	1	2	1	0	1	2	0	2	1	0	1	1	0	2
4:00 AM	2	3	5	0	0	0	3	1	4	2	5	7	2	2	4	1	3	4	3	0	3	2	3	5
5:00 AM	6	3	9	2	3	5	5	9	14	5	3	8	10	4	14	4	2	6	3	4	7	6	3	9
6:00 AM	4	5	9	3	6	9	16	19	35	17	22	39	19	26	45	19	22	41	18	24	42	18	23	42
7:00 AM	20	28	48	10	9	19	66	102	168	61	93	154	55	100	155	52	98	150	40	81	121	56	97	153
8:00 AM	40	25	65	19	16	35	151	193	344	126	204	330	141	198	339	150	178	328	157	141	298	139	193	332
9:00 AM	62	41	103	46	33	79	80	81	161	85	72	157	71	68	139	74	72	146	70	95	165	77	71	147
10:00 AM	89	42	131	43	47	90	97	72	169	84	77	161	115	83	198	121	83	204	101	98	199	107	81	188
11:00 AM	113	67	180	72	51	123	147	132	279	132	102	234	145	123	268	126	92	218	158	117	275	134	106	240
12:00 PM	122	85	207	74	57	131	184	150	334	155	124	279	150	107	257	162	101	263	182	107	289	156	111	266
1:00 PM	105	72	177	82	56	138	125	191	316	152	78	230	125	109	234	134	93	227	162	111	273	137	93	230
2:00 PM	93	69	162	81	45	126	184	152	336	154	97	251	198	124	322	166	123	289	117	94	211	173	115	287
3:00 PM	74	48	122	70	58	128	191	130	321	223	121	344	145	115	260	171	120	291	225	127	352	180	119	298
4:00 PM	95	47	142	66	46	112	216	140	356	195	100	295	156	101	257	198	108	306	199	110	309	183	103	286
5:00 PM	82	55	137	55	35	90	222	128	350	224	125	349	225	96	321	225	112	337	211	85	296	225	111	336
6:00 PM	66	49	115	56	40	96	156	70	226	178	81	259	170	61	231	152	75	227	147	144	291	167	72	239
7:00 PM	50	45	95	48	28	76	84	36	120	136	36	172	121	44	165	72	43	115	119	78	197	110	41	151
8:00 PM	23	18	41	23	19	42	33	17	50	56	32	88	20	20	40	31	20	51	48	48	96	36	24	60
9:00 PM	18	16	34	8	9	17	9	12	21	19	11	30	13	9	22	33	14	47	96	33	129	22	11	33
10:00 PM	4	6	10	2	5	7	8	11	19	11	2	13	3	6	9	12	3	15	48	12	60	9	4	12
11:00 PM	7	1	8	2	0	2	3	1	4	0	2	2	3	1	4	3	1	4	9	5	14	2	1	3
Total	**1,088**	**730**	**1,818**	**773**	**571**	**1,344**	**1,987**	**1,649**	**3,636**	**2,023**	**1,393**	**3,416**	**1,893**	**1,399**	**3,292**	**1,912**	**1,366**	**3,278**	**2,121**	**1,520**	**3,641**	**1,943**	**1,386**	**3,329**
Percent	**60%**	**40%**	-	**58%**	**42%**	-	**55%**	**45%**	-	**59%**	**41%**	-	**58%**	**42%**	-	**58%**	**42%**	-	**58%**	**42%**	-	**58%**	**42%**	-

1. Mid-week average includes data between Tuesday and Thursday.

Vehicle Classification Report Summary

Location: Midland Ave BTWN 8th St & E Wulfsohn

Count Direction: Northbound / Southbound

Date Range: 9/17/2022 to 9/23/2022

Site Code: 05

	FHWA Vehicle Classification													Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
Study Total														
Northbound	141	33,185	8,640	254	3,116	63	0	20	24	9	0	1	5	45,458
Percent	0.3%	73.0%	19.0%	0.6%	6.9%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	100%
Southbound	171	28,702	10,645	264	8,714	73	0	28	23	10	0	1	7	48,638
Percent	0.4%	59.0%	21.9%	0.5%	17.9%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	312	61,887	19,285	518	11,830	136	0	48	47	19	0	2	12	94,096
Percent	0.3%	65.8%	20.5%	0.6%	12.6%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	100%

FHWA Vehicle Classification	
Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Saturday, September 17, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	21	2	3	4	0	0	0	0	0	0	0	0	**30**
1:00 AM	0	14	1	1	3	0	0	0	0	0	0	0	0	**19**
2:00 AM	0	16	3	2	2	0	0	0	0	0	0	0	0	**23**
3:00 AM	0	8	2	0	3	0	0	0	0	0	0	0	0	**13**
4:00 AM	0	4	3	0	1	0	0	0	0	0	0	0	0	**8**
5:00 AM	1	18	4	1	2	1	0	0	0	0	0	0	0	**27**
6:00 AM	0	34	20	1	5	0	0	0	0	0	0	0	0	**60**
7:00 AM	0	77	23	2	14	0	0	0	0	0	0	0	0	**116**
8:00 AM	0	126	46	1	14	0	0	0	0	0	0	0	0	**187**
9:00 AM	2	213	54	3	17	0	0	0	0	0	0	0	0	**289**
10:00 AM	0	307	86	2	28	0	0	0	0	0	0	0	0	**423**
11:00 AM	1	372	92	3	26	0	0	0	0	0	0	0	0	**494**
12:00 PM	1	399	105	1	24	1	0	0	0	0	0	0	0	**531**
1:00 PM	1	363	91	2	28	0	0	0	0	0	0	0	0	**485**
2:00 PM	3	392	82	2	28	0	0	0	0	0	0	0	0	**507**
3:00 PM	3	299	72	1	18	0	0	0	0	0	0	0	0	**393**
4:00 PM	3	335	81	3	24	0	0	0	0	0	0	0	0	**446**
5:00 PM	6	287	79	2	25	0	0	1	0	0	0	0	0	**400**
6:00 PM	0	258	54	2	21	0	0	0	1	0	0	0	0	**336**
7:00 PM	1	222	43	2	22	0	0	0	0	0	0	0	0	**290**
8:00 PM	0	143	35	4	7	0	0	0	0	0	0	0	0	**189**
9:00 PM	0	99	13	4	5	0	0	0	0	0	0	0	0	**121**
10:00 PM	0	60	7	1	9	0	0	0	0	0	0	0	0	**77**
11:00 PM	0	38	11	2	3	0	0	0	0	0	0	0	0	**54**
Total	**22**	**4,105**	**1,009**	**45**	**333**	**2**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**5,518**
Percent	**0.4%**	**74.4%**	**18.3%**	**0.8%**	**6.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Saturday, September 17, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	16	3	0	4	0	0	0	0	0	0	0	0	**23**
1:00 AM	0	9	2	0	2	0	0	0	0	0	0	0	0	**13**
2:00 AM	0	8	3	0	0	0	0	0	0	0	0	0	0	**11**
3:00 AM	0	3	3	0	1	0	0	0	0	0	0	0	0	**7**
4:00 AM	0	5	3	3	3	0	0	0	0	0	0	0	0	**14**
5:00 AM	0	14	8	4	10	0	0	0	0	0	0	0	0	**36**
6:00 AM	0	39	18	4	32	0	0	0	0	0	0	0	0	**93**
7:00 AM	0	100	38	3	49	0	0	0	0	0	0	0	0	**190**
8:00 AM	0	137	56	2	54	0	0	0	0	0	0	0	0	**249**
9:00 AM	1	161	95	0	66	0	0	0	0	0	0	0	0	**323**
10:00 AM	6	244	86	1	60	0	0	0	0	0	0	0	0	**397**
11:00 AM	1	267	91	1	79	1	0	0	0	0	0	0	0	**440**
12:00 PM	2	290	108	0	93	2	0	0	0	0	0	0	0	**495**
1:00 PM	1	318	107	4	89	0	0	0	0	0	0	0	0	**519**
2:00 PM	1	336	100	2	72	0	0	0	0	0	0	0	0	**511**
3:00 PM	0	308	109	3	64	0	0	0	0	0	0	0	0	**484**
4:00 PM	2	298	116	1	68	0	0	1	0	0	0	0	0	**486**
5:00 PM	3	290	79	4	59	0	0	0	1	0	0	0	0	**436**
6:00 PM	1	250	80	3	48	0	0	0	0	0	0	0	0	**382**
7:00 PM	2	174	42	2	54	0	0	0	0	0	0	0	0	**274**
8:00 PM	0	114	31	2	22	0	0	0	0	0	0	0	0	**169**
9:00 PM	0	97	38	2	28	0	0	0	0	0	0	0	0	**165**
10:00 PM	0	51	13	1	8	0	0	0	0	0	0	0	0	**73**
11:00 PM	0	20	11	2	7	0	0	0	0	0	0	0	0	**40**
Total	**20**	**3,549**	**1,240**	**44**	**972**	**3**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**5,830**
Percent	**0.3%**	**60.9%**	**21.3%**	**0.8%**	**16.7%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Sunday, September 18, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	26	4	2	1	0	0	0	0	0	0	0	0	**33**
1:00 AM	0	17	4	1	1	0	0	0	0	0	0	0	0	**23**
2:00 AM	0	19	5	1	2	0	0	0	0	0	0	0	0	**27**
3:00 AM	0	9	1	2	1	0	0	0	0	0	0	0	0	**13**
4:00 AM	0	12	1	0	0	0	0	0	0	0	0	0	0	**13**
5:00 AM	0	9	3	1	0	0	0	0	0	0	0	0	0	**13**
6:00 AM	1	27	9	0	3	0	0	0	0	0	0	0	0	**40**
7:00 AM	2	47	11	1	8	0	0	0	0	0	0	0	0	**69**
8:00 AM	0	70	28	1	8	0	0	0	0	0	0	0	0	**107**
9:00 AM	0	160	56	2	13	0	0	0	0	0	0	0	0	**231**
10:00 AM	0	219	54	2	18	0	0	0	0	0	0	0	0	**293**
11:00 AM	1	301	74	5	19	0	0	0	0	0	0	0	0	**400**
12:00 PM	3	307	91	0	23	0	0	0	0	0	0	0	0	**424**
1:00 PM	5	342	54	1	29	0	0	0	0	0	0	0	0	**431**
2:00 PM	3	341	67	1	26	0	0	0	0	0	0	0	0	**438**
3:00 PM	1	271	64	2	15	0	0	0	1	0	0	0	0	**354**
4:00 PM	1	264	59	4	13	0	0	0	0	0	0	0	0	**341**
5:00 PM	1	241	58	3	16	0	0	0	0	0	0	0	0	**319**
6:00 PM	0	211	36	1	17	0	0	0	0	0	0	0	0	**265**
7:00 PM	1	169	33	5	13	0	0	1	0	0	0	0	0	**222**
8:00 PM	0	115	19	3	10	0	0	0	0	0	0	0	0	**147**
9:00 PM	0	58	9	4	6	0	0	0	0	0	0	0	0	**77**
10:00 PM	0	45	7	0	3	0	0	0	0	0	0	0	0	**55**
11:00 PM	0	12	5	1	3	0	0	0	0	0	0	0	0	**21**
Total	**19**	**3,292**	**752**	**43**	**248**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**4,356**
Percent	**0.4%**	**75.6%**	**17.3%**	**1.0%**	**5.7%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Sunday, September 18, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	10	7	1	2	0	0	0	0	0	0	0	0	**20**
1:00 AM	0	11	5	0	2	0	0	0	0	0	0	0	0	**18**
2:00 AM	0	9	2	0	2	0	0	0	0	0	0	0	0	**13**
3:00 AM	0	6	6	0	2	0	0	0	0	0	0	0	0	**14**
4:00 AM	0	4	4	3	3	0	0	0	0	0	0	0	0	**14**
5:00 AM	0	14	5	4	8	0	0	0	0	0	0	0	0	**31**
6:00 AM	1	26	17	2	12	0	0	0	0	0	0	0	0	**58**
7:00 AM	0	45	22	2	21	0	0	0	0	0	0	0	0	**90**
8:00 AM	0	91	44	1	28	0	0	0	0	0	0	0	0	**164**
9:00 AM	0	142	68	0	52	0	0	0	1	0	0	0	0	**263**
10:00 AM	0	191	73	1	49	0	0	0	0	0	0	0	0	**314**
11:00 AM	4	226	97	0	55	0	0	0	0	0	0	0	0	**382**
12:00 PM	2	260	84	2	59	0	0	0	0	0	0	0	0	**407**
1:00 PM	6	254	116	5	61	0	0	0	0	0	0	0	0	**442**
2:00 PM	3	259	86	3	68	0	0	0	0	0	0	0	0	**419**
3:00 PM	6	267	109	0	75	0	0	0	0	0	0	0	0	**457**
4:00 PM	1	230	107	2	52	0	0	0	0	0	0	0	0	**392**
5:00 PM	0	246	90	2	57	0	0	0	0	0	0	0	0	**395**
6:00 PM	5	207	59	1	54	0	0	0	1	0	0	0	0	**327**
7:00 PM	1	164	59	0	39	0	0	0	0	0	0	0	0	**263**
8:00 PM	1	108	37	3	21	0	0	0	0	0	0	0	0	**170**
9:00 PM	1	70	30	1	20	0	0	0	0	0	0	0	0	**122**
10:00 PM	0	35	12	1	6	0	0	0	0	0	0	0	0	**54**
11:00 PM	1	7	8	0	4	0	0	0	0	0	0	0	0	**20**
Total	**32**	**2,882**	**1,147**	**34**	**752**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**4,849**
Percent	**0.7%**	**59.4%**	**23.7%**	**0.7%**	**15.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Monday, September 19, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	7	2	1	3	0	0	0	0	0	0	0	0	**13**
1:00 AM	0	5	0	1	1	0	0	0	0	0	0	0	0	**7**
2:00 AM	0	5	1	0	0	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	5	2	1	0	0	0	0	0	0	0	0	0	**8**
4:00 AM	0	6	5	0	0	0	0	0	0	0	0	0	0	**11**
5:00 AM	1	21	9	1	2	1	0	0	0	0	0	0	0	**35**
6:00 AM	1	61	26	0	9	0	0	0	0	0	0	0	0	**97**
7:00 AM	1	192	37	1	26	1	0	0	0	0	0	0	0	**258**
8:00 AM	4	256	56	0	27	0	0	0	1	0	0	0	0	**344**
9:00 AM	1	219	64	1	18	1	0	0	0	0	0	0	0	**304**
10:00 AM	3	280	66	0	30	2	0	0	1	0	0	0	0	**382**
11:00 AM	1	375	83	2	42	0	0	0	0	0	0	0	1	**504**
12:00 PM	1	386	103	1	31	1	0	1	0	0	0	0	0	**524**
1:00 PM	2	340	66	1	36	2	0	1	1	1	0	0	0	**450**
2:00 PM	1	428	111	2	48	2	0	1	1	0	0	0	0	**594**
3:00 PM	3	513	141	1	44	1	0	0	0	0	0	0	2	**705**
4:00 PM	3	622	172	3	74	0	0	0	2	0	0	0	0	**876**
5:00 PM	3	700	195	2	62	1	0	2	0	0	0	0	0	**965**
6:00 PM	2	439	108	2	52	0	0	0	0	0	0	0	0	**603**
7:00 PM	0	230	58	0	22	0	0	0	0	0	0	0	0	**310**
8:00 PM	4	118	32	3	10	0	0	0	0	0	0	0	0	**167**
9:00 PM	0	64	16	3	7	0	0	0	0	0	0	0	0	**90**
10:00 PM	0	26	5	0	4	0	0	0	0	0	0	0	0	**35**
11:00 PM	0	18	1	1	1	0	0	0	0	0	0	0	0	**21**
Total	**31**	**5,316**	**1,359**	**27**	**549**	**12**	**0**	**5**	**6**	**1**	**0**	**0**	**3**	**7,309**
Percent	**0.4%**	**72.7%**	**18.6%**	**0.4%**	**7.5%**	**0.2%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Monday, September 19, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	1	13	3	0	2	0	0	0	0	0	0	0	0	**19**
1:00 AM	0	6	4	0	2	0	0	0	0	0	0	0	0	**12**
2:00 AM	0	3	2	0	2	0	0	0	0	0	0	0	0	**7**
3:00 AM	0	0	1	0	2	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	4	3	3	2	0	0	0	0	0	0	0	0	**12**
5:00 AM	0	38	19	4	28	0	0	1	0	0	0	0	0	**90**
6:00 AM	1	124	63	4	92	2	0	0	0	0	0	0	0	**286**
7:00 AM	2	338	152	2	179	0	0	0	2	0	0	0	0	**675**
8:00 AM	1	395	186	3	151	1	0	0	0	0	0	0	0	**737**
9:00 AM	2	190	99	0	83	1	0	0	2	1	0	0	0	**378**
10:00 AM	1	229	98	3	95	0	0	1	0	2	0	0	0	**429**
11:00 AM	4	369	149	3	134	1	0	1	1	0	0	0	2	**664**
12:00 PM	5	488	125	2	132	2	0	0	2	0	0	0	0	**756**
1:00 PM	1	506	200	3	170	1	0	2	0	0	0	0	1	**884**
2:00 PM	5	439	166	2	103	3	0	0	1	0	0	0	0	**719**
3:00 PM	2	537	152	0	115	3	0	0	1	1	0	0	0	**811**
4:00 PM	3	392	129	1	93	1	0	1	3	0	0	0	0	**623**
5:00 PM	0	317	123	3	88	0	0	0	1	0	0	0	0	**532**
6:00 PM	5	258	78	0	75	0	0	0	0	0	0	0	0	**416**
7:00 PM	1	183	68	0	51	0	0	0	0	0	0	0	0	**303**
8:00 PM	0	118	46	3	27	0	0	0	0	0	0	0	0	**194**
9:00 PM	0	48	28	1	21	0	0	0	0	0	0	0	0	**98**
10:00 PM	0	26	19	1	8	0	0	0	0	0	0	0	0	**54**
11:00 PM	0	15	2	0	5	0	0	0	0	0	0	0	0	**22**
Total	**34**	**5,036**	**1,915**	**38**	**1,660**	**15**	**0**	**6**	**13**	**4**	**0**	**0**	**3**	**8,724**
Percent	**0.4%**	**57.7%**	**22.0%**	**0.4%**	**19.0%**	**0.2%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Tuesday, September 20, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	11	1	1	3	0	0	0	0	0	0	0	0	**16**
1:00 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	1	0	0	2	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	2	2	1	2	0	0	0	0	0	0	0	0	**7**
4:00 AM	0	8	5	0	1	0	0	0	0	0	0	0	0	**14**
5:00 AM	0	28	7	1	1	0	0	0	0	0	0	0	0	**37**
6:00 AM	0	67	40	1	5	1	0	0	0	0	0	0	0	**114**
7:00 AM	0	167	48	1	26	0	0	0	0	0	0	0	0	**242**
8:00 AM	1	240	49	0	17	2	0	0	0	0	0	0	0	**309**
9:00 AM	1	231	66	2	31	0	0	1	0	0	0	0	0	**332**
10:00 AM	1	265	73	0	24	0	0	1	1	0	0	0	0	**365**
11:00 AM	0	320	82	2	28	1	0	1	0	0	0	0	0	**434**
12:00 PM	3	357	78	2	33	2	0	0	0	1	0	0	0	**476**
1:00 PM	2	322	113	1	28	0	0	0	0	0	0	0	0	**466**
2:00 PM	0	325	85	2	33	1	0	0	1	0	0	0	0	**447**
3:00 PM	2	497	124	3	36	2	0	0	1	0	0	0	0	**665**
4:00 PM	2	532	146	3	54	1	0	0	0	0	0	0	0	**738**
5:00 PM	5	646	187	1	55	0	0	0	0	0	0	0	0	**894**
6:00 PM	1	478	170	2	60	1	0	1	1	0	0	0	0	**714**
7:00 PM	0	224	67	2	26	2	0	0	0	0	0	0	0	**321**
8:00 PM	0	93	28	2	7	0	0	0	0	0	0	0	0	**130**
9:00 PM	0	68	16	3	3	0	0	0	0	0	0	0	0	**90**
10:00 PM	0	30	6	1	6	0	0	0	0	0	0	0	0	**43**
11:00 PM	0	9	3	2	0	0	0	0	0	0	0	0	0	**14**
Total	**18**	**4,923**	**1,396**	**35**	**481**	**13**	**0**	**4**	**4**	**1**	**0**	**0**	**0**	**6,875**
Percent	**0.3%**	**71.6%**	**20.3%**	**0.5%**	**7.0%**	**0.2%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Tuesday, September 20, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	7	2	1	0	0	0	0	0	0	0	0	0	**10**
1:00 AM	0	1	1	0	2	0	0	0	0	0	0	0	0	**4**
2:00 AM	1	4	0	0	0	0	0	0	0	0	0	0	0	**5**
3:00 AM	1	1	2	0	0	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	9	7	3	6	0	0	0	0	0	0	0	0	**25**
5:00 AM	0	42	12	4	27	0	0	0	0	0	0	0	0	**85**
6:00 AM	0	123	75	5	126	1	0	0	0	0	0	0	0	**330**
7:00 AM	3	398	151	2	149	0	0	0	0	0	0	0	0	**703**
8:00 AM	6	470	165	3	134	7	0	0	0	0	0	0	0	**785**
9:00 AM	1	239	102	3	82	1	0	0	0	0	0	0	0	**428**
10:00 AM	0	219	110	3	96	0	0	0	0	0	0	0	0	**428**
11:00 AM	2	250	89	2	82	0	0	1	0	0	0	0	1	**427**
12:00 PM	2	294	126	1	76	1	0	1	0	0	0	0	0	**501**
1:00 PM	1	253	110	7	96	2	0	0	0	0	0	0	0	**469**
2:00 PM	1	273	106	2	84	2	0	0	0	0	0	0	0	**468**
3:00 PM	2	317	129	1	92	2	0	1	1	0	0	0	0	**545**
4:00 PM	3	313	116	1	73	0	0	0	0	0	0	0	0	**506**
5:00 PM	1	356	104	0	65	0	0	0	0	0	0	0	0	**526**
6:00 PM	1	256	82	1	52	0	0	0	0	0	0	0	0	**392**
7:00 PM	0	198	52	1	47	0	0	0	0	0	0	0	0	**298**
8:00 PM	1	94	45	2	25	0	0	0	0	0	0	0	0	**167**
9:00 PM	0	51	30	2	17	0	0	0	0	0	0	0	0	**100**
10:00 PM	0	30	10	0	13	0	0	0	0	0	0	0	0	**53**
11:00 PM	0	12	4	2	3	0	0	0	0	0	0	0	0	**21**
Total	**26**	**4,210**	**1,630**	**46**	**1,347**	**16**	**0**	**3**	**1**	**0**	**0**	**0**	**1**	**7,280**
Percent	**0.4%**	**57.8%**	**22.4%**	**0.6%**	**18.5%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Wednesday, September 21, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	11	2	2	2	0	0	0	0	0	0	0	0	**17**
1:00 AM	0	4	0	0	3	0	0	0	0	0	0	0	0	**7**
2:00 AM	0	1	0	1	1	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	4	3	3	0	0	0	0	0	0	0	0	0	**10**
4:00 AM	0	11	3	0	2	0	0	0	0	0	0	0	0	**16**
5:00 AM	0	27	12	1	2	1	0	0	0	0	0	0	0	**43**
6:00 AM	0	75	35	1	5	0	0	0	1	0	0	0	0	**117**
7:00 AM	1	162	63	1	26	2	0	0	0	0	0	0	0	**255**
8:00 AM	1	262	76	2	25	0	0	0	0	1	0	0	0	**367**
9:00 AM	1	221	62	1	23	0	0	0	1	0	0	0	0	**309**
10:00 AM	1	285	84	1	28	1	0	0	0	1	0	0	0	**401**
11:00 AM	1	315	85	3	33	0	0	0	0	0	0	0	0	**437**
12:00 PM	2	335	93	1	34	0	0	1	1	0	0	0	0	**467**
1:00 PM	1	381	95	3	27	0	0	0	0	0	0	0	0	**507**
2:00 PM	2	458	108	1	33	2	0	0	0	1	0	0	0	**605**
3:00 PM	0	429	125	1	45	2	0	0	0	0	0	0	0	**602**
4:00 PM	3	528	158	2	60	4	0	0	1	0	0	0	0	**756**
5:00 PM	2	694	168	4	62	0	0	1	1	1	0	0	0	**933**
6:00 PM	5	451	121	2	44	1	0	0	0	0	0	0	0	**624**
7:00 PM	1	251	57	0	21	0	0	1	0	0	0	0	0	**331**
8:00 PM	1	122	24	2	12	0	0	0	0	0	0	0	0	**161**
9:00 PM	2	48	13	1	9	0	0	0	0	0	0	0	0	**73**
10:00 PM	0	24	12	1	3	0	0	0	0	0	0	0	0	**40**
11:00 PM	0	20	3	0	3	0	0	0	0	0	0	0	0	**26**
Total	**24**	**5,119**	**1,402**	**34**	**503**	**13**	**0**	**3**	**5**	**4**	**0**	**0**	**0**	**7,107**
Percent	**0.3%**	**72.0%**	**19.7%**	**0.5%**	**7.1%**	**0.2%**	**0.0%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Wednesday, September 21, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	6	1	1	2	0	0	0	0	0	0	0	0	**10**
1:00 AM	0	5	1	0	3	0	0	0	0	0	0	0	0	**9**
2:00 AM	0	6	0	0	1	0	0	0	0	0	0	0	0	**7**
3:00 AM	1	4	0	0	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	1	6	3	1	7	0	0	0	0	0	0	0	0	**18**
5:00 AM	0	46	19	3	25	1	0	0	0	0	0	0	0	**94**
6:00 AM	1	125	71	4	120	0	0	0	0	0	0	0	0	**321**
7:00 AM	1	382	144	3	167	0	0	0	0	1	0	0	0	**698**
8:00 AM	2	370	163	3	155	1	0	0	0	0	0	0	0	**694**
9:00 AM	2	229	94	0	102	1	0	0	0	0	0	0	0	**428**
10:00 AM	1	242	98	1	73	1	0	0	0	0	0	0	0	**416**
11:00 AM	1	281	97	1	91	0	0	0	0	0	0	0	1	**472**
12:00 PM	1	297	91	0	92	1	0	1	0	0	0	0	0	**483**
1:00 PM	1	328	122	6	74	0	0	1	1	1	0	0	0	**534**
2:00 PM	2	324	106	2	90	0	0	2	0	0	0	0	0	**526**
3:00 PM	1	357	111	1	80	1	0	0	0	0	0	0	0	**551**
4:00 PM	1	311	117	1	78	2	0	1	0	0	0	0	0	**511**
5:00 PM	1	310	92	1	65	0	0	0	1	1	0	0	0	**471**
6:00 PM	0	271	65	0	51	0	0	2	0	0	0	0	0	**389**
7:00 PM	0	186	60	1	42	0	0	1	0	0	0	0	0	**290**
8:00 PM	2	101	39	4	29	0	0	0	0	0	0	0	0	**175**
9:00 PM	0	60	22	1	20	0	0	0	0	0	0	0	0	**103**
10:00 PM	0	37	9	0	8	0	0	0	0	0	0	0	0	**54**
11:00 PM	0	13	6	1	4	0	0	0	0	0	0	0	0	**24**
Total	**19**	**4,297**	**1,531**	**35**	**1,379**	**8**	**0**	**8**	**2**	**3**	**0**	**0**	**1**	**7,283**
Percent	**0.3%**	**59.0%**	**21.0%**	**0.5%**	**18.9%**	**0.1%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Thursday, September 22, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	17	3	0	5	0	0	0	0	0	0	0	0	**25**
1:00 AM	0	3	0	0	2	0	0	0	0	0	0	0	0	**5**
2:00 AM	0	1	0	1	1	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	8	1	0	2	0	0	0	0	0	0	0	0	**11**
4:00 AM	0	9	6	0	2	0	0	0	0	0	0	0	0	**17**
5:00 AM	1	26	12	0	2	0	0	0	0	0	0	0	0	**41**
6:00 AM	0	54	22	3	9	0	0	0	1	0	0	0	0	**89**
7:00 AM	1	155	48	1	24	1	0	0	1	0	0	0	1	**232**
8:00 AM	0	248	70	1	23	0	0	0	0	0	0	0	0	**342**
9:00 AM	0	242	75	2	17	4	0	0	0	0	0	0	0	**340**
10:00 AM	1	259	73	0	36	1	0	1	0	0	0	0	0	**371**
11:00 AM	2	277	82	3	28	0	0	0	1	0	0	0	0	**393**
12:00 PM	3	387	84	0	39	1	0	0	0	0	0	0	0	**514**
1:00 PM	0	343	92	3	30	0	0	0	0	0	0	0	0	**468**
2:00 PM	1	365	98	3	38	0	0	0	0	0	0	0	0	**505**
3:00 PM	0	515	138	3	38	2	0	0	1	1	0	0	0	**698**
4:00 PM	3	569	158	2	54	1	0	0	0	1	0	0	0	**788**
5:00 PM	1	678	173	2	72	0	0	1	0	0	0	0	0	**927**
6:00 PM	0	430	119	2	44	2	0	0	1	0	0	0	0	**598**
7:00 PM	1	219	49	2	21	0	0	0	0	0	0	0	0	**292**
8:00 PM	0	137	37	3	12	0	0	0	0	0	0	0	0	**189**
9:00 PM	0	105	19	2	9	0	0	0	0	0	0	0	0	**135**
10:00 PM	0	38	9	1	4	0	0	0	0	0	0	0	0	**52**
11:00 PM	0	26	3	1	2	0	0	0	0	0	0	0	0	**32**
Total	**14**	**5,111**	**1,371**	**35**	**514**	**12**	**0**	**2**	**5**	**2**	**0**	**0**	**1**	**7,067**
Percent	**0.2%**	**72.3%**	**19.4%**	**0.5%**	**7.3%**	**0.2%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Thursday, September 22, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	4	4	0	4	0	0	0	0	0	0	0	0	**12**
1:00 AM	0	8	1	0	3	0	0	0	0	0	0	0	0	**12**
2:00 AM	0	2	5	0	1	0	0	0	0	0	0	0	0	**8**
3:00 AM	0	5	1	0	1	0	0	0	0	0	0	0	0	**7**
4:00 AM	0	7	5	2	6	0	0	0	0	0	0	0	0	**20**
5:00 AM	0	42	20	4	26	0	0	0	0	0	0	0	0	**92**
6:00 AM	2	133	67	4	96	3	0	0	0	0	0	0	0	**305**
7:00 AM	0	355	123	2	167	0	0	1	1	0	0	0	0	**649**
8:00 AM	0	371	164	3	136	2	0	2	0	0	0	0	0	**678**
9:00 AM	0	204	118	0	101	1	0	0	0	0	0	0	0	**424**
10:00 AM	4	227	93	3	86	2	0	0	0	0	0	0	0	**415**
11:00 AM	1	262	105	0	90	1	0	1	0	0	0	0	0	**460**
12:00 PM	2	292	109	3	81	1	0	1	1	0	0	0	0	**490**
1:00 PM	1	271	108	2	81	1	0	0	0	0	0	0	0	**464**
2:00 PM	1	296	120	2	65	1	0	0	0	0	0	0	0	**485**
3:00 PM	0	371	117	1	87	0	0	0	0	0	0	1	0	**577**
4:00 PM	0	359	119	2	70	1	0	1	0	0	0	0	0	**552**
5:00 PM	1	327	104	1	68	0	0	1	1	0	0	0	0	**503**
6:00 PM	1	270	71	0	55	0	0	0	0	0	0	0	0	**397**
7:00 PM	0	232	70	2	47	0	0	0	0	0	0	0	0	**351**
8:00 PM	0	135	33	2	37	0	0	0	0	0	0	0	0	**207**
9:00 PM	1	73	28	1	20	0	0	0	0	0	0	0	0	**123**
10:00 PM	0	24	17	0	14	0	0	0	0	0	0	0	0	**55**
11:00 PM	0	15	4	2	0	0	0	0	0	0	0	0	0	**21**
Total	**14**	**4,285**	**1,606**	**36**	**1,342**	**13**	**0**	**7**	**3**	**0**	**0**	**1**	**0**	**7,307**
Percent	**0.2%**	**58.6%**	**22.0%**	**0.5%**	**18.4%**	**0.2%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Friday, September 23, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	13	3	1	3	0	0	0	0	0	0	0	0	**20**
1:00 AM	0	4	1	1	1	0	0	0	0	0	0	0	0	**7**
2:00 AM	0	2	1	1	1	0	0	0	0	0	0	0	0	**5**
3:00 AM	0	5	0	1	2	0	0	0	0	0	0	0	0	**8**
4:00 AM	0	6	3	0	1	0	0	0	0	0	0	0	0	**10**
5:00 AM	0	18	12	0	5	0	0	0	0	0	0	0	0	**35**
6:00 AM	0	57	22	1	10	0	0	0	0	0	0	0	1	**91**
7:00 AM	1	173	47	1	17	2	0	0	0	0	0	0	0	**241**
8:00 AM	1	229	65	0	21	3	0	0	0	0	0	1	0	**320**
9:00 AM	0	235	57	1	22	0	0	0	1	0	0	0	0	**316**
10:00 AM	0	243	73	2	28	1	0	0	0	1	0	0	0	**348**
11:00 AM	0	369	91	3	24	1	0	1	0	0	0	0	0	**489**
12:00 PM	0	375	105	1	37	1	0	0	0	0	0	0	0	**519**
1:00 PM	1	357	101	1	33	1	0	1	0	0	0	0	0	**495**
2:00 PM	3	340	83	3	41	0	0	0	0	0	0	0	0	**470**
3:00 PM	2	587	111	2	41	1	0	0	0	0	0	0	0	**744**
4:00 PM	1	611	165	2	57	0	0	0	0	0	0	0	0	**836**
5:00 PM	0	597	151	2	48	1	0	1	0	0	0	0	0	**800**
6:00 PM	2	431	104	1	31	0	0	0	1	0	0	0	0	**570**
7:00 PM	1	258	60	3	29	0	0	1	0	0	0	0	0	**352**
8:00 PM	1	141	45	4	13	0	0	0	0	0	0	0	0	**204**
9:00 PM	0	129	24	3	14	0	0	0	0	0	0	0	0	**170**
10:00 PM	0	106	16	0	8	0	0	0	0	0	0	0	0	**130**
11:00 PM	0	33	11	1	1	0	0	0	0	0	0	0	0	**46**
Total	**13**	**5,319**	**1,351**	**35**	**488**	**11**	**0**	**4**	**2**	**1**	**0**	**1**	**1**	**7,226**
Percent	**0.2%**	**73.6%**	**18.7%**	**0.5%**	**6.8%**	**0.2%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Friday, September 23, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	12	1	0	2	0	0	0	0	0	0	0	0	**15**
1:00 AM	1	3	5	0	1	0	0	0	0	0	0	0	0	**10**
2:00 AM	0	1	1	0	1	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	1	4	0	1	0	0	0	0	0	0	0	0	**6**
4:00 AM	0	7	2	3	2	0	0	0	0	0	0	0	0	**14**
5:00 AM	0	27	17	3	26	1	0	0	0	0	0	0	0	**74**
6:00 AM	0	134	55	2	89	1	0	0	0	0	0	0	0	**281**
7:00 AM	1	320	121	2	132	1	0	0	1	0	0	0	0	**578**
8:00 AM	1	294	116	1	106	1	0	0	0	0	0	0	0	**519**
9:00 AM	0	246	99	1	91	4	0	1	0	0	0	0	0	**442**
10:00 AM	1	328	135	1	113	2	0	0	0	1	0	0	1	**582**
11:00 AM	3	282	107	1	67	1	0	0	0	1	0	0	0	**462**
12:00 PM	1	298	94	1	74	2	0	0	0	0	0	0	0	**470**
1:00 PM	3	283	107	5	76	2	0	2	0	1	0	0	0	**479**
2:00 PM	3	321	128	2	94	1	0	0	0	0	0	0	0	**549**
3:00 PM	1	404	113	2	64	1	0	0	0	0	0	0	0	**585**
4:00 PM	2	360	110	1	71	1	0	0	0	0	0	0	0	**545**
5:00 PM	3	327	97	1	56	0	0	0	0	0	0	0	1	**485**
6:00 PM	4	307	99	0	79	0	0	0	0	0	0	0	0	**489**
7:00 PM	1	205	72	0	37	0	0	0	0	0	0	0	0	**315**
8:00 PM	1	134	39	4	30	0	0	0	0	0	0	0	0	**208**
9:00 PM	0	79	32	1	25	0	0	0	0	0	0	0	0	**137**
10:00 PM	0	53	16	0	17	0	0	0	0	0	0	0	0	**86**
11:00 PM	0	17	6	0	8	0	0	0	0	0	0	0	0	**31**
Total	**26**	**4,443**	**1,576**	**31**	**1,262**	**18**	**0**	**3**	**1**	**3**	**0**	**0**	**2**	**7,365**
Percent	**0.4%**	**60.3%**	**21.4%**	**0.4%**	**17.1%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Total Study Average
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	15	2	1	3	0	0	0	0	0	0	0	0	**21**
1:00 AM	0	7	1	1	2	0	0	0	0	0	0	0	0	**11**
2:00 AM	0	6	1	1	1	0	0	0	0	0	0	0	0	**9**
3:00 AM	0	6	2	1	1	0	0	0	0	0	0	0	0	**10**
4:00 AM	0	8	4	0	1	0	0	0	0	0	0	0	0	**13**
5:00 AM	0	21	8	1	2	0	0	0	0	0	0	0	0	**32**
6:00 AM	0	54	25	1	7	0	0	0	0	0	0	0	0	**87**
7:00 AM	1	139	40	1	20	1	0	0	0	0	0	0	0	**202**
8:00 AM	1	204	56	1	19	1	0	0	0	0	0	0	0	**282**
9:00 AM	1	217	62	2	20	1	0	0	0	0	0	0	0	**303**
10:00 AM	1	265	73	1	27	1	0	0	0	0	0	0	0	**368**
11:00 AM	1	333	84	3	29	0	0	0	0	0	0	0	0	**450**
12:00 PM	2	364	94	1	32	1	0	0	0	0	0	0	0	**494**
1:00 PM	2	350	87	2	30	0	0	0	0	0	0	0	0	**471**
2:00 PM	2	378	91	2	35	1	0	0	0	0	0	0	0	**509**
3:00 PM	2	444	111	2	34	1	0	0	0	0	0	0	0	**594**
4:00 PM	2	494	134	3	48	1	0	0	0	0	0	0	0	**682**
5:00 PM	3	549	144	2	49	0	0	1	0	0	0	0	0	**748**
6:00 PM	1	385	102	2	38	1	0	0	1	0	0	0	0	**530**
7:00 PM	1	225	52	2	22	0	0	0	0	0	0	0	0	**302**
8:00 PM	1	124	31	3	10	0	0	0	0	0	0	0	0	**169**
9:00 PM	0	82	16	3	8	0	0	0	0	0	0	0	0	**109**
10:00 PM	0	47	9	1	5	0	0	0	0	0	0	0	0	**62**
11:00 PM	0	22	5	1	2	0	0	0	0	0	0	0	0	**30**
Total	**21**	**4,739**	**1,234**	**38**	**445**	**9**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**6,488**
Percent	**0.3%**	**73.0%**	**19.0%**	**0.6%**	**6.9%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Total Study Average
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	10	3	0	2	0	0	0	0	0	0	0	0	**15**
1:00 AM	0	6	3	0	2	0	0	0	0	0	0	0	0	**11**
2:00 AM	0	5	2	0	1	0	0	0	0	0	0	0	0	**8**
3:00 AM	0	3	2	0	1	0	0	0	0	0	0	0	0	**6**
4:00 AM	0	6	4	3	4	0	0	0	0	0	0	0	0	**17**
5:00 AM	0	32	14	4	21	0	0	0	0	0	0	0	0	**71**
6:00 AM	1	101	52	4	81	1	0	0	0	0	0	0	0	**240**
7:00 AM	1	277	107	2	123	0	0	0	1	0	0	0	0	**511**
8:00 AM	1	304	128	2	109	2	0	0	0	0	0	0	0	**546**
9:00 AM	1	202	96	1	82	1	0	0	0	0	0	0	0	**383**
10:00 AM	2	240	99	2	82	1	0	0	0	0	0	0	0	**426**
11:00 AM	2	277	105	1	85	1	0	0	0	0	0	0	1	**472**
12:00 PM	2	317	105	1	87	1	0	0	0	0	0	0	0	**513**
1:00 PM	2	316	124	5	92	1	0	1	0	0	0	0	0	**541**
2:00 PM	2	321	116	2	82	1	0	0	0	0	0	0	0	**524**
3:00 PM	2	366	120	1	82	1	0	0	0	0	0	0	0	**572**
4:00 PM	2	323	116	1	72	1	0	1	0	0	0	0	0	**516**
5:00 PM	1	310	98	2	65	0	0	0	1	0	0	0	0	**477**
6:00 PM	2	260	76	1	59	0	0	0	0	0	0	0	0	**398**
7:00 PM	1	192	60	1	45	0	0	0	0	0	0	0	0	**299**
8:00 PM	1	115	39	3	27	0	0	0	0	0	0	0	0	**185**
9:00 PM	0	68	30	1	22	0	0	0	0	0	0	0	0	**121**
10:00 PM	0	37	14	0	11	0	0	0	0	0	0	0	0	**62**
11:00 PM	0	14	6	1	4	0	0	0	0	0	0	0	0	**25**
Total	**23**	**4,102**	**1,519**	**38**	**1,241**	**11**	**0**	**2**	**2**	**0**	**0**	**0**	**1**	**6,939**
Percent	**0.3%**	**59.1%**	**21.9%**	**0.5%**	**17.9%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

3-Day (Tuesday - Thursday) Average
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	13	2	1	3	0	0	0	0	0	0	0	0	**19**
1:00 AM	0	3	0	1	2	0	0	0	0	0	0	0	0	**5**
2:00 AM	0	1	0	1	1	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	5	2	1	1	0	0	0	0	0	0	0	0	**9**
4:00 AM	0	9	5	0	2	0	0	0	0	0	0	0	0	**16**
5:00 AM	0	27	10	1	2	0	0	0	0	0	0	0	0	**40**
6:00 AM	0	65	32	2	6	0	0	0	1	0	0	0	0	**107**
7:00 AM	1	161	53	1	25	1	0	0	0	0	0	0	0	**243**
8:00 AM	1	250	65	1	22	1	0	0	0	0	0	0	0	**339**
9:00 AM	1	231	68	2	24	1	0	0	0	0	0	0	0	**327**
10:00 AM	1	270	77	0	29	1	0	1	0	0	0	0	0	**379**
11:00 AM	1	304	83	3	30	0	0	0	0	0	0	0	0	**421**
12:00 PM	3	360	85	1	35	1	0	0	0	0	0	0	0	**486**
1:00 PM	1	349	100	2	28	0	0	0	0	0	0	0	0	**480**
2:00 PM	1	383	97	2	35	1	0	0	0	0	0	0	0	**519**
3:00 PM	1	480	129	2	40	2	0	0	1	0	0	0	0	**655**
4:00 PM	3	543	154	2	56	2	0	0	0	0	0	0	0	**761**
5:00 PM	3	673	176	2	63	0	0	1	0	0	0	0	0	**918**
6:00 PM	2	453	137	2	49	1	0	0	1	0	0	0	0	**645**
7:00 PM	1	231	58	1	23	1	0	0	0	0	0	0	0	**315**
8:00 PM	0	117	30	2	10	0	0	0	0	0	0	0	0	**160**
9:00 PM	1	74	16	2	7	0	0	0	0	0	0	0	0	**99**
10:00 PM	0	31	9	1	4	0	0	0	0	0	0	0	0	**45**
11:00 PM	0	18	3	1	2	0	0	0	0	0	0	0	0	**24**
Total	**19**	**5,051**	**1,390**	**35**	**499**	**13**	**0**	**3**	**5**	**2**	**0**	**0**	**0**	**7,016**
Percent	**0.3%**	**72.0%**	**19.8%**	**0.5%**	**7.1%**	**0.2%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

3-Day (Tuesday - Thursday) Average
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	6	2	1	2	0	0	0	0	0	0	0	0	**11**
1:00 AM	0	5	1	0	3	0	0	0	0	0	0	0	0	**8**
2:00 AM	0	4	2	0	1	0	0	0	0	0	0	0	0	**7**
3:00 AM	1	3	1	0	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	7	5	2	6	0	0	0	0	0	0	0	0	**21**
5:00 AM	0	43	17	4	26	0	0	0	0	0	0	0	0	**90**
6:00 AM	1	127	71	4	114	1	0	0	0	0	0	0	0	**319**
7:00 AM	1	378	139	2	161	0	0	0	0	0	0	0	0	**683**
8:00 AM	3	404	164	3	142	3	0	1	0	0	0	0	0	**719**
9:00 AM	1	224	105	1	95	1	0	0	0	0	0	0	0	**427**
10:00 AM	2	229	100	2	85	1	0	0	0	0	0	0	0	**420**
11:00 AM	1	264	97	1	88	0	0	1	0	0	0	0	1	**453**
12:00 PM	2	294	109	1	83	1	0	1	0	0	0	0	0	**491**
1:00 PM	1	284	113	5	84	1	0	0	0	0	0	0	0	**489**
2:00 PM	1	298	111	2	80	1	0	1	0	0	0	0	0	**493**
3:00 PM	1	348	119	1	86	1	0	0	0	0	0	0	0	**558**
4:00 PM	1	328	117	1	74	1	0	1	0	0	0	0	0	**523**
5:00 PM	1	331	100	1	66	0	0	0	1	0	0	0	0	**500**
6:00 PM	1	266	73	0	53	0	0	1	0	0	0	0	0	**393**
7:00 PM	0	205	61	1	45	0	0	0	0	0	0	0	0	**313**
8:00 PM	1	110	39	3	30	0	0	0	0	0	0	0	0	**183**
9:00 PM	0	61	27	1	19	0	0	0	0	0	0	0	0	**109**
10:00 PM	0	30	12	0	12	0	0	0	0	0	0	0	0	**54**
11:00 PM	0	13	5	2	2	0	0	0	0	0	0	0	0	**22**
Total	**20**	**4,264**	**1,589**	**39**	**1,356**	**12**	**0**	**6**	**2**	**1**	**0**	**0**	**1**	**7,290**
Percent	**0.3%**	**58.5%**	**21.8%**	**0.5%**	**18.6%**	**0.2%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Vehicle Speed Report Summary

Location: Midland Ave BTWN 8th St & E Wulfsohn

Count Direction: Northbound / Southbound

Date Range: 9/17/2022 to 9/23/2022

Site Code: 05

	Speed Range (mph)																	Total
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
Study Total																		
Northbound	0	5	112	2,274	17,473	21,238	4,026	290	31	4	4	1	0	0	0	0	0	45,458
Percent	0.0%	0.0%	0.2%	5.0%	38.4%	46.7%	8.9%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Southbound	111	219	399	2,281	10,524	19,903	12,321	2,533	308	36	2	1	0	0	0	0	0	48,638
Percent	0.2%	0.5%	0.8%	4.7%	21.6%	40.9%	25.3%	5.2%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	111	224	511	4,555	27,997	41,141	16,347	2,823	339	40	6	2	0	0	0	0	0	94,096
Percent	0.1%	0.2%	0.5%	4.8%	29.8%	43.7%	17.4%	3.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%

Total Study Percentile Speed Summary		
Northbound		
50th Percentile (Median)	30.5	mph
85th Percentile	34.0	mph
95th Percentile	36.4	mph
Southbound		
50th Percentile (Median)	32.7	mph
85th Percentile	37.5	mph
95th Percentile	40.4	mph

Total Study Speed Statistics		
Northbound		
Mean (Average) Speed	30.6	mph
10 mph Pace	25.7 - 35.7	mph
Percent in Pace	85.6	%
Southbound		
Mean (Average) Speed	32.6	mph
10 mph Pace	28.0 - 38.0	mph
Percent in Pace	71.1	%

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Saturday, September 17, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	1	17	10	1	1	0	0	0	0	0	0	0	0	0	**30**
1:00 AM	0	0	0	2	8	6	2	0	1	0	0	0	0	0	0	0	0	**19**
2:00 AM	0	0	0	1	10	10	1	1	0	0	0	0	0	0	0	0	0	**23**
3:00 AM	0	0	0	0	7	3	3	0	0	0	0	0	0	0	0	0	0	**13**
4:00 AM	0	0	0	0	1	5	2	0	0	0	0	0	0	0	0	0	0	**8**
5:00 AM	0	0	0	0	10	16	1	0	0	0	0	0	0	0	0	0	0	**27**
6:00 AM	0	0	0	4	17	26	10	2	0	0	1	0	0	0	0	0	0	**60**
7:00 AM	0	0	0	1	25	70	20	0	0	0	0	0	0	0	0	0	0	**116**
8:00 AM	0	0	0	4	52	106	24	1	0	0	0	0	0	0	0	0	0	**187**
9:00 AM	0	0	0	7	91	152	39	0	0	0	0	0	0	0	0	0	0	**289**
10:00 AM	0	0	0	7	162	217	36	1	0	0	0	0	0	0	0	0	0	**423**
11:00 AM	0	0	0	26	136	281	48	3	0	0	0	0	0	0	0	0	0	**494**
12:00 PM	0	0	0	20	191	262	56	2	0	0	0	0	0	0	0	0	0	**531**
1:00 PM	0	0	0	6	116	303	59	1	0	0	0	0	0	0	0	0	0	**485**
2:00 PM	0	0	0	13	137	289	64	2	1	1	0	0	0	0	0	0	0	**507**
3:00 PM	0	0	0	13	77	227	70	5	1	0	0	0	0	0	0	0	0	**393**
4:00 PM	0	0	0	18	106	241	75	6	0	0	0	0	0	0	0	0	0	**446**
5:00 PM	0	0	0	9	129	200	55	6	1	0	0	0	0	0	0	0	0	**400**
6:00 PM	0	0	0	8	118	166	41	3	0	0	0	0	0	0	0	0	0	**336**
7:00 PM	0	0	0	21	121	117	30	1	0	0	0	0	0	0	0	0	0	**290**
8:00 PM	0	0	1	10	72	79	25	2	0	0	0	0	0	0	0	0	0	**189**
9:00 PM	0	0	1	10	49	54	5	1	1	0	0	0	0	0	0	0	0	**121**
10:00 PM	0	0	0	3	27	34	12	1	0	0	0	0	0	0	0	0	0	**77**
11:00 PM	0	0	0	1	22	22	9	0	0	0	0	0	0	0	0	0	0	**54**
Total	**0**	**0**	**2**	**185**	**1,701**	**2,896**	**688**	**39**	**5**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**5,518**
Percent	**0.0%**	**0.0%**	**0.0%**	**3.4%**	**30.8%**	**52.5%**	**12.5%**	**0.7%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	31.3	mph	Mean (Average) Speed	31.3	mph
85th Percentile	34.7	mph	10 mph Pace	26.6 - 36.6	mph
95th Percentile	36.8	mph	Percent in Pace	86.1	%

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Saturday, September 17, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	1	9	6	2	5	0	0	0	0	0	0	0	0	0	**23**
1:00 AM	0	0	0	0	5	8	0	0	0	0	0	0	0	0	0	0	0	**13**
2:00 AM	0	0	0	1	1	5	2	2	0	0	0	0	0	0	0	0	0	**11**
3:00 AM	0	0	0	0	3	2	1	1	0	0	0	0	0	0	0	0	0	**7**
4:00 AM	0	0	0	2	5	1	3	3	0	0	0	0	0	0	0	0	0	**14**
5:00 AM	0	0	0	0	8	13	10	4	0	1	0	0	0	0	0	0	0	**36**
6:00 AM	0	0	0	4	11	33	26	13	6	0	0	0	0	0	0	0	0	**93**
7:00 AM	0	0	0	2	12	77	70	21	5	3	0	0	0	0	0	0	0	**190**
8:00 AM	0	0	0	6	57	77	85	22	2	0	0	0	0	0	0	0	0	**249**
9:00 AM	0	1	4	7	54	120	102	30	5	0	0	0	0	0	0	0	0	**323**
10:00 AM	0	0	1	5	70	163	124	33	1	0	0	0	0	0	0	0	0	**397**
11:00 AM	0	0	0	13	84	181	132	26	3	1	0	0	0	0	0	0	0	**440**
12:00 PM	0	0	0	8	105	196	154	31	1	0	0	0	0	0	0	0	0	**495**
1:00 PM	0	0	0	9	60	209	202	35	4	0	0	0	0	0	0	0	0	**519**
2:00 PM	0	0	0	4	79	211	170	41	6	0	0	0	0	0	0	0	0	**511**
3:00 PM	0	1	3	3	66	209	164	36	2	0	0	0	0	0	0	0	0	**484**
4:00 PM	0	0	0	3	92	189	153	44	4	1	0	0	0	0	0	0	0	**486**
5:00 PM	0	0	1	24	63	159	152	32	4	1	0	0	0	0	0	0	0	**436**
6:00 PM	0	0	2	12	67	145	117	36	3	0	0	0	0	0	0	0	0	**382**
7:00 PM	0	0	1	11	41	128	82	9	2	0	0	0	0	0	0	0	0	**274**
8:00 PM	0	0	0	4	36	76	36	14	2	1	0	0	0	0	0	0	0	**169**
9:00 PM	0	0	0	3	31	53	60	17	1	0	0	0	0	0	0	0	0	**165**
10:00 PM	0	0	1	1	23	22	16	8	2	0	0	0	0	0	0	0	0	**73**
11:00 PM	0	0	0	3	11	9	14	3	0	0	0	0	0	0	0	0	0	**40**
Total	**0**	**2**	**13**	**126**	**993**	**2,292**	**1,877**	**466**	**53**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5,830**
Percent	**0.0%**	**0.0%**	**0.2%**	**2.2%**	**17.0%**	**39.3%**	**32.2%**	**8.0%**	**0.9%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	33.9	mph	Mean (Average) Speed	33.9	mph
85th Percentile	38.7	mph	10 mph Pace	28.6 - 38.6	mph
95th Percentile	41.6	mph	Percent in Pace	72.85	%

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Sunday, September 18, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	2	12	15	3	0	0	0	1	0	0	0	0	0	0	**33**
1:00 AM	0	0	0	4	8	7	4	0	0	0	0	0	0	0	0	0	0	**23**
2:00 AM	0	0	0	1	9	13	2	2	0	0	0	0	0	0	0	0	0	**27**
3:00 AM	0	0	0	1	4	6	2	0	0	0	0	0	0	0	0	0	0	**13**
4:00 AM	0	0	0	0	4	8	0	1	0	0	0	0	0	0	0	0	0	**13**
5:00 AM	0	0	0	1	2	10	0	0	0	0	0	0	0	0	0	0	0	**13**
6:00 AM	0	0	0	0	10	21	6	2	1	0	0	0	0	0	0	0	0	**40**
7:00 AM	0	0	0	2	20	29	15	3	0	0	0	0	0	0	0	0	0	**69**
8:00 AM	0	0	0	3	29	52	19	4	0	0	0	0	0	0	0	0	0	**107**
9:00 AM	0	0	0	6	54	124	44	3	0	0	0	0	0	0	0	0	0	**231**
10:00 AM	0	0	0	5	87	173	28	0	0	0	0	0	0	0	0	0	0	**293**
11:00 AM	0	0	0	4	118	223	53	2	0	0	0	0	0	0	0	0	0	**400**
12:00 PM	0	0	0	11	127	234	47	5	0	0	0	0	0	0	0	0	0	**424**
1:00 PM	0	0	0	11	133	231	51	5	0	0	0	0	0	0	0	0	0	**431**
2:00 PM	0	0	0	11	97	261	64	5	0	0	0	0	0	0	0	0	0	**438**
3:00 PM	0	0	0	5	52	218	73	5	1	0	0	0	0	0	0	0	0	**354**
4:00 PM	0	0	0	13	81	175	68	4	0	0	0	0	0	0	0	0	0	**341**
5:00 PM	0	0	0	11	127	142	33	6	0	0	0	0	0	0	0	0	0	**319**
6:00 PM	0	0	0	10	90	132	32	1	0	0	0	0	0	0	0	0	0	**265**
7:00 PM	0	0	1	15	91	93	21	0	1	0	0	0	0	0	0	0	0	**222**
8:00 PM	0	0	0	6	72	55	9	3	1	0	0	1	0	0	0	0	0	**147**
9:00 PM	0	0	0	3	32	33	9	0	0	0	0	0	0	0	0	0	0	**77**
10:00 PM	0	0	0	1	11	30	11	2	0	0	0	0	0	0	0	0	0	**55**
11:00 PM	0	0	0	1	9	7	4	0	0	0	0	0	0	0	0	0	0	**21**
Total	**0**	**0**	**1**	**127**	**1,279**	**2,292**	**598**	**53**	**4**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**4,356**
Percent	**0.0%**	**0.0%**	**0.0%**	**2.9%**	**29.4%**	**52.6%**	**13.7%**	**1.2%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	31.5	mph	Mean (Average) Speed	31.6	mph
85th Percentile	35.0	mph	10 mph Pace	26.5 - 36.5	mph
95th Percentile	37.4	mph	Percent in Pace	85.6	%

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Sunday, September 18, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	1	3	10	3	1	1	1	0	0	0	0	0	0	0	**20**
1:00 AM	0	0	0	1	6	6	1	4	0	0	0	0	0	0	0	0	0	**18**
2:00 AM	0	0	0	1	3	5	3	1	0	0	0	0	0	0	0	0	0	**13**
3:00 AM	0	0	0	1	2	4	3	2	2	0	0	0	0	0	0	0	0	**14**
4:00 AM	0	0	0	0	6	5	2	1	0	0	0	0	0	0	0	0	0	**14**
5:00 AM	0	0	0	0	6	8	10	5	2	0	0	0	0	0	0	0	0	**31**
6:00 AM	0	0	1	1	8	18	21	5	3	1	0	0	0	0	0	0	0	**58**
7:00 AM	0	0	0	1	10	33	29	14	2	1	0	0	0	0	0	0	0	**90**
8:00 AM	0	0	1	2	15	47	69	24	6	0	0	0	0	0	0	0	0	**164**
9:00 AM	0	0	0	6	33	108	89	24	3	0	0	0	0	0	0	0	0	**263**
10:00 AM	0	0	0	4	39	110	130	27	4	0	0	0	0	0	0	0	0	**314**
11:00 AM	0	0	0	2	35	148	147	44	6	0	0	0	0	0	0	0	0	**382**
12:00 PM	0	0	0	6	68	156	137	37	3	0	0	0	0	0	0	0	0	**407**
1:00 PM	0	0	0	4	61	174	139	50	13	1	0	0	0	0	0	0	0	**442**
2:00 PM	0	0	0	0	31	141	193	47	7	0	0	0	0	0	0	0	0	**419**
3:00 PM	0	0	0	2	53	190	177	29	5	1	0	0	0	0	0	0	0	**457**
4:00 PM	0	0	0	2	69	148	132	37	4	0	0	0	0	0	0	0	0	**392**
5:00 PM	0	0	0	5	51	164	139	33	3	0	0	0	0	0	0	0	0	**395**
6:00 PM	0	0	0	4	62	142	95	23	1	0	0	0	0	0	0	0	0	**327**
7:00 PM	0	0	1	7	35	121	83	15	0	0	0	1	0	0	0	0	0	**263**
8:00 PM	0	0	0	9	36	74	39	12	0	0	0	0	0	0	0	0	0	**170**
9:00 PM	0	0	0	2	38	37	34	8	2	1	0	0	0	0	0	0	0	**122**
10:00 PM	0	0	0	1	11	22	12	7	0	1	0	0	0	0	0	0	0	**54**
11:00 PM	0	1	0	0	8	6	1	1	3	0	0	0	0	0	0	0	0	**20**
Total	**0**	**1**	**3**	**62**	**689**	**1,877**	**1,688**	**451**	**70**	**7**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**4,849**
Percent	**0.0%**	**0.0%**	**0.1%**	**1.3%**	**14.2%**	**38.7%**	**34.8%**	**9.3%**	**1.4%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	34.4	mph	Mean (Average) Speed	34.5	mph
85th Percentile	39.0	mph	10 mph Pace	29.4 - 39.4	mph
95th Percentile	41.9	mph	Percent in Pace	74.55	%

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Monday, September 19, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	1	9	2	1	0	0	0	0	0	0	0	0	0	0	**13**
1:00 AM	0	0	0	0	2	4	1	0	0	0	0	0	0	0	0	0	0	**7**
2:00 AM	0	0	0	2	2	1	1	0	0	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	0	0	0	3	4	1	0	0	0	0	0	0	0	0	0	0	**8**
4:00 AM	0	0	0	0	4	6	1	0	0	0	0	0	0	0	0	0	0	**11**
5:00 AM	0	0	0	0	10	16	8	1	0	0	0	0	0	0	0	0	0	**35**
6:00 AM	0	0	0	3	25	51	13	3	1	1	0	0	0	0	0	0	0	**97**
7:00 AM	0	0	0	12	95	120	25	6	0	0	0	0	0	0	0	0	0	**258**
8:00 AM	0	1	4	11	110	171	43	4	0	0	0	0	0	0	0	0	0	**344**
9:00 AM	0	0	0	5	95	162	42	0	0	0	0	0	0	0	0	0	0	**304**
10:00 AM	0	0	3	4	103	226	44	2	0	0	0	0	0	0	0	0	0	**382**
11:00 AM	0	0	1	22	184	243	50	4	0	0	0	0	0	0	0	0	0	**504**
12:00 PM	0	0	0	25	162	302	33	2	0	0	0	0	0	0	0	0	0	**524**
1:00 PM	0	0	0	14	168	213	52	2	1	0	0	0	0	0	0	0	0	**450**
2:00 PM	0	0	0	22	244	276	51	1	0	0	0	0	0	0	0	0	0	**594**
3:00 PM	0	0	0	30	220	407	47	1	0	0	0	0	0	0	0	0	0	**705**
4:00 PM	0	0	4	48	434	336	51	3	0	0	0	0	0	0	0	0	0	**876**
5:00 PM	0	0	0	73	493	345	51	3	0	0	0	0	0	0	0	0	0	**965**
6:00 PM	0	0	0	28	249	277	47	2	0	0	0	0	0	0	0	0	0	**603**
7:00 PM	0	0	3	17	150	113	23	4	0	0	0	0	0	0	0	0	0	**310**
8:00 PM	0	0	0	10	67	76	13	1	0	0	0	0	0	0	0	0	0	**167**
9:00 PM	0	0	0	0	32	48	7	3	0	0	0	0	0	0	0	0	0	**90**
10:00 PM	0	0	0	5	12	16	2	0	0	0	0	0	0	0	0	0	0	**35**
11:00 PM	0	0	0	3	5	10	2	0	1	0	0	0	0	0	0	0	0	**21**
Total	**0**	**1**	**15**	**335**	**2,878**	**3,425**	**609**	**42**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7,309**
Percent	**0.0%**	**0.0%**	**0.2%**	**4.6%**	**39.4%**	**46.9%**	**8.3%**	**0.6%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	30.5	mph	Mean (Average) Speed	30.5	mph
85th Percentile	33.9	mph	10 mph Pace	25.6 - 35.6	mph
95th Percentile	36.1	mph	Percent in Pace	86.7	%

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Monday, September 19, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	1	3	7	2	5	0	0	1	0	0	0	0	0	0	**19**
1:00 AM	0	0	0	1	5	5	1	0	0	0	0	0	0	0	0	0	0	**12**
2:00 AM	0	0	0	0	0	3	2	1	1	0	0	0	0	0	0	0	0	**7**
3:00 AM	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	0	2	3	4	1	1	1	0	0	0	0	0	0	0	0	**12**
5:00 AM	0	0	0	2	14	34	25	7	6	1	1	0	0	0	0	0	0	**90**
6:00 AM	0	0	1	7	39	115	84	32	5	3	0	0	0	0	0	0	0	**286**
7:00 AM	0	0	5	29	178	290	148	22	3	0	0	0	0	0	0	0	0	**675**
8:00 AM	24	32	60	42	159	284	119	16	1	0	0	0	0	0	0	0	0	**737**
9:00 AM	0	1	0	17	54	152	124	28	2	0	0	0	0	0	0	0	0	**378**
10:00 AM	0	0	1	29	85	190	101	21	2	0	0	0	0	0	0	0	0	**429**
11:00 AM	0	0	1	54	158	292	140	16	3	0	0	0	0	0	0	0	0	**664**
12:00 PM	0	1	6	44	199	355	131	16	4	0	0	0	0	0	0	0	0	**756**
1:00 PM	0	0	10	72	282	360	140	18	2	0	0	0	0	0	0	0	0	**884**
2:00 PM	0	0	1	46	180	278	177	32	4	1	0	0	0	0	0	0	0	**719**
3:00 PM	1	0	12	73	255	314	131	24	1	0	0	0	0	0	0	0	0	**811**
4:00 PM	0	0	3	24	149	314	108	23	2	0	0	0	0	0	0	0	0	**623**
5:00 PM	0	0	0	6	100	248	157	18	3	0	0	0	0	0	0	0	0	**532**
6:00 PM	0	0	0	2	61	193	126	32	2	0	0	0	0	0	0	0	0	**416**
7:00 PM	0	0	0	4	99	112	70	16	2	0	0	0	0	0	0	0	0	**303**
8:00 PM	0	0	0	7	42	82	47	15	0	1	0	0	0	0	0	0	0	**194**
9:00 PM	0	0	0	5	19	43	24	7	0	0	0	0	0	0	0	0	0	**98**
10:00 PM	0	0	0	0	15	27	9	3	0	0	0	0	0	0	0	0	0	**54**
11:00 PM	0	0	0	2	5	8	3	3	1	0	0	0	0	0	0	0	0	**22**
Total	**25**	**34**	**100**	**470**	**2,104**	**3,711**	**1,870**	**357**	**45**	**6**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**8,724**
Percent	**0.3%**	**0.4%**	**1.1%**	**5.4%**	**24.1%**	**42.5%**	**21.4%**	**4.1%**	**0.5%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	32.2	mph	Mean (Average) Speed	32	mph
85th Percentile	36.8	mph	10 mph Pace	27.0 - 37.0	mph
95th Percentile	39.8	mph	Percent in Pace	72.11	%

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Tuesday, September 20, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	1	7	4	4	0	0	0	0	0	0	0	0	0	0	**16**
1:00 AM	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	0	0	1	2	4	0	0	0	0	0	0	0	0	0	0	0	**7**
4:00 AM	0	0	1	0	4	5	3	0	1	0	0	0	0	0	0	0	0	**14**
5:00 AM	0	0	0	2	12	23	0	0	0	0	0	0	0	0	0	0	0	**37**
6:00 AM	0	0	0	3	32	62	16	1	0	0	0	0	0	0	0	0	0	**114**
7:00 AM	0	0	2	13	77	129	17	4	0	0	0	0	0	0	0	0	0	**242**
8:00 AM	0	0	6	23	119	138	21	2	0	0	0	0	0	0	0	0	0	**309**
9:00 AM	0	0	1	4	113	174	38	2	0	0	0	0	0	0	0	0	0	**332**
10:00 AM	0	0	0	4	153	174	31	2	1	0	0	0	0	0	0	0	0	**365**
11:00 AM	0	0	0	15	149	230	37	3	0	0	0	0	0	0	0	0	0	**434**
12:00 PM	0	0	5	28	183	216	40	3	1	0	0	0	0	0	0	0	0	**476**
1:00 PM	0	0	0	23	171	225	43	4	0	0	0	0	0	0	0	0	0	**466**
2:00 PM	0	0	0	32	194	192	26	3	0	0	0	0	0	0	0	0	0	**447**
3:00 PM	0	0	0	45	307	266	45	2	0	0	0	0	0	0	0	0	0	**665**
4:00 PM	0	2	12	39	318	317	47	3	0	0	0	0	0	0	0	0	0	**738**
5:00 PM	0	0	0	54	444	359	37	0	0	0	0	0	0	0	0	0	0	**894**
6:00 PM	0	0	2	68	315	296	31	2	0	0	0	0	0	0	0	0	0	**714**
7:00 PM	0	0	0	9	157	136	19	0	0	0	0	0	0	0	0	0	0	**321**
8:00 PM	0	0	0	7	36	65	21	1	0	0	0	0	0	0	0	0	0	**130**
9:00 PM	0	0	0	6	34	38	11	1	0	0	0	0	0	0	0	0	0	**90**
10:00 PM	0	0	0	1	13	19	9	1	0	0	0	0	0	0	0	0	0	**43**
11:00 PM	0	0	0	3	6	4	1	0	0	0	0	0	0	0	0	0	0	**14**
Total	**0**	**2**	**29**	**382**	**2,848**	**3,079**	**498**	**34**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6,875**
Percent	**0.0%**	**0.0%**	**0.4%**	**5.6%**	**41.4%**	**44.8%**	**7.2%**	**0.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	30.2	mph	Mean (Average) Speed	30.3	mph
85th Percentile	33.7	mph	10 mph Pace	25.2 - 35.2	mph
95th Percentile	35.9	mph	Percent in Pace	86.1	%

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Tuesday, September 20, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	1	6	3	0	0	0	0	0	0	0	0	0	0	**10**
1:00 AM	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	0	0	0	1	1	2	1	0	0	0	0	0	0	0	0	0	**5**
3:00 AM	0	1	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	0	0	1	7	8	3	6	0	0	0	0	0	0	0	0	0	**25**
5:00 AM	0	0	0	0	14	27	33	8	3	0	0	0	0	0	0	0	0	**85**
6:00 AM	0	0	0	3	76	149	73	24	5	0	0	0	0	0	0	0	0	**330**
7:00 AM	0	0	2	59	224	296	108	13	1	0	0	0	0	0	0	0	0	**703**
8:00 AM	63	132	114	166	145	112	42	11	0	0	0	0	0	0	0	0	0	**785**
9:00 AM	0	0	0	7	73	210	116	20	1	1	0	0	0	0	0	0	0	**428**
10:00 AM	0	0	3	41	111	163	89	20	1	0	0	0	0	0	0	0	0	**428**
11:00 AM	0	1	5	10	72	183	137	14	4	1	0	0	0	0	0	0	0	**427**
12:00 PM	0	0	3	39	132	214	92	18	3	0	0	0	0	0	0	0	0	**501**
1:00 PM	1	4	5	32	99	180	128	18	2	0	0	0	0	0	0	0	0	**469**
2:00 PM	0	1	0	31	83	204	116	29	4	0	0	0	0	0	0	0	0	**468**
3:00 PM	0	0	2	38	116	227	143	19	0	0	0	0	0	0	0	0	0	**545**
4:00 PM	0	0	8	11	95	220	137	33	1	1	0	0	0	0	0	0	0	**506**
5:00 PM	0	0	0	11	105	229	161	18	2	0	0	0	0	0	0	0	0	**526**
6:00 PM	0	0	1	13	88	175	101	13	1	0	0	0	0	0	0	0	0	**392**
7:00 PM	0	0	0	11	87	122	69	8	1	0	0	0	0	0	0	0	0	**298**
8:00 PM	0	0	0	7	43	71	41	4	1	0	0	0	0	0	0	0	0	**167**
9:00 PM	0	0	0	6	21	37	28	7	0	1	0	0	0	0	0	0	0	**100**
10:00 PM	0	0	0	2	15	22	9	5	0	0	0	0	0	0	0	0	0	**53**
11:00 PM	0	0	0	5	8	4	4	0	0	0	0	0	0	0	0	0	0	**21**
Total	**64**	**139**	**143**	**493**	**1,620**	**2,862**	**1,636**	**289**	**30**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7,280**
Percent	**0.9%**	**1.9%**	**2.0%**	**6.8%**	**22.3%**	**39.3%**	**22.5%**	**4.0%**	**0.4%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	32.2	mph	Mean (Average) Speed	31.4	mph
85th Percentile	36.9	mph	10 mph Pace	27.7 - 37.7	mph
95th Percentile	39.6	mph	Percent in Pace	67.79	%

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Wednesday, September 21, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	1	6	6	4	0	0	0	0	0	0	0	0	0	0	**17**
1:00 AM	0	0	0	0	2	0	3	1	1	0	0	0	0	0	0	0	0	**7**
2:00 AM	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	0	0	0	4	4	2	0	0	0	0	0	0	0	0	0	0	**10**
4:00 AM	0	0	0	0	5	7	3	1	0	0	0	0	0	0	0	0	0	**16**
5:00 AM	0	0	0	1	11	25	6	0	0	0	0	0	0	0	0	0	0	**43**
6:00 AM	0	0	0	10	39	50	16	2	0	0	0	0	0	0	0	0	0	**117**
7:00 AM	0	0	0	11	71	130	40	3	0	0	0	0	0	0	0	0	0	**255**
8:00 AM	0	0	0	7	100	212	42	5	1	0	0	0	0	0	0	0	0	**367**
9:00 AM	0	0	0	5	146	131	26	1	0	0	0	0	0	0	0	0	0	**309**
10:00 AM	0	0	0	33	175	169	23	1	0	0	0	0	0	0	0	0	0	**401**
11:00 AM	0	0	0	34	180	183	36	3	1	0	0	0	0	0	0	0	0	**437**
12:00 PM	0	0	1	48	204	182	31	1	0	0	0	0	0	0	0	0	0	**467**
1:00 PM	0	0	0	29	201	241	32	4	0	0	0	0	0	0	0	0	0	**507**
2:00 PM	0	0	1	47	256	273	27	1	0	0	0	0	0	0	0	0	0	**605**
3:00 PM	0	0	0	74	252	234	40	2	0	0	0	0	0	0	0	0	0	**602**
4:00 PM	0	0	7	96	406	208	36	3	0	0	0	0	0	0	0	0	0	**756**
5:00 PM	0	0	14	125	473	291	28	2	0	0	0	0	0	0	0	0	0	**933**
6:00 PM	0	0	0	32	309	242	39	0	2	0	0	0	0	0	0	0	0	**624**
7:00 PM	0	0	0	18	147	145	19	2	0	0	0	0	0	0	0	0	0	**331**
8:00 PM	0	0	0	8	70	69	12	2	0	0	0	0	0	0	0	0	0	**161**
9:00 PM	0	0	0	2	26	38	6	1	0	0	0	0	0	0	0	0	0	**73**
10:00 PM	0	0	0	2	10	20	8	0	0	0	0	0	0	0	0	0	0	**40**
11:00 PM	0	0	0	1	5	12	7	0	0	1	0	0	0	0	0	0	0	**26**
Total	**0**	**0**	**23**	**584**	**3,100**	**2,873**	**486**	**35**	**5**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7,107**
Percent	**0.0%**	**0.0%**	**0.3%**	**8.2%**	**43.6%**	**40.4%**	**6.8%**	**0.5%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	29.9	mph	Mean (Average) Speed	29.9	mph
85th Percentile	33.4	mph	10 mph Pace	24.9 - 34.9	mph
95th Percentile	35.8	mph	Percent in Pace	84.1	%

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Wednesday, September 21, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	1	1	5	2	0	1	0	0	0	0	0	0	0	0	**10**
1:00 AM	0	0	0	0	3	3	2	0	0	1	0	0	0	0	0	0	0	**9**
2:00 AM	0	0	0	1	1	2	2	1	0	0	0	0	0	0	0	0	0	**7**
3:00 AM	0	1	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	0	1	0	6	3	5	3	0	0	0	0	0	0	0	0	0	**18**
5:00 AM	0	0	0	1	9	45	24	13	1	1	0	0	0	0	0	0	0	**94**
6:00 AM	0	0	0	10	56	114	94	42	4	1	0	0	0	0	0	0	0	**321**
7:00 AM	0	0	19	108	229	210	108	21	3	0	0	0	0	0	0	0	0	**698**
8:00 AM	0	0	2	44	207	278	145	15	3	0	0	0	0	0	0	0	0	**694**
9:00 AM	2	3	7	33	102	189	81	11	0	0	0	0	0	0	0	0	0	**428**
10:00 AM	6	10	2	39	107	138	92	19	3	0	0	0	0	0	0	0	0	**416**
11:00 AM	0	0	2	44	124	187	97	18	0	0	0	0	0	0	0	0	0	**472**
12:00 PM	0	3	3	24	115	214	114	9	1	0	0	0	0	0	0	0	0	**483**
1:00 PM	0	0	3	24	170	208	108	18	3	0	0	0	0	0	0	0	0	**534**
2:00 PM	0	0	3	21	154	225	104	19	0	0	0	0	0	0	0	0	0	**526**
3:00 PM	0	0	2	34	151	243	110	10	1	0	0	0	0	0	0	0	0	**551**
4:00 PM	0	0	4	12	140	220	121	14	0	0	0	0	0	0	0	0	0	**511**
5:00 PM	0	0	0	8	82	237	126	18	0	0	0	0	0	0	0	0	0	**471**
6:00 PM	0	0	0	3	59	194	105	25	3	0	0	0	0	0	0	0	0	**389**
7:00 PM	0	0	1	11	68	141	62	6	0	1	0	0	0	0	0	0	0	**290**
8:00 PM	0	0	0	4	71	65	32	1	2	0	0	0	0	0	0	0	0	**175**
9:00 PM	0	0	0	11	30	41	13	6	2	0	0	0	0	0	0	0	0	**103**
10:00 PM	0	0	0	2	21	19	10	2	0	0	0	0	0	0	0	0	0	**54**
11:00 PM	0	0	0	0	4	11	6	3	0	0	0	0	0	0	0	0	0	**24**
Total	**8**	**17**	**49**	**435**	**1,911**	**2,995**	**1,563**	**274**	**27**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7,283**
Percent	**0.1%**	**0.2%**	**0.7%**	**6.0%**	**26.2%**	**41.1%**	**21.5%**	**3.8%**	**0.4%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	31.9	mph	Mean (Average) Speed	31.9	mph
85th Percentile	36.8	mph	10 mph Pace	27.4 - 37.4	mph
95th Percentile	39.5	mph	Percent in Pace	71.73	%

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Thursday, September 22, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	1	11	10	2	0	1	0	0	0	0	0	0	0	0	**25**
1:00 AM	0	0	0	1	2	1	0	0	1	0	0	0	0	0	0	0	0	**5**
2:00 AM	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	0	0	2	4	4	1	0	0	0	0	0	0	0	0	0	0	**11**
4:00 AM	0	0	0	0	7	7	3	0	0	0	0	0	0	0	0	0	0	**17**
5:00 AM	0	0	0	0	14	20	5	2	0	0	0	0	0	0	0	0	0	**41**
6:00 AM	0	0	0	4	26	41	16	2	0	0	0	0	0	0	0	0	0	**89**
7:00 AM	0	0	0	5	83	123	20	1	0	0	0	0	0	0	0	0	0	**232**
8:00 AM	0	0	0	10	103	187	37	5	0	0	0	0	0	0	0	0	0	**342**
9:00 AM	0	0	2	39	151	116	28	4	0	0	0	0	0	0	0	0	0	**340**
10:00 AM	0	0	3	18	141	162	46	1	0	0	0	0	0	0	0	0	0	**371**
11:00 AM	0	0	0	13	182	174	23	1	0	0	0	0	0	0	0	0	0	**393**
12:00 PM	0	0	1	38	216	224	31	4	0	0	0	0	0	0	0	0	0	**514**
1:00 PM	0	0	6	28	165	224	41	4	0	0	0	0	0	0	0	0	0	**468**
2:00 PM	0	0	1	21	190	256	35	2	0	0	0	0	0	0	0	0	0	**505**
3:00 PM	0	0	4	67	290	301	31	3	2	0	0	0	0	0	0	0	0	**698**
4:00 PM	0	0	0	22	333	381	49	3	0	0	0	0	0	0	0	0	0	**788**
5:00 PM	0	0	0	21	424	426	55	1	0	0	0	0	0	0	0	0	0	**927**
6:00 PM	0	0	4	18	262	262	46	6	0	0	0	0	0	0	0	0	0	**598**
7:00 PM	0	0	1	12	145	121	12	1	0	0	0	0	0	0	0	0	0	**292**
8:00 PM	0	0	0	6	85	86	11	1	0	0	0	0	0	0	0	0	0	**189**
9:00 PM	0	0	0	6	43	71	13	0	2	0	0	0	0	0	0	0	0	**135**
10:00 PM	0	0	0	3	14	29	4	2	0	0	0	0	0	0	0	0	0	**52**
11:00 PM	0	0	0	2	4	21	4	1	0	0	0	0	0	0	0	0	0	**32**
Total	**0**	**0**	**22**	**337**	**2,896**	**3,248**	**514**	**44**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7,067**
Percent	**0.0%**	**0.0%**	**0.3%**	**4.8%**	**41.0%**	**46.0%**	**7.3%**	**0.6%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	30.3	mph	Mean (Average) Speed	30.4	mph
85th Percentile	33.7	mph	10 mph Pace	25.2 - 35.2	mph
95th Percentile	36.0	mph	Percent in Pace	86.9	%

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Thursday, September 22, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	4	3	4	1	0	0	0	0	0	0	0	0	0	**12**
1:00 AM	0	0	0	1	4	4	1	2	0	0	0	0	0	0	0	0	0	**12**
2:00 AM	0	0	0	1	2	1	1	0	3	0	0	0	0	0	0	0	0	**8**
3:00 AM	0	0	0	0	1	1	4	0	1	0	0	0	0	0	0	0	0	**7**
4:00 AM	0	0	0	2	4	11	3	0	0	0	0	0	0	0	0	0	0	**20**
5:00 AM	0	0	0	4	10	34	25	15	4	0	0	0	0	0	0	0	0	**92**
6:00 AM	0	0	1	11	38	117	104	26	7	1	0	0	0	0	0	0	0	**305**
7:00 AM	0	0	4	48	176	271	124	24	1	1	0	0	0	0	0	0	0	**649**
8:00 AM	0	2	13	96	217	228	104	17	1	0	0	0	0	0	0	0	0	**678**
9:00 AM	0	0	0	21	73	188	123	16	3	0	0	0	0	0	0	0	0	**424**
10:00 AM	0	0	4	21	107	168	96	18	1	0	0	0	0	0	0	0	0	**415**
11:00 AM	0	0	2	27	95	192	116	27	1	0	0	0	0	0	0	0	0	**460**
12:00 PM	0	7	4	31	118	187	111	29	3	0	0	0	0	0	0	0	0	**490**
1:00 PM	0	0	0	29	111	215	94	15	0	0	0	0	0	0	0	0	0	**464**
2:00 PM	0	0	1	20	110	213	122	18	1	0	0	0	0	0	0	0	0	**485**
3:00 PM	0	0	6	32	153	253	114	17	2	0	0	0	0	0	0	0	0	**577**
4:00 PM	0	0	0	6	106	250	163	23	4	0	0	0	0	0	0	0	0	**552**
5:00 PM	1	3	2	18	90	234	134	20	1	0	0	0	0	0	0	0	0	**503**
6:00 PM	0	1	0	6	59	167	139	22	3	0	0	0	0	0	0	0	0	**397**
7:00 PM	0	0	0	3	81	156	85	23	2	1	0	0	0	0	0	0	0	**351**
8:00 PM	0	0	0	9	43	93	51	8	3	0	0	0	0	0	0	0	0	**207**
9:00 PM	0	0	0	9	32	38	34	8	2	0	0	0	0	0	0	0	0	**123**
10:00 PM	0	0	0	2	12	20	18	3	0	0	0	0	0	0	0	0	0	**55**
11:00 PM	0	0	0	1	3	8	6	2	0	1	0	0	0	0	0	0	0	**21**
Total	**1**	**13**	**37**	**398**	**1,649**	**3,052**	**1,776**	**334**	**43**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7,307**
Percent	**0.0%**	**0.2%**	**0.5%**	**5.4%**	**22.6%**	**41.8%**	**24.3%**	**4.6%**	**0.6%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	32.5	mph	Mean (Average) Speed	32.5	mph
85th Percentile	37.1	mph	10 mph Pace	28.0 - 38.0	mph
95th Percentile	40.2	mph	Percent in Pace	72.16	%

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Friday, September 23, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	2	9	8	1	0	0	0	0	0	0	0	0	0	0	**20**
1:00 AM	0	0	1	0	3	2	0	0	1	0	0	0	0	0	0	0	0	**7**
2:00 AM	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	**5**
3:00 AM	0	0	0	0	3	1	4	0	0	0	0	0	0	0	0	0	0	**8**
4:00 AM	0	0	0	0	3	5	2	0	0	0	0	0	0	0	0	0	0	**10**
5:00 AM	0	0	0	1	17	11	5	1	0	0	0	0	0	0	0	0	0	**35**
6:00 AM	0	0	0	6	31	39	11	2	0	1	1	0	0	0	0	0	0	**91**
7:00 AM	0	0	2	13	94	99	29	3	0	0	1	0	0	0	0	0	0	**241**
8:00 AM	0	2	2	1	75	174	64	2	0	0	0	0	0	0	0	0	0	**320**
9:00 AM	0	0	3	9	100	179	24	1	0	0	0	0	0	0	0	0	0	**316**
10:00 AM	0	0	0	16	133	148	45	5	1	0	0	0	0	0	0	0	0	**348**
11:00 AM	0	0	6	12	181	233	52	5	0	0	0	0	0	0	0	0	0	**489**
12:00 PM	0	0	0	22	219	234	39	5	0	0	0	0	0	0	0	0	0	**519**
1:00 PM	0	0	1	18	133	287	54	2	0	0	0	0	0	0	0	0	0	**495**
2:00 PM	0	0	0	17	162	245	44	2	0	0	0	0	0	0	0	0	0	**470**
3:00 PM	0	0	1	44	311	342	44	2	0	0	0	0	0	0	0	0	0	**744**
4:00 PM	0	0	0	48	317	416	51	4	0	0	0	0	0	0	0	0	0	**836**
5:00 PM	0	0	1	27	347	369	52	4	0	0	0	0	0	0	0	0	0	**800**
6:00 PM	0	0	0	10	237	269	51	0	3	0	0	0	0	0	0	0	0	**570**
7:00 PM	0	0	3	25	152	146	26	0	0	0	0	0	0	0	0	0	0	**352**
8:00 PM	0	0	0	32	74	81	15	2	0	0	0	0	0	0	0	0	0	**204**
9:00 PM	0	0	0	12	91	54	12	1	0	0	0	0	0	0	0	0	0	**170**
10:00 PM	0	0	0	7	56	60	6	1	0	0	0	0	0	0	0	0	0	**130**
11:00 PM	0	0	0	2	19	22	2	1	0	0	0	0	0	0	0	0	0	**46**
Total	**0**	**2**	**20**	**324**	**2,771**	**3,425**	**633**	**43**	**5**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**7,226**
Percent	**0.0%**	**0.0%**	**0.3%**	**4.5%**	**38.3%**	**47.4%**	**8.8%**	**0.6%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	30.5	mph	Mean (Average) Speed	30.6	mph
85th Percentile	34.1	mph	10 mph Pace	25.7 - 35.7	mph
95th Percentile	36.2	mph	Percent in Pace	86.7	%

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Friday, September 23, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	5	9	0	1	0	0	0	0	0	0	0	0	0	**15**
1:00 AM	0	0	0	1	2	6	1	0	0	0	0	0	0	0	0	0	0	**10**
2:00 AM	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	1	0	0	1	1	1	2	0	0	0	0	0	0	0	0	0	**6**
4:00 AM	0	0	2	0	4	3	2	1	2	0	0	0	0	0	0	0	0	**14**
5:00 AM	0	0	0	4	13	27	22	7	1	0	0	0	0	0	0	0	0	**74**
6:00 AM	0	0	0	11	45	87	111	20	6	1	0	0	0	0	0	0	0	**281**
7:00 AM	0	0	19	48	131	237	111	29	3	0	0	0	0	0	0	0	0	**578**
8:00 AM	0	0	4	13	121	216	136	26	3	0	0	0	0	0	0	0	0	**519**
9:00 AM	6	7	5	17	73	166	130	38	0	0	0	0	0	0	0	0	0	**442**
10:00 AM	7	5	12	42	163	219	110	18	6	0	0	0	0	0	0	0	0	**582**
11:00 AM	0	0	4	29	87	210	112	18	2	0	0	0	0	0	0	0	0	**462**
12:00 PM	0	0	2	20	149	186	100	11	1	1	0	0	0	0	0	0	0	**470**
1:00 PM	0	0	2	22	90	201	132	29	3	0	0	0	0	0	0	0	0	**479**
2:00 PM	0	0	1	15	105	260	142	25	1	0	0	0	0	0	0	0	0	**549**
3:00 PM	0	0	0	27	131	277	130	18	2	0	0	0	0	0	0	0	0	**585**
4:00 PM	0	0	0	16	85	233	177	32	2	0	0	0	0	0	0	0	0	**545**
5:00 PM	0	0	3	6	81	207	161	24	2	1	0	0	0	0	0	0	0	**485**
6:00 PM	0	0	0	15	111	213	128	21	1	0	0	0	0	0	0	0	0	**489**
7:00 PM	0	0	0	4	69	156	79	6	1	0	0	0	0	0	0	0	0	**315**
8:00 PM	0	0	0	2	33	87	64	21	1	0	0	0	0	0	0	0	0	**208**
9:00 PM	0	0	0	2	25	70	32	5	3	0	0	0	0	0	0	0	0	**137**
10:00 PM	0	0	0	2	26	29	21	8	0	0	0	0	0	0	0	0	0	**86**
11:00 PM	0	0	0	1	7	13	8	2	0	0	0	0	0	0	0	0	0	**31**
Total	**13**	**13**	**54**	**297**	**1,558**	**3,114**	**1,911**	**362**	**40**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7,365**
Percent	**0.2%**	**0.2%**	**0.7%**	**4.0%**	**21.2%**	**42.3%**	**25.9%**	**4.9%**	**0.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	32.8	mph	Mean (Average) Speed	32.7	mph
85th Percentile	37.5	mph	10 mph Pace	28.0 - 38.0	mph
95th Percentile	40.3	mph	Percent in Pace	73.37	%

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Total Study Average
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	1	10	8	2	0	0	0	0	0	0	0	0	0	0	**21**
1:00 AM	0	0	0	1	4	3	2	0	1	0	0	0	0	0	0	0	0	**11**
2:00 AM	0	0	0	1	4	4	1	0	0	0	0	0	0	0	0	0	0	**10**
3:00 AM	0	0	0	1	4	4	2	0	0	0	0	0	0	0	0	0	0	**11**
4:00 AM	0	0	0	0	4	6	2	0	0	0	0	0	0	0	0	0	0	**12**
5:00 AM	0	0	0	1	11	17	4	1	0	0	0	0	0	0	0	0	0	**34**
6:00 AM	0	0	0	4	26	41	13	2	0	0	0	0	0	0	0	0	0	**86**
7:00 AM	0	0	1	8	66	100	24	3	0	0	0	0	0	0	0	0	0	**202**
8:00 AM	0	0	2	8	84	149	36	3	0	0	0	0	0	0	0	0	0	**282**
9:00 AM	0	0	1	11	107	148	34	2	0	0	0	0	0	0	0	0	0	**303**
10:00 AM	0	0	1	12	136	181	36	2	0	0	0	0	0	0	0	0	0	**368**
11:00 AM	0	0	1	18	161	224	43	3	0	0	0	0	0	0	0	0	0	**450**
12:00 PM	0	0	1	27	186	236	40	3	0	0	0	0	0	0	0	0	0	**493**
1:00 PM	0	0	1	18	155	246	47	3	0	0	0	0	0	0	0	0	0	**470**
2:00 PM	0	0	0	23	183	256	44	2	0	0	0	0	0	0	0	0	0	**508**
3:00 PM	0	0	1	40	216	285	50	3	1	0	0	0	0	0	0	0	0	**596**
4:00 PM	0	0	3	41	285	296	54	4	0	0	0	0	0	0	0	0	0	**683**
5:00 PM	0	0	2	46	348	305	44	3	0	0	0	0	0	0	0	0	0	**748**
6:00 PM	0	0	1	25	226	235	41	2	1	0	0	0	0	0	0	0	0	**531**
7:00 PM	0	0	1	17	138	124	21	1	0	0	0	0	0	0	0	0	0	**302**
8:00 PM	0	0	0	11	68	73	15	2	0	0	0	0	0	0	0	0	0	**169**
9:00 PM	0	0	0	6	44	48	9	1	0	0	0	0	0	0	0	0	0	**108**
10:00 PM	0	0	0	3	20	30	7	1	0	0	0	0	0	0	0	0	0	**61**
11:00 PM	0	0	0	2	10	14	4	0	0	0	0	0	0	0	0	0	0	**30**
Total	**0**	**0**	**16**	**325**	**2,496**	**3,033**	**575**	**41**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6,489**
Percent	**0.0%**	**0.0%**	**0.2%**	**5.0%**	**38.5%**	**46.7%**	**8.9%**	**0.6%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	30.5	mph	Mean (Average) Speed	30.6	mph
85th Percentile	34.0	mph	10 mph Pace	25.7 - 35.7	mph
95th Percentile	36.4	mph	Percent in Pace	85.6	%

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 05

Total Study Average
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	1	4	7	2	2	0	0	0	0	0	0	0	0	0	**16**
1:00 AM	0	0	0	1	4	5	1	1	0	0	0	0	0	0	0	0	0	**12**
2:00 AM	0	0	0	1	1	3	2	1	1	0	0	0	0	0	0	0	0	**9**
3:00 AM	0	0	0	0	1	2	1	1	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	0	0	1	5	5	3	2	0	0	0	0	0	0	0	0	0	**16**
5:00 AM	0	0	0	2	11	27	21	8	2	0	0	0	0	0	0	0	0	**71**
6:00 AM	0	0	0	7	39	90	73	23	5	1	0	0	0	0	0	0	0	**238**
7:00 AM	0	0	7	42	137	202	100	21	3	1	0	0	0	0	0	0	0	**513**
8:00 AM	12	24	28	53	132	177	100	19	2	0	0	0	0	0	0	0	0	**547**
9:00 AM	1	2	2	15	66	162	109	24	2	0	0	0	0	0	0	0	0	**383**
10:00 AM	2	2	3	26	97	164	106	22	3	0	0	0	0	0	0	0	0	**425**
11:00 AM	0	0	2	26	94	199	126	23	3	0	0	0	0	0	0	0	0	**473**
12:00 PM	0	2	3	25	127	215	120	22	2	0	0	0	0	0	0	0	0	**516**
1:00 PM	0	1	3	27	125	221	135	26	4	0	0	0	0	0	0	0	0	**542**
2:00 PM	0	0	1	20	106	219	146	30	3	0	0	0	0	0	0	0	0	**525**
3:00 PM	0	0	4	30	132	245	138	22	2	0	0	0	0	0	0	0	0	**573**
4:00 PM	0	0	2	11	105	225	142	29	2	0	0	0	0	0	0	0	0	**516**
5:00 PM	0	0	1	11	82	211	147	23	2	0	0	0	0	0	0	0	0	**477**
6:00 PM	0	0	0	8	72	176	116	25	2	0	0	0	0	0	0	0	0	**399**
7:00 PM	0	0	0	7	69	134	76	12	1	0	0	0	0	0	0	0	0	**299**
8:00 PM	0	0	0	6	43	78	44	11	1	0	0	0	0	0	0	0	0	**183**
9:00 PM	0	0	0	5	28	46	32	8	1	0	0	0	0	0	0	0	0	**120**
10:00 PM	0	0	0	1	18	23	14	5	0	0	0	0	0	0	0	0	0	**61**
11:00 PM	0	0	0	2	7	8	6	2	1	0	0	0	0	0	0	0	0	**26**
Total	**15**	**31**	**56**	**328**	**1,505**	**2,844**	**1,760**	**362**	**42**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6,945**
Percent	**0.2%**	**0.4%**	**0.8%**	**4.7%**	**21.7%**	**41.0%**	**25.3%**	**5.2%**	**0.6%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	32.7	mph	Mean (Average) Speed	32.6	mph
85th Percentile	37.5	mph	10 mph Pace	28.0 - 38.0	mph
95th Percentile	40.4	mph	Percent in Pace	71.1	%

Location: Midland Ave BTWN 8th St & E Wulfsohn
Date Range: 9/17/2022 - 9/23/2022
Site Code: 05

	Saturday			Sunday			Monday			Tuesday			Wednesday			Thursday			Friday			Mid-Week Average		
	9/17/2022			9/18/2022			9/19/2022			9/20/2022			9/21/2022			9/22/2022			9/23/2022					
Time	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total
12:00 AM	30	23	53	33	20	53	13	19	32	16	10	26	17	10	27	25	12	37	20	15	35	19	11	30
1:00 AM	19	13	32	23	18	41	7	12	19	4	4	8	7	9	16	5	12	17	7	10	17	5	8	14
2:00 AM	23	11	34	27	13	40	6	7	13	3	5	8	3	7	10	3	8	11	5	3	8	3	7	10
3:00 AM	13	7	20	13	14	27	8	3	11	7	4	11	10	5	15	11	7	18	8	6	14	9	5	15
4:00 AM	8	14	22	13	14	27	11	12	23	14	25	39	16	18	34	17	20	37	10	14	24	16	21	37
5:00 AM	27	36	63	13	31	44	35	90	125	37	85	122	43	94	137	41	92	133	35	74	109	40	90	131
6:00 AM	60	93	153	40	58	98	97	286	383	114	330	444	117	321	438	89	305	394	91	281	372	107	319	425
7:00 AM	116	190	306	69	90	159	258	675	933	242	703	945	255	698	953	232	649	881	241	578	819	243	683	926
8:00 AM	187	249	436	107	164	271	344	737	1,081	309	785	1,094	367	694	1,061	342	678	1,020	320	519	839	339	719	1,058
9:00 AM	289	323	612	231	263	494	304	378	682	332	428	760	309	428	737	340	424	764	316	442	758	327	427	754
10:00 AM	423	397	820	293	314	607	382	429	811	365	428	793	401	416	817	371	415	786	348	582	930	379	420	799
11:00 AM	494	440	934	400	382	782	504	664	1,168	434	427	861	437	472	909	393	460	853	489	462	951	421	453	874
12:00 PM	531	495	1,026	424	407	831	524	756	1,280	476	501	977	467	483	950	514	490	1,004	519	470	989	486	491	977
1:00 PM	485	519	1,004	431	442	873	450	884	1,334	466	469	935	507	534	1,041	468	464	932	495	479	974	480	489	969
2:00 PM	507	511	1,018	438	419	857	594	719	1,313	447	468	915	605	526	1,131	505	485	990	470	549	1,019	519	493	1,012
3:00 PM	393	484	877	354	457	811	705	811	1,516	665	545	1,210	602	551	1,153	698	577	1,275	744	585	1,329	655	558	1,213
4:00 PM	446	486	932	341	392	733	876	623	1,499	738	506	1,244	756	511	1,267	788	552	1,340	836	545	1,381	761	523	1,284
5:00 PM	400	436	836	319	395	714	965	532	1,497	894	526	1,420	933	471	1,404	927	503	1,430	800	485	1,285	918	500	1,418
6:00 PM	336	382	718	265	327	592	603	416	1,019	714	392	1,106	624	389	1,013	598	397	995	570	489	1,059	645	393	1,038
7:00 PM	290	274	564	222	263	485	310	303	613	321	298	619	331	290	621	292	351	643	352	315	667	315	313	628
8:00 PM	189	169	358	147	170	317	167	194	361	130	167	297	161	175	336	189	207	396	204	208	412	160	183	343
9:00 PM	121	165	286	77	122	199	90	98	188	90	100	190	73	103	176	135	123	258	170	137	307	99	109	208
10:00 PM	77	73	150	55	54	109	35	54	89	43	53	96	40	54	94	52	55	107	130	86	216	45	54	99
11:00 PM	54	40	94	21	20	41	21	22	43	14	21	35	26	24	50	32	21	53	46	31	77	24	22	46
Total	**5,518**	**5,830**	**11,348**	**4,356**	**4,849**	**9,205**	**7,309**	**8,724**	**16,033**	**6,875**	**7,280**	**14,155**	**7,107**	**7,283**	**14,390**	**7,067**	**7,307**	**14,374**	**7,226**	**7,365**	**14,591**	**7,016**	**7,290**	**14,306**
Percent	**49%**	**51%**	-	**47%**	**53%**	-	**46%**	**54%**	-	**49%**	**51%**	-	**49%**	**51%**	-	**49%**	**51%**	-	**50%**	**50%**	-	**49%**	**51%**	-

1. Mid-week average includes data between Tuesday and Thursday.

Vehicle Classification Report Summary

Location: Midland Ave BTWN E Wulfsohn & E Meadows

Count Direction: Northbound / Southbound

Date Range: 9/27/2022 to 10/3/2022

Site Code: 06

	FHWA Vehicle Classification													Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
Study Total														
Northbound	88	26,191	7,705	42	3,505	150	0	17	29	6	0	0	0	37,733
Percent	0.2%	69.4%	20.4%	0.1%	9.3%	0.4%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	100%
Southbound	15	18,754	13,397	59	8,583	108	0	37	23	4	0	0	4	40,984
Percent	0.0%	45.8%	32.7%	0.1%	20.9%	0.3%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	100%
Total	103	44,945	21,102	101	12,088	258	0	54	52	10	0	0	4	78,717
Percent	0.1%	57.1%	26.8%	0.1%	15.4%	0.3%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	100%

FHWA Vehicle Classification	
Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

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Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Tuesday, September 27, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	5	2	0	0	0	0	0	0	0	0	0	0	**7**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	3	0	0	1	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	6	3	0	0	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	17	8	0	5	0	0	0	0	0	0	0	0	**30**
6:00 AM	1	42	14	0	14	1	0	0	0	1	0	0	0	**73**
7:00 AM	0	161	47	0	20	0	0	0	0	0	0	0	0	**228**
8:00 AM	11	155	46	0	12	1	0	0	0	0	0	0	0	**225**
9:00 AM	0	171	66	0	27	2	0	0	0	0	0	0	0	**266**
10:00 AM	3	231	74	0	31	1	0	0	0	0	0	0	0	**340**
11:00 AM	0	233	77	1	34	2	0	0	1	1	0	0	0	**349**
12:00 PM	0	307	77	0	36	2	0	0	0	0	0	0	0	**422**
1:00 PM	1	279	86	2	33	4	0	1	0	0	0	0	0	**406**
2:00 PM	2	308	79	1	49	2	0	0	0	0	0	0	0	**441**
3:00 PM	0	395	116	0	43	1	0	0	0	0	0	0	0	**555**
4:00 PM	0	466	135	0	64	0	0	0	1	0	0	0	0	**666**
5:00 PM	3	505	170	0	82	1	0	1	0	0	0	0	0	**762**
6:00 PM	2	386	127	0	54	3	0	0	1	1	0	0	0	**574**
7:00 PM	1	168	59	0	19	0	0	0	0	0	0	0	0	**247**
8:00 PM	0	101	29	0	9	0	0	1	0	0	0	0	0	**140**
9:00 PM	0	40	10	1	4	0	0	0	0	0	0	0	0	**55**
10:00 PM	0	26	6	0	0	0	0	0	0	0	0	0	0	**32**
11:00 PM	0	10	4	0	1	0	0	0	0	0	0	0	0	**15**
Total	**24**	**4,017**	**1,235**	**5**	**538**	**20**	**0**	**3**	**3**	**3**	**0**	**0**	**0**	**5,848**
Percent	**0.4%**	**68.7%**	**21.1%**	**0.1%**	**9.2%**	**0.3%**	**0.0%**	**0.1%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	

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Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Tuesday, September 27, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	5	3	0	1	0	0	0	0	0	0	0	0	**9**
1:00 AM	0	1	2	0	1	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	2	0	0	1	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	5	2	0	3	0	0	0	0	0	0	0	0	**10**
5:00 AM	0	24	18	0	24	1	0	0	0	0	0	0	0	**67**
6:00 AM	0	73	78	0	111	0	0	0	0	0	0	0	0	**262**
7:00 AM	0	230	197	0	155	1	0	0	0	0	0	0	0	**583**
8:00 AM	0	177	128	2	98	1	0	0	0	0	0	0	0	**406**
9:00 AM	0	144	109	1	105	1	0	1	0	0	0	0	0	**361**
10:00 AM	0	146	115	0	83	2	0	0	0	0	0	0	0	**346**
11:00 AM	0	193	122	1	69	4	0	1	0	0	0	0	0	**390**
12:00 PM	0	209	127	2	77	1	0	2	0	0	0	0	0	**418**
1:00 PM	0	201	110	0	80	1	0	0	1	0	0	0	0	**393**
2:00 PM	0	201	123	2	59	1	0	0	0	0	0	0	0	**386**
3:00 PM	0	254	134	1	86	2	0	1	0	0	0	0	0	**478**
4:00 PM	0	218	123	0	62	1	0	1	0	0	0	0	0	**405**
5:00 PM	0	228	127	0	73	2	0	0	0	0	0	0	0	**430**
6:00 PM	0	151	108	0	55	0	0	0	0	0	0	0	0	**314**
7:00 PM	0	143	71	0	50	0	0	0	0	0	0	0	0	**264**
8:00 PM	0	80	53	0	30	0	0	0	0	0	0	0	0	**163**
9:00 PM	0	47	30	0	11	0	0	0	0	0	0	0	0	**88**
10:00 PM	1	15	13	0	5	0	0	0	0	0	0	0	0	**34**
11:00 PM	0	7	1	0	3	0	0	0	0	0	0	0	0	**11**
Total	**1**	**2,756**	**1,795**	**9**	**1,242**	**18**	**0**	**6**	**1**	**0**	**0**	**0**	**0**	**5,828**
Percent	**0.0%**	**47.3%**	**30.8%**	**0.2%**	**21.3%**	**0.3%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

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Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Wednesday, September 28, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	9	2	1	0	0	0	0	0	0	0	0	0	**12**
1:00 AM	0	1	1	0	1	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	**4**
3:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	4	2	0	1	0	0	0	0	0	0	0	0	**7**
5:00 AM	0	17	7	0	2	0	0	0	1	0	0	0	0	**27**
6:00 AM	0	59	31	0	12	0	0	0	0	0	0	0	0	**102**
7:00 AM	1	156	43	0	30	1	0	0	0	0	0	0	0	**231**
8:00 AM	2	230	47	0	23	2	0	0	0	0	0	0	0	**304**
9:00 AM	1	149	66	0	22	0	0	0	3	0	0	0	0	**241**
10:00 AM	2	212	63	0	30	1	0	0	0	0	0	0	0	**308**
11:00 AM	1	254	76	0	39	0	0	0	1	0	0	0	0	**371**
12:00 PM	3	291	87	0	38	1	0	0	1	0	0	0	0	**421**
1:00 PM	2	283	88	1	49	2	0	0	1	0	0	0	0	**426**
2:00 PM	2	327	111	0	51	0	0	0	1	0	0	0	0	**492**
3:00 PM	1	359	123	1	47	0	0	0	1	0	0	0	0	**532**
4:00 PM	2	441	143	0	60	2	0	0	0	0	0	0	0	**648**
5:00 PM	4	527	148	0	66	1	0	1	0	0	0	0	0	**747**
6:00 PM	0	405	123	1	68	0	0	0	1	0	0	0	0	**598**
7:00 PM	2	240	66	0	28	0	0	0	0	1	0	0	0	**337**
8:00 PM	0	100	24	1	4	0	0	0	0	0	0	0	0	**129**
9:00 PM	0	36	11	1	7	1	0	0	0	0	0	0	0	**56**
10:00 PM	0	17	6	0	1	0	0	0	0	0	0	0	0	**24**
11:00 PM	0	10	4	0	0	0	0	0	0	0	0	0	0	**14**
Total	**23**	**4,132**	**1,273**	**6**	**579**	**11**	**0**	**1**	**10**	**1**	**0**	**0**	**0**	**6,036**
Percent	**0.4%**	**68.5%**	**21.1%**	**0.1%**	**9.6%**	**0.2%**	**0.0%**	**0.0%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

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Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Wednesday, September 28, 2022
Southbound

	FHWA Vehicle Classification													Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	7	2	0	0	0	0	0	0	0	0	0	0	**9**
1:00 AM	0	3	2	0	1	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	0	4	0	0	0	0	0	0	0	0	0	0	**4**
3:00 AM	0	2	3	0	2	0	0	0	0	0	0	0	0	**7**
4:00 AM	0	2	3	0	4	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	32	18	1	22	1	0	0	0	0	0	0	0	**74**
6:00 AM	0	97	65	0	79	1	0	0	0	0	0	0	0	**242**
7:00 AM	0	260	163	0	147	0	0	0	0	0	0	0	0	**570**
8:00 AM	0	249	184	0	166	3	0	0	1	0	0	0	0	**603**
9:00 AM	0	158	104	2	90	3	0	0	1	0	0	0	0	**358**
10:00 AM	0	154	115	0	81	0	0	0	1	0	0	0	1	**352**
11:00 AM	0	183	111	0	87	1	0	0	1	0	0	0	0	**383**
12:00 PM	0	184	145	0	80	1	0	0	1	0	0	0	0	**411**
1:00 PM	0	197	147	1	87	3	0	0	1	0	0	0	0	**436**
2:00 PM	0	211	144	1	81	1	0	1	0	0	0	0	0	**439**
3:00 PM	0	186	139	0	68	1	0	0	0	0	0	0	1	**395**
4:00 PM	0	229	141	0	77	1	0	1	0	0	0	0	0	**449**
5:00 PM	0	231	127	1	77	0	0	0	0	0	0	0	0	**436**
6:00 PM	0	152	94	1	61	0	0	1	0	0	0	0	0	**309**
7:00 PM	0	123	92	0	49	0	0	0	0	0	0	0	0	**264**
8:00 PM	1	78	50	0	24	0	0	0	0	0	0	0	0	**153**
9:00 PM	0	43	39	0	16	0	0	0	0	0	0	0	0	**98**
10:00 PM	0	20	11	0	11	0	0	0	0	0	0	0	0	**42**
11:00 PM	0	5	6	0	0	0	0	0	0	0	0	0	0	**11**
Total	**1**	**2,806**	**1,909**	**7**	**1,310**	**16**	**0**	**3**	**6**	**0**	**0**	**0**	**2**	**6,060**
Percent	**0.0%**	**46.3%**	**31.5%**	**0.1%**	**21.6%**	**0.3%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

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Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Thursday, September 29, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	5	4	0	2	0	0	0	0	0	0	0	0	**11**
1:00 AM	0	3	2	0	0	0	0	0	0	0	0	0	0	**5**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	5	2	0	1	0	0	0	0	0	0	0	0	**8**
5:00 AM	0	16	2	0	3	0	0	0	0	0	0	0	0	**21**
6:00 AM	0	40	22	0	8	0	0	0	0	0	0	0	0	**70**
7:00 AM	0	160	40	0	31	2	0	0	0	0	0	0	0	**233**
8:00 AM	2	227	52	0	28	3	0	0	0	0	0	0	0	**312**
9:00 AM	0	177	62	1	31	2	0	0	0	0	0	0	0	**273**
10:00 AM	0	242	67	1	36	4	0	0	0	0	0	0	0	**350**
11:00 AM	0	228	78	1	37	7	0	0	0	0	0	0	0	**351**
12:00 PM	0	313	57	1	34	4	0	0	0	0	0	0	0	**409**
1:00 PM	2	281	98	0	40	2	0	0	1	0	0	0	0	**424**
2:00 PM	0	277	79	2	43	2	0	0	0	0	0	0	0	**403**
3:00 PM	1	379	132	1	39	6	0	0	0	0	0	0	0	**558**
4:00 PM	0	472	122	0	67	1	0	0	2	0	0	0	0	**664**
5:00 PM	1	544	144	0	74	0	0	1	1	0	0	0	0	**765**
6:00 PM	2	413	129	0	68	1	0	0	1	0	0	0	0	**614**
7:00 PM	1	197	49	0	21	1	0	0	0	0	0	0	0	**269**
8:00 PM	0	68	23	1	9	0	0	0	0	0	0	0	0	**101**
9:00 PM	0	48	14	1	5	0	0	0	0	0	0	0	0	**68**
10:00 PM	0	26	7	0	2	0	0	0	0	0	0	0	0	**35**
11:00 PM	1	15	3	0	0	0	0	0	0	0	0	0	0	**19**
Total	**10**	**4,140**	**1,188**	**9**	**579**	**35**	**0**	**1**	**5**	**0**	**0**	**0**	**0**	**5,967**
Percent	**0.2%**	**69.4%**	**19.9%**	**0.2%**	**9.7%**	**0.6%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Mark Skaggs:425-250-0777
mark.skaggs@idaxdata.com

Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Thursday, September 29, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	9	4	0	0	0	0	0	0	0	0	0	0	**13**
1:00 AM	0	5	4	0	2	0	0	0	0	0	0	0	0	**11**
2:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	4	3	0	4	0	0	0	0	0	0	0	0	**11**
5:00 AM	0	27	23	1	21	0	0	0	0	0	0	0	0	**72**
6:00 AM	1	96	83	1	97	0	0	0	0	0	0	0	0	**278**
7:00 AM	1	234	198	2	138	2	0	0	0	0	0	0	0	**575**
8:00 AM	2	228	210	0	176	1	0	0	0	1	0	0	0	**618**
9:00 AM	0	136	124	3	109	4	0	0	0	0	0	0	0	**376**
10:00 AM	0	131	132	1	88	4	0	0	0	0	0	0	0	**356**
11:00 AM	0	177	116	1	87	4	0	1	0	0	0	0	0	**386**
12:00 PM	0	223	141	1	98	5	0	0	0	0	0	0	0	**468**
1:00 PM	0	181	134	1	79	3	0	2	0	0	0	0	0	**400**
2:00 PM	0	196	162	1	79	1	0	0	0	0	0	0	0	**439**
3:00 PM	1	228	150	1	71	4	0	0	1	0	0	0	0	**456**
4:00 PM	0	254	140	0	74	0	0	0	0	0	0	0	0	**468**
5:00 PM	0	216	117	2	77	0	0	1	1	0	0	0	1	**415**
6:00 PM	0	165	99	0	53	0	0	0	0	0	0	0	0	**317**
7:00 PM	0	154	85	0	59	0	0	0	0	0	0	0	0	**298**
8:00 PM	0	65	33	0	32	0	0	1	0	0	0	0	0	**131**
9:00 PM	0	49	30	0	17	0	0	0	0	0	0	0	0	**96**
10:00 PM	1	26	16	0	8	0	0	0	0	0	0	0	0	**51**
11:00 PM	0	12	5	0	6	0	0	1	0	0	0	0	0	**24**
Total	**6**	**2,819**	**2,009**	**15**	**1,375**	**28**	**0**	**6**	**2**	**1**	**0**	**0**	**1**	**6,262**
Percent	**0.1%**	**45.0%**	**32.1%**	**0.2%**	**22.0%**	**0.4%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

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Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Friday, September 30, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	8	3	0	4	0	0	0	0	0	0	0	0	**15**
1:00 AM	0	4	0	0	1	0	0	0	0	0	0	0	0	**5**
2:00 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	**5**
3:00 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	8	2	0	1	0	0	0	0	0	0	0	0	**11**
5:00 AM	0	18	3	0	4	1	0	0	0	0	0	0	0	**26**
6:00 AM	0	41	17	0	15	0	0	0	0	0	0	0	0	**73**
7:00 AM	0	145	48	0	26	0	0	0	0	0	0	0	0	**219**
8:00 AM	0	207	61	0	26	4	0	0	0	0	0	0	0	**298**
9:00 AM	0	208	57	0	20	5	0	0	0	0	0	0	0	**290**
10:00 AM	0	197	56	0	29	6	0	0	0	0	0	0	0	**288**
11:00 AM	1	247	74	0	43	4	0	0	0	0	0	0	0	**369**
12:00 PM	2	369	83	0	55	4	0	0	0	0	0	0	0	**513**
1:00 PM	1	297	92	1	38	3	0	0	1	0	0	0	0	**433**
2:00 PM	0	329	89	0	42	4	0	0	0	0	0	0	0	**464**
3:00 PM	0	458	139	0	53	4	0	1	0	0	0	0	0	**655**
4:00 PM	0	473	160	2	93	1	0	0	0	0	0	0	0	**729**
5:00 PM	3	503	148	0	86	0	0	1	1	1	0	0	0	**743**
6:00 PM	0	401	69	0	55	9	0	1	1	0	0	0	0	**536**
7:00 PM	0	172	53	0	24	2	0	0	0	0	0	0	0	**251**
8:00 PM	0	101	19	0	12	3	0	0	0	0	0	0	0	**135**
9:00 PM	0	51	17	0	6	1	0	0	0	0	0	0	0	**75**
10:00 PM	0	34	7	0	1	0	0	0	0	0	0	0	0	**42**
11:00 PM	0	15	3	0	1	0	0	0	0	0	0	0	0	**19**
Total	**7**	**4,296**	**1,200**	**3**	**635**	**51**	**0**	**3**	**3**	**1**	**0**	**0**	**0**	**6,199**
Percent	**0.1%**	**69.3%**	**19.4%**	**0.0%**	**10.2%**	**0.8%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

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Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Friday, September 30, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	9	2	0	0	0	0	0	0	0	0	0	0	**11**
1:00 AM	0	1	3	0	1	0	0	0	0	0	0	0	0	**5**
2:00 AM	0	3	3	0	1	0	0	0	0	0	0	0	0	**7**
3:00 AM	0	2	3	0	1	0	0	0	0	0	0	0	0	**6**
4:00 AM	0	6	2	0	4	0	0	0	0	0	0	0	0	**12**
5:00 AM	0	26	19	0	14	1	0	0	0	0	0	0	0	**60**
6:00 AM	0	73	59	0	87	0	0	0	0	0	0	0	0	**219**
7:00 AM	0	221	162	0	128	3	0	0	0	0	0	0	0	**514**
8:00 AM	0	232	182	0	153	3	0	0	0	0	0	0	0	**570**
9:00 AM	0	134	150	2	98	3	0	0	0	0	0	0	0	**387**
10:00 AM	0	143	125	1	72	3	0	1	0	0	0	0	0	**345**
11:00 AM	0	170	134	1	77	4	0	1	0	0	0	0	0	**387**
12:00 PM	0	233	134	1	101	5	0	1	0	0	0	0	0	**475**
1:00 PM	0	202	151	4	85	3	0	2	1	0	0	0	0	**448**
2:00 PM	0	239	159	2	74	4	0	0	2	0	0	0	0	**480**
3:00 PM	0	283	181	1	99	2	0	0	0	0	0	0	0	**566**
4:00 PM	0	248	138	0	82	0	0	2	0	0	0	0	0	**470**
5:00 PM	1	225	170	1	95	1	0	0	0	0	0	0	0	**493**
6:00 PM	1	276	247	0	103	0	0	0	1	0	0	0	0	**628**
7:00 PM	0	149	168	0	70	0	0	0	0	0	0	0	0	**387**
8:00 PM	0	43	134	0	44	0	0	0	0	0	0	0	0	**221**
9:00 PM	0	39	75	0	29	0	0	0	0	0	0	0	0	**143**
10:00 PM	0	15	39	0	21	0	0	0	0	0	0	0	0	**75**
11:00 PM	0	16	10	0	2	0	0	0	0	0	0	0	0	**28**
Total	**2**	**2,988**	**2,450**	**13**	**1,441**	**32**	**0**	**7**	**4**	**0**	**0**	**0**	**0**	**6,937**
Percent	**0.0%**	**43.1%**	**35.3%**	**0.2%**	**20.8%**	**0.5%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

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Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Saturday, October 1, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	11	4	0	1	0	0	0	0	0	0	0	0	**16**
1:00 AM	0	7	0	0	0	0	0	0	0	0	0	0	0	**7**
2:00 AM	0	7	0	0	0	0	0	0	0	0	0	0	0	**7**
3:00 AM	0	8	3	0	0	0	0	0	1	0	0	0	0	**12**
4:00 AM	0	8	0	0	0	0	0	0	0	0	0	0	0	**8**
5:00 AM	0	9	3	0	1	0	0	0	0	0	0	0	0	**13**
6:00 AM	0	16	13	0	5	1	0	0	0	0	0	0	0	**35**
7:00 AM	0	45	22	0	7	0	0	0	0	0	0	0	0	**74**
8:00 AM	0	89	30	0	14	1	0	0	0	0	0	0	0	**134**
9:00 AM	0	150	71	0	37	2	0	2	0	0	0	0	0	**262**
10:00 AM	0	195	61	0	38	1	0	0	0	0	0	0	0	**295**
11:00 AM	0	300	80	0	42	2	0	0	0	0	0	0	0	**424**
12:00 PM	0	313	76	0	34	4	0	0	0	0	0	0	0	**427**
1:00 PM	0	304	76	1	39	1	0	0	0	0	0	0	0	**421**
2:00 PM	2	318	66	3	31	0	0	0	0	0	0	0	0	**420**
3:00 PM	1	276	90	0	30	1	0	0	0	0	0	0	0	**398**
4:00 PM	0	260	67	0	36	0	0	0	0	0	0	0	0	**363**
5:00 PM	1	210	55	0	29	0	0	0	0	0	0	0	0	**295**
6:00 PM	0	207	65	0	30	0	0	0	1	0	0	0	0	**303**
7:00 PM	0	141	42	0	13	0	0	0	0	0	0	0	0	**196**
8:00 PM	1	101	22	0	10	0	0	0	0	0	0	0	0	**134**
9:00 PM	0	83	8	1	6	0	0	0	0	0	0	0	0	**98**
10:00 PM	0	29	15	0	4	0	0	0	0	0	0	0	0	**48**
11:00 PM	0	25	5	0	0	0	0	0	0	0	0	0	0	**30**
Total	**5**	**3,112**	**874**	**5**	**407**	**13**	**0**	**2**	**2**	**0**	**0**	**0**	**0**	**4,420**
Percent	**0.1%**	**70.4%**	**19.8%**	**0.1%**	**9.2%**	**0.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

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Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Saturday, October 1, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	7	5	0	1	0	0	0	0	0	0	0	0	**13**
1:00 AM	0	5	4	0	1	0	0	0	0	0	0	0	0	**10**
2:00 AM	0	2	6	0	1	0	0	0	0	0	0	0	0	**9**
3:00 AM	0	3	5	0	2	0	0	0	0	0	0	0	0	**10**
4:00 AM	0	2	10	0	2	0	0	0	0	0	0	0	0	**14**
5:00 AM	0	11	9	1	8	0	0	0	0	0	0	0	0	**29**
6:00 AM	0	18	13	0	19	0	0	0	0	0	0	0	0	**50**
7:00 AM	0	47	43	0	33	0	0	1	0	0	0	0	0	**124**
8:00 AM	0	82	72	0	61	0	0	0	0	0	0	0	0	**215**
9:00 AM	1	109	99	0	69	0	0	0	0	0	0	0	0	**278**
10:00 AM	0	112	99	0	81	0	0	0	0	0	0	0	0	**292**
11:00 AM	0	221	164	0	90	1	0	0	0	0	0	0	0	**476**
12:00 PM	0	171	191	0	92	0	0	0	0	0	0	0	0	**454**
1:00 PM	1	200	140	0	87	0	0	0	1	0	0	0	0	**429**
2:00 PM	0	222	155	1	74	0	0	0	0	0	0	0	1	**453**
3:00 PM	0	249	137	0	78	0	0	0	0	0	0	0	0	**464**
4:00 PM	0	200	152	0	68	0	0	1	0	0	0	0	0	**421**
5:00 PM	0	181	131	1	75	0	0	0	0	0	0	0	0	**388**
6:00 PM	0	141	106	0	59	0	0	0	0	0	0	0	0	**306**
7:00 PM	0	114	98	0	42	0	0	0	0	0	0	0	0	**254**
8:00 PM	0	86	52	0	25	0	0	0	0	0	0	0	0	**163**
9:00 PM	0	47	35	0	16	0	0	0	0	0	0	0	0	**98**
10:00 PM	0	26	20	0	14	0	0	0	0	0	0	0	0	**60**
11:00 PM	0	12	13	0	4	0	0	0	0	0	0	0	0	**29**
Total	**2**	**2,268**	**1,759**	**3**	**1,002**	**1**	**0**	**2**	**1**	**0**	**0**	**0**	**1**	**5,039**
Percent	**0.0%**	**45.0%**	**34.9%**	**0.1%**	**19.9%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Mark Skaggs:425-250-0777
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Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Sunday, October 2, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	12	10	0	3	0	0	0	0	0	0	0	0	**25**
1:00 AM	0	14	3	0	2	0	0	0	0	0	0	0	0	**19**
2:00 AM	0	10	3	0	3	0	0	0	0	0	0	0	0	**16**
3:00 AM	0	5	3	1	0	0	0	0	0	0	0	0	0	**9**
4:00 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	**5**
5:00 AM	0	8	5	0	1	0	0	0	0	0	0	0	0	**14**
6:00 AM	0	21	4	1	5	0	0	0	0	0	0	0	0	**31**
7:00 AM	0	25	10	0	4	0	0	0	0	0	0	0	0	**39**
8:00 AM	0	51	21	0	6	0	0	0	0	0	0	0	0	**78**
9:00 AM	0	113	35	0	16	0	0	0	0	0	0	0	0	**164**
10:00 AM	0	186	49	0	15	0	0	0	0	0	0	0	0	**250**
11:00 AM	1	259	58	0	19	0	0	1	0	0	0	0	0	**338**
12:00 PM	1	259	73	0	17	0	0	0	0	0	0	0	0	**350**
1:00 PM	1	263	75	0	30	0	0	0	0	0	0	0	0	**369**
2:00 PM	0	300	75	1	20	0	0	0	0	0	0	0	0	**396**
3:00 PM	0	247	66	0	17	0	0	1	0	0	0	0	0	**331**
4:00 PM	0	214	59	1	16	0	0	0	0	0	0	0	0	**290**
5:00 PM	0	184	53	0	15	0	0	0	0	0	0	0	0	**252**
6:00 PM	0	170	44	0	26	4	0	0	0	0	0	0	0	**244**
7:00 PM	0	86	23	1	6	0	0	0	0	0	0	0	0	**116**
8:00 PM	0	48	22	1	4	0	0	0	0	0	0	0	0	**75**
9:00 PM	0	32	8	0	2	1	0	0	0	0	0	0	0	**43**
10:00 PM	0	14	6	0	3	3	0	0	0	0	0	0	0	**26**
11:00 PM	0	8	1	0	0	0	0	0	0	0	0	0	0	**9**
Total	**3**	**2,534**	**706**	**6**	**230**	**8**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**3,489**
Percent	**0.1%**	**72.6%**	**20.2%**	**0.2%**	**6.6%**	**0.2%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

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Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Sunday, October 2, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	14	7	0	9	0	0	0	0	0	0	0	0	**30**
1:00 AM	0	7	5	0	4	0	0	0	0	0	0	0	0	**16**
2:00 AM	0	9	4	0	0	0	0	0	0	0	0	0	0	**13**
3:00 AM	0	5	3	0	2	0	0	0	0	0	0	0	0	**10**
4:00 AM	0	4	4	0	1	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	7	11	1	8	0	0	0	0	0	0	0	0	**27**
6:00 AM	0	9	9	0	3	0	0	0	0	0	0	0	0	**21**
7:00 AM	0	19	28	0	10	0	0	0	0	0	0	0	0	**57**
8:00 AM	0	47	35	0	23	0	0	0	0	0	0	0	0	**105**
9:00 AM	0	71	66	0	41	0	0	0	0	0	0	0	0	**178**
10:00 AM	0	117	79	0	47	0	0	0	0	0	0	0	0	**243**
11:00 AM	0	165	106	0	57	0	0	0	0	0	0	0	0	**328**
12:00 PM	0	215	162	2	90	0	0	2	2	0	0	0	0	**473**
1:00 PM	0	292	203	1	106	0	0	2	3	1	0	0	0	**608**
2:00 PM	0	205	117	0	79	0	0	1	1	0	0	0	0	**403**
3:00 PM	0	194	132	0	63	0	0	0	0	0	0	0	0	**389**
4:00 PM	0	181	118	0	71	0	0	0	0	0	0	0	0	**370**
5:00 PM	0	168	106	0	60	0	0	0	0	0	0	0	0	**334**
6:00 PM	0	122	109	0	43	0	0	1	0	0	0	0	0	**275**
7:00 PM	0	112	73	0	29	0	0	0	0	0	0	0	0	**214**
8:00 PM	0	65	36	0	16	0	0	0	0	0	0	0	0	**117**
9:00 PM	0	19	33	0	12	0	0	0	0	0	0	0	0	**64**
10:00 PM	0	9	19	0	10	0	0	0	0	0	0	0	0	**38**
11:00 PM	0	5	11	1	4	0	0	0	0	0	0	0	0	**21**
Total	**0**	**2,061**	**1,476**	**5**	**788**	**0**	**0**	**6**	**6**	**1**	**0**	**0**	**0**	**4,343**
Percent	**0.0%**	**47.5%**	**34.0%**	**0.1%**	**18.1%**	**0.0%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Mark Skaggs:425-250-0777
mark.skaggs@idaxdata.com

Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Monday, October 3, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	7	2	0	1	0	0	0	0	0	0	0	0	**10**
1:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	7	2	0	0	0	0	0	0	0	0	0	0	**9**
4:00 AM	0	4	1	0	0	0	0	0	0	0	0	0	0	**5**
5:00 AM	0	14	6	0	3	0	0	0	0	0	0	0	0	**23**
6:00 AM	1	55	20	0	12	0	0	0	1	0	0	0	0	**89**
7:00 AM	2	134	36	1	16	0	0	0	0	0	0	0	0	**189**
8:00 AM	2	193	50	0	31	2	0	0	0	0	0	0	0	**278**
9:00 AM	1	160	54	0	28	0	0	0	1	0	0	0	0	**244**
10:00 AM	1	204	64	1	28	2	0	0	0	0	0	0	0	**300**
11:00 AM	1	258	73	0	25	1	0	0	0	0	0	0	0	**358**
12:00 PM	2	307	81	2	36	1	0	2	1	0	0	0	0	**432**
1:00 PM	2	302	90	2	39	2	0	0	0	0	0	0	0	**437**
2:00 PM	1	280	88	0	39	0	0	0	0	0	0	0	0	**408**
3:00 PM	0	400	123	1	37	0	0	1	1	0	0	0	0	**563**
4:00 PM	1	461	137	0	72	1	0	1	0	1	0	0	0	**674**
5:00 PM	0	516	176	0	73	2	0	1	1	0	0	0	0	**769**
6:00 PM	2	383	138	0	66	1	0	0	1	0	0	0	0	**591**
7:00 PM	0	153	54	0	19	0	0	0	0	0	0	0	0	**226**
8:00 PM	0	65	14	1	7	0	0	0	0	0	0	0	0	**87**
9:00 PM	0	31	11	0	4	0	0	0	0	0	0	0	0	**46**
10:00 PM	0	12	4	0	0	0	0	0	0	0	0	0	0	**16**
11:00 PM	0	12	3	0	1	0	0	0	0	0	0	0	0	**16**
Total	**16**	**3,960**	**1,229**	**8**	**537**	**12**	**0**	**5**	**6**	**1**	**0**	**0**	**0**	**5,774**
Percent	**0.3%**	**68.6%**	**21.3%**	**0.1%**	**9.3%**	**0.2%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

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Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Monday, October 3, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	5	6	0	0	0	0	0	0	0	0	0	0	**11**
1:00 AM	0	4	3	0	2	0	0	0	0	0	0	0	0	**9**
2:00 AM	0	1	3	0	0	0	0	0	0	0	0	0	0	**4**
3:00 AM	0	0	2	0	1	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	1	1	0	4	0	0	0	0	0	0	0	0	**6**
5:00 AM	0	20	22	1	24	1	0	0	0	0	0	0	0	**68**
6:00 AM	0	92	62	0	75	0	0	0	0	0	0	0	0	**229**
7:00 AM	0	365	244	1	245	3	0	0	1	0	0	0	0	**859**
8:00 AM	0	285	184	0	166	1	0	0	0	1	0	0	0	**637**
9:00 AM	0	141	108	1	107	2	0	0	1	0	0	0	0	**360**
10:00 AM	0	133	105	1	84	0	0	1	0	1	0	0	0	**325**
11:00 AM	1	178	146	1	81	1	0	1	0	0	0	0	0	**409**
12:00 PM	0	223	138	0	80	0	0	1	0	0	0	0	0	**442**
1:00 PM	0	222	134	1	73	1	0	2	1	0	0	0	0	**434**
2:00 PM	0	227	119	0	78	2	0	0	0	0	0	0	0	**426**
3:00 PM	1	260	142	1	90	0	0	0	0	0	0	0	0	**494**
4:00 PM	0	253	132	0	73	2	0	2	0	0	0	0	0	**462**
5:00 PM	1	235	150	0	78	0	0	0	0	0	0	0	0	**464**
6:00 PM	0	174	113	0	69	0	0	0	0	0	0	0	0	**356**
7:00 PM	0	106	81	0	45	0	0	0	0	0	0	0	0	**232**
8:00 PM	0	73	47	0	26	0	0	0	0	0	0	0	0	**146**
9:00 PM	0	29	32	0	15	0	0	0	0	0	0	0	0	**76**
10:00 PM	0	21	16	0	8	0	0	0	0	0	0	0	0	**45**
11:00 PM	0	8	9	0	1	0	0	0	0	0	0	0	0	**18**
Total	**3**	**3,056**	**1,999**	**7**	**1,425**	**13**	**0**	**7**	**3**	**2**	**0**	**0**	**0**	**6,515**
Percent	**0.0%**	**46.9%**	**30.7%**	**0.1%**	**21.9%**	**0.2%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

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Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Total Study Average
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	8	4	0	2	0	0	0	0	0	0	0	0	**14**
1:00 AM	0	4	1	0	1	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	4	1	0	0	0	0	0	0	0	0	0	0	**5**
3:00 AM	0	5	1	0	0	0	0	0	0	0	0	0	0	**6**
4:00 AM	0	6	1	0	0	0	0	0	0	0	0	0	0	**7**
5:00 AM	0	14	5	0	3	0	0	0	0	0	0	0	0	**22**
6:00 AM	0	39	17	0	10	0	0	0	0	0	0	0	0	**66**
7:00 AM	0	118	35	0	19	0	0	0	0	0	0	0	0	**172**
8:00 AM	2	165	44	0	20	2	0	0	0	0	0	0	0	**233**
9:00 AM	0	161	59	0	26	2	0	0	1	0	0	0	0	**249**
10:00 AM	1	210	62	0	30	2	0	0	0	0	0	0	0	**305**
11:00 AM	1	254	74	0	34	2	0	0	0	0	0	0	0	**365**
12:00 PM	1	308	76	0	36	2	0	0	0	0	0	0	0	**423**
1:00 PM	1	287	86	1	38	2	0	0	0	0	0	0	0	**415**
2:00 PM	1	306	84	1	39	1	0	0	0	0	0	0	0	**432**
3:00 PM	0	359	113	0	38	2	0	0	0	0	0	0	0	**512**
4:00 PM	0	398	118	0	58	1	0	0	0	0	0	0	0	**575**
5:00 PM	2	427	128	0	61	1	0	1	0	0	0	0	0	**620**
6:00 PM	1	338	99	0	52	3	0	0	1	0	0	0	0	**494**
7:00 PM	1	165	49	0	19	0	0	0	0	0	0	0	0	**234**
8:00 PM	0	83	22	1	8	0	0	0	0	0	0	0	0	**114**
9:00 PM	0	46	11	1	5	0	0	0	0	0	0	0	0	**63**
10:00 PM	0	23	7	0	2	0	0	0	0	0	0	0	0	**32**
11:00 PM	0	14	3	0	0	0	0	0	0	0	0	0	0	**17**
Total	**11**	**3,742**	**1,100**	**4**	**501**	**20**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**5,381**
Percent	**0.2%**	**69.5%**	**20.4%**	**0.1%**	**9.3%**	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Mark Skaggs:425-250-0777
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Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Total Study Average
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	8	4	0	2	0	0	0	0	0	0	0	0	**14**
1:00 AM	0	4	3	0	2	0	0	0	0	0	0	0	0	**9**
2:00 AM	0	3	3	0	0	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	2	2	0	1	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	3	4	0	3	0	0	0	0	0	0	0	0	**10**
5:00 AM	0	21	17	1	17	1	0	0	0	0	0	0	0	**57**
6:00 AM	0	65	53	0	67	0	0	0	0	0	0	0	0	**185**
7:00 AM	0	197	148	0	122	1	0	0	0	0	0	0	0	**468**
8:00 AM	0	186	142	0	120	1	0	0	0	0	0	0	0	**449**
9:00 AM	0	128	109	1	88	2	0	0	0	0	0	0	0	**328**
10:00 AM	0	134	110	0	77	1	0	0	0	0	0	0	0	**322**
11:00 AM	0	184	128	1	78	2	0	1	0	0	0	0	0	**394**
12:00 PM	0	208	148	1	88	2	0	1	0	0	0	0	0	**448**
1:00 PM	0	214	146	1	85	2	0	1	1	0	0	0	0	**450**
2:00 PM	0	214	140	1	75	1	0	0	0	0	0	0	0	**431**
3:00 PM	0	236	145	1	79	1	0	0	0	0	0	0	0	**462**
4:00 PM	0	226	135	0	72	1	0	1	0	0	0	0	0	**435**
5:00 PM	0	212	133	1	76	0	0	0	0	0	0	0	0	**422**
6:00 PM	0	169	125	0	63	0	0	0	0	0	0	0	0	**357**
7:00 PM	0	129	95	0	49	0	0	0	0	0	0	0	0	**273**
8:00 PM	0	70	58	0	28	0	0	0	0	0	0	0	0	**156**
9:00 PM	0	39	39	0	17	0	0	0	0	0	0	0	0	**95**
10:00 PM	0	19	19	0	11	0	0	0	0	0	0	0	0	**49**
11:00 PM	0	9	8	0	3	0	0	0	0	0	0	0	0	**20**
Total	**0**	**2,680**	**1,914**	**8**	**1,223**	**15**	**0**	**4**	**1**	**0**	**0**	**0**	**0**	**5,845**
Percent	**0.0%**	**45.9%**	**32.7%**	**0.1%**	**20.9%**	**0.3%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

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Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

3-Day (Tuesday - Thursday) Average
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	6	3	0	1	0	0	0	0	0	0	0	0	**10**
1:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	5	2	0	1	0	0	0	0	0	0	0	0	**8**
5:00 AM	0	17	6	0	3	0	0	0	0	0	0	0	0	**26**
6:00 AM	0	47	22	0	11	0	0	0	0	0	0	0	0	**82**
7:00 AM	0	159	43	0	27	1	0	0	0	0	0	0	0	**231**
8:00 AM	5	204	48	0	21	2	0	0	0	0	0	0	0	**280**
9:00 AM	0	166	65	0	27	1	0	0	1	0	0	0	0	**260**
10:00 AM	2	228	68	0	32	2	0	0	0	0	0	0	0	**333**
11:00 AM	0	238	77	1	37	3	0	0	1	0	0	0	0	**357**
12:00 PM	1	304	74	0	36	2	0	0	0	0	0	0	0	**417**
1:00 PM	2	281	91	1	41	3	0	0	1	0	0	0	0	**419**
2:00 PM	1	304	90	1	48	1	0	0	0	0	0	0	0	**445**
3:00 PM	1	378	124	1	43	2	0	0	0	0	0	0	0	**548**
4:00 PM	1	460	133	0	64	1	0	0	1	0	0	0	0	**659**
5:00 PM	3	525	154	0	74	1	0	1	0	0	0	0	0	**758**
6:00 PM	1	401	126	0	63	1	0	0	1	0	0	0	0	**595**
7:00 PM	1	202	58	0	23	0	0	0	0	0	0	0	0	**284**
8:00 PM	0	90	25	1	7	0	0	0	0	0	0	0	0	**123**
9:00 PM	0	41	12	1	5	0	0	0	0	0	0	0	0	**60**
10:00 PM	0	23	6	0	1	0	0	0	0	0	0	0	0	**30**
11:00 PM	0	12	4	0	0	0	0	0	0	0	0	0	0	**16**
Total	**19**	**4,096**	**1,232**	**7**	**565**	**22**	**0**	**2**	**6**	**1**	**0**	**0**	**0**	**5,950**
Percent	**0.3%**	**68.8%**	**20.7%**	**0.1%**	**9.5%**	**0.4%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

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Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

3-Day (Tuesday - Thursday) Average
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	7	3	0	0	0	0	0	0	0	0	0	0	**10**
1:00 AM	0	3	3	0	1	0	0	0	0	0	0	0	0	**7**
2:00 AM	0	1	2	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	2	1	0	1	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	4	3	0	4	0	0	0	0	0	0	0	0	**10**
5:00 AM	0	28	20	1	22	1	0	0	0	0	0	0	0	**71**
6:00 AM	0	89	75	0	96	0	0	0	0	0	0	0	0	**261**
7:00 AM	0	241	186	1	147	1	0	0	0	0	0	0	0	**576**
8:00 AM	1	218	174	1	147	2	0	0	0	0	0	0	0	**542**
9:00 AM	0	146	112	2	101	3	0	0	0	0	0	0	0	**365**
10:00 AM	0	144	121	0	84	2	0	0	0	0	0	0	0	**351**
11:00 AM	0	184	116	1	81	3	0	1	0	0	0	0	0	**386**
12:00 PM	0	205	138	1	85	2	0	1	0	0	0	0	0	**432**
1:00 PM	0	193	130	1	82	2	0	1	1	0	0	0	0	**410**
2:00 PM	0	203	143	1	73	1	0	0	0	0	0	0	0	**421**
3:00 PM	0	223	141	1	75	2	0	0	0	0	0	0	0	**443**
4:00 PM	0	234	135	0	71	1	0	1	0	0	0	0	0	**441**
5:00 PM	0	225	124	1	76	1	0	0	0	0	0	0	0	**427**
6:00 PM	0	156	100	0	56	0	0	0	0	0	0	0	0	**313**
7:00 PM	0	140	83	0	53	0	0	0	0	0	0	0	0	**275**
8:00 PM	0	74	45	0	29	0	0	0	0	0	0	0	0	**149**
9:00 PM	0	46	33	0	15	0	0	0	0	0	0	0	0	**94**
10:00 PM	1	20	13	0	8	0	0	0	0	0	0	0	0	**42**
11:00 PM	0	8	4	0	3	0	0	0	0	0	0	0	0	**15**
Total	**3**	**2,794**	**1,904**	**10**	**1,309**	**21**	**0**	**5**	**3**	**0**	**0**	**0**	**1**	**6,050**
Percent	**0.0%**	**46.2%**	**31.5%**	**0.2%**	**21.6%**	**0.3%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

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Vehicle Speed Report Summary

Location: Midland Ave BTWN E Wulfsohn & E Meadows

Count Direction: Northbound / Southbound

Date Range: 9/27/2022 to 10/3/2022

Site Code: 06

	Speed Range (mph)																Total
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
Study Total																		
Northbound	17	3	14	60	545	5,449	17,225	11,966	2,221	200	13	12	2	5	0	1	0	37,733
Percent	0.0%	0.0%	0.0%	0.2%	1.4%	14.4%	45.6%	31.7%	5.9%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Southbound	31	140	149	127	467	2,829	9,880	15,490	9,198	2,252	353	53	10	4	1	0	0	40,984
Percent	0.1%	0.3%	0.4%	0.3%	1.1%	6.9%	24.1%	37.8%	22.4%	5.5%	0.9%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	48	143	163	187	1,012	8,278	27,105	27,456	11,419	2,452	366	65	12	9	1	1	0	78,717
Percent	0.1%	0.2%	0.2%	0.2%	1.3%	10.5%	34.4%	34.9%	14.5%	3.1%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	100%

Total Study Percentile Speed Summary			Total Study Speed Statistics		
Northbound			**Northbound**		
50th Percentile (Median)	38.8	mph	Mean (Average) Speed	38.9	mph
85th Percentile	42.9	mph	10 mph Pace	34.1 - 44.1	mph
95th Percentile	45.5	mph	Percent in Pace	79.1	%
Southbound			**Southbound**		
50th Percentile (Median)	42.2	mph	Mean (Average) Speed	42.0	mph
85th Percentile	47.4	mph	10 mph Pace	37.4 - 47.4	mph
95th Percentile	50.8	mph	Percent in Pace	66.5	%

Mark Skaggs:425-250-0777
mark.skaggs@idaxdata.com

Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Tuesday, September 27, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	1	2	2	2	0	0	0	0	0	0	0	0	0	**7**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	0	0	0	1	1	2	3	2	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	0	0	0	0	5	10	12	3	0	0	0	0	0	0	0	0	**30**
6:00 AM	0	0	0	0	1	7	20	34	11	0	0	0	0	0	0	0	0	**73**
7:00 AM	0	0	0	0	0	16	74	105	31	2	0	0	0	0	0	0	0	**228**
8:00 AM	8	2	5	2	0	23	81	85	16	3	0	0	0	0	0	0	0	**225**
9:00 AM	0	0	0	0	1	19	110	102	30	4	0	0	0	0	0	0	0	**266**
10:00 AM	0	0	0	0	4	44	153	120	16	3	0	0	0	0	0	0	0	**340**
11:00 AM	0	0	0	1	5	35	181	114	11	2	0	0	0	0	0	0	0	**349**
12:00 PM	0	0	0	2	4	79	201	113	20	3	0	0	0	0	0	0	0	**422**
1:00 PM	0	0	0	0	3	29	199	138	35	2	0	0	0	0	0	0	0	**406**
2:00 PM	0	0	0	0	13	58	210	138	20	1	1	0	0	0	0	0	0	**441**
3:00 PM	0	0	0	0	18	63	229	210	32	3	0	0	0	0	0	0	0	**555**
4:00 PM	0	0	0	0	5	77	309	239	34	2	0	0	0	0	0	0	0	**666**
5:00 PM	0	0	0	0	0	56	346	316	40	4	0	0	0	0	0	0	0	**762**
6:00 PM	0	0	0	0	3	65	272	190	42	1	0	1	0	0	0	0	0	**574**
7:00 PM	0	0	0	0	4	42	117	68	16	0	0	0	0	0	0	0	0	**247**
8:00 PM	0	0	0	0	3	23	61	44	7	2	0	0	0	0	0	0	0	**140**
9:00 PM	0	0	0	0	3	14	18	15	4	1	0	0	0	0	0	0	0	**55**
10:00 PM	0	0	0	0	0	7	8	8	6	2	0	1	0	0	0	0	0	**32**
11:00 PM	0	0	0	0	0	2	4	8	0	1	0	0	0	0	0	0	0	**15**
Total	**8**	**2**	**5**	**5**	**69**	**669**	**2,609**	**2,066**	**376**	**36**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**5,848**
Percent	**0.1%**	**0.0%**	**0.1%**	**0.1%**	**1.2%**	**11.4%**	**44.6%**	**35.3%**	**6.4%**	**0.6%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	39.3	mph	Mean (Average) Speed	39.2	mph
85th Percentile	43.3	mph	10 mph Pace	34.8 - 44.8	mph
95th Percentile	45.7	mph	Percent in Pace	80.4	%

Mark Skaggs:425-250-0777
mark.skaggs@idaxdata.com

Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Tuesday, September 27, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	2	2	3	2	0	0	0	0	0	0	0	0	**9**
1:00 AM	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	0	0	0	0	5	0	3	1	1	0	0	0	0	0	0	**10**
5:00 AM	0	0	0	0	0	1	12	25	14	14	1	0	0	0	0	0	0	**67**
6:00 AM	0	0	0	0	2	11	46	97	91	13	2	0	0	0	0	0	0	**262**
7:00 AM	0	0	0	0	4	26	89	278	157	26	3	0	0	0	0	0	0	**583**
8:00 AM	15	43	30	6	20	13	41	103	112	21	1	1	0	0	0	0	0	**406**
9:00 AM	0	0	0	0	1	8	63	145	108	30	5	1	0	0	0	0	0	**361**
10:00 AM	0	0	0	1	4	30	91	124	81	15	0	0	0	0	0	0	0	**346**
11:00 AM	0	0	0	0	5	26	103	161	82	9	4	0	0	0	0	0	0	**390**
12:00 PM	0	0	0	0	0	26	131	173	70	14	3	1	0	0	0	0	0	**418**
1:00 PM	0	0	0	0	2	21	114	146	88	21	1	0	0	0	0	0	0	**393**
2:00 PM	0	0	1	0	2	25	108	160	73	10	7	0	0	0	0	0	0	**386**
3:00 PM	0	0	0	0	1	35	113	224	91	11	3	0	0	0	0	0	0	**478**
4:00 PM	0	0	0	0	4	14	85	172	111	18	1	0	0	0	0	0	0	**405**
5:00 PM	0	0	0	0	1	24	100	178	100	25	2	0	0	0	0	0	0	**430**
6:00 PM	0	0	0	0	2	30	84	133	57	7	0	0	0	1	0	0	0	**314**
7:00 PM	0	0	0	0	2	43	94	81	38	4	1	1	0	0	0	0	0	**264**
8:00 PM	0	0	0	2	3	15	53	55	31	3	1	0	0	0	0	0	0	**163**
9:00 PM	0	0	0	0	5	16	21	21	18	6	1	0	0	0	0	0	0	**88**
10:00 PM	0	0	0	0	0	2	6	10	8	5	3	0	0	0	0	0	0	**34**
11:00 PM	0	0	0	0	0	1	4	1	5	0	0	0	0	0	0	0	0	**11**
Total	**15**	**43**	**31**	**10**	**58**	**370**	**1,366**	**2,294**	**1,343**	**253**	**40**	**4**	**0**	**1**	**0**	**0**	**0**	**5,828**
Percent	**0.3%**	**0.7%**	**0.5%**	**0.2%**	**1.0%**	**6.3%**	**23.4%**	**39.4%**	**23.0%**	**4.3%**	**0.7%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	42.3	mph	Mean (Average) Speed	41.8	mph
85th Percentile	47.2	mph	10 mph Pace	37.4 - 47.4	mph
95th Percentile	50.1	mph	Percent in Pace	68.17	%

Mark Skaggs:425-250-0777
mark.skaggs@idaxdata.com

Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Wednesday, September 28, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	1	3	1	3	3	0	0	0	1	0	0	0	0	**12**
1:00 AM	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	0	0	1	0	0	2	1	0	0	0	0	0	0	0	**4**
3:00 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	0	0	0	0	2	4	0	0	0	0	0	0	0	1	0	**7**
5:00 AM	0	0	0	0	0	2	6	12	7	0	0	0	0	0	0	0	0	**27**
6:00 AM	0	0	2	1	3	10	32	42	11	1	0	0	0	0	0	0	0	**102**
7:00 AM	0	0	0	0	3	21	88	92	24	3	0	0	0	0	0	0	0	**231**
8:00 AM	3	1	0	1	3	19	118	128	30	1	0	0	0	0	0	0	0	**304**
9:00 AM	0	0	0	0	0	21	93	100	25	2	0	0	0	0	0	0	0	**241**
10:00 AM	0	0	0	0	2	41	128	113	22	2	0	0	0	0	0	0	0	**308**
11:00 AM	0	0	0	0	2	51	180	116	20	2	0	0	0	0	0	0	0	**371**
12:00 PM	0	0	0	0	0	39	196	162	23	1	0	0	0	0	0	0	0	**421**
1:00 PM	0	0	0	0	6	64	190	142	24	0	0	0	0	0	0	0	0	**426**
2:00 PM	0	0	0	0	0	55	218	192	24	3	0	0	0	0	0	0	0	**492**
3:00 PM	0	0	0	0	4	68	250	172	37	1	0	0	0	0	0	0	0	**532**
4:00 PM	0	0	0	0	4	73	304	227	38	2	0	0	0	0	0	0	0	**648**
5:00 PM	2	0	0	0	5	74	344	262	54	3	0	1	0	2	0	0	0	**747**
6:00 PM	0	0	0	4	6	70	259	213	44	2	0	0	0	0	0	0	0	**598**
7:00 PM	0	0	0	4	14	68	142	97	11	1	0	0	0	0	0	0	0	**337**
8:00 PM	0	0	0	0	3	24	63	29	8	1	0	1	0	0	0	0	0	**129**
9:00 PM	0	0	0	0	0	14	25	13	3	1	0	0	0	0	0	0	0	**56**
10:00 PM	0	0	0	0	0	2	14	5	3	0	0	0	0	0	0	0	0	**24**
11:00 PM	0	0	0	0	1	2	3	8	0	0	0	0	0	0	0	0	0	**14**
Total	**5**	**1**	**2**	**10**	**57**	**725**	**2,657**	**2,132**	**414**	**27**	**0**	**2**	**1**	**2**	**0**	**1**	**0**	**6,036**
Percent	**0.1%**	**0.0%**	**0.0%**	**0.2%**	**0.9%**	**12.0%**	**44.0%**	**35.3%**	**6.9%**	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	39.4	mph	Mean (Average) Speed	39.3	mph
85th Percentile	43.3	mph	10 mph Pace	34.2 - 44.2	mph
95th Percentile	45.9	mph	Percent in Pace	80.0	%

Mark Skaggs:425-250-0777
mark.skaggs@idaxdata.com

Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Wednesday, September 28, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	1	4	2	2	0	0	0	0	0	0	0	**9**
1:00 AM	0	0	0	0	0	0	1	4	1	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	0	0	0	0	0	2	0	1	1	0	0	0	0	0	0	0	**4**
3:00 AM	0	0	0	0	0	0	0	2	4	1	0	0	0	0	0	0	0	**7**
4:00 AM	0	0	0	0	0	0	1	3	5	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	0	0	0	0	2	8	26	22	13	2	0	1	0	0	0	0	**74**
6:00 AM	0	0	0	0	0	3	62	86	63	26	2	0	0	0	0	0	0	**242**
7:00 AM	0	0	0	0	3	14	145	275	109	23	1	0	0	0	0	0	0	**570**
8:00 AM	1	29	25	11	21	31	84	203	161	34	3	0	0	0	0	0	0	**603**
9:00 AM	0	0	0	0	0	11	63	133	118	25	7	1	0	0	0	0	0	**358**
10:00 AM	0	0	0	0	0	14	87	138	89	18	5	1	0	0	0	0	0	**352**
11:00 AM	0	0	0	0	1	17	74	157	98	30	5	1	0	0	0	0	0	**383**
12:00 PM	0	0	0	5	1	19	102	173	85	23	3	0	0	0	0	0	0	**411**
1:00 PM	0	0	0	0	2	16	109	185	105	16	2	1	0	0	0	0	0	**436**
2:00 PM	0	0	0	1	5	20	88	178	119	26	2	0	0	0	0	0	0	**439**
3:00 PM	0	0	0	0	2	21	115	155	78	22	2	0	0	0	0	0	0	**395**
4:00 PM	0	0	0	0	4	32	100	158	107	42	6	0	0	0	0	0	0	**449**
5:00 PM	0	0	0	0	1	18	94	176	109	35	3	0	0	0	0	0	0	**436**
6:00 PM	0	0	0	0	2	25	66	119	74	18	5	0	0	0	0	0	0	**309**
7:00 PM	0	0	0	1	5	45	80	83	36	14	0	0	0	0	0	0	0	**264**
8:00 PM	0	0	0	0	5	14	38	61	28	6	0	1	0	0	0	0	0	**153**
9:00 PM	0	0	1	0	7	16	22	20	26	6	0	0	0	0	0	0	0	**98**
10:00 PM	0	0	0	0	0	4	14	9	13	1	0	0	1	0	0	0	0	**42**
11:00 PM	0	0	0	0	0	1	2	2	6	0	0	0	0	0	0	0	0	**11**
Total	**1**	**29**	**26**	**18**	**59**	**323**	**1,358**	**2,350**	**1,459**	**382**	**48**	**5**	**2**	**0**	**0**	**0**	**0**	**6,060**
Percent	**0.0%**	**0.5%**	**0.4%**	**0.3%**	**1.0%**	**5.3%**	**22.4%**	**38.8%**	**24.1%**	**6.3%**	**0.8%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	42.6	mph	Mean (Average) Speed	42.4	mph
85th Percentile	47.8	mph	10 mph Pace	37.7 - 47.7	mph
95th Percentile	51.0	mph	Percent in Pace	68.17	%

Mark Skaggs:425-250-0777
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Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Thursday, September 29, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	1	3	1	4	1	1	0	0	0	0	0	0	0	**11**
1:00 AM	0	0	0	0	0	1	3	1	0	0	0	0	0	0	0	0	0	**5**
2:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	0	0	0	4	1	2	1	0	0	0	0	0	0	0	0	**8**
5:00 AM	0	0	0	0	0	3	6	8	3	1	0	0	0	0	0	0	0	**21**
6:00 AM	0	0	0	0	0	3	24	33	9	1	0	0	0	0	0	0	0	**70**
7:00 AM	0	0	0	1	8	29	94	86	12	3	0	0	0	0	0	0	0	**233**
8:00 AM	0	0	0	2	3	39	128	108	30	2	0	0	0	0	0	0	0	**312**
9:00 AM	0	0	0	1	5	47	129	72	19	0	0	0	0	0	0	0	0	**273**
10:00 AM	0	0	0	3	4	56	151	116	20	0	0	0	0	0	0	0	0	**350**
11:00 AM	0	0	0	5	8	55	165	100	15	3	0	0	0	0	0	0	0	**351**
12:00 PM	0	0	0	2	5	48	219	107	26	2	0	0	0	0	0	0	0	**409**
1:00 PM	0	0	0	2	13	79	191	121	17	1	0	0	0	0	0	0	0	**424**
2:00 PM	0	0	0	1	4	65	204	112	16	1	0	0	0	0	0	0	0	**403**
3:00 PM	0	0	0	4	5	83	239	200	26	1	0	0	0	0	0	0	0	**558**
4:00 PM	0	0	0	1	1	97	349	186	28	2	0	0	0	0	0	0	0	**664**
5:00 PM	0	0	0	0	1	73	341	302	44	4	0	0	0	0	0	0	0	**765**
6:00 PM	0	0	0	0	7	113	311	163	20	0	0	0	0	0	0	0	0	**614**
7:00 PM	0	0	0	0	15	59	120	62	12	1	0	0	0	0	0	0	0	**269**
8:00 PM	0	0	0	0	2	11	51	31	6	0	0	0	0	0	0	0	0	**101**
9:00 PM	0	0	0	0	0	13	27	20	8	0	0	0	0	0	0	0	0	**68**
10:00 PM	0	0	0	0	0	6	7	16	4	2	0	0	0	0	0	0	0	**35**
11:00 PM	0	0	0	0	1	1	3	4	6	3	0	0	0	1	0	0	0	**19**
Total	**0**	**0**	**0**	**22**	**83**	**889**	**2,765**	**1,854**	**325**	**28**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**5,967**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.4%**	**1.4%**	**14.9%**	**46.3%**	**31.1%**	**5.4%**	**0.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	38.7	mph	Mean (Average) Speed	38.7	mph
85th Percentile	42.7	mph	10 mph Pace	33.7 - 43.7	mph
95th Percentile	45.3	mph	Percent in Pace	80.0	%

Mark Skaggs:425-250-0777
mark.skaggs@idaxdata.com

Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Thursday, September 29, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	2	3	2	3	3	0	0	0	0	0	0	0	**13**
1:00 AM	0	0	0	0	0	0	2	6	0	3	0	0	0	0	0	0	0	**11**
2:00 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	0	0	0	3	3	4	1	0	0	0	0	0	0	0	**11**
5:00 AM	0	0	0	0	0	2	13	26	24	4	3	0	0	0	0	0	0	**72**
6:00 AM	0	0	0	0	0	15	49	111	87	10	3	1	1	0	1	0	0	**278**
7:00 AM	0	0	0	0	10	30	139	241	129	24	2	0	0	0	0	0	0	**575**
8:00 AM	0	0	0	0	5	42	149	268	128	18	7	1	0	0	0	0	0	**618**
9:00 AM	0	0	0	0	3	25	90	144	94	17	3	0	0	0	0	0	0	**376**
10:00 AM	0	0	0	0	1	16	68	134	106	27	4	0	0	0	0	0	0	**356**
11:00 AM	0	0	0	0	7	26	75	141	111	25	1	0	0	0	0	0	0	**386**
12:00 PM	0	0	0	0	4	37	167	162	78	16	4	0	0	0	0	0	0	**468**
1:00 PM	0	0	0	0	10	35	99	170	61	21	4	0	0	0	0	0	0	**400**
2:00 PM	0	0	0	0	5	30	111	181	91	18	3	0	0	0	0	0	0	**439**
3:00 PM	0	0	0	1	1	26	99	217	91	19	2	0	0	0	0	0	0	**456**
4:00 PM	0	0	0	7	5	25	131	177	96	25	2	0	0	0	0	0	0	**468**
5:00 PM	0	0	0	5	7	29	92	160	97	20	5	0	0	0	0	0	0	**415**
6:00 PM	0	0	0	0	4	25	89	122	63	11	3	0	0	0	0	0	0	**317**
7:00 PM	0	0	0	0	7	40	124	86	36	5	0	0	0	0	0	0	0	**298**
8:00 PM	0	0	0	0	15	19	33	40	17	6	1	0	0	0	0	0	0	**131**
9:00 PM	0	0	0	0	3	11	32	27	20	2	0	1	0	0	0	0	0	**96**
10:00 PM	0	0	0	0	0	5	11	17	13	3	1	0	1	0	0	0	0	**51**
11:00 PM	0	0	0	0	0	4	4	11	4	1	0	0	0	0	0	0	0	**24**
Total	**0**	**0**	**0**	**13**	**87**	**444**	**1,585**	**2,446**	**1,354**	**279**	**48**	**3**	**2**	**0**	**1**	**0**	**0**	**6,262**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.2%**	**1.4%**	**7.1%**	**25.3%**	**39.1%**	**21.6%**	**4.5%**	**0.8%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	42.1	mph	Mean (Average) Speed	41.9	mph
85th Percentile	47.1	mph	10 mph Pace	37.4 - 47.4	mph
95th Percentile	50.2	mph	Percent in Pace	68.56	%

Mark Skaggs:425-250-0777
mark.skaggs@idaxdata.com

Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Friday, September 30, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	4	4	6	1	0	0	0	0	0	0	0	0	**15**
1:00 AM	0	0	0	0	0	1	0	4	0	0	0	0	0	0	0	0	0	**5**
2:00 AM	0	0	0	0	1	0	1	3	0	0	0	0	0	0	0	0	0	**5**
3:00 AM	0	0	0	0	0	0	1	2	2	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	0	0	0	0	0	6	4	1	0	0	0	0	0	0	0	0	**11**
5:00 AM	0	0	0	0	0	4	12	8	0	2	0	0	0	0	0	0	0	**26**
6:00 AM	0	0	0	0	2	7	24	29	10	1	0	0	0	0	0	0	0	**73**
7:00 AM	0	0	0	0	1	14	88	99	14	2	1	0	0	0	0	0	0	**219**
8:00 AM	0	0	0	1	5	22	108	134	25	3	0	0	0	0	0	0	0	**298**
9:00 AM	0	0	1	1	8	39	135	86	14	5	0	1	0	0	0	0	0	**290**
10:00 AM	0	0	0	2	6	55	130	79	14	2	0	0	0	0	0	0	0	**288**
11:00 AM	0	0	0	3	11	72	179	80	21	3	0	0	0	0	0	0	0	**369**
12:00 PM	0	0	0	2	15	103	272	108	11	2	0	0	0	0	0	0	0	**513**
1:00 PM	0	0	2	0	6	71	237	103	13	1	0	0	0	0	0	0	0	**433**
2:00 PM	0	0	0	2	8	98	201	143	10	0	2	0	0	0	0	0	0	**464**
3:00 PM	0	0	1	1	16	153	341	125	18	0	0	0	0	0	0	0	0	**655**
4:00 PM	0	0	0	0	32	210	324	145	16	2	0	0	0	0	0	0	0	**729**
5:00 PM	0	0	0	2	32	204	349	143	12	0	1	0	0	0	0	0	0	**743**
6:00 PM	0	0	0	0	17	135	247	119	17	1	0	0	0	0	0	0	0	**536**
7:00 PM	0	0	0	0	5	66	113	59	7	1	0	0	0	0	0	0	0	**251**
8:00 PM	0	0	0	0	1	19	60	50	5	0	0	0	0	0	0	0	0	**135**
9:00 PM	0	0	0	0	3	11	40	17	4	0	0	0	0	0	0	0	0	**75**
10:00 PM	0	0	0	0	0	3	14	21	4	0	0	0	0	0	0	0	0	**42**
11:00 PM	0	0	0	0	1	2	4	8	4	0	0	0	0	0	0	0	0	**19**
Total	**0**	**0**	**4**	**14**	**170**	**1,293**	**2,890**	**1,575**	**223**	**25**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**6,199**
Percent	**0.0%**	**0.0%**	**0.1%**	**0.2%**	**2.7%**	**20.9%**	**46.6%**	**25.4%**	**3.6%**	**0.4%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	37.8	mph	Mean (Average) Speed	37.9	mph
85th Percentile	42.2	mph	10 mph Pace	33.3 - 43.3	mph
95th Percentile	44.6	mph	Percent in Pace	78.7	%

Mark Skaggs:425-250-0777
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Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Friday, September 30, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	2	1	4	1	2	1	0	0	0	0	0	0	**11**
1:00 AM	0	0	0	0	0	1	2	1	1	0	0	0	0	0	0	0	0	**5**
2:00 AM	0	0	0	0	1	0	2	2	2	0	0	0	0	0	0	0	0	**7**
3:00 AM	0	0	0	0	0	0	3	1	2	0	0	0	0	0	0	0	0	**6**
4:00 AM	0	0	0	0	0	0	4	4	4	0	0	0	0	0	0	0	0	**12**
5:00 AM	0	0	0	0	0	1	10	21	18	8	2	0	0	0	0	0	0	**60**
6:00 AM	0	0	0	0	0	15	38	83	59	23	0	1	0	0	0	0	0	**219**
7:00 AM	0	0	0	0	1	22	106	207	138	40	0	0	0	0	0	0	0	**514**
8:00 AM	0	0	0	1	8	17	116	222	182	21	3	0	0	0	0	0	0	**570**
9:00 AM	0	0	0	0	1	20	83	150	104	27	0	2	0	0	0	0	0	**387**
10:00 AM	0	0	0	0	3	27	84	115	93	19	4	0	0	0	0	0	0	**345**
11:00 AM	0	0	0	1	1	24	97	157	79	24	4	0	0	0	0	0	0	**387**
12:00 PM	0	0	0	0	6	46	153	168	79	18	5	0	0	0	0	0	0	**475**
1:00 PM	0	0	0	0	2	25	116	169	107	26	3	0	0	0	0	0	0	**448**
2:00 PM	0	0	0	0	5	52	116	196	93	14	2	2	0	0	0	0	0	**480**
3:00 PM	0	0	0	0	7	57	173	211	104	12	1	1	0	0	0	0	0	**566**
4:00 PM	0	0	0	0	4	42	147	187	74	12	2	2	0	0	0	0	0	**470**
5:00 PM	0	0	1	7	11	49	133	198	78	14	2	0	0	0	0	0	0	**493**
6:00 PM	0	0	0	1	9	75	206	236	85	12	4	0	0	0	0	0	0	**628**
7:00 PM	0	0	0	2	15	63	130	119	52	4	2	0	0	0	0	0	0	**387**
8:00 PM	0	0	0	0	6	17	61	76	42	14	4	1	0	0	0	0	0	**221**
9:00 PM	0	0	0	2	0	22	46	46	22	2	3	0	0	0	0	0	0	**143**
10:00 PM	0	0	0	0	1	5	25	20	17	4	2	1	0	0	0	0	0	**75**
11:00 PM	0	0	0	0	2	4	4	7	9	2	0	0	0	0	0	0	0	**28**
Total	**0**	**0**	**1**	**14**	**83**	**586**	**1,856**	**2,600**	**1,445**	**298**	**44**	**10**	**0**	**0**	**0**	**0**	**0**	**6,937**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.2%**	**1.2%**	**8.4%**	**26.8%**	**37.5%**	**20.8%**	**4.3%**	**0.6%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	41.7	mph	Mean (Average) Speed	41.7	mph
85th Percentile	47.0	mph	10 mph Pace	36.7 - 46.7	mph
95th Percentile	50.0	mph	Percent in Pace	66.93	%

Mark Skaggs:425-250-0777
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Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Saturday, October 1, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	2	9	2	2	0	1	0	0	0	0	0	0	**16**
1:00 AM	0	0	0	0	0	2	1	4	0	0	0	0	0	0	0	0	0	**7**
2:00 AM	0	0	0	0	1	1	3	2	0	0	0	0	0	0	0	0	0	**7**
3:00 AM	0	0	0	0	0	4	3	2	2	1	0	0	0	0	0	0	0	**12**
4:00 AM	0	0	0	0	0	0	3	3	0	1	0	1	0	0	0	0	0	**8**
5:00 AM	0	0	0	0	0	2	4	5	1	1	0	0	0	0	0	0	0	**13**
6:00 AM	0	0	0	0	1	5	12	12	3	2	0	0	0	0	0	0	0	**35**
7:00 AM	0	0	0	0	1	6	25	36	4	2	0	0	0	0	0	0	0	**74**
8:00 AM	0	0	0	0	0	11	48	51	20	4	0	0	0	0	0	0	0	**134**
9:00 AM	0	0	0	0	1	35	118	80	23	4	1	0	0	0	0	0	0	**262**
10:00 AM	0	0	0	0	2	29	141	95	25	3	0	0	0	0	0	0	0	**295**
11:00 AM	0	0	0	0	4	68	241	96	15	0	0	0	0	0	0	0	0	**424**
12:00 PM	0	0	0	0	2	58	244	106	15	2	0	0	0	0	0	0	0	**427**
1:00 PM	0	0	0	0	4	56	195	135	27	3	1	0	0	0	0	0	0	**421**
2:00 PM	0	0	0	0	4	56	215	127	16	2	0	0	0	0	0	0	0	**420**
3:00 PM	0	0	0	0	7	39	182	141	27	2	0	0	0	0	0	0	0	**398**
4:00 PM	0	0	0	0	1	26	166	131	37	2	0	0	0	0	0	0	0	**363**
5:00 PM	0	0	0	0	1	36	119	112	24	2	0	1	0	0	0	0	0	**295**
6:00 PM	0	0	0	0	1	42	129	107	24	0	0	0	0	0	0	0	0	**303**
7:00 PM	0	0	0	0	6	29	85	59	16	1	0	0	0	0	0	0	0	**196**
8:00 PM	0	0	0	0	3	26	63	28	11	3	0	0	0	0	0	0	0	**134**
9:00 PM	0	0	0	0	2	10	48	37	1	0	0	0	0	0	0	0	0	**98**
10:00 PM	0	0	0	0	1	5	12	20	8	2	0	0	0	0	0	0	0	**48**
11:00 PM	0	0	0	0	0	3	14	13	0	0	0	0	0	0	0	0	0	**30**
Total	**0**	**0**	**0**	**0**	**42**	**551**	**2,080**	**1,404**	**301**	**37**	**3**	**2**	**0**	**0**	**0**	**0**	**0**	**4,420**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**1.0%**	**12.5%**	**47.1%**	**31.8%**	**6.8%**	**0.8%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	39.0	mph	Mean (Average) Speed	39.2	mph
85th Percentile	43.3	mph	10 mph Pace	34.6 - 44.6	mph
95th Percentile	46.1	mph	Percent in Pace	79.7	%

Mark Skaggs:425-250-0777
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Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Saturday, October 1, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	1	0	2	5	3	2	0	0	0	0	0	0	0	**13**
1:00 AM	0	0	0	0	0	1	1	3	3	1	1	0	0	0	0	0	0	**10**
2:00 AM	0	0	0	0	0	2	3	2	2	0	0	0	0	0	0	0	0	**9**
3:00 AM	0	0	0	0	0	1	2	3	2	1	1	0	0	0	0	0	0	**10**
4:00 AM	0	0	0	0	0	0	2	6	3	3	0	0	0	0	0	0	0	**14**
5:00 AM	0	0	0	0	0	1	6	10	8	2	2	0	0	0	0	0	0	**29**
6:00 AM	0	0	0	0	0	4	13	11	16	4	2	0	0	0	0	0	0	**50**
7:00 AM	0	0	0	1	0	1	20	46	41	10	4	1	0	0	0	0	0	**124**
8:00 AM	0	0	0	0	0	6	32	64	70	38	4	1	0	0	0	0	0	**215**
9:00 AM	0	0	0	0	0	15	31	106	90	30	6	0	0	0	0	0	0	**278**
10:00 AM	0	0	0	0	0	9	63	106	77	29	7	1	0	0	0	0	0	**292**
11:00 AM	0	0	0	2	14	31	113	196	97	20	2	1	0	0	0	0	0	**476**
12:00 PM	0	0	0	0	1	34	101	190	97	23	6	1	0	1	0	0	0	**454**
1:00 PM	0	0	0	0	2	20	111	163	98	31	4	0	0	0	0	0	0	**429**
2:00 PM	0	0	0	1	3	34	130	167	91	25	2	0	0	0	0	0	0	**453**
3:00 PM	0	0	0	0	4	27	132	166	98	29	6	2	0	0	0	0	0	**464**
4:00 PM	0	0	0	0	1	20	73	190	109	23	5	0	0	0	0	0	0	**421**
5:00 PM	0	0	0	0	7	22	98	149	82	27	2	1	0	0	0	0	0	**388**
6:00 PM	0	0	0	1	3	23	76	109	68	20	5	0	0	1	0	0	0	**306**
7:00 PM	0	0	0	0	4	37	78	78	54	3	0	0	0	0	0	0	0	**254**
8:00 PM	0	0	0	0	2	23	57	35	38	8	0	0	0	0	0	0	0	**163**
9:00 PM	0	0	0	0	0	22	22	25	21	5	2	1	0	0	0	0	0	**98**
10:00 PM	0	0	0	0	2	3	13	19	16	5	2	0	0	0	0	0	0	**60**
11:00 PM	0	0	0	0	0	3	4	12	8	1	1	0	0	0	0	0	0	**29**
Total	**0**	**0**	**0**	**5**	**44**	**339**	**1,183**	**1,861**	**1,192**	**340**	**64**	**9**	**0**	**2**	**0**	**0**	**0**	**5,039**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.1%**	**0.9%**	**6.7%**	**23.5%**	**36.9%**	**23.7%**	**6.7%**	**1.3%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	42.6	mph	Mean (Average) Speed	42.6	mph
85th Percentile	48.1	mph	10 mph Pace	38.0 - 48.0	mph
95th Percentile	51.6	mph	Percent in Pace	66.1	%

Mark Skaggs:425-250-0777
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Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Sunday, October 2, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	1	6	5	9	3	1	0	0	0	0	0	0	0	**25**
1:00 AM	0	0	0	0	0	1	7	5	6	0	0	0	0	0	0	0	0	**19**
2:00 AM	0	0	0	0	0	2	5	7	1	1	0	0	0	0	0	0	0	**16**
3:00 AM	0	0	0	0	0	0	5	3	1	0	0	0	0	0	0	0	0	**9**
4:00 AM	0	0	0	0	0	0	1	3	0	0	0	0	0	1	0	0	0	**5**
5:00 AM	0	0	0	0	1	3	3	4	2	1	0	0	0	0	0	0	0	**14**
6:00 AM	0	0	0	0	0	7	9	7	6	1	1	0	0	0	0	0	0	**31**
7:00 AM	0	0	0	0	2	5	14	12	5	1	0	0	0	0	0	0	0	**39**
8:00 AM	0	0	0	0	3	12	27	25	10	1	0	0	0	0	0	0	0	**78**
9:00 AM	0	0	0	0	2	15	58	66	21	2	0	0	0	0	0	0	0	**164**
10:00 AM	0	0	0	0	2	29	114	87	16	2	0	0	0	0	0	0	0	**250**
11:00 AM	0	0	0	0	6	49	170	93	20	0	0	0	0	0	0	0	0	**338**
12:00 PM	0	0	0	0	2	64	163	96	18	6	0	1	0	0	0	0	0	**350**
1:00 PM	0	0	0	0	11	40	184	113	18	2	0	1	0	0	0	0	0	**369**
2:00 PM	0	0	0	0	4	74	188	105	25	0	0	0	0	0	0	0	0	**396**
3:00 PM	0	0	0	0	5	63	155	94	11	3	0	0	0	0	0	0	0	**331**
4:00 PM	0	0	0	0	1	29	115	116	26	2	0	1	0	0	0	0	0	**290**
5:00 PM	0	0	0	0	0	28	93	115	14	0	0	1	1	0	0	0	0	**252**
6:00 PM	0	0	0	0	2	26	126	66	22	2	0	0	0	0	0	0	0	**244**
7:00 PM	0	0	0	0	6	21	53	32	3	0	1	0	0	0	0	0	0	**116**
8:00 PM	0	0	1	0	3	18	29	20	3	1	0	0	0	0	0	0	0	**75**
9:00 PM	0	0	0	0	0	6	21	11	5	0	0	0	0	0	0	0	0	**43**
10:00 PM	0	0	0	0	0	2	8	14	2	0	0	0	0	0	0	0	0	**26**
11:00 PM	0	0	0	0	1	3	2	2	1	0	0	0	0	0	0	0	0	**9**
Total	**0**	**0**	**1**	**0**	**52**	**503**	**1,555**	**1,105**	**239**	**26**	**2**	**4**	**1**	**1**	**0**	**0**	**0**	**3,489**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**1.5%**	**14.4%**	**44.6%**	**31.7%**	**6.9%**	**0.7%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	38.9	mph	Mean (Average) Speed	39.1	mph
85th Percentile	43.3	mph	10 mph Pace	34.0 - 44.0	mph
95th Percentile	46.0	mph	Percent in Pace	78.3	%

Mark Skaggs:425-250-0777
mark.skaggs@idaxdata.com

Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Sunday, October 2, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	1	5	6	8	7	3	0	0	0	0	0	0	0	**30**
1:00 AM	0	0	0	0	0	0	7	5	3	1	0	0	0	0	0	0	0	**16**
2:00 AM	0	0	0	0	0	0	3	6	2	2	0	0	0	0	0	0	0	**13**
3:00 AM	0	0	0	0	0	0	1	4	2	1	0	1	0	1	0	0	0	**10**
4:00 AM	0	0	0	0	0	1	1	4	2	0	1	0	0	0	0	0	0	**9**
5:00 AM	0	0	0	0	0	1	3	8	8	2	4	0	1	0	0	0	0	**27**
6:00 AM	0	0	0	0	0	3	5	6	5	2	0	0	0	0	0	0	0	**21**
7:00 AM	0	0	0	0	0	1	5	14	27	6	4	0	0	0	0	0	0	**57**
8:00 AM	0	0	0	0	0	5	13	39	23	23	2	0	0	0	0	0	0	**105**
9:00 AM	0	0	0	0	0	4	27	65	52	24	5	1	0	0	0	0	0	**178**
10:00 AM	0	0	0	0	0	8	39	100	67	23	5	1	0	0	0	0	0	**243**
11:00 AM	0	0	0	0	2	20	85	114	79	22	6	0	0	0	0	0	0	**328**
12:00 PM	0	0	0	1	12	32	104	163	110	45	4	1	1	0	0	0	0	**473**
1:00 PM	0	0	0	1	12	25	161	219	141	40	8	1	0	0	0	0	0	**608**
2:00 PM	0	0	0	0	3	21	92	150	106	27	3	1	0	0	0	0	0	**403**
3:00 PM	0	0	0	1	2	30	99	123	106	27	1	0	0	0	0	0	0	**389**
4:00 PM	0	0	0	0	2	19	61	151	100	31	6	0	0	0	0	0	0	**370**
5:00 PM	0	0	0	0	4	21	66	120	88	27	4	3	1	0	0	0	0	**334**
6:00 PM	0	0	0	0	0	21	64	101	56	18	12	3	0	0	0	0	0	**275**
7:00 PM	0	0	0	1	2	27	79	71	24	9	0	0	1	0	0	0	0	**214**
8:00 PM	0	0	0	0	5	20	50	28	7	4	2	0	1	0	0	0	0	**117**
9:00 PM	0	0	0	0	6	8	17	21	5	6	1	0	0	0	0	0	0	**64**
10:00 PM	0	0	0	0	1	3	11	12	7	4	0	0	0	0	0	0	0	**38**
11:00 PM	0	0	0	0	0	3	2	7	2	5	1	1	0	0	0	0	0	**21**
Total	**0**	**0**	**0**	**4**	**52**	**278**	**1,001**	**1,539**	**1,029**	**352**	**69**	**13**	**5**	**1**	**0**	**0**	**0**	**4,343**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.1%**	**1.2%**	**6.4%**	**23.0%**	**35.4%**	**23.7%**	**8.1%**	**1.6%**	**0.3%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	42.6	mph	Mean (Average) Speed	42.8	mph
85th Percentile	48.5	mph	10 mph Pace	37.7 - 47.7	mph
95th Percentile	52.3	mph	Percent in Pace	63.85	%

Mark Skaggs:425-250-0777
mark.skaggs@idaxdata.com

Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Monday, October 3, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	5	4	1	0	0	0	0	0	0	0	0	**10**
1:00 AM	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	0	2	0	4	0	0	2	1	0	0	0	0	0	0	**9**
4:00 AM	0	0	0	0	0	0	1	4	0	0	0	0	0	0	0	0	0	**5**
5:00 AM	0	0	0	0	1	2	12	4	3	0	0	1	0	0	0	0	0	**23**
6:00 AM	0	0	0	0	2	9	20	41	15	0	2	0	0	0	0	0	0	**89**
7:00 AM	1	0	0	0	1	15	69	86	14	2	0	0	0	1	0	0	0	**189**
8:00 AM	3	0	2	7	11	25	85	118	26	1	0	0	0	0	0	0	0	**278**
9:00 AM	0	0	0	0	1	25	114	78	26	0	0	0	0	0	0	0	0	**244**
10:00 AM	0	0	0	0	0	24	128	115	33	0	0	0	0	0	0	0	0	**300**
11:00 AM	0	0	0	0	2	51	156	127	20	2	0	0	0	0	0	0	0	**358**
12:00 PM	0	0	0	0	1	50	226	133	20	2	0	0	0	0	0	0	0	**432**
1:00 PM	0	0	0	0	4	71	224	117	20	1	0	0	0	0	0	0	0	**437**
2:00 PM	0	0	0	0	7	97	209	80	14	1	0	0	0	0	0	0	0	**408**
3:00 PM	0	0	0	0	2	64	274	186	34	3	0	0	0	0	0	0	0	**563**
4:00 PM	0	0	0	0	12	112	311	202	34	3	0	0	0	0	0	0	0	**674**
5:00 PM	0	0	0	1	4	108	351	266	37	2	0	0	0	0	0	0	0	**769**
6:00 PM	0	0	0	0	12	91	305	159	22	2	0	0	0	0	0	0	0	**591**
7:00 PM	0	0	0	0	4	48	108	56	10	0	0	0	0	0	0	0	0	**226**
8:00 PM	0	0	0	0	4	12	34	28	9	0	0	0	0	0	0	0	0	**87**
9:00 PM	0	0	0	1	1	6	19	14	5	0	0	0	0	0	0	0	0	**46**
10:00 PM	0	0	0	0	0	4	6	6	0	0	0	0	0	0	0	0	0	**16**
11:00 PM	0	0	0	0	1	4	6	5	0	0	0	0	0	0	0	0	0	**16**
Total	**4**	**0**	**2**	**9**	**72**	**819**	**2,669**	**1,830**	**343**	**21**	**3**	**1**	**0**	**1**	**0**	**0**	**0**	**5,774**
Percent	**0.1%**	**0.0%**	**0.0%**	**0.2%**	**1.2%**	**14.2%**	**46.2%**	**31.7%**	**5.9%**	**0.4%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	38.8	mph	Mean (Average) Speed	38.9	mph
85th Percentile	43.1	mph	10 mph Pace	34.1 - 44.1	mph
95th Percentile	45.5	mph	Percent in Pace	79.4	%

Mark Skaggs:425-250-0777
mark.skaggs@idaxdata.com

Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Monday, October 3, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	2	2	5	2	0	0	0	0	0	0	0	**11**
1:00 AM	0	0	0	0	2	0	2	2	2	1	0	0	0	0	0	0	0	**9**
2:00 AM	0	0	0	0	0	1	0	1	1	1	0	0	0	0	0	0	0	**4**
3:00 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	0	0	0	2	2	0	1	0	1	0	0	0	0	0	0	**6**
5:00 AM	0	0	0	0	0	1	7	17	27	10	5	1	0	0	0	0	0	**68**
6:00 AM	0	0	0	0	2	11	34	96	65	16	4	1	0	0	0	0	0	**229**
7:00 AM	1	7	16	18	20	103	265	280	134	14	0	1	0	0	0	0	0	**859**
8:00 AM	14	61	75	42	17	38	104	128	116	36	5	1	0	0	0	0	0	**637**
9:00 AM	0	0	0	0	1	12	44	121	125	53	3	1	0	0	0	0	0	**360**
10:00 AM	0	0	0	0	0	11	48	139	97	27	3	0	0	0	0	0	0	**325**
11:00 AM	0	0	0	0	9	29	101	148	101	18	2	1	0	0	0	0	0	**409**
12:00 PM	0	0	0	0	2	28	94	189	89	31	6	2	1	0	0	0	0	**442**
1:00 PM	0	0	0	0	5	35	118	175	81	18	2	0	0	0	0	0	0	**434**
2:00 PM	0	0	0	0	1	33	109	183	84	16	0	0	0	0	0	0	0	**426**
3:00 PM	0	0	0	0	8	41	106	218	94	26	1	0	0	0	0	0	0	**494**
4:00 PM	0	0	0	1	3	31	145	161	100	20	0	1	0	0	0	0	0	**462**
5:00 PM	0	0	0	2	0	18	111	195	118	18	2	0	0	0	0	0	0	**464**
6:00 PM	0	0	0	0	0	41	86	141	67	20	1	0	0	0	0	0	0	**356**
7:00 PM	0	0	0	0	7	25	82	88	20	9	1	0	0	0	0	0	0	**232**
8:00 PM	0	0	0	0	3	13	36	65	22	6	1	0	0	0	0	0	0	**146**
9:00 PM	0	0	0	0	3	11	23	25	9	3	2	0	0	0	0	0	0	**76**
10:00 PM	0	0	0	0	1	5	8	19	8	3	1	0	0	0	0	0	0	**45**
11:00 PM	0	0	0	0	0	0	4	4	10	0	0	0	0	0	0	0	0	**18**
Total	**15**	**68**	**91**	**63**	**84**	**489**	**1,531**	**2,400**	**1,376**	**348**	**40**	**9**	**1**	**0**	**0**	**0**	**0**	**6,515**
Percent	**0.2%**	**1.0%**	**1.4%**	**1.0%**	**1.3%**	**7.5%**	**23.5%**	**36.8%**	**21.1%**	**5.3%**	**0.6%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	41.8	mph	Mean (Average) Speed	41.2	mph
85th Percentile	47.3	mph	10 mph Pace	36.9 - 46.9	mph
95th Percentile	50.6	mph	Percent in Pace	64.44	%

Mark Skaggs:425-250-0777
mark.skaggs@idaxdata.com

Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Total Study Average
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	1	3	4	4	2	0	0	0	0	0	0	0	0	**14**
1:00 AM	0	0	0	0	0	1	2	2	1	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	0	0	0	0	1	2	2	1	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	0	0	0	0	1	2	1	1	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	0	0	0	0	1	2	3	1	0	0	0	0	0	0	0	0	**7**
5:00 AM	0	0	0	0	0	3	8	8	3	1	0	0	0	0	0	0	0	**23**
6:00 AM	0	0	0	0	1	7	20	28	9	1	0	0	0	0	0	0	0	**66**
7:00 AM	0	0	0	0	2	15	65	74	15	2	0	0	0	0	0	0	0	**173**
8:00 AM	2	0	1	2	4	22	85	93	22	2	0	0	0	0	0	0	0	**233**
9:00 AM	0	0	0	0	3	29	108	83	23	2	0	0	0	0	0	0	0	**248**
10:00 AM	0	0	0	1	3	40	135	104	21	2	0	0	0	0	0	0	0	**306**
11:00 AM	0	0	0	1	5	54	182	104	17	2	0	0	0	0	0	0	0	**365**
12:00 PM	0	0	0	1	4	63	217	118	19	3	0	0	0	0	0	0	0	**425**
1:00 PM	0	0	0	0	7	59	203	124	22	1	0	0	0	0	0	0	0	**416**
2:00 PM	0	0	0	0	6	72	206	128	18	1	0	0	0	0	0	0	0	**431**
3:00 PM	0	0	0	1	8	76	239	161	26	2	0	0	0	0	0	0	0	**513**
4:00 PM	0	0	0	0	8	89	268	178	30	2	0	0	0	0	0	0	0	**575**
5:00 PM	0	0	0	0	6	83	278	217	32	2	0	0	0	0	0	0	0	**618**
6:00 PM	0	0	0	1	7	77	236	145	27	1	0	0	0	0	0	0	0	**494**
7:00 PM	0	0	0	1	8	48	105	62	11	1	0	0	0	0	0	0	0	**236**
8:00 PM	0	0	0	0	3	19	52	33	7	1	0	0	0	0	0	0	0	**115**
9:00 PM	0	0	0	0	1	11	28	18	4	0	0	0	0	0	0	0	0	**62**
10:00 PM	0	0	0	0	0	4	10	13	4	1	0	0	0	0	0	0	0	**32**
11:00 PM	0	0	0	0	1	2	5	7	2	1	0	0	0	0	0	0	0	**18**
Total	**2**	**0**	**1**	**8**	**78**	**780**	**2,462**	**1,710**	**318**	**28**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5,387**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.1%**	**1.4%**	**14.5%**	**45.7%**	**31.7%**	**5.9%**	**0.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	38.8	mph	Mean (Average) Speed	38.9	mph
85th Percentile	42.9	mph	10 mph Pace	34.1 - 44.1	mph
95th Percentile	45.5	mph	Percent in Pace	79.1	%

Mark Skaggs:425-250-0777
mark.skaggs@idaxdata.com

Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 to 10/3/2022
Site Code: 06

Total Study Average
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	2	2	4	3	2	0	0	0	0	0	0	0	**13**
1:00 AM	0	0	0	0	0	0	2	3	1	1	0	0	0	0	0	0	0	**7**
2:00 AM	0	0	0	0	0	0	2	2	1	1	0	0	0	0	0	0	0	**6**
3:00 AM	0	0	0	0	0	0	1	2	2	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	0	0	0	0	0	3	3	3	1	0	0	0	0	0	0	0	**10**
5:00 AM	0	0	0	0	0	1	8	19	17	8	3	0	0	0	0	0	0	**56**
6:00 AM	0	0	0	0	1	9	35	70	55	13	2	0	0	0	0	0	0	**185**
7:00 AM	0	1	2	3	5	28	110	192	105	20	2	0	0	0	0	0	0	**468**
8:00 AM	4	19	19	9	10	22	77	147	113	27	4	1	0	0	0	0	0	**452**
9:00 AM	0	0	0	0	1	14	57	123	99	29	4	1	0	0	0	0	0	**328**
10:00 AM	0	0	0	0	1	16	69	122	87	23	4	0	0	0	0	0	0	**322**
11:00 AM	0	0	0	0	6	25	93	153	92	21	3	0	0	0	0	0	0	**393**
12:00 PM	0	0	0	1	4	32	122	174	87	24	4	1	0	0	0	0	0	**449**
1:00 PM	0	0	0	0	5	25	118	175	97	25	3	0	0	0	0	0	0	**448**
2:00 PM	0	0	0	0	3	31	108	174	94	19	3	0	0	0	0	0	0	**432**
3:00 PM	0	0	0	0	4	34	120	188	95	21	2	0	0	0	0	0	0	**464**
4:00 PM	0	0	0	1	3	26	106	171	100	24	3	0	0	0	0	0	0	**434**
5:00 PM	0	0	0	2	4	26	99	168	96	24	3	1	0	0	0	0	0	**423**
6:00 PM	0	0	0	0	3	34	96	137	67	15	4	0	0	0	0	0	0	**356**
7:00 PM	0	0	0	1	6	40	95	87	37	7	1	0	0	0	0	0	0	**274**
8:00 PM	0	0	0	0	6	17	47	51	26	7	1	0	0	0	0	0	0	**155**
9:00 PM	0	0	0	0	3	15	26	26	17	4	1	0	0	0	0	0	0	**92**
10:00 PM	0	0	0	0	1	4	13	15	12	4	1	0	0	0	0	0	0	**50**
11:00 PM	0	0	0	0	0	2	3	6	6	1	0	0	0	0	0	0	0	**18**
Total	**4**	**20**	**21**	**17**	**66**	**403**	**1,412**	**2,212**	**1,312**	**321**	**48**	**4**	**0**	**0**	**0**	**0**	**0**	**5,840**
Percent	**0.1%**	**0.3%**	**0.4%**	**0.3%**	**1.1%**	**6.9%**	**24.2%**	**37.9%**	**22.5%**	**5.5%**	**0.8%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	42.2	mph	Mean (Average) Speed	42.0	mph
85th Percentile	47.4	mph	10 mph Pace	37.4 - 47.4	mph
95th Percentile	50.8	mph	Percent in Pace	66.5	%

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Location: Midland Ave BTWN E Wulfsohn & E Meadows
Date Range: 9/27/2022 - 10/3/2022
Site Code: 06

	Tuesday			Wednesday			Thursday			Friday			Saturday			Sunday			Monday			Mid-Week Average		
	9/27/2022			9/28/2022			9/29/2022			9/30/2022			10/1/2022			10/2/2022			10/3/2022					
Time	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total
12:00 AM	7	9	16	12	9	21	11	13	24	15	11	26	16	13	29	25	30	55	10	11	21	10	10	20
1:00 AM	0	4	4	3	6	9	5	11	16	5	5	10	7	10	17	19	16	35	3	9	12	3	7	10
2:00 AM	2	3	5	4	4	8	1	2	3	5	7	12	7	9	16	16	13	29	1	4	5	2	3	5
3:00 AM	4	3	7	2	7	9	3	1	4	5	6	11	12	10	22	9	10	19	9	3	12	3	4	7
4:00 AM	9	10	19	7	9	16	8	11	19	11	12	23	8	14	22	5	9	14	5	6	11	8	10	18
5:00 AM	30	67	97	27	74	101	21	72	93	26	60	86	13	29	42	14	27	41	23	68	91	26	71	97
6:00 AM	73	262	335	102	242	344	70	278	348	73	219	292	35	50	85	31	21	52	89	229	318	82	261	342
7:00 AM	228	583	811	231	570	801	233	575	808	219	514	733	74	124	198	39	57	96	189	859	1,048	231	576	807
8:00 AM	225	406	631	304	603	907	312	618	930	298	570	868	134	215	349	78	105	183	278	637	915	280	542	823
9:00 AM	266	361	627	241	358	599	273	376	649	290	387	677	262	278	540	164	178	342	244	360	604	260	365	625
10:00 AM	340	346	686	308	352	660	350	356	706	288	345	633	295	292	587	250	243	493	300	325	625	333	351	684
11:00 AM	349	390	739	371	383	754	351	386	737	369	387	756	424	476	900	338	328	666	358	409	767	357	386	743
12:00 PM	422	418	840	421	411	832	409	468	877	513	475	988	427	454	881	350	473	823	432	442	874	417	432	850
1:00 PM	406	393	799	426	436	862	424	400	824	433	448	881	421	429	850	369	608	977	437	434	871	419	410	828
2:00 PM	441	386	827	492	439	931	403	439	842	464	480	944	420	453	873	396	403	799	408	426	834	445	421	867
3:00 PM	555	478	1,033	532	395	927	558	456	1,014	655	566	1,221	398	464	862	331	389	720	563	494	1,057	548	443	991
4:00 PM	666	405	1,071	648	449	1,097	664	468	1,132	729	470	1,199	363	421	784	290	370	660	674	462	1,136	659	441	1,100
5:00 PM	762	430	1,192	747	436	1,183	765	415	1,180	743	493	1,236	295	388	683	252	334	586	769	464	1,233	758	427	1,185
6:00 PM	574	314	888	598	309	907	614	317	931	536	628	1,164	303	306	609	244	275	519	591	356	947	595	313	909
7:00 PM	247	264	511	337	264	601	269	298	567	251	387	638	196	254	450	116	214	330	226	232	458	284	275	560
8:00 PM	140	163	303	129	153	282	101	131	232	135	221	356	134	163	297	75	117	192	87	146	233	123	149	272
9:00 PM	55	88	143	56	98	154	68	96	164	75	143	218	98	98	196	43	64	107	46	76	122	60	94	154
10:00 PM	32	34	66	24	42	66	35	51	86	42	75	117	48	60	108	26	38	64	16	45	61	30	42	73
11:00 PM	15	11	26	14	11	25	19	24	43	19	28	47	30	29	59	9	21	30	16	18	34	16	15	31
Total	**5,848**	**5,828**	**11,676**	**6,036**	**6,060**	**12,096**	**5,967**	**6,262**	**12,229**	**6,199**	**6,937**	**13,136**	**4,420**	**5,039**	**9,459**	**3,489**	**4,343**	**7,832**	**5,774**	**6,515**	**12,289**	**5,950**	**6,050**	**12,000**
Percent	**50%**	**50%**	-	**50%**	**50%**	-	**49%**	**51%**	-	**47%**	**53%**	-	**47%**	**53%**	-	**45%**	**55%**	-	**47%**	**53%**	-	**50%**	**50%**	-

1. Mid-week average includes data between Tuesday and Thursday.

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Vehicle Classification Report Summary

Location: Midland Ave BTWN E Meadows & W Meadows

Count Direction: Eastbound / Westbound

Date Range: 9/17/2022 to 9/23/2022

Site Code: 07

	FHWA Vehicle Classification													Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
Study Total														
Eastbound	102	21,555	7,563	40	3,531	62	0	24	37	9	0	0	7	32,930
Percent	0.3%	65.5%	23.0%	0.1%	10.7%	0.2%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	100%
Westbound	99	16,458	6,014	43	5,338	71	0	23	26	8	2	0	9	28,091
Percent	0.4%	58.6%	21.4%	0.2%	19.0%	0.3%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	100%
Total	201	38,013	13,577	83	8,869	133	0	47	63	17	2	0	16	61,021
Percent	0.3%	62.3%	22.2%	0.1%	14.5%	0.2%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	100%

FHWA Vehicle Classification	
Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Saturday, September 17, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	13	0	0	1	0	0	0	0	0	0	0	0	**14**
1:00 AM	0	7	2	0	0	0	0	0	0	0	0	0	0	**9**
2:00 AM	0	9	1	0	0	0	0	0	0	0	0	0	0	**10**
3:00 AM	0	4	1	0	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	6	2	0	2	0	0	0	0	0	0	0	0	**10**
5:00 AM	0	17	5	1	1	0	0	0	0	0	0	0	0	**24**
6:00 AM	0	29	19	0	10	0	0	0	0	0	0	0	0	**58**
7:00 AM	0	92	33	1	17	0	0	0	0	0	0	0	0	**143**
8:00 AM	0	97	48	0	23	0	0	0	0	0	0	0	0	**168**
9:00 AM	1	132	58	0	17	0	0	0	0	0	0	0	0	**208**
10:00 AM	5	176	54	0	24	0	0	0	0	0	0	0	0	**259**
11:00 AM	1	198	54	0	27	0	0	0	1	0	0	0	0	**281**
12:00 PM	3	200	79	0	23	1	0	0	0	1	0	0	0	**307**
1:00 PM	0	203	74	1	22	0	0	0	0	0	0	0	0	**300**
2:00 PM	1	201	48	0	25	0	0	0	0	0	0	0	0	**275**
3:00 PM	0	181	64	0	18	0	0	0	0	0	0	0	0	**263**
4:00 PM	1	191	46	0	27	0	0	1	0	0	0	0	0	**266**
5:00 PM	1	186	41	0	27	2	0	0	1	0	0	0	0	**258**
6:00 PM	1	165	41	0	18	0	0	0	0	0	0	0	0	**225**
7:00 PM	1	95	33	0	20	0	0	0	0	0	0	0	0	**149**
8:00 PM	0	88	24	0	7	0	0	0	0	0	0	0	0	**119**
9:00 PM	1	73	18	0	7	0	0	0	0	0	0	0	0	**99**
10:00 PM	0	44	6	0	3	0	0	0	0	0	0	0	0	**53**
11:00 PM	0	24	9	0	2	0	0	0	0	0	0	0	0	**35**
Total	**16**	**2,431**	**760**	**3**	**321**	**3**	**0**	**1**	**2**	**1**	**0**	**0**	**0**	**3,538**
Percent	**0.5%**	**68.7%**	**21.5%**	**0.1%**	**9.1%**	**0.1%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Saturday, September 17, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	9	5	1	2	0	0	0	0	0	0	0	0	**17**
1:00 AM	0	9	0	0	2	0	0	0	0	0	0	0	0	**11**
2:00 AM	0	9	3	1	3	0	0	0	0	0	0	0	0	**16**
3:00 AM	0	5	2	0	1	0	0	0	0	0	0	0	0	**8**
4:00 AM	0	3	1	0	4	0	0	0	0	0	0	0	0	**8**
5:00 AM	0	13	2	0	4	1	0	0	0	0	0	0	0	**20**
6:00 AM	0	23	11	0	13	0	0	0	0	0	0	0	0	**47**
7:00 AM	0	49	16	0	22	0	0	0	0	0	0	0	0	**87**
8:00 AM	0	56	32	0	26	1	0	0	0	0	0	0	0	**115**
9:00 AM	0	82	34	0	21	1	0	0	0	0	0	0	0	**138**
10:00 AM	2	135	59	0	42	0	0	0	0	0	0	0	0	**238**
11:00 AM	2	153	49	1	50	0	0	0	0	0	0	0	0	**255**
12:00 PM	1	185	61	0	54	0	0	0	0	0	0	0	0	**301**
1:00 PM	1	130	47	1	38	0	0	0	0	0	0	0	0	**217**
2:00 PM	0	155	61	0	45	0	0	0	0	0	0	0	0	**261**
3:00 PM	2	137	42	0	42	0	0	0	0	0	0	0	0	**223**
4:00 PM	1	133	34	0	44	0	0	0	0	0	0	0	0	**212**
5:00 PM	4	127	48	0	41	0	0	2	0	0	0	0	0	**222**
6:00 PM	0	117	39	0	36	0	0	0	1	0	0	0	0	**193**
7:00 PM	1	98	27	0	28	0	0	0	0	0	0	0	0	**154**
8:00 PM	0	72	15	0	17	0	0	0	0	0	0	0	0	**104**
9:00 PM	0	52	13	1	7	0	0	0	0	0	0	0	0	**73**
10:00 PM	0	30	11	0	6	0	0	0	0	0	0	0	0	**47**
11:00 PM	0	16	8	0	9	0	0	0	0	0	0	0	0	**33**
Total	**14**	**1,798**	**620**	**5**	**557**	**3**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**3,000**
Percent	**0.5%**	**59.9%**	**20.7%**	**0.2%**	**18.6%**	**0.1%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Sunday, September 18, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	18	4	0	1	0	0	0	0	0	0	0	0	**23**
1:00 AM	0	9	4	0	1	0	0	0	0	0	0	0	0	**14**
2:00 AM	0	9	3	0	0	0	0	0	0	0	0	0	0	**12**
3:00 AM	0	7	3	0	0	0	0	0	0	0	0	0	0	**10**
4:00 AM	0	5	3	0	1	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	11	4	1	1	0	0	0	0	0	0	0	0	**17**
6:00 AM	0	18	9	0	4	0	0	0	0	0	0	0	0	**31**
7:00 AM	0	42	15	0	9	0	0	0	0	0	0	0	0	**66**
8:00 AM	0	64	24	0	13	0	0	0	0	0	0	0	0	**101**
9:00 AM	0	108	44	0	18	0	0	0	0	0	0	0	0	**170**
10:00 AM	0	130	53	0	14	0	0	0	0	0	0	0	0	**197**
11:00 AM	3	145	51	0	24	0	0	0	0	0	0	0	0	**223**
12:00 PM	2	172	57	2	21	0	0	0	0	0	0	0	0	**254**
1:00 PM	4	157	51	0	24	0	0	0	0	0	0	0	0	**236**
2:00 PM	1	170	46	0	14	0	0	0	0	0	0	0	0	**231**
3:00 PM	4	178	53	0	19	0	0	0	0	0	0	0	0	**254**
4:00 PM	0	150	48	0	13	0	0	0	0	0	0	0	0	**211**
5:00 PM	0	169	45	0	18	0	0	0	0	0	0	0	0	**232**
6:00 PM	1	119	46	0	14	0	0	0	0	0	0	0	0	**180**
7:00 PM	0	110	24	0	20	0	0	0	0	0	0	0	0	**154**
8:00 PM	1	88	21	1	5	0	0	0	0	0	0	0	0	**116**
9:00 PM	1	62	18	0	3	0	0	0	0	0	0	0	0	**84**
10:00 PM	0	38	6	0	1	0	0	0	0	0	0	0	0	**45**
11:00 PM	0	11	6	0	3	0	0	0	0	0	0	0	0	**20**
Total	**17**	**1,990**	**638**	**4**	**241**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2,890**
Percent	**0.6%**	**68.9%**	**22.1%**	**0.1%**	**8.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Sunday, September 18, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	16	5	0	3	0	0	0	0	0	0	0	0	**24**
1:00 AM	0	13	1	0	3	0	0	0	0	0	0	0	0	**17**
2:00 AM	0	14	2	0	3	0	0	0	0	0	0	0	0	**19**
3:00 AM	0	4	2	0	0	0	0	0	0	0	0	0	0	**6**
4:00 AM	0	12	1	0	0	0	0	0	0	0	0	0	0	**13**
5:00 AM	0	6	3	0	3	0	0	0	0	0	0	0	0	**12**
6:00 AM	0	17	8	0	7	0	0	0	0	0	0	0	0	**32**
7:00 AM	2	24	10	1	10	0	0	0	0	0	0	0	0	**47**
8:00 AM	0	35	18	1	14	0	0	0	0	0	0	0	0	**68**
9:00 AM	0	60	46	0	32	0	0	0	0	0	0	0	0	**138**
10:00 AM	0	102	44	0	27	0	0	0	0	0	0	0	0	**173**
11:00 AM	1	113	49	1	35	0	0	0	0	0	0	0	0	**199**
12:00 PM	2	154	68	0	40	0	0	0	0	0	0	0	0	**264**
1:00 PM	2	149	49	0	38	0	0	1	0	1	0	0	0	**240**
2:00 PM	3	133	52	1	35	0	0	0	0	0	0	0	0	**224**
3:00 PM	0	129	36	0	25	0	0	0	1	0	0	0	0	**191**
4:00 PM	1	101	40	0	23	0	0	0	0	0	0	0	0	**165**
5:00 PM	1	108	39	0	26	1	0	0	0	0	0	0	0	**175**
6:00 PM	0	93	31	0	24	0	0	0	0	0	0	0	0	**148**
7:00 PM	0	72	23	0	16	0	0	0	0	0	0	0	0	**111**
8:00 PM	0	45	12	0	8	0	0	0	0	0	0	0	0	**65**
9:00 PM	0	25	7	1	3	0	0	0	0	0	0	0	0	**36**
10:00 PM	0	18	4	0	1	0	0	0	0	0	0	0	0	**23**
11:00 PM	0	7	2	1	4	0	0	0	0	0	0	0	0	**14**
Total	**12**	**1,450**	**552**	**6**	**380**	**1**	**0**	**1**	**1**	**1**	**0**	**0**	**0**	**2,404**
Percent	**0.5%**	**60.3%**	**23.0%**	**0.2%**	**15.8%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Monday, September 19, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	1	7	3	0	0	0	0	0	0	0	0	0	0	**11**
1:00 AM	0	7	4	0	0	0	0	0	0	0	0	0	0	**11**
2:00 AM	0	3	2	0	0	0	0	0	0	0	0	0	0	**5**
3:00 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	4	0	0	1	0	0	1	0	0	0	0	0	**6**
5:00 AM	0	34	19	0	8	0	0	0	1	0	0	0	0	**62**
6:00 AM	1	122	67	0	44	2	0	0	0	0	0	0	0	**236**
7:00 AM	0	365	159	1	69	0	0	0	1	0	0	0	1	**596**
8:00 AM	0	401	151	0	72	0	0	0	0	0	0	0	0	**624**
9:00 AM	1	167	82	0	35	0	0	0	2	0	0	0	0	**287**
10:00 AM	0	189	82	1	42	1	0	0	1	0	0	0	0	**316**
11:00 AM	2	310	129	0	65	1	0	2	3	0	0	0	1	**513**
12:00 PM	2	359	119	0	51	1	0	2	3	1	0	0	0	**538**
1:00 PM	0	427	183	1	79	3	0	2	0	1	0	0	0	**696**
2:00 PM	4	352	123	0	47	3	0	0	1	0	0	0	0	**530**
3:00 PM	1	434	101	0	52	1	0	0	1	0	0	0	1	**591**
4:00 PM	4	317	83	0	38	3	0	1	1	0	0	0	1	**448**
5:00 PM	0	239	81	0	22	1	0	0	1	0	0	0	0	**344**
6:00 PM	3	170	51	0	29	0	0	0	0	0	0	0	0	**253**
7:00 PM	1	119	37	0	20	0	0	0	0	0	0	0	0	**177**
8:00 PM	0	74	24	0	10	0	0	0	0	0	0	0	0	**108**
9:00 PM	0	38	13	0	9	0	0	0	0	0	0	0	0	**60**
10:00 PM	0	30	7	0	5	0	0	0	0	0	0	0	0	**42**
11:00 PM	0	11	2	0	2	0	0	0	0	0	0	0	0	**15**
Total	**20**	**4,179**	**1,525**	**3**	**700**	**16**	**0**	**8**	**15**	**2**	**0**	**0**	**4**	**6,472**
Percent	**0.3%**	**64.6%**	**23.6%**	**0.0%**	**10.8%**	**0.2%**	**0.0%**	**0.1%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**	

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Monday, September 19, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	2	4	0	2	0	0	0	0	0	0	0	0	**8**
1:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	**4**
3:00 AM	0	4	4	0	1	0	0	0	0	0	0	0	0	**9**
4:00 AM	0	7	3	0	2	0	0	0	0	0	0	0	0	**12**
5:00 AM	0	9	5	0	4	0	0	0	0	0	0	0	0	**18**
6:00 AM	0	38	14	0	20	0	0	0	0	0	0	0	0	**72**
7:00 AM	0	125	47	0	35	0	0	0	0	0	0	0	0	**207**
8:00 AM	0	151	47	1	48	1	0	0	2	0	0	0	0	**250**
9:00 AM	0	104	45	0	31	1	0	0	0	0	0	0	0	**181**
10:00 AM	0	128	53	0	52	2	0	0	1	1	0	0	0	**237**
11:00 AM	2	171	62	1	62	1	0	0	1	0	0	0	0	**300**
12:00 PM	2	190	61	1	61	1	0	1	0	0	0	0	0	**317**
1:00 PM	1	148	63	0	54	0	0	0	1	0	0	0	2	**269**
2:00 PM	1	229	81	0	88	3	0	1	2	0	0	0	0	**405**
3:00 PM	4	295	115	0	79	0	0	0	1	1	0	0	0	**495**
4:00 PM	2	344	117	0	119	0	0	0	0	0	0	0	1	**583**
5:00 PM	3	403	136	0	126	3	0	1	0	0	0	0	0	**672**
6:00 PM	1	245	72	1	72	0	0	0	1	0	0	0	0	**392**
7:00 PM	0	110	39	0	34	1	0	0	0	0	0	0	1	**185**
8:00 PM	3	61	16	0	12	0	0	0	1	0	1	0	0	**94**
9:00 PM	0	33	9	0	9	0	0	0	0	0	0	0	0	**51**
10:00 PM	0	16	3	0	2	0	0	0	0	0	0	0	0	**21**
11:00 PM	0	11	1	0	0	0	0	0	0	0	0	0	0	**12**
Total	**19**	**2,829**	**999**	**4**	**913**	**13**	**0**	**3**	**10**	**2**	**1**	**0**	**4**	**4,797**
Percent	**0.4%**	**59.0%**	**20.8%**	**0.1%**	**19.0%**	**0.3%**	**0.0%**	**0.1%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**	

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Tuesday, September 20, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	8	0	0	0	0	0	0	0	0	0	0	0	**8**
1:00 AM	0	1	1	0	1	0	0	0	0	0	0	0	0	**3**
2:00 AM	1	6	0	0	0	0	0	0	0	0	0	0	0	**7**
3:00 AM	1	1	1	0	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	10	5	0	1	0	0	0	0	0	0	0	0	**16**
5:00 AM	0	38	17	0	13	0	0	0	0	0	0	0	0	**68**
6:00 AM	0	134	92	0	46	1	0	0	0	0	0	0	0	**273**
7:00 AM	1	359	151	0	73	1	0	0	0	0	0	0	0	**585**
8:00 AM	0	423	140	0	90	2	0	0	0	0	0	0	0	**655**
9:00 AM	0	187	89	4	36	0	0	0	1	0	0	0	0	**317**
10:00 AM	2	175	78	0	38	0	0	1	0	0	0	0	0	**294**
11:00 AM	0	182	57	2	30	1	0	1	0	1	0	0	0	**274**
12:00 PM	1	197	90	1	27	0	0	1	0	1	0	0	0	**318**
1:00 PM	1	177	66	3	45	2	0	0	1	0	0	0	0	**295**
2:00 PM	3	195	69	0	36	1	0	0	0	0	0	0	0	**304**
3:00 PM	2	262	85	0	42	2	0	0	1	0	0	0	0	**394**
4:00 PM	2	214	55	0	35	1	0	0	1	0	0	0	0	**308**
5:00 PM	1	257	65	0	33	0	0	0	0	0	0	0	0	**356**
6:00 PM	0	144	49	0	24	0	0	0	0	0	0	0	0	**217**
7:00 PM	0	116	30	0	17	0	0	0	0	0	0	0	0	**163**
8:00 PM	0	75	25	0	9	0	0	0	0	0	0	0	0	**109**
9:00 PM	0	40	14	0	4	0	0	0	0	0	0	0	0	**58**
10:00 PM	0	23	5	0	7	0	0	0	0	0	0	0	0	**35**
11:00 PM	0	7	4	0	1	0	0	0	0	0	0	0	0	**12**
Total	**15**	**3,231**	**1,188**	**10**	**608**	**11**	**0**	**3**	**4**	**2**	**0**	**0**	**0**	**5,072**
Percent	**0.3%**	**63.7%**	**23.4%**	**0.2%**	**12.0%**	**0.2%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Tuesday, September 20, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	3	3	0	3	0	0	0	0	0	0	0	0	**9**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	1	1	0	2	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	6	3	0	2	0	0	0	0	0	0	0	0	**11**
5:00 AM	0	11	5	0	3	0	0	0	0	0	0	0	0	**19**
6:00 AM	0	39	19	0	21	2	0	0	0	0	0	0	0	**81**
7:00 AM	0	120	44	0	43	3	0	0	0	0	0	0	0	**210**
8:00 AM	1	159	60	0	50	2	0	0	0	0	0	0	0	**272**
9:00 AM	0	116	51	0	42	0	0	1	0	0	0	0	0	**210**
10:00 AM	2	100	50	0	57	2	0	0	0	0	0	0	0	**211**
11:00 AM	0	160	54	0	47	0	0	0	0	0	0	0	0	**261**
12:00 PM	3	155	51	1	49	1	0	0	0	0	0	0	0	**260**
1:00 PM	0	133	58	0	59	0	0	0	0	0	0	0	0	**250**
2:00 PM	0	147	67	1	52	2	0	0	0	0	0	0	0	**269**
3:00 PM	0	240	87	1	73	1	0	0	2	0	1	0	0	**405**
4:00 PM	2	263	98	0	106	1	0	0	0	0	0	0	0	**470**
5:00 PM	2	377	100	1	125	0	0	0	0	0	0	0	0	**605**
6:00 PM	3	300	99	0	123	4	0	0	0	0	0	0	0	**529**
7:00 PM	2	137	39	0	47	1	0	0	0	0	0	0	0	**226**
8:00 PM	0	47	24	0	14	0	0	0	0	0	0	0	0	**85**
9:00 PM	0	34	11	1	6	0	0	0	0	0	0	0	0	**52**
10:00 PM	0	15	7	0	5	0	0	0	0	0	0	0	0	**27**
11:00 PM	0	4	2	0	1	0	0	0	0	0	0	0	0	**7**
Total	**15**	**2,568**	**933**	**5**	**930**	**19**	**0**	**1**	**2**	**0**	**1**	**0**	**0**	**4,474**
Percent	**0.3%**	**57.4%**	**20.9%**	**0.1%**	**20.8%**	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Wednesday, September 21, 2022
Eastbound

	FHWA Vehicle Classification													Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	6	1	0	1	0	0	0	0	0	0	0	0	**8**
1:00 AM	0	6	3	0	0	0	0	0	0	0	0	0	0	**9**
2:00 AM	0	5	1	0	0	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	7	2	0	0	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	42	23	1	7	0	0	0	0	0	0	0	0	**73**
6:00 AM	0	123	71	1	63	1	0	0	1	0	0	0	0	**260**
7:00 AM	1	347	164	1	72	0	0	0	0	0	0	0	0	**585**
8:00 AM	0	359	142	1	80	1	0	0	0	0	0	0	0	**583**
9:00 AM	1	176	102	0	45	0	0	0	0	0	0	0	0	**324**
10:00 AM	0	178	65	0	34	1	0	0	0	0	0	0	0	**278**
11:00 AM	0	195	78	0	35	0	0	0	1	0	0	0	0	**309**
12:00 PM	0	199	66	0	36	0	0	1	0	0	0	0	0	**302**
1:00 PM	1	220	67	2	31	0	0	0	2	0	0	0	0	**323**
2:00 PM	1	237	73	2	38	0	0	0	1	0	0	0	0	**352**
3:00 PM	0	247	63	0	35	1	0	0	0	0	0	0	0	**346**
4:00 PM	0	243	76	0	25	1	0	0	0	0	0	0	0	**345**
5:00 PM	0	220	60	0	28	0	0	0	1	1	0	0	0	**310**
6:00 PM	1	152	44	0	18	0	0	0	0	0	0	0	0	**215**
7:00 PM	0	115	31	0	15	0	0	1	0	0	0	0	0	**162**
8:00 PM	1	66	21	0	6	0	0	0	0	0	0	0	0	**94**
9:00 PM	0	42	10	1	6	0	0	0	1	0	0	0	0	**60**
10:00 PM	0	31	6	0	5	0	0	0	0	0	0	0	0	**42**
11:00 PM	0	7	5	0	2	0	0	0	0	0	0	0	0	**14**
Total	**6**	**3,225**	**1,174**	**9**	**582**	**5**	**0**	**2**	**7**	**1**	**0**	**0**	**0**	**5,011**
Percent	**0.1%**	**64.4%**	**23.4%**	**0.2%**	**11.6%**	**0.1%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Wednesday, September 21, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	1	4	2	0	3	0	0	0	0	0	0	0	0	**10**
1:00 AM	0	2	0	0	1	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	1	1	1	2	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	8	3	0	3	0	0	0	0	0	0	0	0	**14**
5:00 AM	0	16	5	0	4	0	0	0	0	0	0	0	0	**25**
6:00 AM	0	44	22	0	24	0	0	0	0	1	0	0	0	**91**
7:00 AM	1	115	48	0	51	2	0	0	0	0	0	0	0	**217**
8:00 AM	1	153	63	0	60	1	0	0	0	0	0	0	0	**278**
9:00 AM	0	113	37	0	43	0	0	0	0	0	0	0	1	**194**
10:00 AM	0	111	62	1	47	0	0	0	0	0	0	0	0	**221**
11:00 AM	0	126	58	0	54	0	0	1	0	1	0	0	0	**240**
12:00 PM	1	145	60	0	63	0	0	1	1	0	0	0	0	**271**
1:00 PM	1	202	83	1	59	0	0	0	0	0	0	0	0	**346**
2:00 PM	2	218	83	2	69	1	0	0	0	0	0	0	0	**375**
3:00 PM	0	210	105	2	77	1	0	0	0	0	0	0	0	**395**
4:00 PM	2	250	114	1	100	1	0	0	1	0	0	0	0	**469**
5:00 PM	1	383	118	2	111	3	0	1	1	0	0	0	0	**620**
6:00 PM	3	254	67	0	83	2	0	0	1	0	0	0	0	**410**
7:00 PM	0	145	36	0	31	0	0	1	0	0	0	0	0	**213**
8:00 PM	0	66	12	1	13	0	0	0	0	0	0	0	0	**92**
9:00 PM	2	25	7	0	7	0	0	0	0	0	0	0	0	**41**
10:00 PM	0	13	5	0	3	0	0	0	0	0	0	0	0	**21**
11:00 PM	0	8	3	0	1	0	0	0	0	0	0	0	0	**12**
Total	**15**	**2,612**	**994**	**11**	**909**	**11**	**0**	**4**	**4**	**2**	**0**	**0**	**1**	**4,563**
Percent	**0.3%**	**57.2%**	**21.8%**	**0.2%**	**19.9%**	**0.2%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Thursday, September 22, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	5	3	0	2	0	0	0	0	0	0	0	0	**10**
1:00 AM	0	6	1	0	0	0	0	0	0	0	0	0	0	**7**
2:00 AM	0	5	1	0	1	0	0	0	0	0	0	0	0	**7**
3:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	7	3	0	1	0	0	0	0	0	0	0	0	**11**
5:00 AM	0	42	19	1	10	0	0	0	0	0	0	0	0	**72**
6:00 AM	2	120	81	0	38	3	0	0	0	0	0	0	0	**244**
7:00 AM	1	332	137	0	79	0	0	1	0	0	0	0	0	**550**
8:00 AM	0	358	141	1	59	1	0	0	0	1	0	0	0	**561**
9:00 AM	0	177	101	0	36	1	0	0	0	0	0	0	0	**315**
10:00 AM	4	160	83	0	44	3	0	0	0	0	0	0	0	**294**
11:00 AM	3	180	75	0	45	1	0	1	0	0	0	0	1	**306**
12:00 PM	0	214	57	1	39	2	0	0	2	0	0	0	1	**316**
1:00 PM	1	191	57	0	39	0	0	0	1	0	0	0	0	**289**
2:00 PM	0	214	67	1	22	2	0	0	2	0	0	0	0	**308**
3:00 PM	0	242	87	2	37	0	0	1	0	0	0	0	0	**369**
4:00 PM	0	247	65	0	25	1	0	1	0	0	0	0	0	**339**
5:00 PM	1	236	51	0	24	0	0	0	0	0	0	0	0	**312**
6:00 PM	0	164	41	0	16	0	0	0	0	0	0	0	0	**221**
7:00 PM	0	127	37	0	20	0	0	0	0	0	0	0	0	**184**
8:00 PM	0	89	28	0	8	0	0	0	0	0	0	0	0	**125**
9:00 PM	1	52	13	0	6	0	0	0	0	0	0	0	0	**72**
10:00 PM	0	27	13	0	1	0	0	0	0	0	0	0	0	**41**
11:00 PM	0	9	2	0	0	0	0	0	0	0	0	0	0	**11**
Total	**13**	**3,207**	**1,164**	**6**	**552**	**14**	**0**	**4**	**5**	**1**	**0**	**0**	**2**	**4,968**
Percent	**0.3%**	**64.6%**	**23.4%**	**0.1%**	**11.1%**	**0.3%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Thursday, September 22, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	7	4	0	2	0	0	0	0	0	0	0	0	**13**
1:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	**1**
3:00 AM	0	6	1	0	0	1	0	0	0	0	0	0	0	**8**
4:00 AM	0	8	4	0	4	0	0	0	0	0	0	0	0	**16**
5:00 AM	0	12	8	0	4	0	0	0	0	0	0	0	0	**24**
6:00 AM	1	39	15	0	16	0	0	0	0	0	0	0	0	**71**
7:00 AM	0	102	45	0	44	1	0	0	0	0	0	0	0	**192**
8:00 AM	0	151	54	1	43	1	0	0	0	0	0	0	0	**250**
9:00 AM	1	107	58	1	29	3	0	0	0	0	0	0	0	**199**
10:00 AM	0	116	54	0	52	2	0	1	0	0	0	0	0	**225**
11:00 AM	0	124	52	2	44	1	0	0	1	0	0	0	0	**224**
12:00 PM	3	186	68	0	55	1	0	0	0	0	0	0	0	**313**
1:00 PM	0	146	50	1	63	1	0	0	1	0	0	0	0	**262**
2:00 PM	1	159	77	0	65	0	0	2	2	0	0	0	0	**306**
3:00 PM	0	246	97	0	70	2	0	2	3	0	0	0	1	**421**
4:00 PM	1	303	105	0	104	1	0	3	0	2	0	0	0	**519**
5:00 PM	2	377	104	1	126	0	0	1	0	0	0	0	0	**611**
6:00 PM	0	240	86	0	82	2	0	0	1	0	0	0	0	**411**
7:00 PM	0	102	37	1	24	0	0	0	0	0	0	0	0	**164**
8:00 PM	0	61	27	1	11	0	0	0	0	0	0	0	0	**100**
9:00 PM	0	44	20	0	13	0	0	0	0	0	0	0	0	**77**
10:00 PM	0	16	5	0	4	0	0	0	0	0	0	0	0	**25**
11:00 PM	0	9	3	0	1	0	0	0	0	0	0	0	0	**13**
Total	**9**	**2,561**	**975**	**8**	**856**	**17**	**0**	**9**	**8**	**2**	**0**	**0**	**1**	**4,446**
Percent	**0.2%**	**57.6%**	**21.9%**	**0.2%**	**19.3%**	**0.4%**	**0.0%**	**0.2%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Friday, September 23, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	13	0	0	1	0	0	0	0	0	0	0	0	**14**
1:00 AM	0	5	1	0	1	0	0	0	0	0	0	0	0	**7**
2:00 AM	0	1	1	0	1	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	3	1	0	1	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	7	1	0	0	0	0	0	0	0	0	0	0	**8**
5:00 AM	0	24	17	0	10	1	0	0	0	0	0	0	0	**52**
6:00 AM	0	122	60	0	46	1	0	0	0	0	0	0	0	**229**
7:00 AM	1	311	119	0	65	0	0	0	1	0	0	0	1	**498**
8:00 AM	1	264	110	0	45	1	0	0	0	0	0	0	0	**421**
9:00 AM	0	211	79	0	46	3	0	1	0	0	0	0	0	**340**
10:00 AM	1	268	110	0	51	1	0	1	0	0	0	0	0	**432**
11:00 AM	2	205	73	0	31	0	0	0	1	0	0	0	0	**312**
12:00 PM	0	197	76	0	23	2	0	0	1	0	0	0	0	**299**
1:00 PM	2	193	60	3	30	3	0	2	0	0	0	0	0	**293**
2:00 PM	2	206	68	1	35	1	0	1	0	0	0	0	0	**314**
3:00 PM	0	266	69	1	32	0	0	0	0	0	0	0	0	**368**
4:00 PM	0	236	59	0	30	0	0	1	0	2	0	0	0	**328**
5:00 PM	3	222	50	0	19	0	0	0	1	0	0	0	0	**295**
6:00 PM	1	209	59	0	25	0	0	0	0	0	0	0	0	**294**
7:00 PM	1	149	42	0	12	0	0	0	0	0	0	0	0	**204**
8:00 PM	1	72	29	0	10	0	0	0	0	0	0	0	0	**112**
9:00 PM	0	57	16	0	4	0	0	0	0	0	0	0	0	**77**
10:00 PM	0	35	9	0	8	0	0	0	0	0	0	0	0	**52**
11:00 PM	0	16	5	0	1	0	0	0	0	0	0	0	0	**22**
Total	**15**	**3,292**	**1,114**	**5**	**527**	**13**	**0**	**6**	**4**	**2**	**0**	**0**	**1**	**4,979**
Percent	**0.3%**	**66.1%**	**22.4%**	**0.1%**	**10.6%**	**0.3%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Friday, September 23, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	9	3	0	4	0	0	0	0	0	0	0	0	**16**
1:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	7	1	0	4	0	0	0	0	0	0	0	0	**12**
5:00 AM	0	8	8	0	8	0	0	0	0	0	0	0	0	**24**
6:00 AM	1	46	11	0	18	0	0	0	0	0	0	0	0	**76**
7:00 AM	1	110	42	0	40	1	0	0	0	0	0	0	0	**194**
8:00 AM	0	141	60	0	38	0	0	0	0	0	0	0	0	**239**
9:00 AM	0	112	43	0	29	0	0	0	0	0	0	0	1	**185**
10:00 AM	1	115	48	0	34	0	0	0	0	0	0	0	1	**199**
11:00 AM	0	171	78	0	48	1	0	0	0	0	0	0	1	**299**
12:00 PM	0	169	65	0	53	0	0	0	0	0	0	0	0	**287**
1:00 PM	0	160	53	1	52	2	0	0	0	0	0	0	0	**268**
2:00 PM	2	152	55	1	60	1	0	0	0	0	0	0	0	**271**
3:00 PM	3	268	99	1	72	1	0	0	0	0	0	0	0	**444**
4:00 PM	1	281	110	0	95	0	0	0	0	0	0	0	0	**487**
5:00 PM	3	338	93	0	85	1	0	0	0	0	0	0	0	**520**
6:00 PM	2	216	71	0	66	0	0	0	0	1	0	0	0	**356**
7:00 PM	1	120	38	0	33	0	0	2	0	0	0	0	0	**194**
8:00 PM	0	69	21	1	22	0	0	1	0	0	0	0	0	**114**
9:00 PM	0	64	21	0	17	0	0	0	0	0	0	0	0	**102**
10:00 PM	0	59	17	0	8	0	0	0	0	0	0	0	0	**84**
11:00 PM	0	19	2	0	6	0	0	0	0	0	0	0	0	**27**
Total	**15**	**2,640**	**941**	**4**	**793**	**7**	**0**	**3**	**0**	**1**	**0**	**0**	**3**	**4,407**
Percent	**0.3%**	**59.9%**	**21.4%**	**0.1%**	**18.0%**	**0.2%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**	

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Total Study Average
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	10	2	0	1	0	0	0	0	0	0	0	0	**13**
1:00 AM	0	6	2	0	0	0	0	0	0	0	0	0	0	**8**
2:00 AM	0	5	1	0	0	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	7	2	0	1	0	0	0	0	0	0	0	0	**10**
5:00 AM	0	30	15	1	7	0	0	0	0	0	0	0	0	**53**
6:00 AM	0	95	57	0	36	1	0	0	0	0	0	0	0	**189**
7:00 AM	1	264	111	0	55	0	0	0	0	0	0	0	0	**431**
8:00 AM	0	281	108	0	55	1	0	0	0	0	0	0	0	**445**
9:00 AM	0	165	79	1	33	1	0	0	0	0	0	0	0	**279**
10:00 AM	2	182	75	0	35	1	0	0	0	0	0	0	0	**295**
11:00 AM	2	202	74	0	37	0	0	1	1	0	0	0	0	**317**
12:00 PM	1	220	78	1	31	1	0	1	1	0	0	0	0	**334**
1:00 PM	1	224	80	1	39	1	0	1	1	0	0	0	0	**348**
2:00 PM	2	225	71	1	31	1	0	0	1	0	0	0	0	**332**
3:00 PM	1	259	75	0	34	1	0	0	0	0	0	0	0	**370**
4:00 PM	1	228	62	0	28	1	0	1	0	0	0	0	0	**321**
5:00 PM	1	218	56	0	24	0	0	0	1	0	0	0	0	**300**
6:00 PM	1	160	47	0	21	0	0	0	0	0	0	0	0	**229**
7:00 PM	0	119	33	0	18	0	0	0	0	0	0	0	0	**170**
8:00 PM	0	79	25	0	8	0	0	0	0	0	0	0	0	**112**
9:00 PM	0	52	15	0	6	0	0	0	0	0	0	0	0	**73**
10:00 PM	0	33	7	0	4	0	0	0	0	0	0	0	0	**44**
11:00 PM	0	12	5	0	2	0	0	0	0	0	0	0	0	**19**
Total	**13**	**3,079**	**1,081**	**5**	**506**	**9**	**0**	**4**	**5**	**0**	**0**	**0**	**0**	**4,702**
Percent	**0.3%**	**65.5%**	**23.0%**	**0.1%**	**10.8%**	**0.2%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Total Study Average
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	7	4	0	3	0	0	0	0	0	0	0	0	**14**
1:00 AM	0	4	0	0	1	0	0	0	0	0	0	0	0	**5**
2:00 AM	0	4	1	0	1	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	3	2	0	1	0	0	0	0	0	0	0	0	**6**
4:00 AM	0	7	2	0	3	0	0	0	0	0	0	0	0	**12**
5:00 AM	0	11	5	0	4	0	0	0	0	0	0	0	0	**20**
6:00 AM	0	35	14	0	17	0	0	0	0	0	0	0	0	**66**
7:00 AM	1	92	36	0	35	1	0	0	0	0	0	0	0	**165**
8:00 AM	0	121	48	0	40	1	0	0	0	0	0	0	0	**210**
9:00 AM	0	99	45	0	32	1	0	0	0	0	0	0	0	**177**
10:00 AM	1	115	53	0	44	1	0	0	0	0	0	0	0	**214**
11:00 AM	1	145	57	1	49	0	0	0	0	0	0	0	0	**253**
12:00 PM	2	169	62	0	54	0	0	0	0	0	0	0	0	**287**
1:00 PM	1	153	58	1	52	0	0	0	0	0	0	0	0	**265**
2:00 PM	1	170	68	1	59	1	0	0	1	0	0	0	0	**301**
3:00 PM	1	218	83	1	63	1	0	0	1	0	0	0	0	**368**
4:00 PM	1	239	88	0	84	0	0	0	0	0	0	0	0	**412**
5:00 PM	2	302	91	1	91	1	0	1	0	0	0	0	0	**489**
6:00 PM	1	209	66	0	69	1	0	0	1	0	0	0	0	**347**
7:00 PM	1	112	34	0	30	0	0	0	0	0	0	0	0	**177**
8:00 PM	0	60	18	0	14	0	0	0	0	0	0	0	0	**92**
9:00 PM	0	40	13	0	9	0	0	0	0	0	0	0	0	**62**
10:00 PM	0	24	7	0	4	0	0	0	0	0	0	0	0	**35**
11:00 PM	0	11	3	0	3	0	0	0	0	0	0	0	0	**17**
Total	**13**	**2,350**	**858**	**5**	**762**	**8**	**0**	**1**	**3**	**0**	**0**	**0**	**0**	**4,000**
Percent	**0.3%**	**58.8%**	**21.5%**	**0.1%**	**19.1%**	**0.2%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

3-Day (Tuesday - Thursday) Average
Eastbound

	FHWA Vehicle Classification													Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	6	1	0	1	0	0	0	0	0	0	0	0	**9**
1:00 AM	0	4	2	0	0	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	5	1	0	0	0	0	0	0	0	0	0	0	**7**
3:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	8	3	0	1	0	0	0	0	0	0	0	0	**12**
5:00 AM	0	41	20	1	10	0	0	0	0	0	0	0	0	**71**
6:00 AM	1	126	81	0	49	2	0	0	0	0	0	0	0	**259**
7:00 AM	1	346	151	0	75	0	0	0	0	0	0	0	0	**573**
8:00 AM	0	380	141	1	76	1	0	0	0	0	0	0	0	**600**
9:00 AM	0	180	97	1	39	0	0	0	0	0	0	0	0	**319**
10:00 AM	2	171	75	0	39	1	0	0	0	0	0	0	0	**289**
11:00 AM	1	186	70	1	37	1	0	1	0	0	0	0	0	**296**
12:00 PM	0	203	71	1	34	1	0	1	1	0	0	0	0	**312**
1:00 PM	1	196	63	2	38	1	0	0	1	0	0	0	0	**302**
2:00 PM	1	215	70	1	32	1	0	0	1	0	0	0	0	**321**
3:00 PM	1	250	78	1	38	1	0	0	0	0	0	0	0	**370**
4:00 PM	1	235	65	0	28	1	0	0	0	0	0	0	0	**331**
5:00 PM	1	238	59	0	28	0	0	0	0	0	0	0	0	**326**
6:00 PM	0	153	45	0	19	0	0	0	0	0	0	0	0	**218**
7:00 PM	0	119	33	0	17	0	0	0	0	0	0	0	0	**170**
8:00 PM	0	77	25	0	8	0	0	0	0	0	0	0	0	**109**
9:00 PM	0	45	12	0	5	0	0	0	0	0	0	0	0	**63**
10:00 PM	0	27	8	0	4	0	0	0	0	0	0	0	0	**39**
11:00 PM	0	8	4	0	1	0	0	0	0	0	0	0	0	**12**
Total	**11**	**3,221**	**1,175**	**8**	**581**	**10**	**0**	**3**	**5**	**1**	**0**	**0**	**1**	**5,017**
Percent	**0.2%**	**64.2%**	**23.4%**	**0.2%**	**11.6%**	**0.2%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

3-Day (Tuesday - Thursday) Average
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	5	3	0	3	0	0	0	0	0	0	0	0	**11**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	3	1	0	1	0	0	0	0	0	0	0	0	**6**
4:00 AM	0	7	3	0	3	0	0	0	0	0	0	0	0	**14**
5:00 AM	0	13	6	0	4	0	0	0	0	0	0	0	0	**23**
6:00 AM	0	41	19	0	20	1	0	0	0	0	0	0	0	**81**
7:00 AM	0	112	46	0	46	2	0	0	0	0	0	0	0	**206**
8:00 AM	1	154	59	0	51	1	0	0	0	0	0	0	0	**267**
9:00 AM	0	112	49	0	38	1	0	0	0	0	0	0	0	**201**
10:00 AM	1	109	55	0	52	1	0	0	0	0	0	0	0	**219**
11:00 AM	0	137	55	1	48	0	0	0	0	0	0	0	0	**242**
12:00 PM	2	162	60	0	56	1	0	0	0	0	0	0	0	**281**
1:00 PM	0	160	64	1	60	0	0	0	0	0	0	0	0	**286**
2:00 PM	1	175	76	1	62	1	0	1	1	0	0	0	0	**317**
3:00 PM	0	232	96	1	73	1	0	1	2	0	0	0	0	**407**
4:00 PM	2	272	106	0	103	1	0	1	0	1	0	0	0	**486**
5:00 PM	2	379	107	1	121	1	0	1	0	0	0	0	0	**612**
6:00 PM	2	265	84	0	96	3	0	0	1	0	0	0	0	**450**
7:00 PM	1	128	37	0	34	0	0	0	0	0	0	0	0	**201**
8:00 PM	0	58	21	1	13	0	0	0	0	0	0	0	0	**92**
9:00 PM	1	34	13	0	9	0	0	0	0	0	0	0	0	**57**
10:00 PM	0	15	6	0	4	0	0	0	0	0	0	0	0	**24**
11:00 PM	0	7	3	0	1	0	0	0	0	0	0	0	0	**11**
Total	**13**	**2,580**	**967**	**8**	**898**	**16**	**0**	**5**	**5**	**1**	**0**	**0**	**1**	**4,494**
Percent	**0.3%**	**57.4%**	**21.5%**	**0.2%**	**20.0%**	**0.3%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Vehicle Speed Report Summary

Location: Midland Ave BTWN E Meadows & W Meadows

Count Direction: Eastbound / Westbound

Date Range: 9/17/2022 to 9/23/2022

Site Code: 07

	Speed Range (mph)																	Total
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
Study Total																		
Eastbound	28	56	29	87	869	6,811	14,138	8,672	2,004	200	28	5	3	0	0	0	0	32,930
Percent	0.1%	0.2%	0.1%	0.3%	2.6%	20.7%	42.9%	26.3%	6.1%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Westbound	8	46	88	262	753	3,167	9,116	9,954	4,013	597	72	11	4	0	0	0	0	28,091
Percent	0.0%	0.2%	0.3%	0.9%	2.7%	11.3%	32.5%	35.4%	14.3%	2.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	36	102	117	349	1,622	9,978	23,254	18,626	6,017	797	100	16	7	0	0	0	0	61,021
Percent	0.1%	0.2%	0.2%	0.6%	2.7%	16.4%	38.1%	30.5%	9.9%	1.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%

Total Study Percentile Speed Summary			Total Study Speed Statistics		
Eastbound			**Eastbound**		
50th Percentile (Median)	38.0	mph	Mean (Average) Speed	38.1	mph
85th Percentile	42.8	mph	10 mph Pace	33.1 - 43.1	mph
95th Percentile	45.7	mph	Percent in Pace	73.7	%
Westbound			**Westbound**		
50th Percentile (Median)	40.3	mph	Mean (Average) Speed	40.0	mph
85th Percentile	45.3	mph	10 mph Pace	35.5 - 45.5	mph
95th Percentile	48.3	mph	Percent in Pace	68.2	%

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Saturday, September 17, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	4	7	2	1	0	0	0	0	0	0	0	**14**
1:00 AM	0	0	0	0	0	2	1	5	1	0	0	0	0	0	0	0	0	**9**
2:00 AM	0	0	0	0	0	2	2	4	2	0	0	0	0	0	0	0	0	**10**
3:00 AM	0	0	0	0	0	1	3	1	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	0	0	0	0	2	3	5	0	0	0	0	0	0	0	0	0	**10**
5:00 AM	0	0	0	0	0	1	8	9	5	1	0	0	0	0	0	0	0	**24**
6:00 AM	0	0	0	0	0	5	20	21	12	0	0	0	0	0	0	0	0	**58**
7:00 AM	0	0	0	0	2	21	31	63	19	7	0	0	0	0	0	0	0	**143**
8:00 AM	0	0	0	0	2	35	62	46	23	0	0	0	0	0	0	0	0	**168**
9:00 AM	0	0	0	0	9	52	68	70	9	0	0	0	0	0	0	0	0	**208**
10:00 AM	0	0	0	0	5	49	117	75	12	1	0	0	0	0	0	0	0	**259**
11:00 AM	0	0	0	0	7	56	119	81	15	3	0	0	0	0	0	0	0	**281**
12:00 PM	0	0	0	0	9	56	145	74	21	2	0	0	0	0	0	0	0	**307**
1:00 PM	0	0	0	0	2	50	162	66	18	2	0	0	0	0	0	0	0	**300**
2:00 PM	0	0	0	0	2	50	124	82	17	0	0	0	0	0	0	0	0	**275**
3:00 PM	0	0	0	0	4	50	120	67	18	4	0	0	0	0	0	0	0	**263**
4:00 PM	0	0	0	0	4	37	110	88	20	7	0	0	0	0	0	0	0	**266**
5:00 PM	0	0	0	0	4	43	112	80	16	3	0	0	0	0	0	0	0	**258**
6:00 PM	0	0	0	0	0	25	99	77	23	1	0	0	0	0	0	0	0	**225**
7:00 PM	0	0	0	1	4	46	48	40	9	1	0	0	0	0	0	0	0	**149**
8:00 PM	0	0	0	0	6	37	43	24	8	1	0	0	0	0	0	0	0	**119**
9:00 PM	0	0	0	0	2	22	45	21	8	1	0	0	0	0	0	0	0	**99**
10:00 PM	0	0	0	0	2	7	21	15	5	3	0	0	0	0	0	0	0	**53**
11:00 PM	0	0	0	0	0	1	11	18	5	0	0	0	0	0	0	0	0	**35**
Total	**0**	**0**	**0**	**1**	**64**	**650**	**1,478**	**1,039**	**268**	**38**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3,538**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**1.8%**	**18.4%**	**41.8%**	**29.4%**	**7.6%**	**1.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	38.6	mph	Mean (Average) Speed	38.8	mph
85th Percentile	43.6	mph	10 mph Pace	34.1 - 44.1	mph
95th Percentile	46.5	mph	Percent in Pace	73.6	%

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Saturday, September 17, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	3	2	8	3	1	0	0	0	0	0	0	0	**17**
1:00 AM	0	0	0	0	1	2	1	4	3	0	0	0	0	0	0	0	0	**11**
2:00 AM	0	0	0	0	0	2	2	3	6	1	1	1	0	0	0	0	0	**16**
3:00 AM	0	0	0	0	0	0	2	4	2	0	0	0	0	0	0	0	0	**8**
4:00 AM	0	0	0	0	0	0	1	2	5	0	0	0	0	0	0	0	0	**8**
5:00 AM	0	0	0	0	0	3	2	5	8	2	0	0	0	0	0	0	0	**20**
6:00 AM	0	0	0	0	0	4	16	13	9	4	0	0	1	0	0	0	0	**47**
7:00 AM	0	0	0	0	1	4	21	33	24	4	0	0	0	0	0	0	0	**87**
8:00 AM	0	0	0	0	1	3	25	51	26	8	1	0	0	0	0	0	0	**115**
9:00 AM	0	0	0	0	0	4	44	68	19	2	1	0	0	0	0	0	0	**138**
10:00 AM	0	0	0	0	0	13	93	95	32	3	1	1	0	0	0	0	0	**238**
11:00 AM	0	0	0	0	0	22	85	108	36	4	0	0	0	0	0	0	0	**255**
12:00 PM	0	0	0	0	1	29	95	117	53	5	1	0	0	0	0	0	0	**301**
1:00 PM	0	0	0	0	0	10	60	102	38	7	0	0	0	0	0	0	0	**217**
2:00 PM	0	0	0	0	1	11	81	123	36	8	0	1	0	0	0	0	0	**261**
3:00 PM	0	0	0	0	1	15	76	82	40	7	2	0	0	0	0	0	0	**223**
4:00 PM	0	0	0	0	4	14	47	94	45	7	1	0	0	0	0	0	0	**212**
5:00 PM	0	0	0	1	3	15	57	84	48	13	1	0	0	0	0	0	0	**222**
6:00 PM	0	0	0	0	1	18	62	79	26	7	0	0	0	0	0	0	0	**193**
7:00 PM	0	0	0	4	4	16	72	35	22	0	1	0	0	0	0	0	0	**154**
8:00 PM	0	0	0	0	0	9	25	50	13	7	0	0	0	0	0	0	0	**104**
9:00 PM	0	0	0	0	2	5	18	28	17	3	0	0	0	0	0	0	0	**73**
10:00 PM	0	0	0	0	0	4	9	22	6	5	0	1	0	0	0	0	0	**47**
11:00 PM	0	0	0	0	0	1	9	14	8	1	0	0	0	0	0	0	0	**33**
Total	**0**	**0**	**0**	**5**	**20**	**207**	**905**	**1,224**	**525**	**99**	**10**	**4**	**1**	**0**	**0**	**0**	**0**	**3,000**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.2%**	**0.7%**	**6.9%**	**30.2%**	**40.8%**	**17.5%**	**3.3%**	**0.3%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	41.3	mph	Mean (Average) Speed	41.4	mph
85th Percentile	46.0	mph	10 mph Pace	36.1 - 46.1	mph
95th Percentile	49.3	mph	Percent in Pace	73.7	%

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Sunday, September 18, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	3	7	10	1	1	1	0	0	0	0	0	0	**23**
1:00 AM	0	0	0	0	1	0	9	4	0	0	0	0	0	0	0	0	0	**14**
2:00 AM	0	0	0	0	0	2	2	4	2	1	1	0	0	0	0	0	0	**12**
3:00 AM	0	0	0	0	0	4	3	1	1	1	0	0	0	0	0	0	0	**10**
4:00 AM	0	0	0	0	0	0	6	3	0	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	0	0	0	1	0	5	7	2	2	0	0	0	0	0	0	0	**17**
6:00 AM	0	0	0	0	0	4	4	12	9	2	0	0	0	0	0	0	0	**31**
7:00 AM	0	0	0	0	0	7	20	23	12	4	0	0	0	0	0	0	0	**66**
8:00 AM	0	0	0	0	0	11	41	30	19	0	0	0	0	0	0	0	0	**101**
9:00 AM	0	0	0	0	0	26	67	56	19	2	0	0	0	0	0	0	0	**170**
10:00 AM	0	0	0	0	4	34	83	63	11	2	0	0	0	0	0	0	0	**197**
11:00 AM	0	0	0	0	1	34	93	81	14	0	0	0	0	0	0	0	0	**223**
12:00 PM	0	0	0	0	8	39	118	70	13	4	0	1	1	0	0	0	0	**254**
1:00 PM	0	0	0	0	9	50	105	59	10	3	0	0	0	0	0	0	0	**236**
2:00 PM	0	0	0	0	1	39	113	52	22	3	1	0	0	0	0	0	0	**231**
3:00 PM	0	0	0	0	6	32	113	69	30	3	0	1	0	0	0	0	0	**254**
4:00 PM	0	0	0	0	3	42	96	49	18	3	0	0	0	0	0	0	0	**211**
5:00 PM	0	0	0	1	2	31	110	56	31	1	0	0	0	0	0	0	0	**232**
6:00 PM	0	0	0	0	8	25	63	60	20	4	0	0	0	0	0	0	0	**180**
7:00 PM	0	0	0	3	9	39	64	34	5	0	0	0	0	0	0	0	0	**154**
8:00 PM	0	0	0	0	7	28	54	19	8	0	0	0	0	0	0	0	0	**116**
9:00 PM	0	0	0	0	3	13	35	24	8	1	0	0	0	0	0	0	0	**84**
10:00 PM	0	0	0	0	0	3	18	18	6	0	0	0	0	0	0	0	0	**45**
11:00 PM	0	0	0	0	0	2	6	8	4	0	0	0	0	0	0	0	0	**20**
Total	**0**	**0**	**0**	**4**	**63**	**468**	**1,235**	**812**	**265**	**37**	**3**	**2**	**1**	**0**	**0**	**0**	**0**	**2,890**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.1%**	**2.2%**	**16.2%**	**42.7%**	**28.1%**	**9.2%**	**1.3%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	38.7	mph	Mean (Average) Speed	39.0	mph
85th Percentile	43.7	mph	10 mph Pace	34.1 - 44.1	mph
95th Percentile	47.3	mph	Percent in Pace	72.5	%

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Sunday, September 18, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	1	0	1	6	9	7	0	0	0	0	0	0	0	0	**24**
1:00 AM	0	0	0	0	0	1	4	6	5	1	0	0	0	0	0	0	0	**17**
2:00 AM	0	0	0	0	0	0	4	7	5	2	1	0	0	0	0	0	0	**19**
3:00 AM	0	0	0	0	0	0	1	4	0	1	0	0	0	0	0	0	0	**6**
4:00 AM	0	0	0	0	0	0	5	4	4	0	0	0	0	0	0	0	0	**13**
5:00 AM	0	0	0	0	0	1	2	4	3	1	1	0	0	0	0	0	0	**12**
6:00 AM	0	0	0	0	0	0	4	12	10	4	0	1	1	0	0	0	0	**32**
7:00 AM	0	0	0	0	0	1	11	20	14	1	0	0	0	0	0	0	0	**47**
8:00 AM	0	0	0	0	0	1	17	25	20	4	0	1	0	0	0	0	0	**68**
9:00 AM	0	0	0	0	2	9	44	46	32	4	1	0	0	0	0	0	0	**138**
10:00 AM	0	0	0	0	2	13	51	78	24	4	1	0	0	0	0	0	0	**173**
11:00 AM	0	0	0	0	0	14	55	95	32	2	0	1	0	0	0	0	0	**199**
12:00 PM	0	0	0	0	0	15	93	119	31	6	0	0	0	0	0	0	0	**264**
1:00 PM	0	0	0	2	3	16	65	97	51	5	1	0	0	0	0	0	0	**240**
2:00 PM	0	0	0	0	1	12	66	89	44	7	5	0	0	0	0	0	0	**224**
3:00 PM	0	0	0	0	0	5	55	84	37	9	0	1	0	0	0	0	0	**191**
4:00 PM	0	0	0	0	1	14	45	68	26	9	2	0	0	0	0	0	0	**165**
5:00 PM	0	0	0	0	3	12	48	70	36	6	0	0	0	0	0	0	0	**175**
6:00 PM	0	0	0	0	1	10	51	52	28	6	0	0	0	0	0	0	0	**148**
7:00 PM	0	0	0	0	3	20	41	34	11	2	0	0	0	0	0	0	0	**111**
8:00 PM	0	0	0	0	2	9	20	20	10	3	1	0	0	0	0	0	0	**65**
9:00 PM	0	0	0	0	0	2	14	6	14	0	0	0	0	0	0	0	0	**36**
10:00 PM	0	0	0	0	0	3	7	10	3	0	0	0	0	0	0	0	0	**23**
11:00 PM	0	0	0	0	1	0	2	5	5	1	0	0	0	0	0	0	0	**14**
Total	**0**	**0**	**0**	**3**	**19**	**159**	**711**	**964**	**452**	**78**	**13**	**4**	**1**	**0**	**0**	**0**	**0**	**2,404**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.1%**	**0.8%**	**6.6%**	**29.6%**	**40.1%**	**18.8%**	**3.2%**	**0.5%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	41.7	mph	Mean (Average) Speed	41.6	mph
85th Percentile	46.5	mph	10 mph Pace	36.0 - 46.0	mph
95th Percentile	49.4	mph	Percent in Pace	71.59	%

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Monday, September 19, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	1	0	2	6	1	0	1	0	0	0	0	0	0	**11**
1:00 AM	0	0	0	1	0	3	6	1	0	0	0	0	0	0	0	0	0	**11**
2:00 AM	0	0	0	0	0	1	0	1	3	0	0	0	0	0	0	0	0	**5**
3:00 AM	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	**6**
5:00 AM	0	0	0	0	0	4	19	23	14	2	0	0	0	0	0	0	0	**62**
6:00 AM	0	0	0	1	1	17	87	104	23	2	0	1	0	0	0	0	0	**236**
7:00 AM	0	0	0	1	1	113	244	203	30	4	0	0	0	0	0	0	0	**596**
8:00 AM	0	0	0	0	19	134	290	146	34	1	0	0	0	0	0	0	0	**624**
9:00 AM	0	0	0	0	3	35	134	91	24	0	0	0	0	0	0	0	0	**287**
10:00 AM	0	0	0	0	9	83	136	73	13	1	1	0	0	0	0	0	0	**316**
11:00 AM	0	0	0	0	19	175	239	67	13	0	0	0	0	0	0	0	0	**513**
12:00 PM	0	0	0	0	19	180	228	99	11	1	0	0	0	0	0	0	0	**538**
1:00 PM	0	0	0	2	36	185	317	141	14	1	0	0	0	0	0	0	0	**696**
2:00 PM	0	0	0	2	20	171	225	99	12	1	0	0	0	0	0	0	0	**530**
3:00 PM	0	0	0	2	40	204	232	97	16	0	0	0	0	0	0	0	0	**591**
4:00 PM	0	0	0	2	24	102	209	101	9	1	0	0	0	0	0	0	0	**448**
5:00 PM	0	0	0	1	3	84	164	75	12	4	1	0	0	0	0	0	0	**344**
6:00 PM	0	0	0	0	6	51	113	68	14	1	0	0	0	0	0	0	0	**253**
7:00 PM	0	0	1	2	11	40	64	47	12	0	0	0	0	0	0	0	0	**177**
8:00 PM	0	0	0	0	8	16	44	34	4	2	0	0	0	0	0	0	0	**108**
9:00 PM	0	0	0	0	2	16	25	9	8	0	0	0	0	0	0	0	0	**60**
10:00 PM	0	0	0	0	0	9	17	11	5	0	0	0	0	0	0	0	0	**42**
11:00 PM	0	0	0	0	0	1	5	7	1	1	0	0	0	0	0	0	0	**15**
Total	**0**	**0**	**1**	**14**	**222**	**1,627**	**2,801**	**1,507**	**274**	**22**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**6,472**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.2%**	**3.4%**	**25.1%**	**43.3%**	**23.3%**	**4.2%**	**0.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	37.4	mph	Mean (Average) Speed	37.5	mph
85th Percentile	42.2	mph	10 mph Pace	32.7 - 42.7	mph
95th Percentile	44.9	mph	Percent in Pace	74.6	%

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Monday, September 19, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	2	2	2	2	0	0	0	0	0	0	0	0	**8**
1:00 AM	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	0	1	0	0	2	1	0	0	0	0	0	0	0	0	**4**
3:00 AM	0	0	0	0	0	1	1	1	4	1	1	0	0	0	0	0	0	**9**
4:00 AM	0	0	0	0	1	0	2	4	4	1	0	0	0	0	0	0	0	**12**
5:00 AM	0	0	0	0	0	3	3	6	4	1	1	0	0	0	0	0	0	**18**
6:00 AM	0	0	0	0	2	1	13	23	24	9	0	0	0	0	0	0	0	**72**
7:00 AM	0	0	0	0	0	5	40	94	63	5	0	0	0	0	0	0	0	**207**
8:00 AM	0	0	0	0	0	12	49	111	66	8	4	0	0	0	0	0	0	**250**
9:00 AM	0	0	0	0	0	10	54	74	41	1	1	0	0	0	0	0	0	**181**
10:00 AM	0	0	0	0	3	14	85	88	40	6	1	0	0	0	0	0	0	**237**
11:00 AM	0	0	0	0	1	36	79	126	51	4	3	0	0	0	0	0	0	**300**
12:00 PM	0	0	0	0	6	42	113	111	42	3	0	0	0	0	0	0	0	**317**
1:00 PM	0	0	0	0	5	24	78	105	52	4	1	0	0	0	0	0	0	**269**
2:00 PM	0	0	0	2	7	43	135	148	63	6	0	0	1	0	0	0	0	**405**
3:00 PM	0	0	2	3	14	53	150	192	70	11	0	0	0	0	0	0	0	**495**
4:00 PM	0	0	4	12	46	113	189	155	60	4	0	0	0	0	0	0	0	**583**
5:00 PM	3	16	30	44	69	149	205	116	37	3	0	0	0	0	0	0	0	**672**
6:00 PM	0	0	0	8	15	66	139	112	44	6	2	0	0	0	0	0	0	**392**
7:00 PM	0	2	2	1	8	25	73	51	22	1	0	0	0	0	0	0	0	**185**
8:00 PM	0	0	0	2	2	14	29	28	17	2	0	0	0	0	0	0	0	**94**
9:00 PM	0	0	0	0	0	7	14	18	10	0	2	0	0	0	0	0	0	**51**
10:00 PM	0	0	0	0	0	2	10	7	1	1	0	0	0	0	0	0	0	**21**
11:00 PM	0	0	0	0	0	0	4	6	1	1	0	0	0	0	0	0	0	**12**
Total	**3**	**18**	**38**	**72**	**180**	**622**	**1,467**	**1,582**	**720**	**78**	**16**	**0**	**1**	**0**	**0**	**0**	**0**	**4,797**
Percent	**0.1%**	**0.4%**	**0.8%**	**1.5%**	**3.8%**	**13.0%**	**30.6%**	**33.0%**	**15.0%**	**1.6%**	**0.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	40.0	mph	Mean (Average) Speed	39.4	mph
85th Percentile	45.4	mph	10 mph Pace	35.5 - 45.5	mph
95th Percentile	48.1	mph	Percent in Pace	63.89	%

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Tuesday, September 20, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	2	3	0	3	0	0	0	0	0	0	0	0	**8**
1:00 AM	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	0	0	1	2	3	1	0	0	0	0	0	0	0	0	**7**
3:00 AM	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	0	0	0	2	3	8	3	0	0	0	0	0	0	0	0	**16**
5:00 AM	0	0	0	1	0	2	16	35	13	1	0	0	0	0	0	0	0	**68**
6:00 AM	0	0	0	0	5	32	106	110	17	3	0	0	0	0	0	0	0	**273**
7:00 AM	0	0	0	0	4	128	249	176	24	3	1	0	0	0	0	0	0	**585**
8:00 AM	28	55	28	22	33	173	196	106	12	2	0	0	0	0	0	0	0	**655**
9:00 AM	0	0	0	0	10	59	141	86	20	1	0	0	0	0	0	0	0	**317**
10:00 AM	0	0	0	0	16	65	122	72	18	1	0	0	0	0	0	0	0	**294**
11:00 AM	0	0	0	2	8	69	124	59	12	0	0	0	0	0	0	0	0	**274**
12:00 PM	0	0	0	0	9	73	145	76	14	0	1	0	0	0	0	0	0	**318**
1:00 PM	0	0	0	0	10	77	131	59	16	2	0	0	0	0	0	0	0	**295**
2:00 PM	0	0	0	0	4	61	158	70	10	0	1	0	0	0	0	0	0	**304**
3:00 PM	0	0	0	0	6	98	192	82	15	1	0	0	0	0	0	0	0	**394**
4:00 PM	0	0	0	0	9	76	121	80	21	1	0	0	0	0	0	0	0	**308**
5:00 PM	0	0	0	0	1	89	169	82	14	1	0	0	0	0	0	0	0	**356**
6:00 PM	0	0	0	0	2	28	105	66	15	1	0	0	0	0	0	0	0	**217**
7:00 PM	0	0	0	2	5	51	70	30	5	0	0	0	0	0	0	0	0	**163**
8:00 PM	0	0	0	1	8	33	38	24	5	0	0	0	0	0	0	0	0	**109**
9:00 PM	0	0	0	2	0	14	19	17	4	1	0	1	0	0	0	0	0	**58**
10:00 PM	0	0	0	0	0	5	11	14	4	1	0	0	0	0	0	0	0	**35**
11:00 PM	0	0	0	0	1	3	5	3	0	0	0	0	0	0	0	0	0	**12**
Total	**28**	**56**	**28**	**30**	**131**	**1,142**	**2,129**	**1,259**	**246**	**19**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**5,072**
Percent	**0.6%**	**1.1%**	**0.6%**	**0.6%**	**2.6%**	**22.5%**	**42.0%**	**24.8%**	**4.9%**	**0.4%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	37.6	mph	Mean (Average) Speed	37.3	mph
85th Percentile	42.4	mph	10 mph Pace	33.2 - 43.2	mph
95th Percentile	45.2	mph	Percent in Pace	72.8	%

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Tuesday, September 20, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	3	1	2	1	0	2	0	0	0	0	0	0	**9**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	0	0	0	1	0	3	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	0	0	0	0	1	4	2	3	1	0	0	0	0	0	0	0	**11**
5:00 AM	0	0	0	0	0	3	5	6	4	1	0	0	0	0	0	0	0	**19**
6:00 AM	0	0	0	0	0	2	19	30	27	3	0	0	0	0	0	0	0	**81**
7:00 AM	0	0	0	0	2	20	39	98	41	9	1	0	0	0	0	0	0	**210**
8:00 AM	2	1	0	0	1	22	96	114	35	1	0	0	0	0	0	0	0	**272**
9:00 AM	0	0	0	0	3	8	65	87	41	5	1	0	0	0	0	0	0	**210**
10:00 AM	1	0	1	0	0	12	68	88	36	5	0	0	0	0	0	0	0	**211**
11:00 AM	0	0	0	0	0	29	83	107	40	2	0	0	0	0	0	0	0	**261**
12:00 PM	0	0	0	0	9	28	99	80	39	4	1	0	0	0	0	0	0	**260**
1:00 PM	0	0	0	0	1	19	99	101	24	5	1	0	0	0	0	0	0	**250**
2:00 PM	0	0	0	0	4	40	114	91	19	0	1	0	0	0	0	0	0	**269**
3:00 PM	0	0	0	0	8	55	159	149	26	6	1	1	0	0	0	0	0	**405**
4:00 PM	0	0	1	3	14	81	184	149	36	2	0	0	0	0	0	0	0	**470**
5:00 PM	0	1	2	26	72	147	227	107	21	2	0	0	0	0	0	0	0	**605**
6:00 PM	0	0	2	22	65	95	177	123	37	8	0	0	0	0	0	0	0	**529**
7:00 PM	0	0	0	1	7	31	95	75	15	1	1	0	0	0	0	0	0	**226**
8:00 PM	0	0	0	0	0	7	26	38	11	3	0	0	0	0	0	0	0	**85**
9:00 PM	0	0	0	0	1	5	14	20	9	2	1	0	0	0	0	0	0	**52**
10:00 PM	0	0	0	0	0	3	8	3	9	4	0	0	0	0	0	0	0	**27**
11:00 PM	0	0	0	0	0	1	3	0	3	0	0	0	0	0	0	0	0	**7**
Total	**3**	**2**	**6**	**52**	**187**	**612**	**1,586**	**1,471**	**480**	**64**	**10**	**1**	**0**	**0**	**0**	**0**	**0**	**4,474**
Percent	**0.1%**	**0.0%**	**0.1%**	**1.2%**	**4.2%**	**13.7%**	**35.4%**	**32.9%**	**10.7%**	**1.4%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	39.5	mph	Mean (Average) Speed	39.2	mph
85th Percentile	44.4	mph	10 mph Pace	34.9 - 44.9	mph
95th Percentile	47.3	mph	Percent in Pace	68.33	%

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Wednesday, September 21, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	1	3	3	1	0	0	0	0	0	0	0	0	**8**
1:00 AM	0	0	0	0	0	1	2	5	0	1	0	0	0	0	0	0	0	**9**
2:00 AM	0	0	0	0	0	2	2	0	2	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	0	0	0	0	5	3	1	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	0	0	0	1	1	18	30	22	1	0	0	0	0	0	0	0	**73**
6:00 AM	0	0	0	0	4	19	93	97	44	3	0	0	0	0	0	0	0	**260**
7:00 AM	0	0	0	0	6	86	281	176	36	0	0	0	0	0	0	0	0	**585**
8:00 AM	0	0	0	1	9	129	246	160	38	0	0	0	0	0	0	0	0	**583**
9:00 AM	0	0	0	0	10	71	150	69	20	4	0	0	0	0	0	0	0	**324**
10:00 AM	0	0	0	1	3	64	118	78	13	1	0	0	0	0	0	0	0	**278**
11:00 AM	0	0	0	0	5	66	144	79	13	1	1	0	0	0	0	0	0	**309**
12:00 PM	0	0	0	1	5	68	139	71	15	3	0	0	0	0	0	0	0	**302**
1:00 PM	0	0	0	0	10	59	144	85	19	6	0	0	0	0	0	0	0	**323**
2:00 PM	0	0	0	2	15	67	158	87	22	1	0	0	0	0	0	0	0	**352**
3:00 PM	0	0	0	0	18	99	157	59	13	0	0	0	0	0	0	0	0	**346**
4:00 PM	0	0	0	0	14	82	160	78	8	3	0	0	0	0	0	0	0	**345**
5:00 PM	0	0	0	0	10	90	137	59	13	1	0	0	0	0	0	0	0	**310**
6:00 PM	0	0	0	2	8	35	94	62	13	0	1	0	0	0	0	0	0	**215**
7:00 PM	0	0	0	1	16	40	59	37	8	1	0	0	0	0	0	0	0	**162**
8:00 PM	0	0	0	0	9	30	41	11	1	2	0	0	0	0	0	0	0	**94**
9:00 PM	0	0	0	1	1	18	18	16	4	1	1	0	0	0	0	0	0	**60**
10:00 PM	0	0	0	0	1	5	19	13	4	0	0	0	0	0	0	0	0	**42**
11:00 PM	0	0	0	0	1	1	4	5	2	1	0	0	0	0	0	0	0	**14**
Total	**0**	**0**	**0**	**9**	**147**	**1,034**	**2,192**	**1,284**	**312**	**30**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**5,011**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.2%**	**2.9%**	**20.6%**	**43.7%**	**25.6%**	**6.2%**	**0.6%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	38.0	mph	Mean (Average) Speed	38.1	mph
85th Percentile	42.7	mph	10 mph Pace	32.9 - 42.9	mph
95th Percentile	45.6	mph	Percent in Pace	75.0	%

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Wednesday, September 21, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	1	6	3	0	0	0	0	0	0	0	0	0	**10**
1:00 AM	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	2	1	2	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	0	0	0	0	1	2	5	4	1	0	0	1	0	0	0	0	**14**
5:00 AM	0	0	0	0	0	0	7	11	7	0	0	0	0	0	0	0	0	**25**
6:00 AM	0	0	0	0	1	4	22	32	26	6	0	0	0	0	0	0	0	**91**
7:00 AM	0	1	0	0	0	9	51	96	52	6	2	0	0	0	0	0	0	**217**
8:00 AM	0	0	0	0	2	17	56	129	65	8	1	0	0	0	0	0	0	**278**
9:00 AM	0	0	0	0	3	16	47	90	37	0	1	0	0	0	0	0	0	**194**
10:00 AM	0	0	0	0	0	15	77	102	26	1	0	0	0	0	0	0	0	**221**
11:00 AM	0	0	0	0	1	15	77	102	38	7	0	0	0	0	0	0	0	**240**
12:00 PM	0	0	0	1	1	23	108	91	39	8	0	0	0	0	0	0	0	**271**
1:00 PM	0	0	0	0	5	49	104	144	41	3	0	0	0	0	0	0	0	**346**
2:00 PM	0	0	0	2	9	44	143	118	52	6	1	0	0	0	0	0	0	**375**
3:00 PM	0	0	0	0	11	44	145	143	46	6	0	0	0	0	0	0	0	**395**
4:00 PM	0	0	1	4	18	59	172	163	41	10	1	0	0	0	0	0	0	**469**
5:00 PM	1	12	15	54	55	128	184	147	22	2	0	0	0	0	0	0	0	**620**
6:00 PM	0	0	0	6	26	94	142	105	31	6	0	0	0	0	0	0	0	**410**
7:00 PM	0	0	0	0	4	42	77	61	26	3	0	0	0	0	0	0	0	**213**
8:00 PM	0	0	0	0	0	14	32	30	14	2	0	0	0	0	0	0	0	**92**
9:00 PM	0	0	0	0	1	2	13	18	7	0	0	0	0	0	0	0	0	**41**
10:00 PM	0	0	0	0	1	2	3	11	3	1	0	0	0	0	0	0	0	**21**
11:00 PM	0	0	0	0	0	0	1	2	6	3	0	0	0	0	0	0	0	**12**
Total	**1**	**13**	**16**	**67**	**138**	**579**	**1,471**	**1,605**	**586**	**80**	**6**	**0**	**1**	**0**	**0**	**0**	**0**	**4,563**
Percent	**0.0%**	**0.3%**	**0.4%**	**1.5%**	**3.0%**	**12.7%**	**32.2%**	**35.2%**	**12.8%**	**1.8%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	40.0	mph	Mean (Average) Speed	39.5	mph
85th Percentile	45.0	mph	10 mph Pace	35.8 - 45.8	mph
95th Percentile	47.6	mph	Percent in Pace	67.78	%

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Thursday, September 22, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	4	5	1	0	0	0	0	0	0	0	0	**10**
1:00 AM	0	0	0	0	0	1	3	0	3	0	0	0	0	0	0	0	0	**7**
2:00 AM	0	0	0	1	0	2	0	2	1	1	0	0	0	0	0	0	0	**7**
3:00 AM	0	0	0	1	0	0	1	0	2	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	0	0	0	0	1	4	4	2	0	0	0	0	0	0	0	0	**11**
5:00 AM	0	0	0	0	0	1	20	28	21	1	1	0	0	0	0	0	0	**72**
6:00 AM	0	0	0	0	0	10	89	113	28	4	0	0	0	0	0	0	0	**244**
7:00 AM	0	0	0	1	1	78	244	193	31	2	0	0	0	0	0	0	0	**550**
8:00 AM	0	0	0	5	28	142	235	133	16	2	0	0	0	0	0	0	0	**561**
9:00 AM	0	0	0	0	8	55	155	80	17	0	0	0	0	0	0	0	0	**315**
10:00 AM	0	0	0	3	14	50	147	69	9	0	2	0	0	0	0	0	0	**294**
11:00 AM	0	0	0	0	6	72	121	94	13	0	0	0	0	0	0	0	0	**306**
12:00 PM	0	0	0	0	12	80	139	68	13	2	1	0	1	0	0	0	0	**316**
1:00 PM	0	0	0	0	6	74	143	54	12	0	0	0	0	0	0	0	0	**289**
2:00 PM	0	0	0	5	5	76	130	77	14	1	0	0	0	0	0	0	0	**308**
3:00 PM	0	0	0	0	12	97	158	86	14	1	1	0	0	0	0	0	0	**369**
4:00 PM	0	0	0	0	18	76	157	73	13	1	0	0	1	0	0	0	0	**339**
5:00 PM	0	0	0	3	6	38	143	100	21	1	0	0	0	0	0	0	0	**312**
6:00 PM	0	0	0	0	4	37	95	60	24	0	1	0	0	0	0	0	0	**221**
7:00 PM	0	0	0	0	4	52	79	35	12	2	0	0	0	0	0	0	0	**184**
8:00 PM	0	0	0	0	3	29	61	25	7	0	0	0	0	0	0	0	0	**125**
9:00 PM	0	0	0	0	3	16	21	24	8	0	0	0	0	0	0	0	0	**72**
10:00 PM	0	0	0	0	0	6	12	19	4	0	0	0	0	0	0	0	0	**41**
11:00 PM	0	0	0	0	0	1	1	6	2	0	1	0	0	0	0	0	0	**11**
Total	**0**	**0**	**0**	**19**	**130**	**994**	**2,162**	**1,348**	**288**	**18**	**7**	**0**	**2**	**0**	**0**	**0**	**0**	**4,968**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.4%**	**2.6%**	**20.0%**	**43.5%**	**27.1%**	**5.8%**	**0.4%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	38.1	mph	Mean (Average) Speed	38.2	mph
85th Percentile	42.8	mph	10 mph Pace	33.0 - 43.0	mph
95th Percentile	45.5	mph	Percent in Pace	74.3	%

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Thursday, September 22, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	1	4	5	2	1	0	0	0	0	0	0	0	**13**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	0	1	0	1	5	1	0	0	0	0	0	0	0	0	**8**
4:00 AM	0	0	0	0	0	2	2	5	4	3	0	0	0	0	0	0	0	**16**
5:00 AM	0	0	0	0	0	1	3	11	8	0	1	0	0	0	0	0	0	**24**
6:00 AM	0	0	0	0	1	3	14	28	17	7	1	0	0	0	0	0	0	**71**
7:00 AM	0	0	0	0	0	7	41	85	48	9	1	1	0	0	0	0	0	**192**
8:00 AM	0	0	0	0	2	20	62	109	52	5	0	0	0	0	0	0	0	**250**
9:00 AM	0	0	1	0	6	21	61	78	31	1	0	0	0	0	0	0	0	**199**
10:00 AM	0	0	0	0	7	25	76	82	24	8	3	0	0	0	0	0	0	**225**
11:00 AM	0	0	0	0	2	19	84	88	27	2	2	0	0	0	0	0	0	**224**
12:00 PM	0	0	0	0	2	17	125	124	39	6	0	0	0	0	0	0	0	**313**
1:00 PM	0	0	0	0	2	32	94	103	31	0	0	0	0	0	0	0	0	**262**
2:00 PM	0	0	0	0	3	34	133	100	33	2	1	0	0	0	0	0	0	**306**
3:00 PM	0	0	2	1	10	50	148	143	59	8	0	0	0	0	0	0	0	**421**
4:00 PM	0	1	3	8	14	87	200	150	51	5	0	0	0	0	0	0	0	**519**
5:00 PM	1	5	12	22	36	113	205	162	46	9	0	0	0	0	0	0	0	**611**
6:00 PM	0	0	0	6	32	47	152	120	50	3	1	0	0	0	0	0	0	**411**
7:00 PM	0	0	0	0	2	22	58	60	19	3	0	0	0	0	0	0	0	**164**
8:00 PM	0	0	0	0	3	7	26	43	18	3	0	0	0	0	0	0	0	**100**
9:00 PM	0	0	0	0	1	10	26	25	11	4	0	0	0	0	0	0	0	**77**
10:00 PM	0	0	0	0	0	2	4	9	6	3	1	0	0	0	0	0	0	**25**
11:00 PM	0	0	0	0	0	1	5	4	2	1	0	0	0	0	0	0	0	**13**
Total	**1**	**6**	**18**	**37**	**124**	**521**	**1,524**	**1,539**	**579**	**84**	**11**	**2**	**0**	**0**	**0**	**0**	**0**	**4,446**
Percent	**0.0%**	**0.1%**	**0.4%**	**0.8%**	**2.8%**	**11.7%**	**34.3%**	**34.6%**	**13.0%**	**1.9%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	39.9	mph	Mean (Average) Speed	39.7	mph
85th Percentile	45.1	mph	10 mph Pace	35.6 - 45.6	mph
95th Percentile	47.9	mph	Percent in Pace	69.05	%

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Friday, September 23, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	1	0	7	6	0	0	0	0	0	0	0	0	0	**14**
1:00 AM	0	0	0	0	1	0	3	3	0	0	0	0	0	0	0	0	0	**7**
2:00 AM	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	0	0	0	0	0	3	3	1	1	0	0	0	0	0	0	0	**8**
5:00 AM	0	0	0	0	0	3	14	17	16	0	2	0	0	0	0	0	0	**52**
6:00 AM	0	0	0	0	0	12	80	101	32	4	0	0	0	0	0	0	0	**229**
7:00 AM	0	0	0	2	5	76	204	172	32	7	0	0	0	0	0	0	0	**498**
8:00 AM	0	0	0	0	4	59	189	136	30	2	1	0	0	0	0	0	0	**421**
9:00 AM	0	0	0	0	8	59	112	116	40	5	0	0	0	0	0	0	0	**340**
10:00 AM	0	0	0	0	17	118	182	93	21	1	0	0	0	0	0	0	0	**432**
11:00 AM	0	0	0	0	6	73	136	72	23	1	1	0	0	0	0	0	0	**312**
12:00 PM	0	0	0	0	4	62	131	82	20	0	0	0	0	0	0	0	0	**299**
1:00 PM	0	0	0	4	8	51	140	77	11	1	1	0	0	0	0	0	0	**293**
2:00 PM	0	0	0	0	3	56	161	80	14	0	0	0	0	0	0	0	0	**314**
3:00 PM	0	0	0	2	15	71	147	102	26	4	1	0	0	0	0	0	0	**368**
4:00 PM	0	0	0	1	7	69	151	77	18	4	1	0	0	0	0	0	0	**328**
5:00 PM	0	0	0	0	8	42	130	85	30	0	0	0	0	0	0	0	0	**295**
6:00 PM	0	0	0	0	8	53	137	83	11	0	2	0	0	0	0	0	0	**294**
7:00 PM	0	0	0	1	7	44	96	45	9	2	0	0	0	0	0	0	0	**204**
8:00 PM	0	0	0	0	3	18	53	32	3	2	0	1	0	0	0	0	0	**112**
9:00 PM	0	0	0	0	4	16	32	20	5	0	0	0	0	0	0	0	0	**77**
10:00 PM	0	0	0	0	1	10	21	14	4	2	0	0	0	0	0	0	0	**52**
11:00 PM	0	0	0	0	1	3	12	4	2	0	0	0	0	0	0	0	0	**22**
Total	**0**	**0**	**0**	**10**	**112**	**896**	**2,141**	**1,423**	**351**	**36**	**9**	**1**	**0**	**0**	**0**	**0**	**0**	**4,979**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.2%**	**2.2%**	**18.0%**	**43.0%**	**28.6%**	**7.0%**	**0.7%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	38.5	mph	Mean (Average) Speed	38.6	mph
85th Percentile	43.2	mph	10 mph Pace	33.3 - 43.3	mph
95th Percentile	46.0	mph	Percent in Pace	74.5	%

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Friday, September 23, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	1	4	8	3	0	0	0	0	0	0	0	0	**16**
1:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	0	0	0	0	0	3	5	4	0	0	0	0	0	0	0	0	**12**
5:00 AM	0	0	0	0	0	4	7	7	5	1	0	0	0	0	0	0	0	**24**
6:00 AM	0	0	0	0	0	5	16	33	16	5	1	0	0	0	0	0	0	**76**
7:00 AM	0	0	0	2	6	13	41	86	42	4	0	0	0	0	0	0	0	**194**
8:00 AM	0	0	0	0	0	2	62	115	50	10	0	0	0	0	0	0	0	**239**
9:00 AM	0	0	0	0	0	9	60	73	38	5	0	0	0	0	0	0	0	**185**
10:00 AM	0	0	0	0	2	15	77	63	35	7	0	0	0	0	0	0	0	**199**
11:00 AM	0	0	0	0	2	33	102	114	44	4	0	0	0	0	0	0	0	**299**
12:00 PM	0	0	0	1	1	29	101	116	35	4	0	0	0	0	0	0	0	**287**
1:00 PM	0	0	0	1	1	8	84	117	49	8	0	0	0	0	0	0	0	**268**
2:00 PM	0	0	0	0	0	38	84	103	40	6	0	0	0	0	0	0	0	**271**
3:00 PM	0	0	0	0	7	58	168	131	67	11	2	0	0	0	0	0	0	**444**
4:00 PM	0	0	0	0	12	39	178	166	74	17	1	0	0	0	0	0	0	**487**
5:00 PM	0	7	10	19	37	96	147	141	53	10	0	0	0	0	0	0	0	**520**
6:00 PM	0	0	0	3	6	53	141	99	44	10	0	0	0	0	0	0	0	**356**
7:00 PM	0	0	0	0	5	27	80	56	22	3	1	0	0	0	0	0	0	**194**
8:00 PM	0	0	0	0	2	21	30	41	17	2	1	0	0	0	0	0	0	**114**
9:00 PM	0	0	0	0	2	10	31	43	12	4	0	0	0	0	0	0	0	**102**
10:00 PM	0	0	0	0	2	5	28	33	13	3	0	0	0	0	0	0	0	**84**
11:00 PM	0	0	0	0	0	1	6	13	7	0	0	0	0	0	0	0	0	**27**
Total	**0**	**7**	**10**	**26**	**85**	**467**	**1,452**	**1,569**	**671**	**114**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**4,407**
Percent	**0.0%**	**0.2%**	**0.2%**	**0.6%**	**1.9%**	**10.6%**	**32.9%**	**35.6%**	**15.2%**	**2.6%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	40.5	mph	Mean (Average) Speed	40.3	mph
85th Percentile	45.5	mph	10 mph Pace	35.3 - 45.3	mph
95th Percentile	48.4	mph	Percent in Pace	68.69	%

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Total Study Average
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	1	4	5	1	0	0	0	0	0	0	0	0	**11**
1:00 AM	0	0	0	0	0	1	4	3	1	0	0	0	0	0	0	0	0	**9**
2:00 AM	0	0	0	0	0	2	1	2	2	0	0	0	0	0	0	0	0	**7**
3:00 AM	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	0	0	0	0	1	4	4	1	0	0	0	0	0	0	0	0	**10**
5:00 AM	0	0	0	0	0	2	14	21	13	1	0	0	0	0	0	0	0	**51**
6:00 AM	0	0	0	0	1	14	68	80	24	3	0	0	0	0	0	0	0	**190**
7:00 AM	0	0	0	1	3	73	182	144	26	4	0	0	0	0	0	0	0	**433**
8:00 AM	4	8	4	4	14	98	180	108	25	1	0	0	0	0	0	0	0	**446**
9:00 AM	0	0	0	0	7	51	118	81	21	2	0	0	0	0	0	0	0	**280**
10:00 AM	0	0	0	1	10	66	129	75	14	1	0	0	0	0	0	0	0	**296**
11:00 AM	0	0	0	0	7	78	139	76	15	1	0	0	0	0	0	0	0	**316**
12:00 PM	0	0	0	0	9	80	149	77	15	2	0	0	0	0	0	0	0	**332**
1:00 PM	0	0	0	1	12	78	163	77	14	2	0	0	0	0	0	0	0	**347**
2:00 PM	0	0	0	1	7	74	153	78	16	1	0	0	0	0	0	0	0	**330**
3:00 PM	0	0	0	1	14	93	160	80	19	2	0	0	0	0	0	0	0	**369**
4:00 PM	0	0	0	0	11	69	143	78	15	3	0	0	0	0	0	0	0	**319**
5:00 PM	0	0	0	1	5	60	138	77	20	2	0	0	0	0	0	0	0	**303**
6:00 PM	0	0	0	0	5	36	101	68	17	1	1	0	0	0	0	0	0	**229**
7:00 PM	0	0	0	1	8	45	69	38	9	1	0	0	0	0	0	0	0	**171**
8:00 PM	0	0	0	0	6	27	48	24	5	1	0	0	0	0	0	0	0	**111**
9:00 PM	0	0	0	0	2	16	28	19	6	1	0	0	0	0	0	0	0	**72**
10:00 PM	0	0	0	0	1	6	17	15	5	1	0	0	0	0	0	0	0	**45**
11:00 PM	0	0	0	0	0	2	6	7	2	0	0	0	0	0	0	0	0	**17**
Total	**4**	**8**	**4**	**11**	**122**	**974**	**2,019**	**1,238**	**287**	**30**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**4,698**
Percent	**0.1%**	**0.2%**	**0.1%**	**0.2%**	**2.6%**	**20.7%**	**43.0%**	**26.4%**	**6.1%**	**0.6%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	38.0	mph	Mean (Average) Speed	38.1	mph
85th Percentile	42.8	mph	10 mph Pace	33.1 - 43.1	mph
95th Percentile	45.7	mph	Percent in Pace	73.7	%

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 07

Total Study Average
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	2	4	5	3	0	0	0	0	0	0	0	0	**14**
1:00 AM	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	0	0	0	0	0	1	2	2	1	0	0	0	0	0	0	0	**6**
3:00 AM	0	0	0	0	0	0	1	2	2	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	0	0	0	0	1	3	4	4	1	0	0	0	0	0	0	0	**13**
5:00 AM	0	0	0	0	0	2	4	7	6	1	0	0	0	0	0	0	0	**20**
6:00 AM	0	0	0	0	1	3	15	24	18	5	0	0	0	0	0	0	0	**66**
7:00 AM	0	0	0	0	1	8	35	73	41	5	1	0	0	0	0	0	0	**164**
8:00 AM	0	0	0	0	1	11	52	93	45	6	1	0	0	0	0	0	0	**209**
9:00 AM	0	0	0	0	2	11	54	74	34	3	1	0	0	0	0	0	0	**179**
10:00 AM	0	0	0	0	2	15	75	85	31	5	1	0	0	0	0	0	0	**214**
11:00 AM	0	0	0	0	1	24	81	106	38	4	1	0	0	0	0	0	0	**255**
12:00 PM	0	0	0	0	3	26	105	108	40	5	0	0	0	0	0	0	0	**287**
1:00 PM	0	0	0	0	2	23	83	110	41	5	0	0	0	0	0	0	0	**264**
2:00 PM	0	0	0	1	4	32	108	110	41	5	1	0	0	0	0	0	0	**302**
3:00 PM	0	0	1	1	7	40	129	132	49	8	1	0	0	0	0	0	0	**368**
4:00 PM	0	0	1	4	16	58	145	135	48	8	1	0	0	0	0	0	0	**416**
5:00 PM	1	6	10	24	39	94	153	118	38	6	0	0	0	0	0	0	0	**489**
6:00 PM	0	0	0	6	21	55	123	99	37	7	0	0	0	0	0	0	0	**348**
7:00 PM	0	0	0	1	5	26	71	53	20	2	0	0	0	0	0	0	0	**178**
8:00 PM	0	0	0	0	1	12	27	36	14	3	0	0	0	0	0	0	0	**93**
9:00 PM	0	0	0	0	1	6	19	23	11	2	0	0	0	0	0	0	0	**62**
10:00 PM	0	0	0	0	0	3	10	14	6	2	0	0	0	0	0	0	0	**35**
11:00 PM	0	0	0	0	0	1	4	6	5	1	0	0	0	0	0	0	0	**17**
Total	**1**	**6**	**12**	**37**	**107**	**453**	**1,303**	**1,421**	**575**	**85**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**4,008**
Percent	**0.0%**	**0.1%**	**0.3%**	**0.9%**	**2.7%**	**11.3%**	**32.5%**	**35.5%**	**14.3%**	**2.1%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	40.3	mph	Mean (Average) Speed	40.0	mph
85th Percentile	45.3	mph	10 mph Pace	35.5 - 45.5	mph
95th Percentile	48.3	mph	Percent in Pace	68.2	%

Location: Midland Ave BTWN E Meadows & W Meadows
Date Range: 9/17/2022 - 9/23/2022
Site Code: 07

	Saturday			Sunday			Monday			Tuesday			Wednesday			Thursday			Friday					
	9/17/2022			9/18/2022			9/19/2022			9/20/2022			9/21/2022			9/22/2022			9/23/2022			Mid-Week Average		
Time	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total
12:00 AM	14	17	31	23	24	47	11	8	19	8	9	17	8	10	18	10	13	23	14	16	30	9	11	19
1:00 AM	9	11	20	14	17	31	11	3	14	3	0	3	9	3	12	7	1	8	7	2	9	6	1	8
2:00 AM	10	16	26	12	19	31	5	4	9	7	1	8	6	0	6	7	1	8	3	3	6	7	1	7
3:00 AM	5	8	13	10	6	16	3	9	12	3	4	7	2	5	7	4	8	12	5	4	9	3	6	9
4:00 AM	10	8	18	9	13	22	6	12	18	16	11	27	9	14	23	11	16	27	8	12	20	12	14	26
5:00 AM	24	20	44	17	12	29	62	18	80	68	19	87	73	25	98	72	24	96	52	24	76	71	23	94
6:00 AM	58	47	105	31	32	63	236	72	308	273	81	354	260	91	351	244	71	315	229	76	305	259	81	340
7:00 AM	143	87	230	66	47	113	596	207	803	585	210	795	585	217	802	550	192	742	498	194	692	573	206	780
8:00 AM	168	115	283	101	68	169	624	250	874	655	272	927	583	278	861	561	250	811	421	239	660	600	267	866
9:00 AM	208	138	346	170	138	308	287	181	468	317	210	527	324	194	518	315	199	514	340	185	525	319	201	520
10:00 AM	259	238	497	197	173	370	316	237	553	294	211	505	278	221	499	294	225	519	432	199	631	289	219	508
11:00 AM	281	255	536	223	199	422	513	300	813	274	261	535	309	240	549	306	224	530	312	299	611	296	242	538
12:00 PM	307	301	608	254	264	518	538	317	855	318	260	578	302	271	573	316	313	629	299	287	586	312	281	593
1:00 PM	300	217	517	236	240	476	696	269	965	295	250	545	323	346	669	289	262	551	293	268	561	302	286	588
2:00 PM	275	261	536	231	224	455	530	405	935	304	269	573	352	375	727	308	306	614	314	271	585	321	317	638
3:00 PM	263	223	486	254	191	445	591	495	1,086	394	405	799	346	395	741	369	421	790	368	444	812	370	407	777
4:00 PM	266	212	478	211	165	376	448	583	1,031	308	470	778	345	469	814	339	519	858	328	487	815	331	486	817
5:00 PM	258	222	480	232	175	407	344	672	1,016	356	605	961	310	620	930	312	611	923	295	520	815	326	612	938
6:00 PM	225	193	418	180	148	328	253	392	645	217	529	746	215	410	625	221	411	632	294	356	650	218	450	668
7:00 PM	149	154	303	154	111	265	177	185	362	163	226	389	162	213	375	184	164	348	204	194	398	170	201	371
8:00 PM	119	104	223	116	65	181	108	94	202	109	85	194	94	92	186	125	100	225	112	114	226	109	92	202
9:00 PM	99	73	172	84	36	120	60	51	111	58	52	110	60	41	101	72	77	149	77	102	179	63	57	120
10:00 PM	53	47	100	45	23	68	42	21	63	35	27	62	42	21	63	41	25	66	52	84	136	39	24	64
11:00 PM	35	33	68	20	14	34	15	12	27	12	7	19	14	12	26	11	13	24	22	27	49	12	11	23
Total	**3,538**	**3,000**	**6,538**	**2,890**	**2,404**	**5,294**	**6,472**	**4,797**	**11,269**	**5,072**	**4,474**	**9,546**	**5,011**	**4,563**	**9,574**	**4,968**	**4,446**	**9,414**	**4,979**	**4,407**	**9,386**	**5,017**	**4,494**	**9,511**
Percent	**54%**	**46%**	-	**55%**	**45%**	-	**57%**	**43%**	-	**53%**	**47%**	-	**52%**	**48%**	-	**53%**	**47%**	-	**53%**	**47%**	-	**53%**	**47%**	-

1. Mid-week average includes data between Tuesday and Thursday.

Vehicle Classification Report Summary

Location: Midland Ave BTWN W Meadows & W Wulfsohn

Count Direction: Eastbound / Westbound

Date Range: 9/17/2022 to 9/23/2022

Site Code: 08

	FHWA Vehicle Classification													Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
Study Total														
Eastbound	117	23,494	7,639	88	6,039	67	0	46	68	9	0	0	4	37,571
Percent	0.3%	62.5%	20.3%	0.2%	16.1%	0.2%	0.0%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	100%
Westbound	108	24,254	7,427	43	4,287	71	0	32	69	10	0	3	8	36,312
Percent	0.3%	66.8%	20.5%	0.1%	11.8%	0.2%	0.0%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	100%
Total	225	47,748	15,066	131	10,326	138	0	78	137	19	0	3	12	73,883
Percent	0.3%	64.6%	20.4%	0.2%	14.0%	0.2%	0.0%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	100%

FHWA Vehicle Classification	
Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Saturday, September 17, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	13	0	0	1	0	0	0	0	0	0	0	0	**14**
1:00 AM	0	5	4	0	1	0	0	0	0	0	0	0	0	**10**
2:00 AM	0	7	2	0	0	0	0	0	0	0	0	0	0	**9**
3:00 AM	0	9	1	0	0	0	0	0	0	0	0	0	0	**10**
4:00 AM	0	5	3	0	2	0	0	1	0	0	0	0	0	**11**
5:00 AM	0	17	9	2	5	0	0	0	0	0	0	0	0	**33**
6:00 AM	0	40	21	0	13	0	0	0	0	0	0	0	0	**74**
7:00 AM	0	98	36	1	31	0	0	0	0	0	0	0	0	**166**
8:00 AM	0	115	42	1	40	0	0	0	0	0	0	0	0	**198**
9:00 AM	0	164	67	1	43	0	0	0	0	0	0	0	0	**275**
10:00 AM	4	200	57	0	51	0	0	1	0	0	0	0	0	**313**
11:00 AM	1	249	55	0	58	0	0	0	0	0	0	0	0	**363**
12:00 PM	3	239	91	0	63	1	0	0	0	0	0	0	0	**397**
1:00 PM	0	266	84	1	56	0	0	0	0	0	0	0	0	**407**
2:00 PM	1	222	73	0	57	0	0	0	0	0	0	0	0	**353**
3:00 PM	0	197	62	0	41	1	0	0	0	0	0	0	0	**301**
4:00 PM	2	227	62	0	45	0	0	1	0	0	0	0	0	**337**
5:00 PM	6	214	50	0	43	2	0	0	1	0	0	0	0	**316**
6:00 PM	1	195	44	1	41	0	0	0	0	0	0	0	0	**282**
7:00 PM	1	110	28	0	30	0	0	0	0	0	0	0	0	**169**
8:00 PM	0	76	24	0	17	0	0	0	0	0	0	0	0	**117**
9:00 PM	0	58	23	1	9	0	0	0	0	0	0	0	0	**91**
10:00 PM	0	39	9	0	3	0	0	0	0	0	0	0	0	**51**
11:00 PM	0	18	8	0	8	0	0	0	0	0	0	0	0	**34**
Total	**19**	**2,783**	**855**	**8**	**658**	**4**	**0**	**3**	**1**	**0**	**0**	**0**	**0**	**4,331**
Percent	**0.4%**	**64.3%**	**19.7%**	**0.2%**	**15.2%**	**0.1%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Saturday, September 17, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	12	5	1	2	0	0	0	0	0	0	0	0	**20**
1:00 AM	0	9	0	0	3	0	0	0	0	0	0	0	0	**12**
2:00 AM	0	9	5	1	2	0	0	0	0	0	0	0	0	**17**
3:00 AM	0	4	2	0	0	0	0	0	0	0	0	0	0	**6**
4:00 AM	0	5	2	0	2	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	15	1	0	3	1	0	1	0	0	0	0	0	**21**
6:00 AM	0	28	11	0	8	0	0	0	0	0	0	0	0	**47**
7:00 AM	0	52	21	0	9	0	0	0	0	0	0	0	0	**82**
8:00 AM	0	66	34	0	19	0	0	0	0	0	0	0	0	**119**
9:00 AM	1	109	46	0	18	0	0	0	0	0	0	0	0	**174**
10:00 AM	0	171	58	0	36	0	0	0	0	0	0	0	0	**265**
11:00 AM	0	219	67	1	38	0	0	0	0	0	0	0	0	**325**
12:00 PM	1	277	76	0	40	0	0	0	0	0	0	0	0	**394**
1:00 PM	1	237	79	0	43	1	0	0	0	0	0	0	0	**361**
2:00 PM	2	282	74	1	34	0	0	0	0	0	0	0	0	**393**
3:00 PM	3	255	80	0	34	0	0	0	0	0	0	0	0	**372**
4:00 PM	2	241	78	0	29	0	0	0	0	0	0	0	0	**350**
5:00 PM	2	239	61	0	41	0	0	2	1	0	0	0	0	**346**
6:00 PM	0	208	57	0	27	0	0	0	1	0	0	0	0	**293**
7:00 PM	2	179	47	0	34	0	0	1	0	0	0	0	0	**263**
8:00 PM	0	125	32	0	12	0	0	0	0	0	0	0	0	**169**
9:00 PM	0	91	19	1	9	0	0	0	0	0	0	0	0	**120**
10:00 PM	0	51	10	0	5	0	0	0	0	0	0	0	0	**66**
11:00 PM	0	22	7	0	7	0	0	0	0	0	0	0	0	**36**
Total	**14**	**2,906**	**872**	**5**	**455**	**2**	**0**	**4**	**2**	**0**	**0**	**0**	**0**	**4,260**
Percent	**0.3%**	**68.2%**	**20.5%**	**0.1%**	**10.7%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Sunday, September 18, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	15	6	0	2	0	0	0	0	0	0	0	0	**23**
1:00 AM	0	10	4	0	2	0	0	0	0	0	0	0	0	**16**
2:00 AM	0	6	2	0	2	0	0	0	0	0	0	0	0	**10**
3:00 AM	0	8	2	1	1	0	0	0	0	0	0	0	0	**12**
4:00 AM	0	5	3	0	2	0	0	0	0	0	0	0	0	**10**
5:00 AM	0	9	6	1	3	0	0	0	0	0	0	0	0	**19**
6:00 AM	0	35	9	0	8	0	0	0	0	0	0	0	0	**52**
7:00 AM	0	42	18	1	19	0	0	0	0	0	0	0	0	**80**
8:00 AM	0	71	34	1	20	0	0	0	0	0	0	0	0	**126**
9:00 AM	0	118	57	0	28	0	0	0	0	0	0	0	0	**203**
10:00 AM	0	173	57	2	31	0	0	0	0	0	0	0	0	**263**
11:00 AM	5	212	73	0	49	0	0	0	0	0	0	0	0	**339**
12:00 PM	4	223	71	2	52	0	0	0	0	0	0	0	0	**352**
1:00 PM	3	221	63	1	57	0	0	0	0	0	0	0	0	**345**
2:00 PM	6	218	71	0	46	0	0	0	0	0	0	0	0	**341**
3:00 PM	3	219	64	0	58	0	0	0	0	0	0	0	0	**344**
4:00 PM	1	187	50	0	31	0	0	0	0	0	0	0	0	**269**
5:00 PM	0	183	45	0	36	0	0	0	0	0	0	0	0	**264**
6:00 PM	1	128	50	1	36	0	0	0	0	0	0	0	0	**216**
7:00 PM	1	98	31	0	24	0	0	0	0	0	0	0	0	**154**
8:00 PM	1	70	22	1	14	0	0	0	0	0	0	0	0	**108**
9:00 PM	1	49	15	1	9	0	0	0	0	0	0	0	0	**75**
10:00 PM	0	33	6	0	2	0	0	0	0	0	0	0	0	**41**
11:00 PM	1	10	8	0	3	0	0	0	0	0	0	0	0	**22**
Total	**27**	**2,343**	**767**	**12**	**535**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3,684**
Percent	**0.7%**	**63.6%**	**20.8%**	**0.3%**	**14.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Sunday, September 18, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	18	2	0	3	0	0	0	0	0	0	0	0	**23**
1:00 AM	0	16	3	0	1	0	0	0	0	0	0	0	0	**20**
2:00 AM	0	15	3	0	1	0	0	0	0	0	0	0	0	**19**
3:00 AM	0	7	0	0	0	0	0	0	0	0	0	0	0	**7**
4:00 AM	0	9	1	0	0	0	0	0	0	0	0	0	0	**10**
5:00 AM	0	6	5	0	0	0	0	0	0	0	0	0	0	**11**
6:00 AM	0	19	4	0	6	0	0	0	0	0	0	0	0	**29**
7:00 AM	2	22	8	1	8	1	0	0	0	0	0	0	0	**42**
8:00 AM	0	36	16	1	7	0	0	0	0	0	0	0	0	**60**
9:00 AM	0	87	45	0	15	0	0	0	0	0	0	0	0	**147**
10:00 AM	0	130	41	0	25	0	0	0	0	0	0	0	0	**196**
11:00 AM	1	169	54	1	23	0	0	0	0	0	0	0	0	**248**
12:00 PM	6	230	75	0	35	0	0	0	0	0	0	0	0	**346**
1:00 PM	4	249	64	0	41	0	0	1	0	0	0	0	0	**359**
2:00 PM	1	256	64	1	36	0	0	0	0	0	0	0	0	**358**
3:00 PM	3	240	61	0	40	0	0	0	0	0	0	0	0	**344**
4:00 PM	1	236	61	0	29	0	0	0	0	0	0	0	0	**327**
5:00 PM	2	214	51	1	24	0	0	0	0	0	0	0	0	**292**
6:00 PM	0	155	46	0	22	0	0	0	0	0	0	0	0	**223**
7:00 PM	1	128	34	0	18	0	0	0	0	0	0	0	0	**181**
8:00 PM	0	93	24	0	10	0	0	0	0	0	0	0	0	**127**
9:00 PM	1	52	7	2	3	0	0	0	0	0	0	0	0	**65**
10:00 PM	0	24	6	0	1	0	0	0	0	0	0	0	0	**31**
11:00 PM	0	9	5	1	3	0	0	0	0	0	0	0	0	**18**
Total	**22**	**2,420**	**680**	**8**	**351**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3,483**
Percent	**0.6%**	**69.5%**	**19.5%**	**0.2%**	**10.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Monday, September 19, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	4	3	0	3	0	0	0	0	0	0	0	0	**10**
1:00 AM	0	5	6	0	1	0	0	0	0	0	0	0	0	**12**
2:00 AM	0	2	3	0	0	0	0	0	0	0	0	0	0	**5**
3:00 AM	0	6	4	0	0	0	0	0	0	0	0	0	0	**10**
4:00 AM	0	11	1	0	1	0	0	1	0	0	0	0	0	**14**
5:00 AM	0	44	19	0	17	0	0	1	1	0	0	0	0	**82**
6:00 AM	1	116	62	0	70	2	0	0	0	0	0	0	0	**251**
7:00 AM	0	344	130	0	126	1	0	0	3	0	0	0	0	**604**
8:00 AM	1	368	152	2	106	1	0	0	3	1	0	0	0	**634**
9:00 AM	1	195	68	0	67	1	0	0	1	0	0	0	0	**333**
10:00 AM	1	216	68	2	76	1	0	3	2	1	0	0	0	**370**
11:00 AM	3	349	110	1	92	1	0	0	2	0	0	0	1	**559**
12:00 PM	2	375	114	1	95	2	0	2	3	0	0	0	0	**594**
1:00 PM	1	449	151	3	121	2	0	2	2	1	0	0	0	**732**
2:00 PM	1	380	121	0	72	2	0	0	1	0	0	0	0	**577**
3:00 PM	2	434	107	0	89	5	0	0	1	0	0	0	1	**639**
4:00 PM	4	339	96	0	62	1	0	0	1	1	0	0	0	**504**
5:00 PM	0	271	67	0	62	0	0	0	2	0	0	0	0	**402**
6:00 PM	3	204	50	1	44	0	0	0	0	0	0	0	0	**302**
7:00 PM	0	119	37	0	28	0	0	0	0	0	0	0	0	**184**
8:00 PM	0	70	19	1	19	0	0	0	1	0	0	0	0	**110**
9:00 PM	0	38	9	2	11	0	0	0	0	0	0	0	0	**60**
10:00 PM	0	25	9	0	3	0	0	0	0	0	0	0	0	**37**
11:00 PM	0	11	3	0	1	0	0	0	0	0	0	0	0	**15**
Total	**20**	**4,375**	**1,409**	**13**	**1,166**	**19**	**0**	**9**	**23**	**4**	**0**	**0**	**2**	**7,040**
Percent	**0.3%**	**62.1%**	**20.0%**	**0.2%**	**16.6%**	**0.3%**	**0.0%**	**0.1%**	**0.3%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Monday, September 19, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	3	4	0	1	0	0	0	0	0	0	0	0	**8**
1:00 AM	1	3	0	0	0	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	**4**
3:00 AM	0	5	3	0	1	0	0	0	0	0	0	0	0	**9**
4:00 AM	0	5	3	0	2	0	0	0	0	0	0	0	0	**10**
5:00 AM	0	7	3	0	4	0	0	1	0	0	0	0	0	**15**
6:00 AM	0	37	13	0	15	1	0	0	0	0	0	0	0	**66**
7:00 AM	0	133	41	0	28	0	0	0	1	0	0	0	0	**203**
8:00 AM	0	163	35	1	42	0	0	0	4	0	0	1	0	**246**
9:00 AM	0	136	39	0	24	1	0	0	0	0	0	0	1	**201**
10:00 AM	0	186	59	0	30	2	0	0	2	0	0	0	0	**279**
11:00 AM	2	228	86	0	54	0	0	0	2	0	0	0	0	**372**
12:00 PM	3	237	84	0	37	1	0	2	1	1	0	0	0	**366**
1:00 PM	1	215	59	0	46	1	0	0	3	1	0	0	0	**326**
2:00 PM	2	368	96	0	62	3	0	1	1	0	0	0	0	**533**
3:00 PM	3	394	133	0	67	1	0	0	1	1	0	0	0	**600**
4:00 PM	1	490	155	0	93	2	0	0	2	0	0	0	0	**743**
5:00 PM	4	575	173	0	100	0	0	1	0	0	0	0	0	**853**
6:00 PM	1	389	89	0	52	1	0	0	2	0	0	0	0	**534**
7:00 PM	0	199	49	0	28	0	0	0	0	0	0	0	0	**276**
8:00 PM	1	94	22	0	14	0	0	1	1	0	0	1	0	**134**
9:00 PM	0	70	11	0	10	0	0	0	0	0	0	0	0	**91**
10:00 PM	0	27	3	0	3	0	0	0	0	0	0	0	0	**33**
11:00 PM	0	13	0	0	0	0	0	0	0	0	0	0	0	**13**
Total	**19**	**3,980**	**1,161**	**1**	**713**	**13**	**0**	**6**	**20**	**3**	**0**	**2**	**1**	**5,919**
Percent	**0.3%**	**67.2%**	**19.6%**	**0.0%**	**12.0%**	**0.2%**	**0.0%**	**0.1%**	**0.3%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Tuesday, September 20, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	8	0	0	0	0	0	0	0	0	0	0	0	**8**
1:00 AM	0	1	1	0	1	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	6	0	0	0	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	5	1	0	0	0	0	0	0	0	0	0	0	**6**
4:00 AM	0	17	5	0	1	0	0	0	0	0	0	0	0	**23**
5:00 AM	0	49	11	1	22	0	0	0	0	0	0	0	0	**83**
6:00 AM	2	152	63	1	78	1	0	0	0	0	0	0	0	**297**
7:00 AM	1	356	141	1	103	0	0	0	1	0	0	0	0	**603**
8:00 AM	0	420	144	1	109	1	0	0	0	0	0	0	0	**675**
9:00 AM	0	233	73	4	54	1	0	0	3	0	0	0	0	**368**
10:00 AM	1	216	68	1	63	0	0	1	1	0	0	0	0	**351**
11:00 AM	0	201	80	1	41	1	0	2	3	0	0	0	0	**329**
12:00 PM	0	209	96	0	48	0	0	0	0	0	0	0	0	**353**
1:00 PM	1	210	65	3	72	2	0	2	1	0	0	0	0	**356**
2:00 PM	2	208	63	1	63	1	0	0	2	0	0	0	0	**340**
3:00 PM	0	266	88	0	60	1	0	0	1	0	0	0	0	**416**
4:00 PM	2	220	68	0	62	1	0	0	0	0	0	0	0	**353**
5:00 PM	0	286	64	0	57	0	0	0	1	0	0	0	0	**408**
6:00 PM	0	173	55	1	29	0	0	0	0	0	0	0	0	**258**
7:00 PM	0	121	30	0	30	0	0	0	1	0	0	0	0	**182**
8:00 PM	0	61	28	0	11	0	0	0	0	0	0	0	0	**100**
9:00 PM	0	35	11	1	10	0	0	0	0	0	0	0	0	**57**
10:00 PM	0	21	6	0	7	0	0	0	0	0	0	0	0	**34**
11:00 PM	0	7	4	0	2	0	0	0	0	0	0	0	0	**13**
Total	**9**	**3,481**	**1,165**	**16**	**923**	**9**	**0**	**5**	**14**	**0**	**0**	**0**	**0**	**5,622**
Percent	**0.2%**	**61.9%**	**20.7%**	**0.3%**	**16.4%**	**0.2%**	**0.0%**	**0.1%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Tuesday, September 20, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	4	3	0	3	0	0	0	0	0	0	0	0	**10**
1:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	1	2	0	1	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	4	5	1	0	0	0	0	0	0	0	0	0	**10**
5:00 AM	0	7	1	0	2	0	0	0	0	0	0	0	0	**10**
6:00 AM	1	49	19	0	14	1	0	0	0	0	0	0	0	**84**
7:00 AM	0	126	41	0	24	0	0	0	0	0	0	0	0	**191**
8:00 AM	0	188	51	1	37	1	0	0	2	0	0	0	0	**280**
9:00 AM	0	145	56	0	26	0	0	0	3	0	0	0	0	**230**
10:00 AM	0	163	61	0	28	0	0	0	1	0	0	0	0	**253**
11:00 AM	0	203	58	0	37	2	0	1	1	0	0	0	1	**303**
12:00 PM	2	253	65	1	33	1	0	0	1	0	0	0	0	**356**
1:00 PM	0	239	81	0	37	1	0	0	0	0	0	0	0	**358**
2:00 PM	0	232	72	1	47	2	0	0	1	0	0	0	0	**355**
3:00 PM	0	354	115	1	62	1	0	0	1	0	0	0	1	**535**
4:00 PM	3	390	137	0	79	2	0	0	1	0	0	0	0	**612**
5:00 PM	3	540	141	0	95	0	0	1	0	1	0	0	0	**781**
6:00 PM	2	399	148	0	96	1	0	0	1	0	0	0	0	**647**
7:00 PM	2	208	56	0	30	1	0	0	0	0	0	0	0	**297**
8:00 PM	0	91	38	0	17	0	0	0	0	0	0	0	0	**146**
9:00 PM	0	57	16	1	9	0	0	0	0	0	0	0	0	**83**
10:00 PM	0	26	11	0	4	0	0	0	0	0	0	0	0	**41**
11:00 PM	0	7	3	0	0	0	0	0	0	0	0	0	0	**10**
Total	**14**	**3,687**	**1,180**	**6**	**681**	**13**	**0**	**2**	**12**	**1**	**0**	**0**	**2**	**5,598**
Percent	**0.3%**	**65.9%**	**21.1%**	**0.1%**	**12.2%**	**0.2%**	**0.0%**	**0.0%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Wednesday, September 21, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	4	2	0	1	0	0	0	0	0	0	0	0	**7**
1:00 AM	0	5	3	0	1	0	0	0	0	0	0	0	0	**9**
2:00 AM	0	5	0	0	1	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	13	1	0	2	0	0	1	0	0	0	0	0	**17**
5:00 AM	0	53	21	1	17	0	0	0	0	0	0	0	0	**92**
6:00 AM	0	127	67	1	82	1	0	0	1	0	0	0	0	**279**
7:00 AM	2	368	126	2	109	0	0	0	1	0	0	0	0	**608**
8:00 AM	0	367	125	2	108	2	0	0	1	0	0	0	0	**605**
9:00 AM	1	203	85	0	69	0	0	0	0	0	0	0	0	**358**
10:00 AM	0	203	75	2	56	1	0	0	1	0	0	0	0	**338**
11:00 AM	0	210	76	0	64	0	0	0	1	0	0	0	0	**351**
12:00 PM	0	224	64	1	59	0	0	1	0	0	0	0	0	**349**
1:00 PM	1	232	78	3	45	1	0	2	0	1	0	0	0	**363**
2:00 PM	1	249	74	3	64	1	0	3	1	0	0	0	0	**396**
3:00 PM	0	253	79	0	47	1	0	0	1	0	0	0	0	**381**
4:00 PM	0	244	81	2	47	1	0	1	1	1	0	0	0	**378**
5:00 PM	1	256	61	0	54	0	0	0	0	0	0	0	1	**373**
6:00 PM	0	165	52	1	32	0	0	1	0	0	0	0	0	**251**
7:00 PM	0	114	26	0	23	0	0	1	0	0	0	0	0	**164**
8:00 PM	0	53	11	1	13	0	0	0	0	0	0	0	0	**78**
9:00 PM	0	43	9	2	9	0	0	0	1	0	0	0	0	**64**
10:00 PM	0	26	4	0	9	0	0	0	0	0	0	0	0	**39**
11:00 PM	0	5	6	0	2	0	0	0	0	0	0	0	0	**13**
Total	**6**	**3,427**	**1,126**	**21**	**914**	**8**	**0**	**10**	**9**	**2**	**0**	**0**	**1**	**5,524**
Percent	**0.1%**	**62.0%**	**20.4%**	**0.4%**	**16.5%**	**0.1%**	**0.0%**	**0.2%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Wednesday, September 21, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	4	3	1	2	0	0	0	0	0	0	0	0	**10**
1:00 AM	0	3	1	0	1	0	0	0	0	0	0	0	0	**5**
2:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	2	1	1	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	8	1	0	3	0	0	0	0	0	0	0	0	**12**
5:00 AM	0	16	3	0	3	0	0	1	0	0	0	0	0	**23**
6:00 AM	0	48	21	0	15	0	0	0	1	0	0	0	0	**85**
7:00 AM	0	134	45	1	26	2	0	0	0	0	0	0	0	**208**
8:00 AM	0	197	50	0	30	1	0	0	3	0	0	0	0	**281**
9:00 AM	0	137	37	0	31	1	0	0	2	0	0	0	0	**208**
10:00 AM	1	162	64	0	35	0	0	0	0	1	0	0	0	**263**
11:00 AM	0	177	75	0	39	1	0	1	0	0	0	0	0	**293**
12:00 PM	1	221	69	0	47	0	0	2	2	0	0	0	0	**342**
1:00 PM	2	287	87	1	53	0	0	0	1	0	0	0	0	**431**
2:00 PM	0	302	99	0	47	3	0	0	0	0	0	0	0	**451**
3:00 PM	0	333	116	1	59	2	0	0	0	0	0	0	0	**511**
4:00 PM	2	349	124	0	77	5	0	0	0	0	0	0	1	**558**
5:00 PM	0	540	160	1	99	0	0	1	2	0	0	0	0	**803**
6:00 PM	6	362	97	0	73	1	0	0	1	0	0	0	0	**540**
7:00 PM	0	220	48	0	29	0	0	1	1	0	0	0	0	**299**
8:00 PM	1	109	32	1	10	0	0	0	0	0	0	0	0	**153**
9:00 PM	2	51	10	0	6	0	0	0	0	0	0	0	0	**69**
10:00 PM	0	16	11	0	4	0	0	0	0	0	0	0	0	**31**
11:00 PM	0	14	3	0	2	0	0	0	0	0	0	0	0	**19**
Total	**15**	**3,690**	**1,159**	**7**	**692**	**16**	**0**	**6**	**13**	**1**	**0**	**0**	**1**	**5,600**
Percent	**0.3%**	**65.9%**	**20.7%**	**0.1%**	**12.4%**	**0.3%**	**0.0%**	**0.1%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Thursday, September 22, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	3	5	0	2	0	0	0	0	0	0	0	0	**10**
1:00 AM	0	4	1	0	1	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	2	3	0	1	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	10	1	0	0	0	0	0	0	0	0	0	0	**11**
4:00 AM	0	8	6	0	1	0	0	0	0	0	0	0	0	**15**
5:00 AM	0	52	15	1	19	0	0	0	0	0	0	0	0	**87**
6:00 AM	2	125	68	0	66	3	0	0	0	0	0	0	0	**264**
7:00 AM	1	329	102	0	129	1	0	1	0	0	0	0	0	**563**
8:00 AM	0	352	136	2	108	1	0	2	1	0	0	0	0	**602**
9:00 AM	0	215	102	0	58	1	0	0	1	0	0	0	0	**377**
10:00 AM	7	182	68	1	64	3	0	1	1	0	0	0	0	**327**
11:00 AM	0	194	73	0	73	2	0	2	2	0	0	0	0	**346**
12:00 PM	0	241	77	1	60	2	0	0	3	1	0	0	0	**385**
1:00 PM	0	204	52	1	61	0	0	1	1	0	0	0	0	**320**
2:00 PM	1	207	74	0	47	1	0	1	0	0	0	0	1	**332**
3:00 PM	0	247	95	2	60	0	0	0	0	0	0	0	0	**404**
4:00 PM	0	280	66	0	50	0	0	1	0	0	0	0	0	**397**
5:00 PM	1	267	50	0	41	0	0	0	0	0	0	0	0	**359**
6:00 PM	0	177	59	0	31	0	0	0	0	0	0	0	0	**267**
7:00 PM	0	143	32	0	33	0	0	1	0	0	0	0	0	**209**
8:00 PM	0	92	40	0	21	0	0	0	0	0	0	0	0	**153**
9:00 PM	1	41	14	1	10	0	0	0	0	0	0	0	0	**67**
10:00 PM	0	23	12	0	6	0	0	0	0	0	0	0	0	**41**
11:00 PM	0	8	4	0	0	0	0	0	1	0	0	0	0	**13**
Total	**13**	**3,406**	**1,155**	**9**	**942**	**14**	**0**	**10**	**10**	**1**	**0**	**0**	**1**	**5,561**
Percent	**0.2%**	**61.2%**	**20.8%**	**0.2%**	**16.9%**	**0.3%**	**0.0%**	**0.2%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Thursday, September 22, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	9	3	0	2	0	0	0	0	0	0	0	0	**14**
1:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	6	1	0	0	1	0	0	0	0	0	0	0	**8**
4:00 AM	0	6	5	0	3	0	0	0	0	0	0	0	0	**14**
5:00 AM	0	13	3	0	3	0	0	0	0	0	0	0	0	**19**
6:00 AM	0	42	14	0	16	0	0	0	1	0	0	0	0	**73**
7:00 AM	0	117	41	0	33	3	0	1	0	0	0	0	0	**195**
8:00 AM	0	178	52	1	27	1	0	0	0	0	0	0	0	**259**
9:00 AM	2	119	53	2	18	2	0	0	3	0	0	0	0	**199**
10:00 AM	0	148	62	0	41	1	0	0	0	2	0	0	0	**254**
11:00 AM	0	168	59	2	42	0	0	0	2	0	0	0	0	**273**
12:00 PM	3	236	76	0	64	2	0	0	0	0	0	0	0	**381**
1:00 PM	0	231	78	1	59	1	0	1	1	0	0	1	0	**373**
2:00 PM	0	253	86	1	55	0	0	2	1	0	0	0	0	**398**
3:00 PM	0	347	121	0	57	1	0	0	1	0	0	0	1	**528**
4:00 PM	1	433	138	0	81	1	0	1	0	0	0	0	0	**655**
5:00 PM	1	531	146	0	99	1	0	1	0	0	0	0	0	**779**
6:00 PM	0	342	99	0	62	2	0	0	1	0	0	0	0	**506**
7:00 PM	0	203	41	1	30	0	0	1	0	0	0	0	0	**276**
8:00 PM	0	128	43	1	16	0	0	0	0	0	0	0	0	**188**
9:00 PM	0	65	29	0	17	0	0	0	0	0	0	0	0	**111**
10:00 PM	0	35	7	0	4	0	0	0	0	0	0	0	0	**46**
11:00 PM	0	12	5	0	1	0	0	0	0	0	0	0	0	**18**
Total	**7**	**3,625**	**1,162**	**9**	**730**	**16**	**0**	**7**	**10**	**2**	**0**	**1**	**1**	**5,570**
Percent	**0.1%**	**65.1%**	**20.9%**	**0.2%**	**13.1%**	**0.3%**	**0.0%**	**0.1%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Friday, September 23, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	11	0	0	0	0	0	0	0	0	0	0	0	**11**
1:00 AM	0	3	4	0	1	0	0	0	0	0	0	0	0	**8**
2:00 AM	0	2	0	0	1	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	7	3	0	1	0	0	0	0	0	0	0	0	**11**
4:00 AM	0	11	1	0	1	0	0	0	0	0	0	0	0	**13**
5:00 AM	0	35	15	0	19	1	0	1	0	0	0	0	0	**71**
6:00 AM	1	134	55	0	74	1	0	0	1	0	0	0	0	**266**
7:00 AM	1	307	104	2	88	0	0	0	2	0	0	0	0	**504**
8:00 AM	3	263	94	0	82	1	0	0	0	0	0	0	0	**443**
9:00 AM	0	226	84	0	78	3	0	2	1	0	0	0	0	**394**
10:00 AM	0	323	109	1	86	0	0	1	2	0	0	0	0	**522**
11:00 AM	4	249	71	0	48	0	0	0	0	0	0	0	0	**372**
12:00 PM	1	232	75	0	55	3	0	2	3	0	0	0	0	**371**
1:00 PM	1	228	75	3	47	1	0	2	0	0	0	0	0	**357**
2:00 PM	5	249	102	2	54	2	0	1	1	0	0	0	0	**416**
3:00 PM	0	300	88	1	57	0	0	0	0	0	0	0	0	**446**
4:00 PM	1	258	74	0	50	1	0	0	0	2	0	0	0	**386**
5:00 PM	5	271	60	0	45	0	0	0	1	0	0	0	0	**382**
6:00 PM	0	244	52	0	42	0	0	0	0	0	0	0	0	**338**
7:00 PM	1	158	37	0	31	0	0	0	0	0	0	0	0	**227**
8:00 PM	0	74	22	0	17	0	0	0	0	0	0	0	0	**113**
9:00 PM	0	55	20	0	8	0	0	0	0	0	0	0	0	**83**
10:00 PM	0	27	12	0	11	0	0	0	0	0	0	0	0	**50**
11:00 PM	0	12	5	0	5	0	0	0	0	0	0	0	0	**22**
Total	**23**	**3,679**	**1,162**	**9**	**901**	**13**	**0**	**9**	**11**	**2**	**0**	**0**	**0**	**5,809**
Percent	**0.4%**	**63.3%**	**20.0%**	**0.2%**	**15.5%**	**0.2%**	**0.0%**	**0.2%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Friday, September 23, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	8	5	0	3	0	0	0	0	0	0	0	0	**16**
1:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	5	2	0	3	0	0	0	0	0	0	0	0	**10**
5:00 AM	0	7	5	0	8	0	0	0	0	0	0	0	0	**20**
6:00 AM	0	52	13	0	10	0	0	1	0	0	0	0	0	**76**
7:00 AM	1	128	45	0	26	1	0	0	1	0	0	0	0	**202**
8:00 AM	0	147	53	0	35	2	0	0	2	1	0	0	0	**240**
9:00 AM	0	121	43	0	20	0	0	0	2	0	0	0	2	**188**
10:00 AM	0	172	61	0	31	1	0	0	1	0	0	0	0	**266**
11:00 AM	0	238	82	1	44	0	0	2	3	1	0	0	0	**371**
12:00 PM	2	272	91	0	48	1	0	0	0	0	0	0	0	**414**
1:00 PM	0	272	68	1	42	2	0	1	2	0	0	0	0	**388**
2:00 PM	4	254	87	1	52	0	0	0	0	0	0	0	0	**398**
3:00 PM	4	397	144	1	65	0	0	0	0	0	0	0	1	**612**
4:00 PM	1	442	147	0	72	0	0	0	0	0	0	0	0	**662**
5:00 PM	3	511	133	1	65	3	0	1	0	0	0	0	0	**717**
6:00 PM	2	349	93	0	49	0	0	0	1	1	0	0	0	**495**
7:00 PM	0	210	44	0	38	0	0	0	0	0	0	0	0	**292**
8:00 PM	0	138	40	2	24	0	0	1	0	0	0	0	0	**205**
9:00 PM	0	108	32	0	18	0	0	0	0	0	0	0	0	**158**
10:00 PM	0	88	19	0	6	0	0	0	0	0	0	0	0	**113**
11:00 PM	0	21	4	0	6	0	0	0	0	0	0	0	0	**31**
Total	**17**	**3,946**	**1,213**	**7**	**665**	**10**	**0**	**6**	**12**	**3**	**0**	**0**	**3**	**5,882**
Percent	**0.3%**	**67.1%**	**20.6%**	**0.1%**	**11.3%**	**0.2%**	**0.0%**	**0.1%**	**0.2%**	**0.1%**	**0.0%**	**0.0%**	**0.1%**	

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Total Study Average
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	8	2	0	1	0	0	0	0	0	0	0	0	**11**
1:00 AM	0	5	3	0	1	0	0	0	0	0	0	0	0	**9**
2:00 AM	0	4	1	0	1	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	7	2	0	0	0	0	0	0	0	0	0	0	**9**
4:00 AM	0	10	3	0	1	0	0	0	0	0	0	0	0	**14**
5:00 AM	0	37	14	1	15	0	0	0	0	0	0	0	0	**67**
6:00 AM	1	104	49	0	56	1	0	0	0	0	0	0	0	**211**
7:00 AM	1	263	94	1	86	0	0	0	1	0	0	0	0	**446**
8:00 AM	1	279	104	1	82	1	0	0	1	0	0	0	0	**469**
9:00 AM	0	193	77	1	57	1	0	0	1	0	0	0	0	**330**
10:00 AM	2	216	72	1	61	1	0	1	1	0	0	0	0	**355**
11:00 AM	2	238	77	0	61	1	0	1	1	0	0	0	0	**381**
12:00 PM	1	249	84	1	62	1	0	1	1	0	0	0	0	**400**
1:00 PM	1	259	81	2	66	1	0	1	1	0	0	0	0	**412**
2:00 PM	2	248	83	1	58	1	0	1	1	0	0	0	0	**395**
3:00 PM	1	274	83	0	59	1	0	0	0	0	0	0	0	**418**
4:00 PM	1	251	71	0	50	1	0	0	0	1	0	0	0	**375**
5:00 PM	2	250	57	0	48	0	0	0	1	0	0	0	0	**358**
6:00 PM	1	184	52	1	36	0	0	0	0	0	0	0	0	**274**
7:00 PM	0	123	32	0	28	0	0	0	0	0	0	0	0	**183**
8:00 PM	0	71	24	0	16	0	0	0	0	0	0	0	0	**111**
9:00 PM	0	46	14	1	9	0	0	0	0	0	0	0	0	**70**
10:00 PM	0	28	8	0	6	0	0	0	0	0	0	0	0	**42**
11:00 PM	0	10	5	0	3	0	0	0	0	0	0	0	0	**18**
Total	**16**	**3,357**	**1,092**	**11**	**863**	**10**	**0**	**5**	**9**	**1**	**0**	**0**	**0**	**5,364**
Percent	**0.3%**	**62.6%**	**20.4%**	**0.2%**	**16.1%**	**0.2%**	**0.0%**	**0.1%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Total Study Average
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	8	4	0	2	0	0	0	0	0	0	0	0	**14**
1:00 AM	0	5	1	0	1	0	0	0	0	0	0	0	0	**7**
2:00 AM	0	4	2	0	0	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	4	1	0	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	6	3	0	2	0	0	0	0	0	0	0	0	**11**
5:00 AM	0	10	3	0	3	0	0	0	0	0	0	0	0	**16**
6:00 AM	0	39	14	0	12	0	0	0	0	0	0	0	0	**65**
7:00 AM	0	102	35	0	22	1	0	0	0	0	0	0	0	**160**
8:00 AM	0	139	42	1	28	1	0	0	2	0	0	0	0	**213**
9:00 AM	0	122	46	0	22	1	0	0	1	0	0	0	0	**192**
10:00 AM	0	162	58	0	32	1	0	0	1	0	0	0	0	**254**
11:00 AM	0	200	69	1	40	0	0	1	1	0	0	0	0	**312**
12:00 PM	3	247	77	0	43	1	0	1	1	0	0	0	0	**373**
1:00 PM	1	247	74	0	46	1	0	0	1	0	0	0	0	**370**
2:00 PM	1	278	83	1	48	1	0	0	0	0	0	0	0	**412**
3:00 PM	2	331	110	0	55	1	0	0	0	0	0	0	0	**499**
4:00 PM	2	369	120	0	66	1	0	0	0	0	0	0	0	**558**
5:00 PM	2	450	124	0	75	1	0	1	0	0	0	0	0	**653**
6:00 PM	2	315	90	0	54	1	0	0	1	0	0	0	0	**463**
7:00 PM	1	192	46	0	30	0	0	0	0	0	0	0	0	**269**
8:00 PM	0	111	33	1	15	0	0	0	0	0	0	0	0	**160**
9:00 PM	0	71	18	1	10	0	0	0	0	0	0	0	0	**100**
10:00 PM	0	38	10	0	4	0	0	0	0	0	0	0	0	**52**
11:00 PM	0	14	4	0	3	0	0	0	0	0	0	0	0	**21**
Total	**14**	**3,464**	**1,067**	**5**	**613**	**11**	**0**	**3**	**8**	**0**	**0**	**0**	**0**	**5,185**
Percent	**0.3%**	**66.8%**	**20.6%**	**0.1%**	**11.8%**	**0.2%**	**0.0%**	**0.1%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

3-Day (Tuesday - Thursday) Average
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	5	2	0	1	0	0	0	0	0	0	0	0	**8**
1:00 AM	0	3	2	0	1	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	4	1	0	1	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	7	1	0	0	0	0	0	0	0	0	0	0	**7**
4:00 AM	0	13	4	0	1	0	0	0	0	0	0	0	0	**18**
5:00 AM	0	51	16	1	19	0	0	0	0	0	0	0	0	**87**
6:00 AM	1	135	66	1	75	2	0	0	0	0	0	0	0	**280**
7:00 AM	1	351	123	1	114	0	0	0	1	0	0	0	0	**591**
8:00 AM	0	380	135	2	108	1	0	1	1	0	0	0	0	**627**
9:00 AM	0	217	87	1	60	1	0	0	1	0	0	0	0	**368**
10:00 AM	3	200	70	1	61	1	0	1	1	0	0	0	0	**339**
11:00 AM	0	202	76	0	59	1	0	1	2	0	0	0	0	**342**
12:00 PM	0	225	79	1	56	1	0	0	1	0	0	0	0	**362**
1:00 PM	1	215	65	2	59	1	0	2	1	0	0	0	0	**346**
2:00 PM	1	221	70	1	58	1	0	1	1	0	0	0	0	**356**
3:00 PM	0	255	87	1	56	1	0	0	1	0	0	0	0	**400**
4:00 PM	1	248	72	1	53	1	0	1	0	0	0	0	0	**376**
5:00 PM	1	270	58	0	51	0	0	0	0	0	0	0	0	**380**
6:00 PM	0	172	55	1	31	0	0	0	0	0	0	0	0	**259**
7:00 PM	0	126	29	0	29	0	0	1	0	0	0	0	0	**185**
8:00 PM	0	69	26	0	15	0	0	0	0	0	0	0	0	**110**
9:00 PM	0	40	11	1	10	0	0	0	0	0	0	0	0	**63**
10:00 PM	0	23	7	0	7	0	0	0	0	0	0	0	0	**38**
11:00 PM	0	7	5	0	1	0	0	0	0	0	0	0	0	**13**
Total	**9**	**3,438**	**1,149**	**15**	**926**	**10**	**0**	**8**	**11**	**1**	**0**	**0**	**1**	**5,569**
Percent	**0.2%**	**61.7%**	**20.6%**	**0.3%**	**16.6%**	**0.2%**	**0.0%**	**0.1%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

3-Day (Tuesday - Thursday) Average
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	6	3	0	2	0	0	0	0	0	0	0	0	**11**
1:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	2	2	0	1	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	6	4	0	2	0	0	0	0	0	0	0	0	**12**
5:00 AM	0	12	2	0	3	0	0	0	0	0	0	0	0	**17**
6:00 AM	0	46	18	0	15	0	0	0	1	0	0	0	0	**81**
7:00 AM	0	126	42	0	28	2	0	0	0	0	0	0	0	**198**
8:00 AM	0	188	51	1	31	1	0	0	2	0	0	0	0	**273**
9:00 AM	1	134	49	1	25	1	0	0	3	0	0	0	0	**212**
10:00 AM	0	158	62	0	35	0	0	0	0	1	0	0	0	**257**
11:00 AM	0	183	64	1	39	1	0	1	1	0	0	0	0	**290**
12:00 PM	2	237	70	0	48	1	0	1	1	0	0	0	0	**360**
1:00 PM	1	252	82	1	50	1	0	0	1	0	0	0	0	**387**
2:00 PM	0	262	86	1	50	2	0	1	1	0	0	0	0	**401**
3:00 PM	0	345	117	1	59	1	0	0	1	0	0	0	1	**525**
4:00 PM	2	391	133	0	79	3	0	0	0	0	0	0	0	**608**
5:00 PM	1	537	149	0	98	0	0	1	1	0	0	0	0	**788**
6:00 PM	3	368	115	0	77	1	0	0	1	0	0	0	0	**564**
7:00 PM	1	210	48	0	30	0	0	1	0	0	0	0	0	**291**
8:00 PM	0	109	38	1	14	0	0	0	0	0	0	0	0	**162**
9:00 PM	1	58	18	0	11	0	0	0	0	0	0	0	0	**88**
10:00 PM	0	26	10	0	4	0	0	0	0	0	0	0	0	**39**
11:00 PM	0	11	4	0	1	0	0	0	0	0	0	0	0	**16**
Total	**12**	**3,667**	**1,167**	**7**	**701**	**15**	**0**	**5**	**12**	**1**	**0**	**0**	**1**	**5,589**
Percent	**0.2%**	**65.6%**	**20.9%**	**0.1%**	**12.5%**	**0.3%**	**0.0%**	**0.1%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Vehicle Speed Report Summary

Location: Midland Ave BTWN W Meadows & W Wulfsohn

Count Direction: Eastbound / Westbound

Date Range: 9/17/2022 to 9/23/2022

Site Code: 08

	Speed Range (mph)																	Total
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
Study Total																		
Eastbound	1	9	14	31	145	1,315	7,404	16,058	10,238	2,050	253	41	8	2	2	0	0	37,571
Percent	0.0%	0.0%	0.0%	0.1%	0.4%	3.5%	19.7%	42.7%	27.2%	5.5%	0.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Westbound	0	2	1	7	45	802	6,290	15,531	10,762	2,486	330	46	8	1	1	0	0	36,312
Percent	0.0%	0.0%	0.0%	0.0%	0.1%	2.2%	17.3%	42.8%	29.6%	6.8%	0.9%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	1	11	15	38	190	2,117	13,694	31,589	21,000	4,536	583	87	16	3	3	0	0	73,883
Percent	0.0%	0.0%	0.0%	0.1%	0.3%	2.9%	18.5%	42.8%	28.4%	6.1%	0.8%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	100%

Total Study Percentile Speed Summary			Total Study Speed Statistics		
Eastbound			**Eastbound**		
50th Percentile (Median)	43.2	mph	Mean (Average) Speed	43.1	mph
85th Percentile	47.6	mph	10 mph Pace	38.0 - 48.0	mph
95th Percentile	50.6	mph	Percent in Pace	73.9	%
Westbound			**Westbound**		
50th Percentile (Median)	43.6	mph	Mean (Average) Speed	43.7	mph
85th Percentile	48.2	mph	10 mph Pace	38.9 - 48.9	mph
95th Percentile	51.2	mph	Percent in Pace	74.6	%

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Saturday, September 17, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	1	8	5	0	0	0	0	0	0	0	0	**14**
1:00 AM	0	0	0	0	0	2	1	5	1	1	0	0	0	0	0	0	0	**10**
2:00 AM	0	0	0	0	0	0	2	4	2	1	0	0	0	0	0	0	0	**9**
3:00 AM	0	0	0	0	0	0	4	1	1	4	0	0	0	0	0	0	0	**10**
4:00 AM	0	0	0	0	0	1	3	3	4	0	0	0	0	0	0	0	0	**11**
5:00 AM	0	0	0	0	0	2	4	12	11	3	1	0	0	0	0	0	0	**33**
6:00 AM	0	0	0	0	0	0	13	21	27	9	3	1	0	0	0	0	0	**74**
7:00 AM	0	0	0	0	0	2	14	62	61	21	6	0	0	0	0	0	0	**166**
8:00 AM	0	0	0	0	0	5	27	75	65	20	4	2	0	0	0	0	0	**198**
9:00 AM	0	0	0	0	1	5	51	104	98	14	2	0	0	0	0	0	0	**275**
10:00 AM	0	0	0	0	2	4	54	139	96	17	1	0	0	0	0	0	0	**313**
11:00 AM	0	0	0	0	0	2	64	163	115	18	1	0	0	0	0	0	0	**363**
12:00 PM	0	0	0	0	0	10	61	185	120	20	1	0	0	0	0	0	0	**397**
1:00 PM	0	0	0	0	0	11	58	178	135	22	3	0	0	0	0	0	0	**407**
2:00 PM	0	0	0	0	1	5	40	140	131	33	3	0	0	0	0	0	0	**353**
3:00 PM	0	0	0	0	0	0	37	120	101	37	5	1	0	0	0	0	0	**301**
4:00 PM	0	0	0	0	0	8	37	119	139	27	5	2	0	0	0	0	0	**337**
5:00 PM	0	0	0	0	0	0	36	118	108	40	13	1	0	0	0	0	0	**316**
6:00 PM	0	0	0	0	0	6	32	115	88	35	6	0	0	0	0	0	0	**282**
7:00 PM	0	0	0	0	1	18	28	71	41	10	0	0	0	0	0	0	0	**169**
8:00 PM	0	0	0	0	0	6	32	51	23	3	2	0	0	0	0	0	0	**117**
9:00 PM	0	0	0	0	0	12	30	32	13	4	0	0	0	0	0	0	0	**91**
10:00 PM	0	0	0	0	1	4	12	14	11	6	2	1	0	0	0	0	0	**51**
11:00 PM	0	0	0	0	0	0	9	12	10	2	0	1	0	0	0	0	0	**34**
Total	**0**	**0**	**0**	**0**	**6**	**103**	**650**	**1,752**	**1,406**	**347**	**58**	**9**	**0**	**0**	**0**	**0**	**0**	**4,331**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**	**2.4%**	**15.0%**	**40.5%**	**32.5%**	**8.0%**	**1.3%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	44.2	mph	Mean (Average) Speed	44.2	mph
85th Percentile	48.9	mph	10 mph Pace	39.6 - 49.6	mph
95th Percentile	51.9	mph	Percent in Pace	73.5	%

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Saturday, September 17, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	1	5	8	3	2	1	0	0	0	0	0	0	**20**
1:00 AM	0	0	0	0	0	1	3	5	3	0	0	0	0	0	0	0	0	**12**
2:00 AM	0	0	0	0	0	1	1	4	8	2	1	0	0	0	0	0	0	**17**
3:00 AM	0	0	0	0	0	1	2	3	0	0	0	0	0	0	0	0	0	**6**
4:00 AM	0	0	0	0	0	1	1	2	5	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	0	0	0	0	0	5	6	9	1	0	0	0	0	0	0	0	**21**
6:00 AM	0	0	0	0	0	1	11	19	12	3	1	0	0	0	0	0	0	**47**
7:00 AM	0	0	0	0	0	2	9	25	35	9	2	0	0	0	0	0	0	**82**
8:00 AM	0	0	0	0	0	2	9	49	38	16	4	0	1	0	0	0	0	**119**
9:00 AM	0	0	0	0	0	2	19	75	56	20	1	1	0	0	0	0	0	**174**
10:00 AM	0	0	0	0	0	1	27	107	95	33	2	0	0	0	0	0	0	**265**
11:00 AM	0	0	0	0	0	5	46	150	98	19	6	1	0	0	0	0	0	**325**
12:00 PM	0	0	0	0	0	3	56	184	122	24	5	0	0	0	0	0	0	**394**
1:00 PM	0	0	0	0	0	8	52	148	113	34	6	0	0	0	0	0	0	**361**
2:00 PM	0	0	0	0	0	0	61	144	146	38	4	0	0	0	0	0	0	**393**
3:00 PM	0	0	0	0	3	8	56	128	139	33	5	0	0	0	0	0	0	**372**
4:00 PM	0	0	0	0	0	0	29	132	135	44	8	2	0	0	0	0	0	**350**
5:00 PM	0	0	0	0	0	2	38	120	136	39	11	0	0	0	0	0	0	**346**
6:00 PM	0	0	0	0	0	0	37	118	104	31	3	0	0	0	0	0	0	**293**
7:00 PM	0	0	0	1	3	8	69	111	56	12	3	0	0	0	0	0	0	**263**
8:00 PM	0	0	0	0	0	9	28	74	54	3	1	0	0	0	0	0	0	**169**
9:00 PM	0	0	0	0	0	2	34	53	24	7	0	0	0	0	0	0	0	**120**
10:00 PM	0	0	0	0	1	2	13	28	8	11	2	1	0	0	0	0	0	**66**
11:00 PM	0	0	0	0	0	2	5	14	12	3	0	0	0	0	0	0	0	**36**
Total	**0**	**0**	**0**	**1**	**7**	**62**	**616**	**1,707**	**1,411**	**384**	**66**	**5**	**1**	**0**	**0**	**0**	**0**	**4,260**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.2%**	**1.5%**	**14.5%**	**40.1%**	**33.1%**	**9.0%**	**1.5%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	44.4	mph	Mean (Average) Speed	44.4	mph
85th Percentile	48.9	mph	10 mph Pace	38.9 - 48.9	mph
95th Percentile	52.1	mph	Percent in Pace	73.99	%

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Sunday, September 18, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	3	3	7	7	2	0	1	0	0	0	0	0	**23**
1:00 AM	0	0	0	0	0	1	6	5	3	1	0	0	0	0	0	0	0	**16**
2:00 AM	0	0	0	0	0	1	1	4	3	0	0	1	0	0	0	0	0	**10**
3:00 AM	0	0	0	0	1	1	2	2	1	4	1	0	0	0	0	0	0	**12**
4:00 AM	0	0	0	0	0	2	5	3	0	0	0	0	0	0	0	0	0	**10**
5:00 AM	0	0	0	0	0	0	3	6	5	2	2	0	0	1	0	0	0	**19**
6:00 AM	0	0	0	0	0	1	8	13	21	8	0	1	0	0	0	0	0	**52**
7:00 AM	0	0	0	0	0	0	11	22	33	10	2	2	0	0	0	0	0	**80**
8:00 AM	0	0	0	0	0	0	17	40	49	17	3	0	0	0	0	0	0	**126**
9:00 AM	0	0	0	0	0	0	28	80	78	13	4	0	0	0	0	0	0	**203**
10:00 AM	0	0	0	0	0	6	29	116	87	23	2	0	0	0	0	0	0	**263**
11:00 AM	0	0	0	0	0	6	39	132	128	30	4	0	0	0	0	0	0	**339**
12:00 PM	0	0	0	0	0	10	48	150	116	25	3	0	0	0	0	0	0	**352**
1:00 PM	0	0	0	0	0	4	42	141	122	31	4	1	0	0	0	0	0	**345**
2:00 PM	0	0	0	0	0	7	54	143	96	36	5	0	0	0	0	0	0	**341**
3:00 PM	0	0	0	0	0	3	41	140	118	33	8	0	1	0	0	0	0	**344**
4:00 PM	0	0	0	0	0	2	41	104	99	21	2	0	0	0	0	0	0	**269**
5:00 PM	0	0	0	0	0	4	27	99	100	30	4	0	0	0	0	0	0	**264**
6:00 PM	0	0	0	0	0	7	27	86	68	24	2	1	1	0	0	0	0	**216**
7:00 PM	0	0	0	0	2	6	32	72	36	4	2	0	0	0	0	0	0	**154**
8:00 PM	0	0	0	0	1	11	37	34	13	10	2	0	0	0	0	0	0	**108**
9:00 PM	0	0	0	0	0	2	19	30	19	3	2	0	0	0	0	0	0	**75**
10:00 PM	0	0	0	0	0	2	5	18	13	3	0	0	0	0	0	0	0	**41**
11:00 PM	0	1	0	0	1	0	5	3	10	2	0	0	0	0	0	0	0	**22**
Total	**0**	**1**	**0**	**0**	**5**	**79**	**530**	**1,450**	**1,225**	**332**	**52**	**7**	**2**	**1**	**0**	**0**	**0**	**3,684**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**	**2.1%**	**14.4%**	**39.4%**	**33.3%**	**9.0%**	**1.4%**	**0.2%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	44.4	mph	Mean (Average) Speed	44.4	mph
85th Percentile	48.9	mph	10 mph Pace	39.4 - 49.4	mph
95th Percentile	52.0	mph	Percent in Pace	73.8	%

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Sunday, September 18, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	1	1	7	7	5	2	0	0	0	0	0	0	0	**23**
1:00 AM	0	0	0	0	0	1	7	5	4	2	1	0	0	0	0	0	0	**20**
2:00 AM	0	0	0	0	0	0	4	6	6	2	0	1	0	0	0	0	0	**19**
3:00 AM	0	0	0	0	0	1	0	3	2	1	0	0	0	0	0	0	0	**7**
4:00 AM	0	0	0	0	0	0	4	3	3	0	0	0	0	0	0	0	0	**10**
5:00 AM	0	0	0	0	0	1	0	2	5	2	0	1	0	0	0	0	0	**11**
6:00 AM	0	0	0	0	0	0	1	12	7	7	1	0	1	0	0	0	0	**29**
7:00 AM	0	0	0	0	0	0	2	11	21	6	1	1	0	0	0	0	0	**42**
8:00 AM	0	0	0	0	0	0	6	17	23	9	4	0	1	0	0	0	0	**60**
9:00 AM	0	0	0	0	0	1	13	46	54	27	6	0	0	0	0	0	0	**147**
10:00 AM	0	0	0	0	0	2	11	73	85	23	2	0	0	0	0	0	0	**196**
11:00 AM	0	0	0	0	1	0	20	99	105	21	2	0	0	0	0	0	0	**248**
12:00 PM	0	0	0	0	0	3	30	156	131	24	1	1	0	0	0	0	0	**346**
1:00 PM	0	0	0	0	0	3	44	154	120	35	3	0	0	0	0	0	0	**359**
2:00 PM	0	0	0	0	0	1	30	141	130	48	8	0	0	0	0	0	0	**358**
3:00 PM	0	0	0	0	0	0	35	139	134	28	8	0	0	0	0	0	0	**344**
4:00 PM	0	0	0	0	0	5	26	118	132	41	4	1	0	0	0	0	0	**327**
5:00 PM	0	0	0	0	0	1	39	107	108	36	1	0	0	0	0	0	0	**292**
6:00 PM	0	0	0	0	1	3	32	79	79	26	3	0	0	0	0	0	0	**223**
7:00 PM	0	0	0	0	0	7	40	73	51	8	2	0	0	0	0	0	0	**181**
8:00 PM	0	0	0	0	2	9	29	55	26	6	0	0	0	0	0	0	0	**127**
9:00 PM	0	0	0	0	0	1	7	34	20	2	1	0	0	0	0	0	0	**65**
10:00 PM	0	0	0	0	0	1	7	10	11	2	0	0	0	0	0	0	0	**31**
11:00 PM	0	0	0	0	0	2	4	4	5	3	0	0	0	0	0	0	0	**18**
Total	**0**	**0**	**0**	**0**	**5**	**43**	**398**	**1,354**	**1,267**	**361**	**48**	**5**	**2**	**0**	**0**	**0**	**0**	**3,483**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**	**1.2%**	**11.4%**	**38.9%**	**36.4%**	**10.4%**	**1.4%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	44.7	mph	Mean (Average) Speed	44.9	mph
85th Percentile	49.3	mph	10 mph Pace	40.0 - 50.0	mph
95th Percentile	52.6	mph	Percent in Pace	75.02	%

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Monday, September 19, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	1	4	3	1	0	0	1	0	0	0	0	**10**
1:00 AM	0	0	0	0	0	1	5	5	1	0	0	0	0	0	0	0	0	**12**
2:00 AM	0	0	0	0	0	0	0	2	0	3	0	0	0	0	0	0	0	**5**
3:00 AM	0	0	0	0	0	1	2	1	5	1	0	0	0	0	0	0	0	**10**
4:00 AM	0	0	0	0	1	1	1	3	6	2	0	0	0	0	0	0	0	**14**
5:00 AM	0	0	0	0	0	2	11	35	22	10	1	1	0	0	0	0	0	**82**
6:00 AM	0	0	0	0	0	9	44	97	85	13	2	1	0	0	0	0	0	**251**
7:00 AM	0	0	0	0	2	21	142	257	160	20	2	0	0	0	0	0	0	**604**
8:00 AM	0	0	0	4	13	43	110	286	152	25	1	0	0	0	0	0	0	**634**
9:00 AM	0	0	0	0	0	3	51	132	118	26	3	0	0	0	0	0	0	**333**
10:00 AM	0	0	0	0	0	7	67	167	108	18	2	1	0	0	0	0	0	**370**
11:00 AM	0	0	0	0	4	17	139	252	123	23	1	0	0	0	0	0	0	**559**
12:00 PM	0	0	0	0	0	30	181	244	116	22	1	0	0	0	0	0	0	**594**
1:00 PM	0	0	0	0	6	38	201	313	153	19	2	0	0	0	0	0	0	**732**
2:00 PM	0	0	0	0	4	37	135	250	128	22	1	0	0	0	0	0	0	**577**
3:00 PM	0	0	0	0	0	26	176	266	149	19	3	0	0	0	0	0	0	**639**
4:00 PM	0	0	0	1	5	17	80	220	154	21	5	1	0	0	0	0	0	**504**
5:00 PM	0	0	0	0	0	6	53	180	145	14	4	0	0	0	0	0	0	**402**
6:00 PM	0	0	0	0	0	1	53	119	99	27	3	0	0	0	0	0	0	**302**
7:00 PM	0	0	0	0	0	9	48	72	44	10	1	0	0	0	0	0	0	**184**
8:00 PM	0	0	0	0	0	11	31	33	25	8	2	0	0	0	0	0	0	**110**
9:00 PM	0	0	0	0	1	8	9	22	16	3	1	0	0	0	0	0	0	**60**
10:00 PM	0	0	0	0	0	2	9	14	11	0	1	0	0	0	0	0	0	**37**
11:00 PM	0	0	0	0	0	0	6	3	5	0	1	0	0	0	0	0	0	**15**
Total	**0**	**0**	**0**	**5**	**36**	**290**	**1,555**	**2,977**	**1,828**	**307**	**37**	**4**	**1**	**0**	**0**	**0**	**0**	**7,040**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.1%**	**0.5%**	**4.1%**	**22.1%**	**42.3%**	**26.0%**	**4.4%**	**0.5%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	42.8	mph	Mean (Average) Speed	42.7	mph
85th Percentile	47.2	mph	10 mph Pace	37.6 - 47.6	mph
95th Percentile	50.0	mph	Percent in Pace	73.9	%

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Monday, September 19, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	3	0	1	1	3	0	0	0	0	0	0	0	**8**
1:00 AM	0	1	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	0	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	**4**
3:00 AM	0	0	0	0	0	0	1	3	3	2	0	0	0	0	0	0	0	**9**
4:00 AM	0	0	0	0	0	0	3	4	1	1	1	0	0	0	0	0	0	**10**
5:00 AM	0	0	0	0	0	0	4	3	5	3	0	0	0	0	0	0	0	**15**
6:00 AM	0	0	0	0	0	1	7	27	19	9	2	1	0	0	0	0	0	**66**
7:00 AM	0	0	0	0	0	1	9	74	95	21	2	1	0	0	0	0	0	**203**
8:00 AM	0	0	0	0	0	0	18	61	118	42	5	2	0	0	0	0	0	**246**
9:00 AM	0	0	0	0	0	4	27	62	82	22	3	1	0	0	0	0	0	**201**
10:00 AM	0	0	0	0	0	0	29	113	105	23	8	1	0	0	0	0	0	**279**
11:00 AM	0	0	0	0	0	2	49	158	124	37	2	0	0	0	0	0	0	**372**
12:00 PM	0	0	0	0	0	5	63	165	105	24	3	1	0	0	0	0	0	**366**
1:00 PM	0	0	0	0	2	4	49	136	115	17	1	2	0	0	0	0	0	**326**
2:00 PM	0	0	0	0	0	7	83	225	178	31	4	3	2	0	0	0	0	**533**
3:00 PM	0	0	0	0	1	8	87	242	206	51	5	0	0	0	0	0	0	**600**
4:00 PM	0	0	0	0	1	8	127	352	214	37	4	0	0	0	0	0	0	**743**
5:00 PM	0	0	0	0	0	16	194	410	193	37	3	0	0	0	0	0	0	**853**
6:00 PM	0	0	0	0	0	17	88	248	154	23	3	1	0	0	0	0	0	**534**
7:00 PM	0	0	0	0	1	17	77	117	53	9	2	0	0	0	0	0	0	**276**
8:00 PM	0	0	0	0	0	6	26	61	34	6	1	0	0	0	0	0	0	**134**
9:00 PM	0	0	0	0	0	2	19	42	24	3	1	0	0	0	0	0	0	**91**
10:00 PM	0	0	0	0	0	2	11	12	6	1	1	0	0	0	0	0	0	**33**
11:00 PM	0	0	0	0	0	0	2	9	1	1	0	0	0	0	0	0	0	**13**
Total	**0**	**1**	**0**	**0**	**6**	**103**	**974**	**2,527**	**1,839**	**403**	**51**	**13**	**2**	**0**	**0**	**0**	**0**	**5,919**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**	**1.7%**	**16.5%**	**42.7%**	**31.1%**	**6.8%**	**0.9%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	43.8	mph	Mean (Average) Speed	43.9	mph
85th Percentile	48.2	mph	10 mph Pace	39.0 - 49.0	mph
95th Percentile	51.3	mph	Percent in Pace	75.52	%

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Tuesday, September 20, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	1	0	3	1	2	0	1	0	0	0	0	0	0	**8**
1:00 AM	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	0	0	1	1	1	2	0	1	0	0	0	0	0	0	**6**
3:00 AM	0	0	0	0	0	0	1	3	1	1	0	0	0	0	0	0	0	**6**
4:00 AM	0	0	0	0	0	1	5	11	5	1	0	0	0	0	0	0	0	**23**
5:00 AM	0	0	0	0	0	1	12	37	24	8	0	1	0	0	0	0	0	**83**
6:00 AM	0	0	0	0	3	13	63	135	66	14	2	1	0	0	0	0	0	**297**
7:00 AM	0	0	0	0	3	43	212	258	77	9	1	0	0	0	0	0	0	**603**
8:00 AM	1	7	14	20	41	67	198	242	75	10	0	0	0	0	0	0	0	**675**
9:00 AM	0	0	0	0	0	7	65	158	119	18	1	0	0	0	0	0	0	**368**
10:00 AM	0	0	0	0	0	17	79	148	86	20	1	0	0	0	0	0	0	**351**
11:00 AM	0	0	0	0	0	17	76	152	62	21	1	0	0	0	0	0	0	**329**
12:00 PM	0	0	0	0	1	6	53	177	101	14	1	0	0	0	0	0	0	**353**
1:00 PM	0	0	0	0	0	8	71	168	85	20	2	2	0	0	0	0	0	**356**
2:00 PM	0	0	0	0	0	6	52	148	114	18	1	1	0	0	0	0	0	**340**
3:00 PM	0	0	0	0	1	16	96	180	106	14	3	0	0	0	0	0	0	**416**
4:00 PM	0	0	0	0	3	4	61	168	97	18	1	1	0	0	0	0	0	**353**
5:00 PM	0	0	0	0	2	13	70	204	105	14	0	0	0	0	0	0	0	**408**
6:00 PM	0	0	0	0	0	2	58	115	64	19	0	0	0	0	0	0	0	**258**
7:00 PM	0	0	0	3	3	17	57	73	23	6	0	0	0	0	0	0	0	**182**
8:00 PM	0	0	0	0	0	9	30	41	15	4	0	0	1	0	0	0	0	**100**
9:00 PM	0	0	0	0	1	5	17	22	8	3	0	1	0	0	0	0	0	**57**
10:00 PM	0	0	0	0	1	1	13	9	6	4	0	0	0	0	0	0	0	**34**
11:00 PM	0	0	0	0	0	2	4	5	1	1	0	0	0	0	0	0	0	**13**
Total	**1**	**7**	**14**	**23**	**60**	**257**	**1,299**	**2,456**	**1,244**	**237**	**16**	**7**	**1**	**0**	**0**	**0**	**0**	**5,622**
Percent	**0.0%**	**0.1%**	**0.2%**	**0.4%**	**1.1%**	**4.6%**	**23.1%**	**43.7%**	**22.1%**	**4.2%**	**0.3%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	42.4	mph	Mean (Average) Speed	42.2	mph
85th Percentile	46.9	mph	10 mph Pace	37.7 - 47.7	mph
95th Percentile	49.8	mph	Percent in Pace	73.5	%

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Tuesday, September 20, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	4	1	1	2	1	0	1	0	0	0	0	0	**10**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	0	0	0	0	0	4	3	2	1	0	0	0	0	0	0	0	**10**
5:00 AM	0	0	0	0	0	0	2	5	3	0	0	0	0	0	0	0	0	**10**
6:00 AM	0	0	0	0	0	0	14	37	26	6	1	0	0	0	0	0	0	**84**
7:00 AM	0	0	0	0	0	4	27	85	63	11	1	0	0	0	0	0	0	**191**
8:00 AM	0	0	0	3	3	3	45	124	81	20	1	0	0	0	0	0	0	**280**
9:00 AM	0	0	0	0	0	2	20	93	83	26	5	1	0	0	0	0	0	**230**
10:00 AM	0	0	0	0	0	1	27	116	86	21	2	0	0	0	0	0	0	**253**
11:00 AM	0	0	0	0	1	6	43	145	85	20	3	0	0	0	0	0	0	**303**
12:00 PM	0	0	0	0	0	13	59	158	91	29	5	0	1	0	0	0	0	**356**
1:00 PM	0	0	0	2	2	9	49	149	128	18	1	0	0	0	0	0	0	**358**
2:00 PM	0	0	0	0	0	4	74	176	81	16	4	0	0	0	0	0	0	**355**
3:00 PM	0	0	0	0	0	28	118	254	116	18	1	0	0	0	0	0	0	**535**
4:00 PM	0	0	0	0	0	1	123	308	152	27	1	0	0	0	0	0	0	**612**
5:00 PM	0	0	0	0	1	38	234	388	108	11	1	0	0	0	0	0	0	**781**
6:00 PM	0	0	0	0	5	43	205	254	120	19	1	0	0	0	0	0	0	**647**
7:00 PM	0	0	0	1	1	24	99	112	54	5	1	0	0	0	0	0	0	**297**
8:00 PM	0	0	0	0	0	18	36	58	28	4	2	0	0	0	0	0	0	**146**
9:00 PM	0	0	0	0	0	6	27	25	17	7	1	0	0	0	0	0	0	**83**
10:00 PM	0	0	0	0	0	3	5	13	15	5	0	0	0	0	0	0	0	**41**
11:00 PM	0	0	0	0	1	0	4	4	1	0	0	0	0	0	0	0	0	**10**
Total	**0**	**1**	**0**	**6**	**14**	**207**	**1,217**	**2,510**	**1,344**	**265**	**31**	**2**	**1**	**0**	**0**	**0**	**0**	**5,598**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.1%**	**0.3%**	**3.7%**	**21.7%**	**44.8%**	**24.0%**	**4.7%**	**0.6%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	42.7	mph	Mean (Average) Speed	42.8	mph
85th Percentile	47.2	mph	10 mph Pace	37.4 - 47.4	mph
95th Percentile	50.1	mph	Percent in Pace	75.1	%

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Wednesday, September 21, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	1	1	2	3	0	0	0	0	0	0	0	0	**7**
1:00 AM	0	0	0	0	0	0	4	3	0	1	1	0	0	0	0	0	0	**9**
2:00 AM	0	0	0	0	0	2	1	1	1	1	0	0	0	0	0	0	0	**6**
3:00 AM	0	0	0	0	0	0	1	2	2	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	0	0	0	0	2	3	6	6	0	0	0	0	0	0	0	0	**17**
5:00 AM	0	0	0	0	0	3	9	37	32	9	2	0	0	0	0	0	0	**92**
6:00 AM	0	0	0	0	0	7	49	109	85	25	2	2	0	0	0	0	0	**279**
7:00 AM	0	0	0	0	4	75	150	244	125	9	1	0	0	0	0	0	0	**608**
8:00 AM	0	0	0	0	1	18	141	286	139	18	2	0	0	0	0	0	0	**605**
9:00 AM	0	0	0	0	0	12	87	155	89	14	1	0	0	0	0	0	0	**358**
10:00 AM	0	0	0	0	0	5	85	151	80	16	0	0	1	0	0	0	0	**338**
11:00 AM	0	0	0	0	0	9	72	170	84	14	1	1	0	0	0	0	0	**351**
12:00 PM	0	0	0	0	0	6	62	167	90	23	1	0	0	0	0	0	0	**349**
1:00 PM	0	0	0	0	0	9	68	176	97	11	2	0	0	0	0	0	0	**363**
2:00 PM	0	0	0	0	0	7	69	208	97	14	1	0	0	0	0	0	0	**396**
3:00 PM	0	0	0	0	1	16	97	164	87	16	0	0	0	0	0	0	0	**381**
4:00 PM	0	0	0	0	0	6	85	171	102	11	2	1	0	0	0	0	0	**378**
5:00 PM	0	0	0	0	0	12	78	169	97	17	0	0	0	0	0	0	0	**373**
6:00 PM	0	0	0	0	2	11	56	112	54	12	4	0	0	0	0	0	0	**251**
7:00 PM	0	0	0	0	0	17	47	73	17	8	2	0	0	0	0	0	0	**164**
8:00 PM	0	0	0	0	1	14	22	23	15	2	1	0	0	0	0	0	0	**78**
9:00 PM	0	0	0	0	0	11	11	28	11	2	0	0	1	0	0	0	0	**64**
10:00 PM	0	0	0	0	0	4	14	8	11	1	1	0	0	0	0	0	0	**39**
11:00 PM	0	0	0	0	0	0	3	8	1	0	1	0	0	0	0	0	0	**13**
Total	**0**	**0**	**0**	**0**	**9**	**247**	**1,215**	**2,473**	**1,325**	**224**	**25**	**4**	**2**	**0**	**0**	**0**	**0**	**5,524**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.2%**	**4.5%**	**22.0%**	**44.8%**	**24.0%**	**4.1%**	**0.5%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	42.7	mph	Mean (Average) Speed	42.6	mph
85th Percentile	46.9	mph	10 mph Pace	37.8 - 47.8	mph
95th Percentile	49.8	mph	Percent in Pace	76.5	%

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Wednesday, September 21, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	2	2	4	2	0	0	0	0	0	0	0	0	**10**
1:00 AM	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	**5**
2:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	0	0	0	0	1	2	3	2	3	0	0	1	0	0	0	0	**12**
5:00 AM	0	0	0	0	0	0	6	10	5	2	0	0	0	0	0	0	0	**23**
6:00 AM	0	0	0	0	0	0	12	30	28	14	1	0	0	0	0	0	0	**85**
7:00 AM	0	0	0	0	0	0	12	84	87	20	5	0	0	0	0	0	0	**208**
8:00 AM	0	0	0	0	0	0	39	100	93	40	7	1	0	0	1	0	0	**281**
9:00 AM	0	0	0	0	0	2	11	103	70	18	4	0	0	0	0	0	0	**208**
10:00 AM	0	0	0	0	0	2	52	108	73	26	2	0	0	0	0	0	0	**263**
11:00 AM	0	0	0	0	0	6	63	121	80	15	7	1	0	0	0	0	0	**293**
12:00 PM	0	0	0	0	0	9	57	162	90	21	2	1	0	0	0	0	0	**342**
1:00 PM	0	0	0	0	0	4	71	217	118	19	2	0	0	0	0	0	0	**431**
2:00 PM	0	0	0	0	3	4	81	214	125	23	1	0	0	0	0	0	0	**451**
3:00 PM	0	0	0	0	0	9	108	255	112	27	0	0	0	0	0	0	0	**511**
4:00 PM	0	0	0	0	0	6	126	289	116	19	1	1	0	0	0	0	0	**558**
5:00 PM	0	0	0	0	0	24	245	370	143	21	0	0	0	0	0	0	0	**803**
6:00 PM	0	0	0	0	1	39	140	223	120	14	3	0	0	0	0	0	0	**540**
7:00 PM	0	0	0	0	0	15	83	132	57	11	0	0	1	0	0	0	0	**299**
8:00 PM	0	0	0	0	0	11	47	64	24	7	0	0	0	0	0	0	0	**153**
9:00 PM	0	0	0	0	0	4	16	34	13	2	0	0	0	0	0	0	0	**69**
10:00 PM	0	0	0	0	0	1	11	13	4	2	0	0	0	0	0	0	0	**31**
11:00 PM	0	0	0	0	0	1	2	3	7	4	2	0	0	0	0	0	0	**19**
Total	**0**	**0**	**0**	**0**	**4**	**141**	**1,189**	**2,542**	**1,372**	**308**	**37**	**4**	**2**	**0**	**1**	**0**	**0**	**5,600**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**	**2.5%**	**21.2%**	**45.4%**	**24.5%**	**5.5%**	**0.7%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	42.8	mph	Mean (Average) Speed	43.1	mph
85th Percentile	47.5	mph	10 mph Pace	38.1 - 48.1	mph
95th Percentile	50.6	mph	Percent in Pace	75.07	%

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Thursday, September 22, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	2	4	4	0	0	0	0	0	0	0	0	**10**
1:00 AM	0	0	0	0	0	0	3	2	1	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	0	0	0	0	2	0	0	3	1	0	0	0	0	0	0	0	**6**
3:00 AM	0	0	0	0	0	1	3	2	4	1	0	0	0	0	0	0	0	**11**
4:00 AM	0	0	0	0	0	0	2	7	6	0	0	0	0	0	0	0	0	**15**
5:00 AM	0	0	0	0	0	0	14	37	28	7	1	0	0	0	0	0	0	**87**
6:00 AM	0	0	0	0	0	2	54	108	81	15	4	0	0	0	0	0	0	**264**
7:00 AM	0	0	0	1	3	25	108	276	140	8	1	1	0	0	0	0	0	**563**
8:00 AM	0	0	0	0	9	63	215	205	97	11	2	0	0	0	0	0	0	**602**
9:00 AM	0	0	0	0	0	20	87	164	90	14	2	0	0	0	0	0	0	**377**
10:00 AM	0	0	0	0	1	10	86	144	74	12	0	0	0	0	0	0	0	**327**
11:00 AM	0	0	0	0	0	4	69	164	89	19	1	0	0	0	0	0	0	**346**
12:00 PM	0	0	0	0	0	15	79	178	94	18	1	0	0	0	0	0	0	**385**
1:00 PM	0	0	0	0	1	6	77	147	74	12	3	0	0	0	0	0	0	**320**
2:00 PM	0	0	0	2	4	7	65	152	84	17	1	0	0	0	0	0	0	**332**
3:00 PM	0	0	0	0	2	9	66	168	132	25	0	1	1	0	0	0	0	**404**
4:00 PM	0	0	0	0	0	19	97	156	97	26	1	1	0	0	0	0	0	**397**
5:00 PM	0	0	0	0	0	1	28	132	157	37	3	1	0	0	0	0	0	**359**
6:00 PM	0	0	0	0	0	7	32	107	96	21	4	0	0	0	0	0	0	**267**
7:00 PM	0	0	0	0	0	10	37	104	46	7	3	1	1	0	0	0	0	**209**
8:00 PM	0	0	0	0	1	12	49	59	24	7	0	0	0	0	1	0	0	**153**
9:00 PM	0	0	0	0	0	7	16	26	12	6	0	0	0	0	0	0	0	**67**
10:00 PM	0	0	0	0	0	1	8	15	12	5	0	0	0	0	0	0	0	**41**
11:00 PM	0	0	0	0	0	1	1	3	6	1	0	1	0	0	0	0	0	**13**
Total	**0**	**0**	**0**	**3**	**21**	**222**	**1,198**	**2,360**	**1,451**	**270**	**27**	**6**	**2**	**0**	**1**	**0**	**0**	**5,561**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.1%**	**0.4%**	**4.0%**	**21.5%**	**42.4%**	**26.1%**	**4.9%**	**0.5%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	42.9	mph	Mean (Average) Speed	42.9	mph
85th Percentile	47.4	mph	10 mph Pace	37.8 - 47.8	mph
95th Percentile	50.2	mph	Percent in Pace	73.4	%

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Thursday, September 22, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	3	8	2	1	0	0	0	0	0	0	0	**14**
1:00 AM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	**2**
2:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	0	0	1	2	3	1	1	0	0	0	0	0	0	0	**8**
4:00 AM	0	0	0	0	0	1	3	5	3	2	0	0	0	0	0	0	0	**14**
5:00 AM	0	0	0	0	0	0	2	11	4	2	0	0	0	0	0	0	0	**19**
6:00 AM	0	0	0	0	0	2	7	32	25	5	2	0	0	0	0	0	0	**73**
7:00 AM	0	0	0	0	0	1	16	80	86	8	4	0	0	0	0	0	0	**195**
8:00 AM	0	0	0	0	0	1	31	92	110	23	2	0	0	0	0	0	0	**259**
9:00 AM	0	0	1	0	0	4	32	66	70	24	2	0	0	0	0	0	0	**199**
10:00 AM	0	0	0	0	0	2	41	95	80	30	5	1	0	0	0	0	0	**254**
11:00 AM	0	0	0	0	0	1	41	103	102	22	3	1	0	0	0	0	0	**273**
12:00 PM	0	0	0	0	0	6	59	164	124	27	1	0	0	0	0	0	0	**381**
1:00 PM	0	0	0	0	0	4	47	201	107	14	0	0	0	0	0	0	0	**373**
2:00 PM	0	0	0	0	0	6	87	157	124	21	3	0	0	0	0	0	0	**398**
3:00 PM	0	0	0	0	0	12	62	246	168	34	6	0	0	0	0	0	0	**528**
4:00 PM	0	0	0	0	0	21	166	292	149	24	2	1	0	0	0	0	0	**655**
5:00 PM	0	0	0	0	0	7	142	346	237	43	4	0	0	0	0	0	0	**779**
6:00 PM	0	0	0	0	1	18	99	198	156	30	3	1	0	0	0	0	0	**506**
7:00 PM	0	0	0	0	0	9	55	129	71	11	0	0	0	1	0	0	0	**276**
8:00 PM	0	0	0	0	1	11	44	86	39	6	1	0	0	0	0	0	0	**188**
9:00 PM	0	0	0	0	0	7	18	44	32	9	1	0	0	0	0	0	0	**111**
10:00 PM	0	0	0	0	0	2	5	20	13	5	1	0	0	0	0	0	0	**46**
11:00 PM	0	0	0	0	0	2	2	6	6	2	0	0	0	0	0	0	0	**18**
Total	**0**	**0**	**1**	**0**	**2**	**118**	**964**	**2,385**	**1,710**	**344**	**40**	**5**	**0**	**1**	**0**	**0**	**0**	**5,570**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**2.1%**	**17.3%**	**42.8%**	**30.7%**	**6.2%**	**0.7%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	43.6	mph	Mean (Average) Speed	43.7	mph
85th Percentile	48.1	mph	10 mph Pace	38.7 - 48.7	mph
95th Percentile	50.7	mph	Percent in Pace	75.46	%

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Friday, September 23, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	2	5	4	0	0	0	0	0	0	0	0	**11**
1:00 AM	0	0	0	0	0	0	1	5	1	0	0	0	0	0	1	0	0	**8**
2:00 AM	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	0	0	0	0	0	0	5	5	1	0	0	0	0	0	0	0	**11**
4:00 AM	0	0	0	0	0	0	3	4	3	3	0	0	0	0	0	0	0	**13**
5:00 AM	0	0	0	0	0	3	13	27	19	6	1	2	0	0	0	0	0	**71**
6:00 AM	0	0	0	0	0	2	29	128	91	15	0	0	0	1	0	0	0	**266**
7:00 AM	0	0	0	0	0	7	79	231	149	34	4	0	0	0	0	0	0	**504**
8:00 AM	0	0	0	0	0	15	99	203	108	15	3	0	0	0	0	0	0	**443**
9:00 AM	0	0	0	0	0	1	59	169	136	25	3	1	0	0	0	0	0	**394**
10:00 AM	0	0	0	0	0	24	118	242	127	11	0	0	0	0	0	0	0	**522**
11:00 AM	0	0	0	0	1	8	50	172	111	26	3	1	0	0	0	0	0	**372**
12:00 PM	0	0	0	0	0	7	66	174	102	20	2	0	0	0	0	0	0	**371**
1:00 PM	0	1	0	0	0	9	46	166	111	21	3	0	0	0	0	0	0	**357**
2:00 PM	0	0	0	0	7	12	64	176	136	19	2	0	0	0	0	0	0	**416**
3:00 PM	0	0	0	0	0	3	61	200	142	38	2	0	0	0	0	0	0	**446**
4:00 PM	0	0	0	0	0	0	35	171	147	30	3	0	0	0	0	0	0	**386**
5:00 PM	0	0	0	0	0	1	38	149	167	24	3	0	0	0	0	0	0	**382**
6:00 PM	0	0	0	0	0	4	47	155	110	19	3	0	0	0	0	0	0	**338**
7:00 PM	0	0	0	0	0	6	70	102	33	11	5	0	0	0	0	0	0	**227**
8:00 PM	0	0	0	0	0	6	32	45	22	7	1	0	0	0	0	0	0	**113**
9:00 PM	0	0	0	0	0	3	28	35	16	1	0	0	0	0	0	0	0	**83**
10:00 PM	0	0	0	0	0	4	11	18	12	5	0	0	0	0	0	0	0	**50**
11:00 PM	0	0	0	0	0	2	5	7	6	2	0	0	0	0	0	0	0	**22**
Total	**0**	**1**	**0**	**0**	**8**	**117**	**957**	**2,590**	**1,759**	**333**	**38**	**4**	**0**	**1**	**1**	**0**	**0**	**5,809**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**	**2.0%**	**16.5%**	**44.6%**	**30.3%**	**5.7%**	**0.7%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	43.7	mph	Mean (Average) Speed	43.7	mph
85th Percentile	47.9	mph	10 mph Pace	38.7 - 48.7	mph
95th Percentile	50.7	mph	Percent in Pace	76.8	%

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Friday, September 23, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	1	3	7	4	1	0	0	0	0	0	0	0	**16**
1:00 AM	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	0	0	0	0	3	5	1	1	0	0	0	0	0	0	0	**10**
5:00 AM	0	0	0	0	0	2	5	9	3	1	0	0	0	0	0	0	0	**20**
6:00 AM	0	0	0	0	0	1	14	27	31	2	0	1	0	0	0	0	0	**76**
7:00 AM	0	0	0	0	0	1	22	83	82	11	2	1	0	0	0	0	0	**202**
8:00 AM	0	0	0	0	0	5	16	91	89	32	6	1	0	0	0	0	0	**240**
9:00 AM	0	0	0	0	0	1	15	72	70	24	5	1	0	0	0	0	0	**188**
10:00 AM	0	0	0	0	0	0	44	105	87	28	2	0	0	0	0	0	0	**266**
11:00 AM	0	0	0	0	0	5	61	163	103	30	7	2	0	0	0	0	0	**371**
12:00 PM	0	0	0	0	0	5	59	207	103	36	4	0	0	0	0	0	0	**414**
1:00 PM	0	0	0	0	0	6	50	163	137	30	2	0	0	0	0	0	0	**388**
2:00 PM	0	0	0	0	1	18	82	148	123	20	4	2	0	0	0	0	0	**398**
3:00 PM	0	0	0	0	2	5	70	279	203	48	5	0	0	0	0	0	0	**612**
4:00 PM	0	0	0	0	0	5	99	276	220	58	3	1	0	0	0	0	0	**662**
5:00 PM	0	0	0	0	0	10	107	316	231	49	4	0	0	0	0	0	0	**717**
6:00 PM	0	0	0	0	0	10	85	214	152	27	7	0	0	0	0	0	0	**495**
7:00 PM	0	0	0	0	2	18	70	115	72	11	2	2	0	0	0	0	0	**292**
8:00 PM	0	0	0	0	1	20	67	77	37	1	2	0	0	0	0	0	0	**205**
9:00 PM	0	0	0	0	1	9	27	75	41	5	0	0	0	0	0	0	0	**158**
10:00 PM	0	0	0	0	0	4	24	57	22	4	2	0	0	0	0	0	0	**113**
11:00 PM	0	0	0	0	0	2	5	14	7	2	0	1	0	0	0	0	0	**31**
Total	**0**	**0**	**0**	**0**	**7**	**128**	**932**	**2,506**	**1,819**	**421**	**57**	**12**	**0**	**0**	**0**	**0**	**0**	**5,882**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**	**2.2%**	**15.8%**	**42.6%**	**30.9%**	**7.2%**	**1.0%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	43.8	mph	Mean (Average) Speed	43.9	mph
85th Percentile	48.3	mph	10 mph Pace	39.0 - 49.0	mph
95th Percentile	51.3	mph	Percent in Pace	75.09	%

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Total Study Average
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	1	2	4	4	0	0	0	0	0	0	0	0	**11**
1:00 AM	0	0	0	0	0	1	3	4	1	0	0	0	0	0	0	0	0	**9**
2:00 AM	0	0	0	0	0	1	1	2	2	1	0	0	0	0	0	0	0	**7**
3:00 AM	0	0	0	0	0	0	2	2	3	2	0	0	0	0	0	0	0	**9**
4:00 AM	0	0	0	0	0	1	3	5	4	1	0	0	0	0	0	0	0	**14**
5:00 AM	0	0	0	0	0	2	9	27	20	6	1	1	0	0	0	0	0	**66**
6:00 AM	0	0	0	0	0	5	37	87	65	14	2	1	0	0	0	0	0	**211**
7:00 AM	0	0	0	0	2	25	102	193	106	16	2	0	0	0	0	0	0	**446**
8:00 AM	0	1	2	3	9	30	115	191	98	17	2	0	0	0	0	0	0	**468**
9:00 AM	0	0	0	0	0	7	61	137	104	18	2	0	0	0	0	0	0	**329**
10:00 AM	0	0	0	0	0	10	74	158	94	17	1	0	0	0	0	0	0	**354**
11:00 AM	0	0	0	0	1	9	73	172	102	22	2	0	0	0	0	0	0	**381**
12:00 PM	0	0	0	0	0	12	79	182	106	20	1	0	0	0	0	0	0	**400**
1:00 PM	0	0	0	0	1	12	80	184	111	19	3	0	0	0	0	0	0	**410**
2:00 PM	0	0	0	0	2	12	68	174	112	23	2	0	0	0	0	0	0	**393**
3:00 PM	0	0	0	0	1	10	82	177	119	26	3	0	0	0	0	0	0	**418**
4:00 PM	0	0	0	0	1	8	62	158	119	22	3	1	0	0	0	0	0	**374**
5:00 PM	0	0	0	0	0	5	47	150	126	25	4	0	0	0	0	0	0	**357**
6:00 PM	0	0	0	0	0	5	44	116	83	22	3	0	0	0	0	0	0	**273**
7:00 PM	0	0	0	0	1	12	46	81	34	8	2	0	0	0	0	0	0	**184**
8:00 PM	0	0	0	0	0	10	33	41	20	6	1	0	0	0	0	0	0	**111**
9:00 PM	0	0	0	0	0	7	19	28	14	3	0	0	0	0	0	0	0	**71**
10:00 PM	0	0	0	0	0	3	10	14	11	3	1	0	0	0	0	0	0	**42**
11:00 PM	0	0	0	0	0	1	5	6	6	1	0	0	0	0	0	0	0	**19**
Total	**0**	**1**	**2**	**3**	**18**	**189**	**1,057**	**2,293**	**1,464**	**292**	**35**	**3**	**0**	**0**	**0**	**0**	**0**	**5,357**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.1%**	**0.3%**	**3.5%**	**19.7%**	**42.8%**	**27.3%**	**5.5%**	**0.7%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	43.2	mph	Mean (Average) Speed	43.1	mph
85th Percentile	47.6	mph	10 mph Pace	38.0 - 48.0	mph
95th Percentile	50.6	mph	Percent in Pace	73.9	%

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 to 9/23/2022
Site Code: 08

Total Study Average
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	2	3	5	3	1	0	0	0	0	0	0	0	**14**
1:00 AM	0	0	0	0	0	0	2	2	2	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	0	0	0	0	0	1	2	3	1	0	0	0	0	0	0	0	**7**
3:00 AM	0	0	0	0	0	1	1	2	1	1	0	0	0	0	0	0	0	**6**
4:00 AM	0	0	0	0	0	0	3	4	2	1	0	0	0	0	0	0	0	**10**
5:00 AM	0	0	0	0	0	0	3	7	5	2	0	0	0	0	0	0	0	**17**
6:00 AM	0	0	0	0	0	1	9	26	21	7	1	0	0	0	0	0	0	**65**
7:00 AM	0	0	0	0	0	1	14	63	67	12	2	0	0	0	0	0	0	**159**
8:00 AM	0	0	0	0	0	2	23	76	79	26	4	1	0	0	0	0	0	**211**
9:00 AM	0	0	0	0	0	2	20	74	69	23	4	1	0	0	0	0	0	**193**
10:00 AM	0	0	0	0	0	1	33	102	87	26	3	0	0	0	0	0	0	**252**
11:00 AM	0	0	0	0	0	4	46	134	100	23	4	1	0	0	0	0	0	**312**
12:00 PM	0	0	0	0	0	6	55	171	109	26	3	0	0	0	0	0	0	**370**
1:00 PM	0	0	0	0	1	5	52	167	120	24	2	0	0	0	0	0	0	**371**
2:00 PM	0	0	0	0	1	6	71	172	130	28	4	1	0	0	0	0	0	**413**
3:00 PM	0	0	0	0	1	10	77	220	154	34	4	0	0	0	0	0	0	**500**
4:00 PM	0	0	0	0	0	7	99	252	160	36	3	1	0	0	0	0	0	**558**
5:00 PM	0	0	0	0	0	14	143	294	165	34	3	0	0	0	0	0	0	**653**
6:00 PM	0	0	0	0	1	19	98	191	126	24	3	0	0	0	0	0	0	**462**
7:00 PM	0	0	0	0	1	14	70	113	59	10	1	0	0	0	0	0	0	**268**
8:00 PM	0	0	0	0	1	12	40	68	35	5	1	0	0	0	0	0	0	**162**
9:00 PM	0	0	0	0	0	4	21	44	24	5	1	0	0	0	0	0	0	**99**
10:00 PM	0	0	0	0	0	2	11	22	11	4	1	0	0	0	0	0	0	**51**
11:00 PM	0	0	0	0	0	1	3	8	6	2	0	0	0	0	0	0	0	**20**
Total	**0**	**0**	**0**	**0**	**6**	**114**	**898**	**2,219**	**1,538**	**355**	**44**	**5**	**0**	**0**	**0**	**0**	**0**	**5,179**
Percent	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**	**2.2%**	**17.3%**	**42.8%**	**29.7%**	**6.9%**	**0.8%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	43.6	mph	Mean (Average) Speed	43.7	mph
85th Percentile	48.2	mph	10 mph Pace	38.9 - 48.9	mph
95th Percentile	51.2	mph	Percent in Pace	74.6	%

Location: Midland Ave BTWN W Meadows & W Wulfsohn
Date Range: 9/17/2022 - 9/23/2022
Site Code: 08

	Saturday			Sunday			Monday			Tuesday			Wednesday			Thursday			Friday					
	9/17/2022			9/18/2022			9/19/2022			9/20/2022			9/21/2022			9/22/2022			9/23/2022			Mid-Week Average		
Time	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total
12:00 AM	14	20	34	23	23	46	10	8	18	8	10	18	7	10	17	10	14	24	11	16	27	8	11	20
1:00 AM	10	12	22	16	20	36	12	4	16	3	1	4	9	5	14	6	2	8	8	2	10	6	3	9
2:00 AM	9	17	26	10	19	29	5	4	9	6	1	7	6	1	7	6	1	7	3	3	6	6	1	7
3:00 AM	10	6	16	12	7	19	10	9	19	6	4	10	5	4	9	11	8	19	11	3	14	7	5	13
4:00 AM	11	9	20	10	10	20	14	10	24	23	10	33	17	12	29	15	14	29	13	10	23	18	12	30
5:00 AM	33	21	54	19	11	30	82	15	97	83	10	93	92	23	115	87	19	106	71	20	91	87	17	105
6:00 AM	74	47	121	52	29	81	251	66	317	297	84	381	279	85	364	264	73	337	266	76	342	280	81	361
7:00 AM	166	82	248	80	42	122	604	203	807	603	191	794	608	208	816	563	195	758	504	202	706	591	198	789
8:00 AM	198	119	317	126	60	186	634	246	880	675	280	955	605	281	886	602	259	861	443	240	683	627	273	901
9:00 AM	275	174	449	203	147	350	333	201	534	368	230	598	358	208	566	377	199	576	394	188	582	368	212	580
10:00 AM	313	265	578	263	196	459	370	279	649	351	253	604	338	263	601	327	254	581	522	266	788	339	257	595
11:00 AM	363	325	688	339	248	587	559	372	931	329	303	632	351	293	644	346	273	619	372	371	743	342	290	632
12:00 PM	397	394	791	352	346	698	594	366	960	353	356	709	349	342	691	385	381	766	371	414	785	362	360	722
1:00 PM	407	361	768	345	359	704	732	326	1,058	356	358	714	363	431	794	320	373	693	357	388	745	346	387	734
2:00 PM	353	393	746	341	358	699	577	533	1,110	340	355	695	396	451	847	332	398	730	416	398	814	356	401	757
3:00 PM	301	372	673	344	344	688	639	600	1,239	416	535	951	381	511	892	404	528	932	446	612	1,058	400	525	925
4:00 PM	337	350	687	269	327	596	504	743	1,247	353	612	965	378	558	936	397	655	1,052	386	662	1,048	376	608	984
5:00 PM	316	346	662	264	292	556	402	853	1,255	408	781	1,189	373	803	1,176	359	779	1,138	382	717	1,099	380	788	1,168
6:00 PM	282	293	575	216	223	439	302	534	836	258	647	905	251	540	791	267	506	773	338	495	833	259	564	823
7:00 PM	169	263	432	154	181	335	184	276	460	182	297	479	164	299	463	209	276	485	227	292	519	185	291	476
8:00 PM	117	169	286	108	127	235	110	134	244	100	146	246	78	153	231	153	188	341	113	205	318	110	162	273
9:00 PM	91	120	211	75	65	140	60	91	151	57	83	140	64	69	133	67	111	178	83	158	241	63	88	150
10:00 PM	51	66	117	41	31	72	37	33	70	34	41	75	39	31	70	41	46	87	50	113	163	38	39	77
11:00 PM	34	36	70	22	18	40	15	13	28	13	10	23	13	19	32	13	18	31	22	31	53	13	16	29
Total	**4,331**	**4,260**	**8,591**	**3,684**	**3,483**	**7,167**	**7,040**	**5,919**	**12,959**	**5,622**	**5,598**	**11,220**	**5,524**	**5,600**	**11,124**	**5,561**	**5,570**	**11,131**	**5,809**	**5,882**	**11,691**	**5,569**	**5,589**	**11,158**
Percent	**50%**	**50%**	-	**51%**	**49%**	-	**54%**	**46%**	-	**50%**	**50%**	-	**50%**	**50%**	-	**50%**	**50%**	-	**50%**	**50%**	-	**50%**	**50%**	-

1. Mid-week average includes data between Tuesday and Thursday.

Vehicle Classification Report Summary

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd

Count Direction: Eastbound / Westbound

Date Range: 9/17/2022 to 9/23/2022

Site Code: 09

	FHWA Vehicle Classification													Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
Study Total														
Eastbound	168	30,868	9,765	195	8,217	70	0	45	71	4	0	0	6	49,409
Percent	0.3%	62.5%	19.8%	0.4%	16.6%	0.1%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	100%
Westbound	1,618	14,955	21,272	7	320	2,831	0	25	212	444	2	15	724	42,425
Percent	3.8%	35.3%	50.1%	0.0%	0.8%	6.7%	0.0%	0.1%	0.5%	1.0%	0.0%	0.0%	1.7%	100%
Total	1,786	45,823	31,037	202	8,537	2,901	0	70	283	448	2	15	730	91,834
Percent	1.9%	49.9%	33.8%	0.2%	9.3%	3.2%	0.0%	0.1%	0.3%	0.5%	0.0%	0.0%	0.8%	100%

FHWA Vehicle Classification	
Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Saturday, September 17, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	19	1	1	3	0	0	0	0	0	0	0	0	**24**
1:00 AM	0	11	3	0	3	0	0	0	0	0	0	0	0	**17**
2:00 AM	0	13	2	0	0	0	0	0	0	0	0	0	0	**15**
3:00 AM	0	10	5	1	1	0	0	0	0	0	0	0	0	**17**
4:00 AM	0	8	6	0	2	1	0	0	0	0	0	0	0	**17**
5:00 AM	1	25	10	0	11	0	0	0	0	0	0	0	0	**47**
6:00 AM	0	45	22	2	30	0	0	0	1	0	0	0	0	**100**
7:00 AM	0	116	42	2	56	0	0	0	0	0	0	0	0	**216**
8:00 AM	1	140	64	2	58	0	0	0	0	0	0	0	0	**265**
9:00 AM	0	204	77	2	65	0	0	0	0	0	0	0	0	**348**
10:00 AM	6	241	87	2	74	0	0	0	0	0	0	0	0	**410**
11:00 AM	1	302	98	0	81	0	0	0	0	0	0	0	0	**482**
12:00 PM	2	342	97	1	103	1	0	0	0	0	0	0	0	**546**
1:00 PM	0	349	125	1	73	0	0	0	0	0	0	0	0	**548**
2:00 PM	3	308	92	1	83	0	0	0	0	0	0	0	0	**487**
3:00 PM	0	275	88	0	55	1	0	0	0	0	0	0	0	**419**
4:00 PM	3	299	90	0	68	0	0	1	0	0	0	0	0	**461**
5:00 PM	6	287	74	4	59	0	0	0	0	0	0	0	1	**431**
6:00 PM	1	261	68	2	52	0	0	0	0	0	0	0	0	**384**
7:00 PM	1	159	47	0	43	0	0	0	0	0	0	0	0	**250**
8:00 PM	0	122	32	3	22	0	0	0	0	0	0	0	0	**179**
9:00 PM	0	73	29	1	15	0	0	0	0	0	0	0	0	**118**
10:00 PM	0	53	14	1	7	0	0	0	0	0	0	0	0	**75**
11:00 PM	0	25	10	1	7	0	0	0	0	0	0	0	0	**43**
Total	**25**	**3,687**	**1,183**	**27**	**971**	**3**	**0**	**1**	**1**	**0**	**0**	**0**	**1**	**5,899**
Percent	**0.4%**	**62.5%**	**20.1%**	**0.5%**	**16.5%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Saturday, September 17, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	9	18	0	1	1	0	0	0	0	0	0	0	**29**
1:00 AM	0	3	10	0	0	1	0	0	0	0	0	0	0	**14**
2:00 AM	0	6	15	0	0	0	0	0	0	0	0	0	0	**21**
3:00 AM	0	2	3	0	1	1	0	0	0	0	0	0	0	**7**
4:00 AM	0	1	5	0	0	1	0	0	0	0	0	0	0	**7**
5:00 AM	0	7	14	0	3	1	0	0	0	0	0	0	2	**27**
6:00 AM	3	14	37	0	3	1	0	0	0	1	1	0	0	**60**
7:00 AM	2	23	65	0	1	2	0	1	1	1	0	0	1	**97**
8:00 AM	0	48	91	0	3	6	0	0	4	2	0	0	1	**155**
9:00 AM	8	59	127	1	3	7	0	0	0	4	0	1	3	**213**
10:00 AM	4	77	198	0	1	14	0	0	3	6	0	0	4	**307**
11:00 AM	19	110	216	0	0	25	0	1	2	8	0	0	6	**387**
12:00 PM	21	143	247	0	2	41	0	0	1	5	0	0	8	**468**
1:00 PM	28	155	210	0	3	40	0	0	3	4	0	0	3	**446**
2:00 PM	11	165	251	0	1	26	0	0	1	5	0	0	10	**470**
3:00 PM	27	157	206	0	2	45	0	0	1	5	0	0	7	**450**
4:00 PM	24	169	188	0	0	38	0	0	0	4	0	0	5	**428**
5:00 PM	17	158	205	0	4	29	0	1	2	2	0	0	3	**421**
6:00 PM	10	165	160	0	3	37	0	0	0	0	0	0	1	**376**
7:00 PM	7	94	167	0	1	24	0	0	4	0	0	0	3	**300**
8:00 PM	3	85	108	0	2	24	0	0	0	0	0	0	1	**223**
9:00 PM	2	44	84	0	2	11	0	0	0	0	0	0	2	**145**
10:00 PM	0	29	43	0	0	6	0	0	0	0	0	0	0	**78**
11:00 PM	0	13	28	0	0	5	0	0	0	0	0	0	0	**46**
Total	**186**	**1,736**	**2,696**	**1**	**36**	**386**	**0**	**3**	**22**	**47**	**1**	**1**	**60**	**5,175**
Percent	**3.6%**	**33.5%**	**52.1%**	**0.0%**	**0.7%**	**7.5%**	**0.0%**	**0.1%**	**0.4%**	**0.9%**	**0.0%**	**0.0%**	**1.2%**	

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Sunday, September 18, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	21	10	1	3	0	0	0	0	0	0	0	0	**35**
1:00 AM	0	15	4	2	2	0	0	0	0	0	0	0	0	**23**
2:00 AM	0	8	3	0	2	0	0	0	0	0	0	0	0	**13**
3:00 AM	0	12	3	0	2	0	0	0	0	0	0	0	0	**17**
4:00 AM	0	8	4	0	2	0	0	0	0	0	0	0	0	**14**
5:00 AM	0	18	6	0	5	0	0	0	0	0	0	0	0	**29**
6:00 AM	0	38	11	1	10	0	0	0	0	0	0	0	0	**60**
7:00 AM	0	52	27	2	28	0	0	0	0	0	0	0	0	**109**
8:00 AM	0	88	42	1	37	0	0	0	0	0	0	0	0	**168**
9:00 AM	1	148	66	2	48	0	0	0	0	0	0	0	0	**265**
10:00 AM	0	230	71	1	51	0	0	0	0	0	0	0	0	**353**
11:00 AM	5	262	98	0	83	0	0	1	0	0	0	0	0	**449**
12:00 PM	4	300	104	1	72	0	0	0	0	0	0	0	1	**482**
1:00 PM	3	288	90	0	73	0	0	0	0	0	0	0	0	**454**
2:00 PM	5	301	87	0	74	0	0	0	0	0	0	0	0	**467**
3:00 PM	4	301	87	0	76	0	0	0	1	0	0	0	0	**469**
4:00 PM	3	247	74	0	49	0	0	0	0	0	0	0	0	**373**
5:00 PM	0	268	62	3	52	0	0	1	0	0	0	0	0	**386**
6:00 PM	2	190	62	3	53	0	0	0	0	0	0	0	0	**310**
7:00 PM	2	144	44	0	32	0	0	0	0	0	0	0	0	**222**
8:00 PM	0	94	33	1	17	0	0	0	0	0	0	0	0	**145**
9:00 PM	0	60	22	2	15	0	0	0	0	0	0	0	0	**99**
10:00 PM	0	40	7	1	6	0	0	0	0	0	0	0	0	**54**
11:00 PM	0	14	8	0	7	0	0	0	0	0	0	0	0	**29**
Total	**29**	**3,147**	**1,025**	**21**	**799**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**1**	**5,025**
Percent	**0.6%**	**62.6%**	**20.4%**	**0.4%**	**15.9%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Sunday, September 18, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	13	19	0	0	3	0	0	0	0	0	0	0	**35**
1:00 AM	0	10	10	0	0	2	0	0	0	0	0	0	0	**22**
2:00 AM	0	4	14	0	0	2	0	0	0	0	0	0	1	**21**
3:00 AM	0	2	7	0	0	1	0	0	0	0	0	0	0	**10**
4:00 AM	0	2	6	0	0	1	0	0	0	0	0	0	0	**9**
5:00 AM	0	4	8	0	1	2	0	0	0	0	0	0	0	**15**
6:00 AM	1	10	19	0	3	1	0	0	0	0	0	0	0	**34**
7:00 AM	3	17	32	0	0	2	0	1	0	0	0	0	0	**55**
8:00 AM	1	26	43	0	2	9	0	0	0	0	0	0	1	**82**
9:00 AM	5	55	103	0	0	12	0	1	0	0	0	0	0	**176**
10:00 AM	7	89	119	0	1	18	0	0	1	3	0	0	1	**239**
11:00 AM	5	121	148	0	2	16	0	0	0	3	0	0	0	**295**
12:00 PM	15	145	186	0	0	40	0	0	1	3	0	0	6	**396**
1:00 PM	26	144	209	0	2	31	0	0	5	5	0	0	5	**427**
2:00 PM	8	157	213	0	0	32	0	1	2	4	0	0	3	**420**
3:00 PM	16	142	210	0	4	30	0	0	0	4	0	0	6	**412**
4:00 PM	9	130	189	0	1	32	0	0	4	2	0	0	6	**373**
5:00 PM	8	157	165	0	4	20	0	0	1	2	0	1	3	**361**
6:00 PM	1	116	119	0	2	30	0	0	1	1	0	1	2	**273**
7:00 PM	6	79	121	0	2	19	0	0	0	0	0	0	2	**229**
8:00 PM	3	44	84	0	1	15	0	0	0	0	0	0	1	**148**
9:00 PM	1	27	35	1	2	10	0	0	0	0	0	0	0	**76**
10:00 PM	0	14	25	0	0	6	0	0	0	0	0	0	1	**46**
11:00 PM	1	5	12	0	0	1	0	0	0	1	0	0	0	**20**
Total	**116**	**1,513**	**2,096**	**1**	**27**	**335**	**0**	**3**	**15**	**28**	**0**	**2**	**38**	**4,174**
Percent	**2.8%**	**36.2%**	**50.2%**	**0.0%**	**0.6%**	**8.0%**	**0.0%**	**0.1%**	**0.4%**	**0.7%**	**0.0%**	**0.0%**	**0.9%**	

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Monday, September 19, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	6	4	1	3	0	0	0	0	0	0	0	0	**14**
1:00 AM	0	4	4	1	3	0	0	0	1	0	0	0	0	**13**
2:00 AM	0	5	1	0	2	0	0	0	0	0	0	0	0	**8**
3:00 AM	0	10	4	1	1	0	0	0	0	0	0	0	0	**16**
4:00 AM	0	17	5	0	0	1	0	0	0	0	0	0	0	**23**
5:00 AM	1	66	23	0	21	0	0	1	1	0	0	0	0	**113**
6:00 AM	2	149	69	1	95	2	0	0	1	0	0	0	0	**319**
7:00 AM	0	416	165	3	156	0	0	1	2	0	0	0	0	**743**
8:00 AM	0	437	176	2	123	1	0	0	4	1	0	0	0	**744**
9:00 AM	1	233	88	3	86	1	0	0	1	0	0	0	0	**413**
10:00 AM	3	275	72	1	95	1	0	4	2	1	0	0	1	**455**
11:00 AM	3	436	131	2	114	1	0	1	4	0	0	0	1	**693**
12:00 PM	2	462	122	3	122	2	0	1	2	0	0	0	0	**716**
1:00 PM	3	543	182	3	142	4	0	1	0	1	0	0	0	**879**
2:00 PM	3	478	145	2	91	1	0	0	0	0	0	0	1	**721**
3:00 PM	5	537	133	2	104	3	0	0	2	0	0	0	0	**786**
4:00 PM	4	472	103	1	85	0	0	1	0	0	0	0	0	**666**
5:00 PM	1	426	84	1	71	0	0	0	1	0	0	0	0	**584**
6:00 PM	2	306	64	1	61	0	0	0	0	0	0	0	0	**434**
7:00 PM	3	182	47	0	37	0	0	0	0	0	0	0	0	**269**
8:00 PM	1	88	33	2	25	0	0	0	1	0	0	0	0	**150**
9:00 PM	0	53	16	2	13	1	0	0	0	0	0	0	0	**85**
10:00 PM	1	21	14	1	4	0	0	0	0	0	0	0	0	**41**
11:00 PM	0	13	2	1	4	0	0	0	0	0	0	0	0	**20**
Total	**35**	**5,635**	**1,687**	**34**	**1,458**	**18**	**0**	**10**	**22**	**3**	**0**	**0**	**3**	**8,905**
Percent	**0.4%**	**63.3%**	**18.9%**	**0.4%**	**16.4%**	**0.2%**	**0.0%**	**0.1%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Monday, September 19, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	6	10	0	0	1	0	0	0	0	0	0	0	**17**
1:00 AM	0	0	5	0	1	1	0	0	0	0	0	0	0	**7**
2:00 AM	0	4	2	0	0	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	1	4	0	1	0	0	0	0	0	0	0	0	**6**
4:00 AM	0	3	5	0	1	1	0	0	0	0	0	0	0	**10**
5:00 AM	0	8	10	0	3	0	0	0	0	0	0	0	1	**22**
6:00 AM	7	25	45	0	3	3	0	0	0	2	0	0	1	**86**
7:00 AM	17	104	98	0	2	10	0	0	2	1	0	0	4	**238**
8:00 AM	9	136	111	0	1	18	0	0	2	4	0	1	8	**290**
9:00 AM	8	79	121	0	1	11	0	0	2	1	0	0	3	**226**
10:00 AM	10	119	160	0	2	21	0	0	1	2	0	0	11	**326**
11:00 AM	32	180	174	0	2	32	0	0	3	6	0	0	10	**439**
12:00 PM	26	181	183	0	2	25	0	0	2	4	0	0	9	**432**
1:00 PM	34	177	168	0	5	23	0	0	2	7	0	0	7	**423**
2:00 PM	44	237	258	0	7	28	0	0	4	7	0	1	15	**601**
3:00 PM	59	262	314	0	3	34	0	0	3	8	0	1	16	**700**
4:00 PM	48	300	385	0	5	49	0	0	6	8	0	0	24	**825**
5:00 PM	47	323	500	0	3	49	0	2	7	11	0	0	14	**956**
6:00 PM	14	245	292	0	3	47	0	1	1	4	0	0	16	**623**
7:00 PM	3	135	143	0	1	36	0	0	0	1	0	0	1	**320**
8:00 PM	7	63	74	0	0	21	0	0	1	1	0	0	4	**171**
9:00 PM	2	31	59	0	3	12	0	1	0	0	0	0	1	**109**
10:00 PM	0	13	27	0	0	5	0	0	0	0	0	0	0	**45**
11:00 PM	0	6	10	0	1	0	0	0	0	0	0	0	0	**17**
Total	**367**	**2,638**	**3,158**	**0**	**50**	**427**	**0**	**4**	**36**	**67**	**0**	**3**	**145**	**6,895**
Percent	**5.3%**	**38.3%**	**45.8%**	**0.0%**	**0.7%**	**6.2%**	**0.0%**	**0.1%**	**0.5%**	**1.0%**	**0.0%**	**0.0%**	**2.1%**	

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Tuesday, September 20, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	8	3	1	0	0	0	0	0	0	0	0	0	**12**
1:00 AM	0	4	1	2	2	0	0	0	0	0	0	0	0	**9**
2:00 AM	0	6	0	0	0	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	9	3	0	1	0	0	0	0	0	0	0	0	**13**
4:00 AM	0	15	11	0	6	0	0	0	0	0	0	0	0	**32**
5:00 AM	0	62	26	2	29	0	0	0	0	0	0	0	0	**119**
6:00 AM	2	167	76	0	112	1	0	0	1	0	0	0	0	**359**
7:00 AM	1	438	152	3	144	1	0	0	1	0	0	0	0	**740**
8:00 AM	0	461	168	4	142	1	0	0	0	0	0	0	0	**776**
9:00 AM	0	271	96	4	70	0	0	0	2	0	0	0	0	**443**
10:00 AM	3	270	85	3	82	1	0	0	1	0	0	0	0	**445**
11:00 AM	3	248	99	1	71	1	0	3	2	0	0	0	0	**428**
12:00 PM	1	320	111	1	76	1	0	0	0	0	0	0	0	**510**
1:00 PM	1	280	91	2	90	4	0	1	1	0	0	0	0	**470**
2:00 PM	3	264	86	1	79	0	0	0	2	0	0	0	0	**435**
3:00 PM	2	349	104	1	73	3	0	0	1	0	0	0	0	**533**
4:00 PM	0	367	86	0	72	1	0	0	0	0	0	0	0	**526**
5:00 PM	2	411	90	3	78	0	0	0	0	0	0	0	0	**584**
6:00 PM	0	267	57	0	47	0	0	0	0	0	0	0	0	**371**
7:00 PM	1	180	53	0	42	0	0	0	1	0	0	0	0	**277**
8:00 PM	0	79	41	2	19	0	0	0	0	0	0	0	0	**141**
9:00 PM	0	52	17	2	11	0	0	0	0	0	0	0	0	**82**
10:00 PM	0	24	8	1	10	0	0	0	0	0	0	0	0	**43**
11:00 PM	0	11	5	2	3	0	0	0	0	0	0	0	0	**21**
Total	**19**	**4,563**	**1,469**	**35**	**1,259**	**14**	**0**	**4**	**12**	**0**	**0**	**0**	**0**	**7,375**
Percent	**0.3%**	**61.9%**	**19.9%**	**0.5%**	**17.1%**	**0.2%**	**0.0%**	**0.1%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Tuesday, September 20, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	7	7	1	0	2	0	1	0	0	0	0	0	**18**
1:00 AM	2	2	1	0	1	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	1	8	0	2	0	0	0	0	0	0	0	0	**11**
5:00 AM	0	6	11	0	2	4	0	0	0	0	0	0	0	**23**
6:00 AM	2	26	57	0	1	9	0	0	1	1	0	0	4	**101**
7:00 AM	10	88	95	0	0	12	0	1	3	4	0	0	5	**218**
8:00 AM	12	130	139	0	2	7	0	0	5	8	0	1	4	**308**
9:00 AM	14	87	138	0	3	19	0	1	5	3	0	1	2	**273**
10:00 AM	15	112	141	0	3	16	0	0	0	3	0	0	6	**296**
11:00 AM	6	116	184	1	5	25	0	0	3	11	0	1	9	**361**
12:00 PM	22	158	191	0	2	22	0	0	1	7	0	0	11	**414**
1:00 PM	16	139	207	0	4	33	0	0	1	5	0	0	10	**415**
2:00 PM	18	122	214	0	4	20	0	1	4	5	0	0	10	**398**
3:00 PM	17	211	303	0	4	39	0	0	2	11	0	0	16	**603**
4:00 PM	32	250	331	0	6	52	0	0	3	5	0	0	17	**696**
5:00 PM	25	282	451	1	4	51	0	1	2	11	0	0	19	**847**
6:00 PM	8	233	371	0	7	51	0	0	3	6	1	0	16	**696**
7:00 PM	15	114	202	0	2	23	0	0	3	5	0	0	1	**365**
8:00 PM	8	41	132	0	0	11	0	0	0	0	0	0	2	**194**
9:00 PM	1	29	60	0	1	5	0	1	0	1	0	0	0	**98**
10:00 PM	0	15	30	0	0	5	0	0	0	0	0	0	1	**51**
11:00 PM	0	4	9	0	2	0	0	0	0	0	0	0	0	**15**
Total	**223**	**2,174**	**3,286**	**3**	**55**	**406**	**0**	**6**	**36**	**86**	**1**	**3**	**133**	**6,412**
Percent	**3.5%**	**33.9%**	**51.2%**	**0.0%**	**0.9%**	**6.3%**	**0.0%**	**0.1%**	**0.6%**	**1.3%**	**0.0%**	**0.0%**	**2.1%**	

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Wednesday, September 21, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	5	2	0	0	0	0	0	0	0	0	0	0	**7**
1:00 AM	0	6	2	0	3	0	0	0	0	0	0	0	0	**11**
2:00 AM	0	5	0	0	1	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	10	2	0	0	0	0	0	0	0	0	0	0	**12**
4:00 AM	0	18	7	0	2	0	0	1	0	0	0	0	0	**28**
5:00 AM	0	62	34	0	28	0	0	0	0	0	0	0	0	**124**
6:00 AM	0	149	74	1	125	1	0	0	1	0	0	0	0	**351**
7:00 AM	3	404	155	4	164	0	0	0	1	0	0	0	0	**731**
8:00 AM	0	401	179	2	138	2	0	0	2	0	0	0	0	**724**
9:00 AM	0	260	96	1	89	0	0	0	0	0	0	0	0	**446**
10:00 AM	0	254	94	3	77	2	0	0	1	0	0	0	0	**431**
11:00 AM	0	263	98	0	87	0	0	1	1	0	0	0	0	**450**
12:00 PM	0	307	88	2	84	0	0	0	1	0	0	0	0	**482**
1:00 PM	2	347	97	2	68	1	0	0	2	0	0	0	0	**519**
2:00 PM	1	310	113	2	71	0	0	3	1	0	0	0	0	**501**
3:00 PM	1	322	105	1	63	1	0	0	1	0	0	0	0	**494**
4:00 PM	1	347	105	2	52	0	0	1	1	1	0	0	0	**510**
5:00 PM	1	382	72	1	68	0	0	0	1	0	0	0	0	**525**
6:00 PM	5	267	64	1	44	0	0	0	0	0	0	0	0	**381**
7:00 PM	0	168	56	1	31	0	0	1	0	0	0	0	0	**257**
8:00 PM	1	56	26	2	16	0	0	0	0	0	0	0	0	**101**
9:00 PM	0	50	16	1	14	0	0	0	1	0	0	0	0	**82**
10:00 PM	0	30	5	3	12	0	0	0	0	0	0	0	0	**50**
11:00 PM	0	10	3	0	7	0	0	0	0	0	0	0	0	**20**
Total	**15**	**4,433**	**1,493**	**29**	**1,244**	**7**	**0**	**7**	**14**	**1**	**0**	**0**	**0**	**7,243**
Percent	**0.2%**	**61.2%**	**20.6%**	**0.4%**	**17.2%**	**0.1%**	**0.0%**	**0.1%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Wednesday, September 21, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	13	0	0	0	0	0	0	0	0	0	0	**14**
1:00 AM	0	3	4	0	0	2	0	0	0	0	0	0	0	**9**
2:00 AM	1	0	1	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	4	0	0	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	5	6	0	1	1	0	0	0	0	0	0	0	**13**
5:00 AM	0	9	15	0	1	1	0	1	0	1	0	0	1	**29**
6:00 AM	2	32	53	0	5	4	0	0	0	0	0	0	1	**97**
7:00 AM	9	105	111	0	3	15	0	1	2	3	0	0	4	**253**
8:00 AM	6	144	128	0	1	29	0	0	1	6	0	0	3	**318**
9:00 AM	4	96	128	0	1	11	0	0	4	4	0	0	1	**249**
10:00 AM	29	87	161	0	2	20	0	1	1	1	0	0	5	**307**
11:00 AM	29	102	187	0	3	11	0	0	2	5	0	0	9	**348**
12:00 PM	17	120	210	0	2	28	0	0	2	2	0	1	8	**390**
1:00 PM	23	182	252	0	1	39	0	0	3	7	0	1	8	**516**
2:00 PM	22	173	257	0	4	32	0	0	2	5	0	0	13	**508**
3:00 PM	21	182	302	0	4	42	0	0	1	5	0	0	16	**573**
4:00 PM	22	208	321	0	8	44	0	0	3	6	0	1	15	**628**
5:00 PM	41	272	468	0	2	51	0	0	6	13	0	0	25	**878**
6:00 PM	8	192	360	0	6	35	0	0	4	4	0	0	9	**618**
7:00 PM	17	91	235	0	1	9	0	0	0	2	0	0	3	**358**
8:00 PM	1	30	132	0	0	14	0	0	0	0	0	0	2	**179**
9:00 PM	1	18	62	0	2	5	0	0	0	0	0	0	1	**89**
10:00 PM	0	9	32	0	2	2	0	0	0	0	0	0	0	**45**
11:00 PM	0	9	14	0	0	1	0	0	0	0	0	0	0	**24**
Total	**253**	**2,070**	**3,456**	**0**	**49**	**396**	**0**	**3**	**31**	**64**	**0**	**3**	**124**	**6,449**
Percent	**3.9%**	**32.1%**	**53.6%**	**0.0%**	**0.8%**	**6.1%**	**0.0%**	**0.0%**	**0.5%**	**1.0%**	**0.0%**	**0.0%**	**1.9%**	

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Thursday, September 22, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	7	5	0	3	0	0	0	0	0	0	0	0	**15**
1:00 AM	0	3	4	0	3	0	0	0	1	0	0	0	0	**11**
2:00 AM	0	2	2	0	2	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	15	4	0	2	0	0	0	0	0	0	0	0	**21**
4:00 AM	0	14	9	0	2	0	0	0	0	0	0	0	0	**25**
5:00 AM	0	62	26	2	23	0	0	0	0	0	0	0	0	**113**
6:00 AM	2	153	77	0	100	3	0	0	0	0	0	0	0	**335**
7:00 AM	2	401	111	1	159	1	0	1	0	0	0	0	0	**676**
8:00 AM	0	403	174	2	138	0	0	2	1	0	0	0	0	**720**
9:00 AM	1	245	116	2	90	1	0	0	1	0	0	0	0	**456**
10:00 AM	6	230	86	3	89	2	0	0	1	0	0	0	0	**417**
11:00 AM	1	228	90	0	100	2	0	2	1	0	0	0	0	**424**
12:00 PM	0	322	100	1	86	2	0	1	3	0	0	0	0	**515**
1:00 PM	0	277	76	2	70	0	0	0	1	0	0	0	0	**426**
2:00 PM	0	297	87	2	67	2	0	0	1	0	0	0	0	**456**
3:00 PM	1	373	116	0	68	0	0	1	0	0	0	0	0	**559**
4:00 PM	2	406	74	0	59	1	0	1	0	0	0	0	0	**543**
5:00 PM	2	405	68	3	52	0	0	0	0	0	0	0	0	**530**
6:00 PM	0	246	71	0	46	0	0	0	0	0	0	0	0	**363**
7:00 PM	1	184	45	2	46	0	0	0	1	0	0	0	0	**279**
8:00 PM	0	143	43	1	29	0	0	0	0	0	0	0	0	**216**
9:00 PM	0	66	18	1	14	0	0	0	0	0	0	0	0	**99**
10:00 PM	0	27	15	1	11	0	0	0	0	0	0	0	0	**54**
11:00 PM	0	11	6	0	0	0	0	0	1	0	0	0	0	**18**
Total	**18**	**4,520**	**1,423**	**23**	**1,259**	**14**	**0**	**8**	**12**	**0**	**0**	**0**	**0**	**7,277**
Percent	**0.2%**	**62.1%**	**19.6%**	**0.3%**	**17.3%**	**0.2%**	**0.0%**	**0.1%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Thursday, September 22, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	5	20	0	0	0	0	0	0	1	0	0	0	**26**
1:00 AM	1	1	4	0	0	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	0	3	0	0	1	0	0	0	0	0	0	0	**4**
3:00 AM	0	2	7	0	0	0	0	0	0	0	0	0	0	**9**
4:00 AM	0	2	6	0	2	0	0	0	0	0	0	0	1	**11**
5:00 AM	2	9	10	0	2	1	0	0	0	0	0	0	0	**24**
6:00 AM	1	26	47	0	1	6	0	0	0	1	0	0	2	**84**
7:00 AM	22	86	118	0	1	4	0	0	1	1	0	0	4	**237**
8:00 AM	20	112	142	0	4	11	0	0	3	2	0	0	6	**300**
9:00 AM	17	79	129	0	5	11	0	1	2	6	0	0	6	**256**
10:00 AM	15	71	179	0	3	16	0	0	2	1	0	0	7	**294**
11:00 AM	12	85	199	0	1	15	0	0	4	2	0	0	3	**321**
12:00 PM	23	145	219	0	3	29	0	0	1	2	0	0	9	**431**
1:00 PM	11	144	244	0	3	21	0	0	3	4	0	0	7	**437**
2:00 PM	12	159	234	0	6	26	0	0	4	12	0	1	9	**463**
3:00 PM	33	230	269	0	4	54	0	0	3	6	0	0	9	**608**
4:00 PM	18	294	345	0	2	47	0	0	2	12	0	0	18	**738**
5:00 PM	24	327	402	0	6	70	0	0	2	8	0	0	13	**852**
6:00 PM	10	193	303	0	7	45	0	0	1	6	0	0	6	**571**
7:00 PM	8	114	173	0	1	28	0	0	0	2	0	0	3	**329**
8:00 PM	3	95	99	1	0	20	0	0	1	2	0	0	2	**223**
9:00 PM	0	49	81	0	2	6	0	0	0	0	0	0	2	**140**
10:00 PM	1	18	30	0	0	3	0	1	0	0	0	0	0	**53**
11:00 PM	0	9	13	0	0	0	0	0	0	0	0	0	0	**22**
Total	**233**	**2,255**	**3,276**	**1**	**53**	**414**	**0**	**2**	**29**	**68**	**0**	**1**	**107**	**6,439**
Percent	**3.6%**	**35.0%**	**50.9%**	**0.0%**	**0.8%**	**6.4%**	**0.0%**	**0.0%**	**0.5%**	**1.1%**	**0.0%**	**0.0%**	**1.7%**	

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Friday, September 23, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	17	1	1	0	0	0	0	0	0	0	0	0	**19**
1:00 AM	0	2	4	0	1	0	0	0	0	0	0	0	0	**7**
2:00 AM	0	3	1	0	1	0	0	0	0	0	0	0	0	**5**
3:00 AM	0	11	5	0	3	0	0	0	0	0	0	0	0	**19**
4:00 AM	0	17	2	0	4	0	0	0	0	0	0	0	0	**23**
5:00 AM	0	53	22	2	21	1	0	1	0	0	0	0	0	**100**
6:00 AM	0	148	65	1	96	1	0	0	2	0	0	0	0	**313**
7:00 AM	2	338	130	3	120	0	0	0	2	0	0	0	0	**595**
8:00 AM	3	311	106	0	108	0	0	0	0	0	0	0	0	**528**
9:00 AM	1	282	101	1	106	3	0	2	1	0	0	0	0	**497**
10:00 AM	2	358	131	2	116	1	0	1	1	0	0	0	0	**612**
11:00 AM	5	324	95	0	82	0	0	1	0	0	0	0	0	**507**
12:00 PM	1	341	95	0	68	2	0	2	2	0	0	0	0	**511**
1:00 PM	3	333	81	3	79	2	0	4	0	0	0	0	0	**505**
2:00 PM	3	304	115	1	86	2	0	0	1	0	0	0	0	**512**
3:00 PM	2	396	116	0	67	0	0	0	0	0	0	0	0	**581**
4:00 PM	0	355	101	1	57	2	0	1	0	0	0	0	1	**518**
5:00 PM	3	430	98	2	52	0	0	1	0	0	0	0	0	**586**
6:00 PM	0	378	77	3	53	0	0	0	0	0	0	0	0	**511**
7:00 PM	0	224	63	0	40	0	0	0	0	0	0	0	0	**327**
8:00 PM	0	112	33	4	31	0	0	0	0	0	0	0	0	**180**
9:00 PM	1	86	20	0	15	0	0	0	0	0	0	0	0	**122**
10:00 PM	1	48	16	1	15	0	0	0	0	0	0	0	0	**81**
11:00 PM	0	12	7	1	6	0	0	0	0	0	0	0	0	**26**
Total	**27**	**4,883**	**1,485**	**26**	**1,227**	**14**	**0**	**13**	**9**	**0**	**0**	**0**	**1**	**7,685**
Percent	**0.4%**	**63.5%**	**19.3%**	**0.3%**	**16.0%**	**0.2%**	**0.0%**	**0.2%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Friday, September 23, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	8	14	0	0	1	0	1	0	0	0	0	0	**24**
1:00 AM	0	0	2	0	0	1	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	6	0	0	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	1	5	0	0	0	0	0	0	0	0	0	0	**6**
4:00 AM	0	2	7	0	1	0	0	0	0	0	0	0	0	**10**
5:00 AM	1	12	14	0	0	0	0	0	0	0	0	0	0	**27**
6:00 AM	3	33	53	0	2	6	0	1	1	2	0	0	0	**101**
7:00 AM	12	85	108	0	0	7	0	0	1	1	0	0	8	**222**
8:00 AM	11	109	137	0	0	12	0	0	2	4	0	0	6	**281**
9:00 AM	7	91	113	0	1	12	0	0	0	4	0	0	4	**232**
10:00 AM	14	115	161	0	3	25	0	1	3	3	0	1	6	**332**
11:00 AM	12	160	188	0	6	30	0	0	2	11	0	0	6	**415**
12:00 PM	27	180	224	0	5	28	0	0	5	3	0	0	8	**480**
1:00 PM	14	189	209	0	4	30	0	0	5	6	0	0	14	**471**
2:00 PM	28	147	243	0	2	31	0	0	1	7	0	0	8	**467**
3:00 PM	28	263	316	0	5	46	0	0	8	13	0	0	19	**698**
4:00 PM	30	251	389	0	2	48	0	0	3	11	0	0	13	**747**
5:00 PM	28	336	346	0	7	68	0	0	9	7	0	0	11	**812**
6:00 PM	13	259	247	0	3	43	0	1	2	2	0	0	10	**580**
7:00 PM	4	136	175	0	4	26	0	0	1	5	0	1	1	**353**
8:00 PM	4	85	130	0	2	17	0	0	0	4	0	0	2	**244**
9:00 PM	3	55	104	1	1	13	0	0	0	0	0	0	1	**178**
10:00 PM	1	45	84	0	1	17	0	0	0	0	0	0	0	**148**
11:00 PM	0	7	29	0	1	6	0	0	0	1	0	0	0	**44**
Total	**240**	**2,569**	**3,304**	**1**	**50**	**467**	**0**	**4**	**43**	**84**	**0**	**2**	**117**	**6,881**
Percent	**3.5%**	**37.3%**	**48.0%**	**0.0%**	**0.7%**	**6.8%**	**0.0%**	**0.1%**	**0.6%**	**1.2%**	**0.0%**	**0.0%**	**1.7%**	

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Total Study Average
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	12	4	1	2	0	0	0	0	0	0	0	0	**19**
1:00 AM	0	6	3	1	2	0	0	0	0	0	0	0	0	**12**
2:00 AM	0	6	1	0	1	0	0	0	0	0	0	0	0	**8**
3:00 AM	0	11	4	0	1	0	0	0	0	0	0	0	0	**16**
4:00 AM	0	14	6	0	3	0	0	0	0	0	0	0	0	**23**
5:00 AM	0	50	21	1	20	0	0	0	0	0	0	0	0	**92**
6:00 AM	1	121	56	1	81	1	0	0	1	0	0	0	0	**262**
7:00 AM	1	309	112	3	118	0	0	0	1	0	0	0	0	**544**
8:00 AM	1	320	130	2	106	1	0	0	1	0	0	0	0	**561**
9:00 AM	1	235	91	2	79	1	0	0	1	0	0	0	0	**410**
10:00 AM	3	265	89	2	83	1	0	1	1	0	0	0	0	**445**
11:00 AM	3	295	101	0	88	1	0	1	1	0	0	0	0	**490**
12:00 PM	1	342	102	1	87	1	0	1	1	0	0	0	0	**536**
1:00 PM	2	345	106	2	85	2	0	1	1	0	0	0	0	**544**
2:00 PM	3	323	104	1	79	1	0	0	1	0	0	0	0	**512**
3:00 PM	2	365	107	1	72	1	0	0	1	0	0	0	0	**549**
4:00 PM	2	356	90	1	63	1	0	1	0	0	0	0	0	**514**
5:00 PM	2	373	78	2	62	0	0	0	0	0	0	0	0	**517**
6:00 PM	1	274	66	1	51	0	0	0	0	0	0	0	0	**393**
7:00 PM	1	177	51	0	39	0	0	0	0	0	0	0	0	**268**
8:00 PM	0	99	34	2	23	0	0	0	0	0	0	0	0	**158**
9:00 PM	0	63	20	1	14	0	0	0	0	0	0	0	0	**98**
10:00 PM	0	35	11	1	9	0	0	0	0	0	0	0	0	**56**
11:00 PM	0	14	6	1	5	0	0	0	0	0	0	0	0	**26**
Total	**24**	**4,410**	**1,393**	**27**	**1,173**	**11**	**0**	**5**	**10**	**0**	**0**	**0**	**0**	**7,053**
Percent	**0.3%**	**62.5%**	**19.8%**	**0.4%**	**16.6%**	**0.2%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Total Study Average
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	7	14	0	0	1	0	0	0	0	0	0	0	**22**
1:00 AM	0	3	5	0	0	1	0	0	0	0	0	0	0	**9**
2:00 AM	0	2	6	0	0	0	0	0	0	0	0	0	0	**8**
3:00 AM	0	1	5	0	0	0	0	0	0	0	0	0	0	**6**
4:00 AM	0	2	6	0	1	1	0	0	0	0	0	0	0	**10**
5:00 AM	0	8	12	0	2	1	0	0	0	0	0	0	1	**24**
6:00 AM	3	24	44	0	3	4	0	0	0	1	0	0	1	**80**
7:00 AM	11	73	90	0	1	7	0	1	1	2	0	0	4	**190**
8:00 AM	8	101	113	0	2	13	0	0	2	4	0	0	4	**247**
9:00 AM	9	78	123	0	2	12	0	0	2	3	0	0	3	**232**
10:00 AM	13	96	160	0	2	19	0	0	2	3	0	0	6	**301**
11:00 AM	16	125	185	0	3	22	0	0	2	7	0	0	6	**366**
12:00 PM	22	153	209	0	2	30	0	0	2	4	0	0	8	**430**
1:00 PM	22	161	214	0	3	31	0	0	3	5	0	0	8	**447**
2:00 PM	20	166	239	0	3	28	0	0	3	6	0	0	10	**475**
3:00 PM	29	207	274	0	4	41	0	0	3	7	0	0	13	**578**
4:00 PM	26	229	307	0	3	44	0	0	3	7	0	0	14	**633**
5:00 PM	27	265	362	0	4	48	0	1	4	8	0	0	13	**732**
6:00 PM	9	200	265	0	4	41	0	0	2	3	0	0	9	**533**
7:00 PM	9	109	174	0	2	24	0	0	1	2	0	0	2	**323**
8:00 PM	4	63	108	0	1	17	0	0	0	1	0	0	2	**196**
9:00 PM	1	36	69	0	2	9	0	0	0	0	0	0	1	**118**
10:00 PM	0	20	39	0	0	6	0	0	0	0	0	0	0	**65**
11:00 PM	0	8	16	0	1	2	0	0	0	0	0	0	0	**27**
Total	**229**	**2,137**	**3,039**	**0**	**45**	**402**	**0**	**2**	**30**	**63**	**0**	**0**	**105**	**6,052**
Percent	**3.8%**	**35.3%**	**50.2%**	**0.0%**	**0.7%**	**6.6%**	**0.0%**	**0.0%**	**0.5%**	**1.0%**	**0.0%**	**0.0%**	**1.7%**	

Note: Average only condsidered on days with 24-hours of data.

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

3-Day (Tuesday - Thursday) Average
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	7	3	0	1	0	0	0	0	0	0	0	0	**11**
1:00 AM	0	4	2	1	3	0	0	0	0	0	0	0	0	**10**
2:00 AM	0	4	1	0	1	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	11	3	0	1	0	0	0	0	0	0	0	0	**15**
4:00 AM	0	16	9	0	3	0	0	0	0	0	0	0	0	**28**
5:00 AM	0	62	29	1	27	0	0	0	0	0	0	0	0	**119**
6:00 AM	1	156	76	0	112	2	0	0	1	0	0	0	0	**348**
7:00 AM	2	414	139	3	156	1	0	0	1	0	0	0	0	**716**
8:00 AM	0	422	174	3	139	1	0	1	1	0	0	0	0	**740**
9:00 AM	0	259	103	2	83	0	0	0	1	0	0	0	0	**448**
10:00 AM	3	251	88	3	83	2	0	0	1	0	0	0	0	**431**
11:00 AM	1	246	96	0	86	1	0	2	1	0	0	0	0	**434**
12:00 PM	0	316	100	1	82	1	0	0	1	0	0	0	0	**502**
1:00 PM	1	301	88	2	76	2	0	0	1	0	0	0	0	**472**
2:00 PM	1	290	95	2	72	1	0	1	1	0	0	0	0	**464**
3:00 PM	1	348	108	1	68	1	0	0	1	0	0	0	0	**529**
4:00 PM	1	373	88	1	61	1	0	1	0	0	0	0	0	**526**
5:00 PM	2	399	77	2	66	0	0	0	0	0	0	0	0	**546**
6:00 PM	2	260	64	0	46	0	0	0	0	0	0	0	0	**372**
7:00 PM	1	177	51	1	40	0	0	0	1	0	0	0	0	**271**
8:00 PM	0	93	37	2	21	0	0	0	0	0	0	0	0	**153**
9:00 PM	0	56	17	1	13	0	0	0	0	0	0	0	0	**88**
10:00 PM	0	27	9	2	11	0	0	0	0	0	0	0	0	**49**
11:00 PM	0	11	5	1	3	0	0	0	0	0	0	0	0	**20**
Total	**17**	**4,505**	**1,462**	**29**	**1,254**	**12**	**0**	**6**	**13**	**0**	**0**	**0**	**0**	**7,298**
Percent	**0.2%**	**61.7%**	**20.0%**	**0.4%**	**17.2%**	**0.2%**	**0.0%**	**0.1%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

3-Day (Tuesday - Thursday) Average
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	4	13	0	0	1	0	0	0	0	0	0	0	**19**
1:00 AM	1	2	3	0	0	1	0	0	0	0	0	0	0	**7**
2:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	1	5	0	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	3	7	0	2	0	0	0	0	0	0	0	0	**12**
5:00 AM	1	8	12	0	2	2	0	0	0	0	0	0	0	**25**
6:00 AM	2	28	52	0	2	6	0	0	0	1	0	0	2	**94**
7:00 AM	14	93	108	0	1	10	0	1	2	3	0	0	4	**236**
8:00 AM	13	129	136	0	2	16	0	0	3	5	0	0	4	**309**
9:00 AM	12	87	132	0	3	14	0	1	4	4	0	0	3	**259**
10:00 AM	20	90	160	0	3	17	0	0	1	2	0	0	6	**299**
11:00 AM	16	101	190	0	3	17	0	0	3	6	0	0	7	**343**
12:00 PM	21	141	207	0	2	26	0	0	1	4	0	0	9	**412**
1:00 PM	17	155	234	0	3	31	0	0	2	5	0	0	8	**456**
2:00 PM	17	151	235	0	5	26	0	0	3	7	0	0	11	**456**
3:00 PM	24	208	291	0	4	45	0	0	2	7	0	0	14	**595**
4:00 PM	24	251	332	0	5	48	0	0	3	8	0	0	17	**687**
5:00 PM	30	294	440	0	4	57	0	0	3	11	0	0	19	**859**
6:00 PM	9	206	345	0	7	44	0	0	3	5	0	0	10	**628**
7:00 PM	13	106	203	0	1	20	0	0	1	3	0	0	2	**351**
8:00 PM	4	55	121	0	0	15	0	0	0	1	0	0	2	**199**
9:00 PM	1	32	68	0	2	5	0	0	0	0	0	0	1	**109**
10:00 PM	0	14	31	0	1	3	0	0	0	0	0	0	0	**50**
11:00 PM	0	7	12	0	1	0	0	0	0	0	0	0	0	**20**
Total	**236**	**2,166**	**3,339**	**1**	**52**	**405**	**0**	**4**	**32**	**73**	**0**	**2**	**121**	**6,433**
Percent	**3.7%**	**33.7%**	**51.9%**	**0.0%**	**0.8%**	**6.3%**	**0.0%**	**0.1%**	**0.5%**	**1.1%**	**0.0%**	**0.0%**	**1.9%**	

Vehicle Speed Report Summary

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd

Count Direction: Eastbound / Westbound

Date Range: 9/17/2022 to 9/23/2022

Site Code: 09

	Speed Range (mph)																	Total
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
Study Total																		
Eastbound	2	3	68	852	8,183	21,530	15,248	3,132	343	39	8	0	1	0	0	0	0	49,409
Percent	0.0%	0.0%	0.1%	1.7%	16.6%	43.6%	30.9%	6.3%	0.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Westbound	3	6	69	1,728	15,774	18,996	5,136	642	63	5	1	2	0	0	0	0	0	42,425
Percent	0.0%	0.0%	0.2%	4.1%	37.2%	44.8%	12.1%	1.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	5	9	137	2,580	23,957	40,526	20,384	3,774	406	44	9	2	1	0	0	0	0	91,834
Percent	0.0%	0.0%	0.1%	2.8%	26.1%	44.1%	22.2%	4.1%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%

Total Study Percentile Speed Summary			Total Study Speed Statistics		
Eastbound			**Eastbound**		
50th Percentile (Median)	33.7	mph	Mean (Average) Speed	33.8	mph
85th Percentile	38.1	mph	10 mph Pace	28.7 - 38.7	mph
95th Percentile	40.9	mph	Percent in Pace	76.6	%
Westbound			**Westbound**		
50th Percentile (Median)	30.8	mph	Mean (Average) Speed	31.0	mph
85th Percentile	34.8	mph	10 mph Pace	26.1 - 36.1	mph
95th Percentile	37.6	mph	Percent in Pace	82.5	%

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Saturday, September 17, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	0	6	9	6	2	0	0	0	0	0	0	0	0	0	**24**
1:00 AM	0	0	1	0	9	5	0	2	0	0	0	0	0	0	0	0	0	**17**
2:00 AM	0	0	0	0	3	7	2	1	2	0	0	0	0	0	0	0	0	**15**
3:00 AM	0	0	0	0	2	8	5	2	0	0	0	0	0	0	0	0	0	**17**
4:00 AM	0	0	0	2	4	7	3	1	0	0	0	0	0	0	0	0	0	**17**
5:00 AM	0	0	0	1	7	17	15	6	0	1	0	0	0	0	0	0	0	**47**
6:00 AM	0	0	0	2	15	34	35	9	3	2	0	0	0	0	0	0	0	**100**
7:00 AM	0	0	1	2	31	82	68	29	2	0	1	0	0	0	0	0	0	**216**
8:00 AM	0	0	0	2	46	91	92	32	1	1	0	0	0	0	0	0	0	**265**
9:00 AM	0	0	0	6	67	145	96	30	4	0	0	0	0	0	0	0	0	**348**
10:00 AM	0	0	0	1	38	176	166	24	5	0	0	0	0	0	0	0	0	**410**
11:00 AM	0	0	0	2	62	202	180	31	4	1	0	0	0	0	0	0	0	**482**
12:00 PM	0	0	0	3	68	224	205	45	1	0	0	0	0	0	0	0	0	**546**
1:00 PM	0	0	0	11	62	236	192	42	5	0	0	0	0	0	0	0	0	**548**
2:00 PM	0	0	0	1	52	209	173	45	6	1	0	0	0	0	0	0	0	**487**
3:00 PM	0	0	0	3	35	173	168	37	2	1	0	0	0	0	0	0	0	**419**
4:00 PM	0	0	1	5	52	156	189	50	8	0	0	0	0	0	0	0	0	**461**
5:00 PM	0	0	0	1	44	153	175	48	10	0	0	0	0	0	0	0	0	**431**
6:00 PM	0	0	0	8	52	139	130	49	6	0	0	0	0	0	0	0	0	**384**
7:00 PM	0	0	0	9	39	111	72	16	3	0	0	0	0	0	0	0	0	**250**
8:00 PM	0	0	0	3	25	89	54	7	1	0	0	0	0	0	0	0	0	**179**
9:00 PM	0	0	0	3	23	52	32	8	0	0	0	0	0	0	0	0	0	**118**
10:00 PM	0	0	0	2	18	21	27	5	1	1	0	0	0	0	0	0	0	**75**
11:00 PM	0	0	1	3	9	16	11	3	0	0	0	0	0	0	0	0	0	**43**
Total	**0**	**0**	**5**	**70**	**769**	**2,362**	**2,096**	**524**	**64**	**8**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**5,899**
Percent	**0.0%**	**0.0%**	**0.1%**	**1.2%**	**13.0%**	**40.0%**	**35.5%**	**8.9%**	**1.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	34.6	mph	Mean (Average) Speed	34.6	mph
85th Percentile	38.9	mph	10 mph Pace	29.8 - 39.8	mph
95th Percentile	41.9	mph	Percent in Pace	75.6	%

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Saturday, September 17, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	1	17	8	1	0	1	0	0	0	0	0	0	0	0	**29**
1:00 AM	0	0	0	4	5	4	1	0	0	0	0	0	0	0	0	0	0	**14**
2:00 AM	0	0	0	2	5	11	3	0	0	0	0	0	0	0	0	0	0	**21**
3:00 AM	0	0	0	2	2	1	2	0	0	0	0	0	0	0	0	0	0	**7**
4:00 AM	0	0	1	0	2	2	2	0	0	0	0	0	0	0	0	0	0	**7**
5:00 AM	0	0	0	1	13	8	4	1	0	0	0	0	0	0	0	0	0	**27**
6:00 AM	0	0	0	8	20	26	6	0	0	0	0	0	0	0	0	0	0	**60**
7:00 AM	0	0	0	1	34	39	17	6	0	0	0	0	0	0	0	0	0	**97**
8:00 AM	0	0	1	8	52	60	23	8	2	1	0	0	0	0	0	0	0	**155**
9:00 AM	0	0	0	3	66	109	27	7	1	0	0	0	0	0	0	0	0	**213**
10:00 AM	0	0	0	12	114	141	36	3	0	1	0	0	0	0	0	0	0	**307**
11:00 AM	0	0	0	3	148	170	57	8	1	0	0	0	0	0	0	0	0	**387**
12:00 PM	0	0	0	8	130	257	63	10	0	0	0	0	0	0	0	0	0	**468**
1:00 PM	0	0	0	15	115	220	84	10	1	0	0	1	0	0	0	0	0	**446**
2:00 PM	0	0	0	6	115	250	82	16	1	0	0	0	0	0	0	0	0	**470**
3:00 PM	0	0	0	7	147	203	81	12	0	0	0	0	0	0	0	0	0	**450**
4:00 PM	0	0	0	3	114	203	94	10	4	0	0	0	0	0	0	0	0	**428**
5:00 PM	0	0	0	7	145	198	58	13	0	0	0	0	0	0	0	0	0	**421**
6:00 PM	0	0	0	13	102	180	70	10	1	0	0	0	0	0	0	0	0	**376**
7:00 PM	0	0	0	19	115	116	44	6	0	0	0	0	0	0	0	0	0	**300**
8:00 PM	0	0	0	12	73	102	32	4	0	0	0	0	0	0	0	0	0	**223**
9:00 PM	0	0	1	3	60	59	20	2	0	0	0	0	0	0	0	0	0	**145**
10:00 PM	0	0	0	2	24	33	14	4	1	0	0	0	0	0	0	0	0	**78**
11:00 PM	0	0	1	2	10	27	4	1	1	0	0	0	0	0	0	0	0	**46**
Total	**0**	**0**	**5**	**142**	**1,628**	**2,427**	**825**	**131**	**14**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**5,175**
Percent	**0.0%**	**0.0%**	**0.1%**	**2.7%**	**31.5%**	**46.9%**	**15.9%**	**2.5%**	**0.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	31.4	mph	Mean (Average) Speed	31.7	mph
85th Percentile	35.8	mph	10 mph Pace	26.3 - 36.3	mph
95th Percentile	38.6	mph	Percent in Pace	81.06	%

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Sunday, September 18, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	3	8	11	9	2	2	0	0	0	0	0	0	0	0	**35**
1:00 AM	0	0	0	0	4	16	2	1	0	0	0	0	0	0	0	0	0	**23**
2:00 AM	0	0	0	0	2	6	5	0	0	0	0	0	0	0	0	0	0	**13**
3:00 AM	0	0	0	3	3	6	2	2	0	1	0	0	0	0	0	0	0	**17**
4:00 AM	0	0	0	1	6	3	4	0	0	0	0	0	0	0	0	0	0	**14**
5:00 AM	0	0	0	2	5	14	3	2	2	1	0	0	0	0	0	0	0	**29**
6:00 AM	0	0	0	0	12	24	15	7	2	0	0	0	0	0	0	0	0	**60**
7:00 AM	0	0	0	4	12	39	39	12	2	1	0	0	0	0	0	0	0	**109**
8:00 AM	0	0	0	2	25	61	57	19	3	0	1	0	0	0	0	0	0	**168**
9:00 AM	0	0	0	2	31	120	86	24	2	0	0	0	0	0	0	0	0	**265**
10:00 AM	0	0	0	6	42	130	137	33	5	0	0	0	0	0	0	0	0	**353**
11:00 AM	0	0	0	12	50	174	168	41	4	0	0	0	0	0	0	0	0	**449**
12:00 PM	0	0	0	13	62	190	190	24	3	0	0	0	0	0	0	0	0	**482**
1:00 PM	0	0	0	1	47	172	176	50	7	1	0	0	0	0	0	0	0	**454**
2:00 PM	0	0	0	1	47	198	178	40	3	0	0	0	0	0	0	0	0	**467**
3:00 PM	0	0	0	3	43	179	195	38	10	0	1	0	0	0	0	0	0	**469**
4:00 PM	0	0	0	1	48	144	138	38	4	0	0	0	0	0	0	0	0	**373**
5:00 PM	0	0	0	0	40	137	174	32	3	0	0	0	0	0	0	0	0	**386**
6:00 PM	0	0	0	3	48	117	120	22	0	0	0	0	0	0	0	0	0	**310**
7:00 PM	0	0	0	4	54	104	51	8	0	1	0	0	0	0	0	0	0	**222**
8:00 PM	0	1	1	8	31	55	38	11	0	0	0	0	0	0	0	0	0	**145**
9:00 PM	0	0	0	3	30	41	19	5	1	0	0	0	0	0	0	0	0	**99**
10:00 PM	0	0	1	0	9	22	20	2	0	0	0	0	0	0	0	0	0	**54**
11:00 PM	0	0	0	0	12	12	4	1	0	0	0	0	0	0	0	0	0	**29**
Total	**0**	**1**	**2**	**72**	**671**	**1,975**	**1,830**	**414**	**53**	**5**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**5,025**
Percent	**0.0%**	**0.0%**	**0.0%**	**1.4%**	**13.4%**	**39.3%**	**36.4%**	**8.2%**	**1.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	34.6	mph	Mean (Average) Speed	34.5	mph
85th Percentile	38.8	mph	10 mph Pace	29.3 - 39.3	mph
95th Percentile	41.7	mph	Percent in Pace	75.8	%

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Sunday, September 18, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	8	14	9	1	1	1	0	0	0	0	0	0	0	0	**35**
1:00 AM	0	0	0	2	5	13	2	0	0	0	0	0	0	0	0	0	0	**22**
2:00 AM	0	0	0	0	5	12	3	0	0	1	0	0	0	0	0	0	0	**21**
3:00 AM	0	0	0	1	7	1	1	0	0	0	0	0	0	0	0	0	0	**10**
4:00 AM	0	0	0	0	3	3	3	0	0	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	0	0	1	5	4	3	1	1	0	0	0	0	0	0	0	0	**15**
6:00 AM	0	0	1	3	12	9	5	4	0	0	0	0	0	0	0	0	0	**34**
7:00 AM	0	0	0	3	23	22	7	0	0	0	0	0	0	0	0	0	0	**55**
8:00 AM	0	0	0	2	21	36	19	3	0	1	0	0	0	0	0	0	0	**82**
9:00 AM	0	0	0	5	55	77	31	6	2	0	0	0	0	0	0	0	0	**176**
10:00 AM	0	0	0	5	60	140	28	6	0	0	0	0	0	0	0	0	0	**239**
11:00 AM	0	0	0	10	98	133	52	2	0	0	0	0	0	0	0	0	0	**295**
12:00 PM	0	0	2	8	137	176	62	10	1	0	0	0	0	0	0	0	0	**396**
1:00 PM	0	0	0	8	140	216	57	6	0	0	0	0	0	0	0	0	0	**427**
2:00 PM	0	0	0	4	131	200	76	8	1	0	0	0	0	0	0	0	0	**420**
3:00 PM	0	0	0	20	134	178	76	4	0	0	0	0	0	0	0	0	0	**412**
4:00 PM	0	0	0	16	115	178	55	6	3	0	0	0	0	0	0	0	0	**373**
5:00 PM	0	0	0	12	119	170	55	5	0	0	0	0	0	0	0	0	0	**361**
6:00 PM	0	0	0	12	88	100	62	11	0	0	0	0	0	0	0	0	0	**273**
7:00 PM	0	0	0	8	88	101	28	4	0	0	0	0	0	0	0	0	0	**229**
8:00 PM	0	0	0	16	64	45	20	3	0	0	0	0	0	0	0	0	0	**148**
9:00 PM	0	0	0	1	31	33	9	2	0	0	0	0	0	0	0	0	0	**76**
10:00 PM	0	0	1	3	19	21	1	1	0	0	0	0	0	0	0	0	0	**46**
11:00 PM	0	0	0	2	11	6	0	0	1	0	0	0	0	0	0	0	0	**20**
Total	**0**	**0**	**5**	**150**	**1,385**	**1,883**	**656**	**83**	**10**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4,174**
Percent	**0.0%**	**0.0%**	**0.1%**	**3.6%**	**33.2%**	**45.1%**	**15.7%**	**2.0%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	31.2	mph	Mean (Average) Speed	31.5	mph
85th Percentile	35.5	mph	10 mph Pace	26.3 - 36.3	mph
95th Percentile	38.5	mph	Percent in Pace	80.76	%

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Monday, September 19, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	5	3	5	1	0	0	0	0	0	0	0	0	0	**14**
1:00 AM	0	0	0	2	5	4	2	0	0	0	0	0	0	0	0	0	0	**13**
2:00 AM	0	0	0	1	1	0	4	2	0	0	0	0	0	0	0	0	0	**8**
3:00 AM	0	0	0	0	2	8	4	1	1	0	0	0	0	0	0	0	0	**16**
4:00 AM	0	0	0	1	5	10	2	5	0	0	0	0	0	0	0	0	0	**23**
5:00 AM	0	0	0	2	19	40	38	11	3	0	0	0	0	0	0	0	0	**113**
6:00 AM	0	0	1	4	49	129	111	21	3	1	0	0	0	0	0	0	0	**319**
7:00 AM	0	0	3	21	172	328	198	21	0	0	0	0	0	0	0	0	0	**743**
8:00 AM	0	0	2	14	132	329	222	43	2	0	0	0	0	0	0	0	0	**744**
9:00 AM	0	0	0	8	53	174	149	27	2	0	0	0	0	0	0	0	0	**413**
10:00 AM	0	0	0	8	77	192	138	35	3	1	1	0	0	0	0	0	0	**455**
11:00 AM	0	1	1	21	129	298	191	45	6	0	1	0	0	0	0	0	0	**693**
12:00 PM	0	0	1	7	171	296	203	36	2	0	0	0	0	0	0	0	0	**716**
1:00 PM	0	0	0	26	173	405	236	35	3	1	0	0	0	0	0	0	0	**879**
2:00 PM	0	0	5	13	126	304	232	36	4	1	0	0	0	0	0	0	0	**721**
3:00 PM	0	0	0	3	103	341	287	50	2	0	0	0	0	0	0	0	0	**786**
4:00 PM	0	0	0	10	70	295	248	39	3	1	0	0	0	0	0	0	0	**666**
5:00 PM	0	0	0	3	71	285	179	39	7	0	0	0	0	0	0	0	0	**584**
6:00 PM	0	0	0	5	52	193	147	36	1	0	0	0	0	0	0	0	0	**434**
7:00 PM	0	0	0	5	59	116	71	18	0	0	0	0	0	0	0	0	0	**269**
8:00 PM	0	0	0	0	30	56	54	8	2	0	0	0	0	0	0	0	0	**150**
9:00 PM	0	0	0	1	19	42	13	9	1	0	0	0	0	0	0	0	0	**85**
10:00 PM	0	0	0	2	7	21	8	2	1	0	0	0	0	0	0	0	0	**41**
11:00 PM	0	0	0	2	4	7	6	1	0	0	0	0	0	0	0	0	0	**20**
Total	**0**	**1**	**13**	**159**	**1,534**	**3,876**	**2,748**	**521**	**46**	**5**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**8,905**
Percent	**0.0%**	**0.0%**	**0.1%**	**1.8%**	**17.2%**	**43.5%**	**30.9%**	**5.9%**	**0.5%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	33.7	mph	Mean (Average) Speed	33.7	mph
85th Percentile	38.0	mph	10 mph Pace	29.0 - 39.0	mph
95th Percentile	40.6	mph	Percent in Pace	76.8	%

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Monday, September 19, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	1	10	1	2	2	0	0	0	0	0	0	0	0	0	**17**
1:00 AM	0	0	0	1	3	3	0	0	0	0	0	0	0	0	0	0	0	**7**
2:00 AM	0	0	0	0	2	0	4	0	0	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	0	0	0	2	1	2	1	0	0	0	0	0	0	0	0	0	**6**
4:00 AM	0	0	0	0	4	3	3	0	0	0	0	0	0	0	0	0	0	**10**
5:00 AM	0	0	0	2	8	9	1	2	0	0	0	0	0	0	0	0	0	**22**
6:00 AM	0	0	0	2	24	46	9	2	3	0	0	0	0	0	0	0	0	**86**
7:00 AM	0	0	0	4	70	140	21	3	0	0	0	0	0	0	0	0	0	**238**
8:00 AM	0	0	3	5	94	125	53	10	0	0	0	0	0	0	0	0	0	**290**
9:00 AM	0	0	1	15	80	89	33	8	0	0	0	0	0	0	0	0	0	**226**
10:00 AM	0	0	0	13	130	133	46	4	0	0	0	0	0	0	0	0	0	**326**
11:00 AM	0	1	0	6	179	181	66	5	1	0	0	0	0	0	0	0	0	**439**
12:00 PM	0	0	0	15	186	185	43	2	1	0	0	0	0	0	0	0	0	**432**
1:00 PM	0	0	1	18	130	227	41	4	1	1	0	0	0	0	0	0	0	**423**
2:00 PM	0	0	0	20	215	290	71	5	0	0	0	0	0	0	0	0	0	**601**
3:00 PM	0	0	0	27	256	306	92	18	1	0	0	0	0	0	0	0	0	**700**
4:00 PM	0	0	0	20	287	404	103	11	0	0	0	0	0	0	0	0	0	**825**
5:00 PM	0	0	0	44	451	392	64	3	2	0	0	0	0	0	0	0	0	**956**
6:00 PM	0	0	2	22	276	254	63	6	0	0	0	0	0	0	0	0	0	**623**
7:00 PM	0	0	1	21	123	144	28	3	0	0	0	0	0	0	0	0	0	**320**
8:00 PM	0	0	0	11	76	60	20	3	1	0	0	0	0	0	0	0	0	**171**
9:00 PM	0	0	1	6	40	48	12	2	0	0	0	0	0	0	0	0	0	**109**
10:00 PM	0	0	1	1	19	17	4	3	0	0	0	0	0	0	0	0	0	**45**
11:00 PM	0	0	0	0	5	11	1	0	0	0	0	0	0	0	0	0	0	**17**
Total	**0**	**1**	**11**	**254**	**2,670**	**3,069**	**782**	**97**	**10**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6,895**
Percent	**0.0%**	**0.0%**	**0.2%**	**3.7%**	**38.7%**	**44.5%**	**11.3%**	**1.4%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	30.6	mph	Mean (Average) Speed	30.9	mph
85th Percentile	34.6	mph	10 mph Pace	25.8 - 35.8	mph
95th Percentile	37.5	mph	Percent in Pace	83.9	%

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Tuesday, September 20, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	2	7	3	0	0	0	0	0	0	0	0	0	0	**12**
1:00 AM	0	0	0	1	5	3	0	0	0	0	0	0	0	0	0	0	0	**9**
2:00 AM	0	0	0	0	0	4	2	0	0	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	0	0	0	1	8	3	1	0	0	0	0	0	0	0	0	0	**13**
4:00 AM	0	0	0	1	4	17	9	1	0	0	0	0	0	0	0	0	0	**32**
5:00 AM	0	0	0	3	11	50	39	13	2	1	0	0	0	0	0	0	0	**119**
6:00 AM	0	0	3	10	62	162	92	27	3	0	0	0	0	0	0	0	0	**359**
7:00 AM	0	0	0	25	249	327	122	17	0	0	0	0	0	0	0	0	0	**740**
8:00 AM	0	0	1	13	186	402	153	18	2	1	0	0	0	0	0	0	0	**776**
9:00 AM	0	0	0	5	54	201	155	26	2	0	0	0	0	0	0	0	0	**443**
10:00 AM	0	0	0	5	78	210	123	27	2	0	0	0	0	0	0	0	0	**445**
11:00 AM	0	0	0	6	94	183	118	21	6	0	0	0	0	0	0	0	0	**428**
12:00 PM	0	0	0	2	85	210	175	35	3	0	0	0	0	0	0	0	0	**510**
1:00 PM	0	0	0	17	78	229	117	25	4	0	0	0	0	0	0	0	0	**470**
2:00 PM	0	0	0	4	52	206	144	26	3	0	0	0	0	0	0	0	0	**435**
3:00 PM	1	0	0	9	93	254	150	23	3	0	0	0	0	0	0	0	0	**533**
4:00 PM	0	0	0	8	97	238	154	27	1	1	0	0	0	0	0	0	0	**526**
5:00 PM	0	0	1	10	73	271	209	19	0	1	0	0	0	0	0	0	0	**584**
6:00 PM	0	0	0	7	70	176	94	23	1	0	0	0	0	0	0	0	0	**371**
7:00 PM	0	0	1	24	62	118	59	12	1	0	0	0	0	0	0	0	0	**277**
8:00 PM	0	0	0	3	27	73	33	5	0	0	0	0	0	0	0	0	0	**141**
9:00 PM	0	0	0	4	13	47	12	6	0	0	0	0	0	0	0	0	0	**82**
10:00 PM	0	0	0	3	10	16	9	5	0	0	0	0	0	0	0	0	0	**43**
11:00 PM	0	0	0	1	8	9	2	1	0	0	0	0	0	0	0	0	0	**21**
Total	**1**	**0**	**6**	**161**	**1,414**	**3,421**	**1,977**	**358**	**33**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7,375**
Percent	**0.0%**	**0.0%**	**0.1%**	**2.2%**	**19.2%**	**46.4%**	**26.8%**	**4.9%**	**0.4%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	33.1	mph	Mean (Average) Speed	33.2	mph
85th Percentile	37.2	mph	10 mph Pace	28.2 - 38.2	mph
95th Percentile	40.2	mph	Percent in Pace	78.4	%

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Tuesday, September 20, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	12	4	1	1	0	0	0	0	0	0	0	0	0	**18**
1:00 AM	0	1	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	0	0	4	6	1	0	0	0	0	0	0	0	0	0	0	**11**
5:00 AM	0	0	0	3	9	9	0	2	0	0	0	0	0	0	0	0	0	**23**
6:00 AM	0	0	0	4	45	40	11	1	0	0	0	0	0	0	0	0	0	**101**
7:00 AM	0	0	1	4	89	109	13	2	0	0	0	0	0	0	0	0	0	**218**
8:00 AM	0	0	0	11	124	137	27	8	1	0	0	0	0	0	0	0	0	**308**
9:00 AM	0	0	0	7	65	149	48	4	0	0	0	0	0	0	0	0	0	**273**
10:00 AM	0	0	0	13	114	134	33	2	0	0	0	0	0	0	0	0	0	**296**
11:00 AM	0	0	0	7	148	146	56	4	0	0	0	0	0	0	0	0	0	**361**
12:00 PM	0	0	1	25	147	201	34	5	1	0	0	0	0	0	0	0	0	**414**
1:00 PM	0	0	0	24	155	178	55	2	1	0	0	0	0	0	0	0	0	**415**
2:00 PM	0	0	0	25	159	161	47	6	0	0	0	0	0	0	0	0	0	**398**
3:00 PM	0	0	1	33	275	224	63	6	1	0	0	0	0	0	0	0	0	**603**
4:00 PM	0	0	2	20	313	304	54	3	0	0	0	0	0	0	0	0	0	**696**
5:00 PM	0	0	0	36	415	347	47	2	0	0	0	0	0	0	0	0	0	**847**
6:00 PM	0	0	1	31	301	304	52	7	0	0	0	0	0	0	0	0	0	**696**
7:00 PM	0	0	1	24	180	136	22	2	0	0	0	0	0	0	0	0	0	**365**
8:00 PM	0	0	0	13	90	78	10	3	0	0	0	0	0	0	0	0	0	**194**
9:00 PM	0	0	4	7	41	32	10	4	0	0	0	0	0	0	0	0	0	**98**
10:00 PM	0	0	0	5	16	14	14	2	0	0	0	0	0	0	0	0	0	**51**
11:00 PM	0	0	0	2	7	4	2	0	0	0	0	0	0	0	0	0	0	**15**
Total	**0**	**1**	**11**	**300**	**2,713**	**2,717**	**600**	**66**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6,412**
Percent	**0.0%**	**0.0%**	**0.2%**	**4.7%**	**42.3%**	**42.4%**	**9.4%**	**1.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	30.2	mph	Mean (Average) Speed	30.5	mph
85th Percentile	34.1	mph	10 mph Pace	25.4 - 35.4	mph
95th Percentile	36.8	mph	Percent in Pace	84.67	%

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Wednesday, September 21, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	4	1	0	2	0	0	0	0	0	0	0	0	0	**7**
1:00 AM	0	0	0	0	1	4	4	2	0	0	0	0	0	0	0	0	0	**11**
2:00 AM	0	0	0	1	3	0	1	1	0	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	0	0	0	4	6	2	0	0	0	0	0	0	0	0	0	0	**12**
4:00 AM	0	0	0	0	6	12	7	2	0	1	0	0	0	0	0	0	0	**28**
5:00 AM	0	0	0	2	11	44	46	17	3	1	0	0	0	0	0	0	0	**124**
6:00 AM	0	0	0	0	47	143	125	28	7	1	0	0	0	0	0	0	0	**351**
7:00 AM	0	0	5	20	150	365	163	26	2	0	0	0	0	0	0	0	0	**731**
8:00 AM	0	0	0	8	130	367	187	26	6	0	0	0	0	0	0	0	0	**724**
9:00 AM	0	0	1	7	90	188	123	33	4	0	0	0	0	0	0	0	0	**446**
10:00 AM	0	0	1	9	96	194	108	19	3	1	0	0	0	0	0	0	0	**431**
11:00 AM	0	0	1	12	92	197	125	21	2	0	0	0	0	0	0	0	0	**450**
12:00 PM	0	0	0	7	100	230	123	19	3	0	0	0	0	0	0	0	0	**482**
1:00 PM	0	0	0	10	89	233	160	26	1	0	0	0	0	0	0	0	0	**519**
2:00 PM	0	0	5	16	77	234	136	30	3	0	0	0	0	0	0	0	0	**501**
3:00 PM	0	0	2	4	82	220	154	28	4	0	0	0	0	0	0	0	0	**494**
4:00 PM	0	0	0	2	76	242	157	31	1	1	0	0	0	0	0	0	0	**510**
5:00 PM	0	0	0	9	83	235	171	25	1	0	1	0	0	0	0	0	0	**525**
6:00 PM	0	0	1	13	83	159	111	12	1	1	0	0	0	0	0	0	0	**381**
7:00 PM	0	0	0	3	49	126	62	14	3	0	0	0	0	0	0	0	0	**257**
8:00 PM	1	0	0	3	16	43	30	6	0	2	0	0	0	0	0	0	0	**101**
9:00 PM	0	0	0	2	24	38	11	7	0	0	0	0	0	0	0	0	0	**82**
10:00 PM	0	0	0	1	12	17	17	0	3	0	0	0	0	0	0	0	0	**50**
11:00 PM	0	0	0	1	3	10	5	1	0	0	0	0	0	0	0	0	0	**20**
Total	**1**	**0**	**16**	**130**	**1,328**	**3,308**	**2,028**	**376**	**47**	**8**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**7,243**
Percent	**0.0%**	**0.0%**	**0.2%**	**1.8%**	**18.3%**	**45.7%**	**28.0%**	**5.2%**	**0.6%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	33.3	mph	Mean (Average) Speed	33.4	mph
85th Percentile	37.7	mph	10 mph Pace	28.4 - 38.4	mph
95th Percentile	40.4	mph	Percent in Pace	77.8	%

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Wednesday, September 21, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	1	7	5	1	0	0	0	0	0	0	0	0	0	0	**14**
1:00 AM	0	0	0	1	4	2	2	0	0	0	0	0	0	0	0	0	0	**9**
2:00 AM	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	0	0	0	5	5	2	0	1	0	0	0	0	0	0	0	0	**13**
5:00 AM	0	0	0	2	12	12	2	1	0	0	0	0	0	0	0	0	0	**29**
6:00 AM	0	0	0	5	26	48	13	5	0	0	0	0	0	0	0	0	0	**97**
7:00 AM	0	0	0	10	89	115	35	1	3	0	0	0	0	0	0	0	0	**253**
8:00 AM	0	0	1	18	67	162	64	6	0	0	0	0	0	0	0	0	0	**318**
9:00 AM	0	0	4	10	71	125	31	8	0	0	0	0	0	0	0	0	0	**249**
10:00 AM	3	0	2	18	115	132	34	3	0	0	0	0	0	0	0	0	0	**307**
11:00 AM	0	0	0	15	186	116	27	3	1	0	0	0	0	0	0	0	0	**348**
12:00 PM	0	0	0	24	163	157	44	2	0	0	0	0	0	0	0	0	0	**390**
1:00 PM	0	0	1	17	185	256	50	7	0	0	0	0	0	0	0	0	0	**516**
2:00 PM	0	0	0	32	215	204	56	1	0	0	0	0	0	0	0	0	0	**508**
3:00 PM	0	0	0	24	218	280	45	5	1	0	0	0	0	0	0	0	0	**573**
4:00 PM	0	0	2	20	239	300	60	7	0	0	0	0	0	0	0	0	0	**628**
5:00 PM	0	0	1	30	369	429	47	1	0	0	1	0	0	0	0	0	0	**878**
6:00 PM	0	0	1	41	260	278	36	2	0	0	0	0	0	0	0	0	0	**618**
7:00 PM	0	0	1	33	161	129	31	3	0	0	0	0	0	0	0	0	0	**358**
8:00 PM	0	0	0	10	65	83	18	3	0	0	0	0	0	0	0	0	0	**179**
9:00 PM	0	0	1	5	38	28	15	1	1	0	0	0	0	0	0	0	0	**89**
10:00 PM	0	0	0	1	16	21	6	1	0	0	0	0	0	0	0	0	0	**45**
11:00 PM	0	0	0	1	5	11	4	3	0	0	0	0	0	0	0	0	0	**24**
Total	**3**	**0**	**14**	**319**	**2,519**	**2,900**	**623**	**63**	**7**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**6,449**
Percent	**0.0%**	**0.0%**	**0.2%**	**4.9%**	**39.1%**	**45.0%**	**9.7%**	**1.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	30.4	mph	Mean (Average) Speed	30.6	mph
85th Percentile	34.1	mph	10 mph Pace	25.4 - 35.4	mph
95th Percentile	36.8	mph	Percent in Pace	84.2	%

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Thursday, September 22, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	7	3	3	2	0	0	0	0	0	0	0	0	0	**15**
1:00 AM	0	0	0	1	1	5	4	0	0	0	0	0	0	0	0	0	0	**11**
2:00 AM	0	0	0	0	1	3	1	0	1	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	0	0	0	4	10	4	3	0	0	0	0	0	0	0	0	0	**21**
4:00 AM	0	0	0	2	3	14	6	0	0	0	0	0	0	0	0	0	0	**25**
5:00 AM	0	0	0	0	21	36	41	11	4	0	0	0	0	0	0	0	0	**113**
6:00 AM	0	0	1	7	52	142	92	32	9	0	0	0	0	0	0	0	0	**335**
7:00 AM	0	0	0	5	166	296	177	29	3	0	0	0	0	0	0	0	0	**676**
8:00 AM	0	0	0	17	165	343	171	22	1	1	0	0	0	0	0	0	0	**720**
9:00 AM	0	0	2	6	104	198	131	13	2	0	0	0	0	0	0	0	0	**456**
10:00 AM	0	0	1	10	83	200	106	15	2	0	0	0	0	0	0	0	0	**417**
11:00 AM	0	0	0	6	78	162	144	32	2	0	0	0	0	0	0	0	0	**424**
12:00 PM	0	0	1	14	87	235	143	32	3	0	0	0	0	0	0	0	0	**515**
1:00 PM	0	0	0	3	41	232	125	22	2	1	0	0	0	0	0	0	0	**426**
2:00 PM	0	0	3	18	65	182	150	36	2	0	0	0	0	0	0	0	0	**456**
3:00 PM	0	0	1	3	71	278	172	31	3	0	0	0	0	0	0	0	0	**559**
4:00 PM	0	0	0	5	94	238	181	22	3	0	0	0	0	0	0	0	0	**543**
5:00 PM	0	0	0	6	37	240	210	34	3	0	0	0	0	0	0	0	0	**530**
6:00 PM	0	0	0	0	37	174	121	26	4	1	0	0	0	0	0	0	0	**363**
7:00 PM	0	0	0	8	54	121	81	13	1	1	0	0	0	0	0	0	0	**279**
8:00 PM	0	0	1	6	41	108	48	9	2	0	1	0	0	0	0	0	0	**216**
9:00 PM	0	0	0	0	17	54	24	4	0	0	0	0	0	0	0	0	0	**99**
10:00 PM	0	0	0	3	16	22	11	2	0	0	0	0	0	0	0	0	0	**54**
11:00 PM	0	0	0	1	4	9	2	2	0	0	0	0	0	0	0	0	0	**18**
Total	**0**	**0**	**10**	**121**	**1,249**	**3,305**	**2,148**	**392**	**47**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**7,277**
Percent	**0.0%**	**0.0%**	**0.1%**	**1.7%**	**17.2%**	**45.4%**	**29.5%**	**5.4%**	**0.6%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	33.4	mph	Mean (Average) Speed	33.6	mph
85th Percentile	37.8	mph	10 mph Pace	28.5 - 38.5	mph
95th Percentile	40.5	mph	Percent in Pace	78.4	%

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Thursday, September 22, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	3	12	10	1	0	0	0	0	0	0	0	0	0	0	**26**
1:00 AM	0	0	0	1	2	1	1	0	1	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	0	0	1	2	0	1	0	0	0	0	0	0	0	0	0	0	**4**
3:00 AM	0	0	0	2	2	5	0	0	0	0	0	0	0	0	0	0	0	**9**
4:00 AM	0	0	0	1	7	2	1	0	0	0	0	0	0	0	0	0	0	**11**
5:00 AM	0	0	0	2	10	9	2	0	1	0	0	0	0	0	0	0	0	**24**
6:00 AM	0	0	0	3	20	42	16	3	0	0	0	0	0	0	0	0	0	**84**
7:00 AM	0	0	1	13	67	123	28	3	1	0	0	1	0	0	0	0	0	**237**
8:00 AM	0	0	0	10	107	145	30	8	0	0	0	0	0	0	0	0	0	**300**
9:00 AM	0	0	1	21	106	95	28	5	0	0	0	0	0	0	0	0	0	**256**
10:00 AM	0	0	0	19	110	120	39	6	0	0	0	0	0	0	0	0	0	**294**
11:00 AM	0	0	0	23	102	150	41	5	0	0	0	0	0	0	0	0	0	**321**
12:00 PM	0	0	2	31	145	194	55	4	0	0	0	0	0	0	0	0	0	**431**
1:00 PM	0	0	5	14	167	205	42	4	0	0	0	0	0	0	0	0	0	**437**
2:00 PM	0	0	0	18	198	183	57	7	0	0	0	0	0	0	0	0	0	**463**
3:00 PM	0	0	0	35	200	287	80	5	1	0	0	0	0	0	0	0	0	**608**
4:00 PM	0	0	0	16	273	378	58	13	0	0	0	0	0	0	0	0	0	**738**
5:00 PM	0	0	0	12	348	376	108	7	1	0	0	0	0	0	0	0	0	**852**
6:00 PM	0	0	4	33	210	242	74	7	1	0	0	0	0	0	0	0	0	**571**
7:00 PM	0	0	0	10	127	149	37	6	0	0	0	0	0	0	0	0	0	**329**
8:00 PM	0	0	2	7	73	95	43	3	0	0	0	0	0	0	0	0	0	**223**
9:00 PM	0	0	1	4	50	67	15	2	1	0	0	0	0	0	0	0	0	**140**
10:00 PM	0	0	1	3	14	18	14	2	1	0	0	0	0	0	0	0	0	**53**
11:00 PM	0	0	0	0	15	2	4	1	0	0	0	0	0	0	0	0	0	**22**
Total	**0**	**0**	**17**	**282**	**2,367**	**2,898**	**775**	**91**	**8**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**6,439**
Percent	**0.0%**	**0.0%**	**0.3%**	**4.4%**	**36.8%**	**45.0%**	**12.0%**	**1.4%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	30.8	mph	Mean (Average) Speed	30.9	mph
85th Percentile	34.7	mph	10 mph Pace	25.6 - 35.6	mph
95th Percentile	37.5	mph	Percent in Pace	82.34	%

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Friday, September 23, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	10	7	2	0	0	0	0	0	0	0	0	0	0	**19**
1:00 AM	0	0	0	0	0	3	3	0	0	0	0	0	1	0	0	0	0	**7**
2:00 AM	0	0	0	2	1	2	0	0	0	0	0	0	0	0	0	0	0	**5**
3:00 AM	0	0	0	0	9	4	4	2	0	0	0	0	0	0	0	0	0	**19**
4:00 AM	0	0	0	1	4	9	5	3	1	0	0	0	0	0	0	0	0	**23**
5:00 AM	0	0	0	3	20	47	18	10	1	1	0	0	0	0	0	0	0	**100**
6:00 AM	0	0	0	5	56	123	103	22	4	0	0	0	0	0	0	0	0	**313**
7:00 AM	0	0	0	5	99	289	149	49	3	1	0	0	0	0	0	0	0	**595**
8:00 AM	0	0	0	7	62	256	169	32	2	0	0	0	0	0	0	0	0	**528**
9:00 AM	0	0	0	4	77	197	165	47	7	0	0	0	0	0	0	0	0	**497**
10:00 AM	0	1	4	52	173	216	128	37	1	0	0	0	0	0	0	0	0	**612**
11:00 AM	0	0	1	13	85	218	154	34	2	0	0	0	0	0	0	0	0	**507**
12:00 PM	0	0	0	4	85	249	145	24	3	1	0	0	0	0	0	0	0	**511**
1:00 PM	0	0	7	5	60	254	146	28	5	0	0	0	0	0	0	0	0	**505**
2:00 PM	0	0	3	10	64	201	185	45	3	1	0	0	0	0	0	0	0	**512**
3:00 PM	0	0	0	0	54	256	223	42	6	0	0	0	0	0	0	0	0	**581**
4:00 PM	0	0	0	5	47	170	240	49	6	1	0	0	0	0	0	0	0	**518**
5:00 PM	0	0	0	2	61	250	225	46	2	0	0	0	0	0	0	0	0	**586**
6:00 PM	0	0	1	9	81	210	166	42	2	0	0	0	0	0	0	0	0	**511**
7:00 PM	0	0	0	8	77	140	85	14	3	0	0	0	0	0	0	0	0	**327**
8:00 PM	0	0	0	2	30	85	51	10	1	0	1	0	0	0	0	0	0	**180**
9:00 PM	0	0	0	1	28	56	31	6	0	0	0	0	0	0	0	0	0	**122**
10:00 PM	0	0	0	1	27	29	20	4	0	0	0	0	0	0	0	0	0	**81**
11:00 PM	0	0	0	0	8	12	4	1	1	0	0	0	0	0	0	0	0	**26**
Total	**0**	**1**	**16**	**139**	**1,218**	**3,283**	**2,421**	**547**	**53**	**5**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**7,685**
Percent	**0.0%**	**0.0%**	**0.2%**	**1.8%**	**15.8%**	**42.7%**	**31.5%**	**7.1%**	**0.7%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	33.9	mph	Mean (Average) Speed	33.9	mph
85th Percentile	38.3	mph	10 mph Pace	28.7 - 38.7	mph
95th Percentile	41.2	mph	Percent in Pace	75.7	%

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Friday, September 23, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	3	13	6	1	0	0	0	0	0	0	0	0	0	0	**24**
1:00 AM	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	0	0	1	4	0	1	0	0	0	0	0	0	0	0	0	0	**6**
4:00 AM	0	0	0	2	2	6	0	0	0	0	0	0	0	0	0	0	0	**10**
5:00 AM	0	0	0	5	13	6	2	1	0	0	0	0	0	0	0	0	0	**27**
6:00 AM	0	0	1	5	27	57	8	1	2	0	0	0	0	0	0	0	0	**101**
7:00 AM	0	0	0	8	85	108	18	2	1	0	0	0	0	0	0	0	0	**222**
8:00 AM	0	0	0	12	107	115	36	11	0	0	0	0	0	0	0	0	0	**281**
9:00 AM	0	0	0	8	83	102	33	6	0	0	0	0	0	0	0	0	0	**232**
10:00 AM	0	1	0	21	133	134	39	4	0	0	0	0	0	0	0	0	0	**332**
11:00 AM	0	0	0	15	167	178	50	5	0	0	0	0	0	0	0	0	0	**415**
12:00 PM	0	0	0	35	192	193	56	4	0	0	0	0	0	0	0	0	0	**480**
1:00 PM	0	0	1	14	148	247	49	12	0	0	0	0	0	0	0	0	0	**471**
2:00 PM	0	0	1	28	201	170	60	7	0	0	0	0	0	0	0	0	0	**467**
3:00 PM	0	1	1	18	229	339	103	6	1	0	0	0	0	0	0	0	0	**698**
4:00 PM	0	0	0	24	254	353	102	11	3	0	0	0	0	0	0	0	0	**747**
5:00 PM	0	2	0	12	286	400	106	5	1	0	0	0	0	0	0	0	0	**812**
6:00 PM	0	0	0	10	169	288	97	16	0	0	0	0	0	0	0	0	0	**580**
7:00 PM	0	0	0	21	125	149	44	12	2	0	0	0	0	0	0	0	0	**353**
8:00 PM	0	0	0	10	87	114	29	4	0	0	0	0	0	0	0	0	0	**244**
9:00 PM	0	0	0	9	77	75	16	1	0	0	0	0	0	0	0	0	0	**178**
10:00 PM	0	0	1	16	69	40	19	3	0	0	0	0	0	0	0	0	0	**148**
11:00 PM	0	0	0	2	19	17	6	0	0	0	0	0	0	0	0	0	0	**44**
Total	**0**	**4**	**6**	**281**	**2,492**	**3,102**	**875**	**111**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6,881**
Percent	**0.0%**	**0.1%**	**0.1%**	**4.1%**	**36.2%**	**45.1%**	**12.7%**	**1.6%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	30.9	mph	Mean (Average) Speed	31	mph
85th Percentile	34.9	mph	10 mph Pace	26.1 - 36.1	mph
95th Percentile	37.6	mph	Percent in Pace	81.83	%

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Total Study Average
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	6	6	4	1	0	0	0	0	0	0	0	0	0	**17**
1:00 AM	0	0	0	1	4	6	2	1	0	0	0	0	0	0	0	0	0	**14**
2:00 AM	0	0	0	1	2	3	2	1	0	0	0	0	0	0	0	0	0	**9**
3:00 AM	0	0	0	0	4	7	3	2	0	0	0	0	0	0	0	0	0	**16**
4:00 AM	0	0	0	1	5	10	5	2	0	0	0	0	0	0	0	0	0	**23**
5:00 AM	0	0	0	2	13	35	29	10	2	1	0	0	0	0	0	0	0	**92**
6:00 AM	0	0	1	4	42	108	82	21	4	1	0	0	0	0	0	0	0	**263**
7:00 AM	0	0	1	12	126	247	131	26	2	0	0	0	0	0	0	0	0	**545**
8:00 AM	0	0	0	9	107	264	150	27	2	0	0	0	0	0	0	0	0	**559**
9:00 AM	0	0	0	5	68	175	129	29	3	0	0	0	0	0	0	0	0	**409**
10:00 AM	0	0	1	13	84	188	129	27	3	0	0	0	0	0	0	0	0	**445**
11:00 AM	0	0	0	10	84	205	154	32	4	0	0	0	0	0	0	0	0	**489**
12:00 PM	0	0	0	7	94	233	169	31	3	0	0	0	0	0	0	0	0	**537**
1:00 PM	0	0	1	10	79	252	165	33	4	0	0	0	0	0	0	0	0	**544**
2:00 PM	0	0	2	9	69	219	171	37	3	0	0	0	0	0	0	0	0	**510**
3:00 PM	0	0	0	4	69	243	193	36	4	0	0	0	0	0	0	0	0	**549**
4:00 PM	0	0	0	5	69	212	187	37	4	1	0	0	0	0	0	0	0	**515**
5:00 PM	0	0	0	4	58	224	192	35	4	0	0	0	0	0	0	0	0	**517**
6:00 PM	0	0	0	6	60	167	127	30	2	0	0	0	0	0	0	0	0	**392**
7:00 PM	0	0	0	9	56	119	69	14	2	0	0	0	0	0	0	0	0	**269**
8:00 PM	0	0	0	4	29	73	44	8	1	0	0	0	0	0	0	0	0	**159**
9:00 PM	0	0	0	2	22	47	20	6	0	0	0	0	0	0	0	0	0	**97**
10:00 PM	0	0	0	2	14	21	16	3	1	0	0	0	0	0	0	0	0	**57**
11:00 PM	0	0	0	1	7	11	5	1	0	0	0	0	0	0	0	0	0	**25**
Total	**0**	**0**	**6**	**121**	**1,171**	**3,075**	**2,178**	**450**	**48**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7,052**
Percent	**0.0%**	**0.0%**	**0.1%**	**1.7%**	**16.6%**	**43.6%**	**30.9%**	**6.4%**	**0.7%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	33.7	mph	Mean (Average) Speed	33.8	mph
85th Percentile	38.1	mph	10 mph Pace	28.7 - 38.7	mph
95th Percentile	40.9	mph	Percent in Pace	76.6	%

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 to 9/23/2022
Site Code: 09

Total Study Average
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	2	12	6	1	1	0	0	0	0	0	0	0	0	0	**23**
1:00 AM	0	0	0	2	3	4	1	0	0	0	0	0	0	0	0	0	0	**10**
2:00 AM	0	0	0	1	3	4	2	0	0	0	0	0	0	0	0	0	0	**10**
3:00 AM	0	0	0	1	3	1	1	0	0	0	0	0	0	0	0	0	0	**6**
4:00 AM	0	0	0	0	4	4	2	0	0	0	0	0	0	0	0	0	0	**10**
5:00 AM	0	0	0	2	10	8	2	1	0	0	0	0	0	0	0	0	0	**23**
6:00 AM	0	0	0	4	25	38	10	2	1	0	0	0	0	0	0	0	0	**80**
7:00 AM	0	0	0	6	65	94	20	2	1	0	0	0	0	0	0	0	0	**188**
8:00 AM	0	0	1	9	82	111	36	8	0	0	0	0	0	0	0	0	0	**247**
9:00 AM	0	0	1	10	75	107	33	6	0	0	0	0	0	0	0	0	0	**232**
10:00 AM	0	0	0	14	111	133	36	4	0	0	0	0	0	0	0	0	0	**298**
11:00 AM	0	0	0	11	147	153	50	5	0	0	0	0	0	0	0	0	0	**366**
12:00 PM	0	0	1	21	157	195	51	5	0	0	0	0	0	0	0	0	0	**430**
1:00 PM	0	0	1	16	149	221	54	6	0	0	0	0	0	0	0	0	0	**447**
2:00 PM	0	0	0	19	176	208	64	7	0	0	0	0	0	0	0	0	0	**474**
3:00 PM	0	0	0	23	208	260	77	8	1	0	0	0	0	0	0	0	0	**577**
4:00 PM	0	0	1	17	228	303	75	9	1	0	0	0	0	0	0	0	0	**634**
5:00 PM	0	0	0	22	305	330	69	5	1	0	0	0	0	0	0	0	0	**732**
6:00 PM	0	0	1	23	201	235	65	8	0	0	0	0	0	0	0	0	0	**533**
7:00 PM	0	0	0	19	131	132	33	5	0	0	0	0	0	0	0	0	0	**320**
8:00 PM	0	0	0	11	75	82	25	3	0	0	0	0	0	0	0	0	0	**196**
9:00 PM	0	0	1	5	48	49	14	2	0	0	0	0	0	0	0	0	0	**119**
10:00 PM	0	0	1	4	25	23	10	2	0	0	0	0	0	0	0	0	0	**65**
11:00 PM	0	0	0	1	10	11	3	1	0	0	0	0	0	0	0	0	0	**26**
Total	**0**	**0**	**9**	**243**	**2,253**	**2,712**	**734**	**90**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6,046**
Percent	**0.0%**	**0.0%**	**0.1%**	**4.0%**	**37.3%**	**44.9%**	**12.1%**	**1.5%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	30.8	mph	Mean (Average) Speed	31.0	mph
85th Percentile	34.8	mph	10 mph Pace	26.1 - 36.1	mph
95th Percentile	37.6	mph	Percent in Pace	82.5	%

Location: Midland Ave BTWN W Wulfsohn & Devereux Rd
Date Range: 9/17/2022 - 9/23/2022
Site Code: 09

	Saturday			Sunday			Monday			Tuesday			Wednesday			Thursday			Friday			Mid-Week Average		
	9/17/2022			9/18/2022			9/19/2022			9/20/2022			9/21/2022			9/22/2022			9/23/2022					
Time	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total
12:00 AM	24	29	53	35	35	70	14	17	31	12	18	30	7	14	21	15	26	41	19	24	43	11	19	31
1:00 AM	17	14	31	23	22	45	13	7	20	9	6	15	11	9	20	11	6	17	7	3	10	10	7	17
2:00 AM	15	21	36	13	21	34	8	6	14	6	2	8	6	2	8	6	4	10	5	6	11	6	3	9
3:00 AM	17	7	24	17	10	27	16	6	22	13	3	16	12	4	16	21	9	30	19	6	25	15	5	21
4:00 AM	17	7	24	14	9	23	23	10	33	32	11	43	28	13	41	25	11	36	23	10	33	28	12	40
5:00 AM	47	27	74	29	15	44	113	22	135	119	23	142	124	29	153	113	24	137	100	27	127	119	25	144
6:00 AM	100	60	160	60	34	94	319	86	405	359	101	460	351	97	448	335	84	419	313	101	414	348	94	442
7:00 AM	216	97	313	109	55	164	743	238	981	740	218	958	731	253	984	676	237	913	595	222	817	716	236	952
8:00 AM	265	155	420	168	82	250	744	290	1,034	776	308	1,084	724	318	1,042	720	300	1,020	528	281	809	740	309	1,049
9:00 AM	348	213	561	265	176	441	413	226	639	443	273	716	446	249	695	456	256	712	497	232	729	448	259	708
10:00 AM	410	307	717	353	239	592	455	326	781	445	296	741	431	307	738	417	294	711	612	332	944	431	299	730
11:00 AM	482	387	869	449	295	744	693	439	1,132	428	361	789	450	348	798	424	321	745	507	415	922	434	343	777
12:00 PM	546	468	1,014	482	396	878	716	432	1,148	510	414	924	482	390	872	515	431	946	511	480	991	502	412	914
1:00 PM	548	446	994	454	427	881	879	423	1,302	470	415	885	519	516	1,035	426	437	863	505	471	976	472	456	928
2:00 PM	487	470	957	467	420	887	721	601	1,322	435	398	833	501	508	1,009	456	463	919	512	467	979	464	456	920
3:00 PM	419	450	869	469	412	881	786	700	1,486	533	603	1,136	494	573	1,067	559	608	1,167	581	698	1,279	529	595	1,123
4:00 PM	461	428	889	373	373	746	666	825	1,491	526	696	1,222	510	628	1,138	543	738	1,281	518	747	1,265	526	687	1,214
5:00 PM	431	421	852	386	361	747	584	956	1,540	584	847	1,431	525	878	1,403	530	852	1,382	586	812	1,398	546	859	1,405
6:00 PM	384	376	760	310	273	583	434	623	1,057	371	696	1,067	381	618	999	363	571	934	511	580	1,091	372	628	1,000
7:00 PM	250	300	550	222	229	451	269	320	589	277	365	642	257	358	615	279	329	608	327	353	680	271	351	622
8:00 PM	179	223	402	145	148	293	150	171	321	141	194	335	101	179	280	216	223	439	180	244	424	153	199	351
9:00 PM	118	145	263	99	76	175	85	109	194	82	98	180	82	89	171	99	140	239	122	178	300	88	109	197
10:00 PM	75	78	153	54	46	100	41	45	86	43	51	94	50	45	95	54	53	107	81	148	229	49	50	99
11:00 PM	43	46	89	29	20	49	20	17	37	21	15	36	20	24	44	18	22	40	26	44	70	20	20	40
Total	**5,899**	**5,175**	**11,074**	**5,025**	**4,174**	**9,199**	**8,905**	**6,895**	**15,800**	**7,375**	**6,412**	**13,787**	**7,243**	**6,449**	**13,692**	**7,277**	**6,439**	**13,716**	**7,685**	**6,881**	**14,566**	**7,298**	**6,433**	**13,732**
Percent	**53%**	**47%**	-	**55%**	**45%**	-	**56%**	**44%**	-	**53%**	**47%**	-	**53%**	**47%**	-	**53%**	**47%**	-	**53%**	**47%**	-	**53%**	**47%**	-

1. Mid-week average includes data between Tuesday and Thursday.

Vehicle Classification Report Summary

Location: Midland Ave BTWN Riverine & Devereux

Count Direction: Northbound / Southbound

Date Range: 9/17/2022 to 9/23/2022

Site Code: 10

	FHWA Vehicle Classification													Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
Study Total														
Northbound	378	30,329	9,777	177	3,096	902	0	33	70	141	0	0	67	44,970
Percent	0.8%	67.4%	21.7%	0.4%	6.9%	2.0%	0.0%	0.1%	0.2%	0.3%	0.0%	0.0%	0.1%	100%
Southbound	248	27,452	9,347	198	8,257	136	0	36	44	16	5	1	11	45,751
Percent	0.5%	60.0%	20.4%	0.4%	18.0%	0.3%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	100%
Total	626	57,781	19,124	375	11,353	1,038	0	69	114	157	5	1	78	90,721
Percent	0.7%	63.7%	21.1%	0.4%	12.5%	1.1%	0.0%	0.1%	0.1%	0.2%	0.0%	0.0%	0.1%	100%

FHWA Vehicle Classification	
Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Saturday, September 17, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	21	5	1	2	1	0	0	0	0	0	0	0	**30**
1:00 AM	0	9	1	0	3	0	0	0	0	0	0	0	0	**13**
2:00 AM	0	15	5	0	1	1	0	0	0	0	0	0	0	**22**
3:00 AM	0	6	0	1	0	0	0	0	0	0	0	0	0	**7**
4:00 AM	0	4	3	0	0	0	0	0	0	0	0	0	0	**7**
5:00 AM	0	15	4	4	1	2	0	0	0	0	0	0	0	**26**
6:00 AM	1	36	12	3	5	3	0	0	0	2	0	0	0	**62**
7:00 AM	0	54	30	1	16	1	0	0	0	0	0	0	0	**102**
8:00 AM	0	90	42	2	21	3	0	0	0	0	0	0	0	**158**
9:00 AM	2	120	59	2	17	4	0	0	0	2	0	0	0	**206**
10:00 AM	2	215	70	1	22	5	0	0	0	1	0	0	0	**316**
11:00 AM	1	268	87	1	34	4	0	0	0	0	0	0	0	**395**
12:00 PM	5	355	92	1	31	11	0	0	0	1	0	0	0	**496**
1:00 PM	4	286	94	1	33	17	0	0	1	0	0	0	0	**436**
2:00 PM	4	345	114	0	18	5	0	0	0	1	0	0	0	**487**
3:00 PM	3	356	91	0	28	8	0	0	0	1	0	0	0	**487**
4:00 PM	5	364	75	1	27	8	0	0	0	0	0	0	0	**480**
5:00 PM	3	344	71	1	25	13	0	1	0	1	0	0	0	**459**
6:00 PM	1	335	64	1	21	13	0	0	1	0	0	0	0	**436**
7:00 PM	5	267	59	1	16	6	0	0	0	0	0	0	0	**354**
8:00 PM	0	190	40	2	9	9	0	0	0	0	0	0	0	**250**
9:00 PM	0	128	21	2	5	5	0	0	0	0	0	0	0	**161**
10:00 PM	0	75	15	0	4	1	0	0	0	0	0	0	0	**95**
11:00 PM	0	35	7	1	3	1	0	0	0	0	0	0	0	**47**
Total	**36**	**3,933**	**1,061**	**27**	**342**	**121**	**0**	**1**	**2**	**9**	**0**	**0**	**0**	**5,532**
Percent	**0.7%**	**71.1%**	**19.2%**	**0.5%**	**6.2%**	**2.2%**	**0.0%**	**0.0%**	**0.0%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Saturday, September 17, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	15	2	1	0	0	0	0	0	0	0	0	0	**18**
1:00 AM	0	8	3	0	3	0	0	0	0	0	0	0	0	**14**
2:00 AM	0	8	2	0	0	0	0	0	0	0	0	0	0	**10**
3:00 AM	0	11	3	1	1	0	0	0	0	0	0	0	0	**16**
4:00 AM	0	9	7	0	1	1	0	0	0	0	0	0	0	**18**
5:00 AM	0	23	11	0	9	0	0	0	0	0	0	0	0	**43**
6:00 AM	0	52	18	2	36	1	0	0	0	0	0	0	0	**109**
7:00 AM	1	109	43	1	54	0	0	0	0	0	0	0	0	**208**
8:00 AM	0	126	65	3	69	0	0	0	0	0	0	0	0	**263**
9:00 AM	4	197	89	1	70	0	0	0	0	0	0	0	0	**361**
10:00 AM	5	242	84	2	69	0	0	0	0	0	0	0	0	**402**
11:00 AM	2	274	91	0	88	0	0	0	0	0	0	0	0	**455**
12:00 PM	3	305	94	0	103	1	0	0	0	0	0	0	0	**506**
1:00 PM	0	362	107	0	67	1	0	0	0	0	0	0	0	**537**
2:00 PM	3	266	92	0	75	0	0	0	0	0	0	0	0	**436**
3:00 PM	0	233	84	0	57	1	0	0	0	0	0	0	0	**375**
4:00 PM	2	277	87	0	58	0	0	0	0	0	0	0	0	**424**
5:00 PM	6	260	53	2	50	3	0	0	0	0	0	0	0	**374**
6:00 PM	3	229	67	2	50	0	0	0	0	0	0	0	0	**351**
7:00 PM	2	134	37	1	38	0	0	0	0	0	0	0	0	**212**
8:00 PM	0	89	27	3	27	0	0	0	0	0	0	0	0	**146**
9:00 PM	0	70	27	1	12	0	0	0	0	0	0	0	0	**110**
10:00 PM	0	47	12	1	6	0	0	0	0	0	0	0	0	**66**
11:00 PM	0	23	12	1	7	0	0	0	0	0	0	0	0	**43**
Total	**31**	**3,369**	**1,117**	**22**	**950**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5,497**
Percent	**0.6%**	**61.3%**	**20.3%**	**0.4%**	**17.3%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Sunday, September 18, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	26	3	2	0	2	0	0	0	0	0	0	0	**33**
1:00 AM	1	14	4	0	0	2	0	0	0	0	0	0	0	**21**
2:00 AM	0	18	5	0	0	0	0	0	0	0	0	0	0	**23**
3:00 AM	0	7	1	0	0	0	0	0	0	0	0	0	0	**8**
4:00 AM	0	7	1	0	1	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	8	4	3	0	0	0	0	0	0	0	0	0	**15**
6:00 AM	0	21	7	2	5	1	0	0	0	0	0	0	0	**36**
7:00 AM	2	33	15	1	6	0	0	0	0	0	0	0	0	**57**
8:00 AM	0	47	21	2	8	1	0	0	0	0	0	0	0	**79**
9:00 AM	0	117	51	0	11	0	0	0	0	0	0	0	0	**179**
10:00 AM	1	148	55	2	19	4	0	0	1	2	0	0	0	**232**
11:00 AM	1	230	71	1	14	8	0	0	0	0	0	0	1	**326**
12:00 PM	4	274	94	0	20	9	0	1	0	0	0	0	0	**402**
1:00 PM	4	286	85	1	29	7	0	2	2	1	0	0	0	**417**
2:00 PM	7	308	90	0	25	5	0	0	0	0	0	0	0	**435**
3:00 PM	2	332	70	0	25	10	0	1	2	1	0	0	1	**444**
4:00 PM	2	264	88	2	19	3	0	0	0	2	0	0	0	**380**
5:00 PM	2	249	73	2	17	9	0	0	0	1	0	0	0	**353**
6:00 PM	1	219	63	0	18	6	0	1	0	2	0	0	0	**310**
7:00 PM	3	166	52	0	10	6	0	0	0	0	0	0	2	**239**
8:00 PM	2	128	23	0	12	1	0	0	0	0	0	0	0	**166**
9:00 PM	1	78	11	2	7	0	0	0	0	0	0	0	0	**99**
10:00 PM	0	40	11	0	3	1	0	0	0	0	0	0	0	**55**
11:00 PM	0	15	5	0	2	1	0	0	0	0	0	0	0	**23**
Total	**33**	**3,035**	**903**	**20**	**251**	**76**	**0**	**5**	**5**	**9**	**0**	**0**	**4**	**4,341**
Percent	**0.8%**	**69.9%**	**20.8%**	**0.5%**	**5.8%**	**1.8%**	**0.0%**	**0.1%**	**0.1%**	**0.2%**	**0.0%**	**0.0%**	**0.1%**	

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Sunday, September 18, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	14	8	1	4	0	0	0	0	0	0	0	0	**27**
1:00 AM	0	10	5	2	1	0	0	0	0	0	0	0	0	**18**
2:00 AM	0	6	3	0	2	0	0	0	0	0	0	0	0	**11**
3:00 AM	0	10	3	0	3	0	0	0	0	0	0	0	0	**16**
4:00 AM	0	10	3	0	1	0	0	0	0	0	0	0	0	**14**
5:00 AM	0	16	5	0	5	0	0	0	0	0	0	0	0	**26**
6:00 AM	0	44	12	1	14	0	0	0	0	0	0	0	0	**71**
7:00 AM	1	54	19	1	30	0	0	0	0	0	0	0	0	**105**
8:00 AM	0	87	39	1	34	0	0	0	0	0	0	0	0	**161**
9:00 AM	2	149	67	2	44	0	0	0	0	0	0	0	0	**264**
10:00 AM	1	213	63	2	51	0	0	0	0	0	0	0	0	**330**
11:00 AM	4	279	88	0	67	0	0	0	0	0	1	0	0	**439**
12:00 PM	5	275	98	1	64	0	0	1	1	0	0	0	0	**445**
1:00 PM	4	273	80	0	71	0	0	0	0	0	0	0	0	**428**
2:00 PM	6	266	91	1	72	0	0	0	0	0	0	0	0	**436**
3:00 PM	4	284	69	0	66	0	0	0	0	0	0	0	0	**423**
4:00 PM	5	225	68	0	47	0	0	0	0	0	0	0	0	**345**
5:00 PM	1	242	56	3	54	0	0	1	0	0	0	0	0	**357**
6:00 PM	3	178	61	2	45	0	0	0	0	0	0	0	0	**289**
7:00 PM	3	129	41	1	29	0	0	0	0	0	0	0	0	**203**
8:00 PM	0	82	25	1	17	0	0	0	0	0	0	0	0	**125**
9:00 PM	0	54	24	2	13	0	0	0	0	0	0	0	0	**93**
10:00 PM	0	33	5	1	6	0	0	0	0	0	0	0	0	**45**
11:00 PM	0	12	9	0	6	0	0	0	0	0	0	0	0	**27**
Total	**39**	**2,945**	**942**	**22**	**746**	**0**	**0**	**2**	**1**	**0**	**1**	**0**	**0**	**4,698**
Percent	**0.8%**	**62.7%**	**20.1%**	**0.5%**	**15.9%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Monday, September 19, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	12	3	1	0	0	0	0	0	0	0	0	0	**16**
1:00 AM	0	6	1	1	0	0	0	0	0	0	0	0	0	**8**
2:00 AM	0	3	1	0	0	0	0	0	1	0	0	0	0	**5**
3:00 AM	0	5	1	1	0	0	0	0	0	0	0	0	0	**7**
4:00 AM	0	5	6	1	0	0	0	0	0	0	0	0	0	**12**
5:00 AM	1	11	7	3	1	3	0	0	0	0	0	0	0	**26**
6:00 AM	1	58	19	1	9	3	0	0	0	0	0	0	0	**91**
7:00 AM	3	177	26	0	25	4	0	0	0	1	0	0	0	**236**
8:00 AM	4	236	40	2	26	3	0	0	0	1	0	0	0	**312**
9:00 AM	0	152	52	2	28	10	0	0	1	0	0	0	0	**245**
10:00 AM	1	220	65	1	23	9	0	1	1	2	0	0	2	**325**
11:00 AM	3	294	95	2	38	10	0	1	0	1	0	0	0	**444**
12:00 PM	7	320	79	1	28	6	0	0	0	1	0	0	1	**443**
1:00 PM	4	313	69	2	38	7	0	0	3	1	0	0	1	**438**
2:00 PM	6	442	103	2	51	19	0	0	3	3	0	0	2	**631**
3:00 PM	4	514	144	0	48	7	0	1	1	2	0	0	1	**722**
4:00 PM	18	616	181	1	55	18	0	0	2	7	0	0	3	**901**
5:00 PM	15	694	259	1	61	13	0	0	1	3	0	0	3	**1,050**
6:00 PM	5	444	160	3	48	9	0	0	1	3	0	0	4	**677**
7:00 PM	2	248	73	0	17	6	0	0	0	0	0	0	0	**346**
8:00 PM	8	143	46	0	9	3	0	0	0	0	0	0	1	**210**
9:00 PM	2	91	25	1	6	2	0	0	0	0	0	0	0	**127**
10:00 PM	0	39	12	0	2	1	0	0	0	0	0	0	0	**54**
11:00 PM	0	13	0	1	1	0	0	0	0	0	0	0	0	**15**
Total	**84**	**5,056**	**1,467**	**27**	**514**	**133**	**0**	**3**	**14**	**25**	**0**	**0**	**18**	**7,341**
Percent	**1.1%**	**68.9%**	**20.0%**	**0.4%**	**7.0%**	**1.8%**	**0.0%**	**0.0%**	**0.2%**	**0.3%**	**0.0%**	**0.0%**	**0.2%**	

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Monday, September 19, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	5	5	1	2	0	0	0	0	0	0	0	0	**13**
1:00 AM	0	6	6	1	2	0	0	0	1	0	0	0	0	**16**
2:00 AM	0	3	2	0	1	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	13	6	1	1	0	0	0	0	0	0	0	0	**21**
4:00 AM	0	22	4	0	2	1	0	0	0	0	0	0	0	**29**
5:00 AM	1	65	24	1	25	1	0	0	1	0	0	0	0	**118**
6:00 AM	2	145	84	1	104	3	0	0	1	0	0	0	0	**340**
7:00 AM	2	409	161	3	164	2	0	0	0	1	1	0	0	**743**
8:00 AM	0	413	183	2	128	4	0	0	2	0	0	0	1	**733**
9:00 AM	4	204	87	3	97	1	0	0	1	0	0	0	0	**397**
10:00 AM	2	237	88	3	99	1	0	2	2	1	0	0	0	**435**
11:00 AM	4	367	130	2	110	4	0	0	3	0	0	0	1	**621**
12:00 PM	4	417	115	2	114	1	0	2	1	0	0	0	0	**656**
1:00 PM	3	458	157	4	144	5	0	0	2	0	0	0	0	**773**
2:00 PM	5	386	132	2	85	3	0	0	0	0	0	0	0	**613**
3:00 PM	4	477	99	1	91	5	0	1	0	1	0	0	0	**679**
4:00 PM	6	379	99	0	76	3	0	0	2	0	0	0	0	**565**
5:00 PM	2	344	66	3	65	1	0	0	0	0	0	0	0	**481**
6:00 PM	3	244	66	1	50	0	0	0	0	0	0	0	0	**364**
7:00 PM	2	173	35	0	38	0	0	0	0	0	0	0	0	**248**
8:00 PM	1	73	26	1	21	1	0	0	0	0	0	0	0	**123**
9:00 PM	0	46	13	3	14	0	0	0	0	0	0	0	0	**76**
10:00 PM	1	18	12	1	3	0	0	0	0	0	0	0	0	**35**
11:00 PM	0	15	2	1	5	0	0	0	0	0	0	0	0	**23**
Total	**46**	**4,919**	**1,602**	**37**	**1,441**	**36**	**0**	**5**	**16**	**3**	**1**	**0**	**2**	**8,108**
Percent	**0.6%**	**60.7%**	**19.8%**	**0.5%**	**17.8%**	**0.4%**	**0.0%**	**0.1%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Tuesday, September 20, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	14	3	1	1	0	0	0	0	0	0	0	0	**19**
1:00 AM	2	2	0	2	0	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	6	7	2	0	0	0	0	0	0	0	0	0	**15**
5:00 AM	0	14	8	3	0	0	0	0	1	0	0	0	0	**26**
6:00 AM	1	54	27	0	10	3	0	0	0	0	0	0	0	**95**
7:00 AM	6	151	35	1	24	4	0	1	0	0	0	0	0	**222**
8:00 AM	3	216	52	3	25	5	0	0	0	3	0	0	0	**307**
9:00 AM	6	185	59	1	31	5	0	1	1	1	0	0	1	**291**
10:00 AM	8	187	78	2	24	4	0	0	0	0	0	0	0	**303**
11:00 AM	3	233	97	1	42	8	0	0	0	0	0	0	0	**384**
12:00 PM	5	293	95	1	23	12	0	0	0	3	0	0	0	**432**
1:00 PM	5	267	113	3	25	8	0	0	1	0	0	0	0	**422**
2:00 PM	1	295	83	3	33	11	0	0	2	3	0	0	0	**431**
3:00 PM	4	452	159	1	36	4	0	0	2	3	0	0	0	**661**
4:00 PM	2	460	187	2	50	19	0	0	5	7	0	0	2	**734**
5:00 PM	11	575	219	1	61	17	0	1	2	6	0	0	4	**897**
6:00 PM	4	429	204	3	66	17	0	1	1	1	0	0	6	**732**
7:00 PM	4	238	107	1	20	6	0	0	0	2	0	0	1	**379**
8:00 PM	0	126	61	0	13	4	0	0	0	0	0	0	0	**204**
9:00 PM	1	90	22	2	5	2	0	0	0	0	0	0	0	**122**
10:00 PM	0	35	17	0	4	1	0	0	0	0	0	0	0	**57**
11:00 PM	0	12	2	2	0	0	0	0	0	0	0	0	0	**16**
Total	**66**	**4,339**	**1,635**	**35**	**493**	**130**	**0**	**4**	**15**	**29**	**0**	**0**	**14**	**6,760**
Percent	**1.0%**	**64.2%**	**24.2%**	**0.5%**	**7.3%**	**1.9%**	**0.0%**	**0.1%**	**0.2%**	**0.4%**	**0.0%**	**0.0%**	**0.2%**	

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Tuesday, September 20, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	6	2	1	0	0	0	0	0	0	0	0	0	**9**
1:00 AM	0	4	1	2	1	0	0	0	0	0	0	0	0	**8**
2:00 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	**5**
3:00 AM	0	11	2	0	1	0	0	0	0	0	0	0	0	**14**
4:00 AM	0	23	11	0	7	0	0	0	0	0	0	0	0	**41**
5:00 AM	0	72	18	1	33	0	0	0	0	0	0	0	0	**124**
6:00 AM	5	172	86	1	120	2	0	0	0	0	0	0	0	**386**
7:00 AM	4	407	169	3	164	1	0	0	1	0	0	0	0	**749**
8:00 AM	2	451	161	5	158	1	0	0	0	1	0	0	0	**779**
9:00 AM	1	245	102	4	71	2	0	0	3	1	0	0	0	**429**
10:00 AM	2	243	96	3	89	0	0	1	1	0	0	0	0	**435**
11:00 AM	0	239	87	1	78	1	0	3	2	0	0	0	1	**412**
12:00 PM	2	254	107	1	82	1	0	0	0	0	0	0	0	**447**
1:00 PM	1	289	79	1	92	2	0	0	2	0	1	0	0	**467**
2:00 PM	5	243	77	1	75	3	0	0	0	0	0	0	0	**404**
3:00 PM	3	286	90	0	72	4	0	0	0	0	0	0	0	**455**
4:00 PM	2	275	79	0	78	1	0	0	0	1	0	0	0	**436**
5:00 PM	3	337	89	2	72	0	0	1	0	0	1	0	0	**505**
6:00 PM	2	186	55	2	41	0	0	0	0	0	0	0	0	**286**
7:00 PM	1	132	56	0	39	1	0	0	0	0	0	0	0	**229**
8:00 PM	1	65	30	1	20	0	0	0	0	0	0	0	0	**117**
9:00 PM	0	43	16	2	11	0	0	0	0	0	0	0	0	**72**
10:00 PM	0	15	10	1	9	0	0	0	0	0	0	0	0	**35**
11:00 PM	0	12	6	2	2	0	0	0	0	0	0	0	0	**22**
Total	**34**	**4,015**	**1,429**	**34**	**1,315**	**19**	**0**	**5**	**9**	**3**	**2**	**0**	**1**	**6,866**
Percent	**0.5%**	**58.5%**	**20.8%**	**0.5%**	**19.2%**	**0.3%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Wednesday, September 21, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	9	3	0	2	1	0	0	0	0	0	0	0	**15**
1:00 AM	0	7	2	0	1	0	0	0	0	0	0	0	0	**10**
2:00 AM	1	1	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	3	2	0	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	11	3	0	0	0	0	0	0	0	0	0	0	**14**
5:00 AM	0	19	8	2	4	1	0	0	1	0	0	0	0	**35**
6:00 AM	0	56	20	1	17	0	0	0	0	2	0	0	1	**97**
7:00 AM	0	177	42	1	24	2	0	0	0	1	0	0	1	**248**
8:00 AM	3	210	71	1	16	5	0	0	3	2	0	0	0	**311**
9:00 AM	0	176	53	2	25	6	0	1	1	0	0	0	0	**264**
10:00 AM	3	195	82	2	21	8	0	0	1	0	0	0	0	**312**
11:00 AM	0	235	96	1	31	7	0	0	0	2	0	0	0	**372**
12:00 PM	2	253	94	2	29	16	0	1	2	1	0	0	1	**401**
1:00 PM	6	392	89	1	37	13	0	0	1	3	0	0	0	**542**
2:00 PM	1	402	110	2	31	13	0	1	1	1	0	0	0	**562**
3:00 PM	6	448	136	1	43	14	0	0	0	4	0	0	2	**654**
4:00 PM	2	431	177	0	44	16	0	0	2	3	0	0	2	**677**
5:00 PM	8	596	237	2	59	30	0	1	2	3	0	0	2	**940**
6:00 PM	4	411	170	1	56	14	0	1	1	3	0	0	1	**662**
7:00 PM	5	254	79	0	23	8	0	1	0	1	0	0	0	**371**
8:00 PM	1	124	53	0	13	3	0	0	0	2	0	0	0	**196**
9:00 PM	3	73	26	1	7	1	0	0	0	0	0	0	0	**111**
10:00 PM	0	32	17	1	2	0	0	0	0	0	0	0	0	**52**
11:00 PM	0	17	8	0	5	0	0	0	0	0	0	0	0	**30**
Total	**45**	**4,532**	**1,578**	**21**	**490**	**158**	**0**	**6**	**15**	**28**	**0**	**0**	**10**	**6,883**
Percent	**0.7%**	**65.8%**	**22.9%**	**0.3%**	**7.1%**	**2.3%**	**0.0%**	**0.1%**	**0.2%**	**0.4%**	**0.0%**	**0.0%**	**0.1%**	

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Wednesday, September 21, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	5	2	0	0	0	0	0	0	0	0	0	0	**7**
1:00 AM	0	5	3	0	3	0	0	0	0	0	0	0	0	**11**
2:00 AM	0	4	1	0	1	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	10	4	0	1	0	0	0	0	0	0	0	0	**15**
4:00 AM	0	19	9	0	4	1	0	0	0	0	0	0	0	**33**
5:00 AM	0	63	36	0	31	0	0	0	0	0	0	0	0	**130**
6:00 AM	2	143	85	3	141	2	0	0	2	0	0	0	0	**378**
7:00 AM	2	389	167	4	164	2	0	0	0	1	0	0	0	**729**
8:00 AM	2	404	163	3	151	6	0	0	0	2	0	0	0	**731**
9:00 AM	4	234	105	2	98	1	0	0	0	0	0	0	0	**444**
10:00 AM	0	240	98	3	77	3	0	1	0	0	0	0	1	**423**
11:00 AM	0	240	94	0	94	3	0	1	0	0	0	0	0	**432**
12:00 PM	0	273	75	2	81	0	0	1	0	0	0	0	1	**433**
1:00 PM	4	314	95	2	63	1	0	2	0	0	0	0	1	**482**
2:00 PM	1	287	89	2	63	0	0	2	0	0	0	0	1	**445**
3:00 PM	0	256	86	1	61	1	0	0	0	0	0	0	0	**405**
4:00 PM	1	290	89	0	63	2	0	0	0	1	0	1	0	**447**
5:00 PM	1	294	68	2	60	1	0	0	0	0	0	0	1	**427**
6:00 PM	5	186	62	2	41	1	0	1	0	0	0	0	0	**298**
7:00 PM	0	127	35	1	32	0	0	1	0	0	0	0	0	**196**
8:00 PM	0	38	21	2	15	0	0	0	0	0	0	0	0	**76**
9:00 PM	1	52	14	0	13	0	0	0	1	0	0	0	0	**81**
10:00 PM	0	30	3	2	9	0	0	0	0	0	0	0	0	**44**
11:00 PM	0	4	6	0	5	0	0	0	0	0	0	0	0	**15**
Total	**23**	**3,907**	**1,410**	**31**	**1,271**	**24**	**0**	**9**	**3**	**4**	**0**	**1**	**5**	**6,688**
Percent	**0.3%**	**58.4%**	**21.1%**	**0.5%**	**19.0%**	**0.4%**	**0.0%**	**0.1%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.1%**	

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Thursday, September 22, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	17	6	0	3	0	0	0	0	0	0	0	0	**26**
1:00 AM	0	9	1	0	1	0	0	0	0	0	0	0	0	**11**
2:00 AM	0	1	1	0	1	1	0	0	0	0	0	0	0	**4**
3:00 AM	0	7	1	0	0	1	0	0	0	0	0	0	0	**9**
4:00 AM	0	6	4	0	2	0	0	0	1	0	0	0	0	**13**
5:00 AM	0	15	8	3	0	0	0	0	1	0	0	0	0	**27**
6:00 AM	0	57	21	0	14	1	0	0	0	0	0	0	0	**93**
7:00 AM	1	134	47	0	28	6	0	0	0	1	0	0	0	**217**
8:00 AM	4	236	57	1	19	7	0	1	1	1	0	0	0	**327**
9:00 AM	3	142	68	4	22	9	0	0	1	1	0	0	1	**251**
10:00 AM	2	183	82	2	32	5	0	1	0	0	0	0	0	**307**
11:00 AM	3	209	85	0	41	4	0	1	1	0	0	0	0	**344**
12:00 PM	7	290	89	1	46	13	0	0	0	0	0	0	0	**446**
1:00 PM	2	297	120	1	36	9	0	1	1	1	0	0	0	**468**
2:00 PM	1	315	106	2	34	10	0	0	0	0	0	0	1	**469**
3:00 PM	2	403	157	1	40	10	0	1	1	0	0	0	1	**616**
4:00 PM	5	519	191	3	51	13	0	1	1	5	0	0	2	**791**
5:00 PM	8	611	208	2	64	22	0	1	2	3	0	0	2	**923**
6:00 PM	4	362	172	0	37	23	0	0	2	2	0	0	0	**602**
7:00 PM	7	255	63	0	23	7	0	1	0	1	0	0	0	**357**
8:00 PM	1	171	46	0	12	4	0	0	0	0	0	0	0	**234**
9:00 PM	0	113	44	1	7	3	0	0	0	1	0	0	0	**169**
10:00 PM	2	51	16	1	3	2	0	0	0	0	0	0	0	**75**
11:00 PM	0	20	2	0	1	2	0	0	0	0	0	0	0	**25**
Total	**52**	**4,423**	**1,595**	**22**	**517**	**152**	**0**	**8**	**12**	**16**	**0**	**0**	**7**	**6,804**
Percent	**0.8%**	**65.0%**	**23.4%**	**0.3%**	**7.6%**	**2.2%**	**0.0%**	**0.1%**	**0.2%**	**0.2%**	**0.0%**	**0.0%**	**0.1%**	

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Thursday, September 22, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	4	4	0	5	0	0	1	0	0	0	0	0	**14**
1:00 AM	0	6	2	0	3	0	0	0	1	0	0	0	0	**12**
2:00 AM	0	1	2	0	2	0	0	0	0	0	0	0	0	**5**
3:00 AM	0	15	4	0	3	0	0	0	0	0	0	0	0	**22**
4:00 AM	0	18	9	0	2	0	0	0	0	0	0	0	0	**29**
5:00 AM	0	68	26	1	28	0	0	0	0	0	0	0	0	**123**
6:00 AM	2	146	94	1	98	3	0	0	0	0	0	0	0	**344**
7:00 AM	4	380	128	1	175	2	0	0	0	2	0	0	0	**692**
8:00 AM	4	389	174	3	154	0	0	2	0	0	0	0	0	**726**
9:00 AM	1	235	115	4	92	3	0	0	0	0	0	0	1	**451**
10:00 AM	6	219	81	3	87	3	0	1	1	0	0	0	0	**401**
11:00 AM	5	216	86	0	99	5	0	2	0	0	0	0	0	**413**
12:00 PM	1	301	95	3	82	2	0	0	3	1	0	0	0	**488**
1:00 PM	0	223	76	2	74	2	0	0	0	0	0	0	0	**377**
2:00 PM	1	257	81	2	63	2	0	0	2	0	0	0	0	**408**
3:00 PM	2	307	106	0	76	0	0	0	0	0	0	0	0	**491**
4:00 PM	2	324	78	1	60	2	0	0	1	0	0	0	0	**468**
5:00 PM	3	308	72	2	49	1	0	0	0	0	0	0	0	**435**
6:00 PM	0	232	68	0	55	0	0	0	0	0	0	0	0	**355**
7:00 PM	0	167	42	1	42	0	0	1	0	0	0	0	0	**253**
8:00 PM	1	101	42	1	31	0	0	0	0	0	0	0	0	**176**
9:00 PM	1	55	14	1	10	0	0	0	0	0	0	0	0	**81**
10:00 PM	0	25	18	1	6	0	0	0	0	0	0	0	0	**50**
11:00 PM	1	11	5	0	0	0	0	0	0	0	0	0	0	**17**
Total	**34**	**4,008**	**1,422**	**27**	**1,296**	**25**	**0**	**7**	**8**	**3**	**0**	**0**	**1**	**6,831**
Percent	**0.5%**	**58.7%**	**20.8%**	**0.4%**	**19.0%**	**0.4%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Friday, September 23, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	18	5	1	1	0	0	0	0	0	0	0	0	**25**
1:00 AM	0	3	2	0	1	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	6	0	0	0	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	4	2	0	0	0	0	0	0	0	0	0	0	**6**
4:00 AM	0	5	2	1	3	0	0	0	0	0	0	0	0	**11**
5:00 AM	0	19	9	0	3	0	0	0	0	0	0	0	0	**31**
6:00 AM	0	62	25	1	9	5	0	0	0	0	0	0	0	**102**
7:00 AM	4	147	49	1	26	2	0	0	0	0	0	0	0	**229**
8:00 AM	1	176	69	0	24	5	0	0	1	0	0	0	0	**276**
9:00 AM	3	160	56	0	23	6	0	0	0	0	0	0	0	**248**
10:00 AM	0	215	69	1	23	3	0	0	2	1	0	0	2	**316**
11:00 AM	8	289	94	1	39	8	0	1	1	1	0	0	1	**443**
12:00 PM	5	353	101	1	37	9	0	1	0	0	0	0	1	**508**
1:00 PM	3	366	103	1	31	9	0	1	1	2	0	0	1	**518**
2:00 PM	5	329	101	3	36	18	0	0	0	1	0	0	1	**494**
3:00 PM	12	515	153	1	46	8	0	0	0	6	0	0	0	**741**
4:00 PM	7	570	178	1	43	18	0	1	0	5	0	0	5	**828**
5:00 PM	6	618	175	3	46	19	0	1	1	4	0	0	1	**874**
6:00 PM	2	440	128	3	29	11	0	0	0	2	0	0	2	**617**
7:00 PM	4	261	77	1	29	5	0	0	1	1	0	0	0	**379**
8:00 PM	1	180	57	2	18	1	0	1	0	0	0	0	0	**260**
9:00 PM	1	124	43	1	13	1	0	0	0	1	0	0	0	**184**
10:00 PM	0	115	31	1	8	4	0	0	0	1	0	0	0	**160**
11:00 PM	0	36	9	1	1	0	0	0	0	0	0	0	0	**47**
Total	**62**	**5,011**	**1,538**	**25**	**489**	**132**	**0**	**6**	**7**	**25**	**0**	**0**	**14**	**7,309**
Percent	**0.8%**	**68.6%**	**21.0%**	**0.3%**	**6.7%**	**1.8%**	**0.0%**	**0.1%**	**0.1%**	**0.3%**	**0.0%**	**0.0%**	**0.2%**	

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Friday, September 23, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	17	0	1	0	0	0	0	0	0	0	0	0	**18**
1:00 AM	0	4	3	0	1	0	0	0	0	0	0	0	0	**8**
2:00 AM	0	5	0	0	2	0	0	0	0	0	0	0	0	**7**
3:00 AM	0	12	5	0	4	0	0	0	0	0	0	0	0	**21**
4:00 AM	0	19	5	0	2	0	0	0	0	0	0	0	0	**26**
5:00 AM	0	56	21	1	22	2	0	0	0	0	0	0	0	**102**
6:00 AM	0	148	81	1	112	1	0	0	1	0	0	0	0	**344**
7:00 AM	7	319	135	2	125	1	0	0	2	0	0	0	0	**591**
8:00 AM	2	274	105	0	109	1	0	1	0	1	0	0	0	**493**
9:00 AM	3	280	104	2	111	3	0	2	0	0	0	0	0	**505**
10:00 AM	1	328	139	4	117	3	0	1	1	0	0	0	0	**594**
11:00 AM	4	311	83	0	77	2	0	1	1	0	0	0	0	**479**
12:00 PM	2	310	103	0	77	3	0	0	1	0	0	0	1	**497**
1:00 PM	3	277	91	1	73	2	0	3	0	0	0	0	0	**450**
2:00 PM	5	285	101	0	68	2	0	0	0	1	0	0	1	**463**
3:00 PM	5	370	99	1	61	1	0	0	0	1	0	0	0	**538**
4:00 PM	2	302	81	0	59	3	0	0	0	0	0	0	0	**447**
5:00 PM	5	307	88	1	59	0	0	0	1	0	0	0	0	**461**
6:00 PM	0	289	62	4	52	0	0	0	0	0	0	0	0	**407**
7:00 PM	1	193	49	0	45	0	0	0	0	0	1	0	0	**289**
8:00 PM	0	89	25	4	28	0	0	0	0	0	0	0	0	**146**
9:00 PM	1	55	24	0	15	0	0	0	0	0	0	0	0	**95**
10:00 PM	0	28	14	2	14	0	0	0	0	0	0	0	0	**58**
11:00 PM	0	11	7	1	5	0	0	0	0	0	0	0	0	**24**
Total	**41**	**4,289**	**1,425**	**25**	**1,238**	**24**	**0**	**8**	**7**	**3**	**1**	**0**	**2**	**7,063**
Percent	**0.6%**	**60.7%**	**20.2%**	**0.4%**	**17.5%**	**0.3%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Total Study Average
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	17	4	1	1	1	0	0	0	0	0	0	0	**24**
1:00 AM	0	7	2	0	1	0	0	0	0	0	0	0	0	**10**
2:00 AM	0	7	2	0	0	0	0	0	0	0	0	0	0	**9**
3:00 AM	0	5	1	0	0	0	0	0	0	0	0	0	0	**6**
4:00 AM	0	6	4	1	1	0	0	0	0	0	0	0	0	**12**
5:00 AM	0	14	7	3	1	1	0	0	0	0	0	0	0	**26**
6:00 AM	0	49	19	1	10	2	0	0	0	1	0	0	0	**82**
7:00 AM	2	125	35	1	21	3	0	0	0	0	0	0	0	**187**
8:00 AM	2	173	50	2	20	4	0	0	1	1	0	0	0	**253**
9:00 AM	2	150	57	2	22	6	0	0	1	1	0	0	0	**241**
10:00 AM	2	195	72	2	23	5	0	0	1	1	0	0	1	**302**
11:00 AM	3	251	89	1	34	7	0	0	0	1	0	0	0	**386**
12:00 PM	5	305	92	1	31	11	0	0	0	1	0	0	0	**446**
1:00 PM	4	315	96	1	33	10	0	1	1	1	0	0	0	**462**
2:00 PM	4	348	101	2	33	12	0	0	1	1	0	0	1	**503**
3:00 PM	5	431	130	1	38	9	0	0	1	2	0	0	1	**618**
4:00 PM	6	461	154	1	41	14	0	0	1	4	0	0	2	**684**
5:00 PM	8	527	177	2	48	18	0	1	1	3	0	0	2	**787**
6:00 PM	3	377	137	2	39	13	0	0	1	2	0	0	2	**576**
7:00 PM	4	241	73	0	20	6	0	0	0	1	0	0	0	**345**
8:00 PM	2	152	47	1	12	4	0	0	0	0	0	0	0	**218**
9:00 PM	1	100	27	1	7	2	0	0	0	0	0	0	0	**138**
10:00 PM	0	55	17	0	4	1	0	0	0	0	0	0	0	**77**
11:00 PM	0	21	5	1	2	1	0	0	0	0	0	0	0	**30**
Total	**53**	**4,332**	**1,398**	**27**	**442**	**130**	**0**	**2**	**9**	**20**	**0**	**0**	**9**	**6,422**
Percent	**0.8%**	**67.5%**	**21.8%**	**0.4%**	**6.9%**	**2.0%**	**0.0%**	**0.0%**	**0.1%**	**0.3%**	**0.0%**	**0.0%**	**0.1%**	

Note: Average only condsidered on days with 24-hours of data.

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Total Study Average
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	9	3	1	2	0	0	0	0	0	0	0	0	**15**
1:00 AM	0	6	3	1	2	0	0	0	0	0	0	0	0	**12**
2:00 AM	0	5	1	0	1	0	0	0	0	0	0	0	0	**7**
3:00 AM	0	12	4	0	2	0	0	0	0	0	0	0	0	**18**
4:00 AM	0	17	7	0	3	0	0	0	0	0	0	0	0	**27**
5:00 AM	0	52	20	1	22	0	0	0	0	0	0	0	0	**95**
6:00 AM	2	121	66	1	89	2	0	0	1	0	0	0	0	**282**
7:00 AM	3	295	117	2	125	1	0	0	0	1	0	0	0	**544**
8:00 AM	1	306	127	2	115	2	0	0	0	1	0	0	0	**554**
9:00 AM	3	221	96	3	83	1	0	0	1	0	0	0	0	**408**
10:00 AM	2	246	93	3	84	1	0	1	1	0	0	0	0	**431**
11:00 AM	3	275	94	0	88	2	0	1	1	0	0	0	0	**464**
12:00 PM	2	305	98	1	86	1	0	1	1	0	0	0	0	**495**
1:00 PM	2	314	98	1	83	2	0	1	1	0	0	0	0	**502**
2:00 PM	4	284	95	1	72	1	0	0	0	0	0	0	0	**457**
3:00 PM	3	316	90	0	69	2	0	0	0	0	0	0	0	**480**
4:00 PM	3	296	83	0	63	2	0	0	0	0	0	0	0	**447**
5:00 PM	3	299	70	2	58	1	0	0	0	0	0	0	0	**433**
6:00 PM	2	221	63	2	48	0	0	0	0	0	0	0	0	**336**
7:00 PM	1	151	42	1	38	0	0	0	0	0	0	0	0	**233**
8:00 PM	0	77	28	2	23	0	0	0	0	0	0	0	0	**130**
9:00 PM	0	54	19	1	13	0	0	0	0	0	0	0	0	**87**
10:00 PM	0	28	11	1	8	0	0	0	0	0	0	0	0	**48**
11:00 PM	0	13	7	1	4	0	0	0	0	0	0	0	0	**25**
Total	**34**	**3,923**	**1,335**	**27**	**1,181**	**18**	**0**	**4**	**6**	**2**	**0**	**0**	**0**	**6,530**
Percent	**0.5%**	**60.1%**	**20.4%**	**0.4%**	**18.1%**	**0.3%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

3-Day (Tuesday - Thursday) Average
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	13	4	0	2	0	0	0	0	0	0	0	0	**20**
1:00 AM	1	6	1	1	1	0	0	0	0	0	0	0	0	**9**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	4	1	0	0	0	0	0	0	0	0	0	0	**6**
4:00 AM	0	8	5	1	1	0	0	0	0	0	0	0	0	**14**
5:00 AM	0	16	8	3	1	0	0	0	1	0	0	0	0	**29**
6:00 AM	0	56	23	0	14	1	0	0	0	1	0	0	0	**95**
7:00 AM	2	154	41	1	25	4	0	0	0	1	0	0	0	**229**
8:00 AM	3	221	60	2	20	6	0	0	1	2	0	0	0	**315**
9:00 AM	3	168	60	2	26	7	0	1	1	1	0	0	1	**269**
10:00 AM	4	188	81	2	26	6	0	0	0	0	0	0	0	**307**
11:00 AM	2	226	93	1	38	6	0	0	0	1	0	0	0	**367**
12:00 PM	5	279	93	1	33	14	0	0	1	1	0	0	0	**426**
1:00 PM	4	319	107	2	33	10	0	0	1	1	0	0	0	**477**
2:00 PM	1	337	100	2	33	11	0	0	1	1	0	0	0	**487**
3:00 PM	4	434	151	1	40	9	0	0	1	2	0	0	1	**644**
4:00 PM	3	470	185	2	48	16	0	0	3	5	0	0	2	**734**
5:00 PM	9	594	221	2	61	23	0	1	2	4	0	0	3	**920**
6:00 PM	4	401	182	1	53	18	0	1	1	2	0	0	2	**665**
7:00 PM	5	249	83	0	22	7	0	1	0	1	0	0	0	**369**
8:00 PM	1	140	53	0	13	4	0	0	0	1	0	0	0	**211**
9:00 PM	1	92	31	1	6	2	0	0	0	0	0	0	0	**134**
10:00 PM	1	39	17	1	3	1	0	0	0	0	0	0	0	**61**
11:00 PM	0	16	4	1	2	1	0	0	0	0	0	0	0	**24**
Total	**54**	**4,431**	**1,603**	**26**	**500**	**147**	**0**	**6**	**14**	**24**	**0**	**0**	**10**	**6,816**
Percent	**0.8%**	**65.0%**	**23.5%**	**0.4%**	**7.3%**	**2.2%**	**0.0%**	**0.1%**	**0.2%**	**0.4%**	**0.0%**	**0.0%**	**0.2%**	

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

3-Day (Tuesday - Thursday) Average
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	5	3	0	2	0	0	0	0	0	0	0	0	**10**
1:00 AM	0	5	2	1	2	0	0	0	0	0	0	0	0	**10**
2:00 AM	0	3	1	0	1	0	0	0	0	0	0	0	0	**5**
3:00 AM	0	12	3	0	2	0	0	0	0	0	0	0	0	**17**
4:00 AM	0	20	10	0	4	0	0	0	0	0	0	0	0	**34**
5:00 AM	0	68	27	1	31	0	0	0	0	0	0	0	0	**126**
6:00 AM	3	154	88	2	120	2	0	0	1	0	0	0	0	**369**
7:00 AM	3	392	155	3	168	2	0	0	0	1	0	0	0	**723**
8:00 AM	3	415	166	4	154	2	0	1	0	1	0	0	0	**745**
9:00 AM	2	238	107	3	87	2	0	0	1	0	0	0	0	**441**
10:00 AM	3	234	92	3	84	2	0	1	1	0	0	0	0	**420**
11:00 AM	2	232	89	0	90	3	0	2	1	0	0	0	0	**419**
12:00 PM	1	276	92	2	82	1	0	0	1	0	0	0	0	**456**
1:00 PM	2	275	83	2	76	2	0	1	1	0	0	0	0	**442**
2:00 PM	2	262	82	2	67	2	0	1	1	0	0	0	0	**419**
3:00 PM	2	283	94	0	70	2	0	0	0	0	0	0	0	**450**
4:00 PM	2	296	82	0	67	2	0	0	0	1	0	0	0	**450**
5:00 PM	2	313	76	2	60	1	0	0	0	0	0	0	0	**456**
6:00 PM	2	201	62	1	46	0	0	0	0	0	0	0	0	**313**
7:00 PM	0	142	44	1	38	0	0	1	0	0	0	0	0	**226**
8:00 PM	1	68	31	1	22	0	0	0	0	0	0	0	0	**123**
9:00 PM	1	50	15	1	11	0	0	0	0	0	0	0	0	**78**
10:00 PM	0	23	10	1	8	0	0	0	0	0	0	0	0	**43**
11:00 PM	0	9	6	1	2	0	0	0	0	0	0	0	0	**18**
Total	**30**	**3,977**	**1,420**	**31**	**1,294**	**23**	**0**	**7**	**7**	**3**	**1**	**0**	**2**	**6,795**
Percent	**0.4%**	**58.5%**	**20.9%**	**0.5%**	**19.0%**	**0.3%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Vehicle Speed Report Summary

Location: Midland Ave BTWN Riverine & Devereux

Count Direction: Northbound / Southbound

Date Range: 9/17/2022 to 9/23/2022

Site Code: 10

	Speed Range (mph)																	Total
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
Study Total																		
Northbound	131	652	4,133	18,415	18,320	3,104	184	17	2	1	2	0	0	9	0	0	0	44,970
Percent	0.3%	1.4%	9.2%	40.9%	40.7%	6.9%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Southbound	12	34	511	5,259	22,409	15,416	1,904	171	27	5	1	1	0	1	0	0	0	45,751
Percent	0.0%	0.1%	1.1%	11.5%	49.0%	33.7%	4.2%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	143	686	4,644	23,674	40,729	18,520	2,088	188	29	6	3	1	0	10	0	0	0	90,721
Percent	0.2%	0.8%	5.1%	26.1%	44.9%	20.4%	2.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%

Total Study Percentile Speed Summary			Total Study Speed Statistics		
Northbound			**Northbound**		
50th Percentile (Median)	24.8	mph	Mean (Average) Speed	24.7	mph
85th Percentile	28.4	mph	10 mph Pace	19.9 - 29.9	mph
95th Percentile	30.8	mph	Percent in Pace	81.6	%
Southbound			**Southbound**		
50th Percentile (Median)	29.1	mph	Mean (Average) Speed	29.0	mph
85th Percentile	32.5	mph	10 mph Pace	23.9 - 33.9	mph
95th Percentile	34.9	mph	Percent in Pace	84.1	%

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Saturday, September 17, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	2	13	11	2	2	0	0	0	0	0	0	0	0	0	0	**30**
1:00 AM	0	0	3	4	4	2	0	0	0	0	0	0	0	0	0	0	0	**13**
2:00 AM	0	0	1	5	8	8	0	0	0	0	0	0	0	0	0	0	0	**22**
3:00 AM	0	0	1	2	2	2	0	0	0	0	0	0	0	0	0	0	0	**7**
4:00 AM	0	0	1	2	3	1	0	0	0	0	0	0	0	0	0	0	0	**7**
5:00 AM	0	0	0	8	11	6	1	0	0	0	0	0	0	0	0	0	0	**26**
6:00 AM	0	0	1	16	32	13	0	0	0	0	0	0	0	0	0	0	0	**62**
7:00 AM	0	0	5	28	45	22	2	0	0	0	0	0	0	0	0	0	0	**102**
8:00 AM	0	0	7	51	71	27	2	0	0	0	0	0	0	0	0	0	0	**158**
9:00 AM	0	0	12	55	109	29	1	0	0	0	0	0	0	0	0	0	0	**206**
10:00 AM	2	3	15	118	144	33	0	1	0	0	0	0	0	0	0	0	0	**316**
11:00 AM	0	0	20	142	198	33	2	0	0	0	0	0	0	0	0	0	0	**395**
12:00 PM	1	6	28	164	269	26	2	0	0	0	0	0	0	0	0	0	0	**496**
1:00 PM	2	3	27	179	173	47	5	0	0	0	0	0	0	0	0	0	0	**436**
2:00 PM	2	1	19	144	281	36	4	0	0	0	0	0	0	0	0	0	0	**487**
3:00 PM	0	0	20	173	248	43	3	0	0	0	0	0	0	0	0	0	0	**487**
4:00 PM	0	2	47	156	229	42	4	0	0	0	0	0	0	0	0	0	0	**480**
5:00 PM	0	0	16	154	231	56	1	1	0	0	0	0	0	0	0	0	0	**459**
6:00 PM	0	0	29	132	211	61	2	0	0	0	0	0	0	1	0	0	0	**436**
7:00 PM	0	0	46	167	122	12	3	0	0	0	2	0	0	2	0	0	0	**354**
8:00 PM	0	2	16	111	105	14	2	0	0	0	0	0	0	0	0	0	0	**250**
9:00 PM	0	0	9	70	69	12	1	0	0	0	0	0	0	0	0	0	0	**161**
10:00 PM	0	0	9	45	25	13	3	0	0	0	0	0	0	0	0	0	0	**95**
11:00 PM	0	0	1	15	27	3	1	0	0	0	0	0	0	0	0	0	0	**47**
Total	**7**	**17**	**335**	**1,954**	**2,628**	**543**	**41**	**2**	**0**	**0**	**2**	**0**	**0**	**3**	**0**	**0**	**0**	**5,532**
Percent	**0.1%**	**0.3%**	**6.1%**	**35.3%**	**47.5%**	**9.8%**	**0.7%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	25.7	mph	Mean (Average) Speed	25.7	mph
85th Percentile	29.3	mph	10 mph Pace	20.8 - 30.8	mph
95th Percentile	31.6	mph	Percent in Pace	83.8	%

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Saturday, September 17, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	2	12	4	0	0	0	0	0	0	0	0	0	0	0	**18**
1:00 AM	0	0	3	3	5	2	1	0	0	0	0	0	0	0	0	0	0	**14**
2:00 AM	0	0	0	5	1	2	1	1	0	0	0	0	0	0	0	0	0	**10**
3:00 AM	0	0	0	2	5	9	0	0	0	0	0	0	0	0	0	0	0	**16**
4:00 AM	0	0	0	3	12	2	1	0	0	0	0	0	0	0	0	0	0	**18**
5:00 AM	0	0	1	3	13	23	3	0	0	0	0	0	0	0	0	0	0	**43**
6:00 AM	0	0	5	14	40	44	5	1	0	0	0	0	0	0	0	0	0	**109**
7:00 AM	0	0	0	18	87	82	19	2	0	0	0	0	0	0	0	0	0	**208**
8:00 AM	0	0	0	42	103	105	12	1	0	0	0	0	0	0	0	0	0	**263**
9:00 AM	0	0	2	54	143	143	15	2	2	0	0	0	0	0	0	0	0	**361**
10:00 AM	0	0	1	27	189	155	26	4	0	0	0	0	0	0	0	0	0	**402**
11:00 AM	0	3	3	40	197	184	25	3	0	0	0	0	0	0	0	0	0	**455**
12:00 PM	0	0	5	31	263	182	22	3	0	0	0	0	0	0	0	0	0	**506**
1:00 PM	0	0	1	46	270	194	25	1	0	0	0	0	0	0	0	0	0	**537**
2:00 PM	0	0	0	49	198	166	20	3	0	0	0	0	0	0	0	0	0	**436**
3:00 PM	0	0	3	28	163	158	21	2	0	0	0	0	0	0	0	0	0	**375**
4:00 PM	0	0	4	35	217	144	22	2	0	0	0	0	0	0	0	0	0	**424**
5:00 PM	0	0	2	43	179	132	15	3	0	0	0	0	0	0	0	0	0	**374**
6:00 PM	0	0	0	30	173	126	18	4	0	0	0	0	0	0	0	0	0	**351**
7:00 PM	0	0	4	26	118	60	3	1	0	0	0	0	0	0	0	0	0	**212**
8:00 PM	0	0	1	25	65	50	5	0	0	0	0	0	0	0	0	0	0	**146**
9:00 PM	0	0	5	29	51	19	6	0	0	0	0	0	0	0	0	0	0	**110**
10:00 PM	0	0	0	9	29	24	4	0	0	0	0	0	0	0	0	0	0	**66**
11:00 PM	0	0	3	9	18	10	2	1	0	0	0	0	0	0	0	0	0	**43**
Total	**0**	**3**	**43**	**573**	**2,551**	**2,020**	**271**	**34**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5,497**
Percent	**0.0%**	**0.1%**	**0.8%**	**10.4%**	**46.4%**	**36.7%**	**4.9%**	**0.6%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	29.3	mph	Mean (Average) Speed	29.3	mph
85th Percentile	33.0	mph	10 mph Pace	24.4 - 34.4	mph
95th Percentile	35.2	mph	Percent in Pace	83.7	%

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Sunday, September 18, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	7	10	10	5	1	0	0	0	0	0	0	0	0	0	0	**33**
1:00 AM	0	0	2	8	8	3	0	0	0	0	0	0	0	0	0	0	0	**21**
2:00 AM	0	0	0	4	11	6	1	1	0	0	0	0	0	0	0	0	0	**23**
3:00 AM	0	0	0	7	0	1	0	0	0	0	0	0	0	0	0	0	0	**8**
4:00 AM	0	0	0	4	1	3	1	0	0	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	0	2	1	8	1	2	1	0	0	0	0	0	0	0	0	0	**15**
6:00 AM	0	0	2	7	18	9	0	0	0	0	0	0	0	0	0	0	0	**36**
7:00 AM	0	0	3	13	30	10	1	0	0	0	0	0	0	0	0	0	0	**57**
8:00 AM	0	0	1	18	37	22	1	0	0	0	0	0	0	0	0	0	0	**79**
9:00 AM	0	0	6	48	99	25	1	0	0	0	0	0	0	0	0	0	0	**179**
10:00 AM	0	0	9	70	114	35	4	0	0	0	0	0	0	0	0	0	0	**232**
11:00 AM	0	2	22	130	142	29	1	0	0	0	0	0	0	0	0	0	0	**326**
12:00 PM	1	3	24	139	189	42	4	0	0	0	0	0	0	0	0	0	0	**402**
1:00 PM	0	5	38	161	187	25	1	0	0	0	0	0	0	0	0	0	0	**417**
2:00 PM	0	1	22	167	215	28	1	1	0	0	0	0	0	0	0	0	0	**435**
3:00 PM	0	7	48	156	193	38	2	0	0	0	0	0	0	0	0	0	0	**444**
4:00 PM	0	1	15	126	207	29	2	0	0	0	0	0	0	0	0	0	0	**380**
5:00 PM	0	0	7	91	201	51	3	0	0	0	0	0	0	0	0	0	0	**353**
6:00 PM	0	1	13	71	169	52	4	0	0	0	0	0	0	0	0	0	0	**310**
7:00 PM	0	1	10	101	113	12	2	0	0	0	0	0	0	0	0	0	0	**239**
8:00 PM	0	6	8	78	51	20	3	0	0	0	0	0	0	0	0	0	0	**166**
9:00 PM	0	1	12	35	43	8	0	0	0	0	0	0	0	0	0	0	0	**99**
10:00 PM	0	0	1	21	26	6	1	0	0	0	0	0	0	0	0	0	0	**55**
11:00 PM	0	0	0	11	8	3	1	0	0	0	0	0	0	0	0	0	0	**23**
Total	**1**	**28**	**252**	**1,477**	**2,080**	**463**	**37**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4,341**
Percent	**0.0%**	**0.6%**	**5.8%**	**34.0%**	**47.9%**	**10.7%**	**0.9%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	25.8	mph	Mean (Average) Speed	25.8	mph
85th Percentile	29.4	mph	10 mph Pace	21.3 - 31.3	mph
95th Percentile	31.7	mph	Percent in Pace	83.8	%

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Sunday, September 18, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	9	12	5	0	0	0	1	0	0	0	0	0	0	0	**27**
1:00 AM	0	0	0	6	9	3	0	0	0	0	0	0	0	0	0	0	0	**18**
2:00 AM	0	0	0	1	5	5	0	0	0	0	0	0	0	0	0	0	0	**11**
3:00 AM	0	0	0	5	6	5	0	0	0	0	0	0	0	0	0	0	0	**16**
4:00 AM	0	0	0	1	7	6	0	0	0	0	0	0	0	0	0	0	0	**14**
5:00 AM	0	0	0	2	16	6	0	1	1	0	0	0	0	0	0	0	0	**26**
6:00 AM	0	0	2	17	28	19	4	1	0	0	0	0	0	0	0	0	0	**71**
7:00 AM	0	0	1	15	43	37	8	1	0	0	0	0	0	0	0	0	0	**105**
8:00 AM	0	0	2	20	65	65	6	3	0	0	0	0	0	0	0	0	0	**161**
9:00 AM	0	0	3	24	118	100	18	0	1	0	0	0	0	0	0	0	0	**264**
10:00 AM	0	0	3	36	167	105	18	1	0	0	0	0	0	0	0	0	0	**330**
11:00 AM	0	0	6	45	201	164	23	0	0	0	0	0	0	0	0	0	0	**439**
12:00 PM	0	1	3	50	208	164	17	2	0	0	0	0	0	0	0	0	0	**445**
1:00 PM	0	0	0	28	197	183	19	1	0	0	0	0	0	0	0	0	0	**428**
2:00 PM	0	0	3	44	193	172	24	0	0	0	0	0	0	0	0	0	0	**436**
3:00 PM	0	0	4	38	218	139	20	4	0	0	0	0	0	0	0	0	0	**423**
4:00 PM	0	0	0	38	176	114	15	2	0	0	0	0	0	0	0	0	0	**345**
5:00 PM	0	0	0	37	171	138	11	0	0	0	0	0	0	0	0	0	0	**357**
6:00 PM	0	0	1	29	150	94	12	2	1	0	0	0	0	0	0	0	0	**289**
7:00 PM	0	0	7	45	87	55	9	0	0	0	0	0	0	0	0	0	0	**203**
8:00 PM	0	1	2	23	55	40	4	0	0	0	0	0	0	0	0	0	0	**125**
9:00 PM	0	0	6	27	43	12	4	1	0	0	0	0	0	0	0	0	0	**93**
10:00 PM	0	1	0	10	18	14	2	0	0	0	0	0	0	0	0	0	0	**45**
11:00 PM	0	0	1	7	12	6	1	0	0	0	0	0	0	0	0	0	0	**27**
Total	**0**	**3**	**44**	**557**	**2,205**	**1,651**	**215**	**19**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4,698**
Percent	**0.0%**	**0.1%**	**0.9%**	**11.9%**	**46.9%**	**35.1%**	**4.6%**	**0.4%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	29.1	mph	Mean (Average) Speed	29	mph
85th Percentile	32.5	mph	10 mph Pace	23.6 - 33.6	mph
95th Percentile	35.0	mph	Percent in Pace	83.74	%

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Monday, September 19, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	6	7	2	1	0	0	0	0	0	0	0	0	0	0	**16**
1:00 AM	0	0	1	3	2	2	0	0	0	0	0	0	0	0	0	0	0	**8**
2:00 AM	0	0	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	**5**
3:00 AM	0	0	0	1	4	2	0	0	0	0	0	0	0	0	0	0	0	**7**
4:00 AM	0	0	2	4	4	1	1	0	0	0	0	0	0	0	0	0	0	**12**
5:00 AM	0	0	2	10	10	1	1	2	0	0	0	0	0	0	0	0	0	**26**
6:00 AM	0	0	1	20	52	14	3	1	0	0	0	0	0	0	0	0	0	**91**
7:00 AM	0	0	27	80	107	18	4	0	0	0	0	0	0	0	0	0	0	**236**
8:00 AM	0	2	23	88	148	46	5	0	0	0	0	0	0	0	0	0	0	**312**
9:00 AM	0	0	21	77	110	34	3	0	0	0	0	0	0	0	0	0	0	**245**
10:00 AM	0	0	13	118	152	40	2	0	0	0	0	0	0	0	0	0	0	**325**
11:00 AM	0	1	19	162	236	24	2	0	0	0	0	0	0	0	0	0	0	**444**
12:00 PM	0	8	41	179	188	27	0	0	0	0	0	0	0	0	0	0	0	**443**
1:00 PM	0	4	35	164	190	44	1	0	0	0	0	0	0	0	0	0	0	**438**
2:00 PM	1	21	64	253	271	21	0	0	0	0	0	0	0	0	0	0	0	**631**
3:00 PM	3	26	80	277	305	30	1	0	0	0	0	0	0	0	0	0	0	**722**
4:00 PM	3	25	99	450	303	21	0	0	0	0	0	0	0	0	0	0	0	**901**
5:00 PM	14	74	172	503	273	12	2	0	0	0	0	0	0	0	0	0	0	**1,050**
6:00 PM	0	21	78	275	267	35	1	0	0	0	0	0	0	0	0	0	0	**677**
7:00 PM	0	3	29	164	132	17	1	0	0	0	0	0	0	0	0	0	0	**346**
8:00 PM	0	0	13	89	98	9	0	1	0	0	0	0	0	0	0	0	0	**210**
9:00 PM	0	0	7	56	53	11	0	0	0	0	0	0	0	0	0	0	0	**127**
10:00 PM	0	0	5	26	12	11	0	0	0	0	0	0	0	0	0	0	0	**54**
11:00 PM	0	0	0	6	8	1	0	0	0	0	0	0	0	0	0	0	0	**15**
Total	**21**	**185**	**732**	**3,012**	**2,934**	**425**	**28**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7,341**
Percent	**0.3%**	**2.5%**	**10.0%**	**41.0%**	**40.0%**	**5.8%**	**0.4%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	24.6	mph	Mean (Average) Speed	24.3	mph
85th Percentile	28.2	mph	10 mph Pace	19.9 - 29.9	mph
95th Percentile	30.4	mph	Percent in Pace	81.1	%

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Monday, September 19, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	2	6	3	2	0	0	0	0	0	0	0	0	0	0	**13**
1:00 AM	0	0	2	6	4	4	0	0	0	0	0	0	0	0	0	0	0	**16**
2:00 AM	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	0	0	4	11	5	1	0	0	0	0	0	0	0	0	0	0	**21**
4:00 AM	0	0	2	9	8	9	1	0	0	0	0	0	0	0	0	0	0	**29**
5:00 AM	0	0	4	9	58	37	9	0	1	0	0	0	0	0	0	0	0	**118**
6:00 AM	0	1	10	42	165	102	20	0	0	0	0	0	0	0	0	0	0	**340**
7:00 AM	0	0	9	39	398	264	31	2	0	0	0	0	0	0	0	0	0	**743**
8:00 AM	0	0	4	53	334	302	35	5	0	0	0	0	0	0	0	0	0	**733**
9:00 AM	0	0	3	30	188	156	20	0	0	0	0	0	0	0	0	0	0	**397**
10:00 AM	0	0	5	54	202	145	28	1	0	0	0	0	0	0	0	0	0	**435**
11:00 AM	1	3	19	87	313	173	19	4	2	0	0	0	0	0	0	0	0	**621**
12:00 PM	0	6	12	73	337	198	26	4	0	0	0	0	0	0	0	0	0	**656**
1:00 PM	0	3	6	90	403	242	28	1	0	0	0	0	0	0	0	0	0	**773**
2:00 PM	0	0	10	65	307	209	21	1	0	0	0	0	0	0	0	0	0	**613**
3:00 PM	0	0	15	64	310	263	27	0	0	0	0	0	0	0	0	0	0	**679**
4:00 PM	0	0	2	53	280	215	13	2	0	0	0	0	0	0	0	0	0	**565**
5:00 PM	0	1	1	42	272	144	19	2	0	0	0	0	0	0	0	0	0	**481**
6:00 PM	0	0	2	29	177	139	16	0	0	1	0	0	0	0	0	0	0	**364**
7:00 PM	0	0	4	26	146	58	12	0	2	0	0	0	0	0	0	0	0	**248**
8:00 PM	0	0	5	29	50	35	4	0	0	0	0	0	0	0	0	0	0	**123**
9:00 PM	0	0	1	12	45	17	1	0	0	0	0	0	0	0	0	0	0	**76**
10:00 PM	0	0	1	6	22	6	0	0	0	0	0	0	0	0	0	0	0	**35**
11:00 PM	0	1	3	6	9	4	0	0	0	0	0	0	0	0	0	0	0	**23**
Total	**1**	**15**	**120**	**830**	**4,048**	**2,733**	**333**	**22**	**5**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8,108**
Percent	**0.0%**	**0.2%**	**1.5%**	**10.2%**	**49.9%**	**33.7%**	**4.1%**	**0.3%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	29.1	mph	Mean (Average) Speed	29	mph
85th Percentile	32.4	mph	10 mph Pace	24.0 - 34.0	mph
95th Percentile	34.8	mph	Percent in Pace	84.97	%

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Tuesday, September 20, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	13	6	0	0	0	0	0	0	0	0	0	0	0	0	**19**
1:00 AM	0	1	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	2	1	10	2	0	0	0	0	0	0	0	0	0	0	0	**15**
5:00 AM	0	1	2	9	9	4	1	0	0	0	0	0	0	0	0	0	0	**26**
6:00 AM	0	0	2	26	53	14	0	0	0	0	0	0	0	0	0	0	0	**95**
7:00 AM	0	0	10	68	116	21	7	0	0	0	0	0	0	0	0	0	0	**222**
8:00 AM	7	6	24	102	145	21	1	1	0	0	0	0	0	0	0	0	0	**307**
9:00 AM	0	1	23	101	131	33	2	0	0	0	0	0	0	0	0	0	0	**291**
10:00 AM	0	0	12	124	141	23	3	0	0	0	0	0	0	0	0	0	0	**303**
11:00 AM	0	6	21	160	160	35	0	0	0	0	0	0	0	2	0	0	0	**384**
12:00 PM	0	6	21	191	186	27	0	1	0	0	0	0	0	0	0	0	0	**432**
1:00 PM	0	2	38	177	171	32	2	0	0	0	0	0	0	0	0	0	0	**422**
2:00 PM	0	12	36	201	159	23	0	0	0	0	0	0	0	0	0	0	0	**431**
3:00 PM	14	21	104	289	211	21	1	0	0	0	0	0	0	0	0	0	0	**661**
4:00 PM	3	23	131	347	214	15	1	0	0	0	0	0	0	0	0	0	0	**734**
5:00 PM	3	27	186	441	232	8	0	0	0	0	0	0	0	0	0	0	0	**897**
6:00 PM	4	20	151	373	167	16	1	0	0	0	0	0	0	0	0	0	0	**732**
7:00 PM	0	2	53	208	106	10	0	0	0	0	0	0	0	0	0	0	0	**379**
8:00 PM	0	3	25	103	64	7	2	0	0	0	0	0	0	0	0	0	0	**204**
9:00 PM	0	0	8	69	39	6	0	0	0	0	0	0	0	0	0	0	0	**122**
10:00 PM	0	0	2	20	23	10	2	0	0	0	0	0	0	0	0	0	0	**57**
11:00 PM	0	0	3	9	3	1	0	0	0	0	0	0	0	0	0	0	0	**16**
Total	**31**	**131**	**854**	**3,038**	**2,348**	**331**	**23**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**6,760**
Percent	**0.5%**	**1.9%**	**12.6%**	**44.9%**	**34.7%**	**4.9%**	**0.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	24.0	mph	Mean (Average) Speed	23.9	mph
85th Percentile	27.7	mph	10 mph Pace	19.0 - 29.0	mph
95th Percentile	30.1	mph	Percent in Pace	81.0	%

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Tuesday, September 20, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	3	1	3	2	0	0	0	0	0	0	0	0	0	0	0	**9**
1:00 AM	0	0	2	2	4	0	0	0	0	0	0	0	0	0	0	0	0	**8**
2:00 AM	0	0	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	**5**
3:00 AM	0	0	0	2	9	2	1	0	0	0	0	0	0	0	0	0	0	**14**
4:00 AM	0	0	2	9	24	6	0	0	0	0	0	0	0	0	0	0	0	**41**
5:00 AM	0	0	0	13	62	43	5	1	0	0	0	0	0	0	0	0	0	**124**
6:00 AM	1	1	5	63	161	132	22	0	1	0	0	0	0	0	0	0	0	**386**
7:00 AM	1	0	6	83	362	263	32	2	0	0	0	0	0	0	0	0	0	**749**
8:00 AM	0	0	5	96	408	242	26	2	0	0	0	0	0	0	0	0	0	**779**
9:00 AM	0	0	10	33	209	156	19	1	1	0	0	0	0	0	0	0	0	**429**
10:00 AM	0	0	3	64	220	132	14	2	0	0	0	0	0	0	0	0	0	**435**
11:00 AM	0	0	3	54	218	114	19	4	0	0	0	0	0	0	0	0	0	**412**
12:00 PM	0	1	11	48	203	165	18	0	1	0	0	0	0	0	0	0	0	**447**
1:00 PM	0	2	1	68	231	141	24	0	0	0	0	0	0	0	0	0	0	**467**
2:00 PM	0	0	8	53	185	137	18	3	0	0	0	0	0	0	0	0	0	**404**
3:00 PM	1	0	1	44	245	155	8	1	0	0	0	0	0	0	0	0	0	**455**
4:00 PM	1	0	1	44	221	142	26	1	0	0	0	0	0	0	0	0	0	**436**
5:00 PM	1	0	4	52	261	166	19	2	0	0	0	0	0	0	0	0	0	**505**
6:00 PM	1	0	4	43	137	92	9	0	0	0	0	0	0	0	0	0	0	**286**
7:00 PM	0	0	4	50	128	43	4	0	0	0	0	0	0	0	0	0	0	**229**
8:00 PM	0	0	1	26	63	24	3	0	0	0	0	0	0	0	0	0	0	**117**
9:00 PM	0	1	1	19	32	15	4	0	0	0	0	0	0	0	0	0	0	**72**
10:00 PM	0	0	0	6	20	8	1	0	0	0	0	0	0	0	0	0	0	**35**
11:00 PM	0	0	3	6	11	2	0	0	0	0	0	0	0	0	0	0	0	**22**
Total	**6**	**5**	**78**	**880**	**3,419**	**2,184**	**272**	**19**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6,866**
Percent	**0.1%**	**0.1%**	**1.1%**	**12.8%**	**49.8%**	**31.8%**	**4.0%**	**0.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	28.7	mph	Mean (Average) Speed	28.8	mph
85th Percentile	32.4	mph	10 mph Pace	24.3 - 34.3	mph
95th Percentile	34.8	mph	Percent in Pace	83.72	%

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Wednesday, September 21, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	6	8	0	0	0	0	0	0	0	0	0	0	0	0	**15**
1:00 AM	0	0	1	3	5	1	0	0	0	0	0	0	0	0	0	0	0	**10**
2:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	2	1	2	0	0	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	0	2	3	5	3	0	0	1	0	0	0	0	0	0	0	0	**14**
5:00 AM	0	2	1	15	11	5	0	1	0	0	0	0	0	0	0	0	0	**35**
6:00 AM	0	0	2	24	55	13	3	0	0	0	0	0	0	0	0	0	0	**97**
7:00 AM	0	0	9	85	105	45	4	0	0	0	0	0	0	0	0	0	0	**248**
8:00 AM	2	10	17	91	147	41	3	0	0	0	0	0	0	0	0	0	0	**311**
9:00 AM	0	3	24	93	121	23	0	0	0	0	0	0	0	0	0	0	0	**264**
10:00 AM	0	0	25	125	142	20	0	0	0	0	0	0	0	0	0	0	0	**312**
11:00 AM	0	2	21	158	170	18	3	0	0	0	0	0	0	0	0	0	0	**372**
12:00 PM	0	1	25	198	153	23	1	0	0	0	0	0	0	0	0	0	0	**401**
1:00 PM	0	2	34	241	235	28	2	0	0	0	0	0	0	0	0	0	0	**542**
2:00 PM	0	4	56	291	193	18	0	0	0	0	0	0	0	0	0	0	0	**562**
3:00 PM	3	8	58	349	208	28	0	0	0	0	0	0	0	0	0	0	0	**654**
4:00 PM	0	18	93	317	236	13	0	0	0	0	0	0	0	0	0	0	0	**677**
5:00 PM	2	15	201	464	231	27	0	0	0	0	0	0	0	0	0	0	0	**940**
6:00 PM	2	24	165	296	169	6	0	0	0	0	0	0	0	0	0	0	0	**662**
7:00 PM	0	11	56	184	110	10	0	0	0	0	0	0	0	0	0	0	0	**371**
8:00 PM	0	1	19	113	47	15	1	0	0	0	0	0	0	0	0	0	0	**196**
9:00 PM	0	0	4	62	36	9	0	0	0	0	0	0	0	0	0	0	0	**111**
10:00 PM	0	0	1	21	26	3	1	0	0	0	0	0	0	0	0	0	0	**52**
11:00 PM	0	0	1	13	10	6	0	0	0	0	0	0	0	0	0	0	0	**30**
Total	**9**	**101**	**816**	**3,156**	**2,424**	**357**	**18**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6,883**
Percent	**0.1%**	**1.5%**	**11.9%**	**45.9%**	**35.2%**	**5.2%**	**0.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	24.3	mph	Mean (Average) Speed	24.1	mph
85th Percentile	27.8	mph	10 mph Pace	19.2 - 29.2	mph
95th Percentile	30.2	mph	Percent in Pace	82.4	%

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Wednesday, September 21, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	5	1	1	0	0	0	0	0	0	0	0	0	0	**7**
1:00 AM	0	0	0	5	4	1	1	0	0	0	0	0	0	0	0	0	0	**11**
2:00 AM	0	0	0	3	1	2	0	0	0	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	0	0	3	10	2	0	0	0	0	0	0	0	0	0	0	0	**15**
4:00 AM	0	0	0	7	15	7	3	1	0	0	0	0	0	0	0	0	0	**33**
5:00 AM	0	0	2	18	53	49	8	0	0	0	0	0	0	0	0	0	0	**130**
6:00 AM	1	2	7	40	158	139	28	3	0	0	0	0	0	0	0	0	0	**378**
7:00 AM	0	0	4	51	355	283	34	2	0	0	0	0	0	0	0	0	0	**729**
8:00 AM	0	0	9	69	349	273	28	3	0	0	0	0	0	0	0	0	0	**731**
9:00 AM	1	0	6	57	224	136	19	1	0	0	0	0	0	0	0	0	0	**444**
10:00 AM	0	0	2	60	199	140	20	2	0	0	0	0	0	0	0	0	0	**423**
11:00 AM	0	0	12	49	228	126	15	2	0	0	0	0	0	0	0	0	0	**432**
12:00 PM	0	0	4	49	237	133	10	0	0	0	0	0	0	0	0	0	0	**433**
1:00 PM	0	0	9	44	262	148	18	0	1	0	0	0	0	0	0	0	0	**482**
2:00 PM	0	0	13	59	226	136	10	0	1	0	0	0	0	0	0	0	0	**445**
3:00 PM	0	0	4	54	205	128	13	1	0	0	0	0	0	0	0	0	0	**405**
4:00 PM	0	0	5	62	233	135	12	0	0	0	0	0	0	0	0	0	0	**447**
5:00 PM	1	0	1	38	238	138	10	1	0	0	0	0	0	0	0	0	0	**427**
6:00 PM	0	0	2	42	178	69	7	0	0	0	0	0	0	0	0	0	0	**298**
7:00 PM	0	1	5	38	100	43	8	1	0	0	0	0	0	0	0	0	0	**196**
8:00 PM	0	0	2	14	37	20	3	0	0	0	0	0	0	0	0	0	0	**76**
9:00 PM	0	1	2	14	38	21	3	1	1	0	0	0	0	0	0	0	0	**81**
10:00 PM	0	0	2	10	21	10	1	0	0	0	0	0	0	0	0	0	0	**44**
11:00 PM	0	0	0	4	7	3	1	0	0	0	0	0	0	0	0	0	0	**15**
Total	**3**	**4**	**91**	**790**	**3,383**	**2,143**	**253**	**18**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6,688**
Percent	**0.0%**	**0.1%**	**1.4%**	**11.8%**	**50.6%**	**32.0%**	**3.8%**	**0.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	28.9	mph	Mean (Average) Speed	28.8	mph
85th Percentile	32.3	mph	10 mph Pace	23.9 - 33.9	mph
95th Percentile	34.6	mph	Percent in Pace	84.32	%

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Thursday, September 22, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	2	17	5	2	0	0	0	0	0	0	0	0	0	0	0	**26**
1:00 AM	0	0	1	3	3	3	0	1	0	0	0	0	0	0	0	0	0	**11**
2:00 AM	0	0	1	2	0	1	0	0	0	0	0	0	0	0	0	0	0	**4**
3:00 AM	0	0	1	1	6	1	0	0	0	0	0	0	0	0	0	0	0	**9**
4:00 AM	0	0	0	7	5	1	0	0	0	0	0	0	0	0	0	0	0	**13**
5:00 AM	0	0	3	8	12	4	0	0	0	0	0	0	0	0	0	0	0	**27**
6:00 AM	0	0	2	22	48	19	2	0	0	0	0	0	0	0	0	0	0	**93**
7:00 AM	0	0	15	69	106	24	3	0	0	0	0	0	0	0	0	0	0	**217**
8:00 AM	0	1	18	112	163	32	1	0	0	0	0	0	0	0	0	0	0	**327**
9:00 AM	0	0	18	97	98	36	2	0	0	0	0	0	0	0	0	0	0	**251**
10:00 AM	1	4	19	123	134	23	3	0	0	0	0	0	0	0	0	0	0	**307**
11:00 AM	1	1	22	129	155	36	0	0	0	0	0	0	0	0	0	0	0	**344**
12:00 PM	0	0	25	187	197	35	1	1	0	0	0	0	0	0	0	0	0	**446**
1:00 PM	0	4	26	223	191	22	2	0	0	0	0	0	0	0	0	0	0	**468**
2:00 PM	0	1	30	222	186	30	0	0	0	0	0	0	0	0	0	0	0	**469**
3:00 PM	8	21	65	242	246	34	0	0	0	0	0	0	0	0	0	0	0	**616**
4:00 PM	3	9	67	376	303	32	1	0	0	0	0	0	0	0	0	0	0	**791**
5:00 PM	3	23	99	419	326	51	1	0	1	0	0	0	0	0	0	0	0	**923**
6:00 PM	0	3	41	241	262	53	1	0	0	0	0	0	0	1	0	0	0	**602**
7:00 PM	0	0	21	178	142	14	1	1	0	0	0	0	0	0	0	0	0	**357**
8:00 PM	0	0	10	98	103	23	0	0	0	0	0	0	0	0	0	0	0	**234**
9:00 PM	0	1	5	57	80	24	2	0	0	0	0	0	0	0	0	0	0	**169**
10:00 PM	0	0	5	31	32	7	0	0	0	0	0	0	0	0	0	0	0	**75**
11:00 PM	0	0	1	10	8	5	1	0	0	0	0	0	0	0	0	0	0	**25**
Total	**16**	**68**	**497**	**2,874**	**2,811**	**512**	**21**	**3**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**6,804**
Percent	**0.2%**	**1.0%**	**7.3%**	**42.2%**	**41.3%**	**7.5%**	**0.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	24.9	mph	Mean (Average) Speed	24.9	mph
85th Percentile	28.5	mph	10 mph Pace	20.2 - 30.2	mph
95th Percentile	30.9	mph	Percent in Pace	83.6	%

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Thursday, September 22, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	4	3	5	2	0	0	0	0	0	0	0	0	0	0	0	**14**
1:00 AM	0	0	0	5	7	0	0	0	0	0	0	0	0	0	0	0	0	**12**
2:00 AM	0	0	0	2	1	1	1	0	0	0	0	0	0	0	0	0	0	**5**
3:00 AM	0	0	0	6	10	5	1	0	0	0	0	0	0	0	0	0	0	**22**
4:00 AM	0	0	0	8	13	6	2	0	0	0	0	0	0	0	0	0	0	**29**
5:00 AM	0	0	4	12	67	35	4	1	0	0	0	0	0	0	0	0	0	**123**
6:00 AM	0	0	1	38	183	104	16	2	0	0	0	0	0	0	0	0	0	**344**
7:00 AM	0	0	4	60	328	269	29	1	0	0	0	1	0	0	0	0	0	**692**
8:00 AM	0	0	14	93	361	239	18	1	0	0	0	0	0	0	0	0	0	**726**
9:00 AM	0	0	8	57	228	135	22	1	0	0	0	0	0	0	0	0	0	**451**
10:00 AM	0	0	3	47	206	129	13	2	1	0	0	0	0	0	0	0	0	**401**
11:00 AM	0	1	9	49	182	153	16	2	1	0	0	0	0	0	0	0	0	**413**
12:00 PM	0	0	7	82	247	133	18	1	0	0	0	0	0	0	0	0	0	**488**
1:00 PM	0	0	1	48	184	130	14	0	0	0	0	0	0	0	0	0	0	**377**
2:00 PM	0	0	4	45	214	128	16	1	0	0	0	0	0	0	0	0	0	**408**
3:00 PM	0	0	2	58	233	177	15	6	0	0	0	0	0	0	0	0	0	**491**
4:00 PM	0	0	3	45	233	177	8	2	0	0	0	0	0	0	0	0	0	**468**
5:00 PM	0	0	0	43	220	151	20	1	0	0	0	0	0	0	0	0	0	**435**
6:00 PM	0	0	2	25	170	135	18	4	0	0	0	0	0	1	0	0	0	**355**
7:00 PM	0	0	0	41	129	71	9	3	0	0	0	0	0	0	0	0	0	**253**
8:00 PM	0	0	4	38	94	35	3	1	1	0	0	0	0	0	0	0	0	**176**
9:00 PM	0	0	3	18	44	15	1	0	0	0	0	0	0	0	0	0	0	**81**
10:00 PM	0	0	0	15	16	17	2	0	0	0	0	0	0	0	0	0	0	**50**
11:00 PM	0	0	1	3	8	4	1	0	0	0	0	0	0	0	0	0	0	**17**
Total	**0**	**1**	**74**	**841**	**3,383**	**2,251**	**247**	**29**	**3**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**6,831**
Percent	**0.0%**	**0.0%**	**1.1%**	**12.3%**	**49.5%**	**33.0%**	**3.6%**	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	29.0	mph	Mean (Average) Speed	28.9	mph
85th Percentile	32.4	mph	10 mph Pace	23.7 - 33.7	mph
95th Percentile	34.7	mph	Percent in Pace	84.01	%

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Friday, September 23, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	2	1	8	13	1	0	0	0	0	0	0	0	0	0	0	0	**25**
1:00 AM	0	0	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	0	0	3	1	2	0	0	0	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	0	0	1	3	2	0	0	0	0	0	0	0	0	0	0	0	**6**
4:00 AM	0	0	1	1	7	1	1	0	0	0	0	0	0	0	0	0	0	**11**
5:00 AM	0	0	3	16	10	2	0	0	0	0	0	0	0	0	0	0	0	**31**
6:00 AM	0	0	2	28	57	14	0	0	0	1	0	0	0	0	0	0	0	**102**
7:00 AM	0	2	7	65	114	38	3	0	0	0	0	0	0	0	0	0	0	**229**
8:00 AM	0	0	16	78	155	23	4	0	0	0	0	0	0	0	0	0	0	**276**
9:00 AM	0	0	11	78	118	41	0	0	0	0	0	0	0	0	0	0	0	**248**
10:00 AM	0	3	26	105	153	28	1	0	0	0	0	0	0	0	0	0	0	**316**
11:00 AM	3	5	44	189	174	25	0	0	0	0	0	0	0	3	0	0	0	**443**
12:00 PM	12	13	31	230	194	27	0	1	0	0	0	0	0	0	0	0	0	**508**
1:00 PM	0	1	34	234	215	33	1	0	0	0	0	0	0	0	0	0	0	**518**
2:00 PM	8	10	53	173	227	23	0	0	0	0	0	0	0	0	0	0	0	**494**
3:00 PM	4	12	81	341	276	25	2	0	0	0	0	0	0	0	0	0	0	**741**
4:00 PM	9	22	72	353	331	41	0	0	0	0	0	0	0	0	0	0	0	**828**
5:00 PM	10	43	102	291	382	45	1	0	0	0	0	0	0	0	0	0	0	**874**
6:00 PM	0	4	70	257	255	30	1	0	0	0	0	0	0	0	0	0	0	**617**
7:00 PM	0	2	48	167	135	26	1	0	0	0	0	0	0	0	0	0	0	**379**
8:00 PM	0	0	16	107	121	16	0	0	0	0	0	0	0	0	0	0	0	**260**
9:00 PM	0	3	11	78	78	14	0	0	0	0	0	0	0	0	0	0	0	**184**
10:00 PM	0	0	16	78	56	9	1	0	0	0	0	0	0	0	0	0	0	**160**
11:00 PM	0	0	0	21	18	7	0	1	0	0	0	0	0	0	0	0	0	**47**
Total	**46**	**122**	**647**	**2,904**	**3,095**	**473**	**16**	**2**	**0**	**1**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**7,309**
Percent	**0.6%**	**1.7%**	**8.9%**	**39.7%**	**42.3%**	**6.5%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	24.9	mph	Mean (Average) Speed	24.6	mph
85th Percentile	28.4	mph	10 mph Pace	20.0 - 30.0	mph
95th Percentile	30.5	mph	Percent in Pace	82.0	%

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Friday, September 23, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	5	12	0	0	0	0	0	0	0	0	0	0	0	0	**18**
1:00 AM	0	0	0	3	3	1	0	0	0	0	1	0	0	0	0	0	0	**8**
2:00 AM	0	0	0	3	2	2	0	0	0	0	0	0	0	0	0	0	0	**7**
3:00 AM	0	0	0	3	12	6	0	0	0	0	0	0	0	0	0	0	0	**21**
4:00 AM	0	0	1	6	10	7	2	0	0	0	0	0	0	0	0	0	0	**26**
5:00 AM	0	0	1	23	44	27	7	0	0	0	0	0	0	0	0	0	0	**102**
6:00 AM	0	0	3	55	143	131	10	1	0	1	0	0	0	0	0	0	0	**344**
7:00 AM	0	1	0	45	287	223	32	2	1	0	0	0	0	0	0	0	0	**591**
8:00 AM	0	0	1	43	211	210	25	3	0	0	0	0	0	0	0	0	0	**493**
9:00 AM	0	0	1	65	238	170	28	2	1	0	0	0	0	0	0	0	0	**505**
10:00 AM	0	0	3	72	264	224	28	3	0	0	0	0	0	0	0	0	0	**594**
11:00 AM	1	1	14	57	228	147	23	6	2	0	0	0	0	0	0	0	0	**479**
12:00 PM	0	0	5	67	256	145	22	2	0	0	0	0	0	0	0	0	0	**497**
1:00 PM	0	1	9	47	224	157	11	1	0	0	0	0	0	0	0	0	0	**450**
2:00 PM	0	0	2	50	233	166	12	0	0	0	0	0	0	0	0	0	0	**463**
3:00 PM	1	0	6	50	277	174	29	0	1	0	0	0	0	0	0	0	0	**538**
4:00 PM	0	0	4	30	203	191	17	1	1	0	0	0	0	0	0	0	0	**447**
5:00 PM	0	0	4	45	225	165	19	2	1	0	0	0	0	0	0	0	0	**461**
6:00 PM	0	0	1	23	213	144	23	1	1	1	0	0	0	0	0	0	0	**407**
7:00 PM	0	0	3	45	155	72	11	3	0	0	0	0	0	0	0	0	0	**289**
8:00 PM	0	0	0	12	84	39	9	2	0	0	0	0	0	0	0	0	0	**146**
9:00 PM	0	0	0	22	51	18	2	1	0	1	0	0	0	0	0	0	0	**95**
10:00 PM	0	0	2	11	33	10	2	0	0	0	0	0	0	0	0	0	0	**58**
11:00 PM	0	0	0	6	12	5	1	0	0	0	0	0	0	0	0	0	0	**24**
Total	**2**	**3**	**61**	**788**	**3,420**	**2,434**	**313**	**30**	**8**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**7,063**
Percent	**0.0%**	**0.0%**	**0.9%**	**11.2%**	**48.4%**	**34.5%**	**4.4%**	**0.4%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	29.1	mph	Mean (Average) Speed	29.1	mph
85th Percentile	32.5	mph	10 mph Pace	24.2 - 34.2	mph
95th Percentile	35.0	mph	Percent in Pace	84.3	%

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Total Study Average
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	2	10	9	2	1	0	0	0	0	0	0	0	0	0	0	**24**
1:00 AM	0	0	1	4	4	2	0	0	0	0	0	0	0	0	0	0	0	**11**
2:00 AM	0	0	0	2	3	3	0	0	0	0	0	0	0	0	0	0	0	**8**
3:00 AM	0	0	0	2	2	2	0	0	0	0	0	0	0	0	0	0	0	**6**
4:00 AM	0	0	1	3	5	2	0	0	0	0	0	0	0	0	0	0	0	**11**
5:00 AM	0	0	2	10	10	3	1	1	0	0	0	0	0	0	0	0	0	**27**
6:00 AM	0	0	2	20	45	14	1	0	0	0	0	0	0	0	0	0	0	**82**
7:00 AM	0	0	11	58	89	25	3	0	0	0	0	0	0	0	0	0	0	**186**
8:00 AM	1	3	15	77	124	30	2	0	0	0	0	0	0	0	0	0	0	**252**
9:00 AM	0	1	16	78	112	32	1	0	0	0	0	0	0	0	0	0	0	**240**
10:00 AM	0	1	17	112	140	29	2	0	0	0	0	0	0	0	0	0	0	**301**
11:00 AM	1	2	24	153	176	29	1	0	0	0	0	0	0	1	0	0	0	**387**
12:00 PM	2	5	28	184	197	30	1	0	0	0	0	0	0	0	0	0	0	**447**
1:00 PM	0	3	33	197	195	33	2	0	0	0	0	0	0	0	0	0	0	**463**
2:00 PM	2	7	40	207	219	26	1	0	0	0	0	0	0	0	0	0	0	**502**
3:00 PM	5	14	65	261	241	31	1	0	0	0	0	0	0	0	0	0	0	**618**
4:00 PM	3	14	75	304	260	28	1	0	0	0	0	0	0	0	0	0	0	**685**
5:00 PM	5	26	112	338	268	36	1	0	0	0	0	0	0	0	0	0	0	**786**
6:00 PM	1	10	78	235	214	36	1	0	0	0	0	0	0	0	0	0	0	**575**
7:00 PM	0	3	38	167	123	14	1	0	0	0	0	0	0	0	0	0	0	**346**
8:00 PM	0	2	15	100	84	15	1	0	0	0	0	0	0	0	0	0	0	**217**
9:00 PM	0	1	8	61	57	12	0	0	0	0	0	0	0	0	0	0	0	**139**
10:00 PM	0	0	6	35	29	8	1	0	0	0	0	0	0	0	0	0	0	**79**
11:00 PM	0	0	1	12	12	4	0	0	0	0	0	0	0	0	0	0	0	**29**
Total	**20**	**92**	**590**	**2,630**	**2,618**	**446**	**23**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**6,421**
Percent	**0.3%**	**1.4%**	**9.2%**	**41.0%**	**40.8%**	**6.9%**	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	24.8	mph	Mean (Average) Speed	24.7	mph
85th Percentile	28.4	mph	10 mph Pace	19.9 - 29.9	mph
95th Percentile	30.8	mph	Percent in Pace	81.6	%

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 to 9/23/2022
Site Code: 10

Total Study Average
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	3	8	2	0	0	0	0	0	0	0	0	0	0	0	**14**
1:00 AM	0	0	1	4	5	2	0	0	0	0	0	0	0	0	0	0	0	**12**
2:00 AM	0	0	0	2	2	2	0	0	0	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	0	0	4	9	5	0	0	0	0	0	0	0	0	0	0	0	**18**
4:00 AM	0	0	1	6	13	6	1	0	0	0	0	0	0	0	0	0	0	**27**
5:00 AM	0	0	2	11	45	31	5	0	0	0	0	0	0	0	0	0	0	**94**
6:00 AM	0	1	5	38	125	96	15	1	0	0	0	0	0	0	0	0	0	**281**
7:00 AM	0	0	3	44	266	203	26	2	0	0	0	0	0	0	0	0	0	**544**
8:00 AM	0	0	5	59	262	205	21	3	0	0	0	0	0	0	0	0	0	**555**
9:00 AM	0	0	5	46	193	142	20	1	1	0	0	0	0	0	0	0	0	**408**
10:00 AM	0	0	3	51	207	147	21	2	0	0	0	0	0	0	0	0	0	**431**
11:00 AM	0	1	9	54	224	152	20	3	1	0	0	0	0	0	0	0	0	**464**
12:00 PM	0	1	7	57	250	160	19	2	0	0	0	0	0	0	0	0	0	**496**
1:00 PM	0	1	4	53	253	171	20	1	0	0	0	0	0	0	0	0	0	**503**
2:00 PM	0	0	6	52	222	159	17	1	0	0	0	0	0	0	0	0	0	**457**
3:00 PM	0	0	5	48	236	171	19	2	0	0	0	0	0	0	0	0	0	**481**
4:00 PM	0	0	3	44	223	160	16	1	0	0	0	0	0	0	0	0	0	**447**
5:00 PM	0	0	2	43	224	148	16	2	0	0	0	0	0	0	0	0	0	**435**
6:00 PM	0	0	2	32	171	114	15	2	0	0	0	0	0	0	0	0	0	**336**
7:00 PM	0	0	4	39	123	57	8	1	0	0	0	0	0	0	0	0	0	**232**
8:00 PM	0	0	2	24	64	35	4	0	0	0	0	0	0	0	0	0	0	**129**
9:00 PM	0	0	3	20	43	17	3	0	0	0	0	0	0	0	0	0	0	**86**
10:00 PM	0	0	1	10	23	13	2	0	0	0	0	0	0	0	0	0	0	**49**
11:00 PM	0	0	2	6	11	5	1	0	0	0	0	0	0	0	0	0	0	**25**
Total	**0**	**4**	**76**	**750**	**3,202**	**2,203**	**269**	**24**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6,530**
Percent	**0.0%**	**0.1%**	**1.2%**	**11.5%**	**49.0%**	**33.7%**	**4.1%**	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	29.1	mph	Mean (Average) Speed	29.0	mph
85th Percentile	32.5	mph	10 mph Pace	23.9 - 33.9	mph
95th Percentile	34.9	mph	Percent in Pace	84.1	%

Location: Midland Ave BTWN Riverine & Devereux
Date Range: 9/17/2022 - 9/23/2022
Site Code: 10

	Saturday			Sunday			Monday			Tuesday			Wednesday			Thursday			Friday					
	9/17/2022			9/18/2022			9/19/2022			9/20/2022			9/21/2022			9/22/2022			9/23/2022			Mid-Week Average		
Time	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total
12:00 AM	30	18	48	33	27	60	16	13	29	19	9	28	15	7	22	26	14	40	25	18	43	20	10	30
1:00 AM	13	14	27	21	18	39	8	16	24	6	8	14	10	11	21	11	12	23	6	8	14	9	10	19
2:00 AM	22	10	32	23	11	34	5	6	11	2	5	7	2	6	8	4	5	9	6	7	13	3	5	8
3:00 AM	7	16	23	8	16	24	7	21	28	3	14	17	5	15	20	9	22	31	6	21	27	6	17	23
4:00 AM	7	18	25	9	14	23	12	29	41	15	41	56	14	33	47	13	29	42	11	26	37	14	34	48
5:00 AM	26	43	69	15	26	41	26	118	144	26	124	150	35	130	165	27	123	150	31	102	133	29	126	155
6:00 AM	62	109	171	36	71	107	91	340	431	95	386	481	97	378	475	93	344	437	102	344	446	95	369	464
7:00 AM	102	208	310	57	105	162	236	743	979	222	749	971	248	729	977	217	692	909	229	591	820	229	723	952
8:00 AM	158	263	421	79	161	240	312	733	1,045	307	779	1,086	311	731	1,042	327	726	1,053	276	493	769	315	745	1,060
9:00 AM	206	361	567	179	264	443	245	397	642	291	429	720	264	444	708	251	451	702	248	505	753	269	441	710
10:00 AM	316	402	718	232	330	562	325	435	760	303	435	738	312	423	735	307	401	708	316	594	910	307	420	727
11:00 AM	395	455	850	326	439	765	444	621	1,065	384	412	796	372	432	804	344	413	757	443	479	922	367	419	786
12:00 PM	496	506	1,002	402	445	847	443	656	1,099	432	447	879	401	433	834	446	488	934	508	497	1,005	426	456	882
1:00 PM	436	537	973	417	428	845	438	773	1,211	422	467	889	542	482	1,024	468	377	845	518	450	968	477	442	919
2:00 PM	487	436	923	435	436	871	631	613	1,244	431	404	835	562	445	1,007	469	408	877	494	463	957	487	419	906
3:00 PM	487	375	862	444	423	867	722	679	1,401	661	455	1,116	654	405	1,059	616	491	1,107	741	538	1,279	644	450	1,094
4:00 PM	480	424	904	380	345	725	901	565	1,466	734	436	1,170	677	447	1,124	791	468	1,259	828	447	1,275	734	450	1,184
5:00 PM	459	374	833	353	357	710	1,050	481	1,531	897	505	1,402	940	427	1,367	923	435	1,358	874	461	1,335	920	456	1,376
6:00 PM	436	351	787	310	289	599	677	364	1,041	732	286	1,018	662	298	960	602	355	957	617	407	1,024	665	313	978
7:00 PM	354	212	566	239	203	442	346	248	594	379	229	608	371	196	567	357	253	610	379	289	668	369	226	595
8:00 PM	250	146	396	166	125	291	210	123	333	204	117	321	196	76	272	234	176	410	260	146	406	211	123	334
9:00 PM	161	110	271	99	93	192	127	76	203	122	72	194	111	81	192	169	81	250	184	95	279	134	78	212
10:00 PM	95	66	161	55	45	100	54	35	89	57	35	92	52	44	96	75	50	125	160	58	218	61	43	104
11:00 PM	47	43	90	23	27	50	15	23	38	16	22	38	30	15	45	25	17	42	47	24	71	24	18	42
Total	**5,532**	**5,497**	**11,029**	**4,341**	**4,698**	**9,039**	**7,341**	**8,108**	**15,449**	**6,760**	**6,866**	**13,626**	**6,883**	**6,688**	**13,571**	**6,804**	**6,831**	**13,635**	**7,309**	**7,063**	**14,372**	**6,816**	**6,795**	**13,611**
Percent	**50%**	**50%**	-	**48%**	**52%**	-	**48%**	**52%**	-	**50%**	**50%**	-	**51%**	**49%**	-	**50%**	**50%**	-	**51%**	**49%**	-	**50%**	**50%**	-

1. Mid-week average includes data between Tuesday and Thursday.

Vehicle Classification Report Summary

Location: W Wulfsohn E/O Midland Ave

Count Direction: Eastbound / Westbound

Date Range: 9/17/2022 to 9/23/2022

Site Code: 11

	FHWA Vehicle Classification													Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
Study Total														
Eastbound	58	2,781	1,105	315	1,363	4	0	2	4	1	0	0	0	5,633
Percent	1.0%	49.4%	19.6%	5.6%	24.2%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	100%
Westbound	56	4,232	1,781	243	1,013	20	0	5	4	1	0	0	0	7,355
Percent	0.8%	57.5%	24.2%	3.3%	13.8%	0.3%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	100%
Total	114	7,013	2,886	558	2,376	24	0	7	8	2	0	0	0	12,988
Percent	0.9%	54.0%	22.2%	4.3%	18.3%	0.2%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	100%

FHWA Vehicle Classification	
Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Saturday, September 17, 2022
Eastbound

	FHWA Vehicle Classification													Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	**4**
1:00 AM	0	2	0	1	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	2	2	1	2	0	0	0	0	0	0	0	0	**7**
3:00 AM	0	0	0	0	3	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	2	1	2	1	0	0	0	0	0	0	0	0	**6**
6:00 AM	1	5	2	1	1	0	0	0	0	0	0	0	0	**10**
7:00 AM	0	10	4	2	8	0	0	0	0	0	0	0	0	**24**
8:00 AM	0	15	6	2	15	0	0	0	0	0	0	0	0	**38**
9:00 AM	0	15	6	4	6	0	0	0	0	0	0	0	0	**31**
10:00 AM	0	23	13	3	11	0	0	0	0	0	0	0	0	**50**
11:00 AM	0	12	12	3	17	0	0	0	0	0	0	0	0	**44**
12:00 PM	0	28	10	1	15	0	0	0	0	0	0	0	0	**54**
1:00 PM	0	35	14	2	15	0	0	0	0	0	0	0	0	**66**
2:00 PM	1	40	17	1	16	0	0	0	0	0	0	0	0	**75**
3:00 PM	0	31	10	2	19	0	0	0	0	0	0	0	0	**62**
4:00 PM	1	33	11	5	10	0	0	0	0	0	0	0	0	**60**
5:00 PM	2	35	14	3	15	0	0	0	0	0	0	0	0	**69**
6:00 PM	0	53	12	3	11	0	0	0	0	0	0	0	0	**79**
7:00 PM	0	27	7	2	11	0	0	0	0	0	0	0	0	**47**
8:00 PM	0	32	10	4	4	0	0	0	0	0	0	0	0	**50**
9:00 PM	0	16	1	4	6	0	0	0	0	0	0	0	0	**27**
10:00 PM	0	6	2	1	3	0	0	0	0	0	0	0	0	**12**
11:00 PM	0	3	2	2	0	0	0	0	0	0	0	0	0	**7**
Total	**5**	**427**	**156**	**51**	**189**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**828**
Percent	**0.6%**	**51.6%**	**18.8%**	**6.2%**	**22.8%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Saturday, September 17, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	4	2	0	2	0	0	0	0	0	0	0	0	**8**
1:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	3	0	3	2	0	0	0	0	0	0	0	0	**8**
5:00 AM	0	2	1	3	4	0	0	0	0	0	0	0	0	**10**
6:00 AM	0	4	5	5	5	0	0	0	0	0	0	0	0	**19**
7:00 AM	0	16	10	1	10	0	0	0	0	0	0	0	0	**37**
8:00 AM	0	23	16	2	7	0	0	0	0	0	0	0	0	**48**
9:00 AM	0	32	17	0	5	0	0	0	0	0	0	0	0	**54**
10:00 AM	0	37	20	3	11	0	0	0	0	0	0	0	0	**71**
11:00 AM	0	55	22	0	14	0	0	0	0	0	0	0	0	**91**
12:00 PM	0	44	17	2	12	0	0	0	0	0	0	0	0	**75**
1:00 PM	0	74	27	2	4	1	0	0	0	0	0	0	0	**108**
2:00 PM	1	50	26	3	15	0	0	0	0	0	0	0	0	**95**
3:00 PM	0	45	17	3	9	1	0	0	0	0	0	0	0	**75**
4:00 PM	1	51	15	1	7	0	0	0	0	0	0	0	0	**75**
5:00 PM	0	44	15	3	5	0	0	0	0	0	0	0	0	**67**
6:00 PM	0	51	15	3	2	0	0	0	0	0	0	0	0	**71**
7:00 PM	0	39	15	2	4	0	0	0	0	0	0	0	0	**60**
8:00 PM	0	19	7	3	0	1	0	0	0	0	0	0	0	**30**
9:00 PM	0	13	1	1	3	0	0	0	0	0	0	0	0	**18**
10:00 PM	0	8	2	1	1	0	0	0	0	0	0	0	0	**12**
11:00 PM	0	6	1	2	0	0	0	0	0	0	0	0	0	**9**
Total	**2**	**626**	**252**	**43**	**122**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,048**
Percent	**0.2%**	**59.7%**	**24.0%**	**4.1%**	**11.6%**	**0.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Sunday, September 18, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	4	0	2	0	0	0	0	0	0	0	0	0	**6**
1:00 AM	0	1	0	1	1	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	1	2	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	3	0	3	2	0	0	0	0	0	0	0	0	**8**
4:00 AM	0	4	0	0	0	0	0	0	0	0	0	0	0	**4**
5:00 AM	0	1	0	2	0	0	0	0	0	0	0	0	0	**3**
6:00 AM	0	1	0	0	3	0	0	0	0	0	0	0	0	**4**
7:00 AM	0	11	1	2	6	0	0	0	0	0	0	0	0	**20**
8:00 AM	0	11	4	2	6	0	0	0	0	0	0	0	0	**23**
9:00 AM	0	11	5	2	7	0	0	0	0	0	0	0	0	**25**
10:00 AM	1	21	7	4	13	0	0	0	0	0	0	0	0	**46**
11:00 AM	0	19	20	4	11	0	0	0	0	0	0	0	0	**54**
12:00 PM	0	30	10	0	16	0	0	0	0	0	0	0	0	**56**
1:00 PM	1	35	12	1	11	0	0	0	0	0	0	0	0	**60**
2:00 PM	0	30	7	1	12	0	0	0	0	0	0	0	0	**50**
3:00 PM	3	38	6	1	18	0	0	0	0	0	0	0	0	**66**
4:00 PM	3	25	9	4	7	0	0	0	0	0	0	0	0	**48**
5:00 PM	0	26	9	3	9	0	0	0	0	0	0	0	0	**47**
6:00 PM	0	25	7	2	12	0	0	1	0	0	0	0	0	**47**
7:00 PM	3	26	6	5	15	0	0	0	0	0	0	0	0	**55**
8:00 PM	0	10	4	3	4	0	0	0	0	0	0	0	0	**21**
9:00 PM	0	10	3	2	4	0	0	0	0	0	0	0	0	**19**
10:00 PM	0	6	3	1	2	0	0	0	0	0	0	0	0	**12**
11:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	**2**
Total	**11**	**349**	**113**	**46**	**162**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**682**
Percent	**1.6%**	**51.2%**	**16.6%**	**6.7%**	**23.8%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Sunday, September 18, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	4	1	1	0	0	0	0	0	0	0	0	0	**6**
1:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	1	0	3	1	0	0	0	0	0	0	0	0	**5**
5:00 AM	0	2	0	3	3	0	0	0	0	0	0	0	0	**8**
6:00 AM	0	1	0	3	3	0	0	0	0	0	0	0	0	**7**
7:00 AM	0	6	8	2	3	0	0	0	0	0	0	0	0	**19**
8:00 AM	0	15	6	2	8	0	0	0	0	0	0	0	0	**31**
9:00 AM	1	26	10	1	11	0	0	0	0	0	0	0	0	**49**
10:00 AM	0	40	10	1	7	0	0	0	0	0	0	0	0	**58**
11:00 AM	0	34	23	0	9	0	0	0	0	0	0	0	0	**66**
12:00 PM	0	52	23	1	8	0	0	0	0	0	0	0	0	**84**
1:00 PM	2	46	16	5	9	0	0	0	0	0	0	0	0	**78**
2:00 PM	0	57	18	4	10	0	0	0	0	0	0	0	0	**89**
3:00 PM	2	51	14	0	13	0	0	0	0	0	0	0	0	**80**
4:00 PM	4	39	15	1	9	0	0	0	0	0	0	0	0	**68**
5:00 PM	0	56	20	2	9	1	0	1	0	0	0	0	0	**89**
6:00 PM	2	50	14	3	7	0	0	0	0	0	0	0	0	**76**
7:00 PM	0	30	6	0	4	0	0	0	0	0	0	0	0	**40**
8:00 PM	1	19	2	3	1	0	0	0	0	0	0	0	0	**26**
9:00 PM	0	13	1	0	2	0	0	0	0	0	0	0	0	**16**
10:00 PM	0	3	1	1	0	0	0	0	0	0	0	0	0	**5**
11:00 PM	0	4	2	0	1	0	0	0	0	0	0	0	0	**7**
Total	**12**	**557**	**190**	**36**	**118**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**915**
Percent	**1.3%**	**60.9%**	**20.8%**	**3.9%**	**12.9%**	**0.1%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Monday, September 19, 2022
Eastbound

	FHWA Vehicle Classification													Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	0	1	1	2	0	0	0	0	0	0	0	0	**4**
1:00 AM	0	2	0	1	1	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	**1**
3:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	2	1	2	1	0	0	0	0	0	0	0	0	**6**
6:00 AM	1	8	3	1	2	0	0	0	0	0	0	0	0	**15**
7:00 AM	1	20	6	1	8	0	0	0	0	0	0	0	0	**36**
8:00 AM	0	17	7	2	7	0	0	0	0	0	0	0	0	**33**
9:00 AM	1	14	5	2	13	0	0	0	0	0	0	0	0	**35**
10:00 AM	0	23	7	4	11	0	0	0	0	0	0	0	0	**45**
11:00 AM	1	31	8	2	13	0	0	0	0	0	0	0	0	**55**
12:00 PM	0	46	8	1	11	0	0	0	0	0	0	0	0	**66**
1:00 PM	0	40	17	3	13	0	0	0	0	0	0	0	0	**73**
2:00 PM	1	22	12	3	8	0	0	0	0	0	0	0	0	**46**
3:00 PM	1	30	12	2	15	0	0	0	0	0	0	0	0	**60**
4:00 PM	1	26	12	4	9	0	0	0	0	0	0	0	0	**52**
5:00 PM	2	47	12	3	22	0	0	0	0	0	0	0	0	**86**
6:00 PM	0	31	19	2	20	0	0	0	0	0	0	0	0	**72**
7:00 PM	1	31	3	1	14	0	0	0	0	0	0	0	0	**50**
8:00 PM	0	21	4	3	7	0	0	0	0	0	0	0	0	**35**
9:00 PM	2	10	2	5	5	0	0	0	0	0	0	0	0	**24**
10:00 PM	0	4	3	0	5	0	0	0	0	0	0	0	0	**12**
11:00 PM	0	3	0	1	1	0	0	0	0	0	0	0	0	**5**
Total	**12**	**428**	**142**	**45**	**188**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**816**
Percent	**1.5%**	**52.5%**	**17.4%**	**5.5%**	**23.0%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Monday, September 19, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	1	3	0	0	0	0	0	0	0	0	0	0	0	**4**
1:00 AM	0	1	0	0	0	0	0	0	1	0	0	0	0	**2**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	2	0	3	1	0	0	0	0	0	0	0	0	**6**
5:00 AM	0	8	0	4	5	0	0	0	0	0	0	0	0	**17**
6:00 AM	1	13	4	4	10	0	0	0	0	0	0	0	0	**32**
7:00 AM	0	31	24	2	18	0	0	0	0	0	0	0	0	**75**
8:00 AM	0	33	15	2	7	1	0	0	0	0	0	0	0	**58**
9:00 AM	0	28	15	1	10	0	0	0	0	0	0	0	0	**54**
10:00 AM	0	35	14	2	10	0	0	0	0	0	0	0	0	**61**
11:00 AM	0	54	28	0	10	0	0	0	0	0	0	0	0	**92**
12:00 PM	1	48	18	1	10	0	0	0	0	0	0	0	0	**78**
1:00 PM	1	66	23	2	12	0	0	0	0	0	0	0	0	**104**
2:00 PM	1	59	10	0	11	0	0	0	0	0	0	0	0	**81**
3:00 PM	2	51	16	2	11	0	0	0	0	0	0	0	0	**82**
4:00 PM	1	57	32	1	11	0	0	0	0	0	0	0	0	**102**
5:00 PM	1	44	14	4	5	0	0	0	0	0	0	0	0	**68**
6:00 PM	0	50	21	1	3	1	0	0	0	0	0	0	0	**76**
7:00 PM	2	32	10	0	6	0	0	0	0	0	0	0	0	**50**
8:00 PM	0	13	8	3	1	0	0	0	0	0	0	0	0	**25**
9:00 PM	0	11	2	1	1	0	0	0	0	0	0	0	0	**15**
10:00 PM	1	5	1	1	1	0	0	0	0	0	0	0	0	**9**
11:00 PM	0	1	0	0	2	0	0	0	0	0	0	0	0	**3**
Total	**12**	**647**	**255**	**34**	**145**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1,096**
Percent	**1.1%**	**59.0%**	**23.3%**	**3.1%**	**13.2%**	**0.2%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Tuesday, September 20, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	1	1	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	1	0	2	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	1	0	0	2	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	6	2	2	1	0	0	0	0	0	0	0	0	**11**
6:00 AM	1	12	8	1	5	0	0	0	0	0	0	0	0	**27**
7:00 AM	1	14	8	2	7	0	0	0	0	0	0	0	0	**32**
8:00 AM	0	17	3	2	8	0	0	0	0	0	0	0	0	**30**
9:00 AM	1	17	6	4	11	0	0	1	0	0	0	0	0	**40**
10:00 AM	1	19	7	4	19	0	0	0	0	0	0	0	0	**50**
11:00 AM	0	17	11	2	25	0	0	0	0	0	0	0	0	**55**
12:00 PM	1	28	14	2	10	0	0	0	0	0	0	0	0	**55**
1:00 PM	3	36	12	3	11	0	0	0	0	0	0	0	0	**65**
2:00 PM	0	28	11	2	11	0	0	0	0	0	0	0	0	**52**
3:00 PM	0	26	13	2	20	0	0	0	0	0	0	0	0	**61**
4:00 PM	2	37	17	2	11	0	0	0	0	0	0	0	0	**69**
5:00 PM	1	34	10	4	8	0	0	0	0	0	0	0	0	**57**
6:00 PM	0	35	11	3	14	1	0	0	0	0	0	0	0	**64**
7:00 PM	0	19	13	2	17	0	0	0	0	0	0	0	0	**51**
8:00 PM	0	12	7	2	9	0	0	0	0	0	0	0	0	**30**
9:00 PM	0	12	1	3	2	0	0	0	0	0	0	0	0	**18**
10:00 PM	0	5	2	1	1	0	0	0	0	0	0	0	0	**9**
11:00 PM	0	1	0	2	0	0	0	0	0	0	0	0	0	**3**
Total	**11**	**379**	**156**	**49**	**195**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**792**
Percent	**1.4%**	**47.9%**	**19.7%**	**6.2%**	**24.6%**	**0.1%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Tuesday, September 20, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	2	0	1	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	3	0	2	4	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	8	3	4	4	0	0	0	0	0	0	0	0	**19**
6:00 AM	1	9	8	4	8	0	0	0	0	0	0	0	0	**30**
7:00 AM	0	43	19	2	17	0	0	0	0	0	0	0	0	**81**
8:00 AM	0	30	16	2	12	0	0	0	0	0	0	0	0	**60**
9:00 AM	0	31	15	0	9	0	0	0	0	0	0	0	0	**55**
10:00 AM	0	30	14	2	13	0	0	0	0	0	0	0	0	**59**
11:00 AM	0	38	19	0	15	0	0	0	0	0	0	0	0	**72**
12:00 PM	1	55	16	1	7	1	0	0	0	0	0	0	0	**81**
1:00 PM	0	46	20	2	13	0	0	0	0	0	0	0	0	**81**
2:00 PM	0	39	19	2	11	0	0	0	0	0	0	0	0	**71**
3:00 PM	2	42	19	1	10	0	0	0	0	0	0	0	0	**74**
4:00 PM	1	52	26	2	13	0	0	0	0	0	0	0	0	**94**
5:00 PM	1	59	25	1	8	0	0	0	0	0	0	0	0	**94**
6:00 PM	0	34	18	1	7	0	0	0	0	0	0	0	0	**60**
7:00 PM	0	32	20	2	5	0	0	1	0	0	0	0	0	**60**
8:00 PM	0	19	4	3	0	1	0	0	0	0	0	0	0	**27**
9:00 PM	0	14	2	1	1	0	0	0	0	0	0	0	0	**18**
10:00 PM	0	4	2	0	2	0	0	0	0	0	0	0	0	**8**
11:00 PM	0	2	0	3	0	0	0	0	0	0	0	0	0	**5**
Total	**7**	**595**	**265**	**36**	**159**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1,065**
Percent	**0.7%**	**55.9%**	**24.9%**	**3.4%**	**14.9%**	**0.2%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Wednesday, September 21, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	1	0	0	2	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	2	1	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	**3**
5:00 AM	0	2	3	2	1	0	0	0	0	0	0	0	0	**8**
6:00 AM	0	8	7	1	3	0	0	0	0	0	0	0	0	**19**
7:00 AM	0	21	11	2	8	0	0	0	0	0	0	0	0	**42**
8:00 AM	0	10	7	3	14	0	0	0	0	0	0	0	0	**34**
9:00 AM	0	14	11	2	7	0	0	0	0	0	0	0	0	**34**
10:00 AM	0	17	7	3	16	0	0	0	0	0	0	0	0	**43**
11:00 AM	0	24	10	4	11	0	0	0	0	0	0	0	0	**49**
12:00 PM	0	23	13	1	16	0	0	0	0	0	0	0	0	**53**
1:00 PM	0	35	15	3	19	1	0	0	0	0	0	0	0	**73**
2:00 PM	1	33	10	3	13	0	0	0	1	0	0	0	0	**61**
3:00 PM	0	37	17	1	6	0	0	0	0	0	0	0	0	**61**
4:00 PM	0	25	19	2	15	0	0	0	0	0	0	0	0	**61**
5:00 PM	1	34	15	3	17	0	0	0	0	0	0	0	0	**70**
6:00 PM	0	26	15	3	19	0	0	0	0	0	0	0	0	**63**
7:00 PM	4	20	13	2	19	0	0	0	0	0	0	0	0	**58**
8:00 PM	0	13	3	1	8	0	0	0	0	0	0	0	0	**25**
9:00 PM	0	13	6	2	6	0	0	0	0	0	0	0	0	**27**
10:00 PM	0	6	2	1	2	0	0	0	0	0	0	0	0	**11**
11:00 PM	0	2	0	0	3	0	0	0	0	0	0	0	0	**5**
Total	**6**	**366**	**185**	**43**	**208**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**810**
Percent	**0.7%**	**45.2%**	**22.8%**	**5.3%**	**25.7%**	**0.1%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Wednesday, September 21, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	1	2	3	0	0	0	0	0	0	0	0	**6**
5:00 AM	0	7	2	3	5	0	0	0	0	0	0	0	0	**17**
6:00 AM	1	6	5	3	12	0	0	0	0	0	0	0	0	**27**
7:00 AM	0	28	28	3	16	0	0	0	0	0	0	0	0	**75**
8:00 AM	0	37	24	2	8	0	0	0	0	1	0	0	0	**72**
9:00 AM	0	25	15	0	12	0	0	0	0	0	0	0	0	**52**
10:00 AM	0	37	22	3	7	0	0	0	0	0	0	0	0	**69**
11:00 AM	0	48	25	0	9	1	0	0	0	0	0	0	0	**83**
12:00 PM	0	43	21	1	10	1	0	1	1	0	0	0	0	**78**
1:00 PM	2	58	29	4	8	0	0	0	0	0	0	0	0	**101**
2:00 PM	0	54	8	1	7	0	0	0	0	0	0	0	0	**70**
3:00 PM	0	38	20	2	9	0	0	0	0	0	0	0	0	**69**
4:00 PM	0	47	23	0	19	1	0	0	0	0	0	0	0	**90**
5:00 PM	0	55	22	1	5	1	0	0	0	0	0	0	0	**84**
6:00 PM	4	39	13	0	6	0	0	0	0	0	0	0	0	**62**
7:00 PM	0	34	11	1	4	1	0	0	0	0	0	0	0	**51**
8:00 PM	1	5	4	1	3	0	0	0	0	0	0	0	0	**14**
9:00 PM	0	12	4	0	3	0	0	0	0	0	0	0	0	**19**
10:00 PM	0	7	0	0	3	0	0	0	0	0	0	0	0	**10**
11:00 PM	0	1	0	1	1	0	0	0	0	0	0	0	0	**3**
Total	**8**	**585**	**277**	**28**	**150**	**5**	**0**	**1**	**1**	**1**	**0**	**0**	**0**	**1,056**
Percent	**0.8%**	**55.4%**	**26.2%**	**2.7%**	**14.2%**	**0.5%**	**0.0%**	**0.1%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Thursday, September 22, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	0	1	0	2	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	1	0	0	2	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	0	0	1	0	0	0	1	0	0	0	0	**2**
5:00 AM	0	2	1	2	1	0	0	0	0	0	0	0	0	**6**
6:00 AM	1	8	2	1	2	0	0	0	0	0	0	0	0	**14**
7:00 AM	1	14	13	1	9	0	0	0	0	0	0	0	0	**38**
8:00 AM	0	12	4	2	11	0	0	0	0	0	0	0	0	**29**
9:00 AM	0	25	9	2	10	0	0	0	0	0	0	0	0	**46**
10:00 AM	0	18	11	3	12	0	0	0	0	0	0	0	0	**44**
11:00 AM	0	14	8	3	12	0	0	0	0	0	0	0	0	**37**
12:00 PM	0	33	16	1	17	0	0	0	0	0	0	0	0	**67**
1:00 PM	0	45	17	3	15	0	0	0	0	0	0	0	0	**80**
2:00 PM	0	30	9	1	13	0	0	0	0	0	0	0	0	**53**
3:00 PM	0	30	14	4	11	0	0	0	0	0	0	0	0	**59**
4:00 PM	0	33	12	3	12	0	0	0	0	0	0	0	0	**60**
5:00 PM	2	30	14	2	12	0	0	0	0	0	0	0	0	**60**
6:00 PM	0	37	21	2	18	0	0	0	0	0	0	0	0	**78**
7:00 PM	1	29	6	2	12	0	0	0	0	0	0	0	0	**50**
8:00 PM	0	13	11	2	8	0	0	0	0	0	0	0	0	**34**
9:00 PM	0	22	6	2	7	0	0	0	0	0	0	0	0	**37**
10:00 PM	0	5	0	2	1	0	0	0	0	0	0	0	0	**8**
11:00 PM	0	2	1	1	1	0	0	0	0	0	0	0	0	**5**
Total	**5**	**405**	**176**	**40**	**192**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**819**
Percent	**0.6%**	**49.5%**	**21.5%**	**4.9%**	**23.4%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Thursday, September 22, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	2	0	0	1	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	2	2	0	0	0	0	0	1	0	0	0	0	**5**
2:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	2	0	0	1	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	1	0	2	3	0	0	0	0	0	0	0	0	**6**
5:00 AM	0	6	2	3	3	0	0	0	0	0	0	0	0	**14**
6:00 AM	1	4	15	4	6	0	0	0	0	0	0	0	0	**30**
7:00 AM	0	26	16	2	12	1	0	0	0	0	0	0	0	**57**
8:00 AM	0	40	24	2	9	0	0	0	0	0	0	0	0	**75**
9:00 AM	0	25	16	1	11	1	0	0	0	0	0	0	0	**54**
10:00 AM	0	38	25	2	11	0	0	0	0	0	0	0	0	**76**
11:00 AM	0	32	18	0	12	0	0	0	0	0	0	0	0	**62**
12:00 PM	0	52	25	2	11	0	0	1	0	0	0	0	0	**91**
1:00 PM	0	37	25	3	10	0	0	0	0	0	0	0	0	**75**
2:00 PM	0	43	24	1	11	0	0	0	0	0	0	0	0	**79**
3:00 PM	1	48	18	0	15	0	0	0	0	0	0	0	0	**82**
4:00 PM	1	51	18	3	5	0	0	0	0	0	0	0	0	**78**
5:00 PM	1	58	19	3	8	0	0	0	0	0	0	0	0	**89**
6:00 PM	0	45	19	0	13	0	0	0	0	0	0	0	0	**77**
7:00 PM	0	28	16	3	4	1	0	0	0	0	0	0	0	**52**
8:00 PM	0	22	4	2	3	0	0	0	0	0	0	0	0	**31**
9:00 PM	0	13	3	1	1	1	0	0	0	0	0	0	0	**19**
10:00 PM	0	7	3	0	2	0	0	0	0	0	0	0	0	**12**
11:00 PM	0	1	0	2	0	0	0	0	0	0	0	0	0	**3**
Total	**4**	**583**	**293**	**36**	**152**	**4**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**1,074**
Percent	**0.4%**	**54.3%**	**27.3%**	**3.4%**	**14.2%**	**0.4%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Friday, September 23, 2022
Eastbound

	FHWA Vehicle Classification													Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	3	1	1	1	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	2	0	1	1	0	0	0	0	0	0	0	0	**4**
6:00 AM	1	8	6	1	4	0	0	0	0	0	0	0	0	**20**
7:00 AM	0	18	10	2	8	0	0	0	0	0	0	0	0	**38**
8:00 AM	1	12	9	0	9	0	0	0	0	0	0	0	0	**31**
9:00 AM	1	19	4	1	14	1	0	0	0	0	0	0	0	**40**
10:00 AM	0	18	6	3	21	0	0	0	0	0	0	0	0	**48**
11:00 AM	1	17	8	3	16	1	0	0	0	0	0	0	0	**46**
12:00 PM	2	25	8	1	21	0	0	0	0	0	0	0	0	**57**
1:00 PM	0	45	16	1	15	0	0	0	0	0	0	0	0	**77**
2:00 PM	0	26	15	2	20	0	0	0	0	0	0	0	0	**63**
3:00 PM	0	27	15	2	13	0	0	0	0	0	0	0	0	**57**
4:00 PM	0	35	13	1	15	0	0	0	1	1	0	0	0	**66**
5:00 PM	0	40	18	3	18	0	0	0	0	0	0	0	0	**79**
6:00 PM	1	45	20	3	16	0	0	0	0	0	0	0	0	**85**
7:00 PM	0	26	13	5	13	0	0	0	0	0	0	0	0	**57**
8:00 PM	0	20	2	3	6	0	0	0	0	0	0	0	0	**31**
9:00 PM	1	12	7	3	7	0	0	0	0	0	0	0	0	**30**
10:00 PM	0	22	3	1	7	0	0	0	0	0	0	0	0	**33**
11:00 PM	0	5	3	1	1	0	0	0	0	0	0	0	0	**10**
Total	**8**	**427**	**177**	**41**	**229**	**2**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**886**
Percent	**0.9%**	**48.2%**	**20.0%**	**4.6%**	**25.8%**	**0.2%**	**0.0%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Friday, September 23, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	3	0	0	1	0	0	0	0	0	0	0	0	**4**
1:00 AM	1	1	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	3	2	0	0	0	0	0	0	0	0	**5**
5:00 AM	0	11	2	2	3	0	0	1	0	0	0	0	0	**19**
6:00 AM	0	5	7	2	5	0	0	0	0	0	0	0	0	**19**
7:00 AM	0	16	18	1	17	1	0	0	0	0	0	0	0	**53**
8:00 AM	0	18	18	1	11	0	0	0	0	0	0	0	0	**48**
9:00 AM	1	33	15	1	8	1	0	0	0	0	0	0	0	**59**
10:00 AM	0	39	17	2	16	1	0	0	1	0	0	0	0	**76**
11:00 AM	1	55	22	0	14	0	0	0	0	0	0	0	0	**92**
12:00 PM	0	54	19	2	11	0	0	0	0	0	0	0	0	**86**
1:00 PM	0	48	16	2	16	0	0	0	0	0	0	0	0	**82**
2:00 PM	1	42	28	1	14	0	0	0	0	0	0	0	0	**86**
3:00 PM	2	57	14	2	8	0	0	0	0	0	0	0	0	**83**
4:00 PM	0	57	16	1	7	0	0	0	0	0	0	0	0	**81**
5:00 PM	1	56	17	2	9	0	0	0	0	0	0	0	0	**85**
6:00 PM	1	46	15	2	7	0	0	0	0	0	0	0	0	**71**
7:00 PM	2	38	14	0	6	0	0	0	0	0	0	0	0	**60**
8:00 PM	0	28	7	5	2	0	0	0	0	0	0	0	0	**42**
9:00 PM	1	17	1	1	4	0	0	0	0	0	0	0	0	**24**
10:00 PM	0	9	1	0	4	0	0	0	0	0	0	0	0	**14**
11:00 PM	0	4	1	0	2	0	0	0	0	0	0	0	0	**7**
Total	**11**	**639**	**249**	**30**	**167**	**3**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**1,101**
Percent	**1.0%**	**58.0%**	**22.6%**	**2.7%**	**15.2%**	**0.3%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Total Study Average
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	1	1	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	1	0	1	1	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	1	0	1	1	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	1	0	1	1	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	2	1	2	1	0	0	0	0	0	0	0	0	**6**
6:00 AM	1	7	4	1	3	0	0	0	0	0	0	0	0	**16**
7:00 AM	0	15	8	2	8	0	0	0	0	0	0	0	0	**33**
8:00 AM	0	13	6	2	10	0	0	0	0	0	0	0	0	**31**
9:00 AM	0	16	7	2	10	0	0	0	0	0	0	0	0	**35**
10:00 AM	0	20	8	3	15	0	0	0	0	0	0	0	0	**46**
11:00 AM	0	19	11	3	15	0	0	0	0	0	0	0	0	**48**
12:00 PM	0	30	11	1	15	0	0	0	0	0	0	0	0	**57**
1:00 PM	1	39	15	2	14	0	0	0	0	0	0	0	0	**71**
2:00 PM	0	30	12	2	13	0	0	0	0	0	0	0	0	**57**
3:00 PM	1	31	12	2	15	0	0	0	0	0	0	0	0	**61**
4:00 PM	1	31	13	3	11	0	0	0	0	0	0	0	0	**59**
5:00 PM	1	35	13	3	14	0	0	0	0	0	0	0	0	**66**
6:00 PM	0	36	15	3	16	0	0	0	0	0	0	0	0	**70**
7:00 PM	1	25	9	3	14	0	0	0	0	0	0	0	0	**52**
8:00 PM	0	17	6	3	7	0	0	0	0	0	0	0	0	**33**
9:00 PM	0	14	4	3	5	0	0	0	0	0	0	0	0	**26**
10:00 PM	0	8	2	1	3	0	0	0	0	0	0	0	0	**14**
11:00 PM	0	2	1	1	1	0	0	0	0	0	0	0	0	**5**
Total	**6**	**395**	**158**	**46**	**194**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**799**
Percent	**0.8%**	**49.4%**	**19.8%**	**5.8%**	**24.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Total Study Average
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	3	0	0	1	0	0	0	0	0	0	0	0	**4**
1:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	1	0	3	2	0	0	0	0	0	0	0	0	**6**
5:00 AM	0	6	1	3	4	0	0	0	0	0	0	0	0	**14**
6:00 AM	1	6	6	4	7	0	0	0	0	0	0	0	0	**24**
7:00 AM	0	24	18	2	13	0	0	0	0	0	0	0	0	**57**
8:00 AM	0	28	17	2	9	0	0	0	0	0	0	0	0	**56**
9:00 AM	0	29	15	1	9	0	0	0	0	0	0	0	0	**54**
10:00 AM	0	37	17	2	11	0	0	0	0	0	0	0	0	**67**
11:00 AM	0	45	22	0	12	0	0	0	0	0	0	0	0	**79**
12:00 PM	0	50	20	1	10	0	0	0	0	0	0	0	0	**81**
1:00 PM	1	54	22	3	10	0	0	0	0	0	0	0	0	**90**
2:00 PM	0	49	19	2	11	0	0	0	0	0	0	0	0	**81**
3:00 PM	1	47	17	1	11	0	0	0	0	0	0	0	0	**77**
4:00 PM	1	51	21	1	10	0	0	0	0	0	0	0	0	**84**
5:00 PM	1	53	19	2	7	0	0	0	0	0	0	0	0	**82**
6:00 PM	1	45	16	1	6	0	0	0	0	0	0	0	0	**69**
7:00 PM	1	33	13	1	5	0	0	0	0	0	0	0	0	**53**
8:00 PM	0	18	5	3	1	0	0	0	0	0	0	0	0	**27**
9:00 PM	0	13	2	1	2	0	0	0	0	0	0	0	0	**18**
10:00 PM	0	6	1	0	2	0	0	0	0	0	0	0	0	**9**
11:00 PM	0	3	1	1	1	0	0	0	0	0	0	0	0	**6**
Total	**7**	**605**	**252**	**34**	**144**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,042**
Percent	**0.7%**	**58.1%**	**24.2%**	**3.3%**	**13.8%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

3-Day (Tuesday - Thursday) Average
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	1	0	1	1	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	3	2	2	1	0	0	0	0	0	0	0	0	**8**
6:00 AM	1	9	6	1	3	0	0	0	0	0	0	0	0	**20**
7:00 AM	1	16	11	2	8	0	0	0	0	0	0	0	0	**37**
8:00 AM	0	13	5	2	11	0	0	0	0	0	0	0	0	**31**
9:00 AM	0	19	9	3	9	0	0	0	0	0	0	0	0	**40**
10:00 AM	0	18	8	3	16	0	0	0	0	0	0	0	0	**46**
11:00 AM	0	18	10	3	16	0	0	0	0	0	0	0	0	**47**
12:00 PM	0	28	14	1	14	0	0	0	0	0	0	0	0	**58**
1:00 PM	1	39	15	3	15	0	0	0	0	0	0	0	0	**73**
2:00 PM	0	30	10	2	12	0	0	0	0	0	0	0	0	**55**
3:00 PM	0	31	15	2	12	0	0	0	0	0	0	0	0	**60**
4:00 PM	1	32	16	2	13	0	0	0	0	0	0	0	0	**63**
5:00 PM	1	33	13	3	12	0	0	0	0	0	0	0	0	**62**
6:00 PM	0	33	16	3	17	0	0	0	0	0	0	0	0	**68**
7:00 PM	2	23	11	2	16	0	0	0	0	0	0	0	0	**53**
8:00 PM	0	13	7	2	8	0	0	0	0	0	0	0	0	**30**
9:00 PM	0	16	4	2	5	0	0	0	0	0	0	0	0	**27**
10:00 PM	0	5	1	1	1	0	0	0	0	0	0	0	0	**9**
11:00 PM	0	2	0	1	1	0	0	0	0	0	0	0	0	**4**
Total	**7**	**383**	**172**	**44**	**198**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**807**
Percent	**0.9%**	**47.5%**	**21.4%**	**5.5%**	**24.6%**	**0.1%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

3-Day (Tuesday - Thursday) Average
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	1	0	2	3	0	0	0	0	0	0	0	0	**7**
5:00 AM	0	7	2	3	4	0	0	0	0	0	0	0	0	**17**
6:00 AM	1	6	9	4	9	0	0	0	0	0	0	0	0	**29**
7:00 AM	0	32	21	2	15	0	0	0	0	0	0	0	0	**71**
8:00 AM	0	36	21	2	10	0	0	0	0	0	0	0	0	**69**
9:00 AM	0	27	15	0	11	0	0	0	0	0	0	0	0	**54**
10:00 AM	0	35	20	2	10	0	0	0	0	0	0	0	0	**68**
11:00 AM	0	39	21	0	12	0	0	0	0	0	0	0	0	**72**
12:00 PM	0	50	21	1	9	1	0	1	0	0	0	0	0	**83**
1:00 PM	1	47	25	3	10	0	0	0	0	0	0	0	0	**86**
2:00 PM	0	45	17	1	10	0	0	0	0	0	0	0	0	**73**
3:00 PM	1	43	19	1	11	0	0	0	0	0	0	0	0	**75**
4:00 PM	1	50	22	2	12	0	0	0	0	0	0	0	0	**87**
5:00 PM	1	57	22	2	7	0	0	0	0	0	0	0	0	**89**
6:00 PM	1	39	17	0	9	0	0	0	0	0	0	0	0	**66**
7:00 PM	0	31	16	2	4	1	0	0	0	0	0	0	0	**54**
8:00 PM	0	15	4	2	2	0	0	0	0	0	0	0	0	**24**
9:00 PM	0	13	3	1	2	0	0	0	0	0	0	0	0	**19**
10:00 PM	0	6	2	0	2	0	0	0	0	0	0	0	0	**10**
11:00 PM	0	1	0	2	0	0	0	0	0	0	0	0	0	**4**
Total	**6**	**588**	**278**	**33**	**154**	**4**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**1,065**
Percent	**0.6%**	**55.2%**	**26.1%**	**3.1%**	**14.4%**	**0.3%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Vehicle Speed Report Summary

Location: W Wulfsohn E/O Midland Ave

Count Direction: Eastbound / Westbound

Date Range: 9/17/2022 to 9/23/2022

Site Code: 11

	Speed Range (mph)																	Total
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
Study Total																		
Eastbound	1	5	24	234	1,258	2,167	1,379	438	101	15	6	4	1	0	0	0	0	5,633
Percent	0.0%	0.1%	0.4%	4.2%	22.3%	38.5%	24.5%	7.8%	1.8%	0.3%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Westbound	4	5	58	562	2,425	2,928	1,103	210	46	9	2	1	1	0	1	0	0	7,355
Percent	0.1%	0.1%	0.8%	7.6%	33.0%	39.8%	15.0%	2.9%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	5	10	82	796	3,683	5,095	2,482	648	147	24	8	5	2	0	1	0	0	12,988
Percent	0.0%	0.1%	0.6%	6.1%	28.4%	39.2%	19.1%	5.0%	1.1%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%

Total Study Percentile Speed Summary			Total Study Speed Statistics		
Eastbound			**Eastbound**		
50th Percentile (Median)	32.9	mph	Mean (Average) Speed	33.3	mph
85th Percentile	38.6	mph	10 mph Pace	27.7 - 37.7	mph
95th Percentile	42.4	mph	Percent in Pace	68.0	%
Westbound			**Westbound**		
50th Percentile (Median)	31.0	mph	Mean (Average) Speed	31.1	mph
85th Percentile	35.7	mph	10 mph Pace	25.8 - 35.8	mph
95th Percentile	39.1	mph	Percent in Pace	73.5	%

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Saturday, September 17, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	**4**
1:00 AM	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	1	5	1	0	0	0	0	0	0	0	0	0	0	0	**7**
3:00 AM	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	0	0	1	3	0	2	0	0	0	0	0	0	0	0	0	0	**6**
6:00 AM	0	0	0	0	2	5	1	2	0	0	0	0	0	0	0	0	0	**10**
7:00 AM	0	0	0	1	4	7	7	3	2	0	0	0	0	0	0	0	0	**24**
8:00 AM	0	0	0	1	11	12	11	2	1	0	0	0	0	0	0	0	0	**38**
9:00 AM	0	0	0	3	7	13	4	3	0	1	0	0	0	0	0	0	0	**31**
10:00 AM	0	0	0	0	11	21	11	6	1	0	0	0	0	0	0	0	0	**50**
11:00 AM	0	0	0	0	6	18	15	4	1	0	0	0	0	0	0	0	0	**44**
12:00 PM	0	0	0	0	10	23	14	5	2	0	0	0	0	0	0	0	0	**54**
1:00 PM	0	0	0	2	5	29	20	9	1	0	0	0	0	0	0	0	0	**66**
2:00 PM	0	0	0	1	10	30	24	7	3	0	0	0	0	0	0	0	0	**75**
3:00 PM	0	0	0	0	14	20	19	7	2	0	0	0	0	0	0	0	0	**62**
4:00 PM	0	0	1	3	6	28	19	1	1	1	0	0	0	0	0	0	0	**60**
5:00 PM	0	0	0	1	18	27	12	9	2	0	0	0	0	0	0	0	0	**69**
6:00 PM	0	0	0	4	18	38	14	4	1	0	0	0	0	0	0	0	0	**79**
7:00 PM	0	0	0	4	10	16	12	4	1	0	0	0	0	0	0	0	0	**47**
8:00 PM	0	0	0	3	12	12	13	9	1	0	0	0	0	0	0	0	0	**50**
9:00 PM	0	0	0	2	5	10	8	2	0	0	0	0	0	0	0	0	0	**27**
10:00 PM	0	0	0	0	6	2	3	0	1	0	0	0	0	0	0	0	0	**12**
11:00 PM	0	0	1	0	3	1	2	0	0	0	0	0	0	0	0	0	0	**7**
Total	**0**	**0**	**2**	**27**	**169**	**318**	**212**	**78**	**20**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**828**
Percent	**0.0%**	**0.0%**	**0.2%**	**3.3%**	**20.4%**	**38.4%**	**25.6%**	**9.4%**	**2.4%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	33.2	mph	Mean (Average) Speed	33.7	mph
85th Percentile	39.2	mph	10 mph Pace	28.4 - 38.4	mph
95th Percentile	42.3	mph	Percent in Pace	66.9	%

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Saturday, September 17, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	1	1	3	0	3	0	0	0	0	0	0	0	0	0	0	0	**8**
1:00 AM	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	1	4	3	0	0	0	0	0	0	0	0	0	0	0	0	**8**
5:00 AM	0	0	0	3	4	1	0	2	0	0	0	0	0	0	0	0	0	**10**
6:00 AM	0	0	0	3	7	7	1	1	0	0	0	0	0	0	0	0	0	**19**
7:00 AM	0	0	0	2	12	16	7	0	0	0	0	0	0	0	0	0	0	**37**
8:00 AM	0	0	0	4	19	15	8	1	1	0	0	0	0	0	0	0	0	**48**
9:00 AM	0	0	0	2	23	19	10	0	0	0	0	0	0	0	0	0	0	**54**
10:00 AM	0	0	0	1	21	35	13	0	1	0	0	0	0	0	0	0	0	**71**
11:00 AM	0	0	0	3	34	39	10	5	0	0	0	0	0	0	0	0	0	**91**
12:00 PM	0	0	0	2	22	28	15	5	2	1	0	0	0	0	0	0	0	**75**
1:00 PM	0	0	0	8	38	39	20	1	2	0	0	0	0	0	0	0	0	**108**
2:00 PM	0	0	0	6	29	39	16	4	1	0	0	0	0	0	0	0	0	**95**
3:00 PM	0	0	0	4	23	31	15	1	1	0	0	0	0	0	0	0	0	**75**
4:00 PM	0	1	0	4	13	35	18	2	1	1	0	0	0	0	0	0	0	**75**
5:00 PM	0	0	0	3	15	29	16	2	1	0	1	0	0	0	0	0	0	**67**
6:00 PM	0	0	0	4	23	33	9	2	0	0	0	0	0	0	0	0	0	**71**
7:00 PM	0	0	0	3	20	22	11	4	0	0	0	0	0	0	0	0	0	**60**
8:00 PM	0	0	0	5	13	6	6	0	0	0	0	0	0	0	0	0	0	**30**
9:00 PM	0	0	0	3	4	6	5	0	0	0	0	0	0	0	0	0	0	**18**
10:00 PM	0	0	0	0	4	5	2	1	0	0	0	0	0	0	0	0	0	**12**
11:00 PM	0	0	1	1	3	3	0	1	0	0	0	0	0	0	0	0	0	**9**
Total	**0**	**2**	**5**	**69**	**332**	**412**	**183**	**32**	**10**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1,048**
Percent	**0.0%**	**0.2%**	**0.5%**	**6.6%**	**31.7%**	**39.3%**	**17.5%**	**3.1%**	**1.0%**	**0.2%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	31.4	mph	Mean (Average) Speed	31.5	mph
85th Percentile	36.2	mph	10 mph Pace	26.1 - 36.1	mph
95th Percentile	39.5	mph	Percent in Pace	73.57	%

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Sunday, September 18, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	**6**
1:00 AM	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	0	0	0	3	2	3	0	0	0	0	0	0	0	0	0	0	**8**
4:00 AM	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	**4**
5:00 AM	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	**3**
6:00 AM	0	0	0	1	0	1	1	0	1	0	0	0	0	0	0	0	0	**4**
7:00 AM	0	0	0	2	6	7	1	4	0	0	0	0	0	0	0	0	0	**20**
8:00 AM	0	0	0	1	3	7	7	2	3	0	0	0	0	0	0	0	0	**23**
9:00 AM	0	0	0	1	5	9	9	1	0	0	0	0	0	0	0	0	0	**25**
10:00 AM	0	0	0	3	8	18	15	0	2	0	0	0	0	0	0	0	0	**46**
11:00 AM	0	0	0	0	12	21	15	5	1	0	0	0	0	0	0	0	0	**54**
12:00 PM	0	0	0	2	14	17	15	8	0	0	0	0	0	0	0	0	0	**56**
1:00 PM	0	0	0	1	10	26	21	2	0	0	0	0	0	0	0	0	0	**60**
2:00 PM	0	0	0	2	8	20	16	2	1	0	0	1	0	0	0	0	0	**50**
3:00 PM	0	0	1	2	13	27	16	5	1	1	0	0	0	0	0	0	0	**66**
4:00 PM	0	0	1	1	7	22	13	3	1	0	0	0	0	0	0	0	0	**48**
5:00 PM	0	0	0	0	11	19	14	3	0	0	0	0	0	0	0	0	0	**47**
6:00 PM	0	0	0	1	11	21	12	1	0	0	1	0	0	0	0	0	0	**47**
7:00 PM	0	0	0	4	13	22	14	2	0	0	0	0	0	0	0	0	0	**55**
8:00 PM	0	0	0	0	10	8	2	1	0	0	0	0	0	0	0	0	0	**21**
9:00 PM	0	0	0	0	4	8	7	0	0	0	0	0	0	0	0	0	0	**19**
10:00 PM	0	0	1	2	2	3	3	1	0	0	0	0	0	0	0	0	0	**12**
11:00 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	**2**
Total	**0**	**0**	**3**	**28**	**148**	**263**	**187**	**40**	**10**	**1**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**682**
Percent	**0.0%**	**0.0%**	**0.4%**	**4.1%**	**21.7%**	**38.6%**	**27.4%**	**5.9%**	**1.5%**	**0.1%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	33.1	mph	Mean (Average) Speed	33.2	mph
85th Percentile	38.2	mph	10 mph Pace	28.2 - 38.2	mph
95th Percentile	41.5	mph	Percent in Pace	71.1	%

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Sunday, September 18, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	3	2	1	0	0	0	0	0	0	0	0	0	0	0	**6**
1:00 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	**5**
5:00 AM	0	0	0	2	5	1	0	0	0	0	0	0	0	0	0	0	0	**8**
6:00 AM	0	0	0	2	3	2	0	0	0	0	0	0	0	0	0	0	0	**7**
7:00 AM	0	0	0	3	3	10	2	0	0	0	0	0	1	0	0	0	0	**19**
8:00 AM	0	0	1	2	10	13	1	3	1	0	0	0	0	0	0	0	0	**31**
9:00 AM	0	0	1	0	13	23	11	1	0	0	0	0	0	0	0	0	0	**49**
10:00 AM	0	0	0	4	21	21	10	2	0	0	0	0	0	0	0	0	0	**58**
11:00 AM	0	0	0	2	23	35	5	1	0	0	0	0	0	0	0	0	0	**66**
12:00 PM	0	0	0	5	24	37	16	2	0	0	0	0	0	0	0	0	0	**84**
1:00 PM	0	0	1	3	19	36	17	2	0	0	0	0	0	0	0	0	0	**78**
2:00 PM	0	0	0	5	28	39	12	2	1	2	0	0	0	0	0	0	0	**89**
3:00 PM	0	0	0	6	29	32	13	0	0	0	0	0	0	0	0	0	0	**80**
4:00 PM	0	0	0	5	19	30	11	3	0	0	0	0	0	0	0	0	0	**68**
5:00 PM	0	0	0	3	30	37	16	3	0	0	0	0	0	0	0	0	0	**89**
6:00 PM	0	0	0	6	25	38	7	0	0	0	0	0	0	0	0	0	0	**76**
7:00 PM	0	0	2	2	14	18	4	0	0	0	0	0	0	0	0	0	0	**40**
8:00 PM	0	0	0	4	6	9	6	0	0	1	0	0	0	0	0	0	0	**26**
9:00 PM	0	0	1	0	8	5	2	0	0	0	0	0	0	0	0	0	0	**16**
10:00 PM	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	**5**
11:00 PM	0	0	0	0	3	4	0	0	0	0	0	0	0	0	0	0	0	**7**
Total	**0**	**0**	**7**	**59**	**295**	**396**	**133**	**19**	**2**	**3**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**915**
Percent	**0.0%**	**0.0%**	**0.8%**	**6.4%**	**32.2%**	**43.3%**	**14.5%**	**2.1%**	**0.2%**	**0.3%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	31.1	mph	Mean (Average) Speed	31.2	mph
85th Percentile	35.3	mph	10 mph Pace	25.8 - 35.8	mph
95th Percentile	38.3	mph	Percent in Pace	76.07	%

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Monday, September 19, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	**4**
1:00 AM	0	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	0	0	0	2	3	0	1	0	0	0	0	0	0	0	0	0	**6**
6:00 AM	0	0	0	0	3	4	5	2	1	0	0	0	0	0	0	0	0	**15**
7:00 AM	0	0	0	0	5	11	13	6	0	1	0	0	0	0	0	0	0	**36**
8:00 AM	0	0	0	0	7	11	6	5	3	0	0	0	1	0	0	0	0	**33**
9:00 AM	0	0	0	4	11	8	4	6	2	0	0	0	0	0	0	0	0	**35**
10:00 AM	0	0	0	2	3	25	10	4	1	0	0	0	0	0	0	0	0	**45**
11:00 AM	0	0	0	1	12	28	11	3	0	0	0	0	0	0	0	0	0	**55**
12:00 PM	0	0	0	2	10	31	21	1	1	0	0	0	0	0	0	0	0	**66**
1:00 PM	0	0	0	2	17	26	19	8	1	0	0	0	0	0	0	0	0	**73**
2:00 PM	0	0	0	0	3	21	18	4	0	0	0	0	0	0	0	0	0	**46**
3:00 PM	0	0	0	2	15	21	14	8	0	0	0	0	0	0	0	0	0	**60**
4:00 PM	0	0	0	2	8	16	18	4	3	0	0	1	0	0	0	0	0	**52**
5:00 PM	0	0	0	2	9	29	35	10	1	0	0	0	0	0	0	0	0	**86**
6:00 PM	0	0	1	3	16	34	10	7	1	0	0	0	0	0	0	0	0	**72**
7:00 PM	1	0	1	6	14	17	8	2	0	0	0	1	0	0	0	0	0	**50**
8:00 PM	0	0	0	1	16	12	4	1	1	0	0	0	0	0	0	0	0	**35**
9:00 PM	0	0	0	0	9	8	5	1	1	0	0	0	0	0	0	0	0	**24**
10:00 PM	0	0	1	0	2	3	5	1	0	0	0	0	0	0	0	0	0	**12**
11:00 PM	0	0	0	0	1	2	1	1	0	0	0	0	0	0	0	0	0	**5**
Total	**1**	**0**	**3**	**27**	**167**	**314**	**209**	**75**	**16**	**1**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**816**
Percent	**0.1%**	**0.0%**	**0.4%**	**3.3%**	**20.5%**	**38.5%**	**25.6%**	**9.2%**	**2.0%**	**0.1%**	**0.0%**	**0.2%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	33.2	mph	Mean (Average) Speed	33.8	mph
85th Percentile	39.3	mph	10 mph Pace	27.7 - 37.7	mph
95th Percentile	42.9	mph	Percent in Pace	68.5	%

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Monday, September 19, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	1	2	0	0	0	1	0	0	0	0	0	0	0	0	**4**
1:00 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	2	2	1	1	0	0	0	0	0	0	0	0	0	0	**6**
5:00 AM	0	0	0	5	7	3	0	1	1	0	0	0	0	0	0	0	0	**17**
6:00 AM	0	0	2	6	8	11	4	1	0	0	0	0	0	0	0	0	0	**32**
7:00 AM	0	0	0	7	28	29	10	1	0	0	0	0	0	0	0	0	0	**75**
8:00 AM	0	0	0	3	17	25	12	1	0	0	0	0	0	0	0	0	0	**58**
9:00 AM	0	0	0	5	20	22	6	1	0	0	0	0	0	0	0	0	0	**54**
10:00 AM	0	0	0	5	20	27	6	3	0	0	0	0	0	0	0	0	0	**61**
11:00 AM	0	0	2	2	25	42	17	4	0	0	0	0	0	0	0	0	0	**92**
12:00 PM	1	0	0	2	20	38	15	1	1	0	0	0	0	0	0	0	0	**78**
1:00 PM	0	0	0	7	19	43	31	3	1	0	0	0	0	0	0	0	0	**104**
2:00 PM	0	0	0	2	24	40	12	2	1	0	0	0	0	0	0	0	0	**81**
3:00 PM	0	0	0	5	32	29	9	6	1	0	0	0	0	0	0	0	0	**82**
4:00 PM	0	0	0	0	17	52	30	3	0	0	0	0	0	0	0	0	0	**102**
5:00 PM	0	0	3	5	25	24	10	1	0	0	0	0	0	0	0	0	0	**68**
6:00 PM	0	0	0	8	17	36	11	2	1	0	0	1	0	0	0	0	0	**76**
7:00 PM	0	0	2	5	18	20	3	2	0	0	0	0	0	0	0	0	0	**50**
8:00 PM	0	0	1	1	8	8	6	0	1	0	0	0	0	0	0	0	0	**25**
9:00 PM	0	0	0	2	4	7	2	0	0	0	0	0	0	0	0	0	0	**15**
10:00 PM	0	0	1	2	5	1	0	0	0	0	0	0	0	0	0	0	0	**9**
11:00 PM	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	**3**
Total	**1**	**0**	**12**	**77**	**319**	**459**	**185**	**34**	**8**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1,096**
Percent	**0.1%**	**0.0%**	**1.1%**	**7.0%**	**29.1%**	**41.9%**	**16.9%**	**3.1%**	**0.7%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	31.3	mph	Mean (Average) Speed	31.4	mph
85th Percentile	36.1	mph	10 mph Pace	26.4 - 36.4	mph
95th Percentile	39.4	mph	Percent in Pace	72.99	%

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Tuesday, September 20, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	0	0	0	2	4	3	2	0	0	0	0	0	0	0	0	0	**11**
6:00 AM	0	0	0	0	3	14	8	2	0	0	0	0	0	0	0	0	0	**27**
7:00 AM	0	1	1	3	8	8	8	2	1	0	0	0	0	0	0	0	0	**32**
8:00 AM	0	0	0	1	6	11	9	1	1	1	0	0	0	0	0	0	0	**30**
9:00 AM	0	0	0	2	8	13	11	4	1	1	0	0	0	0	0	0	0	**40**
10:00 AM	0	0	0	1	8	24	11	5	1	0	0	0	0	0	0	0	0	**50**
11:00 AM	0	0	0	1	14	19	14	6	1	0	0	0	0	0	0	0	0	**55**
12:00 PM	0	0	0	4	9	23	13	4	2	0	0	0	0	0	0	0	0	**55**
1:00 PM	0	1	1	3	16	25	13	6	0	0	0	0	0	0	0	0	0	**65**
2:00 PM	0	0	0	1	17	25	5	4	0	0	0	0	0	0	0	0	0	**52**
3:00 PM	0	0	0	3	10	28	12	6	2	0	0	0	0	0	0	0	0	**61**
4:00 PM	0	0	1	2	20	21	20	3	0	0	2	0	0	0	0	0	0	**69**
5:00 PM	0	0	0	1	18	22	14	1	1	0	0	0	0	0	0	0	0	**57**
6:00 PM	0	0	0	6	18	21	17	1	0	1	0	0	0	0	0	0	0	**64**
7:00 PM	0	0	0	7	15	14	14	1	0	0	0	0	0	0	0	0	0	**51**
8:00 PM	0	0	0	3	11	10	5	1	0	0	0	0	0	0	0	0	0	**30**
9:00 PM	0	0	1	0	8	6	2	0	0	1	0	0	0	0	0	0	0	**18**
10:00 PM	0	0	0	0	4	2	3	0	0	0	0	0	0	0	0	0	0	**9**
11:00 PM	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	**3**
Total	**0**	**2**	**4**	**39**	**200**	**298**	**184**	**49**	**10**	**4**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**792**
Percent	**0.0%**	**0.3%**	**0.5%**	**4.9%**	**25.3%**	**37.6%**	**23.2%**	**6.2%**	**1.3%**	**0.5%**	**0.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	32.6	mph	Mean (Average) Speed	32.7	mph
85th Percentile	37.8	mph	10 mph Pace	27.3 - 37.3	mph
95th Percentile	41.3	mph	Percent in Pace	69.2	%

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Tuesday, September 20, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	1	4	4	0	0	0	0	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	0	0	3	11	5	0	0	0	0	0	0	0	0	0	0	0	**19**
6:00 AM	0	0	1	5	10	11	3	0	0	0	0	0	0	0	0	0	0	**30**
7:00 AM	0	0	0	12	28	24	14	3	0	0	0	0	0	0	0	0	0	**81**
8:00 AM	0	0	1	6	16	29	8	0	0	0	0	0	0	0	0	0	0	**60**
9:00 AM	0	0	0	4	27	21	3	0	0	0	0	0	0	0	0	0	0	**55**
10:00 AM	0	0	0	3	16	24	12	3	1	0	0	0	0	0	0	0	0	**59**
11:00 AM	0	0	0	2	28	34	6	2	0	0	0	0	0	0	0	0	0	**72**
12:00 PM	0	0	1	5	25	29	17	2	1	1	0	0	0	0	0	0	0	**81**
1:00 PM	0	0	2	2	30	38	5	3	1	0	0	0	0	0	0	0	0	**81**
2:00 PM	2	0	0	5	23	32	8	1	0	0	0	0	0	0	0	0	0	**71**
3:00 PM	0	0	1	4	20	35	14	0	0	0	0	0	0	0	0	0	0	**74**
4:00 PM	0	0	0	7	36	41	9	1	0	0	0	0	0	0	0	0	0	**94**
5:00 PM	0	0	0	4	17	54	15	3	1	0	0	0	0	0	0	0	0	**94**
6:00 PM	0	0	0	8	21	24	5	2	0	0	0	0	0	0	0	0	0	**60**
7:00 PM	0	0	0	8	33	12	7	0	0	0	0	0	0	0	0	0	0	**60**
8:00 PM	0	0	0	4	9	10	4	0	0	0	0	0	0	0	0	0	0	**27**
9:00 PM	0	1	0	3	6	6	1	0	1	0	0	0	0	0	0	0	0	**18**
10:00 PM	0	0	1	3	3	1	0	0	0	0	0	0	0	0	0	0	0	**8**
11:00 PM	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	**5**
Total	**2**	**1**	**8**	**92**	**371**	**433**	**132**	**20**	**5**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,065**
Percent	**0.2%**	**0.1%**	**0.8%**	**8.6%**	**34.8%**	**40.7%**	**12.4%**	**1.9%**	**0.5%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	30.6	mph	Mean (Average) Speed	30.7	mph
85th Percentile	35.0	mph	10 mph Pace	25.5 - 35.5	mph
95th Percentile	38.4	mph	Percent in Pace	75.59	%

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Wednesday, September 21, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	**3**
5:00 AM	0	0	2	0	1	3	1	1	0	0	0	0	0	0	0	0	0	**8**
6:00 AM	0	0	0	1	2	3	8	3	2	0	0	0	0	0	0	0	0	**19**
7:00 AM	0	0	0	1	9	16	11	4	1	0	0	0	0	0	0	0	0	**42**
8:00 AM	0	0	0	1	5	12	7	8	1	0	0	0	0	0	0	0	0	**34**
9:00 AM	0	0	0	0	7	11	12	3	0	1	0	0	0	0	0	0	0	**34**
10:00 AM	0	0	0	2	12	21	5	3	0	0	0	0	0	0	0	0	0	**43**
11:00 AM	0	0	1	1	18	20	6	2	1	0	0	0	0	0	0	0	0	**49**
12:00 PM	0	0	0	1	13	24	12	2	1	0	0	0	0	0	0	0	0	**53**
1:00 PM	0	0	0	3	20	29	19	2	0	0	0	0	0	0	0	0	0	**73**
2:00 PM	0	0	0	5	13	27	10	5	1	0	0	0	0	0	0	0	0	**61**
3:00 PM	0	0	0	2	12	24	18	3	2	0	0	0	0	0	0	0	0	**61**
4:00 PM	0	0	0	3	16	23	12	5	2	0	0	0	0	0	0	0	0	**61**
5:00 PM	0	0	0	0	15	32	16	7	0	0	0	0	0	0	0	0	0	**70**
6:00 PM	0	0	0	5	17	32	7	1	1	0	0	0	0	0	0	0	0	**63**
7:00 PM	0	0	0	9	22	23	3	1	0	0	0	0	0	0	0	0	0	**58**
8:00 PM	0	0	0	2	6	12	3	2	0	0	0	0	0	0	0	0	0	**25**
9:00 PM	0	0	1	3	9	9	4	1	0	0	0	0	0	0	0	0	0	**27**
10:00 PM	0	0	0	0	0	6	5	0	0	0	0	0	0	0	0	0	0	**11**
11:00 PM	0	0	0	0	3	1	0	1	0	0	0	0	0	0	0	0	0	**5**
Total	**0**	**0**	**4**	**41**	**205**	**331**	**160**	**56**	**12**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**810**
Percent	**0.0%**	**0.0%**	**0.5%**	**5.1%**	**25.3%**	**40.9%**	**19.8%**	**6.9%**	**1.5%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	32.1	mph	Mean (Average) Speed	32.6	mph
85th Percentile	37.6	mph	10 mph Pace	27.0 - 37.0	mph
95th Percentile	41.6	mph	Percent in Pace	71.1	%

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Wednesday, September 21, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	**6**
5:00 AM	0	0	0	1	10	4	2	0	0	0	0	0	0	0	0	0	0	**17**
6:00 AM	0	0	3	3	9	9	3	0	0	0	0	0	0	0	0	0	0	**27**
7:00 AM	0	0	1	6	20	28	15	5	0	0	0	0	0	0	0	0	0	**75**
8:00 AM	0	0	0	5	29	24	10	4	0	0	0	0	0	0	0	0	0	**72**
9:00 AM	0	0	0	2	14	23	5	8	0	0	0	0	0	0	0	0	0	**52**
10:00 AM	0	0	0	8	36	18	6	0	1	0	0	0	0	0	0	0	0	**69**
11:00 AM	0	0	1	11	31	28	11	1	0	0	0	0	0	0	0	0	0	**83**
12:00 PM	0	0	0	7	29	32	6	3	1	0	0	0	0	0	0	0	0	**78**
1:00 PM	0	0	0	9	36	40	12	4	0	0	0	0	0	0	0	0	0	**101**
2:00 PM	0	0	0	7	30	22	9	1	1	0	0	0	0	0	0	0	0	**70**
3:00 PM	0	0	0	5	17	36	9	2	0	0	0	0	0	0	0	0	0	**69**
4:00 PM	0	0	0	4	35	42	8	1	0	0	0	0	0	0	0	0	0	**90**
5:00 PM	0	0	0	3	25	38	14	2	2	0	0	0	0	0	0	0	0	**84**
6:00 PM	1	0	0	4	21	25	10	0	1	0	0	0	0	0	0	0	0	**62**
7:00 PM	0	0	2	5	25	15	3	1	0	0	0	0	0	0	0	0	0	**51**
8:00 PM	0	0	0	3	4	5	2	0	0	0	0	0	0	0	0	0	0	**14**
9:00 PM	0	0	0	2	8	7	2	0	0	0	0	0	0	0	0	0	0	**19**
10:00 PM	0	0	0	5	3	2	0	0	0	0	0	0	0	0	0	0	0	**10**
11:00 PM	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	**3**
Total	**1**	**0**	**9**	**94**	**389**	**398**	**127**	**32**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,056**
Percent	**0.1%**	**0.0%**	**0.9%**	**8.9%**	**36.8%**	**37.7%**	**12.0%**	**3.0%**	**0.6%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	30.3	mph	Mean (Average) Speed	30.6	mph
85th Percentile	35.2	mph	10 mph Pace	25.9 - 35.9	mph
95th Percentile	38.9	mph	Percent in Pace	75.19	%

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Thursday, September 22, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	0	0	1	2	1	2	0	0	0	0	0	0	0	0	0	0	**6**
6:00 AM	0	0	0	1	4	2	3	3	1	0	0	0	0	0	0	0	0	**14**
7:00 AM	0	0	0	5	7	10	12	2	1	0	1	0	0	0	0	0	0	**38**
8:00 AM	0	0	0	1	5	11	8	4	0	0	0	0	0	0	0	0	0	**29**
9:00 AM	0	0	0	3	6	16	18	3	0	0	0	0	0	0	0	0	0	**46**
10:00 AM	0	0	0	0	7	22	11	3	1	0	0	0	0	0	0	0	0	**44**
11:00 AM	0	0	0	2	10	14	8	3	0	0	0	0	0	0	0	0	0	**37**
12:00 PM	0	0	1	2	15	25	16	8	0	0	0	0	0	0	0	0	0	**67**
1:00 PM	0	0	1	2	17	30	20	8	2	0	0	0	0	0	0	0	0	**80**
2:00 PM	0	0	0	4	7	22	14	3	1	1	0	1	0	0	0	0	0	**53**
3:00 PM	0	0	0	1	13	29	9	6	1	0	0	0	0	0	0	0	0	**59**
4:00 PM	0	0	0	2	10	29	17	1	1	0	0	0	0	0	0	0	0	**60**
5:00 PM	0	0	1	2	14	22	11	8	2	0	0	0	0	0	0	0	0	**60**
6:00 PM	0	2	0	4	23	28	17	4	0	0	0	0	0	0	0	0	0	**78**
7:00 PM	0	0	0	2	16	21	8	1	0	2	0	0	0	0	0	0	0	**50**
8:00 PM	0	0	0	2	8	12	10	1	0	1	0	0	0	0	0	0	0	**34**
9:00 PM	0	0	1	2	3	14	10	6	1	0	0	0	0	0	0	0	0	**37**
10:00 PM	0	0	0	2	0	5	0	1	0	0	0	0	0	0	0	0	0	**8**
11:00 PM	0	0	0	1	0	3	1	0	0	0	0	0	0	0	0	0	0	**5**
Total	**0**	**2**	**4**	**42**	**170**	**320**	**197**	**67**	**11**	**4**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**819**
Percent	**0.0%**	**0.2%**	**0.5%**	**5.1%**	**20.8%**	**39.1%**	**24.1%**	**8.2%**	**1.3%**	**0.5%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	32.8	mph	Mean (Average) Speed	33.2	mph
85th Percentile	38.4	mph	10 mph Pace	28.7 - 38.7	mph
95th Percentile	43.1	mph	Percent in Pace	67.6	%

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Thursday, September 22, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	0	0	2	1	2	0	0	0	0	0	0	0	0	0	0	0	**5**
2:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	0	2	2	1	1	0	0	0	0	0	0	0	0	0	0	**6**
5:00 AM	0	0	0	4	4	5	1	0	0	0	0	0	0	0	0	0	0	**14**
6:00 AM	0	0	1	5	11	12	1	0	0	0	0	0	0	0	0	0	0	**30**
7:00 AM	0	0	0	3	18	20	12	4	0	0	0	0	0	0	0	0	0	**57**
8:00 AM	0	0	0	4	25	33	11	2	0	0	0	0	0	0	0	0	0	**75**
9:00 AM	0	0	0	5	21	19	7	1	1	0	0	0	0	0	0	0	0	**54**
10:00 AM	0	0	3	7	23	24	14	4	1	0	0	0	0	0	0	0	0	**76**
11:00 AM	0	0	0	8	25	20	4	4	1	0	0	0	0	0	0	0	0	**62**
12:00 PM	0	0	0	5	35	35	15	1	0	0	0	0	0	0	0	0	0	**91**
1:00 PM	0	0	0	7	22	30	13	2	1	0	0	0	0	0	0	0	0	**75**
2:00 PM	0	0	1	2	26	32	16	2	0	0	0	0	0	0	0	0	0	**79**
3:00 PM	0	2	0	3	28	35	11	2	1	0	0	0	0	0	0	0	0	**82**
4:00 PM	0	0	0	1	28	37	10	1	1	0	0	0	0	0	0	0	0	**78**
5:00 PM	0	0	2	2	16	37	26	5	1	0	0	0	0	0	0	0	0	**89**
6:00 PM	0	0	0	7	31	21	11	6	1	0	0	0	0	0	0	0	0	**77**
7:00 PM	0	0	0	1	21	16	11	2	0	1	0	0	0	0	0	0	0	**52**
8:00 PM	0	0	1	2	9	17	2	0	0	0	0	0	0	0	0	0	0	**31**
9:00 PM	0	0	0	2	4	7	6	0	0	0	0	0	0	0	0	0	0	**19**
10:00 PM	0	0	0	6	2	2	1	1	0	0	0	0	0	0	0	0	0	**12**
11:00 PM	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	**3**
Total	**0**	**2**	**9**	**82**	**354**	**408**	**173**	**37**	**8**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,074**
Percent	**0.0%**	**0.2%**	**0.8%**	**7.6%**	**33.0%**	**38.0%**	**16.1%**	**3.4%**	**0.7%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	31.0	mph	Mean (Average) Speed	31.3	mph
85th Percentile	36.1	mph	10 mph Pace	25.9 - 35.9	mph
95th Percentile	39.3	mph	Percent in Pace	71.69	%

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Friday, September 23, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	0	0	1	0	1	3	0	0	1	0	0	0	0	0	0	0	**6**
3:00 AM	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	**4**
6:00 AM	0	0	0	1	5	5	7	2	0	0	0	0	0	0	0	0	0	**20**
7:00 AM	0	0	1	2	4	8	19	3	1	0	0	0	0	0	0	0	0	**38**
8:00 AM	0	0	0	0	8	13	7	2	1	0	0	0	0	0	0	0	0	**31**
9:00 AM	0	0	0	2	10	7	14	6	1	0	0	0	0	0	0	0	0	**40**
10:00 AM	0	0	0	1	12	23	7	4	1	0	0	0	0	0	0	0	0	**48**
11:00 AM	0	1	0	3	13	15	9	5	0	0	0	0	0	0	0	0	0	**46**
12:00 PM	0	0	0	2	7	29	13	4	2	0	0	0	0	0	0	0	0	**57**
1:00 PM	0	0	1	1	10	40	17	5	3	0	0	0	0	0	0	0	0	**77**
2:00 PM	0	0	0	2	25	22	12	2	0	0	0	0	0	0	0	0	0	**63**
3:00 PM	0	0	0	1	10	19	15	7	4	0	1	0	0	0	0	0	0	**57**
4:00 PM	0	0	0	0	10	27	20	6	2	0	1	0	0	0	0	0	0	**66**
5:00 PM	0	0	0	0	10	31	24	9	4	1	0	0	0	0	0	0	0	**79**
6:00 PM	0	0	0	2	19	27	27	9	1	0	0	0	0	0	0	0	0	**85**
7:00 PM	0	0	1	3	20	19	12	2	0	0	0	0	0	0	0	0	0	**57**
8:00 PM	0	0	0	3	11	11	4	2	0	0	0	0	0	0	0	0	0	**31**
9:00 PM	0	0	1	2	8	10	8	1	0	0	0	0	0	0	0	0	0	**30**
10:00 PM	0	0	0	2	10	8	10	2	1	0	0	0	0	0	0	0	0	**33**
11:00 PM	0	0	0	0	3	4	1	1	1	0	0	0	0	0	0	0	0	**10**
Total	**0**	**1**	**4**	**30**	**199**	**323**	**230**	**73**	**22**	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**886**
Percent	**0.0%**	**0.1%**	**0.5%**	**3.4%**	**22.5%**	**36.5%**	**26.0%**	**8.2%**	**2.5%**	**0.2%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	33.2	mph	Mean (Average) Speed	33.6	mph
85th Percentile	39.1	mph	10 mph Pace	27.6 - 37.6	mph
95th Percentile	43.1	mph	Percent in Pace	65.6	%

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Friday, September 23, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	**4**
1:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	**5**
5:00 AM	0	0	0	6	6	6	1	0	0	0	0	0	0	0	0	0	0	**19**
6:00 AM	0	0	0	2	8	6	1	2	0	0	0	0	0	0	0	0	0	**19**
7:00 AM	0	0	1	5	16	20	9	2	0	0	0	0	0	0	0	0	0	**53**
8:00 AM	0	0	0	4	17	21	5	1	0	0	0	0	0	0	0	0	0	**48**
9:00 AM	0	0	0	2	21	20	13	3	0	0	0	0	0	0	0	0	0	**59**
10:00 AM	0	0	0	5	25	31	13	2	0	0	0	0	0	0	0	0	0	**76**
11:00 AM	0	0	0	5	38	35	12	2	0	0	0	0	0	0	0	0	0	**92**
12:00 PM	0	0	0	5	26	41	14	0	0	0	0	0	0	0	0	0	0	**86**
1:00 PM	0	0	1	5	33	28	12	1	2	0	0	0	0	0	0	0	0	**82**
2:00 PM	0	0	0	8	26	33	13	5	1	0	0	0	0	0	0	0	0	**86**
3:00 PM	0	0	0	8	23	29	16	7	0	0	0	0	0	0	0	0	0	**83**
4:00 PM	0	0	0	3	22	40	12	2	2	0	0	0	0	0	0	0	0	**81**
5:00 PM	0	0	0	1	18	38	21	4	1	1	1	0	0	0	0	0	0	**85**
6:00 PM	0	0	0	6	19	34	9	3	0	0	0	0	0	0	0	0	0	**71**
7:00 PM	0	0	1	4	30	21	3	1	0	0	0	0	0	0	0	0	0	**60**
8:00 PM	0	0	1	5	16	12	6	1	0	1	0	0	0	0	0	0	0	**42**
9:00 PM	0	0	1	3	10	5	4	0	0	0	0	0	0	0	1	0	0	**24**
10:00 PM	0	0	0	3	6	0	4	0	1	0	0	0	0	0	0	0	0	**14**
11:00 PM	0	0	0	4	1	1	1	0	0	0	0	0	0	0	0	0	0	**7**
Total	**0**	**0**	**8**	**89**	**365**	**422**	**170**	**36**	**7**	**2**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**1,101**
Percent	**0.0%**	**0.0%**	**0.7%**	**8.1%**	**33.2%**	**38.3%**	**15.4%**	**3.3%**	**0.6%**	**0.2%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	31.0	mph	Mean (Average) Speed	31.3	mph
85th Percentile	35.9	mph	10 mph Pace	25.7 - 35.7	mph
95th Percentile	39.7	mph	Percent in Pace	72.84	%

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Total Study Average
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	0	0	1	2	2	1	1	0	0	0	0	0	0	0	0	0	**7**
6:00 AM	0	0	0	1	3	5	5	2	1	0	0	0	0	0	0	0	0	**17**
7:00 AM	0	0	0	2	6	10	10	3	1	0	0	0	0	0	0	0	0	**32**
8:00 AM	0	0	0	1	6	11	8	3	1	0	0	0	0	0	0	0	0	**30**
9:00 AM	0	0	0	2	8	11	10	4	1	0	0	0	0	0	0	0	0	**36**
10:00 AM	0	0	0	1	9	22	10	4	1	0	0	0	0	0	0	0	0	**47**
11:00 AM	0	0	0	1	12	19	11	4	1	0	0	0	0	0	0	0	0	**48**
12:00 PM	0	0	0	2	11	25	15	5	1	0	0	0	0	0	0	0	0	**59**
1:00 PM	0	0	0	2	14	29	18	6	1	0	0	0	0	0	0	0	0	**70**
2:00 PM	0	0	0	2	12	24	14	4	1	0	0	0	0	0	0	0	0	**57**
3:00 PM	0	0	0	2	12	24	15	6	2	0	0	0	0	0	0	0	0	**61**
4:00 PM	0	0	0	2	11	24	17	3	1	0	0	0	0	0	0	0	0	**58**
5:00 PM	0	0	0	1	14	26	18	7	1	0	0	0	0	0	0	0	0	**67**
6:00 PM	0	0	0	4	17	29	15	4	1	0	0	0	0	0	0	0	0	**70**
7:00 PM	0	0	0	5	16	19	10	2	0	0	0	0	0	0	0	0	0	**52**
8:00 PM	0	0	0	2	11	11	6	2	0	0	0	0	0	0	0	0	0	**32**
9:00 PM	0	0	1	1	7	9	6	2	0	0	0	0	0	0	0	0	0	**26**
10:00 PM	0	0	0	1	3	4	4	1	0	0	0	0	0	0	0	0	0	**13**
11:00 PM	0	0	0	0	2	2	1	0	0	0	0	0	0	0	0	0	0	**5**
Total	**0**	**0**	**1**	**35**	**181**	**310**	**197**	**63**	**14**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**801**
Percent	**0.0%**	**0.0%**	**0.1%**	**4.4%**	**22.6%**	**38.7%**	**24.6%**	**7.9%**	**1.7%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	32.9	mph	Mean (Average) Speed	33.3	mph
85th Percentile	38.6	mph	10 mph Pace	27.7 - 37.7	mph
95th Percentile	42.4	mph	Percent in Pace	68.0	%

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 11

Total Study Average
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	**6**
5:00 AM	0	0	0	3	7	4	1	0	0	0	0	0	0	0	0	0	0	**15**
6:00 AM	0	0	1	4	8	8	2	1	0	0	0	0	0	0	0	0	0	**24**
7:00 AM	0	0	0	5	18	21	10	2	0	0	0	0	0	0	0	0	0	**56**
8:00 AM	0	0	0	4	19	23	8	2	0	0	0	0	0	0	0	0	0	**56**
9:00 AM	0	0	0	3	20	21	8	2	0	0	0	0	0	0	0	0	0	**54**
10:00 AM	0	0	0	5	23	26	11	2	1	0	0	0	0	0	0	0	0	**68**
11:00 AM	0	0	0	5	29	33	9	3	0	0	0	0	0	0	0	0	0	**79**
12:00 PM	0	0	0	4	26	34	14	2	1	0	0	0	0	0	0	0	0	**81**
1:00 PM	0	0	1	6	28	36	16	2	1	0	0	0	0	0	0	0	0	**90**
2:00 PM	0	0	0	5	27	34	12	2	1	0	0	0	0	0	0	0	0	**81**
3:00 PM	0	0	0	5	25	32	12	3	0	0	0	0	0	0	0	0	0	**77**
4:00 PM	0	0	0	3	24	40	14	2	1	0	0	0	0	0	0	0	0	**84**
5:00 PM	0	0	1	3	21	37	17	3	1	0	0	0	0	0	0	0	0	**83**
6:00 PM	0	0	0	6	22	30	9	2	0	0	0	0	0	0	0	0	0	**69**
7:00 PM	0	0	1	4	23	18	6	1	0	0	0	0	0	0	0	0	0	**53**
8:00 PM	0	0	0	3	9	10	5	0	0	0	0	0	0	0	0	0	0	**27**
9:00 PM	0	0	0	2	6	6	3	0	0	0	0	0	0	0	0	0	0	**17**
10:00 PM	0	0	0	3	4	2	1	0	0	0	0	0	0	0	0	0	0	**10**
11:00 PM	0	0	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	**5**
Total	**0**	**0**	**5**	**79**	**347**	**419**	**158**	**29**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,043**
Percent	**0.0%**	**0.0%**	**0.5%**	**7.6%**	**33.3%**	**40.2%**	**15.1%**	**2.8%**	**0.6%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	31.0	mph	Mean (Average) Speed	31.1	mph
85th Percentile	35.7	mph	10 mph Pace	25.8 - 35.8	mph
95th Percentile	39.1	mph	Percent in Pace	73.5	%

Location: W Wulfsohn E/O Midland Ave
Date Range: 9/17/2022 - 9/23/2022
Site Code: 11

	Saturday			Sunday			Monday			Tuesday			Wednesday			Thursday			Friday					
	9/17/2022			9/18/2022			9/19/2022			9/20/2022			9/21/2022			9/22/2022			9/23/2022			Mid-Week Average		
Time	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total
12:00 AM	4	8	12	6	6	12	4	4	8	3	3	6	2	1	3	3	3	6	2	4	6	3	2	5
1:00 AM	3	3	6	3	2	5	4	2	6	3	3	6	3	1	4	4	5	9	2	2	4	3	3	6
2:00 AM	7	3	10	3	3	6	1	1	2	3	1	4	2	0	2	2	1	3	6	2	8	2	1	3
3:00 AM	3	1	4	8	3	11	1	1	2	2	0	2	3	2	5	3	3	6	2	1	3	3	2	4
4:00 AM	0	8	8	4	5	9	0	6	6	2	9	11	3	6	9	2	6	8	2	5	7	2	7	9
5:00 AM	6	10	16	3	8	11	6	17	23	11	19	30	8	17	25	6	14	20	4	19	23	8	17	25
6:00 AM	10	19	29	4	7	11	15	32	47	27	30	57	19	27	46	14	30	44	20	19	39	20	29	49
7:00 AM	24	37	61	20	19	39	36	75	111	32	81	113	42	75	117	38	57	95	38	53	91	37	71	108
8:00 AM	38	48	86	23	31	54	33	58	91	30	60	90	34	72	106	29	75	104	31	48	79	31	69	100
9:00 AM	31	54	85	25	49	74	35	54	89	40	55	95	34	52	86	46	54	100	40	59	99	40	54	94
10:00 AM	50	71	121	46	58	104	45	61	106	50	59	109	43	69	112	44	76	120	48	76	124	46	68	114
11:00 AM	44	91	135	54	66	120	55	92	147	55	72	127	49	83	132	37	62	99	46	92	138	47	72	119
12:00 PM	54	75	129	56	84	140	66	78	144	55	81	136	53	78	131	67	91	158	57	86	143	58	83	142
1:00 PM	66	108	174	60	78	138	73	104	177	65	81	146	73	101	174	80	75	155	77	82	159	73	86	158
2:00 PM	75	95	170	50	89	139	46	81	127	52	71	123	61	70	131	53	79	132	63	86	149	55	73	129
3:00 PM	62	75	137	66	80	146	60	82	142	61	74	135	61	69	130	59	82	141	57	83	140	60	75	135
4:00 PM	60	75	135	48	68	116	52	102	154	69	94	163	61	90	151	60	78	138	66	81	147	63	87	151
5:00 PM	69	67	136	47	89	136	86	68	154	57	94	151	70	84	154	60	89	149	79	85	164	62	89	151
6:00 PM	79	71	150	47	76	123	72	76	148	64	60	124	63	62	125	78	77	155	85	71	156	68	66	135
7:00 PM	47	60	107	55	40	95	50	50	100	51	60	111	58	51	109	50	52	102	57	60	117	53	54	107
8:00 PM	50	30	80	21	26	47	35	25	60	30	27	57	25	14	39	34	31	65	31	42	73	30	24	54
9:00 PM	27	18	45	19	16	35	24	15	39	18	18	36	27	19	46	37	19	56	30	24	54	27	19	46
10:00 PM	12	12	24	12	5	17	12	9	21	9	8	17	11	10	21	8	12	20	33	14	47	9	10	19
11:00 PM	7	9	16	2	7	9	5	3	8	3	5	8	5	3	8	5	3	8	10	7	17	4	4	8
Total	**828**	**1,048**	**1,876**	**682**	**915**	**1,597**	**816**	**1,096**	**1,912**	**792**	**1,065**	**1,857**	**810**	**1,056**	**1,866**	**819**	**1,074**	**1,893**	**886**	**1,101**	**1,987**	**807**	**1,065**	**1,872**
Percent	**44%**	**56%**	-	**43%**	**57%**	-	**43%**	**57%**	-	**43%**	**57%**	-	**43%**	**57%**	-	**43%**	**57%**	-	**45%**	**55%**	-	**43%**	**57%**	-

1. Mid-week average includes data between Tuesday and Thursday.

Vehicle Classification Report Summary

Location: Wulfsohn BTWN E Meadows & W Meadows

Count Direction: Eastbound / Westbound

Date Range: 9/17/2022 to 9/23/2022

Site Code: 12

	FHWA Vehicle Classification													Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
Study Total														
Eastbound	31	3,024	987	254	968	4	0	0	0	0	0	0	0	5,268
Percent	0.6%	57.4%	18.7%	4.8%	18.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Westbound	52	3,803	1,078	250	904	8	0	1	2	1	0	0	0	6,099
Percent	0.9%	62.4%	17.7%	4.1%	14.8%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	83	6,827	2,065	504	1,872	12	0	1	2	1	0	0	0	11,367
Percent	0.7%	60.1%	18.2%	4.4%	16.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%

FHWA Vehicle Classification	
Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Saturday, September 17, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	3	1	0	2	0	0	0	0	0	0	0	0	**6**
1:00 AM	0	4	0	0	0	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	3	2	0	0	0	0	0	0	0	0	**5**
5:00 AM	1	0	2	3	5	0	0	0	0	0	0	0	0	**11**
6:00 AM	0	5	0	4	4	0	0	0	0	0	0	0	0	**13**
7:00 AM	0	12	2	2	4	0	0	0	0	0	0	0	0	**20**
8:00 AM	0	15	5	2	6	0	0	0	0	0	0	0	0	**28**
9:00 AM	0	22	9	0	6	0	0	0	0	0	0	0	0	**37**
10:00 AM	0	31	13	3	8	0	0	0	0	0	0	0	0	**55**
11:00 AM	0	29	5	0	14	0	0	0	0	0	0	0	0	**48**
12:00 PM	0	34	11	1	8	0	0	0	0	0	0	0	0	**54**
1:00 PM	0	40	16	4	8	0	0	0	0	0	0	0	0	**68**
2:00 PM	0	37	10	3	13	0	0	0	0	0	0	0	0	**63**
3:00 PM	0	27	14	2	13	1	0	0	0	0	0	0	0	**57**
4:00 PM	0	29	10	1	9	0	0	0	0	0	0	0	0	**49**
5:00 PM	0	33	7	3	5	0	0	0	0	0	0	0	0	**48**
6:00 PM	0	40	4	3	8	0	0	0	0	0	0	0	0	**55**
7:00 PM	0	22	10	2	8	0	0	0	0	0	0	0	0	**42**
8:00 PM	0	14	2	3	2	0	0	0	0	0	0	0	0	**21**
9:00 PM	0	12	1	2	7	0	0	0	0	0	0	0	0	**22**
10:00 PM	0	6	2	1	1	0	0	0	0	0	0	0	0	**10**
11:00 PM	0	5	2	2	0	0	0	0	0	0	0	0	0	**9**
Total	**1**	**422**	**127**	**44**	**133**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**728**
Percent	**0.1%**	**58.0%**	**17.4%**	**6.0%**	**18.3%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Saturday, September 17, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	2	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	4	0	1	0	0	0	0	0	0	0	0	0	**5**
2:00 AM	0	5	0	1	2	0	0	0	0	0	0	0	0	**8**
3:00 AM	0	0	0	0	2	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	1	1	0	1	1	0	0	0	0	0	0	0	0	**4**
6:00 AM	0	1	2	1	0	0	0	0	0	0	0	0	0	**4**
7:00 AM	0	14	3	2	4	0	0	0	0	0	0	0	0	**23**
8:00 AM	0	21	6	1	5	0	0	0	0	0	0	0	0	**33**
9:00 AM	0	16	9	3	6	0	0	0	0	0	0	0	0	**34**
10:00 AM	0	34	10	2	9	0	0	0	0	0	0	0	0	**55**
11:00 AM	0	24	12	3	17	1	0	1	0	0	0	0	0	**58**
12:00 PM	0	47	18	1	7	0	0	0	0	0	0	0	0	**73**
1:00 PM	0	53	23	2	10	0	0	0	0	0	0	0	0	**88**
2:00 PM	1	48	11	1	7	0	0	0	0	0	0	0	0	**68**
3:00 PM	1	36	12	2	11	0	0	0	0	0	0	0	0	**62**
4:00 PM	2	53	10	5	4	0	0	0	0	0	0	0	0	**74**
5:00 PM	0	41	12	2	9	0	0	0	0	0	0	0	0	**64**
6:00 PM	2	33	10	2	9	0	0	0	0	0	0	0	0	**56**
7:00 PM	0	30	9	2	9	0	0	0	0	0	0	0	0	**50**
8:00 PM	1	32	6	3	5	0	0	0	0	0	0	0	0	**47**
9:00 PM	0	12	4	3	2	1	0	0	0	0	0	0	0	**22**
10:00 PM	0	7	1	1	1	0	0	0	0	0	0	0	0	**10**
11:00 PM	0	7	1	2	0	0	0	0	0	0	0	0	0	**10**
Total	**8**	**520**	**159**	**43**	**120**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**853**
Percent	**0.9%**	**61.0%**	**18.6%**	**5.0%**	**14.1%**	**0.2%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Sunday, September 18, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	3	2	1	0	0	0	0	0	0	0	0	0	**6**
1:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	1	0	3	1	0	0	0	0	0	0	0	0	**5**
5:00 AM	0	0	0	3	4	0	0	0	0	0	0	0	0	**7**
6:00 AM	0	2	0	3	3	0	0	0	0	0	0	0	0	**8**
7:00 AM	0	9	0	2	3	0	0	0	0	0	0	0	0	**14**
8:00 AM	0	14	4	2	7	0	0	0	0	0	0	0	0	**27**
9:00 AM	0	15	3	1	8	0	0	0	0	0	0	0	0	**27**
10:00 AM	0	18	5	1	12	0	0	0	0	0	0	0	0	**36**
11:00 AM	0	19	7	0	7	0	0	0	0	0	0	0	0	**33**
12:00 PM	0	34	5	1	14	0	0	0	0	0	0	0	0	**54**
1:00 PM	1	26	8	5	6	0	0	0	0	0	0	0	0	**46**
2:00 PM	0	46	6	4	8	0	0	0	0	0	0	0	0	**64**
3:00 PM	1	24	14	0	5	0	0	0	0	0	0	0	0	**44**
4:00 PM	0	29	13	2	10	0	0	0	0	0	0	0	0	**54**
5:00 PM	1	34	10	2	12	0	0	0	0	0	0	0	0	**59**
6:00 PM	1	40	10	3	10	0	0	0	0	0	0	0	0	**64**
7:00 PM	0	30	4	0	3	0	0	0	0	0	0	0	0	**37**
8:00 PM	0	22	3	3	2	0	0	0	0	0	0	0	0	**30**
9:00 PM	0	13	3	0	2	0	0	0	0	0	0	0	0	**18**
10:00 PM	0	4	1	1	1	0	0	0	0	0	0	0	0	**7**
11:00 PM	0	3	1	0	0	0	0	0	0	0	0	0	0	**4**
Total	**4**	**391**	**99**	**37**	**118**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**649**
Percent	**0.6%**	**60.2%**	**15.3%**	**5.7%**	**18.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Sunday, September 18, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	8	0	1	0	0	0	0	0	0	0	0	0	**9**
1:00 AM	0	4	0	1	1	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	1	0	1	2	0	0	0	0	0	0	0	0	**4**
3:00 AM	0	1	1	2	1	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**
6:00 AM	1	1	1	0	1	0	0	0	0	0	0	0	0	**4**
7:00 AM	0	9	1	1	3	0	0	0	0	0	0	0	0	**14**
8:00 AM	0	14	3	1	4	0	0	0	0	0	0	0	0	**22**
9:00 AM	0	13	5	2	5	0	0	0	0	0	0	0	0	**25**
10:00 AM	0	29	11	2	8	0	0	0	0	0	0	0	0	**50**
11:00 AM	0	33	10	4	9	0	0	0	0	0	0	0	0	**56**
12:00 PM	1	23	7	0	6	0	0	0	0	0	0	0	0	**37**
1:00 PM	0	50	13	1	8	0	0	0	0	0	0	0	0	**72**
2:00 PM	0	48	16	1	10	0	0	0	0	0	0	0	0	**75**
3:00 PM	3	31	8	1	10	0	0	0	0	0	0	0	0	**53**
4:00 PM	3	39	9	4	4	0	0	0	0	0	0	0	0	**59**
5:00 PM	0	37	12	2	6	0	0	0	0	0	0	0	0	**57**
6:00 PM	0	42	13	1	8	0	0	0	0	0	0	0	0	**64**
7:00 PM	1	32	5	5	7	0	0	0	0	0	0	0	0	**50**
8:00 PM	1	18	3	2	5	0	0	0	0	0	0	0	0	**29**
9:00 PM	0	16	3	2	2	0	0	0	0	0	0	0	0	**23**
10:00 PM	0	5	0	0	2	0	0	0	0	0	0	0	0	**7**
11:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**
Total	**10**	**455**	**121**	**35**	**103**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**724**
Percent	**1.4%**	**62.8%**	**16.7%**	**4.8%**	**14.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Monday, September 19, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	2	0	0	1	0	0	0	0	0	0	0	0	**3**
1:00 AM	1	1	0	0	1	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	1	0	3	1	0	0	0	0	0	0	0	0	**5**
5:00 AM	0	3	0	4	5	0	0	0	0	0	0	0	0	**12**
6:00 AM	1	4	2	4	2	0	0	0	0	0	0	0	0	**13**
7:00 AM	0	27	9	2	12	0	0	0	0	0	0	0	0	**50**
8:00 AM	0	27	7	2	10	0	0	0	0	0	0	0	0	**46**
9:00 AM	0	14	10	1	6	0	0	0	0	0	0	0	0	**31**
10:00 AM	0	18	9	2	11	0	0	0	0	0	0	0	0	**40**
11:00 AM	0	31	5	0	9	0	0	0	0	0	0	0	0	**45**
12:00 PM	0	45	6	1	7	1	0	0	0	0	0	0	0	**60**
1:00 PM	1	44	16	2	19	0	0	0	0	0	0	0	0	**82**
2:00 PM	1	27	7	2	13	0	0	0	0	0	0	0	0	**50**
3:00 PM	1	33	10	2	12	0	0	0	0	0	0	0	0	**58**
4:00 PM	1	50	15	1	9	0	0	0	0	0	0	0	0	**76**
5:00 PM	1	33	11	3	8	0	0	0	0	0	0	0	0	**56**
6:00 PM	0	34	8	1	7	0	0	0	0	0	0	0	0	**50**
7:00 PM	0	28	10	0	8	0	0	0	0	0	0	0	0	**46**
8:00 PM	0	15	6	3	3	0	0	0	0	0	0	0	0	**27**
9:00 PM	0	9	4	1	3	0	0	0	0	0	0	0	0	**17**
10:00 PM	1	4	1	1	1	0	0	0	0	0	0	0	0	**8**
11:00 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	**4**
Total	**8**	**453**	**136**	**35**	**150**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**783**
Percent	**1.0%**	**57.9%**	**17.4%**	**4.5%**	**19.2%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Monday, September 19, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	2	0	1	2	0	0	0	0	0	0	0	0	**5**
1:00 AM	0	1	0	1	1	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	1	2	0	1	1	0	0	0	0	0	0	0	0	**5**
6:00 AM	0	7	4	1	0	0	0	0	0	0	0	0	0	**12**
7:00 AM	0	23	6	1	5	0	0	0	0	0	0	0	0	**35**
8:00 AM	0	21	3	1	6	0	0	0	0	0	0	0	0	**31**
9:00 AM	0	16	6	2	9	0	0	0	0	0	0	0	0	**33**
10:00 AM	0	33	4	2	8	0	0	0	0	0	0	0	0	**47**
11:00 AM	0	34	11	3	11	0	0	0	0	0	0	0	0	**59**
12:00 PM	0	43	11	1	7	0	0	0	0	0	0	0	0	**62**
1:00 PM	0	55	11	1	9	1	0	0	0	0	0	0	0	**77**
2:00 PM	0	34	14	2	8	0	0	0	0	0	0	0	0	**58**
3:00 PM	1	42	17	2	12	0	0	0	0	0	0	0	0	**74**
4:00 PM	0	53	12	4	11	0	0	0	0	0	0	0	0	**80**
5:00 PM	2	62	21	2	9	0	0	0	0	0	0	0	0	**96**
6:00 PM	0	61	13	1	13	0	0	0	0	0	0	0	0	**88**
7:00 PM	0	46	3	1	14	1	0	0	0	0	0	0	0	**65**
8:00 PM	0	28	6	3	5	0	0	0	0	0	0	0	0	**42**
9:00 PM	1	9	4	3	1	0	0	0	0	0	0	0	0	**18**
10:00 PM	0	3	2	0	2	0	0	0	0	0	0	0	0	**7**
11:00 PM	0	2	0	1	1	0	0	0	0	0	0	0	0	**4**
Total	**5**	**577**	**148**	**35**	**135**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**902**
Percent	**0.6%**	**64.0%**	**16.4%**	**3.9%**	**15.0%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Tuesday, September 20, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	2	0	1	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	3	0	3	3	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	8	0	4	3	0	0	0	0	0	0	0	0	**15**
6:00 AM	1	6	2	4	3	0	0	0	0	0	0	0	0	**16**
7:00 AM	0	25	10	2	10	0	0	0	0	0	0	0	0	**47**
8:00 AM	0	29	4	1	5	0	0	0	0	0	0	0	0	**39**
9:00 AM	0	16	7	0	8	0	0	0	0	0	0	0	0	**31**
10:00 AM	0	21	10	3	11	0	0	0	0	0	0	0	0	**45**
11:00 AM	0	25	14	0	10	0	0	0	0	0	0	0	0	**49**
12:00 PM	2	39	10	0	7	0	0	0	0	0	0	0	0	**58**
1:00 PM	0	35	16	4	8	0	0	0	0	0	0	0	0	**63**
2:00 PM	0	22	11	2	10	0	0	0	0	0	0	0	0	**45**
3:00 PM	0	29	8	1	11	0	0	0	0	0	0	0	0	**49**
4:00 PM	1	47	18	1	10	0	0	0	0	0	0	0	0	**77**
5:00 PM	1	39	10	2	10	0	0	0	0	0	0	0	0	**62**
6:00 PM	0	37	19	0	11	0	0	0	0	0	0	0	0	**67**
7:00 PM	1	25	13	2	5	0	0	0	0	0	0	0	0	**46**
8:00 PM	0	13	4	4	7	0	0	0	0	0	0	0	0	**28**
9:00 PM	0	11	4	1	2	0	0	0	0	0	0	0	0	**18**
10:00 PM	0	5	2	0	2	0	0	0	0	0	0	0	0	**9**
11:00 PM	0	0	1	2	0	0	0	0	0	0	0	0	0	**3**
Total	**6**	**440**	**163**	**37**	**136**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**782**
Percent	**0.8%**	**56.3%**	**20.8%**	**4.7%**	**17.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Tuesday, September 20, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	1	1	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	3	0	2	0	0	0	0	0	0	0	0	0	**5**
2:00 AM	0	1	0	0	2	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	**3**
5:00 AM	0	5	2	1	0	0	0	0	0	0	0	0	0	**8**
6:00 AM	0	8	6	1	3	0	0	0	0	0	0	0	0	**18**
7:00 AM	0	21	5	1	6	0	0	0	0	0	0	0	0	**33**
8:00 AM	0	21	4	1	6	0	0	0	0	0	0	0	0	**32**
9:00 AM	2	15	2	4	6	0	0	0	0	0	0	0	0	**29**
10:00 AM	1	26	8	2	7	0	0	0	1	0	0	0	0	**45**
11:00 AM	1	36	16	1	14	0	0	0	0	0	0	0	0	**68**
12:00 PM	1	41	14	2	5	0	0	0	0	0	0	0	0	**63**
1:00 PM	2	48	16	3	7	0	0	0	0	0	0	0	0	**76**
2:00 PM	0	31	12	1	8	0	0	0	0	0	0	0	0	**52**
3:00 PM	3	46	10	2	8	0	0	0	0	0	0	0	0	**69**
4:00 PM	0	47	16	3	13	0	0	0	0	0	0	0	0	**79**
5:00 PM	1	52	17	1	9	0	0	0	0	0	0	0	0	**80**
6:00 PM	0	54	15	2	11	0	0	0	0	0	0	0	0	**82**
7:00 PM	0	32	11	2	8	0	0	0	0	0	0	0	0	**53**
8:00 PM	0	13	5	2	8	0	0	0	0	0	0	0	0	**28**
9:00 PM	1	10	1	2	2	0	0	0	0	0	0	0	0	**16**
10:00 PM	0	3	1	1	1	0	0	0	0	0	0	0	0	**6**
11:00 PM	1	2	0	2	0	0	0	0	0	0	0	0	0	**5**
Total	**13**	**518**	**162**	**38**	**126**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**858**
Percent	**1.5%**	**60.4%**	**18.9%**	**4.4%**	**14.7%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Wednesday, September 21, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	1	2	4	0	0	0	0	0	0	0	0	**7**
5:00 AM	0	5	2	3	4	0	0	0	0	0	0	0	0	**14**
6:00 AM	1	5	4	3	6	0	0	0	0	0	0	0	0	**19**
7:00 AM	0	33	7	2	13	0	0	0	0	0	0	0	0	**55**
8:00 AM	1	24	10	2	8	0	0	0	0	0	0	0	0	**45**
9:00 AM	0	12	5	0	9	0	0	0	0	0	0	0	0	**26**
10:00 AM	0	25	9	2	4	0	0	0	0	0	0	0	0	**40**
11:00 AM	0	27	12	0	10	1	0	0	0	0	0	0	0	**50**
12:00 PM	0	34	13	1	10	0	0	0	0	0	0	0	0	**58**
1:00 PM	0	40	15	4	8	0	0	0	0	0	0	0	0	**67**
2:00 PM	0	34	7	2	11	0	0	0	0	0	0	0	0	**54**
3:00 PM	0	35	7	2	7	0	0	0	0	0	0	0	0	**51**
4:00 PM	0	28	12	1	14	0	0	0	0	0	0	0	0	**55**
5:00 PM	0	37	12	2	10	1	0	0	0	0	0	0	0	**62**
6:00 PM	2	31	8	1	6	0	0	0	0	0	0	0	0	**48**
7:00 PM	0	32	15	1	6	0	0	0	0	0	0	0	0	**54**
8:00 PM	0	13	2	1	4	0	0	0	0	0	0	0	0	**20**
9:00 PM	0	15	3	0	4	0	0	0	0	0	0	0	0	**22**
10:00 PM	0	5	0	0	4	0	0	0	0	0	0	0	0	**9**
11:00 PM	0	2	0	1	1	0	0	0	0	0	0	0	0	**4**
Total	**4**	**439**	**144**	**31**	**143**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**763**
Percent	**0.5%**	**57.5%**	**18.9%**	**4.1%**	**18.7%**	**0.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Wednesday, September 21, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	2	0	1	1	0	0	0	0	0	0	0	0	**4**
1:00 AM	0	1	0	0	2	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	1	2	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	4	2	1	1	0	0	0	0	0	0	0	0	**8**
6:00 AM	0	10	5	1	0	0	0	0	0	0	0	0	0	**16**
7:00 AM	1	29	8	1	6	0	0	0	0	0	0	0	0	**45**
8:00 AM	0	18	6	2	7	0	0	0	0	0	0	0	0	**33**
9:00 AM	2	20	6	1	5	1	0	0	0	0	0	0	0	**35**
10:00 AM	0	24	5	1	9	0	0	0	0	0	0	0	0	**39**
11:00 AM	0	35	9	4	12	0	0	0	0	0	0	0	0	**60**
12:00 PM	0	27	6	1	8	0	0	0	0	0	0	0	0	**42**
1:00 PM	0	44	15	1	9	1	0	0	0	0	0	0	0	**70**
2:00 PM	0	34	14	2	8	0	0	0	0	0	0	0	0	**58**
3:00 PM	0	52	11	1	10	0	0	0	0	0	0	0	0	**74**
4:00 PM	0	40	16	2	8	0	0	0	0	0	0	0	0	**66**
5:00 PM	1	64	15	2	6	0	0	0	0	0	0	0	0	**88**
6:00 PM	0	63	17	2	9	0	0	0	0	0	0	0	0	**91**
7:00 PM	4	47	12	2	11	0	0	0	0	0	0	0	0	**76**
8:00 PM	0	19	4	1	6	0	0	0	0	0	0	0	0	**30**
9:00 PM	0	9	2	1	6	0	0	0	0	0	0	0	0	**18**
10:00 PM	0	4	1	1	1	0	0	0	0	0	0	0	0	**7**
11:00 PM	0	3	0	0	3	0	0	0	0	0	0	0	0	**6**
Total	**8**	**550**	**156**	**31**	**129**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**876**
Percent	**0.9%**	**62.8%**	**17.8%**	**3.5%**	**14.7%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Thursday, September 22, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	1	2	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	2	3	0	0	0	0	0	0	0	0	**5**
5:00 AM	0	5	1	3	4	0	0	0	0	0	0	0	0	**13**
6:00 AM	1	4	0	4	5	0	0	0	0	0	0	0	0	**14**
7:00 AM	0	21	5	2	11	0	0	0	0	0	0	0	0	**39**
8:00 AM	0	35	10	2	3	0	0	0	0	0	0	0	0	**50**
9:00 AM	0	24	16	0	13	0	0	0	0	0	0	0	0	**53**
10:00 AM	0	18	10	3	5	0	0	0	0	0	0	0	0	**36**
11:00 AM	0	26	10	0	8	0	0	0	0	0	0	0	0	**44**
12:00 PM	1	40	15	3	13	0	0	0	0	0	0	0	0	**72**
1:00 PM	0	23	16	3	9	0	0	0	0	0	0	0	0	**51**
2:00 PM	0	28	7	1	9	0	0	0	0	0	0	0	0	**45**
3:00 PM	0	36	12	1	12	0	0	0	0	0	0	0	0	**61**
4:00 PM	0	41	14	3	4	0	0	0	0	0	0	0	0	**62**
5:00 PM	1	50	15	3	7	0	0	0	0	0	0	0	0	**76**
6:00 PM	0	35	14	0	7	0	0	0	0	0	0	0	0	**56**
7:00 PM	0	20	9	3	4	0	0	0	0	0	0	0	0	**36**
8:00 PM	0	14	6	2	4	0	0	0	0	0	0	0	0	**26**
9:00 PM	0	12	2	1	3	0	0	0	0	0	0	0	0	**18**
10:00 PM	0	6	4	0	3	0	0	0	0	0	0	0	0	**13**
11:00 PM	0	1	0	2	0	0	0	0	0	0	0	0	0	**3**
Total	**3**	**442**	**168**	**38**	**128**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**779**
Percent	**0.4%**	**56.7%**	**21.6%**	**4.9%**	**16.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Thursday, September 22, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	4	0	0	2	0	0	0	0	0	0	0	0	**6**
1:00 AM	0	2	1	0	2	0	0	0	0	0	0	0	0	**5**
2:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	1	0	0	2	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	3	0	1	2	0	0	0	0	0	0	0	0	**6**
6:00 AM	0	6	3	1	3	0	0	0	0	0	0	0	0	**13**
7:00 AM	0	21	10	1	7	0	0	0	0	0	0	0	0	**39**
8:00 AM	0	16	8	1	5	0	0	0	0	0	0	0	0	**30**
9:00 AM	0	23	10	2	10	0	0	0	0	0	0	0	0	**45**
10:00 AM	0	22	7	2	8	0	0	0	0	0	0	0	0	**39**
11:00 AM	0	24	11	3	10	0	0	0	0	0	0	0	0	**48**
12:00 PM	0	52	16	1	13	0	0	0	0	0	0	0	0	**82**
1:00 PM	0	51	17	1	7	0	0	0	0	0	0	0	0	**76**
2:00 PM	0	50	6	1	10	0	0	0	0	0	0	0	0	**67**
3:00 PM	0	34	18	5	9	0	0	0	0	0	0	0	0	**66**
4:00 PM	0	49	8	3	8	0	0	0	0	0	0	0	0	**68**
5:00 PM	1	70	19	1	14	0	0	0	0	0	0	0	0	**105**
6:00 PM	0	56	20	2	10	0	0	0	0	0	0	0	0	**88**
7:00 PM	1	41	8	2	9	0	0	0	0	0	0	0	0	**61**
8:00 PM	0	24	8	2	7	0	0	0	0	0	0	0	0	**41**
9:00 PM	0	13	3	2	6	0	0	0	0	0	0	0	0	**24**
10:00 PM	0	4	0	1	1	0	0	0	0	0	0	0	0	**6**
11:00 PM	0	2	0	1	1	0	0	0	0	0	0	0	0	**4**
Total	**2**	**569**	**173**	**34**	**147**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**925**
Percent	**0.2%**	**61.5%**	**18.7%**	**3.7%**	**15.9%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Friday, September 23, 2022
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	**2**
1:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	3	2	0	0	0	0	0	0	0	0	**5**
5:00 AM	0	7	1	3	4	0	0	0	0	0	0	0	0	**15**
6:00 AM	0	6	3	2	4	0	0	0	0	0	0	0	0	**15**
7:00 AM	0	18	7	1	11	0	0	0	0	0	0	0	0	**37**
8:00 AM	0	15	8	1	6	0	0	0	0	0	0	0	0	**30**
9:00 AM	1	15	7	1	6	0	0	0	0	0	0	0	0	**30**
10:00 AM	0	25	6	2	10	0	0	0	0	0	0	0	0	**43**
11:00 AM	1	24	9	0	8	0	0	0	0	0	0	0	0	**42**
12:00 PM	0	28	14	2	8	0	0	0	0	0	0	0	0	**52**
1:00 PM	0	37	12	2	18	0	0	0	0	0	0	0	0	**69**
2:00 PM	0	28	11	1	14	0	0	0	0	0	0	0	0	**54**
3:00 PM	1	37	15	2	11	0	0	0	0	0	0	0	0	**66**
4:00 PM	0	44	7	2	7	0	0	0	0	0	0	0	0	**60**
5:00 PM	1	43	13	2	9	0	0	0	0	0	0	0	0	**68**
6:00 PM	0	29	11	2	14	0	0	0	0	0	0	0	0	**56**
7:00 PM	0	39	12	0	12	0	0	0	0	0	0	0	0	**63**
8:00 PM	0	20	7	5	5	0	0	0	0	0	0	0	0	**37**
9:00 PM	0	8	4	1	3	0	0	0	0	0	0	0	0	**16**
10:00 PM	0	7	1	0	4	0	0	0	0	0	0	0	0	**12**
11:00 PM	0	4	2	0	3	0	0	0	0	0	0	0	0	**9**
Total	**5**	**437**	**150**	**32**	**160**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**784**
Percent	**0.6%**	**55.7%**	**19.1%**	**4.1%**	**20.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Friday, September 23, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	1	1	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	4	0	1	1	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	**2**
6:00 AM	0	8	5	1	3	0	0	0	0	0	0	0	0	**17**
7:00 AM	0	22	5	1	5	0	0	0	0	0	0	0	0	**33**
8:00 AM	0	17	7	0	10	1	0	0	0	0	0	0	0	**35**
9:00 AM	1	19	3	1	9	0	0	0	0	0	0	0	0	**33**
10:00 AM	0	26	10	2	10	0	0	0	0	0	0	0	0	**48**
11:00 AM	0	28	10	3	6	1	0	0	0	0	0	0	0	**48**
12:00 PM	1	35	18	1	12	0	0	0	0	0	0	0	0	**67**
1:00 PM	0	49	13	2	9	0	0	0	0	0	0	0	0	**73**
2:00 PM	0	38	15	0	11	0	0	0	0	0	0	0	0	**64**
3:00 PM	0	45	8	2	9	0	0	0	0	0	0	0	0	**64**
4:00 PM	0	72	10	4	12	0	0	0	1	1	0	0	0	**100**
5:00 PM	1	70	9	2	9	0	0	0	0	0	0	0	0	**91**
6:00 PM	2	64	22	2	11	0	0	0	0	0	0	0	0	**101**
7:00 PM	0	48	10	5	12	0	0	0	0	0	0	0	0	**75**
8:00 PM	0	33	5	2	5	0	0	0	0	0	0	0	0	**45**
9:00 PM	1	14	2	1	3	0	0	0	0	0	0	0	0	**21**
10:00 PM	0	15	4	0	2	0	0	0	0	0	0	0	0	**21**
11:00 PM	0	4	3	1	1	0	0	0	0	0	0	0	0	**9**
Total	**6**	**614**	**159**	**34**	**144**	**2**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**961**
Percent	**0.6%**	**63.9%**	**16.5%**	**3.5%**	**15.0%**	**0.2%**	**0.0%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Total Study Average
Eastbound

	FHWA Vehicle Classification													Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	2	0	0	1	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	1	0	3	2	0	0	0	0	0	0	0	0	**6**
5:00 AM	0	4	1	3	4	0	0	0	0	0	0	0	0	**12**
6:00 AM	1	5	2	3	4	0	0	0	0	0	0	0	0	**15**
7:00 AM	0	21	6	2	9	0	0	0	0	0	0	0	0	**38**
8:00 AM	0	23	7	2	6	0	0	0	0	0	0	0	0	**38**
9:00 AM	0	17	8	0	8	0	0	0	0	0	0	0	0	**33**
10:00 AM	0	22	9	2	9	0	0	0	0	0	0	0	0	**42**
11:00 AM	0	26	9	0	9	0	0	0	0	0	0	0	0	**44**
12:00 PM	0	36	11	1	10	0	0	0	0	0	0	0	0	**58**
1:00 PM	0	35	14	3	11	0	0	0	0	0	0	0	0	**63**
2:00 PM	0	32	8	2	11	0	0	0	0	0	0	0	0	**53**
3:00 PM	0	32	11	1	10	0	0	0	0	0	0	0	0	**54**
4:00 PM	0	38	13	2	9	0	0	0	0	0	0	0	0	**62**
5:00 PM	1	38	11	2	9	0	0	0	0	0	0	0	0	**61**
6:00 PM	0	35	11	1	9	0	0	0	0	0	0	0	0	**56**
7:00 PM	0	28	10	1	7	0	0	0	0	0	0	0	0	**46**
8:00 PM	0	16	4	3	4	0	0	0	0	0	0	0	0	**27**
9:00 PM	0	11	3	1	3	0	0	0	0	0	0	0	0	**18**
10:00 PM	0	5	2	0	2	0	0	0	0	0	0	0	0	**9**
11:00 PM	0	2	1	1	1	0	0	0	0	0	0	0	0	**5**
Total	**2**	**432**	**141**	**33**	**138**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**746**
Percent	**0.3%**	**57.9%**	**18.9%**	**4.4%**	**18.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Total Study Average
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	3	0	1	1	0	0	0	0	0	0	0	0	**5**
1:00 AM	0	2	0	1	1	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	2	0	1	1	0	0	0	0	0	0	0	0	**4**
3:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	2	1	1	1	0	0	0	0	0	0	0	0	**5**
6:00 AM	0	6	4	1	1	0	0	0	0	0	0	0	0	**12**
7:00 AM	0	20	5	1	5	0	0	0	0	0	0	0	0	**31**
8:00 AM	0	18	5	1	6	0	0	0	0	0	0	0	0	**30**
9:00 AM	1	17	6	2	7	0	0	0	0	0	0	0	0	**33**
10:00 AM	0	28	8	2	8	0	0	0	0	0	0	0	0	**46**
11:00 AM	0	31	11	3	11	0	0	0	0	0	0	0	0	**56**
12:00 PM	0	38	13	1	8	0	0	0	0	0	0	0	0	**60**
1:00 PM	0	50	15	2	8	0	0	0	0	0	0	0	0	**75**
2:00 PM	0	40	13	1	9	0	0	0	0	0	0	0	0	**63**
3:00 PM	1	41	12	2	10	0	0	0	0	0	0	0	0	**66**
4:00 PM	1	50	12	4	9	0	0	0	0	0	0	0	0	**76**
5:00 PM	1	57	15	2	9	0	0	0	0	0	0	0	0	**84**
6:00 PM	1	53	16	2	10	0	0	0	0	0	0	0	0	**82**
7:00 PM	1	39	8	3	10	0	0	0	0	0	0	0	0	**61**
8:00 PM	0	24	5	2	6	0	0	0	0	0	0	0	0	**37**
9:00 PM	0	12	3	2	3	0	0	0	0	0	0	0	0	**20**
10:00 PM	0	6	1	1	1	0	0	0	0	0	0	0	0	**9**
11:00 PM	0	3	1	1	1	0	0	0	0	0	0	0	0	**6**
Total	**6**	**543**	**154**	**38**	**127**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**868**
Percent	**0.7%**	**62.6%**	**17.7%**	**4.4%**	**14.6%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

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3-Day (Tuesday - Thursday) Average
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	1	0	2	3	0	0	0	0	0	0	0	0	**7**
5:00 AM	0	6	1	3	4	0	0	0	0	0	0	0	0	**14**
6:00 AM	1	5	2	4	5	0	0	0	0	0	0	0	0	**16**
7:00 AM	0	26	7	2	11	0	0	0	0	0	0	0	0	**47**
8:00 AM	0	29	8	2	5	0	0	0	0	0	0	0	0	**45**
9:00 AM	0	17	9	0	10	0	0	0	0	0	0	0	0	**37**
10:00 AM	0	21	10	3	7	0	0	0	0	0	0	0	0	**40**
11:00 AM	0	26	12	0	9	0	0	0	0	0	0	0	0	**48**
12:00 PM	1	38	13	1	10	0	0	0	0	0	0	0	0	**63**
1:00 PM	0	33	16	4	8	0	0	0	0	0	0	0	0	**60**
2:00 PM	0	28	8	2	10	0	0	0	0	0	0	0	0	**48**
3:00 PM	0	33	9	1	10	0	0	0	0	0	0	0	0	**54**
4:00 PM	0	39	15	2	9	0	0	0	0	0	0	0	0	**65**
5:00 PM	1	42	12	2	9	0	0	0	0	0	0	0	0	**67**
6:00 PM	1	34	14	0	8	0	0	0	0	0	0	0	0	**57**
7:00 PM	0	26	12	2	5	0	0	0	0	0	0	0	0	**45**
8:00 PM	0	13	4	2	5	0	0	0	0	0	0	0	0	**25**
9:00 PM	0	13	3	1	3	0	0	0	0	0	0	0	0	**19**
10:00 PM	0	5	2	0	3	0	0	0	0	0	0	0	0	**10**
11:00 PM	0	1	0	2	0	0	0	0	0	0	0	0	0	**3**
Total	**4**	**440**	**158**	**35**	**136**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**775**
Percent	**0.6%**	**56.8%**	**20.4%**	**4.6%**	**17.5%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

3-Day (Tuesday - Thursday) Average
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	2	0	1	1	0	0	0	0	0	0	0	0	**4**
1:00 AM	0	2	0	1	1	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	4	1	1	1	0	0	0	0	0	0	0	0	**7**
6:00 AM	0	8	5	1	2	0	0	0	0	0	0	0	0	**16**
7:00 AM	0	24	8	1	6	0	0	0	0	0	0	0	0	**39**
8:00 AM	0	18	6	1	6	0	0	0	0	0	0	0	0	**32**
9:00 AM	1	19	6	2	7	0	0	0	0	0	0	0	0	**36**
10:00 AM	0	24	7	2	8	0	0	0	0	0	0	0	0	**41**
11:00 AM	0	32	12	3	12	0	0	0	0	0	0	0	0	**59**
12:00 PM	0	40	12	1	9	0	0	0	0	0	0	0	0	**62**
1:00 PM	1	48	16	2	8	0	0	0	0	0	0	0	0	**74**
2:00 PM	0	38	11	1	9	0	0	0	0	0	0	0	0	**59**
3:00 PM	1	44	13	3	9	0	0	0	0	0	0	0	0	**70**
4:00 PM	0	45	13	3	10	0	0	0	0	0	0	0	0	**71**
5:00 PM	1	62	17	1	10	0	0	0	0	0	0	0	0	**91**
6:00 PM	0	58	17	2	10	0	0	0	0	0	0	0	0	**87**
7:00 PM	2	40	10	2	9	0	0	0	0	0	0	0	0	**63**
8:00 PM	0	19	6	2	7	0	0	0	0	0	0	0	0	**33**
9:00 PM	0	11	2	2	5	0	0	0	0	0	0	0	0	**19**
10:00 PM	0	4	1	1	1	0	0	0	0	0	0	0	0	**6**
11:00 PM	0	2	0	1	1	0	0	0	0	0	0	0	0	**5**
Total	**8**	**546**	**164**	**34**	**134**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**886**
Percent	**0.9%**	**61.6%**	**18.5%**	**3.9%**	**15.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Vehicle Speed Report Summary

Location: Wulfsohn BTWN E Meadows & W Meadows

Count Direction: Eastbound / Westbound

Date Range: 9/17/2022 to 9/23/2022

Site Code: 12

	Speed Range (mph)																	Total
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
Study Total																		
Eastbound	267	2,070	2,313	569	46	3	0	0	0	0	0	0	0	0	0	0	0	5,268
Percent	5.1%	39.3%	43.9%	10.8%	0.9%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Westbound	441	2,481	2,614	529	28	3	3	0	0	0	0	0	0	0	0	0	0	6,099
Percent	7.2%	40.7%	42.9%	8.7%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	708	4,551	4,927	1,098	74	6	3	0	0	0	0	0	0	0	0	0	0	11,367
Percent	6.2%	40.0%	43.3%	9.7%	0.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%

Total Study Percentile Speed Summary		
Eastbound		
50th Percentile (Median)	15.4	mph
85th Percentile	19.3	mph
95th Percentile	21.8	mph
Westbound		
50th Percentile (Median)	15.2	mph
85th Percentile	18.9	mph
95th Percentile	21.3	mph

Total Study Speed Statistics		
Eastbound		
Mean (Average) Speed	15.6	mph
10 mph Pace	10.5 - 20.5	mph
Percent in Pace	83.6	%
Westbound		
Mean (Average) Speed	15.3	mph
10 mph Pace	10.0 - 20.0	mph
Percent in Pace	83.5	%

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Saturday, September 17, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	1	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
1:00 AM	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
2:00 AM	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
5:00 AM	2	5	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**11**
6:00 AM	0	5	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**13**
7:00 AM	1	9	8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**20**
8:00 AM	3	8	11	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**28**
9:00 AM	2	12	17	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**37**
10:00 AM	3	21	27	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**55**
11:00 AM	1	21	19	6	1	0	0	0	0	0	0	0	0	0	0	0	0	**48**
12:00 PM	3	14	30	6	1	0	0	0	0	0	0	0	0	0	0	0	0	**54**
1:00 PM	2	24	29	12	0	1	0	0	0	0	0	0	0	0	0	0	0	**68**
2:00 PM	4	26	28	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**63**
3:00 PM	1	26	22	7	1	0	0	0	0	0	0	0	0	0	0	0	0	**57**
4:00 PM	1	22	16	10	0	0	0	0	0	0	0	0	0	0	0	0	0	**49**
5:00 PM	3	14	26	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**48**
6:00 PM	6	17	27	3	2	0	0	0	0	0	0	0	0	0	0	0	0	**55**
7:00 PM	3	22	16	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**42**
8:00 PM	3	11	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**21**
9:00 PM	3	9	8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**22**
10:00 PM	1	3	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**10**
11:00 PM	1	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
Total	**47**	**286**	**308**	**81**	**5**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**728**
Percent	**6.5%**	**39.3%**	**42.3%**	**11.1%**	**0.7%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	15.3	mph	Mean (Average) Speed	15.5	mph
85th Percentile	19.3	mph	10 mph Pace	11.0 - 21.0	mph
95th Percentile	21.6	mph	Percent in Pace	82.7	%

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Saturday, September 17, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	3	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**5**
2:00 AM	1	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**8**
3:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**4**
6:00 AM	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
7:00 AM	2	4	12	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**23**
8:00 AM	1	9	19	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**33**
9:00 AM	2	14	16	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**34**
10:00 AM	1	15	34	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**55**
11:00 AM	2	28	22	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**58**
12:00 PM	3	34	30	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**73**
1:00 PM	6	27	46	8	1	0	0	0	0	0	0	0	0	0	0	0	0	**88**
2:00 PM	7	31	26	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**68**
3:00 PM	3	28	26	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**62**
4:00 PM	1	20	43	10	0	0	0	0	0	0	0	0	0	0	0	0	0	**74**
5:00 PM	3	19	39	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**64**
6:00 PM	6	21	26	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**56**
7:00 PM	8	30	9	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**50**
8:00 PM	3	21	17	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**47**
9:00 PM	1	11	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**22**
10:00 PM	0	2	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**10**
11:00 PM	3	4	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	**10**
Total	**56**	**332**	**387**	**72**	**5**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**853**
Percent	**6.6%**	**38.9%**	**45.4%**	**8.4%**	**0.6%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	15.4	mph	Mean (Average) Speed	15.4	mph
85th Percentile	19.0	mph	10 mph Pace	10.6 - 20.6	mph
95th Percentile	21.1	mph	Percent in Pace	84.99	%

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Sunday, September 18, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
1:00 AM	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
5:00 AM	1	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
6:00 AM	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**8**
7:00 AM	0	8	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**14**
8:00 AM	3	14	8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**27**
9:00 AM	0	8	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**27**
10:00 AM	2	13	19	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**36**
11:00 AM	0	12	18	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**33**
12:00 PM	3	15	28	7	1	0	0	0	0	0	0	0	0	0	0	0	0	**54**
1:00 PM	0	15	27	3	0	1	0	0	0	0	0	0	0	0	0	0	0	**46**
2:00 PM	2	25	32	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**64**
3:00 PM	2	19	17	5	1	0	0	0	0	0	0	0	0	0	0	0	0	**44**
4:00 PM	2	28	20	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**54**
5:00 PM	4	23	28	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**59**
6:00 PM	6	35	19	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**64**
7:00 PM	0	11	23	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**37**
8:00 PM	3	14	9	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**30**
9:00 PM	4	7	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**18**
10:00 PM	1	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
11:00 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
Total	**34**	**272**	**289**	**48**	**5**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**649**
Percent	**5.2%**	**41.9%**	**44.5%**	**7.4%**	**0.8%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	15.3	mph	Mean (Average) Speed	15.4	mph
85th Percentile	19.0	mph	10 mph Pace	10.2 - 20.2	mph
95th Percentile	21.4	mph	Percent in Pace	86.0	%

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Sunday, September 18, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	6	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
1:00 AM	1	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
2:00 AM	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
3:00 AM	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
6:00 AM	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
7:00 AM	0	7	5	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**14**
8:00 AM	0	9	11	1	0	0	1	0	0	0	0	0	0	0	0	0	0	**22**
9:00 AM	2	7	11	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**25**
10:00 AM	1	14	29	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**50**
11:00 AM	3	14	33	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**56**
12:00 PM	2	13	17	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**37**
1:00 PM	3	26	39	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**72**
2:00 PM	2	38	34	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**75**
3:00 PM	3	24	18	7	0	1	0	0	0	0	0	0	0	0	0	0	0	**53**
4:00 PM	3	18	32	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**59**
5:00 PM	6	24	23	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**57**
6:00 PM	14	28	21	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**64**
7:00 PM	9	26	12	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**50**
8:00 PM	7	17	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**29**
9:00 PM	5	12	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**23**
10:00 PM	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
11:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**62**	**297**	**305**	**57**	**1**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**724**
Percent	**8.6%**	**41.0%**	**42.1%**	**7.9%**	**0.1%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	15.1	mph	Mean (Average) Speed	15.1	mph
85th Percentile	18.7	mph	10 mph Pace	9.8 - 19.8	mph
95th Percentile	20.8	mph	Percent in Pace	84.25	%

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Monday, September 19, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
5:00 AM	1	6	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**12**
6:00 AM	1	5	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**13**
7:00 AM	2	18	23	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**50**
8:00 AM	1	11	21	12	1	0	0	0	0	0	0	0	0	0	0	0	0	**46**
9:00 AM	4	12	12	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**31**
10:00 AM	1	19	12	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**40**
11:00 AM	1	11	25	5	3	0	0	0	0	0	0	0	0	0	0	0	0	**45**
12:00 PM	4	16	29	11	0	0	0	0	0	0	0	0	0	0	0	0	0	**60**
1:00 PM	1	27	46	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**82**
2:00 PM	1	20	21	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**50**
3:00 PM	1	24	25	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**58**
4:00 PM	2	26	39	9	0	0	0	0	0	0	0	0	0	0	0	0	0	**76**
5:00 PM	2	19	28	6	1	0	0	0	0	0	0	0	0	0	0	0	0	**56**
6:00 PM	2	18	21	8	1	0	0	0	0	0	0	0	0	0	0	0	0	**50**
7:00 PM	3	20	16	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**46**
8:00 PM	0	22	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**27**
9:00 PM	2	5	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**17**
10:00 PM	0	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**8**
11:00 PM	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
Total	**31**	**294**	**346**	**106**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**783**
Percent	**4.0%**	**37.5%**	**44.2%**	**13.5%**	**0.8%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	15.8	mph	Mean (Average) Speed	15.9	mph
85th Percentile	19.8	mph	10 mph Pace	11.1 - 21.1	mph
95th Percentile	22.1	mph	Percent in Pace	82.6	%

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Monday, September 19, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
1:00 AM	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**5**
6:00 AM	0	4	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**12**
7:00 AM	0	8	18	9	0	0	0	0	0	0	0	0	0	0	0	0	0	**35**
8:00 AM	1	9	12	9	0	0	0	0	0	0	0	0	0	0	0	0	0	**31**
9:00 AM	3	9	16	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**33**
10:00 AM	1	10	27	9	0	0	0	0	0	0	0	0	0	0	0	0	0	**47**
11:00 AM	2	22	30	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**59**
12:00 PM	2	27	29	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**62**
1:00 PM	2	29	37	7	2	0	0	0	0	0	0	0	0	0	0	0	0	**77**
2:00 PM	3	24	25	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**58**
3:00 PM	3	21	43	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**74**
4:00 PM	1	30	39	10	0	0	0	0	0	0	0	0	0	0	0	0	0	**80**
5:00 PM	7	34	46	9	0	0	0	0	0	0	0	0	0	0	0	0	0	**96**
6:00 PM	7	38	38	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**88**
7:00 PM	14	24	24	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**65**
8:00 PM	5	21	15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**42**
9:00 PM	3	10	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**18**
10:00 PM	1	2	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**7**
11:00 PM	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
Total	**55**	**330**	**417**	**95**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**902**
Percent	**6.1%**	**36.6%**	**46.2%**	**10.5%**	**0.6%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	15.7	mph	Mean (Average) Speed	15.7	mph
85th Percentile	19.3	mph	10 mph Pace	10.4 - 20.4	mph
95th Percentile	22.0	mph	Percent in Pace	83.81	%

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Tuesday, September 20, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	11	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**15**
6:00 AM	1	4	9	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**16**
7:00 AM	5	18	13	11	0	0	0	0	0	0	0	0	0	0	0	0	0	**47**
8:00 AM	1	11	23	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**39**
9:00 AM	0	11	13	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**31**
10:00 AM	3	21	15	5	1	0	0	0	0	0	0	0	0	0	0	0	0	**45**
11:00 AM	2	17	27	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**49**
12:00 PM	1	20	26	9	2	0	0	0	0	0	0	0	0	0	0	0	0	**58**
1:00 PM	0	33	20	10	0	0	0	0	0	0	0	0	0	0	0	0	0	**63**
2:00 PM	1	18	22	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**45**
3:00 PM	3	17	20	9	0	0	0	0	0	0	0	0	0	0	0	0	0	**49**
4:00 PM	1	29	40	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**77**
5:00 PM	2	22	29	7	2	0	0	0	0	0	0	0	0	0	0	0	0	**62**
6:00 PM	1	25	34	6	1	0	0	0	0	0	0	0	0	0	0	0	0	**67**
7:00 PM	5	20	16	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**46**
8:00 PM	5	19	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**28**
9:00 PM	0	11	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**18**
10:00 PM	1	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
11:00 PM	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
Total	**34**	**323**	**327**	**89**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**782**
Percent	**4.3%**	**41.3%**	**41.8%**	**11.4%**	**1.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	15.3	mph	Mean (Average) Speed	15.7	mph
85th Percentile	19.5	mph	10 mph Pace	11.2 - 21.2	mph
95th Percentile	22.0	mph	Percent in Pace	84.7	%

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Tuesday, September 20, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
2:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
5:00 AM	0	1	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**8**
6:00 AM	1	10	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**18**
7:00 AM	3	8	15	6	0	0	1	0	0	0	0	0	0	0	0	0	0	**33**
8:00 AM	1	12	15	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**32**
9:00 AM	2	11	11	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**29**
10:00 AM	0	17	23	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**45**
11:00 AM	6	24	34	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**68**
12:00 PM	6	23	29	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**63**
1:00 PM	5	30	33	7	1	0	0	0	0	0	0	0	0	0	0	0	0	**76**
2:00 PM	1	28	16	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**52**
3:00 PM	7	21	30	10	1	0	0	0	0	0	0	0	0	0	0	0	0	**69**
4:00 PM	6	30	35	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**79**
5:00 PM	5	29	40	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**80**
6:00 PM	8	44	21	8	1	0	0	0	0	0	0	0	0	0	0	0	0	**82**
7:00 PM	3	29	17	2	2	0	0	0	0	0	0	0	0	0	0	0	0	**53**
8:00 PM	3	17	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**28**
9:00 PM	5	5	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**16**
10:00 PM	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
11:00 PM	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
Total	**65**	**351**	**351**	**85**	**5**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**858**
Percent	**7.6%**	**40.9%**	**40.9%**	**9.9%**	**0.6%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	15.1	mph	Mean (Average) Speed	15.2	mph
85th Percentile	19.0	mph	10 mph Pace	9.8 - 19.8	mph
95th Percentile	21.7	mph	Percent in Pace	81.82	%

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Wednesday, September 21, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	1	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
5:00 AM	1	6	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**14**
6:00 AM	1	10	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**19**
7:00 AM	0	19	28	7	1	0	0	0	0	0	0	0	0	0	0	0	0	**55**
8:00 AM	1	10	23	11	0	0	0	0	0	0	0	0	0	0	0	0	0	**45**
9:00 AM	1	5	16	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**26**
10:00 AM	1	22	13	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**40**
11:00 AM	2	23	22	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**50**
12:00 PM	5	23	22	6	2	0	0	0	0	0	0	0	0	0	0	0	0	**58**
1:00 PM	3	31	24	8	1	0	0	0	0	0	0	0	0	0	0	0	0	**67**
2:00 PM	5	19	24	5	1	0	0	0	0	0	0	0	0	0	0	0	0	**54**
3:00 PM	2	17	28	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**51**
4:00 PM	0	22	25	7	1	0	0	0	0	0	0	0	0	0	0	0	0	**55**
5:00 PM	3	20	32	6	1	0	0	0	0	0	0	0	0	0	0	0	0	**62**
6:00 PM	4	22	17	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**48**
7:00 PM	6	25	21	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**54**
8:00 PM	1	15	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**20**
9:00 PM	0	12	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**22**
10:00 PM	0	6	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
11:00 PM	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
Total	**37**	**318**	**323**	**77**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**763**
Percent	**4.8%**	**41.7%**	**42.3%**	**10.1%**	**1.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	15.2	mph	Mean (Average) Speed	15.5	mph
85th Percentile	19.2	mph	10 mph Pace	10.6 - 20.6	mph
95th Percentile	21.7	mph	Percent in Pace	84.9	%

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Wednesday, September 21, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
1:00 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	1	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**8**
6:00 AM	0	10	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**16**
7:00 AM	1	13	21	10	0	0	0	0	0	0	0	0	0	0	0	0	0	**45**
8:00 AM	0	9	18	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**33**
9:00 AM	0	12	20	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**35**
10:00 AM	3	13	19	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**39**
11:00 AM	5	26	24	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**60**
12:00 PM	4	16	19	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**42**
1:00 PM	3	41	24	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**70**
2:00 PM	4	24	24	5	0	1	0	0	0	0	0	0	0	0	0	0	0	**58**
3:00 PM	6	32	28	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**74**
4:00 PM	3	31	27	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**66**
5:00 PM	7	41	34	5	1	0	0	0	0	0	0	0	0	0	0	0	0	**88**
6:00 PM	7	40	39	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**91**
7:00 PM	19	34	22	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**76**
8:00 PM	6	13	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**30**
9:00 PM	1	8	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**18**
10:00 PM	1	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
11:00 PM	1	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
Total	**72**	**375**	**359**	**67**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**876**
Percent	**8.2%**	**42.8%**	**41.0%**	**7.6%**	**0.2%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	15.0	mph	Mean (Average) Speed	15	mph
85th Percentile	18.8	mph	10 mph Pace	9.8 - 19.8	mph
95th Percentile	20.7	mph	Percent in Pace	84.13	%

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Thursday, September 22, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
5:00 AM	0	6	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**13**
6:00 AM	1	6	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**14**
7:00 AM	2	11	21	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**39**
8:00 AM	2	14	26	7	1	0	0	0	0	0	0	0	0	0	0	0	0	**50**
9:00 AM	1	24	25	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**53**
10:00 AM	3	16	11	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**36**
11:00 AM	2	12	23	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**44**
12:00 PM	2	38	26	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**72**
1:00 PM	2	15	27	6	1	0	0	0	0	0	0	0	0	0	0	0	0	**51**
2:00 PM	2	14	24	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**45**
3:00 PM	3	20	31	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**61**
4:00 PM	5	21	32	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**62**
5:00 PM	0	21	42	11	2	0	0	0	0	0	0	0	0	0	0	0	0	**76**
6:00 PM	4	20	29	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**56**
7:00 PM	1	14	14	6	1	0	0	0	0	0	0	0	0	0	0	0	0	**36**
8:00 PM	3	12	9	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**26**
9:00 PM	1	12	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**18**
10:00 PM	2	3	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**13**
11:00 PM	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
Total	**36**	**284**	**365**	**89**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**779**
Percent	**4.6%**	**36.5%**	**46.9%**	**11.4%**	**0.6%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	15.7	mph	Mean (Average) Speed	15.8	mph
85th Percentile	19.5	mph	10 mph Pace	10.8 - 20.8	mph
95th Percentile	21.9	mph	Percent in Pace	84.1	%

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Thursday, September 22, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	2	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**6**
1:00 AM	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
2:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
6:00 AM	0	1	9	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**13**
7:00 AM	1	7	21	10	0	0	0	0	0	0	0	0	0	0	0	0	0	**39**
8:00 AM	1	14	14	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**30**
9:00 AM	6	21	16	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**45**
10:00 AM	3	19	16	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**39**
11:00 AM	3	15	27	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**48**
12:00 PM	14	45	22	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**82**
1:00 PM	4	23	42	6	1	0	0	0	0	0	0	0	0	0	0	0	0	**76**
2:00 PM	1	27	34	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**67**
3:00 PM	3	37	21	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**66**
4:00 PM	0	31	33	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**68**
5:00 PM	9	43	41	12	0	0	0	0	0	0	0	0	0	0	0	0	0	**105**
6:00 PM	16	41	30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**88**
7:00 PM	6	36	17	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**61**
8:00 PM	1	21	17	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**41**
9:00 PM	3	9	10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**24**
10:00 PM	0	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
11:00 PM	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
Total	**75**	**405**	**378**	**62**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**925**
Percent	**8.1%**	**43.8%**	**40.9%**	**6.7%**	**0.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	14.8	mph	Mean (Average) Speed	14.9	mph
85th Percentile	18.5	mph	10 mph Pace	9.4 - 19.4	mph
95th Percentile	20.7	mph	Percent in Pace	84.97	%

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Friday, September 23, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
5:00 AM	1	8	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**15**
6:00 AM	0	7	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**15**
7:00 AM	2	15	17	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**37**
8:00 AM	1	12	16	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**30**
9:00 AM	3	12	10	3	2	0	0	0	0	0	0	0	0	0	0	0	0	**30**
10:00 AM	3	11	21	6	2	0	0	0	0	0	0	0	0	0	0	0	0	**43**
11:00 AM	0	14	25	2	0	1	0	0	0	0	0	0	0	0	0	0	0	**42**
12:00 PM	2	12	31	6	1	0	0	0	0	0	0	0	0	0	0	0	0	**52**
1:00 PM	3	21	37	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**69**
2:00 PM	4	17	24	9	0	0	0	0	0	0	0	0	0	0	0	0	0	**54**
3:00 PM	3	23	33	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**66**
4:00 PM	4	15	31	10	0	0	0	0	0	0	0	0	0	0	0	0	0	**60**
5:00 PM	7	28	23	9	1	0	0	0	0	0	0	0	0	0	0	0	0	**68**
6:00 PM	6	26	19	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**56**
7:00 PM	3	33	25	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**63**
8:00 PM	4	17	13	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**37**
9:00 PM	0	10	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**16**
10:00 PM	2	6	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**12**
11:00 PM	0	3	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
Total	**48**	**293**	**355**	**79**	**8**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**784**
Percent	**6.1%**	**37.4%**	**45.3%**	**10.1%**	**1.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	15.4	mph	Mean (Average) Speed	15.6	mph
85th Percentile	19.3	mph	10 mph Pace	11.5 - 21.5	mph
95th Percentile	21.8	mph	Percent in Pace	83.2	%

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Friday, September 23, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
6:00 AM	2	8	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**17**
7:00 AM	0	12	15	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**33**
8:00 AM	1	9	19	5	1	0	0	0	0	0	0	0	0	0	0	0	0	**35**
9:00 AM	1	8	20	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**33**
10:00 AM	1	13	25	8	1	0	0	0	0	0	0	0	0	0	0	0	0	**48**
11:00 AM	2	18	23	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**48**
12:00 PM	4	27	31	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**67**
1:00 PM	3	26	38	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**73**
2:00 PM	2	27	29	5	0	1	0	0	0	0	0	0	0	0	0	0	0	**64**
3:00 PM	4	20	29	11	0	0	0	0	0	0	0	0	0	0	0	0	0	**64**
4:00 PM	2	32	50	15	1	0	0	0	0	0	0	0	0	0	0	0	0	**100**
5:00 PM	7	44	36	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**91**
6:00 PM	9	53	33	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**101**
7:00 PM	8	41	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**75**
8:00 PM	1	29	12	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**45**
9:00 PM	2	9	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**21**
10:00 PM	3	3	11	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**21**
11:00 PM	3	3	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
Total	**56**	**391**	**417**	**91**	**5**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**961**
Percent	**5.8%**	**40.7%**	**43.4%**	**9.5%**	**0.5%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	15.4	mph	Mean (Average) Speed	15.4	mph
85th Percentile	19.1	mph	10 mph Pace	10.0 - 20.0	mph
95th Percentile	21.4	mph	Percent in Pace	83.98	%

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Total Study Average
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
5:00 AM	1	7	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**13**
6:00 AM	1	6	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**14**
7:00 AM	2	14	16	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**37**
8:00 AM	2	11	18	6	1	0	0	0	0	0	0	0	0	0	0	0	0	**38**
9:00 AM	2	12	16	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**34**
10:00 AM	2	18	17	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**42**
11:00 AM	1	16	23	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**45**
12:00 PM	3	20	27	7	1	0	0	0	0	0	0	0	0	0	0	0	0	**58**
1:00 PM	2	24	30	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**64**
2:00 PM	3	20	25	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**54**
3:00 PM	2	21	25	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**55**
4:00 PM	2	23	29	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**61**
5:00 PM	3	21	30	7	1	0	0	0	0	0	0	0	0	0	0	0	0	**62**
6:00 PM	4	23	24	5	1	0	0	0	0	0	0	0	0	0	0	0	0	**57**
7:00 PM	3	21	19	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**47**
8:00 PM	3	16	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**28**
9:00 PM	1	9	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**18**
10:00 PM	1	5	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**10**
11:00 PM	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
Total	**39**	**297**	**330**	**81**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**752**
Percent	**5.2%**	**39.5%**	**43.9%**	**10.8%**	**0.7%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	15.4	mph	Mean (Average) Speed	15.6	mph
85th Percentile	19.3	mph	10 mph Pace	10.5 - 20.5	mph
95th Percentile	21.8	mph	Percent in Pace	83.6	%

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 to 9/23/2022
Site Code: 12

Total Study Average
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
1:00 AM	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
6:00 AM	1	5	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**12**
7:00 AM	1	8	15	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**31**
8:00 AM	1	10	15	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**30**
9:00 AM	2	12	16	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**34**
10:00 AM	1	14	25	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**45**
11:00 AM	3	21	28	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**57**
12:00 PM	5	26	25	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**60**
1:00 PM	4	29	37	6	1	0	0	0	0	0	0	0	0	0	0	0	0	**77**
2:00 PM	3	28	27	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**63**
3:00 PM	4	26	28	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**65**
4:00 PM	2	27	37	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**74**
5:00 PM	6	33	37	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**82**
6:00 PM	10	38	30	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**82**
7:00 PM	10	31	18	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**62**
8:00 PM	4	20	12	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**38**
9:00 PM	3	9	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**20**
10:00 PM	1	2	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
11:00 PM	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
Total	**63**	**351**	**375**	**75**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**866**
Percent	**7.3%**	**40.5%**	**43.3%**	**8.7%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	15.2	mph	Mean (Average) Speed	15.3	mph
85th Percentile	18.9	mph	10 mph Pace	10.0 - 20.0	mph
95th Percentile	21.3	mph	Percent in Pace	83.5	%

Location: Wulfsohn BTWN E Meadows & W Meadows
Date Range: 9/17/2022 - 9/23/2022
Site Code: 12

	Saturday			Sunday			Monday			Tuesday			Wednesday			Thursday			Friday			Mid-Week Average		
	9/17/2022			9/18/2022			9/19/2022			9/20/2022			9/21/2022			9/22/2022			9/23/2022					
Time	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total
12:00 AM	6	3	9	6	9	15	3	5	8	3	3	6	2	4	6	2	6	8	2	3	5	2	4	7
1:00 AM	4	5	9	3	6	9	3	3	6	3	5	8	1	3	4	3	5	8	1	2	3	2	4	7
2:00 AM	3	8	11	2	4	6	0	0	0	0	3	3	0	2	2	0	2	2	2	6	8	0	2	2
3:00 AM	0	2	2	0	5	5	1	1	2	0	2	2	0	3	3	1	3	4	0	2	2	0	3	3
4:00 AM	5	0	5	5	1	6	5	0	5	9	3	12	7	2	9	5	1	6	5	1	6	7	2	9
5:00 AM	11	4	15	7	1	8	12	5	17	15	8	23	14	8	22	13	6	19	15	2	17	14	7	21
6:00 AM	13	4	17	8	4	12	13	12	25	16	18	34	19	16	35	14	13	27	15	17	32	16	16	32
7:00 AM	20	23	43	14	14	28	50	35	85	47	33	80	55	45	100	39	39	78	37	33	70	47	39	86
8:00 AM	28	33	61	27	22	49	46	31	77	39	32	71	45	33	78	50	30	80	30	35	65	45	32	76
9:00 AM	37	34	71	27	25	52	31	33	64	31	29	60	26	35	61	53	45	98	30	33	63	37	36	73
10:00 AM	55	55	110	36	50	86	40	47	87	45	45	90	40	39	79	36	39	75	43	48	91	40	41	81
11:00 AM	48	58	106	33	56	89	45	59	104	49	68	117	50	60	110	44	48	92	42	48	90	48	59	106
12:00 PM	54	73	127	54	37	91	60	62	122	58	63	121	58	42	100	72	82	154	52	67	119	63	62	125
1:00 PM	68	88	156	46	72	118	82	77	159	63	76	139	67	70	137	51	76	127	69	73	142	60	74	134
2:00 PM	63	68	131	64	75	139	50	58	108	45	52	97	54	58	112	45	67	112	54	64	118	48	59	107
3:00 PM	57	62	119	44	53	97	58	74	132	49	69	118	51	74	125	61	66	127	66	64	130	54	70	123
4:00 PM	49	74	123	54	59	113	76	80	156	77	79	156	55	66	121	62	68	130	60	100	160	65	71	136
5:00 PM	48	64	112	59	57	116	56	96	152	62	80	142	62	88	150	76	105	181	68	91	159	67	91	158
6:00 PM	55	56	111	64	64	128	50	88	138	67	82	149	48	91	139	56	88	144	56	101	157	57	87	144
7:00 PM	42	50	92	37	50	87	46	65	111	46	53	99	54	76	130	36	61	97	63	75	138	45	63	109
8:00 PM	21	47	68	30	29	59	27	42	69	28	28	56	20	30	50	26	41	67	37	45	82	25	33	58
9:00 PM	22	22	44	18	23	41	17	18	35	18	16	34	22	18	40	18	24	42	16	21	37	19	19	39
10:00 PM	10	10	20	7	7	14	8	7	15	9	6	15	9	7	16	13	6	19	12	21	33	10	6	17
11:00 PM	9	10	19	4	1	5	4	4	8	3	5	8	4	6	10	3	4	7	9	9	18	3	5	8
Total	**728**	**853**	**1,581**	**649**	**724**	**1,373**	**783**	**902**	**1,685**	**782**	**858**	**1,640**	**763**	**876**	**1,639**	**779**	**925**	**1,704**	**784**	**961**	**1,745**	**775**	**886**	**1,661**
Percent	**46%**	**54%**	-	**47%**	**53%**	-	**46%**	**54%**	-	**48%**	**52%**	-	**47%**	**53%**	-	**46%**	**54%**	-	**45%**	**55%**	-	**47%**	**53%**	-

1. Mid-week average includes data between Tuesday and Thursday.

Vehicle Classification Report Summary

Location: E Wulfsohn W/O Midland Ave

Count Direction: Eastbound / Westbound

Date Range: 9/17/2022 to 9/23/2022

Site Code: 13

	FHWA Vehicle Classification													Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
Study Total														
Eastbound	97	5,082	1,479	272	1,228	13	0	0	2	0	0	0	0	8,173
Percent	1.2%	62.2%	18.1%	3.3%	15.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Westbound	27	6,223	1,590	256	1,334	13	0	0	4	2	0	0	0	9,449
Percent	0.3%	65.9%	16.8%	2.7%	14.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	124	11,305	3,069	528	2,562	26	0	0	6	2	0	0	0	17,622
Percent	0.7%	64.2%	17.4%	3.0%	14.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%

FHWA Vehicle Classification	
Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Saturday, September 17, 2022
Eastbound

	FHWA Vehicle Classification													Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	4	2	0	2	0	0	0	0	0	0	0	0	**8**
1:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	0	3	2	0	0	0	0	0	0	0	0	**5**
5:00 AM	0	6	2	3	4	0	0	0	0	0	0	0	0	**15**
6:00 AM	0	20	5	4	5	0	0	0	0	0	0	0	0	**34**
7:00 AM	2	37	6	3	6	0	0	0	0	0	0	0	0	**54**
8:00 AM	1	39	13	2	8	0	0	0	0	0	0	0	0	**63**
9:00 AM	1	54	26	0	10	0	0	0	0	0	0	0	0	**91**
10:00 AM	3	57	13	2	11	0	0	0	0	0	0	0	0	**86**
11:00 AM	0	51	15	0	15	0	0	0	0	0	0	0	0	**81**
12:00 PM	4	57	15	0	13	0	0	0	0	0	0	0	0	**89**
1:00 PM	0	43	16	4	16	0	0	0	0	0	0	0	0	**79**
2:00 PM	0	61	12	2	12	0	0	0	0	0	0	0	0	**87**
3:00 PM	1	46	13	3	10	0	0	0	0	0	0	0	0	**73**
4:00 PM	2	63	13	0	14	0	0	0	0	0	0	0	0	**92**
5:00 PM	2	36	12	3	9	0	0	0	0	0	0	0	0	**62**
6:00 PM	1	62	9	3	7	0	0	0	0	0	0	0	0	**82**
7:00 PM	2	35	9	2	9	0	0	0	0	0	0	0	0	**57**
8:00 PM	0	23	3	3	3	0	0	0	0	0	0	0	0	**32**
9:00 PM	0	18	6	2	10	0	0	0	0	0	0	0	0	**36**
10:00 PM	0	9	2	1	3	0	0	0	0	0	0	0	0	**15**
11:00 PM	0	8	2	2	1	0	0	0	0	0	0	0	0	**13**
Total	**19**	**734**	**195**	**42**	**172**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,162**
Percent	**1.6%**	**63.2%**	**16.8%**	**3.6%**	**14.8%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Saturday, September 17, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	10	1	2	2	0	0	0	0	0	0	0	0	**15**
1:00 AM	0	6	0	1	1	0	0	0	0	0	0	0	0	**8**
2:00 AM	0	2	1	1	2	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	1	6	0	1	2	0	0	0	0	0	0	0	0	**10**
6:00 AM	0	3	4	1	1	0	0	0	0	0	0	0	0	**9**
7:00 AM	0	17	3	2	5	0	0	0	0	0	0	0	0	**27**
8:00 AM	0	34	7	1	4	0	0	0	0	0	0	0	0	**46**
9:00 AM	0	48	11	3	8	0	0	0	0	0	0	0	0	**70**
10:00 AM	0	51	18	2	12	0	0	0	0	0	0	0	0	**83**
11:00 AM	2	59	19	3	22	1	0	0	0	0	0	0	0	**106**
12:00 PM	0	71	24	1	18	0	0	0	0	0	0	0	0	**114**
1:00 PM	0	61	16	2	13	0	0	0	0	0	0	0	0	**92**
2:00 PM	0	71	15	1	20	0	0	0	0	0	0	0	0	**107**
3:00 PM	0	58	14	2	12	0	0	0	0	0	0	0	0	**86**
4:00 PM	2	67	15	5	14	0	0	0	0	0	0	0	0	**103**
5:00 PM	0	59	17	2	13	0	0	0	0	0	0	0	0	**91**
6:00 PM	1	68	15	2	9	0	0	0	0	0	0	0	0	**95**
7:00 PM	0	56	17	2	15	0	0	0	0	0	0	0	0	**90**
8:00 PM	0	48	6	4	10	0	0	0	0	0	0	0	0	**68**
9:00 PM	0	40	4	3	5	0	0	0	0	0	0	0	0	**52**
10:00 PM	0	24	5	1	6	0	0	0	0	0	0	0	0	**36**
11:00 PM	0	16	3	2	5	0	0	0	0	0	0	0	0	**26**
Total	**6**	**878**	**216**	**44**	**201**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,346**
Percent	**0.4%**	**65.2%**	**16.0%**	**3.3%**	**14.9%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Sunday, September 18, 2022
Eastbound

	FHWA Vehicle Classification													Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	2	0	1	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	1	0	3	1	0	0	0	0	0	0	0	0	**5**
5:00 AM	0	4	1	4	3	0	0	0	0	0	0	0	0	**12**
6:00 AM	1	11	6	3	3	0	0	0	0	0	0	0	0	**24**
7:00 AM	0	25	4	2	8	0	0	0	0	0	0	0	0	**39**
8:00 AM	1	37	15	2	7	0	0	0	0	0	0	0	0	**62**
9:00 AM	0	53	18	0	10	0	0	0	0	0	0	0	0	**81**
10:00 AM	1	53	15	2	10	0	0	0	0	0	0	0	0	**81**
11:00 AM	0	59	17	0	11	0	0	0	0	0	0	0	0	**87**
12:00 PM	0	56	9	1	17	0	0	0	0	0	0	0	0	**83**
1:00 PM	1	52	17	4	10	0	0	0	0	0	0	0	0	**84**
2:00 PM	1	53	12	5	15	0	0	0	0	0	0	0	0	**86**
3:00 PM	2	36	11	0	9	0	0	0	0	0	0	0	0	**58**
4:00 PM	5	36	15	1	6	0	0	0	0	0	0	0	0	**63**
5:00 PM	1	47	3	1	8	0	0	0	0	0	0	0	0	**60**
6:00 PM	1	41	13	3	7	0	0	0	0	0	0	0	0	**65**
7:00 PM	1	40	11	0	5	0	0	0	0	0	0	0	0	**57**
8:00 PM	0	18	6	3	2	0	0	0	0	0	0	0	0	**29**
9:00 PM	0	18	7	0	5	0	0	0	0	0	0	0	0	**30**
10:00 PM	0	5	1	1	0	0	0	0	0	0	0	0	0	**7**
11:00 PM	0	6	1	0	0	0	0	0	0	0	0	0	0	**7**
Total	**15**	**659**	**184**	**36**	**137**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,031**
Percent	**1.5%**	**63.9%**	**17.8%**	**3.5%**	**13.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Sunday, September 18, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	7	2	2	2	0	0	0	0	0	0	0	0	**13**
1:00 AM	0	5	0	1	1	0	0	0	0	0	0	0	0	**7**
2:00 AM	0	3	2	1	2	0	0	0	0	0	0	0	0	**8**
3:00 AM	0	1	1	2	1	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	**2**
6:00 AM	1	2	2	0	1	0	0	0	0	0	0	0	0	**6**
7:00 AM	1	23	3	0	4	0	0	0	0	0	0	0	0	**31**
8:00 AM	0	24	5	1	7	0	0	0	0	0	0	0	0	**37**
9:00 AM	0	32	12	2	9	0	0	0	0	0	0	0	0	**55**
10:00 AM	0	47	8	2	8	0	0	0	0	0	0	0	0	**65**
11:00 AM	0	52	21	4	13	0	0	0	0	0	0	0	0	**90**
12:00 PM	0	53	12	0	10	0	0	0	0	0	0	0	0	**75**
1:00 PM	0	56	9	1	7	0	0	0	0	0	0	0	0	**73**
2:00 PM	0	71	17	1	11	0	0	0	0	0	0	0	0	**100**
3:00 PM	0	54	12	2	14	0	0	0	0	0	0	0	0	**82**
4:00 PM	1	58	13	4	10	0	0	0	0	0	0	0	0	**86**
5:00 PM	1	57	18	2	6	0	0	0	0	0	0	0	0	**84**
6:00 PM	0	57	9	1	13	0	0	0	0	0	0	0	0	**80**
7:00 PM	2	45	6	5	7	0	0	0	0	0	0	0	0	**65**
8:00 PM	0	50	11	3	6	0	0	0	0	0	0	0	0	**70**
9:00 PM	0	23	9	2	9	0	0	0	0	0	0	0	0	**43**
10:00 PM	0	24	4	0	3	0	0	0	0	0	0	0	0	**31**
11:00 PM	0	9	1	0	1	0	0	0	0	0	0	0	0	**11**
Total	**6**	**755**	**177**	**37**	**145**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,120**
Percent	**0.5%**	**67.4%**	**15.8%**	**3.3%**	**12.9%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Monday, September 19, 2022
Eastbound

	FHWA Vehicle Classification													Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	4	0	0	0	0	0	0	0	0	0	0	0	**4**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	1	1	3	1	0	0	0	0	0	0	0	0	**6**
5:00 AM	1	19	7	4	7	0	0	0	0	0	0	0	0	**38**
6:00 AM	1	20	10	4	10	0	0	0	0	0	0	0	0	**45**
7:00 AM	1	58	17	3	14	0	0	0	0	0	0	0	0	**93**
8:00 AM	2	47	16	2	12	1	0	0	0	0	0	0	0	**80**
9:00 AM	0	46	9	0	11	1	0	0	0	0	0	0	0	**67**
10:00 AM	1	38	13	3	14	0	0	0	0	0	0	0	0	**69**
11:00 AM	1	44	9	0	14	0	0	0	0	0	0	0	0	**68**
12:00 PM	1	57	15	1	7	1	0	0	0	0	0	0	0	**82**
1:00 PM	3	43	21	2	17	0	0	0	0	0	0	0	0	**86**
2:00 PM	1	40	7	2	14	1	0	0	0	0	0	0	0	**65**
3:00 PM	0	52	10	3	8	0	0	0	0	0	0	0	0	**73**
4:00 PM	1	55	17	1	12	0	0	0	0	0	0	0	0	**86**
5:00 PM	1	65	19	2	13	0	0	0	0	0	0	0	0	**100**
6:00 PM	2	45	13	1	10	0	0	0	0	0	0	0	0	**71**
7:00 PM	1	22	10	0	10	1	0	0	0	0	0	0	0	**44**
8:00 PM	0	25	6	3	4	0	0	0	0	0	0	0	0	**38**
9:00 PM	0	13	6	1	3	0	0	0	0	0	0	0	0	**23**
10:00 PM	0	5	0	1	2	0	0	0	0	0	0	0	0	**8**
11:00 PM	0	6	0	0	2	0	0	0	0	0	0	0	0	**8**
Total	**17**	**708**	**206**	**36**	**185**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,157**
Percent	**1.5%**	**61.2%**	**17.8%**	**3.1%**	**16.0%**	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Monday, September 19, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	3	0	1	3	0	0	0	0	0	0	0	0	**7**
1:00 AM	0	2	0	1	1	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	1	5	3	1	1	0	0	0	0	0	0	0	0	**11**
6:00 AM	0	6	5	1	1	0	0	0	0	0	0	0	0	**13**
7:00 AM	0	20	8	0	5	1	0	0	1	0	0	0	0	**35**
8:00 AM	0	40	3	1	7	0	0	0	0	0	0	0	0	**51**
9:00 AM	1	30	5	2	10	1	0	0	0	0	0	0	0	**49**
10:00 AM	0	46	10	2	8	0	0	0	0	0	0	0	0	**66**
11:00 AM	0	56	12	3	13	0	0	0	0	0	0	0	0	**84**
12:00 PM	1	71	15	0	11	0	0	0	0	0	0	0	0	**98**
1:00 PM	2	50	10	2	10	2	0	0	0	0	0	0	0	**76**
2:00 PM	0	63	16	2	4	0	0	0	0	0	0	0	0	**85**
3:00 PM	0	73	21	2	12	0	0	0	0	0	0	0	0	**108**
4:00 PM	1	89	25	3	20	0	0	0	0	0	0	0	0	**138**
5:00 PM	0	98	31	2	22	0	0	0	0	0	0	0	0	**153**
6:00 PM	0	83	22	2	23	0	0	0	0	0	0	0	0	**130**
7:00 PM	0	64	16	0	15	0	0	0	0	0	0	0	0	**95**
8:00 PM	0	43	13	3	10	0	0	0	0	0	0	0	0	**69**
9:00 PM	0	24	8	3	7	0	0	0	0	0	0	0	0	**42**
10:00 PM	0	10	3	0	3	0	0	0	0	0	0	0	0	**16**
11:00 PM	0	8	0	1	2	0	0	0	0	0	0	0	0	**11**
Total	**6**	**884**	**226**	**33**	**188**	**4**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1,342**
Percent	**0.4%**	**65.9%**	**16.8%**	**2.5%**	**14.0%**	**0.3%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Tuesday, September 20, 2022
Eastbound

	FHWA Vehicle Classification													Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	2	0	1	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	3	0	3	3	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	13	3	4	6	0	0	0	0	0	0	0	0	**26**
6:00 AM	1	33	13	4	15	0	0	0	0	0	0	0	0	**66**
7:00 AM	2	66	25	3	14	0	0	0	0	0	0	0	0	**110**
8:00 AM	0	64	22	2	11	0	0	0	0	0	0	0	0	**99**
9:00 AM	1	44	8	0	12	0	0	0	0	0	0	0	0	**65**
10:00 AM	0	36	14	4	19	0	0	0	0	0	0	0	0	**73**
11:00 AM	2	40	8	1	15	0	0	0	0	0	0	0	0	**66**
12:00 PM	3	62	13	0	13	0	0	0	0	0	0	0	0	**91**
1:00 PM	0	50	17	5	10	0	0	0	0	0	0	0	0	**82**
2:00 PM	1	37	12	5	9	1	0	0	0	0	0	0	0	**65**
3:00 PM	1	43	15	1	10	0	0	0	0	0	0	0	0	**70**
4:00 PM	1	63	17	2	9	0	0	0	0	0	0	0	0	**92**
5:00 PM	0	46	13	3	5	0	0	0	0	0	0	0	0	**67**
6:00 PM	1	47	19	1	10	0	0	0	0	0	0	0	0	**78**
7:00 PM	0	28	10	2	6	0	0	0	0	0	0	0	0	**46**
8:00 PM	0	21	1	4	9	0	0	0	0	0	0	0	0	**35**
9:00 PM	0	9	5	1	3	0	0	0	0	0	0	0	0	**18**
10:00 PM	0	7	1	1	1	0	0	0	0	0	0	0	0	**10**
11:00 PM	0	2	2	2	0	0	0	0	0	0	0	0	0	**6**
Total	**13**	**719**	**218**	**49**	**180**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,180**
Percent	**1.1%**	**60.9%**	**18.5%**	**4.2%**	**15.3%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Tuesday, September 20, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	5	0	1	1	0	0	0	0	0	0	0	0	**7**
1:00 AM	0	0	0	2	1	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	3	0	0	2	0	0	0	0	0	0	0	0	**5**
3:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	1	1	0	1	0	0	0	0	0	0	0	0	**3**
5:00 AM	0	4	1	1	0	0	0	0	0	0	0	0	0	**6**
6:00 AM	0	7	5	1	2	0	0	0	0	0	0	0	0	**15**
7:00 AM	0	19	11	1	8	0	0	0	0	0	0	0	0	**39**
8:00 AM	0	35	6	1	8	0	0	0	0	0	0	0	0	**50**
9:00 AM	0	36	7	4	9	0	0	0	0	0	0	0	0	**56**
10:00 AM	1	55	9	2	11	0	0	0	1	0	0	0	0	**79**
11:00 AM	0	56	12	2	19	1	0	0	0	0	0	0	0	**90**
12:00 PM	0	65	14	2	12	0	0	0	0	0	0	0	0	**93**
1:00 PM	2	51	27	3	7	0	0	0	0	0	0	0	0	**90**
2:00 PM	0	44	17	1	14	1	0	0	0	0	0	0	0	**77**
3:00 PM	2	92	15	2	14	0	0	0	0	0	0	0	0	**125**
4:00 PM	0	102	25	2	19	0	0	0	0	0	0	0	0	**148**
5:00 PM	0	109	34	1	21	0	0	0	0	0	0	0	0	**165**
6:00 PM	1	76	21	2	25	0	0	0	0	0	0	0	0	**125**
7:00 PM	0	52	13	2	17	0	0	0	0	0	0	0	0	**84**
8:00 PM	0	24	8	2	11	1	0	0	0	0	0	0	0	**46**
9:00 PM	0	21	8	2	5	0	0	0	0	0	0	0	0	**36**
10:00 PM	0	11	3	1	2	0	0	0	0	0	0	0	0	**17**
11:00 PM	0	6	0	2	1	0	0	0	0	0	0	0	0	**9**
Total	**6**	**874**	**237**	**38**	**211**	**3**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1,370**
Percent	**0.4%**	**63.8%**	**17.3%**	**2.8%**	**15.4%**	**0.2%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Wednesday, September 21, 2022
Eastbound

	FHWA Vehicle Classification													Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	1	2	0	0	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	2	2	2	4	0	0	0	0	0	0	0	0	**10**
5:00 AM	0	9	4	3	7	0	0	0	0	0	0	0	0	**23**
6:00 AM	0	31	20	5	15	0	0	0	0	0	0	0	0	**71**
7:00 AM	3	54	20	2	23	0	0	0	0	0	0	0	0	**102**
8:00 AM	1	54	15	2	17	0	0	0	0	0	0	0	0	**89**
9:00 AM	1	48	11	1	9	1	0	0	0	0	0	0	0	**71**
10:00 AM	1	35	15	4	7	0	0	0	0	0	0	0	0	**62**
11:00 AM	0	36	15	0	9	0	0	0	0	0	0	0	0	**60**
12:00 PM	0	52	17	1	12	1	0	0	0	0	0	0	0	**83**
1:00 PM	1	68	15	3	13	0	0	0	0	0	0	0	0	**100**
2:00 PM	1	52	8	2	16	0	0	0	0	0	0	0	0	**79**
3:00 PM	0	53	10	3	5	0	0	0	0	0	0	0	0	**71**
4:00 PM	0	41	14	2	15	0	0	0	0	0	0	0	0	**72**
5:00 PM	1	61	13	1	17	0	0	0	0	0	0	0	0	**93**
6:00 PM	0	54	15	1	11	0	0	0	0	0	0	0	0	**81**
7:00 PM	0	34	11	1	5	0	0	0	0	0	0	0	0	**51**
8:00 PM	1	18	9	2	5	0	0	0	0	0	0	0	0	**35**
9:00 PM	0	9	5	0	2	0	0	0	0	0	0	0	0	**16**
10:00 PM	0	8	1	0	2	0	0	0	0	0	0	0	0	**11**
11:00 PM	1	7	0	0	1	0	0	0	0	0	0	0	0	**9**
Total	**12**	**728**	**220**	**36**	**195**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,193**
Percent	**1.0%**	**61.0%**	**18.4%**	**3.0%**	**16.3%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Wednesday, September 21, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	4	0	1	1	0	0	0	0	0	0	0	0	**6**
1:00 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	1	0	1	1	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	1	0	2	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	3	0	1	0	0	0	0	0	0	0	0	**4**
5:00 AM	0	7	3	1	2	0	0	0	0	0	0	0	0	**13**
6:00 AM	0	9	5	1	0	0	0	0	0	0	0	0	0	**15**
7:00 AM	1	18	11	1	10	0	0	0	0	0	0	0	0	**41**
8:00 AM	0	32	14	2	14	1	0	0	0	0	0	0	0	**63**
9:00 AM	0	37	6	2	8	0	0	0	0	0	0	0	0	**53**
10:00 AM	0	50	15	1	10	0	0	0	0	0	0	0	0	**76**
11:00 AM	0	51	9	4	14	0	0	0	0	0	0	0	0	**78**
12:00 PM	0	52	11	1	11	0	0	0	0	0	0	0	0	**75**
1:00 PM	0	57	12	2	9	0	0	0	0	0	0	0	0	**80**
2:00 PM	0	78	10	2	14	0	0	0	0	0	0	0	0	**104**
3:00 PM	0	71	18	1	17	0	0	0	0	0	0	0	0	**107**
4:00 PM	0	83	29	3	13	0	0	0	0	0	0	0	0	**128**
5:00 PM	0	124	35	2	15	0	0	0	0	0	0	0	0	**176**
6:00 PM	0	98	18	3	16	0	0	0	0	0	0	0	0	**135**
7:00 PM	0	59	15	2	13	0	0	0	0	0	0	0	0	**89**
8:00 PM	0	35	17	2	8	0	0	0	0	0	0	0	0	**62**
9:00 PM	0	23	3	1	7	0	0	0	0	0	0	0	0	**34**
10:00 PM	0	12	7	1	2	0	0	0	0	0	0	0	0	**22**
11:00 PM	0	12	1	0	2	0	0	0	0	0	0	0	0	**15**
Total	**1**	**916**	**242**	**36**	**190**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,386**
Percent	**0.1%**	**66.1%**	**17.5%**	**2.6%**	**13.7%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Thursday, September 22, 2022
Eastbound

	FHWA Vehicle Classification													Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	1	0	0	2	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	1	2	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	3	1	2	4	0	0	0	0	0	0	0	0	**10**
5:00 AM	1	6	6	3	6	0	0	0	0	0	0	0	0	**22**
6:00 AM	1	29	14	6	11	0	0	0	0	0	0	0	0	**61**
7:00 AM	1	68	18	2	22	0	0	0	0	0	0	0	0	**111**
8:00 AM	0	59	23	2	7	0	0	0	0	0	0	0	0	**91**
9:00 AM	0	41	12	0	15	0	0	0	0	0	0	0	0	**68**
10:00 AM	0	51	18	3	8	0	0	0	0	0	0	0	0	**80**
11:00 AM	2	45	12	0	5	0	0	0	0	0	0	0	0	**64**
12:00 PM	0	39	23	2	8	1	0	0	0	0	0	0	0	**73**
1:00 PM	0	43	16	3	7	0	0	0	0	0	0	0	0	**69**
2:00 PM	0	44	14	1	9	0	0	0	0	0	0	0	0	**68**
3:00 PM	1	53	19	2	12	1	0	0	0	0	0	0	0	**88**
4:00 PM	1	55	16	3	7	0	0	0	0	0	0	0	0	**82**
5:00 PM	0	48	15	3	12	0	0	0	0	0	0	0	0	**78**
6:00 PM	3	53	16	0	8	0	0	0	0	0	0	0	0	**80**
7:00 PM	0	50	8	2	4	0	0	0	0	0	0	0	0	**64**
8:00 PM	0	23	4	2	3	0	0	0	0	0	0	0	0	**32**
9:00 PM	0	15	2	1	8	0	0	0	0	0	0	0	0	**26**
10:00 PM	0	7	2	0	3	0	0	0	0	0	0	0	0	**12**
11:00 PM	0	7	0	2	0	0	0	0	0	0	0	0	0	**9**
Total	**10**	**743**	**242**	**39**	**161**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,197**
Percent	**0.8%**	**62.1%**	**20.2%**	**3.3%**	**13.5%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Thursday, September 22, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	8	1	0	4	0	0	0	0	0	0	0	0	**13**
1:00 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	1	0	0	2	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	7	3	1	1	0	0	0	0	0	0	0	0	**12**
6:00 AM	0	9	4	3	3	0	0	0	0	0	0	0	0	**19**
7:00 AM	0	18	12	1	6	1	0	0	0	0	0	0	0	**38**
8:00 AM	0	38	9	1	12	0	0	0	0	0	0	0	0	**60**
9:00 AM	0	41	17	2	10	0	0	0	0	0	0	0	0	**70**
10:00 AM	0	40	14	1	12	0	0	0	0	0	0	0	0	**67**
11:00 AM	0	40	10	3	13	0	0	0	0	0	0	0	0	**66**
12:00 PM	0	44	17	1	17	0	0	0	0	0	0	0	0	**79**
1:00 PM	0	61	21	2	9	0	0	0	0	0	0	0	0	**93**
2:00 PM	0	56	10	1	12	0	0	0	0	0	0	0	0	**79**
3:00 PM	0	66	26	4	17	0	0	0	1	0	0	0	0	**114**
4:00 PM	0	101	19	2	13	0	0	0	0	0	0	0	0	**135**
5:00 PM	0	121	29	1	25	0	0	0	0	0	0	0	0	**176**
6:00 PM	0	88	12	2	12	0	0	0	0	0	0	0	0	**114**
7:00 PM	0	58	11	2	12	0	0	0	0	0	0	0	0	**83**
8:00 PM	0	46	12	2	7	0	0	0	0	0	0	0	0	**67**
9:00 PM	0	35	5	2	8	0	0	0	0	0	0	0	0	**50**
10:00 PM	0	18	3	1	4	0	0	0	0	0	0	0	0	**26**
11:00 PM	0	16	4	0	2	0	0	0	0	0	0	0	0	**22**
Total	**0**	**914**	**240**	**33**	**204**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1,393**
Percent	**0.0%**	**65.6%**	**17.2%**	**2.4%**	**14.6%**	**0.1%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Friday, September 23, 2022
Eastbound

	FHWA Vehicle Classification													Total
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
12:00 AM	0	2	0	0	1	0	0	0	0	0	0	0	0	**3**
1:00 AM	1	1	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	1	1	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	3	0	3	3	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	12	5	3	5	0	0	0	0	0	0	0	0	**25**
6:00 AM	0	30	10	3	9	0	0	0	0	0	0	0	0	**52**
7:00 AM	2	47	15	1	14	0	0	0	0	0	0	0	0	**79**
8:00 AM	0	51	17	1	7	0	0	0	0	0	0	0	0	**76**
9:00 AM	0	50	12	1	15	0	0	0	0	0	0	0	0	**78**
10:00 AM	1	54	11	1	11	0	0	0	1	0	0	0	0	**79**
11:00 AM	0	48	16	1	10	0	0	0	1	0	0	0	0	**76**
12:00 PM	0	59	19	2	4	0	0	0	0	0	0	0	0	**84**
1:00 PM	0	45	6	3	18	0	0	0	0	0	0	0	0	**72**
2:00 PM	1	51	15	1	18	1	0	0	0	0	0	0	0	**87**
3:00 PM	0	73	13	3	11	1	0	0	0	0	0	0	0	**101**
4:00 PM	1	54	17	2	15	1	0	0	0	0	0	0	0	**90**
5:00 PM	3	59	17	1	12	0	0	0	0	0	0	0	0	**92**
6:00 PM	1	50	19	2	17	0	0	0	0	0	0	0	0	**89**
7:00 PM	0	38	9	0	11	0	0	0	0	0	0	0	0	**58**
8:00 PM	0	28	3	5	5	0	0	0	0	0	0	0	0	**41**
9:00 PM	0	16	8	1	6	0	0	0	0	0	0	0	0	**31**
10:00 PM	0	12	0	0	3	0	0	0	0	0	0	0	0	**15**
11:00 PM	0	7	2	0	3	0	0	0	0	0	0	0	0	**12**
Total	**11**	**791**	**214**	**34**	**198**	**3**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**1,253**
Percent	**0.9%**	**63.1%**	**17.1%**	**2.7%**	**15.8%**	**0.2%**	**0.0%**	**0.0%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Friday, September 23, 2022
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	6	0	1	1	0	0	0	0	0	0	0	0	**8**
1:00 AM	0	2	0	1	1	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	1	0	1	1	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	0	1	1	2	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	4	1	0	3	0	0	0	0	0	0	0	0	**8**
6:00 AM	0	8	0	1	3	0	0	0	0	0	0	0	0	**12**
7:00 AM	0	28	5	1	5	1	0	0	0	0	0	0	0	**40**
8:00 AM	0	30	10	0	11	1	0	0	0	0	0	0	0	**52**
9:00 AM	0	35	8	1	11	1	0	0	0	0	0	0	0	**56**
10:00 AM	0	51	13	2	10	0	0	0	0	0	0	0	0	**76**
11:00 AM	0	55	16	3	8	0	0	0	0	0	0	0	0	**82**
12:00 PM	0	66	22	1	14	0	0	0	0	0	0	0	0	**103**
1:00 PM	0	60	17	1	16	0	0	0	0	0	0	0	0	**94**
2:00 PM	0	58	20	1	15	0	0	0	0	0	0	0	0	**94**
3:00 PM	0	108	19	1	13	0	0	0	0	0	0	0	0	**141**
4:00 PM	0	107	29	3	21	0	0	0	1	2	0	0	0	**163**
5:00 PM	1	107	19	2	16	0	0	0	0	0	0	0	0	**145**
6:00 PM	1	86	22	2	13	0	0	0	0	0	0	0	0	**124**
7:00 PM	0	74	13	5	10	0	0	0	0	0	0	0	0	**102**
8:00 PM	0	40	12	3	8	0	0	0	0	0	0	0	0	**63**
9:00 PM	0	36	13	3	6	0	0	0	0	0	0	0	0	**58**
10:00 PM	0	30	7	0	4	0	0	0	0	0	0	0	0	**41**
11:00 PM	0	10	5	1	3	0	0	0	0	0	0	0	0	**19**
Total	**2**	**1,002**	**252**	**35**	**195**	**3**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**1,492**
Percent	**0.1%**	**67.2%**	**16.9%**	**2.3%**	**13.1%**	**0.2%**	**0.0%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Total Study Average
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	2	0	0	1	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	2	1	3	3	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	10	4	3	5	0	0	0	0	0	0	0	0	**22**
6:00 AM	1	25	11	4	10	0	0	0	0	0	0	0	0	**51**
7:00 AM	2	51	15	2	14	0	0	0	0	0	0	0	0	**84**
8:00 AM	1	50	17	2	10	0	0	0	0	0	0	0	0	**80**
9:00 AM	0	48	14	0	12	0	0	0	0	0	0	0	0	**74**
10:00 AM	1	46	14	3	11	0	0	0	0	0	0	0	0	**75**
11:00 AM	1	46	13	0	11	0	0	0	0	0	0	0	0	**71**
12:00 PM	1	55	16	1	11	0	0	0	0	0	0	0	0	**84**
1:00 PM	1	49	15	3	13	0	0	0	0	0	0	0	0	**81**
2:00 PM	1	48	11	3	13	0	0	0	0	0	0	0	0	**76**
3:00 PM	1	51	13	2	9	0	0	0	0	0	0	0	0	**76**
4:00 PM	2	52	16	2	11	0	0	0	0	0	0	0	0	**83**
5:00 PM	1	52	13	2	11	0	0	0	0	0	0	0	0	**79**
6:00 PM	1	50	15	2	10	0	0	0	0	0	0	0	0	**78**
7:00 PM	1	35	10	1	7	0	0	0	0	0	0	0	0	**54**
8:00 PM	0	22	5	3	4	0	0	0	0	0	0	0	0	**34**
9:00 PM	0	14	6	1	5	0	0	0	0	0	0	0	0	**26**
10:00 PM	0	8	1	1	2	0	0	0	0	0	0	0	0	**12**
11:00 PM	0	6	1	1	1	0	0	0	0	0	0	0	0	**9**
Total	**15**	**725**	**211**	**39**	**174**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,164**
Percent	**1.3%**	**62.3%**	**18.1%**	**3.4%**	**14.9%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Total Study Average
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	6	1	1	2	0	0	0	0	0	0	0	0	**10**
1:00 AM	0	3	0	1	1	0	0	0	0	0	0	0	0	**5**
2:00 AM	0	1	0	1	1	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	1	0	1	1	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	5	2	1	1	0	0	0	0	0	0	0	0	**9**
6:00 AM	0	6	4	1	2	0	0	0	0	0	0	0	0	**13**
7:00 AM	0	20	8	1	6	0	0	0	0	0	0	0	0	**35**
8:00 AM	0	33	8	1	9	0	0	0	0	0	0	0	0	**51**
9:00 AM	0	37	9	2	9	0	0	0	0	0	0	0	0	**57**
10:00 AM	0	49	12	2	10	0	0	0	0	0	0	0	0	**73**
11:00 AM	0	53	14	3	15	0	0	0	0	0	0	0	0	**85**
12:00 PM	0	60	16	1	13	0	0	0	0	0	0	0	0	**90**
1:00 PM	1	57	16	2	10	0	0	0	0	0	0	0	0	**86**
2:00 PM	0	63	15	1	13	0	0	0	0	0	0	0	0	**92**
3:00 PM	0	75	18	2	14	0	0	0	0	0	0	0	0	**109**
4:00 PM	1	87	22	3	16	0	0	0	0	0	0	0	0	**129**
5:00 PM	0	96	26	2	17	0	0	0	0	0	0	0	0	**141**
6:00 PM	0	79	17	2	16	0	0	0	0	0	0	0	0	**114**
7:00 PM	0	58	13	3	13	0	0	0	0	0	0	0	0	**87**
8:00 PM	0	41	11	3	9	0	0	0	0	0	0	0	0	**64**
9:00 PM	0	29	7	2	7	0	0	0	0	0	0	0	0	**45**
10:00 PM	0	18	5	1	3	0	0	0	0	0	0	0	0	**27**
11:00 PM	0	11	2	1	2	0	0	0	0	0	0	0	0	**16**
Total	**2**	**888**	**227**	**38**	**190**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,345**
Percent	**0.1%**	**66.0%**	**16.9%**	**2.8%**	**14.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

3-Day (Tuesday - Thursday) Average
Eastbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	1	1	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	3	1	2	4	0	0	0	0	0	0	0	0	**10**
5:00 AM	0	9	4	3	6	0	0	0	0	0	0	0	0	**24**
6:00 AM	1	31	16	5	14	0	0	0	0	0	0	0	0	**66**
7:00 AM	2	63	21	2	20	0	0	0	0	0	0	0	0	**108**
8:00 AM	0	59	20	2	12	0	0	0	0	0	0	0	0	**93**
9:00 AM	1	44	10	0	12	0	0	0	0	0	0	0	0	**68**
10:00 AM	0	41	16	4	11	0	0	0	0	0	0	0	0	**72**
11:00 AM	1	40	12	0	10	0	0	0	0	0	0	0	0	**63**
12:00 PM	1	51	18	1	11	1	0	0	0	0	0	0	0	**82**
1:00 PM	0	54	16	4	10	0	0	0	0	0	0	0	0	**84**
2:00 PM	1	44	11	3	11	0	0	0	0	0	0	0	0	**71**
3:00 PM	1	50	15	2	9	0	0	0	0	0	0	0	0	**76**
4:00 PM	1	53	16	2	10	0	0	0	0	0	0	0	0	**82**
5:00 PM	0	52	14	2	11	0	0	0	0	0	0	0	0	**79**
6:00 PM	1	51	17	1	10	0	0	0	0	0	0	0	0	**80**
7:00 PM	0	37	10	2	5	0	0	0	0	0	0	0	0	**54**
8:00 PM	0	21	5	3	6	0	0	0	0	0	0	0	0	**34**
9:00 PM	0	11	4	1	4	0	0	0	0	0	0	0	0	**20**
10:00 PM	0	7	1	0	2	0	0	0	0	0	0	0	0	**11**
11:00 PM	0	5	1	1	0	0	0	0	0	0	0	0	0	**8**
Total	**12**	**730**	**227**	**41**	**179**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,190**
Percent	**1.0%**	**61.3%**	**19.0%**	**3.5%**	**15.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

3-Day (Tuesday - Thursday) Average
Westbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	6	0	1	2	0	0	0	0	0	0	0	0	**9**
1:00 AM	0	1	0	1	2	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	1	0	1	1	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	1	0	1	1	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	2	0	1	0	0	0	0	0	0	0	0	**3**
5:00 AM	0	6	2	1	1	0	0	0	0	0	0	0	0	**10**
6:00 AM	0	8	5	2	2	0	0	0	0	0	0	0	0	**16**
7:00 AM	0	18	11	1	8	0	0	0	0	0	0	0	0	**39**
8:00 AM	0	35	10	1	11	0	0	0	0	0	0	0	0	**58**
9:00 AM	0	38	10	3	9	0	0	0	0	0	0	0	0	**60**
10:00 AM	0	48	13	1	11	0	0	0	0	0	0	0	0	**74**
11:00 AM	0	49	10	3	15	0	0	0	0	0	0	0	0	**78**
12:00 PM	0	54	14	1	13	0	0	0	0	0	0	0	0	**82**
1:00 PM	1	56	20	2	8	0	0	0	0	0	0	0	0	**88**
2:00 PM	0	59	12	1	13	0	0	0	0	0	0	0	0	**87**
3:00 PM	1	76	20	2	16	0	0	0	0	0	0	0	0	**115**
4:00 PM	0	95	24	2	15	0	0	0	0	0	0	0	0	**137**
5:00 PM	0	118	33	1	20	0	0	0	0	0	0	0	0	**172**
6:00 PM	0	87	17	2	18	0	0	0	0	0	0	0	0	**125**
7:00 PM	0	56	13	2	14	0	0	0	0	0	0	0	0	**85**
8:00 PM	0	35	12	2	9	0	0	0	0	0	0	0	0	**58**
9:00 PM	0	26	5	2	7	0	0	0	0	0	0	0	0	**40**
10:00 PM	0	14	4	1	3	0	0	0	0	0	0	0	0	**22**
11:00 PM	0	11	2	1	2	0	0	0	0	0	0	0	0	**15**
Total	**2**	**901**	**240**	**36**	**202**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1,383**
Percent	**0.2%**	**65.2%**	**17.3%**	**2.6%**	**14.6%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Vehicle Speed Report Summary

Location: E Wulfsohn W/O Midland Ave

Count Direction: Eastbound / Westbound

Date Range: 9/17/2022 to 9/23/2022

Site Code: 13

	Speed Range (mph)																	Total
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
Study Total																		
Eastbound	4	72	943	3,631	2,912	559	49	2	1	0	0	0	0	0	0	0	0	8,173
Percent	0.0%	0.9%	11.5%	44.4%	35.6%	6.8%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Westbound	11	200	2,624	5,108	1,399	93	12	2	0	0	0	0	0	0	0	0	0	9,449
Percent	0.1%	2.1%	27.8%	54.1%	14.8%	1.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	15	272	3,567	8,739	4,311	652	61	4	1	0	0	0	0	0	0	0	0	17,622
Percent	0.1%	1.5%	20.2%	49.6%	24.5%	3.7%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%

Total Study Percentile Speed Summary		
Eastbound		
50th Percentile (Median)	24.4	mph
85th Percentile	28.5	mph
95th Percentile	30.9	mph
Westbound		
50th Percentile (Median)	21.7	mph
85th Percentile	25.2	mph
95th Percentile	27.3	mph

Total Study Speed Statistics		
Eastbound		
Mean (Average) Speed	24.4	mph
10 mph Pace	19.9 - 29.9	mph
Percent in Pace	80.0	%
Westbound		
Mean (Average) Speed	21.7	mph
10 mph Pace	16.8 - 26.8	mph
Percent in Pace	86.4	%

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Saturday, September 17, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	4	2	2	0	0	0	0	0	0	0	0	0	0	0	**8**
1:00 AM	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
5:00 AM	0	0	3	5	6	1	0	0	0	0	0	0	0	0	0	0	0	**15**
6:00 AM	0	0	3	15	13	3	0	0	0	0	0	0	0	0	0	0	0	**34**
7:00 AM	0	1	3	16	27	6	1	0	0	0	0	0	0	0	0	0	0	**54**
8:00 AM	0	0	7	21	30	5	0	0	0	0	0	0	0	0	0	0	0	**63**
9:00 AM	0	3	11	40	31	6	0	0	0	0	0	0	0	0	0	0	0	**91**
10:00 AM	0	0	18	42	22	4	0	0	0	0	0	0	0	0	0	0	0	**86**
11:00 AM	0	1	8	35	31	4	2	0	0	0	0	0	0	0	0	0	0	**81**
12:00 PM	0	4	8	50	20	7	0	0	0	0	0	0	0	0	0	0	0	**89**
1:00 PM	0	0	7	31	37	4	0	0	0	0	0	0	0	0	0	0	0	**79**
2:00 PM	0	2	8	34	37	4	2	0	0	0	0	0	0	0	0	0	0	**87**
3:00 PM	0	0	7	35	29	2	0	0	0	0	0	0	0	0	0	0	0	**73**
4:00 PM	0	0	11	37	39	5	0	0	0	0	0	0	0	0	0	0	0	**92**
5:00 PM	0	1	6	30	24	1	0	0	0	0	0	0	0	0	0	0	0	**62**
6:00 PM	0	0	7	43	24	8	0	0	0	0	0	0	0	0	0	0	0	**82**
7:00 PM	0	0	3	31	20	3	0	0	0	0	0	0	0	0	0	0	0	**57**
8:00 PM	0	0	5	17	9	1	0	0	0	0	0	0	0	0	0	0	0	**32**
9:00 PM	0	1	3	21	10	1	0	0	0	0	0	0	0	0	0	0	0	**36**
10:00 PM	0	0	2	7	6	0	0	0	0	0	0	0	0	0	0	0	0	**15**
11:00 PM	0	0	1	11	1	0	0	0	0	0	0	0	0	0	0	0	0	**13**
Total	**0**	**13**	**124**	**533**	**420**	**67**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,162**
Percent	**0.0%**	**1.1%**	**10.7%**	**45.9%**	**36.1%**	**5.8%**	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	24.4	mph	Mean (Average) Speed	24.3	mph
85th Percentile	28.0	mph	10 mph Pace	19.2 - 29.2	mph
95th Percentile	30.6	mph	Percent in Pace	83.0	%

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Saturday, September 17, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	5	7	3	0	0	0	0	0	0	0	0	0	0	0	0	**15**
1:00 AM	0	0	4	1	3	0	0	0	0	0	0	0	0	0	0	0	0	**8**
2:00 AM	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
3:00 AM	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	0	4	5	1	0	0	0	0	0	0	0	0	0	0	0	0	**10**
6:00 AM	0	0	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
7:00 AM	0	1	6	15	4	1	0	0	0	0	0	0	0	0	0	0	0	**27**
8:00 AM	0	1	9	29	5	2	0	0	0	0	0	0	0	0	0	0	0	**46**
9:00 AM	0	0	19	37	14	0	0	0	0	0	0	0	0	0	0	0	0	**70**
10:00 AM	0	3	32	32	14	1	0	1	0	0	0	0	0	0	0	0	0	**83**
11:00 AM	0	4	33	49	20	0	0	0	0	0	0	0	0	0	0	0	0	**106**
12:00 PM	0	2	22	73	15	1	1	0	0	0	0	0	0	0	0	0	0	**114**
1:00 PM	0	3	21	55	13	0	0	0	0	0	0	0	0	0	0	0	0	**92**
2:00 PM	0	3	39	50	13	2	0	0	0	0	0	0	0	0	0	0	0	**107**
3:00 PM	1	1	19	54	11	0	0	0	0	0	0	0	0	0	0	0	0	**86**
4:00 PM	0	1	22	58	21	1	0	0	0	0	0	0	0	0	0	0	0	**103**
5:00 PM	0	0	31	44	15	1	0	0	0	0	0	0	0	0	0	0	0	**91**
6:00 PM	0	1	22	56	14	2	0	0	0	0	0	0	0	0	0	0	0	**95**
7:00 PM	0	4	30	49	7	0	0	0	0	0	0	0	0	0	0	0	0	**90**
8:00 PM	0	2	26	31	8	1	0	0	0	0	0	0	0	0	0	0	0	**68**
9:00 PM	1	4	21	18	8	0	0	0	0	0	0	0	0	0	0	0	0	**52**
10:00 PM	0	3	5	24	4	0	0	0	0	0	0	0	0	0	0	0	0	**36**
11:00 PM	0	1	8	13	2	2	0	0	0	0	0	0	0	0	0	0	0	**26**
Total	**2**	**34**	**388**	**711**	**195**	**14**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,346**
Percent	**0.1%**	**2.5%**	**28.8%**	**52.8%**	**14.5%**	**1.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	21.7	mph	Mean (Average) Speed	21.7	mph
85th Percentile	25.1	mph	10 mph Pace	16.7 - 26.7	mph
95th Percentile	27.1	mph	Percent in Pace	87.37	%

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Sunday, September 18, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	**5**
5:00 AM	0	0	2	2	8	0	0	0	0	0	0	0	0	0	0	0	0	**12**
6:00 AM	0	0	4	9	10	0	1	0	0	0	0	0	0	0	0	0	0	**24**
7:00 AM	0	0	2	18	13	6	0	0	0	0	0	0	0	0	0	0	0	**39**
8:00 AM	0	0	8	23	28	3	0	0	0	0	0	0	0	0	0	0	0	**62**
9:00 AM	0	1	5	32	36	7	0	0	0	0	0	0	0	0	0	0	0	**81**
10:00 AM	0	0	7	35	35	4	0	0	0	0	0	0	0	0	0	0	0	**81**
11:00 AM	0	1	12	38	31	4	1	0	0	0	0	0	0	0	0	0	0	**87**
12:00 PM	0	1	7	33	31	11	0	0	0	0	0	0	0	0	0	0	0	**83**
1:00 PM	0	0	13	38	27	5	1	0	0	0	0	0	0	0	0	0	0	**84**
2:00 PM	0	0	9	44	30	2	1	0	0	0	0	0	0	0	0	0	0	**86**
3:00 PM	0	0	5	25	21	5	2	0	0	0	0	0	0	0	0	0	0	**58**
4:00 PM	0	0	9	22	28	4	0	0	0	0	0	0	0	0	0	0	0	**63**
5:00 PM	0	1	3	27	25	3	0	1	0	0	0	0	0	0	0	0	0	**60**
6:00 PM	0	0	3	31	21	9	1	0	0	0	0	0	0	0	0	0	0	**65**
7:00 PM	0	0	1	29	23	2	1	0	1	0	0	0	0	0	0	0	0	**57**
8:00 PM	0	0	3	8	12	6	0	0	0	0	0	0	0	0	0	0	0	**29**
9:00 PM	0	1	2	17	10	0	0	0	0	0	0	0	0	0	0	0	0	**30**
10:00 PM	0	0	0	3	4	0	0	0	0	0	0	0	0	0	0	0	0	**7**
11:00 PM	0	0	1	4	2	0	0	0	0	0	0	0	0	0	0	0	0	**7**
Total	**0**	**5**	**98**	**447**	**398**	**73**	**8**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,031**
Percent	**0.0%**	**0.5%**	**9.5%**	**43.4%**	**38.6%**	**7.1%**	**0.8%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	24.7	mph	Mean (Average) Speed	24.8	mph
85th Percentile	28.7	mph	10 mph Pace	20.1 - 30.1	mph
95th Percentile	31.2	mph	Percent in Pace	82.0	%

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Sunday, September 18, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	1	3	8	1	0	0	0	0	0	0	0	0	0	0	0	0	**13**
1:00 AM	0	2	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
2:00 AM	0	0	3	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**8**
3:00 AM	0	0	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**2**
6:00 AM	0	0	3	1	2	0	0	0	0	0	0	0	0	0	0	0	0	**6**
7:00 AM	0	1	9	16	3	1	1	0	0	0	0	0	0	0	0	0	0	**31**
8:00 AM	0	0	14	18	4	1	0	0	0	0	0	0	0	0	0	0	0	**37**
9:00 AM	0	1	15	32	7	0	0	0	0	0	0	0	0	0	0	0	0	**55**
10:00 AM	0	0	15	36	13	1	0	0	0	0	0	0	0	0	0	0	0	**65**
11:00 AM	0	0	19	48	22	1	0	0	0	0	0	0	0	0	0	0	0	**90**
12:00 PM	0	1	15	43	15	1	0	0	0	0	0	0	0	0	0	0	0	**75**
1:00 PM	0	0	18	41	13	1	0	0	0	0	0	0	0	0	0	0	0	**73**
2:00 PM	0	1	21	53	25	0	0	0	0	0	0	0	0	0	0	0	0	**100**
3:00 PM	0	1	15	47	16	3	0	0	0	0	0	0	0	0	0	0	0	**82**
4:00 PM	0	1	24	49	12	0	0	0	0	0	0	0	0	0	0	0	0	**86**
5:00 PM	0	2	14	43	21	2	2	0	0	0	0	0	0	0	0	0	0	**84**
6:00 PM	0	0	13	54	12	1	0	0	0	0	0	0	0	0	0	0	0	**80**
7:00 PM	0	3	13	36	13	0	0	0	0	0	0	0	0	0	0	0	0	**65**
8:00 PM	0	2	17	43	8	0	0	0	0	0	0	0	0	0	0	0	0	**70**
9:00 PM	0	1	12	24	6	0	0	0	0	0	0	0	0	0	0	0	0	**43**
10:00 PM	0	0	11	15	2	3	0	0	0	0	0	0	0	0	0	0	0	**31**
11:00 PM	0	2	2	4	3	0	0	0	0	0	0	0	0	0	0	0	0	**11**
Total	**0**	**20**	**261**	**620**	**201**	**15**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,120**
Percent	**0.0%**	**1.8%**	**23.3%**	**55.4%**	**17.9%**	**1.3%**	**0.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	22.0	mph	Mean (Average) Speed	22.2	mph
85th Percentile	25.7	mph	10 mph Pace	18.1 - 28.1	mph
95th Percentile	28.1	mph	Percent in Pace	83.93	%

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Monday, September 19, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	**4**
1:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**6**
5:00 AM	0	1	5	17	11	4	0	0	0	0	0	0	0	0	0	0	0	**38**
6:00 AM	0	0	7	13	21	3	1	0	0	0	0	0	0	0	0	0	0	**45**
7:00 AM	0	1	7	28	46	10	1	0	0	0	0	0	0	0	0	0	0	**93**
8:00 AM	0	1	9	24	35	11	0	0	0	0	0	0	0	0	0	0	0	**80**
9:00 AM	0	0	6	31	25	4	1	0	0	0	0	0	0	0	0	0	0	**67**
10:00 AM	0	1	8	39	18	3	0	0	0	0	0	0	0	0	0	0	0	**69**
11:00 AM	1	2	7	27	25	6	0	0	0	0	0	0	0	0	0	0	0	**68**
12:00 PM	0	0	6	33	37	5	1	0	0	0	0	0	0	0	0	0	0	**82**
1:00 PM	1	2	6	33	35	9	0	0	0	0	0	0	0	0	0	0	0	**86**
2:00 PM	0	0	4	30	26	5	0	0	0	0	0	0	0	0	0	0	0	**65**
3:00 PM	0	0	5	30	30	8	0	0	0	0	0	0	0	0	0	0	0	**73**
4:00 PM	1	0	6	40	37	2	0	0	0	0	0	0	0	0	0	0	0	**86**
5:00 PM	0	1	10	43	41	5	0	0	0	0	0	0	0	0	0	0	0	**100**
6:00 PM	0	0	7	38	19	7	0	0	0	0	0	0	0	0	0	0	0	**71**
7:00 PM	0	2	6	22	12	2	0	0	0	0	0	0	0	0	0	0	0	**44**
8:00 PM	0	0	6	16	14	2	0	0	0	0	0	0	0	0	0	0	0	**38**
9:00 PM	0	0	2	16	3	1	1	0	0	0	0	0	0	0	0	0	0	**23**
10:00 PM	0	0	0	4	3	1	0	0	0	0	0	0	0	0	0	0	0	**8**
11:00 PM	0	0	1	5	1	1	0	0	0	0	0	0	0	0	0	0	0	**8**
Total	**3**	**11**	**111**	**494**	**443**	**90**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,157**
Percent	**0.3%**	**1.0%**	**9.6%**	**42.7%**	**38.3%**	**7.8%**	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	24.5	mph	Mean (Average) Speed	24.6	mph
85th Percentile	28.9	mph	10 mph Pace	20.0 - 30.0	mph
95th Percentile	31.0	mph	Percent in Pace	80.8	%

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Monday, September 19, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	1	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**7**
1:00 AM	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	0	3	4	4	0	0	0	0	0	0	0	0	0	0	0	0	**11**
6:00 AM	0	1	6	4	2	0	0	0	0	0	0	0	0	0	0	0	0	**13**
7:00 AM	0	0	14	16	4	1	0	0	0	0	0	0	0	0	0	0	0	**35**
8:00 AM	0	1	16	24	8	2	0	0	0	0	0	0	0	0	0	0	0	**51**
9:00 AM	0	0	11	33	5	0	0	0	0	0	0	0	0	0	0	0	0	**49**
10:00 AM	0	0	10	50	4	2	0	0	0	0	0	0	0	0	0	0	0	**66**
11:00 AM	0	1	24	44	14	1	0	0	0	0	0	0	0	0	0	0	0	**84**
12:00 PM	0	0	20	56	22	0	0	0	0	0	0	0	0	0	0	0	0	**98**
1:00 PM	0	2	20	37	15	1	1	0	0	0	0	0	0	0	0	0	0	**76**
2:00 PM	0	1	15	50	17	1	1	0	0	0	0	0	0	0	0	0	0	**85**
3:00 PM	0	1	25	62	20	0	0	0	0	0	0	0	0	0	0	0	0	**108**
4:00 PM	0	3	43	70	19	3	0	0	0	0	0	0	0	0	0	0	0	**138**
5:00 PM	0	1	42	83	26	1	0	0	0	0	0	0	0	0	0	0	0	**153**
6:00 PM	0	4	44	64	14	4	0	0	0	0	0	0	0	0	0	0	0	**130**
7:00 PM	0	8	30	46	10	1	0	0	0	0	0	0	0	0	0	0	0	**95**
8:00 PM	0	1	32	32	4	0	0	0	0	0	0	0	0	0	0	0	0	**69**
9:00 PM	0	1	12	19	10	0	0	0	0	0	0	0	0	0	0	0	0	**42**
10:00 PM	0	0	5	8	2	1	0	0	0	0	0	0	0	0	0	0	0	**16**
11:00 PM	0	0	5	4	2	0	0	0	0	0	0	0	0	0	0	0	0	**11**
Total	**0**	**26**	**384**	**708**	**204**	**18**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,342**
Percent	**0.0%**	**1.9%**	**28.6%**	**52.8%**	**15.2%**	**1.3%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	21.8	mph	Mean (Average) Speed	21.8	mph
85th Percentile	25.2	mph	10 mph Pace	16.8 - 26.8	mph
95th Percentile	27.3	mph	Percent in Pace	87.03	%

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Tuesday, September 20, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	1	6	2	0	0	0	0	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	0	6	8	8	3	1	0	0	0	0	0	0	0	0	0	0	**26**
6:00 AM	0	1	8	26	25	4	2	0	0	0	0	0	0	0	0	0	0	**66**
7:00 AM	0	0	17	40	37	14	2	0	0	0	0	0	0	0	0	0	0	**110**
8:00 AM	0	1	17	26	35	19	1	0	0	0	0	0	0	0	0	0	0	**99**
9:00 AM	0	2	9	33	15	6	0	0	0	0	0	0	0	0	0	0	0	**65**
10:00 AM	0	2	13	33	19	6	0	0	0	0	0	0	0	0	0	0	0	**73**
11:00 AM	0	0	7	29	24	6	0	0	0	0	0	0	0	0	0	0	0	**66**
12:00 PM	0	1	11	46	24	9	0	0	0	0	0	0	0	0	0	0	0	**91**
1:00 PM	0	1	11	34	32	4	0	0	0	0	0	0	0	0	0	0	0	**82**
2:00 PM	0	2	7	28	24	3	1	0	0	0	0	0	0	0	0	0	0	**65**
3:00 PM	0	1	6	38	24	1	0	0	0	0	0	0	0	0	0	0	0	**70**
4:00 PM	0	0	4	44	40	4	0	0	0	0	0	0	0	0	0	0	0	**92**
5:00 PM	0	0	7	33	23	4	0	0	0	0	0	0	0	0	0	0	0	**67**
6:00 PM	0	0	10	24	37	6	1	0	0	0	0	0	0	0	0	0	0	**78**
7:00 PM	0	0	9	22	12	3	0	0	0	0	0	0	0	0	0	0	0	**46**
8:00 PM	0	1	6	23	4	1	0	0	0	0	0	0	0	0	0	0	0	**35**
9:00 PM	0	0	2	12	4	0	0	0	0	0	0	0	0	0	0	0	0	**18**
10:00 PM	0	0	2	5	1	2	0	0	0	0	0	0	0	0	0	0	0	**10**
11:00 PM	0	0	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**6**
Total	**0**	**12**	**157**	**517**	**391**	**95**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,180**
Percent	**0.0%**	**1.0%**	**13.3%**	**43.8%**	**33.1%**	**8.1%**	**0.7%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	24.3	mph	Mean (Average) Speed	24.3	mph
85th Percentile	28.6	mph	10 mph Pace	19.2 - 29.2	mph
95th Percentile	31.2	mph	Percent in Pace	77.3	%

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Tuesday, September 20, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**7**
1:00 AM	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
3:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
5:00 AM	0	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
6:00 AM	0	0	5	9	1	0	0	0	0	0	0	0	0	0	0	0	0	**15**
7:00 AM	0	0	10	25	2	2	0	0	0	0	0	0	0	0	0	0	0	**39**
8:00 AM	0	1	12	26	11	0	0	0	0	0	0	0	0	0	0	0	0	**50**
9:00 AM	0	2	14	27	13	0	0	0	0	0	0	0	0	0	0	0	0	**56**
10:00 AM	0	2	20	43	14	0	0	0	0	0	0	0	0	0	0	0	0	**79**
11:00 AM	0	1	30	45	14	0	0	0	0	0	0	0	0	0	0	0	0	**90**
12:00 PM	0	2	27	50	13	1	0	0	0	0	0	0	0	0	0	0	0	**93**
1:00 PM	0	2	21	57	10	0	0	0	0	0	0	0	0	0	0	0	0	**90**
2:00 PM	0	2	20	42	13	0	0	0	0	0	0	0	0	0	0	0	0	**77**
3:00 PM	1	1	43	61	18	1	0	0	0	0	0	0	0	0	0	0	0	**125**
4:00 PM	0	5	39	88	16	0	0	0	0	0	0	0	0	0	0	0	0	**148**
5:00 PM	0	4	49	91	19	2	0	0	0	0	0	0	0	0	0	0	0	**165**
6:00 PM	0	2	35	73	12	3	0	0	0	0	0	0	0	0	0	0	0	**125**
7:00 PM	0	1	30	44	9	0	0	0	0	0	0	0	0	0	0	0	0	**84**
8:00 PM	0	0	12	27	7	0	0	0	0	0	0	0	0	0	0	0	0	**46**
9:00 PM	0	3	12	18	3	0	0	0	0	0	0	0	0	0	0	0	0	**36**
10:00 PM	0	0	9	4	4	0	0	0	0	0	0	0	0	0	0	0	0	**17**
11:00 PM	0	0	5	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**9**
Total	**1**	**29**	**404**	**746**	**181**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,370**
Percent	**0.1%**	**2.1%**	**29.5%**	**54.5%**	**13.2%**	**0.7%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	21.6	mph	Mean (Average) Speed	21.5	mph
85th Percentile	24.8	mph	10 mph Pace	16.8 - 26.8	mph
95th Percentile	26.7	mph	Percent in Pace	88.1	%

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Wednesday, September 21, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	2	5	2	1	0	0	0	0	0	0	0	0	0	0	0	**10**
5:00 AM	0	0	1	8	13	1	0	0	0	0	0	0	0	0	0	0	0	**23**
6:00 AM	0	0	9	29	23	9	1	0	0	0	0	0	0	0	0	0	0	**71**
7:00 AM	0	0	9	34	46	11	2	0	0	0	0	0	0	0	0	0	0	**102**
8:00 AM	0	0	8	31	30	19	1	0	0	0	0	0	0	0	0	0	0	**89**
9:00 AM	0	2	7	36	24	2	0	0	0	0	0	0	0	0	0	0	0	**71**
10:00 AM	0	1	10	31	18	2	0	0	0	0	0	0	0	0	0	0	0	**62**
11:00 AM	0	0	11	33	14	1	1	0	0	0	0	0	0	0	0	0	0	**60**
12:00 PM	0	1	9	40	27	6	0	0	0	0	0	0	0	0	0	0	0	**83**
1:00 PM	0	1	11	54	30	4	0	0	0	0	0	0	0	0	0	0	0	**100**
2:00 PM	0	1	13	35	25	4	1	0	0	0	0	0	0	0	0	0	0	**79**
3:00 PM	0	0	11	29	23	7	1	0	0	0	0	0	0	0	0	0	0	**71**
4:00 PM	0	2	8	32	27	3	0	0	0	0	0	0	0	0	0	0	0	**72**
5:00 PM	0	0	12	43	32	6	0	0	0	0	0	0	0	0	0	0	0	**93**
6:00 PM	0	0	15	28	34	3	1	0	0	0	0	0	0	0	0	0	0	**81**
7:00 PM	0	0	9	29	13	0	0	0	0	0	0	0	0	0	0	0	0	**51**
8:00 PM	0	2	4	16	13	0	0	0	0	0	0	0	0	0	0	0	0	**35**
9:00 PM	0	0	3	7	5	1	0	0	0	0	0	0	0	0	0	0	0	**16**
10:00 PM	0	0	3	6	1	1	0	0	0	0	0	0	0	0	0	0	0	**11**
11:00 PM	0	0	0	3	6	0	0	0	0	0	0	0	0	0	0	0	0	**9**
Total	**0**	**10**	**157**	**530**	**407**	**81**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,193**
Percent	**0.0%**	**0.8%**	**13.2%**	**44.4%**	**34.1%**	**6.8%**	**0.7%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	24.2	mph	Mean (Average) Speed	24.3	mph
85th Percentile	28.4	mph	10 mph Pace	19.3 - 29.3	mph
95th Percentile	30.8	mph	Percent in Pace	79.6	%

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Wednesday, September 21, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**6**
1:00 AM	0	0	1	2	0	0	1	0	0	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**4**
5:00 AM	0	0	4	7	2	0	0	0	0	0	0	0	0	0	0	0	0	**13**
6:00 AM	0	0	4	9	2	0	0	0	0	0	0	0	0	0	0	0	0	**15**
7:00 AM	0	0	14	19	7	1	0	0	0	0	0	0	0	0	0	0	0	**41**
8:00 AM	0	1	12	41	7	1	1	0	0	0	0	0	0	0	0	0	0	**63**
9:00 AM	0	0	16	31	5	1	0	0	0	0	0	0	0	0	0	0	0	**53**
10:00 AM	0	0	19	51	6	0	0	0	0	0	0	0	0	0	0	0	0	**76**
11:00 AM	0	1	23	44	8	2	0	0	0	0	0	0	0	0	0	0	0	**78**
12:00 PM	0	1	13	42	19	0	0	0	0	0	0	0	0	0	0	0	0	**75**
1:00 PM	0	6	23	39	12	0	0	0	0	0	0	0	0	0	0	0	0	**80**
2:00 PM	0	4	19	64	16	1	0	0	0	0	0	0	0	0	0	0	0	**104**
3:00 PM	0	1	30	65	11	0	0	0	0	0	0	0	0	0	0	0	0	**107**
4:00 PM	0	5	40	66	17	0	0	0	0	0	0	0	0	0	0	0	0	**128**
5:00 PM	0	2	51	100	21	2	0	0	0	0	0	0	0	0	0	0	0	**176**
6:00 PM	0	2	28	84	19	2	0	0	0	0	0	0	0	0	0	0	0	**135**
7:00 PM	0	2	36	42	8	1	0	0	0	0	0	0	0	0	0	0	0	**89**
8:00 PM	0	5	20	32	5	0	0	0	0	0	0	0	0	0	0	0	0	**62**
9:00 PM	0	0	13	20	1	0	0	0	0	0	0	0	0	0	0	0	0	**34**
10:00 PM	0	1	5	14	2	0	0	0	0	0	0	0	0	0	0	0	0	**22**
11:00 PM	0	1	4	8	1	0	1	0	0	0	0	0	0	0	0	0	0	**15**
Total	**0**	**32**	**381**	**788**	**171**	**11**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,386**
Percent	**0.0%**	**2.3%**	**27.5%**	**56.9%**	**12.3%**	**0.8%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	21.5	mph	Mean (Average) Speed	21.5	mph
85th Percentile	24.7	mph	10 mph Pace	16.3 - 26.3	mph
95th Percentile	27.0	mph	Percent in Pace	87.81	%

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Thursday, September 22, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	1	7	1	1	0	0	0	0	0	0	0	0	0	0	0	**10**
5:00 AM	0	0	3	10	8	1	0	0	0	0	0	0	0	0	0	0	0	**22**
6:00 AM	0	1	12	28	16	2	2	0	0	0	0	0	0	0	0	0	0	**61**
7:00 AM	0	0	2	38	56	14	1	0	0	0	0	0	0	0	0	0	0	**111**
8:00 AM	0	0	9	39	31	11	1	0	0	0	0	0	0	0	0	0	0	**91**
9:00 AM	0	0	9	34	20	4	1	0	0	0	0	0	0	0	0	0	0	**68**
10:00 AM	0	2	11	37	25	5	0	0	0	0	0	0	0	0	0	0	0	**80**
11:00 AM	0	0	9	31	22	1	1	0	0	0	0	0	0	0	0	0	0	**64**
12:00 PM	1	0	13	33	19	7	0	0	0	0	0	0	0	0	0	0	0	**73**
1:00 PM	0	0	18	37	13	1	0	0	0	0	0	0	0	0	0	0	0	**69**
2:00 PM	0	1	10	34	22	1	0	0	0	0	0	0	0	0	0	0	0	**68**
3:00 PM	0	2	14	39	31	2	0	0	0	0	0	0	0	0	0	0	0	**88**
4:00 PM	0	0	7	46	25	4	0	0	0	0	0	0	0	0	0	0	0	**82**
5:00 PM	0	1	6	38	23	10	0	0	0	0	0	0	0	0	0	0	0	**78**
6:00 PM	0	2	15	38	23	1	1	0	0	0	0	0	0	0	0	0	0	**80**
7:00 PM	0	1	11	33	17	2	0	0	0	0	0	0	0	0	0	0	0	**64**
8:00 PM	0	1	9	12	10	0	0	0	0	0	0	0	0	0	0	0	0	**32**
9:00 PM	0	0	3	10	12	1	0	0	0	0	0	0	0	0	0	0	0	**26**
10:00 PM	0	0	1	5	6	0	0	0	0	0	0	0	0	0	0	0	0	**12**
11:00 PM	0	0	2	4	3	0	0	0	0	0	0	0	0	0	0	0	0	**9**
Total	**1**	**12**	**165**	**559**	**384**	**69**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,197**
Percent	**0.1%**	**1.0%**	**13.8%**	**46.7%**	**32.1%**	**5.8%**	**0.6%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	23.9	mph	Mean (Average) Speed	24.1	mph
85th Percentile	28.3	mph	10 mph Pace	18.8 - 28.8	mph
95th Percentile	30.7	mph	Percent in Pace	79.3	%

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Thursday, September 22, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	1	4	6	1	0	0	1	0	0	0	0	0	0	0	0	0	**13**
1:00 AM	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	0	6	4	2	0	0	0	0	0	0	0	0	0	0	0	0	**12**
6:00 AM	0	2	8	8	1	0	0	0	0	0	0	0	0	0	0	0	0	**19**
7:00 AM	0	0	12	25	1	0	0	0	0	0	0	0	0	0	0	0	0	**38**
8:00 AM	0	2	21	32	5	0	0	0	0	0	0	0	0	0	0	0	0	**60**
9:00 AM	1	1	23	32	12	1	0	0	0	0	0	0	0	0	0	0	0	**70**
10:00 AM	0	1	19	38	9	0	0	0	0	0	0	0	0	0	0	0	0	**67**
11:00 AM	0	0	16	30	20	0	0	0	0	0	0	0	0	0	0	0	0	**66**
12:00 PM	1	0	24	42	10	1	1	0	0	0	0	0	0	0	0	0	0	**79**
1:00 PM	0	2	37	42	12	0	0	0	0	0	0	0	0	0	0	0	0	**93**
2:00 PM	0	0	19	48	11	1	0	0	0	0	0	0	0	0	0	0	0	**79**
3:00 PM	1	4	30	58	19	1	1	0	0	0	0	0	0	0	0	0	0	**114**
4:00 PM	0	4	44	63	24	0	0	0	0	0	0	0	0	0	0	0	0	**135**
5:00 PM	0	1	47	93	34	1	0	0	0	0	0	0	0	0	0	0	0	**176**
6:00 PM	0	1	31	66	16	0	0	0	0	0	0	0	0	0	0	0	0	**114**
7:00 PM	0	1	28	41	13	0	0	0	0	0	0	0	0	0	0	0	0	**83**
8:00 PM	0	5	20	32	9	1	0	0	0	0	0	0	0	0	0	0	0	**67**
9:00 PM	0	0	15	28	7	0	0	0	0	0	0	0	0	0	0	0	0	**50**
10:00 PM	0	3	7	13	3	0	0	0	0	0	0	0	0	0	0	0	0	**26**
11:00 PM	0	1	7	7	7	0	0	0	0	0	0	0	0	0	0	0	0	**22**
Total	**3**	**29**	**423**	**712**	**217**	**6**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,393**
Percent	**0.2%**	**2.1%**	**30.4%**	**51.1%**	**15.6%**	**0.4%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	21.5	mph	Mean (Average) Speed	21.6	mph
85th Percentile	25.2	mph	10 mph Pace	16.8 - 26.8	mph
95th Percentile	27.3	mph	Percent in Pace	85.86	%

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Friday, September 23, 2022
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	4	3	2	0	0	0	0	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	1	5	9	8	2	0	0	0	0	0	0	0	0	0	0	0	**25**
6:00 AM	0	0	3	19	27	3	0	0	0	0	0	0	0	0	0	0	0	**52**
7:00 AM	0	0	4	37	30	7	1	0	0	0	0	0	0	0	0	0	0	**79**
8:00 AM	0	1	7	20	35	13	0	0	0	0	0	0	0	0	0	0	0	**76**
9:00 AM	0	1	7	39	24	6	0	1	0	0	0	0	0	0	0	0	0	**78**
10:00 AM	0	0	9	37	28	5	0	0	0	0	0	0	0	0	0	0	0	**79**
11:00 AM	0	0	14	31	30	1	0	0	0	0	0	0	0	0	0	0	0	**76**
12:00 PM	0	0	5	36	37	5	1	0	0	0	0	0	0	0	0	0	0	**84**
1:00 PM	0	1	7	38	20	6	0	0	0	0	0	0	0	0	0	0	0	**72**
2:00 PM	0	0	14	40	25	8	0	0	0	0	0	0	0	0	0	0	0	**87**
3:00 PM	0	0	10	44	40	5	2	0	0	0	0	0	0	0	0	0	0	**101**
4:00 PM	0	1	7	39	35	8	0	0	0	0	0	0	0	0	0	0	0	**90**
5:00 PM	0	1	5	36	44	5	1	0	0	0	0	0	0	0	0	0	0	**92**
6:00 PM	0	0	8	46	33	2	0	0	0	0	0	0	0	0	0	0	0	**89**
7:00 PM	0	0	11	29	17	1	0	0	0	0	0	0	0	0	0	0	0	**58**
8:00 PM	0	0	7	16	15	3	0	0	0	0	0	0	0	0	0	0	0	**41**
9:00 PM	0	2	1	16	10	1	1	0	0	0	0	0	0	0	0	0	0	**31**
10:00 PM	0	0	2	8	3	1	1	0	0	0	0	0	0	0	0	0	0	**15**
11:00 PM	0	0	1	5	3	2	1	0	0	0	0	0	0	0	0	0	0	**12**
Total	**0**	**9**	**131**	**551**	**469**	**84**	**8**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,253**
Percent	**0.0%**	**0.7%**	**10.5%**	**44.0%**	**37.4%**	**6.7%**	**0.6%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	24.5	mph	Mean (Average) Speed	24.6	mph
85th Percentile	28.5	mph	10 mph Pace	19.8 - 29.8	mph
95th Percentile	30.8	mph	Percent in Pace	81.7	%

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Friday, September 23, 2022
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	3	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**8**
1:00 AM	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
3:00 AM	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	0	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**8**
6:00 AM	0	1	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	**12**
7:00 AM	0	0	17	19	4	0	0	0	0	0	0	0	0	0	0	0	0	**40**
8:00 AM	1	2	11	30	7	0	1	0	0	0	0	0	0	0	0	0	0	**52**
9:00 AM	0	1	8	32	14	1	0	0	0	0	0	0	0	0	0	0	0	**56**
10:00 AM	0	2	18	42	13	1	0	0	0	0	0	0	0	0	0	0	0	**76**
11:00 AM	0	1	20	45	16	0	0	0	0	0	0	0	0	0	0	0	0	**82**
12:00 PM	1	1	19	58	23	1	0	0	0	0	0	0	0	0	0	0	0	**103**
1:00 PM	0	0	29	54	10	1	0	0	0	0	0	0	0	0	0	0	0	**94**
2:00 PM	0	4	18	57	14	1	0	0	0	0	0	0	0	0	0	0	0	**94**
3:00 PM	0	0	36	84	20	1	0	0	0	0	0	0	0	0	0	0	0	**141**
4:00 PM	3	5	42	92	19	2	0	0	0	0	0	0	0	0	0	0	0	**163**
5:00 PM	0	1	29	75	36	4	0	0	0	0	0	0	0	0	0	0	0	**145**
6:00 PM	0	1	33	72	13	5	0	0	0	0	0	0	0	0	0	0	0	**124**
7:00 PM	0	2	36	47	17	0	0	0	0	0	0	0	0	0	0	0	0	**102**
8:00 PM	0	3	22	28	9	1	0	0	0	0	0	0	0	0	0	0	0	**63**
9:00 PM	0	2	17	32	7	0	0	0	0	0	0	0	0	0	0	0	0	**58**
10:00 PM	0	0	14	22	5	0	0	0	0	0	0	0	0	0	0	0	0	**41**
11:00 PM	0	1	5	10	1	2	0	0	0	0	0	0	0	0	0	0	0	**19**
Total	**5**	**30**	**383**	**823**	**230**	**20**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,492**
Percent	**0.3%**	**2.0%**	**25.7%**	**55.2%**	**15.4%**	**1.3%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	21.8	mph	Mean (Average) Speed	21.8	mph
85th Percentile	25.2	mph	10 mph Pace	16.2 - 26.2	mph
95th Percentile	27.6	mph	Percent in Pace	86.39	%

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Total Study Average
Eastbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	2	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**7**
5:00 AM	0	0	4	8	9	2	0	0	0	0	0	0	0	0	0	0	0	**23**
6:00 AM	0	0	7	20	19	3	1	0	0	0	0	0	0	0	0	0	0	**50**
7:00 AM	0	0	6	30	36	10	1	0	0	0	0	0	0	0	0	0	0	**83**
8:00 AM	0	0	9	26	32	12	0	0	0	0	0	0	0	0	0	0	0	**79**
9:00 AM	0	1	8	35	25	5	0	0	0	0	0	0	0	0	0	0	0	**74**
10:00 AM	0	1	11	36	24	4	0	0	0	0	0	0	0	0	0	0	0	**76**
11:00 AM	0	1	10	32	25	3	1	0	0	0	0	0	0	0	0	0	0	**72**
12:00 PM	0	1	8	39	28	7	0	0	0	0	0	0	0	0	0	0	0	**83**
1:00 PM	0	1	10	38	28	5	0	0	0	0	0	0	0	0	0	0	0	**82**
2:00 PM	0	1	9	35	27	4	1	0	0	0	0	0	0	0	0	0	0	**77**
3:00 PM	0	0	8	34	28	4	1	0	0	0	0	0	0	0	0	0	0	**75**
4:00 PM	0	0	7	37	33	4	0	0	0	0	0	0	0	0	0	0	0	**81**
5:00 PM	0	1	7	36	30	5	0	0	0	0	0	0	0	0	0	0	0	**79**
6:00 PM	0	0	9	35	27	5	1	0	0	0	0	0	0	0	0	0	0	**77**
7:00 PM	0	0	7	28	16	2	0	0	0	0	0	0	0	0	0	0	0	**53**
8:00 PM	0	1	6	15	11	2	0	0	0	0	0	0	0	0	0	0	0	**35**
9:00 PM	0	1	2	14	8	1	0	0	0	0	0	0	0	0	0	0	0	**26**
10:00 PM	0	0	1	5	3	1	0	0	0	0	0	0	0	0	0	0	0	**10**
11:00 PM	0	0	1	5	2	0	0	0	0	0	0	0	0	0	0	0	0	**8**
Total	**0**	**9**	**132**	**517**	**414**	**79**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,157**
Percent	**0.0%**	**0.8%**	**11.4%**	**44.7%**	**35.8%**	**6.8%**	**0.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	24.4	mph	Mean (Average) Speed	24.4	mph
85th Percentile	28.5	mph	10 mph Pace	19.9 - 29.9	mph
95th Percentile	30.9	mph	Percent in Pace	80.0	%

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 13

Total Study Average
Westbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	1	3	5	1	0	0	0	0	0	0	0	0	0	0	0	0	**10**
1:00 AM	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**4**
2:00 AM	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
3:00 AM	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	0	3	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**8**
6:00 AM	0	1	4	7	1	0	0	0	0	0	0	0	0	0	0	0	0	**13**
7:00 AM	0	0	12	19	4	1	0	0	0	0	0	0	0	0	0	0	0	**36**
8:00 AM	0	1	14	29	7	1	0	0	0	0	0	0	0	0	0	0	0	**52**
9:00 AM	0	1	15	32	10	0	0	0	0	0	0	0	0	0	0	0	0	**58**
10:00 AM	0	1	19	42	10	1	0	0	0	0	0	0	0	0	0	0	0	**73**
11:00 AM	0	1	24	44	16	1	0	0	0	0	0	0	0	0	0	0	0	**86**
12:00 PM	0	1	20	52	17	1	0	0	0	0	0	0	0	0	0	0	0	**91**
1:00 PM	0	2	24	46	12	0	0	0	0	0	0	0	0	0	0	0	0	**84**
2:00 PM	0	2	22	52	16	1	0	0	0	0	0	0	0	0	0	0	0	**93**
3:00 PM	0	1	28	62	16	1	0	0	0	0	0	0	0	0	0	0	0	**108**
4:00 PM	0	3	36	69	18	1	0	0	0	0	0	0	0	0	0	0	0	**127**
5:00 PM	0	2	38	76	25	2	0	0	0	0	0	0	0	0	0	0	0	**143**
6:00 PM	0	2	29	67	14	2	0	0	0	0	0	0	0	0	0	0	0	**114**
7:00 PM	0	3	29	44	11	0	0	0	0	0	0	0	0	0	0	0	0	**87**
8:00 PM	0	3	21	32	7	0	0	0	0	0	0	0	0	0	0	0	0	**63**
9:00 PM	0	2	15	23	6	0	0	0	0	0	0	0	0	0	0	0	0	**46**
10:00 PM	0	1	8	14	3	1	0	0	0	0	0	0	0	0	0	0	0	**27**
11:00 PM	0	1	5	7	2	1	0	0	0	0	0	0	0	0	0	0	0	**16**
Total	**0**	**29**	**375**	**731**	**198**	**14**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,347**
Percent	**0.0%**	**2.2%**	**27.8%**	**54.3%**	**14.7%**	**1.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	21.7	mph	Mean (Average) Speed	21.7	mph
85th Percentile	25.2	mph	10 mph Pace	16.8 - 26.8	mph
95th Percentile	27.3	mph	Percent in Pace	86.4	%

Location: E Wulfsohn W/O Midland Ave
Date Range: 9/17/2022 - 9/23/2022
Site Code: 13

	Saturday			Sunday			Monday			Tuesday			Wednesday			Thursday			Friday					
	9/17/2022			9/18/2022			9/19/2022			9/20/2022			9/21/2022			9/22/2022			9/23/2022			Mid-Week Average		
Time	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total
12:00 AM	8	15	23	3	13	16	4	7	11	3	7	10	1	6	7	3	13	16	3	8	11	2	9	11
1:00 AM	4	8	12	3	7	10	1	4	5	1	3	4	0	4	4	3	4	7	2	4	6	1	4	5
2:00 AM	2	6	8	2	8	10	1	0	1	0	5	5	0	3	3	1	2	3	0	3	3	0	3	4
3:00 AM	2	4	6	3	5	8	1	1	2	2	2	4	3	3	6	2	3	5	2	4	6	2	3	5
4:00 AM	5	2	7	5	1	6	6	0	6	9	3	12	10	4	14	10	1	11	9	0	9	10	3	12
5:00 AM	15	10	25	12	2	14	38	11	49	26	6	32	23	13	36	22	12	34	25	8	33	24	10	34
6:00 AM	34	9	43	24	6	30	45	13	58	66	15	81	71	15	86	61	19	80	52	12	64	66	16	82
7:00 AM	54	27	81	39	31	70	93	35	128	110	39	149	102	41	143	111	38	149	79	40	119	108	39	147
8:00 AM	63	46	109	62	37	99	80	51	131	99	50	149	89	63	152	91	60	151	76	52	128	93	58	151
9:00 AM	91	70	161	81	55	136	67	49	116	65	56	121	71	53	124	68	70	138	78	56	134	68	60	128
10:00 AM	86	83	169	81	65	146	69	66	135	73	79	152	62	76	138	80	67	147	79	76	155	72	74	146
11:00 AM	81	106	187	87	90	177	68	84	152	66	90	156	60	78	138	64	66	130	76	82	158	63	78	141
12:00 PM	89	114	203	83	75	158	82	98	180	91	93	184	83	75	158	73	79	152	84	103	187	82	82	165
1:00 PM	79	92	171	84	73	157	86	76	162	82	90	172	100	80	180	69	93	162	72	94	166	84	88	171
2:00 PM	87	107	194	86	100	186	65	85	150	65	77	142	79	104	183	68	79	147	87	94	181	71	87	157
3:00 PM	73	86	159	58	82	140	73	108	181	70	125	195	71	107	178	88	114	202	101	141	242	76	115	192
4:00 PM	92	103	195	63	86	149	86	138	224	92	148	240	72	128	200	82	135	217	90	163	253	82	137	219
5:00 PM	62	91	153	60	84	144	100	153	253	67	165	232	93	176	269	78	176	254	92	145	237	79	172	252
6:00 PM	82	95	177	65	80	145	71	130	201	78	125	203	81	135	216	80	114	194	89	124	213	80	125	204
7:00 PM	57	90	147	57	65	122	44	95	139	46	84	130	51	89	140	64	83	147	58	102	160	54	85	139
8:00 PM	32	68	100	29	70	99	38	69	107	35	46	81	35	62	97	32	67	99	41	63	104	34	58	92
9:00 PM	36	52	88	30	43	73	23	42	65	18	36	54	16	34	50	26	50	76	31	58	89	20	40	60
10:00 PM	15	36	51	7	31	38	8	16	24	10	17	27	11	22	33	12	26	38	15	41	56	11	22	33
11:00 PM	13	26	39	7	11	18	8	11	19	6	9	15	9	15	24	9	22	31	12	19	31	8	15	23
Total	**1,162**	**1,346**	**2,508**	**1,031**	**1,120**	**2,151**	**1,157**	**1,342**	**2,499**	**1,180**	**1,370**	**2,550**	**1,193**	**1,386**	**2,579**	**1,197**	**1,393**	**2,590**	**1,253**	**1,492**	**2,745**	**1,190**	**1,383**	**2,573**
Percent	**46%**	**54%**	-	**48%**	**52%**	-	**46%**	**54%**	-	**46%**	**54%**	-	**46%**	**54%**	-	**46%**	**54%**	-	**46%**	**54%**	-	**46%**	**54%**	-

1. Mid-week average includes data between Tuesday and Thursday.

Vehicle Classification Report Summary

Location: E Meadows Dr S/O Midland Ave

Count Direction: Northbound / Southbound

Date Range: 9/17/2022 to 9/23/2022

Site Code: 14

	FHWA Vehicle Classification													Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
Study Total														
Northbound	49	7,913	1,813	0	1,074	13	0	0	4	0	0	0	0	10,866
Percent	0.5%	72.8%	16.7%	0.0%	9.9%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Southbound	29	6,923	2,820	5	1,680	73	0	0	6	1	0	0	0	11,537
Percent	0.3%	60.0%	24.4%	0.0%	14.6%	0.6%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	100%
Total	78	14,836	4,633	5	2,754	86	0	0	10	1	0	0	0	22,403
Percent	0.3%	66.2%	20.7%	0.0%	12.3%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%

FHWA Vehicle Classification	
Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Saturday, September 17, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	**4**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	3	1	0	1	0	0	0	0	0	0	0	0	**5**
6:00 AM	0	3	4	0	2	0	0	0	0	0	0	0	0	**9**
7:00 AM	0	13	4	0	3	0	0	0	0	0	0	0	0	**20**
8:00 AM	0	25	5	0	1	0	0	0	0	0	0	0	0	**31**
9:00 AM	0	45	14	0	5	0	0	0	0	0	0	0	0	**64**
10:00 AM	0	69	14	0	14	0	0	0	0	0	0	0	0	**97**
11:00 AM	0	97	20	0	12	1	0	0	0	0	0	0	0	**130**
12:00 PM	0	102	26	0	19	1	0	0	0	0	0	0	0	**148**
1:00 PM	0	120	31	0	17	0	0	0	0	0	0	0	0	**168**
2:00 PM	0	142	31	0	19	0	0	0	0	0	0	0	0	**192**
3:00 PM	1	125	35	0	16	0	0	0	0	0	0	0	0	**177**
4:00 PM	0	109	33	0	15	0	0	0	0	0	0	0	0	**157**
5:00 PM	3	103	22	0	13	0	0	0	0	0	0	0	0	**141**
6:00 PM	1	90	12	0	13	0	0	0	0	0	0	0	0	**116**
7:00 PM	0	68	8	0	12	0	0	0	0	0	0	0	0	**88**
8:00 PM	0	31	5	0	4	0	0	0	0	0	0	0	0	**40**
9:00 PM	0	26	5	0	4	0	0	0	0	0	0	0	0	**35**
10:00 PM	0	13	3	0	0	0	0	0	0	0	0	0	0	**16**
11:00 PM	0	4	1	0	1	0	0	0	0	0	0	0	0	**6**
Total	**5**	**1,194**	**276**	**0**	**171**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,648**
Percent	**0.3%**	**72.5%**	**16.7%**	**0.0%**	**10.4%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Saturday, September 17, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
6:00 AM	0	3	3	0	1	0	0	0	0	0	0	0	0	**7**
7:00 AM	0	18	2	0	2	0	0	0	0	0	0	0	0	**22**
8:00 AM	0	16	8	0	8	0	0	0	0	0	0	0	0	**32**
9:00 AM	0	57	24	0	15	0	0	0	0	0	0	0	0	**96**
10:00 AM	0	99	41	0	24	0	0	0	0	0	0	0	0	**164**
11:00 AM	0	107	36	0	19	0	0	0	0	0	0	0	0	**162**
12:00 PM	0	99	40	0	22	1	0	0	0	0	0	0	0	**162**
1:00 PM	1	125	43	0	35	0	0	0	0	0	0	0	0	**204**
2:00 PM	2	112	51	0	24	0	0	0	0	0	0	0	0	**189**
3:00 PM	0	90	36	0	21	0	0	0	0	0	0	0	0	**147**
4:00 PM	1	100	42	0	16	0	0	0	0	0	0	0	0	**159**
5:00 PM	0	80	27	0	15	0	0	0	0	0	0	0	0	**122**
6:00 PM	1	54	18	0	15	1	0	0	0	0	0	0	0	**89**
7:00 PM	0	47	17	0	10	1	0	0	0	0	0	0	0	**75**
8:00 PM	0	24	7	0	6	2	0	0	0	0	0	0	0	**39**
9:00 PM	0	5	0	0	2	0	0	0	0	0	0	0	0	**7**
10:00 PM	0	5	1	0	0	0	0	0	0	0	0	0	0	**6**
11:00 PM	0	3	3	0	0	0	0	0	0	0	0	0	0	**6**
Total	**5**	**1,047**	**404**	**0**	**235**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,696**
Percent	**0.3%**	**61.7%**	**23.8%**	**0.0%**	**13.9%**	**0.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Sunday, September 18, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	3	0	0	1	0	0	0	0	0	0	0	0	**4**
6:00 AM	0	5	1	0	1	0	0	0	0	0	0	0	0	**7**
7:00 AM	0	4	0	0	1	0	0	0	0	0	0	0	0	**5**
8:00 AM	0	10	4	0	3	0	0	0	0	0	0	0	0	**17**
9:00 AM	0	26	13	0	7	0	0	0	0	0	0	0	0	**46**
10:00 AM	0	66	12	0	10	0	0	0	0	0	0	0	0	**88**
11:00 AM	0	76	27	0	7	0	0	0	0	0	0	0	0	**110**
12:00 PM	0	84	17	0	8	0	0	0	0	0	0	0	0	**109**
1:00 PM	2	110	30	0	14	1	0	0	0	0	0	0	0	**157**
2:00 PM	2	113	21	0	19	0	0	0	0	0	0	0	0	**155**
3:00 PM	1	121	34	0	20	0	0	0	0	0	0	0	0	**176**
4:00 PM	1	106	32	0	15	0	0	0	0	0	0	0	0	**154**
5:00 PM	1	106	22	0	12	0	0	0	0	0	0	0	0	**141**
6:00 PM	1	77	13	0	11	1	0	0	0	0	0	0	0	**103**
7:00 PM	0	56	10	0	7	0	0	0	0	0	0	0	0	**73**
8:00 PM	1	37	5	0	1	0	0	0	0	0	0	0	0	**44**
9:00 PM	1	14	2	0	2	0	0	0	0	0	0	0	0	**19**
10:00 PM	0	6	2	0	0	0	0	0	0	0	0	0	0	**8**
11:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
Total	**10**	**1,027**	**245**	**0**	**139**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,423**
Percent	**0.7%**	**72.2%**	**17.2%**	**0.0%**	**9.8%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Sunday, September 18, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
6:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	**3**
7:00 AM	0	11	0	0	0	1	0	0	0	0	0	0	0	**12**
8:00 AM	0	16	2	0	4	0	0	0	0	0	0	0	0	**22**
9:00 AM	0	32	18	0	9	0	0	0	0	0	0	0	0	**59**
10:00 AM	0	68	24	0	15	1	0	0	0	0	0	0	0	**108**
11:00 AM	0	97	28	0	20	1	0	0	0	0	0	0	0	**146**
12:00 PM	1	73	26	0	22	1	0	0	0	0	0	0	0	**123**
1:00 PM	1	96	34	0	25	0	0	0	0	0	0	0	0	**156**
2:00 PM	1	108	43	0	24	0	0	0	0	0	0	0	0	**176**
3:00 PM	1	76	41	0	17	0	0	0	0	0	0	0	0	**135**
4:00 PM	1	75	26	0	20	0	0	0	0	0	0	0	0	**122**
5:00 PM	0	56	23	0	12	0	0	0	0	0	0	0	0	**91**
6:00 PM	0	44	21	0	11	1	0	0	0	0	0	0	0	**77**
7:00 PM	0	39	9	0	15	0	0	0	0	0	0	0	0	**63**
8:00 PM	0	22	5	0	5	0	0	0	0	0	0	0	0	**32**
9:00 PM	0	8	0	0	1	0	0	0	0	0	0	0	0	**9**
10:00 PM	0	6	1	0	1	0	0	0	0	0	0	0	0	**8**
11:00 PM	0	2	1	0	1	0	0	0	0	0	0	0	0	**4**
Total	**5**	**835**	**306**	**0**	**202**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,353**
Percent	**0.4%**	**61.7%**	**22.6%**	**0.0%**	**14.9%**	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Monday, September 19, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	1	0	0	2	1	0	0	0	0	0	0	0	**4**
6:00 AM	0	8	3	0	2	0	0	0	0	0	0	0	0	**13**
7:00 AM	0	9	5	0	6	0	0	0	0	0	0	0	0	**20**
8:00 AM	0	33	4	0	3	0	0	0	0	0	0	0	0	**40**
9:00 AM	0	40	4	0	8	1	0	0	0	0	0	0	0	**53**
10:00 AM	1	62	17	0	15	0	0	0	0	0	0	0	0	**95**
11:00 AM	0	95	18	0	12	0	0	0	0	0	0	0	0	**125**
12:00 PM	0	109	18	0	16	0	0	0	0	0	0	0	0	**143**
1:00 PM	0	108	18	0	12	0	0	0	0	0	0	0	0	**138**
2:00 PM	1	113	24	0	6	0	0	0	0	0	0	0	0	**144**
3:00 PM	1	122	26	0	13	0	0	0	0	0	0	0	0	**162**
4:00 PM	1	91	24	0	18	0	0	0	0	0	0	0	0	**134**
5:00 PM	0	85	24	0	14	0	0	0	0	0	0	0	0	**123**
6:00 PM	0	89	21	0	7	0	0	0	0	0	0	0	0	**117**
7:00 PM	1	71	20	0	9	0	0	0	0	0	0	0	0	**101**
8:00 PM	1	48	7	0	5	1	0	0	0	0	0	0	0	**62**
9:00 PM	0	8	5	0	5	0	0	0	0	0	0	0	0	**18**
10:00 PM	0	9	2	0	0	0	0	0	0	0	0	0	0	**11**
11:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
Total	**6**	**1,106**	**241**	**0**	**153**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,509**
Percent	**0.4%**	**73.3%**	**16.0%**	**0.0%**	**10.1%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Monday, September 19, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	**1**
5:00 AM	0	2	0	0	0	0	0	0	1	0	0	0	0	**3**
6:00 AM	0	6	1	0	2	0	0	0	0	0	0	0	0	**9**
7:00 AM	0	19	2	0	5	0	0	0	0	0	0	0	0	**26**
8:00 AM	0	33	19	0	7	0	0	0	0	0	0	0	0	**59**
9:00 AM	0	53	27	0	15	0	0	0	0	0	0	0	0	**95**
10:00 AM	0	68	30	0	22	0	0	0	0	0	0	0	0	**120**
11:00 AM	0	94	25	0	19	0	0	0	0	0	0	0	0	**138**
12:00 PM	0	85	46	0	22	0	0	0	0	0	0	0	0	**153**
1:00 PM	0	80	37	0	21	0	0	0	0	0	0	0	0	**138**
2:00 PM	1	88	42	0	24	0	0	0	0	0	0	0	0	**155**
3:00 PM	0	94	36	0	26	1	0	0	0	0	0	0	0	**157**
4:00 PM	0	105	54	0	40	2	0	0	0	0	0	0	0	**201**
5:00 PM	0	90	49	0	21	1	0	0	0	1	0	0	0	**162**
6:00 PM	1	74	34	0	21	0	0	0	0	0	0	0	0	**130**
7:00 PM	0	44	17	0	9	1	0	0	0	0	0	0	0	**71**
8:00 PM	0	19	3	0	5	1	0	0	0	0	0	0	0	**28**
9:00 PM	0	7	3	0	1	0	0	0	0	0	0	0	0	**11**
10:00 PM	0	4	1	0	0	0	0	0	0	0	0	0	0	**5**
11:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	**1**
Total	**2**	**966**	**426**	**0**	**260**	**8**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**1,664**
Percent	**0.1%**	**58.1%**	**25.6%**	**0.0%**	**15.6%**	**0.5%**	**0.0%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Tuesday, September 20, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	3	0	0	3	0	0	0	0	0	0	0	0	**6**
6:00 AM	0	4	3	0	6	0	0	0	0	0	0	0	0	**13**
7:00 AM	0	18	6	0	4	0	0	0	0	0	0	0	0	**28**
8:00 AM	1	22	10	0	2	0	0	0	0	0	0	0	0	**35**
9:00 AM	0	44	8	0	6	1	0	0	0	0	0	0	0	**59**
10:00 AM	4	65	22	0	5	0	0	0	0	0	0	0	0	**96**
11:00 AM	1	91	17	0	11	1	0	0	0	0	0	0	0	**121**
12:00 PM	1	103	24	0	10	0	0	0	0	0	0	0	0	**138**
1:00 PM	0	86	30	0	14	0	0	0	0	0	0	0	0	**130**
2:00 PM	1	100	18	0	14	0	0	0	0	0	0	0	0	**133**
3:00 PM	1	102	24	0	13	0	0	0	0	0	0	0	0	**140**
4:00 PM	0	94	27	0	11	0	0	0	0	0	0	0	0	**132**
5:00 PM	0	98	25	0	12	0	0	0	0	0	0	0	0	**135**
6:00 PM	1	70	21	0	10	0	0	0	0	0	0	0	0	**102**
7:00 PM	0	70	13	0	10	0	0	0	0	0	0	0	0	**93**
8:00 PM	0	28	4	0	6	0	0	0	0	0	0	0	0	**38**
9:00 PM	0	18	8	0	2	0	0	0	0	0	0	0	0	**28**
10:00 PM	0	10	1	0	2	0	0	0	0	0	0	0	0	**13**
11:00 PM	0	4	0	0	0	0	0	0	0	0	0	0	0	**4**
Total	**11**	**1,031**	**261**	**0**	**142**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,447**
Percent	**0.8%**	**71.3%**	**18.0%**	**0.0%**	**9.8%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Tuesday, September 20, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	3	0	0	2	0	0	0	0	0	0	0	0	**5**
6:00 AM	0	9	1	0	1	0	0	0	0	0	0	0	0	**11**
7:00 AM	0	14	6	0	6	1	0	0	0	0	0	0	0	**27**
8:00 AM	0	31	13	0	9	0	0	0	0	0	0	0	0	**53**
9:00 AM	0	47	18	0	6	1	0	0	1	0	0	0	0	**73**
10:00 AM	2	75	30	0	17	0	0	0	0	0	0	0	0	**124**
11:00 AM	0	74	40	0	16	1	0	0	0	0	0	0	0	**131**
12:00 PM	0	93	39	0	20	0	0	0	0	0	0	0	0	**152**
1:00 PM	0	82	40	0	23	0	0	0	1	0	0	0	0	**146**
2:00 PM	1	94	33	0	22	1	0	0	0	0	0	0	0	**151**
3:00 PM	0	92	44	0	22	0	0	0	0	0	0	0	0	**158**
4:00 PM	3	118	42	0	15	2	0	0	0	0	0	0	0	**180**
5:00 PM	0	94	31	0	22	0	0	0	0	0	0	0	0	**147**
6:00 PM	0	58	30	0	24	1	0	0	0	0	0	0	0	**113**
7:00 PM	0	39	20	0	7	0	0	0	0	0	0	0	0	**66**
8:00 PM	0	18	4	0	1	1	0	0	0	0	0	0	0	**24**
9:00 PM	0	11	3	0	1	0	0	0	0	0	0	0	0	**15**
10:00 PM	0	4	0	0	2	0	0	0	0	0	0	0	0	**6**
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**6**	**959**	**394**	**0**	**216**	**8**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**1,585**
Percent	**0.4%**	**60.5%**	**24.9%**	**0.0%**	**13.6%**	**0.5%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Wednesday, September 21, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	2	1	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	8	0	0	1	1	0	0	0	0	0	0	0	**10**
6:00 AM	0	5	4	0	3	0	0	0	0	0	0	0	0	**12**
7:00 AM	0	20	5	0	9	0	0	0	0	0	0	0	0	**34**
8:00 AM	0	27	10	0	5	0	0	0	0	0	0	0	0	**42**
9:00 AM	0	43	15	0	6	0	0	0	0	0	0	0	0	**64**
10:00 AM	0	80	18	0	13	0	0	0	0	0	0	0	0	**111**
11:00 AM	1	97	15	0	20	0	0	0	0	0	0	0	0	**133**
12:00 PM	1	96	25	0	12	0	0	0	0	0	0	0	0	**134**
1:00 PM	1	111	25	0	16	0	0	0	0	0	0	0	0	**153**
2:00 PM	0	109	18	0	10	1	0	0	0	0	0	0	0	**138**
3:00 PM	0	125	23	0	17	0	0	0	0	0	0	0	0	**165**
4:00 PM	0	104	17	0	16	0	0	0	0	0	0	0	0	**137**
5:00 PM	1	104	19	0	12	0	0	0	0	0	0	0	0	**136**
6:00 PM	0	88	13	0	13	0	0	0	0	0	0	0	0	**114**
7:00 PM	0	71	13	0	6	0	0	0	0	0	0	0	0	**90**
8:00 PM	0	34	11	0	3	0	0	0	0	0	0	0	0	**48**
9:00 PM	0	23	4	0	4	0	0	0	0	0	0	0	0	**31**
10:00 PM	0	8	2	0	2	0	0	0	0	0	0	0	0	**12**
11:00 PM	0	2	1	0	0	0	0	0	0	0	0	0	0	**3**
Total	**6**	**1,158**	**239**	**0**	**168**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,573**
Percent	**0.4%**	**73.6%**	**15.2%**	**0.0%**	**10.7%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Wednesday, September 21, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	3	1	0	1	1	0	0	0	0	0	0	0	**6**
6:00 AM	0	10	1	0	1	0	0	0	1	0	0	0	0	**13**
7:00 AM	0	14	6	0	3	1	0	0	0	0	0	0	0	**24**
8:00 AM	0	27	10	0	6	0	0	0	0	0	0	0	0	**43**
9:00 AM	0	46	22	0	10	2	0	0	0	0	0	0	0	**80**
10:00 AM	1	78	35	0	22	0	0	0	0	0	0	0	0	**136**
11:00 AM	0	86	29	1	26	1	0	0	0	0	0	0	0	**143**
12:00 PM	1	95	38	0	24	1	0	0	0	0	0	0	0	**159**
1:00 PM	0	89	39	0	14	0	0	0	0	0	0	0	0	**142**
2:00 PM	0	120	40	0	20	1	0	0	0	0	0	0	0	**181**
3:00 PM	0	96	26	0	16	1	0	0	0	0	0	0	0	**139**
4:00 PM	0	109	39	0	30	0	0	0	0	0	0	0	0	**178**
5:00 PM	1	91	42	0	29	1	0	0	0	0	0	0	0	**164**
6:00 PM	0	80	35	1	20	1	0	0	0	0	0	0	0	**137**
7:00 PM	0	44	22	0	6	2	0	0	0	0	0	0	0	**74**
8:00 PM	0	15	8	0	1	0	0	0	0	0	0	0	0	**24**
9:00 PM	0	12	1	0	3	0	0	0	0	0	0	0	0	**16**
10:00 PM	0	3	1	0	4	0	0	0	0	0	0	0	0	**8**
11:00 PM	0	1	0	0	2	0	0	0	0	0	0	0	0	**3**
Total	**3**	**1,022**	**395**	**2**	**238**	**12**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1,673**
Percent	**0.2%**	**61.1%**	**23.6%**	**0.1%**	**14.2%**	**0.7%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Thursday, September 22, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	1	1	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	6	1	0	2	0	0	0	0	0	0	0	0	**9**
6:00 AM	0	10	5	0	5	0	0	0	0	0	0	0	0	**20**
7:00 AM	0	15	7	0	5	0	0	0	0	0	0	0	0	**27**
8:00 AM	0	29	4	0	1	0	0	0	1	0	0	0	0	**35**
9:00 AM	0	42	19	0	7	0	0	0	0	0	0	0	0	**68**
10:00 AM	0	52	14	0	13	0	0	0	0	0	0	0	0	**79**
11:00 AM	0	72	28	0	13	0	0	0	1	0	0	0	0	**114**
12:00 PM	0	97	24	0	17	0	0	0	0	0	0	0	0	**138**
1:00 PM	1	83	29	0	14	2	0	0	0	0	0	0	0	**129**
2:00 PM	1	105	24	0	9	0	0	0	0	0	0	0	0	**139**
3:00 PM	0	116	29	0	9	0	0	0	1	0	0	0	0	**155**
4:00 PM	0	138	22	0	14	0	0	0	0	0	0	0	0	**174**
5:00 PM	1	114	26	0	16	0	0	0	0	0	0	0	0	**157**
6:00 PM	1	90	15	0	12	0	0	0	0	0	0	0	0	**118**
7:00 PM	0	94	19	0	9	0	0	0	0	0	0	0	0	**122**
8:00 PM	1	53	9	0	7	0	0	0	0	0	0	0	0	**70**
9:00 PM	0	24	3	0	4	0	0	0	0	0	0	0	0	**31**
10:00 PM	0	8	3	0	1	0	0	0	0	0	0	0	0	**12**
11:00 PM	0	4	1	0	0	0	0	0	0	0	0	0	0	**5**
Total	**6**	**1,156**	**282**	**0**	**158**	**2**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**1,607**
Percent	**0.4%**	**71.9%**	**17.5%**	**0.0%**	**9.8%**	**0.1%**	**0.0%**	**0.0%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Thursday, September 22, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	4	0	0	0	0	0	0	0	0	0	0	0	**4**
6:00 AM	0	4	1	0	2	0	0	0	0	0	0	0	0	**7**
7:00 AM	0	16	7	0	4	1	0	0	1	0	0	0	0	**29**
8:00 AM	0	26	16	0	3	1	0	0	0	0	0	0	0	**46**
9:00 AM	0	47	24	0	14	2	0	0	0	0	0	0	0	**87**
10:00 AM	0	70	35	0	15	2	0	0	0	0	0	0	0	**122**
11:00 AM	0	68	45	0	15	6	0	0	0	0	0	0	0	**134**
12:00 PM	0	89	41	0	17	0	0	0	0	0	0	0	0	**147**
1:00 PM	0	66	45	0	24	0	0	0	0	0	0	0	0	**135**
2:00 PM	1	100	35	1	16	2	0	0	0	0	0	0	0	**155**
3:00 PM	1	122	45	0	24	1	0	0	0	0	0	0	0	**193**
4:00 PM	0	105	52	0	32	1	0	0	0	0	0	0	0	**190**
5:00 PM	0	116	31	0	35	1	0	0	0	0	0	0	0	**183**
6:00 PM	0	75	31	0	20	3	0	0	0	0	0	0	0	**129**
7:00 PM	0	58	15	0	13	1	0	0	0	0	0	0	0	**87**
8:00 PM	0	19	15	0	10	0	0	0	0	0	0	0	0	**44**
9:00 PM	0	11	4	0	1	0	0	0	0	0	0	0	0	**16**
10:00 PM	0	6	0	0	2	0	0	0	0	0	0	0	0	**8**
11:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
Total	**2**	**1,007**	**442**	**1**	**247**	**21**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1,721**
Percent	**0.1%**	**58.5%**	**25.7%**	**0.1%**	**14.4%**	**1.2%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Friday, September 23, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	3	2	0	1	0	0	0	0	0	0	0	0	**6**
6:00 AM	0	7	2	0	4	0	0	0	0	0	0	0	0	**13**
7:00 AM	0	21	8	0	6	0	0	0	0	0	0	0	0	**35**
8:00 AM	1	26	6	0	4	0	0	0	0	0	0	0	0	**37**
9:00 AM	0	46	8	0	8	0	0	0	0	0	0	0	0	**62**
10:00 AM	0	80	24	0	15	0	0	0	0	0	0	0	0	**119**
11:00 AM	0	90	18	0	7	0	0	0	0	0	0	0	0	**115**
12:00 PM	0	110	22	0	13	0	0	0	0	0	0	0	0	**145**
1:00 PM	1	96	26	0	14	0	0	0	0	0	0	0	0	**137**
2:00 PM	0	124	26	0	11	0	0	0	0	0	0	0	0	**161**
3:00 PM	0	126	23	0	10	0	0	0	1	0	0	0	0	**160**
4:00 PM	1	136	20	0	14	0	0	0	0	0	0	0	0	**171**
5:00 PM	0	106	24	0	9	0	0	0	0	0	0	0	0	**139**
6:00 PM	1	106	27	0	11	0	0	0	0	0	0	0	0	**145**
7:00 PM	0	71	14	0	4	0	0	0	0	0	0	0	0	**89**
8:00 PM	0	46	7	0	2	0	0	0	0	0	0	0	0	**55**
9:00 PM	0	32	4	0	8	0	0	0	0	0	0	0	0	**44**
10:00 PM	1	11	6	0	2	0	0	0	0	0	0	0	0	**20**
11:00 PM	0	3	1	0	0	0	0	0	0	0	0	0	0	**4**
Total	**5**	**1,241**	**269**	**0**	**143**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1,659**
Percent	**0.3%**	**74.8%**	**16.2%**	**0.0%**	**8.6%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Friday, September 23, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	3	1	0	1	0	0	0	0	0	0	0	0	**5**
6:00 AM	0	9	1	0	1	0	0	0	0	0	0	0	0	**11**
7:00 AM	1	15	8	0	5	2	0	0	0	0	0	0	0	**31**
8:00 AM	1	34	10	0	10	2	0	0	0	0	0	0	0	**57**
9:00 AM	0	47	19	0	13	2	0	0	0	0	0	0	0	**81**
10:00 AM	0	71	32	0	22	0	0	0	0	0	0	0	0	**125**
11:00 AM	0	89	46	0	19	2	0	0	0	0	0	0	0	**156**
12:00 PM	0	96	39	0	25	0	0	0	1	0	0	0	0	**161**
1:00 PM	2	103	40	0	24	1	0	0	0	0	0	0	0	**170**
2:00 PM	0	95	36	1	15	0	0	0	0	0	0	0	0	**147**
3:00 PM	1	114	45	0	27	0	0	0	0	0	0	0	0	**187**
4:00 PM	0	134	58	1	40	2	0	0	0	0	0	0	0	**235**
5:00 PM	1	117	41	0	24	0	0	0	0	0	0	0	0	**183**
6:00 PM	0	70	31	0	18	1	0	0	0	0	0	0	0	**120**
7:00 PM	0	57	22	0	19	0	0	0	0	0	0	0	0	**98**
8:00 PM	0	14	14	0	7	1	0	0	0	0	0	0	0	**36**
9:00 PM	0	10	5	0	7	1	0	0	0	0	0	0	0	**23**
10:00 PM	0	4	4	0	3	0	0	0	0	0	0	0	0	**11**
11:00 PM	0	4	1	0	1	0	0	0	0	0	0	0	0	**6**
Total	**6**	**1,087**	**453**	**2**	**282**	**14**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1,845**
Percent	**0.3%**	**58.9%**	**24.6%**	**0.1%**	**15.3%**	**0.8%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Total Study Average
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	4	1	0	2	0	0	0	0	0	0	0	0	**7**
6:00 AM	0	6	3	0	3	0	0	0	0	0	0	0	0	**12**
7:00 AM	0	14	5	0	5	0	0	0	0	0	0	0	0	**24**
8:00 AM	0	25	6	0	3	0	0	0	0	0	0	0	0	**34**
9:00 AM	0	41	12	0	7	0	0	0	0	0	0	0	0	**60**
10:00 AM	1	68	17	0	12	0	0	0	0	0	0	0	0	**98**
11:00 AM	0	88	20	0	12	0	0	0	0	0	0	0	0	**120**
12:00 PM	0	100	22	0	14	0	0	0	0	0	0	0	0	**136**
1:00 PM	1	102	27	0	14	0	0	0	0	0	0	0	0	**144**
2:00 PM	1	115	23	0	13	0	0	0	0	0	0	0	0	**152**
3:00 PM	1	120	28	0	14	0	0	0	0	0	0	0	0	**163**
4:00 PM	0	111	25	0	15	0	0	0	0	0	0	0	0	**151**
5:00 PM	1	102	23	0	13	0	0	0	0	0	0	0	0	**139**
6:00 PM	1	87	17	0	11	0	0	0	0	0	0	0	0	**116**
7:00 PM	0	72	14	0	8	0	0	0	0	0	0	0	0	**94**
8:00 PM	0	40	7	0	4	0	0	0	0	0	0	0	0	**51**
9:00 PM	0	21	4	0	4	0	0	0	0	0	0	0	0	**29**
10:00 PM	0	9	3	0	1	0	0	0	0	0	0	0	0	**13**
11:00 PM	0	3	1	0	0	0	0	0	0	0	0	0	0	**4**
Total	**6**	**1,131**	**258**	**0**	**155**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,550**
Percent	**0.4%**	**73.0%**	**16.6%**	**0.0%**	**10.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Total Study Average
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	2	0	0	1	0	0	0	0	0	0	0	0	**3**
6:00 AM	0	6	1	0	1	0	0	0	0	0	0	0	0	**8**
7:00 AM	0	15	4	0	4	1	0	0	0	0	0	0	0	**24**
8:00 AM	0	26	11	0	7	0	0	0	0	0	0	0	0	**44**
9:00 AM	0	47	22	0	12	1	0	0	0	0	0	0	0	**82**
10:00 AM	0	76	32	0	20	0	0	0	0	0	0	0	0	**128**
11:00 AM	0	88	36	0	19	2	0	0	0	0	0	0	0	**145**
12:00 PM	0	90	38	0	22	0	0	0	0	0	0	0	0	**150**
1:00 PM	1	92	40	0	24	0	0	0	0	0	0	0	0	**157**
2:00 PM	1	102	40	0	21	1	0	0	0	0	0	0	0	**165**
3:00 PM	0	98	39	0	22	0	0	0	0	0	0	0	0	**159**
4:00 PM	1	107	45	0	28	1	0	0	0	0	0	0	0	**182**
5:00 PM	0	92	35	0	23	0	0	0	0	0	0	0	0	**150**
6:00 PM	0	65	29	0	18	1	0	0	0	0	0	0	0	**113**
7:00 PM	0	47	17	0	11	1	0	0	0	0	0	0	0	**76**
8:00 PM	0	19	8	0	5	1	0	0	0	0	0	0	0	**33**
9:00 PM	0	9	2	0	2	0	0	0	0	0	0	0	0	**13**
10:00 PM	0	5	1	0	2	0	0	0	0	0	0	0	0	**8**
11:00 PM	0	2	1	0	1	0	0	0	0	0	0	0	0	**4**
Total	**3**	**990**	**401**	**0**	**243**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,646**
Percent	**0.2%**	**60.1%**	**24.4%**	**0.0%**	**14.8%**	**0.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

3-Day (Tuesday - Thursday) Average
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	6	0	0	2	0	0	0	0	0	0	0	0	**8**
6:00 AM	0	6	4	0	5	0	0	0	0	0	0	0	0	**15**
7:00 AM	0	18	6	0	6	0	0	0	0	0	0	0	0	**30**
8:00 AM	0	26	8	0	3	0	0	0	0	0	0	0	0	**37**
9:00 AM	0	43	14	0	6	0	0	0	0	0	0	0	0	**64**
10:00 AM	1	66	18	0	10	0	0	0	0	0	0	0	0	**95**
11:00 AM	1	87	20	0	15	0	0	0	0	0	0	0	0	**123**
12:00 PM	1	99	24	0	13	0	0	0	0	0	0	0	0	**137**
1:00 PM	1	93	28	0	15	1	0	0	0	0	0	0	0	**137**
2:00 PM	1	105	20	0	11	0	0	0	0	0	0	0	0	**137**
3:00 PM	0	114	25	0	13	0	0	0	0	0	0	0	0	**153**
4:00 PM	0	112	22	0	14	0	0	0	0	0	0	0	0	**148**
5:00 PM	1	105	23	0	13	0	0	0	0	0	0	0	0	**143**
6:00 PM	1	83	16	0	12	0	0	0	0	0	0	0	0	**111**
7:00 PM	0	78	15	0	8	0	0	0	0	0	0	0	0	**102**
8:00 PM	0	38	8	0	5	0	0	0	0	0	0	0	0	**52**
9:00 PM	0	22	5	0	3	0	0	0	0	0	0	0	0	**30**
10:00 PM	0	9	2	0	2	0	0	0	0	0	0	0	0	**12**
11:00 PM	0	3	1	0	0	0	0	0	0	0	0	0	0	**4**
Total	**8**	**1,115**	**261**	**0**	**156**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1,542**
Percent	**0.5%**	**72.3%**	**16.9%**	**0.0%**	**10.1%**	**0.1%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

3-Day (Tuesday - Thursday) Average
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	3	0	0	1	0	0	0	0	0	0	0	0	**5**
6:00 AM	0	8	1	0	1	0	0	0	0	0	0	0	0	**10**
7:00 AM	0	15	6	0	4	1	0	0	0	0	0	0	0	**27**
8:00 AM	0	28	13	0	6	0	0	0	0	0	0	0	0	**47**
9:00 AM	0	47	21	0	10	2	0	0	0	0	0	0	0	**80**
10:00 AM	1	74	33	0	18	1	0	0	0	0	0	0	0	**127**
11:00 AM	0	76	38	0	19	3	0	0	0	0	0	0	0	**136**
12:00 PM	0	92	39	0	20	0	0	0	0	0	0	0	0	**153**
1:00 PM	0	79	41	0	20	0	0	0	0	0	0	0	0	**141**
2:00 PM	1	105	36	0	19	1	0	0	0	0	0	0	0	**162**
3:00 PM	0	103	38	0	21	1	0	0	0	0	0	0	0	**163**
4:00 PM	1	111	44	0	26	1	0	0	0	0	0	0	0	**183**
5:00 PM	0	100	35	0	29	1	0	0	0	0	0	0	0	**165**
6:00 PM	0	71	32	0	21	2	0	0	0	0	0	0	0	**126**
7:00 PM	0	47	19	0	9	1	0	0	0	0	0	0	0	**76**
8:00 PM	0	17	9	0	4	0	0	0	0	0	0	0	0	**31**
9:00 PM	0	11	3	0	2	0	0	0	0	0	0	0	0	**16**
10:00 PM	0	4	0	0	3	0	0	0	0	0	0	0	0	**7**
11:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	**2**
Total	**4**	**996**	**410**	**1**	**234**	**14**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1,660**
Percent	**0.2%**	**60.0%**	**24.7%**	**0.1%**	**14.1%**	**0.8%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Vehicle Speed Report Summary

Location: E Meadows Dr S/O Midland Ave

Count Direction: Northbound / Southbound

Date Range: 9/17/2022 to 9/23/2022

Site Code: 14

	Speed Range (mph)																	Total
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
Study Total																		
Northbound	16	367	4,636	5,171	644	30	2	0	0	0	0	0	0	0	0	0	0	10,866
Percent	0.1%	3.4%	42.7%	47.6%	5.9%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Southbound	24	578	4,455	5,503	923	52	2	0	0	0	0	0	0	0	0	0	0	11,537
Percent	0.2%	5.0%	38.6%	47.7%	8.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	40	945	9,091	10,674	1,567	82	4	0	0	0	0	0	0	0	0	0	0	22,403
Percent	0.2%	4.2%	40.6%	47.6%	7.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%

Total Study Percentile Speed Summary			Total Study Speed Statistics		
Northbound			**Northbound**		
50th Percentile (Median)	20.2	mph	Mean (Average) Speed	20.3	mph
85th Percentile	23.4	mph	10 mph Pace	15.5 - 25.5	mph
95th Percentile	25.4	mph	Percent in Pace	90.5	%
Southbound			**Southbound**		
50th Percentile (Median)	20.5	mph	Mean (Average) Speed	20.5	mph
85th Percentile	23.8	mph	10 mph Pace	15.5 - 25.5	mph
95th Percentile	26.0	mph	Percent in Pace	86.5	%

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Saturday, September 17, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
1:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**5**
6:00 AM	0	0	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
7:00 AM	0	1	4	8	7	0	0	0	0	0	0	0	0	0	0	0	0	**20**
8:00 AM	0	2	14	14	1	0	0	0	0	0	0	0	0	0	0	0	0	**31**
9:00 AM	0	1	29	28	6	0	0	0	0	0	0	0	0	0	0	0	0	**64**
10:00 AM	0	0	46	44	7	0	0	0	0	0	0	0	0	0	0	0	0	**97**
11:00 AM	0	5	56	61	8	0	0	0	0	0	0	0	0	0	0	0	0	**130**
12:00 PM	0	8	66	65	9	0	0	0	0	0	0	0	0	0	0	0	0	**148**
1:00 PM	0	6	57	101	4	0	0	0	0	0	0	0	0	0	0	0	0	**168**
2:00 PM	0	3	95	82	11	1	0	0	0	0	0	0	0	0	0	0	0	**192**
3:00 PM	0	12	77	81	7	0	0	0	0	0	0	0	0	0	0	0	0	**177**
4:00 PM	0	3	60	85	9	0	0	0	0	0	0	0	0	0	0	0	0	**157**
5:00 PM	0	3	51	79	8	0	0	0	0	0	0	0	0	0	0	0	0	**141**
6:00 PM	0	5	61	45	4	0	1	0	0	0	0	0	0	0	0	0	0	**116**
7:00 PM	0	4	39	40	5	0	0	0	0	0	0	0	0	0	0	0	0	**88**
8:00 PM	0	1	17	17	5	0	0	0	0	0	0	0	0	0	0	0	0	**40**
9:00 PM	0	1	18	15	1	0	0	0	0	0	0	0	0	0	0	0	0	**35**
10:00 PM	0	2	8	5	1	0	0	0	0	0	0	0	0	0	0	0	0	**16**
11:00 PM	0	0	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	**6**
Total	**0**	**57**	**707**	**787**	**95**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,648**
Percent	**0.0%**	**3.5%**	**42.9%**	**47.8%**	**5.8%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	20.2	mph	Mean (Average) Speed	20.3	mph
85th Percentile	23.2	mph	10 mph Pace	15.0 - 25.0	mph
95th Percentile	25.3	mph	Percent in Pace	90.5	%

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Saturday, September 17, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
6:00 AM	0	0	2	3	1	1	0	0	0	0	0	0	0	0	0	0	0	**7**
7:00 AM	0	0	4	15	1	2	0	0	0	0	0	0	0	0	0	0	0	**22**
8:00 AM	0	0	10	15	6	1	0	0	0	0	0	0	0	0	0	0	0	**32**
9:00 AM	0	5	44	44	3	0	0	0	0	0	0	0	0	0	0	0	0	**96**
10:00 AM	0	10	71	73	10	0	0	0	0	0	0	0	0	0	0	0	0	**164**
11:00 AM	0	5	61	78	18	0	0	0	0	0	0	0	0	0	0	0	0	**162**
12:00 PM	0	4	75	73	10	0	0	0	0	0	0	0	0	0	0	0	0	**162**
1:00 PM	0	12	90	86	16	0	0	0	0	0	0	0	0	0	0	0	0	**204**
2:00 PM	0	16	75	88	10	0	0	0	0	0	0	0	0	0	0	0	0	**189**
3:00 PM	1	5	71	60	8	2	0	0	0	0	0	0	0	0	0	0	0	**147**
4:00 PM	1	4	64	73	16	1	0	0	0	0	0	0	0	0	0	0	0	**159**
5:00 PM	0	0	47	66	8	1	0	0	0	0	0	0	0	0	0	0	0	**122**
6:00 PM	0	1	38	43	7	0	0	0	0	0	0	0	0	0	0	0	0	**89**
7:00 PM	0	7	29	32	7	0	0	0	0	0	0	0	0	0	0	0	0	**75**
8:00 PM	0	1	18	18	2	0	0	0	0	0	0	0	0	0	0	0	0	**39**
9:00 PM	0	0	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**7**
10:00 PM	0	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
11:00 PM	0	0	1	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**6**
Total	**2**	**71**	**707**	**780**	**127**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,696**
Percent	**0.1%**	**4.2%**	**41.7%**	**46.0%**	**7.5%**	**0.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	20.4	mph	Mean (Average) Speed	20.4	mph
85th Percentile	23.6	mph	10 mph Pace	15.3 - 25.3	mph
95th Percentile	25.9	mph	Percent in Pace	88.15	%

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Sunday, September 18, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**4**
6:00 AM	0	1	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**7**
7:00 AM	0	0	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**5**
8:00 AM	0	1	5	9	2	0	0	0	0	0	0	0	0	0	0	0	0	**17**
9:00 AM	0	0	19	25	2	0	0	0	0	0	0	0	0	0	0	0	0	**46**
10:00 AM	0	4	27	48	9	0	0	0	0	0	0	0	0	0	0	0	0	**88**
11:00 AM	0	5	43	55	6	1	0	0	0	0	0	0	0	0	0	0	0	**110**
12:00 PM	0	1	42	63	3	0	0	0	0	0	0	0	0	0	0	0	0	**109**
1:00 PM	1	3	64	80	8	1	0	0	0	0	0	0	0	0	0	0	0	**157**
2:00 PM	0	3	68	77	7	0	0	0	0	0	0	0	0	0	0	0	0	**155**
3:00 PM	0	5	80	80	11	0	0	0	0	0	0	0	0	0	0	0	0	**176**
4:00 PM	0	2	66	74	11	1	0	0	0	0	0	0	0	0	0	0	0	**154**
5:00 PM	0	3	60	69	9	0	0	0	0	0	0	0	0	0	0	0	0	**141**
6:00 PM	0	6	50	44	2	1	0	0	0	0	0	0	0	0	0	0	0	**103**
7:00 PM	0	3	31	37	2	0	0	0	0	0	0	0	0	0	0	0	0	**73**
8:00 PM	0	5	24	13	2	0	0	0	0	0	0	0	0	0	0	0	0	**44**
9:00 PM	0	0	10	8	1	0	0	0	0	0	0	0	0	0	0	0	0	**19**
10:00 PM	0	0	1	6	0	1	0	0	0	0	0	0	0	0	0	0	0	**8**
11:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Total	**1**	**42**	**601**	**696**	**78**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,423**
Percent	**0.1%**	**3.0%**	**42.2%**	**48.9%**	**5.5%**	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	20.4	mph	Mean (Average) Speed	20.4	mph
85th Percentile	23.4	mph	10 mph Pace	15.4 - 25.4	mph
95th Percentile	25.3	mph	Percent in Pace	91.4	%

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Sunday, September 18, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
6:00 AM	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**3**
7:00 AM	0	0	5	4	3	0	0	0	0	0	0	0	0	0	0	0	0	**12**
8:00 AM	0	0	11	8	3	0	0	0	0	0	0	0	0	0	0	0	0	**22**
9:00 AM	0	0	25	30	3	1	0	0	0	0	0	0	0	0	0	0	0	**59**
10:00 AM	0	6	31	60	11	0	0	0	0	0	0	0	0	0	0	0	0	**108**
11:00 AM	0	13	61	66	6	0	0	0	0	0	0	0	0	0	0	0	0	**146**
12:00 PM	0	4	50	62	7	0	0	0	0	0	0	0	0	0	0	0	0	**123**
1:00 PM	0	9	64	65	18	0	0	0	0	0	0	0	0	0	0	0	0	**156**
2:00 PM	1	11	80	72	12	0	0	0	0	0	0	0	0	0	0	0	0	**176**
3:00 PM	1	4	61	63	6	0	0	0	0	0	0	0	0	0	0	0	0	**135**
4:00 PM	0	2	56	55	9	0	0	0	0	0	0	0	0	0	0	0	0	**122**
5:00 PM	0	2	31	54	4	0	0	0	0	0	0	0	0	0	0	0	0	**91**
6:00 PM	0	5	28	38	5	1	0	0	0	0	0	0	0	0	0	0	0	**77**
7:00 PM	0	1	27	29	6	0	0	0	0	0	0	0	0	0	0	0	0	**63**
8:00 PM	0	3	8	20	1	0	0	0	0	0	0	0	0	0	0	0	0	**32**
9:00 PM	0	2	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
10:00 PM	0	1	1	4	1	1	0	0	0	0	0	0	0	0	0	0	0	**8**
11:00 PM	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**4**
Total	**2**	**63**	**550**	**638**	**97**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,353**
Percent	**0.1%**	**4.7%**	**40.7%**	**47.2%**	**7.2%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	20.4	mph	Mean (Average) Speed	20.4	mph
85th Percentile	23.8	mph	10 mph Pace	15.7 - 25.7	mph
95th Percentile	25.9	mph	Percent in Pace	87.8	%

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Monday, September 19, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**4**
6:00 AM	0	0	4	7	2	0	0	0	0	0	0	0	0	0	0	0	0	**13**
7:00 AM	0	2	4	12	2	0	0	0	0	0	0	0	0	0	0	0	0	**20**
8:00 AM	0	2	12	22	2	2	0	0	0	0	0	0	0	0	0	0	0	**40**
9:00 AM	0	0	16	28	9	0	0	0	0	0	0	0	0	0	0	0	0	**53**
10:00 AM	0	1	37	56	1	0	0	0	0	0	0	0	0	0	0	0	0	**95**
11:00 AM	1	1	51	62	10	0	0	0	0	0	0	0	0	0	0	0	0	**125**
12:00 PM	0	6	69	58	10	0	0	0	0	0	0	0	0	0	0	0	0	**143**
1:00 PM	0	1	62	65	9	1	0	0	0	0	0	0	0	0	0	0	0	**138**
2:00 PM	0	3	69	68	4	0	0	0	0	0	0	0	0	0	0	0	0	**144**
3:00 PM	2	9	69	72	10	0	0	0	0	0	0	0	0	0	0	0	0	**162**
4:00 PM	1	5	56	63	8	0	1	0	0	0	0	0	0	0	0	0	0	**134**
5:00 PM	0	1	54	60	8	0	0	0	0	0	0	0	0	0	0	0	0	**123**
6:00 PM	0	2	68	35	12	0	0	0	0	0	0	0	0	0	0	0	0	**117**
7:00 PM	0	4	54	41	2	0	0	0	0	0	0	0	0	0	0	0	0	**101**
8:00 PM	0	6	34	20	2	0	0	0	0	0	0	0	0	0	0	0	0	**62**
9:00 PM	0	1	12	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**18**
10:00 PM	0	0	6	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**11**
11:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**4**	**44**	**680**	**684**	**93**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,509**
Percent	**0.3%**	**2.9%**	**45.1%**	**45.3%**	**6.2%**	**0.2%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	20.1	mph	Mean (Average) Speed	20.3	mph
85th Percentile	23.5	mph	10 mph Pace	15.5 - 25.5	mph
95th Percentile	25.3	mph	Percent in Pace	91.3	%

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Monday, September 19, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
6:00 AM	0	1	1	4	2	1	0	0	0	0	0	0	0	0	0	0	0	**9**
7:00 AM	0	1	4	14	5	1	1	0	0	0	0	0	0	0	0	0	0	**26**
8:00 AM	0	2	18	26	13	0	0	0	0	0	0	0	0	0	0	0	0	**59**
9:00 AM	0	3	34	49	8	1	0	0	0	0	0	0	0	0	0	0	0	**95**
10:00 AM	0	8	32	60	20	0	0	0	0	0	0	0	0	0	0	0	0	**120**
11:00 AM	0	4	41	77	15	1	0	0	0	0	0	0	0	0	0	0	0	**138**
12:00 PM	1	14	53	68	17	0	0	0	0	0	0	0	0	0	0	0	0	**153**
1:00 PM	1	2	54	68	13	0	0	0	0	0	0	0	0	0	0	0	0	**138**
2:00 PM	0	15	62	65	13	0	0	0	0	0	0	0	0	0	0	0	0	**155**
3:00 PM	0	12	54	76	14	1	0	0	0	0	0	0	0	0	0	0	0	**157**
4:00 PM	0	6	72	110	13	0	0	0	0	0	0	0	0	0	0	0	0	**201**
5:00 PM	0	8	50	89	14	1	0	0	0	0	0	0	0	0	0	0	0	**162**
6:00 PM	2	8	52	56	12	0	0	0	0	0	0	0	0	0	0	0	0	**130**
7:00 PM	1	2	26	36	6	0	0	0	0	0	0	0	0	0	0	0	0	**71**
8:00 PM	0	0	9	16	3	0	0	0	0	0	0	0	0	0	0	0	0	**28**
9:00 PM	0	0	4	2	4	1	0	0	0	0	0	0	0	0	0	0	0	**11**
10:00 PM	0	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**5**
11:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**6**	**86**	**570**	**821**	**173**	**7**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,664**
Percent	**0.4%**	**5.2%**	**34.3%**	**49.3%**	**10.4%**	**0.4%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	20.8	mph	Mean (Average) Speed	20.8	mph
85th Percentile	24.3	mph	10 mph Pace	15.8 - 25.8	mph
95th Percentile	26.5	mph	Percent in Pace	84.74	%

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Tuesday, September 20, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	0	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**6**
6:00 AM	0	0	1	11	1	0	0	0	0	0	0	0	0	0	0	0	0	**13**
7:00 AM	0	0	6	15	7	0	0	0	0	0	0	0	0	0	0	0	0	**28**
8:00 AM	0	0	12	20	3	0	0	0	0	0	0	0	0	0	0	0	0	**35**
9:00 AM	0	0	21	31	7	0	0	0	0	0	0	0	0	0	0	0	0	**59**
10:00 AM	1	5	40	44	6	0	0	0	0	0	0	0	0	0	0	0	0	**96**
11:00 AM	2	6	58	48	6	1	0	0	0	0	0	0	0	0	0	0	0	**121**
12:00 PM	0	2	75	54	6	1	0	0	0	0	0	0	0	0	0	0	0	**138**
1:00 PM	1	1	57	63	8	0	0	0	0	0	0	0	0	0	0	0	0	**130**
2:00 PM	0	4	61	64	4	0	0	0	0	0	0	0	0	0	0	0	0	**133**
3:00 PM	0	1	60	75	4	0	0	0	0	0	0	0	0	0	0	0	0	**140**
4:00 PM	0	3	65	57	6	1	0	0	0	0	0	0	0	0	0	0	0	**132**
5:00 PM	0	1	69	59	6	0	0	0	0	0	0	0	0	0	0	0	0	**135**
6:00 PM	0	8	39	47	8	0	0	0	0	0	0	0	0	0	0	0	0	**102**
7:00 PM	0	0	47	44	2	0	0	0	0	0	0	0	0	0	0	0	0	**93**
8:00 PM	0	2	21	14	1	0	0	0	0	0	0	0	0	0	0	0	0	**38**
9:00 PM	0	4	11	9	4	0	0	0	0	0	0	0	0	0	0	0	0	**28**
10:00 PM	0	1	2	9	1	0	0	0	0	0	0	0	0	0	0	0	0	**13**
11:00 PM	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
Total	**4**	**40**	**649**	**670**	**81**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,447**
Percent	**0.3%**	**2.8%**	**44.9%**	**46.3%**	**5.6%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	20.2	mph	Mean (Average) Speed	20.2	mph
85th Percentile	23.3	mph	10 mph Pace	15.2 - 25.2	mph
95th Percentile	25.3	mph	Percent in Pace	91.3	%

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Tuesday, September 20, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**5**
6:00 AM	0	1	3	5	2	0	0	0	0	0	0	0	0	0	0	0	0	**11**
7:00 AM	0	2	8	15	2	0	0	0	0	0	0	0	0	0	0	0	0	**27**
8:00 AM	1	6	11	28	7	0	0	0	0	0	0	0	0	0	0	0	0	**53**
9:00 AM	0	3	21	37	11	1	0	0	0	0	0	0	0	0	0	0	0	**73**
10:00 AM	0	7	53	58	6	0	0	0	0	0	0	0	0	0	0	0	0	**124**
11:00 AM	0	11	52	59	9	0	0	0	0	0	0	0	0	0	0	0	0	**131**
12:00 PM	0	6	66	70	10	0	0	0	0	0	0	0	0	0	0	0	0	**152**
1:00 PM	2	12	50	74	7	1	0	0	0	0	0	0	0	0	0	0	0	**146**
2:00 PM	0	8	57	73	11	2	0	0	0	0	0	0	0	0	0	0	0	**151**
3:00 PM	0	10	57	81	10	0	0	0	0	0	0	0	0	0	0	0	0	**158**
4:00 PM	0	8	74	83	14	1	0	0	0	0	0	0	0	0	0	0	0	**180**
5:00 PM	0	8	56	72	10	1	0	0	0	0	0	0	0	0	0	0	0	**147**
6:00 PM	0	5	29	68	10	1	0	0	0	0	0	0	0	0	0	0	0	**113**
7:00 PM	0	6	24	31	5	0	0	0	0	0	0	0	0	0	0	0	0	**66**
8:00 PM	0	0	9	11	3	1	0	0	0	0	0	0	0	0	0	0	0	**24**
9:00 PM	0	1	8	5	1	0	0	0	0	0	0	0	0	0	0	0	0	**15**
10:00 PM	0	1	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	**6**
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**3**	**95**	**581**	**777**	**121**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,585**
Percent	**0.2%**	**6.0%**	**36.7%**	**49.0%**	**7.6%**	**0.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	20.6	mph	Mean (Average) Speed	20.5	mph
85th Percentile	23.8	mph	10 mph Pace	15.5 - 25.5	mph
95th Percentile	25.9	mph	Percent in Pace	85.74	%

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Wednesday, September 21, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	0	1	5	3	1	0	0	0	0	0	0	0	0	0	0	0	**10**
6:00 AM	0	0	5	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**12**
7:00 AM	0	2	10	15	7	0	0	0	0	0	0	0	0	0	0	0	0	**34**
8:00 AM	0	1	17	19	5	0	0	0	0	0	0	0	0	0	0	0	0	**42**
9:00 AM	0	1	29	30	4	0	0	0	0	0	0	0	0	0	0	0	0	**64**
10:00 AM	0	2	57	48	4	0	0	0	0	0	0	0	0	0	0	0	0	**111**
11:00 AM	0	4	46	73	10	0	0	0	0	0	0	0	0	0	0	0	0	**133**
12:00 PM	0	4	56	65	9	0	0	0	0	0	0	0	0	0	0	0	0	**134**
1:00 PM	0	7	74	67	5	0	0	0	0	0	0	0	0	0	0	0	0	**153**
2:00 PM	0	3	68	58	9	0	0	0	0	0	0	0	0	0	0	0	0	**138**
3:00 PM	1	11	84	64	5	0	0	0	0	0	0	0	0	0	0	0	0	**165**
4:00 PM	0	3	65	59	9	1	0	0	0	0	0	0	0	0	0	0	0	**137**
5:00 PM	0	6	57	65	7	1	0	0	0	0	0	0	0	0	0	0	0	**136**
6:00 PM	0	2	55	48	9	0	0	0	0	0	0	0	0	0	0	0	0	**114**
7:00 PM	0	3	46	36	4	1	0	0	0	0	0	0	0	0	0	0	0	**90**
8:00 PM	0	3	24	20	1	0	0	0	0	0	0	0	0	0	0	0	0	**48**
9:00 PM	0	2	14	15	0	0	0	0	0	0	0	0	0	0	0	0	0	**31**
10:00 PM	0	0	3	6	3	0	0	0	0	0	0	0	0	0	0	0	0	**12**
11:00 PM	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
Total	**1**	**54**	**715**	**705**	**94**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,573**
Percent	**0.1%**	**3.4%**	**45.5%**	**44.8%**	**6.0%**	**0.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	20.0	mph	Mean (Average) Speed	20.2	mph
85th Percentile	23.2	mph	10 mph Pace	15.4 - 25.4	mph
95th Percentile	25.3	mph	Percent in Pace	90.7	%

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Wednesday, September 21, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	1	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
6:00 AM	0	1	5	6	1	0	0	0	0	0	0	0	0	0	0	0	0	**13**
7:00 AM	0	0	5	10	9	0	0	0	0	0	0	0	0	0	0	0	0	**24**
8:00 AM	0	3	10	21	9	0	0	0	0	0	0	0	0	0	0	0	0	**43**
9:00 AM	0	7	37	29	7	0	0	0	0	0	0	0	0	0	0	0	0	**80**
10:00 AM	0	7	66	56	6	1	0	0	0	0	0	0	0	0	0	0	0	**136**
11:00 AM	1	6	67	62	7	0	0	0	0	0	0	0	0	0	0	0	0	**143**
12:00 PM	0	12	61	79	5	1	1	0	0	0	0	0	0	0	0	0	0	**159**
1:00 PM	0	10	46	78	7	1	0	0	0	0	0	0	0	0	0	0	0	**142**
2:00 PM	0	13	79	79	10	0	0	0	0	0	0	0	0	0	0	0	0	**181**
3:00 PM	0	10	59	65	4	1	0	0	0	0	0	0	0	0	0	0	0	**139**
4:00 PM	0	7	73	83	14	1	0	0	0	0	0	0	0	0	0	0	0	**178**
5:00 PM	0	13	57	77	17	0	0	0	0	0	0	0	0	0	0	0	0	**164**
6:00 PM	0	2	59	65	11	0	0	0	0	0	0	0	0	0	0	0	0	**137**
7:00 PM	0	6	29	35	4	0	0	0	0	0	0	0	0	0	0	0	0	**74**
8:00 PM	0	1	12	10	1	0	0	0	0	0	0	0	0	0	0	0	0	**24**
9:00 PM	0	2	9	2	3	0	0	0	0	0	0	0	0	0	0	0	0	**16**
10:00 PM	0	1	1	5	1	0	0	0	0	0	0	0	0	0	0	0	0	**8**
11:00 PM	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
Total	**1**	**102**	**681**	**767**	**116**	**5**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,673**
Percent	**0.1%**	**6.1%**	**40.7%**	**45.8%**	**6.9%**	**0.3%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	20.2	mph	Mean (Average) Speed	20.2	mph
85th Percentile	23.5	mph	10 mph Pace	15.4 - 25.4	mph
95th Percentile	25.6	mph	Percent in Pace	86.91	%

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Thursday, September 22, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	0	2	5	2	0	0	0	0	0	0	0	0	0	0	0	0	**9**
6:00 AM	0	0	5	13	2	0	0	0	0	0	0	0	0	0	0	0	0	**20**
7:00 AM	0	2	6	15	3	1	0	0	0	0	0	0	0	0	0	0	0	**27**
8:00 AM	0	2	13	16	4	0	0	0	0	0	0	0	0	0	0	0	0	**35**
9:00 AM	0	5	37	20	6	0	0	0	0	0	0	0	0	0	0	0	0	**68**
10:00 AM	0	5	25	45	4	0	0	0	0	0	0	0	0	0	0	0	0	**79**
11:00 AM	0	5	42	62	5	0	0	0	0	0	0	0	0	0	0	0	0	**114**
12:00 PM	0	6	63	61	7	1	0	0	0	0	0	0	0	0	0	0	0	**138**
1:00 PM	0	6	66	46	9	2	0	0	0	0	0	0	0	0	0	0	0	**129**
2:00 PM	0	4	60	69	6	0	0	0	0	0	0	0	0	0	0	0	0	**139**
3:00 PM	1	3	80	61	9	1	0	0	0	0	0	0	0	0	0	0	0	**155**
4:00 PM	0	12	70	80	12	0	0	0	0	0	0	0	0	0	0	0	0	**174**
5:00 PM	1	6	67	75	7	1	0	0	0	0	0	0	0	0	0	0	0	**157**
6:00 PM	0	4	55	54	4	1	0	0	0	0	0	0	0	0	0	0	0	**118**
7:00 PM	0	6	51	63	1	1	0	0	0	0	0	0	0	0	0	0	0	**122**
8:00 PM	0	6	31	28	4	1	0	0	0	0	0	0	0	0	0	0	0	**70**
9:00 PM	1	1	11	18	0	0	0	0	0	0	0	0	0	0	0	0	0	**31**
10:00 PM	0	1	0	8	3	0	0	0	0	0	0	0	0	0	0	0	0	**12**
11:00 PM	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
Total	**3**	**75**	**685**	**747**	**88**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,607**
Percent	**0.2%**	**4.7%**	**42.6%**	**46.5%**	**5.5%**	**0.6%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	20.1	mph	Mean (Average) Speed	20.2	mph
85th Percentile	23.3	mph	10 mph Pace	15.3 - 25.3	mph
95th Percentile	25.3	mph	Percent in Pace	89.4	%

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Thursday, September 22, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**4**
6:00 AM	0	1	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
7:00 AM	0	2	8	16	3	0	0	0	0	0	0	0	0	0	0	0	0	**29**
8:00 AM	0	3	12	24	6	1	0	0	0	0	0	0	0	0	0	0	0	**46**
9:00 AM	0	3	38	43	3	0	0	0	0	0	0	0	0	0	0	0	0	**87**
10:00 AM	0	8	46	54	13	1	0	0	0	0	0	0	0	0	0	0	0	**122**
11:00 AM	2	14	56	51	11	0	0	0	0	0	0	0	0	0	0	0	0	**134**
12:00 PM	0	10	71	61	4	1	0	0	0	0	0	0	0	0	0	0	0	**147**
1:00 PM	0	6	50	75	4	0	0	0	0	0	0	0	0	0	0	0	0	**135**
2:00 PM	5	14	64	57	14	1	0	0	0	0	0	0	0	0	0	0	0	**155**
3:00 PM	0	5	83	88	16	1	0	0	0	0	0	0	0	0	0	0	0	**193**
4:00 PM	0	12	68	91	18	1	0	0	0	0	0	0	0	0	0	0	0	**190**
5:00 PM	0	0	55	106	21	1	0	0	0	0	0	0	0	0	0	0	0	**183**
6:00 PM	0	6	50	63	9	1	0	0	0	0	0	0	0	0	0	0	0	**129**
7:00 PM	0	8	35	39	4	1	0	0	0	0	0	0	0	0	0	0	0	**87**
8:00 PM	0	1	21	18	3	1	0	0	0	0	0	0	0	0	0	0	0	**44**
9:00 PM	0	0	3	10	3	0	0	0	0	0	0	0	0	0	0	0	0	**16**
10:00 PM	0	0	1	4	2	1	0	0	0	0	0	0	0	0	0	0	0	**8**
11:00 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Total	**7**	**93**	**666**	**808**	**136**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,721**
Percent	**0.4%**	**5.4%**	**38.7%**	**46.9%**	**7.9%**	**0.6%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	20.5	mph	Mean (Average) Speed	20.4	mph
85th Percentile	23.8	mph	10 mph Pace	15.0 - 25.0	mph
95th Percentile	25.9	mph	Percent in Pace	85.65	%

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Friday, September 23, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	0	1	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**6**
6:00 AM	0	1	2	10	0	0	0	0	0	0	0	0	0	0	0	0	0	**13**
7:00 AM	0	0	15	13	7	0	0	0	0	0	0	0	0	0	0	0	0	**35**
8:00 AM	0	1	12	19	4	1	0	0	0	0	0	0	0	0	0	0	0	**37**
9:00 AM	0	1	20	35	6	0	0	0	0	0	0	0	0	0	0	0	0	**62**
10:00 AM	0	7	49	52	10	1	0	0	0	0	0	0	0	0	0	0	0	**119**
11:00 AM	0	3	44	60	8	0	0	0	0	0	0	0	0	0	0	0	0	**115**
12:00 PM	1	3	44	82	14	1	0	0	0	0	0	0	0	0	0	0	0	**145**
1:00 PM	1	5	53	73	5	0	0	0	0	0	0	0	0	0	0	0	0	**137**
2:00 PM	0	8	62	84	7	0	0	0	0	0	0	0	0	0	0	0	0	**161**
3:00 PM	0	4	42	100	13	1	0	0	0	0	0	0	0	0	0	0	0	**160**
4:00 PM	0	0	62	100	9	0	0	0	0	0	0	0	0	0	0	0	0	**171**
5:00 PM	1	3	40	86	9	0	0	0	0	0	0	0	0	0	0	0	0	**139**
6:00 PM	0	8	56	72	9	0	0	0	0	0	0	0	0	0	0	0	0	**145**
7:00 PM	0	5	38	39	6	1	0	0	0	0	0	0	0	0	0	0	0	**89**
8:00 PM	0	1	29	23	2	0	0	0	0	0	0	0	0	0	0	0	0	**55**
9:00 PM	0	3	24	15	2	0	0	0	0	0	0	0	0	0	0	0	0	**44**
10:00 PM	0	1	4	12	3	0	0	0	0	0	0	0	0	0	0	0	0	**20**
11:00 PM	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
Total	**3**	**55**	**599**	**882**	**115**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,659**
Percent	**0.2%**	**3.3%**	**36.1%**	**53.2%**	**6.9%**	**0.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	20.8	mph	Mean (Average) Speed	20.7	mph
85th Percentile	23.7	mph	10 mph Pace	15.8 - 25.8	mph
95th Percentile	25.6	mph	Percent in Pace	90.7	%

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Friday, September 23, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	1	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
6:00 AM	0	0	6	2	2	1	0	0	0	0	0	0	0	0	0	0	0	**11**
7:00 AM	0	2	6	16	5	2	0	0	0	0	0	0	0	0	0	0	0	**31**
8:00 AM	0	2	13	29	12	1	0	0	0	0	0	0	0	0	0	0	0	**57**
9:00 AM	0	2	25	49	5	0	0	0	0	0	0	0	0	0	0	0	0	**81**
10:00 AM	0	2	50	64	9	0	0	0	0	0	0	0	0	0	0	0	0	**125**
11:00 AM	0	7	55	83	10	1	0	0	0	0	0	0	0	0	0	0	0	**156**
12:00 PM	0	4	65	75	17	0	0	0	0	0	0	0	0	0	0	0	0	**161**
1:00 PM	0	9	74	74	13	0	0	0	0	0	0	0	0	0	0	0	0	**170**
2:00 PM	1	7	59	66	14	0	0	0	0	0	0	0	0	0	0	0	0	**147**
3:00 PM	1	9	94	71	12	0	0	0	0	0	0	0	0	0	0	0	0	**187**
4:00 PM	0	13	90	115	15	2	0	0	0	0	0	0	0	0	0	0	0	**235**
5:00 PM	0	4	48	114	16	1	0	0	0	0	0	0	0	0	0	0	0	**183**
6:00 PM	0	5	46	64	5	0	0	0	0	0	0	0	0	0	0	0	0	**120**
7:00 PM	0	0	36	52	9	1	0	0	0	0	0	0	0	0	0	0	0	**98**
8:00 PM	0	0	13	17	6	0	0	0	0	0	0	0	0	0	0	0	0	**36**
9:00 PM	0	2	7	13	1	0	0	0	0	0	0	0	0	0	0	0	0	**23**
10:00 PM	0	0	6	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**11**
11:00 PM	0	0	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**6**
Total	**3**	**68**	**700**	**912**	**153**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,845**
Percent	**0.2%**	**3.7%**	**37.9%**	**49.4%**	**8.3%**	**0.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	20.7	mph	Mean (Average) Speed	20.7	mph
85th Percentile	24.0	mph	10 mph Pace	16.0 - 26.0	mph
95th Percentile	26.0	mph	Percent in Pace	87.75	%

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Total Study Average
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**5**
6:00 AM	0	0	4	7	1	0	0	0	0	0	0	0	0	0	0	0	0	**12**
7:00 AM	0	1	7	11	5	0	0	0	0	0	0	0	0	0	0	0	0	**24**
8:00 AM	0	1	12	17	3	0	0	0	0	0	0	0	0	0	0	0	0	**33**
9:00 AM	0	1	24	28	6	0	0	0	0	0	0	0	0	0	0	0	0	**59**
10:00 AM	0	3	40	48	6	0	0	0	0	0	0	0	0	0	0	0	0	**97**
11:00 AM	0	4	49	60	8	0	0	0	0	0	0	0	0	0	0	0	0	**121**
12:00 PM	0	4	59	64	8	0	0	0	0	0	0	0	0	0	0	0	0	**135**
1:00 PM	0	4	62	71	7	1	0	0	0	0	0	0	0	0	0	0	0	**145**
2:00 PM	0	4	69	72	7	0	0	0	0	0	0	0	0	0	0	0	0	**152**
3:00 PM	1	6	70	76	8	0	0	0	0	0	0	0	0	0	0	0	0	**161**
4:00 PM	0	4	63	74	9	0	0	0	0	0	0	0	0	0	0	0	0	**150**
5:00 PM	0	3	57	70	8	0	0	0	0	0	0	0	0	0	0	0	0	**138**
6:00 PM	0	5	55	49	7	0	0	0	0	0	0	0	0	0	0	0	0	**116**
7:00 PM	0	4	44	43	3	0	0	0	0	0	0	0	0	0	0	0	0	**94**
8:00 PM	0	3	26	19	2	0	0	0	0	0	0	0	0	0	0	0	0	**50**
9:00 PM	0	2	14	12	1	0	0	0	0	0	0	0	0	0	0	0	0	**29**
10:00 PM	0	1	3	7	2	0	0	0	0	0	0	0	0	0	0	0	0	**13**
11:00 PM	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
Total	**1**	**50**	**661**	**736**	**92**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,541**
Percent	**0.1%**	**3.2%**	**42.9%**	**47.8%**	**6.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	20.2	mph	Mean (Average) Speed	20.3	mph
85th Percentile	23.4	mph	10 mph Pace	15.5 - 25.5	mph
95th Percentile	25.4	mph	Percent in Pace	90.5	%

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 14

Total Study Average
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
6:00 AM	0	1	3	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**9**
7:00 AM	0	1	6	13	4	1	0	0	0	0	0	0	0	0	0	0	0	**25**
8:00 AM	0	2	12	22	8	0	0	0	0	0	0	0	0	0	0	0	0	**44**
9:00 AM	0	3	32	40	6	0	0	0	0	0	0	0	0	0	0	0	0	**81**
10:00 AM	0	7	50	61	11	0	0	0	0	0	0	0	0	0	0	0	0	**129**
11:00 AM	0	9	56	68	11	0	0	0	0	0	0	0	0	0	0	0	0	**144**
12:00 PM	0	8	63	70	10	0	0	0	0	0	0	0	0	0	0	0	0	**151**
1:00 PM	0	9	61	74	11	0	0	0	0	0	0	0	0	0	0	0	0	**155**
2:00 PM	1	12	68	71	12	0	0	0	0	0	0	0	0	0	0	0	0	**164**
3:00 PM	0	8	68	72	10	1	0	0	0	0	0	0	0	0	0	0	0	**159**
4:00 PM	0	7	71	87	14	1	0	0	0	0	0	0	0	0	0	0	0	**180**
5:00 PM	0	5	49	83	13	1	0	0	0	0	0	0	0	0	0	0	0	**151**
6:00 PM	0	5	43	57	8	0	0	0	0	0	0	0	0	0	0	0	0	**113**
7:00 PM	0	4	29	36	6	0	0	0	0	0	0	0	0	0	0	0	0	**75**
8:00 PM	0	1	13	16	3	0	0	0	0	0	0	0	0	0	0	0	0	**33**
9:00 PM	0	1	6	5	2	0	0	0	0	0	0	0	0	0	0	0	0	**14**
10:00 PM	0	1	2	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**8**
11:00 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Total	**1**	**84**	**635**	**786**	**131**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,641**
Percent	**0.1%**	**5.1%**	**38.7%**	**47.9%**	**8.0%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	20.5	mph	Mean (Average) Speed	20.5	mph
85th Percentile	23.8	mph	10 mph Pace	15.5 - 25.5	mph
95th Percentile	26.0	mph	Percent in Pace	86.5	%

Location: E Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 - 9/23/2022
Site Code: 14

	Saturday			Sunday			Monday			Tuesday			Wednesday			Thursday			Friday					
	9/17/2022			9/18/2022			9/19/2022			9/20/2022			9/21/2022			9/22/2022			9/23/2022			Mid-Week Average		
Time	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total
12:00 AM	4	2	6	0	1	1	2	0	2	1	1	2	3	2	5	0	1	1	1	1	2	1	1	3
1:00 AM	1	2	3	3	2	5	1	0	1	1	1	2	0	0	0	2	0	2	1	0	1	1	0	1
2:00 AM	1	1	2	0	1	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
3:00 AM	0	1	1	0	2	2	0	1	1	0	1	1	0	1	1	2	1	3	0	0	0	1	1	2
4:00 AM	2	0	2	2	0	2	2	1	3	1	0	1	2	0	2	1	1	2	0	1	1	1	0	2
5:00 AM	5	2	7	4	1	5	4	3	7	6	5	11	10	6	16	9	4	13	6	5	11	8	5	13
6:00 AM	9	7	16	7	3	10	13	9	22	13	11	24	12	13	25	20	7	27	13	11	24	15	10	25
7:00 AM	20	22	42	5	12	17	20	26	46	28	27	55	34	24	58	27	29	56	35	31	66	30	27	56
8:00 AM	31	32	63	17	22	39	40	59	99	35	53	88	42	43	85	35	46	81	37	57	94	37	47	85
9:00 AM	64	96	160	46	59	105	53	95	148	59	73	132	64	80	144	68	87	155	62	81	143	64	80	144
10:00 AM	97	164	261	88	108	196	95	120	215	96	124	220	111	136	247	79	122	201	119	125	244	95	127	223
11:00 AM	130	162	292	110	146	256	125	138	263	121	131	252	133	143	276	114	134	248	115	156	271	123	136	259
12:00 PM	148	162	310	109	123	232	143	153	296	138	152	290	134	159	293	138	147	285	145	161	306	137	153	289
1:00 PM	168	204	372	157	156	313	138	138	276	130	146	276	153	142	295	129	135	264	137	170	307	137	141	278
2:00 PM	192	189	381	155	176	331	144	155	299	133	151	284	138	181	319	139	155	294	161	147	308	137	162	299
3:00 PM	177	147	324	176	135	311	162	157	319	140	158	298	165	139	304	155	193	348	160	187	347	153	163	317
4:00 PM	157	159	316	154	122	276	134	201	335	132	180	312	137	178	315	174	190	364	171	235	406	148	183	330
5:00 PM	141	122	263	141	91	232	123	162	285	135	147	282	136	164	300	157	183	340	139	183	322	143	165	307
6:00 PM	116	89	205	103	77	180	117	130	247	102	113	215	114	137	251	118	129	247	145	120	265	111	126	238
7:00 PM	88	75	163	73	63	136	101	71	172	93	66	159	90	74	164	122	87	209	89	98	187	102	76	177
8:00 PM	40	39	79	44	32	76	62	28	90	38	24	62	48	24	72	70	44	114	55	36	91	52	31	83
9:00 PM	35	7	42	19	9	28	18	11	29	28	15	43	31	16	47	31	16	47	44	23	67	30	16	46
10:00 PM	16	6	22	8	8	16	11	5	16	13	6	19	12	8	20	12	8	20	20	11	31	12	7	20
11:00 PM	6	6	12	2	4	6	1	1	2	4	0	4	3	3	6	5	2	7	4	6	10	4	2	6
Total	**1,648**	**1,696**	**3,344**	**1,423**	**1,353**	**2,776**	**1,509**	**1,664**	**3,173**	**1,447**	**1,585**	**3,032**	**1,573**	**1,673**	**3,246**	**1,607**	**1,721**	**3,328**	**1,659**	**1,845**	**3,504**	**1,542**	**1,660**	**3,202**
Percent	**49%**	**51%**	-	**51%**	**49%**	-	**48%**	**52%**	-	**48%**	**52%**	-	**48%**	**52%**	-	**48%**	**52%**	-	**47%**	**53%**	-	**48%**	**52%**	-

1. Mid-week average includes data between Tuesday and Thursday.

Vehicle Classification Report Summary

Location: W Meadows Dr S/O Midland Ave

Count Direction: Northbound / Southbound

Date Range: 9/17/2022 to 9/23/2022

Site Code: 15

	FHWA Vehicle Classification													Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	Volume
Study Total														
Northbound	115	12,903	4,825	19	3,987	98	0	10	19	4	0	0	0	21,980
Percent	0.5%	58.7%	22.0%	0.1%	18.1%	0.4%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	100%
Southbound	82	11,105	4,232	61	2,653	40	0	13	24	2	0	0	2	18,214
Percent	0.5%	61.0%	23.2%	0.3%	14.6%	0.2%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	100%
Total	197	24,008	9,057	80	6,640	138	0	23	43	6	0	0	2	40,194
Percent	0.5%	59.7%	22.5%	0.2%	16.5%	0.3%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	100%

FHWA Vehicle Classification	
Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

Saturday, September 17, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	**5**
1:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	2	1	0	1	0	0	0	0	0	0	0	0	**4**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
5:00 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	**2**
6:00 AM	0	8	5	0	8	0	0	0	0	0	0	0	0	**21**
7:00 AM	0	14	12	0	14	0	0	0	1	0	0	0	0	**41**
8:00 AM	0	41	25	0	32	0	0	0	0	0	0	0	0	**98**
9:00 AM	1	76	33	0	35	0	0	0	0	0	0	0	0	**145**
10:00 AM	0	117	47	0	43	0	0	0	0	0	0	0	0	**207**
11:00 AM	0	181	48	0	60	1	0	0	0	0	0	0	0	**290**
12:00 PM	0	198	85	0	37	0	0	0	0	0	0	0	0	**320**
1:00 PM	0	220	74	0	49	4	0	0	0	0	0	0	0	**347**
2:00 PM	3	228	54	0	41	1	0	0	0	1	0	0	0	**328**
3:00 PM	1	219	66	0	46	6	0	0	0	0	0	0	0	**338**
4:00 PM	1	172	73	0	39	0	0	0	0	0	0	0	0	**285**
5:00 PM	0	171	52	0	41	2	0	0	0	0	0	0	0	**266**
6:00 PM	0	134	48	0	26	0	0	0	0	0	0	0	0	**208**
7:00 PM	5	112	37	0	39	0	0	0	0	0	0	0	0	**193**
8:00 PM	0	86	20	0	17	0	0	0	0	0	0	0	0	**123**
9:00 PM	0	56	18	0	12	0	0	0	0	0	0	0	0	**86**
10:00 PM	0	21	3	0	3	0	0	0	0	0	0	0	0	**27**
11:00 PM	0	4	1	0	0	0	0	0	0	0	0	0	0	**5**
Total	**11**	**2,070**	**702**	**0**	**544**	**15**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**3,344**
Percent	**0.3%**	**61.9%**	**21.0%**	**0.0%**	**16.3%**	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

Saturday, September 17, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	6	0	0	1	0	0	0	0	0	0	0	0	**7**
4:00 AM	0	1	1	0	0	1	0	0	0	0	0	0	0	**3**
5:00 AM	0	3	3	1	3	1	0	0	0	0	0	0	0	**11**
6:00 AM	0	14	15	0	5	0	0	0	0	0	0	0	0	**34**
7:00 AM	0	34	16	0	17	0	0	0	0	0	0	0	0	**67**
8:00 AM	0	65	39	1	21	0	0	0	0	0	0	0	0	**126**
9:00 AM	1	106	38	0	29	0	0	0	0	0	0	0	0	**174**
10:00 AM	1	147	57	1	32	0	0	0	0	0	0	0	0	**238**
11:00 AM	0	194	56	0	39	1	0	0	0	0	0	0	0	**290**
12:00 PM	0	193	80	0	39	0	0	0	0	0	0	0	0	**312**
1:00 PM	0	216	68	0	21	0	0	0	0	0	0	0	0	**305**
2:00 PM	0	174	66	0	26	0	0	0	0	0	0	0	0	**266**
3:00 PM	0	150	46	0	24	0	0	0	0	0	0	0	0	**220**
4:00 PM	1	136	44	0	33	0	0	0	0	0	0	0	0	**214**
5:00 PM	5	131	34	0	26	0	0	0	0	0	0	0	0	**196**
6:00 PM	0	114	30	1	21	0	0	0	0	0	0	0	0	**166**
7:00 PM	0	71	19	0	15	0	0	0	0	0	0	0	0	**105**
8:00 PM	0	35	19	0	3	0	0	0	0	0	0	0	0	**57**
9:00 PM	0	21	10	1	1	0	0	0	0	0	0	0	0	**33**
10:00 PM	0	4	0	0	1	0	0	0	0	0	0	0	0	**5**
11:00 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
Total	**8**	**1,822**	**642**	**5**	**357**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2,837**
Percent	**0.3%**	**64.2%**	**22.6%**	**0.2%**	**12.6%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

Sunday, September 18, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
6:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
7:00 AM	0	9	7	0	3	0	0	0	0	0	0	0	0	**19**
8:00 AM	0	26	7	0	13	0	0	0	0	0	0	0	0	**46**
9:00 AM	1	51	25	0	32	0	0	0	0	0	0	0	0	**109**
10:00 AM	1	78	57	0	28	0	0	0	0	0	0	0	0	**164**
11:00 AM	1	136	53	0	26	0	0	0	0	1	0	0	0	**217**
12:00 PM	5	181	52	0	44	0	0	0	0	0	0	0	0	**282**
1:00 PM	2	181	58	0	44	2	0	0	0	0	0	0	0	**287**
2:00 PM	0	199	49	0	42	2	0	0	0	0	0	0	0	**292**
3:00 PM	4	184	69	0	50	1	0	0	0	0	0	0	0	**308**
4:00 PM	3	202	58	0	35	1	0	0	0	0	0	0	0	**299**
5:00 PM	1	153	46	0	37	1	0	0	0	0	0	0	0	**238**
6:00 PM	2	111	34	0	29	0	0	0	0	0	0	0	0	**176**
7:00 PM	1	99	29	0	33	0	0	0	0	0	0	0	0	**162**
8:00 PM	1	82	17	0	14	0	0	0	0	0	0	0	0	**114**
9:00 PM	0	35	3	0	5	0	0	0	0	0	0	0	0	**43**
10:00 PM	1	8	2	0	3	0	0	0	0	0	0	0	0	**14**
11:00 PM	0	1	2	0	2	0	0	0	0	0	0	0	0	**5**
Total	**23**	**1,744**	**571**	**0**	**441**	**7**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2,787**
Percent	**0.8%**	**62.6%**	**20.5%**	**0.0%**	**15.8%**	**0.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

Sunday, September 18, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	2	0	1	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	4	0	0	0	0	0	0	0	0	0	0	0	**4**
5:00 AM	0	3	0	1	0	0	0	0	0	0	0	0	0	**4**
6:00 AM	0	23	3	0	1	0	0	0	0	0	0	0	0	**27**
7:00 AM	1	17	12	1	8	0	0	0	0	0	0	0	0	**39**
8:00 AM	0	42	23	1	11	0	0	0	0	0	0	0	0	**77**
9:00 AM	0	63	45	0	23	0	0	0	0	0	0	0	0	**131**
10:00 AM	0	135	40	2	27	0	0	0	0	0	0	0	0	**204**
11:00 AM	3	186	58	0	29	0	0	0	0	0	0	0	0	**276**
12:00 PM	4	191	67	0	37	1	0	0	0	0	0	0	0	**300**
1:00 PM	2	195	52	0	29	1	0	0	0	0	0	0	0	**279**
2:00 PM	6	164	65	0	35	0	0	0	0	0	0	0	0	**270**
3:00 PM	2	157	47	0	26	0	0	0	0	0	0	0	0	**232**
4:00 PM	1	130	42	0	13	0	0	2	0	0	0	0	0	**188**
5:00 PM	1	108	32	0	16	0	0	0	0	0	0	0	0	**157**
6:00 PM	0	89	34	1	12	0	0	0	0	0	0	0	0	**136**
7:00 PM	2	60	18	0	13	0	0	0	0	0	0	0	0	**93**
8:00 PM	1	33	8	0	5	0	0	0	0	0	0	0	0	**47**
9:00 PM	0	5	1	0	0	0	0	0	0	0	0	0	0	**6**
10:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	**2**
11:00 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
Total	**23**	**1,611**	**549**	**8**	**285**	**2**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2,480**
Percent	**0.9%**	**65.0%**	**22.1%**	**0.3%**	**11.5%**	**0.1%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

Monday, September 19, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	1	1	1	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	**2**
6:00 AM	0	8	5	0	9	0	0	0	0	0	0	0	0	**22**
7:00 AM	0	32	20	0	39	0	0	0	1	0	0	0	0	**92**
8:00 AM	1	38	26	0	40	2	0	0	1	0	0	0	0	**108**
9:00 AM	1	51	44	0	35	1	0	0	0	0	0	0	0	**132**
10:00 AM	1	118	51	1	40	1	0	0	1	0	0	0	0	**213**
11:00 AM	2	144	61	0	58	0	0	1	0	0	0	0	0	**266**
12:00 PM	0	133	58	1	40	2	0	0	0	1	0	0	0	**235**
1:00 PM	3	148	56	0	49	1	0	0	0	0	0	0	0	**257**
2:00 PM	3	199	66	0	39	0	0	0	0	0	0	0	0	**307**
3:00 PM	1	183	57	0	39	0	0	0	1	0	0	0	0	**281**
4:00 PM	0	240	60	0	48	4	0	0	0	0	0	0	0	**352**
5:00 PM	2	192	77	0	51	2	0	0	0	0	0	0	0	**324**
6:00 PM	0	181	38	0	40	0	0	0	1	0	0	0	0	**260**
7:00 PM	0	124	38	0	30	0	0	0	0	0	0	0	0	**192**
8:00 PM	1	57	17	0	18	0	0	0	0	0	0	0	0	**93**
9:00 PM	0	47	13	0	10	0	0	0	0	0	0	0	0	**70**
10:00 PM	0	12	1	0	4	0	0	0	0	0	0	0	0	**17**
11:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**16**	**1,910**	**690**	**2**	**590**	**14**	**0**	**1**	**5**	**1**	**0**	**0**	**0**	**3,229**
Percent	**0.5%**	**59.2%**	**21.4%**	**0.1%**	**18.3%**	**0.4%**	**0.0%**	**0.0%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

Monday, September 19, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	**2**
1:00 AM	1	1	0	0	1	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	6	1	0	0	0	0	0	0	0	0	0	0	**7**
4:00 AM	0	11	0	0	0	0	0	0	0	0	0	0	0	**11**
5:00 AM	0	14	4	1	1	1	0	0	0	0	0	0	0	**21**
6:00 AM	0	20	11	0	11	0	0	0	0	0	0	0	0	**42**
7:00 AM	1	44	25	0	24	1	0	0	0	0	0	0	0	**95**
8:00 AM	1	59	41	1	25	2	0	0	1	0	0	0	0	**130**
9:00 AM	0	89	43	0	26	0	0	0	0	0	0	0	0	**158**
10:00 AM	1	117	47	2	45	0	0	2	1	0	0	0	0	**215**
11:00 AM	0	150	48	0	31	0	0	0	1	0	0	0	0	**230**
12:00 PM	0	148	57	0	23	2	0	0	0	0	0	0	0	**230**
1:00 PM	0	134	56	1	33	0	0	0	2	1	0	0	0	**227**
2:00 PM	2	140	40	0	33	0	0	0	0	0	0	0	0	**215**
3:00 PM	2	140	52	0	23	1	0	0	0	0	0	0	0	**218**
4:00 PM	4	142	52	0	30	0	0	0	0	0	0	0	0	**228**
5:00 PM	0	129	39	1	34	0	0	0	0	0	0	0	0	**203**
6:00 PM	0	109	41	1	24	0	0	0	0	0	0	0	0	**175**
7:00 PM	1	67	24	0	20	1	0	0	0	0	0	0	0	**113**
8:00 PM	0	33	14	1	6	1	0	0	0	0	0	0	0	**55**
9:00 PM	0	18	4	2	4	0	0	0	0	0	0	0	0	**28**
10:00 PM	0	2	1	0	0	0	0	0	0	0	0	0	0	**3**
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**13**	**1,574**	**601**	**10**	**395**	**9**	**0**	**2**	**5**	**1**	**0**	**0**	**0**	**2,610**
Percent	**0.5%**	**60.3%**	**23.0%**	**0.4%**	**15.1%**	**0.3%**	**0.0%**	**0.1%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

DATA SOLUTIONS

Tuesday, September 20, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	**2**
6:00 AM	0	8	15	0	17	0	0	0	0	0	0	0	0	**40**
7:00 AM	0	27	17	0	39	0	0	0	0	0	0	0	0	**83**
8:00 AM	0	51	34	0	49	1	0	0	1	0	0	0	0	**136**
9:00 AM	0	68	41	1	41	1	0	0	1	0	0	0	0	**153**
10:00 AM	0	95	49	0	30	0	0	0	1	0	0	0	0	**175**
11:00 AM	1	114	48	0	44	4	0	0	0	0	0	0	0	**211**
12:00 PM	2	145	75	0	34	0	0	0	1	0	0	0	0	**257**
1:00 PM	2	141	66	0	58	0	0	0	0	0	0	0	0	**267**
2:00 PM	1	146	60	0	45	1	0	0	0	0	0	0	0	**253**
3:00 PM	2	175	63	0	52	4	0	0	0	0	0	0	0	**296**
4:00 PM	2	173	73	0	47	1	0	0	0	0	0	0	0	**296**
5:00 PM	1	196	59	0	47	0	0	0	1	0	0	0	0	**304**
6:00 PM	1	138	43	0	50	0	0	0	0	0	0	0	0	**232**
7:00 PM	0	105	27	0	21	0	0	0	0	0	0	0	0	**153**
8:00 PM	0	61	34	0	16	0	0	0	0	0	0	0	0	**111**
9:00 PM	0	22	12	0	9	0	0	0	0	0	0	0	0	**43**
10:00 PM	0	13	4	0	1	0	0	0	0	0	0	0	0	**18**
11:00 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
Total	**13**	**1,681**	**722**	**2**	**601**	**12**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**3,036**
Percent	**0.4%**	**55.4%**	**23.8%**	**0.1%**	**19.8%**	**0.4%**	**0.0%**	**0.0%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

DATA SOLUTIONS

Tuesday, September 20, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	4	0	0	0	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	9	0	0	0	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	16	7	1	1	0	0	0	0	0	0	0	0	**25**
6:00 AM	1	23	18	0	15	1	0	0	0	0	0	0	0	**58**
7:00 AM	0	45	27	1	29	0	0	0	1	0	0	0	0	**103**
8:00 AM	0	83	47	1	33	0	0	0	0	0	0	0	0	**164**
9:00 AM	0	102	43	0	29	0	0	1	1	0	0	0	1	**177**
10:00 AM	2	109	43	2	35	0	0	0	1	0	0	0	0	**192**
11:00 AM	1	135	58	0	21	0	0	0	2	0	0	0	1	**218**
12:00 PM	0	112	51	0	28	1	0	0	0	0	0	0	0	**192**
1:00 PM	1	127	46	0	41	0	0	0	0	0	0	0	0	**215**
2:00 PM	0	120	48	1	31	0	0	0	2	0	0	0	0	**202**
3:00 PM	0	111	37	0	28	0	0	0	0	0	0	0	0	**176**
4:00 PM	0	109	46	0	34	0	0	0	0	0	0	0	0	**189**
5:00 PM	1	126	48	1	23	0	0	0	0	0	0	0	0	**199**
6:00 PM	0	102	35	1	18	0	0	0	0	0	0	0	0	**156**
7:00 PM	0	67	22	0	13	1	0	0	0	0	0	0	0	**103**
8:00 PM	0	30	12	0	6	0	0	0	0	0	0	0	0	**48**
9:00 PM	0	10	0	1	2	0	0	0	0	0	0	0	0	**13**
10:00 PM	0	4	0	0	0	0	0	0	0	0	0	0	0	**4**
11:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**6**	**1,445**	**588**	**9**	**387**	**3**	**0**	**1**	**7**	**0**	**0**	**0**	**2**	**2,448**
Percent	**0.2%**	**59.0%**	**24.0%**	**0.4%**	**15.8%**	**0.1%**	**0.0%**	**0.0%**	**0.3%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**	

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

Wednesday, September 21, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	**2**
6:00 AM	1	10	12	0	24	1	0	0	0	0	0	0	0	**48**
7:00 AM	0	22	33	0	32	2	0	0	0	0	0	0	0	**89**
8:00 AM	0	59	22	1	50	0	0	0	2	0	0	0	0	**134**
9:00 AM	2	65	37	2	45	0	0	0	0	0	0	0	0	**151**
10:00 AM	1	96	50	0	42	0	0	0	0	0	0	0	0	**189**
11:00 AM	0	118	49	0	54	0	0	0	0	0	0	0	0	**221**
12:00 PM	0	141	52	1	55	1	0	2	0	0	0	0	0	**252**
1:00 PM	3	151	68	0	44	1	0	0	1	0	0	0	0	**268**
2:00 PM	0	156	67	0	50	0	0	0	0	0	0	0	0	**273**
3:00 PM	0	175	47	1	47	2	0	0	0	0	0	0	0	**272**
4:00 PM	0	151	61	1	49	0	0	0	0	0	0	0	0	**262**
5:00 PM	2	190	63	1	45	0	0	0	0	0	0	0	0	**301**
6:00 PM	1	141	41	0	37	0	0	0	0	0	0	0	0	**220**
7:00 PM	1	114	36	0	25	1	0	0	0	0	0	0	0	**177**
8:00 PM	0	72	25	0	15	0	0	0	0	0	0	0	0	**112**
9:00 PM	0	37	7	0	2	0	0	0	0	0	0	0	0	**46**
10:00 PM	0	11	8	0	1	0	0	0	0	0	0	0	0	**20**
11:00 PM	0	6	1	0	1	0	0	0	0	0	0	0	0	**8**
Total	**11**	**1,720**	**681**	**7**	**619**	**9**	**0**	**2**	**3**	**0**	**0**	**0**	**0**	**3,052**
Percent	**0.4%**	**56.4%**	**22.3%**	**0.2%**	**20.3%**	**0.3%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

Wednesday, September 21, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	9	0	0	0	1	0	0	0	0	0	0	0	**10**
5:00 AM	0	13	5	1	3	0	0	0	0	0	0	0	0	**22**
6:00 AM	1	29	22	0	17	1	0	0	0	0	0	0	0	**70**
7:00 AM	0	36	39	1	29	0	0	0	1	0	0	0	0	**106**
8:00 AM	1	82	43	1	37	1	0	0	1	0	0	0	0	**166**
9:00 AM	1	93	40	0	31	0	0	0	0	0	0	0	0	**165**
10:00 AM	0	119	51	2	35	0	0	0	1	0	0	0	0	**208**
11:00 AM	0	124	43	0	36	1	0	0	0	0	0	0	0	**204**
12:00 PM	1	132	49	1	40	0	0	0	0	0	0	0	0	**223**
1:00 PM	2	131	53	1	33	1	0	0	0	0	0	0	0	**221**
2:00 PM	1	143	56	0	37	0	0	0	0	0	0	0	0	**237**
3:00 PM	0	123	50	1	24	1	0	0	0	0	0	0	0	**199**
4:00 PM	1	111	46	1	43	1	0	0	1	0	0	0	0	**204**
5:00 PM	0	124	40	1	25	0	0	0	0	0	0	0	0	**190**
6:00 PM	0	69	40	2	18	0	0	0	1	0	0	0	0	**130**
7:00 PM	0	63	15	0	15	0	0	0	0	0	0	0	0	**93**
8:00 PM	1	25	5	0	7	0	0	0	0	0	0	0	0	**38**
9:00 PM	0	17	3	1	1	0	0	0	0	0	0	0	0	**22**
10:00 PM	0	5	2	0	1	0	0	0	0	0	0	0	0	**8**
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**9**	**1,453**	**602**	**13**	**432**	**7**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**2,521**
Percent	**0.4%**	**57.6%**	**23.9%**	**0.5%**	**17.1%**	**0.3%**	**0.0%**	**0.0%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

Thursday, September 22, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	1	1	1	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
6:00 AM	0	8	8	0	15	0	0	0	0	0	0	0	0	**31**
7:00 AM	0	18	27	0	43	3	0	0	0	0	0	0	0	**91**
8:00 AM	0	50	37	1	37	0	0	0	0	0	0	0	0	**125**
9:00 AM	2	44	38	2	39	1	0	0	1	0	0	0	0	**127**
10:00 AM	0	95	42	0	58	0	0	1	0	0	0	0	0	**196**
11:00 AM	2	124	43	0	55	1	0	1	0	0	0	0	0	**226**
12:00 PM	3	138	53	0	65	3	0	0	0	0	0	0	0	**262**
1:00 PM	2	173	55	0	57	1	0	0	0	0	0	0	0	**288**
2:00 PM	0	179	58	0	54	1	0	0	1	0	0	0	0	**293**
3:00 PM	0	176	57	0	34	1	0	0	0	0	0	0	0	**268**
4:00 PM	0	187	73	0	41	4	0	0	0	0	0	0	0	**305**
5:00 PM	1	176	63	0	47	1	0	0	0	0	0	0	0	**288**
6:00 PM	0	131	52	0	37	0	0	0	0	0	0	0	0	**220**
7:00 PM	0	131	30	0	30	0	0	1	0	0	0	0	0	**192**
8:00 PM	0	88	25	0	17	0	0	0	0	0	0	0	0	**130**
9:00 PM	0	32	21	0	10	0	0	0	0	0	0	0	0	**63**
10:00 PM	0	16	4	0	4	0	0	0	0	0	0	0	0	**24**
11:00 PM	0	2	2	0	2	0	0	0	0	0	0	0	0	**6**
Total	**11**	**1,773**	**690**	**3**	**646**	**16**	**0**	**3**	**2**	**0**	**0**	**0**	**0**	**3,144**
Percent	**0.3%**	**56.4%**	**21.9%**	**0.1%**	**20.5%**	**0.5%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

Thursday, September 22, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	7	0	0	0	0	0	0	0	0	0	0	0	**7**
4:00 AM	0	9	0	0	0	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	13	4	1	1	0	0	0	0	0	0	0	0	**19**
6:00 AM	0	23	17	0	9	0	0	0	0	0	0	0	0	**49**
7:00 AM	1	36	30	0	29	2	0	0	0	0	0	0	0	**98**
8:00 AM	0	72	46	2	35	0	0	0	1	0	0	0	0	**156**
9:00 AM	0	91	57	1	30	0	0	0	0	0	0	0	0	**179**
10:00 AM	2	112	41	2	44	1	0	0	0	0	0	0	0	**202**
11:00 AM	2	131	39	0	40	2	0	1	0	1	0	0	0	**216**
12:00 PM	1	160	63	0	35	1	0	0	1	0	0	0	0	**261**
1:00 PM	1	132	35	0	37	0	0	0	0	0	0	0	0	**205**
2:00 PM	1	131	44	1	38	0	0	1	0	0	0	0	0	**216**
3:00 PM	1	117	58	0	16	3	0	0	0	0	0	0	0	**195**
4:00 PM	0	150	46	0	22	0	0	0	0	0	0	0	0	**218**
5:00 PM	0	107	29	1	31	0	0	0	0	0	0	0	0	**168**
6:00 PM	0	106	45	0	21	0	0	0	0	0	0	0	0	**172**
7:00 PM	0	73	26	0	14	0	0	0	0	0	0	0	0	**113**
8:00 PM	0	43	21	0	9	0	0	0	0	0	0	0	0	**73**
9:00 PM	0	12	7	0	5	0	0	0	0	0	0	0	0	**24**
10:00 PM	0	1	3	1	0	0	0	0	0	0	0	0	0	**5**
11:00 PM	0	1	1	0	0	0	0	0	1	0	0	0	0	**3**
Total	**9**	**1,527**	**613**	**9**	**416**	**9**	**0**	**2**	**3**	**1**	**0**	**0**	**0**	**2,589**
Percent	**0.3%**	**59.0%**	**23.7%**	**0.3%**	**16.1%**	**0.3%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

Friday, September 23, 2022
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
6:00 AM	0	11	10	0	13	1	0	0	0	0	0	0	0	**35**
7:00 AM	2	28	21	1	37	2	0	0	0	0	0	0	0	**91**
8:00 AM	1	37	21	0	38	4	0	0	1	0	0	0	0	**102**
9:00 AM	1	50	35	0	27	3	0	0	1	0	0	0	0	**117**
10:00 AM	0	103	56	0	49	0	0	1	0	0	0	0	0	**209**
11:00 AM	3	128	57	2	51	1	0	1	0	0	0	0	0	**243**
12:00 PM	3	188	73	0	43	1	0	0	0	0	0	0	0	**308**
1:00 PM	5	187	55	1	43	5	0	0	0	1	0	0	0	**297**
2:00 PM	3	164	76	0	41	1	0	1	0	0	0	0	0	**286**
3:00 PM	5	197	77	0	32	4	0	0	0	0	0	0	0	**315**
4:00 PM	1	206	73	1	38	2	0	0	0	0	0	0	0	**321**
5:00 PM	2	219	63	0	29	1	0	0	1	0	0	0	0	**315**
6:00 PM	2	167	67	0	42	0	0	1	0	0	0	0	0	**279**
7:00 PM	1	133	34	0	24	0	0	0	0	0	0	0	0	**192**
8:00 PM	1	91	25	0	25	0	0	0	0	0	0	0	0	**142**
9:00 PM	0	58	17	0	10	0	0	0	0	0	0	0	0	**85**
10:00 PM	0	29	5	0	3	0	0	0	0	0	0	0	0	**37**
11:00 PM	0	5	1	0	1	0	0	0	0	0	0	0	0	**7**
Total	**30**	**2,005**	**769**	**5**	**546**	**25**	**0**	**4**	**3**	**1**	**0**	**0**	**0**	**3,388**
Percent	**0.9%**	**59.2%**	**22.7%**	**0.1%**	**16.1%**	**0.7%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

Friday, September 23, 2022
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	7	0	0	0	0	0	0	0	0	0	0	0	**7**
4:00 AM	0	6	1	0	0	0	0	0	0	0	0	0	0	**7**
5:00 AM	0	15	6	1	2	1	0	0	0	0	0	0	0	**25**
6:00 AM	1	27	18	0	21	1	0	0	1	0	0	0	0	**69**
7:00 AM	0	37	22	0	19	0	0	0	1	0	0	0	0	**79**
8:00 AM	2	66	28	0	26	2	0	0	0	0	0	0	0	**124**
9:00 AM	1	80	48	0	25	1	0	1	0	0	0	0	0	**156**
10:00 AM	1	150	53	2	33	0	0	1	1	0	0	0	0	**241**
11:00 AM	1	144	64	0	28	0	0	0	0	0	0	0	0	**237**
12:00 PM	1	141	54	0	40	1	0	1	0	0	0	0	0	**238**
1:00 PM	1	151	60	0	28	0	0	2	0	0	0	0	0	**242**
2:00 PM	1	150	57	1	33	1	0	0	1	0	0	0	0	**244**
3:00 PM	1	149	41	0	29	0	0	0	0	0	0	0	0	**220**
4:00 PM	0	136	51	0	24	0	0	0	0	0	0	0	0	**211**
5:00 PM	2	130	51	0	30	0	0	1	0	0	0	0	0	**214**
6:00 PM	1	127	36	2	21	0	0	0	0	0	0	0	0	**187**
7:00 PM	1	84	27	0	14	0	0	0	0	0	0	0	0	**126**
8:00 PM	0	33	10	0	7	0	0	0	0	0	0	0	0	**50**
9:00 PM	0	29	7	0	1	0	0	0	0	0	0	0	0	**37**
10:00 PM	0	9	0	1	0	0	0	0	0	0	0	0	0	**10**
11:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	**2**
Total	**14**	**1,673**	**637**	**7**	**381**	**7**	**0**	**6**	**4**	**0**	**0**	**0**	**0**	**2,729**
Percent	**0.5%**	**61.3%**	**23.3%**	**0.3%**	**14.0%**	**0.3%**	**0.0%**	**0.2%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

Total Study Average
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
6:00 AM	0	8	8	0	12	0	0	0	0	0	0	0	0	**28**
7:00 AM	0	21	20	0	30	1	0	0	0	0	0	0	0	**72**
8:00 AM	0	43	25	0	37	1	0	0	1	0	0	0	0	**107**
9:00 AM	1	58	36	1	36	1	0	0	0	0	0	0	0	**133**
10:00 AM	0	100	50	0	41	0	0	0	0	0	0	0	0	**191**
11:00 AM	1	135	51	0	50	1	0	0	0	0	0	0	0	**238**
12:00 PM	2	161	64	0	45	1	0	0	0	0	0	0	0	**273**
1:00 PM	2	172	62	0	49	2	0	0	0	0	0	0	0	**287**
2:00 PM	1	182	61	0	45	1	0	0	0	0	0	0	0	**290**
3:00 PM	2	187	62	0	43	3	0	0	0	0	0	0	0	**297**
4:00 PM	1	190	67	0	42	2	0	0	0	0	0	0	0	**302**
5:00 PM	1	185	60	0	42	1	0	0	0	0	0	0	0	**289**
6:00 PM	1	143	46	0	37	0	0	0	0	0	0	0	0	**227**
7:00 PM	1	117	33	0	29	0	0	0	0	0	0	0	0	**180**
8:00 PM	0	77	23	0	17	0	0	0	0	0	0	0	0	**117**
9:00 PM	0	41	13	0	8	0	0	0	0	0	0	0	0	**62**
10:00 PM	0	16	4	0	3	0	0	0	0	0	0	0	0	**23**
11:00 PM	0	3	1	0	1	0	0	0	0	0	0	0	0	**5**
Total	**13**	**1,845**	**687**	**1**	**567**	**14**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**3,128**
Percent	**0.4%**	**59.0%**	**22.0%**	**0.0%**	**18.1%**	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

Total Study Average
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	7	0	0	0	0	0	0	0	0	0	0	0	**7**
5:00 AM	0	11	4	1	2	0	0	0	0	0	0	0	0	**18**
6:00 AM	0	23	15	0	11	0	0	0	0	0	0	0	0	**49**
7:00 AM	0	36	24	0	22	0	0	0	0	0	0	0	0	**82**
8:00 AM	1	67	38	1	27	1	0	0	0	0	0	0	0	**135**
9:00 AM	0	89	45	0	28	0	0	0	0	0	0	0	0	**162**
10:00 AM	1	127	47	2	36	0	0	0	1	0	0	0	0	**214**
11:00 AM	1	152	52	0	32	1	0	0	0	0	0	0	0	**238**
12:00 PM	1	154	60	0	35	1	0	0	0	0	0	0	0	**251**
1:00 PM	1	155	53	0	32	0	0	0	0	0	0	0	0	**241**
2:00 PM	2	146	54	0	33	0	0	0	0	0	0	0	0	**235**
3:00 PM	1	135	47	0	24	1	0	0	0	0	0	0	0	**208**
4:00 PM	1	131	47	0	28	0	0	0	0	0	0	0	0	**207**
5:00 PM	1	122	39	1	26	0	0	0	0	0	0	0	0	**189**
6:00 PM	0	102	37	1	19	0	0	0	0	0	0	0	0	**159**
7:00 PM	1	69	22	0	15	0	0	0	0	0	0	0	0	**107**
8:00 PM	0	33	13	0	6	0	0	0	0	0	0	0	0	**52**
9:00 PM	0	16	5	1	2	0	0	0	0	0	0	0	0	**24**
10:00 PM	0	4	1	0	0	0	0	0	0	0	0	0	0	**5**
11:00 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	**2**
Total	**11**	**1,587**	**604**	**7**	**378**	**4**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2,592**
Percent	**0.4%**	**61.2%**	**23.3%**	**0.3%**	**14.6%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

3-Day (Tuesday - Thursday) Average
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	**2**
6:00 AM	0	9	12	0	19	0	0	0	0	0	0	0	0	**40**
7:00 AM	0	22	26	0	38	2	0	0	0	0	0	0	0	**88**
8:00 AM	0	53	31	1	45	0	0	0	1	0	0	0	0	**132**
9:00 AM	1	59	39	2	42	1	0	0	1	0	0	0	0	**144**
10:00 AM	0	95	47	0	43	0	0	0	0	0	0	0	0	**187**
11:00 AM	1	119	47	0	51	2	0	0	0	0	0	0	0	**219**
12:00 PM	2	141	60	0	51	1	0	1	0	0	0	0	0	**257**
1:00 PM	2	155	63	0	53	1	0	0	0	0	0	0	0	**274**
2:00 PM	0	160	62	0	50	1	0	0	0	0	0	0	0	**273**
3:00 PM	1	175	56	0	44	2	0	0	0	0	0	0	0	**279**
4:00 PM	1	170	69	0	46	2	0	0	0	0	0	0	0	**288**
5:00 PM	1	187	62	0	46	0	0	0	0	0	0	0	0	**298**
6:00 PM	1	137	45	0	41	0	0	0	0	0	0	0	0	**224**
7:00 PM	0	117	31	0	25	0	0	0	0	0	0	0	0	**174**
8:00 PM	0	74	28	0	16	0	0	0	0	0	0	0	0	**118**
9:00 PM	0	30	13	0	7	0	0	0	0	0	0	0	0	**51**
10:00 PM	0	13	5	0	2	0	0	0	0	0	0	0	0	**21**
11:00 PM	0	4	1	0	1	0	0	0	0	0	0	0	0	**6**
Total	**12**	**1,725**	**698**	**4**	**622**	**12**	**0**	**2**	**3**	**0**	**0**	**0**	**0**	**3,077**
Percent	**0.4%**	**56.0%**	**22.7%**	**0.1%**	**20.2%**	**0.4%**	**0.0%**	**0.1%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

3-Day (Tuesday - Thursday) Average
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	9	0	0	0	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	14	5	1	2	0	0	0	0	0	0	0	0	**22**
6:00 AM	1	25	19	0	14	1	0	0	0	0	0	0	0	**59**
7:00 AM	0	39	32	1	29	1	0	0	1	0	0	0	0	**102**
8:00 AM	0	79	45	1	35	0	0	0	1	0	0	0	0	**162**
9:00 AM	0	95	47	0	30	0	0	0	0	0	0	0	0	**174**
10:00 AM	1	113	45	2	38	0	0	0	1	0	0	0	0	**201**
11:00 AM	1	130	47	0	32	1	0	0	1	0	0	0	0	**213**
12:00 PM	1	135	54	0	34	1	0	0	0	0	0	0	0	**225**
1:00 PM	1	130	45	0	37	0	0	0	0	0	0	0	0	**214**
2:00 PM	1	131	49	1	35	0	0	0	1	0	0	0	0	**218**
3:00 PM	0	117	48	0	23	1	0	0	0	0	0	0	0	**190**
4:00 PM	0	123	46	0	33	0	0	0	0	0	0	0	0	**204**
5:00 PM	0	119	39	1	26	0	0	0	0	0	0	0	0	**186**
6:00 PM	0	92	40	1	19	0	0	0	0	0	0	0	0	**153**
7:00 PM	0	68	21	0	14	0	0	0	0	0	0	0	0	**103**
8:00 PM	0	33	13	0	7	0	0	0	0	0	0	0	0	**53**
9:00 PM	0	13	3	1	3	0	0	0	0	0	0	0	0	**20**
10:00 PM	0	3	2	0	0	0	0	0	0	0	0	0	0	**6**
11:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**8**	**1,475**	**601**	**10**	**412**	**6**	**0**	**1**	**5**	**0**	**0**	**0**	**1**	**2,519**
Percent	**0.3%**	**58.5%**	**23.9%**	**0.4%**	**16.3%**	**0.3%**	**0.0%**	**0.0%**	**0.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Vehicle Speed Report Summary

Location: W Meadows Dr S/O Midland Ave

Count Direction: Northbound / Southbound

Date Range: 9/17/2022 to 9/23/2022

Site Code: 15

	Speed Range (mph)																	Total
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	Volume
Study Total																		
Northbound	320	2,179	9,408	8,601	1,354	108	7	0	0	0	1	2	0	0	0	0	0	21,980
Percent	1.5%	9.9%	42.8%	39.1%	6.2%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Southbound	130	2,210	10,268	5,238	353	13	1	1	0	0	0	0	0	0	0	0	0	18,214
Percent	0.7%	12.1%	56.4%	28.8%	1.9%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%
Total	450	4,389	19,676	13,839	1,707	121	8	1	0	0	1	2	0	0	0	0	0	40,194
Percent	1.1%	10.9%	49.0%	34.4%	4.2%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100%

Total Study Percentile Speed Summary			Total Study Speed Statistics		
Northbound			**Northbound**		
50th Percentile (Median)	19.6	mph	Mean (Average) Speed	19.5	mph
85th Percentile	23.3	mph	10 mph Pace	14.4 - 24.4	mph
95th Percentile	25.6	mph	Percent in Pace	82.1	%
Southbound			**Southbound**		
50th Percentile (Median)	18.5	mph	Mean (Average) Speed	18.5	mph
85th Percentile	21.6	mph	10 mph Pace	13.5 - 23.5	mph
95th Percentile	23.6	mph	Percent in Pace	88.8	%

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

Saturday, September 17, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	**5**
1:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
3:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
5:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
6:00 AM	0	0	3	15	3	0	0	0	0	0	0	0	0	0	0	0	0	**21**
7:00 AM	0	1	15	25	0	0	0	0	0	0	0	0	0	0	0	0	0	**41**
8:00 AM	0	3	35	50	10	0	0	0	0	0	0	0	0	0	0	0	0	**98**
9:00 AM	2	5	54	65	18	1	0	0	0	0	0	0	0	0	0	0	0	**145**
10:00 AM	3	20	82	88	14	0	0	0	0	0	0	0	0	0	0	0	0	**207**
11:00 AM	2	25	116	126	20	1	0	0	0	0	0	0	0	0	0	0	0	**290**
12:00 PM	7	26	157	112	17	1	0	0	0	0	0	0	0	0	0	0	0	**320**
1:00 PM	6	50	143	130	18	0	0	0	0	0	0	0	0	0	0	0	0	**347**
2:00 PM	9	25	133	141	17	3	0	0	0	0	0	0	0	0	0	0	0	**328**
3:00 PM	7	47	143	111	27	3	0	0	0	0	0	0	0	0	0	0	0	**338**
4:00 PM	3	31	116	107	25	2	1	0	0	0	0	0	0	0	0	0	0	**285**
5:00 PM	2	15	94	129	24	2	0	0	0	0	0	0	0	0	0	0	0	**266**
6:00 PM	6	17	93	77	14	1	0	0	0	0	0	0	0	0	0	0	0	**208**
7:00 PM	1	15	85	79	13	0	0	0	0	0	0	0	0	0	0	0	0	**193**
8:00 PM	0	9	62	47	4	1	0	0	0	0	0	0	0	0	0	0	0	**123**
9:00 PM	1	9	34	35	7	0	0	0	0	0	0	0	0	0	0	0	0	**86**
10:00 PM	0	1	13	11	2	0	0	0	0	0	0	0	0	0	0	0	0	**27**
11:00 PM	0	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	**5**
Total	**49**	**299**	**1,385**	**1,358**	**237**	**15**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3,344**
Percent	**1.5%**	**8.9%**	**41.4%**	**40.6%**	**7.1%**	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	19.8	mph	Mean (Average) Speed	19.7	mph
85th Percentile	23.4	mph	10 mph Pace	15.0 - 25.0	mph
95th Percentile	25.6	mph	Percent in Pace	82.0	%

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

Saturday, September 17, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
4:00 AM	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
5:00 AM	1	1	2	6	1	0	0	0	0	0	0	0	0	0	0	0	0	**11**
6:00 AM	1	2	20	11	0	0	0	0	0	0	0	0	0	0	0	0	0	**34**
7:00 AM	1	10	34	20	1	1	0	0	0	0	0	0	0	0	0	0	0	**67**
8:00 AM	1	9	60	52	4	0	0	0	0	0	0	0	0	0	0	0	0	**126**
9:00 AM	0	17	104	49	4	0	0	0	0	0	0	0	0	0	0	0	0	**174**
10:00 AM	0	23	139	72	4	0	0	0	0	0	0	0	0	0	0	0	0	**238**
11:00 AM	1	54	172	63	0	0	0	0	0	0	0	0	0	0	0	0	0	**290**
12:00 PM	1	37	194	75	5	0	0	0	0	0	0	0	0	0	0	0	0	**312**
1:00 PM	2	47	170	81	5	0	0	0	0	0	0	0	0	0	0	0	0	**305**
2:00 PM	1	38	154	69	4	0	0	0	0	0	0	0	0	0	0	0	0	**266**
3:00 PM	0	26	126	64	4	0	0	0	0	0	0	0	0	0	0	0	0	**220**
4:00 PM	1	18	123	69	3	0	0	0	0	0	0	0	0	0	0	0	0	**214**
5:00 PM	0	17	100	65	13	1	0	0	0	0	0	0	0	0	0	0	0	**196**
6:00 PM	2	22	97	44	1	0	0	0	0	0	0	0	0	0	0	0	0	**166**
7:00 PM	0	12	60	30	3	0	0	0	0	0	0	0	0	0	0	0	0	**105**
8:00 PM	0	6	29	21	1	0	0	0	0	0	0	0	0	0	0	0	0	**57**
9:00 PM	0	14	14	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**33**
10:00 PM	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
11:00 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Total	**12**	**354**	**1,612**	**804**	**53**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2,837**
Percent	**0.4%**	**12.5%**	**56.8%**	**28.3%**	**1.9%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	18.5	mph	Mean (Average) Speed	18.4	mph
85th Percentile	21.5	mph	10 mph Pace	13.6 - 23.6	mph
95th Percentile	23.5	mph	Percent in Pace	89.64	%

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

Sunday, September 18, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**2**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
6:00 AM	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
7:00 AM	0	0	8	9	2	0	0	0	0	0	0	0	0	0	0	0	0	**19**
8:00 AM	0	0	16	28	2	0	0	0	0	0	0	0	0	0	0	0	0	**46**
9:00 AM	2	5	35	54	10	3	0	0	0	0	0	0	0	0	0	0	0	**109**
10:00 AM	0	4	66	87	6	1	0	0	0	0	0	0	0	0	0	0	0	**164**
11:00 AM	1	4	88	111	13	0	0	0	0	0	0	0	0	0	0	0	0	**217**
12:00 PM	3	18	113	134	13	1	0	0	0	0	0	0	0	0	0	0	0	**282**
1:00 PM	11	34	123	101	17	1	0	0	0	0	0	0	0	0	0	0	0	**287**
2:00 PM	6	24	134	112	15	1	0	0	0	0	0	0	0	0	0	0	0	**292**
3:00 PM	3	36	148	100	21	0	0	0	0	0	0	0	0	0	0	0	0	**308**
4:00 PM	3	33	110	130	22	1	0	0	0	0	0	0	0	0	0	0	0	**299**
5:00 PM	2	15	94	109	18	0	0	0	0	0	0	0	0	0	0	0	0	**238**
6:00 PM	1	13	84	65	13	0	0	0	0	0	0	0	0	0	0	0	0	**176**
7:00 PM	1	13	81	59	8	0	0	0	0	0	0	0	0	0	0	0	0	**162**
8:00 PM	0	13	52	44	5	0	0	0	0	0	0	0	0	0	0	0	0	**114**
9:00 PM	0	2	21	15	4	1	0	0	0	0	0	0	0	0	0	0	0	**43**
10:00 PM	0	1	6	6	1	0	0	0	0	0	0	0	0	0	0	0	0	**14**
11:00 PM	0	0	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**5**
Total	**33**	**215**	**1,186**	**1,171**	**173**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2,787**
Percent	**1.2%**	**7.7%**	**42.6%**	**42.0%**	**6.2%**	**0.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	19.8	mph	Mean (Average) Speed	19.8	mph
85th Percentile	23.3	mph	10 mph Pace	14.9 - 24.9	mph
95th Percentile	25.6	mph	Percent in Pace	85.0	%

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

Sunday, September 18, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
4:00 AM	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
5:00 AM	0	1	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**4**
6:00 AM	0	3	15	7	2	0	0	0	0	0	0	0	0	0	0	0	0	**27**
7:00 AM	0	6	21	12	0	0	0	0	0	0	0	0	0	0	0	0	0	**39**
8:00 AM	1	5	38	32	1	0	0	0	0	0	0	0	0	0	0	0	0	**77**
9:00 AM	0	13	73	40	4	1	0	0	0	0	0	0	0	0	0	0	0	**131**
10:00 AM	0	15	127	60	2	0	0	0	0	0	0	0	0	0	0	0	0	**204**
11:00 AM	2	46	155	67	6	0	0	0	0	0	0	0	0	0	0	0	0	**276**
12:00 PM	3	46	179	64	8	0	0	0	0	0	0	0	0	0	0	0	0	**300**
1:00 PM	0	25	163	87	4	0	0	0	0	0	0	0	0	0	0	0	0	**279**
2:00 PM	2	45	170	48	5	0	0	0	0	0	0	0	0	0	0	0	0	**270**
3:00 PM	1	22	136	69	4	0	0	0	0	0	0	0	0	0	0	0	0	**232**
4:00 PM	1	20	119	44	3	0	0	1	0	0	0	0	0	0	0	0	0	**188**
5:00 PM	1	13	85	57	1	0	0	0	0	0	0	0	0	0	0	0	0	**157**
6:00 PM	0	15	77	43	1	0	0	0	0	0	0	0	0	0	0	0	0	**136**
7:00 PM	0	16	52	22	3	0	0	0	0	0	0	0	0	0	0	0	0	**93**
8:00 PM	0	4	27	15	1	0	0	0	0	0	0	0	0	0	0	0	0	**47**
9:00 PM	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
10:00 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
11:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Total	**11**	**299**	**1,449**	**673**	**46**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2,480**
Percent	**0.4%**	**12.1%**	**58.4%**	**27.1%**	**1.9%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	18.5	mph	Mean (Average) Speed	18.4	mph
85th Percentile	21.5	mph	10 mph Pace	13.0 - 23.0	mph
95th Percentile	23.4	mph	Percent in Pace	90.65	%

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

Monday, September 19, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
5:00 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**2**
6:00 AM	0	0	11	10	1	0	0	0	0	0	0	0	0	0	0	0	0	**22**
7:00 AM	0	3	35	48	6	0	0	0	0	0	0	0	0	0	0	0	0	**92**
8:00 AM	0	10	41	43	14	0	0	0	0	0	0	0	0	0	0	0	0	**108**
9:00 AM	0	3	43	75	10	1	0	0	0	0	0	0	0	0	0	0	0	**132**
10:00 AM	0	12	75	111	14	1	0	0	0	0	0	0	0	0	0	0	0	**213**
11:00 AM	1	25	88	130	20	1	0	0	0	0	0	1	0	0	0	0	0	**266**
12:00 PM	3	30	93	93	15	1	0	0	0	0	0	0	0	0	0	0	0	**235**
1:00 PM	5	25	106	102	18	1	0	0	0	0	0	0	0	0	0	0	0	**257**
2:00 PM	3	32	150	108	14	0	0	0	0	0	0	0	0	0	0	0	0	**307**
3:00 PM	4	36	123	101	14	2	1	0	0	0	0	0	0	0	0	0	0	**281**
4:00 PM	9	60	162	108	12	0	0	0	0	0	1	0	0	0	0	0	0	**352**
5:00 PM	7	41	159	95	17	5	0	0	0	0	0	0	0	0	0	0	0	**324**
6:00 PM	2	16	125	98	18	0	0	0	0	0	0	1	0	0	0	0	0	**260**
7:00 PM	2	24	89	70	7	0	0	0	0	0	0	0	0	0	0	0	0	**192**
8:00 PM	0	10	39	37	7	0	0	0	0	0	0	0	0	0	0	0	0	**93**
9:00 PM	0	1	30	35	4	0	0	0	0	0	0	0	0	0	0	0	0	**70**
10:00 PM	0	1	7	7	2	0	0	0	0	0	0	0	0	0	0	0	0	**17**
11:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**36**	**329**	**1,379**	**1,274**	**195**	**12**	**1**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**3,229**
Percent	**1.1%**	**10.2%**	**42.7%**	**39.5%**	**6.0%**	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	19.7	mph	Mean (Average) Speed	19.6	mph
85th Percentile	23.3	mph	10 mph Pace	14.4 - 24.4	mph
95th Percentile	25.6	mph	Percent in Pace	82.8	%

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

Monday, September 19, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	1	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
4:00 AM	0	2	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**11**
5:00 AM	0	4	14	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**21**
6:00 AM	1	4	21	15	1	0	0	0	0	0	0	0	0	0	0	0	0	**42**
7:00 AM	3	4	47	38	3	0	0	0	0	0	0	0	0	0	0	0	0	**95**
8:00 AM	1	8	70	42	9	0	0	0	0	0	0	0	0	0	0	0	0	**130**
9:00 AM	0	14	85	52	6	1	0	0	0	0	0	0	0	0	0	0	0	**158**
10:00 AM	0	29	111	71	4	0	0	0	0	0	0	0	0	0	0	0	0	**215**
11:00 AM	2	21	115	89	3	0	0	0	0	0	0	0	0	0	0	0	0	**230**
12:00 PM	0	27	129	68	6	0	0	0	0	0	0	0	0	0	0	0	0	**230**
1:00 PM	1	23	138	59	6	0	0	0	0	0	0	0	0	0	0	0	0	**227**
2:00 PM	2	30	113	66	4	0	0	0	0	0	0	0	0	0	0	0	0	**215**
3:00 PM	1	16	119	73	9	0	0	0	0	0	0	0	0	0	0	0	0	**218**
4:00 PM	2	14	125	84	3	0	0	0	0	0	0	0	0	0	0	0	0	**228**
5:00 PM	0	13	93	90	7	0	0	0	0	0	0	0	0	0	0	0	0	**203**
6:00 PM	1	15	109	47	3	0	0	0	0	0	0	0	0	0	0	0	0	**175**
7:00 PM	2	10	66	31	4	0	0	0	0	0	0	0	0	0	0	0	0	**113**
8:00 PM	2	12	23	14	4	0	0	0	0	0	0	0	0	0	0	0	0	**55**
9:00 PM	0	3	19	5	1	0	0	0	0	0	0	0	0	0	0	0	0	**28**
10:00 PM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**20**	**253**	**1,405**	**858**	**73**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2,610**
Percent	**0.8%**	**9.7%**	**53.8%**	**32.9%**	**2.8%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	19.0	mph	Mean (Average) Speed	18.9	mph
85th Percentile	22.0	mph	10 mph Pace	14.0 - 24.0	mph
95th Percentile	24.2	mph	Percent in Pace	88.7	%

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

Tuesday, September 20, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
6:00 AM	0	2	17	17	4	0	0	0	0	0	0	0	0	0	0	0	0	**40**
7:00 AM	0	8	31	36	8	0	0	0	0	0	0	0	0	0	0	0	0	**83**
8:00 AM	0	7	60	57	10	2	0	0	0	0	0	0	0	0	0	0	0	**136**
9:00 AM	0	6	55	79	13	0	0	0	0	0	0	0	0	0	0	0	0	**153**
10:00 AM	1	6	74	77	16	1	0	0	0	0	0	0	0	0	0	0	0	**175**
11:00 AM	1	12	100	83	13	2	0	0	0	0	0	0	0	0	0	0	0	**211**
12:00 PM	0	16	108	114	16	3	0	0	0	0	0	0	0	0	0	0	0	**257**
1:00 PM	3	27	114	104	15	4	0	0	0	0	0	0	0	0	0	0	0	**267**
2:00 PM	3	26	120	85	17	1	1	0	0	0	0	0	0	0	0	0	0	**253**
3:00 PM	7	35	128	111	11	4	0	0	0	0	0	0	0	0	0	0	0	**296**
4:00 PM	8	39	123	107	17	2	0	0	0	0	0	0	0	0	0	0	0	**296**
5:00 PM	9	45	124	107	18	1	0	0	0	0	0	0	0	0	0	0	0	**304**
6:00 PM	4	21	108	80	15	4	0	0	0	0	0	0	0	0	0	0	0	**232**
7:00 PM	3	17	78	46	9	0	0	0	0	0	0	0	0	0	0	0	0	**153**
8:00 PM	0	12	56	38	5	0	0	0	0	0	0	0	0	0	0	0	0	**111**
9:00 PM	0	4	21	15	3	0	0	0	0	0	0	0	0	0	0	0	0	**43**
10:00 PM	0	0	5	10	3	0	0	0	0	0	0	0	0	0	0	0	0	**18**
11:00 PM	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
Total	**39**	**284**	**1,325**	**1,170**	**193**	**24**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3,036**
Percent	**1.3%**	**9.4%**	**43.6%**	**38.5%**	**6.4%**	**0.8%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	19.7	mph	Mean (Average) Speed	19.6	mph
85th Percentile	23.3	mph	10 mph Pace	14.8 - 24.8	mph
95th Percentile	25.6	mph	Percent in Pace	82.4	%

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

Tuesday, September 20, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
4:00 AM	0	0	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	3	14	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**25**
6:00 AM	2	9	27	19	1	0	0	0	0	0	0	0	0	0	0	0	0	**58**
7:00 AM	3	6	53	36	5	0	0	0	0	0	0	0	0	0	0	0	0	**103**
8:00 AM	1	25	79	54	5	0	0	0	0	0	0	0	0	0	0	0	0	**164**
9:00 AM	2	16	95	59	5	0	0	0	0	0	0	0	0	0	0	0	0	**177**
10:00 AM	0	25	105	55	6	1	0	0	0	0	0	0	0	0	0	0	0	**192**
11:00 AM	0	34	115	66	3	0	0	0	0	0	0	0	0	0	0	0	0	**218**
12:00 PM	2	26	111	50	3	0	0	0	0	0	0	0	0	0	0	0	0	**192**
1:00 PM	0	28	142	44	1	0	0	0	0	0	0	0	0	0	0	0	0	**215**
2:00 PM	1	27	125	47	2	0	0	0	0	0	0	0	0	0	0	0	0	**202**
3:00 PM	1	18	113	44	0	0	0	0	0	0	0	0	0	0	0	0	0	**176**
4:00 PM	2	30	96	58	3	0	0	0	0	0	0	0	0	0	0	0	0	**189**
5:00 PM	0	20	126	50	3	0	0	0	0	0	0	0	0	0	0	0	0	**199**
6:00 PM	1	16	97	38	4	0	0	0	0	0	0	0	0	0	0	0	0	**156**
7:00 PM	1	15	61	26	0	0	0	0	0	0	0	0	0	0	0	0	0	**103**
8:00 PM	0	4	25	15	4	0	0	0	0	0	0	0	0	0	0	0	0	**48**
9:00 PM	0	2	3	8	0	0	0	0	0	0	0	0	0	0	0	0	0	**13**
10:00 PM	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
11:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**17**	**306**	**1,399**	**680**	**45**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2,448**
Percent	**0.7%**	**12.5%**	**57.1%**	**27.8%**	**1.8%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	18.3	mph	Mean (Average) Speed	18.4	mph
85th Percentile	21.7	mph	10 mph Pace	13.5 - 23.5	mph
95th Percentile	23.6	mph	Percent in Pace	87.99	%

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

Wednesday, September 21, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
6:00 AM	0	2	15	29	2	0	0	0	0	0	0	0	0	0	0	0	0	**48**
7:00 AM	0	3	41	38	7	0	0	0	0	0	0	0	0	0	0	0	0	**89**
8:00 AM	0	8	62	55	8	1	0	0	0	0	0	0	0	0	0	0	0	**134**
9:00 AM	0	10	66	63	11	1	0	0	0	0	0	0	0	0	0	0	0	**151**
10:00 AM	1	20	81	76	10	1	0	0	0	0	0	0	0	0	0	0	0	**189**
11:00 AM	2	24	102	80	11	2	0	0	0	0	0	0	0	0	0	0	0	**221**
12:00 PM	2	26	129	83	12	0	0	0	0	0	0	0	0	0	0	0	0	**252**
1:00 PM	4	30	115	102	16	1	0	0	0	0	0	0	0	0	0	0	0	**268**
2:00 PM	2	26	135	95	12	2	1	0	0	0	0	0	0	0	0	0	0	**273**
3:00 PM	14	42	120	81	13	2	0	0	0	0	0	0	0	0	0	0	0	**272**
4:00 PM	2	30	109	103	16	2	0	0	0	0	0	0	0	0	0	0	0	**262**
5:00 PM	10	68	117	84	21	1	0	0	0	0	0	0	0	0	0	0	0	**301**
6:00 PM	5	27	95	78	13	2	0	0	0	0	0	0	0	0	0	0	0	**220**
7:00 PM	0	19	77	71	10	0	0	0	0	0	0	0	0	0	0	0	0	**177**
8:00 PM	0	8	52	45	7	0	0	0	0	0	0	0	0	0	0	0	0	**112**
9:00 PM	0	4	19	20	3	0	0	0	0	0	0	0	0	0	0	0	0	**46**
10:00 PM	0	4	9	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**20**
11:00 PM	0	0	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**8**
Total	**42**	**351**	**1,354**	**1,117**	**172**	**15**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3,052**
Percent	**1.4%**	**11.5%**	**44.4%**	**36.6%**	**5.6%**	**0.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	19.3	mph	Mean (Average) Speed	19.3	mph
85th Percentile	23.0	mph	10 mph Pace	14.2 - 24.2	mph
95th Percentile	25.5	mph	Percent in Pace	81.5	%

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

Wednesday, September 21, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	3	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	**10**
5:00 AM	0	2	9	11	0	0	0	0	0	0	0	0	0	0	0	0	0	**22**
6:00 AM	0	11	32	21	5	0	1	0	0	0	0	0	0	0	0	0	0	**70**
7:00 AM	4	9	55	35	2	1	0	0	0	0	0	0	0	0	0	0	0	**106**
8:00 AM	0	22	90	50	4	0	0	0	0	0	0	0	0	0	0	0	0	**166**
9:00 AM	0	20	92	46	7	0	0	0	0	0	0	0	0	0	0	0	0	**165**
10:00 AM	0	30	132	44	1	1	0	0	0	0	0	0	0	0	0	0	0	**208**
11:00 AM	1	18	126	57	2	0	0	0	0	0	0	0	0	0	0	0	0	**204**
12:00 PM	6	39	126	50	2	0	0	0	0	0	0	0	0	0	0	0	0	**223**
1:00 PM	0	36	129	55	1	0	0	0	0	0	0	0	0	0	0	0	0	**221**
2:00 PM	1	37	133	65	1	0	0	0	0	0	0	0	0	0	0	0	0	**237**
3:00 PM	0	28	111	58	2	0	0	0	0	0	0	0	0	0	0	0	0	**199**
4:00 PM	4	24	112	60	4	0	0	0	0	0	0	0	0	0	0	0	0	**204**
5:00 PM	0	21	113	53	3	0	0	0	0	0	0	0	0	0	0	0	0	**190**
6:00 PM	0	15	66	47	2	0	0	0	0	0	0	0	0	0	0	0	0	**130**
7:00 PM	0	15	40	34	4	0	0	0	0	0	0	0	0	0	0	0	0	**93**
8:00 PM	0	2	21	14	1	0	0	0	0	0	0	0	0	0	0	0	0	**38**
9:00 PM	0	1	11	9	1	0	0	0	0	0	0	0	0	0	0	0	0	**22**
10:00 PM	0	1	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**8**
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Total	**16**	**334**	**1,409**	**716**	**43**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2,521**
Percent	**0.6%**	**13.2%**	**55.9%**	**28.4%**	**1.7%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	18.3	mph	Mean (Average) Speed	18.4	mph
85th Percentile	21.6	mph	10 mph Pace	13.1 - 23.1	mph
95th Percentile	23.6	mph	Percent in Pace	88.58	%

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

Thursday, September 22, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
2:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
4:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
5:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
6:00 AM	0	0	15	16	0	0	0	0	0	0	0	0	0	0	0	0	0	**31**
7:00 AM	0	3	41	38	7	2	0	0	0	0	0	0	0	0	0	0	0	**91**
8:00 AM	2	6	59	50	5	3	0	0	0	0	0	0	0	0	0	0	0	**125**
9:00 AM	3	14	58	49	3	0	0	0	0	0	0	0	0	0	0	0	0	**127**
10:00 AM	2	13	94	75	12	0	0	0	0	0	0	0	0	0	0	0	0	**196**
11:00 AM	1	14	97	101	12	1	0	0	0	0	0	0	0	0	0	0	0	**226**
12:00 PM	4	25	118	99	14	1	1	0	0	0	0	0	0	0	0	0	0	**262**
1:00 PM	3	21	151	101	11	1	0	0	0	0	0	0	0	0	0	0	0	**288**
2:00 PM	2	36	125	112	18	0	0	0	0	0	0	0	0	0	0	0	0	**293**
3:00 PM	4	32	111	108	10	2	1	0	0	0	0	0	0	0	0	0	0	**268**
4:00 PM	13	38	138	105	10	1	0	0	0	0	0	0	0	0	0	0	0	**305**
5:00 PM	2	49	118	92	24	3	0	0	0	0	0	0	0	0	0	0	0	**288**
6:00 PM	0	17	92	94	16	1	0	0	0	0	0	0	0	0	0	0	0	**220**
7:00 PM	9	17	91	61	14	0	0	0	0	0	0	0	0	0	0	0	0	**192**
8:00 PM	0	11	65	47	6	1	0	0	0	0	0	0	0	0	0	0	0	**130**
9:00 PM	0	6	26	27	3	1	0	0	0	0	0	0	0	0	0	0	0	**63**
10:00 PM	0	0	10	10	4	0	0	0	0	0	0	0	0	0	0	0	0	**24**
11:00 PM	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
Total	**45**	**304**	**1,414**	**1,193**	**169**	**17**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3,144**
Percent	**1.4%**	**9.7%**	**45.0%**	**37.9%**	**5.4%**	**0.5%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	19.5	mph	Mean (Average) Speed	19.4	mph
85th Percentile	23.0	mph	10 mph Pace	14.4 - 24.4	mph
95th Percentile	25.5	mph	Percent in Pace	83.4	%

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

Thursday, September 22, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
4:00 AM	0	1	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**9**
5:00 AM	0	3	9	7	0	0	0	0	0	0	0	0	0	0	0	0	0	**19**
6:00 AM	0	4	25	18	2	0	0	0	0	0	0	0	0	0	0	0	0	**49**
7:00 AM	1	11	43	36	7	0	0	0	0	0	0	0	0	0	0	0	0	**98**
8:00 AM	1	30	97	28	0	0	0	0	0	0	0	0	0	0	0	0	0	**156**
9:00 AM	2	35	92	45	5	0	0	0	0	0	0	0	0	0	0	0	0	**179**
10:00 AM	3	37	111	49	2	0	0	0	0	0	0	0	0	0	0	0	0	**202**
11:00 AM	4	34	120	58	0	0	0	0	0	0	0	0	0	0	0	0	0	**216**
12:00 PM	0	34	147	75	4	1	0	0	0	0	0	0	0	0	0	0	0	**261**
1:00 PM	2	22	123	55	3	0	0	0	0	0	0	0	0	0	0	0	0	**205**
2:00 PM	2	37	124	53	0	0	0	0	0	0	0	0	0	0	0	0	0	**216**
3:00 PM	2	19	114	58	1	1	0	0	0	0	0	0	0	0	0	0	0	**195**
4:00 PM	1	29	122	58	8	0	0	0	0	0	0	0	0	0	0	0	0	**218**
5:00 PM	0	13	88	63	4	0	0	0	0	0	0	0	0	0	0	0	0	**168**
6:00 PM	1	19	91	55	6	0	0	0	0	0	0	0	0	0	0	0	0	**172**
7:00 PM	0	9	75	28	1	0	0	0	0	0	0	0	0	0	0	0	0	**113**
8:00 PM	0	7	45	19	2	0	0	0	0	0	0	0	0	0	0	0	0	**73**
9:00 PM	1	6	12	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**24**
10:00 PM	0	3	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
11:00 PM	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
Total	**21**	**355**	**1,450**	**716**	**45**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2,589**
Percent	**0.8%**	**13.7%**	**56.0%**	**27.7%**	**1.7%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	18.3	mph	Mean (Average) Speed	18.3	mph
85th Percentile	21.5	mph	10 mph Pace	13.2 - 23.2	mph
95th Percentile	23.4	mph	Percent in Pace	88.49	%

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

Friday, September 23, 2022
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
1:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
6:00 AM	0	1	10	20	4	0	0	0	0	0	0	0	0	0	0	0	0	**35**
7:00 AM	1	5	24	56	4	1	0	0	0	0	0	0	0	0	0	0	0	**91**
8:00 AM	1	7	46	41	6	1	0	0	0	0	0	0	0	0	0	0	0	**102**
9:00 AM	1	7	44	50	14	1	0	0	0	0	0	0	0	0	0	0	0	**117**
10:00 AM	4	21	75	93	16	0	0	0	0	0	0	0	0	0	0	0	0	**209**
11:00 AM	8	36	81	101	17	0	0	0	0	0	0	0	0	0	0	0	0	**243**
12:00 PM	4	27	123	126	22	5	1	0	0	0	0	0	0	0	0	0	0	**308**
1:00 PM	12	33	107	127	16	2	0	0	0	0	0	0	0	0	0	0	0	**297**
2:00 PM	7	44	108	106	21	0	0	0	0	0	0	0	0	0	0	0	0	**286**
3:00 PM	18	62	138	80	17	0	0	0	0	0	0	0	0	0	0	0	0	**315**
4:00 PM	15	40	144	102	20	0	0	0	0	0	0	0	0	0	0	0	0	**321**
5:00 PM	4	39	130	119	21	2	0	0	0	0	0	0	0	0	0	0	0	**315**
6:00 PM	0	35	129	104	11	0	0	0	0	0	0	0	0	0	0	0	0	**279**
7:00 PM	1	22	86	74	8	1	0	0	0	0	0	0	0	0	0	0	0	**192**
8:00 PM	0	10	65	61	5	1	0	0	0	0	0	0	0	0	0	0	0	**142**
9:00 PM	0	5	37	33	9	1	0	0	0	0	0	0	0	0	0	0	0	**85**
10:00 PM	0	2	14	17	3	1	0	0	0	0	0	0	0	0	0	0	0	**37**
11:00 PM	0	1	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	**7**
Total	**76**	**397**	**1,365**	**1,318**	**215**	**16**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3,388**
Percent	**2.2%**	**11.7%**	**40.3%**	**38.9%**	**6.3%**	**0.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	19.6	mph	Mean (Average) Speed	19.3	mph
85th Percentile	23.3	mph	10 mph Pace	14.2 - 24.2	mph
95th Percentile	25.6	mph	Percent in Pace	79.3	%

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

Friday, September 23, 2022
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1:00 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
3:00 AM	0	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
4:00 AM	0	0	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
5:00 AM	0	4	12	8	1	0	0	0	0	0	0	0	0	0	0	0	0	**25**
6:00 AM	1	8	37	21	2	0	0	0	0	0	0	0	0	0	0	0	0	**69**
7:00 AM	1	1	46	30	0	1	0	0	0	0	0	0	0	0	0	0	0	**79**
8:00 AM	1	11	61	51	0	0	0	0	0	0	0	0	0	0	0	0	0	**124**
9:00 AM	2	10	90	52	2	0	0	0	0	0	0	0	0	0	0	0	0	**156**
10:00 AM	5	31	141	57	7	0	0	0	0	0	0	0	0	0	0	0	0	**241**
11:00 AM	0	31	141	62	3	0	0	0	0	0	0	0	0	0	0	0	0	**237**
12:00 PM	7	44	132	50	5	0	0	0	0	0	0	0	0	0	0	0	0	**238**
1:00 PM	5	21	143	70	2	1	0	0	0	0	0	0	0	0	0	0	0	**242**
2:00 PM	4	41	151	45	3	0	0	0	0	0	0	0	0	0	0	0	0	**244**
3:00 PM	0	18	119	77	6	0	0	0	0	0	0	0	0	0	0	0	0	**220**
4:00 PM	0	16	110	79	6	0	0	0	0	0	0	0	0	0	0	0	0	**211**
5:00 PM	4	18	124	63	4	1	0	0	0	0	0	0	0	0	0	0	0	**214**
6:00 PM	2	20	112	51	2	0	0	0	0	0	0	0	0	0	0	0	0	**187**
7:00 PM	0	19	77	29	1	0	0	0	0	0	0	0	0	0	0	0	0	**126**
8:00 PM	0	6	23	20	1	0	0	0	0	0	0	0	0	0	0	0	0	**50**
9:00 PM	1	9	12	13	2	0	0	0	0	0	0	0	0	0	0	0	0	**37**
10:00 PM	0	1	4	4	1	0	0	0	0	0	0	0	0	0	0	0	0	**10**
11:00 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Total	**33**	**309**	**1,544**	**791**	**48**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2,729**
Percent	**1.2%**	**11.3%**	**56.6%**	**29.0%**	**1.8%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	18.6	mph	Mean (Average) Speed	18.5	mph
85th Percentile	21.6	mph	10 mph Pace	13.9 - 23.9	mph
95th Percentile	23.6	mph	Percent in Pace	89.01	%

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

Total Study Average
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
1:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
2:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
4:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
5:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
6:00 AM	0	1	10	15	2	0	0	0	0	0	0	0	0	0	0	0	0	**28**
7:00 AM	0	3	28	36	5	0	0	0	0	0	0	0	0	0	0	0	0	**72**
8:00 AM	0	6	46	46	8	1	0	0	0	0	0	0	0	0	0	0	0	**107**
9:00 AM	1	7	51	62	11	1	0	0	0	0	0	0	0	0	0	0	0	**133**
10:00 AM	2	14	78	87	13	1	0	0	0	0	0	0	0	0	0	0	0	**195**
11:00 AM	2	20	96	105	15	1	0	0	0	0	0	0	0	0	0	0	0	**239**
12:00 PM	3	24	120	109	16	2	0	0	0	0	0	0	0	0	0	0	0	**274**
1:00 PM	6	31	123	110	16	1	0	0	0	0	0	0	0	0	0	0	0	**287**
2:00 PM	5	30	129	108	16	1	0	0	0	0	0	0	0	0	0	0	0	**289**
3:00 PM	8	41	130	99	16	2	0	0	0	0	0	0	0	0	0	0	0	**296**
4:00 PM	8	39	129	109	17	1	0	0	0	0	0	0	0	0	0	0	0	**303**
5:00 PM	5	39	119	105	20	2	0	0	0	0	0	0	0	0	0	0	0	**290**
6:00 PM	3	21	104	85	14	1	0	0	0	0	0	0	0	0	0	0	0	**228**
7:00 PM	2	18	84	66	10	0	0	0	0	0	0	0	0	0	0	0	0	**180**
8:00 PM	0	10	56	46	6	0	0	0	0	0	0	0	0	0	0	0	0	**118**
9:00 PM	0	4	27	26	5	0	0	0	0	0	0	0	0	0	0	0	0	**62**
10:00 PM	0	1	9	10	2	0	0	0	0	0	0	0	0	0	0	0	0	**22**
11:00 PM	0	0	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	**5**
Total	**45**	**309**	**1,346**	**1,230**	**193**	**14**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3,137**
Percent	**1.4%**	**9.9%**	**42.9%**	**39.2%**	**6.2%**	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	19.6	mph	Mean (Average) Speed	19.5	mph
85th Percentile	23.3	mph	10 mph Pace	14.4 - 24.4	mph
95th Percentile	25.6	mph	Percent in Pace	82.1	%

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 to 9/23/2022
Site Code: 15

Total Study Average
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
3:00 AM	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
4:00 AM	0	1	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
5:00 AM	0	3	9	6	0	0	0	0	0	0	0	0	0	0	0	0	0	**18**
6:00 AM	1	6	25	16	2	0	0	0	0	0	0	0	0	0	0	0	0	**50**
7:00 AM	2	7	43	30	3	0	0	0	0	0	0	0	0	0	0	0	0	**85**
8:00 AM	1	16	71	44	3	0	0	0	0	0	0	0	0	0	0	0	0	**135**
9:00 AM	1	18	90	49	5	0	0	0	0	0	0	0	0	0	0	0	0	**163**
10:00 AM	1	27	124	58	4	0	0	0	0	0	0	0	0	0	0	0	0	**214**
11:00 AM	1	34	135	66	2	0	0	0	0	0	0	0	0	0	0	0	0	**238**
12:00 PM	3	36	145	62	5	0	0	0	0	0	0	0	0	0	0	0	0	**251**
1:00 PM	1	29	144	64	3	0	0	0	0	0	0	0	0	0	0	0	0	**241**
2:00 PM	2	36	139	56	3	0	0	0	0	0	0	0	0	0	0	0	0	**236**
3:00 PM	1	21	120	63	4	0	0	0	0	0	0	0	0	0	0	0	0	**209**
4:00 PM	2	22	115	65	4	0	0	0	0	0	0	0	0	0	0	0	0	**208**
5:00 PM	1	16	104	63	5	0	0	0	0	0	0	0	0	0	0	0	0	**189**
6:00 PM	1	17	93	46	3	0	0	0	0	0	0	0	0	0	0	0	0	**160**
7:00 PM	0	14	62	29	2	0	0	0	0	0	0	0	0	0	0	0	0	**107**
8:00 PM	0	6	28	17	2	0	0	0	0	0	0	0	0	0	0	0	0	**53**
9:00 PM	0	5	11	6	1	0	0	0	0	0	0	0	0	0	0	0	0	**23**
10:00 PM	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
11:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Total	**18**	**315**	**1,468**	**747**	**51**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2,599**
Percent	**0.7%**	**12.1%**	**56.5%**	**28.7%**	**2.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	

Note: Average only condsidered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	18.5	mph	Mean (Average) Speed	18.5	mph
85th Percentile	21.6	mph	10 mph Pace	13.5 - 23.5	mph
95th Percentile	23.6	mph	Percent in Pace	88.8	%

Location: W Meadows Dr S/O Midland Ave
Date Range: 9/17/2022 - 9/23/2022
Site Code: 15

	Saturday			Sunday			Monday			Tuesday			Wednesday			Thursday			Friday			Mid-Week Average		
	9/17/2022			9/18/2022			9/19/2022			9/20/2022			9/21/2022			9/22/2022			9/23/2022					
Time	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total
12:00 AM	5	3	8	2	1	3	3	2	5	1	0	1	2	0	2	1	1	2	3	0	3	1	0	2
1:00 AM	1	1	2	2	2	4	0	3	3	0	0	0	2	0	2	3	0	3	1	2	3	2	0	2
2:00 AM	4	2	6	2	0	2	1	1	2	1	0	1	1	0	1	1	0	1	1	1	2	1	0	1
3:00 AM	1	7	8	2	3	5	1	7	8	0	4	4	1	5	6	1	7	8	0	7	7	1	5	6
4:00 AM	3	3	6	0	4	4	0	11	11	1	9	10	1	10	11	2	9	11	1	7	8	1	9	11
5:00 AM	2	11	13	1	4	5	2	21	23	2	25	27	2	22	24	1	19	20	1	25	26	2	22	24
6:00 AM	21	34	55	3	27	30	22	42	64	40	58	98	48	70	118	31	49	80	35	69	104	40	59	99
7:00 AM	41	67	108	19	39	58	92	95	187	83	103	186	89	106	195	91	98	189	91	79	170	88	102	190
8:00 AM	98	126	224	46	77	123	108	130	238	136	164	300	134	166	300	125	156	281	102	124	226	132	162	294
9:00 AM	145	174	319	109	131	240	132	158	290	153	177	330	151	165	316	127	179	306	117	156	273	144	174	317
10:00 AM	207	238	445	164	204	368	213	215	428	175	192	367	189	208	397	196	202	398	209	241	450	187	201	387
11:00 AM	290	290	580	217	276	493	266	230	496	211	218	429	221	204	425	226	216	442	243	237	480	219	213	432
12:00 PM	320	312	632	282	300	582	235	230	465	257	192	449	252	223	475	262	261	523	308	238	546	257	225	482
1:00 PM	347	305	652	287	279	566	257	227	484	267	215	482	268	221	489	288	205	493	297	242	539	274	214	488
2:00 PM	328	266	594	292	270	562	307	215	522	253	202	455	273	237	510	293	216	509	286	244	530	273	218	491
3:00 PM	338	220	558	308	232	540	281	218	499	296	176	472	272	199	471	268	195	463	315	220	535	279	190	469
4:00 PM	285	214	499	299	188	487	352	228	580	296	189	485	262	204	466	305	218	523	321	211	532	288	204	491
5:00 PM	266	196	462	238	157	395	324	203	527	304	199	503	301	190	491	288	168	456	315	214	529	298	186	483
6:00 PM	208	166	374	176	136	312	260	175	435	232	156	388	220	130	350	220	172	392	279	187	466	224	153	377
7:00 PM	193	105	298	162	93	255	192	113	305	153	103	256	177	93	270	192	113	305	192	126	318	174	103	277
8:00 PM	123	57	180	114	47	161	93	55	148	111	48	159	112	38	150	130	73	203	142	50	192	118	53	171
9:00 PM	86	33	119	43	6	49	70	28	98	43	13	56	46	22	68	63	24	87	85	37	122	51	20	70
10:00 PM	27	5	32	14	2	16	17	3	20	18	4	22	20	8	28	24	5	29	37	10	47	21	6	26
11:00 PM	5	2	7	5	2	7	1	0	1	3	1	4	8	0	8	6	3	9	7	2	9	6	1	7
Total	**3,344**	**2,837**	**6,181**	**2,787**	**2,480**	**5,267**	**3,229**	**2,610**	**5,839**	**3,036**	**2,448**	**5,484**	**3,052**	**2,521**	**5,573**	**3,144**	**2,589**	**5,733**	**3,388**	**2,729**	**6,117**	**3,077**	**2,519**	**5,597**
Percent	**54%**	**46%**	-	**53%**	**47%**	-	**55%**	**45%**	-	**55%**	**45%**	-	**55%**	**45%**	-	**55%**	**45%**	-	**55%**	**45%**	-	**55%**	**45%**	-

1. Mid-week average includes data between Tuesday and Thursday.

Meadows Master Traffic Study: CDOT Traffic Projections

ROUTE	REFPT	ENDREFPT	AADT	AADTYR	YR20FACTOR	Annual Growth	DHV	LOCATION
082A	0	0.016	29,000	2021	1.2	0.92%	9	ON SH 82 SW/O I-70
082A	0.016	0.116	24,000	2021	1.16	0.74%	10	ON SH 82 SW/O SH 6 (6TH ST)
082A	0.116	1.405	27,000	2019	1.18	0.83%	9	ON SH 82 6TH ST E/O SH 6 (6TH ST)
006K	0	0.338	11,000	2021	1.15	0.70%	9.5	ON SH 6 WEST ST W/O SH 82
					Average:	0.80%		

APPENDIX B

Trip Generation Worksheets

Kimley»Horn

Project	Glenwood Meadows (130 Midland) - Zone 1				
Subject	Trip Generation for Strip Retail Plaza (<40k)				
Designed by	MAG	*Date*	November 07, 2022	*Job No.*	096798001
Checked by		*Date*		*Sheet No.*	of

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 11th Edition, Average Rate Equations

Land Use Code - Strip Retail Plaza (<40k) (822)

Independent Variable - 1000 Square Feet Gross Leasable Area (X)

Gross Leasable Area = 9,000 Square Feet
X = 9.000
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (800 Series Page 230)

Average Weekday — Directional Distribution: 60% ent. 40% exit.
T = 2.36 * (X) — T = 21 Average Vehicle Trip Ends
T = 2.36 * 9 — 13 entering 8 exiting

13 + 8 = 21

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (800 Series page 231)

Average Weekday — Directional Distribution: 50% ent. 50% exit.
T = 6.59 * (X) — T = 59 Average Vehicle Trip Ends
T = 6.59 * 9 — 29 entering 30 exiting

29 + 30 = 59

Weekday (800 Series page 229)

Average Weekday — Directional Distribution: 50% entering, 50% exiting
T = 54.45 * (X) — T = 490 Average Vehicle Trip Ends
T = 54.45 * 9 — 245 entering 245 exiting

245 + 245 = 490

Non Pass-By Trip Volumes (Per ITE Trip Generation Manual, 11th Edition)

AM Peak Hour = 60% Non-Pass By — PM Peak Hour = 60% Non-Pass By

	IN	Out	Total	
				Pass-By Rates from ITE 821
AM Peak	8	5	13	PM Peak Hour Rate Applied to AM Peak Hour
PM Peak	17	18	36	
Daily	147	147	294	PM Peak Hour Rate Applied to Daily

Pass-By Trip Volumes (Per ITE Trip Generation Manual, 11th Edition)

AM Peak Hour = 40% Pass By — PM Peak Hour = 40% Pass By

	IN	Out	Total	
AM Peak	5	3	9	PM Peak Hour Rate Applied to AM Peak Hour
PM Peak	12	12	24	
Daily	98	98	196	PM Peak Hour Rate Applied to Daily

Kimley»Horn

Project	Glenwood Meadows (130 Midland) - Zone 1				
Subject	Trip Generation for Fast Casual Restaurant				
Designed by	MAG	*Date*	November 07, 2022	*Job No.*	096798001
Checked by		*Date*		*Sheet No.*	1 *of* 1

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 11th Edition, Average Rates

Land Use Code - Fast Casual Restaurant (930)

Independant Variable - 1000 Square Feet (X)
SF = 5,000
X = 5.000
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (900 Series Page 640)
(Note: Small Sample Size < 5)

Directional Distribution: 50% ent. 50% exit.
(T) = 1.43 (X) T = 7 Average Vehicle Trip Ends
(T) = 1.43 * (5.0) 4 entering 4 exiting

4 + 3 = 7

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (900 Series Page 641)

Directional Distribution: 55% ent. 45% exit.
(T) = 12.55 (X) T = 63 Average Vehicle Trip Ends
(T) = 12.55 * (5.0) 35 entering 28 exiting

35 + 28 = 63

Weekday (900 Series Page 639)
(Note: Small Sample Size < 5)

Directional Distribution: 50% ent. 50% exit.
(T) = 97.14 (X) T = 486 Average Vehicle Trip Ends
(T) = 97.14 * (5.0) 243 entering 243 exiting

243 + 243 = 486

Kimley»Horn

Project	Glenwood Meadows (Lot 14) - Zone 2				
Subject	Trip Generation for Multifamily Housing (Mid-Rise)				
Designed by	MAG	*Date*	November 07, 2022	*Job No.*	096798001
Checked by		*Date*		*Sheet No.*	of

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 11th Edition, Average Rate Equations

Land Use Code - Multifamily Housing (Mid-Rise) (221)

Independent Variable - Dwelling Units (X)

X = 550
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (200 Series Page 275)

Average Weekday
(T) = 0.37 (X)
(T) = 0.37 * (550.0)

Directional Distribution: 23% ent. 77% exit.
T = 204 Average Vehicle Trip Ends
47 entering 157 exiting

47 + 157 = 204

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (200 Series Page 276)

Average Weekday
(T) = 0.39(X)
(T) = 0.39 * (550.0)

Directional Distribution: 61% ent. 39% exit.
T = 215 Average Vehicle Trip Ends
131 entering 84 exiting

131 + 84 = 215

Weekday (200 Series Page 274)

Average Weekday
(T) = 4.54 (X)
(T) = 4.54 * (550.0)

Directional Distribution: 50% entering, 50% exiting
T = 2498 Average Vehicle Trip Ends
1249 entering 1249 exiting

1249 + 1249 = 2498

Kimley»Horn

Project	Glenwood Meadows (Lot 10C) - Zone 2				
Subject	Trip Generation for Multifamily Housing (Mid-Rise)				
Designed by	MAG	*Date*	November 07, 2022	*Job No.*	096798001
Checked by		*Date*		*Sheet No.*	of

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 11th Edition, Average Rate Equations

Land Use Code - Multifamily Housing (Mid-Rise) (221)

Independent Variable - Dwelling Units (X)

X = 280
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (200 Series Page 275)

Average Weekday
(T) = 0.37 (X)
(T) = 0.37 * (280.0)

Directional Distribution: 23% ent. 77% exit.
T = 104 Average Vehicle Trip Ends
24 entering 80 exiting

24 + 80 = 104

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (200 Series Page 276)

Average Weekday
(T) = 0.39(X)
(T) = 0.39 * (280.0)

Directional Distribution: 61% ent. 39% exit.
T = 109 Average Vehicle Trip Ends
66 entering 43 exiting

66 + 43 = 109

Weekday (200 Series Page 274)

Average Weekday
(T) = 4.54 (X)
(T) = 4.54 * (280.0)

Directional Distribution: 50% entering, 50% exiting
T = 1272 Average Vehicle Trip Ends
636 entering 636 exiting

636 + 636 = 1272

Kimley»Horn

Project	Lofts at Red Mountain - Phase IV				
Subject	Trip Generation for Multifamily Housing (Mid-Rise)				
Designed by	MAG	*Date*	February 23, 2021	*Job No.*	196157000
Checked by		*Date*		*Sheet No.*	1 *of* 2

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 10th Edition, Fitted Curve Equations

Land Use Code - Multifamily Housing (Mid-Rise) (221)

Independant Variable - Dwelling Units (X)

X = 36
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (Series 200 Page 74)

Ln(T) = 0.98 Ln(X) - 0.98
Ln(T) = 0.98 * Ln(36.0) - 0.98

Directional Distribution: 26% ent. 74% exit.
T = 13 Average Vehicle Trip Ends
3 entering 10 exiting

3 + 10 = 13

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (Series 200 Page 75)

Ln(T) = 0.96 Ln(X) - 0.63
Ln(T) = 0.96 * Ln(36.0) - 0.63

Directional Distribution: 61% ent. 39% exit.
T = 17 Average Vehicle Trip Ends
10 entering 7 exiting

10 + 7 = 17

Weekday (Series 200 Page 73)

(T) = 5.45*(X) - 1.75
(T) = 5.45 * 36 - 1.75

Directional Distribution: 50% ent. 50% exit.
T = 196 Average Vehicle Trip Ends
98 entering 98 exiting

98 + 98 = 196

Peak Hour of Generator, Saturday (Series 200 Page 79)

(T) = 0.42*(X) + 6.73
(T) = 0.42 * 36 + 6.73

Directional Distribution: 49% ent. 51% exit.
T = 22 Average Vehicle Trip Ends
11 entering 11 exiting

11 + 11 = 22

Kimley»Horn

Project	Lofts at Red Mountain - Phase IV				
Subject	Trip Generation for Fast Casual Restaurant				
Designed by	MAG	*Date*	February 23, 2021	*Job No.*	196157000
Checked by		*Date*		*Sheet No.*	2 of 2

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 10th Edition, Average Rate Equations

Land Use Code - Fast Casual Restaurant (930)

Independant Variable - 1000 Square Feet Gross Floor Area (X)
Gross Floor Area = 5,950 Square Feet
X = 5.950
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (900 Series Page 62)

Average Weekday — Directional Distribution: 67% ent. 33% exit.
T = 2.07 (X) — T = 12 Average Vehicle Trip Ends
T = 2.07 * 5.950 — 8 entering 4 exiting

8 + 4 = 12

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (900 Series Page 63)

Average Weekday — Directional Distribution: 55% ent. 45% exit.
T = 14.13(X) — T = 84 Average Vehicle Trip Ends
T = 14.13 * 5.950 — 46 entering 38 exiting

46 + 38 = 84

Weekday (900 Series Page 61)

Average Weekday — Directional Distribution: 50% entering, 50% exiting
T = 315.17 (X) — T = 1876 Average Vehicle Trip Ends
T = 315.17 * 5.950 — 938 entering 938 exiting

938 + 938 = 1876

Saturday Peak Hour of Generator (900 Series Page 67)

Directional Distribution: 55% ent. 45% exit.
T = 34.02 (X) — T = 202 Average Vehicle Trip Ends
T = 34.02 * 5.950 — 111 entering 91 exiting

111 + 91 = 202

Kimley»Horn

Project Glenwood Meadows (Market Street) - Zone 3
Subject Trip Generation for Strip Retail Plaza (<40k)
Designed by MAG *Date* November 07, 2022 *Job No.* 096798001
Checked by *Date* *Sheet No.* *of*

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 11th Edition, Average Rate Equations

Land Use Code - Strip Retail Plaza (<40k) (822)

Independent Variable - 1000 Square Feet Gross Leasable Area (X)

Gross Leasable Area = 9,000 Square Feet
X = 9.000
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (800 Series Page 230)

Average Weekday — Directional Distribution: 60% ent. 40% exit.
T = 2.36 * (X) — T = 21 Average Vehicle Trip Ends
T = 2.36 * 9 — 13 entering 8 exiting

13 + 8 = 21

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (800 Series page 231)

Average Weekday — Directional Distribution: 50% ent. 50% exit.
T = 6.59 * (X) — T = 59 Average Vehicle Trip Ends
T = 6.59 * 9 — 29 entering 30 exiting

29 + 30 = 59

Weekday (800 Series page 229)

Average Weekday — Directional Distribution: 50% entering, 50% exiting
T = 54.45 * (X) — T = 490 Average Vehicle Trip Ends
T = 54.45 * 9 — 245 entering 245 exiting

245 + 245 = 490

Non Pass-By Trip Volumes (Per ITE Trip Generation Manual, 11th Edition)

AM Peak Hour = 60% Non-Pass By	IN	Out	Total	PM Peak Hour = 60% Non-Pass By
				Pass-By Rates from ITE 821
AM Peak	8	5	13	PM Peak Hour Rate Applied to AM Peak Hour
PM Peak	17	18	36	
Daily	147	147	294	PM Peak Hour Rate Applied to Daily

Pass-By Trip Volumes (Per ITE Trip Generation Manual, 11th Edition)

AM Peak Hour = 40% Pass By	IN	Out	Total	PM Peak Hour = 40% Pass By
AM Peak	5	3	9	PM Peak Hour Rate Applied to AM Peak Hour
PM Peak	12	12	24	
Daily	98	98	196	PM Peak Hour Rate Applied to Daily

Kimley»Horn

Project	Glenwood Meadows (Flat Tops View Drive) - Zone 4				
Subject	Trip Generation for Multifamily Housing (Mid-Rise)				
Designed by	MAG	*Date*	November 07, 2022	*Job No.*	096798001
Checked by		*Date*		*Sheet No.*	of

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 11th Edition, Average Rate Equations

Land Use Code - Multifamily Housing (Mid-Rise) (221)

Independent Variable - Dwelling Units (X)

X = 510
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (200 Series Page 275)

Average Weekday — Directional Distribution: 23% ent. 77% exit.
(T) = 0.37 (X) — T = 189 Average Vehicle Trip Ends
(T) = 0.37 * (510.0) — 43 entering 146 exiting

43 + 146 = 189

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (200 Series Page 276)

Average Weekday — Directional Distribution: 61% ent. 39% exit.
(T) = 0.39(X) — T = 199 Average Vehicle Trip Ends
(T) = 0.39 * (510.0) — 121 entering 78 exiting

121 + 78 = 199

Weekday (200 Series Page 274)

Average Weekday — Directional Distribution: 50% entering, 50% exiting
(T) = 4.54 (X) — T = 2316 Average Vehicle Trip Ends
(T) = 4.54 * (510.0) — 1158 entering 1158 exiting

1158 + 1158 = 2316

Kimley»Horn

Project	Glenwood Meadows (Kind Castle) - Zone 4				
Subject	Trip Generation for Marijuana Dispensary				
Designed by	MAG	*Date*	November 07, 2022	*Job No.*	096798001
Checked by				*Sheet No.*	of

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 11th Edition, Average Rate Equations

Land Use Code - Marijuana Dispensary (882)

Independant Variable - 1000 Sq. Feet Gross Floor Area (X)
SF= 4504
X = 4.504
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (page Series 800 Page 541)

Average Weekday
T = 10.54 (X)
(T) = 10.54* (4.5)

Directional Distribution: 52% ent. 48% exit.
T = 47 Average Vehicle Trip Ends
24 entering 23 exiting

24 + 23 = 47

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (Series 800 page 542)

Average Weekday
T = 18.92 (X)
(T) = 18.92 * (4.5)

Directional Distribution: 50% ent. 50% exit.
T = 85 Average Vehicle Trip Ends
43 entering 43 exiting

43 + 43 = not ok

Weekday (Series 800 page 540)

Average Weekday
T = 211.12 (X)
(T) = 211.12 * (4.5)

Directional Distribution: 50% entering, 50% exiting
T = 950 Average Vehicle Trip Ends
475 entering 475 exiting

475 + 475 = 950

2. Preparer Qualifications

I certify that this TRAFFIC ANALYSIS has been prepared by me or under my immediate supervision and that I have experience and training in the field of traffic and transportation engineering.

Jill Palmer
Shrewsberry & Associates, LLC



Eric Rolle, PE
Colorado PE 46126
Shrewsberry & Associates, LLC

4. Trip Generation, Distribution, and Assignment

As part of the expansion, traffic from various on-site sources is expected to increase as well. The Feasibility Study[5] provides the following information regarding additional traffic generated by the facility.

- Bus traffic will be expanded from 45 to 60 operating buses during the winter peak season.
- Bus drivers will also increase from 45 to 60 per day.
- Maintenance staff will increase from 21 to 28.
- Between the on-site parking garage and the park and ride lot on Wulfsohn Road, parking for the public will increase from 85 spaces to 324 spaces combined.
- The quantity of administrative staff will remain at the same levels as today.

4.1 Trip Generation

For the increased bus traffic, the Feasibility Study[5] offers precise numbers for trip generation. During the peak hours of the facility, expansion to 60 operating buses translates to four additional buses exiting the facility in the morning and three additional buses entering the facility in the evening.

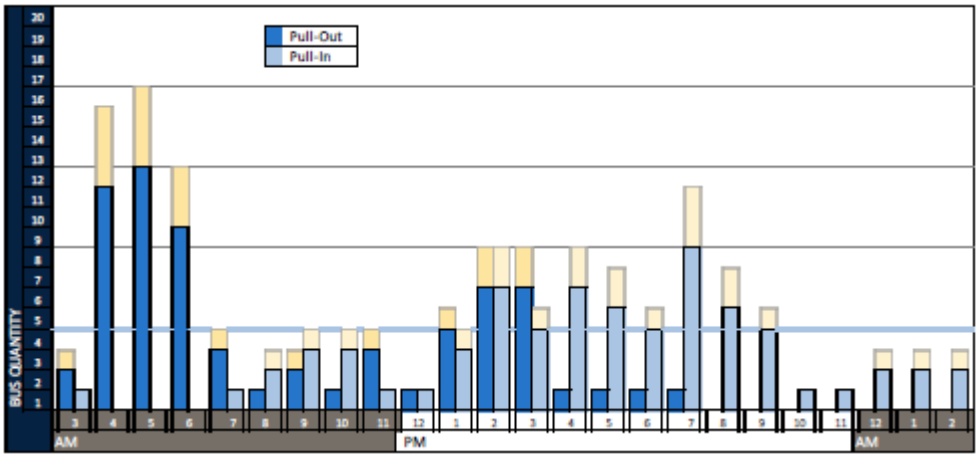


Figure 2. Proportionally Expanded 60-Bus Pull-in and Pull-out Schedule (Feasibility Study Figure 3.12)

The maintenance staff expansion was based on current shift times, assuming three new staff on the 8:00 AM to 4:00 PM shift and two each on the second and third shifts.

For the public parking expansion, Trip Generation[6] was used to calculate the increase traffic from the public. While the site design is underway, the determination has not been made exactly how many parking spaces will be provided on the maintenance facility site, below the bus garage, and how many will be constructed at the existing park and ride facility that is across from the maintenance facility on

[5] *Regional Transit Center (RTC) Glenwood Springs, Colorado Feasibility Study*. Shrewsberry with Iron Horse Architects, November 16, 2016.
[6] *Trip Generation, 10th Edition*, Institute of Transportation Engineers, 2016.

Wulfsohn Road. Traffic from both the garage and park and ride lot will impact the intersection of Wulfsohn Road and Midland Avenue in the same way.

Trip Generation[6] equations for Land Use #90, Park and Ride Lot, were used to calculate the net increase in traffic. First, the trips generated by the existing 85-space facility were calculated. Then trips by the expanded 324-space facility were calculated. The difference between the two is the net increase in traffic caused by the expansion. This net increase results in 202 trip ends in the morning peak of the facility (170 entering, 32 exiting) and 105 trip ends in the evening peak of the facility (26 entering, 79 exiting). Trip generation calculations are shown in Appendix A.

4.2 Trip Distribution

The trips were distributed to area roadways using a different methodology for each source of traffic, using information provided by RFTA where available. Calculations are shown in Appendix A.

The current bus routing has some buses traveling west to Midland Avenue (resulting in northbound left turns), while others travel south on Wulfsohn Road (exiting the study area). Buses return using this route in the opposite direction (resulting in Midland Avenue eastbound right turns). One route has buses traveling eastbound Midland Avenue past Wulfsohn Road (resulting in eastbound through traffic).

For the traffic study, it was assumed that all additional buses will travel west on Midland Avenue and return in the opposite direction (resulting in northbound left turns and eastbound right turns at the study intersection). This assumption neglects those buses traveling south on Wulfsohn Road, which do not impact the study intersection of Midland Avenue and Wulfsohn Road. Therefore, this conservative distribution results in a worst-case traffic scenario.

Public traffic was distributed based on the location of population centers and proximity to other park and ride lots. Using this assumption, 90% of traffic was distributed to and from Midland Avenue west of Wulfsohn Road. The remaining 10% of traffic was distributed to Wulfsohn Road, not impacting the study intersection.

4.3 Trip Assignment

The additional bus and public trips were assigned to the study intersection according to the trip distribution methodology. Calculations of trip assignment are shown in Appendix A. The new trips were added to existing traffic before proceeding with the capacity analysis.

Kimley»Horn

Project	Glenwood Meadows - 8th & Cowdin				
Subject	Trip Generation for Affordable Housing (Income Limits)				
Designed by	MAG	*Date*	November 17, 2022	*Job No.*	096798001
Checked by				*Sheet No.*	of

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 11th Edition, Average Rate Equations

Land Use Code - Affordable Housing (Income Limits) (ITE 223)

Independant Variable - Dwelling Units (X)

X = 8
T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (Page 342)

Average Weekday
T = 0.36 (X)
T = 0.36 * 8

Directional Distribution: 29% ent. 71% exit.
T = 3 Average Vehicle Trip Ends
1 entering 2 exiting

1 + 2 = 3

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (Page 343)

Average Weekday
(T) = 0.46 (X)
T = 0.46 * 8

Directional Distribution: 59% ent. 41% exit.
T = 4 Average Vehicle Trip Ends
2 entering 2 exiting

2 + 2 = 4

Weekday (Page 341)

Average Weekday
(T) = 4.81 (X)
T = 4.81 * 8

Directional Distribution: 50% ent. 50% exit.
T = 40 Average Vehicle Trip Ends
20 entering 20 exiting

20 + 20 = 40

APPENDIX C

Intersection Analysis Worksheets

Existing Geometry and Control LOS

Recommended geometry and Control LOS

Existing Geometry and Control LOS

MOVEMENT SUMMARY

Site: 1 [2022 Existing AM (Site Folder: General)]

Site Category: -
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Mel Rey Rd														
3b	L3	145	5.5	165	5.5	0.149	4.6	LOS A	0.6	15.3	0.29	0.17	0.29	32.5
3	L2	155	5.5	176	5.5	0.547	9.4	LOS A	3.4	88.1	0.44	0.29	0.44	32.1
8	T1	76	5.5	86	5.5	0.547	9.4	LOS A	3.4	88.1	0.44	0.29	0.44	32.1
18	R2	336	5.5	382	5.5	0.547	9.4	LOS A	3.4	88.1	0.44	0.29	0.44	31.1
Approach		712	5.5	809	5.5	0.547	8.4	LOS A	3.4	88.1	0.41	0.26	0.41	31.7
SouthEast: I-70 Off Ramp														
3bx	L3	154	4.4	175	4.4	0.304	10.5	LOS B	1.1	29.7	0.66	0.69	0.75	30.1
3x	L2	3	4.4	3	4.4	0.149	9.0	LOS A	0.5	13.0	0.64	0.64	0.64	31.6
3ax	L1	48	4.4	55	4.4	0.149	9.0	LOS A	0.5	13.0	0.64	0.64	0.64	31.3
18ax	R1	16	4.4	18	4.4	0.149	9.0	LOS A	0.5	13.0	0.64	0.64	0.64	31.3
18bx	R3	5	4.4	6	4.4	0.004	2.8	LOS A	0.0	0.0	0.00	0.00	0.00	36.5
Approach		226	4.4	257	4.4	0.304	9.9	LOS A	1.1	29.7	0.64	0.66	0.70	30.6
East: Highway 6														
1	L2	202	6.0	230	6.0	0.316	8.8	LOS A	1.2	31.9	0.61	0.62	0.63	30.8
1a	L1	36	6.0	41	6.0	0.170	7.5	LOS A	0.6	15.7	0.58	0.58	0.58	32.7
6	T1	51	6.0	58	6.0	0.170	7.5	LOS A	0.6	15.7	0.58	0.58	0.58	33.1
16	R2	11	6.0	13	6.0	0.170	7.5	LOS A	0.6	15.7	0.58	0.58	0.58	32.1
Approach		300	6.0	341	6.0	0.316	8.4	LOS A	1.2	31.9	0.60	0.61	0.61	31.4
North: Mel Rey Rd														
7	L2	26	3.6	30	3.6	0.259	9.2	LOS A	0.9	23.8	0.64	0.64	0.64	32.6
4	T1	77	3.6	88	3.6	0.259	9.2	LOS A	0.9	23.8	0.64	0.64	0.64	32.6
14a	R1	30	3.6	34	3.6	0.259	9.2	LOS A	0.9	23.8	0.64	0.64	0.64	32.3
14	R2	6	3.6	7	3.6	0.259	9.2	LOS A	0.9	23.8	0.64	0.64	0.64	31.7
Approach		139	3.6	158	3.6	0.259	9.2	LOS A	0.9	23.8	0.64	0.64	0.64	32.5
West: Highway 6														
5	L2	7	6.1	8	6.1	0.476	12.4	LOS B	2.5	66.4	0.69	0.80	1.04	31.3
2	T1	98	6.1	111	6.1	0.476	12.4	LOS B	2.5	66.4	0.69	0.80	1.04	31.3
12	R2	178	6.1	202	6.1	0.476	12.4	LOS B	2.5	66.4	0.69	0.80	1.04	30.4
12b	R3	45	6.1	51	6.1	0.084	6.9	LOS A	0.3	7.3	0.58	0.57	0.58	32.4
Approach		328	6.1	373	6.1	0.476	11.7	LOS B	2.5	66.4	0.68	0.77	0.98	31.0
All Vehicles		1705	5.4	1938	5.4	0.547	9.3	LOS A	3.4	88.1	0.54	0.51	0.61	31.4

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.

MOVEMENT SUMMARY

Site: 1 [2022 Existing PM (Site Folder: General)]

Site Category: -
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Mel Rey Rd														
3b	L3	403	2.9	443	2.9	0.394	7.2	LOS A	2.1	53.1	0.39	0.26	0.39	31.4
3	L2	264	2.9	290	2.9	0.559	9.5	LOS A	3.7	93.4	0.47	0.32	0.47	31.8
8	T1	77	2.9	85	2.9	0.559	9.5	LOS A	3.7	93.4	0.47	0.32	0.47	31.7
18	R2	268	2.9	295	2.9	0.559	9.5	LOS A	3.7	93.4	0.47	0.32	0.47	30.8
Approach		1012	2.9	1112	2.9	0.559	8.6	LOS A	3.7	93.4	0.44	0.29	0.44	31.4
SouthEast: I-70 Off Ramp														
3bx	L3	73	2.0	80	2.0	0.208	12.5	LOS B	0.7	17.6	0.75	0.75	0.75	29.4
3x	L2	2	2.0	2	2.0	0.208	12.5	LOS B	0.7	17.6	0.75	0.75	0.75	29.1
3ax	L1	68	2.0	75	2.0	0.255	11.8	LOS B	0.9	22.4	0.73	0.74	0.77	30.4
18ax	R1	38	2.0	42	2.0	0.255	11.8	LOS B	0.9	22.4	0.73	0.74	0.77	30.4
18bx	R3	3	2.0	3	2.0	0.002	2.6	LOS A	0.0	0.0	0.00	0.00	0.00	36.6
Approach		184	2.0	202	2.0	0.255	12.0	LOS B	0.9	22.4	0.73	0.73	0.75	30.1
East: Highway 6														
1	L2	157	2.0	173	2.0	0.426	14.5	LOS B	2.0	49.6	0.74	0.83	1.05	28.8
1a	L1	139	2.0	153	2.0	0.426	13.5	LOS B	2.0	50.1	0.72	0.81	1.02	29.7
6	T1	108	2.0	119	2.0	0.426	13.1	LOS B	2.0	50.1	0.71	0.80	1.01	30.5
16	R2	11	2.0	12	2.0	0.426	13.1	LOS B	2.0	50.1	0.71	0.80	1.01	29.6
Approach		415	2.0	456	2.0	0.426	13.7	LOS B	2.0	50.1	0.72	0.81	1.03	29.5
North: Mel Rey Rd														
7	L2	24	2.8	26	2.8	0.450	17.2	LOS C	1.9	49.1	0.80	0.90	1.18	29.4
4	T1	59	2.8	65	2.8	0.450	17.2	LOS C	1.9	49.1	0.80	0.90	1.18	29.4
14a	R1	74	2.8	81	2.8	0.450	17.2	LOS C	1.9	49.1	0.80	0.90	1.18	29.1
14	R2	20	2.8	22	2.8	0.450	17.2	LOS C	1.9	49.1	0.80	0.90	1.18	28.6
Approach		177	2.8	195	2.8	0.450	17.2	LOS C	1.9	49.1	0.80	0.90	1.18	29.2
West: Highway 6														
5	L2	8	3.7	9	3.7	0.536	16.3	LOS C	2.9	74.3	0.75	0.90	1.25	29.8
2	T1	115	3.7	126	3.7	0.536	16.3	LOS C	2.9	74.3	0.75	0.90	1.25	29.8
12	R2	151	3.7	166	3.7	0.536	16.3	LOS C	2.9	74.3	0.75	0.90	1.25	29.0
12b	R3	163	3.7	179	3.7	0.361	13.1	LOS B	1.5	38.4	0.71	0.77	0.92	29.7
Approach		437	3.7	480	3.7	0.536	15.1	LOS C	2.9	74.3	0.74	0.85	1.12	29.5
All Vehicles		2225	2.8	2445	2.8	0.559	11.8	LOS B	3.7	93.4	0.60	0.58	0.77	30.4

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.

MOVEMENT SUMMARY

Site: 1 [2030 Total AM (Site Folder: General)]

Site Category: -
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Mel Rey Rd														
3b	L3	243	5.5	276	5.5	0.259	5.9	LOS A	1.1	29.3	0.36	0.25	0.36	31.9
3	L2	186	5.5	211	5.5	0.704	13.8	LOS B	9.6	249.8	0.63	0.60	0.88	30.3
8	T1	145	5.5	165	5.5	0.704	13.8	LOS B	9.6	249.8	0.63	0.60	0.88	30.2
18	R2	373	5.5	424	5.5	0.704	13.8	LOS B	9.6	249.8	0.63	0.60	0.88	29.4
Approach		947	5.5	1076	5.5	0.704	11.8	LOS B	9.6	249.8	0.56	0.51	0.75	30.3
SouthEast: I-70 Off Ramp														
3bx	L3	230	4.4	261	4.4	0.597	22.7	LOS C	3.1	79.1	0.83	1.01	1.49	26.1
3x	L2	3	4.4	3	4.4	0.234	13.5	LOS B	0.8	19.8	0.76	0.76	0.76	29.9
3ax	L1	52	4.4	59	4.4	0.234	13.5	LOS B	0.8	19.8	0.76	0.76	0.76	29.6
18ax	R1	23	4.4	26	4.4	0.234	13.5	LOS B	0.8	19.8	0.76	0.76	0.76	29.6
18bx	R3	5	4.4	6	4.4	0.004	2.9	LOS A	0.0	0.0	0.00	0.00	0.00	36.5
Approach		313	4.4	356	4.4	0.597	20.1	LOS C	3.1	79.1	0.80	0.93	1.28	27.0
East: Highway 6														
1	L2	227	6.0	258	6.0	0.475	14.9	LOS B	2.3	59.3	0.73	0.84	1.12	28.5
1a	L1	37	6.0	42	6.0	0.270	11.6	LOS B	0.9	24.9	0.69	0.70	0.73	30.9
6	T1	57	6.0	65	6.0	0.270	11.6	LOS B	0.9	24.9	0.69	0.70	0.73	31.2
16	R2	20	6.0	23	6.0	0.270	11.6	LOS B	0.9	24.9	0.69	0.70	0.73	30.3
Approach		341	6.0	388	6.0	0.475	13.8	LOS B	2.3	59.3	0.71	0.80	0.99	29.3
North: Mel Rey Rd														
7	L2	47	3.6	53	3.6	0.573	20.0	LOS C	3.0	76.6	0.81	0.97	1.40	28.3
4	T1	147	3.6	167	3.6	0.573	20.0	LOS C	3.0	76.6	0.81	0.97	1.40	28.2
14a	R1	41	3.6	47	3.6	0.573	20.0	LOS C	3.0	76.6	0.81	0.97	1.40	28.0
14	R2	6	3.6	7	3.6	0.573	20.0	LOS C	3.0	76.6	0.81	0.97	1.40	27.6
Approach		241	3.6	274	3.6	0.573	20.0	LOS C	3.0	76.6	0.81	0.97	1.40	28.2
West: Highway 6														
5	L2	7	6.1	8	6.1	0.753	29.8	LOS D	5.5	144.1	0.85	1.18	1.99	25.2
2	T1	112	6.1	127	6.1	0.753	29.8	LOS D	5.5	144.1	0.85	1.18	1.99	25.2
12	R2	211	6.1	240	6.1	0.753	29.8	LOS D	5.5	144.1	0.85	1.18	1.99	24.6
12b	R3	47	6.1	53	6.1	0.122	10.0	LOS B	0.4	10.2	0.68	0.68	0.68	31.0
Approach		377	6.1	428	6.1	0.753	27.3	LOS D	5.5	144.1	0.83	1.12	1.83	25.5
All Vehicles		2219	5.3	2522	5.3	0.753	16.8	LOS C	9.6	249.8	0.69	0.77	1.11	28.5

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.

MOVEMENT SUMMARY

Site: 1 [2030 Total PM (Site Folder: General)]

Site Category: -
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Mel Rey Rd														
3b	L3	510	2.9	560	2.9	0.512	9.3	LOS A	3.1	79.2	0.49	0.36	0.49	30.6
3	L2	301	2.9	331	2.9	0.731	14.6	LOS B	12.2	312.3	0.68	0.68	1.01	29.8
8	T1	174	2.9	191	2.9	0.731	14.6	LOS B	12.2	312.3	0.68	0.68	1.01	29.7
18	R2	301	2.9	331	2.9	0.731	14.6	LOS B	12.2	312.3	0.68	0.68	1.01	28.9
Approach		1286	2.9	1413	2.9	0.731	12.5	LOS B	12.2	312.3	0.61	0.55	0.80	29.9
SouthEast: I-70 Off Ramp														
3bx	L3	116	2.0	127	2.0	0.440	24.1	LOS C	1.7	43.0	0.86	0.96	1.25	25.7
3x	L2	2	2.0	2	2.0	0.431	22.1	LOS C	1.7	42.5	0.84	0.94	1.21	27.6
3ax	L1	76	2.0	84	2.0	0.431	20.4	LOS C	1.7	42.5	0.84	0.94	1.21	27.4
18ax	R1	56	2.0	62	2.0	0.431	20.4	LOS C	1.7	42.5	0.84	0.94	1.21	27.4
18bx	R3	3	2.0	3	2.0	0.002	2.7	LOS A	0.0	0.0	0.00	0.00	0.00	36.6
Approach		253	2.0	278	2.0	0.440	21.9	LOS C	1.7	43.0	0.84	0.94	1.22	26.7
East: Highway 6														
1	L2	188	2.0	207	2.0	0.683	32.2	LOS D	3.8	96.5	0.89	1.12	1.75	23.6
1a	L1	145	2.0	159	2.0	0.683	29.4	LOS D	3.9	100.1	0.88	1.11	1.74	24.7
6	T1	123	2.0	135	2.0	0.683	28.4	LOS D	3.9	100.1	0.87	1.11	1.74	25.3
16	R2	33	2.0	36	2.0	0.683	28.4	LOS D	3.9	100.1	0.87	1.11	1.74	24.8
Approach		489	2.0	537	2.0	0.683	30.2	LOS D	3.9	100.1	0.88	1.11	1.74	24.4
North: Mel Rey Rd														
7	L2	39	2.8	43	2.8	0.915	64.7	LOS F	8.1	205.9	0.97	1.54	3.19	18.2
4	T1	140	2.8	154	2.8	0.915	64.7	LOS F	8.1	205.9	0.97	1.54	3.19	18.2
14a	R1	84	2.8	92	2.8	0.915	64.7	LOS F	8.1	205.9	0.97	1.54	3.19	18.1
14	R2	21	2.8	23	2.8	0.915	64.7	LOS F	8.1	205.9	0.97	1.54	3.19	17.9
Approach		284	2.8	312	2.8	0.915	64.7	LOS F	8.1	205.9	0.97	1.54	3.19	18.2
West: Highway 6														
5	L2	8	3.7	9	3.7	0.837	43.4	LOS E	6.7	172.9	0.92	1.35	2.52	21.9
2	T1	127	3.7	140	3.7	0.837	43.4	LOS E	6.7	172.9	0.92	1.35	2.52	21.9
12	R2	188	3.7	207	3.7	0.837	43.4	LOS E	6.7	172.9	0.92	1.35	2.52	21.4
12b	R3	170	3.7	187	3.7	0.510	22.2	LOS C	2.3	58.1	0.83	0.97	1.32	26.5
Approach		493	3.7	542	3.7	0.837	36.1	LOS E	6.7	172.9	0.89	1.22	2.11	23.1
All Vehicles		2805	2.8	3082	2.8	0.915	25.9	LOS D	12.2	312.3	0.76	0.90	1.47	25.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.

MOVEMENT SUMMARY

Site: 1 [2040 Total AM (Site Folder: General)]

Site Category: -
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Mel Rey Rd														
3b	L3	255	5.5	290	5.5	0.276	6.1	LOS A	1.2	31.6	0.38	0.27	0.38	31.8
3	L2	195	5.5	222	5.5	0.750	15.9	LOS C	13.9	362.4	0.70	0.78	1.18	29.4
8	T1	150	5.5	170	5.5	0.750	15.9	LOS C	13.9	362.4	0.70	0.78	1.18	29.4
18	R2	395	5.5	449	5.5	0.750	15.9	LOS C	13.9	362.4	0.70	0.78	1.18	28.6
Approach		995	5.5	1131	5.5	0.750	13.4	LOS B	13.9	362.4	0.62	0.65	0.97	29.7
SouthEast: I-70 Off Ramp														
3bx	L3	240	4.4	273	4.4	0.664	27.8	LOS D	3.6	93.6	0.86	1.09	1.69	24.7
3x	L2	5	4.4	6	4.4	0.273	15.3	LOS C	0.9	24.0	0.78	0.81	0.89	29.2
3ax	L1	55	4.4	63	4.4	0.273	15.3	LOS C	0.9	24.0	0.78	0.81	0.89	28.9
18ax	R1	25	4.4	28	4.4	0.273	15.3	LOS C	0.9	24.0	0.78	0.81	0.89	28.9
18bx	R3	5	4.4	6	4.4	0.004	3.0	LOS A	0.0	0.0	0.00	0.00	0.00	36.5
Approach		330	4.4	375	4.4	0.664	24.2	LOS C	3.6	93.6	0.83	1.00	1.46	25.7
East: Highway 6														
1	L2	240	6.0	273	6.0	0.526	17.0	LOS C	2.6	69.2	0.76	0.90	1.26	27.8
1a	L1	40	6.0	45	6.0	0.312	13.0	LOS B	1.2	30.2	0.72	0.76	0.85	30.4
6	T1	60	6.0	68	6.0	0.312	13.0	LOS B	1.2	30.2	0.72	0.76	0.85	30.7
16	R2	25	6.0	28	6.0	0.312	13.0	LOS B	1.2	30.2	0.72	0.76	0.85	29.8
Approach		365	6.0	415	6.0	0.526	15.6	LOS C	2.6	69.2	0.74	0.85	1.12	28.6
North: Mel Rey Rd														
7	L2	50	3.6	57	3.6	0.654	25.0	LOS D	3.7	95.6	0.85	1.06	1.63	26.6
4	T1	155	3.6	176	3.6	0.654	25.0	LOS D	3.7	95.6	0.85	1.06	1.63	26.6
14a	R1	45	3.6	51	3.6	0.654	25.0	LOS D	3.7	95.6	0.85	1.06	1.63	26.4
14	R2	10	3.6	11	3.6	0.654	25.0	LOS D	3.7	95.6	0.85	1.06	1.63	26.0
Approach		260	3.6	295	3.6	0.654	25.0	LOS D	3.7	95.6	0.85	1.06	1.63	26.5
West: Highway 6														
5	L2	10	6.1	11	6.1	0.856	42.7	LOS E	7.9	207.4	0.90	1.41	2.68	22.0
2	T1	120	6.1	136	6.1	0.856	42.7	LOS E	7.9	207.4	0.90	1.41	2.68	22.0
12	R2	225	6.1	256	6.1	0.856	42.7	LOS E	7.9	207.4	0.90	1.41	2.68	21.6
12b	R3	50	6.1	57	6.1	0.138	10.8	LOS B	0.4	11.5	0.71	0.71	0.71	30.6
Approach		405	6.1	460	6.1	0.856	38.8	LOS E	7.9	207.4	0.88	1.32	2.44	22.5
All Vehicles		2355	5.3	2676	5.3	0.856	20.9	LOS C	13.9	362.4	0.74	0.89	1.39	27.1

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.

MOVEMENT SUMMARY

Site: 1 [2040 Total PM (Site Folder: General)]

Site Category: -
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Mel Rey Rd														
3b	L3	535	2.9	588	2.9	0.543	9.9	LOS A	3.4	86.8	0.52	0.39	0.52	30.3
3	L2	315	2.9	346	2.9	0.771	16.6	LOS C	16.4	418.9	0.75	0.84	1.27	29.0
8	T1	180	2.9	198	2.9	0.771	16.6	LOS C	16.4	418.9	0.75	0.84	1.27	29.0
18	R2	315	2.9	346	2.9	0.771	16.6	LOS C	16.4	418.9	0.75	0.84	1.27	28.2
Approach		1345	2.9	1478	2.9	0.771	13.9	LOS B	16.4	418.9	0.66	0.66	0.97	29.4
SouthEast: I-70 Off Ramp														
3bx	L3	120	2.0	132	2.0	0.494	28.2	LOS D	1.9	49.4	0.88	1.00	1.36	24.6
3x	L2	5	2.0	5	2.0	0.494	26.6	LOS D	2.0	50.6	0.87	0.99	1.35	25.9
3ax	L1	80	2.0	88	2.0	0.494	24.3	LOS C	2.0	50.6	0.87	0.99	1.34	26.2
18ax	R1	60	2.0	66	2.0	0.494	24.3	LOS C	2.0	50.6	0.87	0.99	1.34	26.2
18bx	R3	5	2.0	5	2.0	0.004	2.8	LOS A	0.0	0.0	0.00	0.00	0.00	36.6
Approach		270	2.0	297	2.0	0.494	25.7	LOS D	2.0	50.6	0.86	0.98	1.32	25.6
East: Highway 6														
1	L2	200	2.0	220	2.0	0.773	42.6	LOS E	4.8	123.1	0.92	1.23	2.11	21.4
1a	L1	155	2.0	170	2.0	0.773	38.9	LOS E	5.1	129.0	0.91	1.23	2.11	22.4
6	T1	130	2.0	143	2.0	0.773	37.7	LOS E	5.1	129.0	0.91	1.23	2.11	23.0
16	R2	35	2.0	38	2.0	0.773	37.7	LOS E	5.1	129.0	0.91	1.23	2.11	22.5
Approach		520	2.0	571	2.0	0.773	39.9	LOS E	5.1	129.0	0.92	1.23	2.11	22.1
North: Mel Rey Rd														
7	L2	40	2.8	44	2.8	1.043	99.7	LOS F	14.5	370.7	1.00	1.98	4.87	14.2
4	T1	145	2.8	159	2.8	1.043	99.7	LOS F	14.5	370.7	1.00	1.98	4.87	14.2
14a	R1	90	2.8	99	2.8	1.043	99.7	LOS F	14.5	370.7	1.00	1.98	4.87	14.2
14	R2	25	2.8	27	2.8	1.043	99.7	LOS F	14.5	370.7	1.00	1.98	4.87	14.0
Approach		300	2.8	330	2.8	1.043	99.7	LOS F	14.5	370.7	1.00	1.98	4.87	14.2
West: Highway 6														
5	L2	10	3.7	11	3.7	0.947	65.0	LOS F	10.7	276.1	0.96	1.69	3.66	18.1
2	T1	135	3.7	148	3.7	0.947	65.0	LOS F	10.7	276.1	0.96	1.69	3.66	18.1
12	R2	200	3.7	220	3.7	0.947	65.0	LOS F	10.7	276.1	0.96	1.69	3.66	17.8
12b	R3	180	3.7	198	3.7	0.575	26.7	LOS D	2.7	68.6	0.86	1.02	1.48	25.1
Approach		525	3.7	577	3.7	0.947	51.9	LOS F	10.7	276.1	0.93	1.46	2.91	19.8
All Vehicles		2960	2.8	3253	2.8	1.043	35.0	LOS D	16.4	418.9	0.81	1.07	1.94	23.3

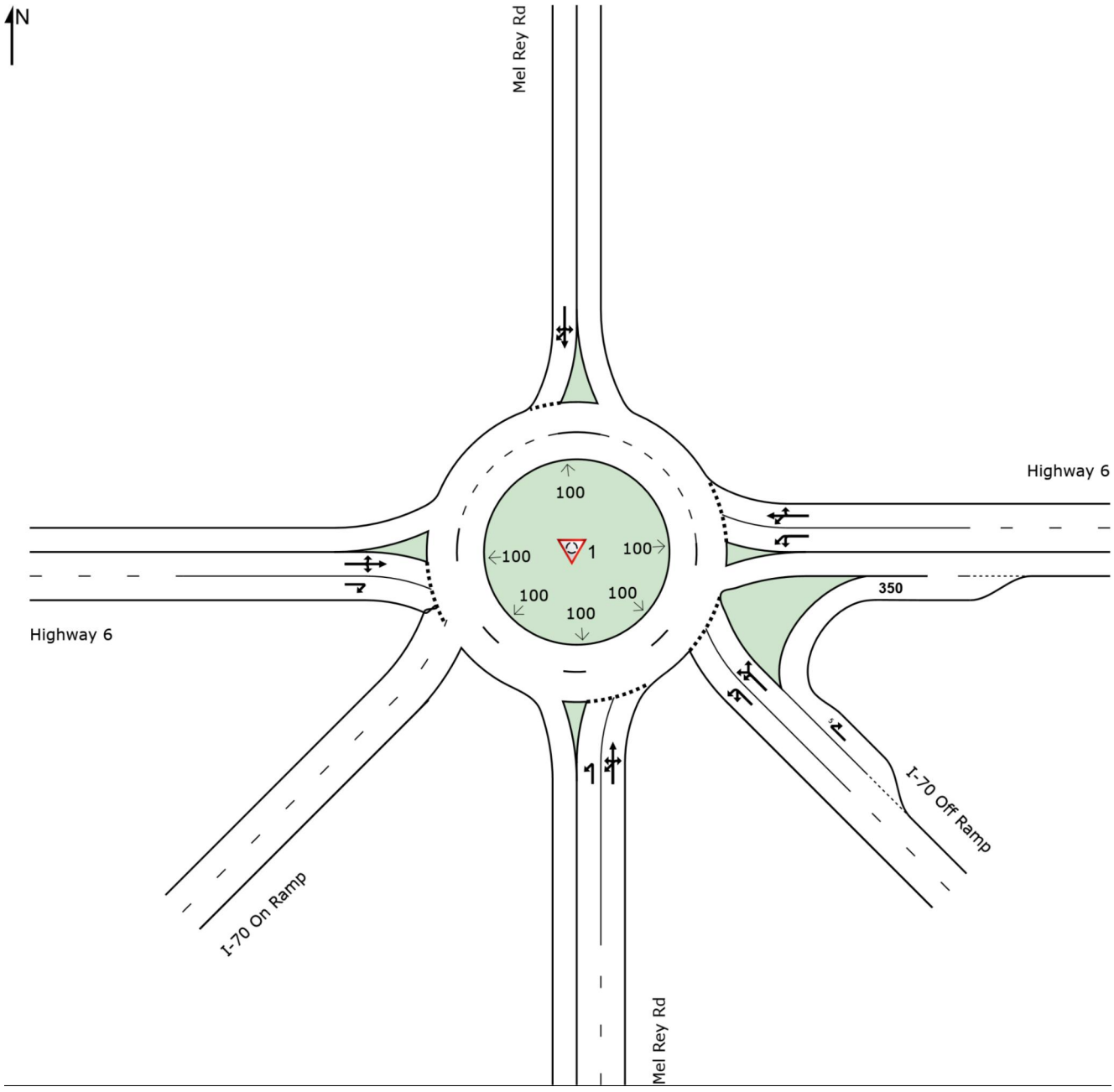
Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.

SITE LAYOUT

Site: 1 [2022 Existing AM (Site Folder: General)]

Site Category: -
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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MOVEMENT SUMMARY

Site: 2 [2022 Existing AM (Site Folder: General)]

Site Category: -
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Midland Ave														
3b	L3	30	6.0	34	6.0	0.223	6.6	LOS A	0.9	23.0	0.54	0.50	0.54	34.1
8	T1	288	6.0	324	6.0	0.223	6.6	LOS A	0.9	23.0	0.54	0.50	0.54	34.0
18	R2	15	6.0	17	6.0	0.223	6.6	LOS A	0.9	23.0	0.54	0.50	0.54	33.2
Approach		333	6.0	374	6.0	0.223	6.6	LOS A	0.9	23.0	0.54	0.50	0.54	34.0
North: RoadName														
7	L2	53	3.5	60	3.5	0.537	8.7	LOS A	4.3	111.3	0.24	0.09	0.24	33.2
4	T1	512	3.5	575	3.5	0.537	17.5	LOS C	4.3	111.3	0.24	0.09	0.24	33.1
14a	R1	49	3.5	55	3.5	0.537	8.7	LOS A	4.3	111.3	0.24	0.09	0.24	32.8
Approach		614	3.5	690	3.5	0.537	16.0	LOS C	4.3	111.3	0.24	0.09	0.24	33.1
West: I-70 EB Off Ramp														
5	L2	391	4.7	439	4.7	1.201	125.4	LOS F	60.9	1578.5	1.00	3.56	8.72	12.1
2	T1	3	4.7	3	4.7	1.201	125.4	LOS F	60.9	1578.5	1.00	3.56	8.72	12.1
12	R2	559	4.7	628	4.7	1.201	84.0	LOS F	60.9	1578.5	0.88	2.46	5.66	15.7
12b	R3	51	4.7	57	4.7	0.445	11.6	LOS B	2.4	61.4	0.70	0.79	0.97	30.4
Approach		1004	4.7	1128	4.7	1.201	96.6	LOS F	60.9	1578.5	0.92	2.81	6.62	14.4
SouthWest: Riverrine Road														
5ax	L1	30	8.2	34	8.2	0.380	19.5	LOS C	1.3	35.3	0.82	0.90	1.13	27.8
12ax	R1	23	8.2	26	8.2	0.380	19.5	LOS C	1.3	35.3	0.82	0.90	1.13	27.9
12bx	R3	57	8.2	64	8.2	0.380	28.4	LOS D	1.3	35.3	0.82	0.90	1.13	27.1
Approach		110	8.2	124	8.2	0.380	24.1	LOS C	1.3	35.3	0.82	0.90	1.13	27.5
All Vehicles		2061	4.7	2316	4.7	1.201	54.2	LOS F	60.9	1578.5	0.65	1.52	3.45	20.2

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 2 [2022 Existing PM (Site Folder: General)]

Site Category: -
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Midland Ave														
3b	L3	59	2.1	67	2.1	0.527	10.4	LOS B	4.0	102.8	0.64	0.68	0.86	32.6
8	T1	808	2.1	918	2.1	0.527	10.4	LOS B	4.0	102.8	0.64	0.68	0.86	32.4
18	R2	37	2.1	42	2.1	0.527	10.4	LOS B	4.0	102.8	0.64	0.68	0.86	31.6
Approach		904	2.1	1027	2.1	0.527	10.4	LOS B	4.0	102.8	0.64	0.68	0.86	32.3
North: RoadName														
7	L2	81	2.3	92	2.3	0.393	6.7	LOS A	2.5	63.3	0.28	0.13	0.28	33.9
4	T1	278	2.3	316	2.3	0.393	10.9	LOS B	2.5	63.3	0.28	0.13	0.28	33.9
14a	R1	76	2.3	86	2.3	0.393	6.7	LOS A	2.5	63.3	0.28	0.13	0.28	33.6
Approach		435	2.3	494	2.3	0.393	9.4	LOS A	2.5	63.3	0.28	0.13	0.28	33.8
West: I-70 EB Off Ramp														
5	L2	134	5.3	152	5.3	0.353	8.7	LOS A	1.5	39.9	0.61	0.62	0.63	31.8
2	T1	1	5.3	1	5.3	0.353	8.7	LOS A	1.5	39.9	0.61	0.62	0.63	31.8
12	R2	174	5.3	198	5.3	0.353	9.2	LOS A	1.5	39.9	0.58	0.57	0.59	31.7
12b	R3	31	5.3	35	5.3	0.131	5.8	LOS A	0.5	12.6	0.53	0.48	0.53	33.0
Approach		340	5.3	386	5.3	0.353	8.7	LOS A	1.5	39.9	0.59	0.58	0.60	31.8
SouthWest: Riverrine Road														
5ax	L1	73	2.0	83	2.0	0.269	8.2	LOS A	1.0	26.0	0.61	0.61	0.61	32.3
12ax	R1	43	2.0	49	2.0	0.269	8.2	LOS A	1.0	26.0	0.61	0.61	0.61	32.3
12bx	R3	53	2.0	60	2.0	0.269	12.5	LOS B	1.0	26.0	0.61	0.61	0.61	31.3
Approach		169	2.0	192	2.0	0.269	9.6	LOS A	1.0	26.0	0.61	0.61	0.61	32.0
All Vehicles		1848	2.7	2100	2.7	0.527	9.8	LOS A	4.0	102.8	0.54	0.52	0.65	32.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
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Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 2 [2030 Total AM (Site Folder: General)]

Site Category: -
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Midland Ave														
3b	L3	31	6.0	35	6.0	0.363	8.1	LOS A	1.6	42.4	0.57	0.52	0.57	33.6
8	T1	495	6.0	556	6.0	0.363	8.1	LOS A	1.6	42.4	0.57	0.52	0.57	33.4
18	R2	50	6.0	56	6.0	0.363	8.1	LOS A	1.6	42.4	0.57	0.52	0.57	32.5
Approach		576	6.0	647	6.0	0.363	8.1	LOS A	1.6	42.4	0.57	0.52	0.57	33.3
North: RoadName														
7	L2	75	3.5	84	3.5	0.732	13.7	LOS B	9.3	238.4	0.39	0.15	0.39	30.9
4	T1	706	3.5	793	3.5	0.732	26.2	LOS D	9.3	238.4	0.39	0.15	0.39	30.9
14a	R1	56	3.5	63	3.5	0.732	13.7	LOS B	9.3	238.4	0.39	0.15	0.39	30.6
Approach		837	3.5	940	3.5	0.732	24.2	LOS C	9.3	238.4	0.39	0.15	0.39	30.8
West: I-70 EB Off Ramp														
5	L2	411	4.7	462	4.7	1.709	346.0	LOS F	132.4	3435.7	1.00	5.78	16.94	5.6
2	T1	3	4.7	3	4.7	1.709	346.0	LOS F	132.4	3435.7	1.00	5.78	16.94	5.6
12	R2	660	4.7	742	4.7	1.709	226.7	LOS F	132.4	3435.7	0.92	3.97	11.06	7.9
12b	R3	53	4.7	60	4.7	0.632	20.6	LOS C	4.1	105.7	0.80	1.01	1.51	27.1
Approach		1127	4.7	1266	4.7	1.709	260.8	LOS F	132.4	3435.7	0.95	4.49	12.77	7.0
SouthWest: Riverrine Road														
5ax	L1	33	8.2	37	8.2	0.451	24.5	LOS C	1.6	43.0	0.86	0.97	1.29	26.2
12ax	R1	24	8.2	27	8.2	0.451	24.5	LOS C	1.6	43.0	0.86	0.97	1.29	26.3
12bx	R3	59	8.2	66	8.2	0.451	36.9	LOS E	1.6	43.0	0.86	0.97	1.29	25.6
Approach		116	8.2	130	8.2	0.451	30.8	LOS D	1.6	43.0	0.86	0.97	1.29	25.9
All Vehicles		2656	4.8	2984	4.8	1.709	121.4	LOS F	132.4	3435.7	0.68	2.11	5.72	12.7

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
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Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 2 [2030 Total PM (Site Folder: General)]

Site Category: -
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Midland Ave														
3b	L3	61	2.1	69	2.1	0.731	17.2	LOS C	10.5	266.1	0.84	1.14	1.63	29.8
8	T1	1046	2.1	1189	2.1	0.731	17.2	LOS C	10.5	266.1	0.84	1.14	1.63	29.5
18	R2	91	2.1	103	2.1	0.731	17.2	LOS C	10.5	266.1	0.84	1.14	1.63	28.8
Approach		1198	2.1	1361	2.1	0.731	17.2	LOS C	10.5	266.1	0.84	1.14	1.63	29.5
North: RoadName														
7	L2	98	2.3	111	2.3	0.569	9.4	LOS A	4.8	121.7	0.37	0.18	0.37	32.7
4	T1	448	2.3	509	2.3	0.569	15.5	LOS C	4.8	121.7	0.37	0.18	0.37	32.6
14a	R1	82	2.3	93	2.3	0.569	9.4	LOS A	4.8	121.7	0.37	0.18	0.37	32.3
Approach		628	2.3	714	2.3	0.569	13.8	LOS B	4.8	121.7	0.37	0.18	0.37	32.6
West: I-70 EB Off Ramp														
5	L2	150	5.3	170	5.3	0.594	16.3	LOS C	4.1	106.1	0.77	0.96	1.35	28.9
2	T1	1	5.3	1	5.3	0.594	16.3	LOS C	4.1	106.1	0.77	0.96	1.35	28.9
12	R2	283	5.3	322	5.3	0.594	15.6	LOS C	4.1	106.1	0.72	0.85	1.11	29.4
12b	R3	32	5.3	36	5.3	0.220	8.2	LOS A	0.8	21.2	0.62	0.62	0.62	31.9
Approach		466	5.3	530	5.3	0.594	15.3	LOS C	4.1	106.1	0.73	0.87	1.15	29.4
SouthWest: Riverrine Road														
5ax	L1	81	2.0	92	2.0	0.394	13.3	LOS B	1.7	43.0	0.73	0.81	1.00	30.1
12ax	R1	45	2.0	51	2.0	0.394	13.3	LOS B	1.7	43.0	0.73	0.81	1.00	30.1
12bx	R3	55	2.0	63	2.0	0.394	19.4	LOS C	1.7	43.0	0.73	0.81	1.00	29.3
Approach		181	2.0	206	2.0	0.394	15.1	LOS C	1.7	43.0	0.73	0.81	1.00	29.8
All Vehicles		2473	2.7	2810	2.7	0.731	15.8	LOS C	10.5	266.1	0.69	0.82	1.17	30.2

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
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Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 2 [2040 Total AM (Site Folder: General)]

Site Category: -
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Midland Ave														
3b	L3	35	6.0	39	6.0	0.374	8.3	LOS A	1.7	44.2	0.57	0.52	0.57	33.5
8	T1	510	6.0	573	6.0	0.374	8.3	LOS A	1.7	44.2	0.57	0.52	0.57	33.3
18	R2	50	6.0	56	6.0	0.374	8.3	LOS A	1.7	44.2	0.57	0.52	0.57	32.4
Approach		595	6.0	669	6.0	0.374	8.3	LOS A	1.7	44.2	0.57	0.52	0.57	33.2
North: RoadName														
7	L2	80	3.5	90	3.5	0.769	15.3	LOS C	10.8	277.2	0.46	0.19	0.46	30.2
4	T1	735	3.5	826	3.5	0.769	28.7	LOS D	10.8	277.2	0.46	0.19	0.46	30.2
14a	R1	60	3.5	67	3.5	0.769	15.3	LOS C	10.8	277.2	0.46	0.19	0.46	30.0
Approach		875	3.5	983	3.5	0.769	26.6	LOS D	10.8	277.2	0.46	0.19	0.46	30.2
West: I-70 EB Off Ramp														
5	L2	435	4.7	489	4.7	1.887	425.2	LOS F	156.0	4045.7	1.00	6.24	18.72	4.7
2	T1	5	4.7	6	4.7	1.887	425.2	LOS F	156.0	4045.7	1.00	6.24	18.72	4.7
12	R2	690	4.7	775	4.7	1.887	278.6	LOS F	156.0	4045.7	0.94	4.29	12.28	6.7
12b	R3	60	4.7	67	4.7	0.698	25.0	LOS C	4.9	127.8	0.83	1.10	1.73	25.7
Approach		1190	4.7	1337	4.7	1.887	320.1	LOS F	156.0	4045.7	0.95	4.85	14.13	6.0
SouthWest: Riverrine Road														
5ax	L1	35	8.2	39	8.2	0.496	27.0	LOS D	1.8	49.0	0.87	1.00	1.37	25.5
12ax	R1	25	8.2	28	8.2	0.496	27.0	LOS D	1.8	49.0	0.87	1.00	1.37	25.5
12bx	R3	65	8.2	73	8.2	0.496	40.4	LOS E	1.8	49.0	0.87	1.00	1.37	24.9
Approach		125	8.2	140	8.2	0.496	33.9	LOS D	1.8	49.0	0.87	1.00	1.37	25.2
All Vehicles		2785	4.8	3129	4.8	1.887	148.4	LOS F	156.0	4045.7	0.71	2.29	6.37	11.1

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Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 2 [2040 Total PM (Site Folder: General)]

Site Category: -
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Midland Ave														
3b	L3	65	2.1	74	2.1	0.787	20.9	LOS C	13.0	330.5	0.90	1.32	1.97	28.4
8	T1	1090	2.1	1239	2.1	0.787	20.9	LOS C	13.0	330.5	0.90	1.32	1.97	28.1
18	R2	95	2.1	108	2.1	0.787	20.9	LOS C	13.0	330.5	0.90	1.32	1.97	27.5
Approach		1250	2.1	1420	2.1	0.787	20.9	LOS C	13.0	330.5	0.90	1.32	1.97	28.1
North: RoadName														
7	L2	105	2.3	119	2.3	0.600	10.1	LOS B	5.3	135.9	0.41	0.21	0.41	32.3
4	T1	465	2.3	528	2.3	0.600	16.5	LOS C	5.3	135.9	0.41	0.21	0.41	32.3
14a	R1	90	2.3	102	2.3	0.600	10.1	LOS B	5.3	135.9	0.41	0.21	0.41	32.0
Approach		660	2.3	750	2.3	0.600	14.6	LOS B	5.3	135.9	0.41	0.21	0.41	32.3
West: I-70 EB Off Ramp														
5	L2	160	5.3	182	5.3	0.655	19.3	LOS C	4.9	128.5	0.80	1.04	1.55	27.9
2	T1	5	5.3	6	5.3	0.655	19.3	LOS C	4.9	128.5	0.80	1.04	1.55	27.9
12	R2	295	5.3	335	5.3	0.655	17.9	LOS C	4.9	128.5	0.75	0.91	1.24	28.6
12b	R3	35	5.3	40	5.3	0.243	8.8	LOS A	0.9	23.5	0.64	0.64	0.64	31.6
Approach		495	5.3	563	5.3	0.655	17.7	LOS C	4.9	128.5	0.76	0.93	1.30	28.5
SouthWest: Riverrine Road														
5ax	L1	85	2.0	97	2.0	0.446	15.2	LOS C	2.0	51.1	0.76	0.86	1.12	29.4
12ax	R1	50	2.0	57	2.0	0.446	15.2	LOS C	2.0	51.1	0.76	0.86	1.12	29.4
12bx	R3	60	2.0	68	2.0	0.446	21.6	LOS C	2.0	51.1	0.76	0.86	1.12	28.6
Approach		195	2.0	222	2.0	0.446	17.2	LOS C	2.0	51.1	0.76	0.86	1.12	29.1
All Vehicles		2600	2.8	2955	2.8	0.787	18.4	LOS C	13.0	330.5	0.74	0.93	1.38	29.2

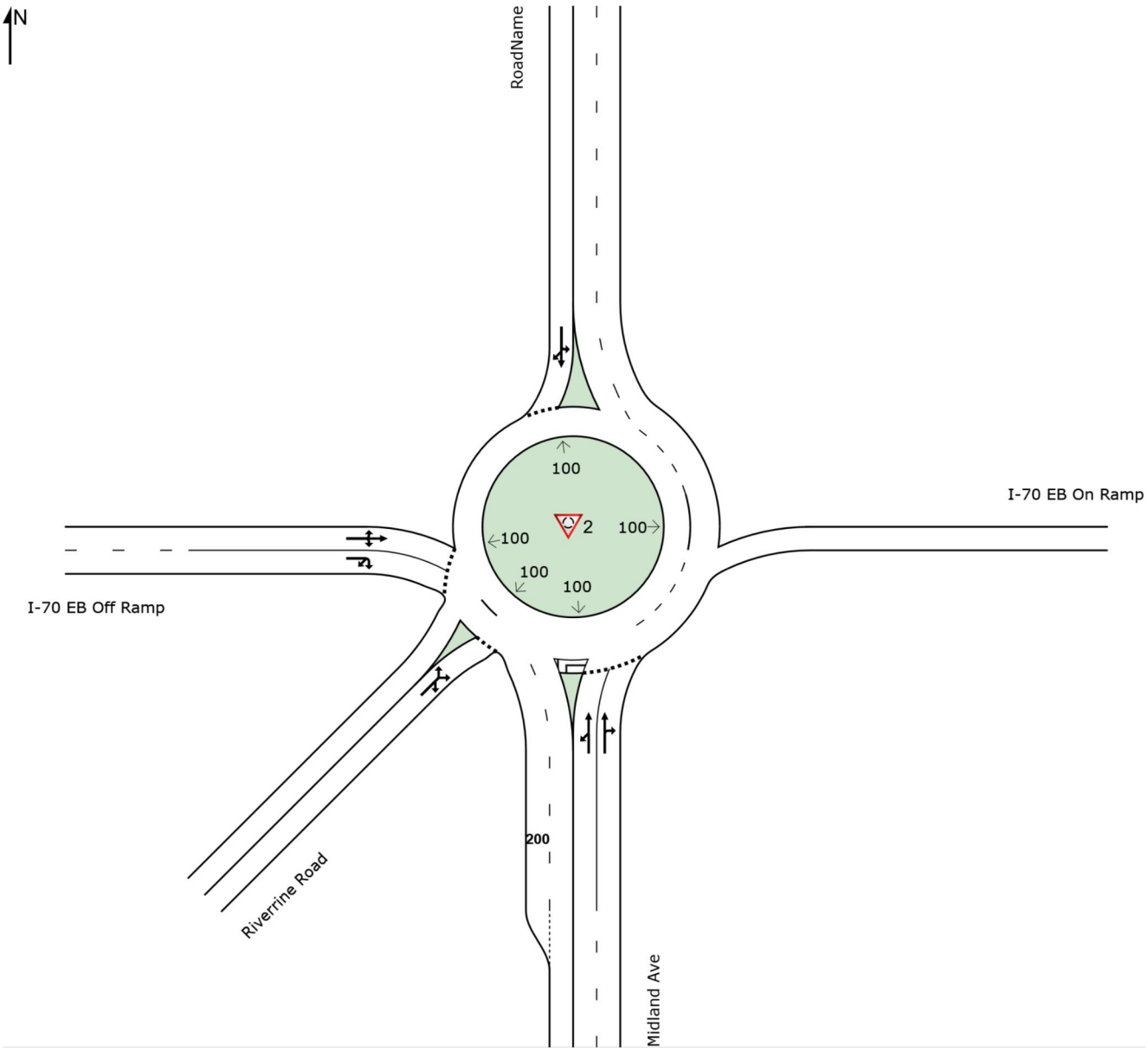
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Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SITE LAYOUT

Site: 2 [2022 Existing AM (Site Folder: General)]

Site Category: -
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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Project: K:\DEN_TPTO\096798001 - Meadows\Engineering\2022 Study\Analysis\2_RiverineI-70 Eb & Midland Roundabout.sip9

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	21	15	315	13	59	1075
Future Vol, veh/h	21	15	315	13	59	1075
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	17	350	14	66	1194

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1683	357	0	0	364	0
Stage 1	357	-	-	-	-	-
Stage 2	1326	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	104	687	-	-	1195	-
Stage 1	708	-	-	-	-	-
Stage 2	248	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	98	687	-	-	1195	-
Mov Cap-2 Maneuver	191	-	-	-	-	-
Stage 1	708	-	-	-	-	-
Stage 2	234	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.4	0	0.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	273	1195	-
HCM Lane V/C Ratio	-	-	0.147	0.055	-
HCM Control Delay (s)	-	-	20.4	8.2	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0.2	-

Intersection	
Int Delay, s/veh	1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	54	856	31	34	404
Future Vol, veh/h	30	54	856	31	34	404
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	59	941	34	37	444

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1478	960	0	0	977	0
Stage 1	960	-	-	-	-	-
Stage 2	518	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	139	311	-	-	706	-
Stage 1	372	-	-	-	-	-
Stage 2	598	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	131	310	-	-	705	-
Mov Cap-2 Maneuver	261	-	-	-	-	-
Stage 1	371	-	-	-	-	-
Stage 2	567	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23	0	0.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	291	705	-
HCM Lane V/C Ratio	-	-	0.317	0.053	-
HCM Control Delay (s)	-	-	23	10.4	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	1.3	0.2	-

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	22	16	551	14	61	1353
Future Vol, veh/h	22	16	551	14	61	1353
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	18	612	16	68	1503

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2259	620	0	0	628	0
Stage 1	620	-	-	-	-	-
Stage 2	1639	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	45	488	-	-	954	-
Stage 1	536	-	-	-	-	-
Stage 2	174	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	42	488	-	-	954	-
Mov Cap-2 Maneuver	126	-	-	-	-	-
Stage 1	536	-	-	-	-	-
Stage 2	162	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	30.5	0	0.4
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	183	954	-
HCM Lane V/C Ratio	-	-	0.231	0.071	-
HCM Control Delay (s)	-	-	30.5	9.1	-
HCM Lane LOS	-	-	D	A	-
HCM 95th %tile Q(veh)	-	-	0.9	0.2	-

Intersection	
Int Delay, s/veh	2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	31	56	1132	32	35	670
Future Vol, veh/h	31	56	1132	32	35	670
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	62	1244	35	38	736

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2076	1264	0	0	1281	0
Stage 1	1264	-	-	-	-	-
Stage 2	812	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	59	207	-	-	542	-
Stage 1	266	-	-	-	-	-
Stage 2	437	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	55	207	-	-	541	-
Mov Cap-2 Maneuver	170	-	-	-	-	-
Stage 1	265	-	-	-	-	-
Stage 2	406	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	41	0	0.6
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	192	541	-
HCM Lane V/C Ratio	-	-	0.498	0.071	-
HCM Control Delay (s)	-	-	41	12.2	-
HCM Lane LOS	-	-	E	B	-
HCM 95th %tile Q(veh)	-	-	2.5	0.2	-

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	25	20	570	15	65	1410
Future Vol, veh/h	25	20	570	15	65	1410
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	22	620	16	71	1533

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2303	628	0	0	636	0
Stage 1	628	-	-	-	-	-
Stage 2	1675	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	42	483	-	-	947	-
Stage 1	532	-	-	-	-	-
Stage 2	167	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	39	483	-	-	947	-
Mov Cap-2 Maneuver	121	-	-	-	-	-
Stage 1	532	-	-	-	-	-
Stage 2	154	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	32.1	0	0.4
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	181	947	-
HCM Lane V/C Ratio	-	-	0.27	0.075	-
HCM Control Delay (s)	-	-	32.1	9.1	-
HCM Lane LOS	-	-	D	A	-
HCM 95th %tile Q(veh)	-	-	1	0.2	-

Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	35	60	1180	35	40	695
Future Vol, veh/h	35	60	1180	35	40	695
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	65	1283	38	43	755

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2145	1304	0	0	1323	0
Stage 1	1304	-	-	-	-	-
Stage 2	841	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	53	196	-	-	522	-
Stage 1	254	-	-	-	-	-
Stage 2	423	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	48	196	-	-	521	-
Mov Cap-2 Maneuver	161	-	-	-	-	-
Stage 1	253	-	-	-	-	-
Stage 2	388	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	48.4	0	0.7
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	181	521	-
HCM Lane V/C Ratio	-	-	0.571	0.083	-
HCM Control Delay (s)	-	-	48.4	12.5	-
HCM Lane LOS	-	-	E	B	-
HCM 95th %tile Q(veh)	-	-	3	0.3	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	943	96	6	288	1	33	0	0	8	2	7
Future Vol, veh/h	32	943	96	6	288	1	33	0	0	8	2	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	25	100	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	36	1072	109	7	327	1	38	0	0	9	2	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	328	0	0	1181	0	0	1491	1486	1072	1541	1595	328
Stage 1	-	-	-	-	-	-	1144	1144	-	342	342	-
Stage 2	-	-	-	-	-	-	347	342	-	1199	1253	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1232	-	-	591	-	-	102	124	268	94	107	713
Stage 1	-	-	-	-	-	-	243	275	-	673	638	-
Stage 2	-	-	-	-	-	-	669	638	-	226	244	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1232	-	-	591	-	-	97	119	268	91	103	713
Mov Cap-2 Maneuver	-	-	-	-	-	-	189	212	-	174	187	-
Stage 1	-	-	-	-	-	-	236	267	-	653	630	-
Stage 2	-	-	-	-	-	-	651	630	-	219	237	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.2	28.7	20
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	189	1232	-	-	591	-	-	176	713
HCM Lane V/C Ratio	0.198	0.03	-	-	0.012	-	-	0.065	0.011
HCM Control Delay (s)	28.7	8	-	-	11.2	-	-	26.9	10.1
HCM Lane LOS	D	A	-	-	B	-	-	D	B
HCM 95th %tile Q(veh)	0.7	0.1	-	-	0	-	-	0.2	0

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	395	79	8	800	1	77	0	3	5	0	35
Future Vol, veh/h	9	395	79	8	800	1	77	0	3	5	0	35
Conflicting Peds, #/hr	0	0	2	2	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	25	100	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	444	89	9	899	1	87	0	3	6	0	39

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	900	0	0	535	0	0	1404	1384	446	1428	1473	901
Stage 1	-	-	-	-	-	-	466	466	-	918	918	-
Stage 2	-	-	-	-	-	-	938	918	-	510	555	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	755	-	-	1033	-	-	117	143	612	113	127	337
Stage 1	-	-	-	-	-	-	577	562	-	326	350	-
Stage 2	-	-	-	-	-	-	317	350	-	546	513	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	755	-	-	1031	-	-	101	140	611	111	124	337
Mov Cap-2 Maneuver	-	-	-	-	-	-	204	250	-	229	240	-
Stage 1	-	-	-	-	-	-	568	554	-	322	347	-
Stage 2	-	-	-	-	-	-	277	347	-	536	505	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.1	34.6	17.6
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	209	755	-	-	1031	-	-	229	337
HCM Lane V/C Ratio	0.43	0.013	-	-	0.009	-	-	0.025	0.117
HCM Control Delay (s)	34.6	9.8	-	-	8.5	-	-	21.1	17.1
HCM Lane LOS	D	A	-	-	A	-	-	C	C
HCM 95th %tile Q(veh)	2	0	-	-	0	-	-	0.1	0.4

Intersection	
Int Delay, s/veh	40.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	992	315	15	327	10	225	0	2	14	2	13
Future Vol, veh/h	42	992	315	15	327	10	225	0	2	14	2	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	25	100	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	1127	358	17	372	11	256	0	2	16	2	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	383	0	0	1485	0	0	1643	1640	1127	1815	1993	378
Stage 1	-	-	-	-	-	-	1223	1223	-	412	412	-
Stage 2	-	-	-	-	-	-	420	417	-	1403	1581	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1175	-	-	453	-	-	~ 80	100	249	60	60	669
Stage 1	-	-	-	-	-	-	~ 219	252	-	617	594	-
Stage 2	-	-	-	-	-	-	611	591	-	173	169	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1175	-	-	453	-	-	~ 73	92	249	56	55	669
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 163	185	-	122	120	-
Stage 1	-	-	-	-	-	-	~ 210	242	-	592	571	-
Stage 2	-	-	-	-	-	-	573	569	-	164	162	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.6	$ 339.6	26.6
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	163	1175	-	-	453	-	-	122	669
HCM Lane V/C Ratio	1.583	0.041	-	-	0.038	-	-	0.149	0.022
HCM Control Delay (s)	$ 339.6	8.2	-	-	13.3	-	-	39.6	10.5
HCM Lane LOS	F	A	-	-	B	-	-	E	B
HCM 95th %tile Q(veh)	17.4	0.1	-	-	0.1	-	-	0.5	0.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	94.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	41	442	269	9	856	33	269	0	7	34	0	65
Future Vol, veh/h	41	442	269	9	856	33	269	0	7	34	0	65
Conflicting Peds, #/hr	0	0	2	2	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	25	100	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	46	497	302	10	962	37	302	0	8	38	0	73

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	999	0	0	801	0	0	1629	1610	499	1745	1894	982
Stage 1	-	-	-	-	-	-	591	591	-	1001	1001	-
Stage 2	-	-	-	-	-	-	1038	1019	-	744	893	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	693	-	-	822	-	-	~ 82	105	572	68	70	302
Stage 1	-	-	-	-	-	-	493	494	-	293	321	-
Stage 2	-	-	-	-	-	-	~ 279	314	-	407	360	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	693	-	-	820	-	-	~ 58	97	571	63	64	302
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 129	193	-	171	176	-
Stage 1	-	-	-	-	-	-	459	460	-	274	317	-
Stage 2	-	-	-	-	-	-	~ 209	310	-	375	336	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.1	$ 683.7	24.6
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	132	693	-	-	820	-	-	171	302
HCM Lane V/C Ratio	2.349	0.066	-	-	0.012	-	-	0.223	0.242
HCM Control Delay (s)	$ 683.7	10.6	-	-	9.4	-	-	32	20.7
HCM Lane LOS	F	B	-	-	A	-	-	D	C
HCM 95th %tile Q(veh)	26.6	0.2	-	-	0	-	-	0.8	0.9

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	41

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	45	1045	320	20	345	10	230	0	5	15	5	15
Future Vol, veh/h	45	1045	320	20	345	10	230	0	5	15	5	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	25	100	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	49	1136	348	22	375	11	250	0	5	16	5	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	386	0	0	1484	0	0	1669	1664	1136	1836	2007	381
Stage 1	-	-	-	-	-	-	1234	1234	-	425	425	-
Stage 2	-	-	-	-	-	-	435	430	-	1411	1582	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1172	-	-	453	-	-	~ 76	97	246	58	59	666
Stage 1	-	-	-	-	-	-	~ 216	249	-	607	586	-
Stage 2	-	-	-	-	-	-	600	583	-	171	169	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1172	-	-	453	-	-	~ 67	88	246	53	54	666
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 158	182	-	115	116	-
Stage 1	-	-	-	-	-	-	~ 207	239	-	582	557	-
Stage 2	-	-	-	-	-	-	551	554	-	160	162	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.7	$ 351.2	29.4
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	159	1172	-	-	453	-	-	115	666
HCM Lane V/C Ratio	1.607	0.042	-	-	0.048	-	-	0.189	0.024
HCM Control Delay (s)	$ 351.2	8.2	-	-	13.3	-	-	43.5	10.5
HCM Lane LOS	F	A	-	-	B	-	-	E	B
HCM 95th %tile Q(veh)	17.5	0.1	-	-	0.2	-	-	0.7	0.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	105.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	45	465	275	10	900	35	275	0	10	35	0	70
Future Vol, veh/h	45	465	275	10	900	35	275	0	10	35	0	70
Conflicting Peds, #/hr	0	0	2	2	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	25	100	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	49	505	299	11	978	38	299	0	11	38	0	76

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1016	0	0	806	0	0	1663	1643	507	1777	1923	998
Stage 1	-	-	-	-	-	-	605	605	-	1019	1019	-
Stage 2	-	-	-	-	-	-	1058	1038	-	758	904	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	683	-	-	819	-	-	~ 77	100	566	64	67	296
Stage 1	-	-	-	-	-	-	485	487	-	286	314	-
Stage 2	-	-	-	-	-	-	~ 272	308	-	399	356	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	683	-	-	817	-	-	~ 53	91	565	59	61	296
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 119	186	-	164	171	-
Stage 1	-	-	-	-	-	-	449	451	-	265	310	-
Stage 2	-	-	-	-	-	-	~ 199	304	-	363	330	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.1	$ 772.8	25.4
HCM LOS			F	D

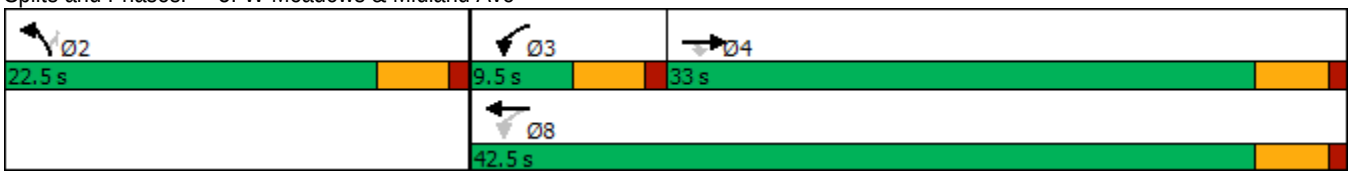
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	122	683	-	-	817	-	-	164	296
HCM Lane V/C Ratio	2.539	0.072	-	-	0.013	-	-	0.232	0.257
HCM Control Delay (s)	$ 772.8	10.7	-	-	9.5	-	-	33.5	21.3
HCM Lane LOS	F	B	-	-	A	-	-	D	C
HCM 95th %tile Q(veh)	27.7	0.2	-	-	0	-	-	0.9	1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	821	128	40	252	51	81
Future Volume (vph)	821	128	40	252	51	81
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	4		3	8	2	
Permitted Phases		4	8			2
Detector Phase	4	4	3	8	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	33.0	33.0	9.5	42.5	22.5	22.5
Total Split (%)	50.8%	50.8%	14.6%	65.4%	34.6%	34.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	None	None	None	None	Max	Max
Act Effct Green (s)	28.7	28.7	34.0	34.0	18.1	18.1
Actuated g/C Ratio	0.47	0.47	0.56	0.56	0.30	0.30
v/c Ratio	1.07	0.19	0.18	0.28	0.11	0.17
Control Delay	72.3	4.8	7.5	7.7	18.0	5.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.3	4.8	7.5	7.7	18.0	5.8
LOS	E	A	A	A	B	A
Approach Delay	63.2			7.7	10.5	
Approach LOS	E			A	B	

Intersection Summary	
Cycle Length: 65	
Actuated Cycle Length: 61.2	
Natural Cycle: 80	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.07	
Intersection Signal Delay: 46.4	Intersection LOS: D
Intersection Capacity Utilization 55.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 5: W Meadows & Midland Ave





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	821	128	40	252	51	81
Future Volume (veh/h)	821	128	40	252	51	81
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	933	145	45	286	58	92
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	850	719	192	1065	511	455
Arrive On Green	0.45	0.45	0.04	0.57	0.29	0.29
Sat Flow, veh/h	1870	1583	1781	1870	1781	1585
Grp Volume(v), veh/h	933	145	45	286	58	92
Grp Sat Flow(s),veh/h/ln	1870	1583	1781	1870	1781	1585
Q Serve(g_s), s	28.5	3.4	0.8	4.9	1.5	2.8
Cycle Q Clear(g_c), s	28.5	3.4	0.8	4.9	1.5	2.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	850	719	192	1065	511	455
V/C Ratio(X)	1.10	0.20	0.23	0.27	0.11	0.20
Avail Cap(c_a), veh/h	850	719	257	1133	511	455
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.1	10.3	14.5	6.9	16.5	16.9
Incr Delay (d2), s/veh	61.1	0.1	0.6	0.1	0.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	24.8	1.1	0.3	1.6	0.6	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	78.2	10.4	15.2	7.0	16.9	17.9
LnGrp LOS	F	B	B	A	B	B
Approach Vol, veh/h	1078			331	150	
Approach Delay, s/veh	69.1			8.1	17.5	
Approach LOS	E			A	B	

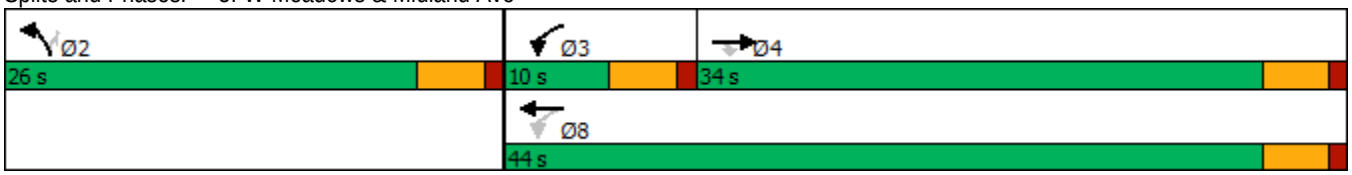
Timer - Assigned Phs		2	3	4			8
Phs Duration (G+Y+Rc), s		22.5	7.2	33.0			40.2
Change Period (Y+Rc), s		4.5	4.5	4.5			4.5
Max Green Setting (Gmax), s		18.0	5.0	28.5			38.0
Max Q Clear Time (g_c+I1), s		4.8	2.8	30.5			6.9
Green Ext Time (p_c), s		0.3	0.0	0.0			1.8

Intersection Summary	
HCM 6th Ctrl Delay	51.2
HCM 6th LOS	D

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	260	101	71	550	211	68
Future Volume (vph)	260	101	71	550	211	68
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	4		3	8	2	
Permitted Phases		4	8			2
Detector Phase	4	4	3	8	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	34.0	34.0	10.0	44.0	26.0	26.0
Total Split (%)	48.6%	48.6%	14.3%	62.9%	37.1%	37.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	None	None	None	None	Max	Max
Act Effct Green (s)	17.5	17.5	23.1	23.1	21.9	21.9
Actuated g/C Ratio	0.32	0.32	0.43	0.43	0.40	0.40
v/c Ratio	0.47	0.19	0.19	0.76	0.32	0.11
Control Delay	18.5	4.4	9.5	19.6	14.9	4.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.5	4.4	9.5	19.6	14.9	4.8
LOS	B	A	A	B	B	A
Approach Delay	14.5			18.5	12.5	
Approach LOS	B			B	B	

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 54.1	
Natural Cycle: 55	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 16.0	Intersection LOS: B
Intersection Capacity Utilization 48.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 5: W Meadows & Midland Ave



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	260	101	71	550	211	68
Future Volume (veh/h)	260	101	71	550	211	68
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	286	111	78	604	232	75
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	471	399	372	758	747	665
Arrive On Green	0.25	0.25	0.07	0.41	0.42	0.42
Sat Flow, veh/h	1870	1582	1781	1870	1781	1585
Grp Volume(v), veh/h	286	111	78	604	232	75
Grp Sat Flow(s),veh/h/ln	1870	1582	1781	1870	1781	1585
Q Serve(g_s), s	6.9	2.9	1.5	14.5	4.5	1.5
Cycle Q Clear(g_c), s	6.9	2.9	1.5	14.5	4.5	1.5
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	471	399	372	758	747	665
V/C Ratio(X)	0.61	0.28	0.21	0.80	0.31	0.11
Avail Cap(c_a), veh/h	1076	910	447	1441	747	665
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.9	15.4	11.9	13.4	9.9	9.1
Incr Delay (d2), s/veh	1.3	0.4	0.3	2.0	1.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	1.0	0.5	5.4	1.7	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.2	15.8	12.2	15.4	11.0	9.4
LnGrp LOS	B	B	B	B	B	A
Approach Vol, veh/h	397			682	307	
Approach Delay, s/veh	17.5			15.0	10.6	
Approach LOS	B			B	B	

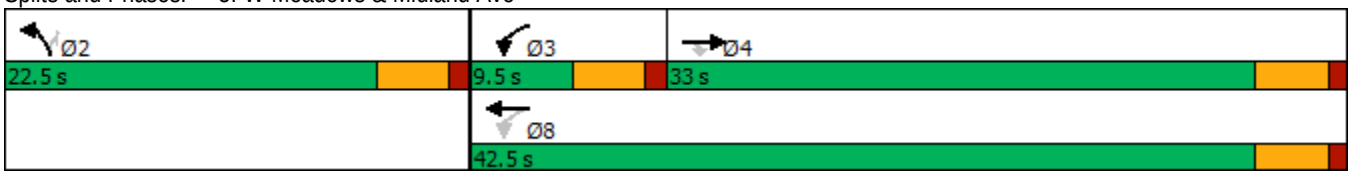
Timer - Assigned Phs		2	3	4			8
Phs Duration (G+Y+Rc), s		26.0	7.9	17.4			25.3
Change Period (Y+Rc), s		4.5	4.5	4.5			4.5
Max Green Setting (Gmax), s		21.5	5.5	29.5			39.5
Max Q Clear Time (g_c+I1), s		6.5	3.5	8.9			16.5
Green Ext Time (p_c), s		0.8	0.0	2.0			4.2

Intersection Summary	
HCM 6th Ctrl Delay	14.8
HCM 6th LOS	B

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	870	136	43	280	80	86
Future Volume (vph)	870	136	43	280	80	86
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	4		3	8	2	
Permitted Phases		4	8			2
Detector Phase	4	4	3	8	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	33.0	33.0	9.5	42.5	22.5	22.5
Total Split (%)	50.8%	50.8%	14.6%	65.4%	34.6%	34.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	None	None	None	None	Max	Max
Act Effct Green (s)	28.7	28.7	34.0	34.0	18.1	18.1
Actuated g/C Ratio	0.47	0.47	0.56	0.56	0.30	0.30
v/c Ratio	1.13	0.20	0.20	0.31	0.17	0.18
Control Delay	95.8	5.1	7.7	8.0	18.6	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	95.8	5.1	7.7	8.0	18.6	5.7
LOS	F	A	A	A	B	A
Approach Delay	83.5			8.0	11.9	
Approach LOS	F			A	B	

Intersection Summary	
Cycle Length: 65	
Actuated Cycle Length: 61.2	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.13	
Intersection Signal Delay: 59.2	Intersection LOS: E
Intersection Capacity Utilization 58.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 5: W Meadows & Midland Ave





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	870	136	43	280	80	86
Future Volume (veh/h)	870	136	43	280	80	86
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	989	155	49	318	91	98
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	848	718	196	1067	510	454
Arrive On Green	0.45	0.45	0.05	0.57	0.29	0.29
Sat Flow, veh/h	1870	1583	1781	1870	1781	1585
Grp Volume(v), veh/h	989	155	49	318	91	98
Grp Sat Flow(s),veh/h/ln	1870	1583	1781	1870	1781	1585
Q Serve(g_s), s	28.5	3.7	0.8	5.5	2.4	3.0
Cycle Q Clear(g_c), s	28.5	3.7	0.8	5.5	2.4	3.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	848	718	196	1067	510	454
V/C Ratio(X)	1.17	0.22	0.25	0.30	0.18	0.22
Avail Cap(c_a), veh/h	848	718	256	1130	510	454
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.2	10.4	14.5	7.0	16.9	17.1
Incr Delay (d2), s/veh	87.7	0.1	0.7	0.2	0.8	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	31.0	1.2	0.3	1.8	1.0	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	104.9	10.6	15.2	7.1	17.6	18.2
LnGrp LOS	F	B	B	A	B	B
Approach Vol, veh/h	1144			367	189	
Approach Delay, s/veh	92.1			8.2	17.9	
Approach LOS	F			A	B	

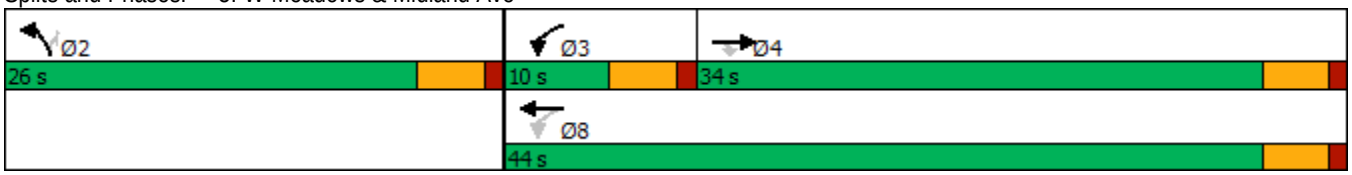
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		22.5	7.4	33.0		40.4
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s		18.0	5.0	28.5		38.0
Max Q Clear Time (g_c+I1), s		5.0	2.8	30.5		7.5
Green Ext Time (p_c), s		0.4	0.0	0.0		2.0

Intersection Summary	
HCM 6th Ctrl Delay	65.7
HCM 6th LOS	E

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	329	111	77	605	243	77
Future Volume (vph)	329	111	77	605	243	77
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	4		3	8	2	
Permitted Phases		4	8			2
Detector Phase	4	4	3	8	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	34.0	34.0	10.0	44.0	26.0	26.0
Total Split (%)	48.6%	48.6%	14.3%	62.9%	37.1%	37.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	None	None	None	None	Max	Max
Act Effct Green (s)	20.4	20.4	25.9	25.9	22.0	22.0
Actuated g/C Ratio	0.36	0.36	0.45	0.45	0.39	0.39
v/c Ratio	0.54	0.19	0.22	0.79	0.39	0.13
Control Delay	18.8	3.9	9.3	20.1	17.4	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.8	3.9	9.3	20.1	17.4	5.1
LOS	B	A	A	C	B	A
Approach Delay	15.1			18.9	14.5	
Approach LOS	B			B	B	

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 57.1	
Natural Cycle: 55	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 16.7	Intersection LOS: B
Intersection Capacity Utilization 52.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 5: W Meadows & Midland Ave





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	329	111	77	605	243	77
Future Volume (veh/h)	329	111	77	605	243	77
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	362	122	85	665	267	85
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	533	451	355	814	709	631
Arrive On Green	0.28	0.28	0.07	0.44	0.40	0.40
Sat Flow, veh/h	1870	1582	1781	1870	1781	1585
Grp Volume(v), veh/h	362	122	85	665	267	85
Grp Sat Flow(s),veh/h/ln	1870	1582	1781	1870	1781	1585
Q Serve(g_s), s	9.3	3.2	1.7	16.8	5.7	1.8
Cycle Q Clear(g_c), s	9.3	3.2	1.7	16.8	5.7	1.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	533	451	355	814	709	631
V/C Ratio(X)	0.68	0.27	0.24	0.82	0.38	0.13
Avail Cap(c_a), veh/h	1022	865	418	1368	709	631
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.1	15.0	11.9	13.4	11.5	10.3
Incr Delay (d2), s/veh	1.5	0.3	0.3	2.1	1.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	1.1	0.6	6.2	2.2	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.6	15.3	12.2	15.5	13.0	10.8
LnGrp LOS	B	B	B	B	B	B
Approach Vol, veh/h	484			750	352	
Approach Delay, s/veh	17.8			15.1	12.5	
Approach LOS	B			B	B	

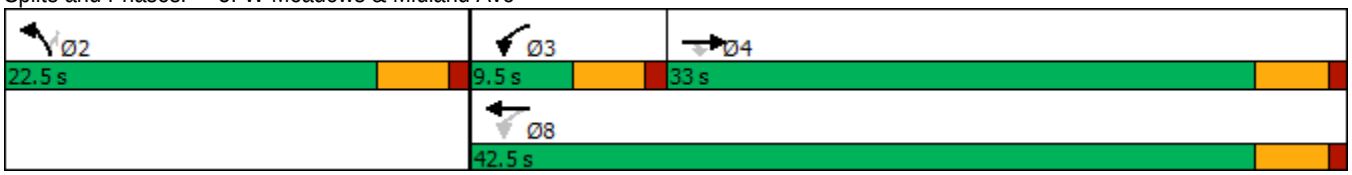
Timer - Assigned Phs		2	3	4			8
Phs Duration (G+Y+Rc), s		26.0	8.1	19.9			28.0
Change Period (Y+Rc), s		4.5	4.5	4.5			4.5
Max Green Setting (Gmax), s		21.5	5.5	29.5			39.5
Max Q Clear Time (g_c+I1), s		7.7	3.7	11.3			18.8
Green Ext Time (p_c), s		0.9	0.0	2.5			4.7

Intersection Summary	
HCM 6th Ctrl Delay	15.3
HCM 6th LOS	B

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	915	145	45	295	85	95
Future Volume (vph)	915	145	45	295	85	95
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	4		3	8	2	
Permitted Phases		4	8			2
Detector Phase	4	4	3	8	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	33.0	33.0	9.5	42.5	22.5	22.5
Total Split (%)	50.8%	50.8%	14.6%	65.4%	34.6%	34.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	None	None	None	None	Max	Max
Act Effct Green (s)	28.7	28.7	34.0	34.0	18.1	18.1
Actuated g/C Ratio	0.47	0.47	0.56	0.56	0.30	0.30
v/c Ratio	1.14	0.20	0.20	0.31	0.18	0.19
Control Delay	98.4	5.1	7.7	8.0	18.6	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	98.4	5.1	7.7	8.0	18.6	5.6
LOS	F	A	A	A	B	A
Approach Delay	85.6			8.0	11.8	
Approach LOS	F			A	B	

Intersection Summary	
Cycle Length: 65	
Actuated Cycle Length: 61.2	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.14	
Intersection Signal Delay: 60.5	Intersection LOS: E
Intersection Capacity Utilization 61.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 5: W Meadows & Midland Ave





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	915	145	45	295	85	95
Future Volume (veh/h)	915	145	45	295	85	95
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	995	158	49	321	92	103
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	848	718	196	1067	510	454
Arrive On Green	0.45	0.45	0.05	0.57	0.29	0.29
Sat Flow, veh/h	1870	1583	1781	1870	1781	1585
Grp Volume(v), veh/h	995	158	49	321	92	103
Grp Sat Flow(s),veh/h/ln	1870	1583	1781	1870	1781	1585
Q Serve(g_s), s	28.5	3.8	0.8	5.6	2.4	3.1
Cycle Q Clear(g_c), s	28.5	3.8	0.8	5.6	2.4	3.1
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	848	718	196	1067	510	454
V/C Ratio(X)	1.17	0.22	0.25	0.30	0.18	0.23
Avail Cap(c_a), veh/h	848	718	256	1130	510	454
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.2	10.4	14.5	7.0	16.9	17.1
Incr Delay (d2), s/veh	90.5	0.2	0.7	0.2	0.8	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	31.6	1.2	0.3	1.8	1.0	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	107.7	10.6	15.2	7.2	17.7	18.3
LnGrp LOS	F	B	B	A	B	B
Approach Vol, veh/h	1153			370	195	
Approach Delay, s/veh	94.4			8.2	18.0	
Approach LOS	F			A	B	

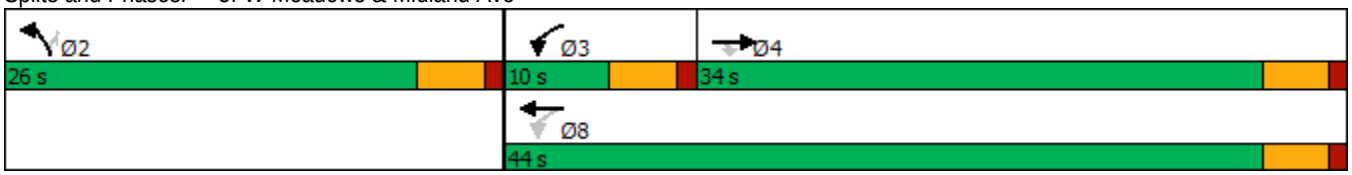
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		22.5	7.4	33.0		40.4
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s		18.0	5.0	28.5		38.0
Max Q Clear Time (g_c+I1), s		5.1	2.8	30.5		7.6
Green Ext Time (p_c), s		0.4	0.0	0.0		2.0

Intersection Summary	
HCM 6th Ctrl Delay	67.2
HCM 6th LOS	E

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	345	120	85	635	255	80
Future Volume (vph)	345	120	85	635	255	80
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	4		3	8	2	
Permitted Phases		4	8			2
Detector Phase	4	4	3	8	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	34.0	34.0	10.0	44.0	26.0	26.0
Total Split (%)	48.6%	48.6%	14.3%	62.9%	37.1%	37.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	None	None	None	None	Max	Max
Act Effct Green (s)	19.6	19.6	27.2	27.2	21.9	21.9
Actuated g/C Ratio	0.34	0.34	0.47	0.47	0.38	0.38
v/c Ratio	0.60	0.21	0.24	0.79	0.42	0.13
Control Delay	20.9	3.9	9.4	20.2	18.3	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.9	3.9	9.4	20.2	18.3	5.2
LOS	C	A	A	C	B	A
Approach Delay	16.6			19.0	15.2	
Approach LOS	B			B	B	

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 58.3	
Natural Cycle: 60	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 17.4	Intersection LOS: B
Intersection Capacity Utilization 55.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 5: W Meadows & Midland Ave



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	345	120	85	635	255	80
Future Volume (veh/h)	345	120	85	635	255	80
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	375	130	92	690	277	87
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	555	470	360	836	695	618
Arrive On Green	0.30	0.30	0.07	0.45	0.39	0.39
Sat Flow, veh/h	1870	1582	1781	1870	1781	1585
Grp Volume(v), veh/h	375	130	92	690	277	87
Grp Sat Flow(s),veh/h/ln	1870	1582	1781	1870	1781	1585
Q Serve(g_s), s	9.7	3.5	1.8	17.8	6.2	2.0
Cycle Q Clear(g_c), s	9.7	3.5	1.8	17.8	6.2	2.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	555	470	360	836	695	618
V/C Ratio(X)	0.68	0.28	0.26	0.83	0.40	0.14
Avail Cap(c_a), veh/h	1001	847	416	1340	695	618
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.1	14.9	11.8	13.4	12.2	10.9
Incr Delay (d2), s/veh	1.4	0.3	0.4	2.4	1.7	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	1.2	0.6	6.7	2.4	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.5	15.2	12.2	15.7	13.9	11.3
LnGrp LOS	B	B	B	B	B	B
Approach Vol, veh/h	505			782	364	
Approach Delay, s/veh	17.6			15.3	13.3	
Approach LOS	B			B	B	

Timer - Assigned Phs	2	3	4	8
Phs Duration (G+Y+Rc), s	26.0	8.3	20.9	29.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	21.5	5.5	29.5	39.5
Max Q Clear Time (g_c+I1), s	8.2	3.8	11.7	19.8
Green Ext Time (p_c), s	0.9	0.0	2.6	4.8

Intersection Summary	
HCM 6th Ctrl Delay	15.6
HCM 6th LOS	B

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	32	53	42	39	17	32
Future Vol, veh/h	32	53	42	39	17	32
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	60	48	44	19	36
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	7.7	7.3	7.3
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	38%	0%	35%
Vol Thru, %	62%	52%	0%
Vol Right, %	0%	48%	65%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	85	81	49
LT Vol	32	0	17
Through Vol	53	42	0
RT Vol	0	39	32
Lane Flow Rate	97	92	56
Geometry Grp	1	1	1
Degree of Util (X)	0.112	0.098	0.061
Departure Headway (Hd)	4.176	3.815	3.934
Convergence, Y/N	Yes	Yes	Yes
Cap	856	933	898
Service Time	2.214	1.861	2.013
HCM Lane V/C Ratio	0.113	0.099	0.062
HCM Control Delay	7.7	7.3	7.3
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.4	0.3	0.2

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	32	59	49	29	16	32
Future Vol, veh/h	32	59	49	29	16	32
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	66	54	32	18	36
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	7.8	7.3	7.2
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	35%	0%	33%
Vol Thru, %	65%	63%	0%
Vol Right, %	0%	37%	67%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	91	78	48
LT Vol	32	0	16
Through Vol	59	49	0
RT Vol	0	29	32
Lane Flow Rate	101	87	53
Geometry Grp	1	1	1
Degree of Util (X)	0.117	0.093	0.058
Departure Headway (Hd)	4.163	3.88	3.921
Convergence, Y/N	Yes	Yes	Yes
Cap	858	919	900
Service Time	2.199	1.925	2.002
HCM Lane V/C Ratio	0.118	0.095	0.059
HCM Control Delay	7.8	7.3	7.2
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.4	0.3	0.2

Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	34	178	174	66	18	34
Future Vol, veh/h	34	178	174	66	18	34
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	202	198	75	20	39
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	9.2	9.1	8.1
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	16%	0%	35%
Vol Thru, %	84%	72%	0%
Vol Right, %	0%	28%	65%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	212	240	52
LT Vol	34	0	18
Through Vol	178	174	0
RT Vol	0	66	34
Lane Flow Rate	241	273	59
Geometry Grp	1	1	1
Degree of Util (X)	0.294	0.315	0.077
Departure Headway (Hd)	4.391	4.159	4.706
Convergence, Y/N	Yes	Yes	Yes
Cap	824	867	761
Service Time	2.391	2.175	2.734
HCM Lane V/C Ratio	0.292	0.315	0.078
HCM Control Delay	9.2	9.1	8.1
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.2	1.4	0.2

Intersection	
Intersection Delay, s/veh	9.4
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	36	216	205	47	17	36
Future Vol, veh/h	36	216	205	47	17	36
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	240	228	52	19	40
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	9.7	9.4	8.2
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	14%	0%	32%
Vol Thru, %	86%	81%	0%
Vol Right, %	0%	19%	68%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	252	252	53
LT Vol	36	0	17
Through Vol	216	205	0
RT Vol	0	47	36
Lane Flow Rate	280	280	59
Geometry Grp	1	1	1
Degree of Util (X)	0.341	0.331	0.078
Departure Headway (Hd)	4.387	4.255	4.793
Convergence, Y/N	Yes	Yes	Yes
Cap	823	848	747
Service Time	2.403	2.271	2.823
HCM Lane V/C Ratio	0.34	0.33	0.079
HCM Control Delay	9.7	9.4	8.2
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.5	1.5	0.3

Intersection	
Intersection Delay, s/veh	9.1
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	40	185	180	70	20	40
Future Vol, veh/h	40	185	180	70	20	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	43	201	196	76	22	43
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	9.3	9.1	8.2
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	18%	0%	33%
Vol Thru, %	82%	72%	0%
Vol Right, %	0%	28%	67%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	225	250	60
LT Vol	40	0	20
Through Vol	185	180	0
RT Vol	0	70	40
Lane Flow Rate	245	272	65
Geometry Grp	1	1	1
Degree of Util (X)	0.299	0.315	0.085
Departure Headway (Hd)	4.396	4.178	4.706
Convergence, Y/N	Yes	Yes	Yes
Cap	819	861	762
Service Time	2.411	2.193	2.733
HCM Lane V/C Ratio	0.299	0.316	0.085
HCM Control Delay	9.3	9.1	8.2
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.3	1.4	0.3

Intersection	
Intersection Delay, s/veh	9.5
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	40	220	210	50	20	40
Future Vol, veh/h	40	220	210	50	20	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	43	239	228	54	22	43
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	9.8	9.4	8.3
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	15%	0%	33%
Vol Thru, %	85%	81%	0%
Vol Right, %	0%	19%	67%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	260	260	60
LT Vol	40	0	20
Through Vol	220	210	0
RT Vol	0	50	40
Lane Flow Rate	283	283	65
Geometry Grp	1	1	1
Degree of Util (X)	0.346	0.335	0.087
Departure Headway (Hd)	4.41	4.272	4.817
Convergence, Y/N	Yes	Yes	Yes
Cap	817	842	743
Service Time	2.428	2.291	2.848
HCM Lane V/C Ratio	0.346	0.336	0.087
HCM Control Delay	9.8	9.4	8.3
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.6	1.5	0.3

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	29	36	76	25	13	19
Future Vol, veh/h	29	36	76	25	13	19
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	41	87	29	15	22
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	7.6	7.5	7.2
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	45%	0%	41%
Vol Thru, %	55%	75%	0%
Vol Right, %	0%	25%	59%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	65	101	32
LT Vol	29	0	13
Through Vol	36	76	0
RT Vol	0	25	19
Lane Flow Rate	75	116	37
Geometry Grp	1	1	1
Degree of Util (X)	0.087	0.126	0.041
Departure Headway (Hd)	4.176	3.906	3.984
Convergence, Y/N	Yes	Yes	Yes
Cap	856	916	886
Service Time	2.211	1.94	2.067
HCM Lane V/C Ratio	0.088	0.127	0.042
HCM Control Delay	7.6	7.5	7.2
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.3	0.4	0.1

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	24	44	66	24	8	22
Future Vol, veh/h	24	44	66	24	8	22
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	49	74	27	9	25
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	7.6	7.4	7.1
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	35%	0%	27%
Vol Thru, %	65%	73%	0%
Vol Right, %	0%	27%	73%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	68	90	30
LT Vol	24	0	8
Through Vol	44	66	0
RT Vol	0	24	22
Lane Flow Rate	76	101	34
Geometry Grp	1	1	1
Degree of Util (X)	0.088	0.109	0.036
Departure Headway (Hd)	4.14	3.89	3.851
Convergence, Y/N	Yes	Yes	Yes
Cap	865	920	918
Service Time	2.168	1.919	1.924
HCM Lane V/C Ratio	0.088	0.11	0.037
HCM Control Delay	7.6	7.4	7.1
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.3	0.4	0.1

Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	31	157	224	27	16	21
Future Vol, veh/h	31	157	224	27	16	21
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	180	257	31	18	24
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	8.9	9.2	8
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	16%	0%	43%
Vol Thru, %	84%	89%	0%
Vol Right, %	0%	11%	57%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	188	251	37
LT Vol	31	0	16
Through Vol	157	224	0
RT Vol	0	27	21
Lane Flow Rate	216	289	43
Geometry Grp	1	1	1
Degree of Util (X)	0.256	0.329	0.056
Departure Headway (Hd)	4.259	4.107	4.763
Convergence, Y/N	Yes	Yes	Yes
Cap	830	863	757
Service Time	2.359	2.199	2.763
HCM Lane V/C Ratio	0.26	0.335	0.057
HCM Control Delay	8.9	9.2	8
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1	1.4	0.2

Intersection	
Intersection Delay, s/veh	9.3
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	28	194	236	28	14	26
Future Vol, veh/h	28	194	236	28	14	26
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	218	265	31	16	29
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	9.3	9.5	8.1
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	13%	0%	35%
Vol Thru, %	87%	89%	0%
Vol Right, %	0%	11%	65%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	222	264	40
LT Vol	28	0	14
Through Vol	194	236	0
RT Vol	0	28	26
Lane Flow Rate	249	297	45
Geometry Grp	1	1	1
Degree of Util (X)	0.303	0.35	0.06
Departure Headway (Hd)	4.37	4.242	4.785
Convergence, Y/N	Yes	Yes	Yes
Cap	826	851	748
Service Time	2.378	2.249	2.814
HCM Lane V/C Ratio	0.301	0.349	0.06
HCM Control Delay	9.3	9.5	8.1
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.3	1.6	0.2

Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	35	160	230	30	20	25
Future Vol, veh/h	35	160	230	30	20	25
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	174	250	33	22	27
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	8.9	9.3	8.1
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	18%	0%	44%
Vol Thru, %	82%	88%	0%
Vol Right, %	0%	12%	56%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	195	260	45
LT Vol	35	0	20
Through Vol	160	230	0
RT Vol	0	30	25
Lane Flow Rate	212	283	49
Geometry Grp	1	1	1
Degree of Util (X)	0.257	0.331	0.065
Departure Headway (Hd)	4.368	4.214	4.753
Convergence, Y/N	Yes	Yes	Yes
Cap	825	859	754
Service Time	2.383	2.214	2.778
HCM Lane V/C Ratio	0.257	0.329	0.065
HCM Control Delay	8.9	9.3	8.1
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1	1.5	0.2

Intersection	
Intersection Delay, s/veh	9.3
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	30	200	240	30	15	30
Future Vol, veh/h	30	200	240	30	15	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	217	261	33	16	33
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	9.3	9.5	8.1
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	13%	0%	33%
Vol Thru, %	87%	89%	0%
Vol Right, %	0%	11%	67%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	230	270	45
LT Vol	30	0	15
Through Vol	200	240	0
RT Vol	0	30	30
Lane Flow Rate	250	293	49
Geometry Grp	1	1	1
Degree of Util (X)	0.304	0.346	0.065
Departure Headway (Hd)	4.371	4.242	4.768
Convergence, Y/N	Yes	Yes	Yes
Cap	825	851	751
Service Time	2.386	2.257	2.795
HCM Lane V/C Ratio	0.303	0.344	0.065
HCM Control Delay	9.3	9.5	8.1
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.3	1.6	0.2

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	922	13	14	269	0	27
Future Vol, veh/h	922	13	14	269	0	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	175	250	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1024	14	16	299	0	30

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1038	0	-	1024
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	4.12	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	2.218	-	-	3.318
Pot Cap-1 Maneuver	-	-	670	-	0	286
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	670	-	-	286
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	19.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	286	-	-	670	-
HCM Lane V/C Ratio	0.105	-	-	0.023	-
HCM Control Delay (s)	19.1	-	-	10.5	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	327	19	144	604	3	128
Future Vol, veh/h	327	19	144	604	3	128
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	175	250	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	330	19	145	610	3	129

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	349	0	1230	330
Stage 1	-	-	-	-	330	-
Stage 2	-	-	-	-	900	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1210	-	196	712
Stage 1	-	-	-	-	728	-
Stage 2	-	-	-	-	397	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1210	-	172	712
Mov Cap-2 Maneuver	-	-	-	-	172	-
Stage 1	-	-	-	-	728	-
Stage 2	-	-	-	-	349	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	11.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	712	-	-	1210	-
HCM Lane V/C Ratio	0.182	-	-	0.12	-
HCM Control Delay (s)	11.2	-	-	8.4	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.7	-	-	0.4	-

Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	970	22	30	299	0	93
Future Vol, veh/h	970	22	30	299	0	93
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	175	250	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1078	24	33	332	0	103

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1102	0	-	1078
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	4.12	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	2.218	-	-	3.318
Pot Cap-1 Maneuver	-	-	633	-	0	266
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	633	-	-	266
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	26.9
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	266	-	-	633	-
HCM Lane V/C Ratio	0.388	-	-	0.053	-
HCM Control Delay (s)	26.9	-	-	11	-
HCM Lane LOS	D	-	-	B	-
HCM 95th %tile Q(veh)	1.8	-	-	0.2	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	379	45	195	665	3	182
Future Vol, veh/h	379	45	195	665	3	182
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	175	250	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	383	45	197	672	3	184

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	428	0	1449	383
Stage 1	-	-	-	-	383	-
Stage 2	-	-	-	-	1066	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1131	-	144	664
Stage 1	-	-	-	-	689	-
Stage 2	-	-	-	-	331	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1131	-	119	664
Mov Cap-2 Maneuver	-	-	-	-	119	-
Stage 1	-	-	-	-	689	-
Stage 2	-	-	-	-	273	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2	12.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	664	-	-	1131	-
HCM Lane V/C Ratio	0.277	-	-	0.174	-
HCM Control Delay (s)	12.5	-	-	8.9	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	1.1	-	-	0.6	-

Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1020	25	30	315	0	95
Future Vol, veh/h	1020	25	30	315	0	95
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	175	250	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1109	27	33	342	0	103

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1136	0	-	1109
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	4.12	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	2.218	-	-	3.318
Pot Cap-1 Maneuver	-	-	615	-	0	255
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	615	-	-	255
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	28.4
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	255	-	-	615	-
HCM Lane V/C Ratio	0.405	-	-	0.053	-
HCM Control Delay (s)	28.4	-	-	11.2	-
HCM Lane LOS	D	-	-	B	-
HCM 95th %tile Q(veh)	1.9	-	-	0.2	-

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	400	50	205	700	5	190
Future Vol, veh/h	400	50	205	700	5	190
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	175	250	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	404	51	207	707	5	192

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	455	0	1525	404
Stage 1	-	-	-	-	404	-
Stage 2	-	-	-	-	1121	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1106	-	130	647
Stage 1	-	-	-	-	674	-
Stage 2	-	-	-	-	311	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1106	-	106	647
Mov Cap-2 Maneuver	-	-	-	-	106	-
Stage 1	-	-	-	-	674	-
Stage 2	-	-	-	-	253	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2	12.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	647	-	-	1106	-
HCM Lane V/C Ratio	0.297	-	-	0.187	-
HCM Control Delay (s)	12.9	-	-	9	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	1.2	-	-	0.7	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	35	3	7	78	9	1	4	14	10	2	19
Future Vol, veh/h	12	35	3	7	78	9	1	4	14	10	2	19
Conflicting Peds, #/hr	6	0	2	6	0	2	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	39	3	8	87	10	1	4	16	11	2	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	103	0	0	48	0	0	194	192	48	192	188	99
Stage 1	-	-	-	-	-	-	73	73	-	114	114	-
Stage 2	-	-	-	-	-	-	121	119	-	78	74	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1489	-	-	1559	-	-	765	703	1021	768	707	957
Stage 1	-	-	-	-	-	-	937	834	-	891	801	-
Stage 2	-	-	-	-	-	-	883	797	-	931	833	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1480	-	-	1550	-	-	734	685	1014	740	689	951
Mov Cap-2 Maneuver	-	-	-	-	-	-	734	685	-	740	689	-
Stage 1	-	-	-	-	-	-	923	821	-	878	792	-
Stage 2	-	-	-	-	-	-	856	788	-	903	821	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.8	0.5	9	9.4
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	734	916	1480	-	-	1550	-	-	852
HCM Lane V/C Ratio	0.002	0.022	0.009	-	-	0.005	-	-	0.04
HCM Control Delay (s)	9.9	9	7.5	0	-	7.3	0	-	9.4
HCM Lane LOS	A	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0.1	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	38	5	20	76	21	6	1	8	16	5	10
Future Vol, veh/h	15	38	5	20	76	21	6	1	8	16	5	10
Conflicting Peds, #/hr	2	0	5	5	0	2	3	0	4	4	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	44	6	23	88	24	7	1	9	19	6	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	114	0	0	55	0	0	244	246	56	238	237	105
Stage 1	-	-	-	-	-	-	86	86	-	148	148	-
Stage 2	-	-	-	-	-	-	158	160	-	90	89	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1475	-	-	1550	-	-	710	656	1011	716	664	949
Stage 1	-	-	-	-	-	-	922	824	-	855	775	-
Stage 2	-	-	-	-	-	-	844	766	-	917	821	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1472	-	-	1543	-	-	677	633	1002	690	641	944
Mov Cap-2 Maneuver	-	-	-	-	-	-	677	633	-	690	641	-
Stage 1	-	-	-	-	-	-	906	810	-	843	761	-
Stage 2	-	-	-	-	-	-	812	752	-	893	807	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.9	1.3	9.5	10.1
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	677	941	1472	-	-	1543	-	-	746
HCM Lane V/C Ratio	0.01	0.011	0.012	-	-	0.015	-	-	0.048
HCM Control Delay (s)	10.4	8.9	7.5	0	-	7.4	0	-	10.1
HCM Lane LOS	B	A	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	0	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	5.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↰	↱			↕	
Traffic Vol, veh/h	24	127	23	30	124	26	52	4	74	35	2	83
Future Vol, veh/h	24	127	23	30	124	26	52	4	74	35	2	83
Conflicting Peds, #/hr	6	0	2	6	0	2	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	27	141	26	33	138	29	58	4	82	39	2	92

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	173	0	0	173	0	0	481	453	161	477	452	160
Stage 1	-	-	-	-	-	-	214	214	-	225	225	-
Stage 2	-	-	-	-	-	-	267	239	-	252	227	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1404	-	-	1404	-	-	495	503	884	498	503	885
Stage 1	-	-	-	-	-	-	788	725	-	778	718	-
Stage 2	-	-	-	-	-	-	738	708	-	752	716	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1396	-	-	1396	-	-	423	474	878	429	474	879
Mov Cap-2 Maneuver	-	-	-	-	-	-	423	474	-	429	474	-
Stage 1	-	-	-	-	-	-	767	705	-	757	695	-
Stage 2	-	-	-	-	-	-	641	685	-	662	697	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.1	1.3	11.8	11.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	423	841	1396	-	-	1396	-	-	666
HCM Lane V/C Ratio	0.137	0.103	0.019	-	-	0.024	-	-	0.2
HCM Control Delay (s)	14.9	9.8	7.6	0	-	7.6	0	-	11.8
HCM Lane LOS	B	A	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.5	0.3	0.1	-	-	0.1	-	-	0.7

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↰	↱			↕	
Traffic Vol, veh/h	54	110	54	78	174	74	42	1	50	36	5	53
Future Vol, veh/h	54	110	54	78	174	74	42	1	50	36	5	53
Conflicting Peds, #/hr	2	0	5	5	0	2	3	0	4	4	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	63	128	63	91	202	86	49	1	58	42	6	62

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	290	0	0	196	0	0	755	763	169	748	751	250
Stage 1	-	-	-	-	-	-	291	291	-	429	429	-
Stage 2	-	-	-	-	-	-	464	472	-	319	322	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1272	-	-	1377	-	-	325	334	875	329	340	789
Stage 1	-	-	-	-	-	-	717	672	-	604	584	-
Stage 2	-	-	-	-	-	-	578	559	-	693	651	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1270	-	-	1370	-	-	263	288	868	274	293	785
Mov Cap-2 Maneuver	-	-	-	-	-	-	263	288	-	274	293	-
Stage 1	-	-	-	-	-	-	674	631	-	569	536	-
Stage 2	-	-	-	-	-	-	483	513	-	607	611	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2	1.9	15.1	16
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	263	835	1270	-	-	1370	-	-	435
HCM Lane V/C Ratio	0.186	0.071	0.049	-	-	0.066	-	-	0.251
HCM Control Delay (s)	21.8	9.6	8	0	-	7.8	0	-	16
HCM Lane LOS	C	A	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.7	0.2	0.2	-	-	0.2	-	-	1

Intersection	
Int Delay, s/veh	5.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	130	25	35	130	30	55	5	75	40	5	85
Future Vol, veh/h	25	130	25	35	130	30	55	5	75	40	5	85
Conflicting Peds, #/hr	6	0	2	6	0	2	1	0	1	1	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	27	141	27	38	141	33	60	5	82	43	5	92

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	180	0	0	174	0	0	498	471	162	493	468	165
Stage 1	-	-	-	-	-	-	215	215	-	240	240	-
Stage 2	-	-	-	-	-	-	283	256	-	253	228	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1396	-	-	1403	-	-	483	491	883	486	493	879
Stage 1	-	-	-	-	-	-	787	725	-	763	707	-
Stage 2	-	-	-	-	-	-	724	696	-	751	715	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1388	-	-	1395	-	-	409	460	877	417	462	873
Mov Cap-2 Maneuver	-	-	-	-	-	-	409	460	-	417	462	-
Stage 1	-	-	-	-	-	-	765	705	-	742	682	-
Stage 2	-	-	-	-	-	-	622	671	-	660	695	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.1	1.4	12	12.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	409	830	1388	-	-	1395	-	-	637
HCM Lane V/C Ratio	0.146	0.105	0.02	-	-	0.027	-	-	0.222
HCM Control Delay (s)	15.3	9.8	7.6	0	-	7.7	0	-	12.3
HCM Lane LOS	C	A	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.5	0.3	0.1	-	-	0.1	-	-	0.8

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↰	↱			↕	
Traffic Vol, veh/h	55	115	55	80	180	75	45	5	55	40	5	55
Future Vol, veh/h	55	115	55	80	180	75	45	5	55	40	5	55
Conflicting Peds, #/hr	2	0	5	5	0	2	3	0	4	4	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	60	125	60	87	196	82	49	5	60	43	5	60

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	280	0	0	190	0	0	727	734	164	725	723	242
Stage 1	-	-	-	-	-	-	280	280	-	413	413	-
Stage 2	-	-	-	-	-	-	447	454	-	312	310	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1283	-	-	1384	-	-	339	347	881	340	352	797
Stage 1	-	-	-	-	-	-	727	679	-	616	594	-
Stage 2	-	-	-	-	-	-	591	569	-	699	659	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1281	-	-	1377	-	-	278	302	873	281	306	793
Mov Cap-2 Maneuver	-	-	-	-	-	-	278	302	-	281	306	-
Stage 1	-	-	-	-	-	-	685	640	-	582	548	-
Stage 2	-	-	-	-	-	-	499	525	-	609	621	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.9	1.9	14.7	15.9
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	278	754	1281	-	-	1377	-	-	439
HCM Lane V/C Ratio	0.176	0.086	0.047	-	-	0.063	-	-	0.248
HCM Control Delay (s)	20.7	10.2	7.9	0	-	7.8	0	-	15.9
HCM Lane LOS	C	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.6	0.3	0.1	-	-	0.2	-	-	1

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	935	13	51	294	8	67
Future Vol, veh/h	935	13	51	294	8	67
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	175	250	-	275	0
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1016	14	55	320	9	73

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1030	0	1446	-
Stage 1	-	-	-	-	1016	-
Stage 2	-	-	-	-	430	-
Critical Hdwy	-	-	4.12	-	6.42	-
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	-
Pot Cap-1 Maneuver	-	-	674	-	145	0
Stage 1	-	-	-	-	350	0
Stage 2	-	-	-	-	656	0
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	674	-	133	-
Mov Cap-2 Maneuver	-	-	-	-	257	-
Stage 1	-	-	-	-	350	-
Stage 2	-	-	-	-	602	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	19.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	257	-	-	-	674	-
HCM Lane V/C Ratio	0.034	-	-	-	0.082	-
HCM Control Delay (s)	19.5	0	-	-	10.8	-
HCM Lane LOS	C	A	-	-	B	-
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	406	11	168	792	8	95
Future Vol, veh/h	406	11	168	792	8	95
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	175	250	-	275	0
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	446	12	185	870	9	104

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	458	0	1686	-
Stage 1	-	-	-	-	446	-
Stage 2	-	-	-	-	1240	-
Critical Hdwy	-	-	4.12	-	6.42	-
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	-
Pot Cap-1 Maneuver	-	-	1103	-	103	0
Stage 1	-	-	-	-	645	0
Stage 2	-	-	-	-	273	0
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1103	-	86	-
Mov Cap-2 Maneuver	-	-	-	-	181	-
Stage 1	-	-	-	-	645	-
Stage 2	-	-	-	-	227	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	25.9
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	181	-	-	-	1103	-
HCM Lane V/C Ratio	0.049	-	-	-	0.167	-
HCM Control Delay (s)	25.9	0	-	-	8.9	-
HCM Lane LOS	D	A	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	-	0.6	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1047	14	136	341	8	247
Future Vol, veh/h	1047	14	136	341	8	247
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	175	250	-	275	0
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1138	15	148	371	9	268

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1153	0	1805	-
Stage 1	-	-	-	-	1138	-
Stage 2	-	-	-	-	667	-
Critical Hdwy	-	-	4.12	-	6.42	-
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	-
Pot Cap-1 Maneuver	-	-	606	-	87	0
Stage 1	-	-	-	-	306	0
Stage 2	-	-	-	-	510	0
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	606	-	66	-
Mov Cap-2 Maneuver	-	-	-	-	185	-
Stage 1	-	-	-	-	306	-
Stage 2	-	-	-	-	386	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.7	25.4
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	185	-	-	-	606	-
HCM Lane V/C Ratio	0.047	-	-	-	0.244	-
HCM Control Delay (s)	25.4	0	-	-	12.8	-
HCM Lane LOS	D	A	-	-	B	-
HCM 95th %tile Q(veh)	0.1	-	-	-	1	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	511	11	379	905	8	229
Future Vol, veh/h	511	11	379	905	8	229
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	175	250	-	275	0
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	562	12	416	995	9	252

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	574	0	2389	-
Stage 1	-	-	-	-	562	-
Stage 2	-	-	-	-	1827	-
Critical Hdwy	-	-	4.12	-	6.42	-
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	-
Pot Cap-1 Maneuver	-	-	999	-	37	0
Stage 1	-	-	-	-	571	0
Stage 2	-	-	-	-	140	0
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	999	-	22	-
Mov Cap-2 Maneuver	-	-	-	-	69	-
Stage 1	-	-	-	-	571	-
Stage 2	-	-	-	-	82	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.3	64.7
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	69	-	-	-	999	-
HCM Lane V/C Ratio	0.127	-	-	-	0.417	-
HCM Control Delay (s)	64.7	0	-	-	11.2	-
HCM Lane LOS	F	A	-	-	B	-
HCM 95th %tile Q(veh)	0.4	-	-	-	2.1	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1100	15	140	360	10	250
Future Vol, veh/h	1100	15	140	360	10	250
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	175	250	-	275	0
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1196	16	152	391	11	272

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1212	0	1891	-
Stage 1	-	-	-	-	1196	-
Stage 2	-	-	-	-	695	-
Critical Hdwy	-	-	4.12	-	6.42	-
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	-
Pot Cap-1 Maneuver	-	-	576	-	77	0
Stage 1	-	-	-	-	287	0
Stage 2	-	-	-	-	495	0
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	576	-	57	-
Mov Cap-2 Maneuver	-	-	-	-	172	-
Stage 1	-	-	-	-	287	-
Stage 2	-	-	-	-	364	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.8	27.3
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	172	-	-	-	576	-
HCM Lane V/C Ratio	0.063	-	-	-	0.264	-
HCM Control Delay (s)	27.3	0	-	-	13.5	-
HCM Lane LOS	D	A	-	-	B	-
HCM 95th %tile Q(veh)	0.2	-	-	-	1.1	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	535	15	390	950	10	235
Future Vol, veh/h	535	15	390	950	10	235
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	175	250	-	275	0
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	582	16	424	1033	11	255

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	598	0	2463	-
Stage 1	-	-	-	-	582	-
Stage 2	-	-	-	-	1881	-
Critical Hdwy	-	-	4.12	-	6.42	-
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	-
Pot Cap-1 Maneuver	-	-	979	-	33	0
Stage 1	-	-	-	-	559	0
Stage 2	-	-	-	-	132	0
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	979	-	19	-
Mov Cap-2 Maneuver	-	-	-	-	64	-
Stage 1	-	-	-	-	559	-
Stage 2	-	-	-	-	75	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.3	72.4
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	64	-	-	-	979	-
HCM Lane V/C Ratio	0.17	-	-	-	0.433	-
HCM Control Delay (s)	72.4	0	-	-	11.5	-
HCM Lane LOS	F	A	-	-	B	-
HCM 95th %tile Q(veh)	0.6	-	-	-	2.2	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	42	152	204	121	480	366
Future Volume (vph)	42	152	204	121	480	366
Turn Type	Prot	Perm	NA	Perm	pm+pt	NA
Protected Phases	4		6		5	2
Permitted Phases		4		6	2	
Detector Phase	4	4	6	6	5	2
Switch Phase						
Minimum Initial (s)	7.0	7.0	20.0	20.0	3.0	20.0
Minimum Split (s)	30.0	30.0	30.0	30.0	12.0	25.0
Total Split (s)	30.0	30.0	45.0	45.0	20.0	65.0
Total Split (%)	31.6%	31.6%	47.4%	47.4%	21.1%	68.4%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	Max	Max	None	Max
Act Effct Green (s)	8.2	8.2	41.9	41.9	60.0	60.0
Actuated g/C Ratio	0.10	0.10	0.54	0.54	0.77	0.77
v/c Ratio	0.26	0.54	0.23	0.15	0.61	0.29
Control Delay	35.7	12.4	11.2	2.6	6.5	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.7	12.4	11.2	2.6	6.5	3.5
LOS	D	B	B	A	A	A
Approach Delay	17.4		8.0			5.2
Approach LOS	B		A			A

Intersection Summary	
Cycle Length: 95	
Actuated Cycle Length: 78.2	
Natural Cycle: 75	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 7.6	Intersection LOS: A
Intersection Capacity Utilization 61.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 11: 8th Street & Midland Avenue





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	42	152	204	121	480	366
Future Volume (veh/h)	42	152	204	121	480	366
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	48	0	234	139	552	421
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	105		1111	942	896	1508
Arrive On Green	0.06	0.00	0.59	0.59	0.14	0.81
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	48	0	234	139	552	421
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	1.9	0.0	4.3	2.9	7.8	4.2
Cycle Q Clear(g_c), s	1.9	0.0	4.3	2.9	7.8	4.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	105		1111	942	896	1508
V/C Ratio(X)	0.46		0.21	0.15	0.62	0.28
Avail Cap(c_a), veh/h	599		1111	942	997	1508
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.8	0.0	7.0	6.7	3.5	1.8
Incr Delay (d2), s/veh	3.0	0.0	0.4	0.3	1.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	1.6	0.9	1.8	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	36.9	0.0	7.4	7.0	4.5	2.3
LnGrp LOS	D		A	A	A	A
Approach Vol, veh/h	48		373			973
Approach Delay, s/veh	36.9		7.3			3.5
Approach LOS	D		A			A

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		65.0		9.4	15.8	49.2
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		60.0		25.0	15.0	40.0
Max Q Clear Time (g_c+I1), s		6.2		3.9	9.8	6.3
Green Ext Time (p_c), s		3.0		0.1	1.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	5.7
HCM 6th LOS	A

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	54	434	447	64	244	246
Future Volume (vph)	54	434	447	64	244	246
Turn Type	Prot	Perm	NA	Perm	pm+pt	NA
Protected Phases	4		6		5	2
Permitted Phases		4		6	2	
Detector Phase	4	4	6	6	5	2
Switch Phase						
Minimum Initial (s)	7.0	7.0	20.0	20.0	3.0	20.0
Minimum Split (s)	30.0	30.0	30.0	30.0	12.0	25.0
Total Split (s)	30.0	30.0	45.0	45.0	20.0	65.0
Total Split (%)	31.6%	31.6%	47.4%	47.4%	21.1%	68.4%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	Max	Max	None	Max
Act Effct Green (s)	10.1	10.1	46.0	46.0	60.2	60.2
Actuated g/C Ratio	0.13	0.13	0.57	0.57	0.75	0.75
v/c Ratio	0.26	0.77	0.45	0.07	0.41	0.19
Control Delay	33.9	12.6	13.2	4.6	5.6	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.9	12.6	13.2	4.6	5.6	3.9
LOS	C	B	B	A	A	A
Approach Delay	15.0		12.2			4.8
Approach LOS	B		B			A

Intersection Summary	
Cycle Length: 95	
Actuated Cycle Length: 80.4	
Natural Cycle: 75	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay: 10.6	Intersection LOS: B
Intersection Capacity Utilization 58.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 11: 8th Street & Midland Avenue





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	54	434	447	64	244	246
Future Volume (veh/h)	54	434	447	64	244	246
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	58	0	481	69	262	265
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	117		1233	1045	694	1498
Arrive On Green	0.07	0.00	0.66	0.66	0.07	0.80
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	58	0	481	69	262	265
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	2.4	0.0	8.8	1.2	3.1	2.5
Cycle Q Clear(g_c), s	2.4	0.0	8.8	1.2	3.1	2.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	117		1233	1045	694	1498
V/C Ratio(X)	0.50		0.39	0.07	0.38	0.18
Avail Cap(c_a), veh/h	595		1233	1045	917	1498
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.8	0.0	5.8	4.5	3.6	1.7
Incr Delay (d2), s/veh	3.2	0.0	0.9	0.1	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	3.0	0.3	0.7	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	37.1	0.0	6.8	4.7	4.0	2.0
LnGrp LOS	D		A	A	A	A
Approach Vol, veh/h	58		550			527
Approach Delay, s/veh	37.1		6.5			3.0
Approach LOS	D		A			A

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		65.0		9.9	10.6	54.4
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		60.0		25.0	15.0	40.0
Max Q Clear Time (g_c+I1), s		4.5		4.4	5.1	10.8
Green Ext Time (p_c), s		1.7		0.1	0.5	3.6

Intersection Summary	
HCM 6th Ctrl Delay	6.4
HCM 6th LOS	A

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	44	245	241	126	683	449
Future Volume (vph)	44	245	241	126	683	449
Turn Type	Prot	Perm	NA	Perm	pm+pt	NA
Protected Phases	4		6		5	2
Permitted Phases		4		6	2	
Detector Phase	4	4	6	6	5	2
Switch Phase						
Minimum Initial (s)	7.0	7.0	20.0	20.0	3.0	20.0
Minimum Split (s)	30.0	30.0	30.0	30.0	12.0	25.0
Total Split (s)	30.0	30.0	45.0	45.0	20.0	65.0
Total Split (%)	31.6%	31.6%	47.4%	47.4%	21.1%	68.4%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	Max	Max	None	Max
Act Effct Green (s)	8.7	8.7	40.0	40.0	60.1	60.1
Actuated g/C Ratio	0.11	0.11	0.51	0.51	0.76	0.76
v/c Ratio	0.26	0.66	0.29	0.17	0.91	0.36
Control Delay	35.2	12.6	12.7	2.7	22.6	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.2	12.6	12.7	2.7	22.6	4.2
LOS	D	B	B	A	C	A
Approach Delay	16.1		9.3			15.3
Approach LOS	B		A			B

Intersection Summary	
Cycle Length: 95	
Actuated Cycle Length: 78.8	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 14.2	Intersection LOS: B
Intersection Capacity Utilization 72.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 11: 8th Street & Midland Avenue





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	44	245	241	126	683	449
Future Volume (veh/h)	44	245	241	126	683	449
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	51	0	277	145	785	516
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	109		1003	850	895	1505
Arrive On Green	0.06	0.00	0.54	0.54	0.20	0.80
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	51	0	277	145	785	516
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	2.1	0.0	6.0	3.5	13.8	5.5
Cycle Q Clear(g_c), s	2.1	0.0	6.0	3.5	13.8	5.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	109		1003	850	895	1505
V/C Ratio(X)	0.47		0.28	0.17	0.88	0.34
Avail Cap(c_a), veh/h	597		1003	850	895	1505
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.8	0.0	9.4	8.8	6.0	2.0
Incr Delay (d2), s/veh	3.1	0.0	0.7	0.4	9.9	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	2.4	1.2	5.2	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	36.9	0.0	10.1	9.3	15.9	2.6
LnGrp LOS	D		B	A	B	A
Approach Vol, veh/h	51		422			1301
Approach Delay, s/veh	36.9		9.8			10.6
Approach LOS	D		A			B

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		65.0		9.6	20.0	45.0
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		60.0		25.0	15.0	40.0
Max Q Clear Time (g_c+I1), s		7.5		4.1	15.8	8.0
Green Ext Time (p_c), s		3.9		0.1	0.0	2.2

Intersection Summary	
HCM 6th Ctrl Delay	11.2
HCM 6th LOS	B

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	56	654	551	67	409	323
Future Volume (vph)	56	654	551	67	409	323
Turn Type	Prot	Perm	NA	Perm	pm+pt	NA
Protected Phases	4		6		5	2
Permitted Phases		4		6	2	
Detector Phase	4	4	6	6	5	2
Switch Phase						
Minimum Initial (s)	7.0	7.0	20.0	20.0	3.0	20.0
Minimum Split (s)	30.0	30.0	30.0	30.0	12.0	25.0
Total Split (s)	30.0	30.0	45.0	45.0	20.0	65.0
Total Split (%)	31.6%	31.6%	47.4%	47.4%	21.1%	68.4%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	Max	Max	None	Max
Act Effct Green (s)	23.9	23.9	40.0	40.0	60.1	60.1
Actuated g/C Ratio	0.25	0.25	0.43	0.43	0.64	0.64
v/c Ratio	0.13	0.98	0.75	0.10	0.99	0.29
Control Delay	27.8	44.1	30.1	8.0	58.7	8.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.8	44.1	30.1	8.0	58.7	8.5
LOS	C	D	C	A	E	A
Approach Delay	42.8		27.7			36.6
Approach LOS	D		C			D

Intersection Summary	
Cycle Length: 95	
Actuated Cycle Length: 94	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay: 36.1	Intersection LOS: D
Intersection Capacity Utilization 77.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 11: 8th Street & Midland Avenue





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	56	654	551	67	409	323
Future Volume (veh/h)	56	654	551	67	409	323
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	60	0	592	72	440	347
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	119		1153	977	643	1496
Arrive On Green	0.07	0.00	0.62	0.62	0.12	0.80
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	60	0	592	72	440	347
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	2.4	0.0	13.3	1.4	5.9	3.4
Cycle Q Clear(g_c), s	2.4	0.0	13.3	1.4	5.9	3.4
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	119		1153	977	643	1496
V/C Ratio(X)	0.51		0.51	0.07	0.68	0.23
Avail Cap(c_a), veh/h	594		1153	977	791	1496
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.8	0.0	8.1	5.8	6.5	1.8
Incr Delay (d2), s/veh	3.3	0.0	1.6	0.1	1.8	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	4.9	0.4	1.7	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	37.1	0.0	9.7	5.9	8.3	2.2
LnGrp LOS	D		A	A	A	A
Approach Vol, veh/h	60		664			787
Approach Delay, s/veh	37.1		9.3			5.6
Approach LOS	D		A			A

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		65.0		10.0	13.8	51.2
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		60.0		25.0	15.0	40.0
Max Q Clear Time (g_c+I1), s		5.4		4.4	7.9	15.3
Green Ext Time (p_c), s		2.4		0.1	0.9	4.5

Intersection Summary	
HCM 6th Ctrl Delay	8.5
HCM 6th LOS	A

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	50	255	255	135	710	470
Future Volume (vph)	50	255	255	135	710	470
Turn Type	Prot	Perm	NA	Perm	pm+pt	NA
Protected Phases	4		6		5	2
Permitted Phases		4		6	2	
Detector Phase	4	4	6	6	5	2
Switch Phase						
Minimum Initial (s)	7.0	7.0	20.0	20.0	3.0	20.0
Minimum Split (s)	30.0	30.0	30.0	30.0	12.0	25.0
Total Split (s)	30.0	30.0	45.0	45.0	20.0	65.0
Total Split (%)	31.6%	31.6%	47.4%	47.4%	21.1%	68.4%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	Max	Max	None	Max
Act Effct Green (s)	8.7	8.7	40.0	40.0	60.1	60.1
Actuated g/C Ratio	0.11	0.11	0.51	0.51	0.76	0.76
v/c Ratio	0.28	0.66	0.29	0.17	0.89	0.36
Control Delay	35.5	12.5	12.7	2.7	20.8	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.5	12.5	12.7	2.7	20.8	4.2
LOS	D	B	B	A	C	A
Approach Delay	16.3		9.2			14.2
Approach LOS	B		A			B

Intersection Summary	
Cycle Length: 95	
Actuated Cycle Length: 78.8	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 13.5	Intersection LOS: B
Intersection Capacity Utilization 74.3%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 11: 8th Street & Midland Avenue





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	50	255	255	135	710	470
Future Volume (veh/h)	50	255	255	135	710	470
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	54	0	277	147	772	511
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	112		1001	849	892	1502
Arrive On Green	0.06	0.00	0.54	0.54	0.20	0.80
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	54	0	277	147	772	511
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	2.2	0.0	6.0	3.5	13.6	5.5
Cycle Q Clear(g_c), s	2.2	0.0	6.0	3.5	13.6	5.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	112		1001	849	892	1502
V/C Ratio(X)	0.48		0.28	0.17	0.87	0.34
Avail Cap(c_a), veh/h	596		1001	849	892	1502
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.8	0.0	9.5	8.9	5.9	2.0
Incr Delay (d2), s/veh	3.2	0.0	0.7	0.4	8.9	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	2.4	1.2	4.9	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	37.0	0.0	10.2	9.3	14.8	2.6
LnGrp LOS	D		B	A	B	A
Approach Vol, veh/h	54		424			1283
Approach Delay, s/veh	37.0		9.9			10.0
Approach LOS	D		A			A

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		65.0		9.7	20.0	45.0
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		60.0		25.0	15.0	40.0
Max Q Clear Time (g_c+I1), s		7.5		4.2	15.6	8.0
Green Ext Time (p_c), s		3.8		0.1	0.0	2.2

Intersection Summary	
HCM 6th Ctrl Delay	10.8
HCM 6th LOS	B

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	60	680	575	70	425	340
Future Volume (vph)	60	680	575	70	425	340
Turn Type	Prot	Perm	NA	Perm	pm+pt	NA
Protected Phases	4		6		5	2
Permitted Phases		4		6	2	
Detector Phase	4	4	6	6	5	2
Switch Phase						
Minimum Initial (s)	7.0	7.0	20.0	20.0	3.0	20.0
Minimum Split (s)	30.0	30.0	30.0	30.0	12.0	25.0
Total Split (s)	30.0	30.0	45.0	45.0	20.0	65.0
Total Split (%)	31.6%	31.6%	47.4%	47.4%	21.1%	68.4%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	Max	Max	None	Max
Act Effct Green (s)	25.0	25.0	40.0	40.0	60.0	60.0
Actuated g/C Ratio	0.26	0.26	0.42	0.42	0.63	0.63
v/c Ratio	0.14	1.02	0.79	0.11	1.10	0.31
Control Delay	27.9	54.3	32.7	8.2	94.8	8.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.9	54.3	32.7	8.2	94.8	8.9
LOS	C	D	C	A	F	A
Approach Delay	52.1		30.0			56.6
Approach LOS	D		C			E

Intersection Summary	
Cycle Length: 95	
Actuated Cycle Length: 95	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.10	
Intersection Signal Delay: 47.1	Intersection LOS: D
Intersection Capacity Utilization 80.7%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 11: 8th Street & Midland Avenue





Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	60	680	575	70	425	340
Future Volume (veh/h)	60	680	575	70	425	340
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	65	0	618	75	457	366
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	123		1140	966	626	1492
Arrive On Green	0.07	0.00	0.61	0.61	0.12	0.80
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	65	0	618	75	457	366
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	2.7	0.0	14.5	1.5	6.3	3.7
Cycle Q Clear(g_c), s	2.7	0.0	14.5	1.5	6.3	3.7
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	123		1140	966	626	1492
V/C Ratio(X)	0.53		0.54	0.08	0.73	0.25
Avail Cap(c_a), veh/h	592		1140	966	764	1492
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.8	0.0	8.6	6.0	7.6	1.9
Incr Delay (d2), s/veh	3.5	0.0	1.9	0.2	2.8	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	5.4	0.5	2.5	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	37.3	0.0	10.4	6.2	10.4	2.3
LnGrp LOS	D		B	A	B	A
Approach Vol, veh/h	65		693			823
Approach Delay, s/veh	37.3		10.0			6.8
Approach LOS	D		A			A

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		65.0		10.2	14.2	50.8
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		60.0		25.0	15.0	40.0
Max Q Clear Time (g_c+I1), s		5.7		4.7	8.3	16.5
Green Ext Time (p_c), s		2.5		0.1	0.9	4.7

Intersection Summary	
HCM 6th Ctrl Delay	9.4
HCM 6th LOS	A

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	11.2
Intersection LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	248	88	24	193	158	41
Future Vol, veh/h	248	88	24	193	158	41
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	267	95	26	208	170	44
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	11.8	10.4	10.9
HCM LOS	B	B	B

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	79%	0%	11%
Vol Thru, %	0%	74%	89%
Vol Right, %	21%	26%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	199	336	217
LT Vol	158	0	24
Through Vol	0	248	193
RT Vol	41	88	0
Lane Flow Rate	214	361	233
Geometry Grp	1	1	1
Degree of Util (X)	0.316	0.466	0.321
Departure Headway (Hd)	5.318	4.645	4.956
Convergence, Y/N	Yes	Yes	Yes
Cap	670	770	719
Service Time	3.405	2.709	3.031
HCM Lane V/C Ratio	0.319	0.469	0.324
HCM Control Delay	10.9	11.8	10.4
HCM Lane LOS	B	B	B
HCM 95th-tile Q	1.4	2.5	1.4

Intersection	
Intersection Delay, s/veh	11.4
Intersection LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	199	66	11	189	210	44
Future Vol, veh/h	199	66	11	189	210	44
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	226	75	13	215	239	50
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	11.3	10.6	12.1
HCM LOS	B	B	B

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	83%	0%	6%
Vol Thru, %	0%	75%	94%
Vol Right, %	17%	25%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	254	265	200
LT Vol	210	0	11
Through Vol	0	199	189
RT Vol	44	66	0
Lane Flow Rate	289	301	227
Geometry Grp	1	1	1
Degree of Util (X)	0.42	0.406	0.321
Departure Headway (Hd)	5.233	4.851	5.091
Convergence, Y/N	Yes	Yes	Yes
Cap	681	735	698
Service Time	3.327	2.936	3.185
HCM Lane V/C Ratio	0.424	0.41	0.325
HCM Control Delay	12.1	11.3	10.6
HCM Lane LOS	B	B	B
HCM 95th-tile Q	2.1	2	1.4

Intersection	
Intersection Delay, s/veh	19.7
Intersection LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	441	92	25	288	164	43
Future Vol, veh/h	441	92	25	288	164	43
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	474	99	27	310	176	46
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	25.6	14.1	13.1
HCM LOS	D	B	B

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	79%	0%	8%
Vol Thru, %	0%	83%	92%
Vol Right, %	21%	17%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	207	533	313
LT Vol	164	0	25
Through Vol	0	441	288
RT Vol	43	92	0
Lane Flow Rate	223	573	337
Geometry Grp	1	1	1
Degree of Util (X)	0.384	0.805	0.511
Departure Headway (Hd)	6.206	5.058	5.465
Convergence, Y/N	Yes	Yes	Yes
Cap	579	716	660
Service Time	4.258	3.096	3.51
HCM Lane V/C Ratio	0.385	0.8	0.511
HCM Control Delay	13.1	25.6	14.1
HCM Lane LOS	B	D	B
HCM 95th-tile Q	1.8	8.3	2.9

Intersection	
Intersection Delay, s/veh	22.5
Intersection LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	362	69	11	399	219	46
Future Vol, veh/h	362	69	11	399	219	46
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	411	78	13	453	249	52
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	24.7	23.7	17
HCM LOS	C	C	C

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	83%	0%	3%
Vol Thru, %	0%	84%	97%
Vol Right, %	17%	16%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	265	431	410
LT Vol	219	0	11
Through Vol	0	362	399
RT Vol	46	69	0
Lane Flow Rate	301	490	466
Geometry Grp	1	1	1
Degree of Util (X)	0.541	0.764	0.743
Departure Headway (Hd)	6.469	5.615	5.741
Convergence, Y/N	Yes	Yes	Yes
Cap	554	642	624
Service Time	4.553	3.694	3.82
HCM Lane V/C Ratio	0.543	0.763	0.747
HCM Control Delay	17	24.7	23.7
HCM Lane LOS	C	C	C
HCM 95th-tile Q	3.2	7	6.5

Intersection	
Intersection Delay, s/veh	22.9
Intersection LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	455	100	30	300	175	45
Future Vol, veh/h	455	100	30	300	175	45
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	489	108	32	323	188	48
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	30.9	15.3	13.9
HCM LOS	D	C	B

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	80%	0%	9%
Vol Thru, %	0%	82%	91%
Vol Right, %	20%	18%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	220	555	330
LT Vol	175	0	30
Through Vol	0	455	300
RT Vol	45	100	0
Lane Flow Rate	237	597	355
Geometry Grp	1	1	1
Degree of Util (X)	0.416	0.855	0.55
Departure Headway (Hd)	6.333	5.155	5.583
Convergence, Y/N	Yes	Yes	Yes
Cap	568	698	642
Service Time	4.394	3.201	3.637
HCM Lane V/C Ratio	0.417	0.855	0.553
HCM Control Delay	13.9	30.9	15.3
HCM Lane LOS	B	D	C
HCM 95th-tile Q	2	9.9	3.4

Intersection	
Intersection Delay, s/veh	22.3
Intersection LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	375	75	15	410	230	50
Future Vol, veh/h	375	75	15	410	230	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	408	82	16	446	250	54
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	24.6	23.4	17.1
HCM LOS	C	C	C

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	82%	0%	4%
Vol Thru, %	0%	83%	96%
Vol Right, %	18%	17%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	280	450	425
LT Vol	230	0	15
Through Vol	0	375	410
RT Vol	50	75	0
Lane Flow Rate	304	489	462
Geometry Grp	1	1	1
Degree of Util (X)	0.546	0.763	0.738
Departure Headway (Hd)	6.456	5.615	5.75
Convergence, Y/N	Yes	Yes	Yes
Cap	554	641	624
Service Time	4.54	3.696	3.832
HCM Lane V/C Ratio	0.549	0.763	0.74
HCM Control Delay	17.1	24.6	23.4
HCM Lane LOS	C	C	C
HCM 95th-tile Q	3.3	7	6.4

Intersection	
Intersection Delay, s/veh	10.7
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	202	67	49	150	55	51	23	32	39	37	16
Future Vol, veh/h	27	202	67	49	150	55	51	23	32	39	37	16
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	29	220	73	53	163	60	55	25	35	42	40	17
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	11.3	10.7	9.7	9.6
HCM LOS	B	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	48%	9%	19%	42%
Vol Thru, %	22%	68%	59%	40%
Vol Right, %	30%	23%	22%	17%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	106	296	254	92
LT Vol	51	27	49	39
Through Vol	23	202	150	37
RT Vol	32	67	55	16
Lane Flow Rate	115	322	276	100
Geometry Grp	1	1	1	1
Degree of Util (X)	0.176	0.422	0.368	0.155
Departure Headway (Hd)	5.491	4.722	4.799	5.584
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	657	753	740	646
Service Time	3.495	2.815	2.895	3.589
HCM Lane V/C Ratio	0.175	0.428	0.373	0.155
HCM Control Delay	9.7	11.3	10.7	9.6
HCM Lane LOS	A	B	B	A
HCM 95th-tile Q	0.6	2.1	1.7	0.5

Intersection	
Intersection Delay, s/veh	10
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	19	168	55	23	154	67	33	10	38	32	33	17
Future Vol, veh/h	19	168	55	23	154	67	33	10	38	32	33	17
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	195	64	27	179	78	38	12	44	37	38	20
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.3	10.3	9.1	9.3
HCM LOS	B	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	41%	8%	9%	39%
Vol Thru, %	12%	69%	63%	40%
Vol Right, %	47%	23%	27%	21%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	81	242	244	82
LT Vol	33	19	23	32
Through Vol	10	168	154	33
RT Vol	38	55	67	17
Lane Flow Rate	94	281	284	95
Geometry Grp	1	1	1	1
Degree of Util (X)	0.135	0.362	0.363	0.14
Departure Headway (Hd)	5.153	4.629	4.604	5.303
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	689	771	777	669
Service Time	3.24	2.691	2.664	3.39
HCM Lane V/C Ratio	0.136	0.364	0.366	0.142
HCM Control Delay	9.1	10.3	10.3	9.3
HCM Lane LOS	A	B	B	A
HCM 95th-tile Q	0.5	1.7	1.7	0.5

Intersection	
Intersection Delay, s/veh	18.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	28	393	70	51	243	57	53	24	33	41	39	17
Future Vol, veh/h	28	393	70	51	243	57	53	24	33	41	39	17
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	30	427	76	55	264	62	58	26	36	45	42	18
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	23.2	15.4	11.3	11.2
HCM LOS	C	C	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	48%	6%	15%	42%
Vol Thru, %	22%	80%	69%	40%
Vol Right, %	30%	14%	16%	18%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	110	491	351	97
LT Vol	53	28	51	41
Through Vol	24	393	243	39
RT Vol	33	70	57	17
Lane Flow Rate	120	534	382	105
Geometry Grp	1	1	1	1
Degree of Util (X)	0.214	0.766	0.569	0.191
Departure Headway (Hd)	6.432	5.168	5.373	6.534
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	555	699	668	545
Service Time	4.515	3.222	3.434	4.622
HCM Lane V/C Ratio	0.216	0.764	0.572	0.193
HCM Control Delay	11.3	23.2	15.4	11.2
HCM Lane LOS	B	C	C	B
HCM 95th-tile Q	0.8	7.2	3.6	0.7

Intersection	
Intersection Delay, s/veh	19.6
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	330	57	24	362	70	34	10	40	33	34	18
Future Vol, veh/h	20	330	57	24	362	70	34	10	40	33	34	18
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	384	66	28	421	81	40	12	47	38	40	21
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	19.4	23	11	11.2
HCM LOS	C	C	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	40%	5%	5%	39%
Vol Thru, %	12%	81%	79%	40%
Vol Right, %	48%	14%	15%	21%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	84	407	456	85
LT Vol	34	20	24	33
Through Vol	10	330	362	34
RT Vol	40	57	70	18
Lane Flow Rate	98	473	530	99
Geometry Grp	1	1	1	1
Degree of Util (X)	0.176	0.692	0.763	0.182
Departure Headway (Hd)	6.484	5.262	5.183	6.632
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	549	686	695	538
Service Time	4.571	3.317	3.237	4.719
HCM Lane V/C Ratio	0.179	0.69	0.763	0.184
HCM Control Delay	11	19.4	23	11.2
HCM Lane LOS	B	C	C	B
HCM 95th-tile Q	0.6	5.6	7.1	0.7

Intersection	
Intersection Delay, s/veh	21.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	405	75	55	255	60	60	25	35	45	40	20
Future Vol, veh/h	30	405	75	55	255	60	60	25	35	45	40	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	440	82	60	277	65	65	27	38	49	43	22
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	28	17.2	11.9	11.7
HCM LOS	D	C	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	50%	6%	15%	43%
Vol Thru, %	21%	79%	69%	38%
Vol Right, %	29%	15%	16%	19%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	120	510	370	105
LT Vol	60	30	55	45
Through Vol	25	405	255	40
RT Vol	35	75	60	20
Lane Flow Rate	130	554	402	114
Geometry Grp	1	1	1	1
Degree of Util (X)	0.244	0.818	0.617	0.217
Departure Headway (Hd)	6.736	5.309	5.526	6.836
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	536	676	648	527
Service Time	4.744	3.393	3.62	4.844
HCM Lane V/C Ratio	0.243	0.82	0.62	0.216
HCM Control Delay	11.9	28	17.2	11.7
HCM Lane LOS	B	D	C	B
HCM 95th-tile Q	1	8.6	4.2	0.8

Intersection	
Intersection Delay, s/veh	18.8
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	340	60	25	370	75	40	15	45	35	40	20
Future Vol, veh/h	25	340	60	25	370	75	40	15	45	35	40	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	27	370	65	27	402	82	43	16	49	38	43	22
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

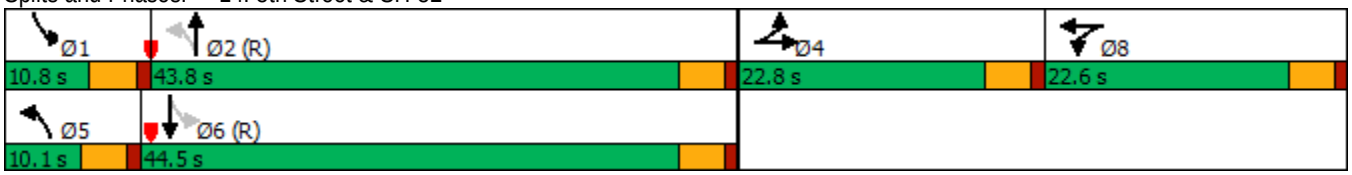
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	19	21.8	11.1	11.2
HCM LOS	C	C	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	40%	6%	5%	37%
Vol Thru, %	15%	80%	79%	42%
Vol Right, %	45%	14%	16%	21%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	100	425	470	95
LT Vol	40	25	25	35
Through Vol	15	340	370	40
RT Vol	45	60	75	20
Lane Flow Rate	109	462	511	103
Geometry Grp	1	1	1	1
Degree of Util (X)	0.195	0.68	0.741	0.189
Departure Headway (Hd)	6.454	5.297	5.223	6.604
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	552	679	690	539
Service Time	4.543	3.355	3.28	4.696
HCM Lane V/C Ratio	0.197	0.68	0.741	0.191
HCM Control Delay	11.1	19	21.8	11.2
HCM Lane LOS	B	C	C	B
HCM 95th-tile Q	0.7	5.3	6.6	0.7

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	81	40	27	32	42	823	58	691
Future Volume (vph)	81	40	27	32	42	823	58	691
Turn Type	Split	NA	Split	NA	pm+pt	NA	pm+pt	NA
Protected Phases	4	4	8	8	5	2	1	6
Permitted Phases					2		6	
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5	9.5	22.5
Total Split (s)	22.8	22.8	22.6	22.6	10.1	43.8	10.8	44.5
Total Split (%)	22.8%	22.8%	22.6%	22.6%	10.1%	43.8%	10.8%	44.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	10.4	10.4	8.0	8.0	66.2	60.9	67.7	63.3
Actuated g/C Ratio	0.10	0.10	0.08	0.08	0.66	0.61	0.68	0.63
v/c Ratio	0.46	0.64	0.20	0.46	0.10	0.46	0.16	0.40
Control Delay	49.2	21.5	45.0	29.7	3.5	5.4	7.7	12.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay	49.2	21.5	45.0	29.7	3.5	5.5	7.7	12.0
LOS	D	C	D	C	A	A	A	B
Approach Delay		29.9		33.7		5.4		11.7
Approach LOS		C		C		A		B

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.64	
Intersection Signal Delay: 12.2	Intersection LOS: B
Intersection Capacity Utilization 63.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 14: 8th Street & SH-82



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	40	148	27	32	46	42	823	115	58	691	140
Future Volume (veh/h)	81	40	148	27	32	46	42	823	115	58	691	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.93	1.00		0.95	0.99		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	41	143	28	33	37	43	848	119	60	712	144
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	266	53	184	165	71	80	388	1667	234	452	1582	320
Arrive On Green	0.15	0.15	0.15	0.09	0.09	0.09	0.07	1.00	1.00	0.04	0.54	0.54
Sat Flow, veh/h	1781	352	1227	1781	770	863	1781	3105	436	1781	2914	589
Grp Volume(v), veh/h	84	0	184	28	0	70	43	485	482	60	434	422
Grp Sat Flow(s),veh/h/ln	1781	0	1579	1781	0	1633	1781	1777	1764	1781	1777	1727
Q Serve(g_s), s	4.2	0.0	11.2	1.4	0.0	4.1	1.0	0.0	0.0	1.5	14.8	14.8
Cycle Q Clear(g_c), s	4.2	0.0	11.2	1.4	0.0	4.1	1.0	0.0	0.0	1.5	14.8	14.8
Prop In Lane	1.00		0.78	1.00		0.53	1.00		0.25	1.00		0.34
Lane Grp Cap(c), veh/h	266	0	236	165	0	152	388	954	947	452	964	937
V/C Ratio(X)	0.32	0.00	0.78	0.17	0.00	0.46	0.11	0.51	0.51	0.13	0.45	0.45
Avail Cap(c_a), veh/h	326	0	289	322	0	296	426	954	947	492	964	937
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.90	0.90	0.90	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.9	0.0	40.9	41.8	0.0	43.0	10.1	0.0	0.0	9.2	13.8	13.8
Incr Delay (d2), s/veh	0.7	0.0	10.4	0.5	0.0	2.2	0.1	1.7	1.8	0.1	1.5	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	5.0	0.7	0.0	1.7	0.4	0.5	0.5	0.6	6.0	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.6	0.0	51.4	42.3	0.0	45.2	10.2	1.7	1.8	9.4	15.3	15.4
LnGrp LOS	D	A	D	D	A	D	B	A	A	A	B	B
Approach Vol, veh/h		268			98			1010			916	
Approach Delay, s/veh		47.4			44.3			2.1			15.0	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.6	58.2		19.5	8.0	58.8		13.8				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	6.3	39.3		18.3	5.6	40.0		18.1				
Max Q Clear Time (g_c+I1), s	3.5	2.0		13.2	3.0	16.8		6.1				
Green Ext Time (p_c), s	0.0	7.8		0.6	0.0	5.9		0.3				

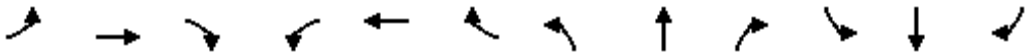
Intersection Summary												
HCM 6th Ctrl Delay			14.4									
HCM 6th LOS			B									

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	113	26	17	23	38	1710	65	691
Future Volume (vph)	113	26	17	23	38	1710	65	691
Turn Type	Split	NA	Split	NA	pm+pt	NA	pm+pt	NA
Protected Phases	4	4	8	8	5	2	1	6
Permitted Phases					2		6	
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5	9.5	22.5
Total Split (s)	26.0	26.0	26.0	26.0	10.0	132.0	16.0	138.0
Total Split (%)	13.0%	13.0%	13.0%	13.0%	5.0%	66.0%	8.0%	69.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	18.0	18.0	13.9	13.9	147.7	141.6	152.9	145.9
Actuated g/C Ratio	0.09	0.09	0.07	0.07	0.74	0.71	0.76	0.73
v/c Ratio	0.75	0.61	0.15	0.78	0.09	0.77	0.46	0.35
Control Delay	116.1	51.0	86.6	58.9	7.3	23.6	18.2	11.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	47.6	0.0	0.0
Total Delay	116.1	51.0	86.6	58.9	7.3	71.2	18.2	11.2
LOS	F	D	F	E	A	E	B	B
Approach Delay		82.9		61.8		69.9		11.7
Approach LOS		F		E		E		B

Intersection Summary	
Cycle Length: 200	
Actuated Cycle Length: 200	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay: 53.9	Intersection LOS: D
Intersection Capacity Utilization 83.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 14: SH-82 & 8th Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	113	26	91	17	23	123	38	1710	80	65	691	123
Future Volume (veh/h)	113	26	91	17	23	123	38	1710	80	65	691	123
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	120	28	86	18	24	120	40	1819	85	69	735	131
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	153	33	102	181	26	132	461	2409	112	164	2098	374
Arrive On Green	0.09	0.09	0.09	0.10	0.10	0.10	0.02	0.70	0.70	0.02	0.70	0.70
Sat Flow, veh/h	1781	387	1187	1781	260	1300	1781	3453	160	1781	2997	534
Grp Volume(v), veh/h	120	0	114	18	0	144	40	928	976	69	436	430
Grp Sat Flow(s),veh/h/ln	1781	0	1574	1781	0	1560	1781	1777	1836	1781	1777	1754
Q Serve(g_s), s	13.2	0.0	14.3	1.8	0.0	18.3	1.3	66.1	68.6	2.2	19.5	19.5
Cycle Q Clear(g_c), s	13.2	0.0	14.3	1.8	0.0	18.3	1.3	66.1	68.6	2.2	19.5	19.5
Prop In Lane	1.00		0.75	1.00		0.83	1.00		0.09	1.00		0.30
Lane Grp Cap(c), veh/h	153	0	135	181	0	159	461	1240	1281	164	1244	1228
V/C Ratio(X)	0.78	0.00	0.84	0.10	0.00	0.91	0.09	0.75	0.76	0.42	0.35	0.35
Avail Cap(c_a), veh/h	191	0	169	191	0	168	470	1240	1281	222	1244	1228
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.66	0.66	0.66	1.00	1.00	1.00
Uniform Delay (d), s/veh	89.6	0.0	90.1	81.5	0.0	88.9	9.0	19.1	19.5	24.6	11.9	11.9
Incr Delay (d2), s/veh	15.3	0.0	25.7	0.2	0.0	42.6	0.1	2.8	2.9	1.7	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	0.0	6.9	0.9	0.0	9.3	0.5	28.0	30.0	1.7	8.2	8.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	104.9	0.0	115.7	81.7	0.0	131.4	9.0	21.9	22.4	26.3	12.7	12.7
LnGrp LOS	F	A	F	F	A	F	A	C	C	C	B	B
Approach Vol, veh/h		234			162			1944			935	
Approach Delay, s/veh		110.2			125.9			21.9			13.7	
Approach LOS		F			F			C			B	

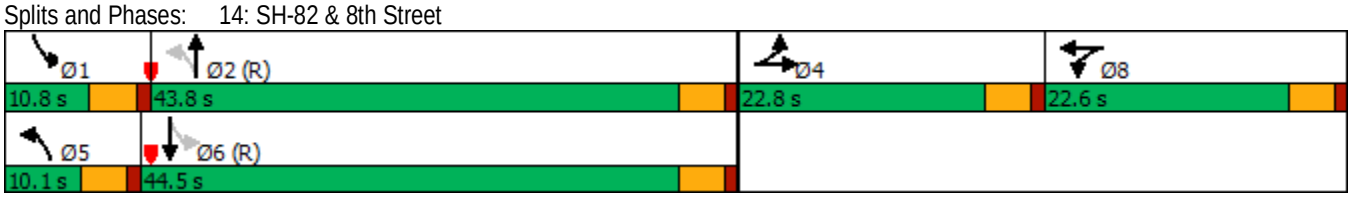
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.4	144.1		21.7	9.0	144.5		24.9				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	11.5	127.5		21.5	5.5	133.5		21.5				
Max Q Clear Time (g_c+I1), s	4.2	70.6		16.3	3.3	21.5		20.3				
Green Ext Time (p_c), s	0.1	28.3		0.4	0.0	7.0		0.1				

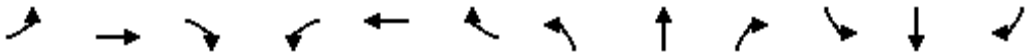
Intersection Summary			
HCM 6th Ctrl Delay		31.0	
HCM 6th LOS		C	

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	198	42	28	33	81	857	60	719
Future Volume (vph)	198	42	28	33	81	857	60	719
Turn Type	Split	NA	Split	NA	pm+pt	NA	pm+pt	NA
Protected Phases	4	4	8	8	5	2	1	6
Permitted Phases					2		6	
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5	9.5	22.5
Total Split (s)	22.8	22.8	22.6	22.6	10.1	43.8	10.8	44.5
Total Split (%)	22.8%	22.8%	22.6%	22.6%	10.1%	43.8%	10.8%	44.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	15.8	15.8	8.0	8.0	61.6	55.2	60.6	54.7
Actuated g/C Ratio	0.16	0.16	0.08	0.08	0.62	0.55	0.61	0.55
v/c Ratio	0.73	0.62	0.20	0.47	0.24	0.53	0.19	0.52
Control Delay	55.5	14.7	45.1	29.7	5.1	7.8	10.2	17.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay	55.5	14.7	45.1	29.7	5.1	7.9	10.2	17.6
LOS	E	B	D	C	A	A	B	B
Approach Delay		32.1		33.7		7.7		17.2
Approach LOS		C		C		A		B

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.73	
Intersection Signal Delay: 16.7	Intersection LOS: B
Intersection Capacity Utilization 66.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 14: SH-82 & 8th Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	198	42	224	28	33	48	81	857	120	60	719	197
Future Volume (veh/h)	198	42	224	28	33	48	81	857	120	60	719	197
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.93	1.00		0.94	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	204	43	221	29	34	39	84	884	124	62	741	203
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	326	47	241	168	72	82	336	1556	218	419	1351	370
Arrive On Green	0.18	0.18	0.18	0.09	0.09	0.09	0.09	1.00	1.00	0.04	0.50	0.50
Sat Flow, veh/h	1781	256	1316	1781	760	872	1781	3103	435	1781	2717	744
Grp Volume(v), veh/h	204	0	264	29	0	73	84	506	502	62	485	459
Grp Sat Flow(s),veh/h/ln	1781	0	1573	1781	0	1632	1781	1777	1762	1781	1777	1684
Q Serve(g_s), s	10.6	0.0	16.5	1.5	0.0	4.2	2.3	0.0	0.0	1.7	18.8	18.9
Cycle Q Clear(g_c), s	10.6	0.0	16.5	1.5	0.0	4.2	2.3	0.0	0.0	1.7	18.8	18.9
Prop In Lane	1.00		0.84	1.00		0.53	1.00		0.25	1.00		0.44
Lane Grp Cap(c), veh/h	326	0	288	168	0	154	336	891	883	419	884	838
V/C Ratio(X)	0.63	0.00	0.92	0.17	0.00	0.47	0.25	0.57	0.57	0.15	0.55	0.55
Avail Cap(c_a), veh/h	326	0	288	322	0	295	355	891	883	458	884	838
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.87	0.87	0.87	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.7	0.0	40.1	41.7	0.0	42.9	12.4	0.0	0.0	11.0	17.4	17.4
Incr Delay (d2), s/veh	3.7	0.0	32.3	0.5	0.0	2.2	0.3	2.3	2.3	0.2	2.4	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	0.0	8.9	0.7	0.0	1.8	0.8	0.6	0.6	0.7	8.0	7.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.4	0.0	72.4	42.2	0.0	45.2	12.8	2.3	2.3	11.2	19.8	19.9
LnGrp LOS	D	A	E	D	A	D	B	A	A	B	B	B
Approach Vol, veh/h		468			102			1092			1006	
Approach Delay, s/veh		58.9			44.3			3.1			19.3	
Approach LOS		E			D			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.6	54.7		22.8	9.0	54.2		13.9				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	6.3	39.3		18.3	5.6	40.0		18.1				
Max Q Clear Time (g_c+I1), s	3.7	2.0		18.5	4.3	20.9		6.2				
Green Ext Time (p_c), s	0.0	8.2		0.0	0.0	6.3		0.3				

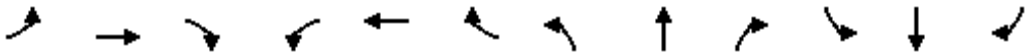
Intersection Summary												
HCM 6th Ctrl Delay			20.6									
HCM 6th LOS			C									

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	207	27	18	24	124	1780	68	719
Future Volume (vph)	207	27	18	24	124	1780	68	719
Turn Type	Split	NA	Split	NA	pm+pt	NA	pm+pt	NA
Protected Phases	4	4	8	8	5	2	1	6
Permitted Phases					2		6	
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5	9.5	22.5
Total Split (s)	26.0	26.0	26.0	26.0	10.0	132.0	16.0	138.0
Total Split (%)	13.0%	13.0%	13.0%	13.0%	5.0%	66.0%	8.0%	69.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	21.5	21.5	17.1	17.1	141.4	134.3	144.8	136.3
Actuated g/C Ratio	0.11	0.11	0.09	0.09	0.71	0.67	0.72	0.68
v/c Ratio	1.16	0.73	0.13	0.82	0.37	0.85	0.57	0.47
Control Delay	186.3	50.7	83.8	79.6	11.5	30.8	43.1	15.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	47.1	0.0	0.0
Total Delay	186.3	50.7	83.8	79.6	11.5	77.9	43.1	15.1
LOS	F	D	F	E	B	E	D	B
Approach Delay		121.6		80.1		73.8		16.9
Approach LOS		F		F		E		B

Intersection Summary	
Cycle Length: 200	
Actuated Cycle Length: 200	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.16	
Intersection Signal Delay: 63.0	Intersection LOS: E
Intersection Capacity Utilization 95.0%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 14: SH-82 & 8th Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	207	27	162	18	24	128	124	1780	83	68	719	246
Future Volume (veh/h)	207	27	162	18	24	128	124	1780	83	68	719	246
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	220	29	161	19	26	125	132	1894	88	72	765	262
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	191	26	142	188	28	137	376	2322	107	138	1722	590
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.03	0.67	0.67	0.02	0.67	0.67
Sat Flow, veh/h	1781	238	1322	1781	269	1295	1781	3453	159	1781	2573	881
Grp Volume(v), veh/h	220	0	190	19	0	151	132	966	1016	72	528	499
Grp Sat Flow(s),veh/h/ln	1781	0	1560	1781	0	1565	1781	1777	1836	1781	1777	1677
Q Serve(g_s), s	21.5	0.0	21.5	1.9	0.0	19.1	4.9	78.0	81.3	2.6	28.0	28.0
Cycle Q Clear(g_c), s	21.5	0.0	21.5	1.9	0.0	19.1	4.9	78.0	81.3	2.6	28.0	28.0
Prop In Lane	1.00		0.85	1.00		0.83	1.00		0.09	1.00		0.53
Lane Grp Cap(c), veh/h	191	0	168	188	0	165	376	1195	1234	138	1189	1123
V/C Ratio(X)	1.15	0.00	1.13	0.10	0.00	0.91	0.35	0.81	0.82	0.52	0.44	0.44
Avail Cap(c_a), veh/h	191	0	168	191	0	168	376	1195	1234	197	1189	1123
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.56	0.56	0.56	1.00	1.00	1.00
Uniform Delay (d), s/veh	89.3	0.0	89.3	80.8	0.0	88.5	12.5	23.5	24.1	34.0	15.6	15.6
Incr Delay (d2), s/veh	110.8	0.0	109.8	0.2	0.0	44.8	0.3	3.4	3.6	3.0	1.2	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.9	0.0	13.9	0.9	0.0	9.9	2.0	33.6	36.1	2.2	12.0	11.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	200.1	0.0	199.1	81.1	0.0	133.3	12.8	26.9	27.7	37.1	16.8	16.8
LnGrp LOS	F	A	F	F	A	F	B	C	C	D	B	B
Approach Vol, veh/h		410			170			2114			1099	
Approach Delay, s/veh		199.6			127.5			26.4			18.1	
Approach LOS		F			F			C			B	

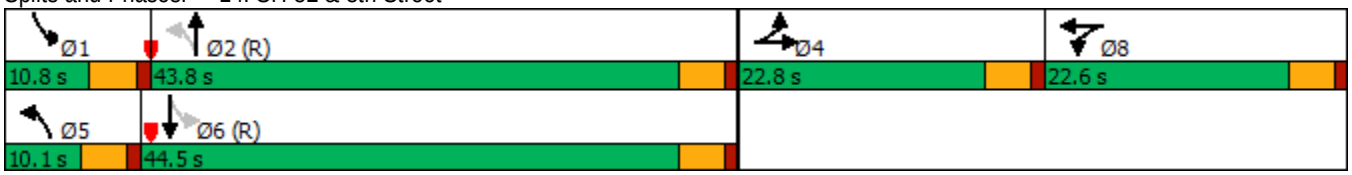
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.4	139.0		26.0	10.0	138.4		25.6				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	11.5	127.5		21.5	5.5	133.5		21.5				
Max Q Clear Time (g_c+I1), s	4.6	83.3		23.5	6.9	30.0		21.1				
Green Ext Time (p_c), s	0.1	26.7		0.0	0.0	9.2		0.0				

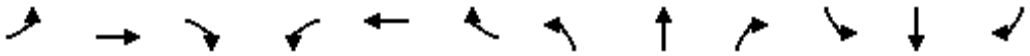
Intersection Summary	
HCM 6th Ctrl Delay	47.3
HCM 6th LOS	D

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	205	45	30	35	85	900	65	760
Future Volume (vph)	205	45	30	35	85	900	65	760
Turn Type	Split	NA	Split	NA	pm+pt	NA	pm+pt	NA
Protected Phases	4	4	8	8	5	2	1	6
Permitted Phases					2		6	
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5	9.5	22.5
Total Split (s)	22.8	22.8	22.6	22.6	10.1	43.8	10.8	44.5
Total Split (%)	22.8%	22.8%	22.6%	22.6%	10.1%	43.8%	10.8%	44.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	16.0	16.0	8.2	8.2	61.2	54.8	60.3	54.3
Actuated g/C Ratio	0.16	0.16	0.08	0.08	0.61	0.55	0.60	0.54
v/c Ratio	0.75	0.64	0.22	0.48	0.26	0.57	0.22	0.55
Control Delay	56.4	16.2	45.1	29.7	5.5	7.9	10.7	18.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.4	16.2	45.1	29.7	5.5	7.9	10.7	18.5
LOS	E	B	D	C	A	A	B	B
Approach Delay		33.2		33.7		7.8		18.0
Approach LOS		C		C		A		B

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay: 17.2	Intersection LOS: B
Intersection Capacity Utilization 69.9%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 14: SH-82 & 8th Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	205	45	235	30	35	50	85	900	130	65	760	205
Future Volume (veh/h)	205	45	235	30	35	50	85	900	130	65	760	205
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.93	1.00		0.94	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	211	46	232	31	36	42	88	928	134	67	784	211
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	326	48	240	173	73	85	318	1538	222	406	1349	363
Arrive On Green	0.18	0.18	0.18	0.10	0.10	0.10	0.09	1.00	1.00	0.04	0.49	0.49
Sat Flow, veh/h	1781	260	1313	1781	754	879	1781	3090	446	1781	2729	734
Grp Volume(v), veh/h	211	0	278	31	0	78	88	534	528	67	511	484
Grp Sat Flow(s),veh/h/ln	1781	0	1573	1781	0	1633	1781	1777	1759	1781	1777	1686
Q Serve(g_s), s	11.0	0.0	17.5	1.6	0.0	4.5	2.4	0.3	0.3	1.8	20.4	20.4
Cycle Q Clear(g_c), s	11.0	0.0	17.5	1.6	0.0	4.5	2.4	0.3	0.3	1.8	20.4	20.4
Prop In Lane	1.00		0.83	1.00		0.54	1.00		0.25	1.00		0.44
Lane Grp Cap(c), veh/h	326	0	288	173	0	158	318	884	875	406	878	833
V/C Ratio(X)	0.65	0.00	0.97	0.18	0.00	0.49	0.28	0.60	0.60	0.16	0.58	0.58
Avail Cap(c_a), veh/h	326	0	288	322	0	296	336	884	875	443	878	833
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.83	0.83	0.83	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.9	0.0	40.5	41.5	0.0	42.8	12.9	0.1	0.1	11.2	17.9	17.9
Incr Delay (d2), s/veh	4.4	0.0	43.5	0.5	0.0	2.4	0.4	2.5	2.6	0.2	2.8	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	0.0	10.2	0.7	0.0	1.9	0.9	0.7	0.7	0.7	8.7	8.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.3	0.0	84.1	42.0	0.0	45.2	13.3	2.6	2.7	11.4	20.7	20.9
LnGrp LOS	D	A	F	D	A	D	B	A	A	B	C	C
Approach Vol, veh/h		489			109			1150			1062	
Approach Delay, s/veh		66.0			44.3			3.5			20.2	
Approach LOS		E			D			A			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.7	54.3		22.8	9.1	53.9		14.2				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	6.3	39.3		18.3	5.6	40.0		18.1				
Max Q Clear Time (g_c+I1), s	3.8	2.3		19.5	4.4	22.4		6.5				
Green Ext Time (p_c), s	0.0	8.9		0.0	0.0	6.4		0.3				

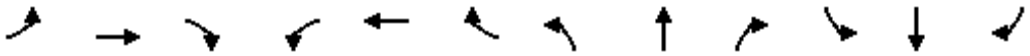
Intersection Summary												
HCM 6th Ctrl Delay			22.3									
HCM 6th LOS			C									

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	215	30	20	25	130	1875	75	760
Future Volume (vph)	215	30	20	25	130	1875	75	760
Turn Type	Split	NA	Split	NA	pm+pt	NA	pm+pt	NA
Protected Phases	4	4	8	8	5	2	1	6
Permitted Phases					2		6	
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5	9.5	22.5
Total Split (s)	26.0	26.0	26.0	26.0	10.0	132.0	16.0	138.0
Total Split (%)	13.0%	13.0%	13.0%	13.0%	5.0%	66.0%	8.0%	69.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	21.5	21.5	17.8	17.8	140.1	133.2	144.7	135.8
Actuated g/C Ratio	0.11	0.11	0.09	0.09	0.70	0.67	0.72	0.68
v/c Ratio	1.21	0.79	0.13	0.86	0.41	0.90	0.67	0.49
Control Delay	200.2	60.9	83.8	88.5	12.7	35.6	67.2	15.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	46.2	0.0	0.0
Total Delay	200.2	60.9	83.8	88.5	12.7	81.8	67.2	15.8
LOS	F	E	F	F	B	F	E	B
Approach Delay		133.1		88.0		77.5		19.3
Approach LOS		F		F		E		B

Intersection Summary	
Cycle Length: 200	
Actuated Cycle Length: 200	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.21	
Intersection Signal Delay: 67.3	Intersection LOS: E
Intersection Capacity Utilization 98.6%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 14: SH-82 & 8th Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	215	30	170	20	25	135	130	1875	90	75	760	255
Future Volume (veh/h)	215	30	170	20	25	135	130	1875	90	75	760	255
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	229	32	170	21	27	133	138	1995	96	80	809	271
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	191	27	141	191	28	140	355	2310	110	121	1729	579
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.03	0.67	0.67	0.02	0.67	0.67
Sat Flow, veh/h	1781	247	1314	1781	264	1301	1781	3447	164	1781	2590	867
Grp Volume(v), veh/h	229	0	202	21	0	160	138	1019	1072	80	555	525
Grp Sat Flow(s),veh/h/ln	1781	0	1561	1781	0	1565	1781	1777	1834	1781	1777	1680
Q Serve(g_s), s	21.5	0.0	21.5	2.1	0.0	20.3	5.1	88.6	92.8	2.9	30.2	30.2
Cycle Q Clear(g_c), s	21.5	0.0	21.5	2.1	0.0	20.3	5.1	88.6	92.8	2.9	30.2	30.2
Prop In Lane	1.00		0.84	1.00		0.83	1.00		0.09	1.00		0.52
Lane Grp Cap(c), veh/h	191	0	168	191	0	168	355	1191	1230	121	1186	1122
V/C Ratio(X)	1.20	0.00	1.20	0.11	0.00	0.95	0.39	0.86	0.87	0.66	0.47	0.47
Avail Cap(c_a), veh/h	191	0	168	191	0	168	355	1191	1230	179	1186	1122
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.46	0.46	0.46	1.00	1.00	1.00
Uniform Delay (d), s/veh	89.3	0.0	89.3	80.6	0.0	88.7	13.2	25.5	26.2	44.0	16.1	16.1
Incr Delay (d2), s/veh	127.7	0.0	134.7	0.3	0.0	55.0	0.3	3.9	4.3	6.1	1.3	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.8	0.0	15.1	1.0	0.0	10.9	2.1	38.2	41.3	2.9	13.0	12.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	217.0	0.0	223.9	80.9	0.0	143.7	13.5	29.4	30.4	50.1	17.4	17.5
LnGrp LOS	F	A	F	F	A	F	B	C	C	D	B	B
Approach Vol, veh/h		431			181			2229			1160	
Approach Delay, s/veh		220.2			136.4			28.9			19.7	
Approach LOS		F			F			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.4	138.6		26.0	10.0	138.0		26.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	11.5	127.5		21.5	5.5	133.5		21.5				
Max Q Clear Time (g_c+I1), s	4.9	94.8		23.5	7.1	32.2		22.3				
Green Ext Time (p_c), s	0.1	23.7		0.0	0.0	10.0		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		51.7	
HCM 6th LOS		D	

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	50	22	16	51	92	0	4	0	65	50	47
Future Vol, veh/h	18	50	22	16	51	92	0	4	0	65	50	47
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	19	54	24	17	55	99	0	4	0	70	54	51
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8	8.2	7.8	8.7
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	20%	10%	40%
Vol Thru, %	100%	56%	32%	31%
Vol Right, %	0%	24%	58%	29%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	4	90	159	162
LT Vol	0	18	16	65
Through Vol	4	50	51	50
RT Vol	0	22	92	47
Lane Flow Rate	4	97	171	174
Geometry Grp	1	1	1	1
Degree of Util (X)	0.006	0.119	0.196	0.214
Departure Headway (Hd)	4.722	4.42	4.129	4.427
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	758	813	870	812
Service Time	2.748	2.439	2.146	2.447
HCM Lane V/C Ratio	0.005	0.119	0.197	0.214
HCM Control Delay	7.8	8	8.2	8.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0	0.4	0.7	0.8

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	28	46	14	15	38	61	0	0	0	40	35	19
Future Vol, veh/h	28	46	14	15	38	61	0	0	0	40	35	19
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	53	16	17	44	71	0	0	0	47	41	22
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.9	7.7	0	8.1
HCM LOS	A	A	-	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	32%	13%	43%
Vol Thru, %	100%	52%	33%	37%
Vol Right, %	0%	16%	54%	20%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	88	114	94
LT Vol	0	28	15	40
Through Vol	0	46	38	35
RT Vol	0	14	61	19
Lane Flow Rate	0	102	133	109
Geometry Grp	1	1	1	1
Degree of Util (X)	0	0.119	0.144	0.134
Departure Headway (Hd)	4.564	4.197	3.909	4.4
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	0	840	900	820
Service Time	2.567	2.295	2.008	2.4
HCM Lane V/C Ratio	0	0.121	0.148	0.133
HCM Control Delay	7.6	7.9	7.7	8.1
HCM Lane LOS	N	A	A	A
HCM 95th-tile Q	0	0.4	0.5	0.5

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	19	52	23	17	53	96	0	4	0	68	52	49
Future Vol, veh/h	19	52	23	17	53	96	0	4	0	68	52	49
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	56	25	18	57	103	0	4	0	73	56	53
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.1	8.3	7.8	8.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	20%	10%	40%
Vol Thru, %	100%	55%	32%	31%
Vol Right, %	0%	24%	58%	29%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	4	94	166	169
LT Vol	0	19	17	68
Through Vol	4	52	53	52
RT Vol	0	23	96	49
Lane Flow Rate	4	101	178	182
Geometry Grp	1	1	1	1
Degree of Util (X)	0.006	0.125	0.206	0.225
Departure Headway (Hd)	4.762	4.449	4.155	4.456
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	751	807	866	807
Service Time	2.791	2.472	2.175	2.477
HCM Lane V/C Ratio	0.005	0.125	0.206	0.226
HCM Control Delay	7.8	8.1	8.3	8.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0	0.4	0.8	0.9

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	29	48	15	16	40	63	0	0	0	42	36	20
Future Vol, veh/h	29	48	15	16	40	63	0	0	0	42	36	20
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	34	56	17	19	47	73	0	0	0	49	42	23
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.9	7.8	0	8.2
HCM LOS	A	A	-	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	32%	13%	43%
Vol Thru, %	100%	52%	34%	37%
Vol Right, %	0%	16%	53%	20%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	92	119	98
LT Vol	0	29	16	42
Through Vol	0	48	40	36
RT Vol	0	15	63	20
Lane Flow Rate	0	107	138	114
Geometry Grp	1	1	1	1
Degree of Util (X)	0	0.128	0.155	0.14
Departure Headway (Hd)	4.595	4.31	4.03	4.423
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	0	837	895	814
Service Time	2.612	2.314	2.033	2.436
HCM Lane V/C Ratio	0	0.128	0.154	0.14
HCM Control Delay	7.6	7.9	7.8	8.2
HCM Lane LOS	N	A	A	A
HCM 95th-tile Q	0	0.4	0.5	0.5

Intersection	
Intersection Delay, s/veh	8.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	55	25	20	60	105	0	5	0	75	55	55
Future Vol, veh/h	20	55	25	20	60	105	0	5	0	75	55	55
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	59	27	22	65	113	0	5	0	81	59	59
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.3	8.5	7.9	9.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	20%	11%	41%
Vol Thru, %	100%	55%	32%	30%
Vol Right, %	0%	25%	57%	30%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	5	100	185	185
LT Vol	0	20	20	75
Through Vol	5	55	60	55
RT Vol	0	25	105	55
Lane Flow Rate	5	108	199	199
Geometry Grp	1	1	1	1
Degree of Util (X)	0.007	0.135	0.233	0.25
Departure Headway (Hd)	4.853	4.52	4.221	4.517
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	736	794	851	796
Service Time	2.89	2.546	2.244	2.543
HCM Lane V/C Ratio	0.007	0.136	0.234	0.25
HCM Control Delay	7.9	8.3	8.5	9.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0	0.5	0.9	1

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	50	15	20	45	70	0	0	0	45	40	25
Future Vol, veh/h	35	50	15	20	45	70	0	0	0	45	40	25
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	38	54	16	22	49	76	0	0	0	49	43	27
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

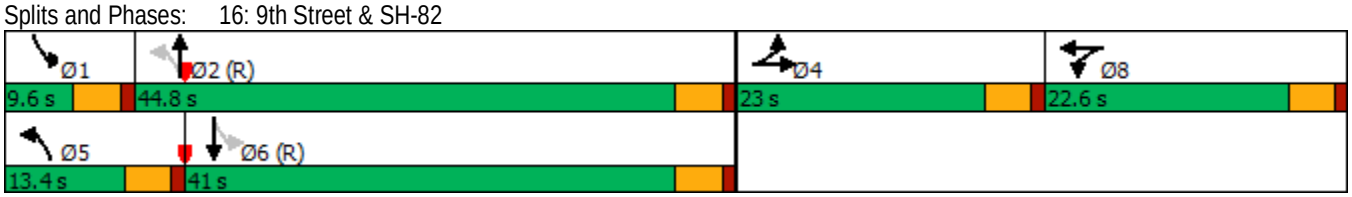
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8	7.9	0	8.2
HCM LOS	A	A	-	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	35%	15%	41%
Vol Thru, %	100%	50%	33%	36%
Vol Right, %	0%	15%	52%	23%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	100	135	110
LT Vol	0	35	20	45
Through Vol	0	50	45	40
RT Vol	0	15	70	25
Lane Flow Rate	0	109	147	120
Geometry Grp	1	1	1	1
Degree of Util (X)	0	0.131	0.165	0.147
Departure Headway (Hd)	4.626	4.34	4.048	4.43
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	0	829	889	812
Service Time	2.644	2.352	2.059	2.443
HCM Lane V/C Ratio	0	0.131	0.165	0.148
HCM Control Delay	7.6	8	7.9	8.2
HCM Lane LOS	N	A	A	A
HCM 95th-tile Q	0	0.4	0.6	0.5

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	34	15	33	18	91	952	19	833
Future Volume (vph)	34	15	33	18	91	952	19	833
Turn Type	Split	NA	Split	NA	pm+pt	NA	pm+pt	NA
Protected Phases	4	4	8	8	5	2	1	6
Permitted Phases					2		6	
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5	9.5	22.5
Total Split (s)	23.0	23.0	22.6	22.6	13.4	44.8	9.6	41.0
Total Split (%)	23.0%	23.0%	22.6%	22.6%	13.4%	44.8%	9.6%	41.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	7.7	7.7	7.5	7.5	74.3	71.8	70.3	66.5
Actuated g/C Ratio	0.08	0.08	0.08	0.08	0.74	0.72	0.70	0.66
v/c Ratio	0.26	0.46	0.26	0.38	0.20	0.40	0.05	0.38
Control Delay	47.1	22.3	47.5	26.3	6.1	9.1	4.4	6.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.1	22.3	47.5	26.3	6.1	9.1	4.4	6.7
LOS	D	C	D	C	A	A	A	A
Approach Delay		29.5		34.0		8.8		6.6
Approach LOS		C		C		A		A

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.46	
Intersection Signal Delay: 10.1	Intersection LOS: B
Intersection Capacity Utilization 55.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 16: 9th Street & SH-82



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	15	70	33	18	41	91	952	37	19	833	40
Future Volume (veh/h)	34	15	70	33	18	41	91	952	37	19	833	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.92	0.98		0.95	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	15	71	34	18	42	93	971	38	19	850	41
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	185	28	131	159	42	98	511	2109	83	361	1998	96
Arrive On Green	0.10	0.10	0.10	0.09	0.09	0.09	0.05	0.61	0.61	0.04	1.00	1.00
Sat Flow, veh/h	1781	268	1268	1781	470	1096	1781	3478	136	1781	3440	166
Grp Volume(v), veh/h	35	0	86	34	0	60	93	496	513	19	439	452
Grp Sat Flow(s),veh/h/ln	1781	0	1535	1781	0	1565	1781	1777	1837	1781	1777	1829
Q Serve(g_s), s	1.8	0.0	5.3	1.8	0.0	3.6	2.1	15.2	15.2	0.4	0.0	0.0
Cycle Q Clear(g_c), s	1.8	0.0	5.3	1.8	0.0	3.6	2.1	15.2	15.2	0.4	0.0	0.0
Prop In Lane	1.00		0.83	1.00		0.70	1.00		0.07	1.00		0.09
Lane Grp Cap(c), veh/h	185	0	159	159	0	140	511	1078	1114	361	1032	1062
V/C Ratio(X)	0.19	0.00	0.54	0.21	0.00	0.43	0.18	0.46	0.46	0.05	0.43	0.43
Avail Cap(c_a), veh/h	330	0	284	322	0	283	587	1078	1114	416	1032	1062
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.92	0.92	0.92
Uniform Delay (d), s/veh	41.0	0.0	42.6	42.3	0.0	43.1	7.3	10.7	10.7	8.7	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	2.8	0.7	0.0	2.1	0.2	1.4	1.4	0.1	1.2	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	2.1	0.8	0.0	1.5	0.7	6.0	6.2	0.2	0.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.5	0.0	45.4	42.9	0.0	45.2	7.5	12.2	12.1	8.7	1.2	1.1
LnGrp LOS	D	A	D	D	A	D	A	B	B	A	A	A
Approach Vol, veh/h		121			94			1102			910	
Approach Delay, s/veh		44.3			44.4			11.7			1.3	
Approach LOS		D			D			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.6	65.1		14.9	9.1	62.6		13.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.1	40.3		18.5	8.9	36.5		18.1				
Max Q Clear Time (g_c+I1), s	2.4	17.2		7.3	4.1	2.0		5.6				
Green Ext Time (p_c), s	0.0	7.1		0.4	0.1	6.7		0.3				

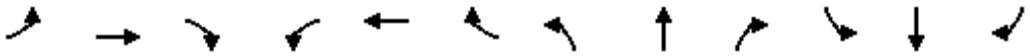
Intersection Summary												
HCM 6th Ctrl Delay			10.6									
HCM 6th LOS			B									

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	43	13	21	17	44	1670	30	797
Future Volume (vph)	43	13	21	17	44	1670	30	797
Turn Type	Split	NA	Split	NA	pm+pt	NA	pm+pt	NA
Protected Phases	4	4	8	8	5	2	1	6
Permitted Phases					2		6	
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5	9.5	22.5
Total Split (s)	23.0	23.0	23.2	23.2	10.2	112.8	11.0	113.6
Total Split (%)	13.5%	13.5%	13.6%	13.6%	6.0%	66.4%	6.5%	66.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	9.6	9.6	8.9	8.9	134.7	129.4	134.1	129.1
Actuated g/C Ratio	0.06	0.06	0.05	0.05	0.79	0.76	0.79	0.76
v/c Ratio	0.44	0.49	0.24	0.65	0.09	0.64	0.16	0.32
Control Delay	90.5	36.1	81.6	37.7	4.3	12.2	5.8	7.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Total Delay	90.5	36.1	81.6	37.7	4.3	12.2	5.8	8.6
LOS	F	D	F	D	A	B	A	A
Approach Delay		57.6		45.0		12.0		8.5
Approach LOS		E		D		B		A

Intersection Summary	
Cycle Length: 170	
Actuated Cycle Length: 170	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 14.2	Intersection LOS: B
Intersection Capacity Utilization 66.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 16: 9th Street & SH-82





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	13	52	21	17	89	44	1670	11	30	797	32
Future Volume (veh/h)	43	13	52	21	17	89	44	1670	11	30	797	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.93	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	44	13	54	22	18	92	45	1722	11	31	822	33
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	137	23	94	166	23	118	478	2538	16	203	2428	97
Arrive On Green	0.08	0.08	0.08	0.09	0.09	0.09	0.03	0.70	0.70	0.02	0.70	0.70
Sat Flow, veh/h	1781	293	1217	1781	249	1272	1781	3619	23	1781	3478	140
Grp Volume(v), veh/h	44	0	67	22	0	110	45	845	888	31	420	435
Grp Sat Flow(s),veh/h/ln	1781	0	1510	1781	0	1521	1781	1777	1865	1781	1777	1841
Q Serve(g_s), s	4.0	0.0	7.3	1.9	0.0	12.0	1.2	46.0	46.2	0.8	15.9	15.9
Cycle Q Clear(g_c), s	4.0	0.0	7.3	1.9	0.0	12.0	1.2	46.0	46.2	0.8	15.9	15.9
Prop In Lane	1.00		0.81	1.00		0.84	1.00		0.01	1.00		0.08
Lane Grp Cap(c), veh/h	137	0	116	166	0	142	478	1246	1308	203	1240	1285
V/C Ratio(X)	0.32	0.00	0.58	0.13	0.00	0.78	0.09	0.68	0.68	0.15	0.34	0.34
Avail Cap(c_a), veh/h	194	0	164	196	0	167	492	1246	1308	231	1240	1285
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95
Uniform Delay (d), s/veh	74.2	0.0	75.8	70.8	0.0	75.4	7.4	14.5	14.5	13.6	10.2	10.2
Incr Delay (d2), s/veh	1.3	0.0	4.4	0.4	0.0	17.4	0.1	3.0	2.9	0.3	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	3.0	0.9	0.0	5.4	0.5	19.1	20.1	0.4	6.5	6.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.6	0.0	80.2	71.1	0.0	92.8	7.5	17.4	17.3	14.0	10.9	10.8
LnGrp LOS	E	A	F	E	A	F	A	B	B	B	B	B
Approach Vol, veh/h		111			132			1778			886	
Approach Delay, s/veh		78.3			89.2			17.1			11.0	
Approach LOS		E			F			B			B	

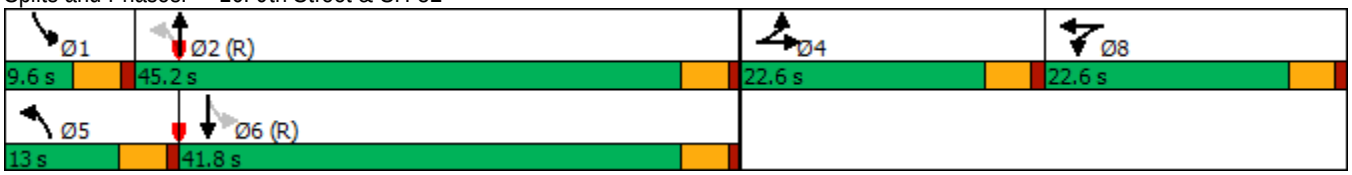
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.3	123.7		17.6	8.9	123.2		20.3				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	6.5	108.3		18.5	5.7	109.1		18.7				
Max Q Clear Time (g_c+I1), s	2.8	48.2		9.3	3.2	17.9		14.0				
Green Ext Time (p_c), s	0.0	23.4		0.3	0.0	6.7		0.2				

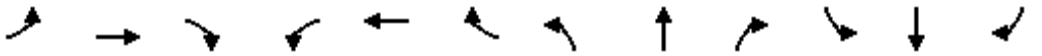
Intersection Summary			
HCM 6th Ctrl Delay		20.9	
HCM 6th LOS		C	

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	35	16	34	19	95	1029	20	937
Future Volume (vph)	35	16	34	19	95	1029	20	937
Turn Type	Split	NA	Split	NA	pm+pt	NA	pm+pt	NA
Protected Phases	4	4	8	8	5	2	1	6
Permitted Phases					2		6	
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5	9.5	22.5
Total Split (s)	22.6	22.6	22.6	22.6	13.0	45.2	9.6	41.8
Total Split (%)	22.6%	22.6%	22.6%	22.6%	13.0%	45.2%	9.6%	41.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	7.8	7.8	7.6	7.6	74.2	71.7	70.1	66.2
Actuated g/C Ratio	0.08	0.08	0.08	0.08	0.74	0.72	0.70	0.66
v/c Ratio	0.26	0.47	0.26	0.39	0.24	0.43	0.05	0.43
Control Delay	47.1	22.4	47.6	26.2	6.5	9.6	4.7	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	47.1	22.4	47.6	26.2	6.5	9.6	4.7	7.2
LOS	D	C	D	C	A	A	A	A
Approach Delay		29.5		33.9		9.3		7.2
Approach LOS		C		C		A		A

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.47	
Intersection Signal Delay: 10.5	Intersection LOS: B
Intersection Capacity Utilization 57.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 16: 9th Street & SH-82





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	16	73	34	19	43	95	1029	39	20	937	42
Future Volume (veh/h)	35	16	73	34	19	43	95	1029	39	20	937	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.92	0.99		0.95	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	36	16	74	35	19	44	97	1050	40	20	956	43
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	188	29	134	162	43	100	476	2096	80	332	1992	90
Arrive On Green	0.11	0.11	0.11	0.09	0.09	0.09	0.05	0.60	0.60	0.04	1.00	1.00
Sat Flow, veh/h	1781	273	1265	1781	473	1095	1781	3482	133	1781	3453	155
Grp Volume(v), veh/h	36	0	90	35	0	63	97	536	554	20	492	507
Grp Sat Flow(s),veh/h/ln	1781	0	1538	1781	0	1567	1781	1777	1838	1781	1777	1831
Q Serve(g_s), s	1.8	0.0	5.6	1.8	0.0	3.8	2.2	17.2	17.2	0.5	0.0	0.0
Cycle Q Clear(g_c), s	1.8	0.0	5.6	1.8	0.0	3.8	2.2	17.2	17.2	0.5	0.0	0.0
Prop In Lane	1.00		0.82	1.00		0.70	1.00		0.07	1.00		0.08
Lane Grp Cap(c), veh/h	188	0	162	162	0	143	476	1070	1106	332	1025	1056
V/C Ratio(X)	0.19	0.00	0.55	0.22	0.00	0.44	0.20	0.50	0.50	0.06	0.48	0.48
Avail Cap(c_a), veh/h	322	0	278	322	0	284	544	1070	1106	385	1025	1056
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.85	0.85	0.85
Uniform Delay (d), s/veh	40.8	0.0	42.5	42.1	0.0	43.0	7.5	11.3	11.3	9.1	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	2.9	0.7	0.0	2.1	0.2	1.7	1.6	0.1	1.4	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	2.2	0.8	0.0	1.6	0.8	6.7	7.0	0.2	0.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.3	0.0	45.4	42.8	0.0	45.2	7.7	13.0	13.0	9.1	1.4	1.3
LnGrp LOS	D	A	D	D	A	D	A	B	B	A	A	A
Approach Vol, veh/h		126			98			1187			1019	
Approach Delay, s/veh		44.2			44.3			12.6			1.5	
Approach LOS		D			D			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.6	64.7		15.1	9.2	62.2		13.6				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.1	40.7		18.1	8.5	37.3		18.1				
Max Q Clear Time (g_c+I1), s	2.5	19.2		7.6	4.2	2.0		5.8				
Green Ext Time (p_c), s	0.0	7.7		0.4	0.1	7.9		0.3				

Intersection Summary												
HCM 6th Ctrl Delay			10.8									
HCM 6th LOS			B									

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	45	14	22	18	46	1822	31	896
Future Volume (vph)	45	14	22	18	46	1822	31	896
Turn Type	Split	NA	Split	NA	pm+pt	NA	pm+pt	NA
Protected Phases	4	4	8	8	5	2	1	6
Permitted Phases					2		6	
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5	9.5	22.5
Total Split (s)	22.8	22.8	23.0	23.0	10.0	113.2	11.0	114.2
Total Split (%)	13.4%	13.4%	13.5%	13.5%	5.9%	66.6%	6.5%	67.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	9.8	9.8	9.0	9.0	134.4	129.0	133.8	128.8
Actuated g/C Ratio	0.06	0.06	0.05	0.05	0.79	0.76	0.79	0.76
v/c Ratio	0.45	0.50	0.24	0.66	0.11	0.70	0.19	0.36
Control Delay	90.6	35.9	81.6	37.8	4.5	13.9	6.7	8.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
Total Delay	90.6	35.9	81.6	37.8	4.5	13.9	6.7	9.3
LOS	F	D	F	D	A	B	A	A
Approach Delay		57.6		45.1		13.7		9.2
Approach LOS		E		D		B		A

Intersection Summary	
Cycle Length: 170	
Actuated Cycle Length: 170	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 15.3	Intersection LOS: B
Intersection Capacity Utilization 70.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 16: 9th Street & SH-82



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	14	54	22	18	93	46	1822	11	31	896	33
Future Volume (veh/h)	45	14	54	22	18	93	46	1822	11	31	896	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.93	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	46	14	56	23	19	96	47	1878	11	32	924	34
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	139	24	95	169	24	121	432	2528	15	172	2426	89
Arrive On Green	0.08	0.08	0.08	0.09	0.09	0.09	0.03	0.70	0.70	0.02	0.69	0.69
Sat Flow, veh/h	1781	303	1211	1781	252	1272	1781	3622	21	1781	3491	128
Grp Volume(v), veh/h	46	0	70	23	0	115	47	920	969	32	470	488
Grp Sat Flow(s),veh/h/ln	1781	0	1514	1781	0	1524	1781	1777	1866	1781	1777	1843
Q Serve(g_s), s	4.2	0.0	7.6	2.0	0.0	12.6	1.3	55.2	55.4	0.9	18.7	18.7
Cycle Q Clear(g_c), s	4.2	0.0	7.6	2.0	0.0	12.6	1.3	55.2	55.4	0.9	18.7	18.7
Prop In Lane	1.00		0.80	1.00		0.83	1.00		0.01	1.00		0.07
Lane Grp Cap(c), veh/h	139	0	118	169	0	145	432	1240	1302	172	1234	1281
V/C Ratio(X)	0.33	0.00	0.59	0.14	0.00	0.80	0.11	0.74	0.74	0.19	0.38	0.38
Avail Cap(c_a), veh/h	192	0	163	194	0	166	443	1240	1302	200	1234	1281
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.89	0.89	0.89
Uniform Delay (d), s/veh	74.1	0.0	75.7	70.5	0.0	75.3	7.9	16.1	16.1	17.1	10.8	10.8
Incr Delay (d2), s/veh	1.4	0.0	4.6	0.4	0.0	20.5	0.1	4.0	3.9	0.5	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	3.1	0.9	0.0	5.8	0.5	23.1	24.3	0.5	7.6	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.5	0.0	80.3	70.9	0.0	95.9	8.0	20.1	20.0	17.6	11.6	11.5
LnGrp LOS	E	A	F	E	A	F	A	C	B	B	B	B
Approach Vol, veh/h		116			138			1936			990	
Approach Delay, s/veh		78.4			91.7			19.8			11.7	
Approach LOS		E			F			B			B	

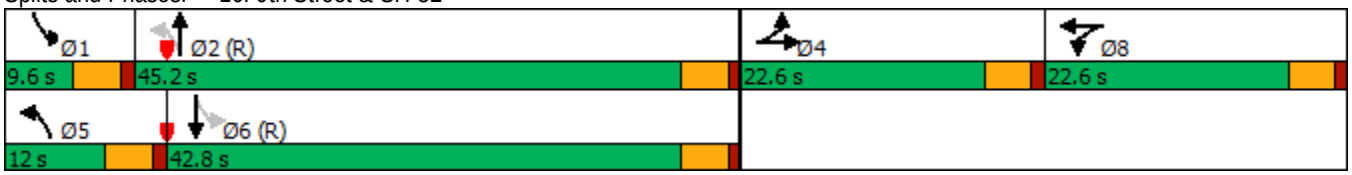
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.4	123.2		17.8	9.0	122.6		20.6				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	6.5	108.7		18.3	5.5	109.7		18.5				
Max Q Clear Time (g_c+I1), s	2.9	57.4		9.6	3.3	20.7		14.6				
Green Ext Time (p_c), s	0.0	26.3		0.3	0.0	7.9		0.2				

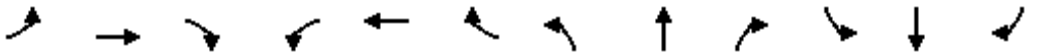
Intersection Summary			
HCM 6th Ctrl Delay		22.5	
HCM 6th LOS		C	

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	40	20	40	20	100	1080	25	985
Future Volume (vph)	40	20	40	20	100	1080	25	985
Turn Type	Split	NA	Split	NA	pm+pt	NA	pm+pt	NA
Protected Phases	4	4	8	8	5	2	1	6
Permitted Phases					2		6	
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5	9.5	22.5
Total Split (s)	22.6	22.6	22.6	22.6	12.0	45.2	9.6	42.8
Total Split (%)	22.6%	22.6%	22.6%	22.6%	12.0%	45.2%	9.6%	42.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	8.1	8.1	7.8	7.8	73.7	71.1	69.6	65.6
Actuated g/C Ratio	0.08	0.08	0.08	0.08	0.74	0.71	0.70	0.66
v/c Ratio	0.29	0.50	0.30	0.39	0.27	0.46	0.07	0.46
Control Delay	47.3	22.8	48.2	25.8	7.0	10.3	5.3	7.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	47.3	22.8	48.2	25.8	7.0	10.3	5.3	7.7
LOS	D	C	D	C	A	B	A	A
Approach Delay		29.8		34.4		10.0		7.7
Approach LOS		C		C		B		A

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.50	
Intersection Signal Delay: 11.1	Intersection LOS: B
Intersection Capacity Utilization 58.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 16: 9th Street & SH-82





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	20	80	40	20	45	100	1080	40	25	985	45
Future Volume (veh/h)	40	20	80	40	20	45	100	1080	40	25	985	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.93	0.99		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	41	20	82	41	20	46	102	1102	41	26	1005	46
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	199	34	139	166	44	102	457	2055	76	314	1961	90
Arrive On Green	0.11	0.11	0.11	0.09	0.09	0.09	0.05	0.59	0.59	0.05	1.00	1.00
Sat Flow, veh/h	1781	304	1245	1781	476	1094	1781	3485	130	1781	3450	158
Grp Volume(v), veh/h	41	0	102	41	0	66	102	562	581	26	518	533
Grp Sat Flow(s),veh/h/ln	1781	0	1549	1781	0	1570	1781	1777	1838	1781	1777	1831
Q Serve(g_s), s	2.1	0.0	6.3	2.1	0.0	4.0	2.3	19.0	19.0	0.6	0.0	0.0
Cycle Q Clear(g_c), s	2.1	0.0	6.3	2.1	0.0	4.0	2.3	19.0	19.0	0.6	0.0	0.0
Prop In Lane	1.00		0.80	1.00		0.70	1.00		0.07	1.00		0.09
Lane Grp Cap(c), veh/h	199	0	173	166	0	146	457	1048	1084	314	1010	1040
V/C Ratio(X)	0.21	0.00	0.59	0.25	0.00	0.45	0.22	0.54	0.54	0.08	0.51	0.51
Avail Cap(c_a), veh/h	322	0	280	322	0	284	507	1048	1084	360	1010	1040
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.83	0.83	0.83
Uniform Delay (d), s/veh	40.4	0.0	42.2	42.1	0.0	42.9	7.8	12.3	12.3	9.6	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	3.2	0.8	0.0	2.2	0.2	2.0	1.9	0.1	1.5	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	2.5	1.0	0.0	1.6	0.9	7.6	7.8	0.2	0.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.9	0.0	45.4	42.9	0.0	45.1	8.1	14.3	14.2	9.7	1.5	1.5
LnGrp LOS	D	A	D	D	A	D	A	B	B	A	A	A
Approach Vol, veh/h		143			107			1245			1077	
Approach Delay, s/veh		44.1			44.2			13.7			1.7	
Approach LOS		D			D			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	63.5		15.7	9.2	61.3		13.8				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.1	40.7		18.1	7.5	38.3		18.1				
Max Q Clear Time (g_c+I1), s	2.6	21.0		8.3	4.3	2.0		6.0				
Green Ext Time (p_c), s	0.0	7.8		0.4	0.1	8.6		0.3				

Intersection Summary			
HCM 6th Ctrl Delay		11.7	
HCM 6th LOS		B	

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	50	15	25	20	50	1915	35	940
Future Volume (vph)	50	15	25	20	50	1915	35	940
Turn Type	Split	NA	Split	NA	pm+pt	NA	pm+pt	NA
Protected Phases	4	4	8	8	5	2	1	6
Permitted Phases					2		6	
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5	9.5	22.5
Total Split (s)	22.8	22.8	23.0	23.0	10.2	114.2	10.0	114.0
Total Split (%)	13.4%	13.4%	13.5%	13.5%	6.0%	67.2%	5.9%	67.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	10.4	10.4	9.3	9.3	133.4	127.9	133.0	127.7
Actuated g/C Ratio	0.06	0.06	0.05	0.05	0.78	0.75	0.78	0.75
v/c Ratio	0.49	0.51	0.27	0.68	0.12	0.75	0.24	0.38
Control Delay	91.2	34.6	82.0	37.7	4.9	16.0	8.3	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Total Delay	91.2	34.6	82.0	37.7	4.9	16.0	8.3	10.1
LOS	F	C	F	D	A	B	A	B
Approach Delay		57.4		45.4		15.8		10.0
Approach LOS		E		D		B		A

Intersection Summary	
Cycle Length: 170	
Actuated Cycle Length: 170	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay: 16.9	Intersection LOS: B
Intersection Capacity Utilization 73.3%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 16: 9th Street & SH-82



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	15	60	25	20	100	50	1915	15	35	940	35
Future Volume (veh/h)	50	15	60	25	20	100	50	1915	15	35	940	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.93	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	52	15	62	26	21	103	52	1974	15	36	969	36
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	24	99	175	25	125	409	2497	19	154	2402	89
Arrive On Green	0.08	0.08	0.08	0.10	0.10	0.10	0.03	0.69	0.69	0.02	0.69	0.69
Sat Flow, veh/h	1781	295	1221	1781	259	1270	1781	3614	27	1781	3490	130
Grp Volume(v), veh/h	52	0	77	26	0	124	52	969	1020	36	493	512
Grp Sat Flow(s),veh/h/ln	1781	0	1516	1781	0	1529	1781	1777	1865	1781	1777	1843
Q Serve(g_s), s	4.7	0.0	8.4	2.3	0.0	13.5	1.5	63.0	63.4	1.0	20.4	20.4
Cycle Q Clear(g_c), s	4.7	0.0	8.4	2.3	0.0	13.5	1.5	63.0	63.4	1.0	20.4	20.4
Prop In Lane	1.00		0.81	1.00		0.83	1.00		0.01	1.00		0.07
Lane Grp Cap(c), veh/h	144	0	123	175	0	150	409	1228	1288	154	1223	1268
V/C Ratio(X)	0.36	0.00	0.63	0.15	0.00	0.83	0.13	0.79	0.79	0.23	0.40	0.40
Avail Cap(c_a), veh/h	192	0	163	194	0	166	421	1228	1288	169	1223	1268
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.87	0.87	0.87
Uniform Delay (d), s/veh	74.0	0.0	75.6	70.2	0.0	75.2	8.5	17.9	17.9	21.2	11.4	11.4
Incr Delay (d2), s/veh	1.5	0.0	5.2	0.4	0.0	25.8	0.1	5.2	5.0	0.7	0.9	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	3.5	1.1	0.0	6.4	0.6	26.8	28.2	0.7	8.4	8.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.5	0.0	80.8	70.5	0.0	101.1	8.6	23.1	23.0	21.8	12.3	12.3
LnGrp LOS	E	A	F	E	A	F	A	C	C	C	B	B
Approach Vol, veh/h		129			150			2041			1041	
Approach Delay, s/veh		78.7			95.8			22.6			12.6	
Approach LOS		E			F			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.6	122.0		18.3	9.1	121.5		21.2				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	109.7		18.3	5.7	109.5		18.5				
Max Q Clear Time (g_c+I1), s	3.0	65.4		10.4	3.5	22.4		15.5				
Green Ext Time (p_c), s	0.0	26.8		0.3	0.0	8.5		0.2				

Intersection Summary												
HCM 6th Ctrl Delay			24.9									
HCM 6th LOS			C									

Recommended geometry and Control LOS

MOVEMENT SUMMARY

Site: 1 [2030 Total AM Improved (Site Folder: General)]

Site Category: -
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Mel Rey Rd														
3b	L3	243	5.5	276	5.5	0.259	5.9	LOS A	1.1	29.3	0.36	0.25	0.36	31.9
3	L2	186	5.5	211	5.5	0.704	13.8	LOS B	9.6	249.8	0.63	0.60	0.88	30.3
8	T1	145	5.5	165	5.5	0.704	13.8	LOS B	9.6	249.8	0.63	0.60	0.88	30.2
18	R2	373	5.5	424	5.5	0.704	13.8	LOS B	9.6	249.8	0.63	0.60	0.88	29.4
Approach		947	5.5	1076	5.5	0.704	11.8	LOS B	9.6	249.8	0.56	0.51	0.75	30.3
SouthEast: I-70 Off Ramp														
3bx	L3	230	4.4	261	4.4	0.597	22.7	LOS C	3.1	79.1	0.83	1.01	1.49	26.1
3x	L2	3	4.4	3	4.4	0.234	13.5	LOS B	0.8	19.8	0.76	0.76	0.76	29.9
3ax	L1	52	4.4	59	4.4	0.234	13.5	LOS B	0.8	19.8	0.76	0.76	0.76	29.6
18ax	R1	23	4.4	26	4.4	0.234	13.5	LOS B	0.8	19.8	0.76	0.76	0.76	29.6
18bx	R3	5	4.4	6	4.4	0.004	2.9	LOS A	0.0	0.0	0.00	0.00	0.00	36.5
Approach		313	4.4	356	4.4	0.597	20.1	LOS C	3.1	79.1	0.80	0.93	1.28	27.0
East: Highway 6														
1	L2	227	6.0	258	6.0	0.475	14.9	LOS B	2.3	59.3	0.73	0.84	1.12	28.5
1a	L1	37	6.0	42	6.0	0.270	11.6	LOS B	0.9	24.9	0.69	0.70	0.73	30.9
6	T1	57	6.0	65	6.0	0.270	11.6	LOS B	0.9	24.9	0.69	0.70	0.73	31.2
16	R2	20	6.0	23	6.0	0.270	11.6	LOS B	0.9	24.9	0.69	0.70	0.73	30.3
Approach		341	6.0	388	6.0	0.475	13.8	LOS B	2.3	59.3	0.71	0.80	0.99	29.3
North: Mel Rey Rd														
7	L2	47	3.6	53	3.6	0.461	16.1	LOS C	2.1	53.2	0.77	0.88	1.16	29.6
4	T1	147	3.6	167	3.6	0.461	16.1	LOS C	2.1	53.2	0.77	0.88	1.16	29.6
14a	R1	41	3.6	47	3.6	0.128	10.5	LOS B	0.4	10.7	0.71	0.71	0.71	32.2
14	R2	6	3.6	7	3.6	0.128	10.5	LOS B	0.4	10.7	0.71	0.71	0.71	31.5
Approach		241	3.6	274	3.6	0.461	15.0	LOS C	2.1	53.2	0.76	0.85	1.07	30.0
West: Highway 6														
5	L2	7	6.1	8	6.1	0.753	29.8	LOS D	5.5	144.1	0.85	1.18	1.99	25.2
2	T1	112	6.1	127	6.1	0.753	29.8	LOS D	5.5	144.1	0.85	1.18	1.99	25.2
12	R2	211	6.1	240	6.1	0.753	29.8	LOS D	5.5	144.1	0.85	1.18	1.99	24.6
12b	R3	47	6.1	53	6.1	0.122	10.0	LOS B	0.4	10.2	0.68	0.68	0.68	31.0
Approach		377	6.1	428	6.1	0.753	27.3	LOS D	5.5	144.1	0.83	1.12	1.83	25.5
All Vehicles		2219	5.3	2522	5.3	0.753	16.3	LOS C	9.6	249.8	0.68	0.75	1.08	28.7

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.

MOVEMENT SUMMARY

Site: 1 [2030 Total PM Improved (Site Folder: General)]

Site Category: -
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Mel Rey Rd														
3b	L3	510	2.9	560	2.9	0.512	9.3	LOS A	3.1	79.2	0.49	0.36	0.49	30.6
3	L2	301	2.9	331	2.9	0.731	14.6	LOS B	12.2	312.3	0.68	0.68	1.01	29.8
8	T1	174	2.9	191	2.9	0.731	14.6	LOS B	12.2	312.3	0.68	0.68	1.01	29.7
18	R2	301	2.9	331	2.9	0.731	14.6	LOS B	12.2	312.3	0.68	0.68	1.01	28.9
Approach		1286	2.9	1413	2.9	0.731	12.5	LOS B	12.2	312.3	0.61	0.55	0.80	29.9
SouthEast: I-70 Off Ramp														
3bx	L3	116	2.0	127	2.0	0.440	24.1	LOS C	1.7	43.0	0.86	0.96	1.25	25.7
3x	L2	2	2.0	2	2.0	0.431	22.1	LOS C	1.7	42.5	0.84	0.94	1.21	27.6
3ax	L1	76	2.0	84	2.0	0.431	20.4	LOS C	1.7	42.5	0.84	0.94	1.21	27.4
18ax	R1	56	2.0	62	2.0	0.431	20.4	LOS C	1.7	42.5	0.84	0.94	1.21	27.4
18bx	R3	3	2.0	3	2.0	0.002	2.7	LOS A	0.0	0.0	0.00	0.00	0.00	36.6
Approach		253	2.0	278	2.0	0.440	21.9	LOS C	1.7	43.0	0.84	0.94	1.22	26.7
East: Highway 6														
1	L2	188	2.0	207	2.0	0.683	32.2	LOS D	3.8	96.5	0.89	1.12	1.75	23.6
1a	L1	145	2.0	159	2.0	0.683	29.4	LOS D	3.9	100.1	0.88	1.11	1.74	24.7
6	T1	123	2.0	135	2.0	0.683	28.4	LOS D	3.9	100.1	0.87	1.11	1.74	25.3
16	R2	33	2.0	36	2.0	0.683	28.4	LOS D	3.9	100.1	0.87	1.11	1.74	24.8
Approach		489	2.0	537	2.0	0.683	30.2	LOS D	3.9	100.1	0.88	1.11	1.74	24.4
North: Mel Rey Rd														
7	L2	39	2.8	43	2.8	0.577	26.9	LOS D	2.6	65.9	0.87	1.03	1.49	26.0
4	T1	140	2.8	154	2.8	0.577	26.9	LOS D	2.6	65.9	0.87	1.03	1.49	26.0
14a	R1	84	2.8	92	2.8	0.399	22.5	LOS C	1.5	37.7	0.85	0.94	1.18	27.5
14	R2	21	2.8	23	2.8	0.399	22.5	LOS C	1.5	37.7	0.85	0.94	1.18	27.0
Approach		284	2.8	312	2.8	0.577	25.3	LOS D	2.6	65.9	0.87	1.00	1.38	26.5
West: Highway 6														
5	L2	8	3.7	9	3.7	0.837	43.4	LOS E	6.7	172.9	0.92	1.35	2.52	21.9
2	T1	127	3.7	140	3.7	0.837	43.4	LOS E	6.7	172.9	0.92	1.35	2.52	21.9
12	R2	188	3.7	207	3.7	0.837	43.4	LOS E	6.7	172.9	0.92	1.35	2.52	21.4
12b	R3	170	3.7	187	3.7	0.510	22.2	LOS C	2.3	58.1	0.83	0.97	1.32	26.5
Approach		493	3.7	542	3.7	0.837	36.1	LOS E	6.7	172.9	0.89	1.22	2.11	23.1
All Vehicles		2805	2.8	3082	2.8	0.837	21.9	LOS C	12.2	312.3	0.75	0.85	1.29	26.8

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.

MOVEMENT SUMMARY

Site: 1 [2040 Total AM Improved (Site Folder: General)]

Site Category: -
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Mel Rey Rd														
3b	L3	255	5.5	290	5.5	0.276	6.1	LOS A	1.2	31.6	0.38	0.27	0.38	31.8
3	L2	195	5.5	222	5.5	0.750	15.9	LOS C	13.9	362.4	0.70	0.78	1.18	29.4
8	T1	150	5.5	170	5.5	0.750	15.9	LOS C	13.9	362.4	0.70	0.78	1.18	29.4
18	R2	395	5.5	449	5.5	0.750	15.9	LOS C	13.9	362.4	0.70	0.78	1.18	28.6
Approach		995	5.5	1131	5.5	0.750	13.4	LOS B	13.9	362.4	0.62	0.65	0.97	29.7
SouthEast: I-70 Off Ramp														
3bx	L3	240	4.4	273	4.4	0.664	27.8	LOS D	3.6	93.6	0.86	1.09	1.69	24.7
3x	L2	5	4.4	6	4.4	0.273	15.3	LOS C	0.9	24.0	0.78	0.81	0.89	29.2
3ax	L1	55	4.4	63	4.4	0.273	15.3	LOS C	0.9	24.0	0.78	0.81	0.89	28.9
18ax	R1	25	4.4	28	4.4	0.273	15.3	LOS C	0.9	24.0	0.78	0.81	0.89	28.9
18bx	R3	5	4.4	6	4.4	0.004	3.0	LOS A	0.0	0.0	0.00	0.00	0.00	36.5
Approach		330	4.4	375	4.4	0.664	24.2	LOS C	3.6	93.6	0.83	1.00	1.46	25.7
East: Highway 6														
1	L2	240	6.0	273	6.0	0.526	17.0	LOS C	2.6	69.2	0.76	0.90	1.26	27.8
1a	L1	40	6.0	45	6.0	0.312	13.0	LOS B	1.2	30.2	0.72	0.76	0.85	30.4
6	T1	60	6.0	68	6.0	0.312	13.0	LOS B	1.2	30.2	0.72	0.76	0.85	30.7
16	R2	25	6.0	28	6.0	0.312	13.0	LOS B	1.2	30.2	0.72	0.76	0.85	29.8
Approach		365	6.0	415	6.0	0.526	15.6	LOS C	2.6	69.2	0.74	0.85	1.12	28.6
North: Mel Rey Rd														
7	L2	50	3.6	57	3.6	0.515	18.7	LOS C	2.4	62.1	0.80	0.94	1.29	28.6
4	T1	155	3.6	176	3.6	0.515	18.7	LOS C	2.4	62.1	0.80	0.94	1.29	28.6
14a	R1	45	3.6	51	3.6	0.159	11.7	LOS B	0.5	13.3	0.73	0.73	0.73	31.7
14	R2	10	3.6	11	3.6	0.159	11.7	LOS B	0.5	13.3	0.73	0.73	0.73	31.0
Approach		260	3.6	295	3.6	0.515	17.2	LOS C	2.4	62.1	0.79	0.89	1.17	29.2
West: Highway 6														
5	L2	10	6.1	11	6.1	0.856	42.7	LOS E	7.9	207.4	0.90	1.41	2.68	22.0
2	T1	120	6.1	136	6.1	0.856	42.7	LOS E	7.9	207.4	0.90	1.41	2.68	22.0
12	R2	225	6.1	256	6.1	0.856	42.7	LOS E	7.9	207.4	0.90	1.41	2.68	21.6
12b	R3	50	6.1	57	6.1	0.138	10.8	LOS B	0.4	11.5	0.71	0.71	0.71	30.6
Approach		405	6.1	460	6.1	0.856	38.8	LOS E	7.9	207.4	0.88	1.32	2.44	22.5
All Vehicles		2355	5.3	2676	5.3	0.856	20.0	LOS C	13.9	362.4	0.73	0.87	1.34	27.4

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
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Roundabout Capacity Model: US HCM 6.

MOVEMENT SUMMARY

Site: 1 [2040 Total PM Improved (Site Folder: General)]

Site Category: -
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Mel Rey Rd														
3b	L3	535	2.9	588	2.9	0.544	9.9	LOS A	3.4	86.9	0.53	0.39	0.53	30.3
3	L2	315	2.9	346	2.9	0.771	16.6	LOS C	16.5	421.3	0.76	0.85	1.28	29.0
8	T1	180	2.9	198	2.9	0.771	16.6	LOS C	16.5	421.3	0.76	0.85	1.28	29.0
18	R2	315	2.9	346	2.9	0.771	16.6	LOS C	16.5	421.3	0.76	0.85	1.28	28.2
Approach		1345	2.9	1478	2.9	0.771	14.0	LOS B	16.5	421.3	0.66	0.67	0.98	29.3
SouthEast: I-70 Off Ramp														
3bx	L3	120	2.0	132	2.0	0.495	28.3	LOS D	1.9	49.5	0.88	1.00	1.36	24.6
3x	L2	5	2.0	5	2.0	0.495	26.6	LOS D	2.0	50.7	0.87	0.99	1.35	25.9
3ax	L1	80	2.0	88	2.0	0.495	24.3	LOS C	2.0	50.7	0.87	0.99	1.34	26.2
18ax	R1	60	2.0	66	2.0	0.495	24.3	LOS C	2.0	50.7	0.87	0.99	1.34	26.2
18bx	R3	5	2.0	5	2.0	0.004	2.8	LOS A	0.0	0.0	0.00	0.00	0.00	36.6
Approach		270	2.0	297	2.0	0.495	25.7	LOS D	2.0	50.7	0.86	0.98	1.33	25.5
East: Highway 6														
1	L2	200	2.0	220	2.0	0.773	42.6	LOS E	4.8	123.1	0.92	1.23	2.11	21.4
1a	L1	155	2.0	170	2.0	0.773	38.9	LOS E	5.1	129.0	0.91	1.23	2.11	22.4
6	T1	130	2.0	143	2.0	0.773	37.7	LOS E	5.1	129.0	0.91	1.23	2.11	23.0
16	R2	35	2.0	38	2.0	0.773	37.7	LOS E	5.1	129.0	0.91	1.23	2.11	22.5
Approach		520	2.0	571	2.0	0.773	39.9	LOS E	5.1	129.0	0.92	1.23	2.11	22.1
North: Mel Rey Rd														
7	L2	40	2.8	44	2.8	0.643	33.0	LOS D	3.0	76.8	0.90	1.10	1.67	24.3
4	T1	145	2.8	159	2.8	0.643	33.0	LOS D	3.0	76.8	0.90	1.10	1.67	24.3
14a	R1	90	2.8	99	2.8	0.475	27.5	LOS D	1.8	46.6	0.88	0.99	1.33	25.9
14	R2	25	2.8	27	2.8	0.475	27.5	LOS D	1.8	46.6	0.88	0.99	1.33	25.5
Approach		300	2.8	330	2.8	0.643	30.9	LOS D	3.0	76.8	0.89	1.06	1.54	24.9
West: Highway 6														
5	L2	10	3.7	11	3.7	0.953	66.3	LOS F	10.9	281.8	0.97	1.70	3.71	17.9
2	T1	135	3.7	148	3.7	0.953	66.3	LOS F	10.9	281.8	0.97	1.70	3.71	17.9
12	R2	200	3.7	220	3.7	0.953	66.3	LOS F	10.9	281.8	0.97	1.70	3.71	17.6
12b	R3	180	3.7	198	3.7	0.579	26.9	LOS D	2.7	69.2	0.86	1.03	1.49	25.1
Approach		525	3.7	577	3.7	0.953	52.8	LOS F	10.9	281.8	0.93	1.47	2.95	19.7
All Vehicles		2960	2.8	3253	2.8	0.953	28.2	LOS D	16.5	421.3	0.80	0.98	1.62	25.0

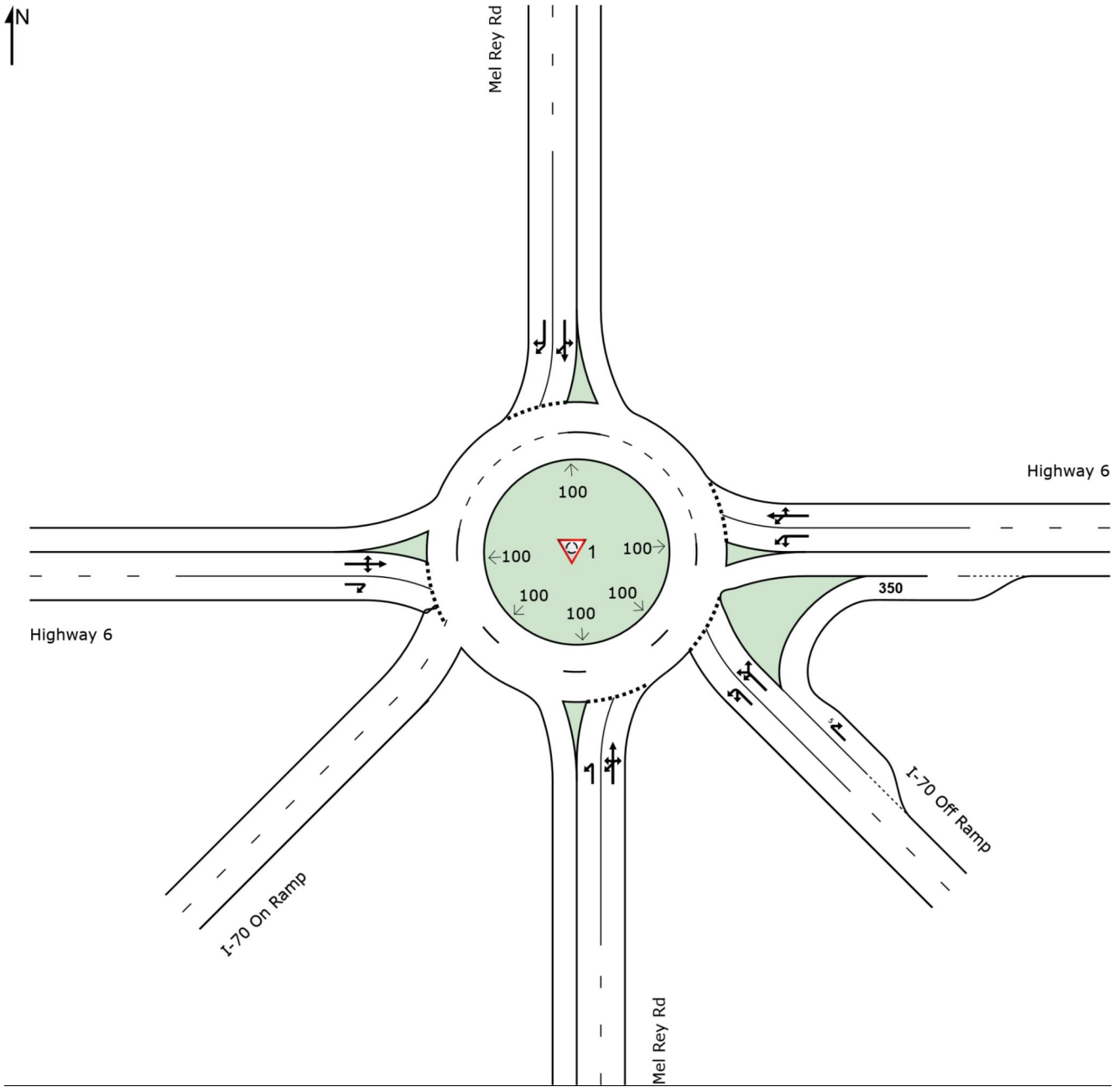
Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
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Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.

SITE LAYOUT

Site: 1 [2030 Total AM Improved (Site Folder: General)]

Site Category: -
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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MOVEMENT SUMMARY

Site: 2 [2030 Total AM Improved (Site Folder: General)]

Site Category: -
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Midland Ave														
3b	L3	31	6.0	35	6.0	0.434	10.6	LOS B	2.3	60.6	0.67	0.74	0.88	32.4
8	T1	495	6.0	556	6.0	0.434	10.6	LOS B	2.3	60.6	0.67	0.74	0.88	32.2
18	R2	50	6.0	56	6.0	0.434	10.6	LOS B	2.3	60.6	0.67	0.74	0.88	31.4
Approach		576	6.0	647	6.0	0.434	10.6	LOS B	2.3	60.6	0.67	0.74	0.88	32.1
North: RoadName														
7	L2	75	3.5	84	3.5	0.479	7.6	LOS A	3.2	82.5	0.20	0.07	0.20	33.6
4	T1	706	3.5	793	3.5	0.479	9.7	LOS A	3.2	82.5	0.18	0.07	0.18	34.1
14a	R1	56	3.5	63	3.5	0.230	4.7	LOS A	1.1	28.0	0.14	0.05	0.14	35.1
Approach		837	3.5	940	3.5	0.479	9.2	LOS A	3.2	82.5	0.18	0.07	0.18	34.1
West: I-70 EB Off Ramp														
5	L2	411	4.7	462	4.7	0.854	38.4	LOS E	9.3	242.0	0.90	1.41	2.61	22.2
2	T1	3	4.7	3	4.7	1.085	91.1	LOS F	30.1	780.1	1.00	2.56	6.21	14.8
12	R2	660	4.7	742	4.7	1.085	76.6	LOS F	30.1	780.1	0.94	2.19	5.10	16.4
12b	R3	53	4.7	60	4.7	0.402	13.1	LOS B	1.8	47.0	0.72	0.80	0.98	29.7
Approach		1127	4.7	1266	4.7	1.085	59.7	LOS F	30.1	780.1	0.91	1.84	4.00	18.6
SouthWest: Riverrine Road														
5ax	L1	33	8.2	37	8.2	0.607	42.6	LOS E	2.3	60.5	0.92	1.10	1.65	21.6
12ax	R1	24	8.2	27	8.2	0.607	42.6	LOS E	2.3	60.5	0.92	1.10	1.65	21.7
12bx	R3	59	8.2	66	8.2	0.607	52.6	LOS F	2.3	60.5	0.92	1.10	1.65	21.2
Approach		116	8.2	130	8.2	0.607	47.7	LOS E	2.3	60.5	0.92	1.10	1.65	21.4
All Vehicles		2656	4.8	2984	4.8	1.085	32.6	LOS D	30.1	780.1	0.63	1.01	2.02	24.5

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 2 [2030 Total PM Improved (Site Folder: General)]

Site Category: -
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Midland Ave														
3b	L3	61	2.1	69	2.1	0.731	17.2	LOS C	10.5	266.1	0.84	1.14	1.63	29.8
8	T1	1046	2.1	1189	2.1	0.731	17.2	LOS C	10.5	266.1	0.84	1.14	1.63	29.5
18	R2	91	2.1	103	2.1	0.731	17.2	LOS C	10.5	266.1	0.84	1.14	1.63	28.8
Approach		1198	2.1	1361	2.1	0.731	17.2	LOS C	10.5	266.1	0.84	1.14	1.63	29.5
North: RoadName														
7	L2	98	2.3	111	2.3	0.370	6.2	LOS A	2.1	53.3	0.25	0.11	0.25	34.0
4	T1	448	2.3	509	2.3	0.370	7.0	LOS A	2.1	53.3	0.23	0.11	0.23	34.4
14a	R1	82	2.3	93	2.3	0.178	4.3	LOS A	0.8	20.3	0.19	0.08	0.19	35.4
Approach		628	2.3	714	2.3	0.370	6.5	LOS A	2.1	53.3	0.23	0.10	0.23	34.5
West: I-70 EB Off Ramp														
5	L2	150	5.3	170	5.3	0.262	8.8	LOS A	1.0	25.8	0.64	0.64	0.64	30.8
2	T1	1	5.3	1	5.3	0.403	11.2	LOS B	1.9	50.4	0.69	0.76	0.90	31.8
12	R2	283	5.3	322	5.3	0.403	11.4	LOS B	1.9	50.4	0.67	0.73	0.84	31.1
12b	R3	32	5.3	36	5.3	0.149	7.2	LOS A	0.5	13.9	0.60	0.60	0.60	32.1
Approach		466	5.3	530	5.3	0.403	10.3	LOS B	1.9	50.4	0.66	0.69	0.76	31.0
SouthWest: Riverrine Road														
5ax	L1	81	2.0	92	2.0	0.394	13.3	LOS B	1.7	43.0	0.73	0.81	1.00	30.1
12ax	R1	45	2.0	51	2.0	0.394	13.3	LOS B	1.7	43.0	0.73	0.81	1.00	30.1
12bx	R3	55	2.0	63	2.0	0.394	18.0	LOS C	1.7	43.0	0.73	0.81	1.00	29.3
Approach		181	2.0	206	2.0	0.394	14.7	LOS B	1.7	43.0	0.73	0.81	1.00	29.8
All Vehicles		2473	2.7	2810	2.7	0.731	13.0	LOS B	10.5	266.1	0.64	0.77	1.06	30.9

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 2 [2040 Total AM Improved (Site Folder: General)]

Site Category: -
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Midland Ave														
3b	L3	35	6.0	39	6.0	0.464	11.6	LOS B	2.6	68.4	0.69	0.79	0.98	32.0
8	T1	510	6.0	573	6.0	0.464	11.6	LOS B	2.6	68.4	0.69	0.79	0.98	31.7
18	R2	50	6.0	56	6.0	0.464	11.6	LOS B	2.6	68.4	0.69	0.79	0.98	31.0
Approach		595	6.0	669	6.0	0.464	11.6	LOS B	2.6	68.4	0.69	0.79	0.98	31.7
North: RoadName														
7	L2	80	3.5	90	3.5	0.502	8.0	LOS A	3.5	89.9	0.22	0.09	0.22	33.4
4	T1	735	3.5	826	3.5	0.502	10.2	LOS B	3.5	89.9	0.20	0.08	0.20	33.9
14a	R1	60	3.5	67	3.5	0.242	4.8	LOS A	1.2	29.7	0.15	0.06	0.15	35.1
Approach		875	3.5	983	3.5	0.502	9.6	LOS A	3.5	89.9	0.20	0.08	0.20	34.0
West: I-70 EB Off Ramp														
5	L2	435	4.7	489	4.7	0.945	55.1	LOS F	13.9	361.5	0.94	1.74	3.63	19.1
2	T1	5	4.7	6	4.7	1.197	131.8	LOS F	44.5	1154.2	1.00	3.22	8.52	11.7
12	R2	690	4.7	775	4.7	1.197	109.5	LOS F	44.5	1154.2	0.95	2.72	6.96	13.2
12b	R3	60	4.7	67	4.7	0.443	14.6	LOS B	2.1	54.1	0.74	0.84	1.08	29.1
Approach		1190	4.7	1337	4.7	1.197	84.9	LOS F	44.5	1154.2	0.93	2.27	5.45	15.4
SouthWest: Riverrine Road														
5ax	L1	35	8.2	39	8.2	0.681	51.4	LOS F	2.7	72.4	0.93	1.16	1.85	19.9
12ax	R1	25	8.2	28	8.2	0.681	51.4	LOS F	2.7	72.4	0.93	1.16	1.85	20.0
12bx	R3	65	8.2	73	8.2	0.681	61.8	LOS F	2.7	72.4	0.93	1.16	1.85	19.6
Approach		125	8.2	140	8.2	0.681	56.8	LOS F	2.7	72.4	0.93	1.16	1.85	19.8
All Vehicles		2785	4.8	3129	4.8	1.197	44.3	LOS E	44.5	1154.2	0.65	1.21	2.69	21.8

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
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Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 2 [2040 Total PM Improved (Site Folder: General)]

Site Category: -
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Midland Ave														
3b	L3	65	2.1	74	2.1	0.787	20.9	LOS C	13.0	330.5	0.90	1.32	1.97	28.4
8	T1	1090	2.1	1239	2.1	0.787	20.9	LOS C	13.0	330.5	0.90	1.32	1.97	28.1
18	R2	95	2.1	108	2.1	0.787	20.9	LOS C	13.0	330.5	0.90	1.32	1.97	27.5
Approach		1250	2.1	1420	2.1	0.787	20.9	LOS C	13.0	330.5	0.90	1.32	1.97	28.1
North: RoadName														
7	L2	105	2.3	119	2.3	0.391	6.5	LOS A	2.3	57.8	0.26	0.13	0.26	33.9
4	T1	465	2.3	528	2.3	0.391	7.2	LOS A	2.3	57.8	0.25	0.12	0.25	34.3
14a	R1	90	2.3	102	2.3	0.188	4.4	LOS A	0.8	21.6	0.20	0.09	0.20	35.4
Approach		660	2.3	750	2.3	0.391	6.7	LOS A	2.3	57.8	0.24	0.11	0.24	34.3
West: I-70 EB Off Ramp														
5	L2	160	5.3	182	5.3	0.290	9.5	LOS A	1.1	28.9	0.65	0.66	0.66	30.5
2	T1	5	5.3	6	5.3	0.444	12.5	LOS B	2.3	58.9	0.71	0.80	1.01	31.2
12	R2	295	5.3	335	5.3	0.444	12.5	LOS B	2.3	58.9	0.69	0.77	0.93	30.6
12b	R3	35	5.3	40	5.3	0.164	7.7	LOS A	0.6	15.3	0.62	0.62	0.62	31.9
Approach		495	5.3	563	5.3	0.444	11.2	LOS B	2.3	58.9	0.67	0.72	0.82	30.7
SouthWest: Riverrine Road														
5ax	L1	85	2.0	97	2.0	0.446	15.2	LOS C	2.0	51.1	0.76	0.86	1.12	29.4
12ax	R1	50	2.0	57	2.0	0.446	15.2	LOS C	2.0	51.1	0.76	0.86	1.12	29.4
12bx	R3	60	2.0	68	2.0	0.446	20.1	LOS C	2.0	51.1	0.76	0.86	1.12	28.6
Approach		195	2.0	222	2.0	0.446	16.7	LOS C	2.0	51.1	0.76	0.86	1.12	29.1
All Vehicles		2600	2.8	2955	2.8	0.787	15.2	LOS C	13.0	330.5	0.68	0.86	1.25	30.0

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
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Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

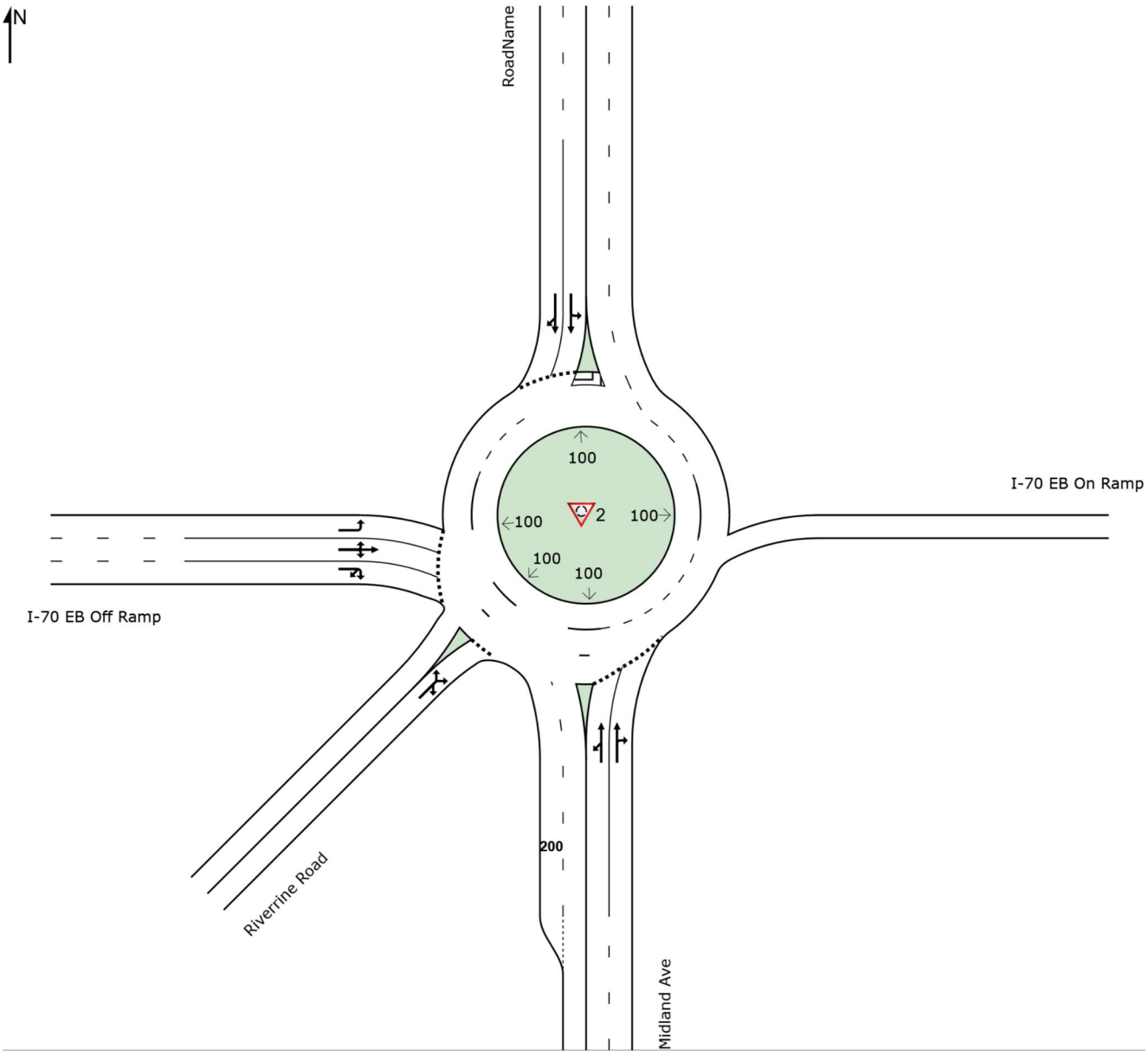
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SITE LAYOUT

Site: 2 [2030 Total AM Improved (Site Folder: General)]

Site Category: -
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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Project: K:\DEN_TPTO\096798001 - Meadows\Engineering\2022 Study\Analysis\Improvements\2_RiverineI-70 Eb & Midland Roundabout Improved.sip9

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	16	551	14	61	1353
Future Vol, veh/h	0	16	551	14	61	1353
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	100	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	18	612	16	68	1503

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	620	0	0	628	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	4.12	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	0	488	-	-	954	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	488	-	-	954	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.7	0	0.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	488	954	-
HCM Lane V/C Ratio	-	-	0.036	0.071	-
HCM Control Delay (s)	-	-	12.7	9.1	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.2	-

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	31	56	1132	32	35	670
Future Vol, veh/h	31	56	1132	32	35	670
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	100	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	62	1244	35	38	736

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2076	1264	0	0	1281	0
Stage 1	1264	-	-	-	-	-
Stage 2	812	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	59	207	-	-	542	-
Stage 1	266	-	-	-	-	-
Stage 2	437	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	55	207	-	-	541	-
Mov Cap-2 Maneuver	170	-	-	-	-	-
Stage 1	265	-	-	-	-	-
Stage 2	406	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	29.6	0	0.6
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	207	541	-
HCM Lane V/C Ratio	-	-	0.297	0.071	-
HCM Control Delay (s)	-	-	29.6	12.2	-
HCM Lane LOS	-	-	D	B	-
HCM 95th %tile Q(veh)	-	-	1.2	0.2	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	25	20	570	15	65	1410
Future Vol, veh/h	25	20	570	15	65	1410
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	100	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	22	620	16	71	1533

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2303	628	0	0	636	0
Stage 1	628	-	-	-	-	-
Stage 2	1675	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	42	483	-	-	947	-
Stage 1	532	-	-	-	-	-
Stage 2	167	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	39	483	-	-	947	-
Mov Cap-2 Maneuver	121	-	-	-	-	-
Stage 1	532	-	-	-	-	-
Stage 2	154	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.8	0	0.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	483	947	-
HCM Lane V/C Ratio	-	-	0.045	0.075	-
HCM Control Delay (s)	-	-	12.8	9.1	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.2	-

Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	60	1180	35	40	695
Future Vol, veh/h	0	60	1180	35	40	695
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	100	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	65	1283	38	43	755

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1304	0	0	1323	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	4.12	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	0	196	-	-	522	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	196	-	-	521	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	32.3	0	0.7
HCM LOS	D		

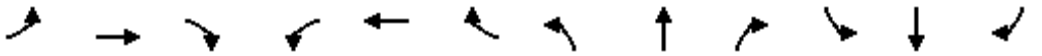
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	196	521	-
HCM Lane V/C Ratio	-	-	0.333	0.083	-
HCM Control Delay (s)	-	-	32.3	12.5	-
HCM Lane LOS	-	-	D	B	-
HCM 95th %tile Q(veh)	-	-	1.4	0.3	-

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	42	992	315	15	327	225	0	14	2	13
Future Volume (vph)	42	992	315	15	327	225	0	14	2	13
Turn Type	Perm	NA	Perm	Perm	NA	Perm	NA	Perm	NA	Perm
Protected Phases		2			6		4		8	
Permitted Phases	2		2	6		4		8		8
Detector Phase	2	2	2	6	6	4	4	8	8	8
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	66.0	66.0	66.0	66.0	66.0	24.0	24.0	24.0	24.0	24.0
Total Split (%)	73.3%	73.3%	73.3%	73.3%	73.3%	26.7%	26.7%	26.7%	26.7%	26.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5		4.5	4.5
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	Max	Max	Max	Max	Max	None	None	None	None	None
Act Effct Green (s)	62.6	62.6	62.6	62.6	62.6		18.6		18.6	18.6
Actuated g/C Ratio	0.69	0.69	0.69	0.69	0.69		0.21		0.21	0.21
v/c Ratio	0.07	0.87	0.32	0.15	0.30		0.90		0.06	0.04
Control Delay	5.1	20.7	5.1	8.6	6.2		65.6		28.6	11.9
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Delay	5.1	20.7	5.1	8.6	6.2		65.6		28.6	11.9
LOS	A	C	A	A	A		E		C	B
Approach Delay		16.6			6.3		65.6		21.0	
Approach LOS		B			A		E		C	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90.2	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 20.5	Intersection LOS: C
Intersection Capacity Utilization 79.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 4: Wulfsohn Road & Midland Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	992	315	15	327	10	225	0	2	14	2	13
Future Volume (veh/h)	42	992	315	15	327	10	225	0	2	14	2	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	48	1127	358	17	372	11	256	0	2	16	2	15
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	688	1286	1090	157	1243	37	363	0	2	401	46	335
Arrive On Green	0.69	0.69	0.69	0.69	0.69	0.69	0.21	0.00	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1000	1870	1585	355	1807	53	1335	0	10	1538	217	1585
Grp Volume(v), veh/h	48	1127	358	17	0	383	258	0	0	18	0	15
Grp Sat Flow(s),veh/h/ln	1000	1870	1585	355	0	1861	1345	0	0	1755	0	1585
Q Serve(g_s), s	1.8	42.3	8.1	3.5	0.0	7.2	16.1	0.0	0.0	0.0	0.0	0.7
Cycle Q Clear(g_c), s	9.0	42.3	8.1	45.9	0.0	7.2	16.8	0.0	0.0	0.7	0.0	0.7
Prop In Lane	1.00		1.00	1.00		0.03	0.99		0.01	0.89		1.00
Lane Grp Cap(c), veh/h	688	1286	1090	157	0	1280	365	0	0	447	0	335
V/C Ratio(X)	0.07	0.88	0.33	0.11	0.00	0.30	0.71	0.00	0.00	0.04	0.00	0.04
Avail Cap(c_a), veh/h	688	1286	1090	157	0	1280	374	0	0	457	0	346
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.3	11.0	5.6	29.0	0.0	5.5	34.8	0.0	0.0	28.1	0.0	28.1
Incr Delay (d2), s/veh	0.2	8.6	0.8	1.4	0.0	0.6	5.9	0.0	0.0	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	16.9	2.5	0.4	0.0	2.6	5.9	0.0	0.0	0.3	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.5	19.5	6.4	30.4	0.0	6.1	40.6	0.0	0.0	28.1	0.0	28.1
LnGrp LOS	A	B	A	C	A	A	D	A	A	C	A	C
Approach Vol, veh/h		1533			400			258			33	
Approach Delay, s/veh		16.1			7.1			40.6			28.1	
Approach LOS		B			A			D			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	66.0	23.4	66.0	23.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	61.5	19.5	61.5	19.5
Max Q Clear Time (g_c+I1), s	44.3	18.8	47.9	2.7
Green Ext Time (p_c), s	10.6	0.1	2.2	0.1

Intersection Summary	
HCM 6th Ctrl Delay	17.5
HCM 6th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	41	442	269	9	856	269	0	34	0	65
Future Volume (vph)	41	442	269	9	856	269	0	34	0	65
Turn Type	Perm	NA	Perm	Perm	NA	Perm	NA	Perm	NA	Perm
Protected Phases		2			6		4		8	
Permitted Phases	2		2	6		4		8		8
Detector Phase	2	2	2	6	6	4	4	8	8	8
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	60.0	60.0	60.0	60.0	60.0	30.0	30.0	30.0	30.0	30.0
Total Split (%)	66.7%	66.7%	66.7%	66.7%	66.7%	33.3%	33.3%	33.3%	33.3%	33.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5		4.5	4.5
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	Max	Max	Max	Max	Max	None	None	None	None	None
Act Effct Green (s)	55.7	55.7	55.7	55.7	55.7		22.7		22.7	22.7
Actuated g/C Ratio	0.64	0.64	0.64	0.64	0.64		0.26		0.26	0.26
v/c Ratio	0.35	0.42	0.29	0.02	0.85		0.88		0.10	0.16
Control Delay	17.5	9.7	5.2	6.9	22.1		56.0		24.8	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Delay	17.5	9.7	5.2	6.9	22.1		56.0		24.8	7.2
LOS	B	A	A	A	C		E		C	A
Approach Delay		8.5			22.0		56.0		13.2	
Approach LOS		A			C		E		B	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 87.5	
Natural Cycle: 70	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay: 21.2	Intersection LOS: C
Intersection Capacity Utilization 78.2%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 4: Wulfsohn Road & Midland Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	442	269	9	856	33	269	0	7	34	0	65
Future Volume (veh/h)	41	442	269	9	856	33	269	0	7	34	0	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	46	497	302	10	962	37	302	0	8	38	0	73
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	192	1176	995	418	1124	43	409	0	9	552	0	427
Arrive On Green	0.63	0.63	0.63	0.63	0.63	0.63	0.27	0.00	0.27	0.27	0.00	0.27
Sat Flow, veh/h	564	1870	1583	680	1789	69	1220	0	32	1744	0	1582
Grp Volume(v), veh/h	46	497	302	10	0	999	310	0	0	38	0	73
Grp Sat Flow(s),veh/h/ln	564	1870	1583	680	0	1858	1252	0	0	1744	0	1582
Q Serve(g_s), s	6.3	11.9	7.7	0.7	0.0	38.2	20.0	0.0	0.0	0.0	0.0	3.1
Cycle Q Clear(g_c), s	44.5	11.9	7.7	12.5	0.0	38.2	21.4	0.0	0.0	1.4	0.0	3.1
Prop In Lane	1.00		1.00	1.00		0.04	0.97		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	192	1176	995	418	0	1168	418	0	0	552	0	427
V/C Ratio(X)	0.24	0.42	0.30	0.02	0.00	0.86	0.74	0.00	0.00	0.07	0.00	0.17
Avail Cap(c_a), veh/h	192	1176	995	418	0	1168	443	0	0	579	0	457
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.0	8.3	7.5	11.5	0.0	13.2	32.1	0.0	0.0	24.1	0.0	24.7
Incr Delay (d2), s/veh	2.9	1.1	0.8	0.1	0.0	8.1	6.2	0.0	0.0	0.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	4.6	2.5	0.1	0.0	16.1	7.0	0.0	0.0	0.6	0.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.0	9.4	8.3	11.6	0.0	21.3	38.3	0.0	0.0	24.1	0.0	24.9
LnGrp LOS	C	A	A	B	A	C	D	A	A	C	A	C
Approach Vol, veh/h		845			1009			310			111	
Approach Delay, s/veh		10.4			21.2			38.3			24.6	
Approach LOS		B			C			D			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		60.0		28.3		60.0		28.3				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		55.5		25.5		55.5		25.5				
Max Q Clear Time (g_c+I1), s		46.5		23.4		40.2		5.1				
Green Ext Time (p_c), s		3.3		0.4		7.3		0.3				

Intersection Summary												
HCM 6th Ctrl Delay			19.7									
HCM 6th LOS			B									

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	45	1045	320	20	345	230	0	15	5	15
Future Volume (vph)	45	1045	320	20	345	230	0	15	5	15
Turn Type	Perm	NA	Perm	Perm	NA	Perm	NA	Perm	NA	Perm
Protected Phases		2			6		4		8	
Permitted Phases	2		2	6		4		8		8
Detector Phase	2	2	2	6	6	4	4	8	8	8
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	67.0	67.0	67.0	67.0	67.0	23.0	23.0	23.0	23.0	23.0
Total Split (%)	74.4%	74.4%	74.4%	74.4%	74.4%	25.6%	25.6%	25.6%	25.6%	25.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5		4.5	4.5
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	Max	Max	Max	Max	Max	None	None	None	None	None
Act Effct Green (s)	63.6	63.6	63.6	63.6	63.6		18.0		18.0	18.0
Actuated g/C Ratio	0.70	0.70	0.70	0.70	0.70		0.20		0.20	0.20
v/c Ratio	0.07	0.87	0.31	0.18	0.30		0.92		0.07	0.05
Control Delay	4.8	19.9	4.7	9.2	5.8		71.4		29.5	12.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Delay	4.8	19.9	4.7	9.2	5.8		71.4		29.5	12.6
LOS	A	B	A	A	A		E		C	B
Approach Delay		16.0			6.0		71.4		22.2	
Approach LOS		B			A		E		C	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90.6	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 20.6	Intersection LOS: C
Intersection Capacity Utilization 82.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 4: Wulfsohn Road & Midland Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	1045	320	20	345	10	230	0	5	15	5	15
Future Volume (veh/h)	45	1045	320	20	345	10	230	0	5	15	5	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	49	1136	348	22	375	11	250	0	5	16	5	16
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	693	1299	1101	159	1255	37	348	0	5	339	97	326
Arrive On Green	0.69	0.69	0.69	0.69	0.69	0.69	0.21	0.00	0.21	0.21	0.21	0.21
Sat Flow, veh/h	997	1870	1585	355	1808	53	1306	0	26	1308	472	1585
Grp Volume(v), veh/h	49	1136	348	22	0	386	255	0	0	21	0	16
Grp Sat Flow(s),veh/h/ln	997	1870	1585	355	0	1861	1333	0	0	1780	0	1585
Q Serve(g_s), s	1.8	42.5	7.7	4.6	0.0	7.2	16.2	0.0	0.0	0.0	0.0	0.7
Cycle Q Clear(g_c), s	9.0	42.5	7.7	47.2	0.0	7.2	17.0	0.0	0.0	0.8	0.0	0.7
Prop In Lane	1.00		1.00	1.00		0.03	0.98		0.02	0.76		1.00
Lane Grp Cap(c), veh/h	693	1299	1101	159	0	1292	353	0	0	436	0	326
V/C Ratio(X)	0.07	0.87	0.32	0.14	0.00	0.30	0.72	0.00	0.00	0.05	0.00	0.05
Avail Cap(c_a), veh/h	693	1299	1101	159	0	1292	353	0	0	436	0	326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.0	10.7	5.4	29.1	0.0	5.3	35.6	0.0	0.0	28.7	0.0	28.7
Incr Delay (d2), s/veh	0.2	8.4	0.8	1.8	0.0	0.6	7.1	0.0	0.0	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	16.8	2.3	0.5	0.0	2.5	6.1	0.0	0.0	0.4	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.2	19.1	6.1	30.9	0.0	5.9	42.6	0.0	0.0	28.8	0.0	28.8
LnGrp LOS	A	B	A	C	A	A	D	A	A	C	A	C
Approach Vol, veh/h		1533			408			255			37	
Approach Delay, s/veh		15.8			7.2			42.6			28.8	
Approach LOS		B			A			D			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		67.0		23.0		67.0		23.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		62.5		18.5		62.5		18.5				
Max Q Clear Time (g_c+I1), s		44.5		19.0		49.2		2.8				
Green Ext Time (p_c), s		11.0		0.0		2.3		0.1				

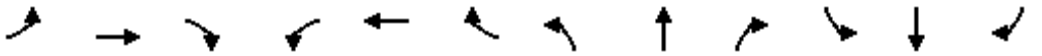
Intersection Summary												
HCM 6th Ctrl Delay			17.5									
HCM 6th LOS			B									

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	45	465	275	10	900	275	0	35	0	70
Future Volume (vph)	45	465	275	10	900	275	0	35	0	70
Turn Type	Perm	NA	Perm	Perm	NA	Perm	NA	Perm	NA	Perm
Protected Phases		2			6		4		8	
Permitted Phases	2		2	6		4		8		8
Detector Phase	2	2	2	6	6	4	4	8	8	8
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	61.0	61.0	61.0	61.0	61.0	29.0	29.0	29.0	29.0	29.0
Total Split (%)	67.8%	67.8%	67.8%	67.8%	67.8%	32.2%	32.2%	32.2%	32.2%	32.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5		4.5	4.5
Lead/Lag										
Lead-Lag Optimize?										
Recall Mode	Max	Max	Max	Max	Max	None	None	None	None	None
Act Effct Green (s)	56.7	56.7	56.7	56.7	56.7		22.6		22.6	22.6
Actuated g/C Ratio	0.64	0.64	0.64	0.64	0.64		0.26		0.26	0.26
v/c Ratio	0.39	0.42	0.29	0.02	0.85		0.89		0.10	0.17
Control Delay	19.6	9.5	4.9	6.5	22.2		59.0		25.5	7.4
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Delay	19.6	9.5	4.9	6.5	22.2		59.0		25.5	7.4
LOS	B	A	A	A	C		E		C	A
Approach Delay		8.4			22.1		59.0		13.4	
Approach LOS		A			C		E		B	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 88.3	
Natural Cycle: 80	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 21.6	Intersection LOS: C
Intersection Capacity Utilization 81.4%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 4: Wulfsohn Road & Midland Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	465	275	10	900	35	275	0	10	35	0	70
Future Volume (veh/h)	45	465	275	10	900	35	275	0	10	35	0	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	49	505	299	11	978	38	299	0	11	38	0	76
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	184	1182	1000	416	1130	44	402	0	12	548	0	423
Arrive On Green	0.63	0.63	0.63	0.63	0.63	0.63	0.27	0.00	0.27	0.27	0.00	0.27
Sat Flow, veh/h	555	1870	1583	677	1788	69	1205	0	44	1748	0	1582
Grp Volume(v), veh/h	49	505	299	11	0	1016	310	0	0	38	0	76
Grp Sat Flow(s),veh/h/ln	555	1870	1583	677	0	1858	1250	0	0	1748	0	1582
Q Serve(g_s), s	7.0	12.2	7.7	0.7	0.0	39.7	20.4	0.0	0.0	0.0	0.0	3.3
Cycle Q Clear(g_c), s	46.8	12.2	7.7	12.9	0.0	39.7	21.8	0.0	0.0	1.4	0.0	3.3
Prop In Lane	1.00		1.00	1.00		0.04	0.96		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	184	1182	1000	416	0	1174	413	0	0	548	0	423
V/C Ratio(X)	0.27	0.43	0.30	0.03	0.00	0.87	0.75	0.00	0.00	0.07	0.00	0.18
Avail Cap(c_a), veh/h	184	1182	1000	416	0	1174	422	0	0	557	0	433
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.4	8.3	7.5	11.6	0.0	13.4	32.7	0.0	0.0	24.5	0.0	25.2
Incr Delay (d2), s/veh	3.5	1.1	0.8	0.1	0.0	8.6	7.2	0.0	0.0	0.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	4.7	2.5	0.1	0.0	16.9	7.2	0.0	0.0	0.6	0.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.9	9.4	8.2	11.7	0.0	22.0	39.8	0.0	0.0	24.6	0.0	25.4
LnGrp LOS	D	A	A	B	A	C	D	A	A	C	A	C
Approach Vol, veh/h		853			1027			310			114	
Approach Delay, s/veh		10.5			21.9			39.8			25.1	
Approach LOS		B			C			D			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		61.0		28.4		61.0		28.4				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		56.5		24.5		56.5		24.5				
Max Q Clear Time (g_c+I1), s		48.8		23.8		41.7		5.3				
Green Ext Time (p_c), s		3.0		0.1		7.3		0.4				

Intersection Summary												
HCM 6th Ctrl Delay			20.3									
HCM 6th LOS			C									

MOVEMENT SUMMARY

Site: 4 [Midland Avenue & Wulfsohn Road (2030 AM) - 2 Lanes (Site Folder: General)]

2030 Total AM Peak
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Wulfsohn Road														
3	L2	225	3.0	256	3.0	0.676	30.2	LOS D	4.1	104.9	0.88	1.11	1.71	24.1
8	T1	1	3.0	1	3.0	0.676	30.2	LOS D	4.1	104.9	0.88	1.11	1.71	24.0
18	R2	2	3.0	2	3.0	0.676	30.2	LOS D	4.1	104.9	0.88	1.11	1.71	23.6
Approach		228	3.0	259	3.0	0.676	30.2	LOS D	4.1	104.9	0.88	1.11	1.71	24.1
East: Midland Avenue														
1	L2	15	3.0	17	3.0	0.193	5.3	LOS A	0.8	20.8	0.43	0.33	0.43	34.9
6	T1	327	3.0	372	3.0	0.193	5.3	LOS A	0.8	20.8	0.43	0.33	0.43	35.0
16	R2	10	3.0	11	3.0	0.193	5.3	LOS A	0.8	20.8	0.43	0.33	0.43	34.0
Approach		352	3.0	400	3.0	0.193	5.3	LOS A	0.8	20.8	0.43	0.33	0.43	34.9
North: Wulfsohn Road														
7	L2	14	3.0	16	3.0	0.048	5.8	LOS A	0.2	4.7	0.57	0.50	0.57	33.4
4	T1	2	3.0	2	3.0	0.048	5.8	LOS A	0.2	4.7	0.57	0.50	0.57	33.4
14	R2	13	3.0	15	3.0	0.048	5.8	LOS A	0.2	4.7	0.57	0.50	0.57	32.4
Approach		29	3.0	33	3.0	0.048	5.8	LOS A	0.2	4.7	0.57	0.50	0.57	33.0
West: Midland Avenue														
5	L2	42	3.0	48	3.0	0.575	9.2	LOS A	4.7	119.1	0.24	0.09	0.24	33.0
2	T1	992	3.0	1127	3.0	0.575	9.2	LOS A	4.7	119.1	0.24	0.09	0.24	33.0
12	R2	315	3.0	358	3.0	0.575	9.2	LOS A	4.7	119.1	0.24	0.09	0.24	32.0
Approach		1349	3.0	1533	3.0	0.575	9.2	LOS A	4.7	119.1	0.24	0.09	0.24	32.7
All Vehicles		1958	3.0	2225	3.0	0.676	10.9	LOS B	4.7	119.1	0.35	0.26	0.45	31.7

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 4 [Midland Avenue & Wulfsohn Road (2030 PM) - 2 Lanes (Site Folder: General)]

2030 Total PM Peak
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Wulfsohn Road														
3	L2	269	3.0	302	3.0	0.428	10.7	LOS B	2.4	62.1	0.70	0.76	0.88	30.2
8	T1	1	3.0	1	3.0	0.428	10.7	LOS B	2.4	62.1	0.70	0.76	0.88	30.1
18	R2	7	3.0	8	3.0	0.428	10.7	LOS B	2.4	62.1	0.70	0.76	0.88	29.4
Approach		277	3.0	311	3.0	0.428	10.7	LOS B	2.4	62.1	0.70	0.76	0.88	30.1
East: Midland Avenue														
1	L2	9	3.0	10	3.0	0.508	9.8	LOS A	3.6	90.9	0.61	0.60	0.75	32.8
6	T1	856	3.0	962	3.0	0.508	9.8	LOS A	3.6	90.9	0.61	0.60	0.75	32.8
16	R2	33	3.0	37	3.0	0.508	9.8	LOS A	3.6	90.9	0.61	0.60	0.75	31.8
Approach		898	3.0	1009	3.0	0.508	9.8	LOS A	3.6	90.9	0.61	0.60	0.75	32.7
North: Wulfsohn Road														
7	L2	34	3.0	38	3.0	0.333	16.9	LOS C	1.3	33.4	0.81	0.86	1.00	29.0
4	T1	5	3.0	6	3.0	0.333	16.9	LOS C	1.3	33.4	0.81	0.86	1.00	29.0
14	R2	65	3.0	73	3.0	0.333	16.9	LOS C	1.3	33.4	0.81	0.86	1.00	28.2
Approach		104	3.0	117	3.0	0.333	16.9	LOS C	1.3	33.4	0.81	0.86	1.00	28.5
West: Midland Avenue														
5	L2	41	3.0	46	3.0	0.322	5.7	LOS A	1.7	43.7	0.20	0.08	0.20	34.6
2	T1	442	3.0	497	3.0	0.322	5.7	LOS A	1.7	43.7	0.20	0.08	0.20	34.6
12	R2	269	3.0	302	3.0	0.322	5.7	LOS A	1.7	43.7	0.20	0.08	0.20	33.6
Approach		752	3.0	845	3.0	0.322	5.7	LOS A	1.7	43.7	0.20	0.08	0.20	34.3
All Vehicles		2031	3.0	2282	3.0	0.508	8.8	LOS A	3.6	90.9	0.48	0.44	0.58	32.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
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Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 4 [Midland Avenue & Wulfsohn Road (2040 AM) - 2 Lanes (Site Folder: General)]

2030 Total AM Peak
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Wulfsohn Road														
3	L2	230	3.0	250	3.0	0.676	30.5	LOS D	4.1	104.4	0.88	1.11	1.71	24.0
8	T1	1	3.0	1	3.0	0.676	30.5	LOS D	4.1	104.4	0.88	1.11	1.71	24.0
18	R2	5	3.0	5	3.0	0.676	30.5	LOS D	4.1	104.4	0.88	1.11	1.71	23.5
Approach		236	3.0	257	3.0	0.676	30.5	LOS D	4.1	104.4	0.88	1.11	1.71	24.0
East: Midland Avenue														
1	L2	20	3.0	22	3.0	0.196	5.3	LOS A	0.8	21.2	0.43	0.33	0.43	34.8
6	T1	345	3.0	375	3.0	0.196	5.3	LOS A	0.8	21.2	0.43	0.33	0.43	34.9
16	R2	10	3.0	11	3.0	0.196	5.3	LOS A	0.8	21.2	0.43	0.33	0.43	34.0
Approach		375	3.0	408	3.0	0.196	5.3	LOS A	0.8	21.2	0.43	0.33	0.43	34.9
North: Wulfsohn Road														
7	L2	15	3.0	16	3.0	0.056	5.9	LOS A	0.2	5.4	0.58	0.51	0.58	33.5
4	T1	5	3.0	5	3.0	0.056	5.9	LOS A	0.2	5.4	0.58	0.51	0.58	33.5
14	R2	15	3.0	16	3.0	0.056	5.9	LOS A	0.2	5.4	0.58	0.51	0.58	32.5
Approach		35	3.0	38	3.0	0.056	5.9	LOS A	0.2	5.4	0.58	0.51	0.58	33.1
West: Midland Avenue														
5	L2	45	3.0	49	3.0	0.579	9.3	LOS A	4.7	119.9	0.27	0.11	0.27	32.9
2	T1	1045	3.0	1136	3.0	0.579	9.3	LOS A	4.7	119.9	0.27	0.11	0.27	32.9
12	R2	320	3.0	348	3.0	0.579	9.3	LOS A	4.7	119.9	0.27	0.11	0.27	32.0
Approach		1410	3.0	1533	3.0	0.579	9.3	LOS A	4.7	119.9	0.27	0.11	0.27	32.7
All Vehicles		2056	3.0	2235	3.0	0.676	10.9	LOS B	4.7	119.9	0.38	0.27	0.47	31.7

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
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Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 4 [Midland Avenue & Wulfsohn Road (2040 PM) - 2 Lanes (Site Folder: General)]

2030 Total PM Peak
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Wulfsohn Road														
3	L2	275	3.0	299	3.0	0.432	10.9	LOS B	2.5	63.3	0.70	0.77	0.90	30.1
8	T1	1	3.0	1	3.0	0.432	10.9	LOS B	2.5	63.3	0.70	0.77	0.90	30.1
18	R2	10	3.0	11	3.0	0.432	10.9	LOS B	2.5	63.3	0.70	0.77	0.90	29.3
Approach		286	3.0	311	3.0	0.432	10.9	LOS B	2.5	63.3	0.70	0.77	0.90	30.1
East: Midland Avenue														
1	L2	10	3.0	11	3.0	0.517	10.0	LOS B	3.7	95.8	0.62	0.62	0.77	32.7
6	T1	900	3.0	978	3.0	0.517	10.0	LOS B	3.7	95.8	0.62	0.62	0.77	32.7
16	R2	35	3.0	38	3.0	0.517	10.0	LOS B	3.7	95.8	0.62	0.62	0.77	31.7
Approach		945	3.0	1027	3.0	0.517	10.0	LOS B	3.7	95.8	0.62	0.62	0.77	32.6
North: Wulfsohn Road														
7	L2	35	3.0	38	3.0	0.333	17.2	LOS C	1.3	33.3	0.81	0.86	1.01	28.9
4	T1	1	3.0	1	3.0	0.333	17.2	LOS C	1.3	33.3	0.81	0.86	1.01	28.9
14	R2	70	3.0	76	3.0	0.333	17.2	LOS C	1.3	33.3	0.81	0.86	1.01	28.2
Approach		106	3.0	115	3.0	0.333	17.2	LOS C	1.3	33.3	0.81	0.86	1.01	28.4
West: Midland Avenue														
5	L2	45	3.0	49	3.0	0.324	5.7	LOS A	1.7	44.2	0.19	0.08	0.19	34.6
2	T1	465	3.0	505	3.0	0.324	5.7	LOS A	1.7	44.2	0.19	0.08	0.19	34.6
12	R2	275	3.0	299	3.0	0.324	5.7	LOS A	1.7	44.2	0.19	0.08	0.19	33.6
Approach		785	3.0	853	3.0	0.324	5.7	LOS A	1.7	44.2	0.19	0.08	0.19	34.3
All Vehicles		2122	3.0	2307	3.0	0.517	8.9	LOS A	3.7	95.8	0.48	0.45	0.59	32.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

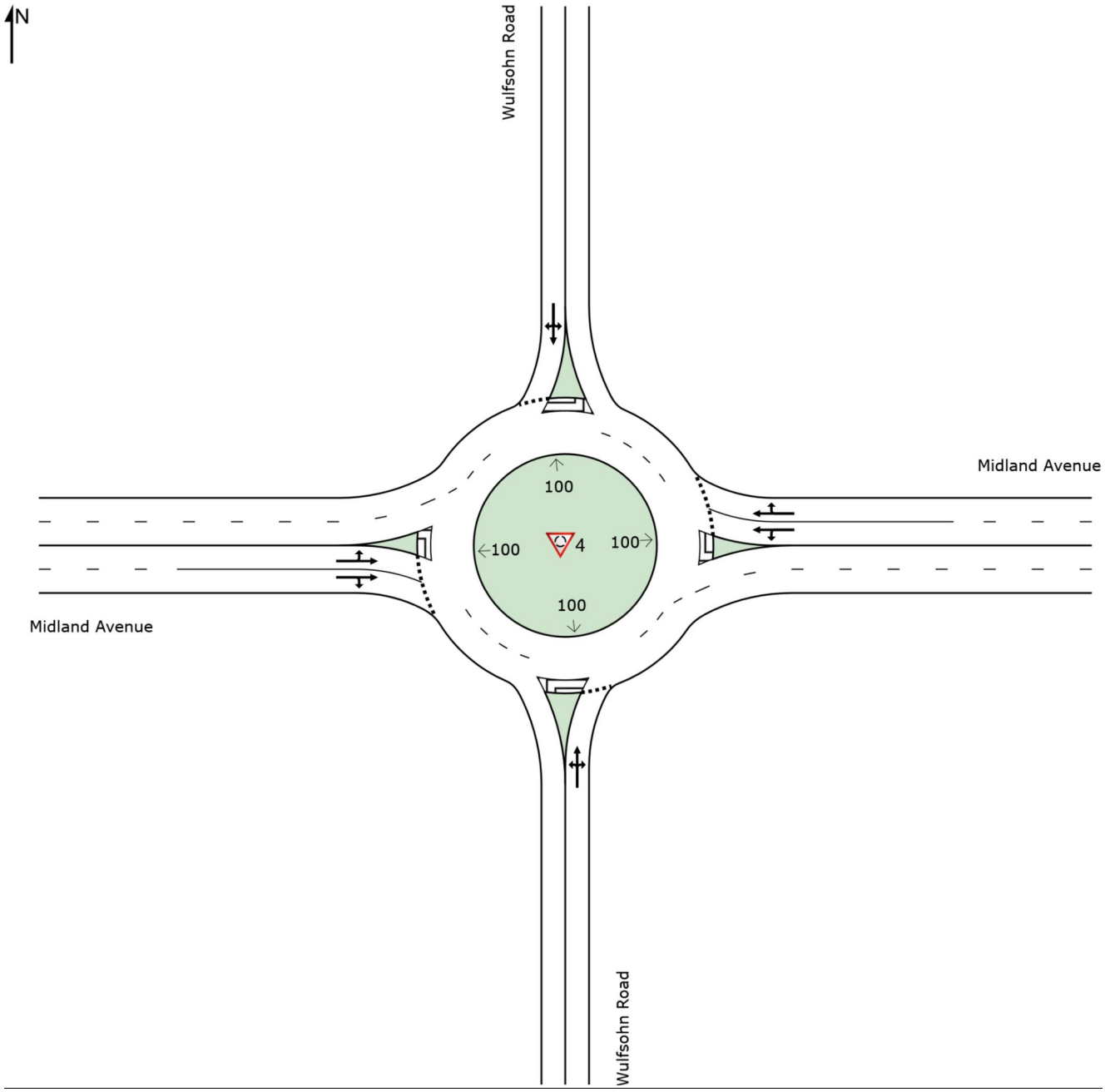
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SITE LAYOUT

Site: 4 [Midland Avenue & Wulfsohn Road (2030 AM) - 2 Lanes (Site Folder: General)]

2030 Total AM Peak
Site Category: (None)
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	870	136	43	280	88	86
Future Volume (vph)	870	136	43	280	88	86
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	4		3	8	2	
Permitted Phases		4	8			2
Detector Phase	4	4	3	8	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	58.0	58.0	9.5	67.5	22.5	22.5
Total Split (%)	64.4%	64.4%	10.6%	75.0%	25.0%	25.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	None	None	None	None	Max	Max
Act Effct Green (s)	46.2	46.2	51.3	51.3	18.6	18.6
Actuated g/C Ratio	0.58	0.58	0.65	0.65	0.23	0.23
v/c Ratio	0.91	0.16	0.24	0.26	0.24	0.22
Control Delay	28.9	3.4	7.2	6.0	31.1	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.9	3.4	7.2	6.0	31.1	8.4
LOS	C	A	A	A	C	A
Approach Delay	25.4			6.2	19.9	
Approach LOS	C			A	B	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 79.2	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 20.7	Intersection LOS: C
Intersection Capacity Utilization 58.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 5: W Meadows & Midland Ave



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	870	136	43	280	88	86
Future Volume (veh/h)	870	136	43	280	88	86
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	989	155	49	318	100	98
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1081	915	211	1259	388	345
Arrive On Green	0.58	0.58	0.04	0.67	0.22	0.22
Sat Flow, veh/h	1870	1584	1781	1870	1781	1585
Grp Volume(v), veh/h	989	155	49	318	100	98
Grp Sat Flow(s),veh/h/ln	1870	1584	1781	1870	1781	1585
Q Serve(g_s), s	39.1	3.8	0.8	5.5	3.8	4.3
Cycle Q Clear(g_c), s	39.1	3.8	0.8	5.5	3.8	4.3
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1081	915	211	1259	388	345
V/C Ratio(X)	0.92	0.17	0.23	0.25	0.26	0.28
Avail Cap(c_a), veh/h	1211	1026	246	1427	388	345
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.6	8.2	16.8	5.3	26.8	26.9
Incr Delay (d2), s/veh	10.1	0.1	0.6	0.1	1.6	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.3	1.2	0.5	1.8	1.8	1.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	25.7	8.2	17.4	5.4	28.4	29.0
LnGrp LOS	C	A	B	A	C	C
Approach Vol, veh/h	1144			367	198	
Approach Delay, s/veh	23.4			7.0	28.7	
Approach LOS	C			A	C	

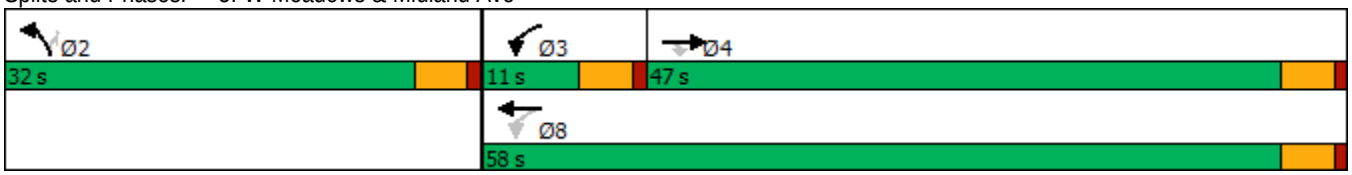
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		22.5	7.9	52.2		60.1
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s		18.0	5.0	53.5		63.0
Max Q Clear Time (g_c+I1), s		6.3	2.8	41.1		7.5
Green Ext Time (p_c), s		0.4	0.0	6.6		2.1

Intersection Summary	
HCM 6th Ctrl Delay	20.5
HCM 6th LOS	C

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	329	111	77	605	251	77
Future Volume (vph)	329	111	77	605	251	77
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	4		3	8	2	
Permitted Phases		4	8			2
Detector Phase	4	4	3	8	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	47.0	47.0	11.0	58.0	32.0	32.0
Total Split (%)	52.2%	52.2%	12.2%	64.4%	35.6%	35.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	None	None	None	None	Max	Max
Act Effct Green (s)	21.0	21.0	29.5	29.5	27.9	27.9
Actuated g/C Ratio	0.32	0.32	0.44	0.44	0.42	0.42
v/c Ratio	0.62	0.21	0.24	0.81	0.37	0.12
Control Delay	24.8	4.5	11.5	24.0	17.4	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.8	4.5	11.5	24.0	17.4	4.9
LOS	C	A	B	C	B	A
Approach Delay	19.7			22.6	14.4	
Approach LOS	B			C	B	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 66.6	
Natural Cycle: 55	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 19.9	Intersection LOS: B
Intersection Capacity Utilization 53.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 5: W Meadows & Midland Ave





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	329	111	77	605	251	77
Future Volume (veh/h)	329	111	77	605	251	77
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	362	122	85	665	276	85
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	555	470	338	801	767	683
Arrive On Green	0.30	0.30	0.06	0.43	0.43	0.43
Sat Flow, veh/h	1870	1582	1781	1870	1781	1585
Grp Volume(v), veh/h	362	122	85	665	276	85
Grp Sat Flow(s),veh/h/ln	1870	1582	1781	1870	1781	1585
Q Serve(g_s), s	10.8	3.8	2.0	20.1	6.7	2.1
Cycle Q Clear(g_c), s	10.8	3.8	2.0	20.1	6.7	2.1
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	555	470	338	801	767	683
V/C Ratio(X)	0.65	0.26	0.25	0.83	0.36	0.12
Avail Cap(c_a), veh/h	1245	1053	411	1567	767	683
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.6	17.1	13.9	16.2	12.2	10.9
Incr Delay (d2), s/veh	1.3	0.3	0.4	2.3	1.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	1.3	0.7	8.0	2.6	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.9	17.4	14.3	18.5	13.6	11.3
LnGrp LOS	C	B	B	B	B	B
Approach Vol, veh/h	484			750	361	
Approach Delay, s/veh	20.0			18.0	13.0	
Approach LOS	B			B	B	

Timer - Assigned Phs	2	3	4	8
Phs Duration (G+Y+Rc), s	32.0	8.4	23.5	31.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	27.5	6.5	42.5	53.5
Max Q Clear Time (g_c+I1), s	8.7	4.0	12.8	22.1
Green Ext Time (p_c), s	1.0	0.0	2.8	5.2

Intersection Summary	
HCM 6th Ctrl Delay	17.5
HCM 6th LOS	B

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	915	145	45	295	95	95
Future Volume (vph)	915	145	45	295	95	95
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	4		3	8	2	
Permitted Phases		4	8			2
Detector Phase	4	4	3	8	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	58.0	58.0	9.5	67.5	22.5	22.5
Total Split (%)	64.4%	64.4%	10.6%	75.0%	25.0%	25.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	None	None	None	None	Max	Max
Act Effct Green (s)	46.5	46.5	51.5	51.5	18.6	18.6
Actuated g/C Ratio	0.59	0.59	0.65	0.65	0.23	0.23
v/c Ratio	0.91	0.17	0.25	0.27	0.25	0.23
Control Delay	29.2	3.4	7.3	6.0	31.3	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.2	3.4	7.3	6.0	31.3	8.3
LOS	C	A	A	A	C	A
Approach Delay	25.7			6.2	19.8	
Approach LOS	C			A	B	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 79.4	
Natural Cycle: 90	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 20.8	Intersection LOS: C
Intersection Capacity Utilization 61.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 5: W Meadows & Midland Ave



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	915	145	45	295	95	95
Future Volume (veh/h)	915	145	45	295	95	95
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	995	158	49	321	103	103
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1084	918	209	1262	386	344
Arrive On Green	0.58	0.58	0.04	0.67	0.22	0.22
Sat Flow, veh/h	1870	1584	1781	1870	1781	1585
Grp Volume(v), veh/h	995	158	49	321	103	103
Grp Sat Flow(s),veh/h/ln	1870	1584	1781	1870	1781	1585
Q Serve(g_s), s	39.7	3.9	0.8	5.6	4.0	4.5
Cycle Q Clear(g_c), s	39.7	3.9	0.8	5.6	4.0	4.5
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1084	918	209	1262	386	344
V/C Ratio(X)	0.92	0.17	0.23	0.25	0.27	0.30
Avail Cap(c_a), veh/h	1206	1021	244	1420	386	344
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.7	8.1	17.0	5.3	27.0	27.2
Incr Delay (d2), s/veh	10.5	0.1	0.6	0.1	1.7	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.6	1.2	0.5	1.8	1.8	1.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	26.1	8.2	17.6	5.4	28.7	29.4
LnGrp LOS	C	A	B	A	C	C
Approach Vol, veh/h	1153			370	206	
Approach Delay, s/veh	23.7			7.0	29.1	
Approach LOS	C			A	C	

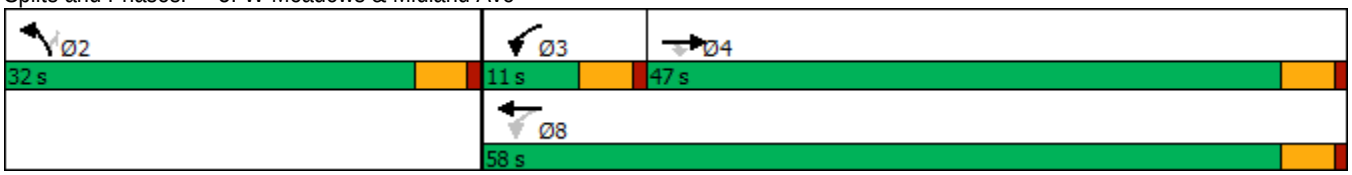
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		22.5	7.9	52.6		60.5
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s		18.0	5.0	53.5		63.0
Max Q Clear Time (g_c+I1), s		6.5	2.8	41.7		7.6
Green Ext Time (p_c), s		0.4	0.0	6.5		2.1

Intersection Summary	
HCM 6th Ctrl Delay	20.8
HCM 6th LOS	C

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	345	120	85	635	265	80
Future Volume (vph)	345	120	85	635	265	80
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	4		3	8	2	
Permitted Phases		4	8			2
Detector Phase	4	4	3	8	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	47.0	47.0	11.0	58.0	32.0	32.0
Total Split (%)	52.2%	52.2%	12.2%	64.4%	35.6%	35.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	None	None	None	None	Max	Max
Act Effct Green (s)	22.7	22.7	31.3	31.3	28.0	28.0
Actuated g/C Ratio	0.33	0.33	0.46	0.46	0.41	0.41
v/c Ratio	0.61	0.22	0.25	0.81	0.40	0.12
Control Delay	24.0	4.1	11.4	23.9	18.8	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.0	4.1	11.4	23.9	18.8	5.1
LOS	C	A	B	C	B	A
Approach Delay	18.9			22.4	15.6	
Approach LOS	B			C	B	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 68.4	
Natural Cycle: 60	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 19.8	Intersection LOS: B
Intersection Capacity Utilization 55.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 5: W Meadows & Midland Ave





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	345	120	85	635	265	80
Future Volume (veh/h)	345	120	85	635	265	80
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	375	130	92	690	288	87
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	580	491	343	825	750	668
Arrive On Green	0.31	0.31	0.06	0.44	0.42	0.42
Sat Flow, veh/h	1870	1582	1781	1870	1781	1585
Grp Volume(v), veh/h	375	130	92	690	288	87
Grp Sat Flow(s),veh/h/ln	1870	1582	1781	1870	1781	1585
Q Serve(g_s), s	11.3	4.0	2.1	21.3	7.3	2.2
Cycle Q Clear(g_c), s	11.3	4.0	2.1	21.3	7.3	2.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	580	491	343	825	750	668
V/C Ratio(X)	0.65	0.27	0.27	0.84	0.38	0.13
Avail Cap(c_a), veh/h	1217	1030	410	1532	750	668
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.4	16.9	13.8	16.2	13.0	11.6
Incr Delay (d2), s/veh	1.2	0.3	0.4	2.3	1.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	1.4	0.8	8.5	2.9	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.7	17.2	14.2	18.5	14.5	12.0
LnGrp LOS	C	B	B	B	B	B
Approach Vol, veh/h	505			782	375	
Approach Delay, s/veh	19.8			18.0	13.9	
Approach LOS	B			B	B	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		32.0	8.6	24.7		33.3
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s		27.5	6.5	42.5		53.5
Max Q Clear Time (g_c+I1), s		9.3	4.1	13.3		23.3
Green Ext Time (p_c), s		1.1	0.0	2.9		5.5

Intersection Summary	
HCM 6th Ctrl Delay	17.6
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1047	14	136	341	0	249
Future Vol, veh/h	1047	14	136	341	0	249
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	175	250	-	-	0
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1138	15	148	371	0	271

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1153	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	4.12	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	2.218	-	-	-
Pot Cap-1 Maneuver	-	-	606	-	0	0
Stage 1	-	-	-	-	0	0
Stage 2	-	-	-	-	0	0
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	606	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.7	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	606	-
HCM Lane V/C Ratio	-	-	-	0.244	-
HCM Control Delay (s)	0	-	-	12.8	-
HCM Lane LOS	A	-	-	B	-
HCM 95th %tile Q(veh)	-	-	-	1	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	511	11	379	905	0	229
Future Vol, veh/h	511	11	379	905	0	229
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	175	250	-	-	0
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	562	12	416	995	0	252

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	574	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	4.12	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	2.218	-	-	-
Pot Cap-1 Maneuver	-	-	999	-	0	0
Stage 1	-	-	-	-	0	0
Stage 2	-	-	-	-	0	0
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	999	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.3	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	999	-
HCM Lane V/C Ratio	-	-	-	0.417	-
HCM Control Delay (s)	0	-	-	11.2	-
HCM Lane LOS	A	-	-	B	-
HCM 95th %tile Q(veh)	-	-	-	2.1	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1100	15	140	360	0	250
Future Vol, veh/h	1100	15	140	360	0	250
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	175	250	-	-	0
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1196	16	152	391	0	272

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1212	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	4.12	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	2.218	-	-	-
Pot Cap-1 Maneuver	-	-	576	-	0	0
Stage 1	-	-	-	-	0	0
Stage 2	-	-	-	-	0	0
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	576	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.8	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	576	-
HCM Lane V/C Ratio	-	-	-	0.264	-
HCM Control Delay (s)	0	-	-	13.5	-
HCM Lane LOS	A	-	-	B	-
HCM 95th %tile Q(veh)	-	-	-	1.1	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	535	15	390	950	0	235
Future Vol, veh/h	535	15	390	950	0	235
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	175	250	-	-	0
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	582	16	424	1033	0	255

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	598	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	4.12	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	2.218	-	-	-
Pot Cap-1 Maneuver	-	-	979	-	0	0
Stage 1	-	-	-	-	0	0
Stage 2	-	-	-	-	0	0
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	979	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

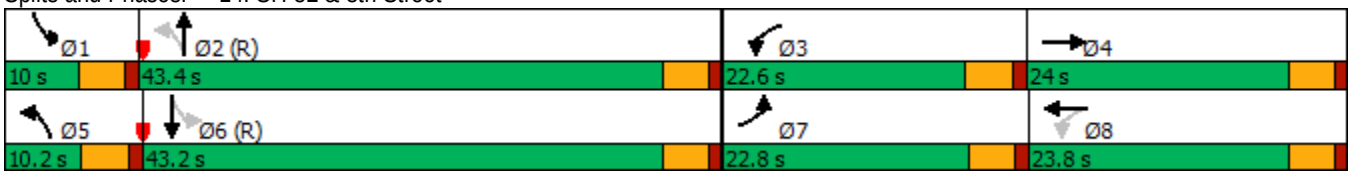
Approach	EB	WB	NB
HCM Control Delay, s	0	3.3	0
HCM LOS			A

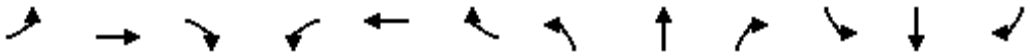
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	979	-
HCM Lane V/C Ratio	-	-	-	0.433	-
HCM Control Delay (s)	0	-	-	11.5	-
HCM Lane LOS	A	-	-	B	-
HCM 95th %tile Q(veh)	-	-	-	2.2	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	198	42	28	33	81	857	60	719
Future Volume (vph)	198	42	28	33	81	857	60	719
Turn Type	Prot	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases			8		2		6	
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5	9.5	22.5
Total Split (s)	22.8	24.0	22.6	23.8	10.2	43.4	10.0	43.2
Total Split (%)	22.8%	24.0%	22.6%	23.8%	10.2%	43.4%	10.0%	43.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	11.2	14.5	13.7	8.0	66.1	60.0	65.2	59.6
Actuated g/C Ratio	0.11	0.14	0.14	0.08	0.66	0.60	0.65	0.60
v/c Ratio	0.53	0.64	0.16	0.47	0.22	0.49	0.17	0.48
Control Delay	46.6	16.0	29.6	29.9	4.3	5.8	8.0	14.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay	46.6	16.0	29.6	29.9	4.3	5.8	8.0	14.2
LOS	D	B	C	C	A	A	A	B
Approach Delay		29.1		29.8		5.7		13.8
Approach LOS		C		C		A		B

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.64	
Intersection Signal Delay: 13.9	Intersection LOS: B
Intersection Capacity Utilization 66.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 14: SH-82 & 8th Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	198	42	224	28	33	48	81	857	120	60	719	197
Future Volume (veh/h)	198	42	224	28	33	48	81	857	120	60	719	197
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.98		0.96	1.00		0.95	0.99		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	204	43	221	29	34	39	84	884	124	62	741	203
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	284	48	245	185	119	136	370	1686	237	443	1466	402
Arrive On Green	0.08	0.19	0.19	0.05	0.15	0.15	0.09	1.00	1.00	0.04	0.54	0.54
Sat Flow, veh/h	3456	256	1317	1781	774	888	1781	3105	436	1781	2720	745
Grp Volume(v), veh/h	204	0	264	29	0	73	84	506	502	62	484	460
Grp Sat Flow(s),veh/h/ln	1728	0	1573	1781	0	1661	1781	1777	1764	1781	1777	1688
Q Serve(g_s), s	5.8	0.0	16.4	1.3	0.0	3.9	2.1	0.0	0.0	1.5	17.3	17.3
Cycle Q Clear(g_c), s	5.8	0.0	16.4	1.3	0.0	3.9	2.1	0.0	0.0	1.5	17.3	17.3
Prop In Lane	1.00		0.84	1.00		0.53	1.00		0.25	1.00		0.44
Lane Grp Cap(c), veh/h	284	0	292	185	0	255	370	965	958	443	958	910
V/C Ratio(X)	0.72	0.00	0.90	0.16	0.00	0.29	0.23	0.52	0.52	0.14	0.51	0.51
Avail Cap(c_a), veh/h	632	0	307	418	0	321	391	965	958	467	958	910
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.87	0.87	0.87	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.8	0.0	39.8	33.1	0.0	37.5	10.3	0.0	0.0	9.1	14.6	14.6
Incr Delay (d2), s/veh	3.4	0.0	27.4	0.4	0.0	0.6	0.3	1.8	1.8	0.1	1.9	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	8.5	0.6	0.0	1.6	0.8	0.5	0.5	0.6	7.1	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.1	0.0	67.2	33.5	0.0	38.1	10.6	1.8	1.8	9.3	16.5	16.6
LnGrp LOS	D	A	E	C	A	D	B	A	A	A	B	B
Approach Vol, veh/h		468			102			1092			1006	
Approach Delay, s/veh		58.9			36.8			2.5			16.1	
Approach LOS		E			D			A			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	58.8	9.5	23.1	9.0	58.4	12.7	19.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	38.9	18.1	19.5	5.7	38.7	18.3	19.3
Max Q Clear Time (g_c+I1), s	3.5	2.0	3.3	18.4	4.1	19.3	7.8	5.9
Green Ext Time (p_c), s	0.0	8.2	0.0	0.2	0.0	6.3	0.5	0.2

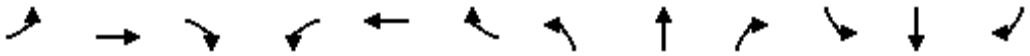
Intersection Summary	
HCM 6th Ctrl Delay	18.8
HCM 6th LOS	B

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	207	27	18	24	124	1780	68	719
Future Volume (vph)	207	27	18	24	124	1780	68	719
Turn Type	Prot	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases			8		2		6	
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5	9.5	22.5
Total Split (s)	23.0	30.0	22.8	29.8	18.0	132.2	15.0	129.2
Total Split (%)	11.5%	15.0%	11.4%	14.9%	9.0%	66.1%	7.5%	64.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	16.9	28.7	22.2	14.9	150.5	141.2	149.8	140.8
Actuated g/C Ratio	0.08	0.14	0.11	0.07	0.75	0.71	0.75	0.70
v/c Ratio	0.76	0.61	0.15	0.81	0.34	0.81	0.51	0.45
Control Delay	106.2	39.1	66.4	66.1	8.9	25.5	30.1	14.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	47.3	0.0	0.0
Total Delay	106.2	39.1	66.4	66.1	8.9	72.8	30.1	14.0
LOS	F	D	E	E	A	E	C	B
Approach Delay		74.2		66.1		68.8		15.0
Approach LOS		E		E		E		B

Intersection Summary	
Cycle Length: 200	
Actuated Cycle Length: 200	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 53.8	Intersection LOS: D
Intersection Capacity Utilization 89.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 14: SH-82 & 8th Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	207	27	162	18	24	128	124	1780	83	68	719	246
Future Volume (veh/h)	207	27	162	18	24	128	124	1780	83	68	719	246
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.98		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	220	29	161	19	26	125	132	1894	88	72	765	262
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	257	38	209	128	29	138	406	2433	112	154	1793	614
Arrive On Green	0.07	0.16	0.16	0.03	0.11	0.11	0.03	0.70	0.70	0.02	0.70	0.70
Sat Flow, veh/h	3456	241	1338	1781	269	1296	1781	3454	159	1781	2574	881
Grp Volume(v), veh/h	220	0	190	19	0	151	132	966	1016	72	528	499
Grp Sat Flow(s),veh/h/ln	1728	0	1579	1781	0	1565	1781	1777	1836	1781	1777	1679
Q Serve(g_s), s	12.6	0.0	23.1	1.9	0.0	19.1	4.3	70.4	73.3	2.4	25.7	25.7
Cycle Q Clear(g_c), s	12.6	0.0	23.1	1.9	0.0	19.1	4.3	70.4	73.3	2.4	25.7	25.7
Prop In Lane	1.00		0.85	1.00		0.83	1.00		0.09	1.00		0.53
Lane Grp Cap(c), veh/h	257	0	246	128	0	167	406	1252	1293	154	1238	1169
V/C Ratio(X)	0.86	0.00	0.77	0.15	0.00	0.90	0.33	0.77	0.79	0.47	0.43	0.43
Avail Cap(c_a), veh/h	320	0	246	247	0	198	468	1252	1293	204	1238	1169
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.56	0.56	0.56	1.00	1.00	1.00
Uniform Delay (d), s/veh	91.5	0.0	81.0	76.6	0.0	88.3	10.1	19.1	19.6	27.3	13.1	13.1
Incr Delay (d2), s/veh	17.1	0.0	13.9	0.5	0.0	35.1	0.3	2.6	2.8	2.2	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	0.0	10.5	0.9	0.0	9.4	1.8	29.6	31.9	1.9	10.9	10.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	108.6	0.0	94.9	77.2	0.0	123.4	10.4	21.8	22.3	29.5	14.2	14.3
LnGrp LOS	F	A	F	E	A	F	B	C	C	C	B	B
Approach Vol, veh/h		410			170			2114			1099	
Approach Delay, s/veh		102.2			118.2			21.3			15.2	
Approach LOS		F			F			C			B	

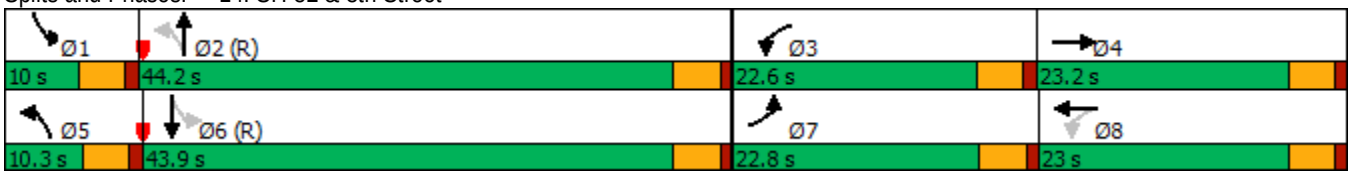
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	145.4	9.5	35.7	11.0	143.8	19.3	25.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	127.7	18.3	25.5	13.5	124.7	18.5	25.3
Max Q Clear Time (g_c+I1), s	4.4	75.3	3.9	25.1	6.3	27.7	14.6	21.1
Green Ext Time (p_c), s	0.1	29.4	0.0	0.0	0.2	9.2	0.3	0.3

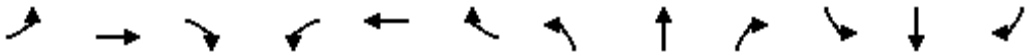
Intersection Summary	
HCM 6th Ctrl Delay	32.7
HCM 6th LOS	C

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	205	45	30	35	85	900	65	760
Future Volume (vph)	205	45	30	35	85	900	65	760
Turn Type	Prot	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases			8		2		6	
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5	9.5	22.5
Total Split (s)	22.8	23.2	22.6	23.0	10.3	44.2	10.0	43.9
Total Split (%)	22.8%	23.2%	22.6%	23.0%	10.3%	44.2%	10.0%	43.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	11.4	14.9	14.0	8.2	65.7	59.5	64.8	59.1
Actuated g/C Ratio	0.11	0.15	0.14	0.08	0.66	0.60	0.65	0.59
v/c Ratio	0.54	0.67	0.17	0.48	0.24	0.52	0.20	0.51
Control Delay	46.6	17.4	29.3	29.5	4.4	5.8	8.5	15.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.6	17.4	29.3	29.5	4.4	5.8	8.5	15.1
LOS	D	B	C	C	A	A	A	B
Approach Delay		29.7		29.5		5.7		14.7
Approach LOS		C		C		A		B

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 14.3	Intersection LOS: B
Intersection Capacity Utilization 69.9%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 14: SH-82 & 8th Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	205	45	235	30	35	50	85	900	130	65	760	205
Future Volume (veh/h)	205	45	235	30	35	50	85	900	130	65	760	205
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.98		0.95	1.00		0.95	0.99		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	211	46	232	31	36	42	88	928	134	67	784	211
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	292	49	246	175	117	136	352	1672	241	429	1468	395
Arrive On Green	0.08	0.19	0.19	0.05	0.15	0.15	0.09	1.00	1.00	0.04	0.54	0.54
Sat Flow, veh/h	3456	261	1314	1781	766	894	1781	3092	446	1781	2732	735
Grp Volume(v), veh/h	211	0	278	31	0	78	88	533	529	67	510	485
Grp Sat Flow(s),veh/h/ln	1728	0	1574	1781	0	1660	1781	1777	1761	1781	1777	1690
Q Serve(g_s), s	6.0	0.0	17.4	1.4	0.0	4.2	2.2	0.0	0.0	1.6	18.6	18.6
Cycle Q Clear(g_c), s	6.0	0.0	17.4	1.4	0.0	4.2	2.2	0.0	0.0	1.6	18.6	18.6
Prop In Lane	1.00		0.83	1.00		0.54	1.00		0.25	1.00		0.43
Lane Grp Cap(c), veh/h	292	0	294	175	0	253	352	961	952	429	955	908
V/C Ratio(X)	0.72	0.00	0.94	0.18	0.00	0.31	0.25	0.55	0.56	0.16	0.53	0.53
Avail Cap(c_a), veh/h	632	0	294	408	0	307	374	961	952	452	955	908
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.83	0.83	0.83	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.6	0.0	40.1	33.4	0.0	37.7	10.6	0.0	0.0	9.2	15.0	15.0
Incr Delay (d2), s/veh	3.4	0.0	37.7	0.5	0.0	0.7	0.3	1.9	1.9	0.2	2.1	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	9.7	0.6	0.0	1.7	0.8	0.5	0.5	0.6	7.7	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.0	0.0	77.9	33.8	0.0	38.4	11.0	1.9	1.9	9.4	17.1	17.3
LnGrp LOS	D	A	E	C	A	D	B	A	A	A	B	B
Approach Vol, veh/h		489			109			1150			1062	
Approach Delay, s/veh		65.0			37.1			2.6			16.7	
Approach LOS		E			D			A			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	58.6	9.5	23.2	9.1	58.2	12.9	19.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	39.7	18.1	18.7	5.8	39.4	18.3	18.5
Max Q Clear Time (g_c+I1), s	3.6	2.0	3.4	19.4	4.2	20.6	8.0	6.2
Green Ext Time (p_c), s	0.0	8.9	0.0	0.0	0.0	6.6	0.5	0.2

Intersection Summary	
HCM 6th Ctrl Delay	20.1
HCM 6th LOS	C

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	215	30	20	25	130	1875	75	760
Future Volume (vph)	215	30	20	25	130	1875	75	760
Turn Type	Prot	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases			8		2		6	
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	9.5	22.5	9.5	22.5
Total Split (s)	23.2	29.0	22.6	28.4	18.2	133.9	14.5	130.2
Total Split (%)	11.6%	14.5%	11.3%	14.2%	9.1%	67.0%	7.3%	65.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	17.3	31.3	24.6	17.2	148.0	138.2	147.0	137.7
Actuated g/C Ratio	0.09	0.16	0.12	0.09	0.74	0.69	0.74	0.69
v/c Ratio	0.77	0.62	0.16	0.81	0.38	0.87	0.67	0.48
Control Delay	106.9	43.6	64.9	70.3	10.2	30.7	68.2	15.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	46.7	0.0	0.0
Total Delay	106.9	43.6	64.9	70.3	10.2	77.4	68.2	15.7
LOS	F	D	E	E	B	E	E	B
Approach Delay		76.4		69.7		73.2		19.3
Approach LOS		E		E		E		B

Intersection Summary	
Cycle Length: 200	
Actuated Cycle Length: 200	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 57.9	Intersection LOS: E
Intersection Capacity Utilization 92.8%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 14: SH-82 & 8th Street



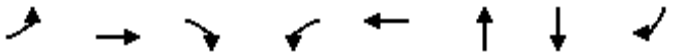
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	215	30	170	20	25	135	130	1875	90	75	760	255
Future Volume (veh/h)	215	30	170	20	25	135	130	1875	90	75	760	255
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.99		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	229	32	170	21	27	133	138	1995	96	80	809	271
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	265	41	218	128	30	145	382	2402	114	133	1781	596
Arrive On Green	0.08	0.16	0.16	0.03	0.11	0.11	0.03	0.70	0.70	0.02	0.69	0.69
Sat Flow, veh/h	3456	251	1332	1781	264	1302	1781	3447	164	1781	2591	867
Grp Volume(v), veh/h	229	0	202	21	0	160	138	1019	1072	80	555	525
Grp Sat Flow(s),veh/h/ln	1728	0	1583	1781	0	1567	1781	1777	1835	1781	1777	1681
Q Serve(g_s), s	13.1	0.0	24.5	2.1	0.0	20.2	4.7	81.5	85.3	2.7	28.4	28.4
Cycle Q Clear(g_c), s	13.1	0.0	24.5	2.1	0.0	20.2	4.7	81.5	85.3	2.7	28.4	28.4
Prop In Lane	1.00		0.84	1.00		0.83	1.00		0.09	1.00		0.52
Lane Grp Cap(c), veh/h	265	0	259	128	0	175	382	1238	1278	133	1221	1155
V/C Ratio(X)	0.86	0.00	0.78	0.16	0.00	0.91	0.36	0.82	0.84	0.60	0.45	0.45
Avail Cap(c_a), veh/h	323	0	259	245	0	187	443	1238	1278	178	1221	1155
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.46	0.46	0.46	1.00	1.00	1.00
Uniform Delay (d), s/veh	91.3	0.0	80.2	75.9	0.0	87.9	11.2	21.5	22.1	37.9	14.2	14.2
Incr Delay (d2), s/veh	18.0	0.0	14.2	0.6	0.0	41.0	0.3	3.0	3.2	4.3	1.2	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	0.0	11.1	1.0	0.0	10.3	1.9	34.4	37.2	2.9	12.1	11.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	109.3	0.0	94.4	76.5	0.0	128.9	11.4	24.5	25.3	42.2	15.4	15.5
LnGrp LOS	F	A	F	E	A	F	B	C	C	D	B	B
Approach Vol, veh/h		431			181			2229			1160	
Approach Delay, s/veh		102.3			122.8			24.1			17.3	
Approach LOS		F			F			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	143.9	9.5	37.2	11.4	142.0	19.9	26.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.0	129.4	18.1	24.5	13.7	125.7	18.7	23.9
Max Q Clear Time (g_c+I1), s	4.7	87.3	4.1	26.5	6.7	30.4	15.1	22.2
Green Ext Time (p_c), s	0.1	28.3	0.0	0.0	0.2	10.0	0.3	0.1

Intersection Summary	
HCM 6th Ctrl Delay	35.0
HCM 6th LOS	D

APPENDIX D

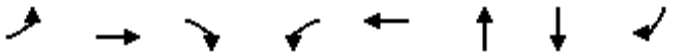
Queue Analysis Worksheets



Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	48	1127	358	17	383	258	18	15
v/c Ratio	0.07	0.87	0.32	0.15	0.30	0.90	0.06	0.04
Control Delay	5.1	20.7	5.1	8.6	6.2	65.6	28.6	11.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.1	20.7	5.1	8.6	6.2	65.6	28.6	11.9
Queue Length 50th (ft)	8	447	53	3	75	132	8	0
Queue Length 95th (ft)	19	#718	88	12	111	#259	26	14
Internal Link Dist (ft)		978			3232	239	207	
Turn Bay Length (ft)	100		25	100				
Base Capacity (vph)	657	1293	1123	115	1288	301	338	356
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.87	0.32	0.15	0.30	0.86	0.05	0.04

Intersection Summary

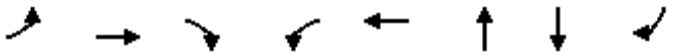
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	46	497	302	10	999	310	38	73
v/c Ratio	0.35	0.42	0.29	0.02	0.85	0.88	0.10	0.16
Control Delay	17.5	9.7	5.2	6.9	22.1	56.0	24.8	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.5	9.7	5.2	6.9	22.1	56.0	24.8	7.2
Queue Length 50th (ft)	12	134	39	2	428	155	16	0
Queue Length 95th (ft)	41	197	76	8	#729	#290	39	30
Internal Link Dist (ft)		978			3232	239	207	
Turn Bay Length (ft)	100		25	100				
Base Capacity (vph)	133	1186	1029	492	1181	393	428	503
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.42	0.29	0.02	0.85	0.79	0.09	0.15

Intersection Summary

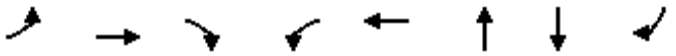
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	49	1136	348	22	386	255	21	16
v/c Ratio	0.07	0.87	0.31	0.18	0.30	0.92	0.07	0.05
Control Delay	4.8	19.9	4.7	9.2	5.8	71.4	29.5	12.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.8	19.9	4.7	9.2	5.8	71.4	29.5	12.6
Queue Length 50th (ft)	8	435	48	4	72	132	10	0
Queue Length 95th (ft)	19	#826	84	15	110	#275	29	16
Internal Link Dist (ft)		978			3232	239	207	
Turn Bay Length (ft)	100		25	100				
Base Capacity (vph)	665	1308	1135	119	1304	285	328	337
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.87	0.31	0.18	0.30	0.89	0.06	0.05

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	49	505	299	11	1016	310	38	76
v/c Ratio	0.39	0.42	0.29	0.02	0.85	0.89	0.10	0.17
Control Delay	19.6	9.5	4.9	6.5	22.2	59.0	25.5	7.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.6	9.5	4.9	6.5	22.2	59.0	25.5	7.4
Queue Length 50th (ft)	12	132	37	2	428	157	16	0
Queue Length 95th (ft)	48	197	73	8	#754	#304	41	32
Internal Link Dist (ft)		978			3232	239	207	
Turn Bay Length (ft)	100		25	100				
Base Capacity (vph)	126	1196	1037	491	1191	375	407	484
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.42	0.29	0.02	0.85	0.83	0.09	0.16

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	989	155	49	318	100	98
v/c Ratio	0.91	0.16	0.24	0.26	0.24	0.22
Control Delay	28.9	3.4	7.2	6.0	31.1	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.9	3.4	7.2	6.0	31.1	8.4
Queue Length 50th (ft)	447	10	7	56	49	0
Queue Length 95th (ft)	#722	33	17	85	92	38
Internal Link Dist (ft)	3232			883	389	
Turn Bay Length (ft)		150	200			
Base Capacity (vph)	1302	1114	201	1501	416	447
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.76	0.14	0.24	0.21	0.24	0.22

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	362	122	85	665	276	85
v/c Ratio	0.62	0.21	0.24	0.81	0.37	0.12
Control Delay	24.8	4.5	11.5	24.0	17.4	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.8	4.5	11.5	24.0	17.4	4.9
Queue Length 50th (ft)	130	0	19	219	74	0
Queue Length 95th (ft)	206	30	39	336	172	28
Internal Link Dist (ft)	3232			883	389	
Turn Bay Length (ft)		150	200			
Base Capacity (vph)	1208	1046	364	1520	742	713
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.12	0.23	0.44	0.37	0.12

Intersection Summary



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	995	158	49	321	103	103
v/c Ratio	0.91	0.17	0.25	0.27	0.25	0.23
Control Delay	29.2	3.4	7.3	6.0	31.3	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.2	3.4	7.3	6.0	31.3	8.3
Queue Length 50th (ft)	453	10	7	57	50	0
Queue Length 95th (ft)	#762	35	17	88	96	41
Internal Link Dist (ft)	3232			883	389	
Turn Bay Length (ft)		150	200			
Base Capacity (vph)	1295	1109	199	1497	414	449
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.14	0.25	0.21	0.25	0.23

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	375	130	92	690	288	87
v/c Ratio	0.61	0.22	0.25	0.81	0.40	0.12
Control Delay	24.0	4.1	11.4	23.9	18.8	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.0	4.1	11.4	23.9	18.8	5.1
Queue Length 50th (ft)	135	0	21	232	80	0
Queue Length 95th (ft)	212	31	41	352	191	30
Internal Link Dist (ft)	3232			883	389	
Turn Bay Length (ft)		150	200			
Base Capacity (vph)	1177	1026	369	1482	724	699
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.13	0.25	0.47	0.40	0.12

Intersection Summary



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	51	282	277	145	785	516
v/c Ratio	0.26	0.18	0.27	0.15	0.83	0.32
Control Delay	35.3	0.2	10.9	2.5	14.1	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.3	0.2	10.9	2.5	14.1	3.0
Queue Length 50th (ft)	23	0	71	0	114	58
Queue Length 95th (ft)	54	0	121	25	#279	102
Internal Link Dist (ft)	1387		293			295
Turn Bay Length (ft)	125			125	125	
Base Capacity (vph)	609	1583	1026	937	950	1597
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.18	0.27	0.15	0.83	0.32

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	60	703	592	72	440	347
v/c Ratio	0.30	0.44	0.58	0.08	0.65	0.22
Control Delay	35.8	0.9	15.4	5.3	9.0	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.8	0.9	15.4	5.3	9.0	2.6
Queue Length 50th (ft)	28	0	193	5	49	36
Queue Length 95th (ft)	63	0	320	26	139	70
Internal Link Dist (ft)	1387		293			295
Turn Bay Length (ft)	125			125	125	
Base Capacity (vph)	607	1583	1022	890	678	1591
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.44	0.58	0.08	0.65	0.22

Intersection Summary



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	54	277	277	147	772	511
v/c Ratio	0.28	0.17	0.27	0.16	0.81	0.32
Control Delay	35.5	0.2	11.0	2.5	13.3	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.5	0.2	11.0	2.5	13.3	3.0
Queue Length 50th (ft)	25	0	72	0	111	57
Queue Length 95th (ft)	58	0	127	27	#310	108
Internal Link Dist (ft)	1387		293			295
Turn Bay Length (ft)	125			125	125	
Base Capacity (vph)	608	1583	1025	937	949	1595
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.17	0.27	0.16	0.81	0.32

Intersection Summary

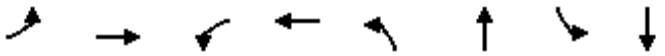
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	65	731	618	75	457	366
v/c Ratio	0.33	0.46	0.63	0.09	0.73	0.24
Control Delay	37.0	1.0	17.5	5.5	14.5	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.0	1.0	17.5	5.5	14.5	3.1
Queue Length 50th (ft)	30	0	207	6	52	39
Queue Length 95th (ft)	67	0	343	27	#212	75
Internal Link Dist (ft)	1387		293			295
Turn Bay Length (ft)	125			125	125	
Base Capacity (vph)	584	1583	984	859	624	1505
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.46	0.63	0.09	0.73	0.24

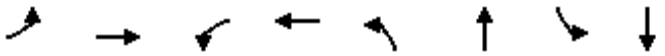
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



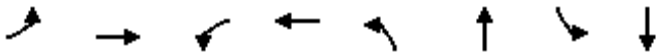
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	204	274	29	83	84	1008	62	944
v/c Ratio	0.53	0.64	0.16	0.47	0.22	0.49	0.17	0.48
Control Delay	46.6	16.0	29.6	29.9	4.3	5.8	8.0	14.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay	46.6	16.0	29.6	29.9	4.3	5.8	8.0	14.2
Queue Length 50th (ft)	64	25	15	21	6	139	12	173
Queue Length 95th (ft)	97	101	34	65	13	57	32	283
Internal Link Dist (ft)		186		437		379		1390
Turn Bay Length (ft)	75		75		175		100	
Base Capacity (vph)	628	496	371	357	389	2050	359	1981
Starvation Cap Reductn	0	0	0	0	0	123	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.55	0.08	0.23	0.22	0.52	0.17	0.48

Intersection Summary



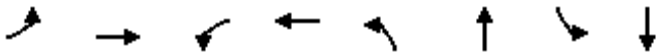
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	220	201	19	162	132	1982	72	1027
v/c Ratio	0.63	0.62	0.15	0.79	0.34	0.81	0.51	0.45
Control Delay	78.5	39.3	66.7	61.7	8.8	25.3	29.9	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	47.3	0.0	0.0
Total Delay	78.5	39.3	66.7	61.7	8.8	72.6	29.9	13.9
Queue Length 50th (ft)	132	101	21	85	39	894	21	278
Queue Length 95th (ft)	168	194	46	172	74	1229	79	406
Internal Link Dist (ft)		186		437		379		1390
Turn Bay Length (ft)	75		75		175		100	
Base Capacity (vph)	375	329	220	280	428	2457	157	2279
Starvation Cap Reductn	0	0	0	0	0	747	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.61	0.09	0.58	0.31	1.16	0.46	0.45

Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	211	288	31	88	88	1062	67	995
v/c Ratio	0.54	0.67	0.17	0.48	0.24	0.52	0.20	0.51
Control Delay	46.6	17.4	29.3	29.5	4.4	5.8	8.5	15.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.6	17.4	29.3	29.5	4.4	5.8	8.5	15.1
Queue Length 50th (ft)	66	32	15	22	6	63	13	190
Queue Length 95th (ft)	100	112	35	67	13	61	35	312
Internal Link Dist (ft)		186		437		379		1390
Turn Bay Length (ft)	75		75		175		100	
Base Capacity (vph)	628	489	373	347	367	2031	337	1965
Starvation Cap Reductn	0	0	0	0	0	81	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.59	0.08	0.25	0.24	0.54	0.20	0.51

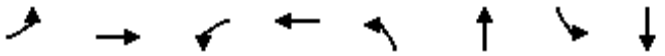
Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	229	213	21	171	138	2091	80	1080
v/c Ratio	0.77	0.62	0.16	0.81	0.38	0.87	0.67	0.48
Control Delay	106.9	43.6	64.9	70.3	10.2	30.7	68.2	15.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	46.7	0.0	0.0
Total Delay	106.9	43.6	64.9	70.3	10.2	77.4	68.2	15.7
Queue Length 50th (ft)	154	123	23	112	46	1124	54	330
Queue Length 95th (ft)	207	224	50	204	78	1362	#134	438
Internal Link Dist (ft)		186		437		379		1390
Turn Bay Length (ft)	75		75		175		100	
Base Capacity (vph)	320	341	229	260	396	2401	129	2228
Starvation Cap Reductn	0	0	0	0	0	665	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.72	0.62	0.09	0.66	0.35	1.20	0.62	0.48

Intersection Summary

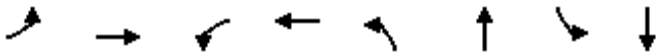
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	36	90	35	63	97	1090	20	999
v/c Ratio	0.26	0.47	0.26	0.39	0.24	0.43	0.05	0.43
Control Delay	47.1	22.4	47.6	26.2	6.5	9.6	4.7	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	47.1	22.4	47.6	26.2	6.5	9.6	4.7	7.2
Queue Length 50th (ft)	22	10	21	12	16	128	2	90
Queue Length 95th (ft)	52	56	51	51	39	293	m7	137
Internal Link Dist (ft)		190		182		387		379
Turn Bay Length (ft)								
Base Capacity (vph)	320	344	320	327	426	2511	379	2312
Starvation Cap Reductn	0	0	0	0	0	0	0	196
Spillback Cap Reductn	0	0	0	0	0	25	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.26	0.11	0.19	0.23	0.44	0.05	0.47

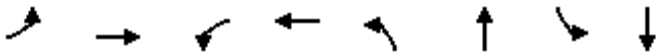
Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	46	70	23	115	47	1889	32	958
v/c Ratio	0.45	0.50	0.24	0.66	0.11	0.70	0.19	0.36
Control Delay	90.6	35.9	81.6	37.8	4.5	13.9	6.7	8.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
Total Delay	90.6	35.9	81.6	37.8	4.5	13.9	6.7	9.3
Queue Length 50th (ft)	51	15	25	21	8	525	6	171
Queue Length 95th (ft)	96	70	57	89	23	797	18	271
Internal Link Dist (ft)		190		182		387		379
Turn Bay Length (ft)								
Base Capacity (vph)	190	215	192	254	436	2682	172	2650
Starvation Cap Reductn	0	0	0	0	0	0	0	1363
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.33	0.12	0.45	0.11	0.70	0.19	0.74

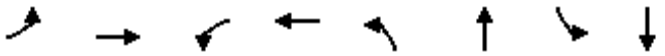
Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	41	102	41	66	102	1143	26	1051
v/c Ratio	0.29	0.50	0.30	0.39	0.27	0.46	0.07	0.46
Control Delay	47.3	22.8	48.2	25.8	7.0	10.3	5.3	7.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	47.3	22.8	48.2	25.8	7.0	10.3	5.3	7.7
Queue Length 50th (ft)	25	12	25	12	17	141	3	94
Queue Length 95th (ft)	57	61	58	52	42	322	m9	153
Internal Link Dist (ft)		190		182		387		379
Turn Bay Length (ft)								
Base Capacity (vph)	320	352	320	329	393	2493	357	2288
Starvation Cap Reductn	0	0	0	0	0	0	0	188
Spillback Cap Reductn	0	0	0	0	0	39	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.29	0.13	0.20	0.26	0.47	0.07	0.50

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



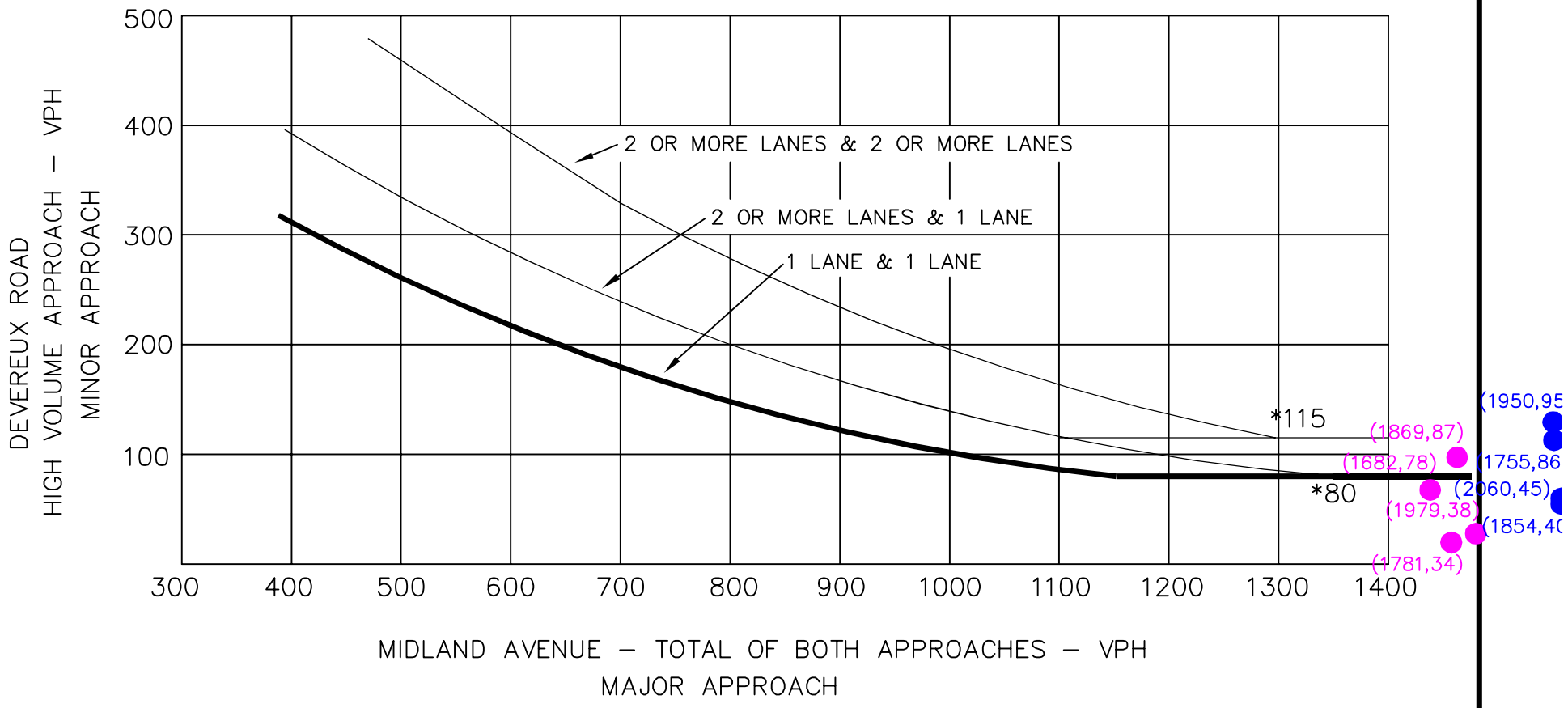
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	52	77	26	124	52	1989	36	1005
v/c Ratio	0.49	0.51	0.27	0.68	0.12	0.75	0.24	0.38
Control Delay	91.2	34.6	82.0	37.7	4.9	16.0	8.3	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Total Delay	91.2	34.6	82.0	37.7	4.9	16.0	8.3	10.1
Queue Length 50th (ft)	57	16	29	23	10	606	7	188
Queue Length 95th (ft)	106	73	63	94	26	936	20	299
Internal Link Dist (ft)		190		182		387		379
Turn Bay Length (ft)								
Base Capacity (vph)	190	220	192	260	422	2658	148	2628
Starvation Cap Reductn	0	0	0	0	0	0	0	1319
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.35	0.14	0.48	0.12	0.75	0.24	0.77

Intersection Summary

APPENDIX E

Signal Warrant Analysis Worksheets

WARRANT 2 - FOUR HOUR VEHICULAR VOLUME



* NOTE: 115 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 80 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

SIGNAL WARRANT ANALYSIS
MIDLAND AVENUE & DEVEREUX ROAD
FOUR HOUR VOLUME WARRANT

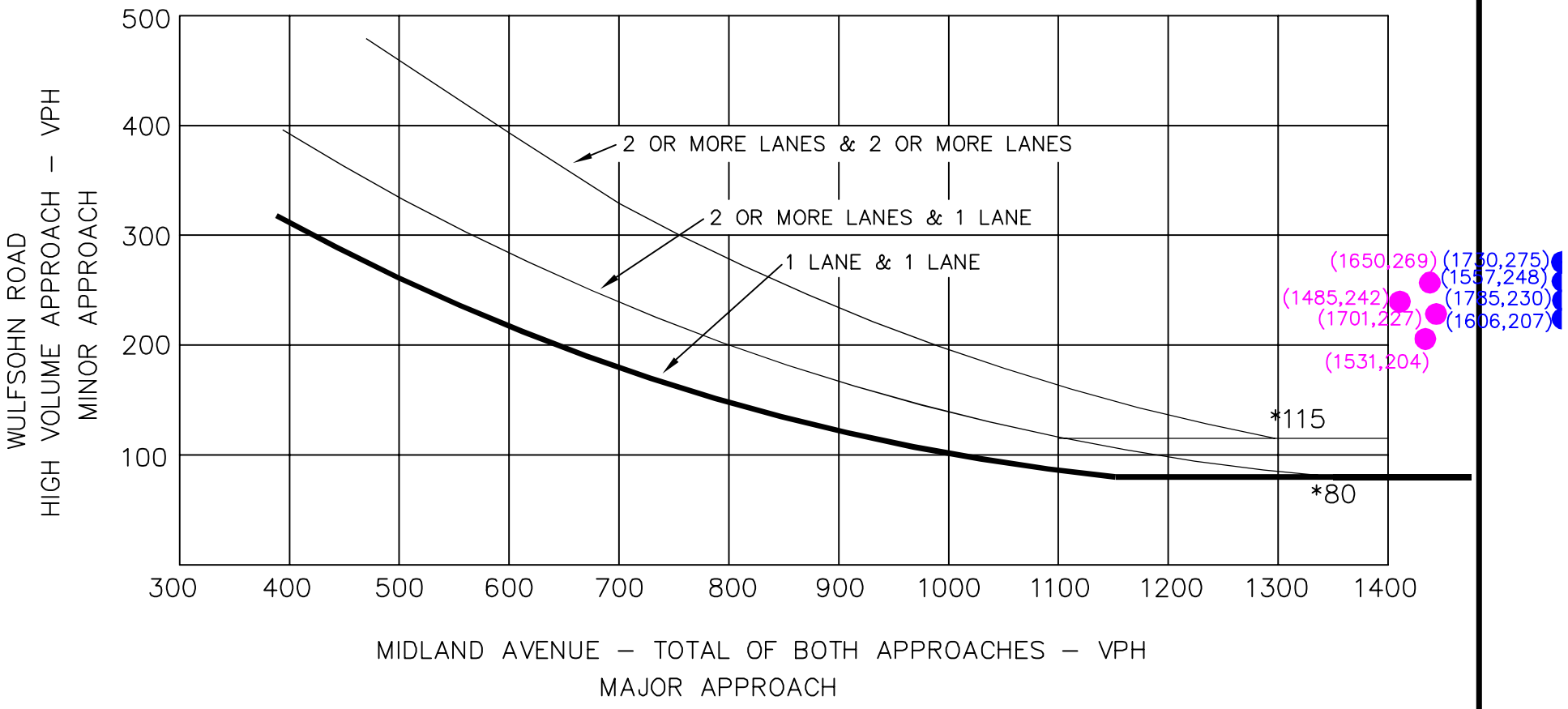
● 2030 TRAFFIC DATA POINT
● 2040 TRAFFIC DATA POINT

FIGURE A

Source: Manual of Uniform Traffic Control Devices 2009

Kimley»Horn

WARRANT 2 - FOUR HOUR VEHICULAR VOLUME



* NOTE: 115 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 80 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

SIGNAL WARRANT ANALYSIS
MIDLAND AVENUE & WULFSOHN ROAD
FOUR HOUR VOLUME WARRANT

● 2030 TRAFFIC DATA POINT
● 2040 TRAFFIC DATA POINT

FIGURE B

Source: Manual of Uniform Traffic Control Devices 2009

Kimley»Horn

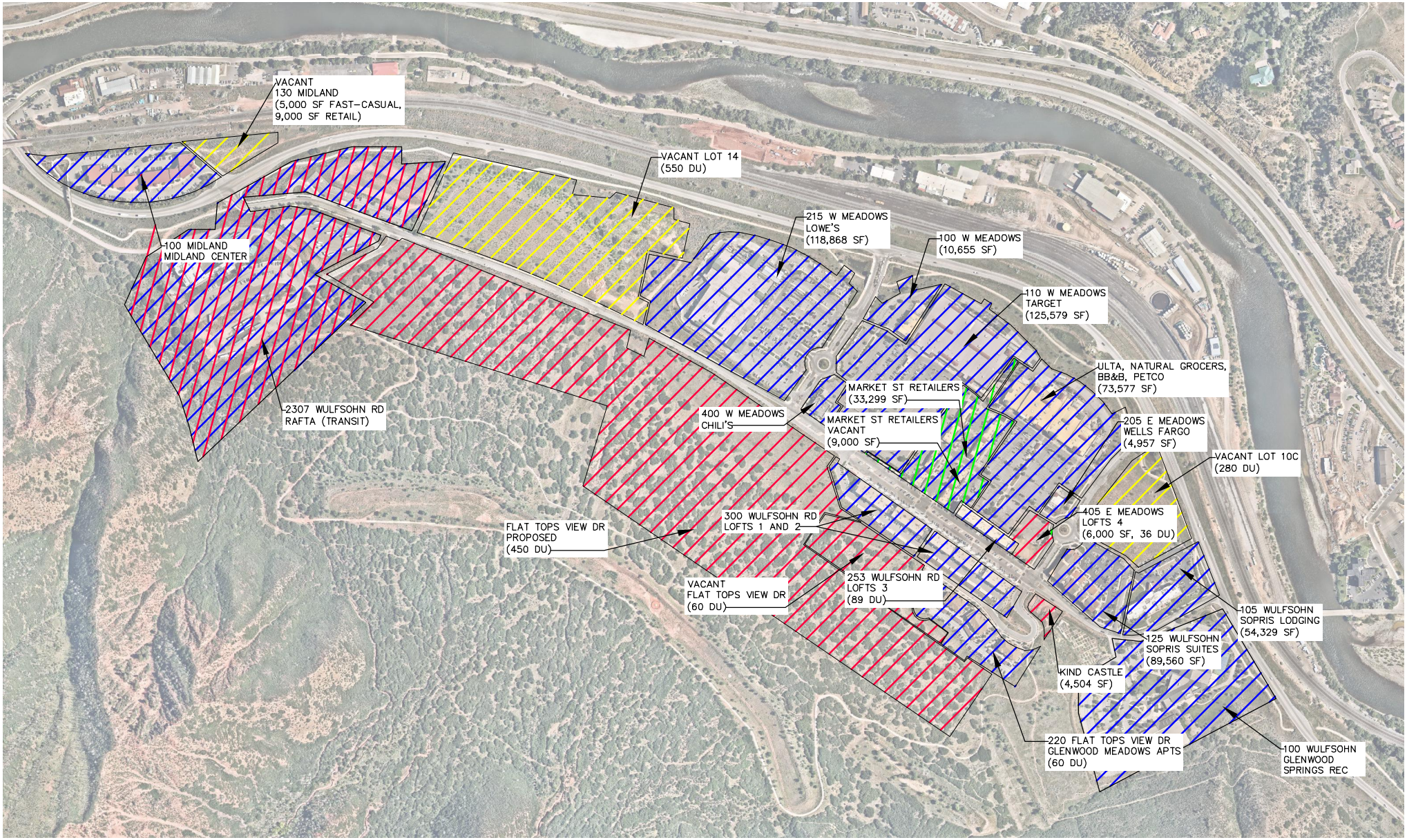
APPENDIX F

Land Use Development Plan

MEADOWS GLENWOOD SPRINGS DEVELOPMENT

Parcel No.	Address	Built/Proposed/Vacant	Building Name	Use Type	Vacant (Y/N)
	100 Midland	Built	Midland Center	Retail	N
	130 Midland	Vacant	-	Restaurant/Retail	Y
	RAFTA	Built/Proposed Expansion	RAFTA	Transit	N
	Lot 14	Vacant	-	Residential	
	215 W Meadows	Built	Lowe's	Retail	N
	100 W Meadows	Built/Vacant	Big 5	Retail	Y
	110 W Meadows	Built	Target	Retail	N
	400 W Meadows	Built	Chili's	Restaurant	N
	Market Street	Built/Some Vacant	Market Street Retailers	Retail	N
	E Meadows	Built	Ulta/ Natural Grocers, BB&B, Petco	Retail	N
	205 E Meadows	Built	Wells Fargo	Bank	N
	405 E Meadows	Proposed	Red Montain Lofts 4	Residential/Retail	Y
	253 Wulfsohn	Built	Red Montain Lofts 3	Residential	N
	125 Wulfsohn	Built	Sopris Suites (Residence Inn)	Hotel	N
	105 Wulfsohn	Built	Sopris Lodging (Courtyard)	Hotel	N
	300 Wulfsohn	Built	Red Mountain Lofts 1 & 2	Residential	N
	100 Wulfsohn	Built	Glendwood Springs Rec Center	Other	
	Flat Tops View Dr	Vacant	-	Residential	Y
	220 Flat Tops View Dr	Built	Glenwood Green Apts	Residential	N
	100 Wulfsohn	Built	Glendwood Springs Rec Center	Other	N
	8th & Cowdin	Proposed	Affodable Housing	Residential	Y

*For Market Street Retailers please note the number of total stores.

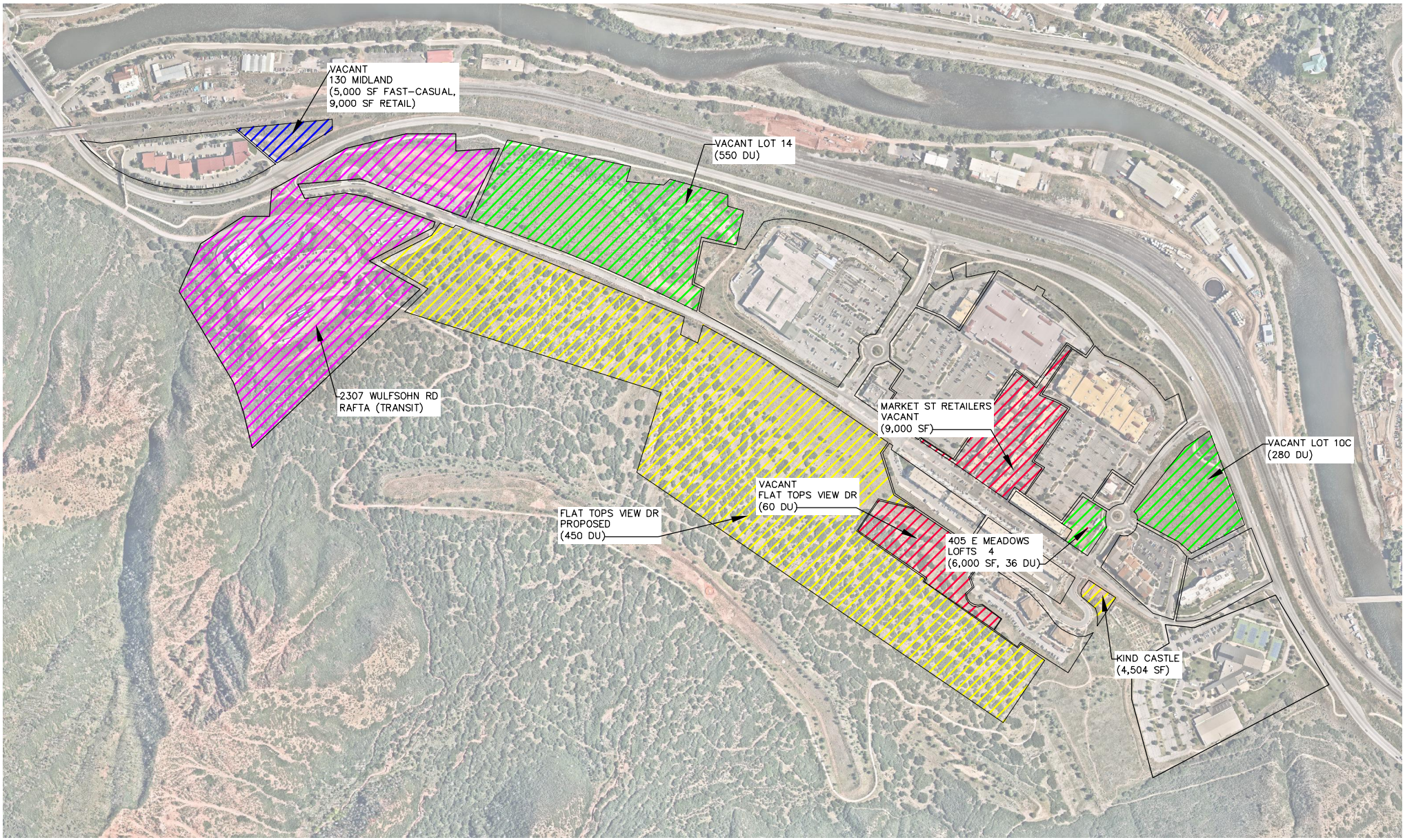


EXISTING OCCUPIED BUILDINGS

EXISTING VACANT BUILDINGS

PLANNED/APPROVED USES

VACANT LAND WITH PROPOSED USES


VACANT
130 MIDLAND
(5,000 SF FAST-CASUAL,
9,000 SF RETAIL)
VACANT LOT 14
(550 DU)
2307 WULFSOHN RD
RAFTA (TRANSIT)
MARKET ST RETAILERS
VACANT
(9,000 SF)
VACANT LOT 10C
(280 DU)
VACANT
FLAT TOPS VIEW DR
(60 DU)
FLAT TOPS VIEW DR
PROPOSED
(450 DU)
405 E MEADOWS
LOFTS 4
(6,000 SF, 36 DU)
KIND CASTLE
(4,504 SF)
LEGEND
Zone 1
Zone 2
Zone 3
Zone 4
Zone 5

APPENDIX G

Comparison of Approved vs Proposed Uses

Previously Approved vs Current/Proposed

Address	Previous;y Approved		Current/Proposed
	Land Use/Intensity	Report Date	Land Use/Intensity
130 Midland (Midland Center)	unknown	unknown	5,000 SF Fast-Casual Restaurant 9,000 SF Retail
RAFTA	Expansion	Regional Transit Center (RTC) Traffic Analysis_2018-03-09	Expansion
Market Street	Part of Phase I Retail	Traffic Analysis for the Phase I Retail Portion of the Glenwood Springs Project_2004-06-06	9,000 SF Retail (Vacant)
405 E Meadows	5,950 sf Fast-Casual Restaurant 36 DU	Lofts at Red Mountain Phase IV TIS_2021-02-25	5,950 sf Fast-Casual Restaurant 36 DU
Lot 14	15,000 SF Retail 15,000 SF Office 15,000 SF MOB	Wulfsohn Road Commercial Building TIS_2018-12-21	550 DU
Flat Tops View Dr	475 DU	Glenwood Meadows Multifamily Phase I TIS_2020-12-02	510 DU
Lot 10C/Pad #3	68,320 SF Department Store 20,050 SF General Retail 6,000 SF Restaurant	Traffic Analysis for the Glenwood Meadows Phase II Project_2007-08-08	280 DU
150 Wulfsohn	2,400 SF Dispensary	The King Castle Dispensary Glenwood Meadow Traffic Assessment_2020-09-15	4,504 SF Dispensary

Previously Approved Uses

Address	Land Use	Intensity	Unit	Vehicle Trips						
				Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
130 Midland	Unknown									
Lot 14	Retail	15,000	SF	570	10	5	15	25	35	60
	Office	15,000	SF	150	15	5	20	5	15	20
	MOB	15,000	SF	520	35	5	40	15	35	50
Lot 10C	Department Store	68,320	SF	1,202	11	11	22	70	34	104
	Retail	20,050	SF	652	5	3	8	18	24	42
	High Turnover	6,000	SF	626	23	21	44	31	21	52
405 E Meadows	Lofts at Red Mountain 4			2,072	11	14	25	56	45	101
Market St Retailers	Retail	9,000	SF	490	13	8	21	29	30	59
Flat Tops View Dr	Mid-Rise	300	DU	1,632	28	80	108	81	51	132
	Townhomes	175	DU	952	14	47	61	47	30	77
150 Wulfsohn	Marijuana Dispensary	2,400	SF	606	0	0	0	36	36	72
2307 Wulfsohn Rd	RFTA Expansion			1,200	170	32	202	26	79	105
Total Approved Trips				10,672	335	231	566	439	435	874

Note: The trip generation rates/equations utilized the most recent trip generation manual at the time of completing the traffic letter/study

Proposed Uses

Address	Land Use	Intensity	Unit	Vehicle Trips						
				Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
130 Midland	Retail	9,000	SF	490	13	8	21	29	30	59
	Fast Causal	5,000	SF	486	4	3	7	35	28	63
Lot 14	Mid-Rise	550	DU	2,498	47	157	204	131	84	215
Lot 10C	Mid-Rise	280	DU	1,272	24	80	104	66	43	109
405 E Meadows	Lofts at Red Mountain 4[1]			2,072	11	14	25	56	45	101
Market St Retailers	Retail	9,000	SF	490	13	8	21	29	30	59
Flat Tops View Dr	Mid-Rise	510	DU	2,316	43	146	189	121	78	199
150 Wulfsohn	Marijuana Dispensary	4,504	SF	950	24	23	57	43	42	85
2307 Wulfsohn Rd	RFTA Expansion[1]			1,200	170	32	202	26	79	105
Total Proposed Trips				11,774	349	471	830	536	459	995

[1]Trip generation taken directly from traffic impact study.

Lot Comparison

Address	Land Use	Intensity	Unit	Vehicle Trips						
				Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
130 Midland	Unknown									
	Retail	9,000	SF	490	13	8	21	29	30	59
	Fast Causal	5,000	SF	486	4	3	7	35	28	63
Trip Differential of 130 Midland				976	17	11	28	64	58	122
Lot 14	Retail	15,000	SF	570	10	5	15	25	35	60
	Office	15,000	SF	150	15	5	20	5	15	20
	MOB	15,000	SF	520	35	5	40	15	35	50
	Mid-Rise	550	DU	2,498	47	157	204	131	84	215
Trip Differential of Lot 14				1,258	-13	142	129	86	-1	85
Lot 10C	Department Store	68,320	SF	1,202	11	11	22	70	34	104
	Retail	20,050	SF	652	5	3	8	18	24	42
	High Turnover	6,000	SF	626	23	21	44	31	21	52
	Mid-Rise	280	DU	1,272	24	80	104	66	43	109
Trip Differential of Lot 10C				-1,208	-15	45	30	-53	-36	-89
405 E Meadows	Lofts at Red Mountain 4			2,072	11	14	25	56	45	101
	Lofts at Red Mountain 4			2,072	11	14	25	56	45	101
Trip Differential of Lot 10C				0	0	0	0	0	0	0
Market St Retailers	Retail	9,000	SF	490	13	8	21	29	30	59
	Retail	9,000	SF	490	13	8	21	29	30	59
Trip Differential of Market St Retailers				0	0	0	0	0	0	0
Flat Tops View Dr	Mid-Rise	300	DU	1,632	28	80	108	81	51	132
	Townhomes	175	DU	952	14	47	61	47	30	77
	Mid-Rise	510	DU	2,316	43	146	189	121	78	199
Trip Differential of Flat Top View Dr				-268	1	19	20	-7	-3	-10
150 Wulfsohn	Marijuana Dispensary	2,400	SF	606	0	0	0	36	36	72
	Marijuana Dispensary	4,504	SF	950	24	23	57	43	42	85
Trip Differential of 150 Wulfsohn				344	24	23	57	7	6	13
2307 Wulfsohn Rd	RFTA Expansion			1,200	170	32	202	26	79	105
	RFTA Expansion			1,200	170	32	202	26	79	105
Trip Differential of 2307 Wulfsohn Rd				0	0	0	0	0	0	0
Total Trip Differential (Proposed-Approved)				1,102	14	240	264	97	24	121

City Council
STAFF REPORT
City of Glenwood Springs
April 20, 2023

Agenda Item: Resolution 2023-12; Setting the June 13, 2023 Special Election

Action Requested: Officially set the special election date for June 13, 2023.

Department: City Clerk

Presented By:

Strategic Goals: Provide Efficient and Responsive City Government

Background Info: The Charter states that if there is not an election within 150 days of the first presentation of a petition to Council, a special election must be held within 90 days of that meeting. Council has 30 days from first presentation to decide whether to adopt the initiated ordinance or submit it to the electors. At the first presentation, Council moved to continue the item to the next regularly scheduled meeting to gather more information. At the April 6, 2023 City Council meeting, City Council voted 5-2 in favor of holding a special election to determine whether retail and medical marijuana establishments should extend their hours of operation from the current 7pm until the proposed 10pm. By Charter, the special election must now be held within 69 days of this vote. The best determined outcome was on Tuesday, June 13, which was 68 days away.

Issues: The special election is 54 days from this council meeting and ballots will be sent to UOCAVA voters in 8 days.

Fiscal Impact:

Legal Review:

Staff Recommendation:

RESOLUTION 2023-12

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF GLENWOOD SPRINGS, COLORADO, CALLING A SPECIAL ELECTION TO OCCUR ON JUNE 13, 2023 AND REFERRING TO THE REGISTERED ELECTORS OF THE CITY OF GLENWOOD SPRINGS A QUESTION WHETHER TO ADOPT ORDINANCE 2023-06, SERIES OF 2023, AN ORDINANCE OF THE CITY OF GLENWOOD SPRINGS INITIATED BY CITIZEN PETITION PURSUANT TO GLENWOOD SPRINGS MUNICIPAL CHARTER ARTICLE V TO AMEND GLENWOOD SPRINGS MUNICIPAL CODE SECTIONS 050.080.080 AND 050.090.090 EXPANDING RETAIL AND MEDICAL MARIJUANA SALES HOURS FROM 7:00 P.M. TO 10:00 P.M.

WHEREAS, the City of Glenwood Springs ("Glenwood Springs" or the "City") is a home-rule municipality organized under Article XX of the Colorado Constitution and with the authority of the Glenwood Springs Home Rule Charter (the "Charter"); and

WHEREAS, pursuant to Municipal Code sections 050.080.080 and 050.090.090 the current operating hours for retail and medical marijuana establishments are 8:00am to 7:00pm.

WHEREAS, Section 5 of the Charter states the requirements for a citizen petition.

WHEREAS, the initiated petition collected the 299 required signatures within the allotted 15 days and the required schedule was followed according to the Charter.

WHEREAS, Section 2.4 of the Charter states that any special election shall be called by resolution or ordinance and set forth the purpose of such election.

WHEREAS, City Council finds and determines that it is in the public interest to call a special election for the purpose of referring the Question to the electors.

NOW, THEREFORE, IT IS RESOLVED BY THE CITY COUNCIL OF THE CITY OF GLENWOOD SPRINGS, COLORADO, THAT:

Section 1. The above recitals are hereby incorporated as findings.

Section 2. Pursuant to the Glenwood Springs Municipal Charter, the City Council hereby calls a special election to be held on June 13, 2023.

Section 3. The form of the ballot shall be as follows:

Shall citizen-initiated Ordinance 06, Series of 2023, changing the currently allowed 8:00AM to 7:00PM hours of operation for retail and medical marijuana establishments to 8:00AM to 10:00PM be approved?

_____ YES

_____ NO

Section 4. Upon an affirmative vote, the Municipal Code sections 050.080.080 and 050.090.090 shall be amended as set forth in Section 3 of this Resolution.

INTRODUCED, READ AND PASSED THIS _____ DAY OF _____ 2023.

CITY OF GLENWOOD SPRINGS, COLORADO

_____

ATTEST: Jonathan Godes, Mayor

_____

Ryan M. Muse, City Clerk

City Council
STAFF REPORT
City of Glenwood Springs
April 20, 2023

Agenda Item: Adjournment

Action Requested:

Department: City Clerk

Presented By:

Strategic Goals:

Background Info:

Issues:

Fiscal Impact:

Legal Review:

Staff Recommendation: