

# Transportation Impact Assessment

Mill Creek Marshfield  
Commerce Way  
Marshfield, Massachusetts

*Prepared for:*



January 2022

*Prepared by:*



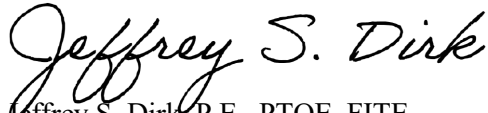
35 New England Business Center Drive  
Suite 140  
Andover, MA 01810

Dear Reviewer:

This letter shall certify that this *Transportation Impact Assessment* has been prepared under my direct supervision and responsible charge. I am a Registered Professional Engineer (P.E.) in the Commonwealth of Massachusetts (Massachusetts P.E. No. 38871, Civil) and hold Certification as a Professional Traffic Operations Engineer (PTOE) from the Transportation Professional Certification Board, Inc. (TPCB), an independent affiliate of the Institute of Transportation Engineers (ITE) (PTOE Certificate No. 993). I am also a Fellow of the Institute of Transportation Engineers (FITE).

Sincerely,

VANASSE & ASSOCIATES, INC.



Jeffrey S. Dirk, P.E., PTOE, FITE  
Managing Partner

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## EXECUTIVE SUMMARY

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Vanasse & Associates, Inc. (VAI) has conducted a Transportation Impact Assessment (TIA) in order to determine the potential impacts on the transportation infrastructure associated with the proposed construction of a multifamily residential community to be located off Commerce Way and within Enterprise Park in Marshfield, Massachusetts (hereafter referred to as the Project). This assessment was prepared in consultation with the Town of Marshfield and the Massachusetts Department of Transportation (MassDOT), and was performed in accordance with MassDOT's *Transportation Impact Assessment (TIA) Guidelines* and the standards of the Traffic Engineering and Transportation Planning professions for the preparation of such reports.

Based on this assessment, we have concluded the following with respect to the Project:

1. Using trip-generation statistics published by the Institute of Transportation Engineers (ITE),<sup>1</sup> the Project is expected to generate approximately 1,998 vehicle trips on an average weekday and 1,366 vehicle trips on a Saturday (both two way, 24-hour volumes), with approximately 116 vehicle trips expected during the weekday morning peak hour, 150 vehicle trips expected during the weekday evening peak hour and 123 vehicle trips expected during the Saturday midday peak hour;
2. The Project will not result in a significant impact (increase) on motorist delays or vehicle queuing over Existing or anticipated future conditions without the Project (No-Build conditions); however, it was noted that one or more movements at the study intersections are currently operating at or over capacity (defined as a level-of-service (LOS) "E" or "F", respectively) independent of the Project;
3. All movements at the Project site driveway intersection with Commerce Way were shown to operate at LOS A during the peak hours with minor (up to one (1)) vehicle queuing predicted to occur;
4. No apparent safety deficiencies were noted with respect to the motor vehicle crash history at the study intersections; and

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<sup>1</sup>*Trip Generation*, 11<sup>th</sup> Edition; Institute of Transportation Engineers; Washington, DC; 2021.

5. Lines of sight to and from the Project site driveway intersection were found to exceed the recommended minimum distances for safe operation based on the appropriate approach speed.

In consideration of the above, we have concluded that the Project can be accommodated within the confines of the existing transportation infrastructure in a safe and efficient manner with implementation of the recommendations that follow.

## **RECOMMENDATIONS**

A detailed transportation improvement program has been developed that is designed to provide safe and efficient access to the Project site and address any deficiencies identified at off-site locations evaluated in conjunction with this study. The following improvements have been recommended as a part of this evaluation and, where applicable, will be completed in conjunction with the Project subject to receipt of all necessary rights, permits, and approvals.

### **Project Access**

Access to the Project will be provided by way of a new driveway that will intersect the south side of Commerce Way approximately 600 feet east of the Modera Marshfield Phase I driveway and 1,200 feet west of Proprietors Drive. The following recommendations are offered with respect to the design and operation of the Project site access and internal circulation, many of which are reflected on the site plans:

- The Project site driveway should be 24 feet in width and designed to accommodate the turning and maneuvering requirements of the largest anticipated responding emergency vehicle as defined by the Marshfield Fire Department.
- Where perpendicular parking is proposed, the drive aisle behind the parking should be a minimum of 23 feet in order to facilitate parking maneuvers.
- Vehicles exiting the Project site should be placed under STOP-sign control with a marked STOP-line provided.
- All signs and pavement markings to be installed within the Project site shall conform to the applicable standards of the *Manual on Uniform Traffic Control Devices (MUTCD)*.<sup>2</sup>
- Pedestrian walkways are proposed within the Project site and should include marked crosswalks with Americans with Disabilities Act (ADA) compliant wheelchair ramps at all pedestrian crossings.
- ADA compliant wheelchair ramps should be provided for crossing the Project site driveway, or the driveway should be designed such that the sidewalk along Commerce Way is flush with (i.e., crosses) the driveway.
- Signs and landscaping to be installed as a part of the Project within the intersection sight triangle areas of the Project site driveway should be designed and maintained so as not to restrict lines of sight.

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<sup>2</sup>*Manual on Uniform Traffic Control Devices (MUTCD)*; Federal Highway Administration; Washington, D.C.; 2009.

- Snow accumulations (windrows) within the sight triangle areas of the Project site driveway should be promptly removed where such accumulations would impede sight lines.
- Consideration should be given to providing electric vehicle (EV) charging stations for use by residents of the Project.

## **Off Site**

### **Route 139 at Enterprise Drive**

Independent of the Project, one or more movements at the intersection of Route 139 at Enterprise Drive are currently operating at their design capacity (i.e., LOS “E”), with delays expected to increase in the future absent improvement. In order to improve operating conditions at the intersection and to off-set the predicted impact of the Project, the Project proponent will design and implement an optimal traffic signal timing and phasing plan. With these improvements, overall intersection operations will be maintained at LOS D or better, with no movement operating below LOS E, an improvement over No-Build conditions. This plan will be designed and implemented by the Project proponent prior to the issuance of a Certificate of Occupancy for the Project subject to receipt of all necessary rights, permits and approvals.

### **Route 139 at School Street**

Independent of the Project, left-turn movements from School Street at its intersection with Route 139 are currently operating over capacity (i.e., LOS “F”) under 2021 Existing conditions. Absent improvement, motorist delays are expected to further increase in the future, again, independent of the Project. As a part of the October 2, 2020, Zoning Board of Appeals (ZBA) approval of the recreational marijuana retail establishment located at 985 Plain Street (ZBA Case No. 20-49), the ZBA identified in its decision granting a Special Permit and Site Plan Approval for the project that the Host Community Agreement with the Town included an offer to design, permit and providing funding for the installation of a traffic signal at the Route 139/School Street intersection. With the installation of a traffic control signal at this intersection, overall intersection operations will improve to LOS A during the peak hours with no movement operating below LOS D. No additional improvements are required at this intersection to accommodate the Project.

### **Route 139 at Forest Street**

Independent of the Project, all movements from Forest Street at its intersection with Route 139 are currently operating at or over capacity (i.e., LOS “E” or “F”, respectively) under 2021 Existing conditions, with Project-related impacts at the intersection generally defined as an incremental increase in motorist delay that did not result in a corresponding increase in vehicle queuing (no change over No-Build conditions). Given the modest impact of the Project (i.e., no material increase in vehicle queueing), no improvements are recommended or are necessary at this intersection to accommodate the Project.

## **Transportation Demand Management**

Public transportation services are provided within the study area by the Greater Attleboro-Taunton Regional Transit Authority (GATRA) by way of the *SAIL (Seaside Area Inter-Link) Marshfield/Duxbury/Kingston* bus route. The SAIL bus travels along Route 139 with a stop located within the Roche Brothers shopping center, adjacent to the Route 139/Proprietors Drive intersection and within an approximate 14-minute walking distance. In addition, GATRA provides

Dial-a-Ride paratransit services to eligible persons that cannot use fixed-route transit all or some of the time due to a physical, cognitive or mental disability in compliance with the Americans with Disabilities Act (ADA).

In an effort to encourage the use of alternative modes of transportation to single-occupant vehicles (SOVs), the following Transportation Demand Management (TDM) measures will be implemented as a part of the Project:

- A transportation coordinator will be assigned for the Project to coordinate the TDM program;
- Information regarding public transportation services, maps, schedules and fare information will be posted in a central location and/or otherwise made available to residents;
- A “welcome packet” will be provided to residents detailing available public transportation services, bicycle and walking alternatives, and commuter options;
- Pedestrian accommodations will be incorporated within the Project site;
- Secure bicycle parking will be provided at an appropriate location(s) within the Project site, including a bicycle rack at the clubhouse; and
- A centralized mail kiosk will be provided.

With implementation of the aforementioned recommendations, safe and efficient access will be provided to the Project site and the Project can be accommodated within the confines of the existing and improved transportation system.

## **INTRODUCTION**

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Vanasse & Associates, Inc. (VAI) has conducted a Transportation Impact Assessment (TIA) in order to determine the potential impacts on the transportation infrastructure associated with the proposed construction of a multifamily residential community to be located off Commerce Way and within Enterprise Park in Marshfield, Massachusetts (hereafter referred to as the Project). This study evaluates the following specific areas as they relate to the Project: i) access requirements; ii) potential off-site improvements; and iii) safety considerations; and identifies and analyzes existing traffic conditions and future traffic conditions, both with and without the Project, along Plain Street (Route 139), Enterprise Drive, Commerce Way and Proprietors Drive, and at the following specific intersections: Route 139 at School Street; Route 139 at Enterprise Drive; Route 139 at Proprietors Drive and Furnace Street; Route 139 at Forest Street; Enterprise Drive at Commerce Way; and Proprietors Drive at Commerce Way and Old Woodlot Lane.

### **PROJECT DESCRIPTION**

The Project will entail the construction of a 300-unit multifamily residential community to be located off Commerce Way and within Enterprise Park in Marshfield, Massachusetts. The Project site encompasses approximately 12.7± acres of undeveloped land that is bounded by Commerce Way to the north; areas of open and wooded space to the south and west; and the Sprague Forest to the east. Figure 1 depicts the Project site location in relation to the existing roadway network.

Access to the Project site will be provided by way of a new driveway that will intersect the south side of Commerce Way approximately 600 feet east of the Modera Marshfield Phase I driveway and 1,200 feet west of Proprietors Drive.

On-site parking will be provided for 505 vehicles, or a parking ratio of 1.68 parking spaces per unit, consisting of 306 surface parking spaces dispersed throughout the Project site and 204 parking spaces that are located in individual parking garages and in the driveways that provide access to the garages. This parking ratio (1.68 parking spaces per unit) is below the minimum parking requirements of Section 305-8.01, *Minimum Off-Street Parking Requirements*, of the Zoning Bylaw of the Town of Marshfield (2.0 parking spaces per dwelling unit are required); however, the parking



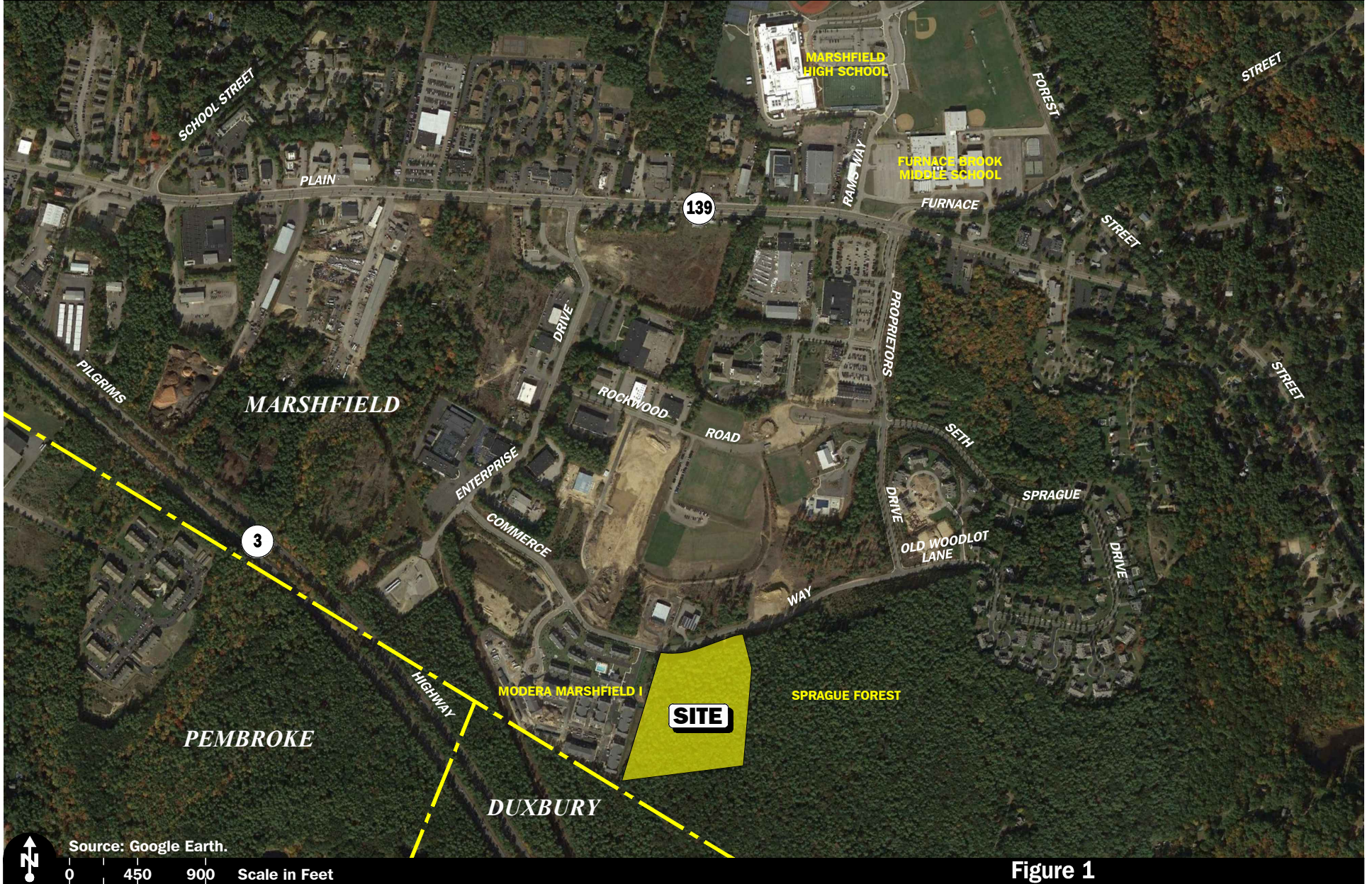


Figure 1  
Site Location Map



ratio is within the range of rates documented by the ITE for similar multifamily residential communities.<sup>3</sup>

## **STUDY METHODOLOGY**

This study was prepared in consultation with the Town of Marshfield and MassDOT; was performed in accordance with MassDOT's *Transportation Impact Assessment (TIA) Guidelines* and the standards of the Traffic Engineering and Transportation Planning professions for the preparation of such reports; and was conducted in three distinct stages.

The first stage involved an assessment of existing conditions in the study area and included an inventory of roadway geometrics; pedestrian and bicycle facilities; on-street parking; public transportation services; observations of traffic flow; and collection of pedestrian, bicycle and vehicle counts.

In the second stage of the study, future traffic conditions were projected and analyzed. Specific travel demand forecasts for the Project were assessed along with future traffic demands due to expected traffic growth independent of the Project. A seven-year time horizon from the date of publication of this assessment was selected for analyses consistent with MassDOT's *Transportation Impact Assessment (TIA) Guidelines*. The traffic analysis conducted in stage two identifies existing or projected future roadway capacity, traffic safety, and site access issues.

The third stage of the study presents and evaluates measures to address traffic and safety issues, if any, identified in stage two of the study.

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<sup>3</sup>*Parking Generation Manual*, 5th Edition; Institute of Transportation Engineers; Washington D.C.; 2019. Observed peak parking demand ratios for a low-rise multifamily residential community were found to range from 0.37 to 1.38 spaces per dwelling unit, with an average peak parking demand of 0.66 spaces per dwelling unit and an 85<sup>th</sup> percentile peak parking demand of 0.86 spaces per dwelling unit.

## **EXISTING CONDITIONS**

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A comprehensive field inventory of existing conditions within the study area was conducted in September and December 2021. The field investigation consisted of an inventory of existing roadway geometrics; pedestrian and bicycle facilities; public transportation services; traffic volumes; and operating characteristics; as well as posted speed limits and land use information within the study area. The study area that was assessed for the Project consisted of Route 139, Enterprise Drive, Commerce Way and Proprietors Drive, and the following specific intersections: Route 139 at School Street; Route 139 at Enterprise Drive; Route 139 at Proprietors Drive and Furnace Street; Route 139 at Forest Street; Enterprise Drive at Commerce Way; and Proprietors Drive at Commerce Way and Old Woodlot Lane.

The following describes the study area roadways and intersections.

### **ROADWAYS**

#### **Route 139**

- Four-lane urban principal arterial roadway under MassDOT jurisdiction;
- Transitions to a two-lane roadway east of Furnace Street;
- Traverses the study area in a general east-west direction providing a full access interchange with Route 3 to the west of the Project site;
- Provides four 11 to 13-foot wide travel lanes that are separated by a double-yellow centerline with 1 to 6 foot wide marked shoulders and additional turning lanes provided at major intersections;
- The posted speed limit is 45 miles per hour (mph) to the east of 928 Plain Street (approximately 550 feet east of School Street) and 35 mph to the west;
- Sidewalks are provided along both sides of the roadway west of Furnace Street, along the south side between Furnace Street and Forest Street, and along both sides east of Forest Street;
- Land use within the study area consists of commercial properties, the Furnace Brook Middle School and Marshfield High School.

### **Enterprise Drive**

- Two-lane local access roadway under Town jurisdiction;
- Traverses the study area in a general north-south direction for a distance of approximately 2,700 feet south of Route 139;
- Provides an approximate 40-foot wide traveled-way with centerline pavement markings, marked shoulders and additional turning lanes provided approaching Route 139;
- A posted speed limit is not provided and, as such, the statutory speed limit pursuant to MGL C. 90 §17 is 30 mph;<sup>4</sup>
- A sidewalk is provided along the west side of the roadway;
- Land use within the study area consists of commercial properties and areas of open and wooded space.

### **Commerce Way**

- Two-lane, private roadway that is open to public travel;
- Traverses the study area in a general east-west direction between Enterprise Drive and Proprietors Drive;
- Generally provides an approximate 32-foot wide traveled-way with no marked shoulders or centerline provided;
- A posted speed limit is not provided and, as such, the statutory speed limit pursuant to MGL C. 90 §17 is 30 mph;
- A sidewalk is provided along the south (Project) side of the roadway;
- Land use within the study area consists of the Project site, commercial and residential properties, and areas of open and wooded space.

### **Proprietors Drive**

- Two-lane, private roadway that is open to public travel;
- Traverses the study area in a general north-south direction for a distance of approximately 2,300 feet south of Route 139;
- Generally provides an approximate 26-foot wide traveled-way with a raised center median island, centerline pavement markings, marked shoulders and additional turning lanes provided approaching Route 139;
- A posted speed limit is not provided and, as such, the statutory speed limit pursuant to MGL C. 90 §17 is 30 mph;
- Sidewalks are provided along both sides of the roadway;
- Land use within the study area consists of commercial and residential properties, and areas of open and wooded space.

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<sup>4</sup>The statutory of “prima facie” speed is defined in M.G.L. Chapter 90, Section 17, as the speed which would be deemed reasonable and proper to operate a motor vehicle. Within a thickly settled or business district, the statutory speed limit is 30 mph.

## INTERSECTIONS

Table 1 and Figure 2 summarize existing lane use, traffic control, and pedestrian and bicycle accommodations at the study area intersections as observed in December 2021.

**Table 1**  
**STUDY AREA INTERSECTION DESCRIPTION**

<b>Intersection</b>	<b>Traffic Control Type<sup>a</sup></b>	<b>No. of Travel Lanes Provided</b>	<b>Shoulder Provided? (Yes/No/Width)</b>	<b>Pedestrian Accommodations? (Yes/No/Description)</b>	<b>Bicycle Accommodations? (Yes/No/Description)</b>
Rte. 139/ School St.	S	1 left-turn lane and 2 through lanes on Rte. 139 eastbound; 2 general purpose travel lanes on Rte. 139 westbound; 1 left-turn lane and 1 right-turn lane on School St.	Yes; 1 to 4 feet on Rte. 139, 2 to 3 feet on School St.	Yes, both sides of Rte. 139 and east side of School St.; crosswalk provided across School St.	Yes; shared traveled-way <sup>b</sup>
Rte. 139/ Enterprise Dr.	TS	1 left-turn lane, 1 through lane, and 1 shared through/right-turn lane on Rte. 139; 1 shared left-turn/through lane and 1 right-turn lane on Enterprise Dr.; 1 general purpose travel lane on the private dwy.	Yes; 6 feet on Rte. 139, 3 feet on Enterprise Dr. 1 to 2 feet on the private dwy.	Yes, both sides of Rte. 139 and the west side of Enterprise Dr. and the private dwy.	Yes; shared travel-way
Rte. 139/ Proprietors Dr./ Furnace St.	TS	1 left-turn lane, 2 through lanes and 1 right-turn lane on Rte. 139 eastbound; 1 left-turn, 1 through lane and 1 through/right-turn lane on Rte. 139 westbound; 1 left-turn lane and 1 shared through/right-turn lane on Proprietors Dr.; 1 left-turn/through lane and 1 right-turn lane on Furnace St.	Yes; 1 to 3 feet on Rte. 139, 1 to 2 feet on Furnace St.	Yes, both sides of Rte. 139 west of the intersection and Proprietors Dr.; the south side of Rte. 139 east of the intersection, and the west side of Furnace St.	Yes; shared travel-way
Rte. 139/ Forest St.	S	1 general-purpose travel lane on all approaches	Yes; 6 feet on Rte. 139, 2 feet on Forest St.	Yes, both sides of Rte. 139 east of the intersection, the south side of Rte. 139 west of the intersection, and the west side of Forest St.	Yes; shared travel-way

See notes at end of the table.

**Table 1 (Continued)**  
**STUDY AREA INTERSECTION DESCRIPTION**

<b>Intersection</b>	<b>Traffic Control Type<sup>a</sup></b>	<b>No. of Travel Lanes Provided</b>	<b>Shoulder Provided? (Yes/No/Width)</b>	<b>Pedestrian Accommodations? (Yes/No/Description)</b>	<b>Bicycle Accommodations? (Yes/No/Description)</b>
Enterprise Dr./Commerce Way	S	1 general-purpose travel lane on all approaches	No	Yes, the west side of Enterprise Dr. and the south side of Commerce Way	Yes; shared travel-way
Proprietors Dr./Commerce Way/Old Woodlot Rd.	S	1 general-purpose travel lane on all approaches	No	Yes, both sides of Proprietors Dr. and Old Woodlot Rd., the south side of Commerce Way	Yes; shared travel-way

<sup>a</sup>TS = traffic signal control; S = STOP control.

<sup>b</sup>Combined shoulder and travel lane width equal to or exceed 14 feet.

### **TRAFFIC VOLUMES**

In order to determine existing traffic-volume demands and flow patterns within the study area, automatic traffic recorder (ATR) counts, manual turning movement counts (TMCs) and vehicle classification counts were completed in September 2021. The ATR counts were conducted on the study area roadways on September 16<sup>th</sup> through 18<sup>th</sup>, 2021, and on September 23<sup>rd</sup> through 25<sup>th</sup>, 2021 (both time periods are Thursday through Saturday, inclusive) in order to record traffic volume and flow conditions over an extended period, with peak period manual TMCs performed at the study intersections during the weekday morning (7:00 to 9:00 AM) and evening (4:00 to 6:00 PM) peak periods on Thursday, September 16, 2021, and during the Saturday midday (11:00 AM to 2:00 PM) peak period on September 18, 2021. These time periods were selected for analysis purposes as they are representative of the peak-traffic-volume hours for both the Project and the adjacent roadway network.

### **Traffic-Volume Adjustments**

In order to evaluate the potential for seasonal fluctuation of traffic volumes within the study area, traffic volume data from MassDOT Continuous Count Station No. 20 located on Route 3, north of the Bourne Town Line, in Plymouth were reviewed.<sup>5</sup> Based on a review of this data, it was determined that traffic volumes for the month of September are approximately 7.1 percent *above* average-month conditions. As such, no adjustment was made to the raw traffic count data as the data is representative of traffic volume conditions that are higher than those under average-month conditions.

In order to account for the impact on traffic volumes and trip patterns resulting from the “safer-at-home” order and the phased “Reopening Massachusetts” plan that was issued by the Governor on May 18, 2020, in response to the COVID-19 pandemic, the TMCs that were collected as part of this assessment at the intersection of Route 139/Enterprise Drive were compared to those that were collected at the same intersection in November 2019. The 2019 traffic volumes were expanded to 2021 by applying the traffic growth procedure detailed in the April 2020 “Guidance

<sup>5</sup>MassDOT Traffic Volumes for the Commonwealth of Massachusetts; 2021.

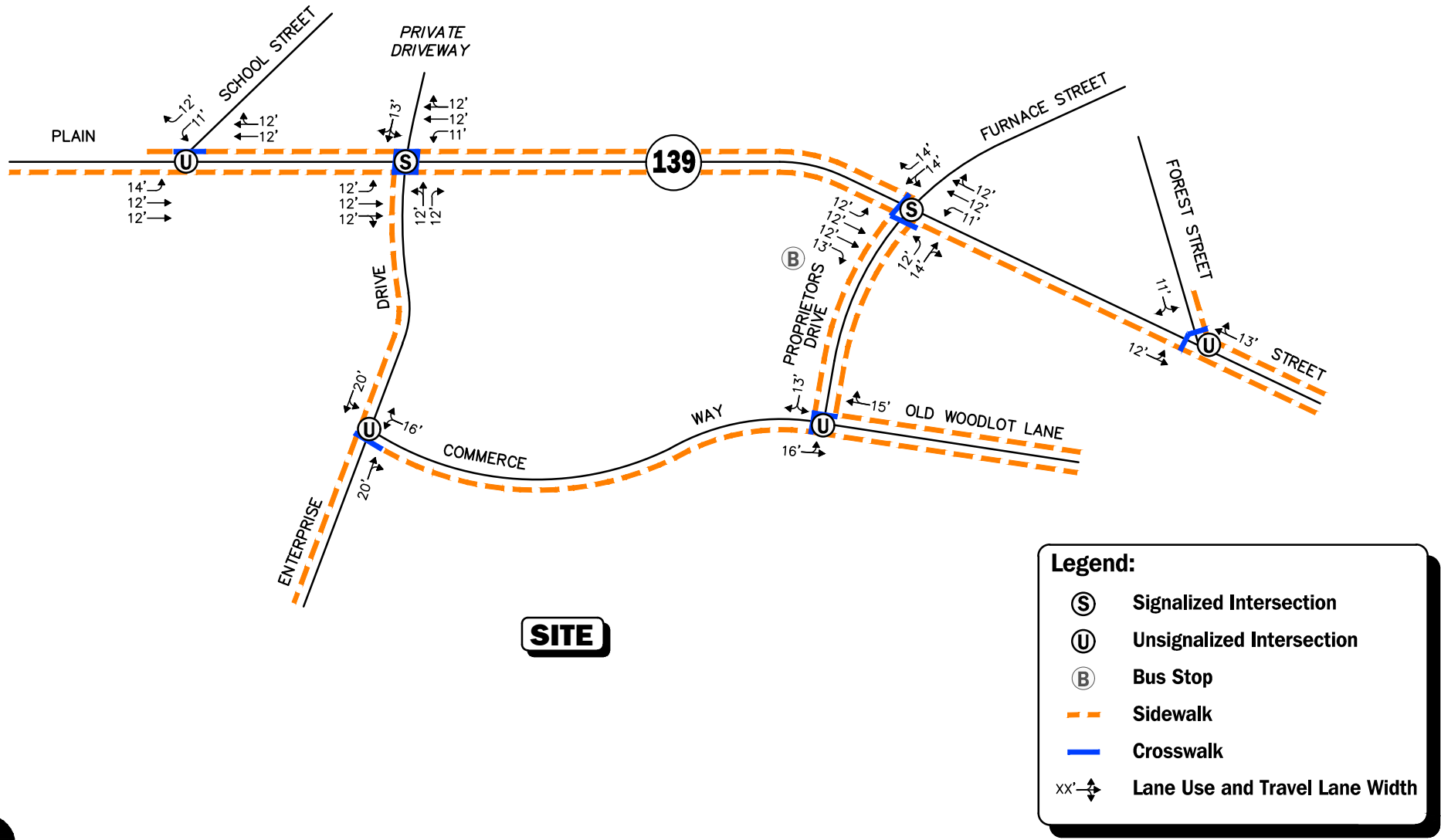


Figure 2

Existing Intersection Lane Use, Travel Lane Width, and Pedestrian Facilities

Not To Scale



on Traffic Counting Data” published by MassDOT<sup>6</sup> in order to allow for a comparison of the data. Based on this pre and post COVID-19 traffic-volume comparison, it was determined that traffic volumes within the study area are within 5 percent of the traffic-volume conditions that existed prior to the restrictions that were imposed as a result of the COVID-19 pandemic, which is within the range of normal daily and seasonal traffic-volume fluctuations as documented above. As such, further adjustment of the traffic-volume data was not required.

The 2021 Existing traffic volumes are summarized in Table 2, with the weekday morning, weekday evening, and Saturday midday peak-hour traffic volumes graphically depicted on Figures 3, 4 and 5, respectively. Note that the peak-hour traffic volumes that are presented in Table 2 were obtained from the aforementioned figures.

**Table 2**  
**2021 EXISTING TRAFFIC VOLUMES**

Location/Peak Hour	AWT <sup>a</sup>	Saturday <sup>b</sup>	VPH <sup>c</sup>	K Factor <sup>d</sup>	Directional Distribution <sup>e</sup>
<i>Route 139, west of Enterprise Drive:</i>	29,650	27,375	--	--	--
Weekday Morning (7:15 – 8:15 AM)	--	--	1,930	6.5	59.7% WB
Weekday Evening (4:30 – 5:30 PM)	--	--	2,425	8.2	56.3% EB
Saturday Midday (12:00 – 1:00 PM)	--	--	2,392	8.7	52.7% WB
<i>Enterprise Drive, south of Route 139:</i>	2,395	2,825	--	--	--
Weekday Morning (7:15 – 8:15 AM)	--	--	193	8.0	56.0% SB
Weekday Evening (4:30 – 5:30 PM)	--	--	293	12.2	50.9% NB
Saturday Midday (12:00 – 1:00 PM)	--	--	444	15.7	50.7% NB
<i>Commerce Way, east of Enterprise Drive:</i>	1,150	945	--	--	--
Weekday Morning (7:15 – 8:15 AM)	--	--	76	6.6	68.4% WB
Weekday Evening (4:30 – 5:30 PM)	--	--	96	8.3	56.2% EB
Saturday Midday (12:00 – 1:00 PM)	--	--	80	8.5	61.2% WB
<i>Proprietors Drive, south of Route 139:</i>	3,070	2,610	--	--	--
Weekday Morning (7:15 – 8:15 AM)	--	--	227	7.4	55.5% SB
Weekday Evening (4:30 – 5:30 PM)	--	--	686	22.3	50.6% NB
Saturday Midday (12:00 – 1:00 PM)	--	--	512	19.6	52.1% SB

<sup>a</sup>Average weekday traffic in vehicles per day.

<sup>b</sup>Saturday traffic in vehicles.

<sup>c</sup>Vehicles per hour.

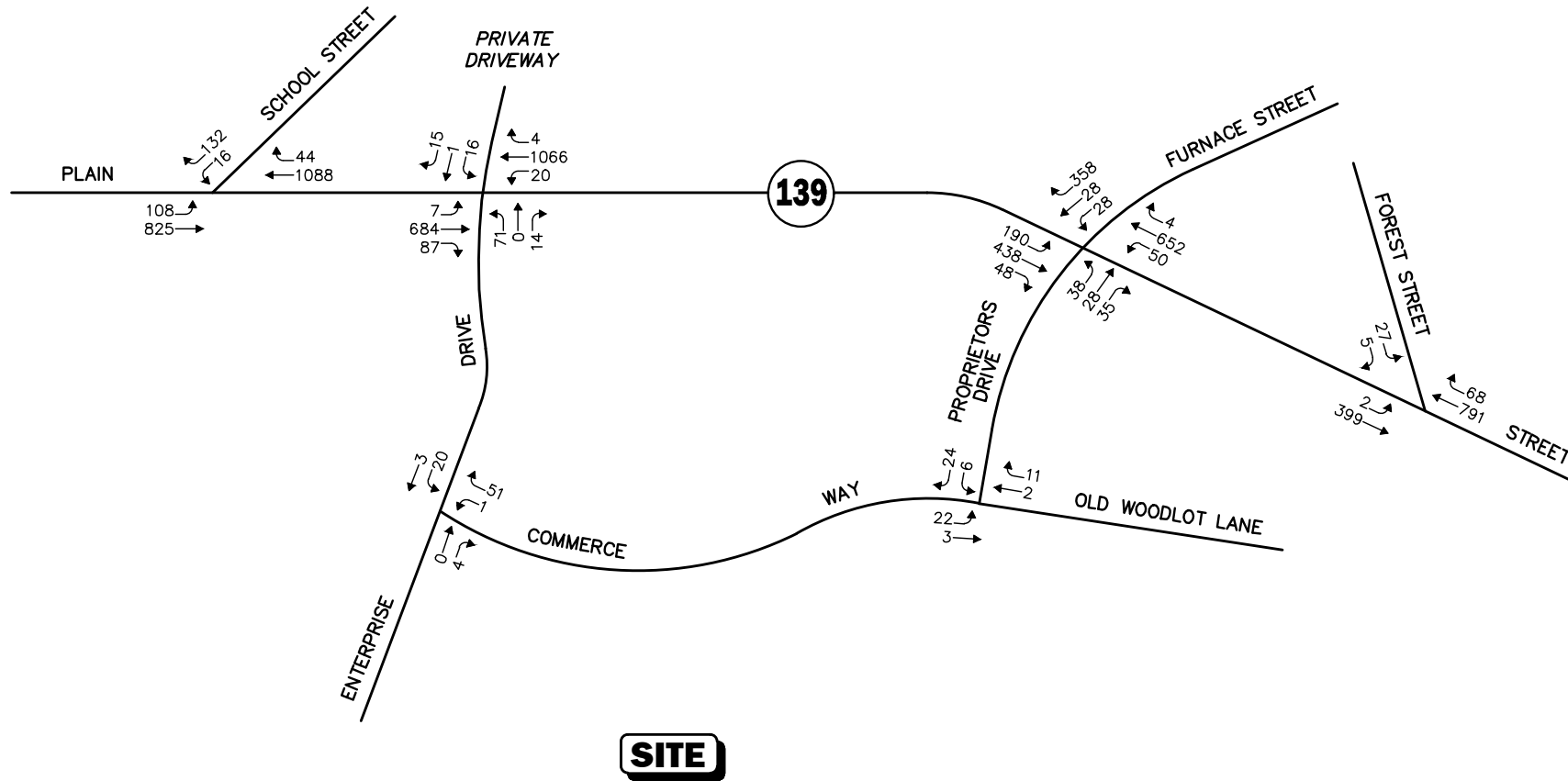
<sup>d</sup>Percent of daily traffic occurring during the peak hour.

<sup>e</sup>Percent traveling in peak direction.

NB = northbound; SB = southbound; EB = eastbound; WB = westbound.

As can be seen in Table 2, Route 139 in the vicinity of the Project site was found to accommodate approximately 29,650 vehicles on an average weekday and 27,375 vehicles on a Saturday (two-way, 24-hour volumes), with approximately 1,930 vehicles per hour (vph) during the weekday morning peak-hour, 2,425 vph during the weekday evening peak-hour and 2,392 vph during the Saturday midday peak-hour.

<sup>6</sup>Guidance on Traffic Count Data; MassDOT; revised April 2020.



Note: Imbalances exist due to numerous curb cuts and side streets that are not shown.

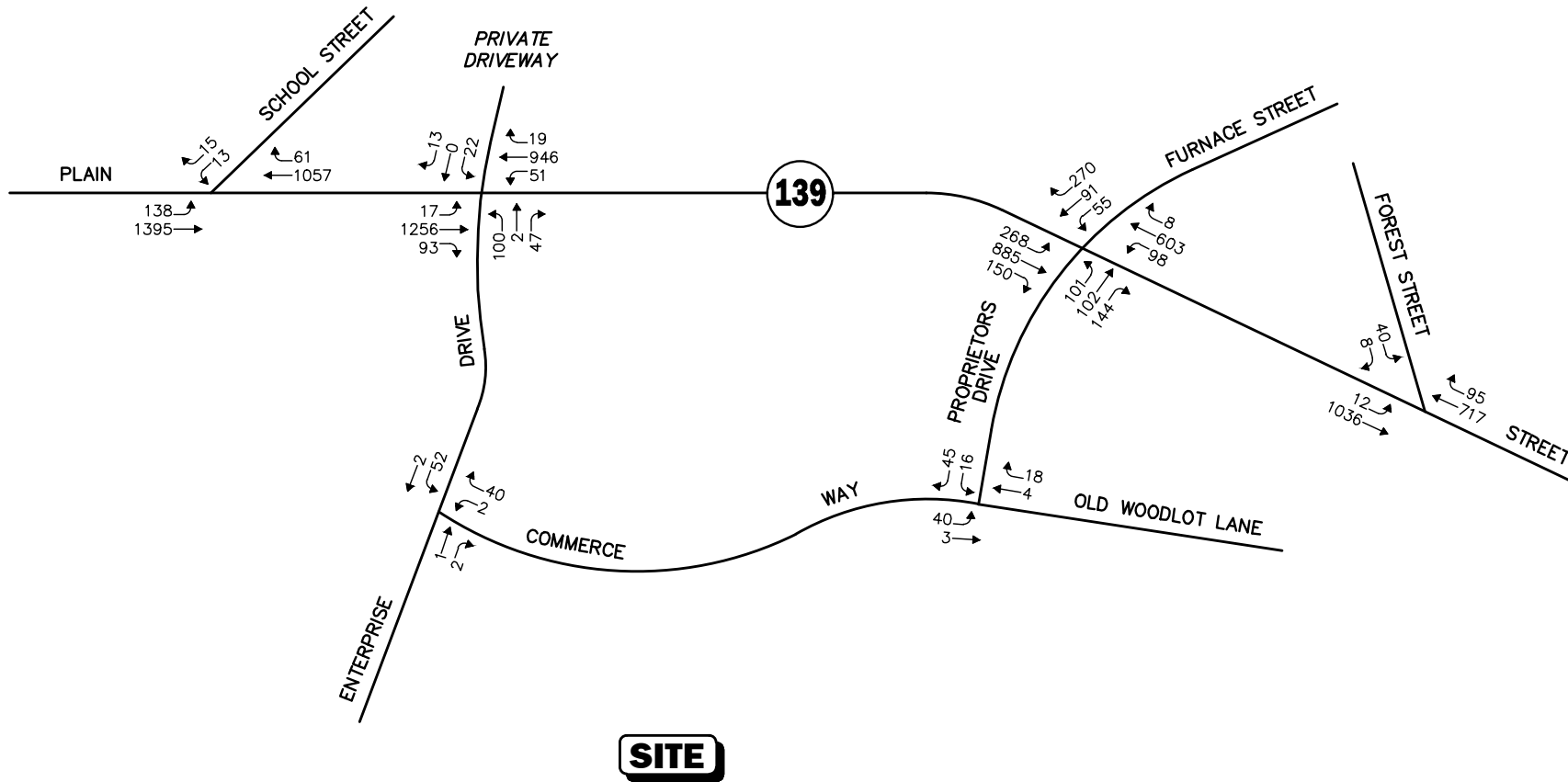
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Figure 3

2021 Existing  
Weekday Morning  
Peak-Hour Traffic Volumes





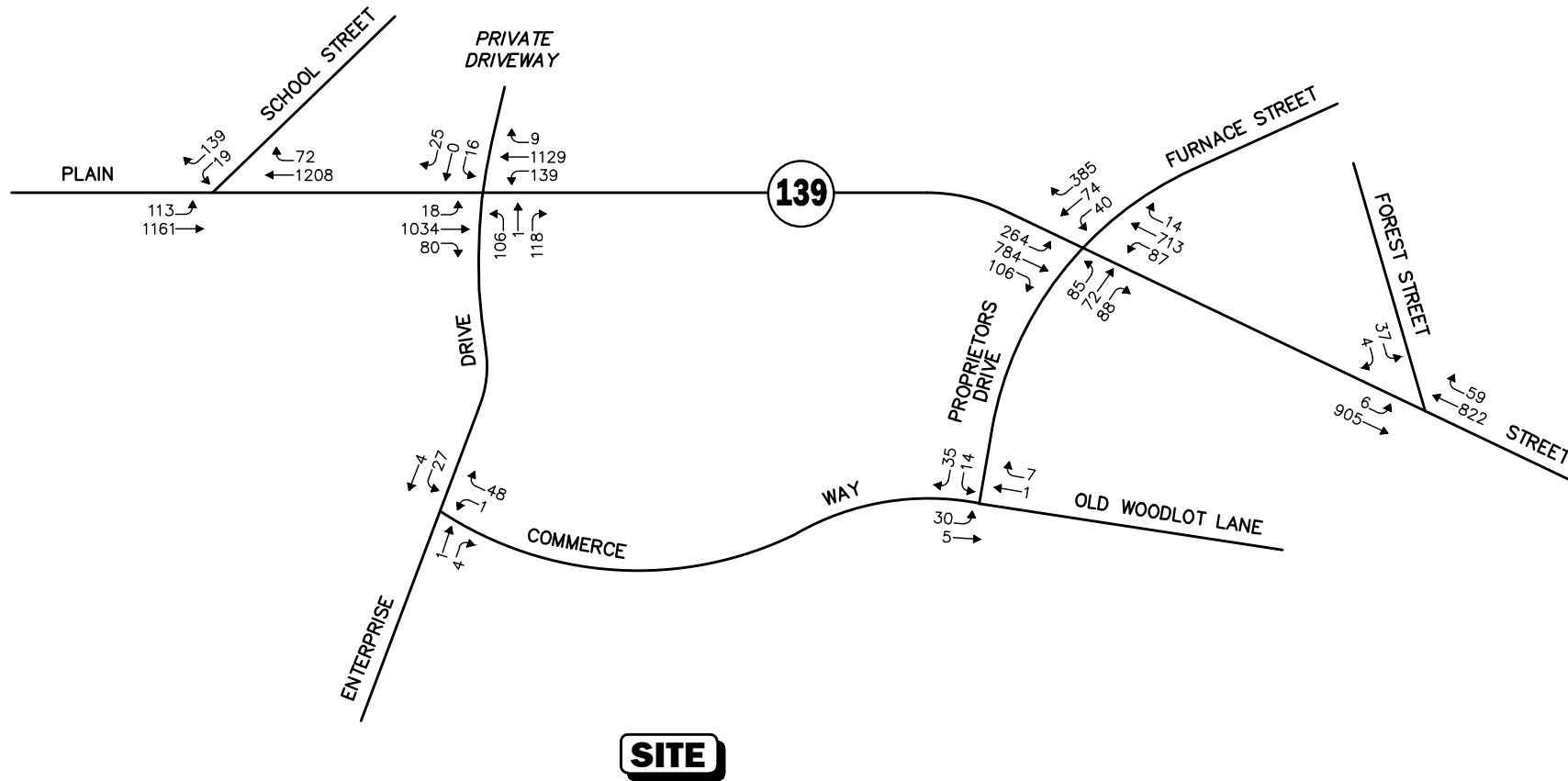
Note: Imbalances exist due to numerous curb cuts and side streets that are not shown.

Not To Scale

Figure 4

2021 Existing  
Weekday Evening  
Peak-Hour Traffic Volumes





Note: Imbalances exist due to numerous curb cuts and side streets that are not shown.

Not To Scale



Figure 5

2021 Existing Saturday MIDDAY Peak-Hour Traffic Volumes

Enterprise Drive in the vicinity of the Project site was found to accommodate approximately 2,395 vehicles on an average weekday and 2,825 vehicles on a Saturday, with approximately 193 vph during the weekday morning peak-hour, 293 vph during the weekday evening peak-hour and 444 vph during the Saturday midday peak-hour.

Commerce Way in the vicinity of the Project site was found to accommodate approximately 1,150 vehicles on an average weekday and 945 vehicles on a Saturday, with approximately 76 vph during the weekday morning peak-hour, 96 vph during the weekday evening peak-hour and 80 vph during the Saturday midday peak-hour.

Proprietors Drive in the vicinity of the Project site was found to accommodate approximately 3,070 vehicles on an average weekday and 2,610 vehicles on a Saturday, with approximately 227 vph during the weekday morning peak-hour, 686 vph during the weekday evening peak-hour and 512 vph during the Saturday midday peak-hour.

### **PEDESTRIAN AND BICYCLE FACILITIES**

A comprehensive field inventory of pedestrian and bicycle facilities within the study area was undertaken in December 2021. The field inventory consisted of a review of the location of sidewalks and pedestrian crossing locations along the study roadways and at the study area intersections. As detailed on Figure 2, sidewalks are provided along one or both sides of the study area roadways, with marked crosswalks provided for crossing one or more legs of the study area intersections. Pedestrian traffic signal equipment and phasing are provided as a part of the traffic signal systems at the Route 139/Enterprise Drive and Route 139/Proprietors Drive/Furnace Street intersections.

Formal bicycle facilities are not provided within the study area; however, the study area roadways generally provide sufficient width to accommodate bicycle travel in a shared traveled-way configuration (i.e., bicyclists and motor vehicles sharing the traveled-way).<sup>7</sup> Bicycle detection is provided as a part of the traffic signal systems at the Route 139/Enterprise Drive and Route 139/Proprietors Drive/Furnace Street intersections.

### **PUBLIC TRANSPORTATION**

Public transportation services are provided within the study area by the Greater Attleboro-Taunton Regional Transit Authority (GATRA) by way of the *SAIL (Seaside Area Inter-Link) Marshfield/Duxbury/Kingston* bus route. The SAIL bus travels along Route 139 with a stop located within the Roche Brothers shopping center, adjacent to the Route 139/Proprietors Drive intersection and within an approximate 14-minute walking distance of the Project site. In addition, GATRA provides Dial-a-Ride paratransit services to eligible persons that cannot use fixed-route transit all or some of the time due to a physical, cognitive or mental disability in compliance with the Americans with Disabilities Act (ADA).

The public transportation schedules and fare information are provided in the Appendix.

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<sup>7</sup>A minimum combined travel lane and paved shoulder width of 14-feet is required to support bicycle travel in a shared traveled-way condition.

**SPOT SPEED MEASUREMENTS**

Vehicle travel speed measurements were performed on the study area roadways in conjunction with the ATR counts. Table 3 summarizes the vehicle travel speed measurements.

**Table 3  
VEHICLE TRAVEL SPEED MEASUREMENTS**

	Route 139		Enterprise Drive		Commerce Way		Proprietors Drive	
	EB	WB	NB	SB	EB	WB	NB	SB
Mean Travel Speed (mph)	34	35	24	28	28	29	29	27
85 <sup>th</sup> Percentile Speed (mph)	43	43	27	31	31	32	32	30
Posted or Statutory Speed Limit (mph)	45	45	30	30	30	30	30	30

mph = miles per hour.

NB = northbound; SB = southbound; EB = eastbound; WB = westbound.

As can be seen in Table 3, the mean vehicle travel speed along Route 139 within the study area was found to be 34 mph in the eastbound direction and 35 mph westbound. The measured 85<sup>th</sup> percentile vehicle travel speed, or the speed at which 85 percent of the observed vehicles traveled at or below, was found to be 43 mph in both the east and westbound directions, which is generally consistent with the posted speed limit in the vicinity of the Project site (45 mph). The 85<sup>th</sup> percentile speed is used as the basis of engineering design and in the evaluation of sight distances and is often used in establishing posted speed limits.

The mean vehicle travel speed along Enterprise Drive was found to be 24 mph in the northbound direction and 28 mph southbound. The measured 85<sup>th</sup> percentile vehicle travel speed was found to be 27 mph northbound and 31 mph southbound, which is generally consistent with the statutory speed limit (30 mph).

The mean vehicle travel speed along Commerce Way was found to be 28 mph in the eastbound direction and 29 mph westbound. The measured 85<sup>th</sup> percentile vehicle travel speed was found to be 31 mph eastbound and 32 mph westbound, which is generally consistent with the statutory speed limit (30 mph).

The mean vehicle travel speed along Proprietors Drive was found to be 29 mph in the eastbound direction and 27 mph westbound. The measured 85<sup>th</sup> percentile vehicle travel speed was found to be 32 mph eastbound and 30 mph westbound, which is generally consistent with the statutory speed limit (30 mph).

## **MOTOR VEHICLE CRASH DATA**

Motor vehicle crash information for the study area intersections was provided by the MassDOT Highway Division Safety Management/Traffic Operations Unit for the most recent five-year period available (2015 through 2019, inclusive) in order to examine motor vehicle crash trends occurring within the study area. The data is summarized by intersection, type, severity, roadway and weather conditions, and day of occurrence, and presented in Table 4.

As can be seen in Table 4, the study area intersections were found to have experienced an average of four (4) or fewer reported motor vehicle crashes over the five-year review period and were found to have motor vehicle crash rates *below* both the MassDOT statewide and District averages for similar intersections for the MassDOT Highway Division District in which the intersections are located (District 5). The majority of the crashes were reported to have occurred on a weekday; during daylight; under clear weather conditions; and were reported as rear-end type collisions that resulted in property damage only. No (0) motor vehicle crashes were reported to have occurred at the Enterprise Drive/Commerce Way or Proprietors Drive/Commerce Way/Old Woodlot Road intersections.

A review of the MassDOT statewide High Crash Location List indicated that there were no locations within the study area that were included on MassDOT's Highway Safety Improvement Program (HSIP) listing as a high crash location. In addition, no fatal motor vehicle crashes were reported to have occurred at the study area intersections over the five-year review period.

A Road Safety Audit (RSA) was conducted at the Route 139/Furnace Street/Proprietors Drive intersection in 2017 as a part of Phase 1 of the Modera Marshfield residential community.<sup>8</sup> The RSA suggested a number of safety-related improvements at the intersection that included sign and pavement marking improvements; lane use assignment changes; traffic signal timing changes; and geometric improvements. A number of the improvements that are suggested in the RSA were completed in conjunction with Phase 1 of the Modera Marshfield residential community.

The detailed MassDOT Crash Rate Worksheets are provided in the Appendix.

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<sup>8</sup>*Road Safety Audit*, Plain Street (Route 139) at Furnace Street and Proprietors Drive; Town of Marshfield; Toole Design Group, June 9, 2017.

**Table 4**  
**MOTOR VEHICLE CRASH DATA SUMMARY<sup>a</sup>**

	Rte. 139/ School St.	Rte. 139/ Enterprise Dr./ Fox Run	Rte. 139/ Proprietors Dr./ Furnace St.	Rte. 139/ Forest St.	Enterprise Dr./ Commerce Way	Proprietors Dr./ Commerce Way/ Old Woodlot Rd.
Traffic Control Type: <sup>b</sup>	S	TS	TS	S	S	S
<i>Year:</i>						
2015	2	7	5	3	0	0
2016	3	4	5	1	0	0
2017	1	6	4	0	0	0
2018	3	2	5	2	0	0
<u>2019</u>	<u>1</u>	<u>2</u>	<u>0</u>	<u>2</u>	<u>0</u>	<u>0</u>
Total	10	21	19	8	0	0
Average	2.0	4.2	3.8	1.6	0.0	0.0
Rate <sup>c</sup>	0.18	0.40	0.34	0.21	0.00	0.00
MassDOT Crash Rate: <sup>d</sup>	0.57/0.57	0.78/0.75	0.78/0.75	0.57/0.57	0.57/0.57	0.57/0.57
Significant? <sup>e</sup>	No	No	No	No	No	No
<i>Type:</i>						
Angle	9	7	4	1	0	0
Rear-End	0	10	11	4	0	0
Head-On	0	0	0	0	0	0
Sideswipe	0	3	2	0	0	0
Fixed Object	0	0	2	1	0	0
Pedestrian/Bicycle	1	1	0	1	0	0
<u>Unknown/Other</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>
Total	10	21	19	8	0	0
<i>Conditions:</i>						
Clear	6	17	16	6	0	0
Cloudy	2	3	0	1	0	0
Rain	1	1	3	1	0	0
<u>Snow/Ice</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	10	21	19	8	0	0
<i>Lighting:</i>						
Daylight	6	14	13	7	0	0
Dawn/Dusk	1	1	1	0	0	0
Dark (Road Lit)	3	6	5	1	0	0
<u>Dark (Road Unlit)</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	10	21	19	8	0	0
<i>Day of Week:</i>						
Monday through Friday	9	17	13	6	0	0
Saturday	0	1	3	1	0	0
<u>Sunday</u>	<u>1</u>	<u>3</u>	<u>3</u>	<u>1</u>	<u>0</u>	<u>0</u>
Total	10	21	19	8	0	0
<i>Severity:</i>						
Property Damage Only	8	15	18	6	0	0
Personal Injury	1	6	1	2	0	0
Fatality	0	0	0	0	0	0
<u>Unknown</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	10	21	19	8	0	0

<sup>a</sup>Source: MassDOT Safety Management/Traffic Operations Unit records, 2015 through 2019.

<sup>b</sup>Traffic Control Type: TS = traffic signal control; S = stop control.

<sup>c</sup>Crash rate per million vehicles entering the intersection.

<sup>d</sup>Statewide/District crash rate.

<sup>e</sup>The intersection crash rate is significant if it is found to exceed the MassDOT crash rate for the MassDOT Highway Division District in which the Project is located (District 5).

## **FUTURE CONDITIONS**

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Traffic volumes in the study area were projected to the year 2029, which reflects a seven-year planning horizon from the date of publication of this assessment consistent with MassDOT's *Transportation Impact Assessment (TIA) Guidelines*. Independent of the Project, traffic volumes on the roadway network in the year 2029 under No-Build conditions include all existing traffic and new traffic resulting from background traffic growth. Anticipated Project-generated traffic volumes superimposed upon the 2029 No-Build traffic volumes reflect 2029 Build traffic-volume conditions with the Project.

### **FUTURE TRAFFIC GROWTH**

Future traffic growth is a function of the expected land development in the immediate area and the surrounding region. Several methods can be used to estimate this growth. A procedure frequently employed estimates an annual percentage increase in traffic growth and applies that percentage to all traffic volumes under study. The drawback to such a procedure is that some turning volumes may actually grow at either a higher or a lower rate at particular intersections.

An alternative procedure identifies the location and type of planned development, estimates the traffic to be generated, and assigns it to the area roadway network. This procedure produces a more realistic estimate of growth for local traffic; however, potential population growth and development external to the study area would not be accounted for in the resulting traffic projections.

To provide a conservative analysis framework, both procedures were used, the salient components of which are described below.

#### **Specific Development by Others**

The Town of Marshfield Planning Department has been contacted in order to determine if there were any projects planned within the study area that would have an impact on future traffic volumes at the study intersections. At this time, no projects were identified for inclusion in this assessment. A supplement to this assessment will be prepared to the extent that the Town identifies specific projects that would result in an increase in traffic within the study area that would exceed the general background traffic growth rate (discussion follows).

## **General Background Traffic Growth**

Traffic-volume data compiled by MassDOT from permanent count stations located in Marshfield and Pembroke were reviewed in order to determine general traffic growth trends in the area. This data indicates that traffic volumes have fluctuated over the 10-year period between 2009 and 2019, with an average traffic growth rate of 0.70 percent per year. In order to provide a prudent planning condition for the Project, a slightly higher 1.0 percent per year compounded annual background traffic growth rate was used in order to account for future traffic growth and presently unforeseen development within the study area.

## **Roadway Improvement Projects**

The Town of Marshfield and MassDOT were contacted in order to determine if there were any planned future roadway improvement projects expected to be complete by 2029 within the study area. Based on these discussions, no roadway improvement projects aside from routine maintenance activities were identified to be planned within the study area at this time.

As a part of the October 2, 2020, Zoning Board of Appeals (ZBA) approval of the recreational marijuana retail establishment located at 985 Plain Street (ZBA Case No. 20-49), the ZBA identified in its decision granting a Special Permit and Site Plan Approval for the project that the Host Community Agreement with the Town included an offer to design, permit and provide funding for the installation of a traffic signal at the Route 139/School Street intersection.

## **No-Build Traffic Volumes**

The 2029 No-Build condition peak-hour traffic volumes were developed by applying the 1.0 percent per year compounded annual background traffic growth rate to the 2021 Existing peak-hour traffic volumes. The resulting 2029 No-Build weekday morning, weekday evening and Saturday midday peak-hour traffic volumes are shown on Figures 6, 7, and 8, respectively.

## **PROJECT-GENERATED TRAFFIC**

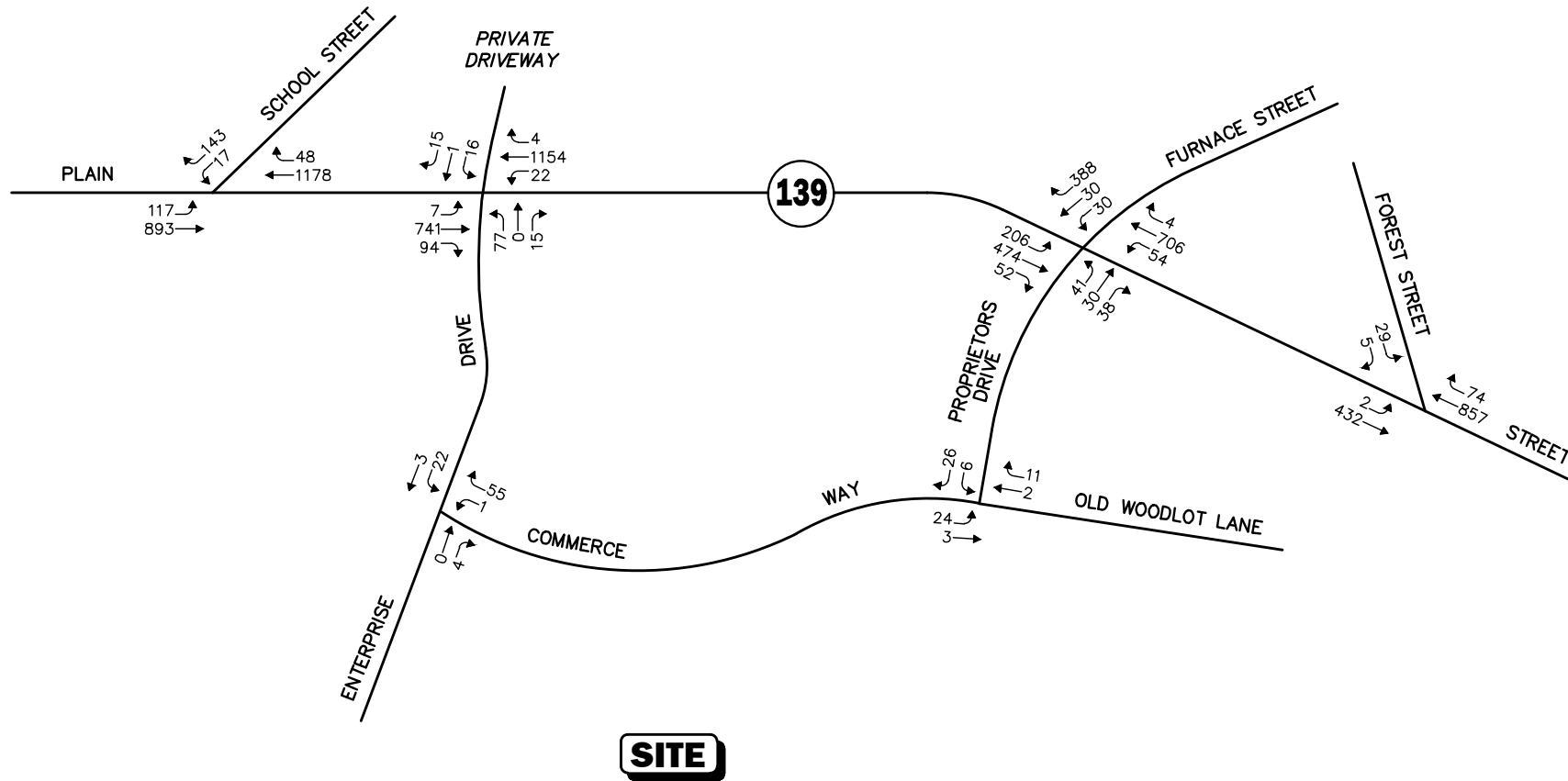
Design year (2029 Build) traffic volumes for the study area roadways were determined by estimating Project-generated traffic volumes and assigning those volumes on the study roadways. The following sections describe the methodology used to develop the anticipated traffic characteristics of the Project.

As proposed, the Project will entail the construction of a 300-unit multifamily residential community. In order to develop the traffic characteristics of the Project, trip-generation statistics published by the Institute of Transportation Engineers (ITE)<sup>9</sup> for a similar land use as that proposed was used. ITE Land Use Code (LUC) 220, *Multifamily Housing (Low-Rise)*; was used to establish the trip-generation characteristics of the Project, the results of which are summarized in Table 5, with the detailed trip calculations provided in the Appendix.

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<sup>9</sup>Ibid 1.





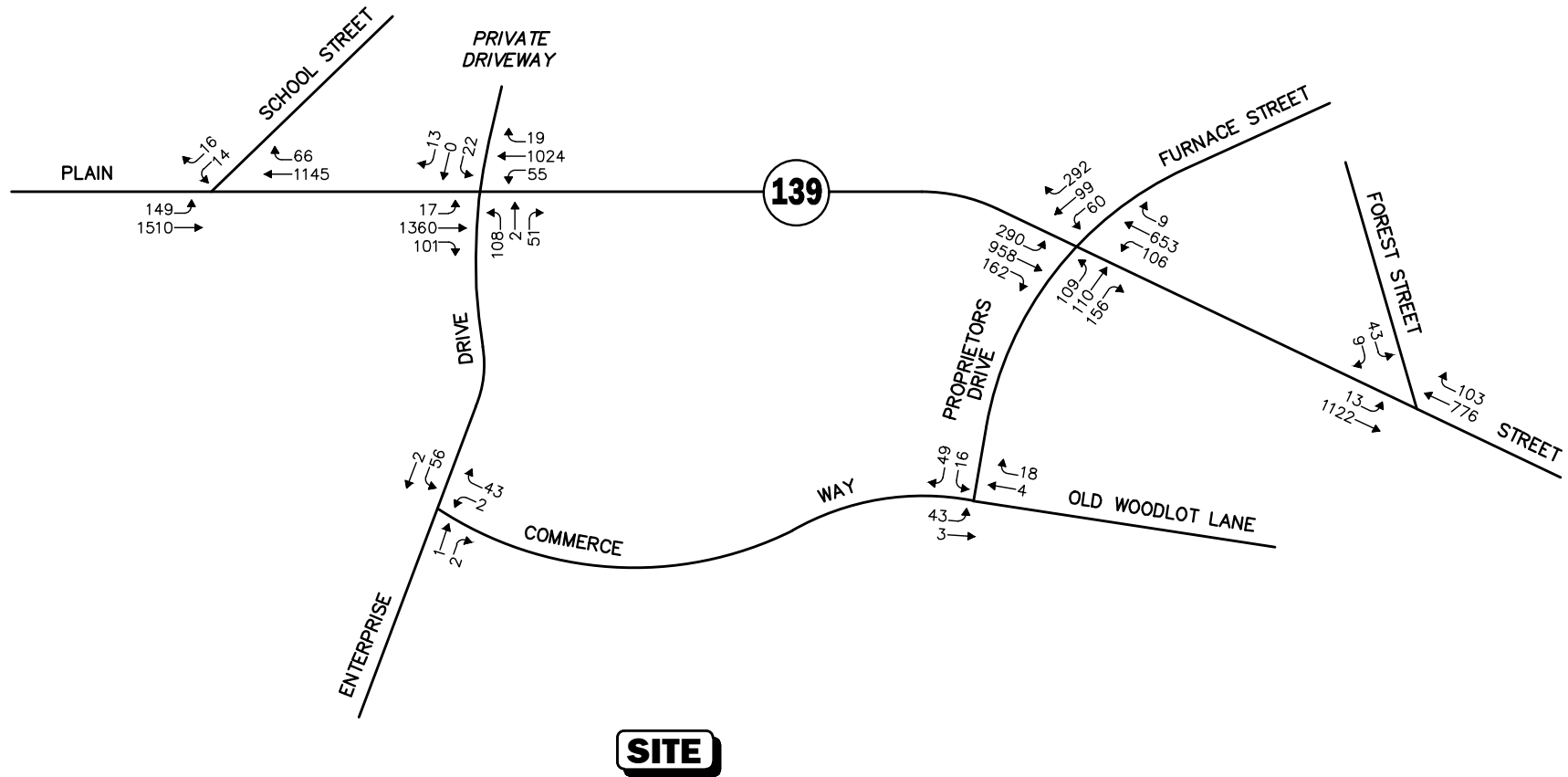
Note: Imbalances exist due to numerous curb cuts and side streets that are not shown.

Not To Scale



Figure 6

2029 No-Build  
Weekday Morning  
Peak-Hour Traffic Volumes



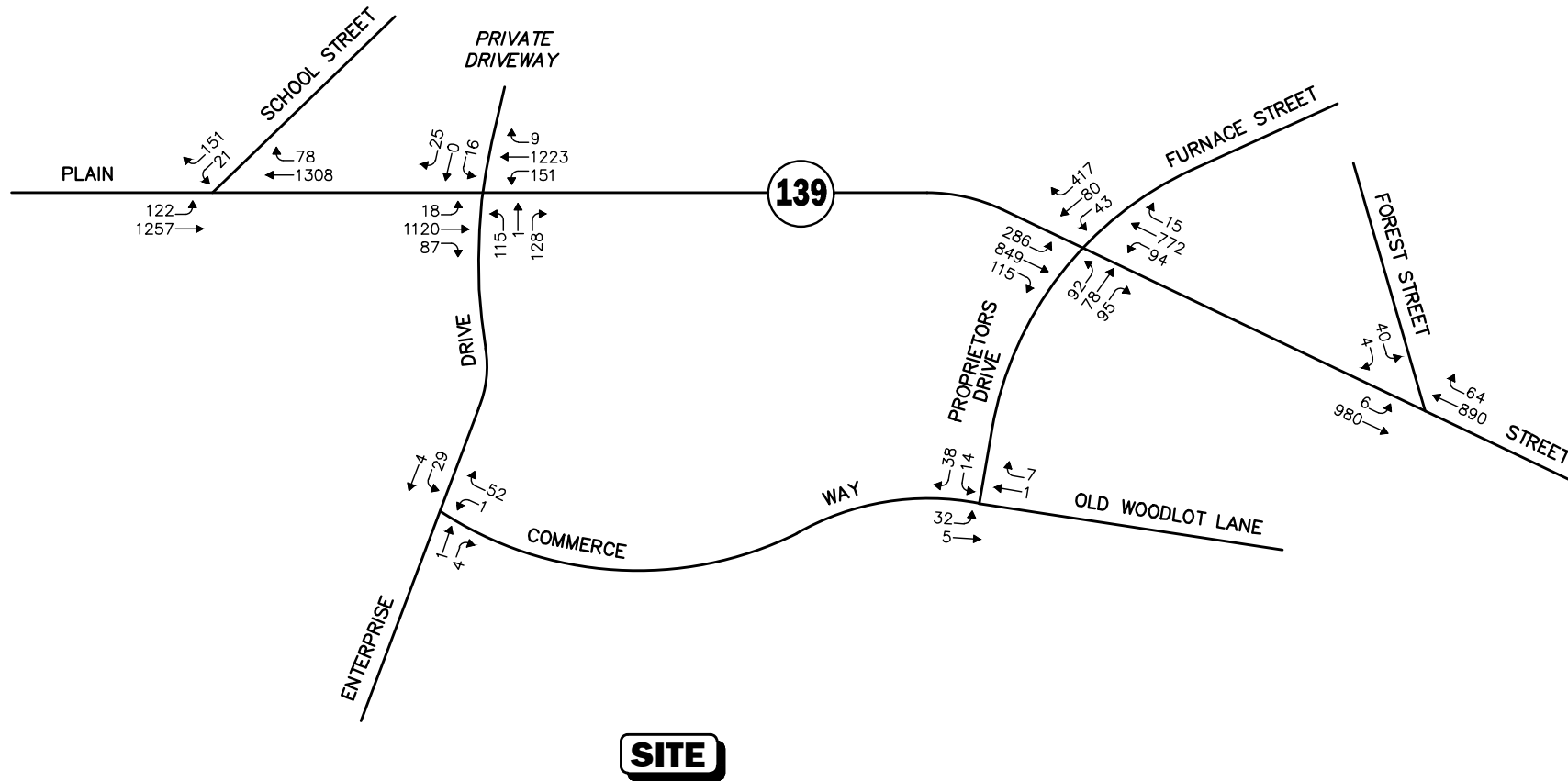
Note: Imbalances exist due to numerous curb cuts and side streets that are not shown.

Not To Scale



Figure 7

2029 No-Build  
Weekday Evening  
Peak-Hour Traffic Volumes



Note: Imbalances exist due to numerous curb cuts and side streets that are not shown.

Not To Scale



Figure 8

2029 No-Build  
Saturday Midday  
Peak-Hour Traffic Volumes

**Table 5**  
**TRIP GENERATION SUMMARY**

Time Period	Vehicle Trips <sup>a</sup>		
	Entering	Exiting	Total
<i>Average Weekday:</i>	999	999	1,998
<i>Weekday Morning Peak-Hour:</i>	28	88	116
<i>Weekday Evening Peak-Hour:</i>	95	55	150
<i>Average Saturday:</i>	683	683	1,366
<i>Saturday Midday Peak-Hour:</i>	62	61	123

<sup>a</sup>Based on ITE LUC 220, *Multifamily Housing (Low-Rise)*.

### **Project-Generated Traffic-Volume Summary**

As can be seen in Table 5, the Project is expected to generate approximately 1,998 vehicle trips on an average weekday and 1,366 vehicle trips on a Saturday (both two way, 24-hour volumes), with approximately 116 vehicle trips (28 vehicles entering and 88 exiting) expected during the weekday morning peak hour, 150 vehicle trips (95 vehicles entering and 55 exiting) expected during the weekday evening peak hour and 123 vehicle trips (62 vehicles entering and 61 exiting) expected during the Saturday midday peak hour.

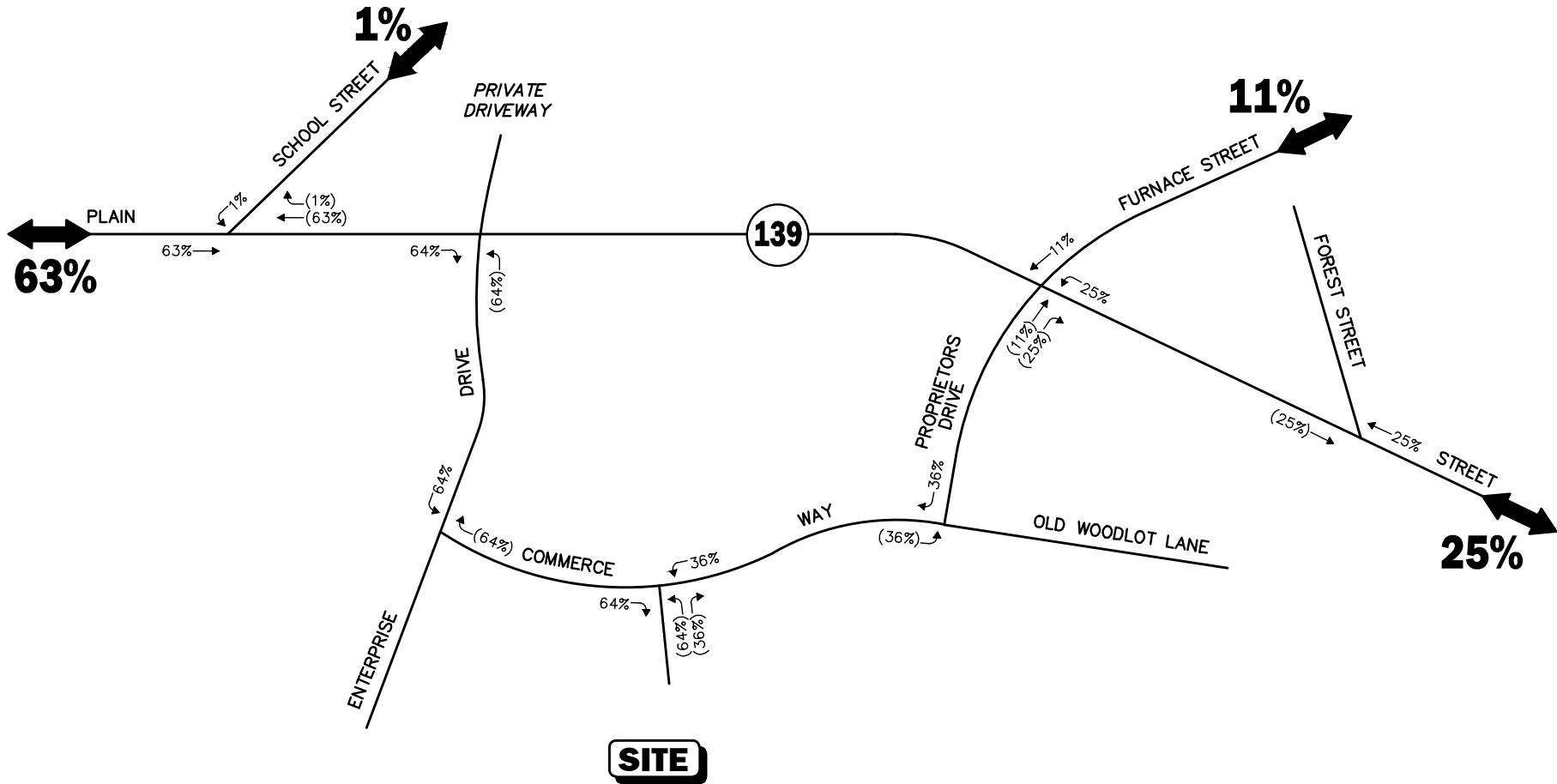
### **TRIP DISTRIBUTION AND ASSIGNMENT**

The directional distribution of generated trips to and from the Project site was determined based on a review of Journey-to-Work data obtained from the U.S. Census for persons residing in the Town of Marshfield and then refined based on existing traffic patterns within the study area. This methodology is consistent with the residential nature of the Project. The general trip distribution for the Project is graphically depicted on Figure 9. Traffic volumes expected to be generated by the Project were assigned onto the study area roadway network as shown on Figures 10, 11, and 12 for the weekday morning, weekday evening and Saturday midday peak hours, respectively.

### **FUTURE TRAFFIC VOLUMES - BUILD CONDITION**

The 2029 Build condition traffic volumes consist of the 2029 No-Build traffic volumes with the additional traffic expected to be generated by the Project added to them. The 2029 Build weekday morning, weekday evening and Saturday midday peak-hour traffic volumes are graphically depicted on Figures 13, 14, and 15, respectively.

A summary of peak-hour projected traffic-volume changes outside of the study area that is the subject of this assessment is shown in Table 6. These changes are a result of the construction of the Project.



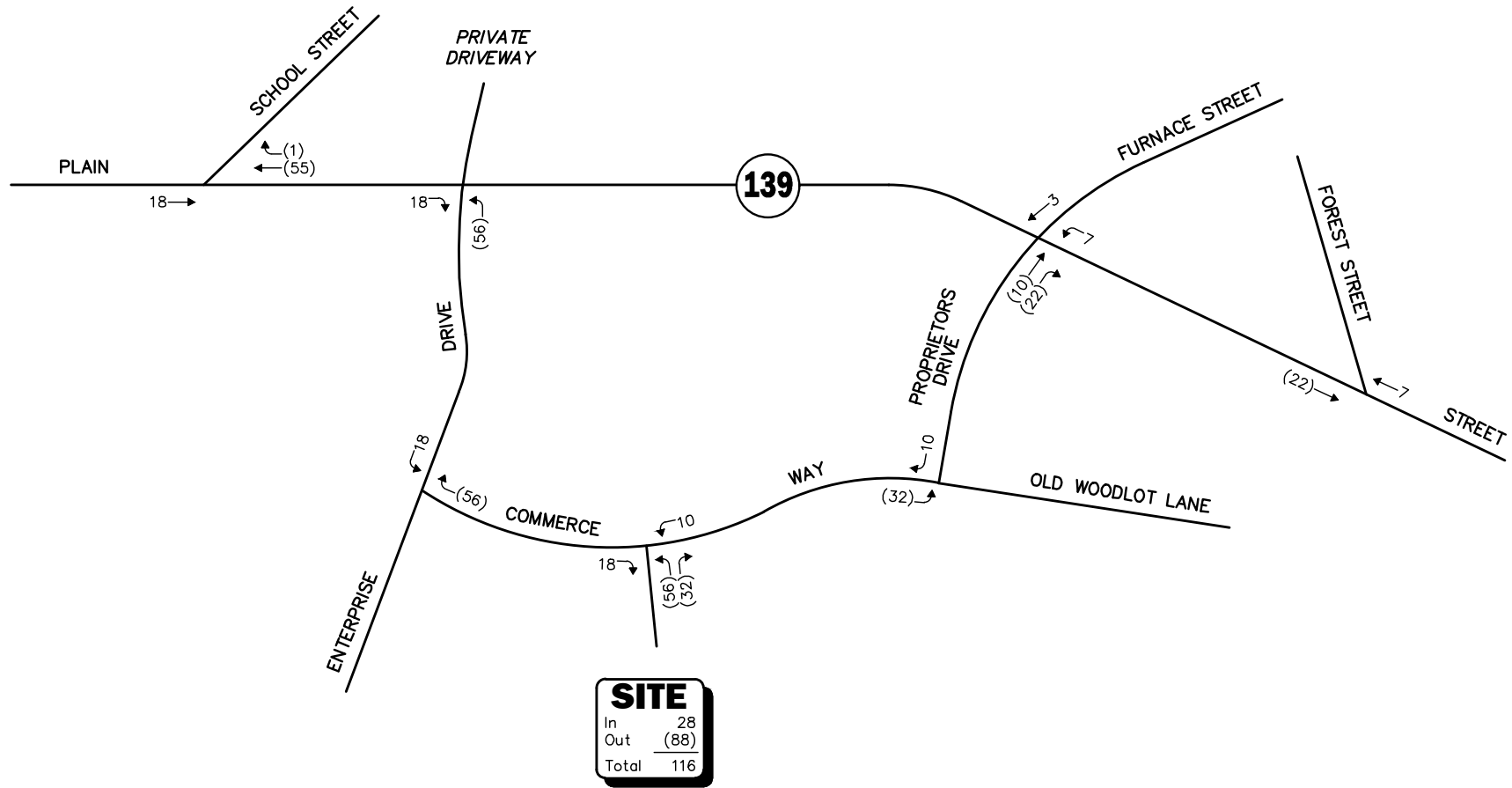
**Legend:**  
 XX Entering Trips  
 (XX) Exiting Trips

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**Figure 9**  
**Trip Distribution Map**



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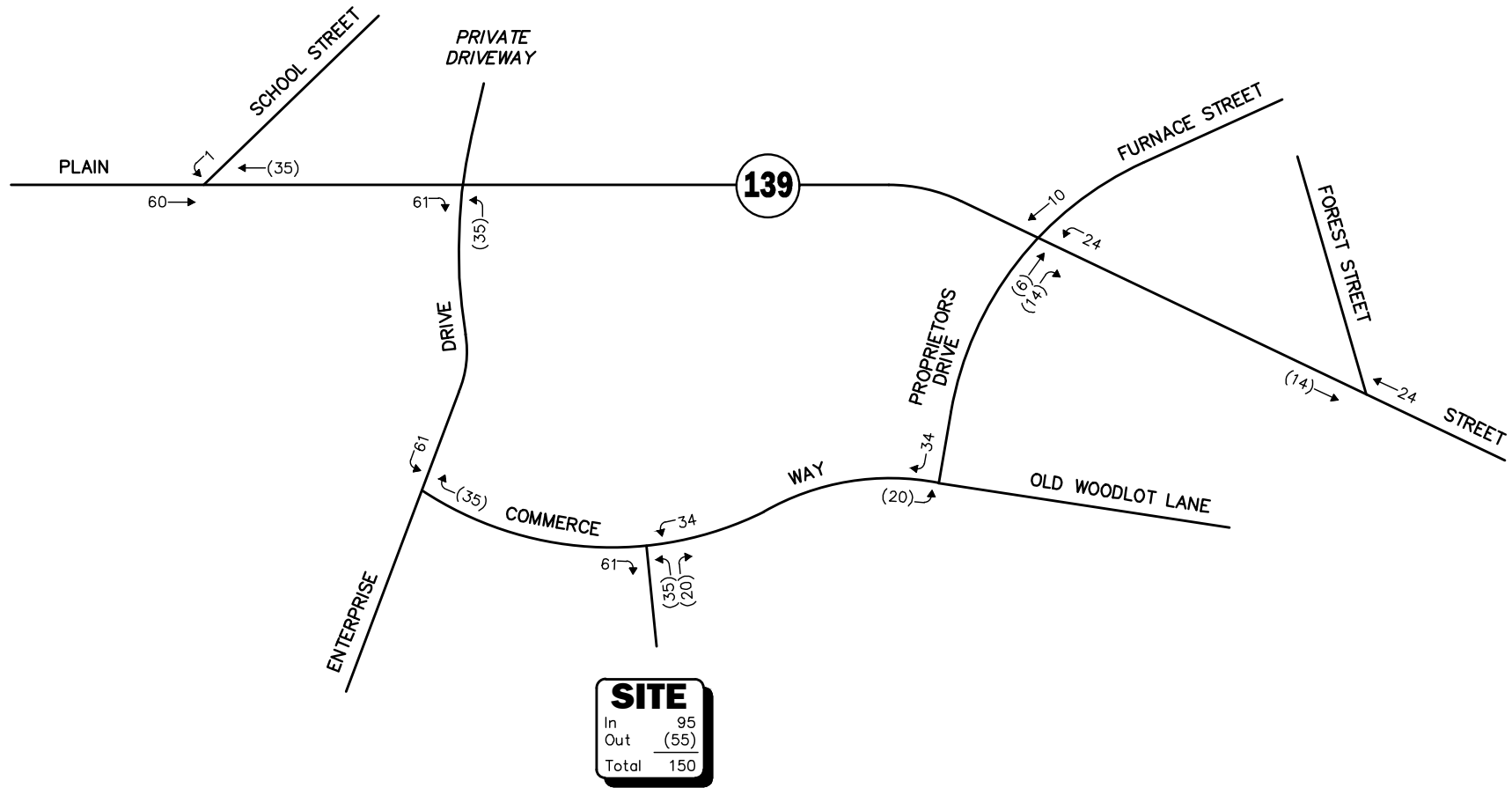


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Figure 10

Project-Generated  
Weekday Morning  
Peak-Hour Traffic Volumes

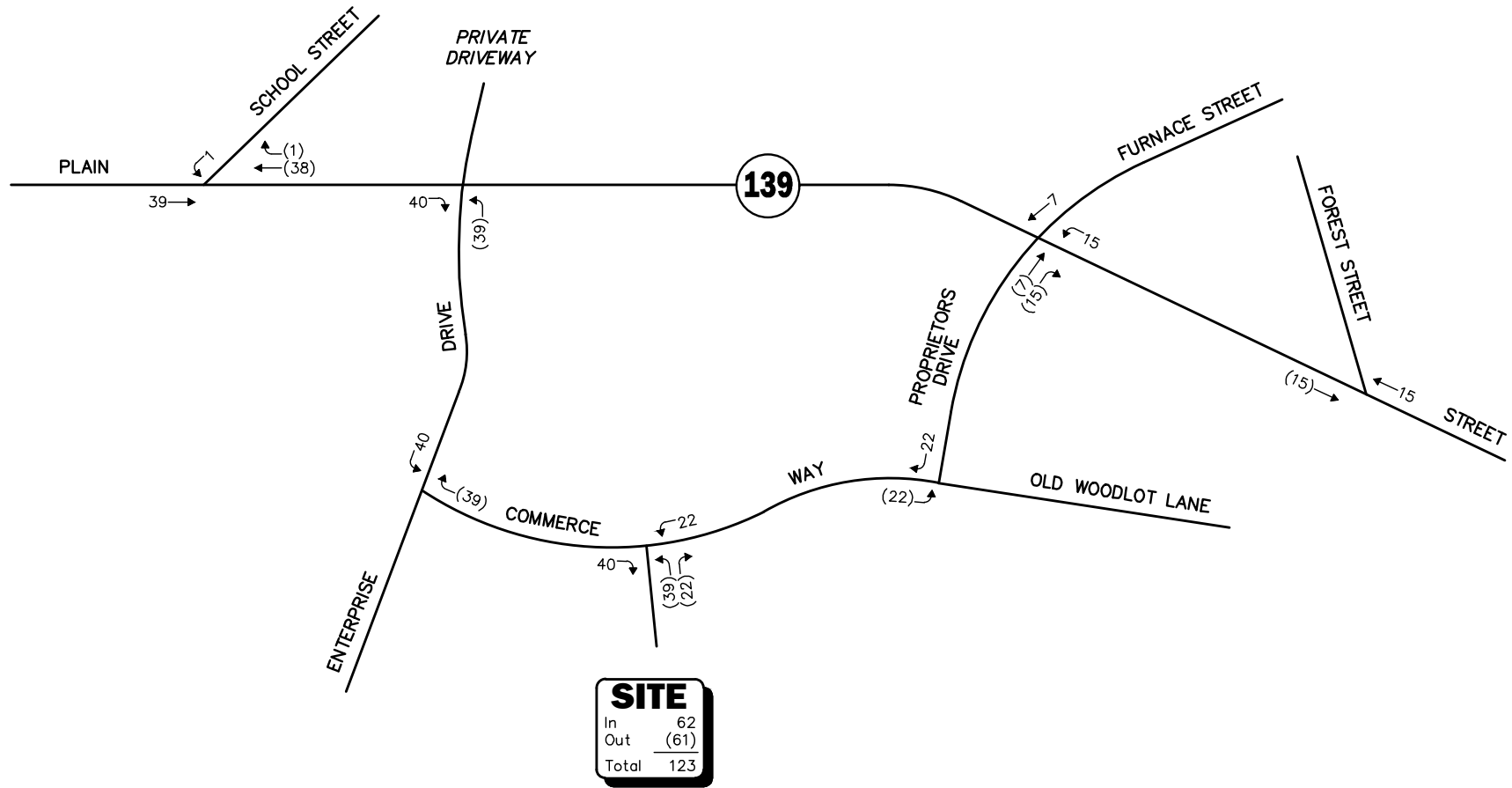


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**Figure 11**  
 Project-Generated  
 Weekday Evening  
 Peak-Hour Traffic Volumes

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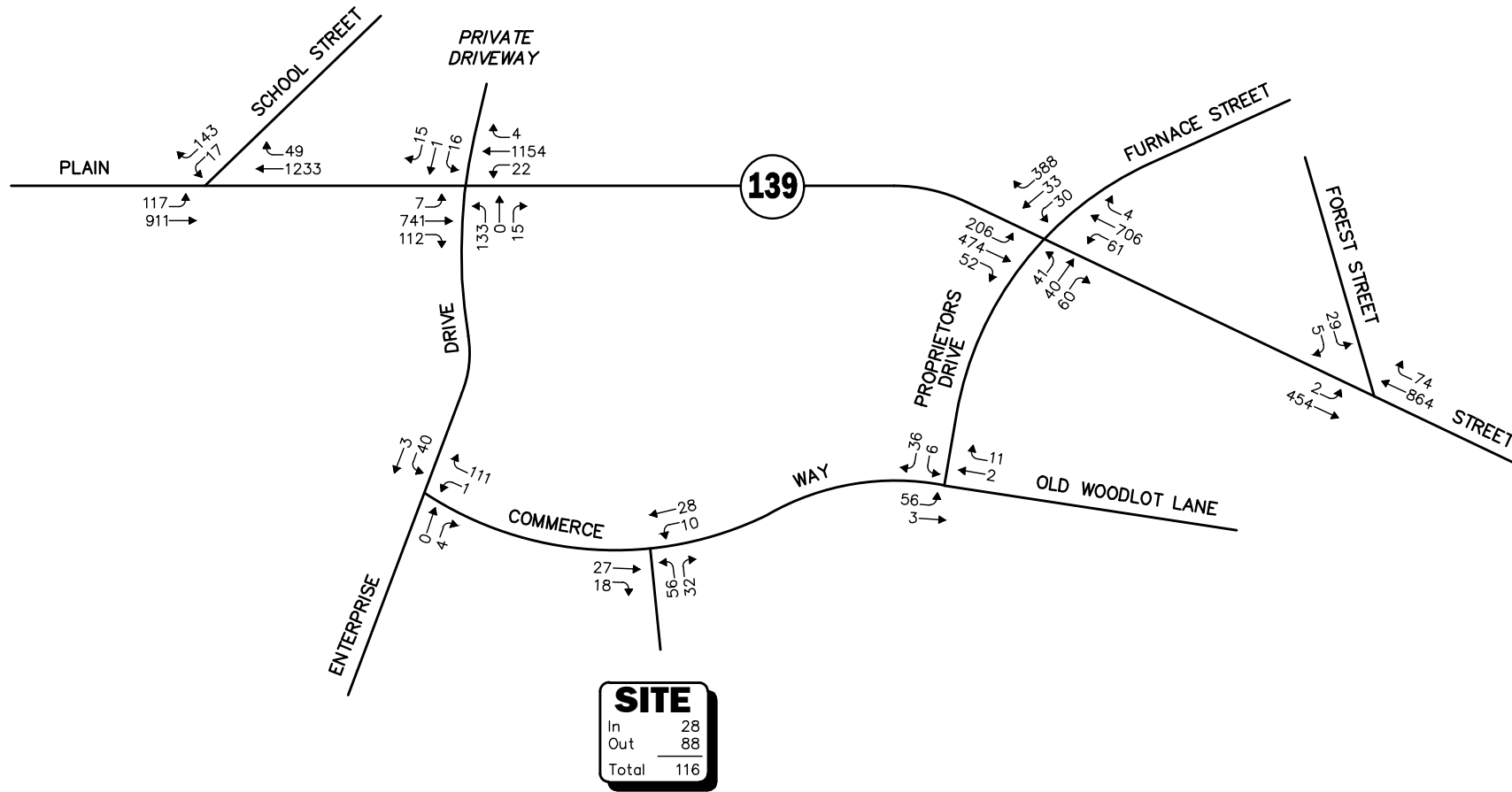
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**Figure 12**  
**Project-Generated**  
**Saturday MIDDAY**  
**Peak-Hour Traffic Volumes**

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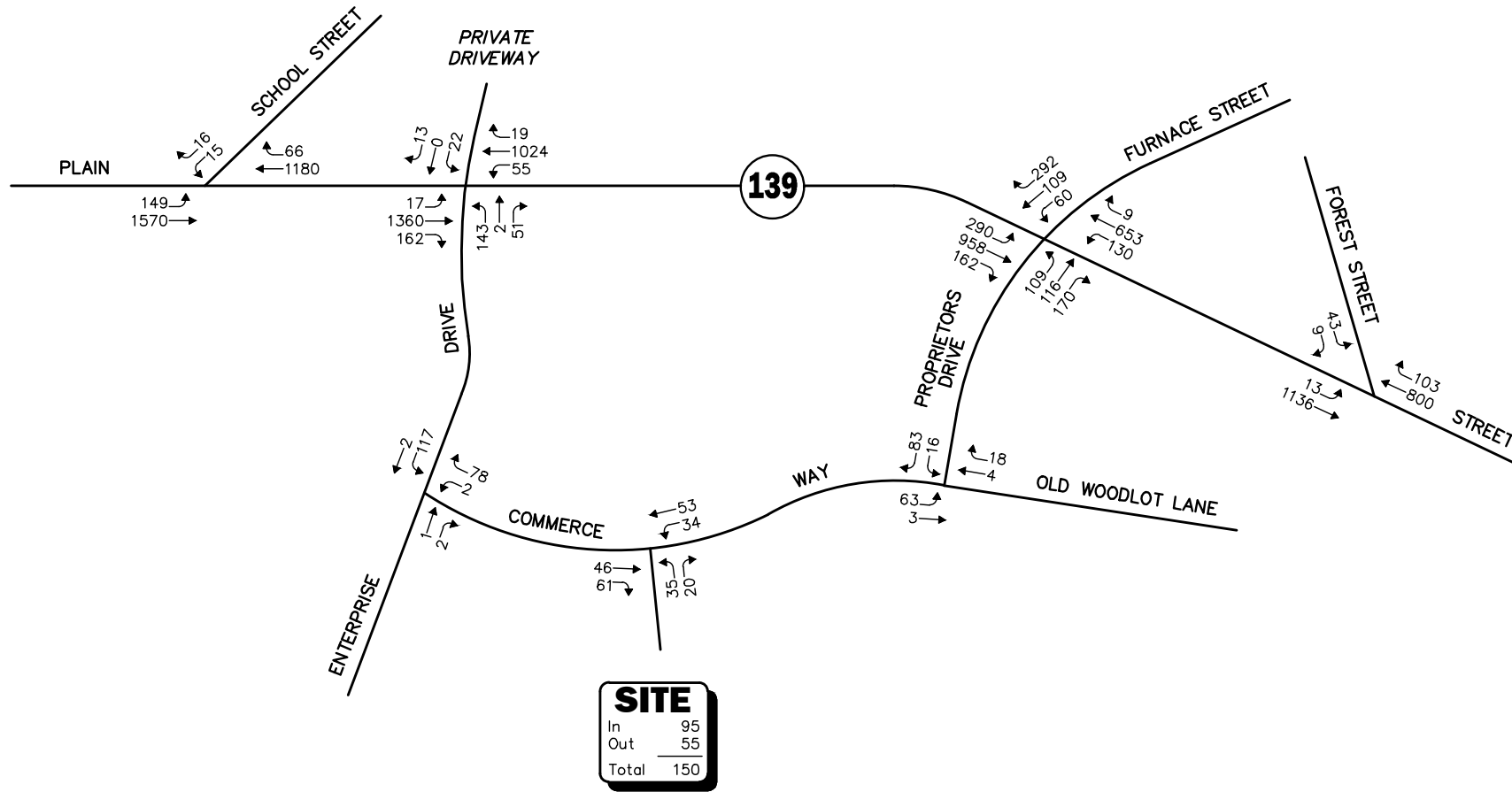
Note: Imbalances exist due to numerous curb cuts and side streets that are not shown.

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Figure 13

2029 Build  
Weekday Morning  
Peak-Hour Traffic Volumes





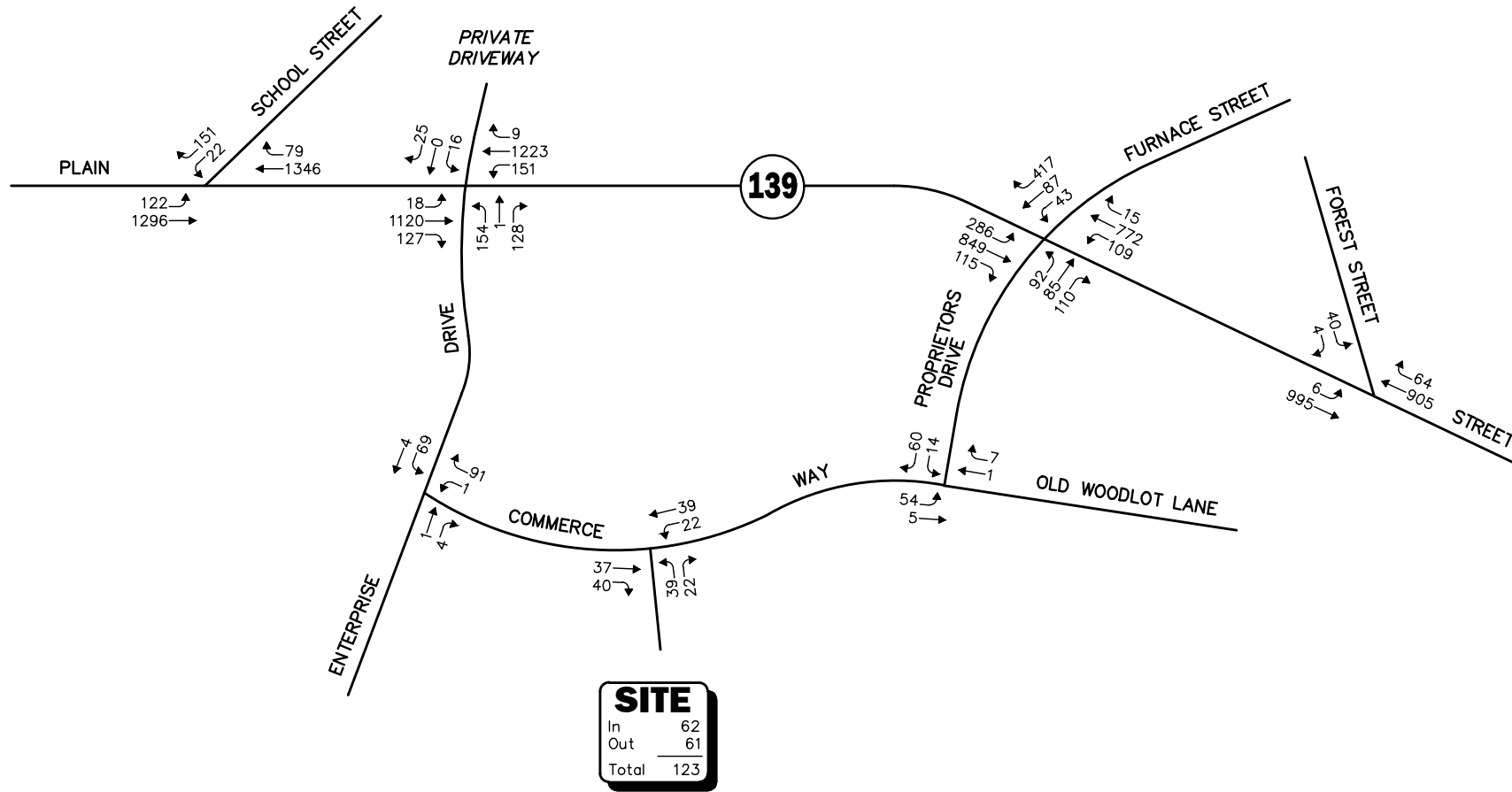
Note: Imbalances exist due to numerous curb cuts and side streets that are not shown.

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Figure 14

2029 Build  
Weekday Evening  
Peak-Hour Traffic Volumes





Note: Imbalances exist due to numerous curb cuts and side streets that are not shown.

Not To Scale

Figure 15

2029 Build  
 Saturday Midday  
 Peak-Hour Traffic Volumes



**Table 6**  
**PEAK-HOUR TRAFFIC-VOLUME INCREASES**

Location/Peak Hour	2021 Existing	2029 No-Build	2029 Build	Traffic-Volume Increase Over No-Build	Percent Increase Over No-Build
<i>Route 139, west of School Street:</i>					
Weekday Morning	2,153	2,331	2,404	73	3.1
Weekday Evening	2,605	2,820	2,915	95	3.4
Saturday MIDDAY	2,621	2,838	2,915	77	2.7
<i>Route 139, east of Forest Street:</i>					
Weekday Morning	1,285	1,392	1,421	29	2.1
Weekday Evening	1,888	2,044	2,082	38	1.9
Saturday MIDDAY	1,823	1,974	2,004	30	1.5
<i>School Street, north of Route 139:</i>					
Weekday Morning	300	325	326	1	0.3
Weekday Evening	227	245	246	1	0.4
Saturday MIDDAY	343	372	374	2	0.5
<i>Furnace Street, north of Route 139:</i>					
Weekday Morning	636	688	701	13	1.9
Weekday Evening	794	860	876	16	1.9
Saturday MIDDAY	849	919	933	14	1.5

As shown in Table 7, Project-related traffic-volume increases outside of the study area relative to 2029 No-Build conditions are anticipated to range from 0.3 to 3.4 percent during the peak periods, with vehicle increases shown to range from 1 to 95 vehicles. As such, the study area that has been evaluated as a part of this assessment includes all intersections where the Project is predicted to result in an increase in peak hour traffic volumes by: a) five (5) percent or more, or b) by more than 100 vehicles per hour; consistent with the guidance provided in MassDOT’s *Transportation Impact Assessment (TIA) Guidelines*.

# **TRAFFIC OPERATIONS ANALYSIS**

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Measuring existing and future traffic volumes quantifies traffic flow within the study area. To assess quality of flow, roadway capacity and vehicle queue analyses were conducted under Existing, No-Build, and Build traffic-volume conditions. Capacity analyses provide an indication of how well the roadway facilities serve the traffic demands placed upon them, with vehicle queue analyses providing a secondary measure of the operational characteristics of an intersection or section of roadway under study.

## **METHODOLOGY**

### **Levels of Service**

A primary result of capacity analyses is the assignment of level of service to traffic facilities under various traffic-flow conditions.<sup>10</sup> The concept of level of service is defined as a qualitative measure describing operational conditions within a traffic stream and their perception by motorists and/or passengers. A level-of-service definition provides an index to quality of traffic flow in terms of such factors as speed, travel time, freedom to maneuver, traffic interruptions, comfort, convenience, and safety.

Six levels of service are defined for each type of facility. They are given letter designations from A to F, with level-of-service (LOS) A representing the best operating conditions and LOS F representing congested or constrained operating conditions.

Since the level of service of a traffic facility is a function of the traffic flows placed upon it, such a facility may operate at a wide range of levels of service, depending on the time of day, day of week, or period of year.

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<sup>10</sup>The capacity analysis methodology is based on the concepts and procedures presented in the *Highway Capacity Manual*; Transportation Research Board; Washington, DC; 2010.

## **Signalized Intersections**

The six levels of service for signalized intersections may be described as follows:

- *LOS A* describes operations with very low control delay; most vehicles do not stop at all.
- *LOS B* describes operations with relatively low control delay. However, more vehicles stop than *LOS A*.
- *LOS C* describes operations with higher control delays. Individual cycle failures may begin to appear. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.
- *LOS D* describes operations with control delay in the range where the influence of congestion becomes more noticeable. Many vehicles stop and individual cycle failures are noticeable.
- *LOS E* describes operations with high control delay values. Individual cycle failures are frequent occurrences.
- *LOS F* describes operations with high control delay values that often occur with oversaturation. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.

Levels of service for signalized intersections are calculated using the operational analysis methodology of the 2000 *Highway Capacity Manual*<sup>11</sup> and implemented as a part of the Synchro® 11 software as recommended by MassDOT. This method assesses the effects of signal type, timing, phasing, and progression; vehicle mix; and geometrics on delay. Level-of-service designations are based on the criterion of control or signal delay per vehicle. Control or signal delay is a measure of driver discomfort, frustration, and fuel consumption, and includes initial deceleration delay approaching the traffic signal, queue move-up time, stopped delay and final acceleration delay. Table 7 summarizes the relationship between level of service and control delay. The tabulated control delay criterion may be applied in assigning level-of-service designations to individual lane groups, to individual intersection approaches, or to entire intersections.

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<sup>11</sup>*Highway Capacity Manual*; Transportation Research Board; Washington, DC; 2000.

**Table 7**  
**LEVEL-OF-SERVICE CRITERIA**  
**FOR SIGNALIZED INTERSECTIONS<sup>a</sup>**

Level of Service	Control (Signal) Delay Per Vehicle (Seconds)
A	≤10.0
B	10.1 to 20.0
C	20.1 to 35.0
D	35.1 to 55.0
E	55.1 to 80.0
F	>80.0

<sup>a</sup>Source: *Highway Capacity Manual*, Transportation Research Board; Washington, DC; 2000; page 16-2.

### Unsignalized Intersections

The six levels of service for unsignalized intersections may be described as follows:

- *LOS A* represents a condition with little or no control delay to minor street traffic.
- *LOS B* represents a condition with short control delays to minor street traffic.
- *LOS C* represents a condition with average control delays to minor street traffic.
- *LOS D* represents a condition with long control delays to minor street traffic.
- *LOS E* represents operating conditions at or near capacity level, with very long control delays to minor street traffic.
- *LOS F* represents a condition where minor street demand volume exceeds capacity of an approach lane, with extreme control delays resulting.

The levels of service of unsignalized intersections are determined by application of a procedure described in the 2010 *Highway Capacity Manual*.<sup>12</sup> Level of service is measured in terms of average control delay. Mathematically, control delay is a function of the capacity and degree of saturation of the lane group and/or approach under study and is a quantification of motorist delay associated with traffic control devices such as traffic signals and STOP signs. Control delay includes the effects of initial deceleration delay approaching a STOP sign, stopped delay, queue move-up time, and final acceleration delay from a stopped condition. Definitions for level of service at unsignalized intersections are also given in the 2010 *Highway Capacity Manual*. Table 8 summarizes the relationship between level of service and average control delay for two-way stop controlled and all-way stop controlled intersections.

<sup>12</sup>*Highway Capacity Manual*; Transportation Research Board; Washington, DC; 2010.

**Table 8**  
**LEVEL-OF-SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS<sup>a</sup>**

Level-Of-Service by Volume-to-Capacity Ratio		Average Control Delay (Seconds Per Vehicle)
v/c ≤ 1.0	v/c > 1.0	
A	F	≤10.0
B	F	10.1 to 15.0
C	F	15.1 to 25.0
D	F	25.1 to 35.0
E	F	35.1 to 50.0
F	F	>50.0

<sup>a</sup>Source: *Highway Capacity Manual*; Transportation Research Board; Washington, DC; 2010; page 19-2.

### Vehicle Queue Analysis

Vehicle queue analyses are a direct measurement of an intersection’s ability to process vehicles under various traffic control and volume scenarios and lane use arrangements. The vehicle queue analysis was performed using the Synchro® intersection capacity analysis software which is based upon the methodology and procedures presented in the 2010 *Highway Capacity Manual*. The Synchro® vehicle queue analysis methodology is a simulation based model which reports the number of vehicles that experience a delay of six seconds or more at an intersection. For signalized intersections, Synchro® reports both the average (50<sup>th</sup> percentile) the 95<sup>th</sup> percentile vehicle queue. For unsignalized intersections, Synchro® reports the 95<sup>th</sup> percentile vehicle queue. Vehicle queue lengths are a function of the capacity of the movement under study and the volume of traffic being processed by the intersection during the analysis period. The 95<sup>th</sup> percentile vehicle queue is the vehicle queue length that will be exceeded only 5 percent of the time, or approximately three minutes out of sixty minutes during the peak one hour of the day (during the remaining fifty-seven minutes, the vehicle queue length will be less than the 95<sup>th</sup> percentile queue length).

### ANALYSIS RESULTS

Level-of-service and vehicle queue analyses were conducted for 2021 Existing, 2029 No-Build, and 2029 Build conditions for the intersections within the study area. The results of the intersection capacity and vehicle queue analyses are summarized in Tables 9 and 10, with the detailed analysis results presented in the Appendix.

The following is a summary of the level-of-service and vehicle queue analyses for the intersections within the study area. For context, we note that an LOS of “D” or better is generally defined as “acceptable” operating conditions.



## **Signalized Intersections**

Project-related impacts at the signalized study area intersection are shown on Table 9 and are defined as follows:

### **Route 139 at Enterprise Drive**

Overall operating conditions were shown to degrade from LOS C to a LOS D during the Saturday midday peak-hour as a result of a predicted increase in overall average motorist delay of 19.5 seconds with the addition of Project-related traffic. Vehicle queues at the intersection were shown to increase by up to six (6) vehicles with the addition of Project-related traffic. Independent of the Project, it was noted that left-turn movements from the Route 139 westbound approach during the weekday evening and Saturday midday peak hours, and left-turn/through movements from Enterprise Drive during the Saturday midday peak-hour are operating at capacity (i.e., LOS "E") under existing conditions, with conditions expected to further degrade in the future under No Build conditions.

### **Route 139 at Proprietors Drive and Furnace Street**

No change in overall level-of-service is predicted to occur over No-Build conditions, with all movements predicted to continue to operate at LOS D or better and Project-related impacts defined as an increase in overall average motorist delay of up to 1.7 seconds and in vehicle queuing of up to two (2) vehicles. Operating conditions for left-turn movements from the Route 139 eastbound approach were shown to degrade over No-Build conditions from LOS B to LOS C during the weekday morning peak-hour as a result of a predicted increase in average motorist delay of 0.9 seconds with the addition of Project-related traffic

## **Unsignalized Intersections**

Project-related impacts at the unsignalized study area intersections are shown on Table 10 and are defined as follows:

### **Route 139 at School Street**

No change in level of service is predicted to occur for any movement over No-Build conditions, with Project-related impacts defined as a general increase in average motorist delay that resulted in a corresponding increase in vehicle queuing of up to one (1) vehicle. Independent of the Project, left-turn movements from School Street were identified to be operating over capacity (i.e., LOS "F") during the peak hours under existing conditions as a result of the relatively large volume of conflicting traffic along Route 139 during these periods.

As identified previously, as a condition of the approval of the recreational marijuana retail establishment located at 985 Plain Street, the Applicant will design, permit and provide funding for the installation of a traffic control signal at the Route 139/School Street intersection. As can be seen in Table 9, with the installation of a traffic control signal at this intersection as committed to and for which the Town has or receive funding for construction, overall intersection operations will improve to LOS A during the peak hours, with no movement operating below LOS D.

### **Route 139 at Forest Street**

No change in level of service or increase in vehicle queuing is predicted to occur for any movement over No-Build conditions. Independent of the Project, all movements from Forest Street were identified to be operating at or over capacity during the peak hours under existing conditions as a result of the relatively large volume of conflicting traffic along Route 139 during these periods.

### **Enterprise Drive at Commerce Way**

No change in level of service is predicted to occur for any movement over No-Build conditions, with all movements shown to continue to operate at LOS A and Project-related impacts defined as an increase in motorist delay of less than 1.0 seconds and in vehicle queuing of up to one (1) vehicle.

### **Proprietors Drive at Commerce Way and Old Woodlot Lane**

No change in level of service is predicted to occur for any movement over No-Build conditions, with all movements shown to continue to operate at LOS A and Project-related impacts defined as an increase in motorist delay of less than 1.0 seconds and in vehicle queuing of up to one (1) vehicle.

### **Commerce Way at the Project Site Driveway**

All movements at the Project site driveway intersection with Commerce Way are predicted to operate at LOS A with minor (up to one (1)) vehicle queuing predicted for motorists exiting the Project site.

**Table 9**  
**SIGNALIZED INTERSECTION LEVEL-OF-SERVICE AND VEHICLE QUEUE SUMMARY**

Signalized Intersection/Peak Hour/Movement	2021 Existing				2029 No-Build				2029 Build			
	V/C <sup>a</sup>	Delay <sup>b</sup>	LOS <sup>c</sup>	Queue <sup>d</sup> 50 <sup>th</sup> /95 <sup>th</sup>	V/C	Delay	LOS	Queue 50 <sup>th</sup> /95 <sup>th</sup>	V/C	Delay	LOS	Queue 50 <sup>th</sup> /95 <sup>th</sup>
<b>Route 139 at Enterprise Drive</b>												
<i>Weekday Morning:</i>												
Route 139 EB LT	0.39	46.7	D	0/1	0.41	50.3	D	0/1	0.41	51.6	D	0/1
Route 139 EB TH/RT	0.49	12.1	B	3/13	0.51	12.1	B	3/15	0.59	16.6	B	4/15
Route 139 WB LT	0.39	36.6	D	1/2	0.43	38.8	D	1/2	0.44	42.3	D	1/2
Route 139 WB TH/RT	0.66	13.2	B	5/21	0.68	13.5	B	6/23	0.76	19.0	B	7/23
Enterprise Drive NB LT/TH	0.44	27.7	C	1/4	0.50	29.9	C	1/5	0.56	29.9	C	2/8
Enterprise Drive NB RT	0.01	24.5	C	0/0	0.01	26.0	C	0/0	0.01	26.0	C	0/0
Private Driveway SB LT/TH/RT	0.11	25.0	C	0/2	0.11	26.6	C	0/2	0.11	26.6	C	1/2
<b>Overall</b>	--	<b>14.1</b>	<b>B</b>	--	--	<b>14.3</b>	<b>B</b>	--	--	<b>19.2</b>	<b>B</b>	--
<i>Weekday Evening:</i>												
Route 139 EB LT	0.45	52.9	D	1/2	0.45	53.1	D	1/2	0.46	54.8	D	1/2
Route 139 EB TH/RT	0.75	18.5	B	1/31	0.81	20.8	C	13/35	0.87	25.1	C	16/38
Route 139 WB LT	0.62	56.4	E	1/4	0.68	62.7	E	2/5	0.71	69.8	E	2/5
Route 139 WB TH/RT	0.51	12.7	B	4/18	0.55	13.4	B	5/20	0.57	14.7	B	6/20
Enterprise Drive NB LT/TH	0.60	41.2	D	3/6	0.64	42.7	D	3/6	0.75	49.7	D	4/8
Enterprise Drive NB RT	0.04	33.2	C	0/0	0.04	33.1	C	0/1	0.04	32.3	C	0/1
Private Driveway SB LT/TH/RT	0.04	33.2	C	0/0	0.04	33.1	C	0/0	0.04	32.3	C	0/0
<b>Overall</b>	--	<b>18.9</b>	<b>B</b>	--	--	<b>20.5</b>	<b>C</b>	--	--	<b>24.1</b>	<b>C</b>	--
<i>Saturday MIDDAY:</i>												
Route 139 EB LT	0.38	50.6	D	1/2	0.38	52.9	D	1/2	0.40	54.7	D	1/2
Route 139 EB TH/RT	0.76	24.8	C	11/22	0.78	24.9	C	12/25	0.79	24.9	C	13/28
Route 139 WB LT	0.78	60.5	E	3/11	0.90	>80.0	F	4/12	0.92	>80.0	F	4/12
Route 139 WB TH/RT	0.64	17.3	B	7/22	0.67	17.4	B	8/24	0.66	17.0	B	8/24
Enterprise Drive NB LT/TH	0.93	71.5	E	5/6	1.07	>80.0	F	6/7	1.47	>80.0	F	8/13
Enterprise Drive NB RT	0.18	31.9	C	0/0	0.20	34.4	C	0/0	0.20	35.7	D	0/0
Private Driveway SB LT/TH/RT	0.06	30.9	C	0/0	0.07	33.4	C	0/0	0.15	35.8	D	0/0
<b>Overall</b>	--	<b>28.5</b>	<b>C</b>	--	--	<b>33.6</b>	<b>C</b>	--	--	<b>53.1</b>	<b>D</b>	--

See notes at end of the table.

**Table 9 (Continued)**  
**SIGNALIZED INTERSECTION LEVEL-OF-SERVICE AND VEHICLE QUEUE SUMMARY**

Signalized Intersection/Peak Hour/Movement	2021 Existing				2029 No-Build				2029 Build			
	V/C <sup>a</sup>	Delay <sup>b</sup>	LOS <sup>c</sup>	Queue <sup>d</sup> 50 <sup>th</sup> /95 <sup>th</sup>	V/C	Delay	LOS	Queue 50 <sup>th</sup> /95 <sup>th</sup>	V/C	Delay	LOS	Queue 50 <sup>th</sup> /95 <sup>th</sup>
<i>Route 139 at Proprietors Drive and Furnace Street</i>												
<i>Weekday Morning:</i>												
Route 139 EB LT	0.49	19.0	B	3/6	0.51	19.8	B	3/7	0.52	20.7	C	3/7
Route 139 EB TH	0.25	6.8	A	2/4	0.26	6.8	A	3/4	0.29	8.9	A	3/5
Route 139 EB RT	0.03	5.9	A	0/1	0.04	5.8	A	0/1	0.04	7.7	A	0/1
Route 139 WB LT	0.40	27.7	C	1/2	0.44	29.8	C	1/3	0.36	27.3	C	1/3
Route 139 WB TH/RT	0.54	15.0	B	4/7	0.57	16.2	B	5/8	0.61	17.8	B	5/8
Proprietors Drive NB LT	0.33	25.3	C	1/2	0.36	27.1	C	1/2	0.28	24.9	C	1/2
Proprietors Drive NB TH/RT	0.21	24.2	C	1/2	0.24	25.8	C	1/2	0.33	25.1	C	1/3
Furnace Street SB LT	0.39	25.5	C	1/2	0.42	27.4	C	1/3	0.35	25.3	C	1/3
Furnace Street SB TH/RT	0.21	12.5	B	0/1	0.24	13.1	B	0/2	0.25	12.3	B	0/2
<b>Overall</b>	--	<b>14.0</b>	<b>B</b>	--	--	<b>14.8</b>	<b>B</b>	--	--	<b>15.8</b>	<b>B</b>	--
<i>Weekday Evening:</i>												
Route 139 EB LT	0.71	37.8	D	5/15	0.79	44.4	D	6/17	0.80	45.6	D	7/17
Route 139 EB TH	0.69	25.4	C	8/16	0.73	26.2	C	9/17	0.74	27.2	C	10/17
Route 139 EB RT	0.17	19.1	B	1/4	0.19	19.0	B	1/4	0.19	19.6	B	1/4
Route 139 WB LT	0.50	38.1	D	2/6	0.54	39.9	D	3/6	0.61	41.6	D	3/7
Route 139 WB TH/RT	0.70	31.1	C	7/11	0.71	30.8	C	8/12	0.69	30.2	C	8/12
Proprietors Drive NB LT	0.38	26.2	C	2/6	0.46	28.5	C	2/6	0.49	29.6	C	2/7
Proprietors Drive NB TH/RT	0.44	26.4	C	4/10	0.49	28.3	C	4/11	0.53	29.4	C	5/12
Furnace Street SB LT	0.58	29.2	C	4/7	0.74	39.0	D	5/8	0.86	52.7	D	5/10
Furnace Street SB TH/RT	0.21	12.2	B	0/0	0.23	13.4	B	0/0	0.23	13.8	B	0/0
<b>Overall</b>	--	<b>26.6</b>	<b>C</b>	--	--	<b>28.4</b>	<b>C</b>	--	--	<b>30.1</b>	<b>C</b>	--
<i>Saturday Midday:</i>												
Route 139 EB LT	0.59	26.5	C	4/14	0.67	31.2	C	5/17	0.68	31.5	C	5/17
Route 139 EB TH	0.49	13.9	B	5/13	0.53	15.1	B	6/15	0.58	18.1	B	6/15
Route 139 EB RT	0.09	11.1	B	1/2	0.10	11.7	B	1/3	0.11	13.8	B	1/3
Route 139 WB LT	0.49	34.1	C	2/5	0.52	36.5	D	2/5	0.52	36.5	D	2/6
Route 139 WB TH/RT	0.66	23.9	C	6/12	0.69	24.9	C	7/14	0.71	26.2	C	7/14
Proprietors Drive NB LT	0.47	30.4	C	2/5	0.50	31.6	C	2/5	0.50	31.6	C	2/5
Proprietors Drive NB TH/RT	0.50	30.1	C	2/6	0.52	31.2	C	3/7	0.55	31.2	C	3/8
Furnace Street SB LT	0.54	31.4	C	2/6	0.57	33.5	C	2/6	0.58	33.5	C	3/7
Furnace Street SB TH/RT	0.22	13.8	B	0/3	0.25	14.9	B	0/3	0.25	14.9	B	0/3
<b>Overall</b>	--	<b>20.6</b>	<b>C</b>	--	--	<b>22.1</b>	<b>C</b>	--	--	<b>23.3</b>	<b>C</b>	--

See notes at end of the table.

**Table 9**  
**SIGNALIZED INTERSECTION LEVEL-OF-SERVICE AND VEHICLE QUEUE SUMMARY**

Signalized Intersection/Peak Hour/Movement	2021 Existing				2029 No-Build				2029 Build			
	V/C <sup>a</sup>	Delay <sup>b</sup>	LOS <sup>c</sup>	Queue <sup>d</sup> 50 <sup>th</sup> /95 <sup>th</sup>	V/C	Delay	LOS	Queue 50 <sup>th</sup> /95 <sup>th</sup>	V/C	Delay	LOS	Queue 50 <sup>th</sup> /95 <sup>th</sup>
<b>Route 139 at School Street</b>												
<i>Weekday Morning:</i>												
Route 139 EB LT					0.33	4.9	A	0/1	0.34	5.5	A	0/1
Route 139 EB TH					0.36	2.2	A	0/4	0.37	2.2	A	0/4
Route 139 WB TH/RT					0.66	9.8	A	4/10	0.69	10.2	B	4/11
School Street SB LT					0.54	42.9	D	0/1	0.54	42.9	D	0/1
School Street SB RT					0.06	21.1	C	0/2	0.06	21.1	C	0/2
<b>Overall</b>					--	<b>7.7</b>	<b>A</b>	--	--	<b>7.9</b>	<b>A</b>	--
<i>Weekday Evening:</i>												
Route 139 EB LT					0.44	6.6	A	0/2	0.44	7.0	A	0/2
Route 139 EB TH					0.57	2.9	A	0/7	0.59	3.1	A	0/8
Route 139 WB TH/RT					0.70	10.3	B	4/11	0.72	10.7	B	4/12
School Street SB LT					0.50	38.8	D	0/1	0.53	41.7	D	0/1
School Street SB RT					0.01	21.8	C	0/1	0.01	21.7	C	0/1
<b>Overall</b>					--	<b>6.7</b>	<b>A</b>	--	--	<b>6.9</b>	<b>A</b>	--
<i>Saturday Midday:</i>												
Route 139 EB LT					0.36	7.1	A	0/2	0.36	7.5	A	0/2
Route 139 EB TH					0.51	2.8	A	0/6	0.53	2.9	A	0/7
Route 139 WB TH/RT					0.80	12.9	B	5/16	0.82	13.7	B	5/17
School Street SB LT					0.56	40.5	D	0/1	0.58	44.2	D	0/1
School Street SB RT					0.06	20.0	C	0/2	0.06	20.0	C	0/2
<b>Overall</b>					--	<b>8.9</b>	<b>A</b>	--	--	<b>9.4</b>	<b>A</b>	--

<sup>a</sup>Volume-to-capacity ratio.

<sup>b</sup>Control (signal) delay per vehicle in seconds.

<sup>c</sup>Level-of-Service.

<sup>d</sup>Queue length in vehicles based on 25-feet per vehicle.

NB = northbound; SB = southbound; EB = eastbound; WB = westbound; LT = left-turning movements; TH = through movements; RT = right-turning movements.

**Table 10**  
**UNSIGNALIZED INTERSECTION LEVEL-OF-SERVICE AND VEHICLE QUEUE SUMMARY**

Unsignalized Intersection/Peak-hour/Movement	2021 Existing				2029 No-Build				2029 Build			
	Demand <sup>a</sup>	Delay <sup>b</sup>	LOS <sup>c</sup>	Queue <sup>d</sup> 95 <sup>th</sup>	Demand	Delay	LOS	Queue 95 <sup>th</sup>	Demand	Delay	LOS	Queue 95 <sup>th</sup>
<b>Route 139 at School Street</b>												
<i>Weekday Morning:</i>												
Route 139 EB LT	108	12.4	B	1	117	13.4	B	1	117	14.0	B	1
Route 139 EB TH	825	0.0	A	0	893	0.0	A	0	911	0.0	A	0
Route 139 WB TH/RT	1,132	0.0	A	0	1,226	0.0	A	0	1,282	0.0	A	0
School Street SB LT	16	>50.0	F	1	17	>50.0	F	2	17	>50.0	F	2
School Street SB RT	132	16.7	C	2	143	18.6	C	2	143	19.6	C	2
<i>Weekday Evening:</i>												
Route 139 EB LT	138	13.7	B	1	149	15.2	C	2	149	15.8	C	2
Route 139 EB TH	1,395	0.0	A	0	1,510	0.0	A	0	1,570	0.0	A	0
Route 139 WB TH/RT	1,118	0.0	A	0	1,211	0.0	A	0	1,246	0.0	A	0
School Street SB LT	13	>50.0	F	2	14	>50.0	F	3	15	>50.0	F	3
School Street SB RT	15	13.9	B	0	16	14.7	B	0	16	15.0	B	0
<i>Saturday Midday:</i>												
Route 139 EB LT	113	14.4	B	1	122	16.1	C	1	122	16.7	C	2
Route 139 EB TH	1,161	0.0	A	0	1,257	0.0	A	0	1,296	0.0	A	0
Route 139 WB TH/RT	1,280	0.0	A	0	1,386	0.0	A	0	1,425	0.0	A	0
School Street SB LT	19	>50.0	F	3	21	>50.0	F	3	22	>50.0	F	4
School Street SB RT	139	20.2	C	2	151	23.7	C	3	151	24.8	C	3
<b>Route 139 at Forest Street</b>												
<i>Weekday Morning:</i>												
Route 139 EB LT/TH	401	0.1	A	0	434	0.1	A	0	456	0.0	A	0
Route 139 WB TH/RT	859	0.0	A	0	931	0.0	A	0	938	0.0	A	0
Forest Street SB LT/RT	32	39.2	E	2	34	>50.0	F	2	34	>50.0	F	2
<i>Weekday Evening:</i>												
Route 139 EB LT/TH	1,048	0.1	A	0	1,135	0.1	A	0	1,149	0.1	A	0
Route 139 WB TH/RT	812	0.0	A	0	879	0.0	A	0	903	0.0	A	0
Forest Street SB LT/RT	48	>50.0	F	4	52	>50.0	F	6	52	>50.0	F	6
<i>Saturday Midday:</i>												
Route 139 EB LT/TH	911	0.1	A	0	986	0.1	A	0	1,001	0.1	A	0
Route 139 WB TH/RT	886	0.0	A	0	954	0.0	A	0	969	0.0	A	0
Forest Street SB LT/RT	41	>50.0	F	3	44	>50.0	F	4	44	>50.0	F	4

See notes at end of the table.

**Table 10 (Continued)**  
**UNSIGNALIZED INTERSECTION LEVEL-OF-SERVICE AND VEHICLE QUEUE SUMMARY**

Unsignalized Intersection/Peak-hour/Movement	2021 Existing				2029 No-Build				2029 Build			
	Demand <sup>a</sup>	Delay <sup>b</sup>	LOS <sup>c</sup>	Queue <sup>d</sup> 95 <sup>th</sup>	Demand	Delay	LOS	Queue 95 <sup>th</sup>	Demand	Delay	LOS	Queue 95 <sup>th</sup>
<b>Enterprise Drive at Commerce Way</b>												
<i>Weekday Morning:</i>												
Commerce Way WB LT/RT	52	8.5	A	0	56	8.6	A	0	112	8.8	A	1
Enterprise Drive NB TH/RT	4	0.0	A	0	4	0.0	A	0	4	0.0	A	0
Enterprise Drive SB LT/TH	23	6.3	A	0	25	6.4	A	0	43	6.8	A	0
<i>Weekday Evening:</i>												
Commerce Way WB LT/RT	42	8.5	A	0	45	8.5	A	0	80	8.7	A	1
Enterprise Drive NB TH/RT	3	0.0	A	0	3	0.0	A	0	3	0.0	A	0
Enterprise Drive SB LT/TH	54	7.0	A	0	58	7.1	A	0	119	7.3	A	1
<i>Saturday Midday:</i>												
Commerce Way WB LT/RT	49	8.6	A	0	53	8.6	A	0	92	8.9	A	1
Enterprise Drive NB TH/RT	5	0.0	A	0	5	0.0	A	0	5	0.0	A	0
Enterprise Drive SB LT/TH	31	6.3	A	0	33	6.4	A	0	73	6.9	A	0
<b>Proprietors Drive at Commerce Way and Old Woodlot Lane</b>												
<i>Weekday Morning:</i>												
Commerce Way EB LT/TH	25	7.4	A	0	27	7.4	A	0	59	7.7	A	1
Old Woodlot Road WB TH/RT	13	0.0	A	0	13	0.0	A	0	13	0.0	A	0
Proprietors Drive SB LT/RT	30	6.7	A	0	32	6.7	A	0	42	6.9	A	0
<i>Weekday Evening:</i>												
Commerce Way EB LT/TH	43	7.5	A	0	46	7.5	A	0	66	7.8	A	1
Old Woodlot Road WB TH/RT	22	0.0	A	0	22	0.0	A	0	22	0.0	A	0
Proprietors Drive SB LT/RT	61	7.0	A	0	65	7.0	A	1	99	7.2	A	1
<i>Saturday Midday:</i>												
Commerce Way EB LT/TH	35	7.5	A	0	37	7.5	A	0	59	7.7	A	1
Old Woodlot Road WB TH/RT	8	0.0	A	0	8	0.0	A	0	8	0.0	A	0
Proprietors Drive SB LT/RT	49	6.9	A	0	52	6.9	A	0	74	7.0	A	1

See notes at end of the table.

**Table 10 (Continued)**  
**UNSIGNALIZED INTERSECTION LEVEL-OF-SERVICE AND VEHICLE QUEUE SUMMARY**

Unsignalized Intersection/Peak-hour/Movement	2021 Existing				2029 No-Build				2029 Build			
	Demand <sup>a</sup>	Delay <sup>b</sup>	LOS <sup>c</sup>	Queue <sup>d</sup> 95 <sup>th</sup>	Demand	Delay	LOS	Queue 95 <sup>th</sup>	Demand	Delay	LOS	Queue 95 <sup>th</sup>
<b>Commerce Way at the Project Site Driveway</b>												
<i>Weekday Morning:</i>												
Commerce Way EB TH/RT	--	--	--	--	--	--	--	--	45	0.0	A	0
Commerce Way WB LT/TH	--	--	--	--	--	--	--	--	38	1.8	A	0
Project Site Driveway NB LT/RT	--	--	--	--	--	--	--	--	88	9.3	A	1
<i>Weekday Evening:</i>												
Commerce Way EB TH/RT	--	--	--	--	--	--	--	--	107	0.0	A	0
Commerce Way WB LT/TH	--	--	--	--	--	--	--	--	87	2.8	A	0
Project Site Driveway NB LT/RT	--	--	--	--	--	--	--	--	55	9.8	A	0
<i>Saturday Midday:</i>												
Commerce Way EB TH/RT	--	--	--	--	--	--	--	--	77	0.0	A	0
Commerce Way WB LT/TH	--	--	--	--	--	--	--	--	61	2.4	A	0
Project Site Driveway NB LT/RT	--	--	--	--	--	--	--	--	61	9.5	A	0

<sup>a</sup>Demand in vehicles per hour.

<sup>b</sup>Average control delay per vehicle (in seconds).

<sup>c</sup>Level-of-Service.

<sup>d</sup>Queue length in vehicles.

NB = northbound; SB = southbound; EB = eastbound; WB = westbound; LT = left-turning movements; TH = through movements; RT = right-turning movements.



## **SIGHT DISTANCE EVALUATION**

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Sight distance measurements were performed at the Project site driveway intersection with Commerce Way in accordance with MassDOT and American Association of State Highway and Transportation Officials (AASHTO)<sup>13</sup> requirements. Both stopping sight distance (SSD) and intersection sight distance (ISD) measurements were performed. In brief, SSD is the distance required by a vehicle traveling at the design speed of a roadway, on wet pavement, to stop prior to striking an object in its travel path. ISD or corner sight distance (CSD) is the sight distance required by a driver entering or crossing an intersecting roadway to perceive an on-coming vehicle and safely complete a turning or crossing maneuver with on-coming traffic. In accordance with AASHTO standards, if the measured ISD is at least equal to the required SSD value for the appropriate design speed, the intersection can operate in a safe manner. Table 11 presents the measured SSD and ISD at the subject intersection.

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<sup>13</sup>*A Policy on Geometric Design of Highway and Streets*, 7<sup>th</sup> Edition; American Association of State Highway and Transportation Officials (AASHTO); Washington D.C.; 2018.

**Table 11**  
**SIGHT DISTANCE MEASUREMENTS<sup>a</sup>**

Intersection/Sight Distance Measurement	Feet		
	Required Minimum (SSD)	Desirable (ISD) <sup>b</sup>	Measured
<b><i>Commerce Way at the Project Site Driveway</i></b>			
<i>Stopping Sight Distance:</i>			
Commerce Way approaching from the east	250	--	295
Commerce Way approaching from the west	250	--	444
<i>Intersection Sight Distance:</i>			
Looking to the east from the Project Site Driveway	250	390	363
Looking to the west from the Project Site Driveway	250	335	500+

<sup>a</sup>Recommended minimum values obtained from *A Policy on Geometric Design of Highways and Streets*, 7<sup>th</sup> Edition; American Association of State Highway and Transportation Officials (AASHTO); 2018; and based on a 35 mph approach speed along Commerce Way.

<sup>b</sup>Values shown are the intersection sight distance for a vehicle turning right or left exiting a roadway under STOP control such that motorists approaching the intersection on the major street should not need to adjust their travel speed to less than 70 percent of their initial approach speed.

As can be seen in Table 11, the available lines of sight at the Project site driveway intersection with Commerce Way exceed the recommended minimum sight distance to function in a safe manner (SSD) based on a 35 mph approach speed along Commerce Way, which exceeds the measured 85<sup>th</sup> percentile vehicle travel speed approaching the driveway (31/32 mph) and is 5 mph above the statutory speed limit (30 mph).

## **CONCLUSIONS AND RECOMMENDATIONS**

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### **CONCLUSIONS**

VAI has conducted a TIA in order to determine the potential impacts on the transportation infrastructure associated with the proposed construction of a multifamily residential community to be located off Commerce Way and within Enterprise Park in Marshfield, Massachusetts. The following specific areas have been evaluated as they relate to the Project: i) access requirements; ii) potential off-site improvements; and iii) safety considerations; under existing and future conditions, both with and without the Project. Based on this assessment, we have concluded the following with respect to the Project:

1. Using trip-generation statistics published by the ITE,<sup>14</sup> the Project is expected to generate approximately 1,998 vehicle trips on an average weekday and 1,366 vehicle trips on a Saturday (both two way, 24-hour volumes), with approximately 116 vehicle trips expected during the weekday morning peak hour, 150 vehicle trips expected during the weekday evening peak hour and 123 vehicle trips expected during the Saturday midday peak hour;
2. The Project will not result in a significant impact (increase) on motorist delays or vehicle queuing over Existing or anticipated future conditions without the Project (No-Build conditions); however, it was noted that one or more movements at the study intersections are currently operating at or over capacity (defined as LOS “E” or “F”, respectively) independent of the Project;
3. All movements at the Project site driveway intersection with Commerce Way were shown to operate at LOS A during the peak hours with minor (up to one (1)) vehicle queuing predicted to occur;
4. No apparent safety deficiencies were noted with respect to the motor vehicle crash history at the study intersections; and
5. Lines of sight to and from the Project site driveway intersection were found to exceed the recommended minimum distances for safe operation based on the appropriate approach speed.

In consideration of the above, we have concluded that the Project can be accommodated within the

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<sup>14</sup>Ibid 1.

confines of the existing transportation infrastructure in a safe and efficient manner with implementation of the recommendations that follow.

## **RECOMMENDATIONS**

A detailed transportation improvement program has been developed that is designed to provide safe and efficient access to the Project site and address any deficiencies identified at off-site locations evaluated in conjunction with this study. The following improvements have been recommended as a part of this evaluation and, where applicable, will be completed in conjunction with the Project subject to receipt of all necessary rights, permits, and approvals.

### **Project Access**

Access to the Project will be provided by way of a new driveway that will intersect the south side of Commerce Way approximately 600 feet east of the Modera Marshfield Phase I driveway and 1,200 feet west of Proprietors Drive. The following recommendations are offered with respect to the design and operation of the Project site access and internal circulation, many of which are reflected on the site plans:

- The Project site driveway should be 24 feet in width and designed to accommodate the turning and maneuvering requirements of the largest anticipated responding emergency vehicle as defined by the Marshfield Fire Department.
- Where perpendicular parking is proposed, the drive aisle behind the parking should be a minimum of 23 feet in order to facilitate parking maneuvers.
- Vehicles exiting the Project site should be placed under STOP-sign control with a marked STOP-line provided.
- All signs and pavement markings to be installed within the Project site shall conform to the applicable standards of the *Manual on Uniform Traffic Control Devices (MUTCD)*.<sup>15</sup>
- Pedestrian walkways are proposed within the Project site and should include marked crosswalks with Americans with Disabilities Act (ADA) compliant wheelchair ramps at all pedestrian crossings.
- ADA compliant wheelchair ramps should be provided for crossing the Project site driveway, or the driveway should be designed such that the sidewalk along Commerce Way is flush with (i.e., crosses) the driveway.
- Signs and landscaping to be installed as a part of the Project within the intersection sight triangle areas of the Project site driveway should be designed and maintained so as not to restrict lines of sight.
- Snow accumulations (windrows) within the sight triangle areas of the Project site driveway should be promptly removed where such accumulations would impede sight lines.
- Consideration should be given to providing electric vehicle (EV) charging stations for use by residents of the Project.

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<sup>15</sup>Ibid 2.

## **Off Site**

### **Route 139 at Enterprise Drive**

Independent of the Project, one or more movements at the intersection of Route 139 at Enterprise Drive are currently operating at their design capacity (i.e., LOS “E”), with delays expected to increase in the future absent improvement. In order to improve operating conditions at the intersection and to off-set the predicted impact of the Project, the Project proponent will design and implement an optimal traffic signal timing and phasing plan. As can be seen in Table 12, with these improvements, overall intersection operations will be maintained at LOS D or better, with no movement operating below LOS E, an improvement over No-Build conditions. This plan will be designed and implemented by the Project proponent prior to the issuance of a Certificate of Occupancy for the Project subject to receipt of all necessary rights, permits and approvals.

### **Route 139 at School Street**

Independent of the Project, left-turn movements from School Street at its intersection with Route 139 are currently operating over capacity (i.e., LOS “F”) under 2021 Existing conditions. Absent improvement, motorist delays are expected to further increase in the future, again, independent of the Project. As a part of the October 2, 2020, Zoning Board of Appeals (ZBA) approval of the recreational marijuana retail establishment located at 985 Plain Street (ZBA Case No. 20-49), the ZBA identified in its decision granting a Special Permit and Site Plan Approval for the project that the Host Community Agreement with the Town included an offer to design, permit and providing funding for the installation of a traffic signal at the Route 139/School Street intersection. With the installation of a traffic control signal at this intersection, overall intersection operations will improve to LOS A during the peak hours with no movement operating below LOS D. No additional improvements are required at this intersection to accommodate the Project.

### **Route 139 at Forest Street**

Independent of the Project, all movements from Forest Street at its intersection with Route 139 are currently operating at or over capacity (i.e., LOS “E” or “F”, respectively) under 2021 Existing conditions, with Project-related impacts at the intersection generally defined as an incremental increase in motorist delay that did not result in a corresponding increase in vehicle queuing (no change over No-Build conditions). Given the modest impact of the Project (i.e., no material increase in vehicle queueing), no improvements are recommended or are necessary at this intersection to accommodate the Project.

## **Transportation Demand Management**

Public transportation services are provided within the study area by GATRA by way of the *SAIL (Seaside Area Inter-Link) Marshfield/Duxbury/Kingston* bus route. The SAIL bus travels along Route 139 with a stop located within the Roche Brothers shopping center, adjacent to the Route 139/Proprietors Drive intersection and within an approximate 14-minute walking distance. In addition, GATRA provides Dial-a-Ride paratransit services to eligible persons that cannot use fixed-route transit all or some of the time due to a physical, cognitive or mental disability in compliance with the Americans with Disabilities Act (ADA).

In an effort to encourage the use of alternative modes of transportation to single-occupant vehicles (SOVs), the following Transportation Demand Management (TDM) measures will be implemented as a part of the Project:

- A transportation coordinator will be assigned for the Project to coordinate the TDM program;
- Information regarding public transportation services, maps, schedules and fare information will be posted in a central location and/or otherwise made available to residents;
- A “welcome packet” will be provided to residents detailing available public transportation services, bicycle and walking alternatives, and commuter options;
- Pedestrian accommodations will be incorporated within the Project site;
- Secure bicycle parking will be provided at an appropriate location(s) within the Project site, including a bicycle rack at the clubhouse; and
- A centralized mail kiosk will be provided.

With implementation of the aforementioned recommendations, safe and efficient access will be provided to the Project site and the Project can be accommodated within the confines of the existing and improved transportation system.

**Table 12**  
**MITIGATED SIGNALIZED INTERSECTION LEVEL-OF-SERVICE AND VEHICLE QUEUE SUMMARY**

Signalized Intersection/Peak Hour/Movement	2029 No-Build				2029 Build				2029 Build with Mitigation			
	V/C <sup>a</sup>	Delay <sup>b</sup>	LOS <sup>c</sup>	Queue <sup>d</sup> 50 <sup>th</sup> /95 <sup>th</sup>	V/C	Delay	LOS	Queue 50 <sup>th</sup> /95 <sup>th</sup>	V/C	Delay	LOS	Queue 50 <sup>th</sup> /95 <sup>th</sup>
<b>Route 139 at Enterprise Drive</b>												
<i>Weekday Morning:</i>												
Route 139 EB LT	0.41	50.3	D	0/1	0.41	51.6	D	0/1	0.37	48.6	D	0/1
Route 139 EB TH/RT	0.51	12.1	B	3/15	0.59	16.6	B	4/15	0.58	15.6	B	4/14
Route 139 WB LT	0.43	38.8	D	1/2	0.44	42.3	D	1/2	0.55	49.2	D	1/2
Route 139 WB TH/RT	0.68	13.5	B	6/23	0.76	19.0	B	7/23	0.76	18.4	B	7/24
Enterprise Drive NB LT/TH	0.50	29.9	C	1/5	0.56	29.9	C	2/8	0.60	30.2	C	2/8
Enterprise Drive NB RT	0.01	26.0	C	0/0	0.01	26.0	C	0/0	0.01	23.6	C	0/0
Private Driveway SB LT/TH/RT	0.11	26.6	C	0/2	0.11	26.6	C	1/2	0.08	24.0	C	1/2
<b>Overall</b>	--	<b>14.3</b>	<b>B</b>	--	--	<b>19.2</b>	<b>B</b>	--	--	<b>18.7</b>	<b>B</b>	--
<i>Weekday Evening:</i>												
Route 139 EB LT	0.45	53.1	D	1/2	0.46	54.8	D	1/2	0.38	51.2	D	1/2
Route 139 EB TH/RT	0.81	20.8	C	13/35	0.87	25.1	C	16/38	0.88	25.9	C	16/38
Route 139 WB LT	0.68	62.7	E	2/5	0.71	69.8	E	2/5	0.60	53.9	D	2/4
Route 139 WB TH/RT	0.55	13.4	B	5/20	0.57	14.7	B	6/20	0.57	14.8	B	6/20
Enterprise Drive NB LT/TH	0.64	42.7	D	3/6	0.75	49.7	D	4/8	0.76	51.5	D	4/8
Enterprise Drive NB RT	0.04	33.1	C	0/1	0.04	32.3	C	0/1	0.04	32.8	C	0/1
Private Driveway SB LT/TH/RT	0.04	33.1	C	0/0	0.04	32.3	C	0/0	0.04	32.8	C	0/0
<b>Overall</b>	--	<b>20.5</b>	<b>C</b>	--	--	<b>24.1</b>	<b>C</b>	--	--	<b>24.4</b>	<b>C</b>	--
<i>Saturday MIDDAY:</i>												
Route 139 EB LT	0.38	52.9	D	1/2	0.40	54.7	D	1/2	0.45	67.1	E	1/2
Route 139 EB TH/RT	0.78	24.9	C	12/25	0.79	24.9	C	13/28	0.96	53.0	D	20/37
Route 139 WB LT	0.90	>80.0	F	4/12	0.92	>80.0	F	4/12	0.81	75.4	E	5/12
Route 139 WB TH/RT	0.67	17.4	B	8/24	0.66	17.0	B	8/24	0.75	27.8	C	13/32
Enterprise Drive NB LT/TH	1.07	>80.0	F	6/7	1.47	>80.0	F	8/13	0.96	77.7	E	7/11
Enterprise Drive NB RT	0.20	34.4	C	0/0	0.20	35.7	D	0/0	0.20	32.5	C	0/0
Private Driveway SB LT/TH/RT	0.07	33.4	C	0/0	0.15	35.8	D	0/0	0.06	31.1	C	0/0
<b>Overall</b>	--	<b>33.6</b>	<b>C</b>	--	--	<b>53.1</b>	<b>D</b>	--	--	<b>45.4</b>	<b>D</b>	--

<sup>a</sup>Volume-to-capacity ratio.

<sup>b</sup>Control (signal) delay per vehicle in seconds.

<sup>c</sup>Level-of-Service.

<sup>d</sup>Queue length in vehicles based on 25-feet per vehicle.

NB = northbound; SB = southbound; EB = eastbound; WB = westbound; LT = left-turning movements; TH = through movements; RT = right-turning movements.

## APPENDIX

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PROJECT SITE PLAN  
AUTOMATIC TRAFFIC RECORDER COUNT DATA  
MANUAL TURNING MOVEMENT COUNT DATA  
SEASONAL ADJUSTMENT DATA  
COVID-19 ADJUSTMENT DATA  
PUBLIC TRANSPORTATION SCHEDULES  
VEHICLE TRAVEL SPEED DATA  
MASSDOT CRASH RATE WORKSHEETS AND HIGH CRASH LOCATION  
MAPPING  
GENERAL BACKGROUND TRAFFIC GROWTH  
TRIP-GENERATION CALCULATIONS  
JOURNEY TO WORK TRIP DISTRIBUTION  
CAPACITY ANALYSIS WORKSHEETS  
TRAFFIC SIGNAL WARRANTS ANALYSIS





PROJECT SITE PLAN

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AUTOMATIC TRAFFIC RECORDER COUNT DATA



Location : Route 139 EB  
 Location : West of Enterprise Drive  
 City/State: Marshfield, MA

9096EB01

Time	Thursday 9/16/2021		Friday 9/17/2021		Saturday 9/18/2021		Daily Average	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00 AM	19	260	17	229	33	221	23	237
12:15 AM	18	280	15	254	40	241	24	258
12:30 AM	16	250	16	252	15	264	16	255
12:45 AM	10	245	8	265	25	277	14	262
1:00 AM	6	234	13	259	17	251	12	248
1:15 AM	11	241	9	271	20	260	13	257
1:30 AM	4	258	9	244	18	256	10	253
1:45 AM	2	237	8	227	13	262	8	242
2:00 AM	6	246	5	256	12	230	8	244
2:15 AM	3	236	6	202	9	241	6	226
2:30 AM	6	226	10	261	8	284	8	257
2:45 AM	4	288	2	245	4	216	3	250
3:00 AM	8	297	5	270	6	223	6	263
3:15 AM	2	282	2	326	8	261	4	290
3:30 AM	7	243	8	262	5	246	7	250
3:45 AM	5	292	9	277	6	217	7	262
4:00 AM	9	258	5	229	4	225	6	237
4:15 AM	11	302	14	270	11	226	12	266
4:30 AM	13	265	12	250	8	253	11	256
4:45 AM	18	297	22	258	13	251	18	269
5:00 AM	20	293	20	281	19	195	20	256
5:15 AM	37	309	47	261	25	237	36	269
5:30 AM	37	295	52	304	32	216	40	272
5:45 AM	84	201	82	271	41	195	69	222
6:00 AM	63	247	71	257	38	214	57	239
6:15 AM	78	248	105	267	43	187	75	234
6:30 AM	103	265	143	230	67	209	104	235
6:45 AM	182	194	200	235	68	206	150	212
7:00 AM	146	206	188	211	88	193	141	203
7:15 AM	148	202	201	209	83	171	144	194
7:30 AM	199	192	218	177	104	181	174	183
7:45 AM	183	196	202	162	138	132	174	163
8:00 AM	168	171	168	140	141	128	159	146
8:15 AM	188	182	217	140	158	138	188	153
8:30 AM	196	118	192	149	165	148	184	138
8:45 AM	185	110	218	125	156	94	186	110
9:00 AM	176	96	196	92	156	102	176	97
9:15 AM	192	99	232	87	189	121	204	102
9:30 AM	200	78	209	83	225	95	211	85
9:45 AM	198	62	226	91	226	85	217	79
10:00 AM	165	57	192	76	222	82	193	72
10:15 AM	200	52	220	87	250	79	223	73
10:30 AM	186	39	208	84	231	61	208	61
10:45 AM	195	33	247	89	229	52	224	58
11:00 AM	191	50	215	69	249	45	218	55
11:15 AM	255	32	233	52	218	65	235	50
11:30 AM	240	38	254	54	248	38	247	43
11:45 AM	221	29	211	42	262	53	231	41
<b>Total</b>	<b>4614</b>	<b>9331</b>	<b>5162</b>	<b>9432</b>	<b>4346</b>	<b>8627</b>	<b>4704</b>	<b>9127</b>
<b>Combined Total</b>	<b>13945</b>		<b>14594</b>		<b>12973</b>		<b>13831</b>	
<b>Peak</b>	<b>11:00 AM</b>	<b>4:45 AM</b>	<b>10:45 AM</b>	<b>3:00 AM</b>	<b>11:00 AM</b>	<b>12:30 AM</b>	<b>11:00 AM</b>	<b>4:45 AM</b>
<b>Volume</b>	<b>907</b>	<b>1194</b>	<b>949</b>	<b>1135</b>	<b>977</b>	<b>1052</b>	<b>931</b>	<b>1066</b>
<b>Peak Factor</b>	<b>0.889</b>	<b>0.966</b>	<b>0.934</b>	<b>0.870</b>	<b>0.932</b>	<b>0.949</b>	<b>0.942</b>	<b>0.980</b>
<b>ADT</b>	<b>ADT: 13,837</b>		<b>AADT: 13,837</b>					

Accurate Counts

Location : Route 139 EB  
 Location : West of Enterprise Drive  
 City/State: Marshfield, MA

9096EB01

9/13/2021	9/13/21	9/14/21	9/15/2021	9/16/2021	9/17/2021	9/18/2021	9/19/2021	Average	
Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon - Fri	Mon - Sun
12:00 AM	*	*	*	63	56	113	*	60	77
1:00	*	*	*	23	39	68	*	31	43
2:00	*	*	*	19	23	33	*	21	25
3:00	*	*	*	22	24	25	*	23	24
4:00	*	*	*	51	53	36	*	52	47
5:00	*	*	*	178	201	117	*	190	165
6:00	*	*	*	426	519	216	*	472	387
7:00	*	*	*	676	809	413	*	742	633
8:00	*	*	*	737	795	620	*	766	717
9:00	*	*	*	766	863	796	*	814	808
10:00	*	*	*	746	867	932	*	806	848
11:00	*	*	*	907	913	977	*	910	932
12:00 PM	*	*	*	1035	1000	1003	*	1018	1013
1:00	*	*	*	970	1001	1029	*	986	1000
2:00	*	*	*	996	964	971	*	980	977
3:00	*	*	*	1114	1135	947	*	1124	1065
4:00	*	*	*	1122	1007	955	*	1064	1028
5:00	*	*	*	1098	1117	843	*	1108	1019
6:00	*	*	*	954	989	816	*	972	920
7:00	*	*	*	796	759	677	*	778	744
8:00	*	*	*	581	554	508	*	568	548
9:00	*	*	*	335	353	403	*	344	364
10:00	*	*	*	181	336	274	*	258	264
11:00	*	*	*	149	217	201	*	183	189
Total	0	0	0	13945	14594	12973	0	14270	13837
Percent	0.0%	0.0%	0.0%	33.6%	35.2%	31.3%	0.0%		
AM Peak				11:00	11:00	11:00		11:00	11:00
Volume				907	913	977		910	932
PM Peak				4:00	3:00	1:00		3:00	3:00
Volume				1122	1135	1029		1124	1065

Location : Route 139 WB  
 Location : West of Enterprise Drive  
 City/State: Marshfield, MA

9096WB01

Time	Thursday 9/16/2021		Friday 9/17/2021		Saturday 9/18/2021		Daily Average	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00 AM	10	296	17	367	17	339	15	334
12:15 AM	6	264	9	306	12	305	9	292
12:30 AM	11	260	6	329	11	296	9	295
12:45 AM	12	265	10	259	20	327	14	284
1:00 AM	8	274	5	280	13	269	9	274
1:15 AM	13	270	6	314	10	300	10	295
1:30 AM	3	263	6	268	12	287	7	273
1:45 AM	3	275	5	307	8	241	5	274
2:00 AM	6	308	4	321	10	242	7	290
2:15 AM	7	316	6	306	6	255	6	292
2:30 AM	5	295	4	305	6	236	5	279
2:45 AM	9	261	6	282	3	225	6	256
3:00 AM	9	242	10	331	3	227	7	267
3:15 AM	8	297	8	267	8	201	8	255
3:30 AM	10	283	8	311	8	246	9	280
3:45 AM	18	248	15	311	13	240	15	266
4:00 AM	20	314	23	255	6	244	16	271
4:15 AM	35	271	27	273	17	253	26	266
4:30 AM	47	275	45	300	20	287	37	287
4:45 AM	87	234	74	296	27	260	63	263
5:00 AM	106	313	105	274	27	261	79	283
5:15 AM	126	289	116	250	40	280	94	273
5:30 AM	124	243	141	262	41	244	102	250
5:45 AM	159	256	124	199	34	190	106	215
6:00 AM	167	204	186	254	59	187	137	215
6:15 AM	193	193	194	230	77	193	155	205
6:30 AM	246	189	239	164	83	191	189	181
6:45 AM	248	157	289	179	101	160	213	165
7:00 AM	310	176	288	188	107	167	235	177
7:15 AM	242	132	284	146	113	154	213	144
7:30 AM	267	144	298	141	132	148	232	144
7:45 AM	308	120	270	130	152	141	243	130
8:00 AM	251	126	286	108	152	124	230	119
8:15 AM	275	92	264	103	160	115	233	103
8:30 AM	245	91	247	94	190	104	227	96
8:45 AM	249	61	277	76	234	100	253	79
9:00 AM	289	61	295	90	285	98	290	83
9:15 AM	231	61	262	64	242	98	245	74
9:30 AM	253	62	269	56	284	111	269	76
9:45 AM	246	38	246	60	338	54	277	51
10:00 AM	253	35	235	74	295	77	261	62
10:15 AM	254	44	212	56	263	68	243	56
10:30 AM	282	45	272	62	304	51	286	53
10:45 AM	237	25	253	38	333	48	274	37
11:00 AM	247	17	280	33	346	46	291	32
11:15 AM	248	18	277	34	330	39	285	30
11:30 AM	306	12	280	33	340	30	309	25
11:45 AM	290	10	267	24	324	25	294	20
Total	6979	8725	7050	9410	5616	8784	6548	8971
Combined Total	15704		16460		14400		15519	
Peak	7:00 AM	1:45 AM	6:45 AM	12:00 AM	10:45 AM	12:00 AM	11:00 AM	12:00 AM
Volume	1127	1194	1159	1261	1349	1267	1179	1205
Peak Factor	0.909	0.945	0.972	0.859	0.975	0.934	0.954	0.902
ADT	ADT: 15,521		AADT: 15,521					

Accurate Counts

Location : Route 139 WB  
 Location : West of Enterprise Drive  
 City/State: Marshfield, MA

9096WB01

9/13/2021	9/13/21	9/14/21	9/15/2021	9/16/2021	9/17/2021	9/18/2021	9/19/2021	Average	
Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon - Fri	Mon - Sun
12:00 AM	*	*	*	39	42	60	*	40	47
1:00	*	*	*	27	22	43	*	24	31
2:00	*	*	*	27	20	25	*	24	24
3:00	*	*	*	45	41	32	*	43	39
4:00	*	*	*	189	169	70	*	179	143
5:00	*	*	*	515	486	142	*	500	381
6:00	*	*	*	854	908	320	*	881	694
7:00	*	*	*	1127	1140	504	*	1134	924
8:00	*	*	*	1020	1074	736	*	1047	943
9:00	*	*	*	1019	1072	1149	*	1046	1080
10:00	*	*	*	1026	972	1195	*	999	1064
11:00	*	*	*	1091	1104	1340	*	1098	1178
12:00 PM	*	*	*	1085	1261	1267	*	1173	1204
1:00	*	*	*	1082	1169	1097	*	1126	1116
2:00	*	*	*	1180	1214	958	*	1197	1117
3:00	*	*	*	1070	1220	914	*	1145	1068
4:00	*	*	*	1094	1124	1044	*	1109	1087
5:00	*	*	*	1101	985	975	*	1043	1020
6:00	*	*	*	743	827	731	*	785	767
7:00	*	*	*	572	605	610	*	588	596
8:00	*	*	*	370	381	443	*	376	398
9:00	*	*	*	222	270	361	*	246	284
10:00	*	*	*	149	230	244	*	190	208
11:00	*	*	*	57	124	140	*	90	107
Total	0	0	0	15704	16460	14400	0	16083	15520
Percent	0.0%	0.0%	0.0%	33.7%	35.3%	30.9%	0.0%		
AM Peak				7:00	7:00	11:00		7:00	11:00
Volume				1127	1140	1340		1134	1178
PM Peak				2:00	12:00 PM	12:00 PM		2:00	12:00 PM
Volume				1180	1261	1267		1197	1204

Accurate Counts

Location : Enterprise Drive  
 Location : South of Route 139  
 City/State: Marshfield, MA

90960002

9/16/2021 Time	NB,		Hour Totals		SB,		Hour Totals		Combined Totals	
	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	2	22			4	20				
12:15	0	8			0	14				
12:30	1	24			0	11				
12:45	0	21	3	75	2	20	6	65	9	140
1:00	0	16			0	13				
1:15	1	17			0	12				
1:30	1	23			0	14				
1:45	0	16	2	72	0	24	0	63	2	135
2:00	0	23			0	10				
2:15	0	17			0	20				
2:30	0	20			0	13				
2:45	0	22	0	82	0	20	0	63	0	145
3:00	1	22			0	23				
3:15	0	22			0	21				
3:30	0	39			3	17				
3:45	2	24	3	107	1	18	4	79	7	186
4:00	0	32			0	17				
4:15	3	25			0	23				
4:30	3	38			7	23				
4:45	3	20	9	115	4	22	11	85	20	200
5:00	7	31			7	21				
5:15	7	27			9	44				
5:30	7	31			13	26				
5:45	4	20	25	109	32	27	61	118	86	227
6:00	14	37			9	24				
6:15	13	20			13	19				
6:30	11	45			17	11				
6:45	17	18	55	120	21	14	60	68	115	188
7:00	18	9			13	14				
7:15	18	14			18	10				
7:30	20	38			24	12				
7:45	12	11	68	72	28	9	83	45	151	117
8:00	26	12			19	10				
8:15	21	7			8	7				
8:30	21	8			20	6				
8:45	16	4	84	31	13	7	60	30	144	61
9:00	20	8			21	8				
9:15	16	6			19	1				
9:30	18	4			12	1				
9:45	17	1	71	19	21	3	73	13	144	32
10:00	15	3			10	2				
10:15	16	1			10	5				
10:30	20	3			15	3				
10:45	12	1	63	8	9	0	44	10	107	18
11:00	19	4			12	2				
11:15	18	3			17	3				
11:30	27	1			14	1				
11:45	18	3	82	11	16	2	59	8	141	19
Total	465	821			461	647			926	1468
Percent	36.2%	63.8%			41.6%	58.4%			38.7%	61.3%



Location : Enterprise Drive  
 Location : South of Route 139  
 City/State: Marshfield, MA

90960002

9/17/2021 Time	NB,		Hour Totals		SB,		Hour Totals		Combined Totals	
	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	0	25			0	14				
12:15	0	25			3	17				
12:30	0	19			0	13				
12:45	0	22	0	91	1	11	4	55	4	146
1:00	0	22			2	19				
1:15	1	15			1	26				
1:30	1	23			1	15				
1:45	1	17	3	77	1	14	5	74	8	151
2:00	0	23			0	17				
2:15	1	16			1	11				
2:30	0	22			1	20				
2:45	1	24	2	85	2	18	4	66	6	151
3:00	1	25			0	21				
3:15	0	19			0	23				
3:30	0	56			2	12				
3:45	0	34	1	134	0	29	2	85	3	219
4:00	0	29			0	20				
4:15	2	20			2	25				
4:30	0	42			2	27				
4:45	3	25	5	116	5	19	9	91	14	207
5:00	5	25			7	24				
5:15	10	39			10	29				
5:30	7	38			20	21				
5:45	10	33	32	135	26	31	63	105	95	240
6:00	13	27			10	17				
6:15	11	15			21	15				
6:30	12	13			17	17				
6:45	15	26	51	81	29	18	77	67	128	148
7:00	16	18			15	12				
7:15	22	8			15	11				
7:30	15	22			29	11				
7:45	10	12	63	60	30	9	89	43	152	103
8:00	17	18			18	10				
8:15	22	9			21	5				
8:30	23	7			15	5				
8:45	21	5	83	39	16	6	70	26	153	65
9:00	23	6			18	4				
9:15	22	6			21	3				
9:30	17	8			15	4				
9:45	8	6	70	26	25	5	79	16	149	42
10:00	16	6			6	2				
10:15	13	1			9	3				
10:30	14	3			7	4				
10:45	14	3	57	13	12	2	34	11	91	24
11:00	17	2			10	3				
11:15	16	1			16	3				
11:30	18	1			12	2				
11:45	21	0	72	4	14	0	52	8	124	12
Total	439	861			488	647			927	1508
Percent	33.8%	66.2%			43.0%	57.0%			38.1%	61.9%

Location : Enterprise Drive  
 Location : South of Route 139  
 City/State: Marshfield, MA

90960002

9/18/2021 Time	NB,		Hour Totals		SB,		Hour Totals		Combined Totals	
	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	0	135			2	42				
12:15	1	49			2	77				
12:30	0	14			0	44				
12:45	1	13	2	211	2	25	6	188	8	399
1:00	0	14			0	18				
1:15	0	19			2	29				
1:30	1	95			1	29				
1:45	1	78	2	206	1	27	4	103	6	309
2:00	0	21			0	17				
2:15	0	13			1	13				
2:30	0	15			0	26				
2:45	0	56	0	105	0	21	1	77	1	182
3:00	0	20			0	23				
3:15	0	25			2	20				
3:30	0	18			1	18				
3:45	0	11	0	74	0	20	3	81	3	155
4:00	0	21			0	25				
4:15	1	18			0	10				
4:30	2	14			3	15				
4:45	0	16	3	69	3	18	6	68	9	137
5:00	1	25			2	14				
5:15	4	16			3	23				
5:30	2	17			9	17				
5:45	2	13	9	71	5	12	19	66	28	137
6:00	3	7			5	19				
6:15	1	14			11	9				
6:30	5	16			6	10				
6:45	8	17	17	54	7	10	29	48	46	102
7:00	9	16			8	14				
7:15	12	11			8	18				
7:30	9	21			12	14				
7:45	3	17	33	65	41	14	69	60	102	125
8:00	12	15			17	5				
8:15	9	11			11	8				
8:30	20	4			18	8				
8:45	11	3	52	33	12	3	58	24	110	57
9:00	81	7			19	7				
9:15	24	6			75	8				
9:30	11	3			33	5				
9:45	18	6	134	22	17	6	144	26	278	48
10:00	27	14			20	8				
10:15	14	4			21	8				
10:30	102	7			24	2				
10:45	69	1	212	26	68	1	133	19	345	45
11:00	22	2			41	5				
11:15	25	1			23	0				
11:30	16	2			14	1				
11:45	14	0	77	5	23	2	101	8	178	13
Total	541	941			573	768			1114	1709
Percent	36.5%	63.5%			42.7%	57.3%			39.5%	60.5%
Grand Total	1445	2623			1522	2062			2967	4685
Percent	35.5%	64.5%			42.5%	57.5%			38.8%	61.2%

ADT

ADT: 2,551

AADT: 2,551

Accurate Counts

Location : Enterprise Drive  
 Location : South of Route 139  
 City/State: Marshfield, MA

90960002

9/13/2021 Time	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday		Week Average	
	NB,	SB,	NB,	SB,	NB,	SB,	NB,	SB,	NB,	SB,	NB,	SB,	NB,	SB,	NB,	SB,
12:00 AM	*	*	*	*	*	*	3	6	0	4	2	6	*	*	2	5
1:00	*	*	*	*	*	*	2	0	3	5	2	4	*	*	2	3
2:00	*	*	*	*	*	*	0	0	2	4	0	1	*	*	1	2
3:00	*	*	*	*	*	*	3	4	1	2	0	3	*	*	1	3
4:00	*	*	*	*	*	*	9	11	5	9	3	6	*	*	6	9
5:00	*	*	*	*	*	*	25	61	32	63	9	19	*	*	22	48
6:00	*	*	*	*	*	*	55	60	51	77	17	29	*	*	41	55
7:00	*	*	*	*	*	*	68	83	63	89	33	69	*	*	55	80
8:00	*	*	*	*	*	*	84	60	83	70	52	58	*	*	73	63
9:00	*	*	*	*	*	*	71	73	70	79	134	144	*	*	92	99
10:00	*	*	*	*	*	*	63	44	57	34	212	133	*	*	111	70
11:00	*	*	*	*	*	*	82	59	72	52	77	101	*	*	77	71
12:00 PM	*	*	*	*	*	*	75	65	91	55	211	188	*	*	126	103
1:00	*	*	*	*	*	*	72	63	77	74	206	103	*	*	118	80
2:00	*	*	*	*	*	*	82	63	85	66	105	77	*	*	91	69
3:00	*	*	*	*	*	*	107	79	134	85	74	81	*	*	105	82
4:00	*	*	*	*	*	*	115	85	116	91	69	68	*	*	100	81
5:00	*	*	*	*	*	*	109	118	135	105	71	66	*	*	105	96
6:00	*	*	*	*	*	*	120	68	81	67	54	48	*	*	85	61
7:00	*	*	*	*	*	*	72	45	60	43	65	60	*	*	66	49
8:00	*	*	*	*	*	*	31	30	39	26	33	24	*	*	34	27
9:00	*	*	*	*	*	*	19	13	26	16	22	26	*	*	22	18
10:00	*	*	*	*	*	*	8	10	13	11	26	19	*	*	16	13
11:00	*	*	*	*	*	*	11	8	4	8	5	8	*	*	7	8
Total	0	0	0	0	0	0	1286	1108	1300	1135	1482	1341	0	0	1358	1195
Day	0		0		0		2394		2435		2823		0		2553	
AM Peak Volume							8:00 84	7:00 83	8:00 83	7:00 89	10:00 212	9:00 144			10:00 111	9:00 99
PM Peak Volume							6:00 120	5:00 118	5:00 135	5:00 105	12:00 PM 211	12:00 PM 188			12:00 PM 126	12:00 PM 103
Comb Total ADT	0 ADT: 2,551		0 AADT: 2,551		0		2394		2435		2823		0		2553	

Location : Commerce Way  
 Location : East of Enterprise Drive  
 City/State: Marshfield, MA

90960003

9/16/2021 Time	EB,		Hour Totals		WB,		Hour Totals		Combined Totals	
	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	5	19			2	5				
12:15	0	12			0	11				
12:30	0	6			0	14				
12:45	1	10	6	47	0	7	2	37	8	84
1:00	0	6			0	11				
1:15	0	1			1	9				
1:30	0	3			0	11				
1:45	0	16	0	26	0	5	1	36	1	62
2:00	0	8			0	7				
2:15	0	11			0	6				
2:30	0	8			0	8				
2:45	0	9	0	36	0	4	0	25	0	61
3:00	0	13			1	8				
3:15	0	15			0	10				
3:30	2	10			0	6				
3:45	1	13	3	51	1	12	2	36	5	87
4:00	0	11			0	7				
4:15	0	12			3	9				
4:30	2	13			4	12				
4:45	0	11	2	47	3	10	10	38	12	85
5:00	1	12			3	7				
5:15	1	18			5	12				
5:30	0	11			6	13				
5:45	0	14	2	55	1	8	15	40	17	95
6:00	1	14			9	9				
6:15	0	10			5	14				
6:30	4	6			11	9				
6:45	3	8	8	38	14	8	39	40	47	78
7:00	2	13			11	4				
7:15	6	10			14	6				
7:30	7	10			16	7				
7:45	5	5	20	38	10	4	51	21	71	59
8:00	6	11			11	2				
8:15	3	9			11	7				
8:30	6	7			16	3				
8:45	9	8	24	35	16	2	54	14	78	49
9:00	7	9			10	2				
9:15	5	1			10	3				
9:30	5	4			8	3				
9:45	10	3	27	17	5	1	33	9	60	26
10:00	5	3			8	2				
10:15	2	6			12	0				
10:30	5	2			11	3				
10:45	9	1	21	12	7	2	38	7	59	19
11:00	8	2			7	1				
11:15	12	2			11	0				
11:30	8	2			11	2				
11:45	5	2	33	8	11	0	40	3	73	11
Total	146	410			285	306			431	716
Percent	26.3%	73.7%			48.2%	51.8%			37.6%	62.4%

Location : Commerce Way  
 Location : East of Enterprise Drive  
 City/State: Marshfield, MA

90960003

9/17/2021 Time	EB,		Hour Totals		WB,		Hour Totals		Combined Totals	
	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	0	12			0	14				
12:15	2	8			0	10				
12:30	1	5			0	12				
12:45	1	9	4	34	0	12	0	48	4	82
1:00	1	7			0	9				
1:15	2	16			1	6				
1:30	0	13			1	14				
1:45	1	10	4	46	0	8	2	37	6	83
2:00	0	11			0	8				
2:15	1	6			1	7				
2:30	1	6			0	7				
2:45	1	12	3	35	0	7	1	29	4	64
3:00	0	14			1	13				
3:15	0	17			0	11				
3:30	1	11			0	5				
3:45	0	18	1	60	0	7	1	36	2	96
4:00	0	15			0	13				
4:15	0	10			2	6				
4:30	0	19			0	12				
4:45	0	10	0	54	3	13	5	44	5	98
5:00	0	12			4	9				
5:15	1	14			7	12				
5:30	0	12			5	10				
5:45	2	16	3	54	7	7	23	38	26	92
6:00	1	14			8	13				
6:15	5	11			6	8				
6:30	0	6			9	4				
6:45	5	6	11	37	13	4	36	29	47	66
7:00	4	6			11	5				
7:15	9	10			14	2				
7:30	7	6			10	5				
7:45	4	7	24	29	8	5	43	17	67	46
8:00	6	7			12	4				
8:15	7	6			9	4				
8:30	2	8			15	2				
8:45	9	6	24	27	17	4	53	14	77	41
9:00	9	4			14	4				
9:15	9	5			10	2				
9:30	8	6			7	3				
9:45	11	6	37	21	5	4	36	13	73	34
10:00	2	4			7	3				
10:15	9	4			7	1				
10:30	3	5			5	1				
10:45	4	3	18	16	6	2	25	7	43	23
11:00	7	3			11	1				
11:15	4	4			8	1				
11:30	7	2			6	1				
11:45	10	0	28	9	12	0	37	3	65	12
Total	157	422			262	315			419	737
Percent	27.1%	72.9%			45.4%	54.6%			36.2%	63.8%

Location : Commerce Way  
 Location : East of Enterprise Drive  
 City/State: Marshfield, MA

90960003

9/18/2021 Time	EB,		Hour Totals		WB,		Hour Totals		Combined Totals	
	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	2	7			0	7				
12:15	3	11			1	19				
12:30	1	10			0	7				
12:45	0	10	6	38	0	7	1	40	7	78
1:00	0	7			0	9				
1:15	1	10			0	8				
1:30	0	8			0	6				
1:45	2	14	3	39	1	8	1	31	4	70
2:00	0	7			0	8				
2:15	1	2			0	7				
2:30	0	6			0	6				
2:45	0	9	1	24	0	5	0	26	1	50
3:00	0	10			0	7				
3:15	2	11			0	5				
3:30	1	9			0	10				
3:45	0	7	3	37	0	4	0	26	3	63
4:00	0	10			0	7				
4:15	0	7			1	5				
4:30	2	6			3	9				
4:45	1	4	3	27	0	3	4	24	7	51
5:00	0	5			1	8				
5:15	0	18			1	4				
5:30	2	6			1	8				
5:45	0	4	2	33	3	2	6	22	8	55
6:00	1	11			2	2				
6:15	1	4			1	3				
6:30	0	3			5	4				
6:45	2	3	4	21	6	7	14	16	18	37
7:00	0	11			6	6				
7:15	2	12			6	5				
7:30	1	4			7	7				
7:45	6	9	9	36	6	9	25	27	34	63
8:00	3	4			8	2				
8:15	4	6			8	4				
8:30	8	11			12	1				
8:45	5	3	20	24	7	2	35	9	55	33
9:00	9	8			12	2				
9:15	5	8			22	3				
9:30	2	7			9	2				
9:45	11	5	27	28	12	2	55	9	82	37
10:00	10	6			10	7				
10:15	9	5			4	0				
10:30	13	4			13	2				
10:45	6	1	38	16	10	1	37	10	75	26
11:00	4	4			11	1				
11:15	6	1			16	1				
11:30	7	2			11	0				
11:45	7	2	24	9	12	0	50	2	74	11
Total	140	332			228	242			368	574
Percent	29.7%	70.3%			48.5%	51.5%			39.1%	60.9%
Grand Total	443	1164			775	863			1218	2027
Percent	27.6%	72.4%			47.3%	52.7%			37.5%	62.5%

ADT

ADT: 1,082

AADT: 1,082



Accurate Counts

Location : Proprietors Way  
 Location : South of Route 139  
 City/State: Marshfield, MA

90960004

9/23/2021 Time	SB,		Hour Totals		NB,		Hour Totals		Combined Totals	
	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	0	27			0	15				
12:15	2	33			0	24				
12:30	0	26			0	21				
12:45	0	25	2	111	0	22	0	82	2	193
1:00	1	20			0	19				
1:15	1	19			1	25				
1:30	0	19			1	29				
1:45	0	28	2	86	0	27	2	100	4	186
2:00	0	35			0	25				
2:15	0	23			0	31				
2:30	0	21			0	27				
2:45	0	25	0	104	0	28	0	111	0	215
3:00	0	37			0	23				
3:15	0	38			0	35				
3:30	0	29			0	28				
3:45	0	34	0	138	1	38	1	124	1	262
4:00	0	39			1	40				
4:15	2	48			0	62				
4:30	1	36			0	41				
4:45	2	48	5	171	0	34	1	177	6	348
5:00	0	45			1	44				
5:15	2	37			1	27				
5:30	5	56			2	34				
5:45	3	33	10	171	3	31	7	136	17	307
6:00	6	31			2	31				
6:15	10	31			8	18				
6:30	7	35			11	24				
6:45	17	19	40	116	14	20	35	93	75	209
7:00	12	24			20	30				
7:15	11	15			11	23				
7:30	15	13			24	28				
7:45	34	16	72	68	17	23	72	104	144	172
8:00	25	5			19	30				
8:15	20	13			10	16				
8:30	27	13			28	12				
8:45	36	8	108	39	22	5	79	63	187	102
9:00	25	10			16	12				
9:15	19	4			14	13				
9:30	20	2			16	16				
9:45	29	2	93	18	32	5	78	46	171	64
10:00	15	1			16	7				
10:15	13	3			24	4				
10:30	23	3			16	4				
10:45	18	4	69	11	18	2	74	17	143	28
11:00	21	4			14	6				
11:15	30	0			31	8				
11:30	24	1			22	0				
11:45	31	1	106	6	40	0	107	14	213	20
Total	507	1039			456	1067			963	2106
Percent	32.8%	67.2%			29.9%	70.1%			31.4%	68.6%



Location : Proprietors Way  
 Location : South of Route 139  
 City/State: Marshfield, MA

90960004

9/24/2021 Time	SB,		Hour Totals		NB,		Hour Totals		Combined Totals	
	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	2	33			1	23				
12:15	2	29			2	30				
12:30	0	20			1	23				
12:45	0	27	4	109	0	22	4	98	8	207
1:00	1	24			0	27				
1:15	1	23			2	17				
1:30	0	31			0	38				
1:45	0	20	2	98	0	24	2	106	4	204
2:00	1	27			0	29				
2:15	0	30			0	37				
2:30	0	27			1	37				
2:45	0	25	1	109	0	18	1	121	2	230
3:00	0	26			1	30				
3:15	0	39			0	28				
3:30	1	30			1	22				
3:45	0	34	1	129	2	28	4	108	5	237
4:00	0	43			1	36				
4:15	1	45			0	53				
4:30	1	43			0	42				
4:45	2	26	4	157	1	46	2	177	6	334
5:00	1	33			1	27				
5:15	9	37			1	37				
5:30	1	34			3	36				
5:45	2	51	13	155	1	34	6	134	19	289
6:00	2	41			2	37				
6:15	5	35			7	28				
6:30	6	28			10	28				
6:45	17	21	30	125	19	24	38	117	68	242
7:00	13	21			24	27				
7:15	21	30			8	22				
7:30	20	27			25	27				
7:45	21	15	75	93	18	24	75	100	150	193
8:00	23	16			19	18				
8:15	18	10			14	33				
8:30	33	10			22	12				
8:45	24	10	98	46	19	18	74	81	172	127
9:00	24	9			18	30				
9:15	21	9			18	19				
9:30	14	9			23	15				
9:45	26	3	85	30	20	9	79	73	164	103
10:00	24	4			23	9				
10:15	23	3			16	7				
10:30	20	3			33	10				
10:45	18	6	85	16	20	9	92	35	177	51
11:00	24	7			20	13				
11:15	21	4			19	5				
11:30	24	0			31	2				
11:45	33	4	102	15	20	1	90	21	192	36
Total	500	1082			467	1171			967	2253
Percent	31.6%	68.4%			28.5%	71.5%			30.0%	70.0%

Location : Proprietors Way  
 Location : South of Route 139  
 City/State: Marshfield, MA

90960004

9/25/2021 Time	SB,		Hour Totals		NB,		Hour Totals		Combined Totals	
	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	1	21			2	23				
12:15	0	32			1	17				
12:30	0	22			1	16				
12:45	1	27	2	102	0	23	4	79	6	181
1:00	1	19			1	20				
1:15	0	27			1	17				
1:30	0	21			0	39				
1:45	0	25	1	92	0	34	2	110	3	202
2:00	0	23			2	31				
2:15	0	20			0	37				
2:30	0	24			0	24				
2:45	0	25	0	92	0	17	2	109	2	201
3:00	0	32			0	29				
3:15	0	31			0	23				
3:30	1	21			1	27				
3:45	0	33	1	117	2	17	3	96	4	213
4:00	0	34			0	31				
4:15	0	35			1	28				
4:30	0	25			1	34				
4:45	1	31	1	125	1	23	3	116	4	241
5:00	1	40			0	16				
5:15	1	40			0	23				
5:30	1	29			0	24				
5:45	3	31	6	140	1	24	1	87	7	227
6:00	1	15			3	20				
6:15	4	29			2	30				
6:30	6	18			4	20				
6:45	12	25	23	87	8	20	17	90	40	177
7:00	8	19			7	30				
7:15	10	22			7	15				
7:30	8	23			6	26				
7:45	16	12	42	76	16	30	36	101	78	177
8:00	12	13			16	17				
8:15	16	7			20	18				
8:30	13	8			17	10				
8:45	9	4	50	32	13	12	66	57	116	89
9:00	18	3			14	9				
9:15	19	7			13	12				
9:30	20	2			20	9				
9:45	25	7	82	19	18	14	65	44	147	63
10:00	16	2			21	7				
10:15	31	6			11	8				
10:30	26	2			25	12				
10:45	20	3	93	13	24	5	81	32	174	45
11:00	23	2			21	6				
11:15	26	4			22	7				
11:30	24	4			24	2				
11:45	23	0	96	10	21	0	88	15	184	25
Total	397	905			368	936			765	1841
Percent	30.5%	69.5%			28.2%	71.8%			29.4%	70.6%
Grand Total	1404	3026			1291	3174			2695	6200
Percent	31.7%	68.3%			28.9%	71.1%			30.3%	69.7%

ADT

ADT: 2,965

AADT: 2,965



MANUAL TURNING MOVEMENT COUNT DATA

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**Accurate Counts**  
978-664-2565

N/S Street : School Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain

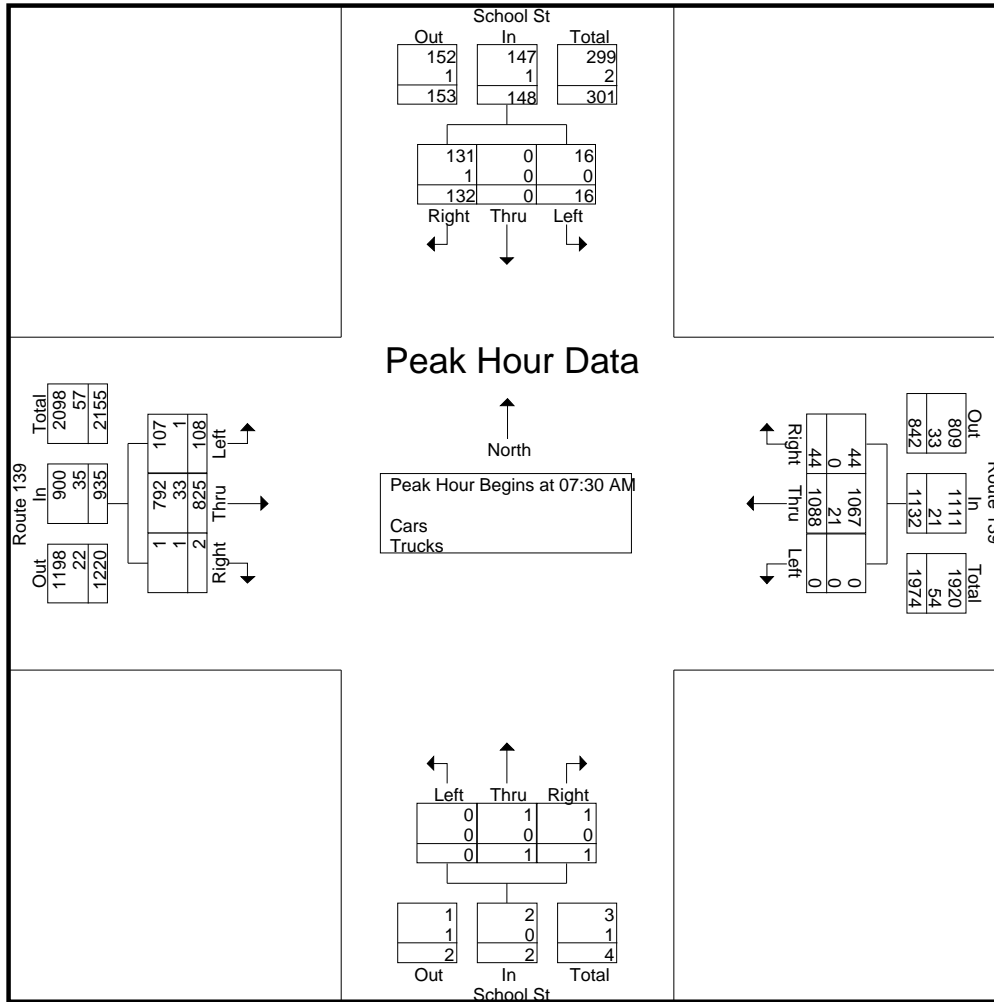
File Name : 90960001  
Site Code : 90960001  
Start Date : 9/16/2021  
Page No : 1

Groups Printed- Cars - Trucks

Start Time	School St From North			Route 139 From East			School St From South			Route 139 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	2	0	39	0	293	10	0	0	0	13	157	0	514
07:15 AM	1	0	22	0	275	12	1	0	0	16	165	0	492
07:30 AM	4	0	34	0	264	21	0	1	1	30	192	1	548
07:45 AM	5	0	37	0	276	11	0	0	0	22	226	0	577
<b>Total</b>	<b>12</b>	<b>0</b>	<b>132</b>	<b>0</b>	<b>1108</b>	<b>54</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>81</b>	<b>740</b>	<b>1</b>	<b>2131</b>
08:00 AM	2	0	32	0	268	8	0	0	0	30	202	0	542
08:15 AM	5	0	29	0	280	4	0	0	0	26	205	1	550
08:30 AM	4	0	30	0	249	13	0	0	0	16	211	1	524
08:45 AM	2	0	33	0	279	13	0	0	0	23	205	0	555
<b>Total</b>	<b>13</b>	<b>0</b>	<b>124</b>	<b>0</b>	<b>1076</b>	<b>38</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>95</b>	<b>823</b>	<b>2</b>	<b>2171</b>
<b>Grand Total</b>	<b>25</b>	<b>0</b>	<b>256</b>	<b>0</b>	<b>2184</b>	<b>92</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>176</b>	<b>1563</b>	<b>3</b>	<b>4302</b>
Apprch %	8.9	0	91.1	0	96	4	33.3	33.3	33.3	10.1	89.7	0.2	
Total %	0.6	0	6	0	50.8	2.1	0	0	0	4.1	36.3	0.1	
Cars	25	0	255	0	2137	90	0	1	1	174	1486	2	4171
% Cars	100	0	99.6	0	97.8	97.8	0	100	100	98.9	95.1	66.7	97
Trucks	0	0	1	0	47	2	1	0	0	2	77	1	131
% Trucks	0	0	0.4	0	2.2	2.2	100	0	0	1.1	4.9	33.3	3

Start Time	School St From North				Route 139 From East				School St From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	4	0	34	38	0	264	21	285	0	1	1	2	30	192	1	223	548
07:45 AM	5	0	37	42	0	276	11	287	0	0	0	0	22	226	0	248	577
08:00 AM	2	0	32	34	0	268	8	276	0	0	0	0	30	202	0	232	542
08:15 AM	5	0	29	34	0	280	4	284	0	0	0	0	26	205	1	232	550
<b>Total Volume</b>	<b>16</b>	<b>0</b>	<b>132</b>	<b>148</b>	<b>0</b>	<b>1088</b>	<b>44</b>	<b>1132</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>108</b>	<b>825</b>	<b>2</b>	<b>935</b>	<b>2217</b>
% App. Total	10.8	0	89.2	99.3	0	96.1	3.9	99.3	0	50	50	100	11.6	88.2	0.2	99.3	99.3
PHF	.800	.000	.892	.881	.000	.971	.524	.986	.000	.250	.250	.250	.900	.913	.500	.943	.961
Cars	16	0	131	147	0	1067	44	1111	0	1	1	2	107	792	1	900	2160
% Cars	100	0	99.2	99.3	0	98.1	100	98.1	0	100	100	100	99.1	96.0	50.0	96.3	97.4
Trucks	0	0	1	1	0	21	0	21	0	0	0	0	1	33	1	35	57
% Trucks	0	0	0.8	0.7	0	1.9	0	1.9	0	0	0	0	0.9	4.0	50.0	3.7	2.6

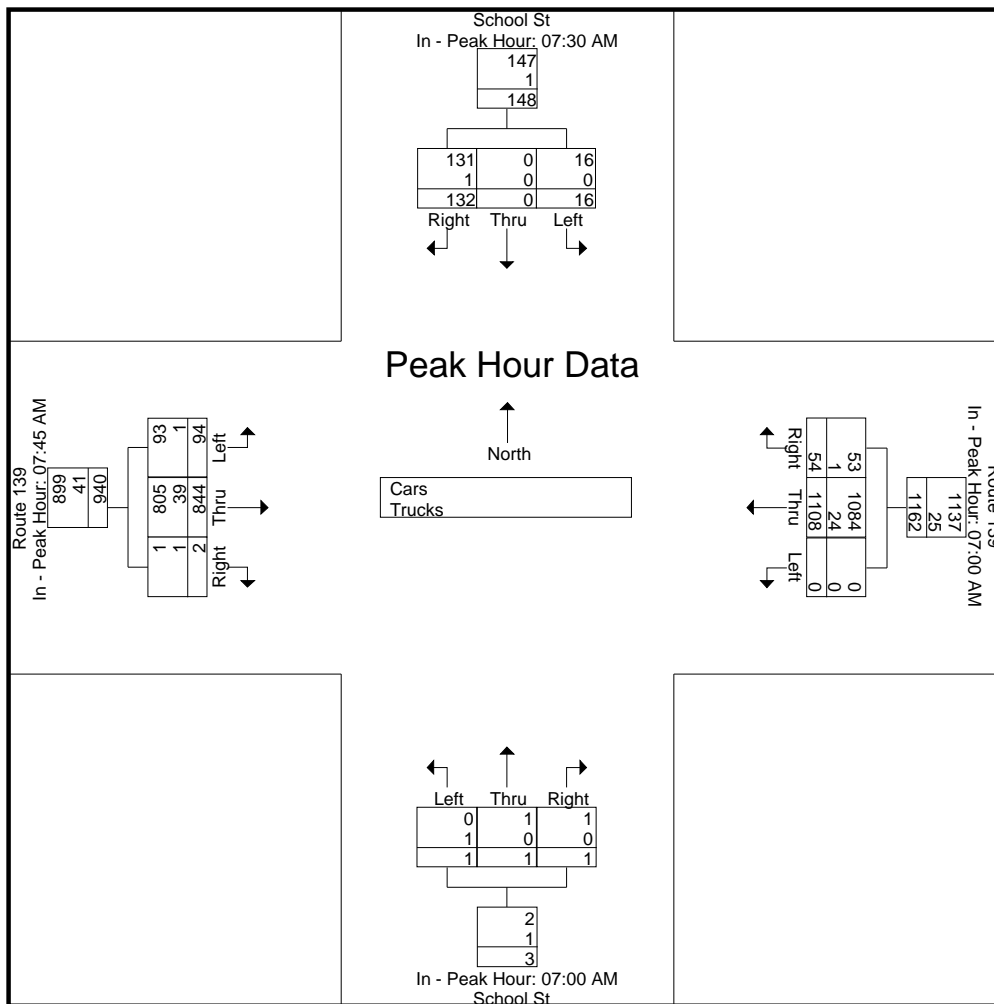
N/S Street : School Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:30 AM				07:00 AM				07:00 AM				07:45 AM			
+0 mins.	4	0	34	38	0	<b>293</b>	10	<b>303</b>	0	0	0	0	22	<b>226</b>	0	<b>248</b>
+15 mins.	<b>5</b>	0	<b>37</b>	<b>42</b>	0	275	12	287	<b>1</b>	0	0	<b>1</b>	<b>30</b>	202	0	232
+30 mins.	2	0	32	34	0	264	<b>21</b>	285	0	<b>1</b>	<b>1</b>	<b>2</b>	26	205	<b>1</b>	232
+45 mins.	5	0	29	34	0	276	11	287	0	0	0	0	16	211	1	228
Total Volume	16	0	132	148	0	1108	54	1162	1	1	1	3	94	844	2	940
% App. Total	10.8	0	89.2		0	95.4	4.6		33.3	33.3	33.3		10	89.8	0.2	
PHF	.800	.000	.892	.881	.000	.945	.643	.959	.250	.250	.250	.375	.783	.934	.500	.948
Cars	16	0	131	147	0	1084	53	1137	0	1	1	2	93	805	1	899
% Cars	100	0	99.2	99.3	0	97.8	98.1	97.8	0	100	100	66.7	98.9	95.4	50	95.6
Trucks	0	0	1	1	0	24	1	25	1	0	0	1	1	39	1	41
% Trucks	0	0	0.8	0.7	0	2.2	1.9	2.2	100	0	0	33.3	1.1	4.6	50	4.4

N/S Street : School Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



# Accurate Counts

978-664-2565

N/S Street : School Street  
 E/W Street : Route 139  
 City/State : Marshfield, MA  
 Weather : Rain

File Name : 90960001  
 Site Code : 90960001  
 Start Date : 9/16/2021  
 Page No : 4

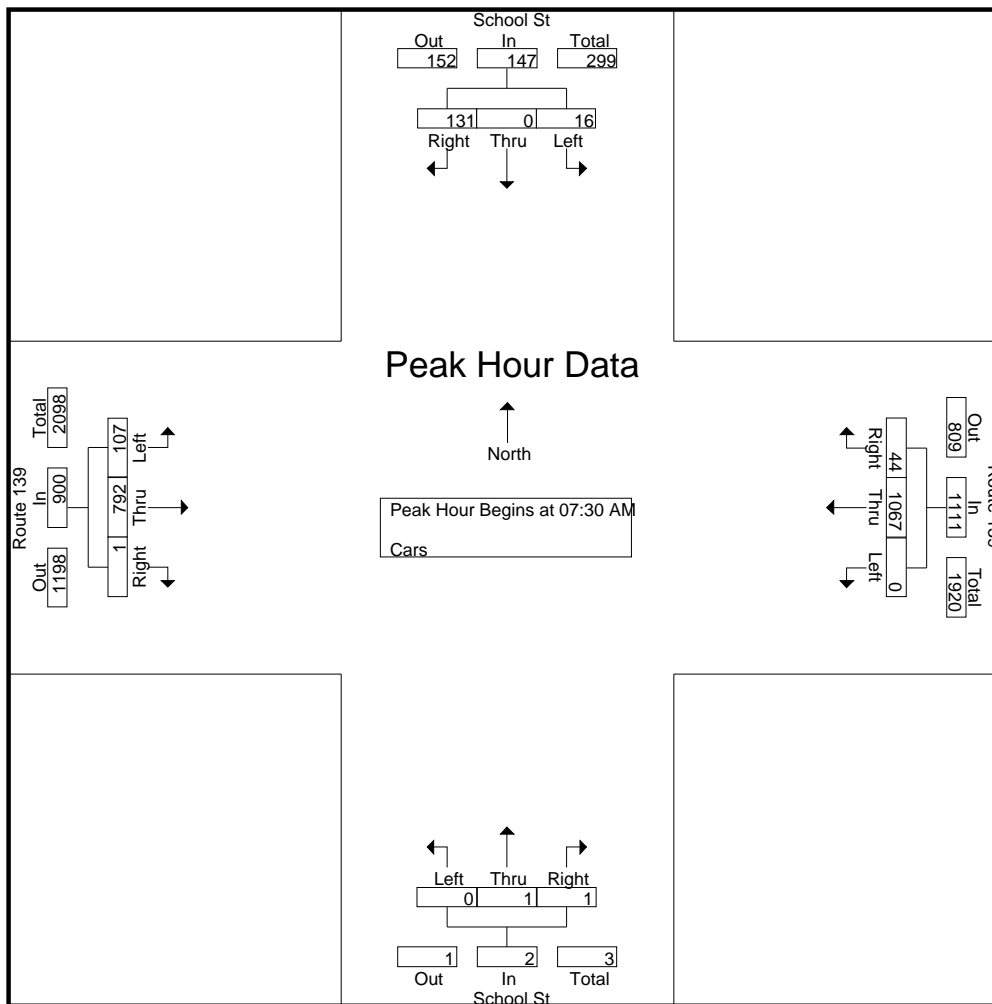
## Groups Printed- Cars

Start Time	School St From North			Route 139 From East			School St From South			Route 139 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	2	0	39	0	285	10	0	0	0	13	143	0	492
07:15 AM	1	0	22	0	270	11	0	0	0	16	156	0	476
07:30 AM	4	0	33	0	258	21	0	1	1	30	185	1	534
07:45 AM	5	0	37	0	271	11	0	0	0	22	218	0	564
<b>Total</b>	<b>12</b>	<b>0</b>	<b>131</b>	<b>0</b>	<b>1084</b>	<b>53</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>81</b>	<b>702</b>	<b>1</b>	<b>2066</b>
08:00 AM	2	0	32	0	264	8	0	0	0	29	195	0	530
08:15 AM	5	0	29	0	274	4	0	0	0	26	194	0	532
08:30 AM	4	0	30	0	244	12	0	0	0	16	198	1	505
08:45 AM	2	0	33	0	271	13	0	0	0	22	197	0	538
<b>Total</b>	<b>13</b>	<b>0</b>	<b>124</b>	<b>0</b>	<b>1053</b>	<b>37</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>93</b>	<b>784</b>	<b>1</b>	<b>2105</b>
<b>Grand Total</b>	<b>25</b>	<b>0</b>	<b>255</b>	<b>0</b>	<b>2137</b>	<b>90</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>174</b>	<b>1486</b>	<b>2</b>	<b>4171</b>
Apprch %	8.9	0	91.1	0	96	4	0	50	50	10.5	89.4	0.1	
Total %	0.6	0	6.1	0	51.2	2.2	0	0	0	4.2	35.6	0	

Start Time	School St From North				Route 139 From East				School St From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	4	0	33	37	0	258	21	279	0	1	1	2	30	185	1	216	534
07:45 AM	5	0	37	42	0	271	11	282	0	0	0	0	22	218	0	240	564
08:00 AM	2	0	32	34	0	264	8	272	0	0	0	0	29	195	0	224	530
08:15 AM	5	0	29	34	0	274	4	278	0	0	0	0	26	194	0	220	532
<b>Total Volume</b>	16	0	131	147	0	1067	44	1111	0	1	1	2	107	792	1	900	2160
% App. Total	10.9	0	89.1		0	96	4		0	50	50		11.9	88	0.1		
PHF	.800	.000	.885	.875	.000	.974	.524	.985	.000	.250	.250	.250	.892	.908	.250	.938	.957



N/S Street : School Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



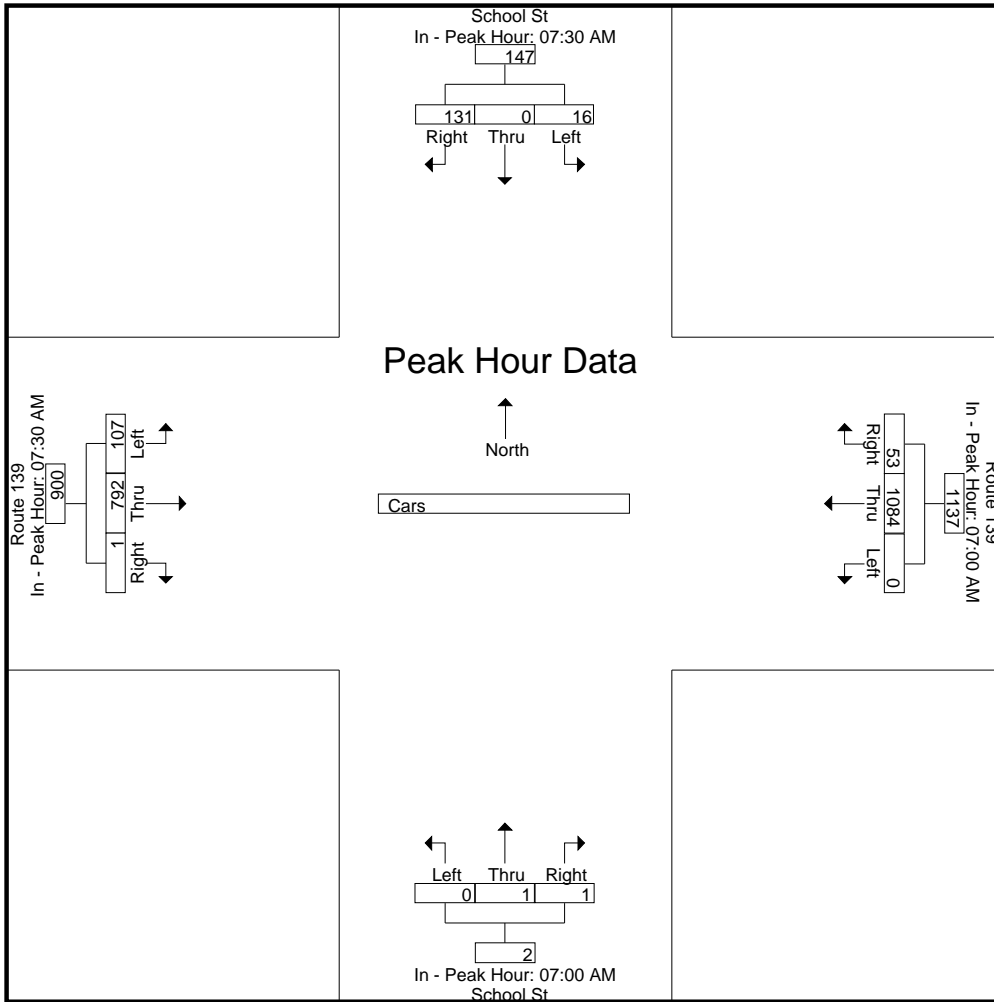
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:30 AM				07:00 AM				07:00 AM				07:30 AM			
+0 mins.	4	0	33	37	0	<b>285</b>	10	<b>295</b>	0	0	0	0	<b>30</b>	185	<b>1</b>	216
+15 mins.	<b>5</b>	0	<b>37</b>	<b>42</b>	0	270	11	281	0	0	0	0	22	<b>218</b>	0	<b>240</b>
+30 mins.	2	0	32	34	0	258	<b>21</b>	279	0	<b>1</b>	<b>1</b>	<b>2</b>	29	195	0	224
+45 mins.	5	0	29	34	0	271	11	282	0	0	0	0	26	194	0	220
Total Volume	16	0	131	147	0	1084	53	1137	0	1	1	2	107	792	1	900
% App. Total	10.9	0	89.1		0	95.3	4.7		0	50	50		11.9	88	0.1	
PHF	.800	.000	.885	.875	.000	.951	.631	.964	.000	.250	.250	.250	.892	.908	.250	.938

**Accurate Counts**  
978-664-2565

File Name : 90960001  
Site Code : 90960001  
Start Date : 9/16/2021  
Page No : 6

N/S Street : School Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



**Accurate Counts**  
978-664-2565

N/S Street : School Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain

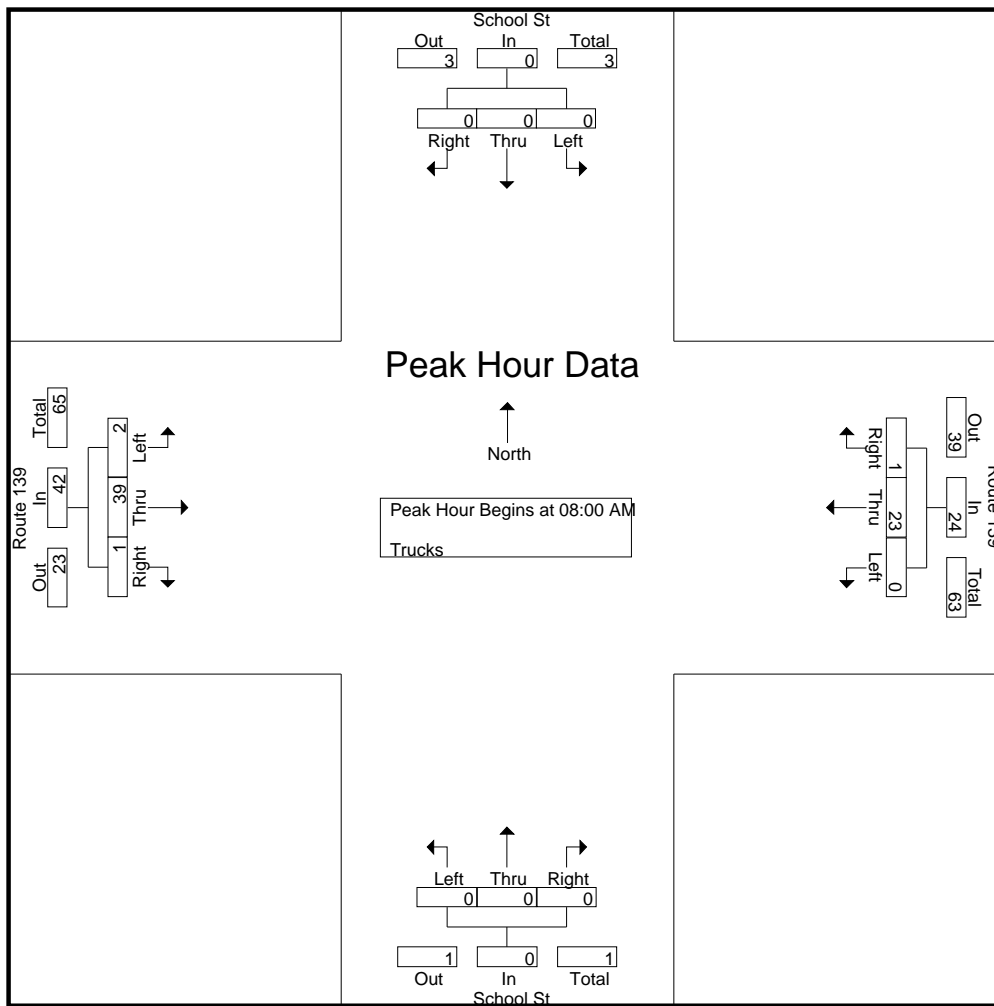
File Name : 90960001  
Site Code : 90960001  
Start Date : 9/16/2021  
Page No : 7

Groups Printed- Trucks

Start Time	School St From North			Route 139 From East			School St From South			Route 139 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	0	0	0	0	8	0	0	0	0	0	14	0	22
07:15 AM	0	0	0	0	5	1	1	0	0	0	9	0	16
07:30 AM	0	0	1	0	6	0	0	0	0	0	7	0	14
07:45 AM	0	0	0	0	5	0	0	0	0	0	8	0	13
Total	0	0	1	0	24	1	1	0	0	0	38	0	65
08:00 AM	0	0	0	0	4	0	0	0	0	1	7	0	12
08:15 AM	0	0	0	0	6	0	0	0	0	0	11	1	18
08:30 AM	0	0	0	0	5	1	0	0	0	0	13	0	19
08:45 AM	0	0	0	0	8	0	0	0	0	1	8	0	17
Total	0	0	0	0	23	1	0	0	0	2	39	1	66
Grand Total	0	0	1	0	47	2	1	0	0	2	77	1	131
Apprch %	0	0	100	0	95.9	4.1	100	0	0	2.5	96.2	1.2	
Total %	0	0	0.8	0	35.9	1.5	0.8	0	0	1.5	58.8	0.8	

Start Time	School St From North				Route 139 From East				School St From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	4	0	4	0	0	0	0	1	7	0	8	12
08:15 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	11	1	12	18
08:30 AM	0	0	0	0	0	5	1	6	0	0	0	0	0	13	0	13	19
08:45 AM	0	0	0	0	0	8	0	8	0	0	0	0	1	8	0	9	17
Total Volume	0	0	0	0	0	23	1	24	0	0	0	0	2	39	1	42	66
% App. Total	0	0	0	0	0	95.8	4.2		0	0	0	0	4.8	92.9	2.4		
PHF	.000	.000	.000	.000	.000	.719	.250	.750	.000	.000	.000	.000	.500	.750	.250	.808	.868

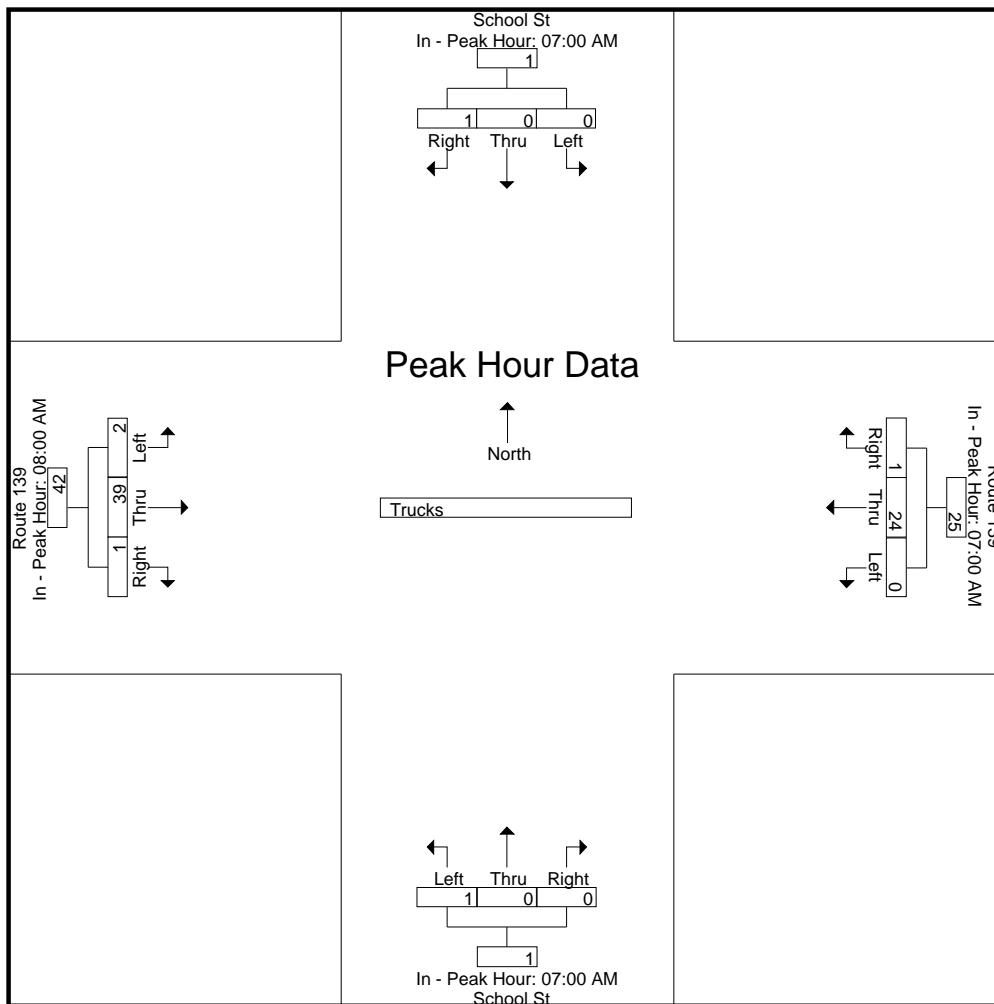
N/S Street : School Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				08:00 AM			
+0 mins.	0	0	0	0	0	<b>8</b>	0	<b>8</b>	0	0	0	0	<b>1</b>	7	0	<b>8</b>
+15 mins.	0	0	0	0	0	5	<b>1</b>	6	<b>1</b>	0	0	<b>1</b>	0	11	<b>1</b>	12
+30 mins.	0	0	<b>1</b>	<b>1</b>	0	6	0	6	0	0	0	0	0	<b>13</b>	0	<b>13</b>
+45 mins.	0	0	0	0	0	5	0	5	0	0	0	0	1	8	0	9
Total Volume	0	0	1	1	0	24	1	25	1	0	0	1	2	39	1	42
% App. Total	0	0	100		0	96	4		100	0	0		4.8	92.9	2.4	
PHF	.000	.000	.250	.250	.000	.750	.250	.781	.250	.000	.000	.250	.500	.750	.250	.808

N/S Street : School Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



**Accurate Counts**  
978-664-2565

N/S Street : School Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain

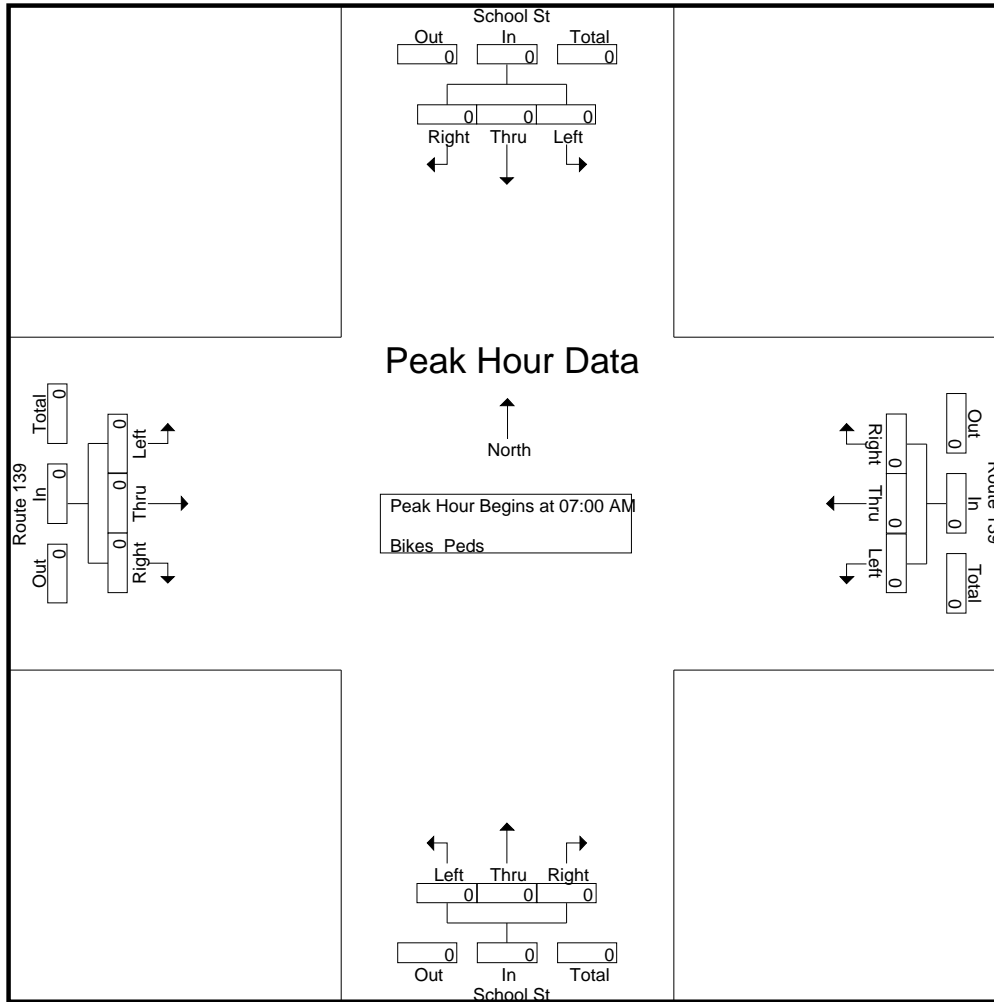
File Name : 90960001  
Site Code : 90960001  
Start Date : 9/16/2021  
Page No : 10

Groups Printed- Bikes Peds

Start Time	School St From North				Route 139 From East				School St From South				Route 139 From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0				
Total %																	0	0	

Start Time	School St From North				Route 139 From East				School St From South				Route 139 From West				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 07:00 AM																		
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0			
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

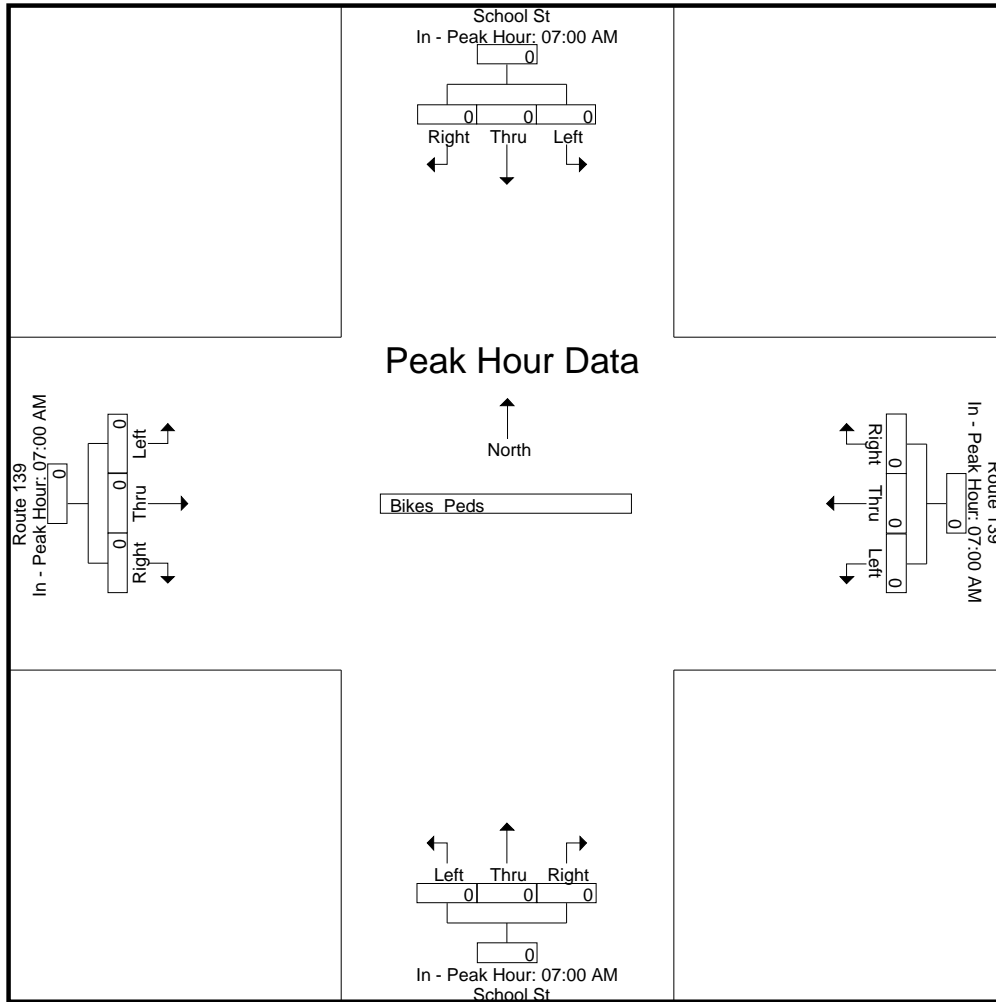
N/S Street : School Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

N/S Street : School Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain





# Accurate Counts

978-664-2565

N/S Street : School Street  
 E/W Street : Route 139  
 City/State : Marshfield, MA  
 Weather : Rain

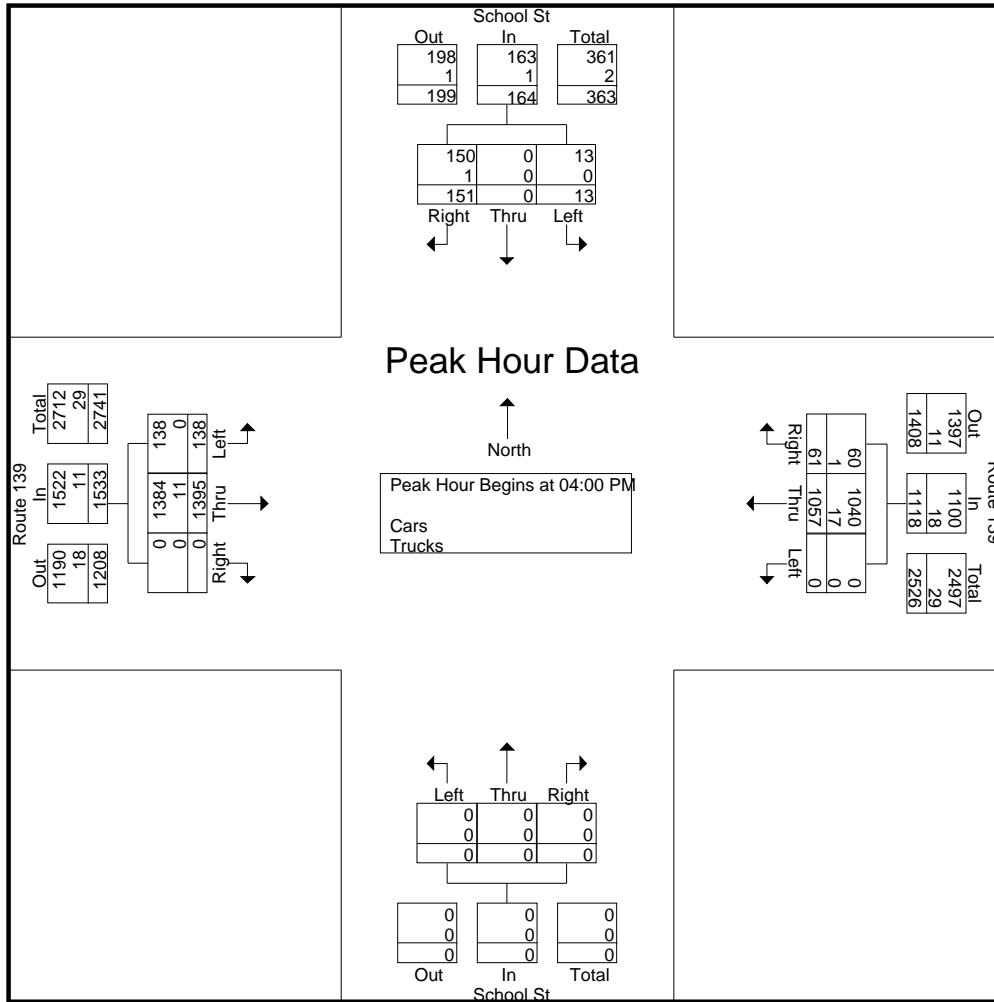
File Name : 90960001  
 Site Code : 90960001  
 Start Date : 9/16/2021  
 Page No : 1

### Groups Printed- Cars - Trucks

Start Time	School St From North			Route 139 From East			School St From South			Route 139 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
04:00 PM	1	0	45	0	303	14	0	0	0	39	357	0	759
04:15 PM	1	0	30	0	246	18	0	0	0	31	354	0	680
04:30 PM	7	0	42	0	276	15	0	0	0	38	332	0	710
04:45 PM	4	0	34	0	232	14	0	0	0	30	352	0	666
<b>Total</b>	<b>13</b>	<b>0</b>	<b>151</b>	<b>0</b>	<b>1057</b>	<b>61</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>138</b>	<b>1395</b>	<b>0</b>	<b>2815</b>
05:00 PM	1	0	24	0	292	13	0	0	0	32	328	0	690
05:15 PM	4	0	28	0	266	18	0	0	0	53	364	1	734
05:30 PM	2	0	35	0	270	13	0	0	0	41	341	0	702
05:45 PM	3	0	21	0	225	12	0	0	0	18	308	0	587
<b>Total</b>	<b>10</b>	<b>0</b>	<b>108</b>	<b>0</b>	<b>1053</b>	<b>56</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>144</b>	<b>1341</b>	<b>1</b>	<b>2713</b>
<b>Grand Total</b>	<b>23</b>	<b>0</b>	<b>259</b>	<b>0</b>	<b>2110</b>	<b>117</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>282</b>	<b>2736</b>	<b>1</b>	<b>5528</b>
Apprch %	8.2	0	91.8	0	94.7	5.3	0	0	0	9.3	90.6	0	
Total %	0.4	0	4.7	0	38.2	2.1	0	0	0	5.1	49.5	0	
Cars	23	0	258	0	2084	116	0	0	0	281	2716	1	5479
% Cars	100	0	99.6	0	98.8	99.1	0	0	0	99.6	99.3	100	99.1
Trucks	0	0	1	0	26	1	0	0	0	1	20	0	49
% Trucks	0	0	0.4	0	1.2	0.9	0	0	0	0.4	0.7	0	0.9

Start Time	School St From North				Route 139 From East				School St From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
<b>Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1</b>																	
<b>Peak Hour for Entire Intersection Begins at 04:00 PM</b>																	
04:00 PM	1	0	<b>45</b>	46	0	<b>303</b>	14	<b>317</b>	0	0	0	0	<b>39</b>	<b>357</b>	0	<b>396</b>	<b>759</b>
04:15 PM	1	0	30	31	0	246	<b>18</b>	264	0	0	0	0	31	354	0	385	680
04:30 PM	<b>7</b>	0	42	<b>49</b>	0	276	15	291	0	0	0	0	38	332	0	370	710
04:45 PM	4	0	34	38	0	232	14	246	0	0	0	0	30	352	0	382	666
<b>Total Volume</b>	<b>13</b>	<b>0</b>	<b>151</b>	<b>164</b>	<b>0</b>	<b>1057</b>	<b>61</b>	<b>1118</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>138</b>	<b>1395</b>	<b>0</b>	<b>1533</b>	<b>2815</b>
% App. Total	7.9	0	92.1	99.4	0	94.5	5.5	98.4	0	0	0	0	9	91	0	96.8	99.2
PHF	.464	.000	.839	.837	.000	.872	.847	.882	.000	.000	.000	.000	.885	.977	.000	.968	.927
Cars	13	0	150	163	0	1040	60	1100	0	0	0	0	138	1384	0	1522	2785
% Cars	100	0	99.3	99.4	0	98.4	98.4	98.4	0	0	0	0	100	99.2	0	99.3	98.9
Trucks	0	0	1	1	0	17	1	18	0	0	0	0	0	11	0	11	30
% Trucks	0	0	0.7	0.6	0	1.6	1.6	1.6	0	0	0	0	0	0.8	0	0.7	1.1

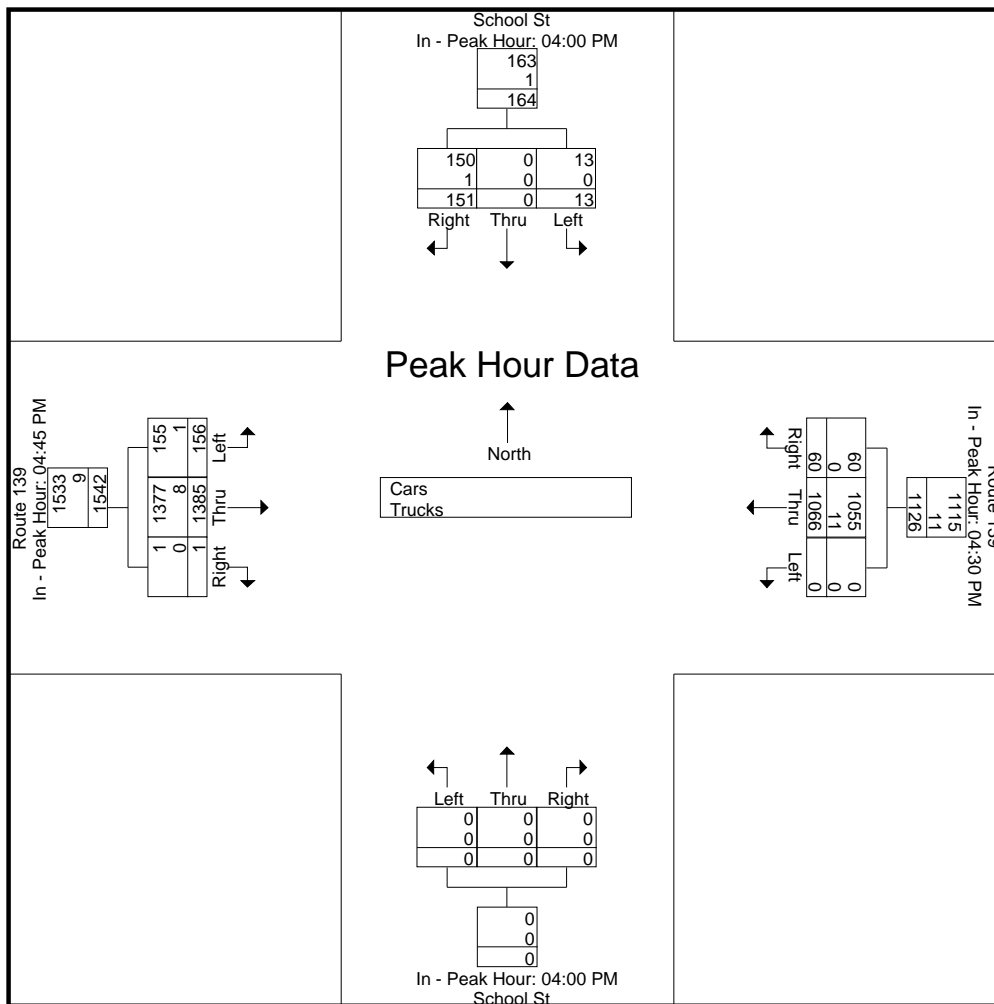
N/S Street : School Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	04:00 PM				04:30 PM				04:00 PM				04:45 PM			
+0 mins.	1	0	<b>45</b>	46	0	276	15	291	0	0	0	0	30	352	0	382
+15 mins.	1	0	30	31	0	232	14	246	0	0	0	0	32	328	0	360
+30 mins.	<b>7</b>	0	42	<b>49</b>	0	<b>292</b>	13	<b>305</b>	0	0	0	0	<b>53</b>	<b>364</b>	<b>1</b>	<b>418</b>
+45 mins.	4	0	34	38	0	266	<b>18</b>	284	0	0	0	0	41	341	0	382
Total Volume	13	0	151	164	0	1066	60	1126	0	0	0	0	156	1385	1	1542
% App. Total	7.9	0	92.1		0	94.7	5.3		0	0	0		10.1	89.8	0.1	
PHF	.464	.000	.839	.837	.000	.913	.833	.923	.000	.000	.000	.000	.736	.951	.250	.922
Cars	13	0	150	163	0	1055	60	1115	0	0	0	0	155	1377	1	1533
% Cars	100	0	99.3	99.4	0	99	100	99	0	0	0	0	99.4	99.4	100	99.4
Trucks	0	0	1	1	0	11	0	11	0	0	0	0	1	8	0	9
% Trucks	0	0	0.7	0.6	0	1	0	1	0	0	0	0	0.6	0.6	0	0.6

N/S Street : School Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



# Accurate Counts

978-664-2565

N/S Street : School Street  
 E/W Street : Route 139  
 City/State : Marshfield, MA  
 Weather : Rain

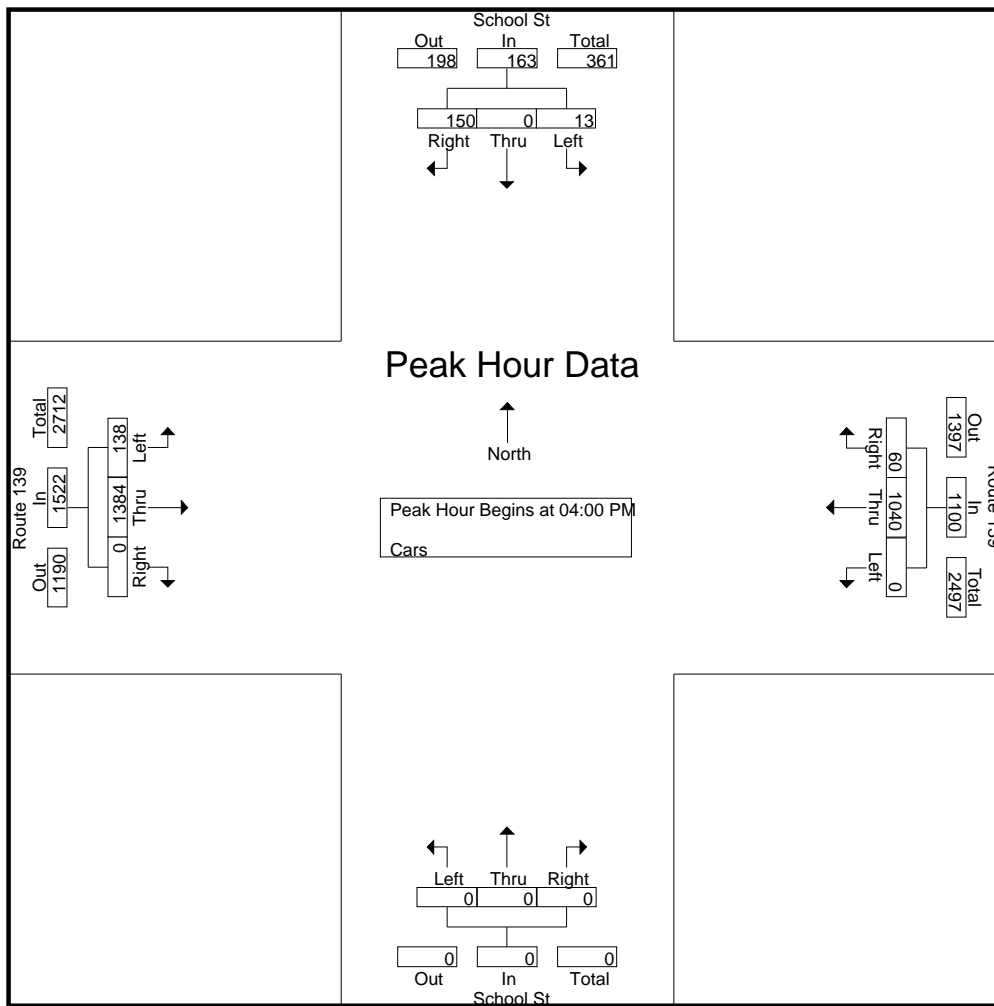
File Name : 90960001  
 Site Code : 90960001  
 Start Date : 9/16/2021  
 Page No : 4

## Groups Printed- Cars

Start Time	School St From North			Route 139 From East			School St From South			Route 139 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
04:00 PM	1	0	44	0	294	14	0	0	0	39	354	0	746
04:15 PM	1	0	30	0	243	17	0	0	0	31	349	0	671
04:30 PM	7	0	42	0	271	15	0	0	0	38	330	0	703
04:45 PM	4	0	34	0	232	14	0	0	0	30	351	0	665
<b>Total</b>	<b>13</b>	<b>0</b>	<b>150</b>	<b>0</b>	<b>1040</b>	<b>60</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>138</b>	<b>1384</b>	<b>0</b>	<b>2785</b>
05:00 PM	1	0	24	0	290	13	0	0	0	32	328	0	688
05:15 PM	4	0	28	0	262	18	0	0	0	52	360	1	725
05:30 PM	2	0	35	0	267	13	0	0	0	41	338	0	696
05:45 PM	3	0	21	0	225	12	0	0	0	18	306	0	585
<b>Total</b>	<b>10</b>	<b>0</b>	<b>108</b>	<b>0</b>	<b>1044</b>	<b>56</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>143</b>	<b>1332</b>	<b>1</b>	<b>2694</b>
<b>Grand Total</b>	<b>23</b>	<b>0</b>	<b>258</b>	<b>0</b>	<b>2084</b>	<b>116</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>281</b>	<b>2716</b>	<b>1</b>	<b>5479</b>
Apprch %	8.2	0	91.8	0	94.7	5.3	0	0	0	9.4	90.6	0	
Total %	0.4	0	4.7	0	38	2.1	0	0	0	5.1	49.6	0	

Start Time	School St From North				Route 139 From East				School St From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	1	0	<b>44</b>	45	0	<b>294</b>	14	<b>308</b>	0	0	0	0	<b>39</b>	<b>354</b>	0	<b>393</b>	<b>746</b>
04:15 PM	1	0	30	31	0	243	17	260	0	0	0	0	31	349	0	380	671
04:30 PM	7	0	42	49	0	271	15	286	0	0	0	0	38	330	0	368	703
04:45 PM	4	0	34	38	0	232	14	246	0	0	0	0	30	351	0	381	665
<b>Total Volume</b>	<b>13</b>	<b>0</b>	<b>150</b>	<b>163</b>	<b>0</b>	<b>1040</b>	<b>60</b>	<b>1100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>138</b>	<b>1384</b>	<b>0</b>	<b>1522</b>	<b>2785</b>
% App. Total	8	0	92		0	94.5	5.5		0	0	0		9.1	90.9	0		
PHF	.464	.000	.852	.832	.000	.884	.882	.893	.000	.000	.000	.000	.885	.977	.000	.968	.933

N/S Street : School Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	04:00 PM				04:30 PM				04:00 PM				04:45 PM			
+0 mins.	1	0	<b>44</b>	45	0	271	15	286	0	0	0	0	30	351	0	381
+15 mins.	1	0	30	31	0	232	14	246	0	0	0	0	32	328	0	360
+30 mins.	<b>7</b>	0	42	<b>49</b>	0	<b>290</b>	13	<b>303</b>	0	0	0	0	<b>52</b>	<b>360</b>	<b>1</b>	<b>413</b>
+45 mins.	4	0	34	38	0	262	<b>18</b>	280	0	0	0	0	41	338	0	379
Total Volume	13	0	150	163	0	1055	60	1115	0	0	0	0	155	1377	1	1533
% App. Total	8	0	92		0	94.6	5.4		0	0	0		10.1	89.8	0.1	
PHF	.464	.000	.852	.832	.000	.909	.833	.920	.000	.000	.000	.000	.745	.956	.250	.928

# Accurate Counts

978-664-2565

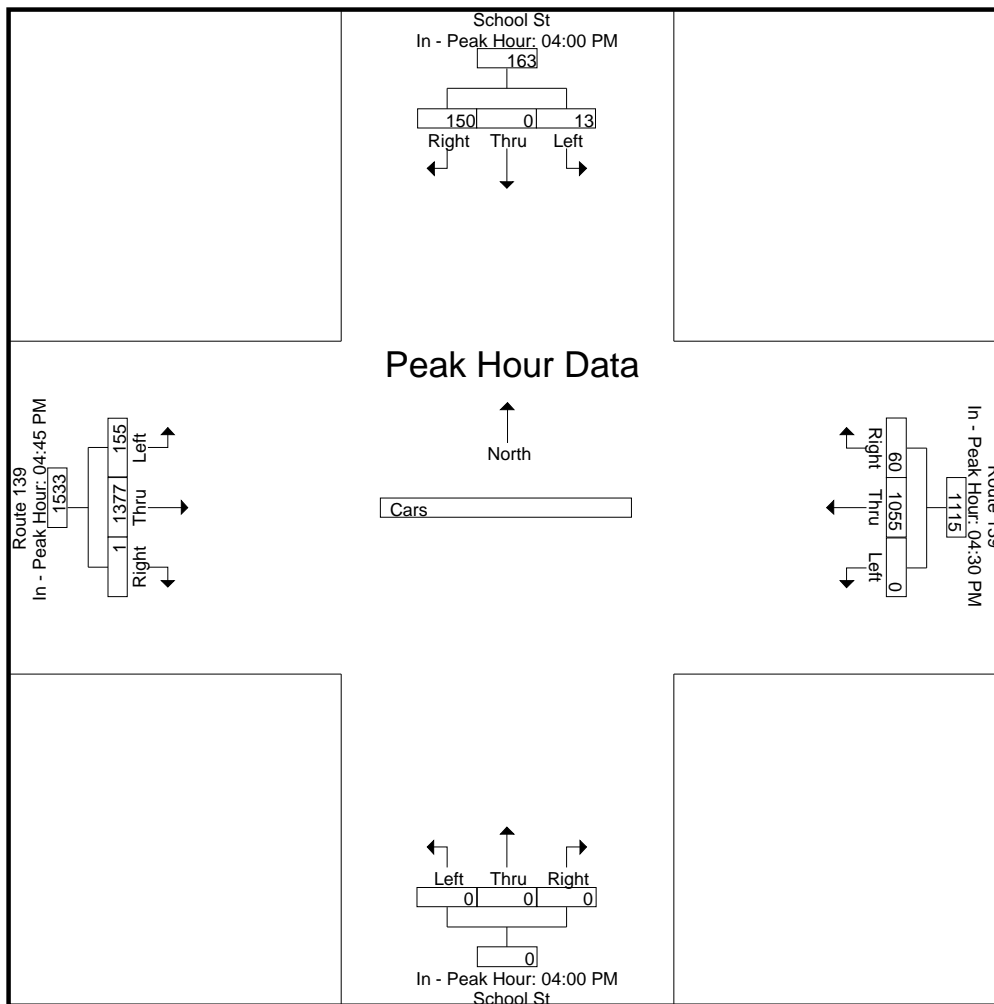
File Name : 90960001

Site Code : 90960001

Start Date : 9/16/2021

Page No : 6

N/S Street : School Street  
 E/W Street : Route 139  
 City/State : Marshfield, MA  
 Weather : Rain



# Accurate Counts

978-664-2565

N/S Street : School Street  
 E/W Street : Route 139  
 City/State : Marshfield, MA  
 Weather : Rain

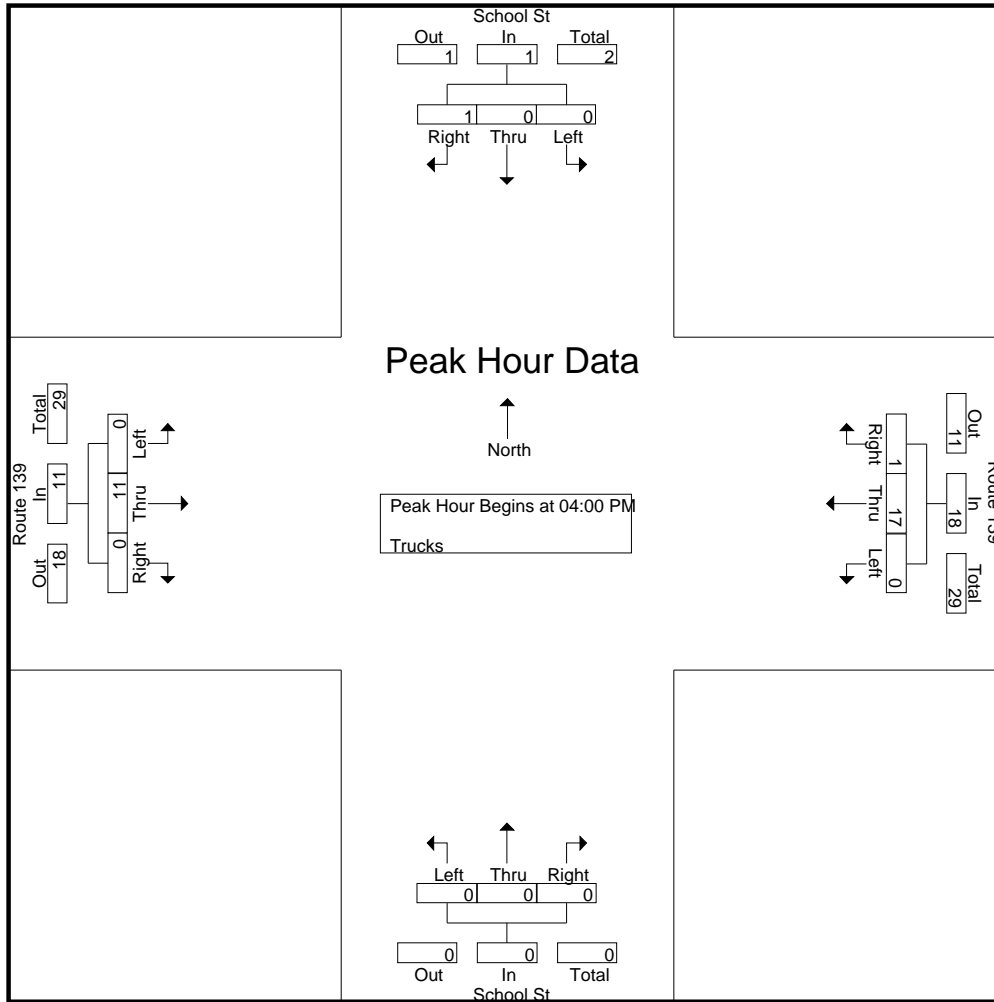
File Name : 90960001  
 Site Code : 90960001  
 Start Date : 9/16/2021  
 Page No : 7

### Groups Printed- Trucks

Start Time	School St From North			Route 139 From East			School St From South			Route 139 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
04:00 PM	0	0	1	0	9	0	0	0	0	0	3	0	13
04:15 PM	0	0	0	0	3	1	0	0	0	0	5	0	9
04:30 PM	0	0	0	0	5	0	0	0	0	0	2	0	7
04:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
<b>Total</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>17</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>30</b>
05:00 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
05:15 PM	0	0	0	0	4	0	0	0	0	1	4	0	9
05:30 PM	0	0	0	0	3	0	0	0	0	0	3	0	6
05:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>9</b>	<b>0</b>	<b>19</b>
<b>Grand Total</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>26</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>20</b>	<b>0</b>	<b>49</b>
Apprch %	0	0	100	0	96.3	3.7	0	0	0	4.8	95.2	0	
Total %	0	0	2	0	53.1	2	0	0	0	2	40.8	0	

Start Time	School St From North				Route 139 From East				School St From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	1	1	0	9	0	9	0	0	0	0	0	3	0	3	13
04:15 PM	0	0	0	0	0	3	1	4	0	0	0	0	0	5	0	5	9
04:30 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	2	0	2	7
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
<b>Total Volume</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>17</b>	<b>1</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>11</b>	<b>30</b>
<b>% App. Total</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b></b>	<b>0</b>	<b>94.4</b>	<b>5.6</b>	<b></b>	<b>0</b>	<b>0</b>	<b>0</b>	<b></b>	<b>0</b>	<b>100</b>	<b>0</b>	<b></b>	<b></b>
PHF	.000	.000	.250	.250	.000	.472	.250	.500	.000	.000	.000	.000	.000	.550	.000	.550	.577

N/S Street : School Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain

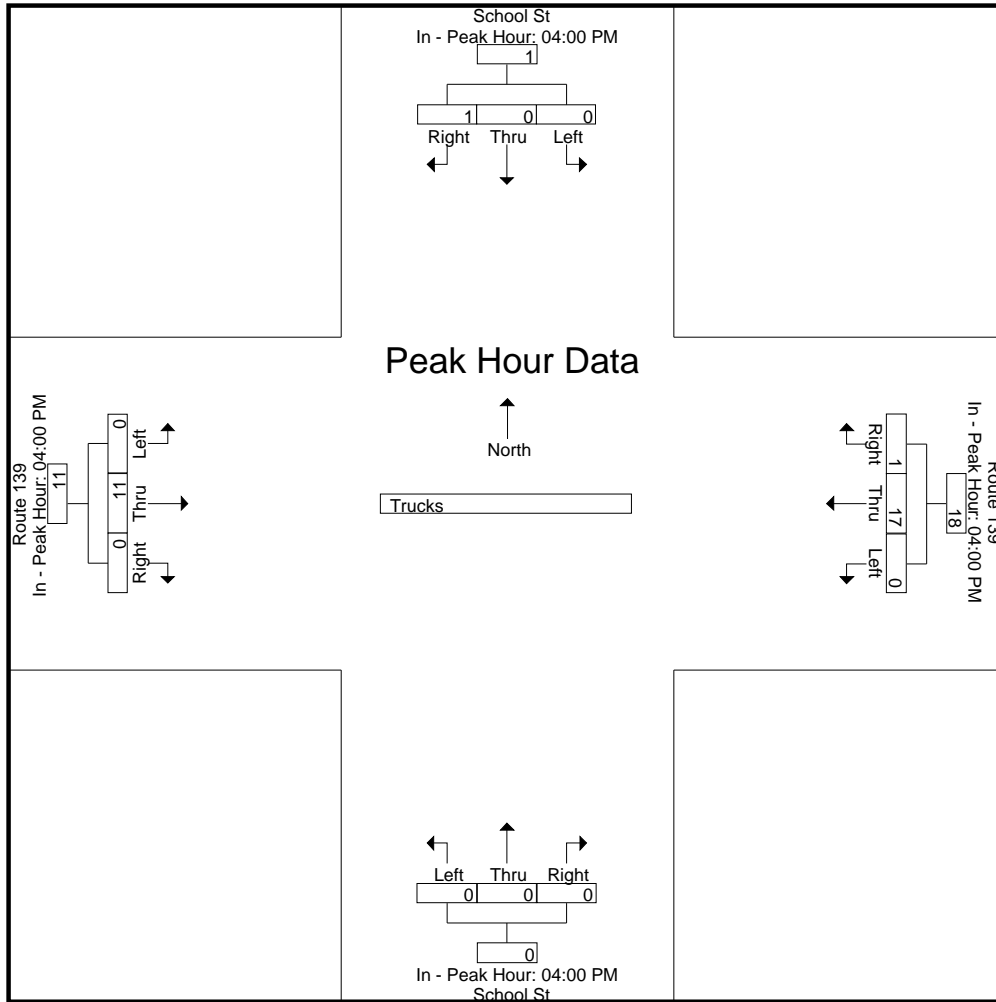


Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	1	1	0	9	0	9	0	0	0	0	0	3	0	3
+15 mins.	0	0	0	0	0	3	1	4	0	0	0	0	0	5	0	5
+30 mins.	0	0	0	0	0	5	0	5	0	0	0	0	0	2	0	2
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Total Volume	0	0	1	1	0	17	1	18	0	0	0	0	0	11	0	11
% App. Total	0	0	100		0	94.4	5.6		0	0	0		0	100	0	
PHF	.000	.000	.250	.250	.000	.472	.250	.500	.000	.000	.000	.000	.000	.550	.000	.550



N/S Street : School Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



**Accurate Counts**  
978-664-2565

N/S Street : School Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain

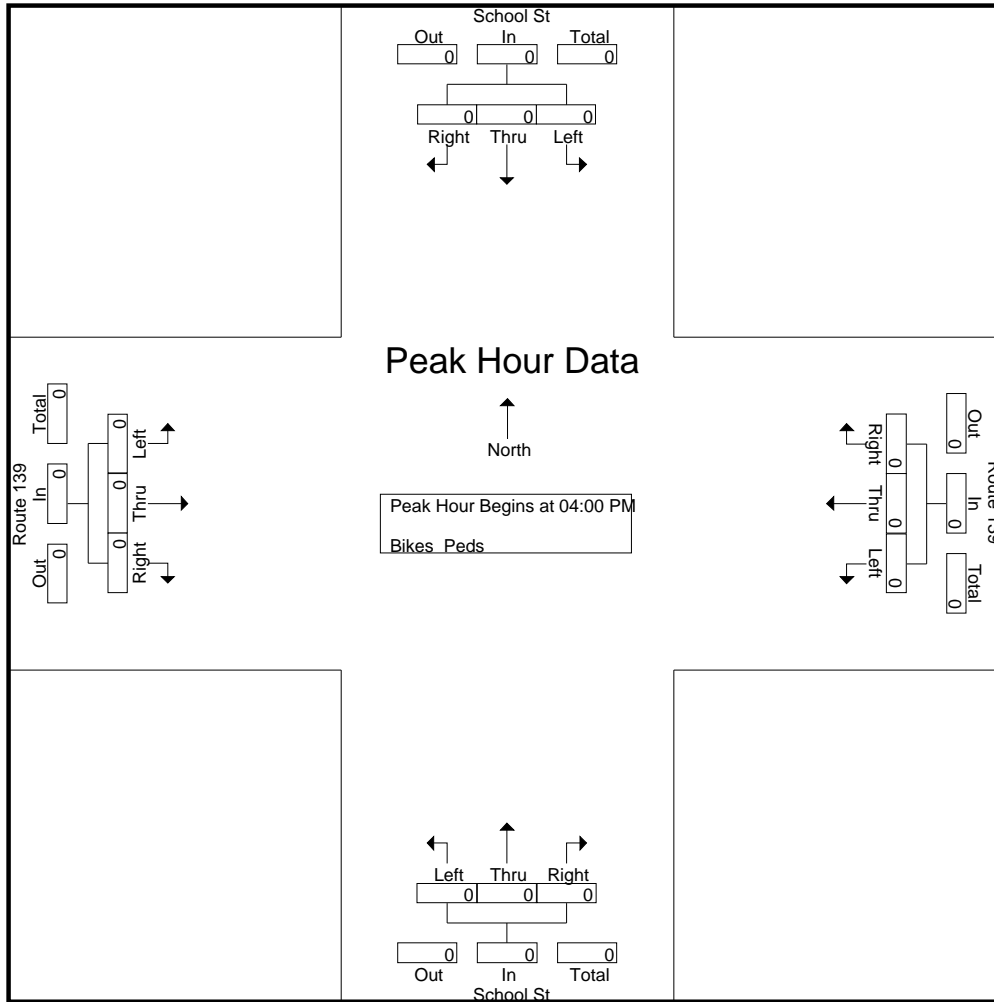
File Name : 90960001  
Site Code : 90960001  
Start Date : 9/16/2021  
Page No : 10

Groups Printed- Bikes Peds

Start Time	School St From North				Route 139 From East				School St From South				Route 139 From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Total	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2	0	2
Grand Total	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	3	0	3
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0				
Total %																	100	0	

Start Time	School St From North				Route 139 From East				School St From South				Route 139 From West				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 04:00 PM																		
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0			
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

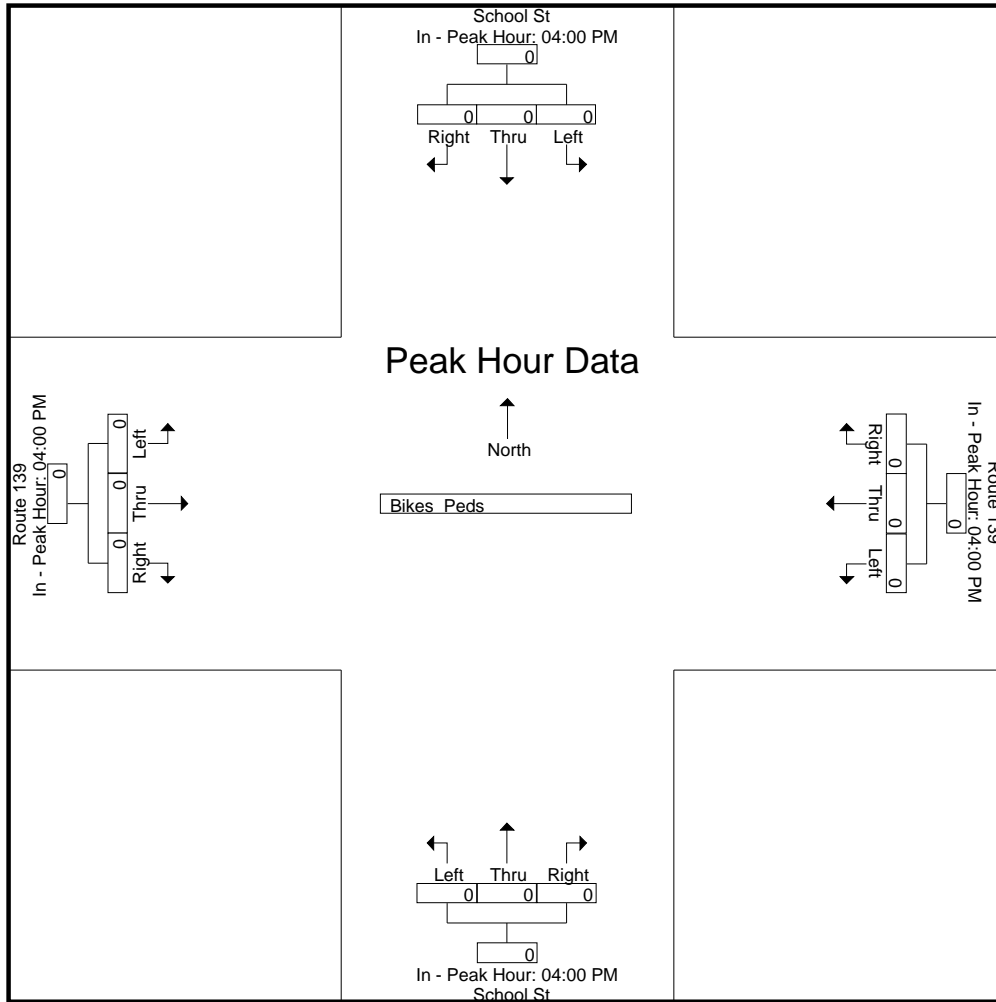
N/S Street : School Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

N/S Street : School Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



**Accurate Counts**  
978-664-2565

N/S Street : School Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy

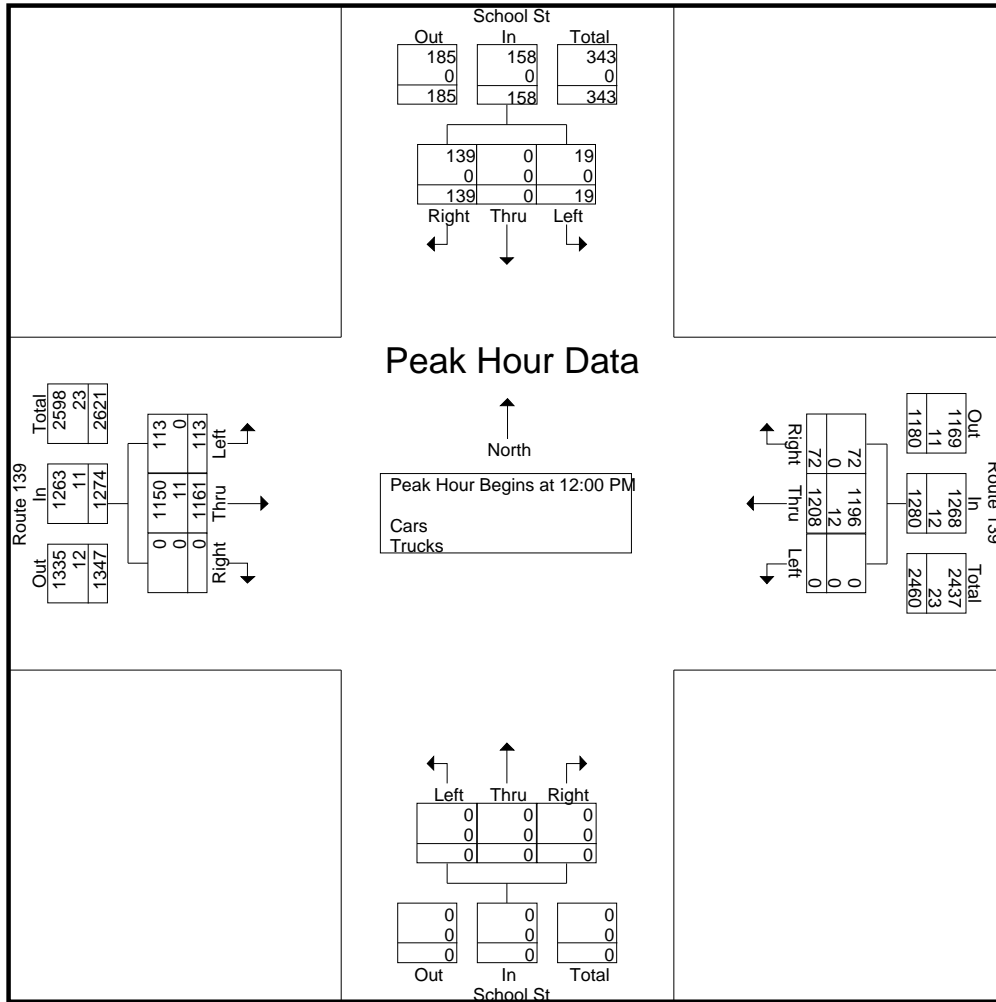
File Name : 909600S1  
Site Code : 90960001  
Start Date : 9/18/2021  
Page No : 1

Groups Printed- Cars - Trucks

Start Time	School St From North			Route 139 From East			School St From South			Route 139 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:00 AM	2	0	35	1	329	37	0	0	0	29	278	0	711
11:15 AM	4	0	39	0	332	17	0	0	0	23	237	0	652
11:30 AM	7	0	34	0	296	17	0	0	0	28	257	0	639
11:45 AM	4	0	36	0	331	8	0	0	0	26	273	0	678
<b>Total</b>	<b>17</b>	<b>0</b>	<b>144</b>	<b>1</b>	<b>1288</b>	<b>79</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>106</b>	<b>1045</b>	<b>0</b>	<b>2680</b>
12:00 PM	4	0	31	0	307	13	0	0	0	27	240	0	622
12:15 PM	4	0	36	0	275	16	0	0	0	27	294	0	652
12:30 PM	8	0	37	0	303	22	0	0	0	36	310	0	716
12:45 PM	3	0	35	0	323	21	0	0	0	23	317	0	722
<b>Total</b>	<b>19</b>	<b>0</b>	<b>139</b>	<b>0</b>	<b>1208</b>	<b>72</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>113</b>	<b>1161</b>	<b>0</b>	<b>2712</b>
01:00 PM	1	0	34	0	273	9	0	0	0	32	266	0	615
01:15 PM	1	0	26	0	289	14	0	0	0	28	296	2	656
01:30 PM	2	0	31	0	262	17	1	0	1	36	301	0	651
01:45 PM	5	0	20	0	228	20	0	0	0	28	279	0	580
<b>Total</b>	<b>9</b>	<b>0</b>	<b>111</b>	<b>0</b>	<b>1052</b>	<b>60</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>124</b>	<b>1142</b>	<b>2</b>	<b>2502</b>
<b>Grand Total</b>	<b>45</b>	<b>0</b>	<b>394</b>	<b>1</b>	<b>3548</b>	<b>211</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>343</b>	<b>3348</b>	<b>2</b>	<b>7894</b>
Apprch %	10.3	0	89.7	0	94.4	5.6	50	0	50	9.3	90.7	0.1	
Total %	0.6	0	5	0	44.9	2.7	0	0	0	4.3	42.4	0	
Cars	45	0	393	1	3519	210	1	0	1	343	3324	2	7839
% Cars	100	0	99.7	100	99.2	99.5	100	0	100	100	99.3	100	99.3
Trucks	0	0	1	0	29	1	0	0	0	0	24	0	55
% Trucks	0	0	0.3	0	0.8	0.5	0	0	0	0	0.7	0	0.7

Start Time	School St From North				Route 139 From East				School St From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
<b>Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1</b>																	
<b>Peak Hour for Entire Intersection Begins at 12:00 PM</b>																	
12:00 PM	4	0	31	35	0	307	13	320	0	0	0	0	27	240	0	267	622
12:15 PM	4	0	36	40	0	275	16	291	0	0	0	0	27	294	0	321	652
12:30 PM	<b>8</b>	0	<b>37</b>	<b>45</b>	0	303	<b>22</b>	325	0	0	0	0	<b>36</b>	310	0	<b>346</b>	716
12:45 PM	3	0	35	38	0	<b>323</b>	21	<b>344</b>	0	0	0	0	23	<b>317</b>	0	340	<b>722</b>
Total Volume	19	0	139	158	0	1208	72	1280	0	0	0	0	113	1161	0	1274	2712
% App. Total	12	0	88		0	94.4	5.6		0	0	0		8.9	91.1	0		
PHF	.594	.000	.939	.878	.000	.935	.818	.930	.000	.000	.000	.000	.785	.916	.000	.921	.939
Cars	19	0	139	158	0	1196	72	1268	0	0	0	0	113	1150	0	1263	2689
% Cars	100	0	100	100	0	99.0	100	99.1	0	0	0	0	100	99.1	0	99.1	99.2
Trucks	0	0	0	0	0	12	0	12	0	0	0	0	0	11	0	11	23
% Trucks	0	0	0	0	0	1.0	0	0.9	0	0	0	0	0	0.9	0	0.9	0.8

N/S Street : School Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy



Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	11:00 AM				11:00 AM				12:45 PM				12:30 PM			
+0 mins.	2	0	35	37	1	329	37	367	0	0	0	0	36	310	0	346
+15 mins.	4	0	39	43	0	332	17	349	0	0	0	0	23	317	0	340
+30 mins.	7	0	34	41	0	296	17	313	0	0	0	0	32	266	0	298
+45 mins.	4	0	36	40	0	331	8	339	1	0	1	2	28	296	2	326
Total Volume	17	0	144	161	1	1288	79	1368	1	0	1	2	119	1189	2	1310
% App. Total	10.6	0	89.4		0.1	94.2	5.8		50	0	50		9.1	90.8	0.2	
PHF	.607	.000	.923	.936	.250	.970	.534	.932	.250	.000	.250	.250	.826	.938	.250	.947
Cars	17	0	143	160	1	1276	78	1355	1	0	1	2	119	1178	2	1299
% Cars	100	0	99.3	99.4	100	99.1	98.7	99	100	0	100	100	100	99.1	100	99.2
Trucks	0	0	1	1	0	12	1	13	0	0	0	0	0	11	0	11
% Trucks	0	0	0.7	0.6	0	0.9	1.3	1	0	0	0	0	0	0.9	0	0.8

# Accurate Counts

978-664-2565

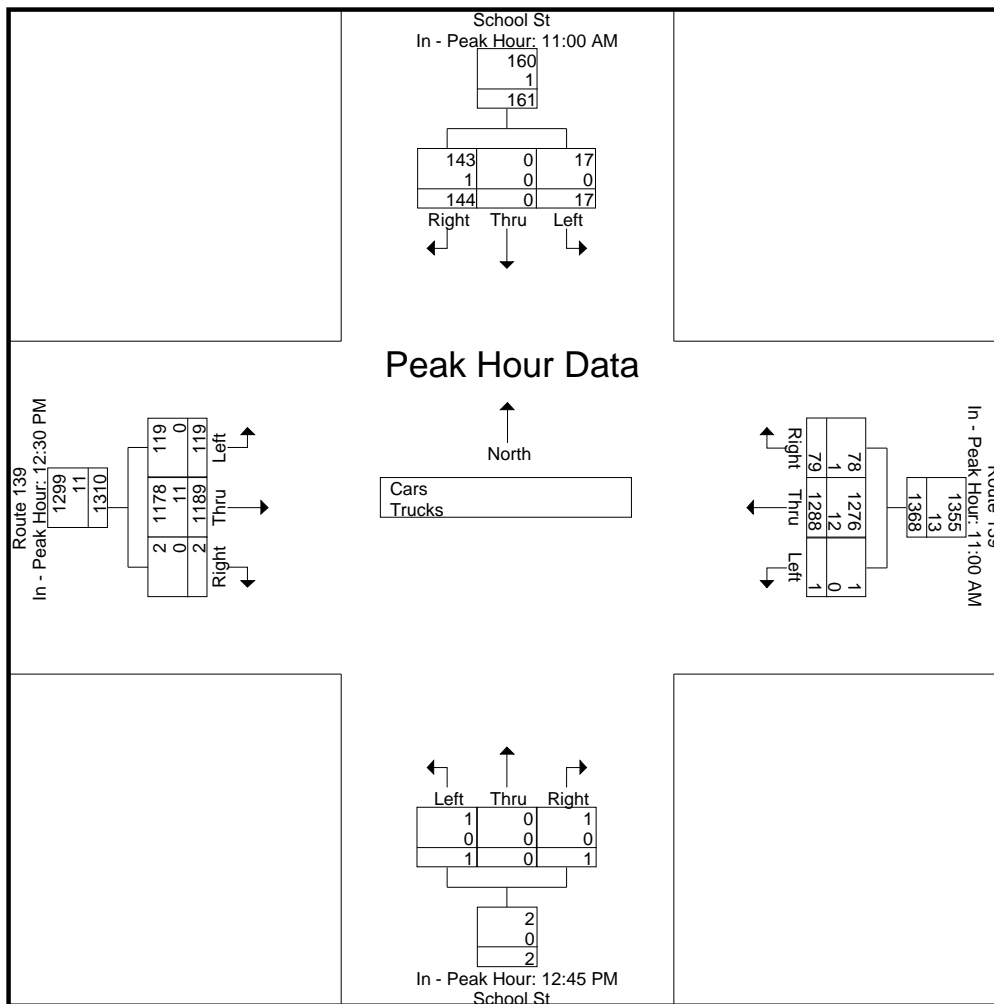
File Name : 909600S1

Site Code : 90960001

Start Date : 9/18/2021

Page No : 3

N/S Street : School Street  
 E/W Street : Route 139  
 City/State : Marshfield, MA  
 Weather : Cloudy



# Accurate Counts

978-664-2565

N/S Street : School Street  
 E/W Street : Route 139  
 City/State : Marshfield, MA  
 Weather : Cloudy

File Name : 909600S1  
 Site Code : 90960001  
 Start Date : 9/18/2021  
 Page No : 4

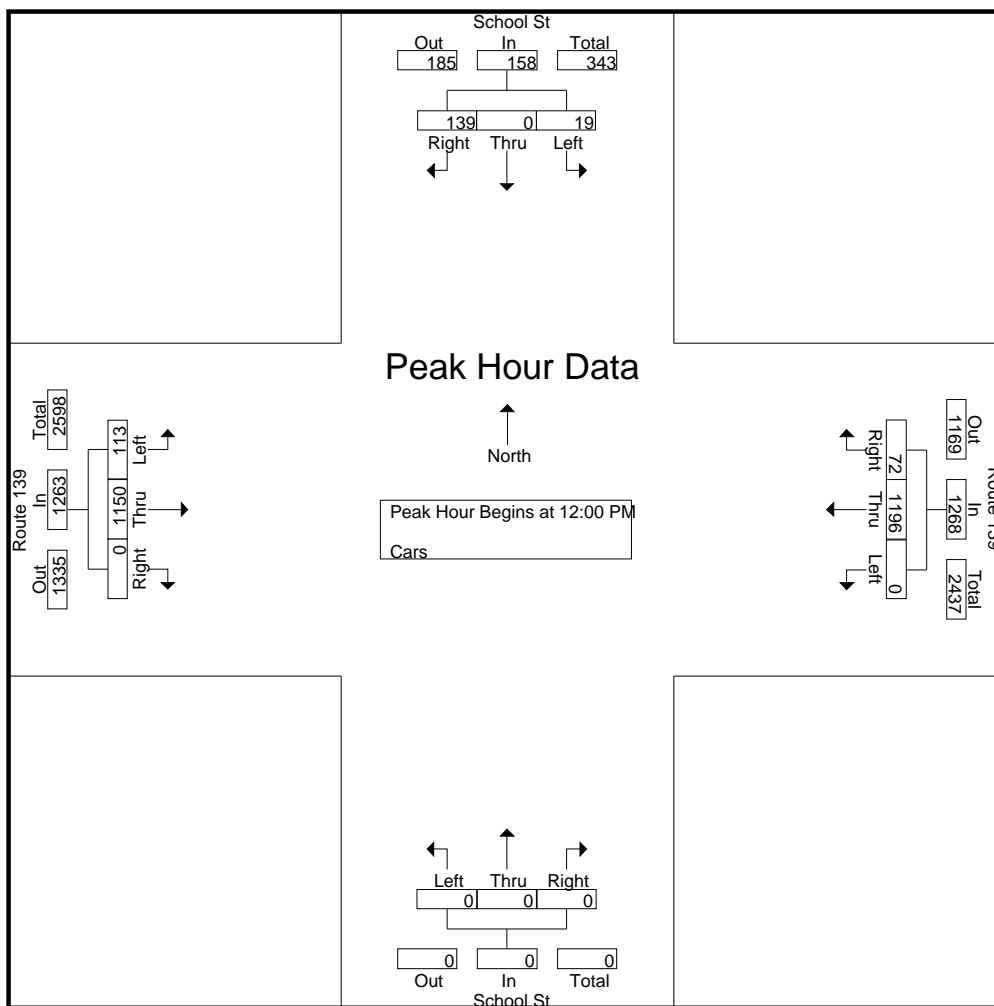
## Groups Printed- Cars

Start Time	School St From North			Route 139 From East			School St From South			Route 139 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:00 AM	2	0	34	1	327	36	0	0	0	29	276	0	705
11:15 AM	4	0	39	0	329	17	0	0	0	23	237	0	649
11:30 AM	7	0	34	0	292	17	0	0	0	28	256	0	634
11:45 AM	4	0	36	0	328	8	0	0	0	26	273	0	675
<b>Total</b>	<b>17</b>	<b>0</b>	<b>143</b>	<b>1</b>	<b>1276</b>	<b>78</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>106</b>	<b>1042</b>	<b>0</b>	<b>2663</b>
12:00 PM	4	0	31	0	305	13	0	0	0	27	234	0	614
12:15 PM	4	0	36	0	270	16	0	0	0	27	293	0	646
12:30 PM	8	0	37	0	300	22	0	0	0	36	310	0	713
12:45 PM	3	0	35	0	321	21	0	0	0	23	313	0	716
<b>Total</b>	<b>19</b>	<b>0</b>	<b>139</b>	<b>0</b>	<b>1196</b>	<b>72</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>113</b>	<b>1150</b>	<b>0</b>	<b>2689</b>
01:00 PM	1	0	34	0	269	9	0	0	0	32	264	0	609
01:15 PM	1	0	26	0	289	14	0	0	0	28	291	2	651
01:30 PM	2	0	31	0	261	17	1	0	1	36	298	0	647
01:45 PM	5	0	20	0	228	20	0	0	0	28	279	0	580
<b>Total</b>	<b>9</b>	<b>0</b>	<b>111</b>	<b>0</b>	<b>1047</b>	<b>60</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>124</b>	<b>1132</b>	<b>2</b>	<b>2487</b>
<b>Grand Total</b>	<b>45</b>	<b>0</b>	<b>393</b>	<b>1</b>	<b>3519</b>	<b>210</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>343</b>	<b>3324</b>	<b>2</b>	<b>7839</b>
Apprch %	10.3	0	89.7	0	94.3	5.6	50	0	50	9.3	90.6	0.1	
Total %	0.6	0	5	0	44.9	2.7	0	0	0	4.4	42.4	0	

Start Time	School St From North				Route 139 From East				School St From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:00 PM																	
12:00 PM	4	0	31	35	0	305	13	318	0	0	0	0	27	234	0	261	614
12:15 PM	4	0	36	40	0	270	16	286	0	0	0	0	27	293	0	320	646
12:30 PM	<b>8</b>	<b>0</b>	<b>37</b>	<b>45</b>	<b>0</b>	<b>300</b>	<b>22</b>	<b>322</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>36</b>	<b>310</b>	<b>0</b>	<b>346</b>	<b>713</b>
12:45 PM	3	0	35	38	0	321	21	342	0	0	0	0	23	313	0	336	716
<b>Total Volume</b>	<b>19</b>	<b>0</b>	<b>139</b>	<b>158</b>	<b>0</b>	<b>1196</b>	<b>72</b>	<b>1268</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>113</b>	<b>1150</b>	<b>0</b>	<b>1263</b>	<b>2689</b>
% App. Total	12	0	88		0	94.3	5.7		0	0	0		8.9	91.1	0		
PHF	.594	.000	.939	.878	.000	.931	.818	.927	.000	.000	.000	.000	.785	.919	.000	.913	.939



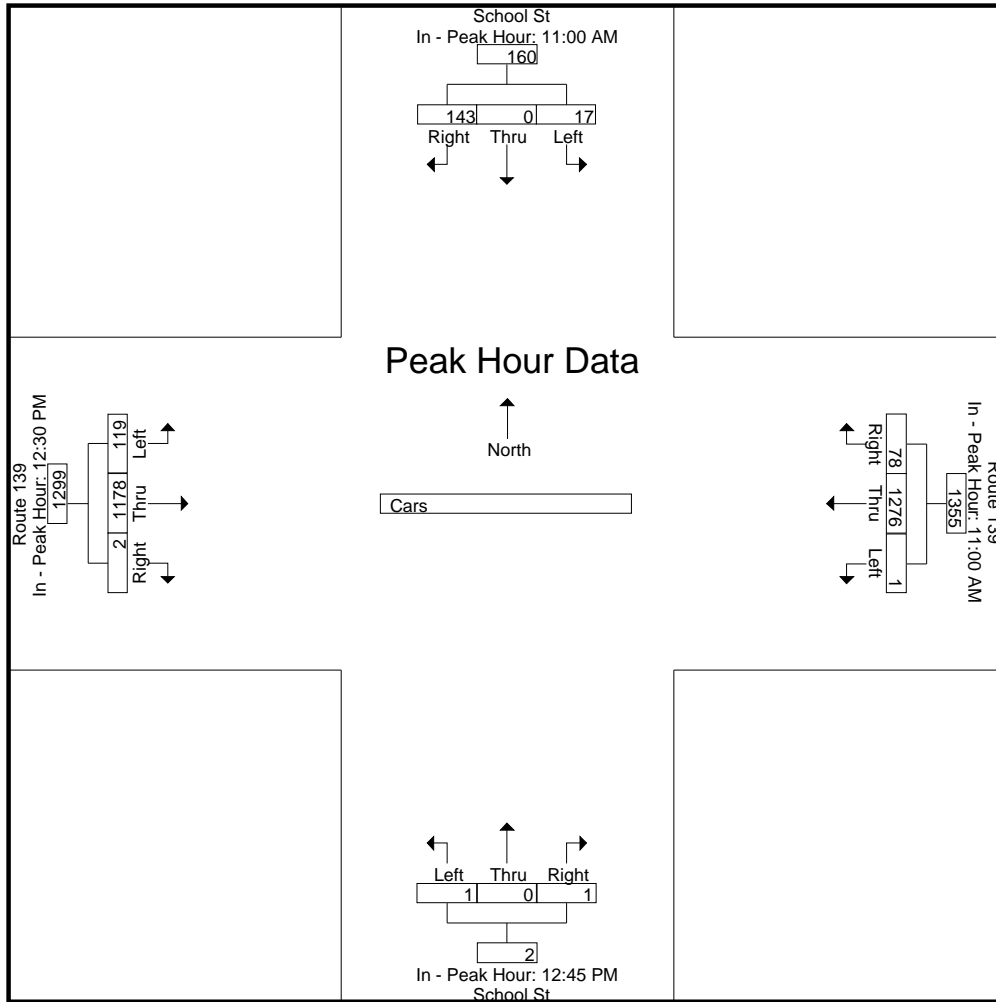
N/S Street : School Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy



Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	11:00 AM				11:00 AM				12:45 PM				12:30 PM			
+0 mins.	2	0	34	36	1	327	36	364	0	0	0	0	36	310	0	346
+15 mins.	4	0	39	43	0	329	17	346	0	0	0	0	23	313	0	336
+30 mins.	7	0	34	41	0	292	17	309	0	0	0	0	32	264	0	296
+45 mins.	4	0	36	40	0	328	8	336	1	0	1	2	28	291	2	321
Total Volume	17	0	143	160	1	1276	78	1355	1	0	1	2	119	1178	2	1299
% App. Total	10.6	0	89.4		0.1	94.2	5.8		50	0	50		9.2	90.7	0.2	
PHF	.607	.000	.917	.930	.250	.970	.542	.931	.250	.000	.250	.250	.826	.941	.250	.939

N/S Street : School Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy



# Accurate Counts

978-664-2565

N/S Street : School Street  
 E/W Street : Route 139  
 City/State : Marshfield, MA  
 Weather : Cloudy

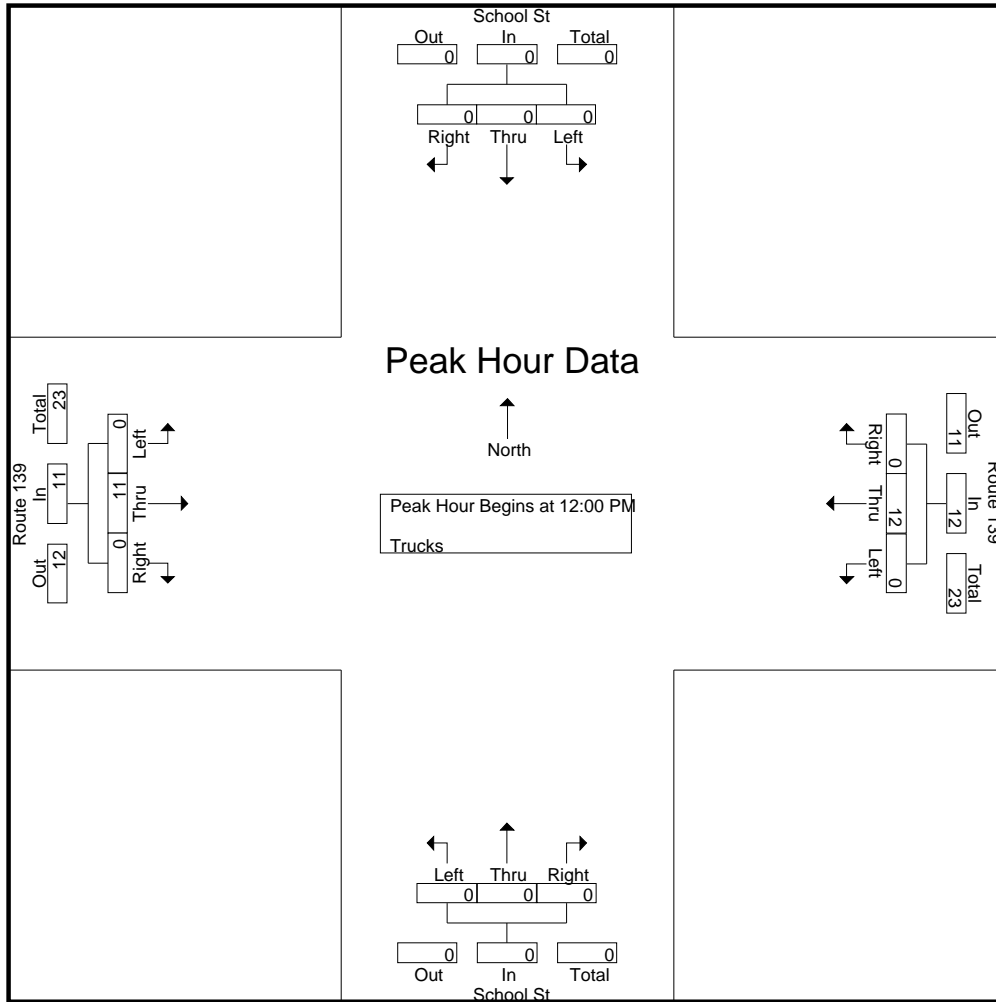
File Name : 909600S1  
 Site Code : 90960001  
 Start Date : 9/18/2021  
 Page No : 7

### Groups Printed- Trucks

Start Time	School St From North			Route 139 From East			School St From South			Route 139 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:00 AM	0	0	1	0	2	1	0	0	0	0	2	0	6
11:15 AM	0	0	0	0	3	0	0	0	0	0	0	0	3
11:30 AM	0	0	0	0	4	0	0	0	0	0	1	0	5
11:45 AM	0	0	0	0	3	0	0	0	0	0	0	0	3
<b>Total</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>12</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>17</b>
12:00 PM	0	0	0	0	2	0	0	0	0	0	6	0	8
12:15 PM	0	0	0	0	5	0	0	0	0	0	1	0	6
12:30 PM	0	0	0	0	3	0	0	0	0	0	0	0	3
12:45 PM	0	0	0	0	2	0	0	0	0	0	4	0	6
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>23</b>
01:00 PM	0	0	0	0	4	0	0	0	0	0	2	0	6
01:15 PM	0	0	0	0	0	0	0	0	0	0	5	0	5
01:30 PM	0	0	0	0	1	0	0	0	0	0	3	0	4
01:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>15</b>
<b>Grand Total</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>29</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>0</b>	<b>55</b>
Apprch %	0	0	100	0	96.7	3.3	0	0	0	0	100	0	
Total %	0	0	1.8	0	52.7	1.8	0	0	0	0	43.6	0	

Start Time	School St From North				Route 139 From East				School St From South				Route 139 From West				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
<b>Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1</b>																		
<b>Peak Hour for Entire Intersection Begins at 12:00 PM</b>																		
12:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	6	0	6	8
12:15 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	1	0	1	1	6
12:30 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	3
12:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	4	0	4	4	6
<b>Total Volume</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>11</b>	<b>11</b>	<b>23</b>
<b>% App. Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>100</b>
PHF	.000	.000	.000	.000	.000	.600	.000	.600	.000	.000	.000	.000	.000	.458	.000	.458	.458	.719

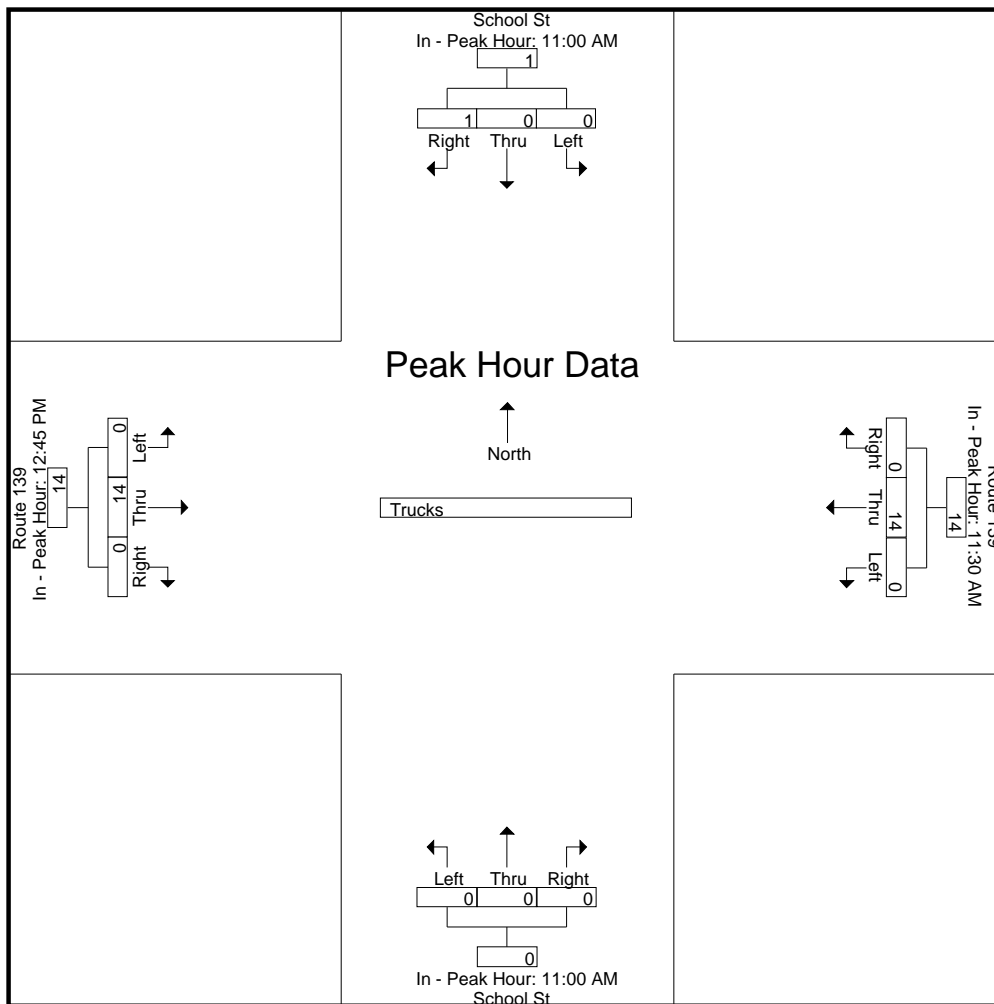
N/S Street : School Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy



Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	11:00 AM				11:30 AM				11:00 AM				12:45 PM			
+0 mins.	0	0	1	1	0	4	0	4	0	0	0	0	0	4	0	4
+15 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2
+30 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	5	0	5
+45 mins.	0	0	0	0	0	5	0	5	0	0	0	0	0	3	0	3
Total Volume	0	0	1	1	0	14	0	14	0	0	0	0	0	14	0	14
% App. Total	0	0	100		0	100	0		0	0	0		0	100	0	
PHF	.000	.000	.250	.250	.000	.700	.000	.700	.000	.000	.000	.000	.000	.700	.000	.700

N/S Street : School Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy



**Accurate Counts**  
978-664-2565

N/S Street : School Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy

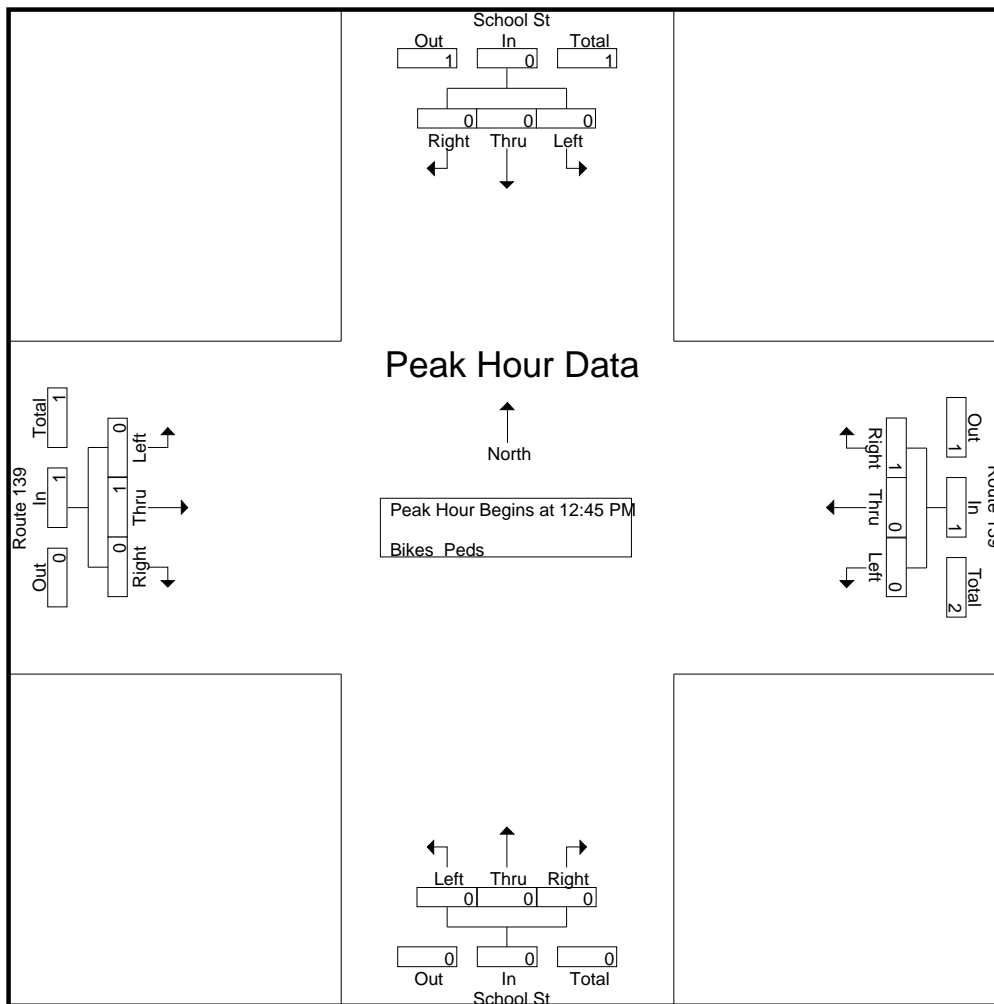
File Name : 909600S1  
Site Code : 90960001  
Start Date : 9/18/2021  
Page No : 10

Groups Printed- Bikes Peds

Start Time	School St From North				Route 139 From East				School St From South				Route 139 From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
11:00 AM	0	0	0	0	0	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	0	0	0	0	0
11:30 AM	0	0	0	0	0	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	0	0	0	0	0
Total	0	0	0	0	0	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	0	0	0	0	0
12:15 PM	0	0	0	0	0	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	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 PM	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	1	2
01:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1
Total	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	2	1	3
Grand Total	0	0	0	0	0	0	1	0	0	0	0	2	0	1	0	0	2	2	4
Apprch %	0	0	0		0	0	100		0	0	0		0	100	0				
Total %	0	0	0		0	0	50		0	0	0		0	50	0		50	50	

Start Time	School St From North				Route 139 From East				School St From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:45 PM																	
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	1	2
% App. Total	0	0	0		0	0	100		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.000	.250	.250	.000	.000	.000	.000	.000	.250	.000	.250	.500

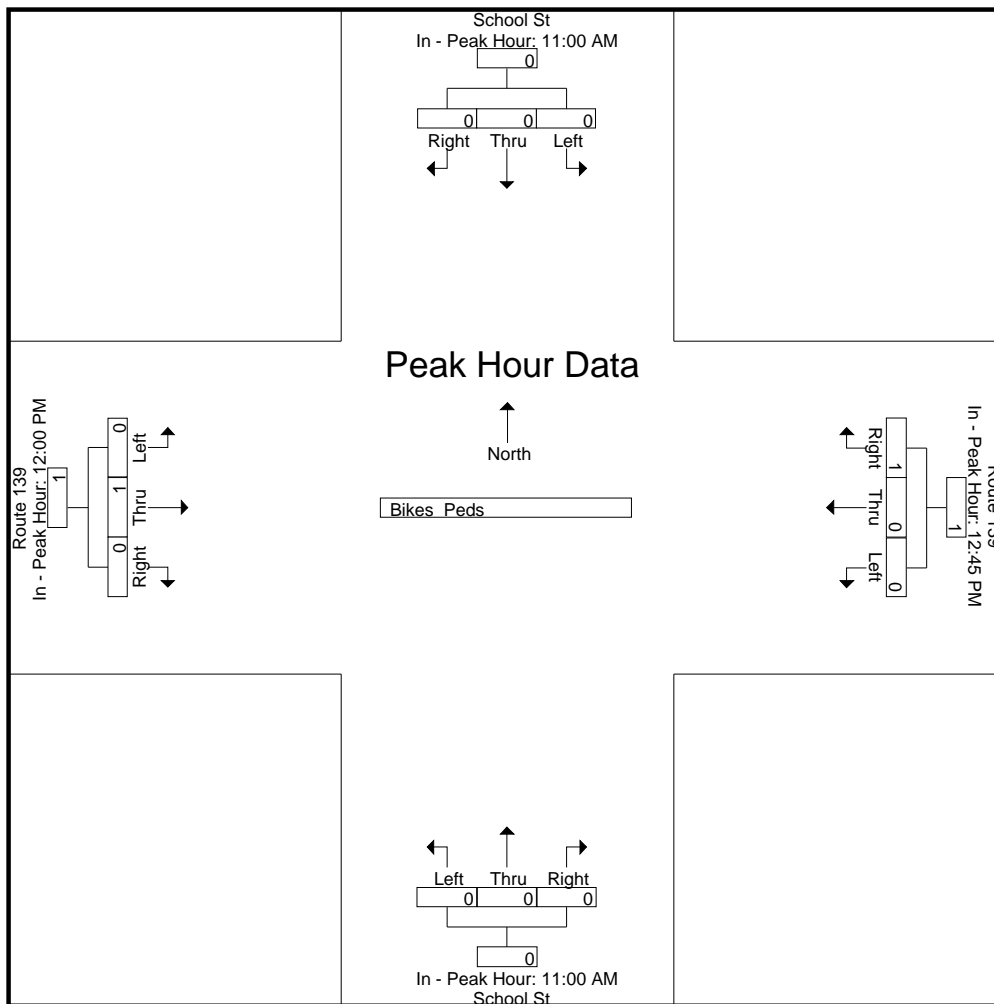
N/S Street : School Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy



Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	11:00 AM				12:45 PM				11:00 AM				12:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	1
Total Volume	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	1
% App. Total	0	0	0	0	0	0	100	100	0	0	0	0	0	100	0	100
PHF	.000	.000	.000	.000	.000	.000	.250	.250	.000	.000	.000	.000	.000	.250	.000	.250

N/S Street : School Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy





**Accurate Counts**  
978-664-2565

N/S Street : Fox Run/Enterprise Drive  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain

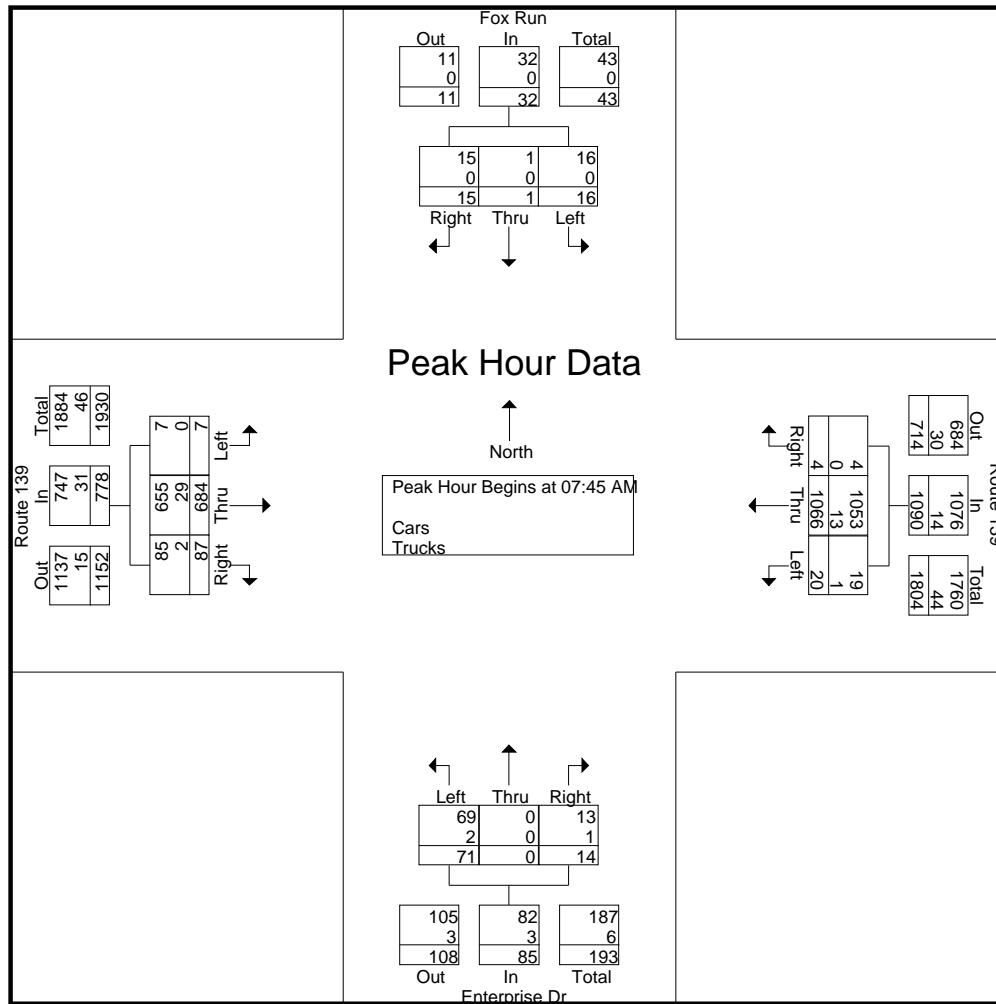
File Name : 90960002  
Site Code : 90960002  
Start Date : 9/16/2021  
Page No : 1

Groups Printed- Cars - Trucks

Start Time	Fox Run From North			Route 139 From East			Enterprise Dr From South			Route 139 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	3	1	6	6	290	3	18	1	1	1	137	11	478
07:15 AM	1	1	2	4	249	1	11	1	4	1	129	22	426
07:30 AM	1	0	0	4	264	2	16	0	4	0	163	29	483
07:45 AM	5	0	3	4	300	0	12	0	3	1	180	26	534
<b>Total</b>	<b>10</b>	<b>2</b>	<b>11</b>	<b>18</b>	<b>1103</b>	<b>6</b>	<b>57</b>	<b>2</b>	<b>12</b>	<b>3</b>	<b>609</b>	<b>88</b>	<b>1921</b>
08:00 AM	2	1	7	5	238	2	21	0	6	2	158	26	468
08:15 AM	4	0	1	4	262	0	18	0	3	3	163	13	471
08:30 AM	5	0	4	7	266	2	20	0	2	1	183	22	512
08:45 AM	3	1	2	6	235	4	18	0	4	0	157	21	451
<b>Total</b>	<b>14</b>	<b>2</b>	<b>14</b>	<b>22</b>	<b>1001</b>	<b>8</b>	<b>77</b>	<b>0</b>	<b>15</b>	<b>6</b>	<b>661</b>	<b>82</b>	<b>1902</b>
<b>Grand Total</b>	<b>24</b>	<b>4</b>	<b>25</b>	<b>40</b>	<b>2104</b>	<b>14</b>	<b>134</b>	<b>2</b>	<b>27</b>	<b>9</b>	<b>1270</b>	<b>170</b>	<b>3823</b>
Apprch %	45.3	7.5	47.2	1.9	97.5	0.6	82.2	1.2	16.6	0.6	87.6	11.7	
Total %	0.6	0.1	0.7	1	55	0.4	3.5	0.1	0.7	0.2	33.2	4.4	
Cars	24	4	24	39	2071	14	131	1	25	8	1215	166	3722
% Cars	100	100	96	97.5	98.4	100	97.8	50	92.6	88.9	95.7	97.6	97.4
Trucks	0	0	1	1	33	0	3	1	2	1	55	4	101
% Trucks	0	0	4	2.5	1.6	0	2.2	50	7.4	11.1	4.3	2.4	2.6

Start Time	Fox Run From North				Route 139 From East				Enterprise Dr From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	5	0	3	8	4	300	0	304	12	0	3	15	1	180	26	207	534
08:00 AM	2	1	7	10	5	238	2	245	21	0	6	27	2	158	26	186	468
08:15 AM	4	0	1	5	4	262	0	266	18	0	3	21	3	163	13	179	471
08:30 AM	5	0	4	9	7	266	2	275	20	0	2	22	1	183	22	206	512
Total Volume	16	1	15	32	20	1066	4	1090	71	0	14	85	7	684	87	778	1985
% App. Total	50	3.1	46.9		1.8	97.8	0.4		83.5	0	16.5		0.9	87.9	11.2		
PHF	.800	.250	.536	.800	.714	.888	.500	.896	.845	.000	.583	.787	.583	.934	.837	.940	.929
Cars	16	1	15	32	19	1053	4	1076	69	0	13	82	7	655	85	747	1937
% Cars	100	100	100	100	95.0	98.8	100	98.7	97.2	0	92.9	96.5	100	95.8	97.7	96.0	97.6
Trucks	0	0	0	0	1	13	0	14	2	0	1	3	0	29	2	31	48
% Trucks	0	0	0	0	5.0	1.2	0	1.3	2.8	0	7.1	3.5	0	4.2	2.3	4.0	2.4

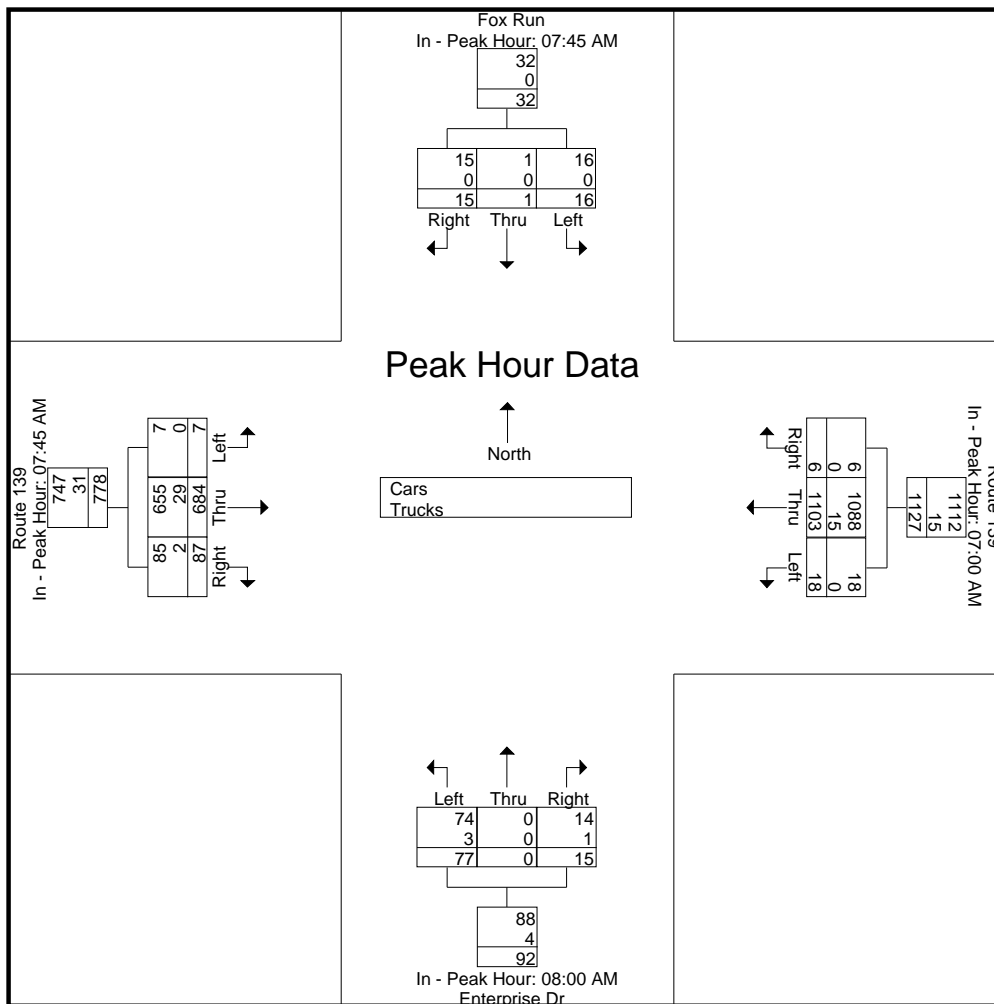
N/S Street : Fox Run/Enterprise Drive  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:45 AM				07:00 AM				08:00 AM				07:45 AM			
+0 mins.	5	0	3	8	6	290	3	299	21	0	6	27	1	180	26	207
+15 mins.	2	1	7	10	4	249	1	254	18	0	3	21	2	158	26	186
+30 mins.	4	0	1	5	4	264	2	270	20	0	2	22	3	163	13	179
+45 mins.	5	0	4	9	4	300	0	304	18	0	4	22	1	183	22	206
Total Volume	16	1	15	32	18	1103	6	1127	77	0	15	92	7	684	87	778
% App. Total	50	3.1	46.9		1.6	97.9	0.5		83.7	0	16.3		0.9	87.9	11.2	
PHF	.800	.250	.536	.800	.750	.919	.500	.927	.917	.000	.625	.852	.583	.934	.837	.940
Cars	16	1	15	32	18	1088	6	1112	74	0	14	88	7	655	85	747
% Cars	100	100	100	100	100	98.6	100	98.7	96.1	0	93.3	95.7	100	95.8	97.7	96
Trucks	0	0	0	0	0	15	0	15	3	0	1	4	0	29	2	31
% Trucks	0	0	0	0	0	1.4	0	1.3	3.9	0	6.7	4.3	0	4.2	2.3	4

N/S Street : Fox Run/Enterprise Drive  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



# Accurate Counts

978-664-2565

N/S Street : Fox Run/Enterprise Drive  
 E/W Street : Route 139  
 City/State : Marshfield, MA  
 Weather : Rain

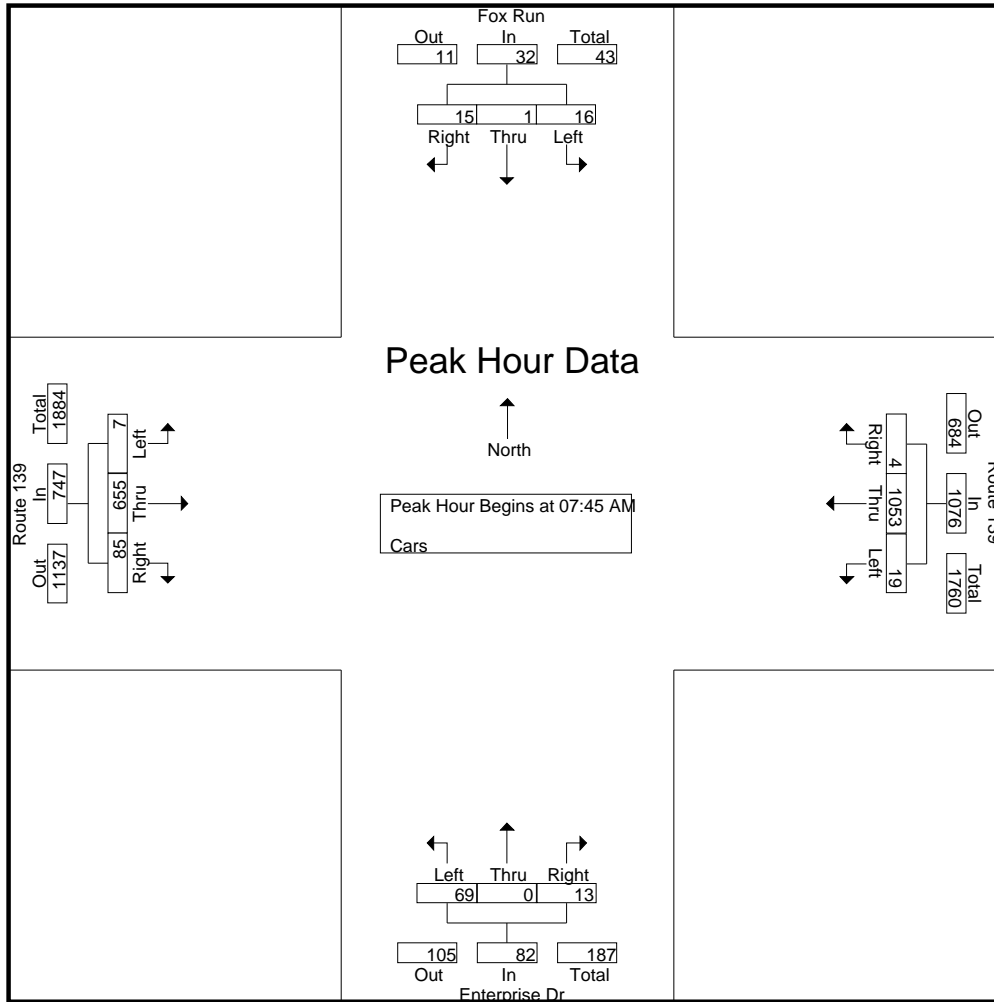
File Name : 90960002  
 Site Code : 90960002  
 Start Date : 9/16/2021  
 Page No : 4

## Groups Printed- Cars

Start Time	Fox Run From North			Route 139 From East			Enterprise Dr From South			Route 139 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	3	1	5	6	286	3	18	0	1	0	130	9	462
07:15 AM	1	1	2	4	244	1	11	1	3	1	121	22	412
07:30 AM	1	0	0	4	260	2	16	0	4	0	158	29	474
07:45 AM	5	0	3	4	298	0	12	0	3	1	175	25	526
<b>Total</b>	<b>10</b>	<b>2</b>	<b>10</b>	<b>18</b>	<b>1088</b>	<b>6</b>	<b>57</b>	<b>1</b>	<b>11</b>	<b>2</b>	<b>584</b>	<b>85</b>	<b>1874</b>
08:00 AM	2	1	7	5	234	2	21	0	6	2	154	25	459
08:15 AM	4	0	1	4	258	0	18	0	2	3	154	13	457
08:30 AM	5	0	4	6	263	2	18	0	2	1	172	22	495
08:45 AM	3	1	2	6	228	4	17	0	4	0	151	21	437
<b>Total</b>	<b>14</b>	<b>2</b>	<b>14</b>	<b>21</b>	<b>983</b>	<b>8</b>	<b>74</b>	<b>0</b>	<b>14</b>	<b>6</b>	<b>631</b>	<b>81</b>	<b>1848</b>
<b>Grand Total</b>	<b>24</b>	<b>4</b>	<b>24</b>	<b>39</b>	<b>2071</b>	<b>14</b>	<b>131</b>	<b>1</b>	<b>25</b>	<b>8</b>	<b>1215</b>	<b>166</b>	<b>3722</b>
Apprch %	46.2	7.7	46.2	1.8	97.5	0.7	83.4	0.6	15.9	0.6	87.5	12	
Total %	0.6	0.1	0.6	1	55.6	0.4	3.5	0	0.7	0.2	32.6	4.5	

Start Time	Fox Run From North				Route 139 From East				Enterprise Dr From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	5	0	3	8	4	<b>298</b>	0	<b>302</b>	12	0	3	15	1	<b>175</b>	<b>25</b>	<b>201</b>	<b>526</b>
08:00 AM	2	1	7	10	5	234	2	241	21	0	6	27	2	154	25	181	459
08:15 AM	4	0	1	5	4	258	0	262	18	0	2	20	3	154	13	170	457
08:30 AM	5	0	4	9	6	263	2	271	18	0	2	20	1	172	22	195	495
Total Volume	16	1	15	32	19	1053	4	1076	69	0	13	82	7	655	85	747	1937
% App. Total	50	3.1	46.9	32	1.8	97.9	0.4	100	84.1	0	15.9	82	0.9	87.7	11.4	747	1937
PHF	.800	.250	.536	.800	.792	.883	.500	.891	.821	.000	.542	.759	.583	.936	.850	.929	.921

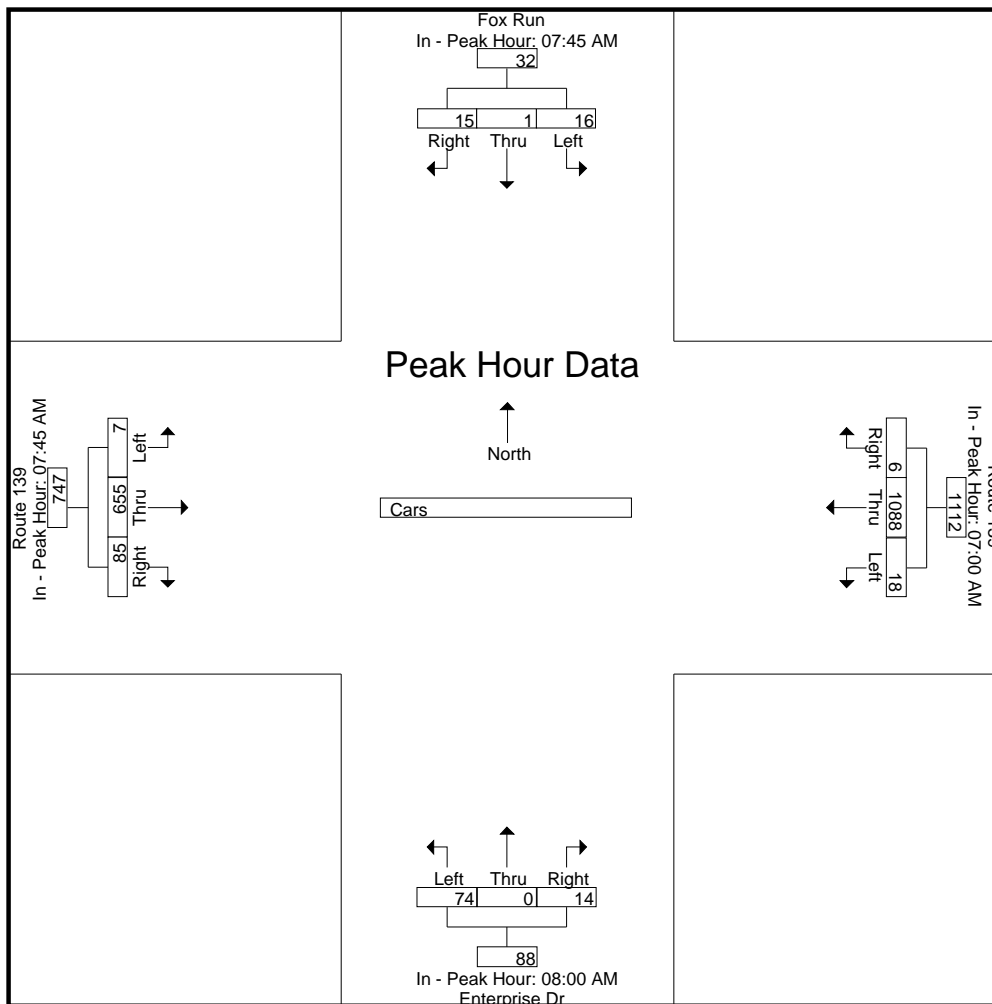
N/S Street : Fox Run/Enterprise Drive  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:45 AM				07:00 AM				08:00 AM				07:45 AM			
+0 mins.	5	0	3	8	6	286	3	295	21	0	6	27	1	175	25	201
+15 mins.	2	1	7	10	4	244	1	249	18	0	2	20	2	154	25	181
+30 mins.	4	0	1	5	4	260	2	266	18	0	2	20	3	154	13	170
+45 mins.	5	0	4	9	4	298	0	302	17	0	4	21	1	172	22	195
Total Volume	16	1	15	32	18	1088	6	1112	74	0	14	88	7	655	85	747
% App. Total	50	3.1	46.9		1.6	97.8	0.5		84.1	0	15.9		0.9	87.7	11.4	
PHF	.800	.250	.536	.800	.750	.913	.500	.921	.881	.000	.583	.815	.583	.936	.850	.929

N/S Street : Fox Run/Enterprise Drive  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



**Accurate Counts**  
978-664-2565

N/S Street : Fox Run/Enterprise Drive  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain

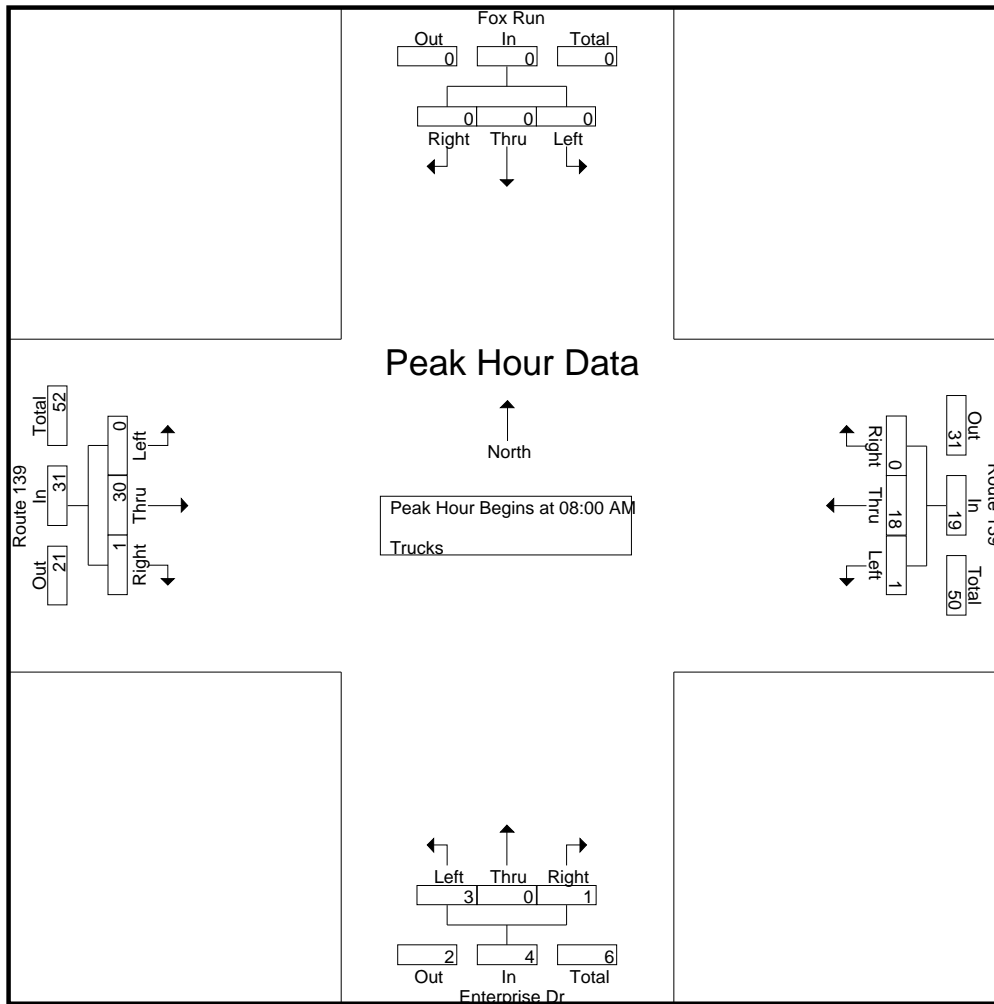
File Name : 90960002  
Site Code : 90960002  
Start Date : 9/16/2021  
Page No : 7

Groups Printed- Trucks

Start Time	Fox Run From North			Route 139 From East			Enterprise Dr From South			Route 139 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	0	0	1	0	4	0	0	1	0	1	7	2	16
07:15 AM	0	0	0	0	5	0	0	0	1	8	0	0	14
07:30 AM	0	0	0	0	4	0	0	0	0	5	0	0	9
07:45 AM	0	0	0	0	2	0	0	0	0	5	1	0	8
Total	0	0	1	0	15	0	0	1	1	1	25	3	47
08:00 AM	0	0	0	0	4	0	0	0	0	4	1	0	9
08:15 AM	0	0	0	0	4	0	0	0	1	9	0	0	14
08:30 AM	0	0	0	1	3	0	2	0	0	11	0	0	17
08:45 AM	0	0	0	0	7	0	1	0	0	6	0	0	14
Total	0	0	0	1	18	0	3	0	1	0	30	1	54
Grand Total	0	0	1	1	33	0	3	1	2	1	55	4	101
Apprch %	0	0	100	2.9	97.1	0	50	16.7	33.3	1.7	91.7	6.7	
Total %	0	0	1	1	32.7	0	3	1	2	1	54.5	4	

Start Time	Fox Run From North				Route 139 From East				Enterprise Dr From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	4	1	5	9
08:15 AM	0	0	0	0	0	4	0	4	0	0	1	1	0	9	0	9	14
08:30 AM	0	0	0	0	1	3	0	4	2	0	0	2	0	11	0	11	17
08:45 AM	0	0	0	0	0	7	0	7	1	0	0	1	0	6	0	6	14
Total Volume	0	0	0	0	1	18	0	19	3	0	1	4	0	30	1	31	54
% App. Total	0	0	0	0	5.3	94.7	0	75	0	25	0	96.8	3.2				
PHF	.000	.000	.000	.000	.250	.643	.000	.679	.375	.000	.250	.500	.000	.682	.250	.705	.794

N/S Street : Fox Run/Enterprise Drive  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain

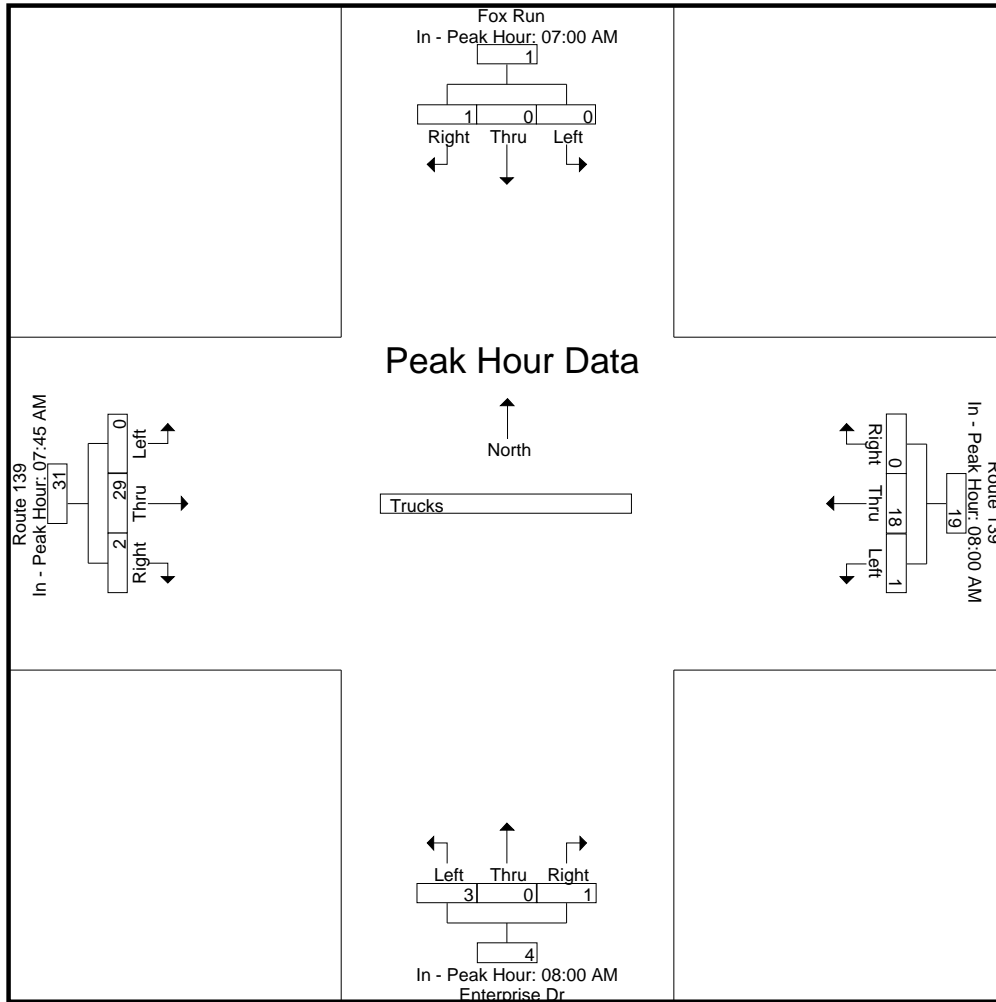


Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:00 AM				08:00 AM				08:00 AM				07:45 AM			
+0 mins.	0	0	1	1	0	4	0	4	0	0	0	0	0	5	1	6
+15 mins.	0	0	0	0	0	4	0	4	0	0	1	1	0	4	1	5
+30 mins.	0	0	0	0	1	3	0	4	2	0	0	2	0	9	0	9
+45 mins.	0	0	0	0	0	7	0	7	1	0	0	1	0	11	0	11
Total Volume	0	0	1	1	1	18	0	19	3	0	1	4	0	29	2	31
% App. Total	0	0	100		5.3	94.7	0		75	0	25		0	93.5	6.5	
PHF	.000	.000	.250	.250	.250	.643	.000	.679	.375	.000	.250	.500	.000	.659	.500	.705



N/S Street : Fox Run/Enterprise Drive  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



**Accurate Counts**  
978-664-2565

N/S Street : Fox Run/Enterprise Drive  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain

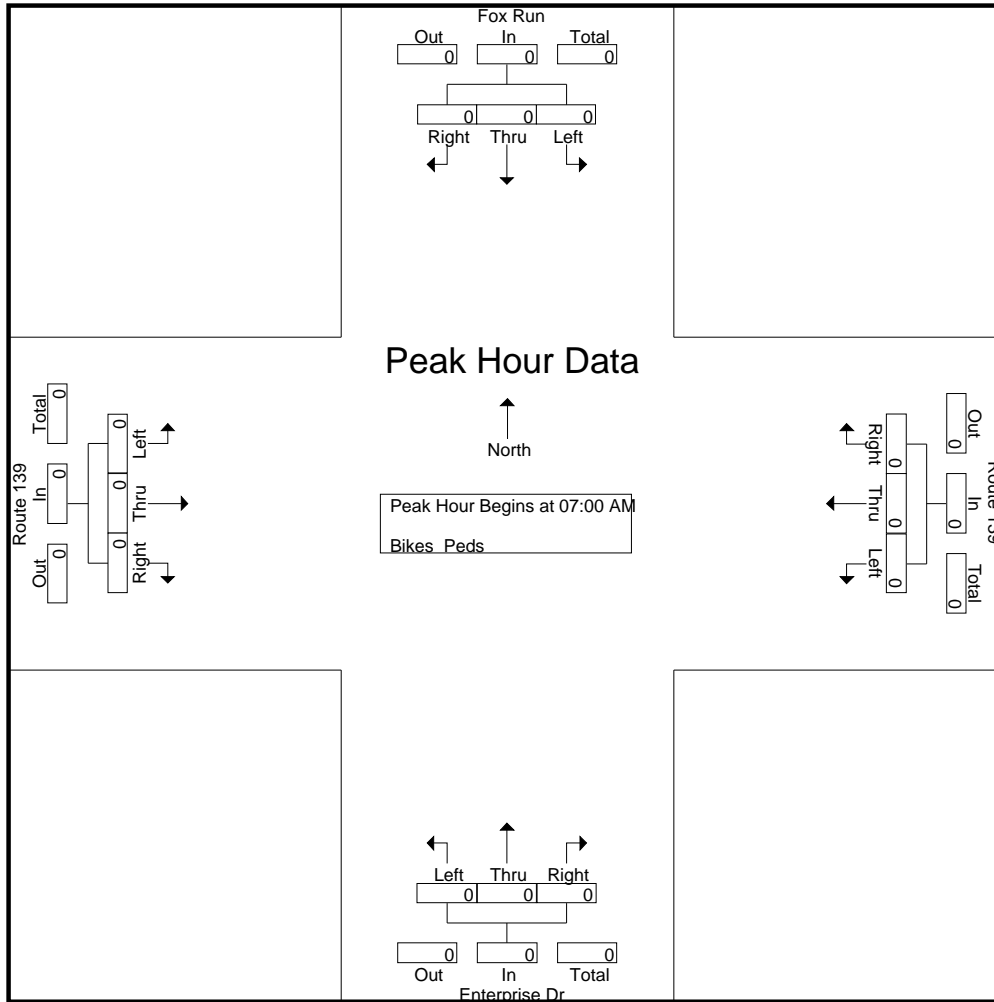
File Name : 90960002  
Site Code : 90960002  
Start Date : 9/16/2021  
Page No : 10

Groups Printed- Bikes Peds

Start Time	Fox Run From North				Route 139 From East				Enterprise Dr From South				Route 139 From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	3	0	3
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	2
Total	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	2	5	0	5
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	2
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1
Total	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	3	0	3
Grand Total	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	4	8	0	8
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0				
Total %																	100	0	

Start Time	Fox Run From North				Route 139 From East				Enterprise Dr From South				Route 139 From West				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 07:00 AM																		
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0			
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

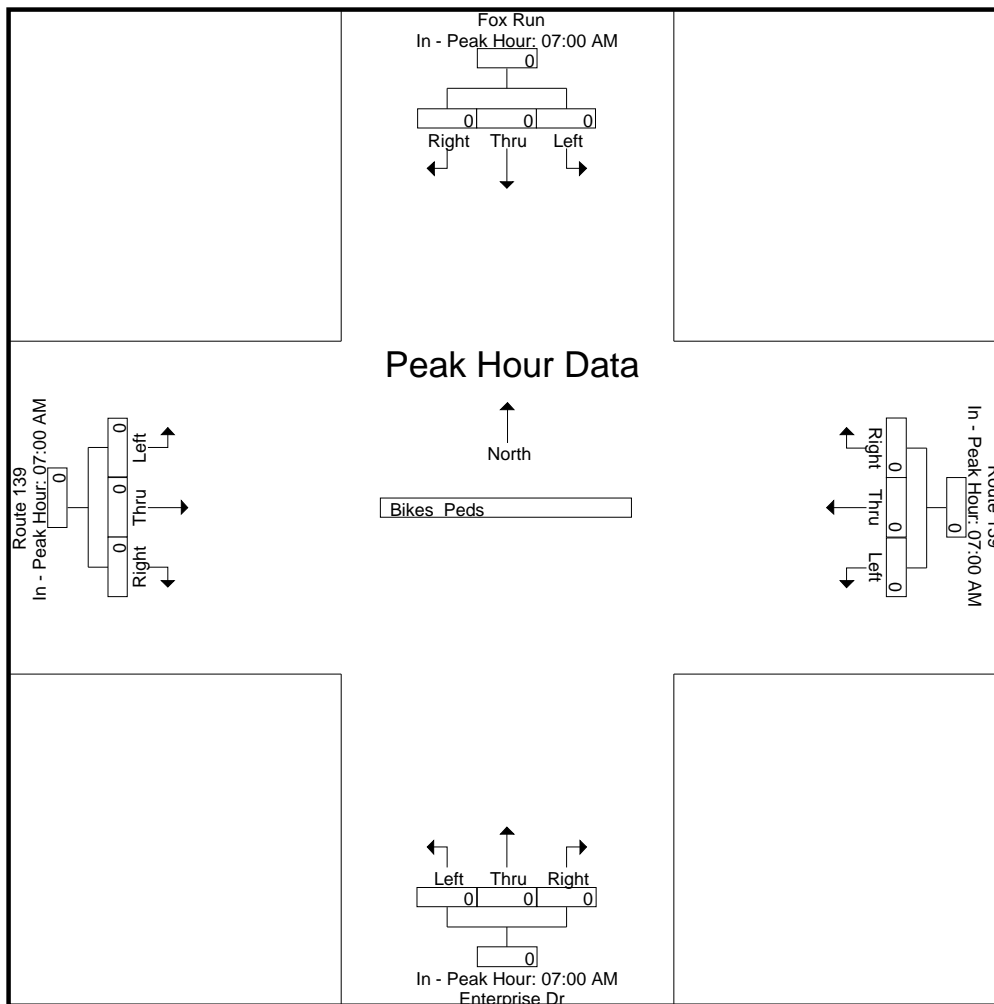
N/S Street : Fox Run/Enterprise Drive  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

N/S Street : Fox Run/Enterprise Drive  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



# Accurate Counts

978-664-2565

N/S Street : Fox Run/Enterprise Drive  
 E/W Street : Route 139  
 City/State : Marshfield, MA  
 Weather : Rain

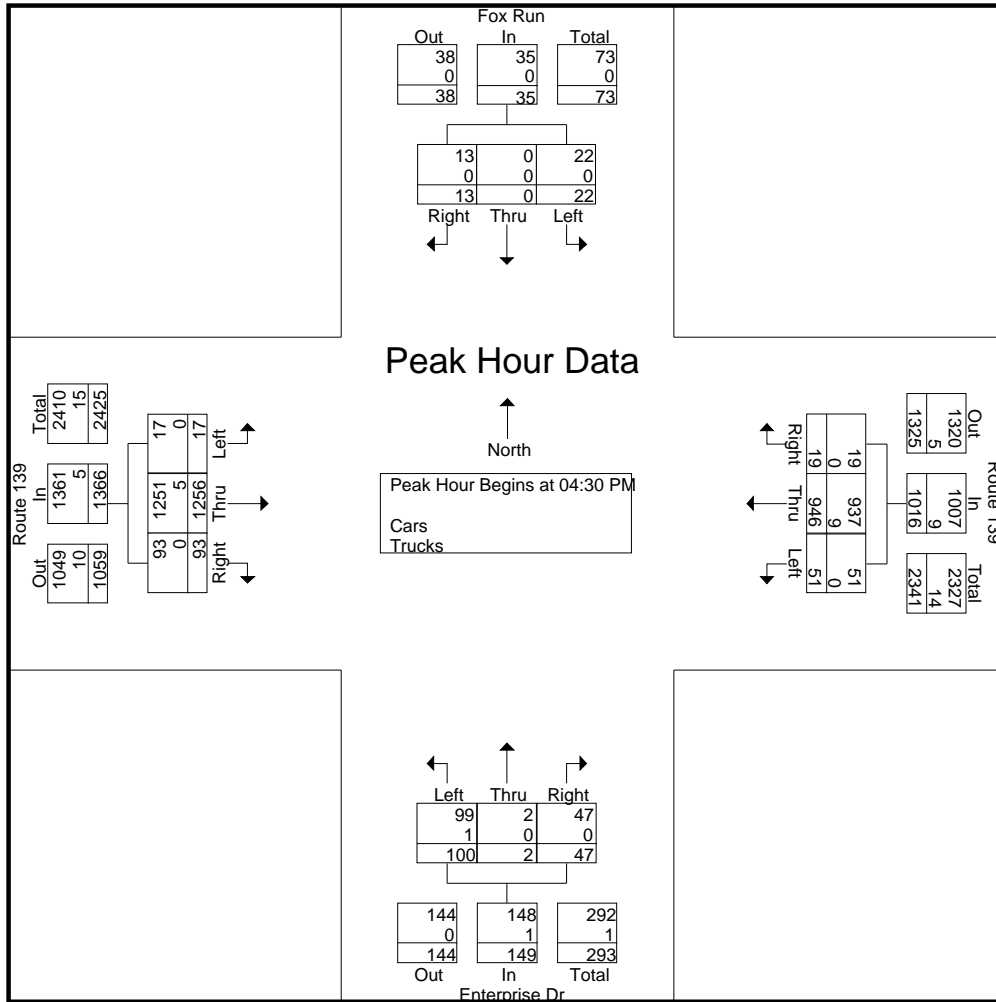
File Name : 90960002  
 Site Code : 90960002  
 Start Date : 9/16/2021  
 Page No : 1

### Groups Printed- Cars - Trucks

Start Time	Fox Run From North			Route 139 From East			Enterprise Dr From South			Route 139 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
04:00 PM	9	1	6	4	275	1	27	0	12	1	321	19	676
04:15 PM	3	0	6	13	232	1	17	1	11	4	300	14	602
04:30 PM	5	0	0	13	235	5	32	0	13	1	318	19	641
04:45 PM	4	0	3	17	206	5	21	1	6	7	315	15	600
<b>Total</b>	<b>21</b>	<b>1</b>	<b>15</b>	<b>47</b>	<b>948</b>	<b>12</b>	<b>97</b>	<b>2</b>	<b>42</b>	<b>13</b>	<b>1254</b>	<b>67</b>	<b>2519</b>
05:00 PM	6	0	7	7	256	6	28	0	18	1	306	21	656
05:15 PM	7	0	3	14	249	3	19	1	10	8	317	38	669
05:30 PM	8	1	0	11	186	2	40	0	5	3	314	19	589
05:45 PM	4	0	4	15	232	4	16	1	9	4	275	20	584
<b>Total</b>	<b>25</b>	<b>1</b>	<b>14</b>	<b>47</b>	<b>923</b>	<b>15</b>	<b>103</b>	<b>2</b>	<b>42</b>	<b>16</b>	<b>1212</b>	<b>98</b>	<b>2498</b>
<b>Grand Total</b>	<b>46</b>	<b>2</b>	<b>29</b>	<b>94</b>	<b>1871</b>	<b>27</b>	<b>200</b>	<b>4</b>	<b>84</b>	<b>29</b>	<b>2466</b>	<b>165</b>	<b>5017</b>
Apprch %	59.7	2.6	37.7	4.7	93.9	1.4	69.4	1.4	29.2	1.1	92.7	6.2	
Total %	0.9	0	0.6	1.9	37.3	0.5	4	0.1	1.7	0.6	49.2	3.3	
Cars	46	2	28	94	1853	27	198	4	84	29	2455	164	4984
% Cars	100	100	96.6	100	99	100	99	100	100	100	99.6	99.4	99.3
Trucks	0	0	1	0	18	0	2	0	0	0	11	1	33
% Trucks	0	0	3.4	0	1	0	1	0	0	0	0.4	0.6	0.7

Start Time	Fox Run From North				Route 139 From East				Enterprise Dr From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
<b>Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1</b>																	
<b>Peak Hour for Entire Intersection Begins at 04:30 PM</b>																	
04:30 PM	5	0	0	5	13	235	5	253	<b>32</b>	0	13	45	1	<b>318</b>	19	338	641
04:45 PM	4	0	3	7	<b>17</b>	206	5	228	21	<b>1</b>	6	28	7	315	15	337	600
05:00 PM	6	0	<b>7</b>	<b>13</b>	7	<b>256</b>	<b>6</b>	<b>269</b>	28	0	<b>18</b>	<b>46</b>	1	306	21	328	656
05:15 PM	<b>7</b>	0	3	10	14	249	3	266	19	1	10	30	<b>8</b>	317	<b>38</b>	<b>363</b>	<b>669</b>
Total Volume	22	0	13	35	51	946	19	1016	100	2	47	149	17	1256	93	1366	2566
% App. Total	62.9	0	37.1		5	93.1	1.9		67.1	1.3	31.5		1.2	91.9	6.8		
PHF	.786	.000	.464	.673	.750	.924	.792	.944	.781	.500	.653	.810	.531	.987	.612	.941	.959
Cars	22	0	13	35	51	937	19	1007	99	2	47	148	17	1251	93	1361	2551
% Cars	100	0	100	100	100	99.0	100	99.1	99.0	100	100	99.3	100	99.6	100	99.6	99.4
Trucks	0	0	0	0	0	9	0	9	1	0	0	1	0	5	0	5	15
% Trucks	0	0	0	0	0	1.0	0	0.9	1.0	0	0	0.7	0	0.4	0	0.4	0.6

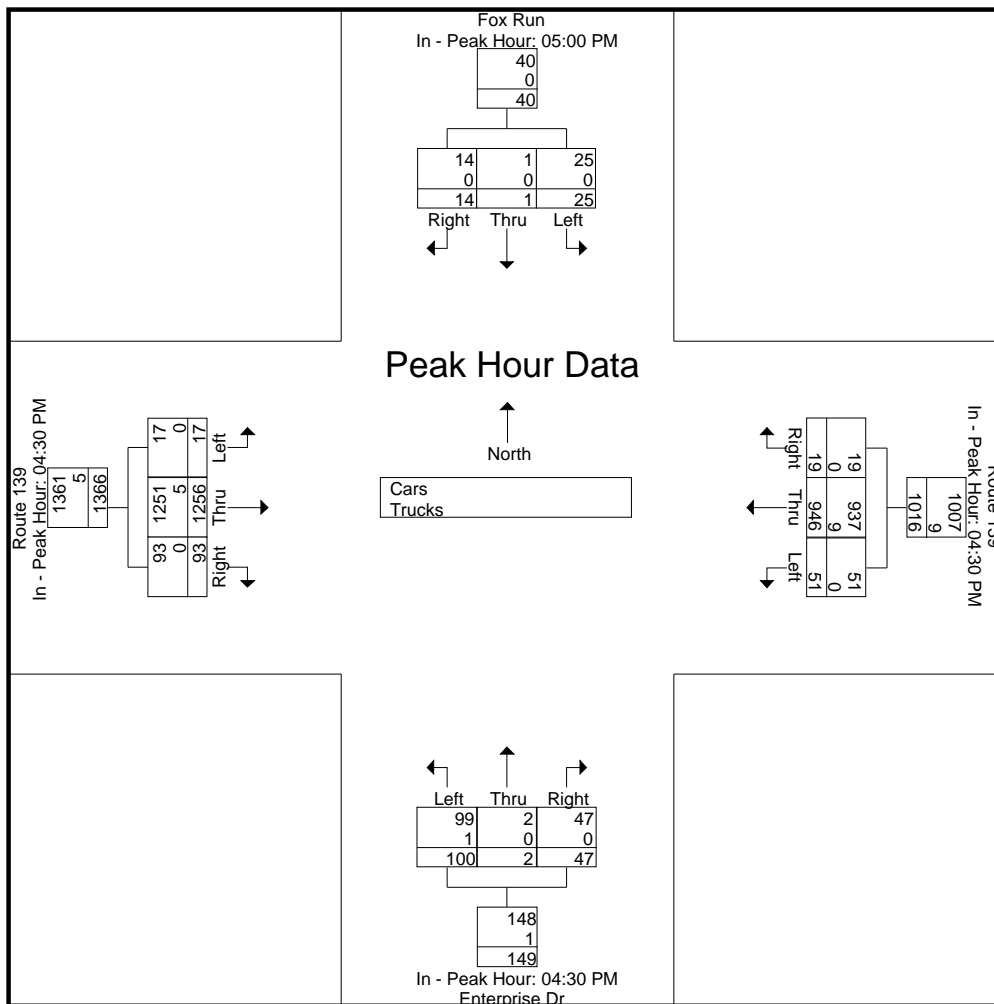
N/S Street : Fox Run/Enterprise Drive  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	05:00 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	6	0	7	13	13	235	5	253	32	0	13	45	1	318	19	338
+15 mins.	7	0	3	10	17	206	5	228	21	1	6	28	7	315	15	337
+30 mins.	8	1	0	9	7	256	6	269	28	0	18	46	1	306	21	328
+45 mins.	4	0	4	8	14	249	3	266	19	1	10	30	8	317	38	363
Total Volume	25	1	14	40	51	946	19	1016	100	2	47	149	17	1256	93	1366
% App. Total	62.5	2.5	35		5	93.1	1.9		67.1	1.3	31.5		1.2	91.9	6.8	
PHF	.781	.250	.500	.769	.750	.924	.792	.944	.781	.500	.653	.810	.531	.987	.612	.941
Cars	25	1	14	40	51	937	19	1007	99	2	47	148	17	1251	93	1361
% Cars	100	100	100	100	100	99	100	99.1	99	100	100	99.3	100	99.6	100	99.6
Trucks	0	0	0	0	0	9	0	9	1	0	0	1	0	5	0	5
% Trucks	0	0	0	0	0	1	0	0.9	1	0	0	0.7	0	0.4	0	0.4

N/S Street : Fox Run/Enterprise Drive  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



# Accurate Counts

978-664-2565

N/S Street : Fox Run/Enterprise Drive  
 E/W Street : Route 139  
 City/State : Marshfield, MA  
 Weather : Rain

File Name : 90960002  
 Site Code : 90960002  
 Start Date : 9/16/2021  
 Page No : 4

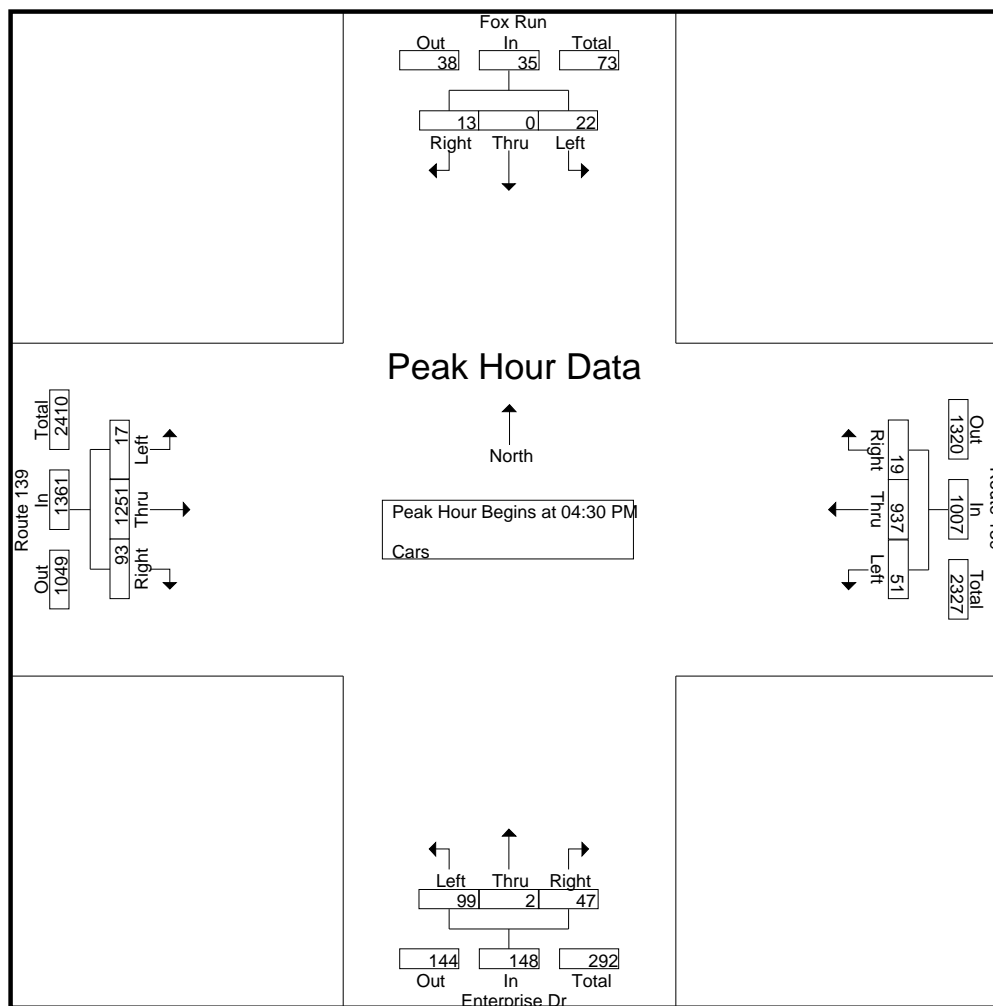
## Groups Printed- Cars

Start Time	Fox Run From North			Route 139 From East			Enterprise Dr From South			Route 139 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
04:00 PM	9	1	5	4	271	1	26	0	12	1	320	19	669
04:15 PM	3	0	6	13	229	1	17	1	11	4	299	13	597
04:30 PM	5	0	0	13	233	5	31	0	13	1	317	19	637
04:45 PM	4	0	3	17	205	5	21	1	6	7	314	15	598
<b>Total</b>	<b>21</b>	<b>1</b>	<b>14</b>	<b>47</b>	<b>938</b>	<b>12</b>	<b>95</b>	<b>2</b>	<b>42</b>	<b>13</b>	<b>1250</b>	<b>66</b>	<b>2501</b>
05:00 PM	6	0	7	7	253	6	28	0	18	1	305	21	652
05:15 PM	7	0	3	14	246	3	19	1	10	8	315	38	664
05:30 PM	8	1	0	11	184	2	40	0	5	3	312	19	585
05:45 PM	4	0	4	15	232	4	16	1	9	4	273	20	582
<b>Total</b>	<b>25</b>	<b>1</b>	<b>14</b>	<b>47</b>	<b>915</b>	<b>15</b>	<b>103</b>	<b>2</b>	<b>42</b>	<b>16</b>	<b>1205</b>	<b>98</b>	<b>2483</b>
<b>Grand Total</b>	<b>46</b>	<b>2</b>	<b>28</b>	<b>94</b>	<b>1853</b>	<b>27</b>	<b>198</b>	<b>4</b>	<b>84</b>	<b>29</b>	<b>2455</b>	<b>164</b>	<b>4984</b>
Apprch %	60.5	2.6	36.8	4.8	93.9	1.4	69.2	1.4	29.4	1.1	92.7	6.2	
Total %	0.9	0	0.6	1.9	37.2	0.5	4	0.1	1.7	0.6	49.3	3.3	

Start Time	Fox Run From North				Route 139 From East				Enterprise Dr From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	5	0	0	5	13	233	5	251	31	0	13	44	1	317	19	337	637
04:45 PM	4	0	3	7	17	205	5	227	21	1	6	28	7	314	15	336	598
05:00 PM	6	0	7	13	7	253	6	266	28	0	18	46	1	305	21	327	652
05:15 PM	7	0	3	10	14	246	3	263	19	1	10	30	8	315	38	361	664
<b>Total Volume</b>	<b>22</b>	<b>0</b>	<b>13</b>	<b>35</b>	<b>51</b>	<b>937</b>	<b>19</b>	<b>1007</b>	<b>99</b>	<b>2</b>	<b>47</b>	<b>148</b>	<b>17</b>	<b>1251</b>	<b>93</b>	<b>1361</b>	<b>2551</b>
% App. Total	62.9	0	37.1		5.1	93	1.9		66.9	1.4	31.8		1.2	91.9	6.8		
PHF	.786	.000	.464	.673	.750	.926	.792	.946	.798	.500	.653	.804	.531	.987	.612	.943	.960



N/S Street : Fox Run/Enterprise Drive  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	05:00 PM				04:30 PM				04:45 PM				04:30 PM			
+0 mins.	6	0	7	13	13	233	5	251	21	1	6	28	1	317	19	337
+15 mins.	7	0	3	10	17	205	5	227	28	0	18	46	7	314	15	336
+30 mins.	8	1	0	9	7	253	6	266	19	1	10	30	1	305	21	327
+45 mins.	4	0	4	8	14	246	3	263	40	0	5	45	8	315	38	361
Total Volume	25	1	14	40	51	937	19	1007	108	2	39	149	17	1251	93	1361
% App. Total	62.5	2.5	35		5.1	93	1.9		72.5	1.3	26.2		1.2	91.9	6.8	
PHF	.781	.250	.500	.769	.750	.926	.792	.946	.675	.500	.542	.810	.531	.987	.612	.943

# Accurate Counts

978-664-2565

File Name : 90960002

Site Code : 90960002

Start Date : 9/16/2021

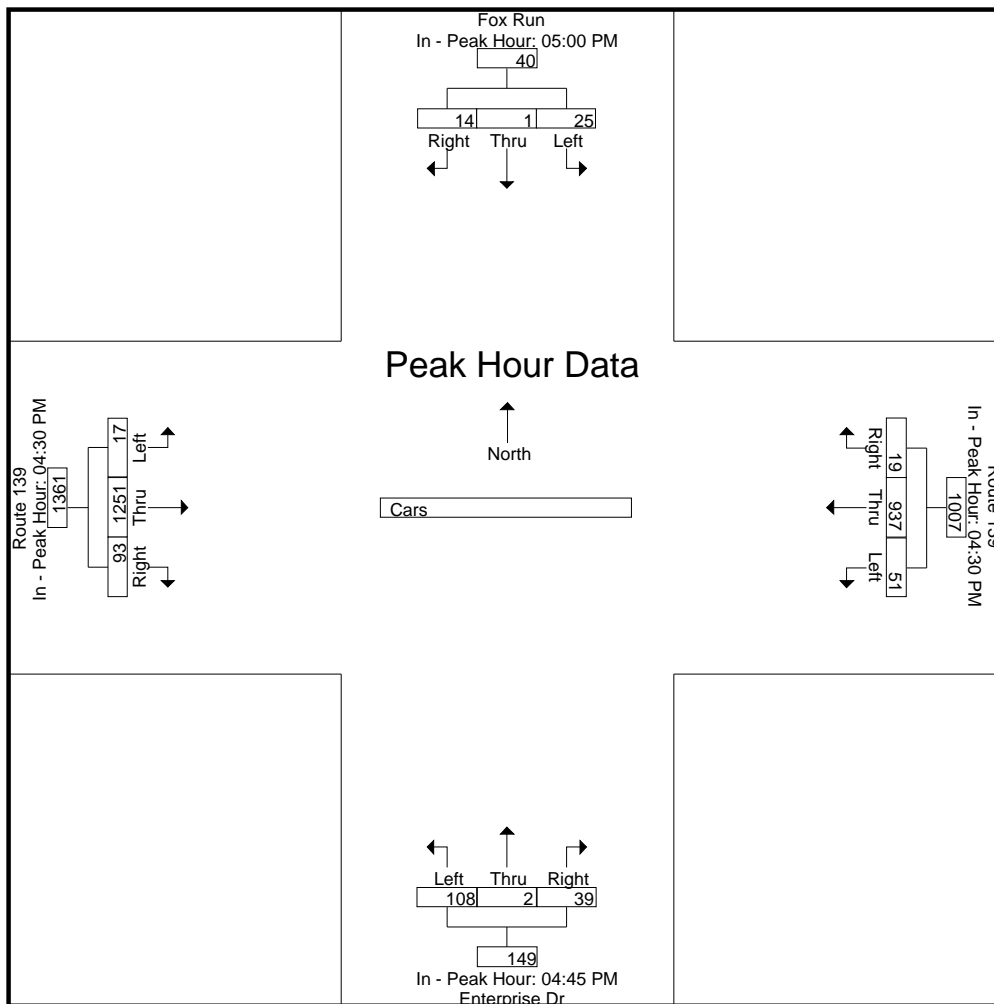
Page No : 6

N/S Street : Fox Run/Enterprise Drive

E/W Street : Route 139

City/State : Marshfield, MA

Weather : Rain



**Accurate Counts**  
978-664-2565

N/S Street : Fox Run/Enterprise Drive  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain

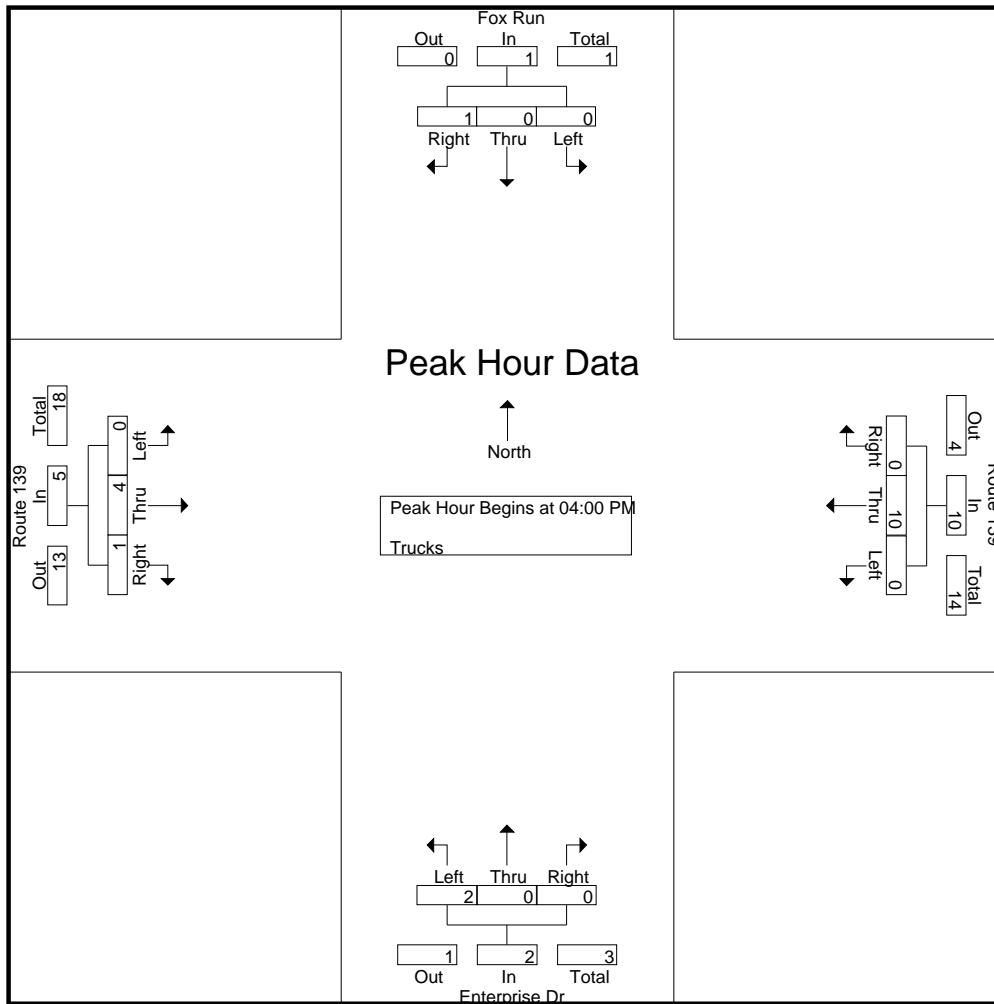
File Name : 90960002  
Site Code : 90960002  
Start Date : 9/16/2021  
Page No : 7

Groups Printed- Trucks

Start Time	Fox Run From North			Route 139 From East			Enterprise Dr From South			Route 139 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
04:00 PM	0	0	1	0	4	0	1	0	0	0	1	0	7
04:15 PM	0	0	0	0	3	0	0	0	0	0	1	1	5
04:30 PM	0	0	0	0	2	0	1	0	0	0	1	0	4
04:45 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
<b>Total</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>1</b>	<b>18</b>
05:00 PM	0	0	0	0	3	0	0	0	0	0	1	0	4
05:15 PM	0	0	0	0	3	0	0	0	0	0	2	0	5
05:30 PM	0	0	0	0	2	0	0	0	0	0	2	0	4
05:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>15</b>
<b>Grand Total</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>18</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>1</b>	<b>33</b>
Apprch %	0	0	100	0	100	0	100	0	0	0	91.7	8.3	
Total %	0	0	3	0	54.5	0	6.1	0	0	0	33.3	3	

Start Time	Fox Run From North				Route 139 From East				Enterprise Dr From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	1	1	0	4	0	4	1	0	0	1	0	1	0	1	7
04:15 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	1	1	2	5
04:30 PM	0	0	0	0	0	2	0	2	1	0	0	1	0	1	0	1	4
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
<b>Total Volume</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>10</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>1</b>	<b>5</b>	<b>18</b>
% App. Total	0	0	100		0	100	0		100	0	0		0	80	20		
PHF	.000	.000	.250	.250	.000	.625	.000	.625	.500	.000	.000	.500	.000	1.00	.250	.625	.643

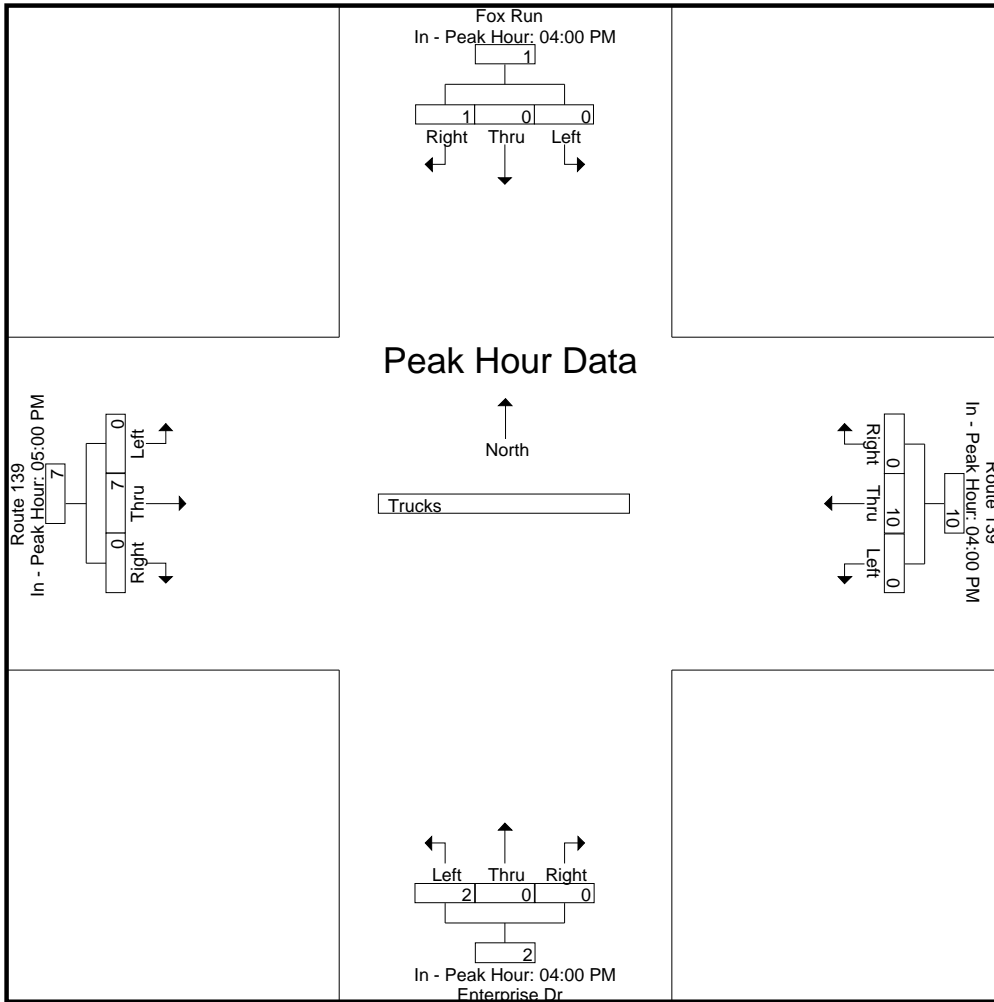
N/S Street : Fox Run/Enterprise Drive  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				05:00 PM			
+0 mins.	0	0	1	1	0	4	0	4	1	0	0	1	0	1	0	1
+15 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2
+30 mins.	0	0	0	0	0	2	0	2	1	0	0	1	0	2	0	2
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2
Total Volume	0	0	1	1	0	10	0	10	2	0	0	2	0	7	0	7
% App. Total	0	0	100		0	100	0		100	0	0		0	100	0	
PHF	.000	.000	.250	.250	.000	.625	.000	.625	.500	.000	.000	.500	.000	.875	.000	.875

N/S Street : Fox Run/Enterprise Drive  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



**Accurate Counts**  
978-664-2565

N/S Street : Fox Run/Enterprise Drive  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain

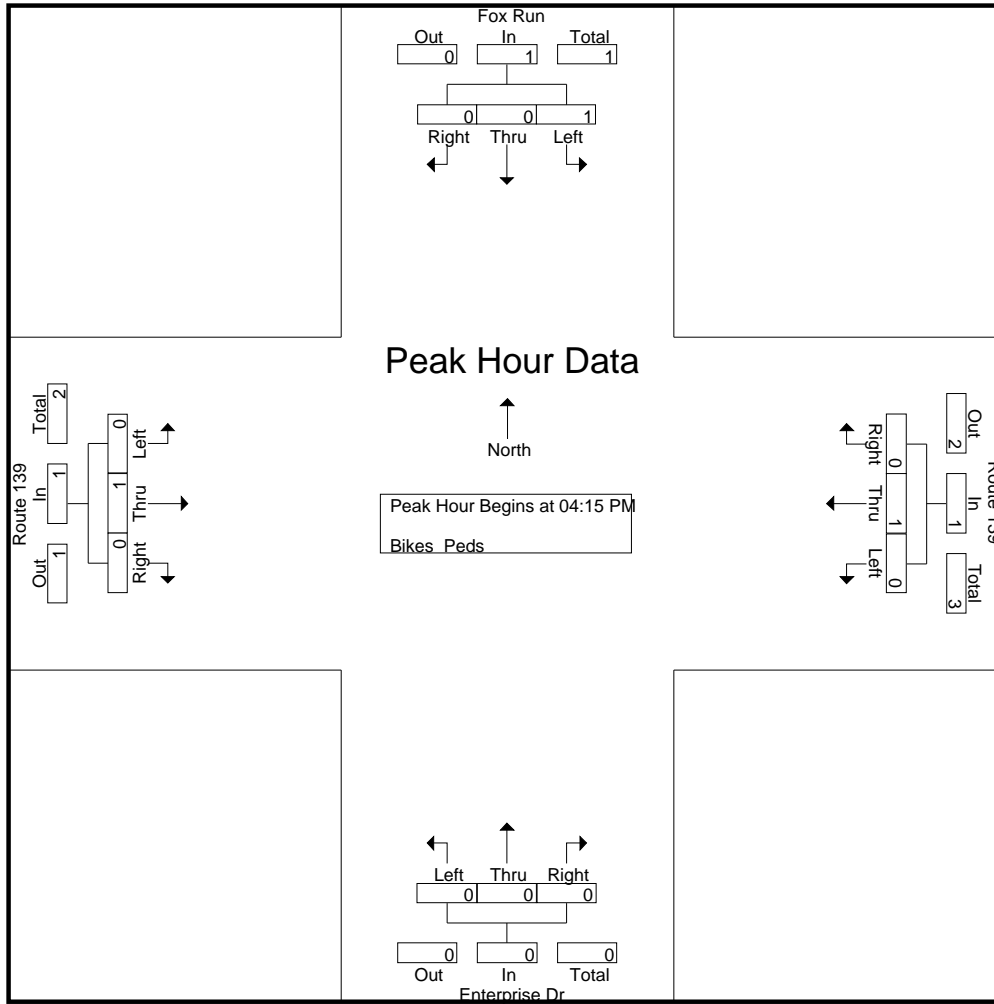
File Name : 90960002  
Site Code : 90960002  
Start Date : 9/16/2021  
Page No : 10

Groups Printed- Bikes Peds

Start Time	Fox Run From North				Route 139 From East				Enterprise Dr From South				Route 139 From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
04:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	3	0	3
04:15 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
04:30 PM	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2	0	2
04:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
<b>Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>6</b>	<b>1</b>	<b>7</b>
05:00 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	1	2	3
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>4</b>
<b>Grand Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>8</b>	<b>3</b>	<b>11</b>
Apprch %	100	0	0		0	100	0		0	0	0		0	100	0				
Total %	33.3	0	0		0	33.3	0		0	0	0		0	33.3	0		72.7	27.3	

Start Time	Fox Run From North				Route 139 From East				Enterprise Dr From South				Route 139 From West				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 04:15 PM																		
04:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	0	2
<b>Total Volume</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>3</b>
% App. Total	100	0	0		0	100	0		0	0	0		0	100	0			
PHF	.250	.000	.000	.250	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250		.375

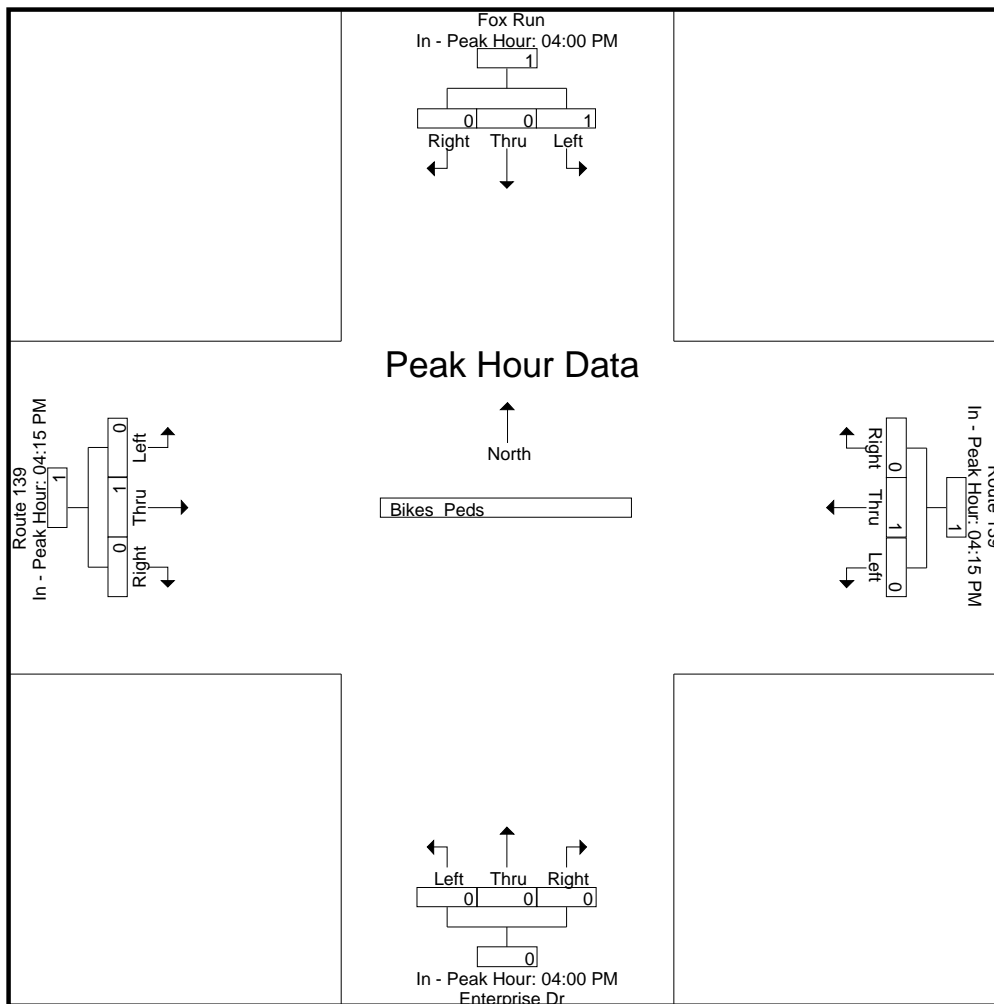
N/S Street : Fox Run/Enterprise Drive  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	04:00 PM				04:15 PM				04:00 PM				04:15 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
Total Volume	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	1
% App. Total	100	0	0		0	100	0		0	0	0		0	100	0	
PHF	.250	.000	.000	.250	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250

N/S Street : Fox Run/Enterprise Drive  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain





**Accurate Counts**  
978-664-2565

N/S Street : Fox Run/Enterprise Drive  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy

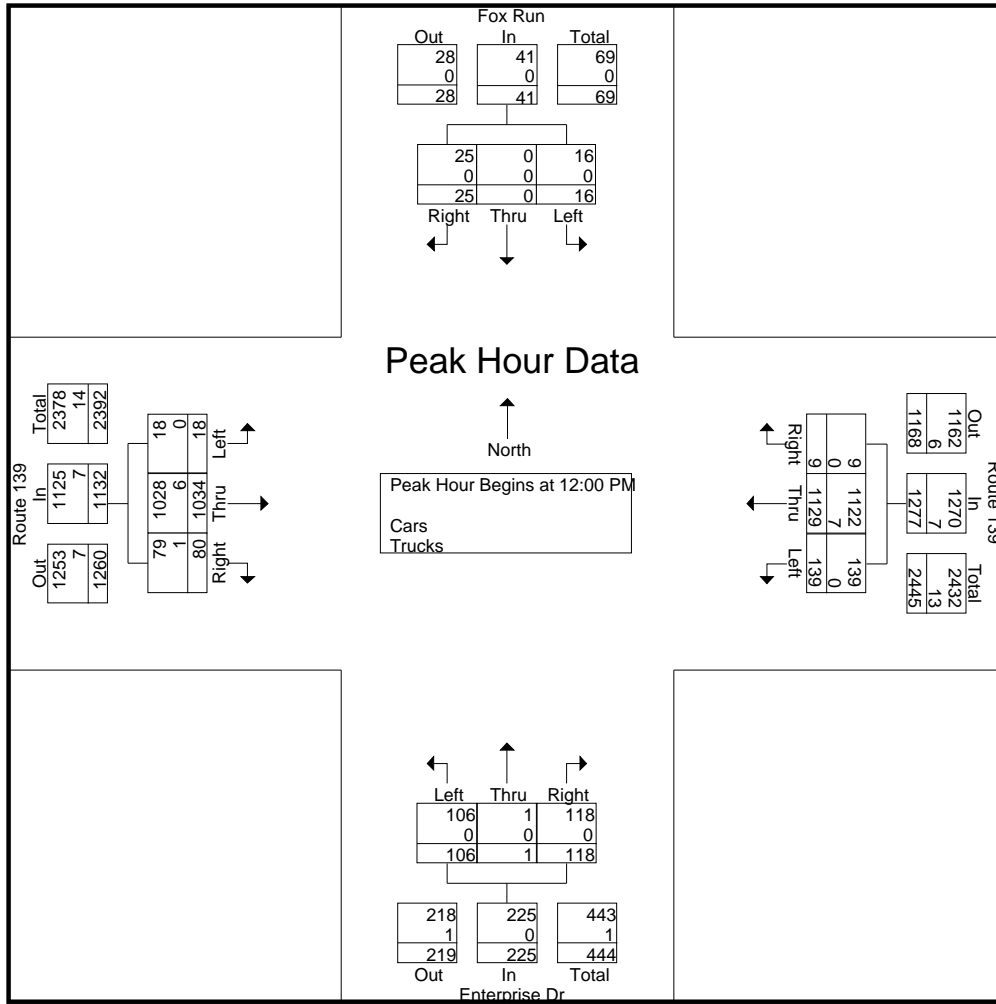
File Name : 909600S2  
Site Code : 90960002  
Start Date : 9/18/2021  
Page No : 1

Groups Printed- Cars - Trucks

Start Time	Fox Run From North			Route 139 From East			Enterprise Dr From South			Route 139 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:00 AM	7	0	5	31	314	4	24	1	9	2	243	20	660
11:15 AM	5	0	7	15	305	1	17	0	13	4	225	17	609
11:30 AM	5	0	7	6	317	2	15	1	3	8	252	10	626
11:45 AM	5	0	1	25	310	2	11	0	3	3	232	8	600
<b>Total</b>	<b>22</b>	<b>0</b>	<b>20</b>	<b>77</b>	<b>1246</b>	<b>9</b>	<b>67</b>	<b>2</b>	<b>28</b>	<b>17</b>	<b>952</b>	<b>55</b>	<b>2495</b>
12:00 PM	0	0	1	38	272	0	59	1	79	5	218	17	690
12:15 PM	2	0	5	57	275	4	27	0	28	3	258	26	685
12:30 PM	6	0	10	30	281	1	13	0	4	6	275	20	646
12:45 PM	8	0	9	14	301	4	7	0	7	4	283	17	654
<b>Total</b>	<b>16</b>	<b>0</b>	<b>25</b>	<b>139</b>	<b>1129</b>	<b>9</b>	<b>106</b>	<b>1</b>	<b>118</b>	<b>18</b>	<b>1034</b>	<b>80</b>	<b>2675</b>
01:00 PM	7	0	10	11	262	2	5	0	7	9	240	10	563
01:15 PM	6	0	7	23	259	4	12	0	14	4	268	9	606
01:30 PM	6	0	5	21	249	1	24	1	63	4	279	11	664
01:45 PM	10	0	4	13	207	6	36	1	54	2	266	18	617
<b>Total</b>	<b>29</b>	<b>0</b>	<b>26</b>	<b>68</b>	<b>977</b>	<b>13</b>	<b>77</b>	<b>2</b>	<b>138</b>	<b>19</b>	<b>1053</b>	<b>48</b>	<b>2450</b>
<b>Grand Total</b>	<b>67</b>	<b>0</b>	<b>71</b>	<b>284</b>	<b>3352</b>	<b>31</b>	<b>250</b>	<b>5</b>	<b>284</b>	<b>54</b>	<b>3039</b>	<b>183</b>	<b>7620</b>
Apprch %	48.6	0	51.4	7.7	91.4	0.8	46.4	0.9	52.7	1.6	92.8	5.6	
Total %	0.9	0	0.9	3.7	44	0.4	3.3	0.1	3.7	0.7	39.9	2.4	
Cars	66	0	71	284	3328	31	250	5	284	54	3020	182	7575
% Cars	98.5	0	100	100	99.3	100	100	100	100	100	99.4	99.5	99.4
Trucks	1	0	0	0	24	0	0	0	0	0	19	1	45
% Trucks	1.5	0	0	0	0.7	0	0	0	0	0	0.6	0.5	0.6

Start Time	Fox Run From North				Route 139 From East				Enterprise Dr From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
<b>Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1</b>																	
<b>Peak Hour for Entire Intersection Begins at 12:00 PM</b>																	
12:00 PM	0	0	1	1	38	272	0	310	<b>59</b>	<b>1</b>	<b>79</b>	<b>139</b>	5	218	17	240	<b>690</b>
12:15 PM	2	0	5	7	<b>57</b>	275	<b>4</b>	<b>336</b>	27	0	28	55	3	258	<b>26</b>	287	685
12:30 PM	6	0	<b>10</b>	16	30	281	1	312	13	0	4	17	<b>6</b>	275	20	301	646
12:45 PM	<b>8</b>	0	9	<b>17</b>	14	<b>301</b>	4	319	7	0	7	14	4	<b>283</b>	17	<b>304</b>	654
Total Volume	16	0	25	41	139	1129	9	1277	106	1	118	225	18	1034	80	1132	2675
% App. Total	39	0	61		10.9	88.4	0.7		47.1	0.4	52.4		1.6	91.3	7.1		
PHF	.500	.000	.625	.603	.610	.938	.563	.950	.449	.250	.373	.405	.750	.913	.769	.931	.969
Cars	16	0	25	41	139	1122	9	1270	106	1	118	225	18	1028	79	1125	2661
% Cars	100	0	100	100	100	99.4	100	99.5	100	100	100	100	100	99.4	98.8	99.4	99.5
Trucks	0	0	0	0	0	7	0	7	0	0	0	0	0	6	1	7	14
% Trucks	0	0	0	0	0	0.6	0	0.5	0	0	0	0	0	0.6	1.3	0.6	0.5

N/S Street : Fox Run/Enterprise Drive  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy



Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	12:30 PM				11:00 AM				11:30 AM				12:15 PM			
+0 mins.	6	0	10	16	31	314	4	349	15	1	3	19	3	258	26	287
+15 mins.	8	0	9	17	15	305	1	321	11	0	3	14	6	275	20	301
+30 mins.	7	0	10	17	6	317	2	325	59	1	79	139	4	283	17	304
+45 mins.	6	0	7	13	25	310	2	337	27	0	28	55	9	240	10	259
Total Volume	27	0	36	63	77	1246	9	1332	112	2	113	227	22	1056	73	1151
% App. Total	42.9	0	57.1		5.8	93.5	0.7		49.3	0.9	49.8		1.9	91.7	6.3	
PHF	.844	.000	.900	.926	.621	.983	.563	.954	.475	.500	.358	.408	.611	.933	.702	.947
Cars	27	0	36	63	77	1235	9	1321	112	2	113	227	22	1049	72	1143
% Cars	100	0	100	100	100	99.1	100	99.2	100	100	100	100	100	99.3	98.6	99.3
Trucks	0	0	0	0	0	11	0	11	0	0	0	0	0	7	1	8
% Trucks	0	0	0	0	0	0.9	0	0.8	0	0	0	0	0	0.7	1.4	0.7

# Accurate Counts

978-664-2565

File Name : 909600S2

Site Code : 90960002

Start Date : 9/18/2021

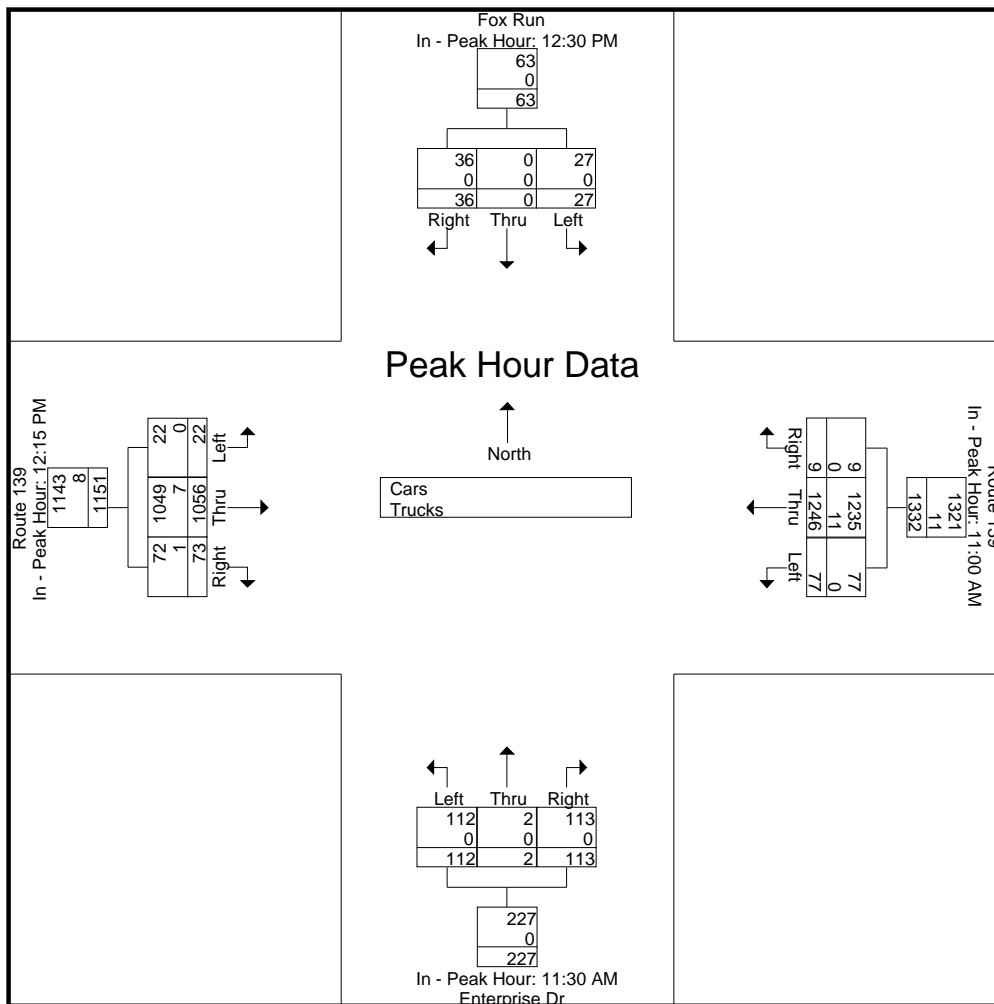
Page No : 3

N/S Street : Fox Run/Enterprise Drive

E/W Street : Route 139

City/State : Marshfield, MA

Weather : Cloudy



# Accurate Counts

978-664-2565

N/S Street : Fox Run/Enterprise Drive  
 E/W Street : Route 139  
 City/State : Marshfield, MA  
 Weather : Cloudy

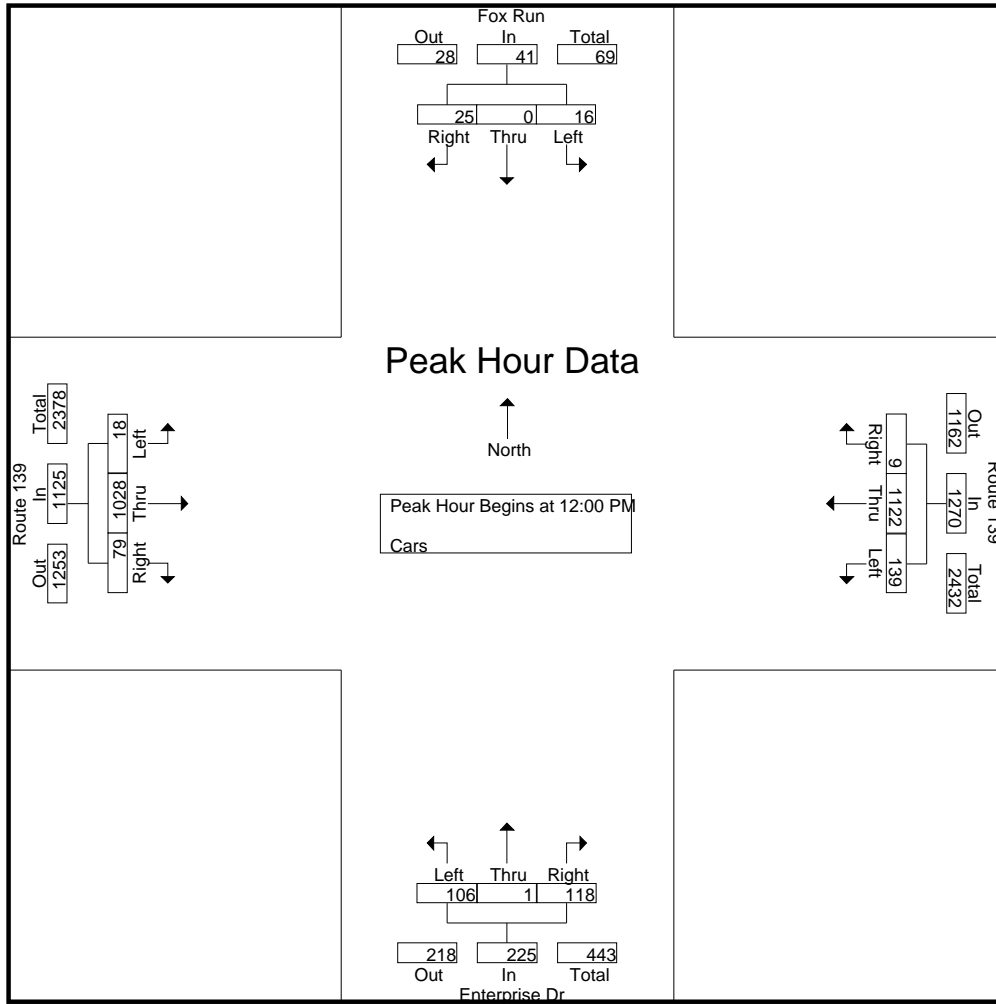
File Name : 909600S2  
 Site Code : 90960002  
 Start Date : 9/18/2021  
 Page No : 4

## Groups Printed- Cars

Start Time	Fox Run From North			Route 139 From East			Enterprise Dr From South			Route 139 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:00 AM	7	0	5	31	311	4	24	1	9	2	241	20	655
11:15 AM	4	0	7	15	301	1	17	0	13	4	223	17	602
11:30 AM	5	0	7	6	315	2	15	1	3	8	251	10	623
11:45 AM	5	0	1	25	308	2	11	0	3	3	231	8	597
<b>Total</b>	<b>21</b>	<b>0</b>	<b>20</b>	<b>77</b>	<b>1235</b>	<b>9</b>	<b>67</b>	<b>2</b>	<b>28</b>	<b>17</b>	<b>946</b>	<b>55</b>	<b>2477</b>
12:00 PM	0	0	1	38	270	0	59	1	79	5	217	17	687
12:15 PM	2	0	5	57	273	4	27	0	28	3	256	26	681
12:30 PM	6	0	10	30	280	1	13	0	4	6	274	20	644
12:45 PM	8	0	9	14	299	4	7	0	7	4	281	16	649
<b>Total</b>	<b>16</b>	<b>0</b>	<b>25</b>	<b>139</b>	<b>1122</b>	<b>9</b>	<b>106</b>	<b>1</b>	<b>118</b>	<b>18</b>	<b>1028</b>	<b>79</b>	<b>2661</b>
01:00 PM	7	0	10	11	260	2	5	0	7	9	238	10	559
01:15 PM	6	0	7	23	257	4	12	0	14	4	266	9	602
01:30 PM	6	0	5	21	248	1	24	1	63	4	278	11	662
01:45 PM	10	0	4	13	206	6	36	1	54	2	264	18	614
<b>Total</b>	<b>29</b>	<b>0</b>	<b>26</b>	<b>68</b>	<b>971</b>	<b>13</b>	<b>77</b>	<b>2</b>	<b>138</b>	<b>19</b>	<b>1046</b>	<b>48</b>	<b>2437</b>
<b>Grand Total</b>	<b>66</b>	<b>0</b>	<b>71</b>	<b>284</b>	<b>3328</b>	<b>31</b>	<b>250</b>	<b>5</b>	<b>284</b>	<b>54</b>	<b>3020</b>	<b>182</b>	<b>7575</b>
Apprch %	48.2	0	51.8	7.8	91.4	0.9	46.4	0.9	52.7	1.7	92.8	5.6	
Total %	0.9	0	0.9	3.7	43.9	0.4	3.3	0.1	3.7	0.7	39.9	2.4	

Start Time	Fox Run From North				Route 139 From East				Enterprise Dr From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:00 PM																	
12:00 PM	0	0	1	1	38	270	0	308	<b>59</b>	<b>1</b>	<b>79</b>	<b>139</b>	5	217	17	239	<b>687</b>
12:15 PM	2	0	5	7	<b>57</b>	273	<b>4</b>	<b>334</b>	27	0	28	55	3	256	<b>26</b>	285	681
12:30 PM	6	0	<b>10</b>	16	30	280	1	311	13	0	4	17	<b>6</b>	274	20	300	644
12:45 PM	<b>8</b>	0	9	<b>17</b>	14	<b>299</b>	4	317	7	0	7	14	4	<b>281</b>	16	<b>301</b>	649
<b>Total Volume</b>	<b>16</b>	<b>0</b>	<b>25</b>	<b>41</b>	<b>139</b>	<b>1122</b>	<b>9</b>	<b>1270</b>	<b>106</b>	<b>1</b>	<b>118</b>	<b>225</b>	<b>18</b>	<b>1028</b>	<b>79</b>	<b>1125</b>	<b>2661</b>
% App. Total	39	0	61		10.9	88.3	0.7		47.1	0.4	52.4		1.6	91.4	7		
PHF	.500	.000	.625	.603	.610	.938	.563	.951	.449	.250	.373	.405	.750	.915	.760	.934	.968

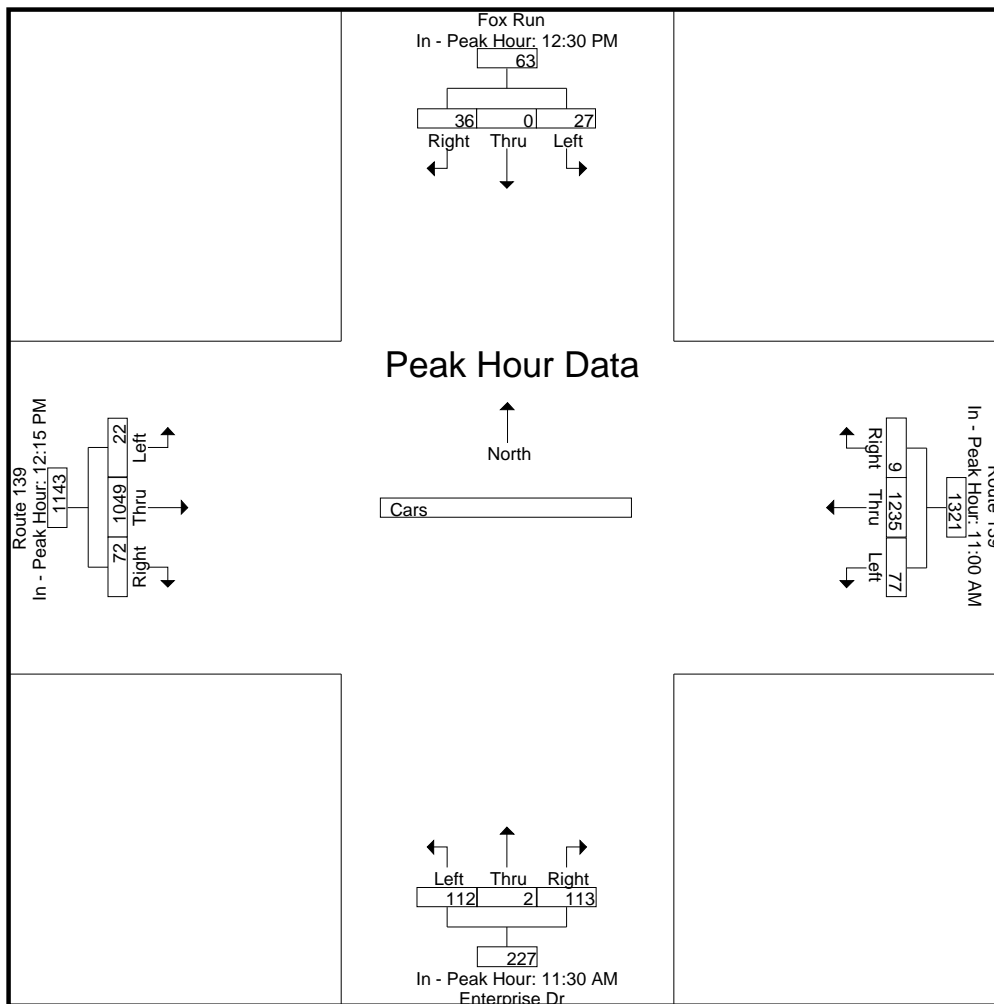
N/S Street : Fox Run/Enterprise Drive  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy



Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	12:30 PM				11:00 AM				11:30 AM				12:15 PM			
+0 mins.	6	0	10	16	31	311	4	346	15	1	3	19	3	256	26	285
+15 mins.	8	0	9	17	15	301	1	317	11	0	3	14	6	274	20	300
+30 mins.	7	0	10	17	6	315	2	323	59	1	79	139	4	281	16	301
+45 mins.	6	0	7	13	25	308	2	335	27	0	28	55	9	238	10	257
Total Volume	27	0	36	63	77	1235	9	1321	112	2	113	227	22	1049	72	1143
% App. Total	42.9	0	57.1		5.8	93.5	0.7		49.3	0.9	49.8		1.9	91.8	6.3	
PHF	.844	.000	.900	.926	.621	.980	.563	.954	.475	.500	.358	.408	.611	.933	.692	.949

N/S Street : Fox Run/Enterprise Drive  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy



**Accurate Counts**  
978-664-2565

N/S Street : Fox Run/Enterprise Drive  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy

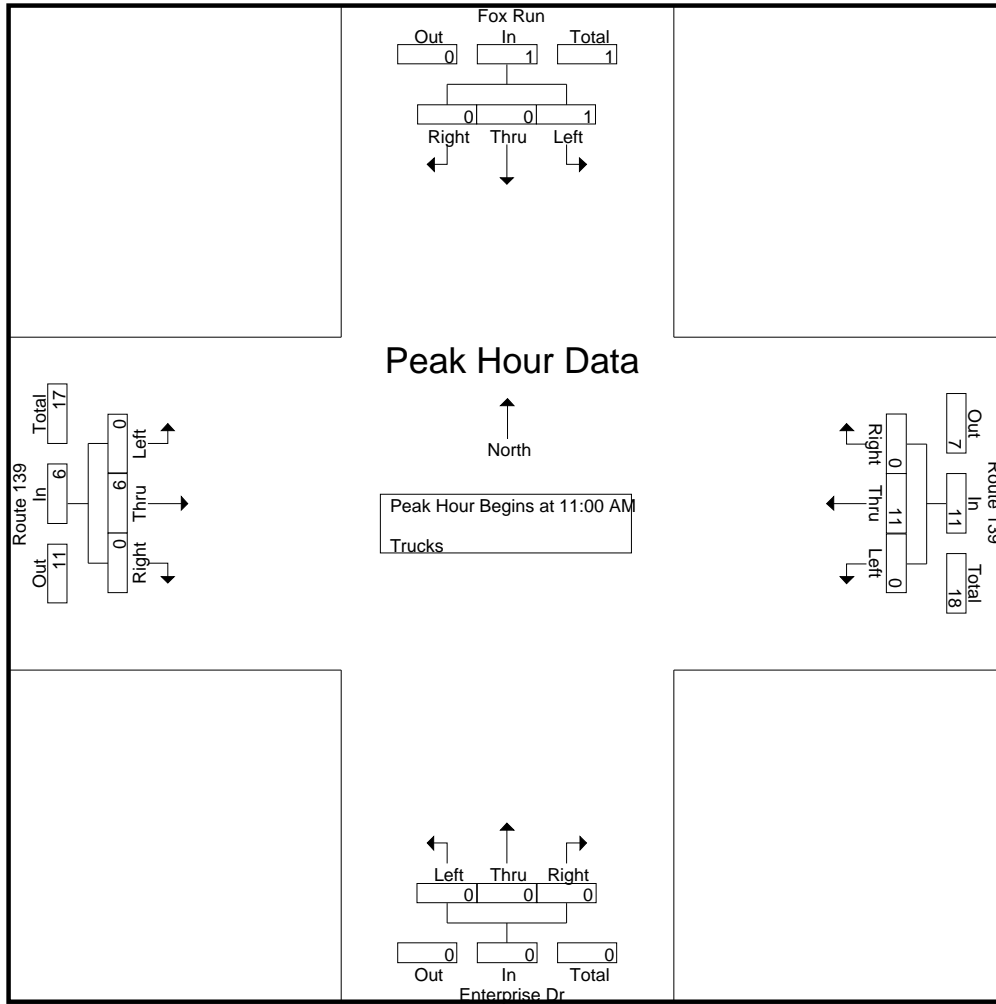
File Name : 909600S2  
Site Code : 90960002  
Start Date : 9/18/2021  
Page No : 7

Groups Printed- Trucks

Start Time	Fox Run From North			Route 139 From East			Enterprise Dr From South			Route 139 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:00 AM	0	0	0	0	3	0	0	0	0	0	2	0	5
11:15 AM	1	0	0	0	4	0	0	0	0	0	2	0	7
11:30 AM	0	0	0	0	2	0	0	0	0	0	1	0	3
11:45 AM	0	0	0	0	2	0	0	0	0	0	1	0	3
Total	1	0	0	0	11	0	0	0	0	0	6	0	18
12:00 PM	0	0	0	0	2	0	0	0	0	0	1	0	3
12:15 PM	0	0	0	0	2	0	0	0	0	0	2	0	4
12:30 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
12:45 PM	0	0	0	0	2	0	0	0	0	0	2	1	5
Total	0	0	0	0	7	0	0	0	0	0	6	1	14
01:00 PM	0	0	0	0	2	0	0	0	0	0	2	0	4
01:15 PM	0	0	0	0	2	0	0	0	0	0	2	0	4
01:30 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
01:45 PM	0	0	0	0	1	0	0	0	0	0	2	0	3
Total	0	0	0	0	6	0	0	0	0	0	7	0	13
Grand Total	1	0	0	0	24	0	0	0	0	0	19	1	45
Apprch %	100	0	0	0	100	0	0	0	0	0	95	5	
Total %	2.2	0	0	0	53.3	0	0	0	0	0	42.2	2.2	

Start Time	Fox Run From North				Route 139 From East				Enterprise Dr From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:00 AM																	
11:00 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
11:15 AM	1	0	0	1	0	4	0	4	0	0	0	0	0	2	0	2	7
11:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
11:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
Total Volume	1	0	0	1	0	11	0	11	0	0	0	0	0	6	0	6	18
% App. Total	100	0	0		0	100	0		0	0	0		0	100	0		
PHF	.250	.000	.000	.250	.000	.688	.000	.688	.000	.000	.000	.000	.000	.750	.000	.750	.643

N/S Street : Fox Run/Enterprise Drive  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy

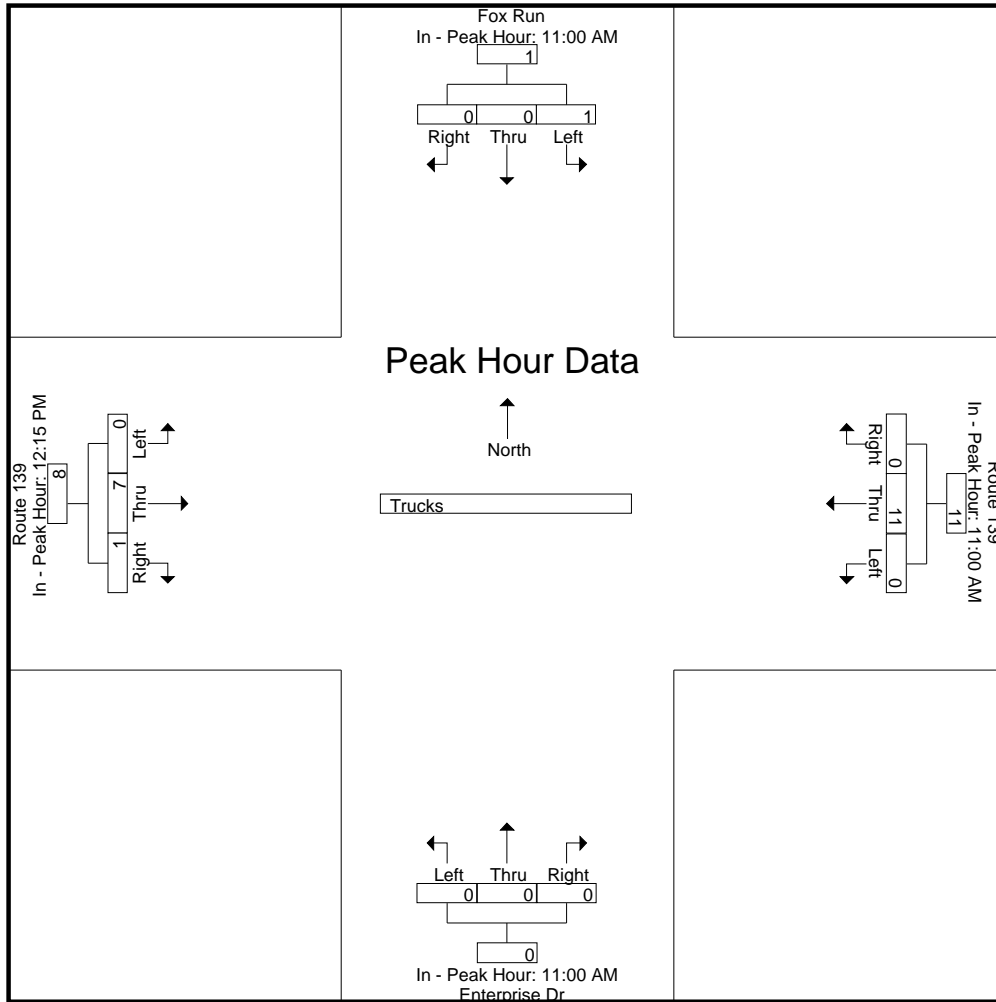


Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	11:00 AM				11:00 AM				11:00 AM				12:15 PM			
+0 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2
+15 mins.	1	0	0	1	0	4	0	4	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	2	1	3
+45 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2
Total Volume	1	0	0	1	0	11	0	11	0	0	0	0	0	7	1	8
% App. Total	100	0	0		0	100	0		0	0	0		0	87.5	12.5	
PHF	.250	.000	.000	.250	.000	.688	.000	.688	.000	.000	.000	.000	.000	.875	.250	.667



N/S Street : Fox Run/Enterprise Drive  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy



**Accurate Counts**  
978-664-2565

N/S Street : Fox Run/Enterprise Drive  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy

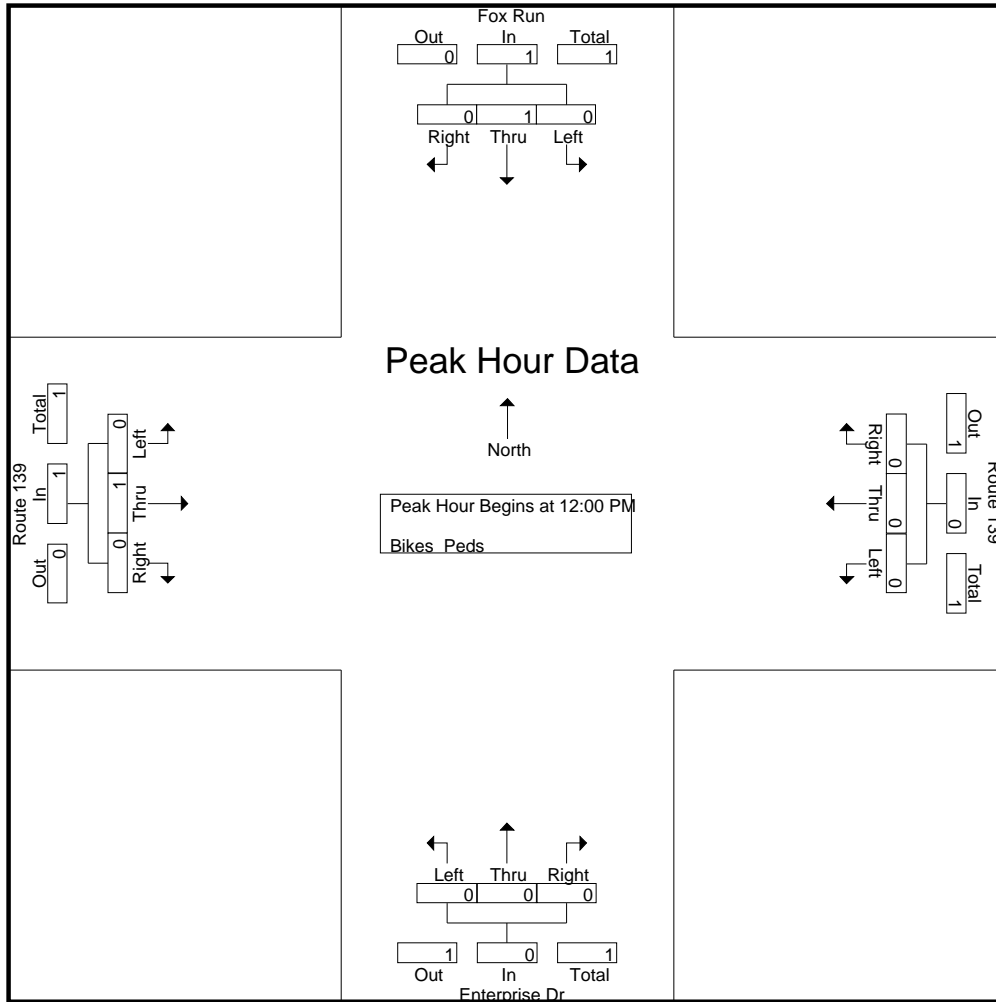
File Name : 909600S2  
Site Code : 90960002  
Start Date : 9/18/2021  
Page No : 10

Groups Printed- Bikes Peds

Start Time	Fox Run From North				Route 139 From East				Enterprise Dr From South				Route 139 From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	3	0	3
11:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1	4	0	4
12:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1
12:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	2
12:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
<b>Total</b>	0	1	0	0	0	0	0	2	0	0	0	0	0	1	0	1	3	2	5
01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1
01:15 PM	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2	0	2
01:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
01:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	1	3	1	4
<b>Grand Total</b>	0	1	0	4	0	1	0	3	0	0	0	0	0	1	0	3	10	3	13
Apprch %	0	100	0		0	100	0		0	0	0		0	100	0				
Total %	0	33.3	0		0	33.3	0		0	0	0		0	33.3	0		76.9	23.1	

Start Time	Fox Run From North				Route 139 From East				Enterprise Dr From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:00 PM																	
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	1	0	1	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	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
<b>Total Volume</b>	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
<b>% App. Total</b>	0	100	0		0	0	0		0	0	0		0	100	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.500

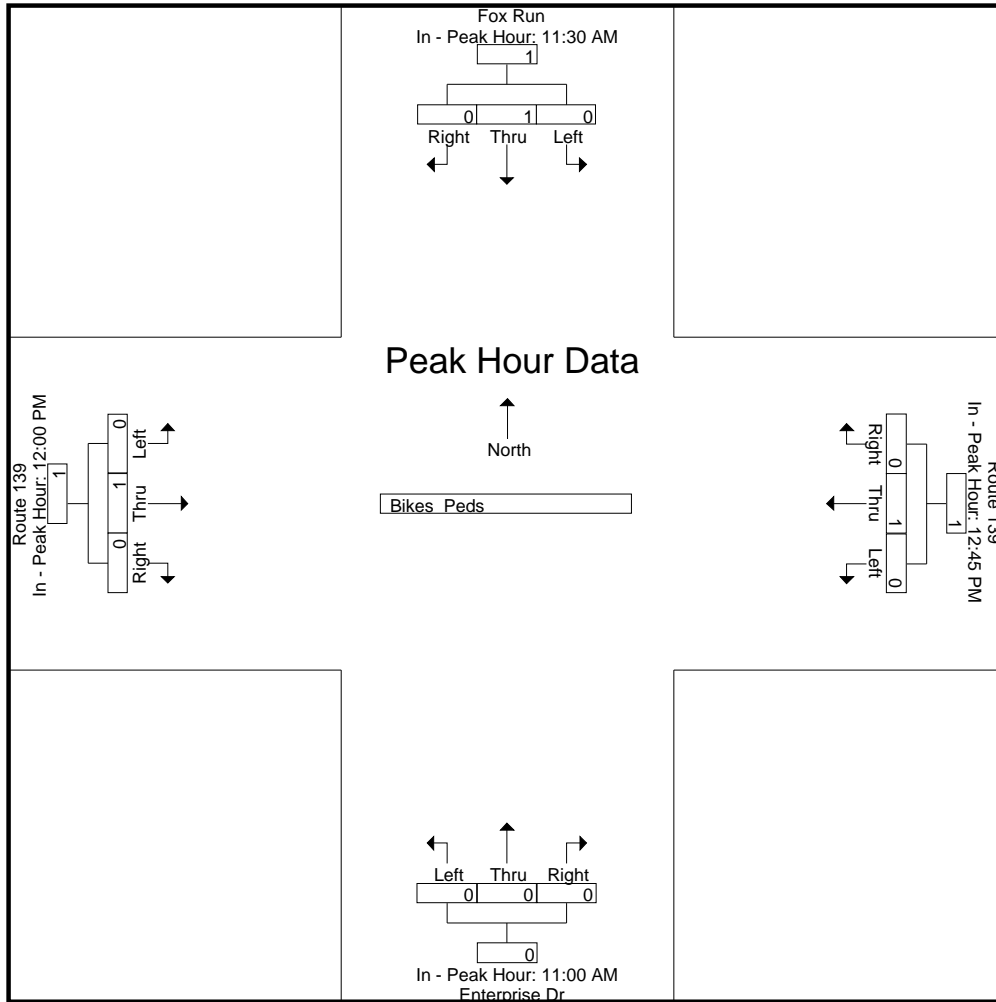
N/S Street : Fox Run/Enterprise Drive  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy



Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	11:30 AM				12:45 PM				11:00 AM				12:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	1	0	1	0	1	0	1	0	0	0	0	0	1	0	1
Total Volume	0	1	0	1	0	1	0	1	0	0	0	0	0	1	0	1
% App. Total	0	100	0		0	100	0		0	0	0		0	100	0	
PHF	.000	.250	.000	.250	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250

N/S Street : Fox Run/Enterprise Drive  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy



# Accurate Counts

978-664-2565

N/S Street : Furnace St / Proprietors Dr  
 E/W Street : Route 139  
 City/State : Marshfield, MA  
 Weather : Rain

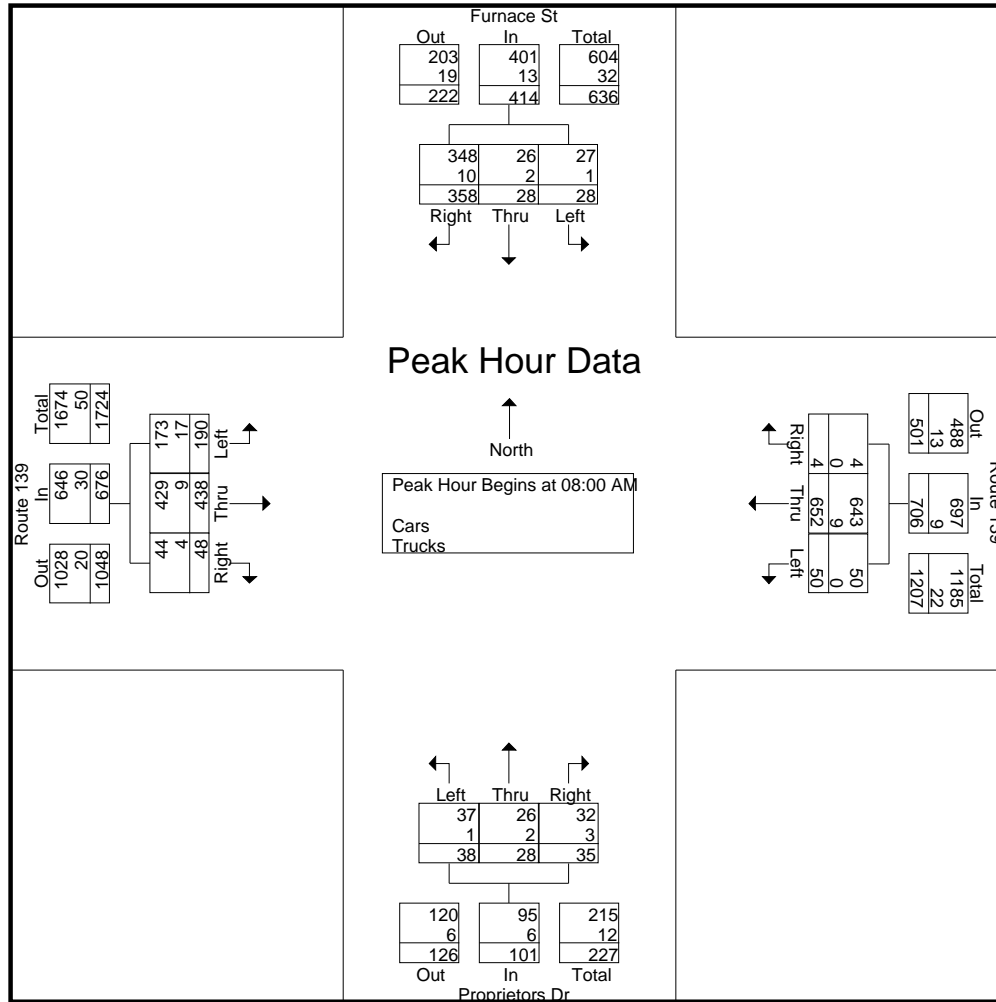
File Name : 90960005  
 Site Code : 90960005  
 Start Date : 9/16/2021  
 Page No : 1

### Groups Printed- Cars - Trucks

Start Time	Furnace St From North			Route 139 From East			Proprietors Dr From South			Route 139 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	39	8	91	4	221	6	9	5	8	34	46	12	483
07:15 AM	13	3	66	8	159	2	10	3	3	53	65	13	398
07:30 AM	19	6	104	7	181	4	9	9	8	44	96	10	497
07:45 AM	5	16	95	19	175	1	8	3	3	35	125	14	499
<b>Total</b>	<b>76</b>	<b>33</b>	<b>356</b>	<b>38</b>	<b>736</b>	<b>13</b>	<b>36</b>	<b>20</b>	<b>22</b>	<b>166</b>	<b>332</b>	<b>49</b>	<b>1877</b>
08:00 AM	4	2	70	13	157	1	6	7	12	40	116	7	435
08:15 AM	2	7	91	12	168	0	7	4	8	47	103	12	461
08:30 AM	7	9	98	16	172	2	15	8	9	50	96	15	497
08:45 AM	15	10	99	9	155	1	10	9	6	53	123	14	504
<b>Total</b>	<b>28</b>	<b>28</b>	<b>358</b>	<b>50</b>	<b>652</b>	<b>4</b>	<b>38</b>	<b>28</b>	<b>35</b>	<b>190</b>	<b>438</b>	<b>48</b>	<b>1897</b>
<b>Grand Total</b>	<b>104</b>	<b>61</b>	<b>714</b>	<b>88</b>	<b>1388</b>	<b>17</b>	<b>74</b>	<b>48</b>	<b>57</b>	<b>356</b>	<b>770</b>	<b>97</b>	<b>3774</b>
Apprch %	11.8	6.9	81.2	5.9	93	1.1	41.3	26.8	31.8	29.1	63	7.9	
Total %	2.8	1.6	18.9	2.3	36.8	0.5	2	1.3	1.5	9.4	20.4	2.6	
Cars	87	57	699	88	1373	16	72	44	52	322	753	88	3651
% Cars	83.7	93.4	97.9	100	98.9	94.1	97.3	91.7	91.2	90.4	97.8	90.7	96.7
Trucks	17	4	15	0	15	1	2	4	5	34	17	9	123
% Trucks	16.3	6.6	2.1	0	1.1	5.9	2.7	8.3	8.8	9.6	2.2	9.3	3.3

Start Time	Furnace St From North				Route 139 From East				Proprietors Dr From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
<b>Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1</b>																	
<b>Peak Hour for Entire Intersection Begins at 08:00 AM</b>																	
08:00 AM	4	2	70	76	13	157	1	171	6	7	12	25	40	116	7	163	435
08:15 AM	2	7	91	100	12	168	0	180	7	4	8	19	47	103	12	162	461
08:30 AM	7	9	98	114	16	172	2	190	15	8	9	32	50	96	15	161	497
08:45 AM	15	10	99	124	9	155	1	165	10	9	6	25	53	123	14	190	504
<b>Total Volume</b>	<b>28</b>	<b>28</b>	<b>358</b>	<b>414</b>	<b>50</b>	<b>652</b>	<b>4</b>	<b>706</b>	<b>38</b>	<b>28</b>	<b>35</b>	<b>101</b>	<b>190</b>	<b>438</b>	<b>48</b>	<b>676</b>	<b>1897</b>
% App. Total	6.8	6.8	86.5		7.1	92.4	0.6		37.6	27.7	34.7		28.1	64.8	7.1		
PHF	.467	.700	.904	.835	.781	.948	.500	.929	.633	.778	.729	.789	.896	.890	.800	.889	.941
Cars	27	26	348	401	50	643	4	697	37	26	32	95	173	429	44	646	1839
% Cars	96.4	92.9	97.2	96.9	100	98.6	100	98.7	97.4	92.9	91.4	94.1	91.1	97.9	91.7	95.6	96.9
Trucks	1	2	10	13	0	9	0	9	1	2	3	6	17	9	4	30	58
% Trucks	3.6	7.1	2.8	3.1	0	1.4	0	1.3	2.6	7.1	8.6	5.9	8.9	2.1	8.3	4.4	3.1

N/S Street : Furnace St / Proprietors Dr  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				08:00 AM				08:00 AM			
+0 mins.	<b>39</b>	8	91	<b>138</b>	4	<b>221</b>	<b>6</b>	<b>231</b>	6	7	<b>12</b>	25	40	116	7	163
+15 mins.	13	3	66	82	8	159	2	169	7	4	8	19	47	103	12	162
+30 mins.	19	6	<b>104</b>	129	7	181	4	192	<b>15</b>	8	9	<b>32</b>	50	96	<b>15</b>	161
+45 mins.	5	<b>16</b>	95	116	<b>19</b>	175	1	195	10	<b>9</b>	6	25	<b>53</b>	<b>123</b>	14	<b>190</b>
Total Volume	76	33	356	465	38	736	13	787	38	28	35	101	190	438	48	676
% App. Total	16.3	7.1	76.6		4.8	93.5	1.7		37.6	27.7	34.7		28.1	64.8	7.1	
PHF	.487	.516	.856	.842	.500	.833	.542	.852	.633	.778	.729	.789	.896	.890	.800	.889
Cars	60	31	351	442	38	730	12	780	37	26	32	95	173	429	44	646
% Cars	78.9	93.9	98.6	95.1	100	99.2	92.3	99.1	97.4	92.9	91.4	94.1	91.1	97.9	91.7	95.6
Trucks	16	2	5	23	0	6	1	7	1	2	3	6	17	9	4	30
% Trucks	21.1	6.1	1.4	4.9	0	0.8	7.7	0.9	2.6	7.1	8.6	5.9	8.9	2.1	8.3	4.4

# Accurate Counts

978-664-2565

File Name : 90960005

Site Code : 90960005

Start Date : 9/16/2021

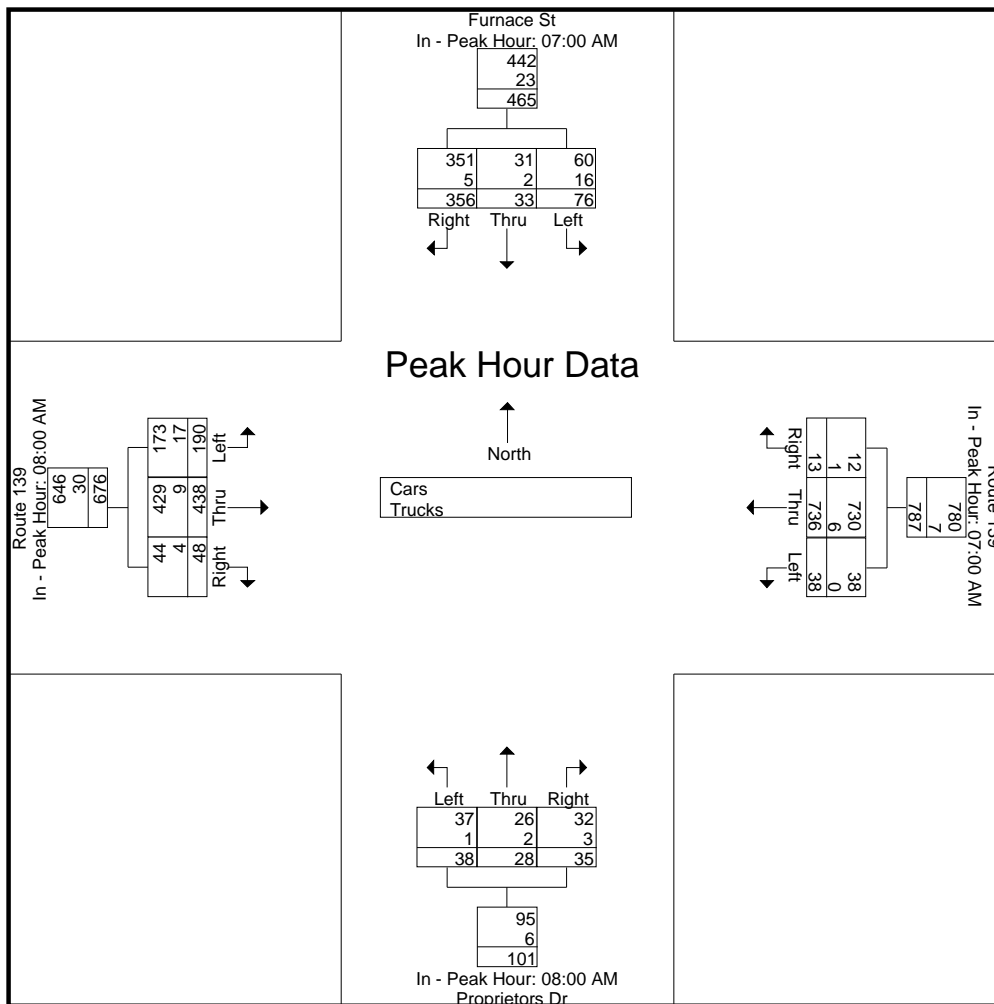
Page No : 3

N/S Street : Furnace St / Proprietors Dr

E/W Street : Route 139

City/State : Marshfield, MA

Weather : Rain



# Accurate Counts

978-664-2565

N/S Street : Furnace St / Proprietors Dr  
 E/W Street : Route 139  
 City/State : Marshfield, MA  
 Weather : Rain

File Name : 90960005  
 Site Code : 90960005  
 Start Date : 9/16/2021  
 Page No : 4

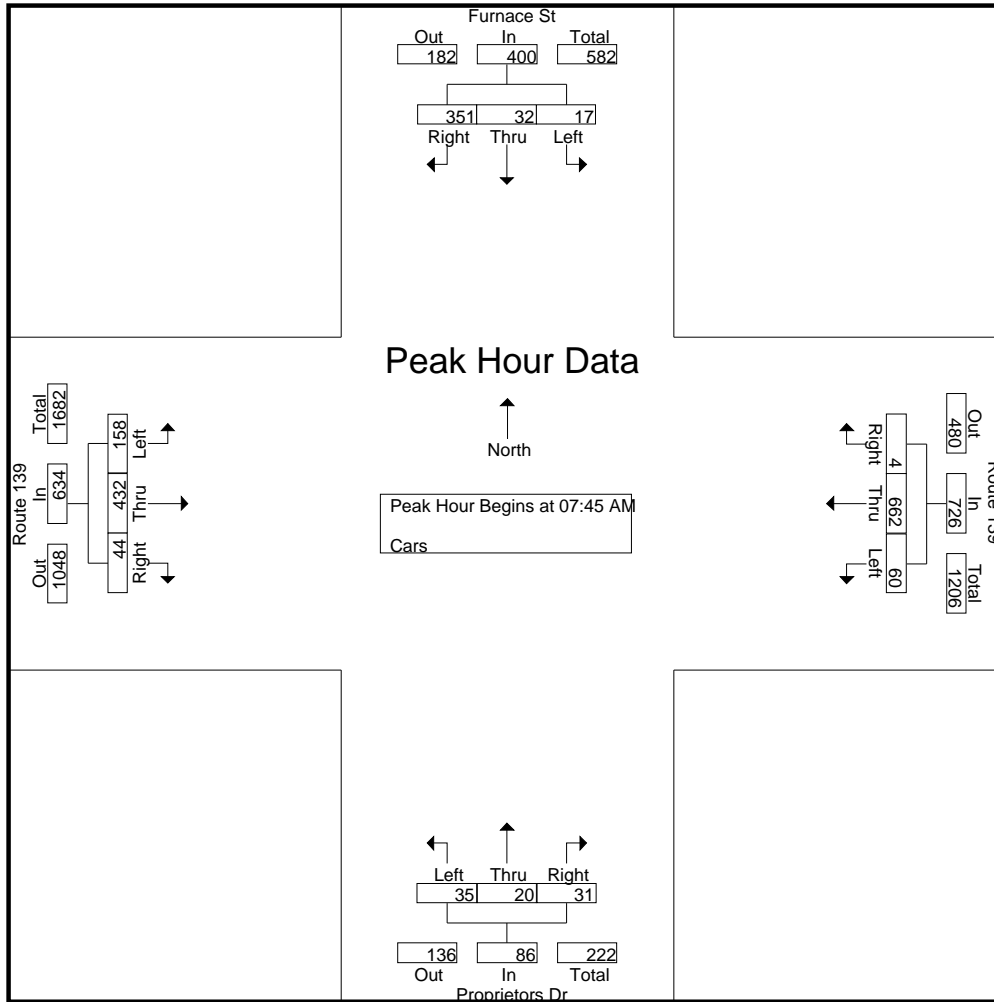
### Groups Printed- Cars

Start Time	Furnace St From North			Route 139 From East			Proprietors Dr From South			Route 139 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	31	7	89	4	220	6	9	4	8	31	45	10	464
07:15 AM	13	3	65	8	158	2	9	3	3	45	62	12	383
07:30 AM	11	5	102	7	179	3	9	8	7	43	93	8	475
07:45 AM	5	16	95	19	173	1	8	3	2	30	124	14	490
<b>Total</b>	<b>60</b>	<b>31</b>	<b>351</b>	<b>38</b>	<b>730</b>	<b>12</b>	<b>35</b>	<b>18</b>	<b>20</b>	<b>149</b>	<b>324</b>	<b>44</b>	<b>1812</b>
08:00 AM	4	2	69	13	153	1	6	5	12	38	115	6	424
08:15 AM	2	6	89	12	167	0	7	4	8	44	97	12	448
08:30 AM	6	8	98	16	169	2	14	8	9	46	96	12	484
08:45 AM	15	10	92	9	154	1	10	9	3	45	121	14	483
<b>Total</b>	<b>27</b>	<b>26</b>	<b>348</b>	<b>50</b>	<b>643</b>	<b>4</b>	<b>37</b>	<b>26</b>	<b>32</b>	<b>173</b>	<b>429</b>	<b>44</b>	<b>1839</b>
<b>Grand Total</b>	<b>87</b>	<b>57</b>	<b>699</b>	<b>88</b>	<b>1373</b>	<b>16</b>	<b>72</b>	<b>44</b>	<b>52</b>	<b>322</b>	<b>753</b>	<b>88</b>	<b>3651</b>
Apprch %	10.3	6.8	82.9	6	93	1.1	42.9	26.2	31	27.7	64.7	7.6	
Total %	2.4	1.6	19.1	2.4	37.6	0.4	2	1.2	1.4	8.8	20.6	2.4	

Start Time	Furnace St From North				Route 139 From East				Proprietors Dr From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	5	<b>16</b>	95	<b>116</b>	<b>19</b>	<b>173</b>	1	<b>193</b>	8	3	2	13	30	<b>124</b>	<b>14</b>	<b>168</b>	<b>490</b>
08:00 AM	4	2	69	75	13	153	1	167	6	5	<b>12</b>	23	38	115	6	159	424
08:15 AM	2	6	89	97	12	167	0	179	7	4	8	19	44	97	12	153	448
08:30 AM	<b>6</b>	8	<b>98</b>	112	16	169	<b>2</b>	187	<b>14</b>	<b>8</b>	9	<b>31</b>	<b>46</b>	96	12	154	484
Total Volume	17	32	351	400	60	662	4	726	35	20	31	86	158	432	44	634	1846
% App. Total	4.2	8	87.8		8.3	91.2	0.6		40.7	23.3	36		24.9	68.1	6.9		
PHF	.708	.500	.895	.862	.789	.957	.500	.940	.625	.625	.646	.694	.859	.871	.786	.943	.942



N/S Street : Furnace St / Proprietors Dr  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:00 AM				08:00 AM				08:00 AM							
+0 mins.	<b>31</b>	7	89	<b>127</b>	4	<b>220</b>	<b>6</b>	<b>230</b>	6	5	<b>12</b>	23	38	115	6	159
+15 mins.	13	3	65	81	8	158	2	168	7	4	8	19	44	97	12	153
+30 mins.	11	5	<b>102</b>	118	7	179	3	189	<b>14</b>	8	9	<b>31</b>	<b>46</b>	96	12	154
+45 mins.	5	<b>16</b>	95	116	<b>19</b>	173	1	193	10	<b>9</b>	3	22	45	<b>121</b>	<b>14</b>	<b>180</b>
Total Volume	60	31	351	442	38	730	12	780	37	26	32	95	173	429	44	646
% App. Total	13.6	7	79.4		4.9	93.6	1.5		38.9	27.4	33.7		26.8	66.4	6.8	
PHF	.484	.484	.860	.870	.500	.830	.500	.848	.661	.722	.667	.766	.940	.886	.786	.897

# Accurate Counts

978-664-2565

File Name : 90960005

Site Code : 90960005

Start Date : 9/16/2021

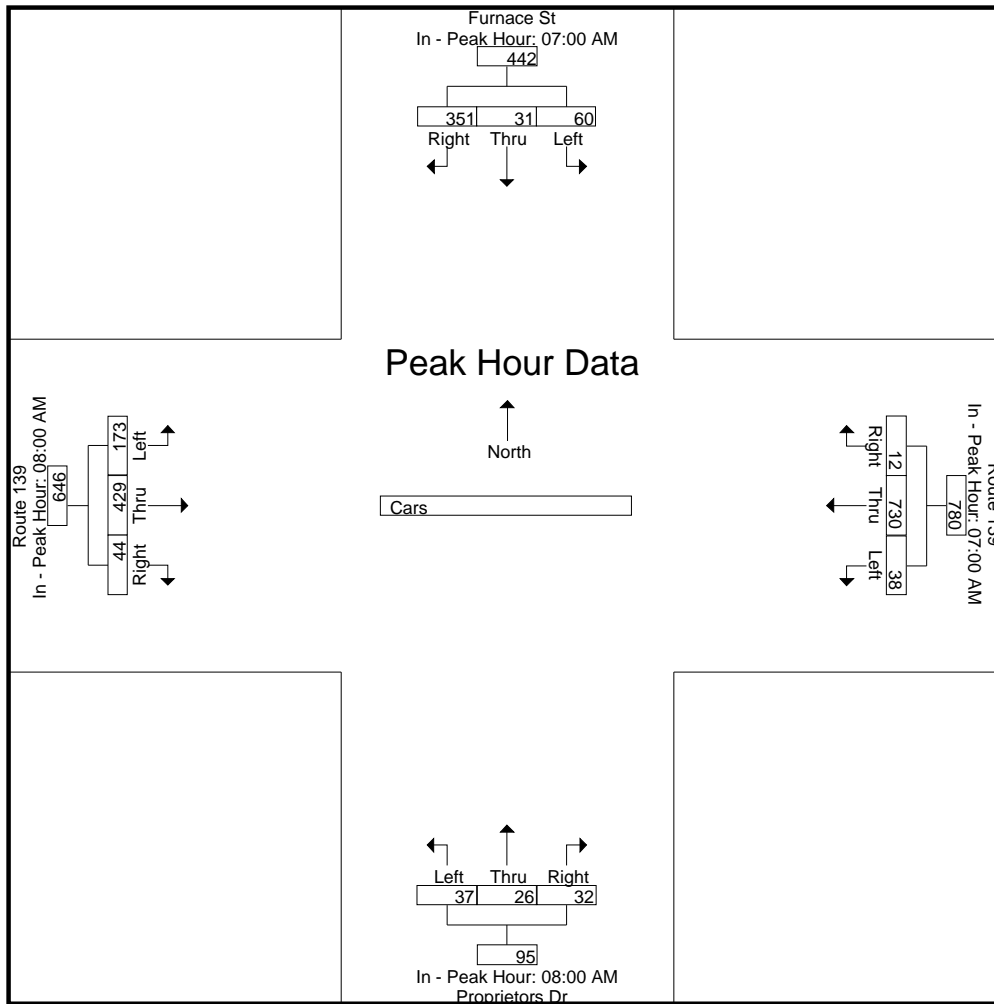
Page No : 6

N/S Street : Furnace St / Proprietors Dr

E/W Street : Route 139

City/State : Marshfield, MA

Weather : Rain



# Accurate Counts

978-664-2565

N/S Street : Furnace St / Proprietors Dr  
 E/W Street : Route 139  
 City/State : Marshfield, MA  
 Weather : Rain

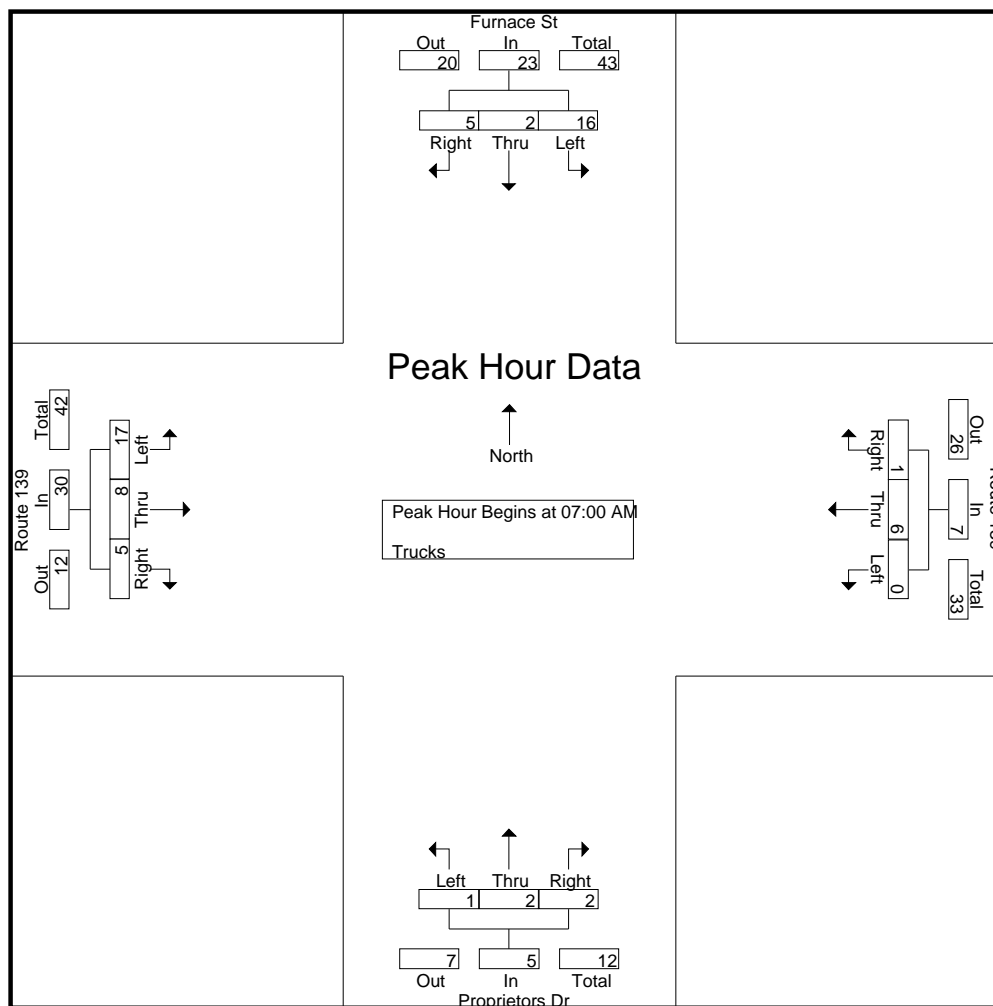
File Name : 90960005  
 Site Code : 90960005  
 Start Date : 9/16/2021  
 Page No : 7

## Groups Printed- Trucks

Start Time	Furnace St From North			Route 139 From East			Proprietors Dr From South			Route 139 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	8	1	2	0	1	0	0	1	0	3	1	2	19
07:15 AM	0	0	1	0	1	0	1	0	0	8	3	1	15
07:30 AM	8	1	2	0	2	1	0	1	1	1	3	2	22
07:45 AM	0	0	0	0	2	0	0	0	1	5	1	0	9
<b>Total</b>	<b>16</b>	<b>2</b>	<b>5</b>	<b>0</b>	<b>6</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>17</b>	<b>8</b>	<b>5</b>	<b>65</b>
08:00 AM	0	0	1	0	4	0	0	2	0	2	1	1	11
08:15 AM	0	1	2	0	1	0	0	0	0	3	6	0	13
08:30 AM	1	1	0	0	3	0	1	0	0	4	0	3	13
08:45 AM	0	0	7	0	1	0	0	0	3	8	2	0	21
<b>Total</b>	<b>1</b>	<b>2</b>	<b>10</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>17</b>	<b>9</b>	<b>4</b>	<b>58</b>
<b>Grand Total</b>	<b>17</b>	<b>4</b>	<b>15</b>	<b>0</b>	<b>15</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>5</b>	<b>34</b>	<b>17</b>	<b>9</b>	<b>123</b>
Apprch %	47.2	11.1	41.7	0	93.8	6.2	18.2	36.4	45.5	56.7	28.3	15	
Total %	13.8	3.3	12.2	0	12.2	0.8	1.6	3.3	4.1	27.6	13.8	7.3	

Start Time	Furnace St From North				Route 139 From East				Proprietors Dr From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	8	1	2	11	0	1	0	1	0	1	0	1	3	1	2	6	19
07:15 AM	0	0	1	1	0	1	0	1	1	0	0	1	8	3	1	12	15
07:30 AM	8	1	2	11	0	2	1	3	0	1	1	2	1	3	2	6	22
07:45 AM	0	0	0	0	0	2	0	2	0	0	1	1	5	1	0	6	9
<b>Total Volume</b>	<b>16</b>	<b>2</b>	<b>5</b>	<b>23</b>	<b>0</b>	<b>6</b>	<b>1</b>	<b>7</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>5</b>	<b>17</b>	<b>8</b>	<b>5</b>	<b>30</b>	<b>65</b>
<b>% App. Total</b>	<b>69.6</b>	<b>8.7</b>	<b>21.7</b>		<b>0</b>	<b>85.7</b>	<b>14.3</b>		<b>20</b>	<b>40</b>	<b>40</b>		<b>56.7</b>	<b>26.7</b>	<b>16.7</b>		
PHF	.500	.500	.625	.523	.000	.750	.250	.583	.250	.500	.500	.625	.531	.667	.625	.625	.739

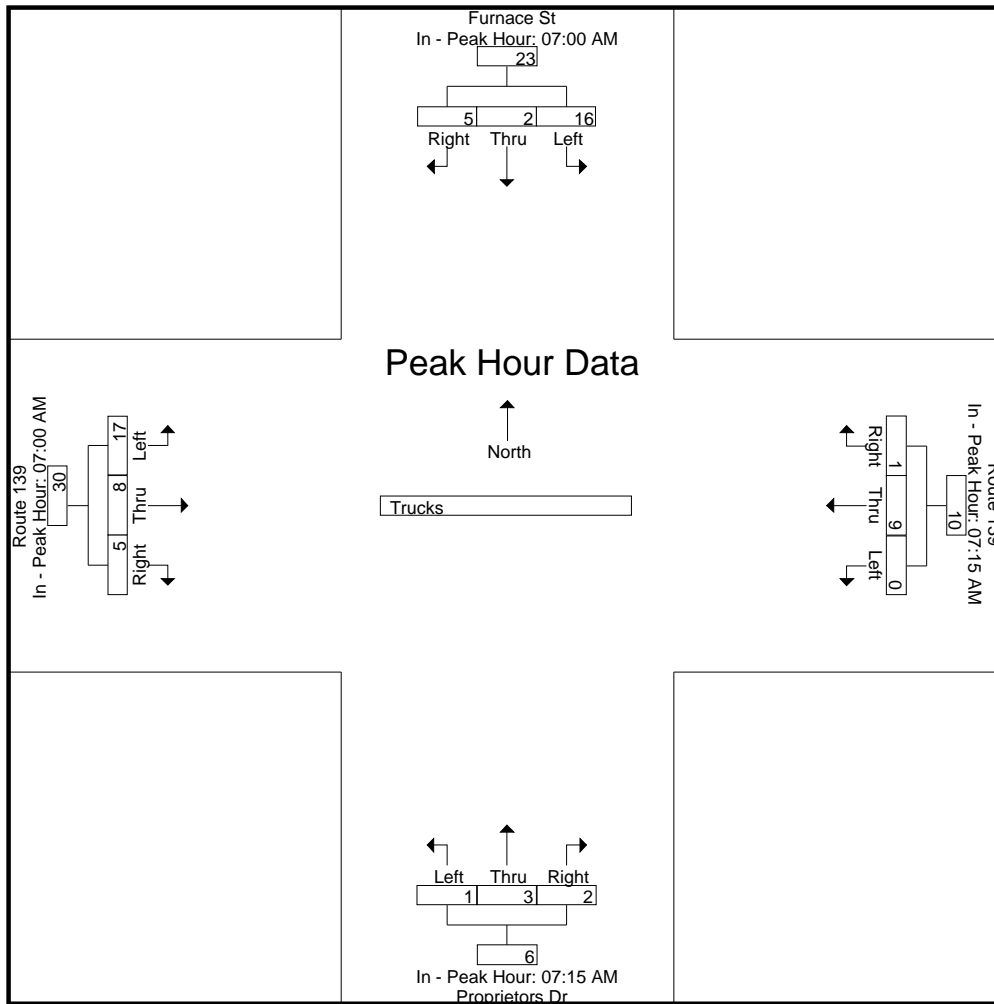
N/S Street : Furnace St / Proprietors Dr  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:00 AM				07:15 AM				07:30 AM				07:45 AM			
+0 mins.	8	1	2	11	0	1	0	1	1	0	0	1	3	1	2	6
+15 mins.	0	0	1	1	0	2	1	3	0	1	1	2	8	3	1	12
+30 mins.	8	1	2	11	0	2	0	2	0	0	1	1	1	3	2	6
+45 mins.	0	0	0	0	0	4	0	4	0	2	0	2	5	1	0	6
Total Volume	16	2	5	23	0	9	1	10	1	3	2	6	17	8	5	30
% App. Total	69.6	8.7	21.7		0	90	10		16.7	50	33.3		56.7	26.7	16.7	
PHF	.500	.500	.625	.523	.000	.563	.250	.625	.250	.375	.500	.750	.531	.667	.625	.625

N/S Street : Furnace St / Proprietors Dr  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



**Accurate Counts**  
978-664-2565

N/S Street : Furnace St / Proprietors Dr  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain

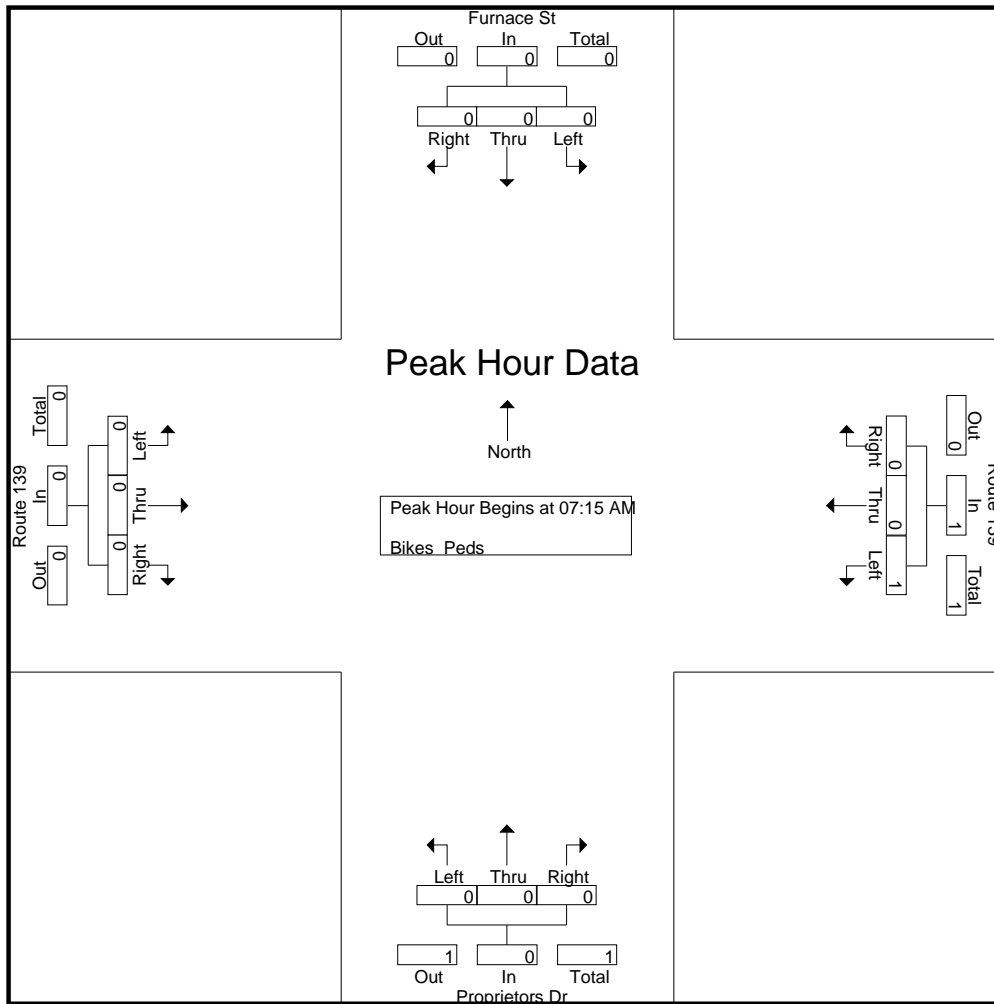
File Name : 90960005  
Site Code : 90960005  
Start Date : 9/16/2021  
Page No : 10

Groups Printed- Bikes Peds

Start Time	Furnace St From North				Route 139 From East				Proprietors Dr From South				Route 139 From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1
<b>Grand Total</b>	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Apprch %	0	0	0		100	0	0		0	0	0		0	0	0				
Total %	0	0	0		100	0	0		0	0	0		0	0	0		0	100	

Start Time	Furnace St From North				Route 139 From East				Proprietors Dr From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
<b>Total Volume</b>	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
<b>% App. Total</b>	0	0	0		100	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.250

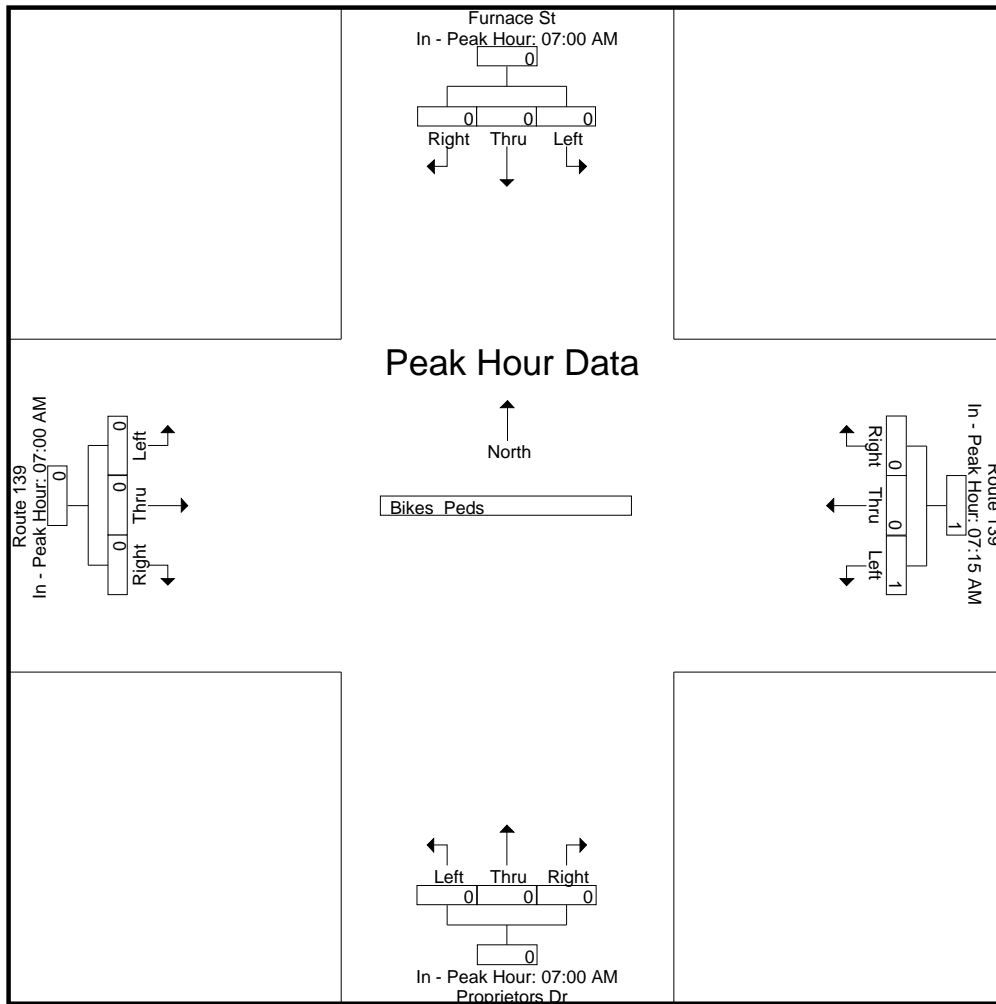
N/S Street : Furnace St / Proprietors Dr  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:00 AM				07:15 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	100	0	0	100	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000

N/S Street : Furnace St / Proprietors Dr  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain





# Accurate Counts

978-664-2565

N/S Street : Furnace St / Proprietors Dr  
 E/W Street : Route 139  
 City/State : Marshfield, MA  
 Weather : Rain

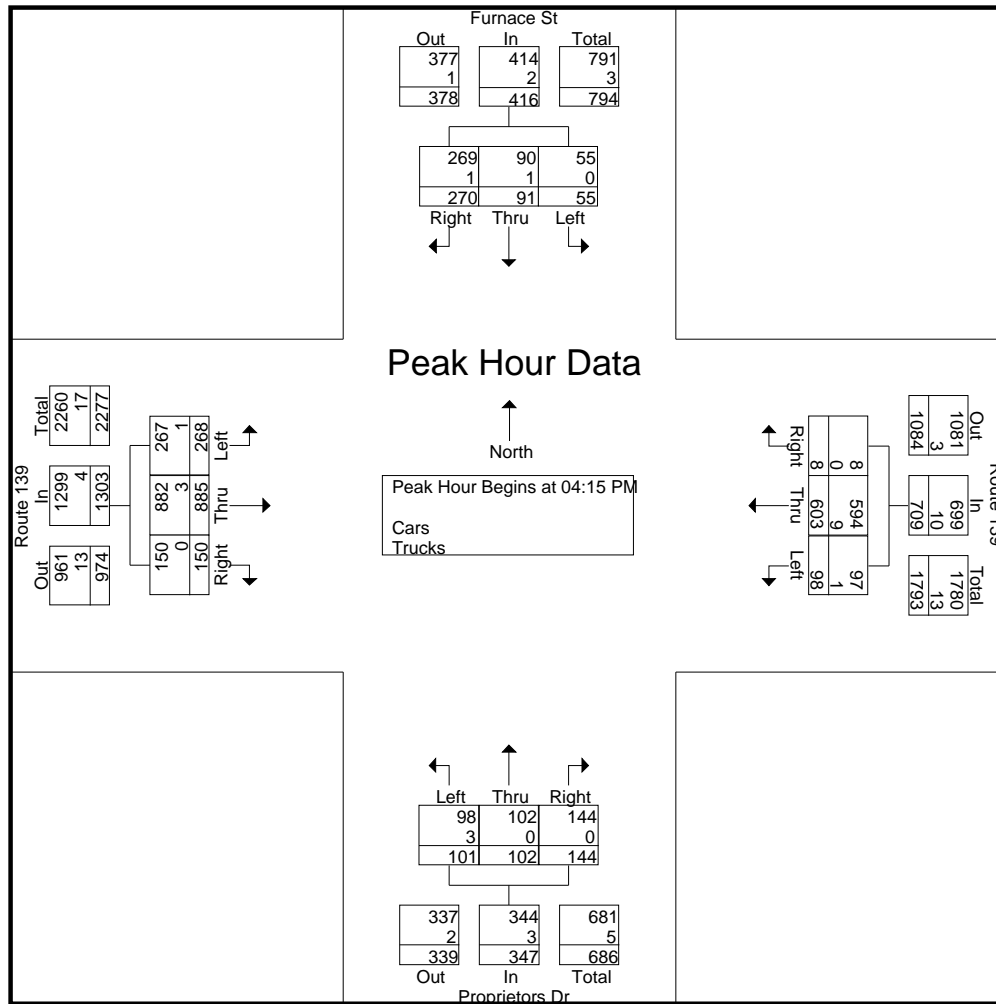
File Name : 90960005  
 Site Code : 90960005  
 Start Date : 9/16/2021  
 Page No : 1

### Groups Printed- Cars - Trucks

Start Time	Furnace St From North			Route 139 From East			Proprietors Dr From South			Route 139 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
04:00 PM	20	21	77	29	167	6	15	22	22	73	209	24	685
04:15 PM	9	16	65	19	165	2	23	28	34	78	227	35	701
04:30 PM	20	27	74	28	126	2	25	19	39	70	226	33	689
04:45 PM	13	29	62	28	139	1	23	25	37	48	207	39	651
<b>Total</b>	<b>62</b>	<b>93</b>	<b>278</b>	<b>104</b>	<b>597</b>	<b>11</b>	<b>86</b>	<b>94</b>	<b>132</b>	<b>269</b>	<b>869</b>	<b>131</b>	<b>2726</b>
05:00 PM	13	19	69	23	173	3	30	30	34	72	225	43	734
05:15 PM	10	27	77	16	145	2	20	35	37	65	212	47	693
05:30 PM	10	14	49	18	124	4	18	21	28	75	210	31	602
05:45 PM	16	19	70	13	142	2	20	24	28	68	164	27	593
<b>Total</b>	<b>49</b>	<b>79</b>	<b>265</b>	<b>70</b>	<b>584</b>	<b>11</b>	<b>88</b>	<b>110</b>	<b>127</b>	<b>280</b>	<b>811</b>	<b>148</b>	<b>2622</b>
<b>Grand Total</b>	<b>111</b>	<b>172</b>	<b>543</b>	<b>174</b>	<b>1181</b>	<b>22</b>	<b>174</b>	<b>204</b>	<b>259</b>	<b>549</b>	<b>1680</b>	<b>279</b>	<b>5348</b>
Apprch %	13.4	20.8	65.7	12.6	85.8	1.6	27.3	32	40.7	21.9	67	11.1	
Total %	2.1	3.2	10.2	3.3	22.1	0.4	3.3	3.8	4.8	10.3	31.4	5.2	
Cars	111	170	536	173	1170	22	170	203	259	545	1675	277	5311
% Cars	100	98.8	98.7	99.4	99.1	100	97.7	99.5	100	99.3	99.7	99.3	99.3
Trucks	0	2	7	1	11	0	4	1	0	4	5	2	37
% Trucks	0	1.2	1.3	0.6	0.9	0	2.3	0.5	0	0.7	0.3	0.7	0.7

Start Time	Furnace St From North				Route 139 From East				Proprietors Dr From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	9	16	65	90	19	165	2	186	23	28	34	85	<b>78</b>	<b>227</b>	35	<b>340</b>	701
04:30 PM	<b>20</b>	27	<b>74</b>	<b>121</b>	<b>28</b>	126	2	156	25	19	<b>39</b>	83	70	226	33	329	689
04:45 PM	13	<b>29</b>	62	104	28	139	1	168	23	25	37	85	48	207	39	294	651
05:00 PM	13	19	69	101	23	<b>173</b>	<b>3</b>	<b>199</b>	<b>30</b>	<b>30</b>	34	<b>94</b>	72	225	<b>43</b>	340	<b>734</b>
Total Volume	55	91	270	416	98	603	8	709	101	102	144	347	268	885	150	1303	2775
% App. Total	13.2	21.9	64.9		13.8	85	1.1		29.1	29.4	41.5		20.6	67.9	11.5		
PHF	.688	.784	.912	.860	.875	.871	.667	.891	.842	.850	.923	.923	.859	.975	.872	.958	.945
Cars	55	90	269	414	97	594	8	699	98	102	144	344	267	882	150	1299	2756
% Cars	100	98.9	99.6	99.5	99.0	98.5	100	98.6	97.0	100	100	99.1	99.6	99.7	100	99.7	99.3
Trucks	0	1	1	2	1	9	0	10	3	0	0	3	1	3	0	4	19
% Trucks	0	1.1	0.4	0.5	1.0	1.5	0	1.4	3.0	0	0	0.9	0.4	0.3	0	0.3	0.7

N/S Street : Furnace St / Proprietors Dr  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	04:30 PM				04:00 PM				04:30 PM				04:15 PM			
+0 mins.	<b>20</b>	27	74	<b>121</b>	<b>29</b>	<b>167</b>	<b>6</b>	<b>202</b>	25	19	<b>39</b>	83	<b>78</b>	<b>227</b>	35	<b>340</b>
+15 mins.	13	<b>29</b>	62	104	19	165	2	186	23	25	37	85	70	226	33	329
+30 mins.	13	19	69	101	28	126	2	156	<b>30</b>	<b>30</b>	<b>34</b>	<b>94</b>	48	207	39	294
+45 mins.	10	27	<b>77</b>	114	28	139	1	168	20	<b>35</b>	37	92	72	225	<b>43</b>	340
Total Volume	56	102	282	440	104	597	11	712	98	109	147	354	268	885	150	1303
% App. Total	12.7	23.2	64.1		14.6	83.8	1.5		27.7	30.8	41.5		20.6	67.9	11.5	
PHF	.700	.879	.916	.909	.897	.894	.458	.881	.817	.779	.942	.941	.859	.975	.872	.958
Cars	56	101	280	437	103	590	11	704	95	108	147	350	267	882	150	1299
% Cars	100	99	99.3	99.3	99	98.8	100	98.9	96.9	99.1	100	98.9	99.6	99.7	100	99.7
Trucks	0	1	2	3	1	7	0	8	3	1	0	4	1	3	0	4
% Trucks	0	1	0.7	0.7	1	1.2	0	1.1	3.1	0.9	0	1.1	0.4	0.3	0	0.3

# Accurate Counts

978-664-2565

File Name : 90960005

Site Code : 90960005

Start Date : 9/16/2021

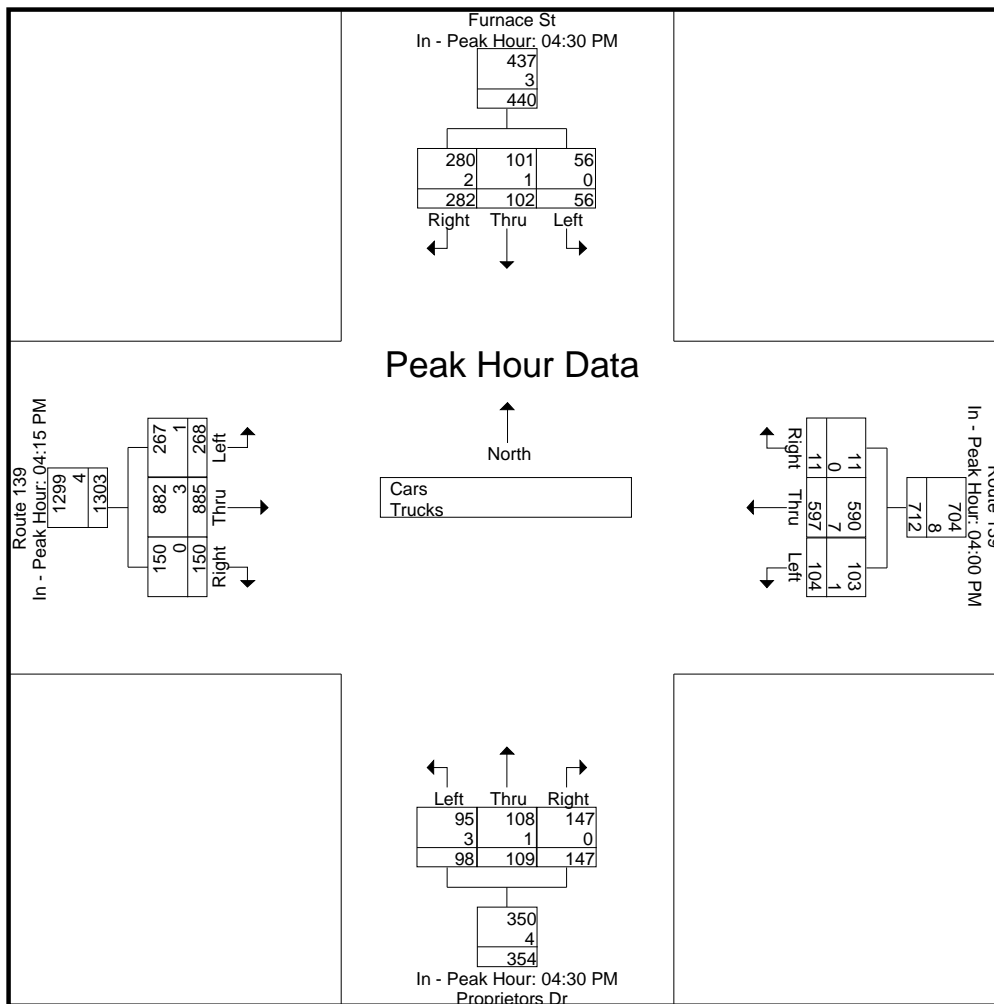
Page No : 3

N/S Street : Furnace St / Proprietors Dr

E/W Street : Route 139

City/State : Marshfield, MA

Weather : Rain



# Accurate Counts

978-664-2565

N/S Street : Furnace St / Proprietors Dr  
 E/W Street : Route 139  
 City/State : Marshfield, MA  
 Weather : Rain

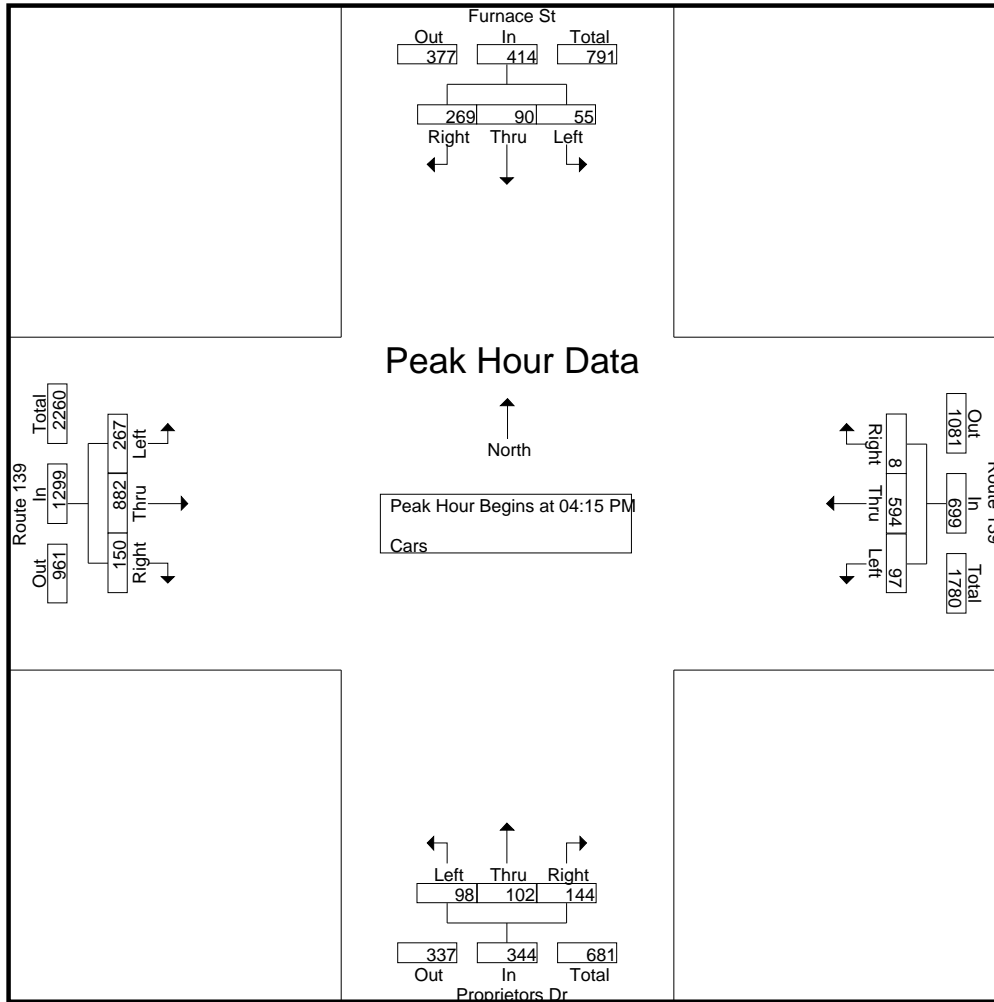
File Name : 90960005  
 Site Code : 90960005  
 Start Date : 9/16/2021  
 Page No : 4

## Groups Printed- Cars

Start Time	Furnace St From North			Route 139 From East			Proprietors Dr From South			Route 139 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
04:00 PM	20	21	74	29	166	6	15	22	22	72	209	24	680
04:15 PM	9	16	64	19	162	2	23	28	34	77	227	35	696
04:30 PM	20	27	74	27	124	2	25	19	39	70	225	33	685
04:45 PM	13	28	62	28	138	1	22	25	37	48	206	39	647
<b>Total</b>	<b>62</b>	<b>92</b>	<b>274</b>	<b>103</b>	<b>590</b>	<b>11</b>	<b>85</b>	<b>94</b>	<b>132</b>	<b>267</b>	<b>867</b>	<b>131</b>	<b>2708</b>
05:00 PM	13	19	69	23	170	3	28	30	34	72	224	43	728
05:15 PM	10	27	75	16	144	2	20	34	37	65	212	46	688
05:30 PM	10	13	48	18	124	4	17	21	28	74	208	31	596
05:45 PM	16	19	70	13	142	2	20	24	28	67	164	26	591
<b>Total</b>	<b>49</b>	<b>78</b>	<b>262</b>	<b>70</b>	<b>580</b>	<b>11</b>	<b>85</b>	<b>109</b>	<b>127</b>	<b>278</b>	<b>808</b>	<b>146</b>	<b>2603</b>
<b>Grand Total</b>	<b>111</b>	<b>170</b>	<b>536</b>	<b>173</b>	<b>1170</b>	<b>22</b>	<b>170</b>	<b>203</b>	<b>259</b>	<b>545</b>	<b>1675</b>	<b>277</b>	<b>5311</b>
Apprch %	13.6	20.8	65.6	12.7	85.7	1.6	26.9	32.1	41	21.8	67.1	11.1	
Total %	2.1	3.2	10.1	3.3	22	0.4	3.2	3.8	4.9	10.3	31.5	5.2	

Start Time	Furnace St From North				Route 139 From East				Proprietors Dr From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	9	16	64	89	19	162	2	183	23	28	34	85	<b>77</b>	<b>227</b>	35	<b>339</b>	696
04:30 PM	<b>20</b>	27	<b>74</b>	<b>121</b>	27	124	2	153	25	19	<b>39</b>	83	70	225	33	328	685
04:45 PM	13	<b>28</b>	62	103	<b>28</b>	138	1	167	22	25	37	84	48	206	39	293	647
05:00 PM	13	19	69	101	23	<b>170</b>	<b>3</b>	<b>196</b>	<b>28</b>	<b>30</b>	34	<b>92</b>	72	224	<b>43</b>	339	<b>728</b>
Total Volume	55	90	269	414	97	594	8	699	98	102	144	344	267	882	150	1299	2756
% App. Total	13.3	21.7	65		13.9	85	1.1		28.5	29.7	41.9		20.6	67.9	11.5		
PHF	.688	.804	.909	.855	.866	.874	.667	.892	.875	.850	.923	.935	.867	.971	.872	.958	.946

N/S Street : Furnace St / Proprietors Dr  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	04:30 PM				04:00 PM				04:30 PM				04:15 PM			
+0 mins.	<b>20</b>	27	74	<b>121</b>	<b>29</b>	<b>166</b>	<b>6</b>	<b>201</b>	25	19	<b>39</b>	83	<b>77</b>	<b>227</b>	35	<b>339</b>
+15 mins.	13	<b>28</b>	62	103	19	162	2	183	22	25	37	84	70	225	33	328
+30 mins.	13	19	69	101	27	124	2	153	<b>28</b>	<b>30</b>	<b>34</b>	<b>92</b>	48	206	39	293
+45 mins.	10	27	<b>75</b>	112	28	138	1	167	20	<b>34</b>	37	91	72	224	<b>43</b>	339
Total Volume	56	101	280	437	103	590	11	704	95	108	147	350	267	882	150	1299
% App. Total	12.8	23.1	64.1		14.6	83.8	1.6		27.1	30.9	42		20.6	67.9	11.5	
PHF	.700	.902	.933	.903	.888	.889	.458	.876	.848	.794	.942	.951	.867	.971	.872	.958

# Accurate Counts

978-664-2565

File Name : 90960005

Site Code : 90960005

Start Date : 9/16/2021

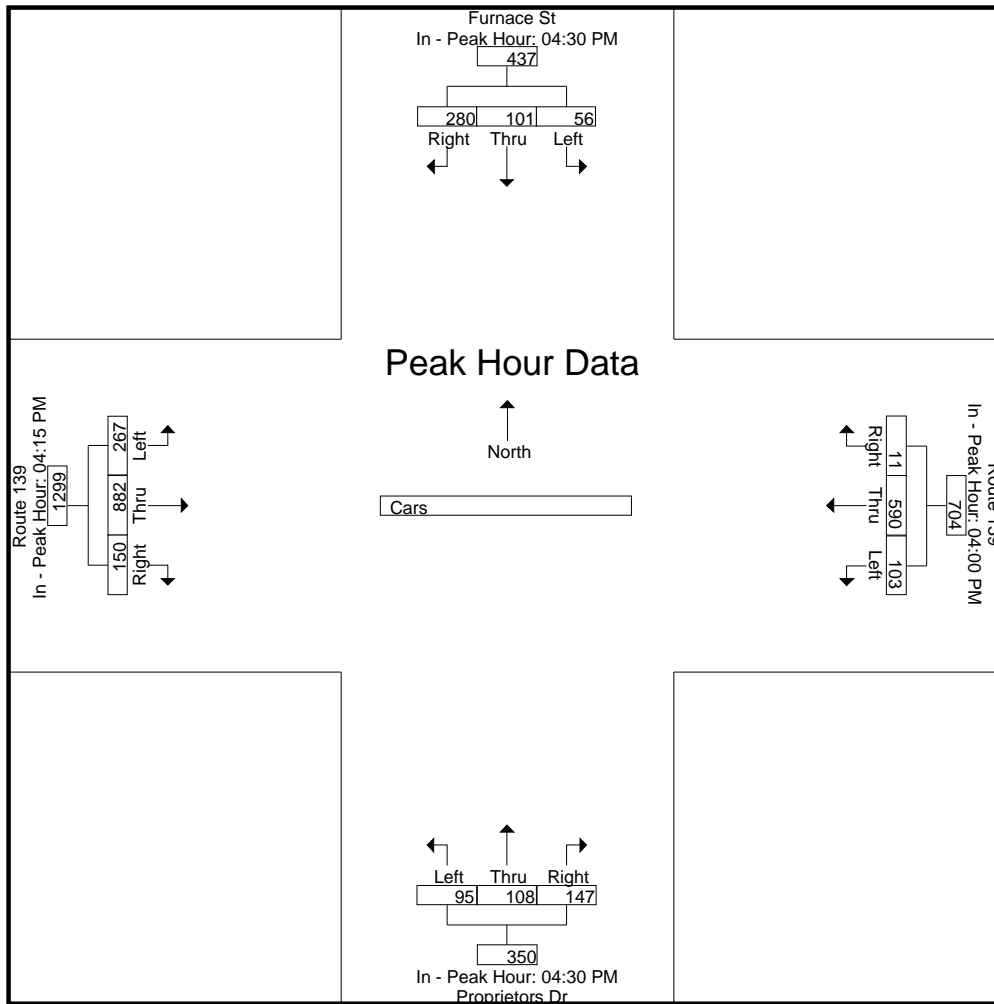
Page No : 6

N/S Street : Furnace St / Proprietors Dr

E/W Street : Route 139

City/State : Marshfield, MA

Weather : Rain



# Accurate Counts

978-664-2565

N/S Street : Furnace St / Proprietors Dr  
 E/W Street : Route 139  
 City/State : Marshfield, MA  
 Weather : Rain

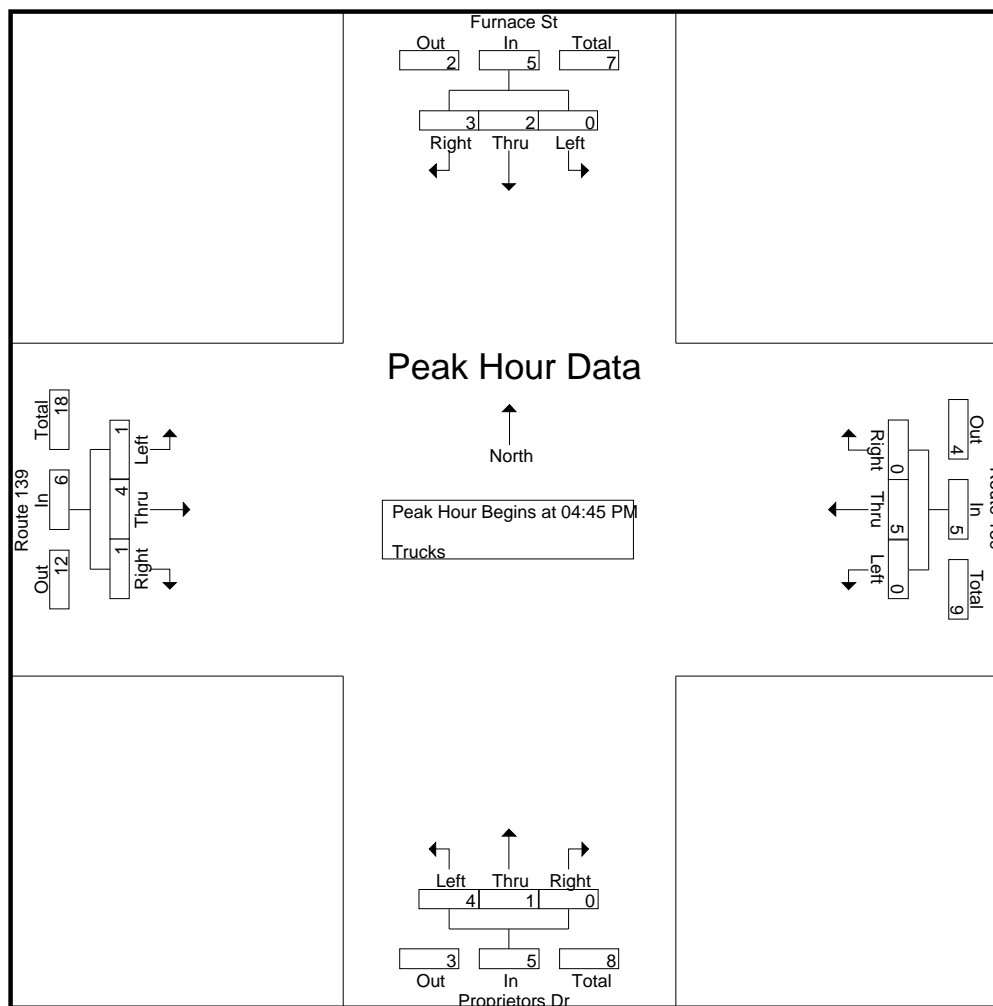
File Name : 90960005  
 Site Code : 90960005  
 Start Date : 9/16/2021  
 Page No : 7

### Groups Printed- Trucks

Start Time	Furnace St From North			Route 139 From East			Proprietors Dr From South			Route 139 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
04:00 PM	0	0	3	0	1	0	0	0	0	1	0	0	5
04:15 PM	0	0	1	0	3	0	0	0	0	1	0	0	5
04:30 PM	0	0	0	1	2	0	0	0	0	0	1	0	4
04:45 PM	0	1	0	0	1	0	1	0	0	0	1	0	4
<b>Total</b>	0	1	4	1	7	0	1	0	0	2	2	0	18
05:00 PM	0	0	0	0	3	0	2	0	0	0	1	0	6
05:15 PM	0	0	2	0	1	0	0	1	0	0	0	1	5
05:30 PM	0	1	1	0	0	0	1	0	0	1	2	0	6
05:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	2
<b>Total</b>	0	1	3	0	4	0	3	1	0	2	3	2	19
<b>Grand Total</b>	0	2	7	1	11	0	4	1	0	4	5	2	37
Apprch %	0	22.2	77.8	8.3	91.7	0	80	20	0	36.4	45.5	18.2	
Total %	0	5.4	18.9	2.7	29.7	0	10.8	2.7	0	10.8	13.5	5.4	

Start Time	Furnace St From North				Route 139 From East				Proprietors Dr From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	1	0	1	0	1	0	1	1	0	0	1	0	1	0	1	4
05:00 PM	0	0	0	0	0	3	0	3	2	0	0	2	0	1	0	1	6
05:15 PM	0	0	2	2	0	1	0	1	0	1	0	1	0	0	1	1	5
05:30 PM	0	1	1	2	0	0	0	0	1	0	0	1	1	2	0	3	6
<b>Total Volume</b>	0	2	3	5	0	5	0	5	4	1	0	5	1	4	1	6	21
<b>% App. Total</b>	0	40	60		0	100	0		80	20	0		16.7	66.7	16.7		
PHF	.000	.500	.375	.625	.000	.417	.000	.417	.500	.250	.000	.625	.250	.500	.250	.500	.875

N/S Street : Furnace St / Proprietors Dr  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain

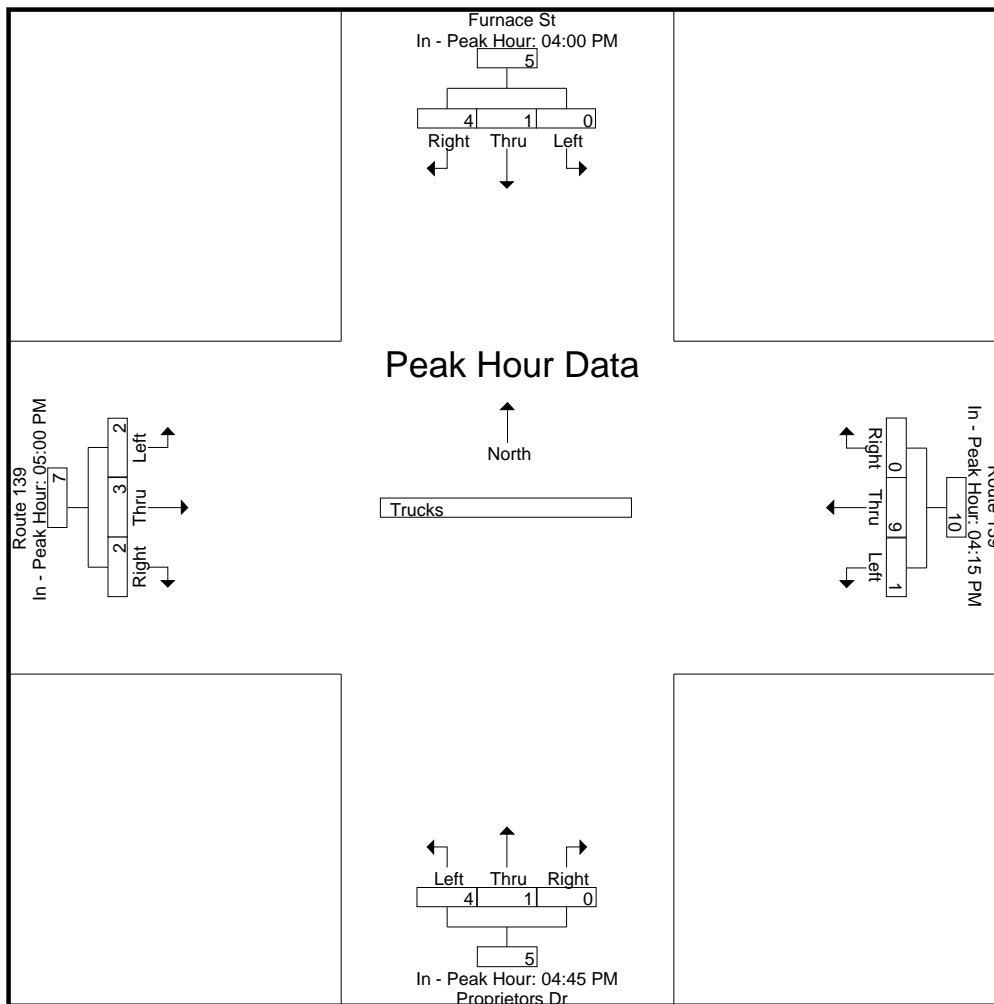


Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	04:00 PM				04:15 PM				04:45 PM				05:00 PM			
+0 mins.	0	0	3	3	0	3	0	3	1	0	0	1	0	1	0	1
+15 mins.	0	0	1	1	1	2	0	3	2	0	0	2	0	0	1	1
+30 mins.	0	0	0	0	0	1	0	1	0	1	0	1	1	2	0	3
+45 mins.	0	1	0	1	0	3	0	3	1	0	0	1	1	0	1	2
Total Volume	0	1	4	5	1	9	0	10	4	1	0	5	2	3	2	7
% App. Total	0	20	80		10	90	0		80	20	0		28.6	42.9	28.6	
PHF	.000	.250	.333	.417	.250	.750	.000	.833	.500	.250	.000	.625	.500	.375	.500	.583



N/S Street : Furnace St / Proprietors Dr  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



**Accurate Counts**  
978-664-2565

N/S Street : Furnace St / Proprietors Dr  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain

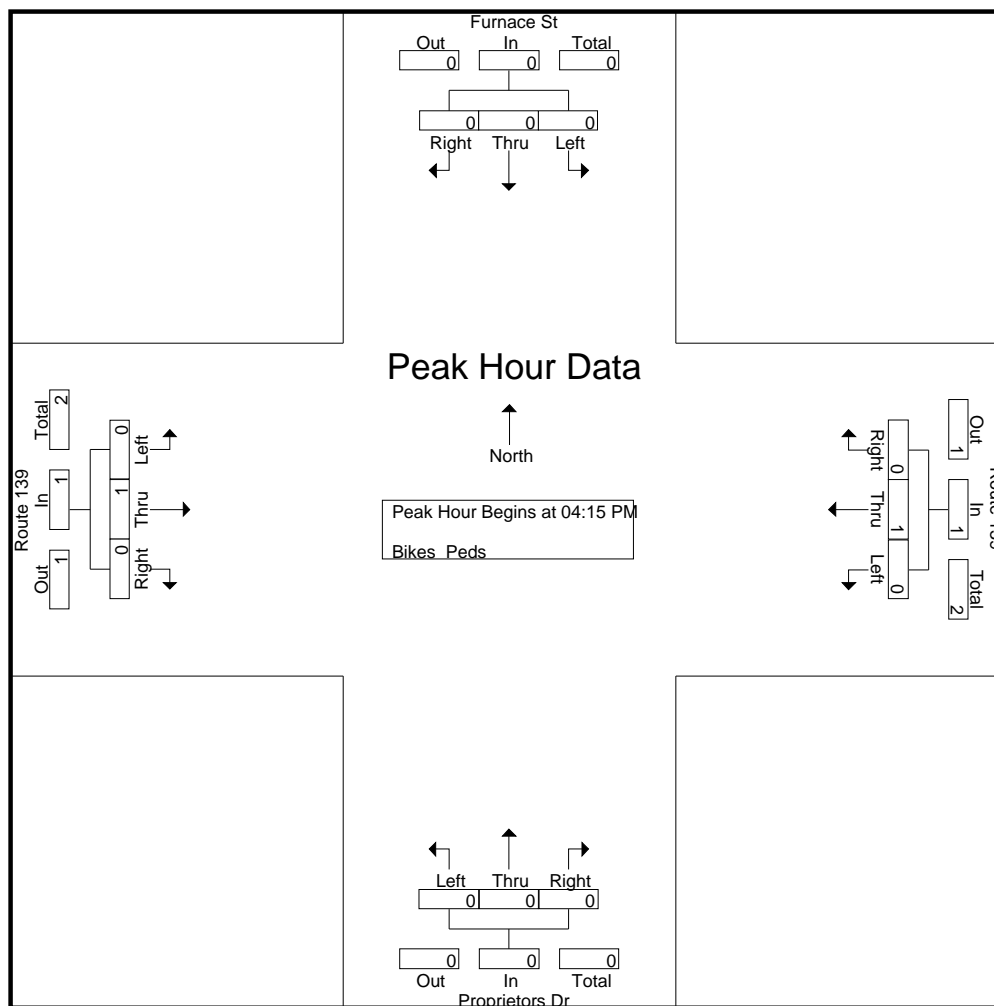
File Name : 90960005  
Site Code : 90960005  
Start Date : 9/16/2021  
Page No : 10

Groups Printed- Bikes Peds

Start Time	Furnace St From North				Route 139 From East				Proprietors Dr From South				Route 139 From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	0	7
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	8	8	1	9
05:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	1	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	3	3	2	5
<b>Grand Total</b>	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	11	11	3	14
Apprch %	0	0	0		0	100	0		0	0	0		50	50	0				
Total %	0	0	0		0	33.3	0		0	0	0		33.3	33.3	0		78.6	21.4	

Start Time	Furnace St From North				Route 139 From East				Proprietors Dr From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
<b>Total Volume</b>	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
<b>% App. Total</b>	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250	.500

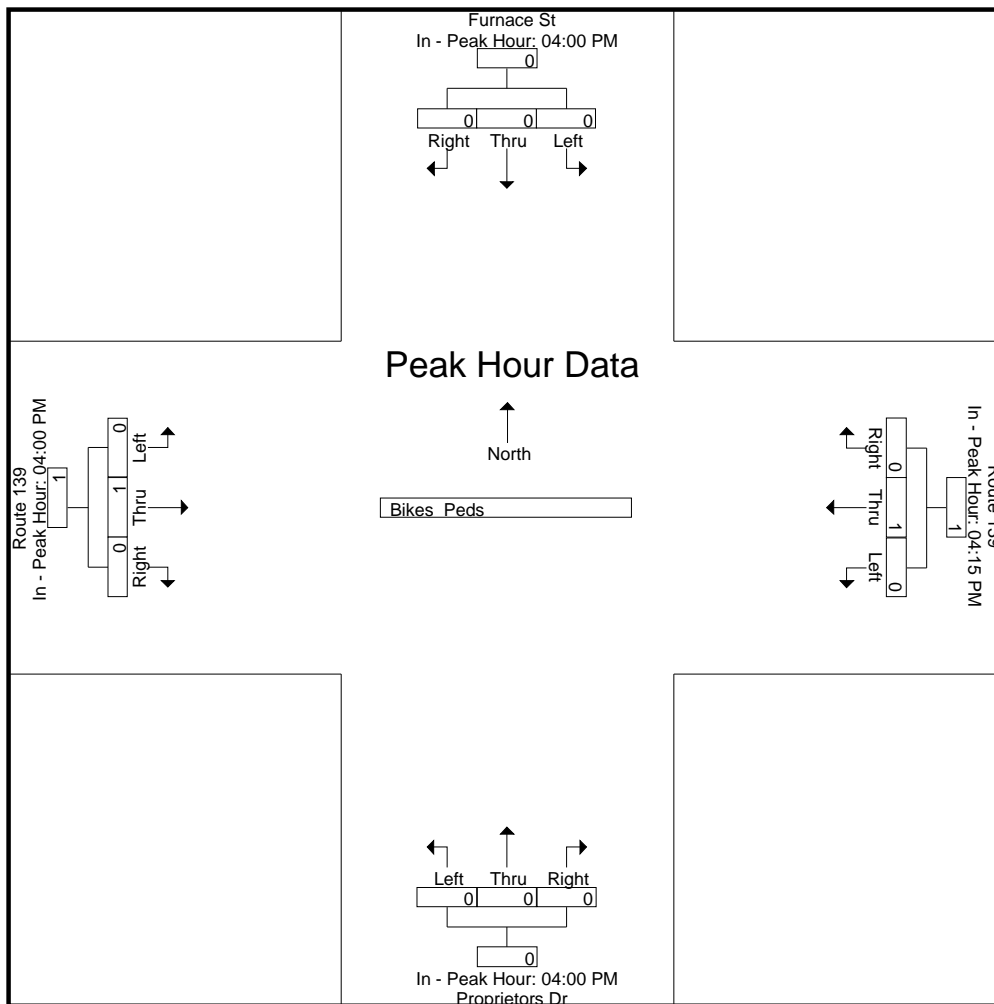
N/S Street : Furnace St / Proprietors Dr  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	04:00 PM				04:15 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
% App. Total	0	0	0	0	0	100	0	100	0	0	0	0	0	100	0	100
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250

N/S Street : Furnace St / Proprietors Dr  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



**Accurate Counts**  
978-664-2565

N/S Street : Furnace St / Proprietors Dr  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy

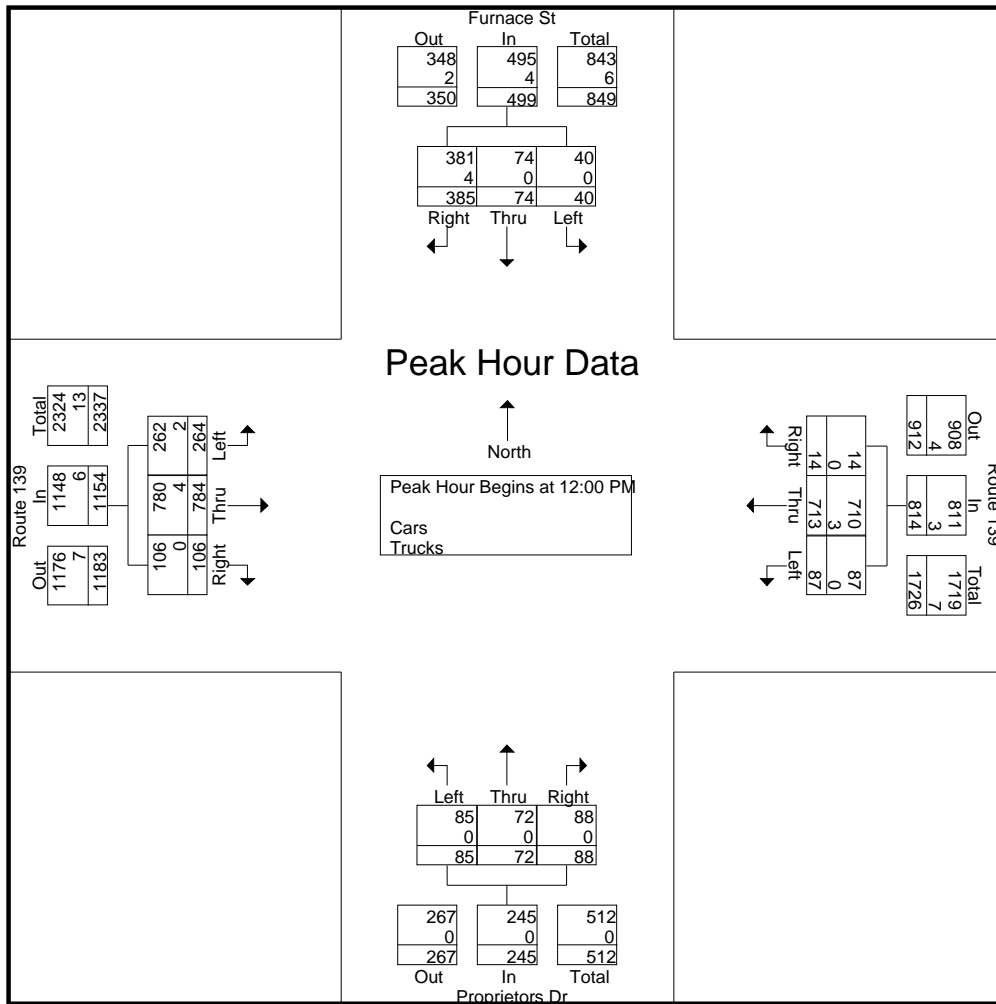
File Name : 909600S5  
Site Code : 90960005  
Start Date : 9/18/2021  
Page No : 1

Groups Printed- Cars - Trucks

Start Time	Furnace St From North			Route 139 From East			Proprietors Dr From South			Route 139 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:00 AM	13	25	127	14	204	5	23	17	19	62	174	21	704
11:15 AM	13	14	106	28	182	3	22	26	24	58	148	33	657
11:30 AM	6	11	94	17	179	2	28	28	25	69	164	21	644
11:45 AM	8	14	98	22	196	2	21	15	25	64	179	20	664
<b>Total</b>	<b>40</b>	<b>64</b>	<b>425</b>	<b>81</b>	<b>761</b>	<b>12</b>	<b>94</b>	<b>86</b>	<b>93</b>	<b>253</b>	<b>665</b>	<b>95</b>	<b>2669</b>
12:00 PM	10	13	92	23	184	6	24	18	19	62	184	25	660
12:15 PM	7	24	108	18	184	4	16	17	18	65	197	23	681
12:30 PM	6	17	87	17	172	2	21	16	22	62	211	30	663
12:45 PM	17	20	98	29	173	2	24	21	29	75	192	28	708
<b>Total</b>	<b>40</b>	<b>74</b>	<b>385</b>	<b>87</b>	<b>713</b>	<b>14</b>	<b>85</b>	<b>72</b>	<b>88</b>	<b>264</b>	<b>784</b>	<b>106</b>	<b>2712</b>
01:00 PM	1	16	66	22	186	0	26	14	27	63	172	27	620
01:15 PM	6	19	91	15	166	0	28	16	24	70	188	28	651
01:30 PM	5	17	69	27	171	1	24	24	28	68	185	32	651
01:45 PM	8	13	60	12	152	1	21	20	19	82	207	29	624
<b>Total</b>	<b>20</b>	<b>65</b>	<b>286</b>	<b>76</b>	<b>675</b>	<b>2</b>	<b>99</b>	<b>74</b>	<b>98</b>	<b>283</b>	<b>752</b>	<b>116</b>	<b>2546</b>
<b>Grand Total</b>	<b>100</b>	<b>203</b>	<b>1096</b>	<b>244</b>	<b>2149</b>	<b>28</b>	<b>278</b>	<b>232</b>	<b>279</b>	<b>800</b>	<b>2201</b>	<b>317</b>	<b>7927</b>
Apprch %	7.1	14.5	78.3	10.1	88.8	1.2	35.2	29.4	35.4	24.1	66.3	9.6	
Total %	1.3	2.6	13.8	3.1	27.1	0.4	3.5	2.9	3.5	10.1	27.8	4	
Cars	100	203	1085	244	2141	28	277	230	279	789	2191	316	7883
% Cars	100	100	99	100	99.6	100	99.6	99.1	100	98.6	99.5	99.7	99.4
Trucks	0	0	11	0	8	0	1	2	0	11	10	1	44
% Trucks	0	0	1	0	0.4	0	0.4	0.9	0	1.4	0.5	0.3	0.6

Start Time	Furnace St From North				Route 139 From East				Proprietors Dr From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
<b>Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1</b>																	
<b>Peak Hour for Entire Intersection Begins at 12:00 PM</b>																	
12:00 PM	10	13	92	115	23	<b>184</b>	<b>6</b>	<b>213</b>	<b>24</b>	18	19	61	62	184	25	271	660
12:15 PM	7	<b>24</b>	<b>108</b>	<b>139</b>	18	184	4	206	16	17	18	51	65	197	23	285	681
12:30 PM	6	17	87	110	17	172	2	191	21	16	22	59	62	<b>211</b>	<b>30</b>	<b>303</b>	663
12:45 PM	<b>17</b>	20	98	135	<b>29</b>	173	2	204	24	<b>21</b>	<b>29</b>	<b>74</b>	<b>75</b>	192	28	295	<b>708</b>
Total Volume	40	74	385	499	87	713	14	814	85	72	88	245	264	784	106	1154	2712
% App. Total	8	14.8	77.2		10.7	87.6	1.7		34.7	29.4	35.9		22.9	67.9	9.2		
PHF	.588	.771	.891	.897	.750	.969	.583	.955	.885	.857	.759	.828	.880	.929	.883	.952	.958
Cars	40	74	381	495	87	710	14	811	85	72	88	245	262	780	106	1148	2699
% Cars	100	100	99.0	99.2	100	99.6	100	99.6	100	100	100	100	99.2	99.5	100	99.5	99.5
Trucks	0	0	4	4	0	3	0	3	0	0	0	0	2	4	0	6	13
% Trucks	0	0	1.0	0.8	0	0.4	0	0.4	0	0	0	0	0.8	0.5	0	0.5	0.5

N/S Street : Furnace St / Proprietors Dr  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy



Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	11:00 AM				11:00 AM				12:45 PM				12:00 PM			
+0 mins.	13	25	127	165	14	204	5	223	24	21	29	74	62	184	25	271
+15 mins.	13	14	106	133	28	182	3	213	26	14	27	67	65	197	23	285
+30 mins.	6	11	94	111	17	179	2	198	28	16	24	68	62	211	30	303
+45 mins.	8	14	98	120	22	196	2	220	24	24	28	76	75	192	28	295
Total Volume	40	64	425	529	81	761	12	854	102	75	108	285	264	784	106	1154
% App. Total	7.6	12.1	80.3		9.5	89.1	1.4		35.8	26.3	37.9		22.9	67.9	9.2	
PHF	.769	.640	.837	.802	.723	.933	.600	.957	.911	.781	.931	.938	.880	.929	.883	.952
Cars	40	64	421	525	81	758	12	851	101	75	108	284	262	780	106	1148
% Cars	100	100	99.1	99.2	100	99.6	100	99.6	99	100	100	99.6	99.2	99.5	100	99.5
Trucks	0	0	4	4	0	3	0	3	1	0	0	1	2	4	0	6
% Trucks	0	0	0.9	0.8	0	0.4	0	0.4	1	0	0	0.4	0.8	0.5	0	0.5

# Accurate Counts

978-664-2565

File Name : 909600S5

Site Code : 90960005

Start Date : 9/18/2021

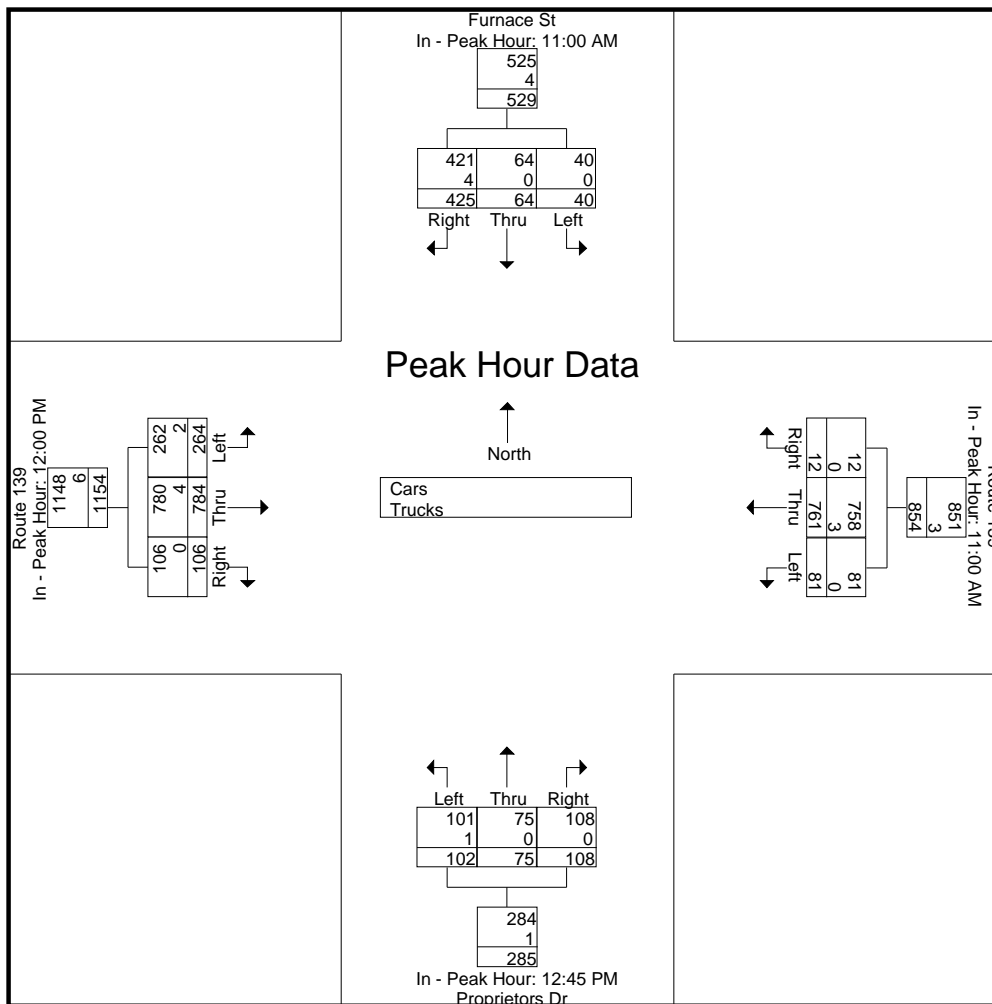
Page No : 3

N/S Street : Furnace St / Proprietors Dr

E/W Street : Route 139

City/State : Marshfield, MA

Weather : Cloudy



# Accurate Counts

978-664-2565

N/S Street : Furnace St / Proprietors Dr  
 E/W Street : Route 139  
 City/State : Marshfield, MA  
 Weather : Cloudy

File Name : 909600S5  
 Site Code : 90960005  
 Start Date : 9/18/2021  
 Page No : 4

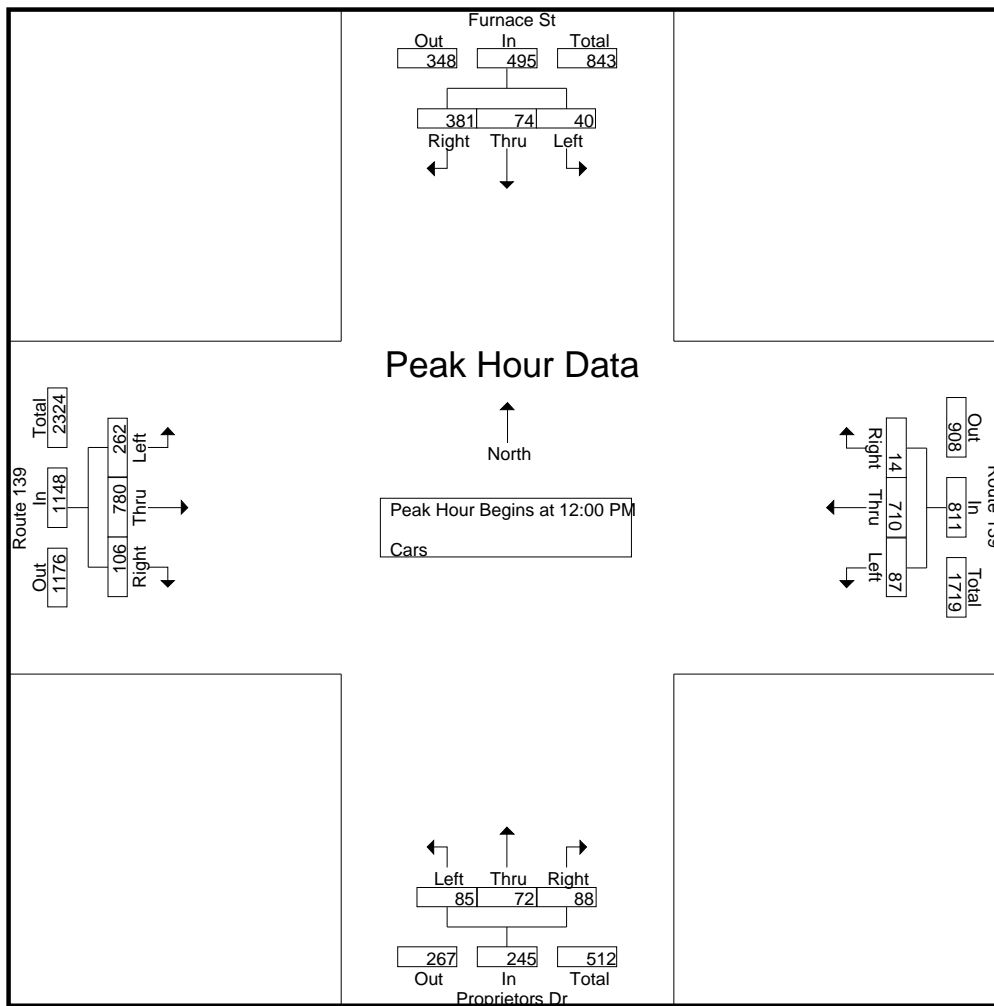
## Groups Printed- Cars

Start Time	Furnace St From North			Route 139 From East			Proprietors Dr From South			Route 139 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:00 AM	13	25	125	14	203	5	23	17	19	61	173	21	699
11:15 AM	13	14	106	28	181	3	22	25	24	58	146	32	652
11:30 AM	6	11	93	17	178	2	28	27	25	68	164	21	640
11:45 AM	8	14	97	22	196	2	21	15	25	63	178	20	661
<b>Total</b>	<b>40</b>	<b>64</b>	<b>421</b>	<b>81</b>	<b>758</b>	<b>12</b>	<b>94</b>	<b>84</b>	<b>93</b>	<b>250</b>	<b>661</b>	<b>94</b>	<b>2652</b>
12:00 PM	10	13	92	23	182	6	24	18	19	61	184	25	657
12:15 PM	7	24	107	18	183	4	16	17	18	65	195	23	677
12:30 PM	6	17	87	17	172	2	21	16	22	62	210	30	662
12:45 PM	17	20	95	29	173	2	24	21	29	74	191	28	703
<b>Total</b>	<b>40</b>	<b>74</b>	<b>381</b>	<b>87</b>	<b>710</b>	<b>14</b>	<b>85</b>	<b>72</b>	<b>88</b>	<b>262</b>	<b>780</b>	<b>106</b>	<b>2699</b>
01:00 PM	1	16	65	22	185	0	26	14	27	61	172	27	616
01:15 PM	6	19	89	15	166	0	27	16	24	69	187	28	646
01:30 PM	5	17	69	27	171	1	24	24	28	67	184	32	649
01:45 PM	8	13	60	12	151	1	21	20	19	80	207	29	621
<b>Total</b>	<b>20</b>	<b>65</b>	<b>283</b>	<b>76</b>	<b>673</b>	<b>2</b>	<b>98</b>	<b>74</b>	<b>98</b>	<b>277</b>	<b>750</b>	<b>116</b>	<b>2532</b>
<b>Grand Total</b>	<b>100</b>	<b>203</b>	<b>1085</b>	<b>244</b>	<b>2141</b>	<b>28</b>	<b>277</b>	<b>230</b>	<b>279</b>	<b>789</b>	<b>2191</b>	<b>316</b>	<b>7883</b>
Apprch %	7.2	14.6	78.2	10.1	88.7	1.2	35.2	29.3	35.5	23.9	66.5	9.6	
Total %	1.3	2.6	13.8	3.1	27.2	0.4	3.5	2.9	3.5	10	27.8	4	

Start Time	Furnace St From North				Route 139 From East				Proprietors Dr From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:00 PM																	
12:00 PM	10	13	92	115	23	182	<b>6</b>	<b>211</b>	<b>24</b>	18	19	61	61	184	25	270	657
12:15 PM	7	<b>24</b>	<b>107</b>	<b>138</b>	18	<b>183</b>	4	205	16	17	18	51	65	195	23	283	677
12:30 PM	6	17	87	110	17	172	2	191	21	16	22	59	62	<b>210</b>	<b>30</b>	<b>302</b>	662
12:45 PM	<b>17</b>	20	95	132	<b>29</b>	173	2	204	24	<b>21</b>	<b>29</b>	<b>74</b>	<b>74</b>	191	28	293	<b>703</b>
<b>Total Volume</b>	<b>40</b>	<b>74</b>	<b>381</b>	<b>495</b>	<b>87</b>	<b>710</b>	<b>14</b>	<b>811</b>	<b>85</b>	<b>72</b>	<b>88</b>	<b>245</b>	<b>262</b>	<b>780</b>	<b>106</b>	<b>1148</b>	<b>2699</b>
% App. Total	8.1	14.9	77		10.7	87.5	1.7		34.7	29.4	35.9		22.8	67.9	9.2		
PHF	.588	.771	.890	.897	.750	.970	.583	.961	.885	.857	.759	.828	.885	.929	.883	.950	.960



N/S Street : Furnace St / Proprietors Dr  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy



Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	11:00 AM				11:00 AM				12:45 PM				12:00 PM			
+0 mins.	13	25	125	163	14	203	5	222	24	21	29	74	61	184	25	270
+15 mins.	13	14	106	133	28	181	3	212	26	14	27	67	65	195	23	283
+30 mins.	6	11	93	110	17	178	2	197	27	16	24	67	62	210	30	302
+45 mins.	8	14	97	119	22	196	2	220	24	24	28	76	74	191	28	293
Total Volume	40	64	421	525	81	758	12	851	101	75	108	284	262	780	106	1148
% App. Total	7.6	12.2	80.2		9.5	89.1	1.4		35.6	26.4	38		22.8	67.9	9.2	
PHF	.769	.640	.842	.805	.723	.933	.600	.958	.935	.781	.931	.934	.885	.929	.883	.950

# Accurate Counts

978-664-2565

File Name : 909600S5

Site Code : 90960005

Start Date : 9/18/2021

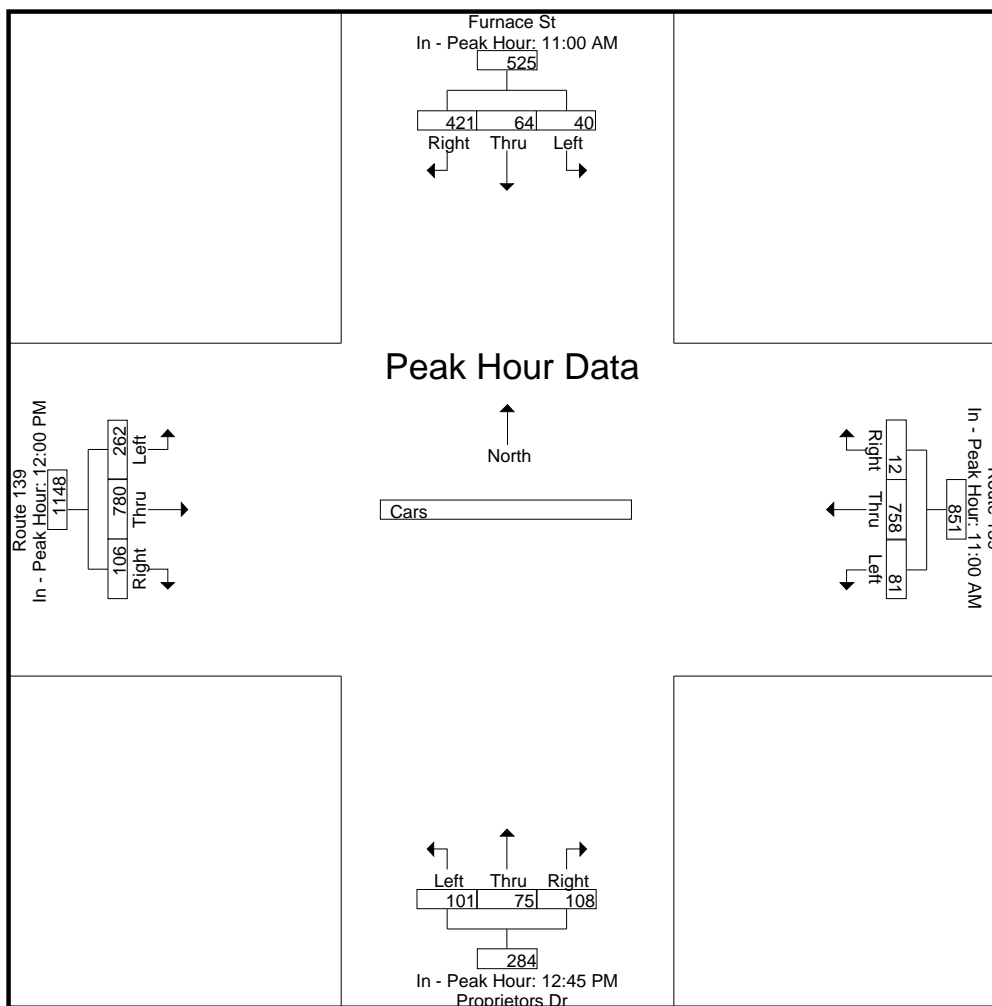
Page No : 6

N/S Street : Furnace St / Proprietors Dr

E/W Street : Route 139

City/State : Marshfield, MA

Weather : Cloudy



# Accurate Counts

978-664-2565

N/S Street : Furnace St / Proprietors Dr  
 E/W Street : Route 139  
 City/State : Marshfield, MA  
 Weather : Cloudy

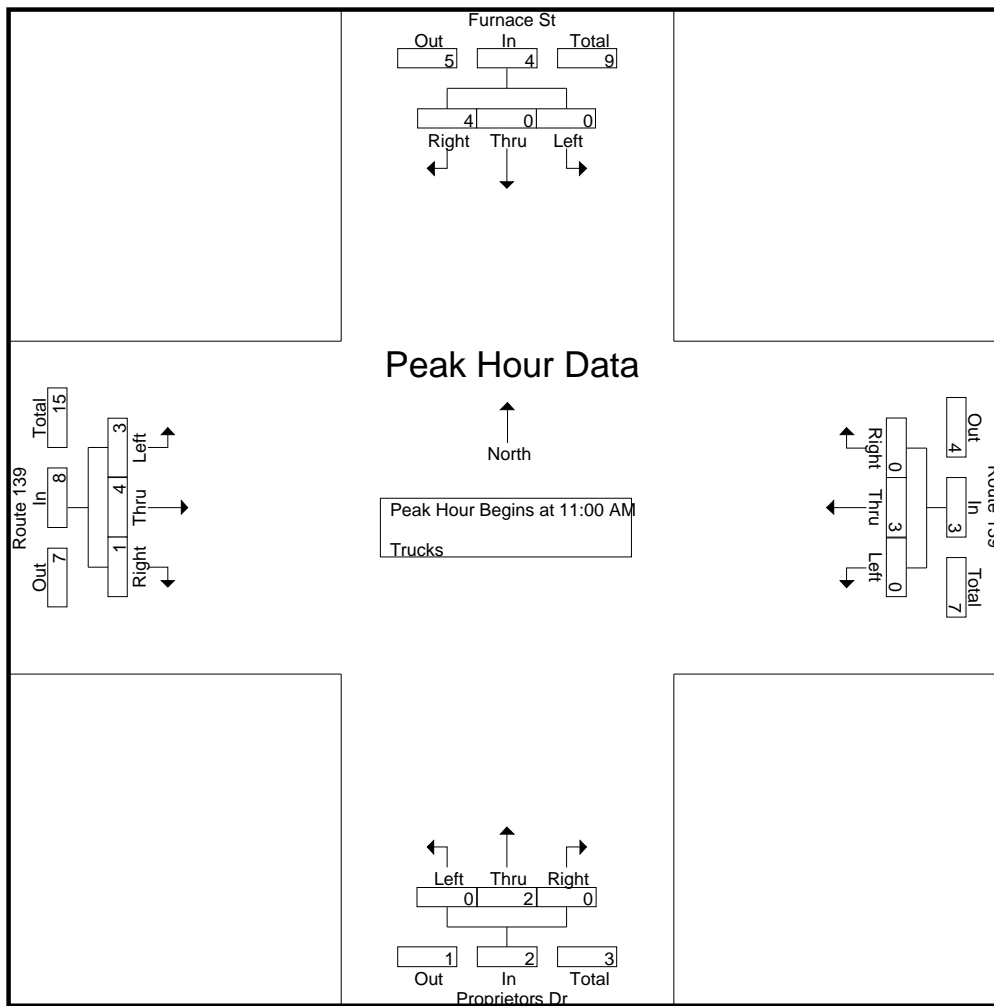
File Name : 909600S5  
 Site Code : 90960005  
 Start Date : 9/18/2021  
 Page No : 7

### Groups Printed- Trucks

Start Time	Furnace St From North			Route 139 From East			Proprietors Dr From South			Route 139 From West			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:00 AM	0	0	2	0	1	0	0	0	0	1	1	0	5
11:15 AM	0	0	0	0	1	0	0	1	0	0	2	1	5
11:30 AM	0	0	1	0	1	0	0	1	0	1	0	0	4
11:45 AM	0	0	1	0	0	0	0	0	0	1	1	0	3
<b>Total</b>	0	0	4	0	3	0	0	2	0	3	4	1	17
12:00 PM	0	0	0	0	2	0	0	0	0	1	0	0	3
12:15 PM	0	0	1	0	1	0	0	0	0	0	2	0	4
12:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
12:45 PM	0	0	3	0	0	0	0	0	0	1	1	0	5
<b>Total</b>	0	0	4	0	3	0	0	0	0	2	4	0	13
01:00 PM	0	0	1	0	1	0	0	0	0	2	0	0	4
01:15 PM	0	0	2	0	0	0	1	0	0	1	1	0	5
01:30 PM	0	0	0	0	0	0	0	0	0	1	1	0	2
01:45 PM	0	0	0	0	1	0	0	0	0	2	0	0	3
<b>Total</b>	0	0	3	0	2	0	1	0	0	6	2	0	14
<b>Grand Total</b>	0	0	11	0	8	0	1	2	0	11	10	1	44
Apprch %	0	0	100	0	100	0	33.3	66.7	0	50	45.5	4.5	
Total %	0	0	25	0	18.2	0	2.3	4.5	0	25	22.7	2.3	

Start Time	Furnace St From North				Route 139 From East				Proprietors Dr From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:00 AM																	
11:00 AM	0	0	2	2	0	1	0	1	0	0	0	0	1	1	0	2	5
11:15 AM	0	0	0	0	0	1	0	1	0	1	0	1	0	2	1	3	5
11:30 AM	0	0	1	1	0	1	0	1	0	1	0	1	1	0	0	1	4
11:45 AM	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	2	3
<b>Total Volume</b>	0	0	4	4	0	3	0	3	0	2	0	2	3	4	1	8	17
<b>% App. Total</b>	0	0	100		0	100	0		0	100	0		37.5	50	12.5		
PHF	.000	.000	.500	.500	.000	.750	.000	.750	.000	.500	.000	.500	.750	.500	.250	.667	.850

N/S Street : Furnace St / Proprietors Dr  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy



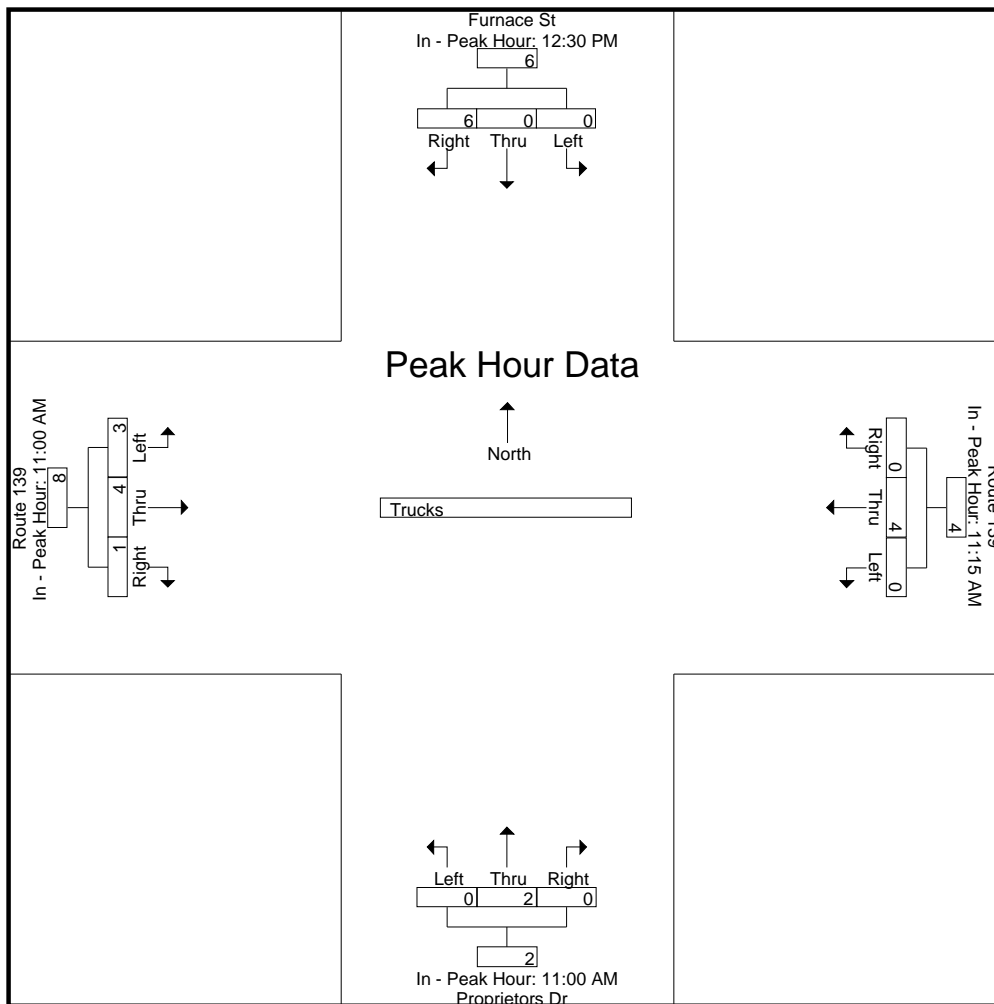
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	12:30 PM				11:15 AM				11:00 AM				11:00 AM			
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	1	1	0	2
+15 mins.	0	0	3	3	0	1	0	1	0	1	0	1	0	2	1	3
+30 mins.	0	0	1	1	0	0	0	0	0	1	0	1	1	0	0	1
+45 mins.	0	0	2	2	0	2	0	2	0	0	0	0	1	1	0	2
Total Volume	0	0	6	6	0	4	0	4	0	2	0	2	3	4	1	8
% App. Total	0	0	100		0	100	0		0	100	0		37.5	50	12.5	
PHF	.000	.000	.500	.500	.000	.500	.000	.500	.000	.500	.000	.500	.750	.500	.250	.667

**Accurate Counts**  
978-664-2565

File Name : 909600S5  
Site Code : 90960005  
Start Date : 9/18/2021  
Page No : 9

N/S Street : Furnace St / Proprietors Dr  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy



**Accurate Counts**  
978-664-2565

N/S Street : Furnace St / Proprietors Dr  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy

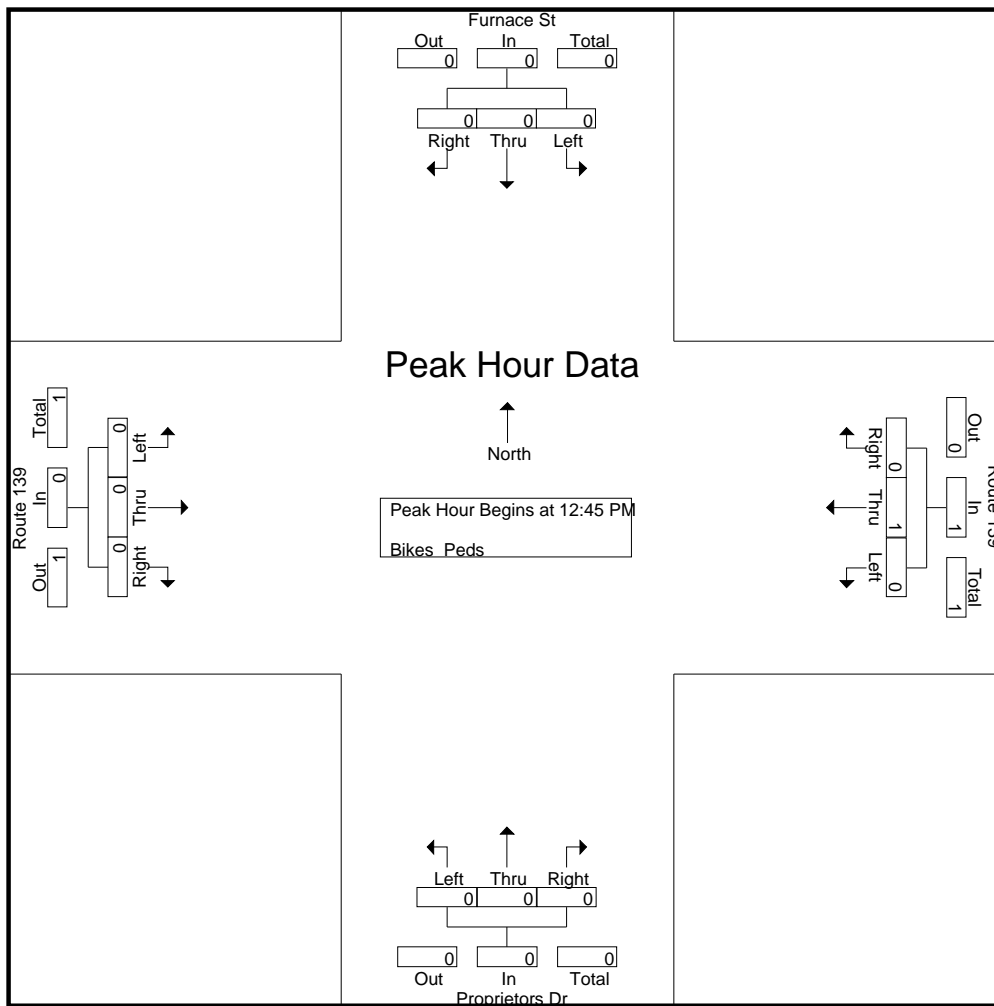
File Name : 909600S5  
Site Code : 90960005  
Start Date : 9/18/2021  
Page No : 10

Groups Printed- Bikes Peds

Start Time	Furnace St From North				Route 139 From East				Proprietors Dr From South				Route 139 From West				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds			
11:00 AM	0	0	0	0	0	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	0	5	5	0	5
11:30 AM	0	0	0	0	0	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	0	0	0	0	0
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	5
12:00 PM	0	0	0	0	0	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	0	1	1	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	2
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	2
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	5
01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
01:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	2
<b>Total</b>	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	2	1	3
<b>Grand Total</b>	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	12	12	1	13
Apprch %	0	0	0		0	100	0		0	0	0		0	0	0				
Total %	0	0	0		0	100	0		0	0	0		0	0	0		92.3	7.7	

Start Time	Furnace St From North				Route 139 From East				Proprietors Dr From South				Route 139 From West				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:45 PM																	
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
<b>Total Volume</b>	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
<b>% App. Total</b>	0	0	0		0	100	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.250

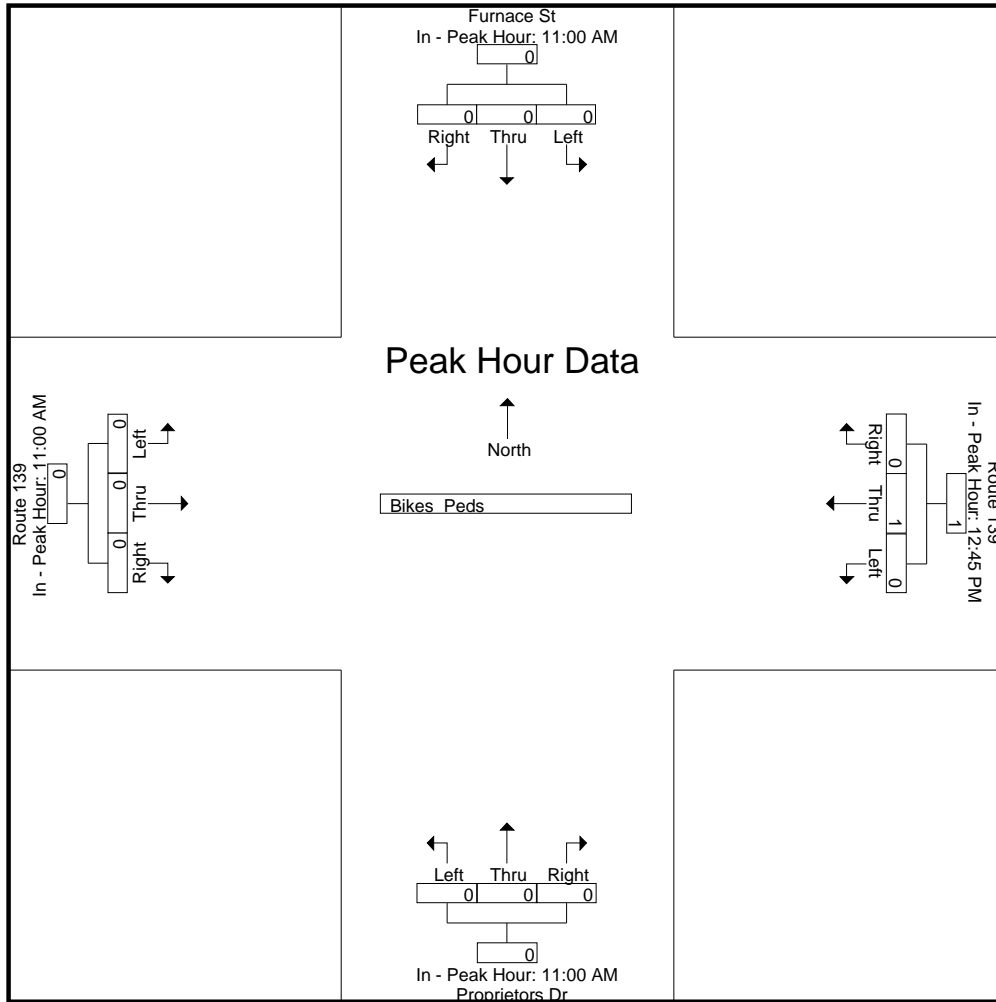
N/S Street : Furnace St / Proprietors Dr  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy



Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	11:00 AM				12:45 PM				11:00 AM				11:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	100	0	100	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000

N/S Street : Furnace St / Proprietors Dr  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy





# Accurate Counts

978-664-2565

N/S Street : Forest Street  
 E/W Street : Route 139  
 City/State : Marshfield, MA  
 Weather : Rain

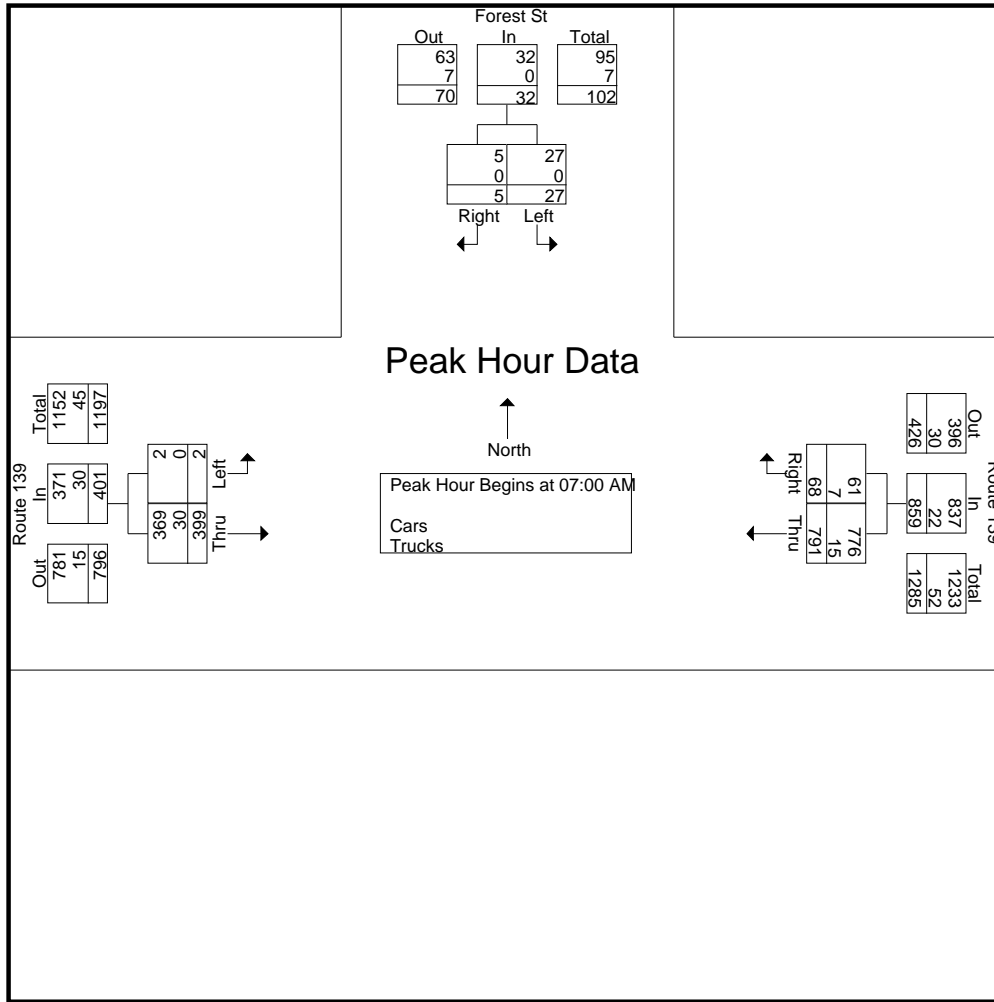
File Name : 90960006  
 Site Code : 90960006  
 Start Date : 9/16/2021  
 Page No : 1

### Groups Printed- Cars - Trucks

Start Time	Forest St From North		Route 139 From East		Route 139 From West		Int. Total
	Left	Right	Thru	Right	Left	Thru	
07:00 AM	7	0	230	19	0	78	334
07:15 AM	8	1	171	15	1	87	283
07:30 AM	9	3	196	26	1	106	341
07:45 AM	3	1	194	8	0	128	334
<b>Total</b>	<b>27</b>	<b>5</b>	<b>791</b>	<b>68</b>	<b>2</b>	<b>399</b>	<b>1292</b>
08:00 AM	1	2	167	9	0	129	308
08:15 AM	3	2	181	12	2	99	299
08:30 AM	3	3	179	20	1	103	309
08:45 AM	10	2	176	20	1	122	331
<b>Total</b>	<b>17</b>	<b>9</b>	<b>703</b>	<b>61</b>	<b>4</b>	<b>453</b>	<b>1247</b>
<b>Grand Total</b>	<b>44</b>	<b>14</b>	<b>1494</b>	<b>129</b>	<b>6</b>	<b>852</b>	<b>2539</b>
Apprch %	75.9	24.1	92.1	7.9	0.7	99.3	
Total %	1.7	0.6	58.8	5.1	0.2	33.6	
Cars	44	14	1468	119	6	806	2457
% Cars	100	100	98.3	92.2	100	94.6	96.8
Trucks	0	0	26	10	0	46	82
% Trucks	0	0	1.7	7.8	0	5.4	3.2

Start Time	Forest St From North			Route 139 From East			Route 139 From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	7	0	7	<b>230</b>	19	<b>249</b>	0	78	78	334
07:15 AM	8	1	9	171	15	186	1	87	88	283
07:30 AM	<b>9</b>	<b>3</b>	<b>12</b>	196	<b>26</b>	222	1	106	107	<b>341</b>
07:45 AM	3	1	4	194	8	202	0	<b>128</b>	<b>128</b>	334
<b>Total Volume</b>	<b>27</b>	<b>5</b>	<b>32</b>	<b>791</b>	<b>68</b>	<b>859</b>	<b>2</b>	<b>399</b>	<b>401</b>	<b>1292</b>
% App. Total	84.4	15.6		92.1	7.9		0.5	99.5		
PHF	.750	.417	.667	.860	.654	.862	.500	.779	.783	.947
Cars	27	5	32	776	61	837	2	369	371	1240
% Cars	100	100	100	98.1	89.7	97.4	100	92.5	92.5	96.0
Trucks	0	0	0	15	7	22	0	30	30	52
% Trucks	0	0	0	1.9	10.3	2.6	0	7.5	7.5	4.0

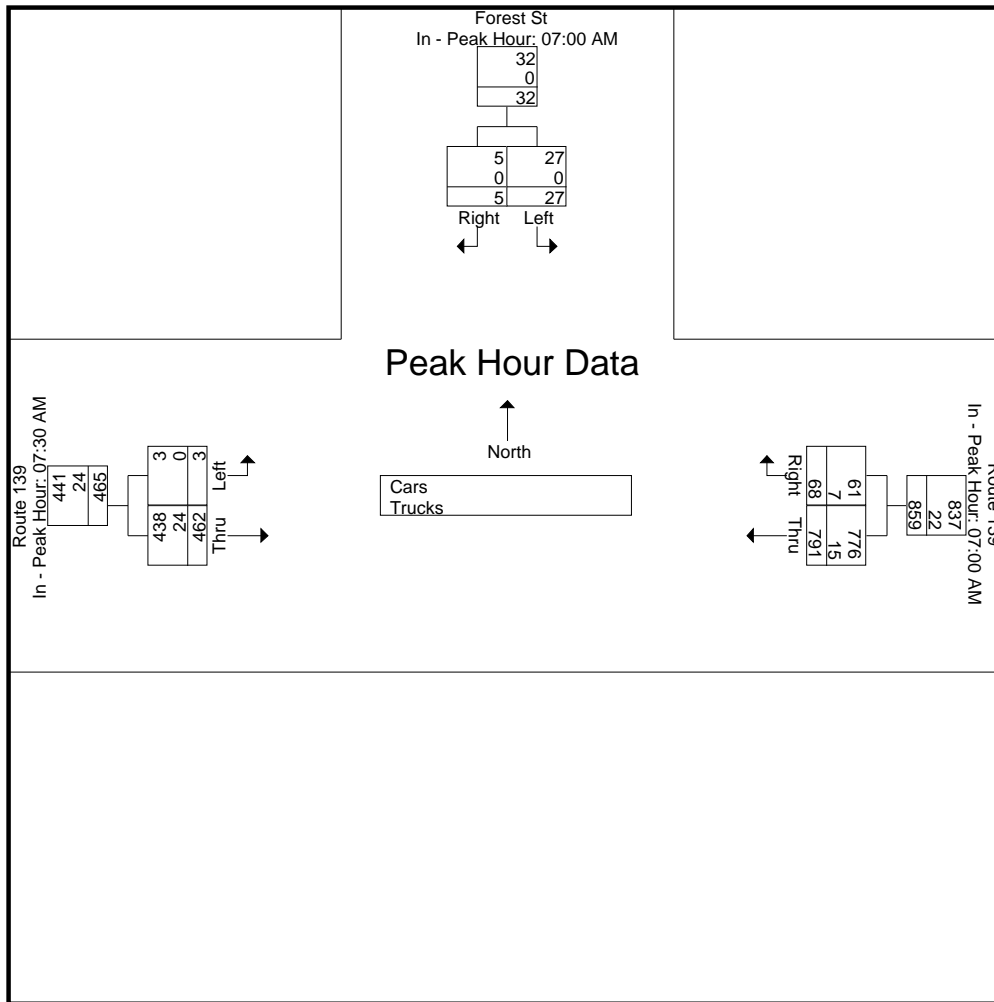
N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:30 AM		
+0 mins.	7	0	7	<b>230</b>	19	<b>249</b>	1	106	107
+15 mins.	8	1	9	171	15	186	0	128	128
+30 mins.	<b>9</b>	<b>3</b>	<b>12</b>	196	<b>26</b>	222	0	<b>129</b>	<b>129</b>
+45 mins.	3	1	4	194	8	202	<b>2</b>	99	101
Total Volume	27	5	32	791	68	859	3	462	465
% App. Total	84.4	15.6		92.1	7.9		0.6	99.4	
PHF	.750	.417	.667	.860	.654	.862	.375	.895	.901
Cars	27	5	32	776	61	837	3	438	441
% Cars	100	100	100	98.1	89.7	97.4	100	94.8	94.8
Trucks	0	0	0	15	7	22	0	24	24
% Trucks	0	0	0	1.9	10.3	2.6	0	5.2	5.2

N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



**Accurate Counts**  
978-664-2565

File Name : 90960006  
Site Code : 90960006  
Start Date : 9/16/2021  
Page No : 4

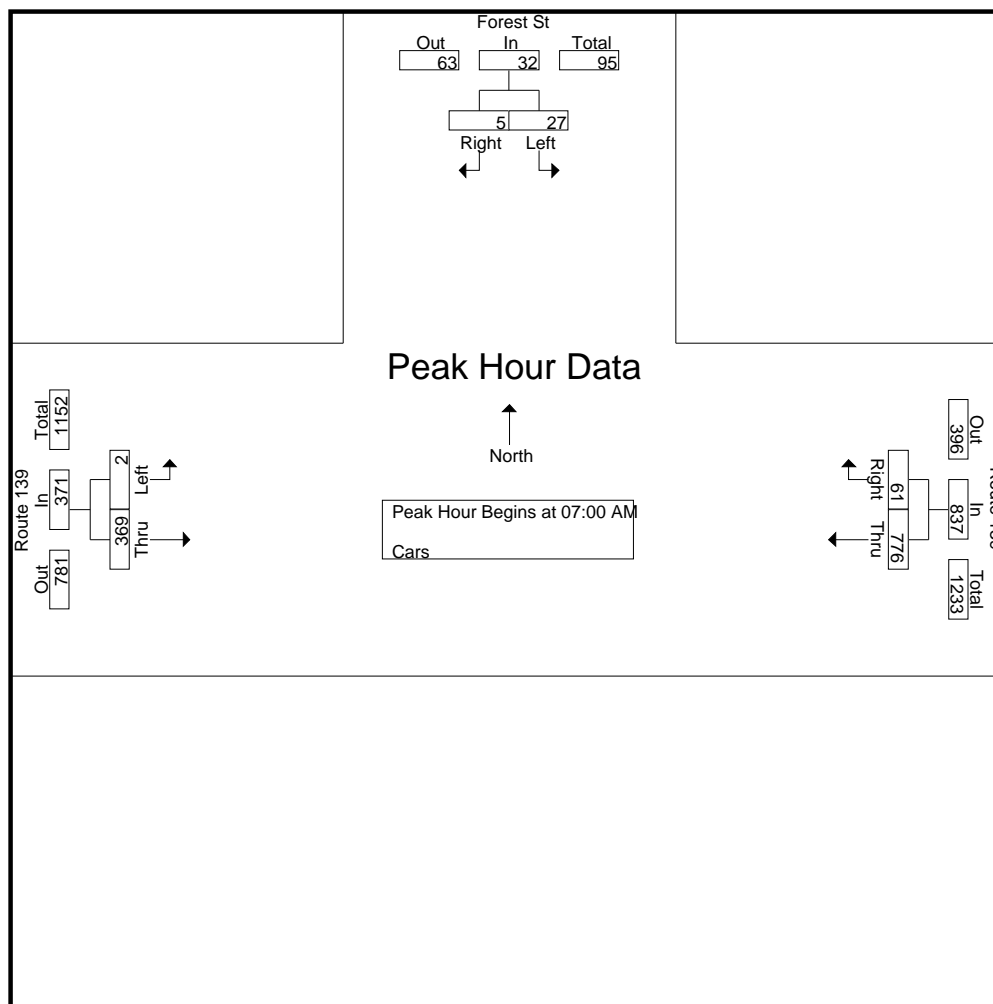
N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain

Groups Printed- Cars

Start Time	Forest St From North		Route 139 From East		Route 139 From West		Int. Total
	Left	Right	Thru	Right	Left	Thru	
07:00 AM	7	0	228	19	0	68	322
07:15 AM	8	1	165	14	1	82	271
07:30 AM	9	3	193	20	1	93	319
07:45 AM	3	1	190	8	0	126	328
Total	27	5	776	61	2	369	1240
08:00 AM	1	2	162	9	0	126	300
08:15 AM	3	2	180	10	2	93	290
08:30 AM	3	3	176	20	1	101	304
08:45 AM	10	2	174	19	1	117	323
Total	17	9	692	58	4	437	1217
Grand Total	44	14	1468	119	6	806	2457
Apprch %	75.9	24.1	92.5	7.5	0.7	99.3	
Total %	1.8	0.6	59.7	4.8	0.2	32.8	

Start Time	Forest St From North			Route 139 From East			Route 139 From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	7	0	7	<b>228</b>	19	<b>247</b>	0	68	68	322
07:15 AM	8	1	9	165	14	179	1	82	83	271
07:30 AM	<b>9</b>	<b>3</b>	<b>12</b>	193	<b>20</b>	213	1	93	94	319
07:45 AM	3	1	4	190	8	198	0	<b>126</b>	<b>126</b>	<b>328</b>
Total Volume	27	5	32	776	61	837	2	369	371	1240
% App. Total	84.4	15.6		92.7	7.3		0.5	99.5		
PHF	.750	.417	.667	.851	.763	.847	.500	.732	.736	.945

N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



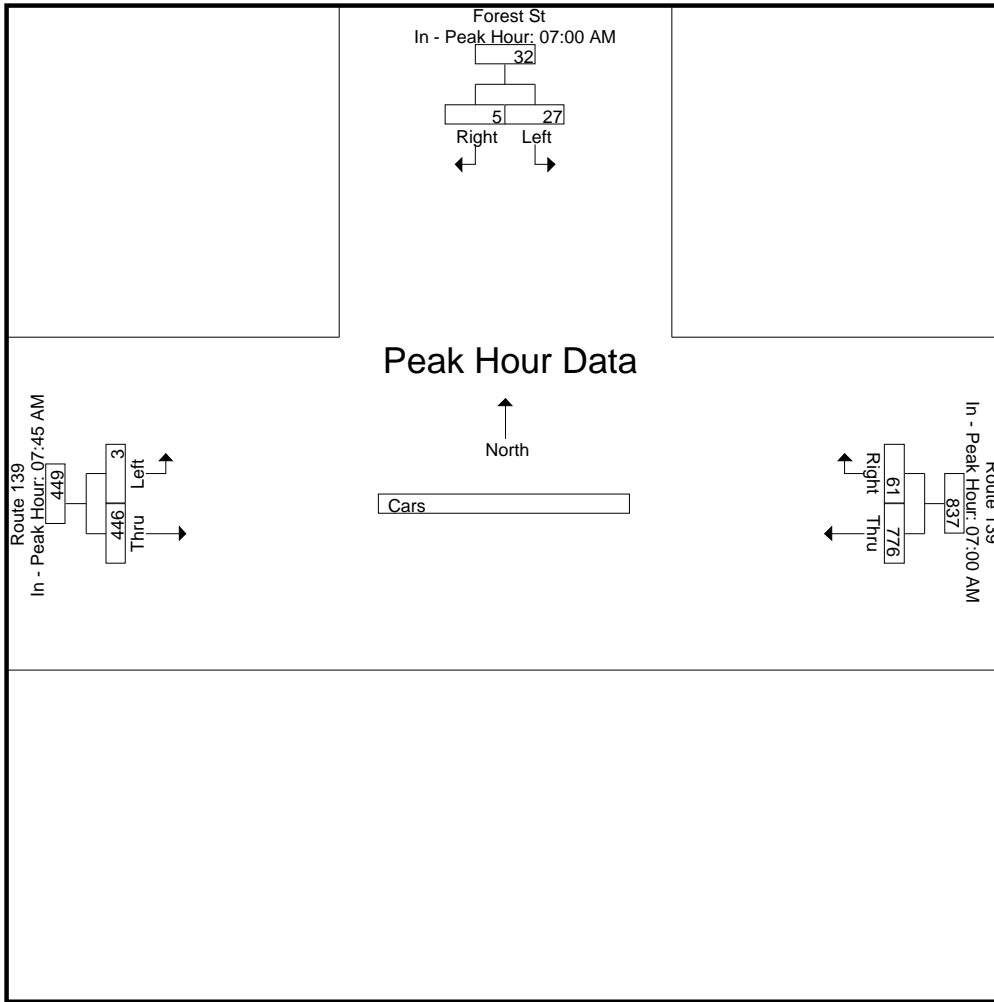
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:45 AM		
+0 mins.	7	0	7	<b>228</b>	19	<b>247</b>	0	<b>126</b>	<b>126</b>
+15 mins.	8	1	9	165	14	179	0	126	126
+30 mins.	<b>9</b>	<b>3</b>	<b>12</b>	193	<b>20</b>	213	<b>2</b>	93	95
+45 mins.	3	1	4	190	8	198	1	101	102
Total Volume	27	5	32	776	61	837	3	446	449
% App. Total	84.4	15.6		92.7	7.3		0.7	99.3	
PHF	.750	.417	.667	.851	.763	.847	.375	.885	.891

Accurate Counts  
978-664-2565

File Name : 90960006  
Site Code : 90960006  
Start Date : 9/16/2021  
Page No : 6

N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



**Accurate Counts**  
978-664-2565

File Name : 90960006  
Site Code : 90960006  
Start Date : 9/16/2021  
Page No : 7

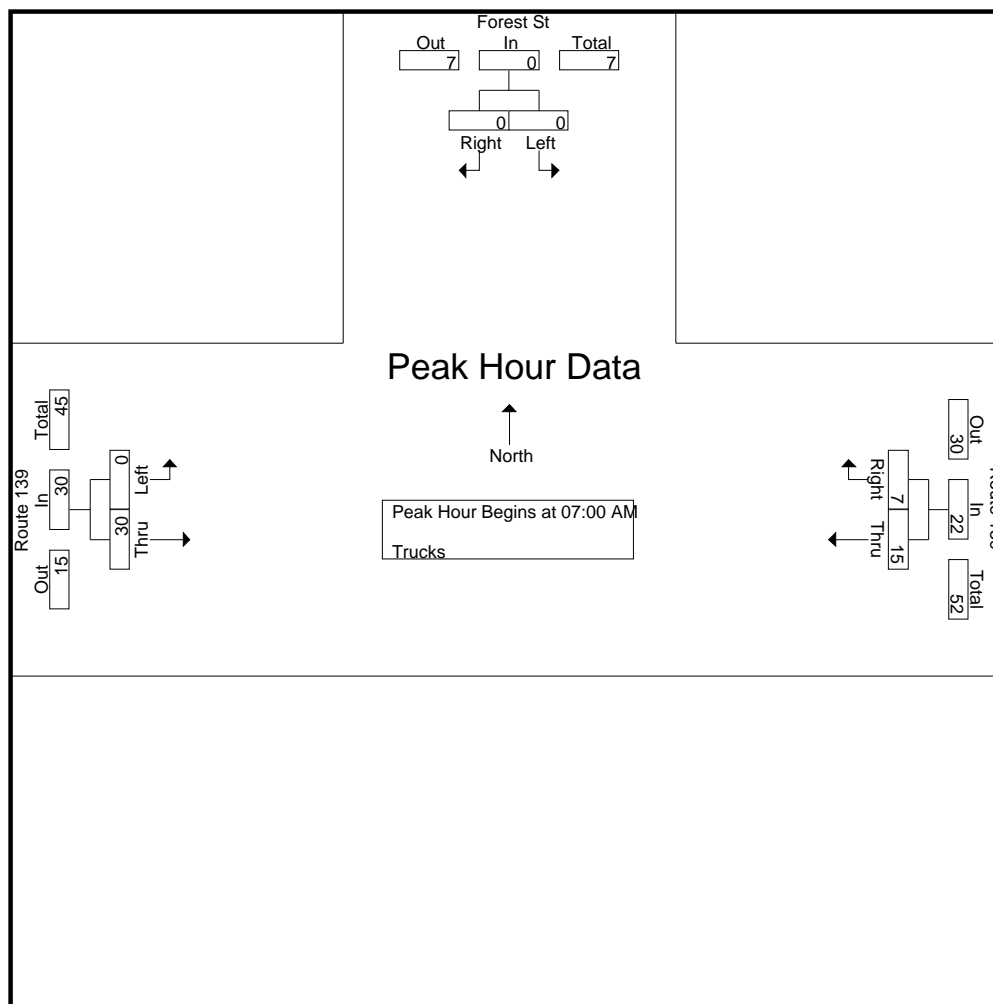
N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain

Groups Printed- Trucks

Start Time	Forest St From North		Route 139 From East		Route 139 From West		Int. Total
	Left	Right	Thru	Right	Left	Thru	
07:00 AM	0	0	2	0	0	10	12
07:15 AM	0	0	6	1	0	5	12
07:30 AM	0	0	3	6	0	13	22
07:45 AM	0	0	4	0	0	2	6
<b>Total</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>7</b>	<b>0</b>	<b>30</b>	<b>52</b>
08:00 AM	0	0	5	0	0	3	8
08:15 AM	0	0	1	2	0	6	9
08:30 AM	0	0	3	0	0	2	5
08:45 AM	0	0	2	1	0	5	8
<b>Total</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>3</b>	<b>0</b>	<b>16</b>	<b>30</b>
<b>Grand Total</b>	<b>0</b>	<b>0</b>	<b>26</b>	<b>10</b>	<b>0</b>	<b>46</b>	<b>82</b>
Apprch %	0	0	72.2	27.8	0	100	
Total %	0	0	31.7	12.2	0	56.1	

Start Time	Forest St From North			Route 139 From East			Route 139 From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	0	0	2	0	2	0	10	10	12
07:15 AM	0	0	0	6	1	7	0	5	5	12
07:30 AM	0	0	0	3	6	9	0	13	13	22
07:45 AM	0	0	0	4	0	4	0	2	2	6
Total Volume	0	0	0	15	7	22	0	30	30	52
% App. Total	0	0	0	68.2	31.8		0	100		
PHF	.000	.000	.000	.625	.292	.611	.000	.577	.577	.591

N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain

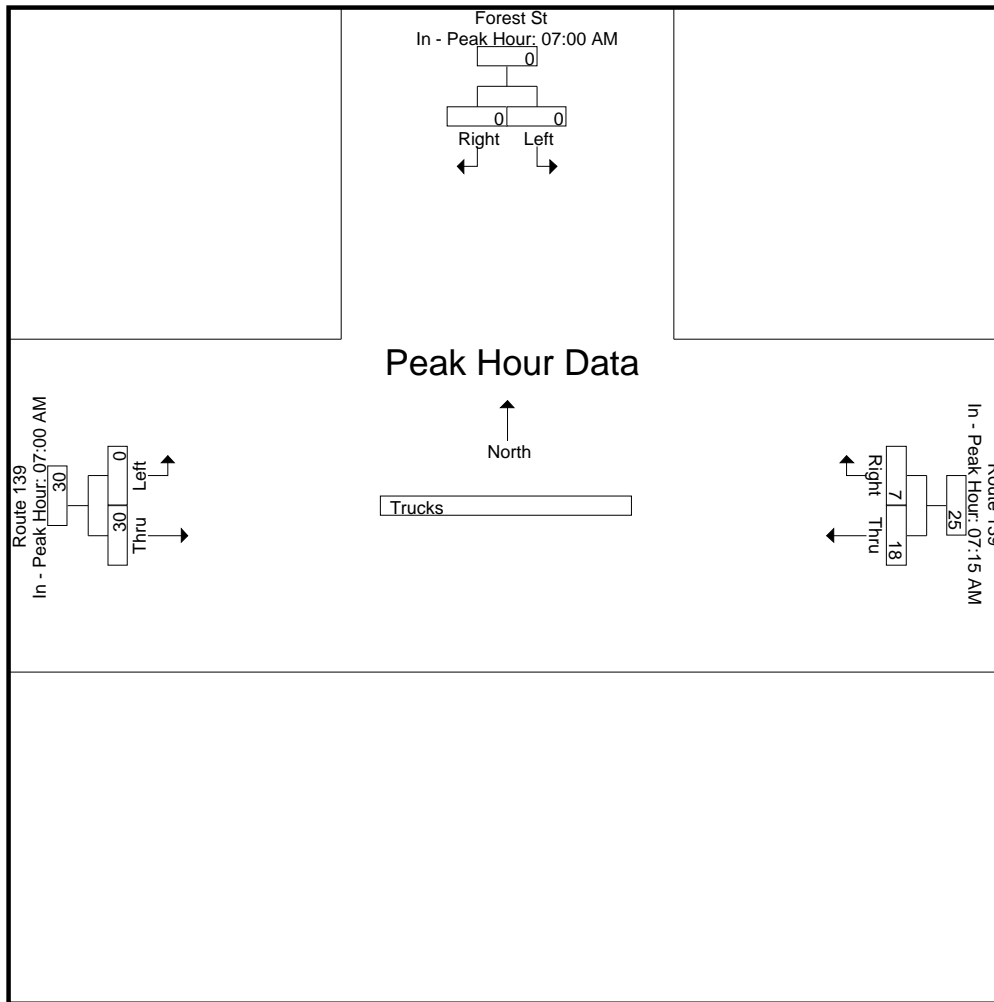


Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:00 AM			07:15 AM			07:00 AM		
+0 mins.	0	0	0	6	1	7	0	10	10
+15 mins.	0	0	0	3	6	9	0	5	5
+30 mins.	0	0	0	4	0	4	0	13	13
+45 mins.	0	0	0	5	0	5	0	2	2
Total Volume	0	0	0	18	7	25	0	30	30
% App. Total	0	0	0	72	28	100	0	100	100
PHF	.000	.000	.000	.750	.292	.694	.000	.577	.577



N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



**Accurate Counts**  
978-664-2565

N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain

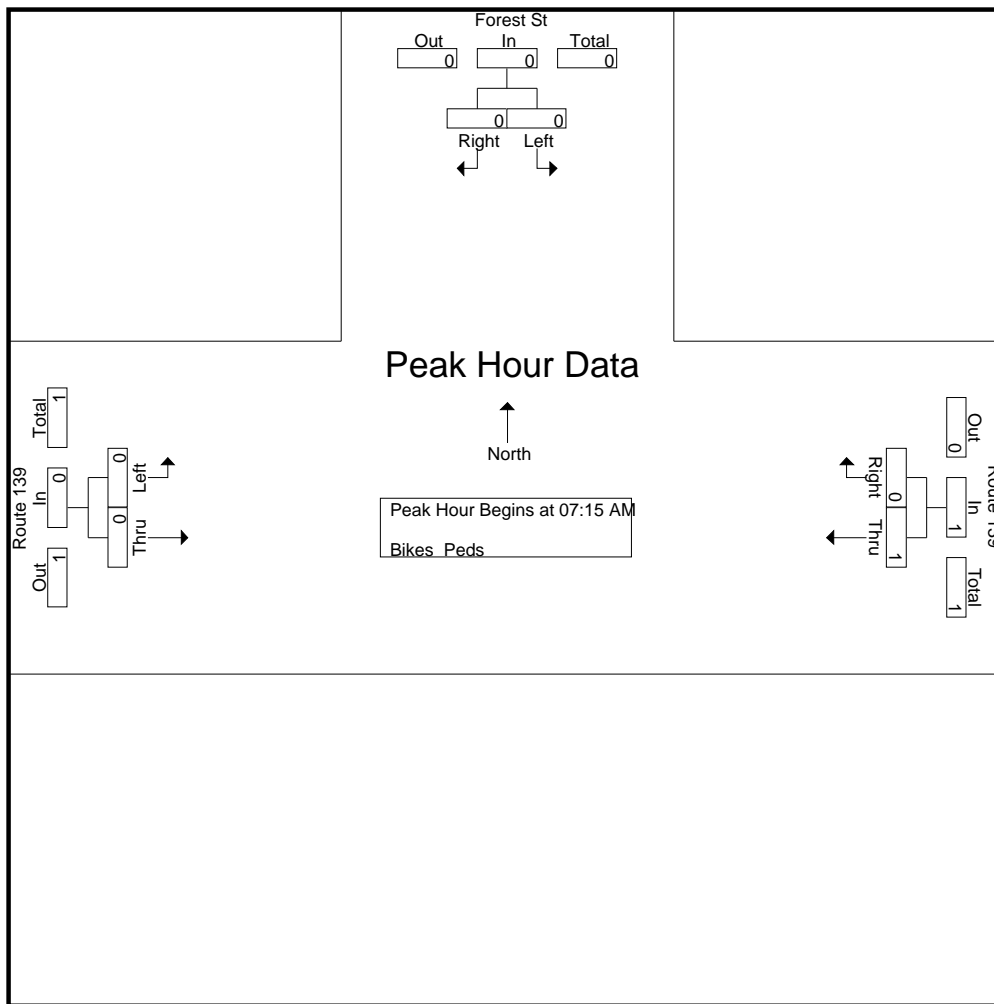
File Name : 90960006  
Site Code : 90960006  
Start Date : 9/16/2021  
Page No : 10

Groups Printed- Bikes Peds

Start Time	Forest St From North			Route 139 From East			Route 139 From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	1	1	0	0	0	0	0	1	1	2
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	1	0	0	0	0	0	1	1	2
Grand Total	0	0	1	1	0	0	0	0	0	1	1	2
Apprch %	0	0		100	0		0	0				
Total %	0	0		100	0		0	0		50	50	

Start Time	Forest St From North			Route 139 From East			Route 139 From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	1	0	1	0	0	0	1
Total Volume	0	0	0	1	0	1	0	0	0	1
% App. Total	0	0		100	0		0	0		
PHF	.000	.000	.000	.250	.000	.250	.000	.000	.000	.250

N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



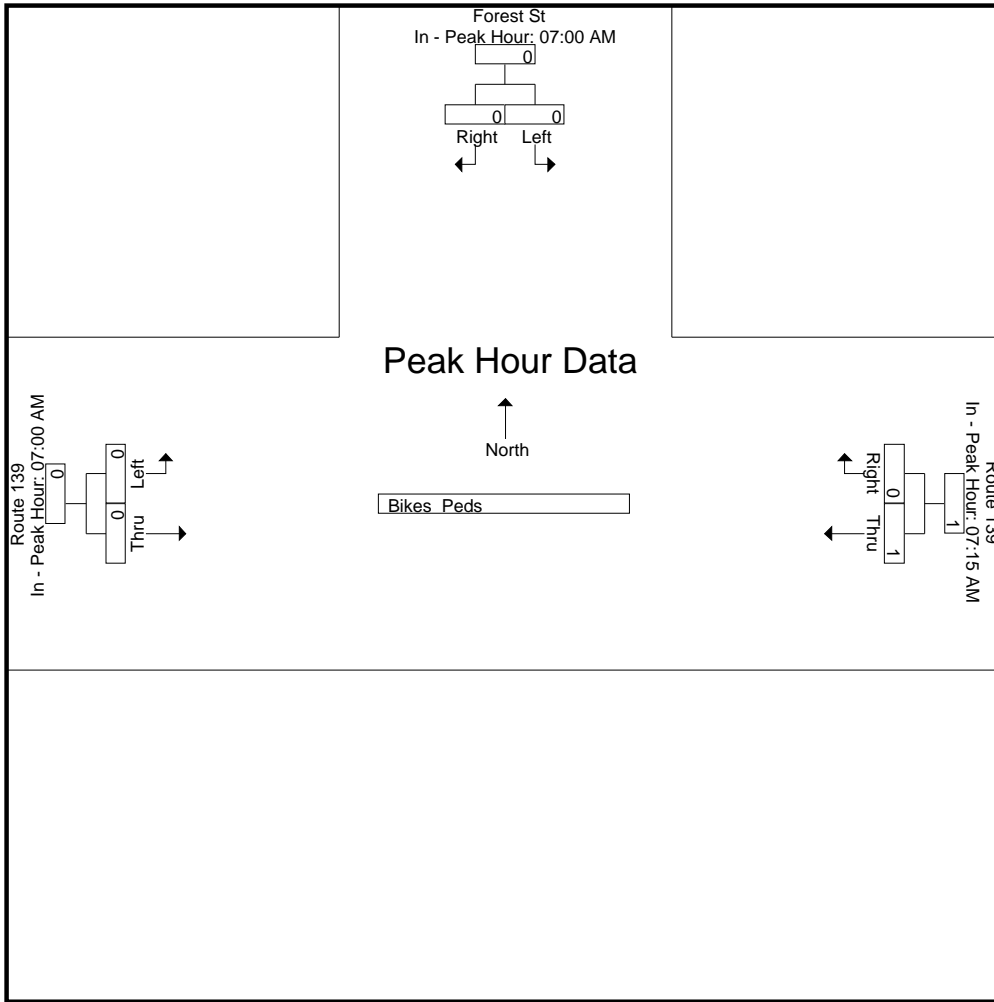
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:00 AM			07:15 AM			07:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	1	0	1	0	0	0
Total Volume	0	0	0	1	0	1	0	0	0
% App. Total	0	0		100	0		0	0	
PHF	.000	.000	.000	.250	.000	.250	.000	.000	.000

Accurate Counts  
978-664-2565

File Name : 90960006  
Site Code : 90960006  
Start Date : 9/16/2021  
Page No : 12

N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



# Accurate Counts

978-664-2565

N/S Street : Forest Street  
 E/W Street : Route 139  
 City/State : Marshfield, MA  
 Weather : Rain

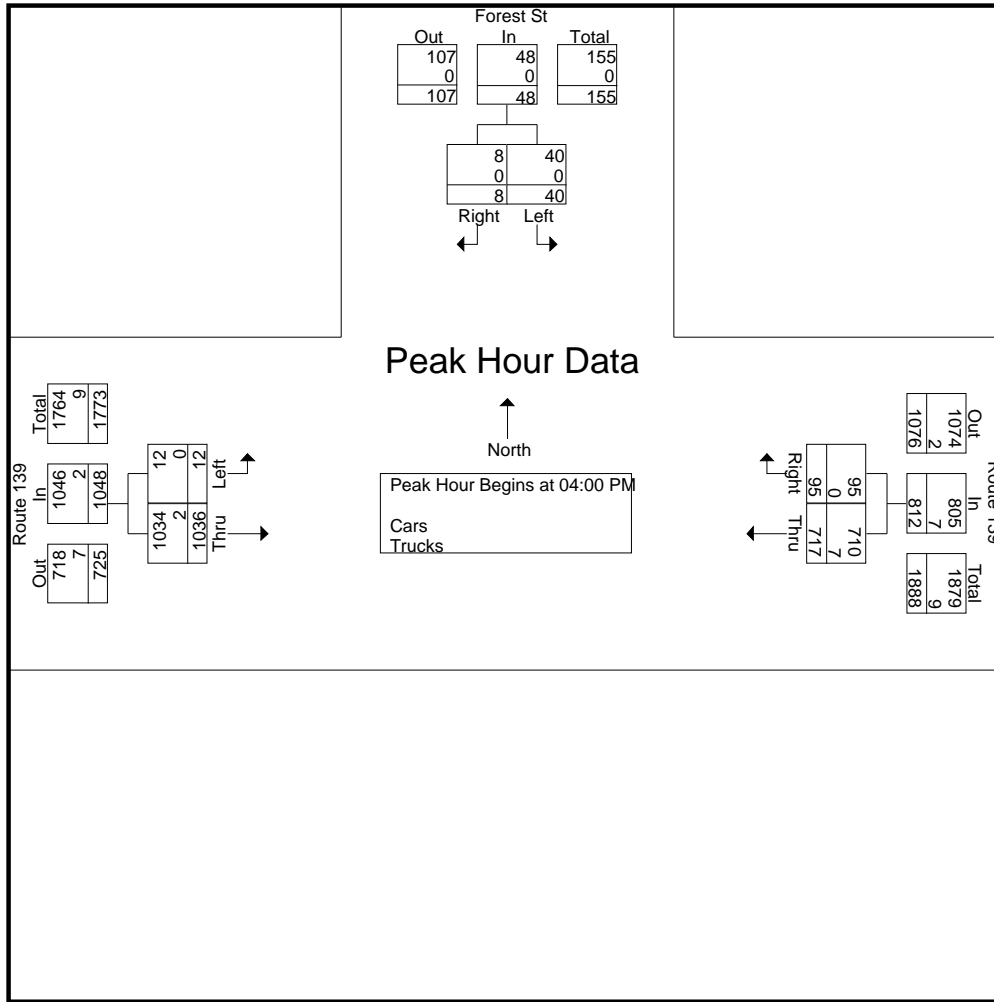
File Name : 90960006  
 Site Code : 90960006  
 Start Date : 9/16/2021  
 Page No : 1

### Groups Printed- Cars - Trucks

Start Time	Forest St From North		Route 139 From East		Route 139 From West		Int. Total
	Left	Right	Thru	Right	Left	Thru	
04:00 PM	8	2	199	15	2	250	476
04:15 PM	10	0	187	24	3	242	466
04:30 PM	11	4	163	29	5	294	506
04:45 PM	11	2	168	27	2	250	460
<b>Total</b>	<b>40</b>	<b>8</b>	<b>717</b>	<b>95</b>	<b>12</b>	<b>1036</b>	<b>1908</b>
05:00 PM	3	4	176	24	3	263	473
05:15 PM	5	2	169	6	1	260	443
05:30 PM	5	3	135	8	1	241	393
05:45 PM	10	0	156	14	2	205	387
<b>Total</b>	<b>23</b>	<b>9</b>	<b>636</b>	<b>52</b>	<b>7</b>	<b>969</b>	<b>1696</b>
<b>Grand Total</b>	<b>63</b>	<b>17</b>	<b>1353</b>	<b>147</b>	<b>19</b>	<b>2005</b>	<b>3604</b>
Apprch %	78.8	21.2	90.2	9.8	0.9	99.1	
Total %	1.7	0.5	37.5	4.1	0.5	55.6	
Cars	63	17	1343	147	19	2000	3589
% Cars	100	100	99.3	100	100	99.8	99.6
Trucks	0	0	10	0	0	5	15
% Trucks	0	0	0.7	0	0	0.2	0.4

Start Time	Forest St From North			Route 139 From East			Route 139 From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
<b>Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1</b>										
<b>Peak Hour for Entire Intersection Begins at 04:00 PM</b>										
04:00 PM	8	2	10	<b>199</b>	15	<b>214</b>	2	250	252	476
04:15 PM	10	0	10	187	24	211	3	242	245	466
04:30 PM	<b>11</b>	<b>4</b>	<b>15</b>	163	<b>29</b>	192	<b>5</b>	<b>294</b>	<b>299</b>	<b>506</b>
04:45 PM	11	2	13	168	27	195	2	250	252	460
<b>Total Volume</b>	<b>40</b>	<b>8</b>	<b>48</b>	<b>717</b>	<b>95</b>	<b>812</b>	<b>12</b>	<b>1036</b>	<b>1048</b>	<b>1908</b>
% App. Total	83.3	16.7		88.3	11.7		1.1	98.9		
PHF	.909	.500	.800	.901	.819	.949	.600	.881	.876	.943
Cars	40	8	48	710	95	805	12	1034	1046	1899
% Cars	100	100	100	99.0	100	99.1	100	99.8	99.8	99.5
Trucks	0	0	0	7	0	7	0	2	2	9
% Trucks	0	0	0	1.0	0	0.9	0	0.2	0.2	0.5

N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



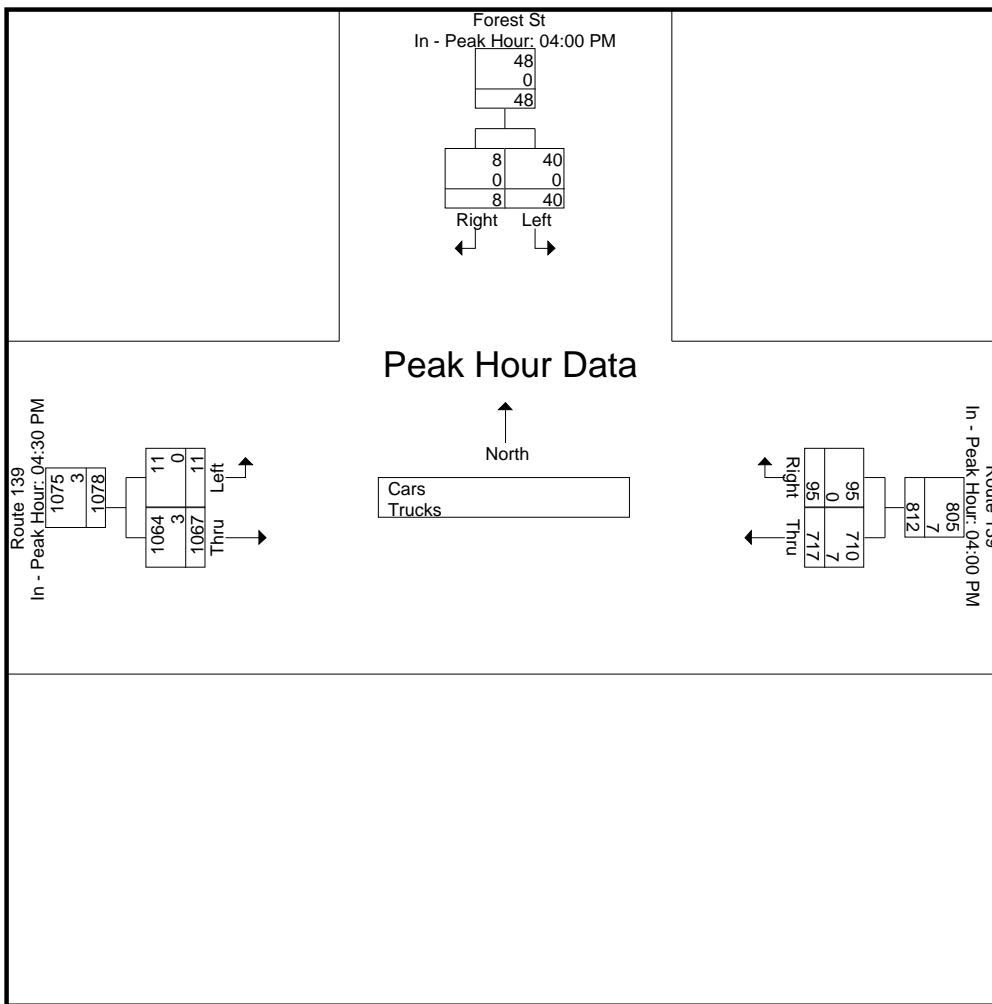
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:30 PM		
+0 mins.	8	2	10	<b>199</b>	15	<b>214</b>	<b>5</b>	<b>294</b>	<b>299</b>
+15 mins.	10	0	10	187	24	211	2	250	252
+30 mins.	<b>11</b>	<b>4</b>	<b>15</b>	163	<b>29</b>	192	3	263	266
+45 mins.	11	2	13	168	27	195	1	260	261
Total Volume	40	8	48	717	95	812	11	1067	1078
% App. Total	83.3	16.7		88.3	11.7		1	99	
PHF	.909	.500	.800	.901	.819	.949	.550	.907	.901
Cars	40	8	48	710	95	805	11	1064	1075
% Cars	100	100	100	99	100	99.1	100	99.7	99.7
Trucks	0	0	0	7	0	7	0	3	3
% Trucks	0	0	0	1	0	0.9	0	0.3	0.3

**Accurate Counts**  
978-664-2565

File Name : 90960006  
Site Code : 90960006  
Start Date : 9/16/2021  
Page No : 3

N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



**Accurate Counts**  
978-664-2565

File Name : 90960006  
Site Code : 90960006  
Start Date : 9/16/2021  
Page No : 4

N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain

Groups Printed- Cars

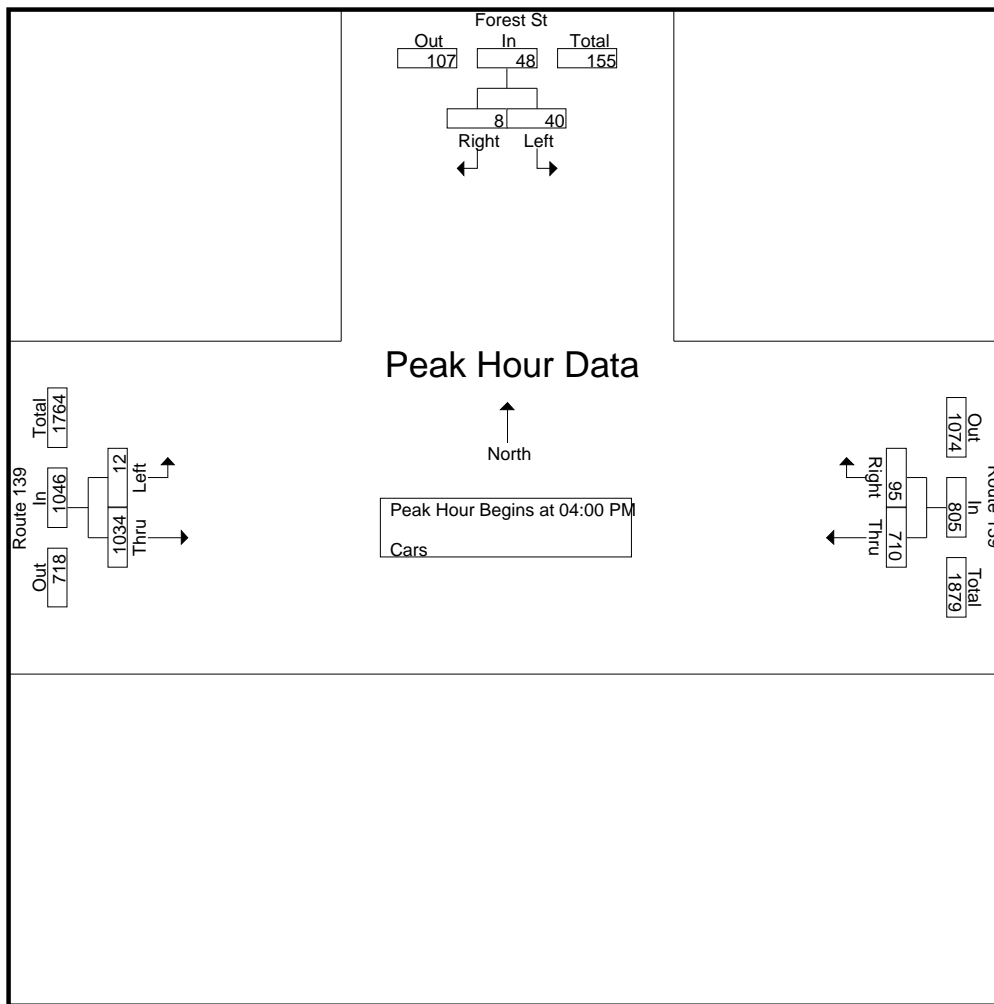
Start Time	Forest St From North		Route 139 From East		Route 139 From West		Int. Total
	Left	Right	Thru	Right	Left	Thru	
04:00 PM	8	2	198	15	2	250	475
04:15 PM	10	0	182	24	3	242	461
04:30 PM	11	4	162	29	5	293	504
04:45 PM	11	2	168	27	2	249	459
Total	40	8	710	95	12	1034	1899
05:00 PM	3	4	174	24	3	262	470
05:15 PM	5	2	168	6	1	260	442
05:30 PM	5	3	135	8	1	239	391
05:45 PM	10	0	156	14	2	205	387
Total	23	9	633	52	7	966	1690
Grand Total	63	17	1343	147	19	2000	3589
Apprch %	78.8	21.2	90.1	9.9	0.9	99.1	
Total %	1.8	0.5	37.4	4.1	0.5	55.7	

Start Time	Forest St From North			Route 139 From East			Route 139 From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	8	2	10	<b>198</b>	15	<b>213</b>	2	250	252	475
04:15 PM	10	0	10	182	24	206	3	242	245	461
04:30 PM	<b>11</b>	<b>4</b>	<b>15</b>	162	<b>29</b>	191	<b>5</b>	<b>293</b>	<b>298</b>	<b>504</b>
04:45 PM	11	2	13	168	27	195	2	249	251	459
Total Volume	40	8	48	710	95	805	12	1034	1046	1899
% App. Total	83.3	16.7		88.2	11.8		1.1	98.9		
PHF	.909	.500	.800	.896	.819	.945	.600	.882	.878	.942

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
Peak Hour for Entire Intersection Begins at 04:00 PM



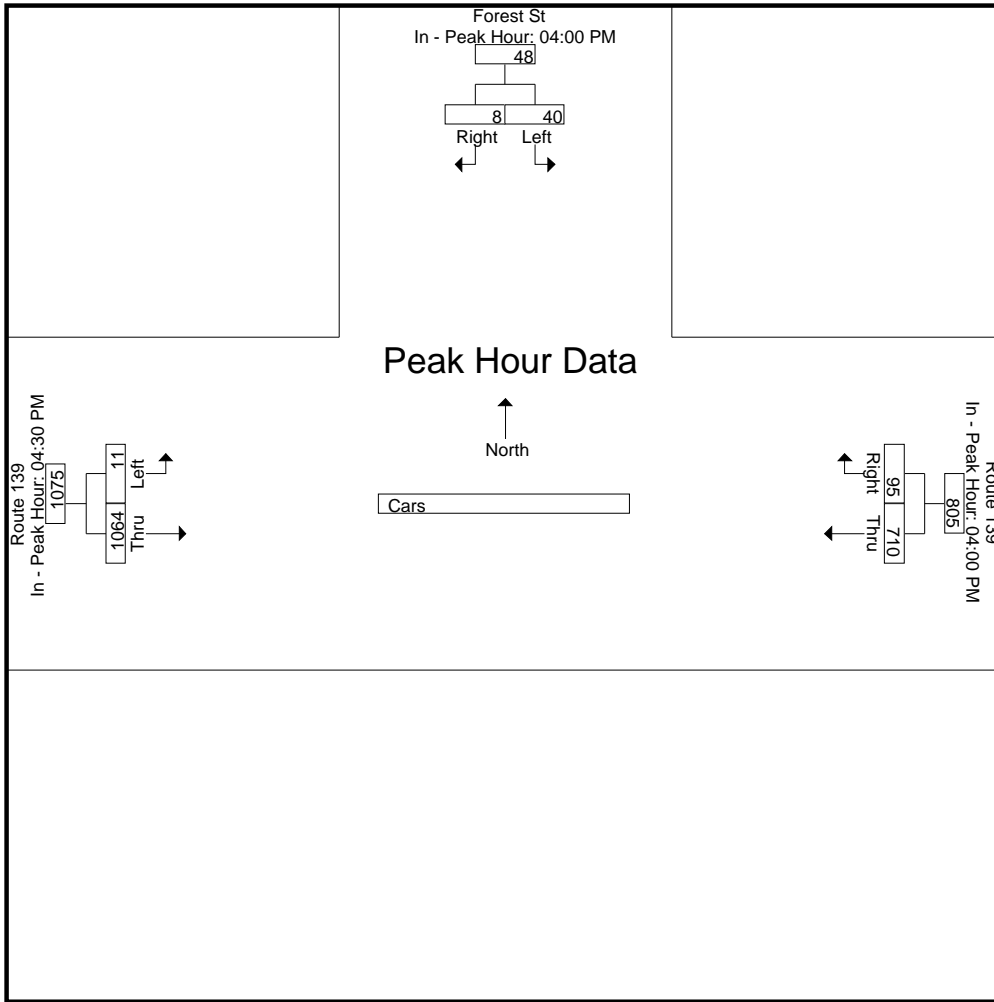
N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:30 PM		
+0 mins.	8	2	10	<b>198</b>	15	<b>213</b>	<b>5</b>	<b>293</b>	<b>298</b>
+15 mins.	10	0	10	182	24	206	2	249	251
+30 mins.	<b>11</b>	<b>4</b>	<b>15</b>	162	<b>29</b>	191	3	262	265
+45 mins.	11	2	13	168	27	195	1	260	261
Total Volume	40	8	48	710	95	805	11	1064	1075
% App. Total	83.3	16.7		88.2	11.8		1	99	
PHF	.909	.500	.800	.896	.819	.945	.550	.908	.902

N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



**Accurate Counts**  
978-664-2565

File Name : 90960006  
Site Code : 90960006  
Start Date : 9/16/2021  
Page No : 7

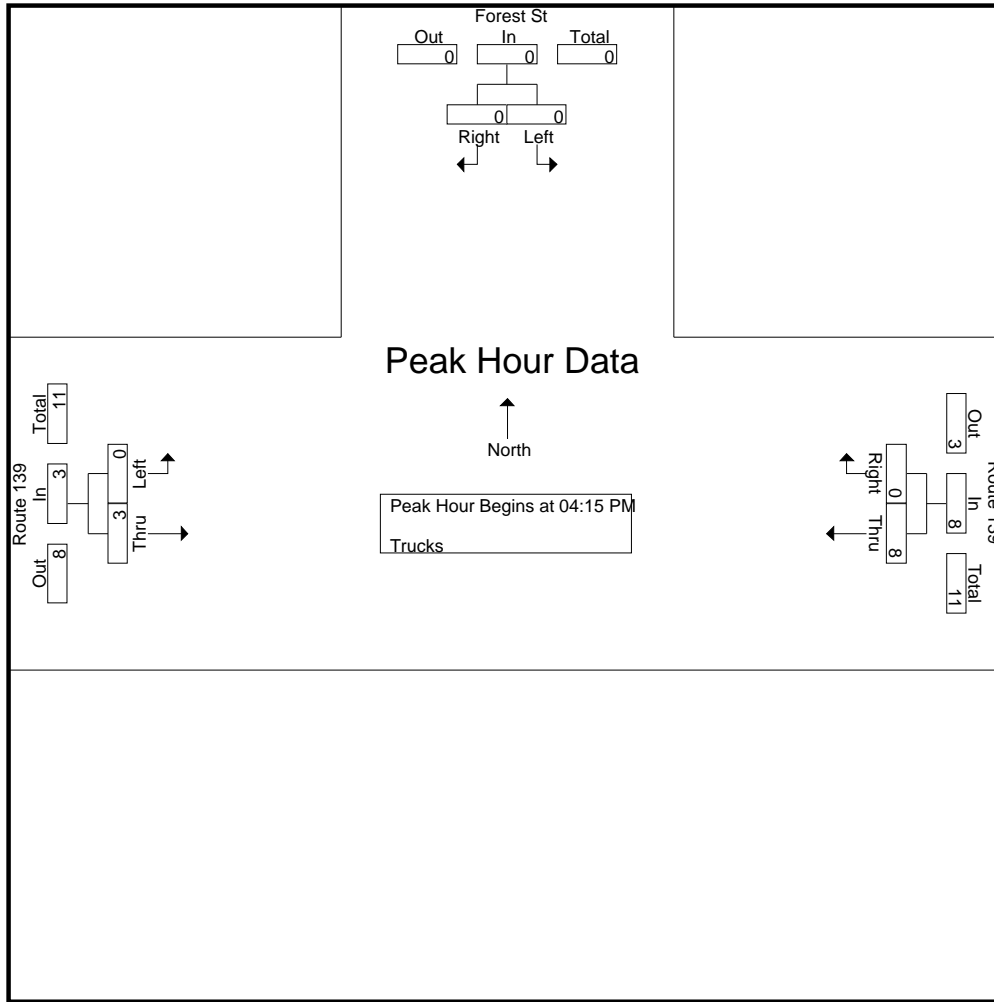
N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain

Groups Printed- Trucks

Start Time	Forest St From North		Route 139 From East		Route 139 From West		Int. Total
	Left	Right	Thru	Right	Left	Thru	
04:00 PM	0	0	1	0	0	0	1
04:15 PM	0	0	5	0	0	0	5
04:30 PM	0	0	1	0	0	1	2
04:45 PM	0	0	0	0	0	1	1
<b>Total</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>9</b>
05:00 PM	0	0	2	0	0	1	3
05:15 PM	0	0	1	0	0	0	1
05:30 PM	0	0	0	0	0	2	2
05:45 PM	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>6</b>
<b>Grand Total</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>15</b>
Apprch %	0	0	100	0	0	100	
Total %	0	0	66.7	0	0	33.3	

Start Time	Forest St From North			Route 139 From East			Route 139 From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	0	0	0	5	0	5	0	0	0	5
04:30 PM	0	0	0	1	0	1	0	1	1	2
04:45 PM	0	0	0	0	0	0	0	1	1	1
05:00 PM	0	0	0	2	0	2	0	1	1	3
Total Volume	0	0	0	8	0	8	0	3	3	11
% App. Total	0	0	0	100	0	100	0	100		
PHF	.000	.000	.000	.400	.000	.400	.000	.750	.750	.550

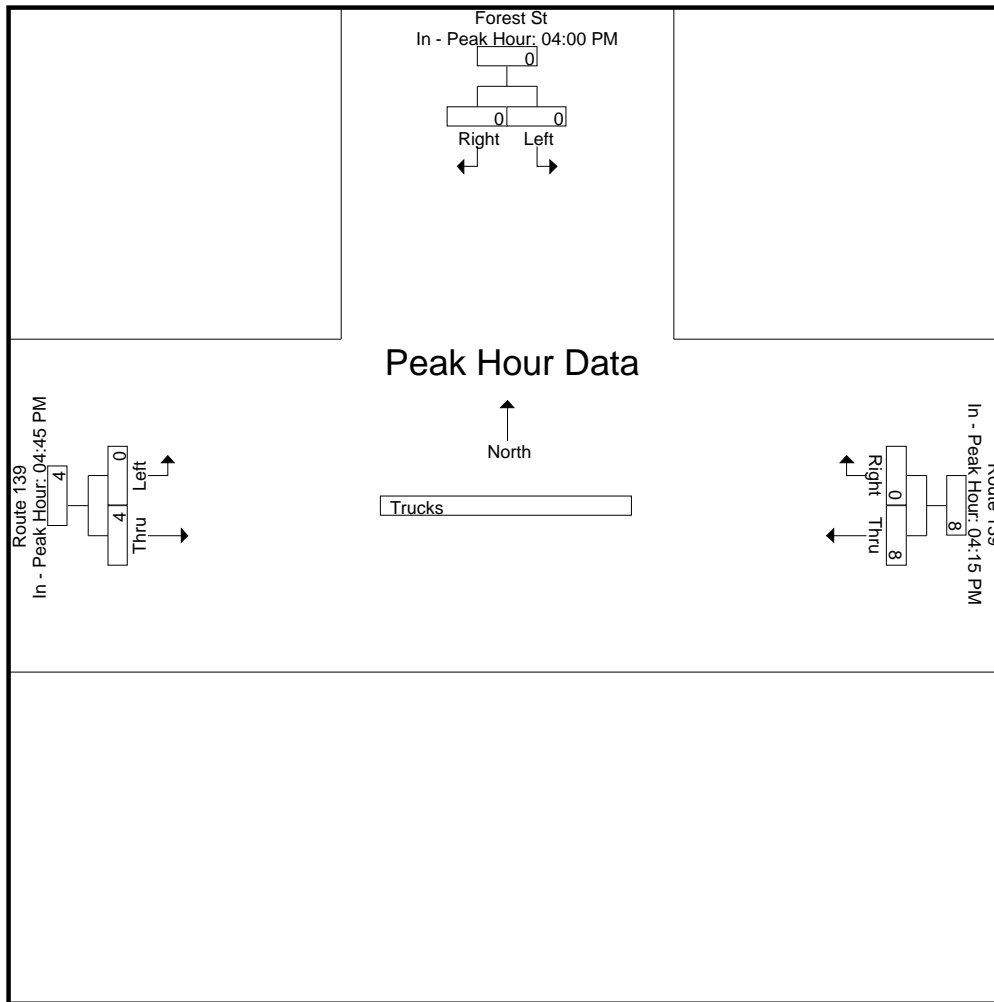
N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	04:00 PM			04:15 PM			04:45 PM		
+0 mins.	0	0	0	5	0	5	0	1	1
+15 mins.	0	0	0	1	0	1	0	1	1
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	2	0	2	0	2	2
Total Volume	0	0	0	8	0	8	0	4	4
% App. Total	0	0	0	100	0	100	0	100	100
PHF	.000	.000	.000	.400	.000	.400	.000	.500	.500

N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



# Accurate Counts

978-664-2565

N/S Street : Forest Street  
 E/W Street : Route 139  
 City/State : Marshfield, MA  
 Weather : Rain

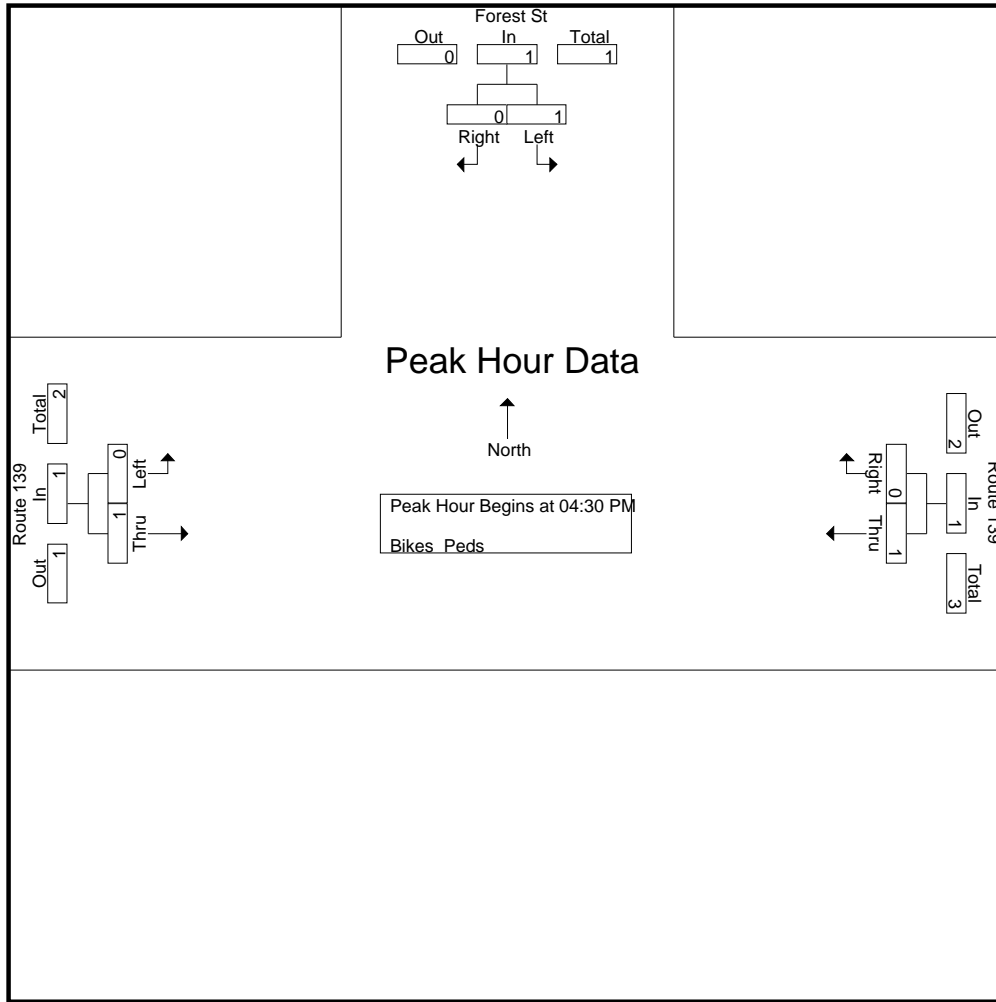
File Name : 90960006  
 Site Code : 90960006  
 Start Date : 9/16/2021  
 Page No : 10

### Groups Printed- Bikes Peds

Start Time	Forest St From North			Route 139 From East			Route 139 From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	1	0	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>
05:00 PM	0	0	0	1	0	0	0	0	0	0	1	1
05:15 PM	1	0	0	0	0	0	0	0	0	0	1	1
05:30 PM	1	0	1	0	0	0	0	0	0	1	1	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>4</b>
<b>Grand Total</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>4</b>	<b>5</b>
Apprch %	100	0		100	0		0	100				
Total %	50	0		25	0		0	25		20	80	

Start Time	Forest St From North			Route 139 From East			Route 139 From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	0	0	0	0	0	0	0	1	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	1	0	1	0	0	0	1
05:15 PM	1	0	1	0	0	0	0	0	0	1
<b>Total Volume</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>3</b>
<b>% App. Total</b>	<b>100</b>	<b>0</b>	<b>100</b>	<b>100</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>100</b>	<b>100</b>	<b>100</b>
PHF	.250	.000	.250	.250	.000	.250	.000	.250	.250	.750

N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain



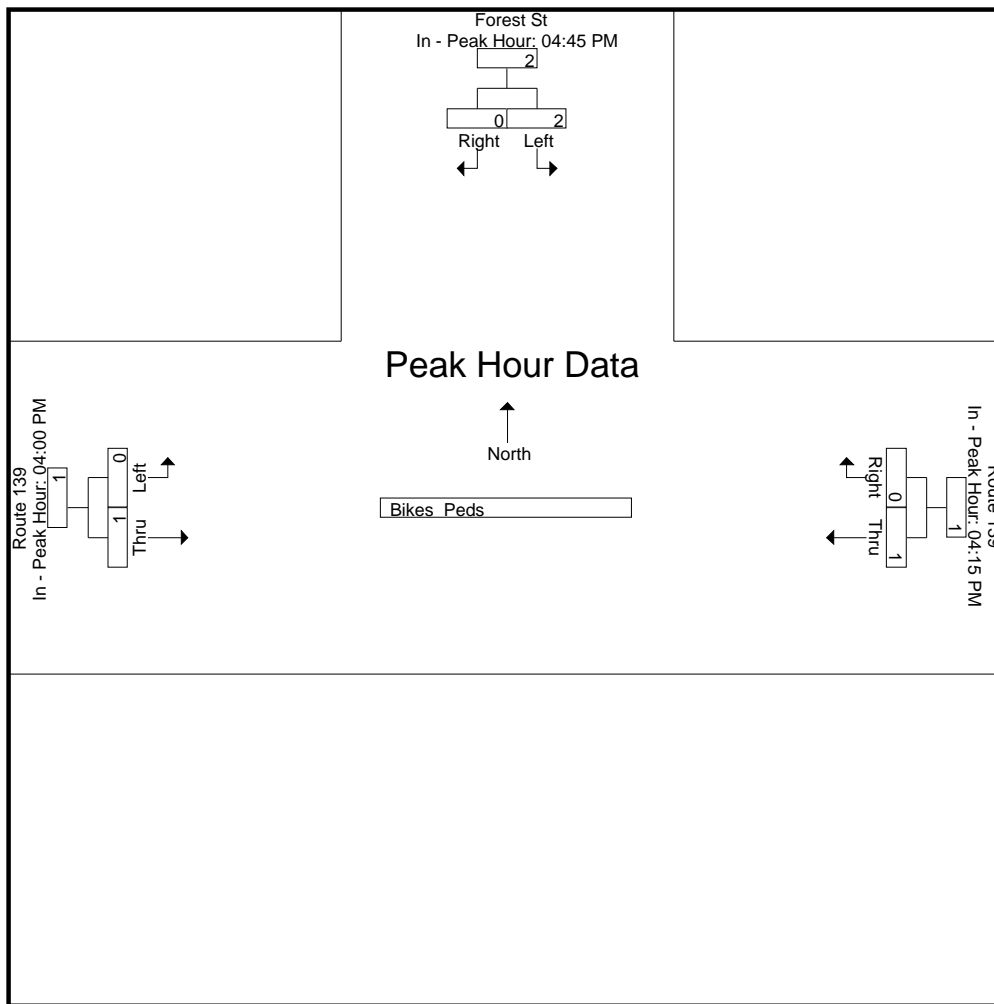
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	04:45 PM			04:15 PM			04:00 PM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	1	0	1	0	0	0	0	1	1
+45 mins.	1	0	1	1	0	1	0	0	0
Total Volume	2	0	2	1	0	1	0	1	1
% App. Total	100	0		100	0		0	100	
PHF	.500	.000	.500	.250	.000	.250	.000	.250	.250

**Accurate Counts**  
978-664-2565

File Name : 90960006  
Site Code : 90960006  
Start Date : 9/16/2021  
Page No : 12

N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Rain





**Accurate Counts**  
978-664-2565

N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy

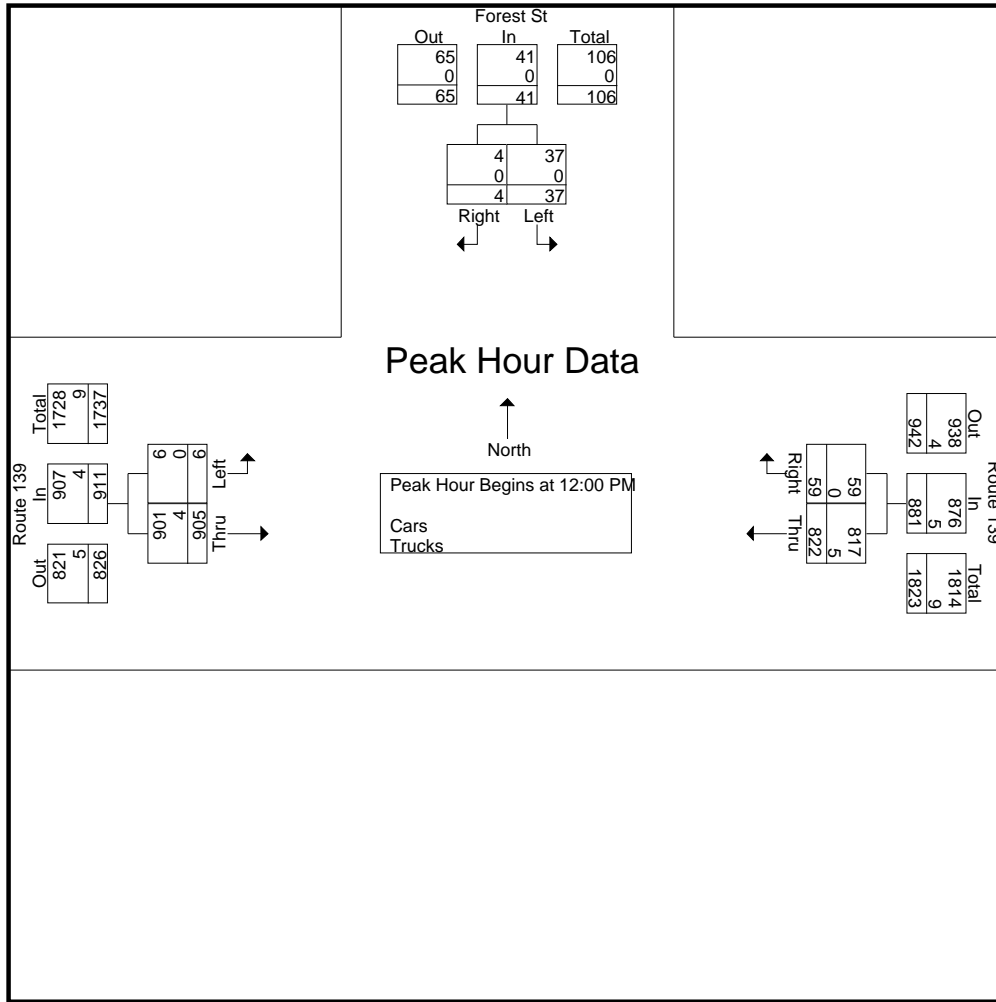
File Name : 909600S6  
Site Code : 90960006  
Start Date : 9/18/2021  
Page No : 1

Groups Printed- Cars - Trucks

Start Time	Forest St From North		Route 139 From East		Route 139 From West		Int. Total
	Left	Right	Thru	Right	Left	Thru	
11:00 AM	11	1	211	21	4	182	430
11:15 AM	12	4	219	13	2	195	445
11:30 AM	5	1	211	11	0	188	416
11:45 AM	11	1	203	19	3	195	432
<b>Total</b>	<b>39</b>	<b>7</b>	<b>844</b>	<b>64</b>	<b>9</b>	<b>760</b>	<b>1723</b>
12:00 PM	6	1	209	15	1	214	446
12:15 PM	6	3	213	12	3	227	464
12:30 PM	13	0	190	19	0	227	449
12:45 PM	12	0	210	13	2	237	474
<b>Total</b>	<b>37</b>	<b>4</b>	<b>822</b>	<b>59</b>	<b>6</b>	<b>905</b>	<b>1833</b>
01:00 PM	5	1	190	11	1	191	399
01:15 PM	5	2	196	13	2	215	433
01:30 PM	3	1	189	5	0	226	424
01:45 PM	3	0	166	19	5	223	416
<b>Total</b>	<b>16</b>	<b>4</b>	<b>741</b>	<b>48</b>	<b>8</b>	<b>855</b>	<b>1672</b>
<b>Grand Total</b>	<b>92</b>	<b>15</b>	<b>2407</b>	<b>171</b>	<b>23</b>	<b>2520</b>	<b>5228</b>
Apprch %	86	14	93.4	6.6	0.9	99.1	
Total %	1.8	0.3	46	3.3	0.4	48.2	
Cars	92	15	2393	171	23	2510	5204
% Cars	100	100	99.4	100	100	99.6	99.5
Trucks	0	0	14	0	0	10	24
% Trucks	0	0	0.6	0	0	0.4	0.5

Start Time	Forest St From North			Route 139 From East			Route 139 From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 12:00 PM										
12:00 PM	6	1	7	209	15	224	1	214	215	446
12:15 PM	6	<b>3</b>	<b>9</b>	<b>213</b>	12	<b>225</b>	<b>3</b>	227	230	464
12:30 PM	<b>13</b>	0	<b>13</b>	190	<b>19</b>	209	0	227	227	449
12:45 PM	12	0	12	210	13	223	2	<b>237</b>	<b>239</b>	<b>474</b>
Total Volume	37	4	41	822	59	881	6	905	911	1833
% App. Total	90.2	9.8		93.3	6.7		0.7	99.3		
PHF	.712	.333	.788	.965	.776	.979	.500	.955	.953	.967
Cars	37	4	41	817	59	876	6	901	907	1824
% Cars	100	100	100	99.4	100	99.4	100	99.6	99.6	99.5
Trucks	0	0	0	5	0	5	0	4	4	9
% Trucks	0	0	0	0.6	0	0.6	0	0.4	0.4	0.5

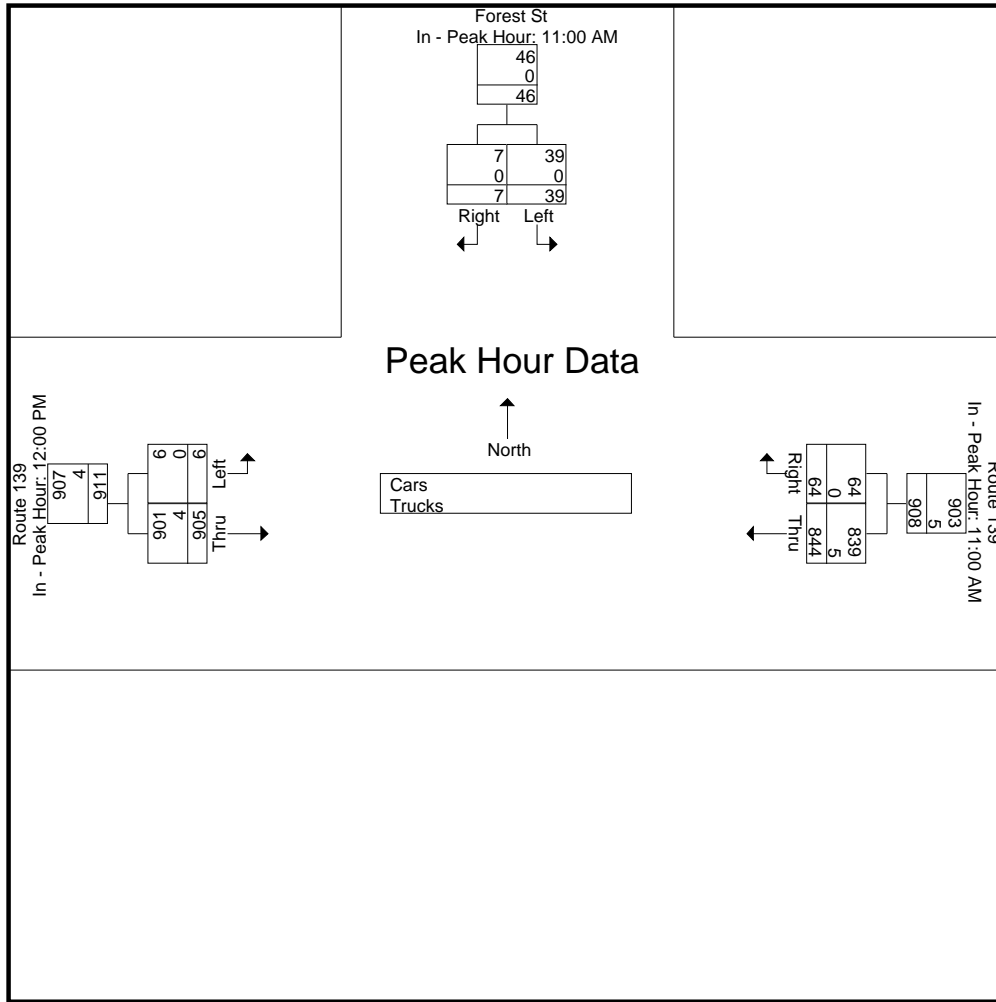
N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy



Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	11:00 AM			11:00 AM			12:00 PM		
+0 mins.	11	1	12	211	<b>21</b>	<b>232</b>	1	214	215
+15 mins.	<b>12</b>	<b>4</b>	<b>16</b>	<b>219</b>	13	232	<b>3</b>	227	230
+30 mins.	5	1	6	211	11	222	0	227	227
+45 mins.	11	1	12	203	19	222	2	<b>237</b>	<b>239</b>
Total Volume	39	7	46	844	64	908	6	905	911
% App. Total	84.8	15.2		93	7		0.7	99.3	
PHF	.813	.438	.719	.963	.762	.978	.500	.955	.953
Cars	39	7	46	839	64	903	6	901	907
% Cars	100	100	100	99.4	100	99.4	100	99.6	99.6
Trucks	0	0	0	5	0	5	0	4	4
% Trucks	0	0	0	0.6	0	0.6	0	0.4	0.4

N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy



# Accurate Counts

978-664-2565

N/S Street : Forest Street  
 E/W Street : Route 139  
 City/State : Marshfield, MA  
 Weather : Cloudy

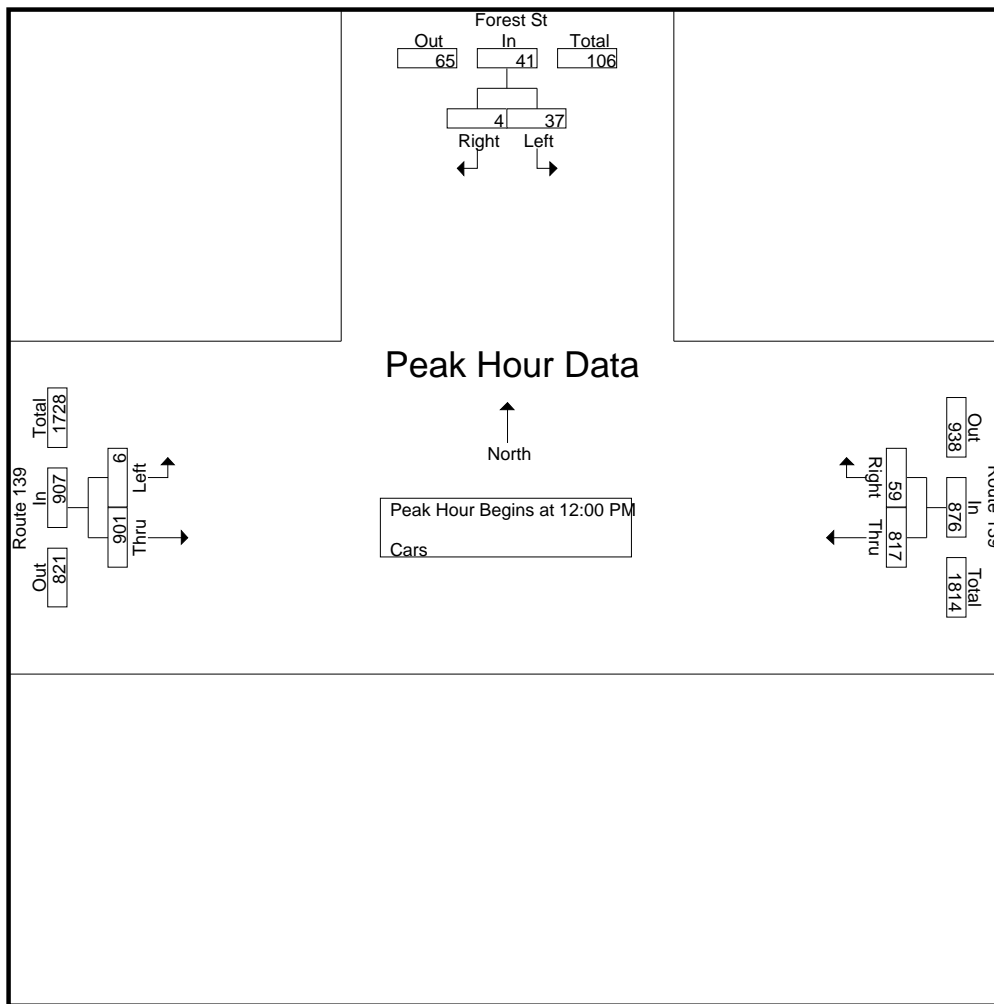
File Name : 909600S6  
 Site Code : 90960006  
 Start Date : 9/18/2021  
 Page No : 4

### Groups Printed- Cars

Start Time	Forest St From North		Route 139 From East		Route 139 From West		Int. Total
	Left	Right	Thru	Right	Left	Thru	
11:00 AM	11	1	209	21	4	180	426
11:15 AM	12	4	217	13	2	193	441
11:30 AM	5	1	210	11	0	188	415
11:45 AM	11	1	203	19	3	195	432
<b>Total</b>	<b>39</b>	<b>7</b>	<b>839</b>	<b>64</b>	<b>9</b>	<b>756</b>	<b>1714</b>
12:00 PM	6	1	207	15	1	214	444
12:15 PM	6	3	211	12	3	225	460
12:30 PM	13	0	190	19	0	226	448
12:45 PM	12	0	209	13	2	236	472
<b>Total</b>	<b>37</b>	<b>4</b>	<b>817</b>	<b>59</b>	<b>6</b>	<b>901</b>	<b>1824</b>
01:00 PM	5	1	187	11	1	191	396
01:15 PM	5	2	196	13	2	214	432
01:30 PM	3	1	189	5	0	225	423
01:45 PM	3	0	165	19	5	223	415
<b>Total</b>	<b>16</b>	<b>4</b>	<b>737</b>	<b>48</b>	<b>8</b>	<b>853</b>	<b>1666</b>
<b>Grand Total</b>	<b>92</b>	<b>15</b>	<b>2393</b>	<b>171</b>	<b>23</b>	<b>2510</b>	<b>5204</b>
Apprch %	86	14	93.3	6.7	0.9	99.1	
Total %	1.8	0.3	46	3.3	0.4	48.2	

Start Time	Forest St From North			Route 139 From East			Route 139 From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 12:00 PM										
12:00 PM	6	1	7	207	15	222	1	214	215	444
12:15 PM	6	<b>3</b>	9	<b>211</b>	12	<b>223</b>	<b>3</b>	225	228	460
12:30 PM	<b>13</b>	0	<b>13</b>	190	<b>19</b>	209	0	226	226	448
12:45 PM	12	0	12	209	13	222	2	<b>236</b>	<b>238</b>	<b>472</b>
<b>Total Volume</b>	<b>37</b>	<b>4</b>	<b>41</b>	<b>817</b>	<b>59</b>	<b>876</b>	<b>6</b>	<b>901</b>	<b>907</b>	<b>1824</b>
% App. Total	90.2	9.8		93.3	6.7		0.7	99.3		
PHF	.712	.333	.788	.968	.776	.982	.500	.954	.953	.966

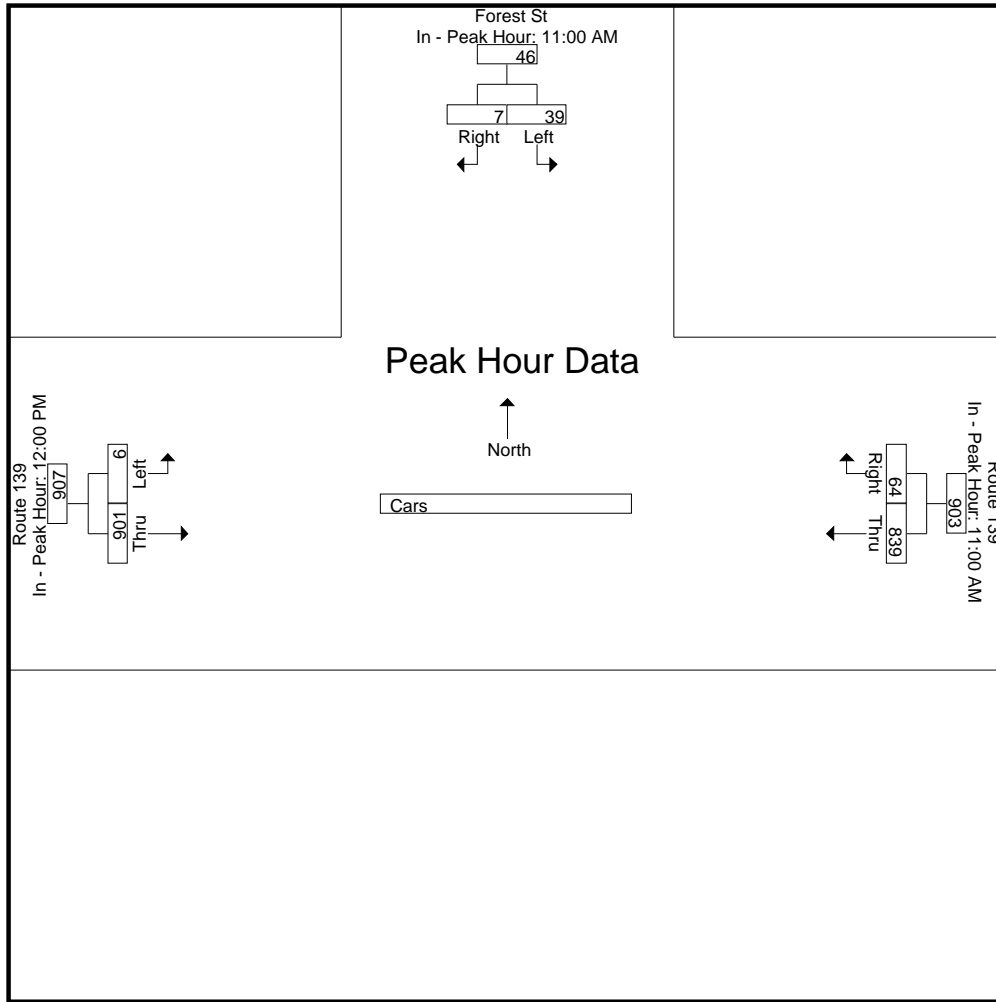
N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy



Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	11:00 AM			11:00 AM			12:00 PM		
+0 mins.	11	1	12	209	<b>21</b>	<b>230</b>	1	214	215
+15 mins.	<b>12</b>	<b>4</b>	<b>16</b>	<b>217</b>	13	230	<b>3</b>	225	228
+30 mins.	5	1	6	210	11	221	0	226	226
+45 mins.	11	1	12	203	19	222	2	<b>236</b>	<b>238</b>
Total Volume	39	7	46	839	64	903	6	901	907
% App. Total	84.8	15.2		92.9	7.1		0.7	99.3	
PHF	.813	.438	.719	.967	.762	.982	.500	.954	.953

N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy



# Accurate Counts

978-664-2565

N/S Street : Forest Street  
 E/W Street : Route 139  
 City/State : Marshfield, MA  
 Weather : Cloudy

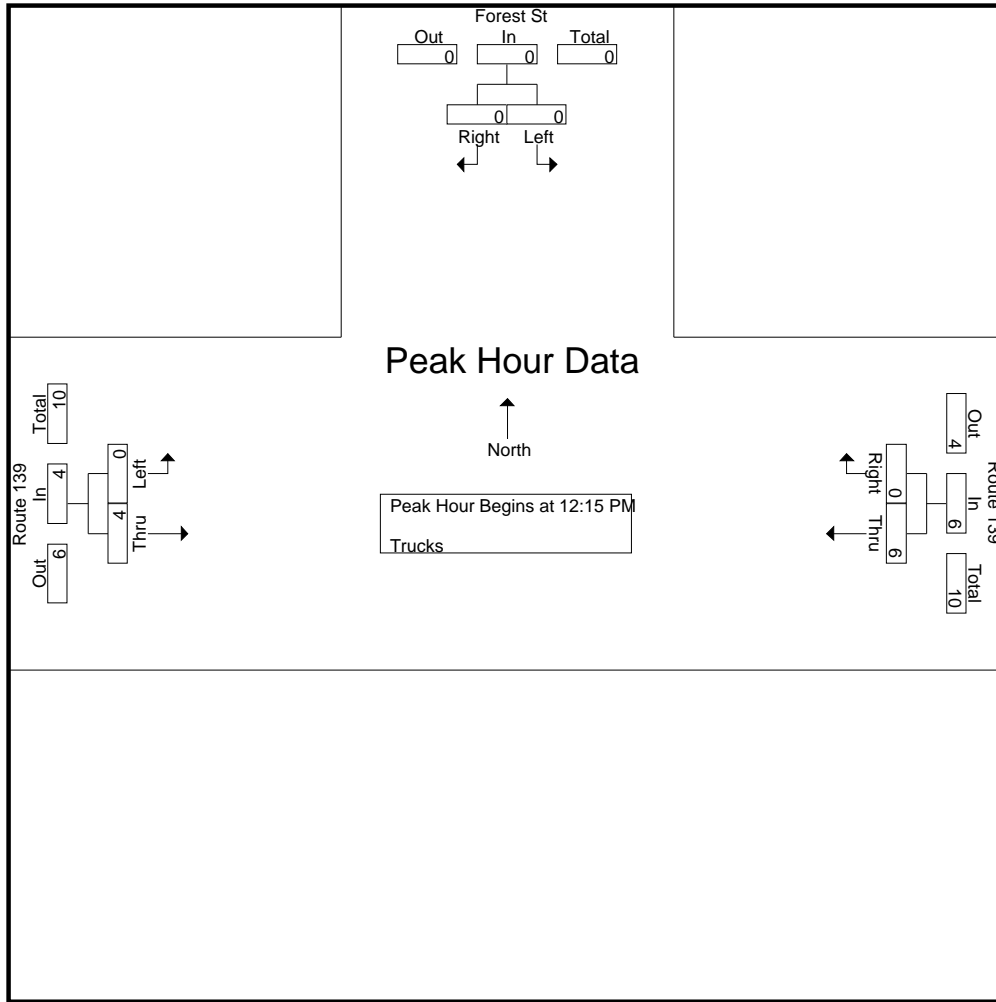
File Name : 909600S6  
 Site Code : 90960006  
 Start Date : 9/18/2021  
 Page No : 7

### Groups Printed- Trucks

Start Time	Forest St From North		Route 139 From East		Route 139 From West		Int. Total
	Left	Right	Thru	Right	Left	Thru	
11:00 AM	0	0	2	0	0	2	4
11:15 AM	0	0	2	0	0	2	4
11:30 AM	0	0	1	0	0	0	1
11:45 AM	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>9</b>
12:00 PM	0	0	2	0	0	0	2
12:15 PM	0	0	2	0	0	2	4
12:30 PM	0	0	0	0	0	1	1
12:45 PM	0	0	1	0	0	1	2
<b>Total</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>9</b>
01:00 PM	0	0	3	0	0	0	3
01:15 PM	0	0	0	0	0	1	1
01:30 PM	0	0	0	0	0	1	1
01:45 PM	0	0	1	0	0	0	1
<b>Total</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>6</b>
<b>Grand Total</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>24</b>
Apprch %	0	0	100	0	0	100	
Total %	0	0	58.3	0	0	41.7	

Start Time	Forest St From North			Route 139 From East			Route 139 From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 12:15 PM										
12:15 PM	0	0	0	2	0	2	0	<b>2</b>	<b>2</b>	<b>4</b>
12:30 PM	0	0	0	0	0	0	0	1	1	1
12:45 PM	0	0	0	1	0	1	0	1	1	2
01:00 PM	0	0	0	<b>3</b>	0	<b>3</b>	0	0	0	3
<b>Total Volume</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>10</b>
<b>% App. Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>100</b>	<b>100</b>	<b>100</b>
PHF	.000	.000	.000	.500	.000	.500	.000	.500	.500	.625

N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy

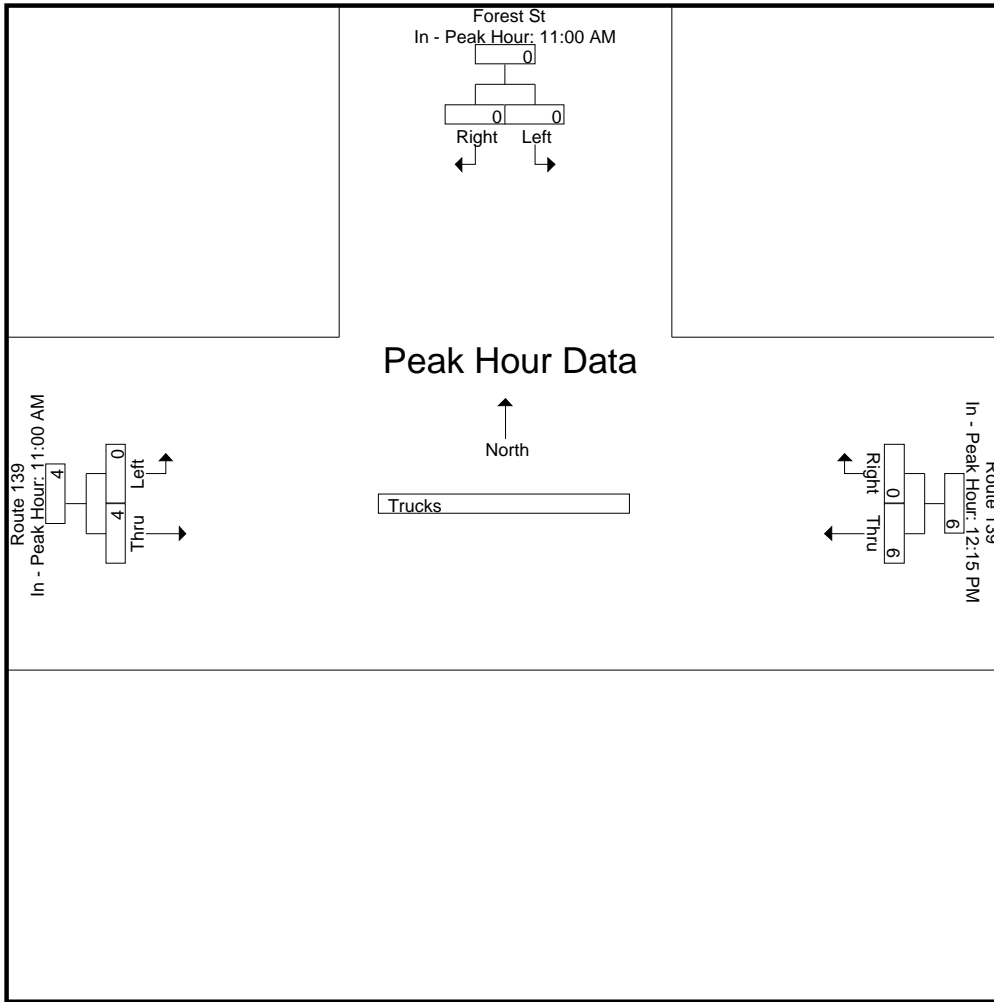


Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	11:00 AM			12:15 PM			11:00 AM		
+0 mins.	0	0	0	2	0	2	0	2	2
+15 mins.	0	0	0	0	0	0	0	2	2
+30 mins.	0	0	0	1	0	1	0	0	0
+45 mins.	0	0	0	3	0	3	0	0	0
Total Volume	0	0	0	6	0	6	0	4	4
% App. Total	0	0	0	100	0	100	0	100	100
PHF	.000	.000	.000	.500	.000	.500	.000	.500	.500



N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy



**Accurate Counts**  
978-664-2565

N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy

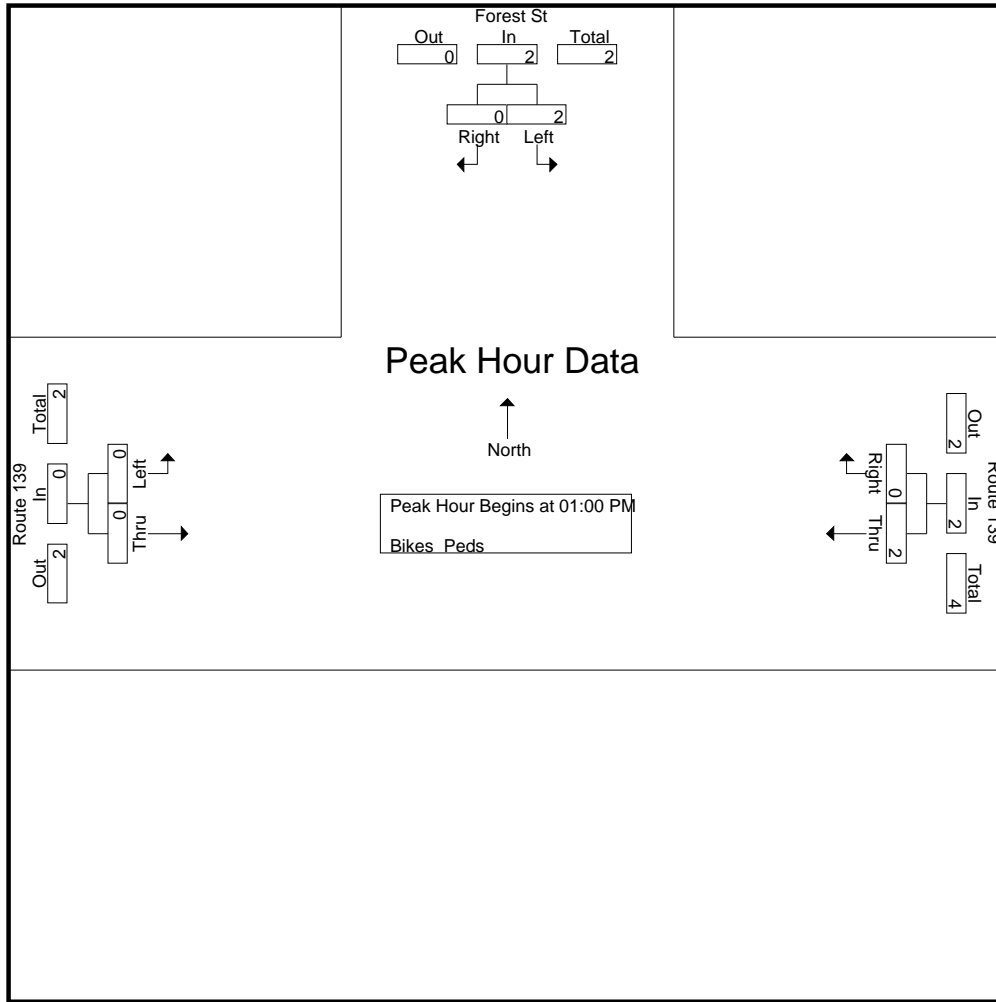
File Name : 909600S6  
Site Code : 90960006  
Start Date : 9/18/2021  
Page No : 10

Groups Printed- Bikes Peds

Start Time	Forest St From North			Route 139 From East			Route 139 From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
11:00 AM	0	0	1	0	0	0	0	0	0	1	0	1
11:15 AM	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
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	0	0	0	0	0	1	0	1
12:00 PM	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
12:30 PM	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
Total	0	0	0	0	0	0	0	0	0	0	0	0
01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
01:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
01:30 PM	1	0	0	2	0	0	0	0	0	0	3	3
01:45 PM	1	0	0	0	0	0	0	0	0	0	1	1
Total	2	0	0	2	0	0	0	0	0	0	4	4
Grand Total	2	0	1	2	0	0	0	0	0	1	4	5
Apprch %	100	0		100	0		0	0				
Total %	50	0		50	0		0	0		20	80	

Start Time	Forest St From North			Route 139 From East			Route 139 From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 01:00 PM										
01:00 PM	0	0	0	0	0	0	0	0	0	0
01:15 PM	0	0	0	0	0	0	0	0	0	0
01:30 PM	1	0	1	2	0	2	0	0	0	3
01:45 PM	1	0	1	0	0	0	0	0	0	1
Total Volume	2	0	2	2	0	2	0	0	0	4
% App. Total	100	0		100	0		0	0		
PHF	.500	.000	.500	.250	.000	.250	.000	.000	.000	.333

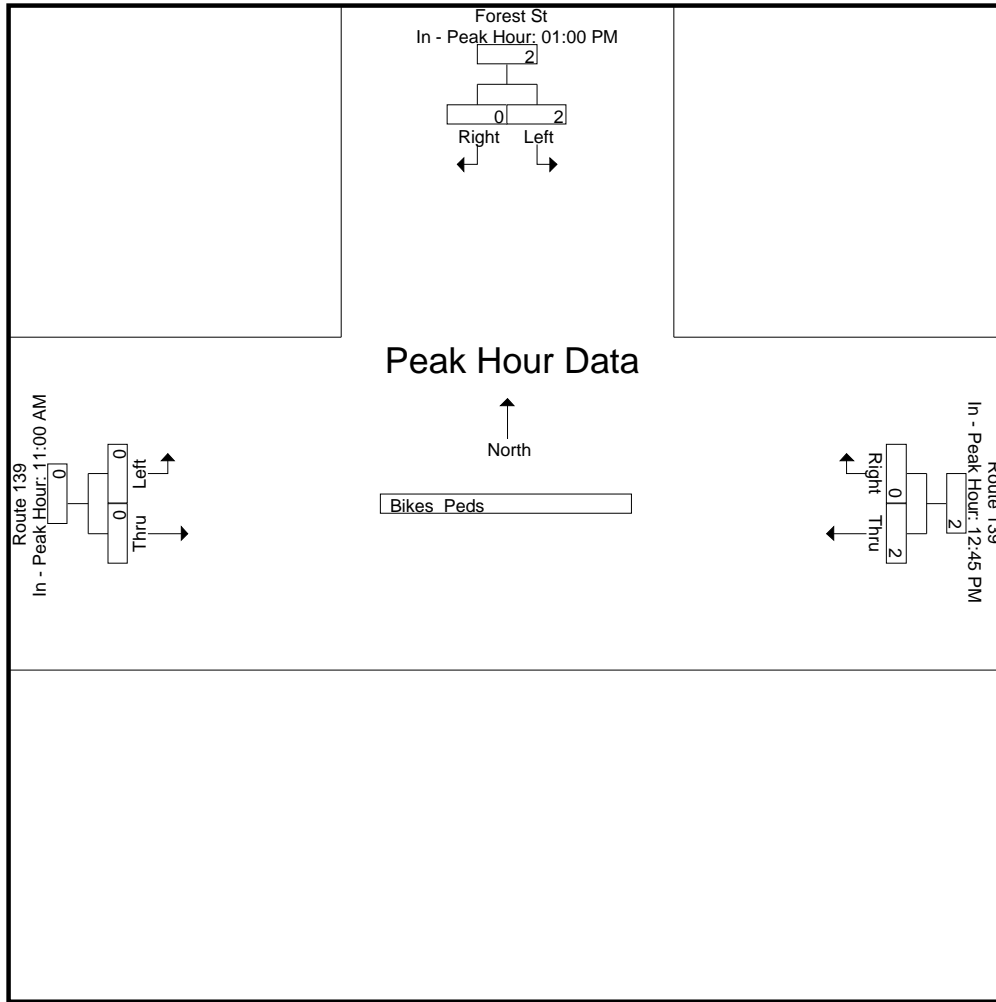
N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy



Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	01:00 PM			12:45 PM			11:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	1	0	1	0	0	0	0	0	0
+45 mins.	1	0	1	2	0	2	0	0	0
Total Volume	2	0	2	2	0	2	0	0	0
% App. Total	100	0		100	0		0	0	
PHF	.500	.000	.500	.250	.000	.250	.000	.000	.000

N/S Street : Forest Street  
E/W Street : Route 139  
City/State : Marshfield, MA  
Weather : Cloudy



# Accurate Counts

978-664-2565

N/S Street : Enterprise Drive  
 E/W Street : Commerce Way  
 City/State : Marshfield, MA  
 Weather : Rain

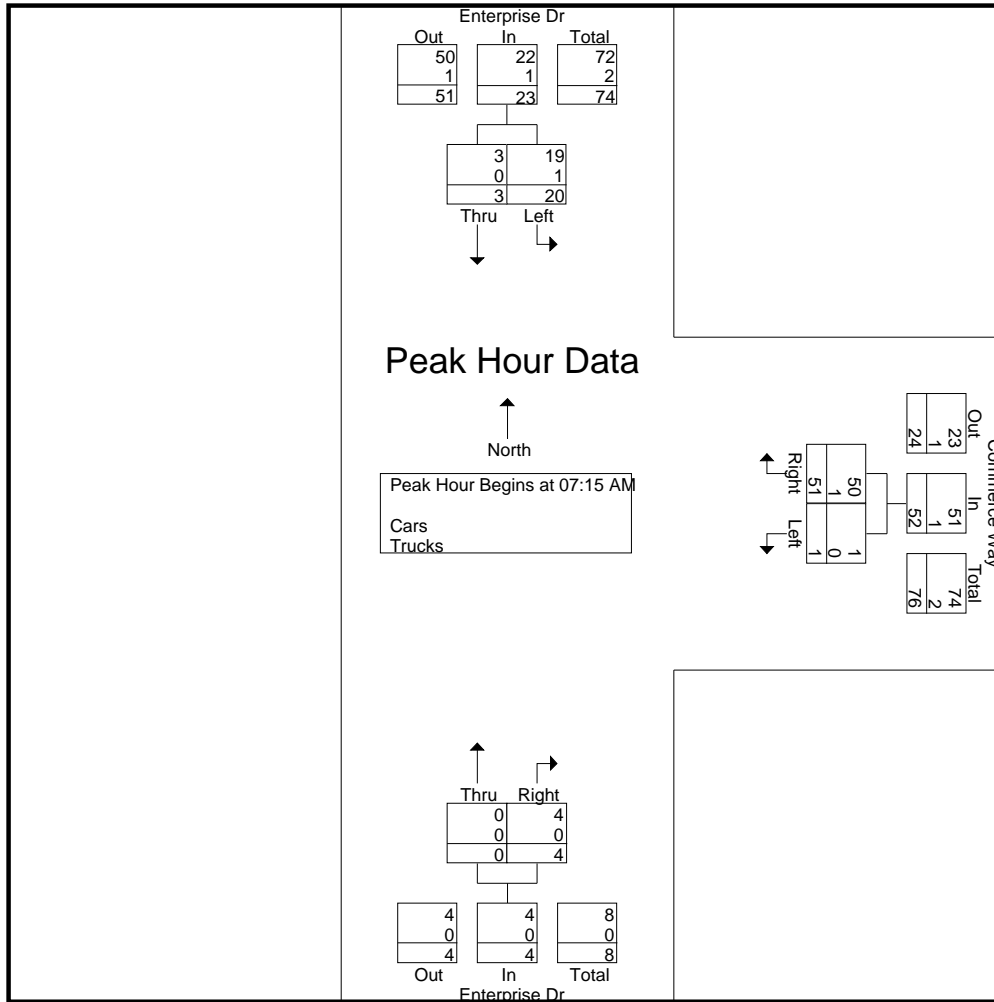
File Name : 90960003  
 Site Code : 90960003  
 Start Date : 9/16/2021  
 Page No : 1

### Groups Printed- Cars - Trucks

Start Time	Enterprise Dr From North		Commerce Way From East		Enterprise Dr From South		Int. Total
	Left	Thru	Left	Right	Thru	Right	
07:00 AM	3	0	0	11	0	0	14
07:15 AM	5	1	1	13	0	1	21
07:30 AM	6	1	0	16	0	1	24
07:45 AM	5	1	0	10	0	1	17
<b>Total</b>	<b>19</b>	<b>3</b>	<b>1</b>	<b>50</b>	<b>0</b>	<b>3</b>	<b>76</b>
08:00 AM	4	0	0	12	0	1	17
08:15 AM	3	0	0	11	0	0	14
08:30 AM	6	0	0	16	0	0	22
08:45 AM	9	0	1	15	0	0	25
<b>Total</b>	<b>22</b>	<b>0</b>	<b>1</b>	<b>54</b>	<b>0</b>	<b>1</b>	<b>78</b>
<b>Grand Total</b>	<b>41</b>	<b>3</b>	<b>2</b>	<b>104</b>	<b>0</b>	<b>4</b>	<b>154</b>
Apprch %	93.2	6.8	1.9	98.1	0	100	
Total %	26.6	1.9	1.3	67.5	0	2.6	
Cars	40	3	2	102	0	4	151
% Cars	97.6	100	100	98.1	0	100	98.1
Trucks	1	0	0	2	0	0	3
% Trucks	2.4	0	0	1.9	0	0	1.9

Start Time	Enterprise Dr From North			Commerce Way From East			Enterprise Dr From South			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	5	1	6	1	13	14	0	1	1	21
07:30 AM	6	1	7	0	16	16	0	1	1	24
07:45 AM	5	1	6	0	10	10	0	1	1	17
08:00 AM	4	0	4	0	12	12	0	1	1	17
<b>Total Volume</b>	<b>20</b>	<b>3</b>	<b>23</b>	<b>1</b>	<b>51</b>	<b>52</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>79</b>
<b>% App. Total</b>	<b>87</b>	<b>13</b>	<b>95.7</b>	<b>1.9</b>	<b>98.1</b>	<b>98.1</b>	<b>0</b>	<b>100</b>	<b>100</b>	<b>97.5</b>
PHF	.833	.750	.821	.250	.797	.813	.000	1.00	1.00	.823
Cars	19	3	22	1	50	51	0	4	4	77
% Cars	95.0	100	95.7	100	98.0	98.1	0	100	100	97.5
Trucks	1	0	1	0	1	1	0	0	0	2
% Trucks	5.0	0	4.3	0	2.0	1.9	0	0	0	2.5

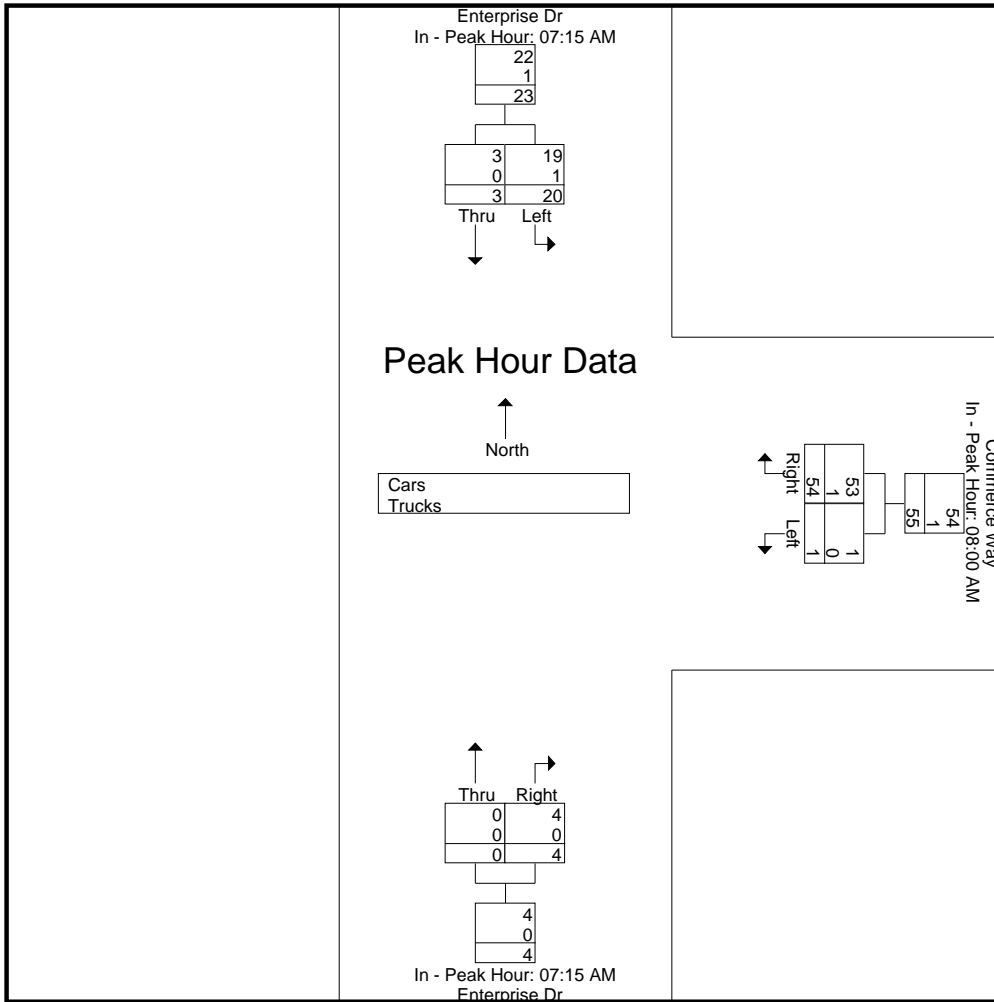
N/S Street : Enterprise Drive  
E/W Street : Commerce Way  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:15 AM			08:00 AM			07:15 AM		
+0 mins.	5	1	6	0	12	12	0	1	1
+15 mins.	6	1	7	0	11	11	0	1	1
+30 mins.	5	1	6	0	16	16	0	1	1
+45 mins.	4	0	4	1	15	16	0	1	1
Total Volume	20	3	23	1	54	55	0	4	4
% App. Total	87	13		1.8	98.2		0	100	
PHF	.833	.750	.821	.250	.844	.859	.000	1.000	1.000
Cars	19	3	22	1	53	54	0	4	4
% Cars	95	100	95.7	100	98.1	98.2	0	100	100
Trucks	1	0	1	0	1	1	0	0	0
% Trucks	5	0	4.3	0	1.9	1.8	0	0	0

N/S Street : Enterprise Drive  
E/W Street : Commerce Way  
City/State : Marshfield, MA  
Weather : Rain



# Accurate Counts

978-664-2565

N/S Street : Enterprise Drive  
 E/W Street : Commerce Way  
 City/State : Marshfield, MA  
 Weather : Rain

File Name : 90960003  
 Site Code : 90960003  
 Start Date : 9/16/2021  
 Page No : 4

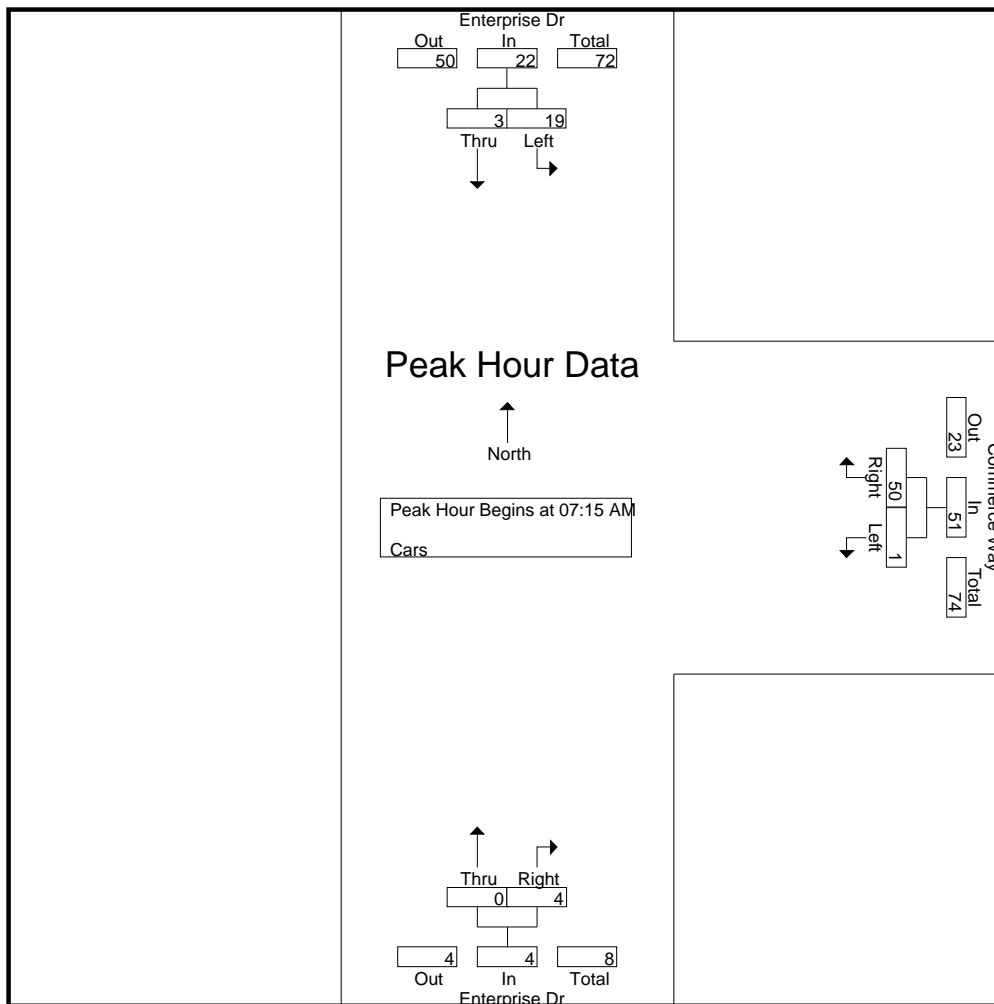
### Groups Printed- Cars

Start Time	Enterprise Dr From North		Commerce Way From East		Enterprise Dr From South		Int. Total
	Left	Thru	Left	Right	Thru	Right	
07:00 AM	3	0	0	11	0	0	14
07:15 AM	5	1	1	12	0	1	20
07:30 AM	5	1	0	16	0	1	23
07:45 AM	5	1	0	10	0	1	17
<b>Total</b>	<b>18</b>	<b>3</b>	<b>1</b>	<b>49</b>	<b>0</b>	<b>3</b>	<b>74</b>
08:00 AM	4	0	0	12	0	1	17
08:15 AM	3	0	0	11	0	0	14
08:30 AM	6	0	0	15	0	0	21
08:45 AM	9	0	1	15	0	0	25
<b>Total</b>	<b>22</b>	<b>0</b>	<b>1</b>	<b>53</b>	<b>0</b>	<b>1</b>	<b>77</b>
<b>Grand Total</b>	<b>40</b>	<b>3</b>	<b>2</b>	<b>102</b>	<b>0</b>	<b>4</b>	<b>151</b>
Apprch %	93	7	1.9	98.1	0	100	
Total %	26.5	2	1.3	67.5	0	2.6	

Start Time	Enterprise Dr From North			Commerce Way From East			Enterprise Dr From South			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	5	1	6	1	12	13	0	1	1	20
07:30 AM	5	1	6	0	16	16	0	1	1	23
07:45 AM	5	1	6	0	10	10	0	1	1	17
08:00 AM	4	0	4	0	12	12	0	1	1	17
Total Volume	19	3	22	1	50	51	0	4	4	77
% App. Total	86.4	13.6		2	98		0	100		
PHF	.950	.750	.917	.250	.781	.797	.000	1.00	1.00	.837



N/S Street : Enterprise Drive  
E/W Street : Commerce Way  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:15 AM			08:00 AM			07:15 AM		
+0 mins.	5	1	6	0	12	12	0	1	1
+15 mins.	5	1	6	0	11	11	0	1	1
+30 mins.	5	1	6	0	15	15	0	1	1
+45 mins.	4	0	4	1	15	16	0	1	1
Total Volume	19	3	22	1	53	54	0	4	4
% App. Total	86.4	13.6		1.9	98.1		0	100	
PHF	.950	.750	.917	.250	.883	.844	.000	1.000	1.000

# Accurate Counts

978-664-2565

File Name : 90960003

Site Code : 90960003

Start Date : 9/16/2021

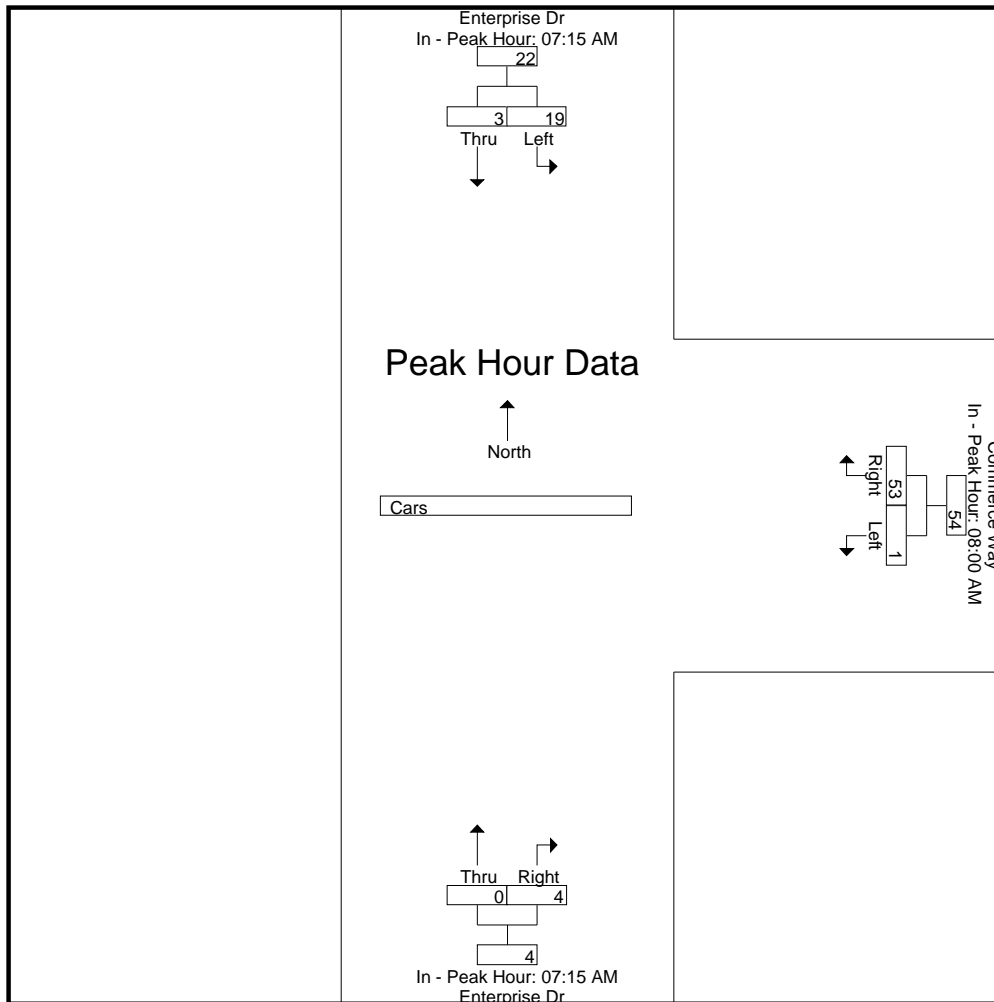
Page No : 6

N/S Street : Enterprise Drive

E/W Street : Commerce Way

City/State : Marshfield, MA

Weather : Rain



# Accurate Counts

978-664-2565

N/S Street : Enterprise Drive  
 E/W Street : Commerce Way  
 City/State : Marshfield, MA  
 Weather : Rain

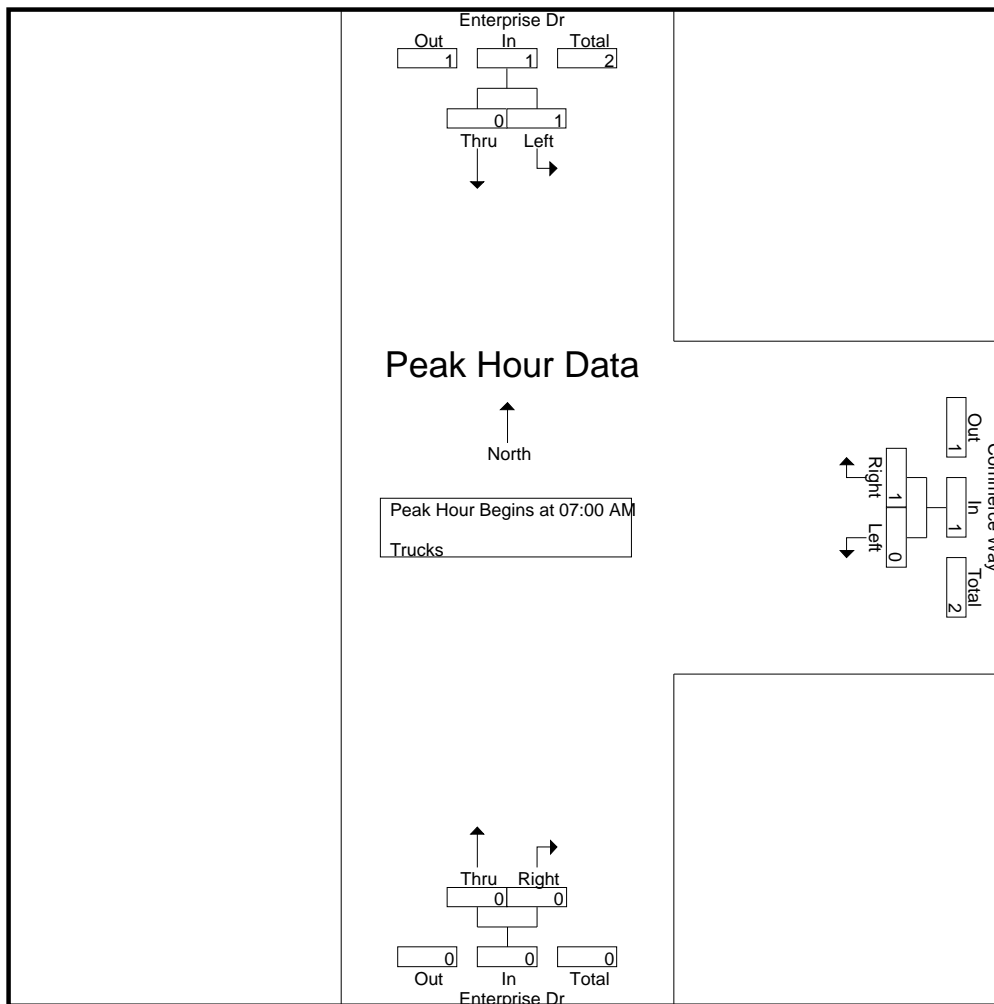
File Name : 90960003  
 Site Code : 90960003  
 Start Date : 9/16/2021  
 Page No : 7

### Groups Printed- Trucks

Start Time	Enterprise Dr From North		Commerce Way From East		Enterprise Dr From South		Int. Total
	Left	Thru	Left	Right	Thru	Right	
07:00 AM	0	0	0	0	0	0	0
07:15 AM	0	0	0	1	0	0	1
07:30 AM	1	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0
<b>Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>2</b>
08:00 AM	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0
08:30 AM	0	0	0	1	0	0	1
08:45 AM	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>
<b>Grand Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>3</b>
Apprch %	100	0	0	100	0	0	
Total %	33.3	0	0	66.7	0	0	

Start Time	Enterprise Dr From North			Commerce Way From East			Enterprise Dr From South			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	1	1	0	0	0	1
07:30 AM	1	0	1	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0
<b>Total Volume</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>
<b>% App. Total</b>	<b>100</b>	<b>0</b>	<b></b>	<b>0</b>	<b>100</b>	<b></b>	<b>0</b>	<b>0</b>	<b></b>	<b></b>
PHF	.250	.000	.250	.000	.250	.250	.000	.000	.000	.500

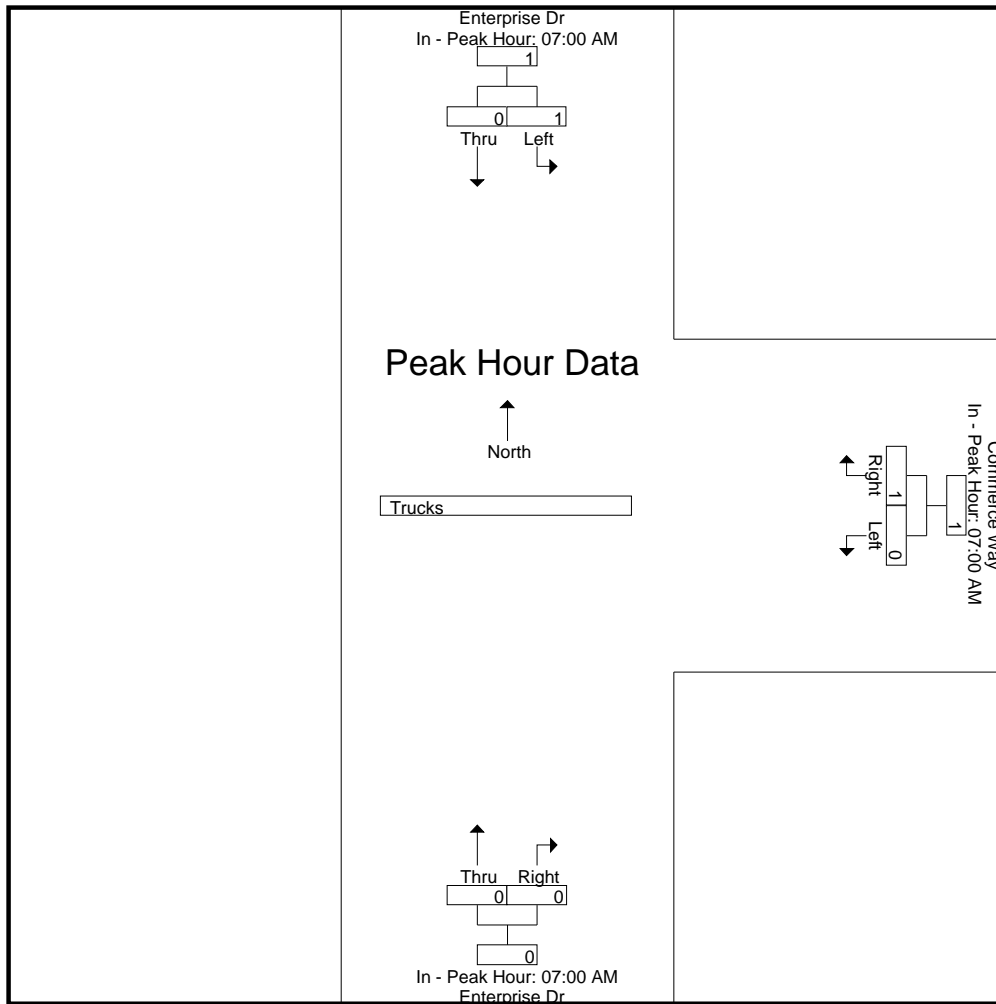
N/S Street : Enterprise Drive  
E/W Street : Commerce Way  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	1	1	0	0	0
+30 mins.	1	0	1	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	1	0	1	0	1	1	0	0	0
% App. Total	100	0		0	100		0	0	
PHF	.250	.000	.250	.000	.250	.250	.000	.000	.000

N/S Street : Enterprise Drive  
E/W Street : Commerce Way  
City/State : Marshfield, MA  
Weather : Rain



**Accurate Counts**  
978-664-2565

File Name : 90960003  
Site Code : 90960003  
Start Date : 9/16/2021  
Page No : 10

N/S Street : Enterprise Drive  
E/W Street : Commerce Way  
City/State : Marshfield, MA  
Weather : Rain

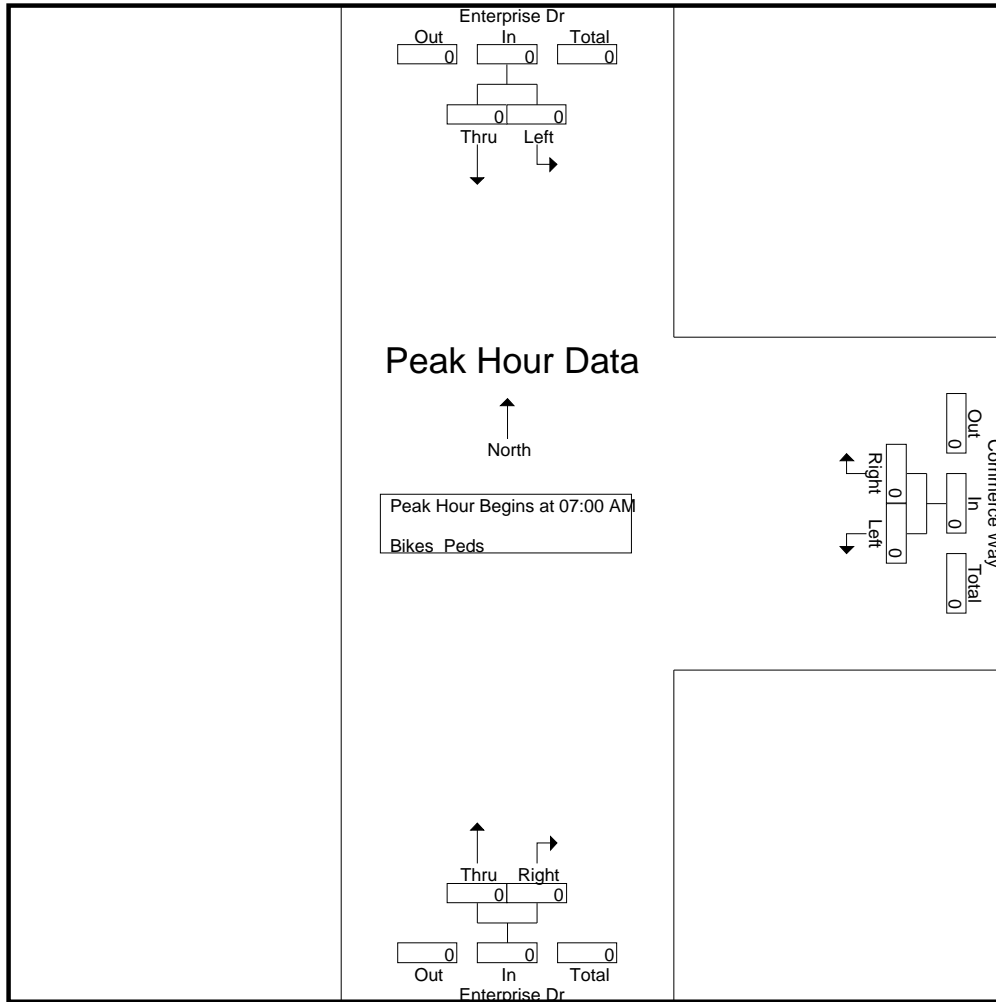
**Groups Printed- Bikes Peds**

Start Time	Enterprise Dr From North			Commerce Way From East			Enterprise Dr From South			Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	1	1	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	1	1	0	1
Grand Total	0	0	0	0	0	0	0	0	1	1	0	1
Apprch %	0	0		0	0		0	0				
Total %										100	0	

Start Time	Enterprise Dr From North			Commerce Way From East			Enterprise Dr From South			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Entire Intersection Begins at 07:00 AM

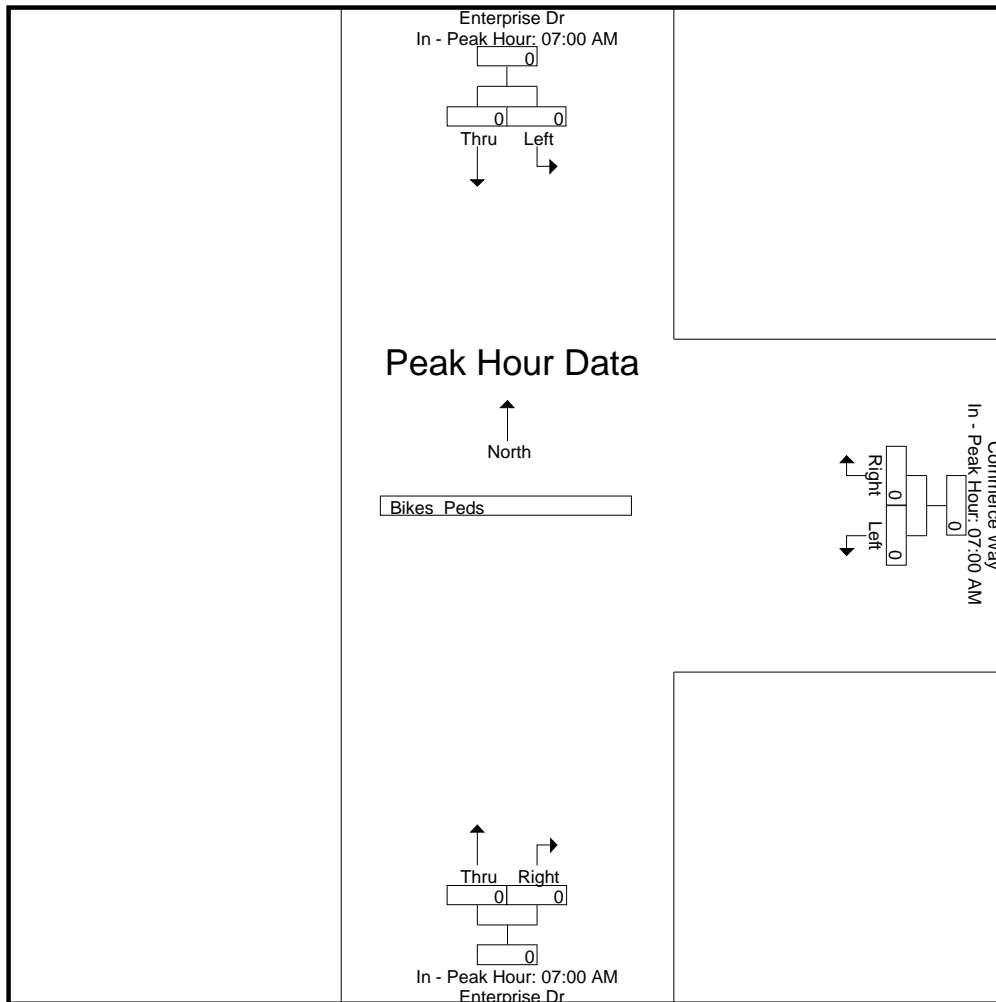
N/S Street : Enterprise Drive  
E/W Street : Commerce Way  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000

N/S Street : Enterprise Drive  
E/W Street : Commerce Way  
City/State : Marshfield, MA  
Weather : Rain

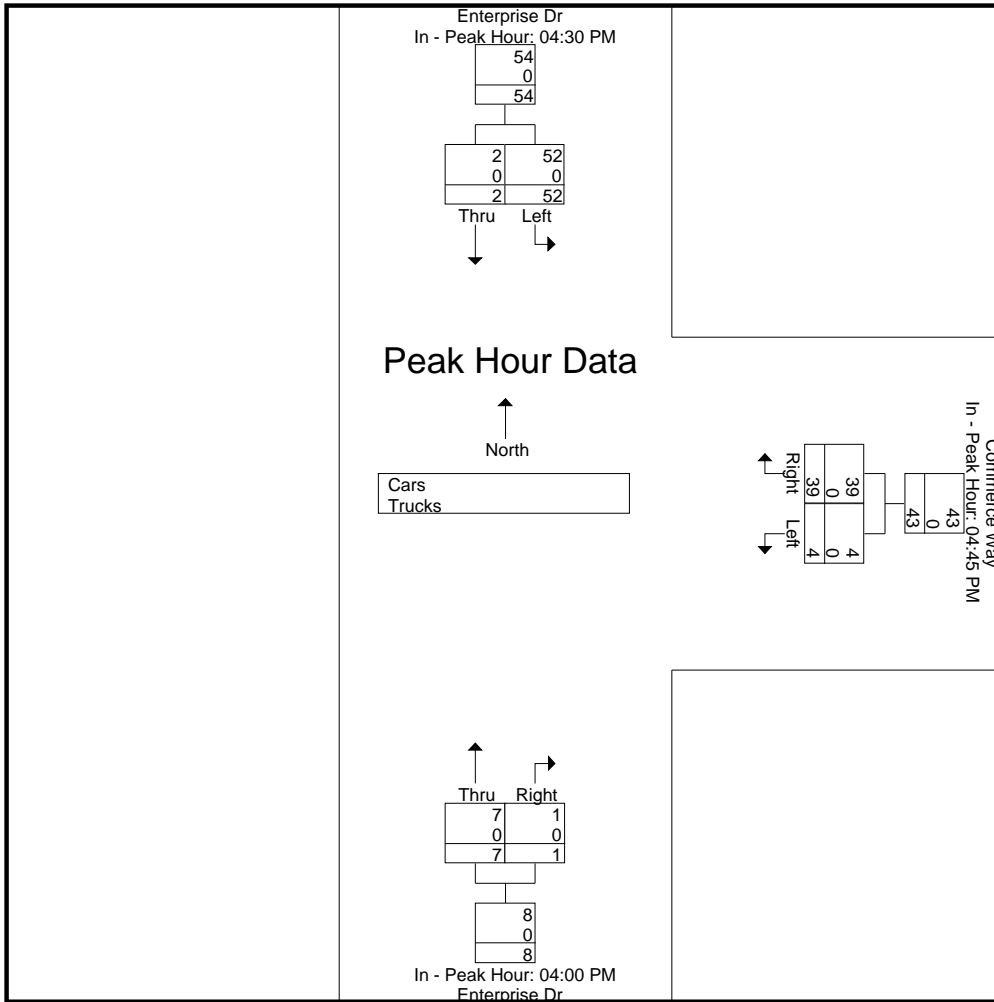








N/S Street : Enterprise Drive  
E/W Street : Commerce Way  
City/State : Marshfield, MA  
Weather : Rain



# Accurate Counts

978-664-2565

N/S Street : Enterprise Drive  
 E/W Street : Commerce Way  
 City/State : Marshfield, MA  
 Weather : Rain

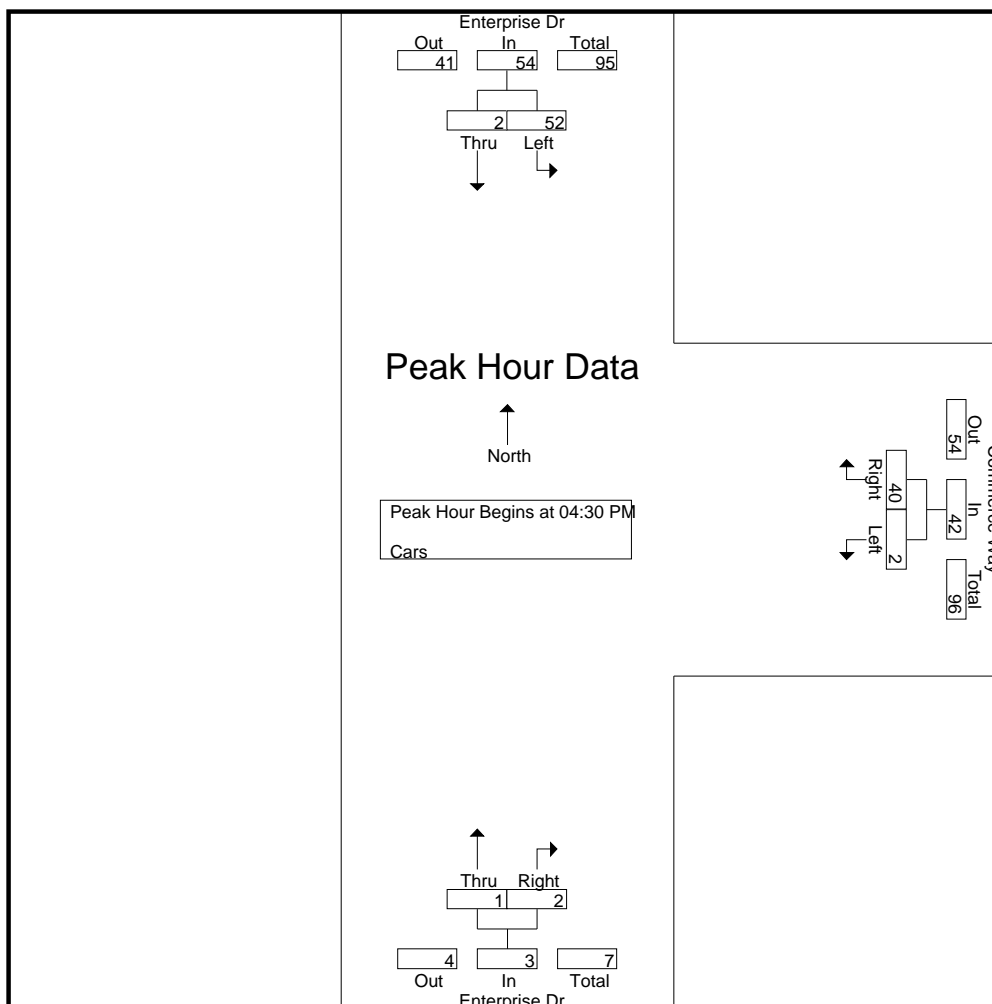
File Name : 90960003  
 Site Code : 90960003  
 Start Date : 9/16/2021  
 Page No : 4

## Groups Printed- Cars

Start Time	Enterprise Dr From North		Commerce Way From East		Enterprise Dr From South		Int. Total
	Left	Thru	Left	Right	Thru	Right	
04:00 PM	11	3	2	6	4	1	27
04:15 PM	11	0	1	8	2	0	22
04:30 PM	13	0	0	11	0	0	24
04:45 PM	11	1	1	11	1	0	25
<b>Total</b>	<b>46</b>	<b>4</b>	<b>4</b>	<b>36</b>	<b>7</b>	<b>1</b>	<b>98</b>
05:00 PM	11	0	0	7	0	1	19
05:15 PM	17	1	1	11	0	1	31
05:30 PM	11	0	2	10	0	0	23
05:45 PM	13	0	0	10	2	1	26
<b>Total</b>	<b>52</b>	<b>1</b>	<b>3</b>	<b>38</b>	<b>2</b>	<b>3</b>	<b>99</b>
<b>Grand Total</b>	<b>98</b>	<b>5</b>	<b>7</b>	<b>74</b>	<b>9</b>	<b>4</b>	<b>197</b>
Apprch %	95.1	4.9	8.6	91.4	69.2	30.8	
Total %	49.7	2.5	3.6	37.6	4.6	2	

Start Time	Enterprise Dr From North			Commerce Way From East			Enterprise Dr From South			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	13	0	13	0	11	11	0	0	0	24
04:45 PM	11	1	12	1	11	12	1	0	1	25
05:00 PM	11	0	11	0	7	7	0	1	1	19
05:15 PM	17	1	18	1	11	12	0	1	1	31
Total Volume	52	2	54	2	40	42	1	2	3	99
% App. Total	96.3	3.7		4.8	95.2		33.3	66.7		
PHF	.765	.500	.750	.500	.909	.875	.250	.500	.750	.798

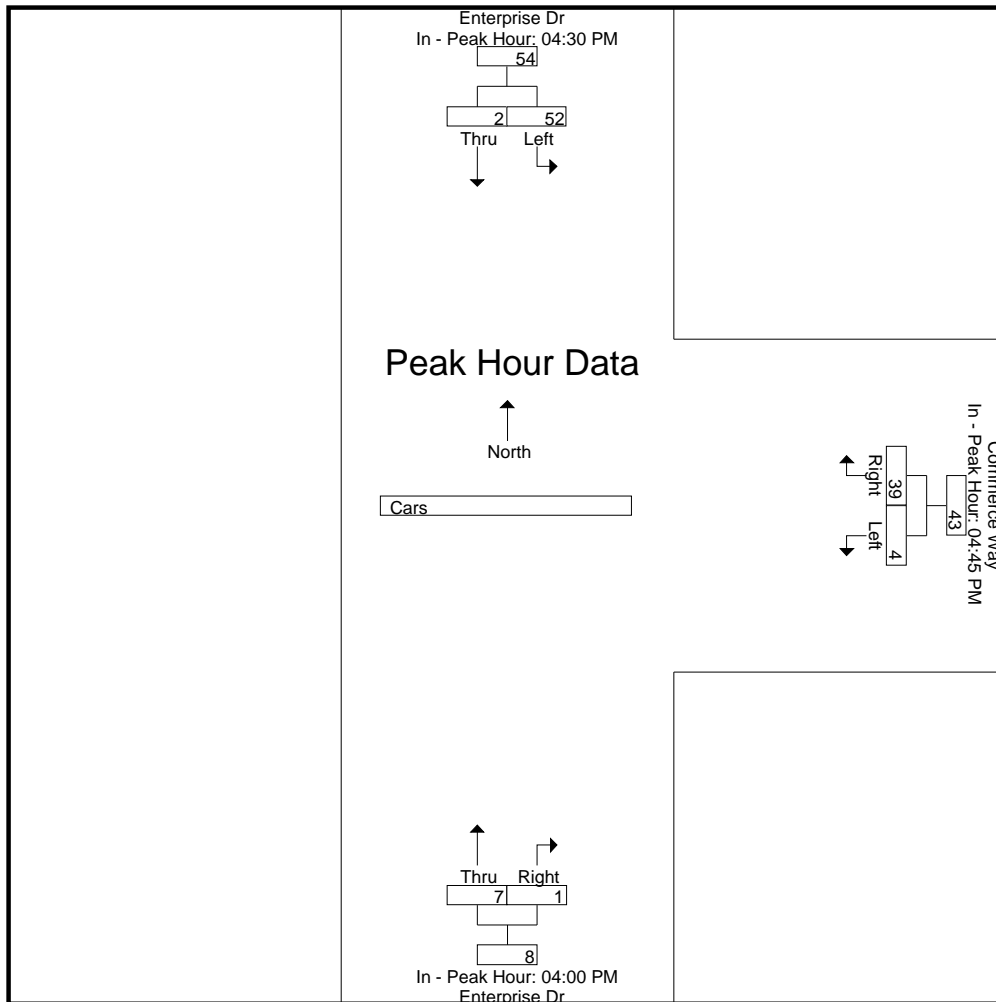
N/S Street : Enterprise Drive  
E/W Street : Commerce Way  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	04:30 PM			04:45 PM			04:00 PM		
+0 mins.	13	0	13	1	11	12	4	1	5
+15 mins.	11	1	12	0	7	7	2	0	2
+30 mins.	11	0	11	1	11	12	0	0	0
+45 mins.	17	1	18	2	10	12	1	0	1
Total Volume	52	2	54	4	39	43	7	1	8
% App. Total	96.3	3.7		9.3	90.7		87.5	12.5	
PHF	.765	.500	.750	.500	.886	.896	.438	.250	.400

N/S Street : Enterprise Drive  
E/W Street : Commerce Way  
City/State : Marshfield, MA  
Weather : Rain

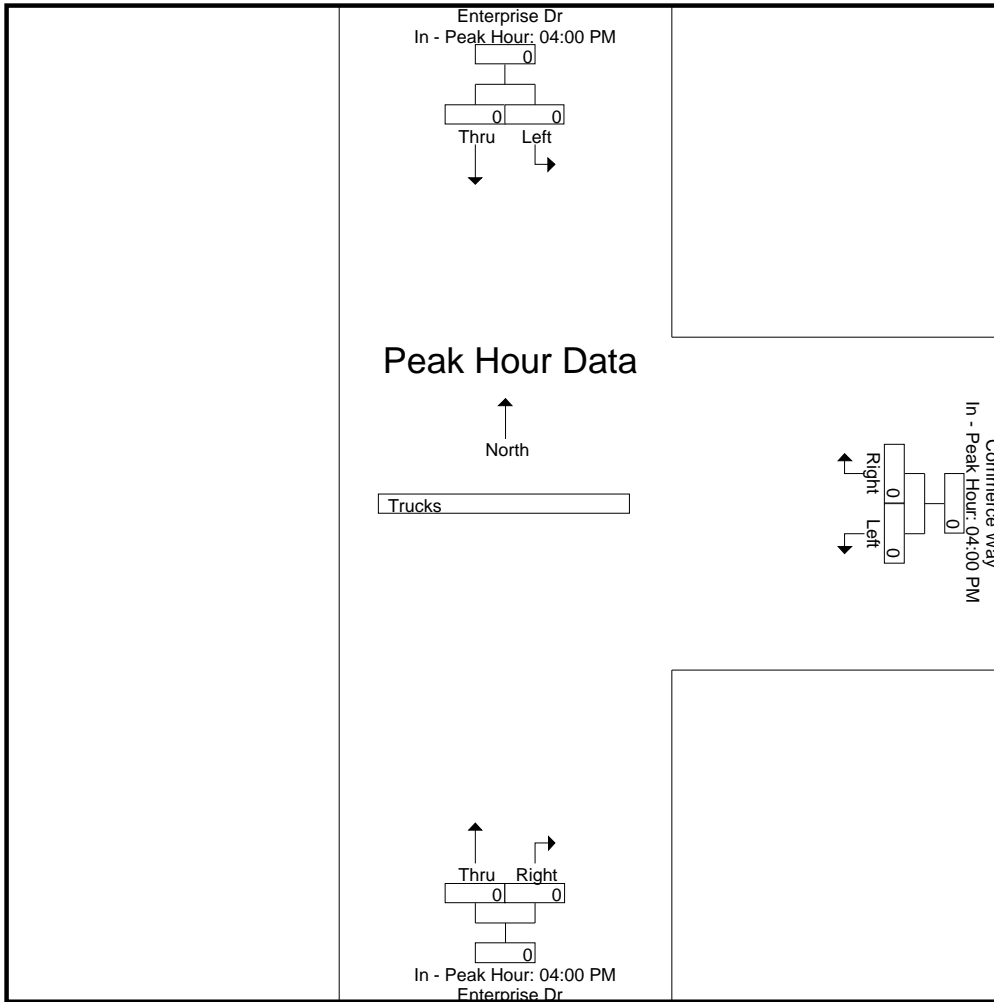








N/S Street : Enterprise Drive  
E/W Street : Commerce Way  
City/State : Marshfield, MA  
Weather : Rain



**Accurate Counts**  
978-664-2565

File Name : 90960003  
Site Code : 90960003  
Start Date : 9/16/2021  
Page No : 10

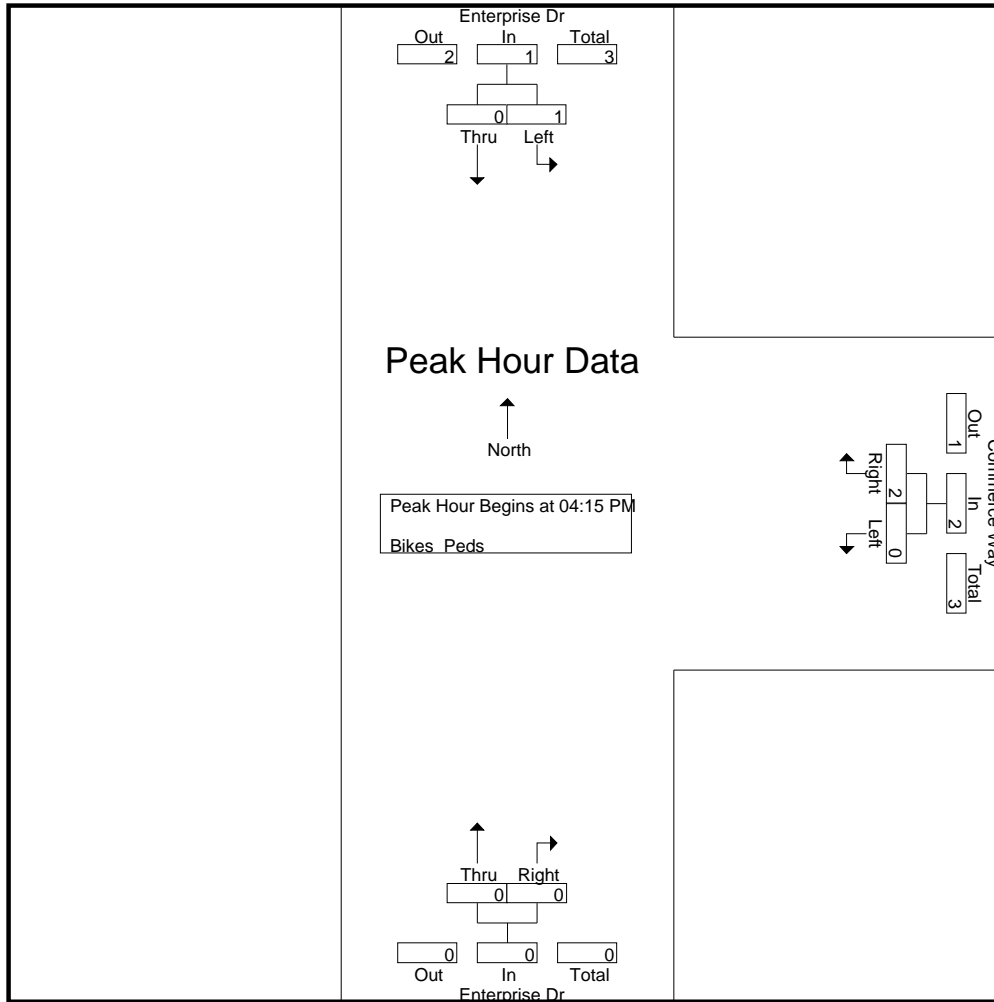
N/S Street : Enterprise Drive  
E/W Street : Commerce Way  
City/State : Marshfield, MA  
Weather : Rain

**Groups Printed- Bikes Peds**

Start Time	Enterprise Dr From North			Commerce Way From East			Enterprise Dr From South			Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Peds	Left	Right	Peds	Thru	Right	Peds			
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	1	1	0	1
04:30 PM	0	0	0	0	0	0	0	0	1	1	0	1
04:45 PM	0	0	0	0	2	0	0	0	1	1	2	3
Total	0	0	0	0	2	0	0	0	3	3	2	5
05:00 PM	1	0	0	0	0	0	0	0	0	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	1	1	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	0	0	0	0	1	1	1	2
Grand Total	1	0	0	0	2	0	0	0	4	4	3	7
Apprch %	100	0		0	100		0	0				
Total %	33.3	0		0	66.7		0	0		57.1	42.9	

Start Time	Enterprise Dr From North			Commerce Way From East			Enterprise Dr From South			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	2	2	0	0	0	2
05:00 PM	1	0	1	0	0	0	0	0	0	1
Total Volume	1	0	1	0	2	2	0	0	0	3
% App. Total	100	0		0	100		0	0		
PHF	.250	.000	.250	.000	.250	.250	.000	.000	.000	.375

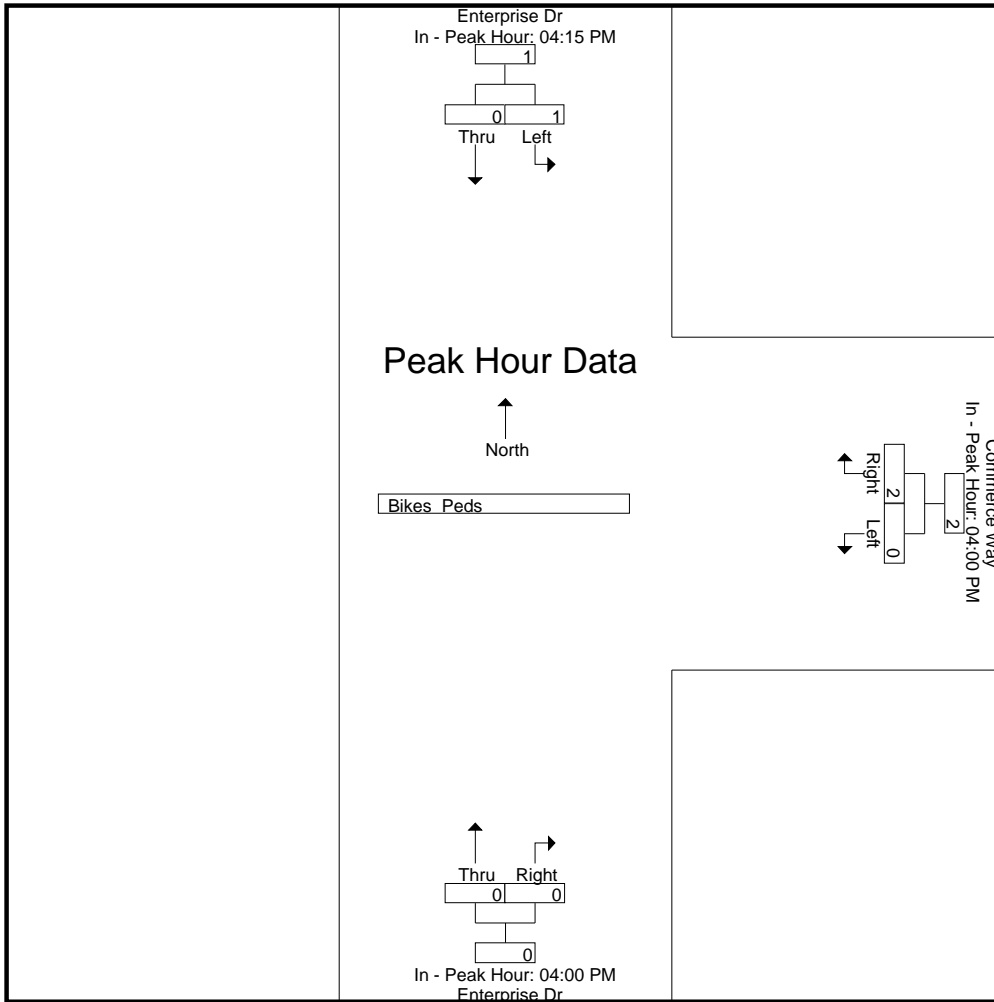
N/S Street : Enterprise Drive  
E/W Street : Commerce Way  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	04:15 PM			04:00 PM			04:00 PM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	1	0	1	0	2	2	0	0	0
Total Volume	1	0	1	0	2	2	0	0	0
% App. Total	100	0		0	100		0	0	
PHF	.250	.000	.250	.000	.250	.250	.000	.000	.000

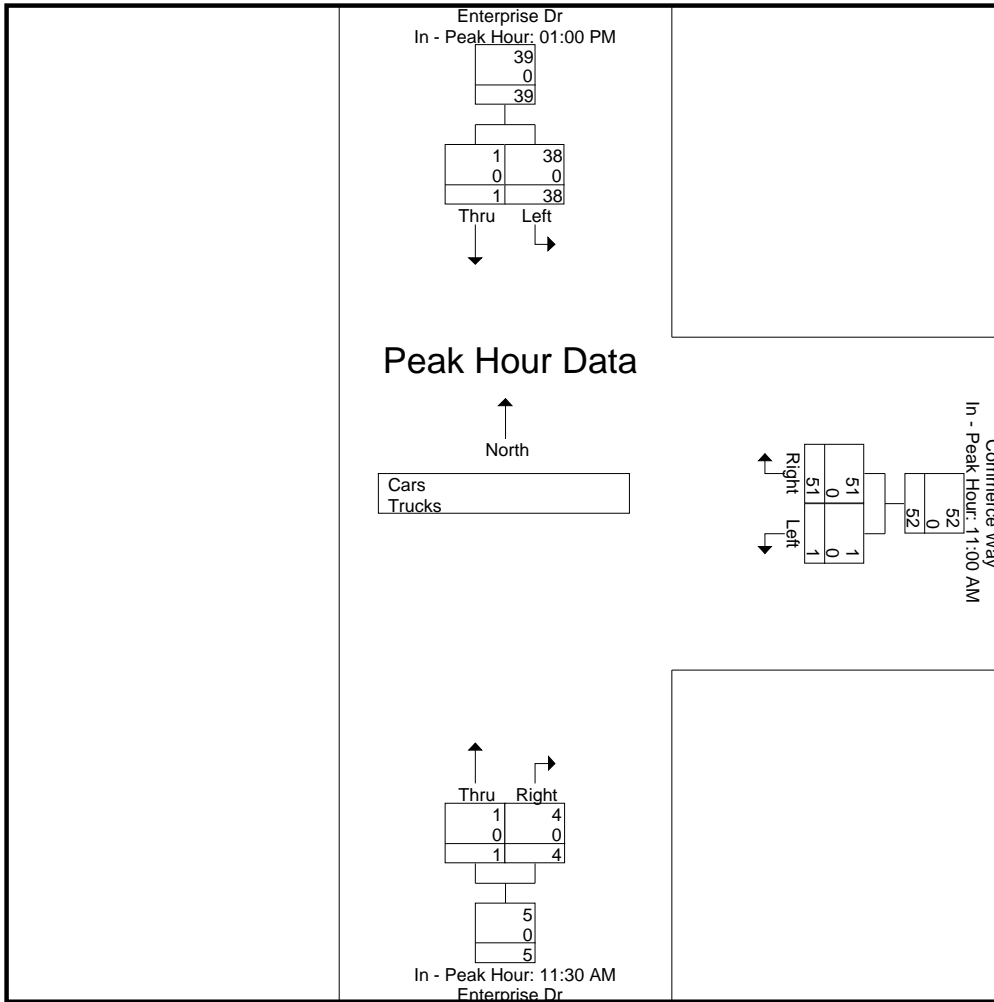
N/S Street : Enterprise Drive  
E/W Street : Commerce Way  
City/State : Marshfield, MA  
Weather : Rain







N/S Street : Enterprise Drive  
E/W Street : Commerce Way  
City/State : Marshfield, MA  
Weather : Cloudy



# Accurate Counts

978-664-2565

N/S Street : Enterprise Drive  
 E/W Street : Commerce Way  
 City/State : Marshfield, MA  
 Weather : Cloudy

File Name : 909600S3  
 Site Code : 90960003  
 Start Date : 9/18/2021  
 Page No : 4

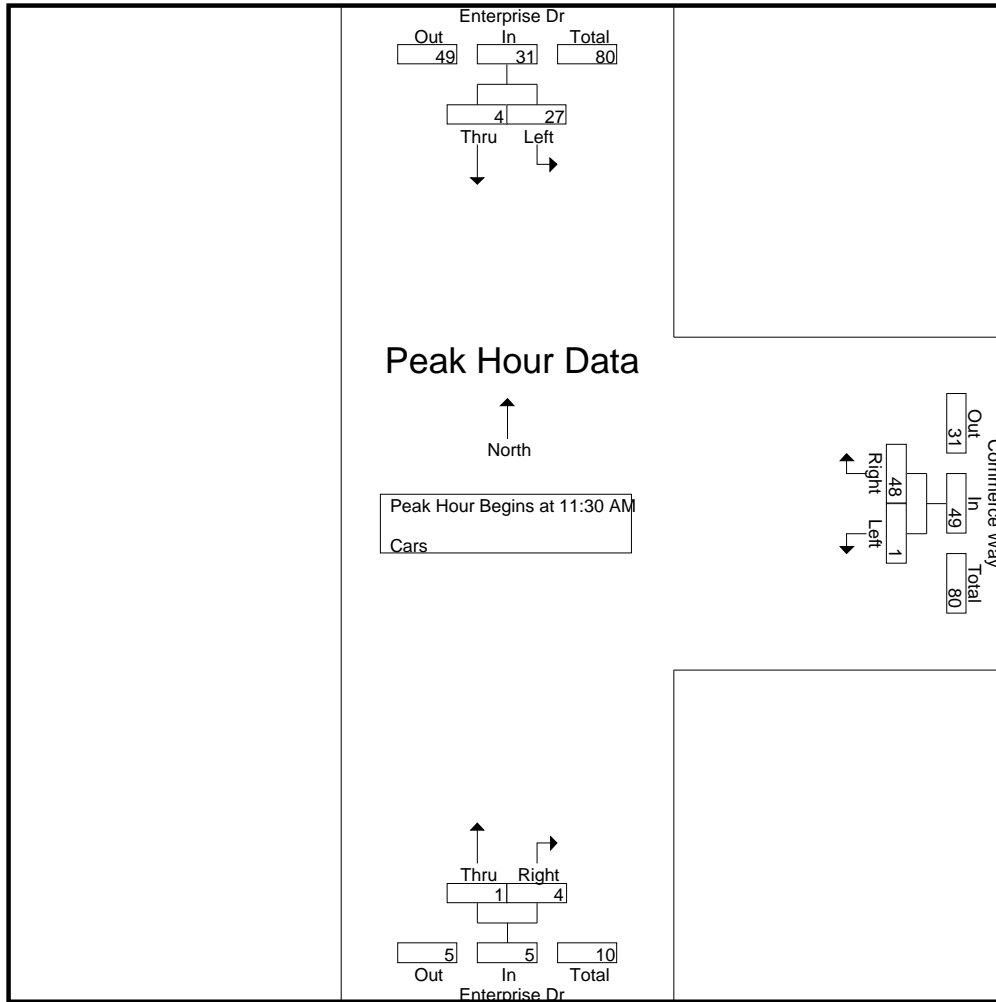
### Groups Printed- Cars

Start Time	Enterprise Dr From North		Commerce Way From East		Enterprise Dr From South		Int. Total
	Left	Thru	Left	Right	Thru	Right	
11:00 AM	4	0	0	11	0	0	15
11:15 AM	8	0	1	16	0	0	25
11:30 AM	7	0	0	12	0	0	19
11:45 AM	6	1	0	12	0	1	20
<b>Total</b>	<b>25</b>	<b>1</b>	<b>1</b>	<b>51</b>	<b>0</b>	<b>1</b>	<b>79</b>
12:00 PM	7	0	0	6	1	0	14
12:15 PM	7	3	1	18	0	3	32
12:30 PM	10	1	0	7	0	0	18
12:45 PM	10	0	0	7	0	0	17
<b>Total</b>	<b>34</b>	<b>4</b>	<b>1</b>	<b>38</b>	<b>1</b>	<b>3</b>	<b>81</b>
01:00 PM	7	0	0	9	2	0	18
01:15 PM	9	0	1	6	0	1	17
01:30 PM	8	0	0	6	0	0	14
01:45 PM	14	1	1	7	0	0	23
<b>Total</b>	<b>38</b>	<b>1</b>	<b>2</b>	<b>28</b>	<b>2</b>	<b>1</b>	<b>72</b>
<b>Grand Total</b>	<b>97</b>	<b>6</b>	<b>4</b>	<b>117</b>	<b>3</b>	<b>5</b>	<b>232</b>
Apprch %	94.2	5.8	3.3	96.7	37.5	62.5	
Total %	41.8	2.6	1.7	50.4	1.3	2.2	

Start Time	Enterprise Dr From North			Commerce Way From East			Enterprise Dr From South			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 11:30 AM										
11:30 AM	7	0	7	0	12	12	0	0	0	19
11:45 AM	6	1	7	0	12	12	0	1	1	20
12:00 PM	7	0	7	0	6	6	1	0	1	14
12:15 PM	7	3	10	1	18	19	0	3	3	32
<b>Total Volume</b>	<b>27</b>	<b>4</b>	<b>31</b>	<b>1</b>	<b>48</b>	<b>49</b>	<b>1</b>	<b>4</b>	<b>5</b>	<b>85</b>
<b>% App. Total</b>	<b>87.1</b>	<b>12.9</b>		<b>2</b>	<b>98</b>		<b>20</b>	<b>80</b>		
PHF	.964	.333	.775	.250	.667	.645	.250	.333	.417	.664



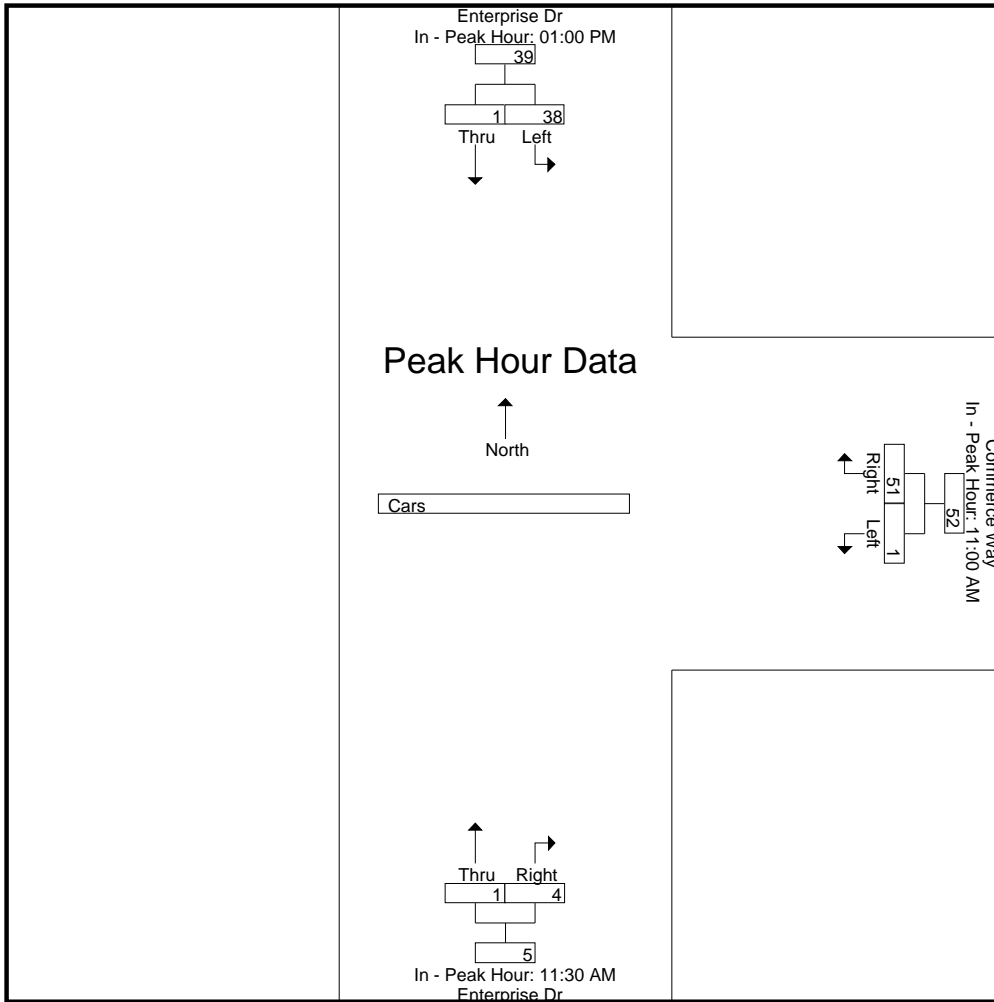
N/S Street : Enterprise Drive  
E/W Street : Commerce Way  
City/State : Marshfield, MA  
Weather : Cloudy



Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

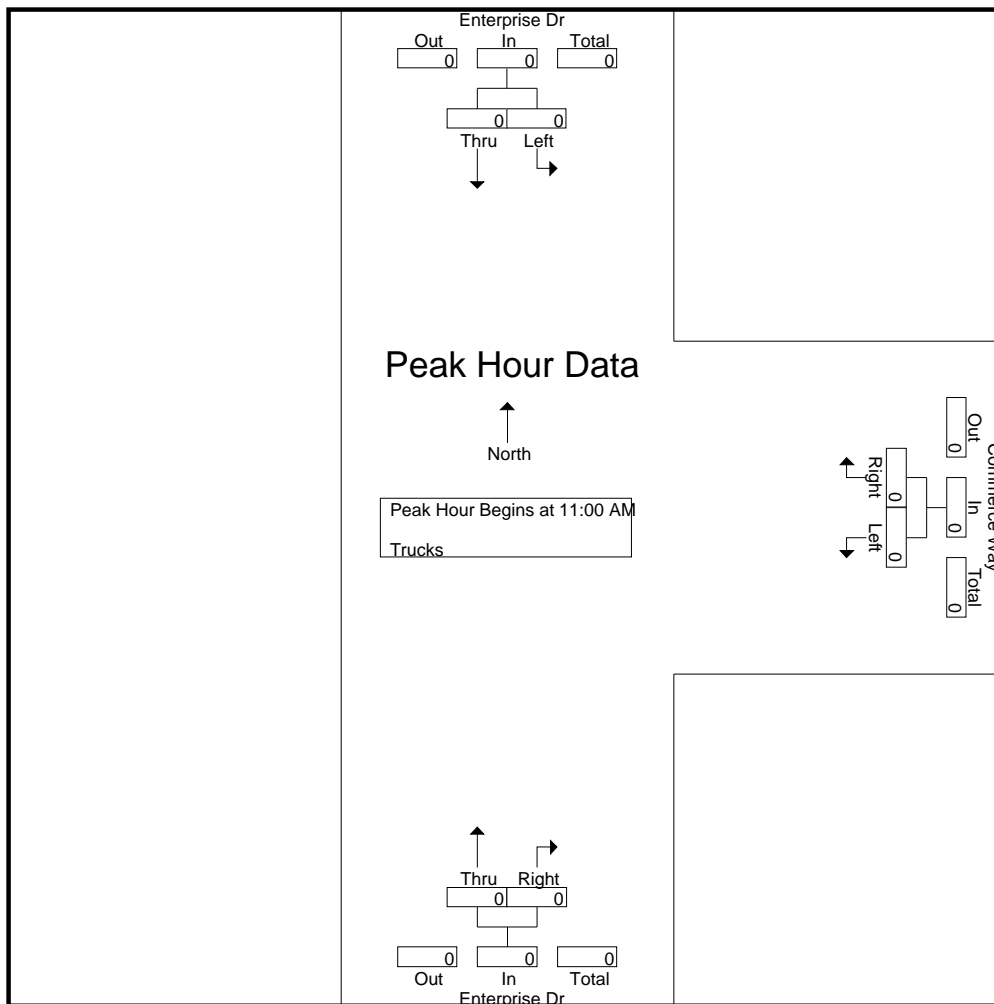
	01:00 PM			11:00 AM			11:30 AM		
+0 mins.	7	0	7	0	11	11	0	0	0
+15 mins.	9	0	9	1	16	17	0	1	1
+30 mins.	8	0	8	0	12	12	1	0	1
+45 mins.	14	1	15	0	12	12	0	3	3
Total Volume	38	1	39	1	51	52	1	4	5
% App. Total	97.4	2.6		1.9	98.1		20	80	
PHF	.679	.250	.650	.250	.797	.765	.250	.333	.417

N/S Street : Enterprise Drive  
E/W Street : Commerce Way  
City/State : Marshfield, MA  
Weather : Cloudy





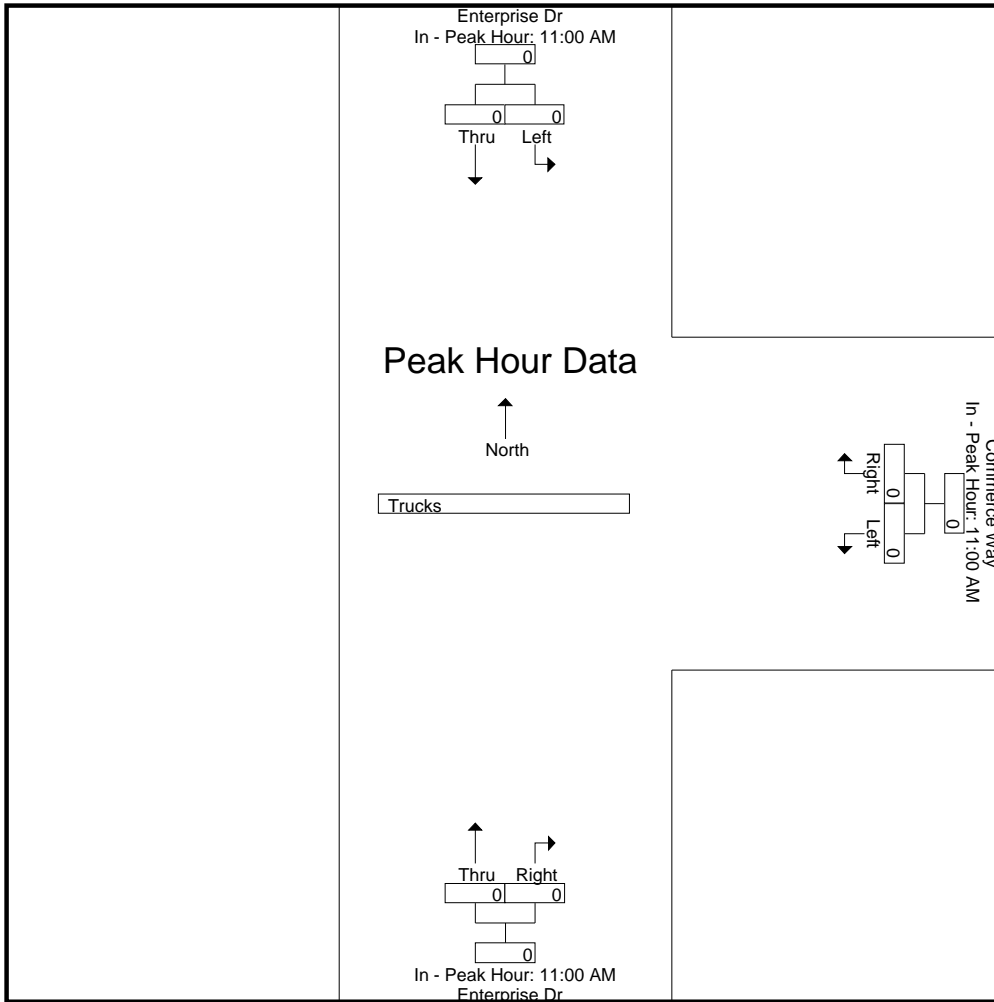
N/S Street : Enterprise Drive  
E/W Street : Commerce Way  
City/State : Marshfield, MA  
Weather : Cloudy



Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	11:00 AM			11:00 AM			11:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000

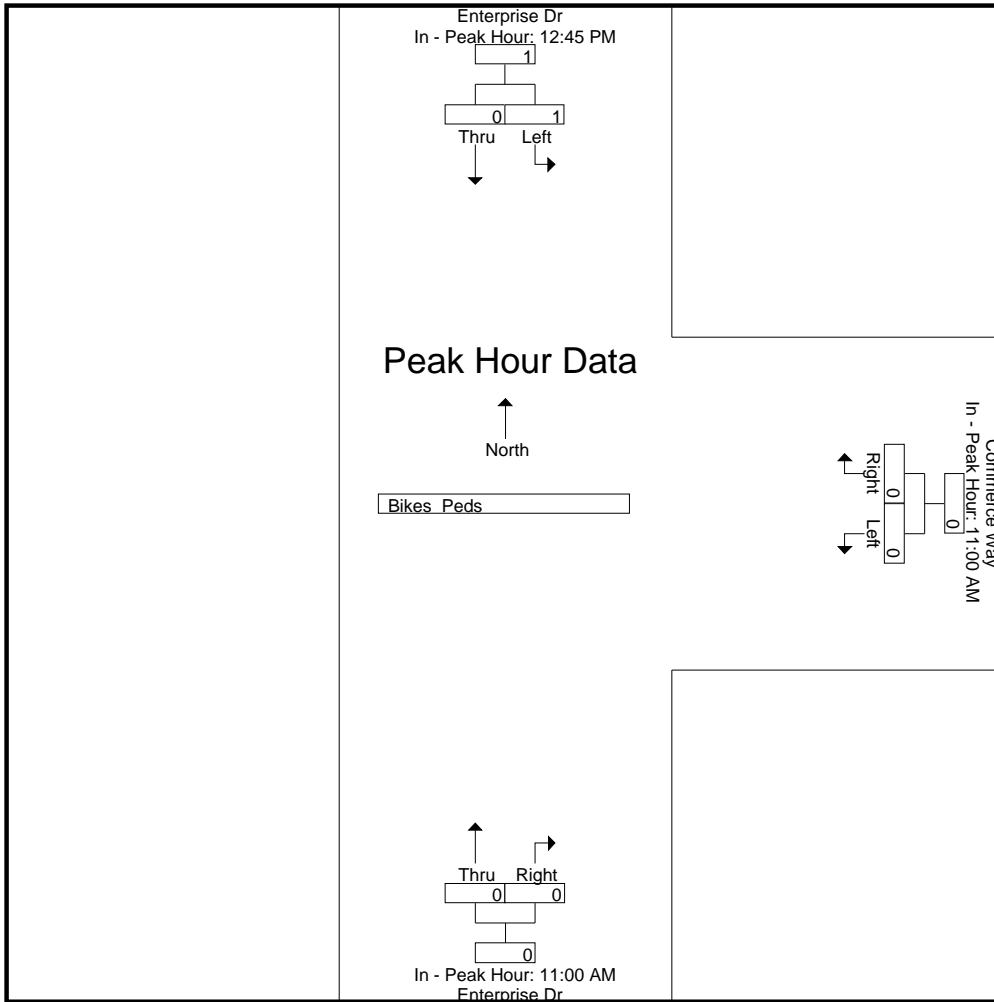
N/S Street : Enterprise Drive  
E/W Street : Commerce Way  
City/State : Marshfield, MA  
Weather : Cloudy







N/S Street : Enterprise Drive  
E/W Street : Commerce Way  
City/State : Marshfield, MA  
Weather : Cloudy





# Accurate Counts

978-664-2565

N/S Street : Proprietors Drive  
 E/W Street : Old Woodlot Ln / Commerce Way  
 City/State : Marshfield, MA  
 Weather : Rain

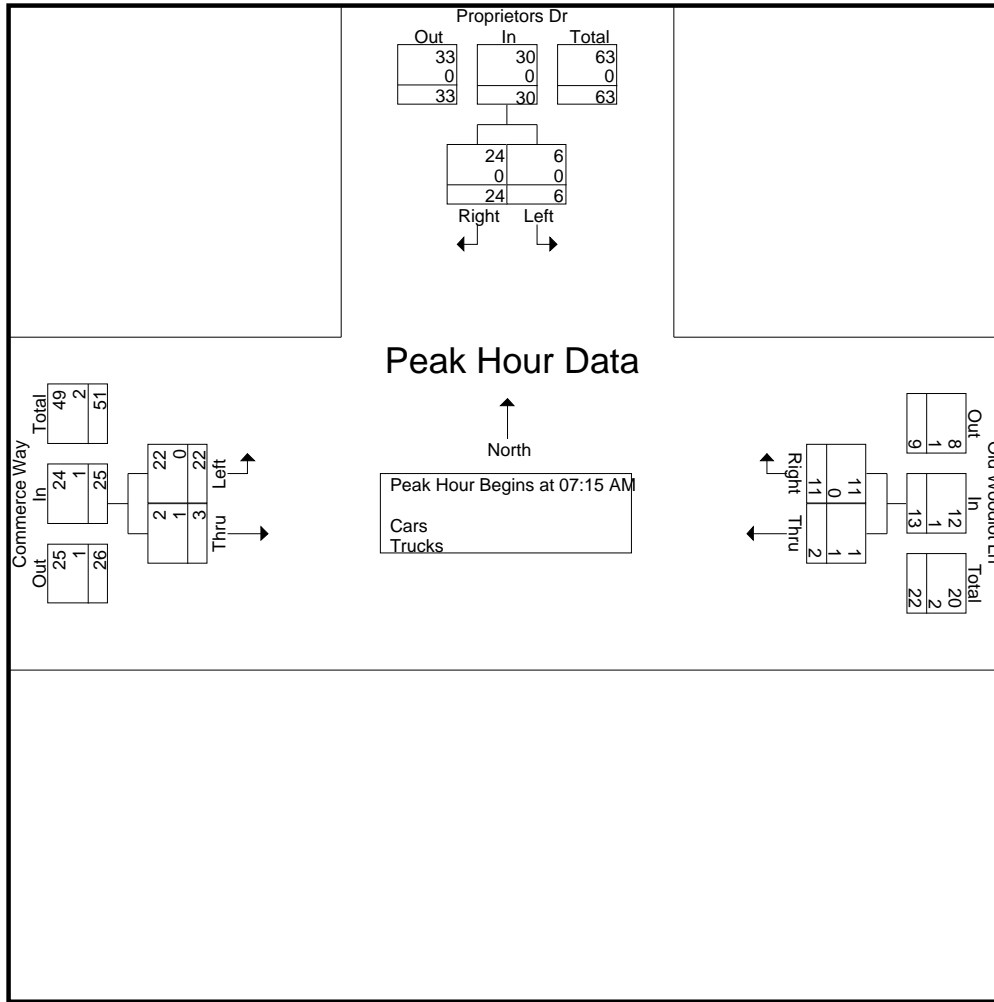
File Name : 90960004  
 Site Code : 90960004  
 Start Date : 9/16/2021  
 Page No : 1

### Groups Printed- Cars - Trucks

Start Time	Proprietors Dr From North		Old Woodlot Ln From East		Commerce Way From West		Int. Total
	Left	Right	Thru	Right	Left	Thru	
07:00 AM	0	3	0	0	7	0	10
07:15 AM	1	3	1	3	3	0	11
07:30 AM	1	7	1	1	8	2	20
07:45 AM	2	7	0	4	6	1	20
<b>Total</b>	<b>4</b>	<b>20</b>	<b>2</b>	<b>8</b>	<b>24</b>	<b>3</b>	<b>61</b>
08:00 AM	2	7	0	3	5	0	17
08:15 AM	0	4	0	3	3	0	10
08:30 AM	1	9	1	1	6	0	18
08:45 AM	2	9	0	1	7	0	19
<b>Total</b>	<b>5</b>	<b>29</b>	<b>1</b>	<b>8</b>	<b>21</b>	<b>0</b>	<b>64</b>
<b>Grand Total</b>	<b>9</b>	<b>49</b>	<b>3</b>	<b>16</b>	<b>45</b>	<b>3</b>	<b>125</b>
Apprch %	15.5	84.5	15.8	84.2	93.8	6.2	
Total %	7.2	39.2	2.4	12.8	36	2.4	
Cars	9	49	1	16	45	2	122
% Cars	100	100	33.3	100	100	66.7	97.6
Trucks	0	0	2	0	0	1	3
% Trucks	0	0	66.7	0	0	33.3	2.4

Start Time	Proprietors Dr From North			Old Woodlot Ln From East			Commerce Way From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	1	3	4	1	3	4	3	0	3	11
07:30 AM	1	7	8	1	1	2	8	2	10	20
07:45 AM	2	7	9	0	4	4	6	1	7	20
08:00 AM	2	7	9	0	3	3	5	0	5	17
<b>Total Volume</b>	<b>6</b>	<b>24</b>	<b>30</b>	<b>2</b>	<b>11</b>	<b>13</b>	<b>22</b>	<b>3</b>	<b>25</b>	<b>68</b>
<b>% App. Total</b>	<b>20</b>	<b>80</b>		<b>15.4</b>	<b>84.6</b>		<b>88</b>	<b>12</b>		
PHF	.750	.857	.833	.500	.688	.813	.688	.375	.625	.850
Cars	6	24	30	1	11	12	22	2	24	66
% Cars	100	100	100	50.0	100	92.3	100	66.7	96.0	97.1
Trucks	0	0	0	1	0	1	0	1	1	2
% Trucks	0	0	0	50.0	0	7.7	0	33.3	4.0	2.9

N/S Street : Proprietors Drive  
E/W Street : Old Woodlot Ln / Commerce Way  
City/State : Marshfield, MA  
Weather : Rain



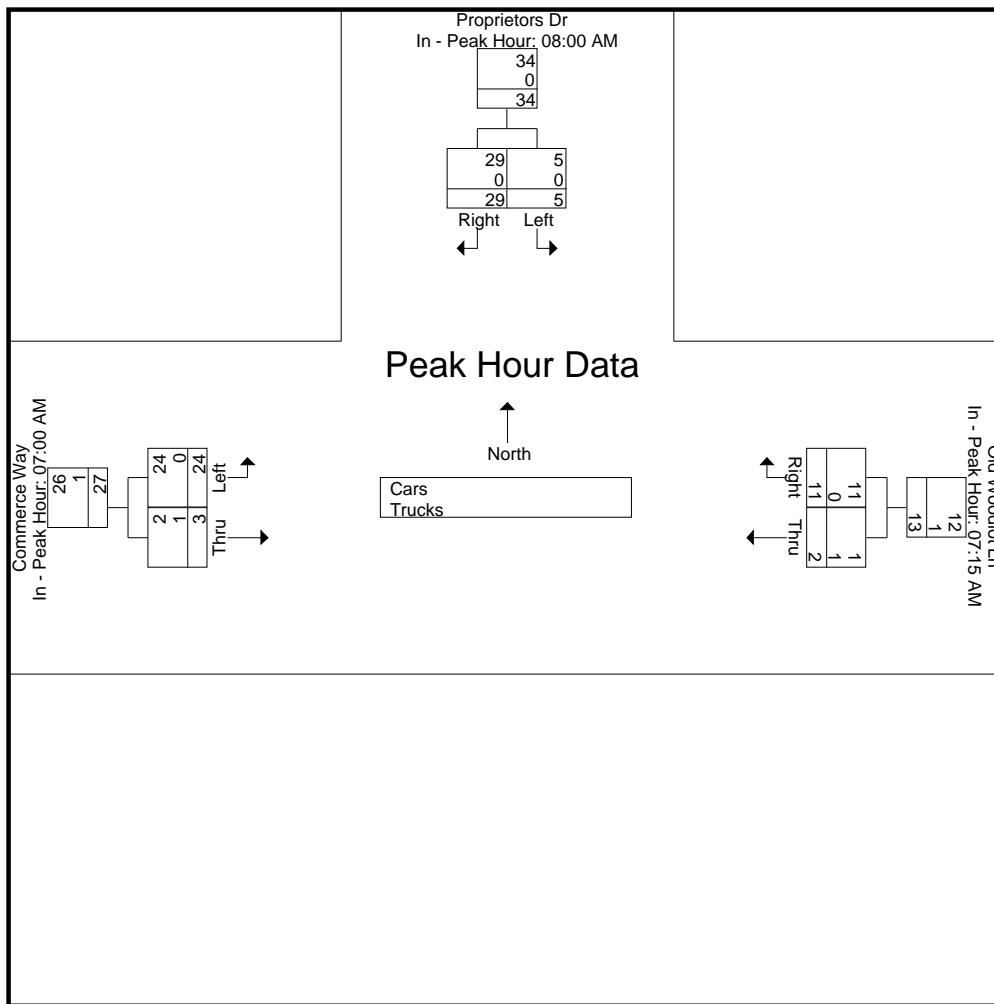
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	08:00 AM			07:15 AM			07:00 AM		
+0 mins.	2	7	9	1	3	4	7	0	7
+15 mins.	0	4	4	1	1	2	3	0	3
+30 mins.	1	9	10	0	4	4	8	2	10
+45 mins.	2	9	11	0	3	3	6	1	7
Total Volume	5	29	34	2	11	13	24	3	27
% App. Total	14.7	85.3		15.4	84.6		88.9	11.1	
PHF	.625	.806	.773	.500	.688	.813	.750	.375	.675
Cars	5	29	34	1	11	12	24	2	26
% Cars	100	100	100	50	100	92.3	100	66.7	96.3
Trucks	0	0	0	1	0	1	0	1	1
% Trucks	0	0	0	50	0	7.7	0	33.3	3.7

**Accurate Counts**  
978-664-2565

File Name : 90960004  
Site Code : 90960004  
Start Date : 9/16/2021  
Page No : 3

N/S Street : Proprietors Drive  
E/W Street : Old Woodlot Ln / Commerce Way  
City/State : Marshfield, MA  
Weather : Rain



# Accurate Counts

978-664-2565

N/S Street : Proprietors Drive  
 E/W Street : Old Woodlot Ln / Commerce Way  
 City/State : Marshfield, MA  
 Weather : Rain

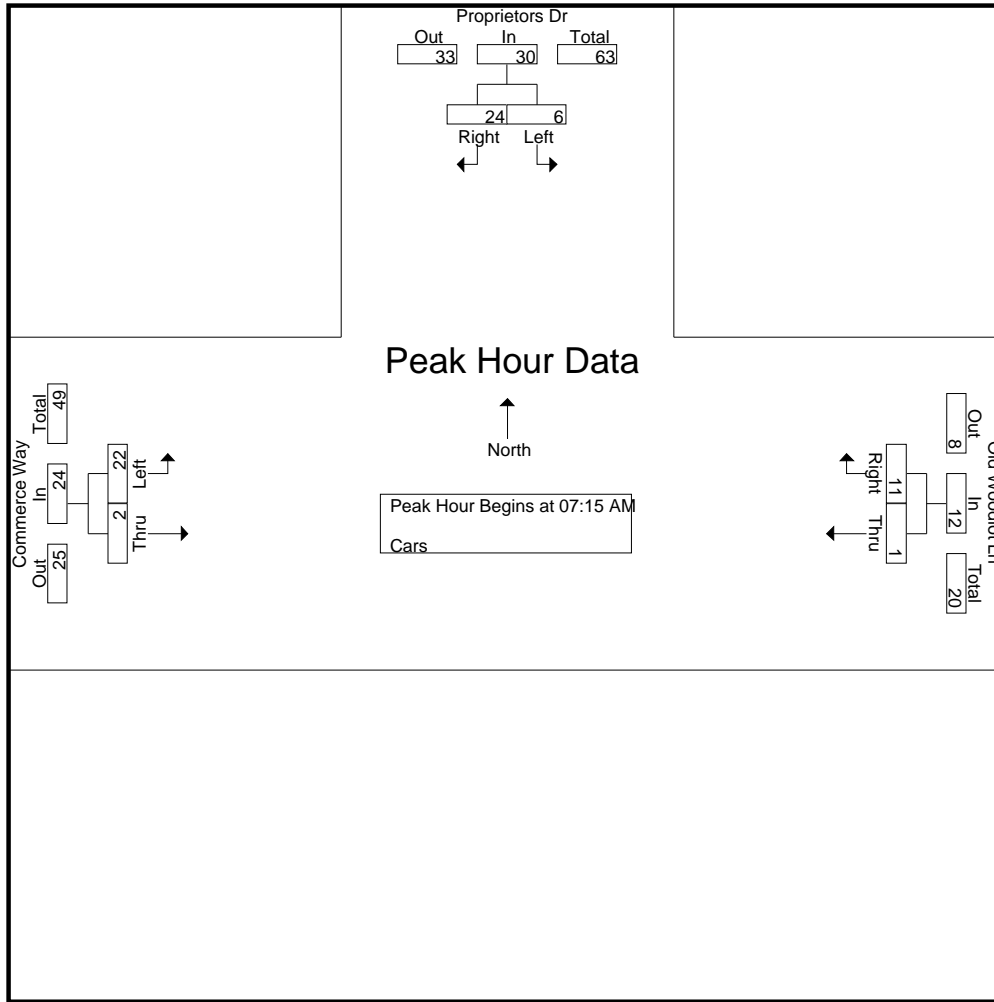
File Name : 90960004  
 Site Code : 90960004  
 Start Date : 9/16/2021  
 Page No : 4

### Groups Printed- Cars

Start Time	Proprietors Dr From North		Old Woodlot Ln From East		Commerce Way From West		Int. Total
	Left	Right	Thru	Right	Left	Thru	
07:00 AM	0	3	0	0	7	0	10
07:15 AM	1	3	0	3	3	0	10
07:30 AM	1	7	1	1	8	1	19
07:45 AM	2	7	0	4	6	1	20
<b>Total</b>	<b>4</b>	<b>20</b>	<b>1</b>	<b>8</b>	<b>24</b>	<b>2</b>	<b>59</b>
08:00 AM	2	7	0	3	5	0	17
08:15 AM	0	4	0	3	3	0	10
08:30 AM	1	9	0	1	6	0	17
08:45 AM	2	9	0	1	7	0	19
<b>Total</b>	<b>5</b>	<b>29</b>	<b>0</b>	<b>8</b>	<b>21</b>	<b>0</b>	<b>63</b>
<b>Grand Total</b>	<b>9</b>	<b>49</b>	<b>1</b>	<b>16</b>	<b>45</b>	<b>2</b>	<b>122</b>
Apprch %	15.5	84.5	5.9	94.1	95.7	4.3	
Total %	7.4	40.2	0.8	13.1	36.9	1.6	

Start Time	Proprietors Dr From North			Old Woodlot Ln From East			Commerce Way From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	1	3	4	0	3	3	3	0	3	10
07:30 AM	1	7	8	1	1	2	8	1	9	19
07:45 AM	2	7	9	0	4	4	6	1	7	20
08:00 AM	2	7	9	0	3	3	5	0	5	17
<b>Total Volume</b>	<b>6</b>	<b>24</b>	<b>30</b>	<b>1</b>	<b>11</b>	<b>12</b>	<b>22</b>	<b>2</b>	<b>24</b>	<b>66</b>
<b>% App. Total</b>	<b>20</b>	<b>80</b>		<b>8.3</b>	<b>91.7</b>		<b>91.7</b>	<b>8.3</b>		
PHF	.750	.857	.833	.250	.688	.750	.688	.500	.667	.825

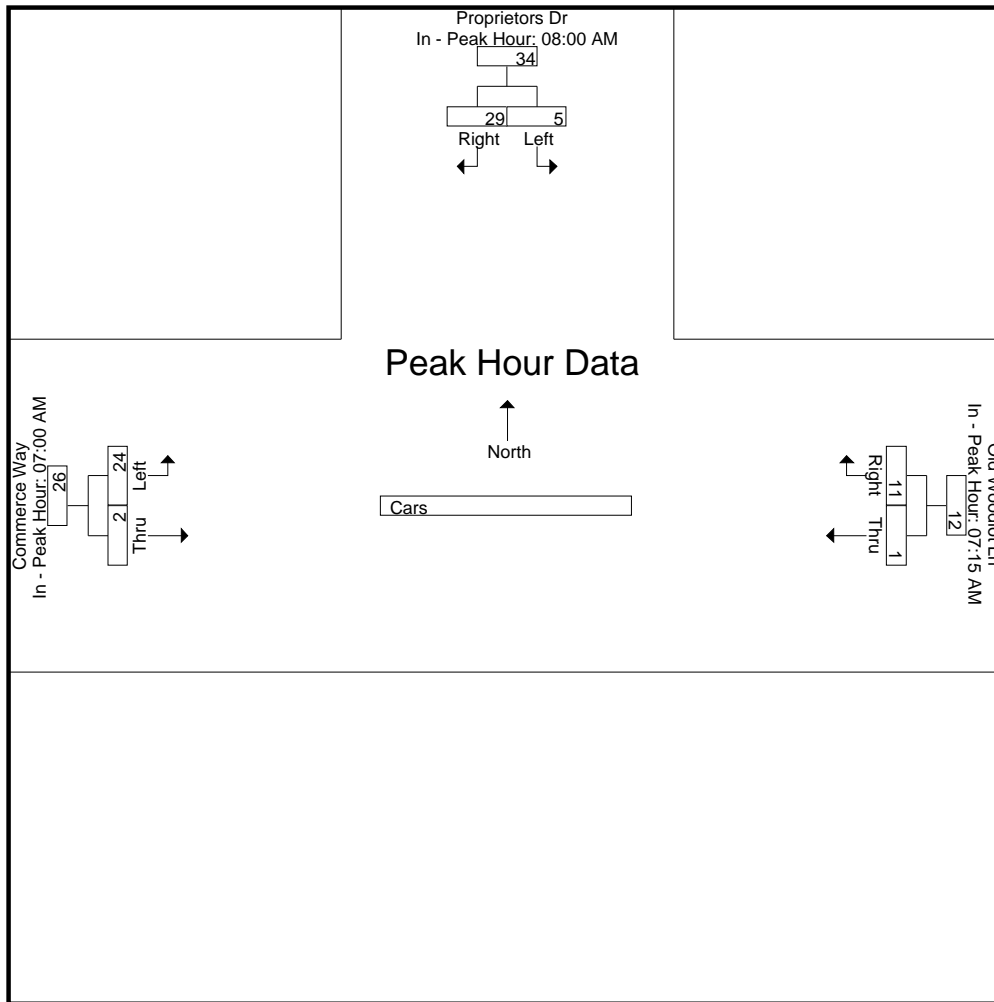
N/S Street : Proprietors Drive  
E/W Street : Old Woodlot Ln / Commerce Way  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	08:00 AM			07:15 AM			07:00 AM		
+0 mins.	2	7	9	0	3	3	7	0	7
+15 mins.	0	4	4	1	1	2	3	0	3
+30 mins.	1	9	10	0	4	4	8	1	9
+45 mins.	2	9	11	0	3	3	6	1	7
Total Volume	5	29	34	1	11	12	24	2	26
% App. Total	14.7	85.3		8.3	91.7		92.3	7.7	
PHF	.625	.806	.773	.250	.688	.750	.750	.500	.722

N/S Street : Proprietors Drive  
E/W Street : Old Woodlot Ln / Commerce Way  
City/State : Marshfield, MA  
Weather : Rain



# Accurate Counts

978-664-2565

N/S Street : Proprietors Drive  
 E/W Street : Old Woodlot Ln / Commerce Way  
 City/State : Marshfield, MA  
 Weather : Rain

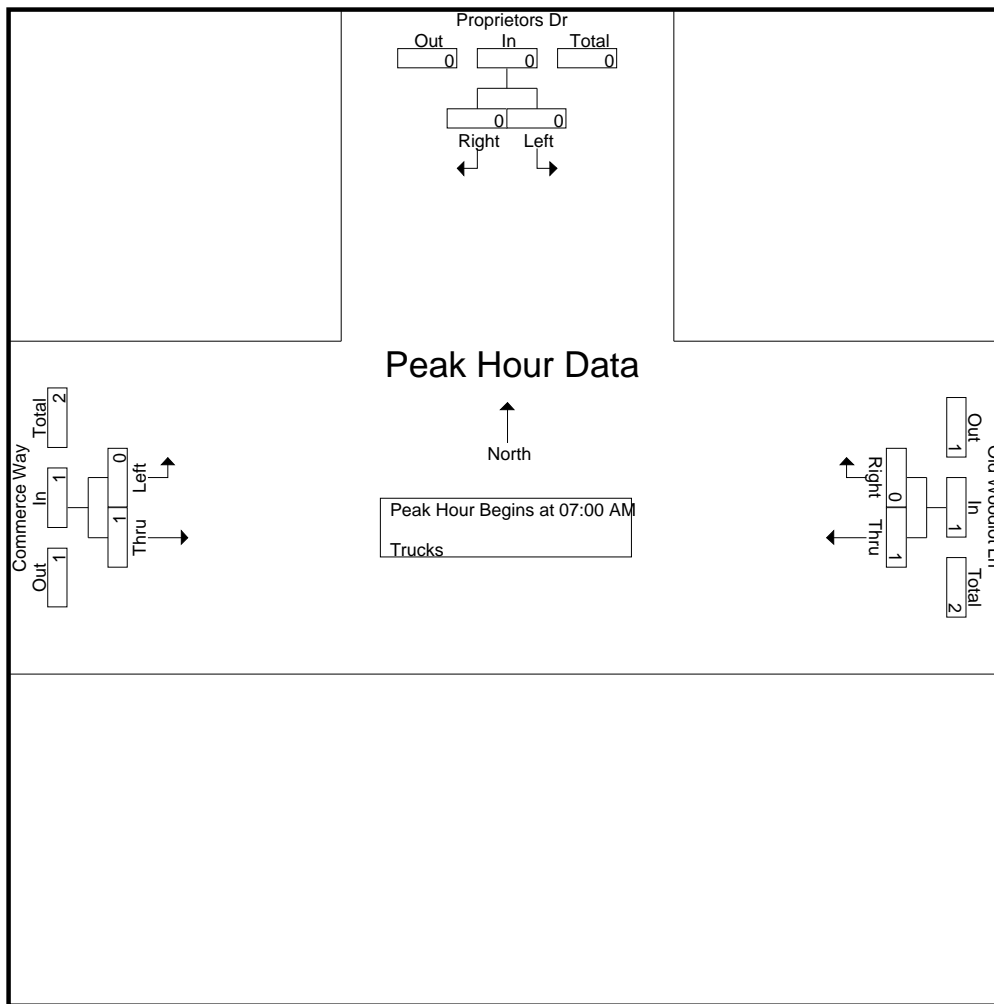
File Name : 90960004  
 Site Code : 90960004  
 Start Date : 9/16/2021  
 Page No : 7

### Groups Printed- Trucks

Start Time	Proprietors Dr From North		Old Woodlot Ln From East		Commerce Way From West		Int. Total
	Left	Right	Thru	Right	Left	Thru	
07:00 AM	0	0	0	0	0	0	0
07:15 AM	0	0	1	0	0	0	1
07:30 AM	0	0	0	0	0	1	1
07:45 AM	0	0	0	0	0	0	0
<b>Total</b>	0	0	1	0	0	1	2
08:00 AM	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0
08:30 AM	0	0	1	0	0	0	1
08:45 AM	0	0	0	0	0	0	0
<b>Total</b>	0	0	1	0	0	0	1
<b>Grand Total</b>	0	0	2	0	0	1	3
Apprch %	0	0	100	0	0	100	
Total %	0	0	66.7	0	0	33.3	

Start Time	Proprietors Dr From North			Old Woodlot Ln From East			Commerce Way From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	1	0	1	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	1	1	1
07:45 AM	0	0	0	0	0	0	0	0	0	0
<b>Total Volume</b>	0	0	0	1	0	1	0	1	1	2
<b>% App. Total</b>	0	0		100	0		0	100		
PHF	.000	.000	.000	.250	.000	.250	.000	.250	.250	.500

N/S Street : Proprietors Drive  
E/W Street : Old Woodlot Ln / Commerce Way  
City/State : Marshfield, MA  
Weather : Rain

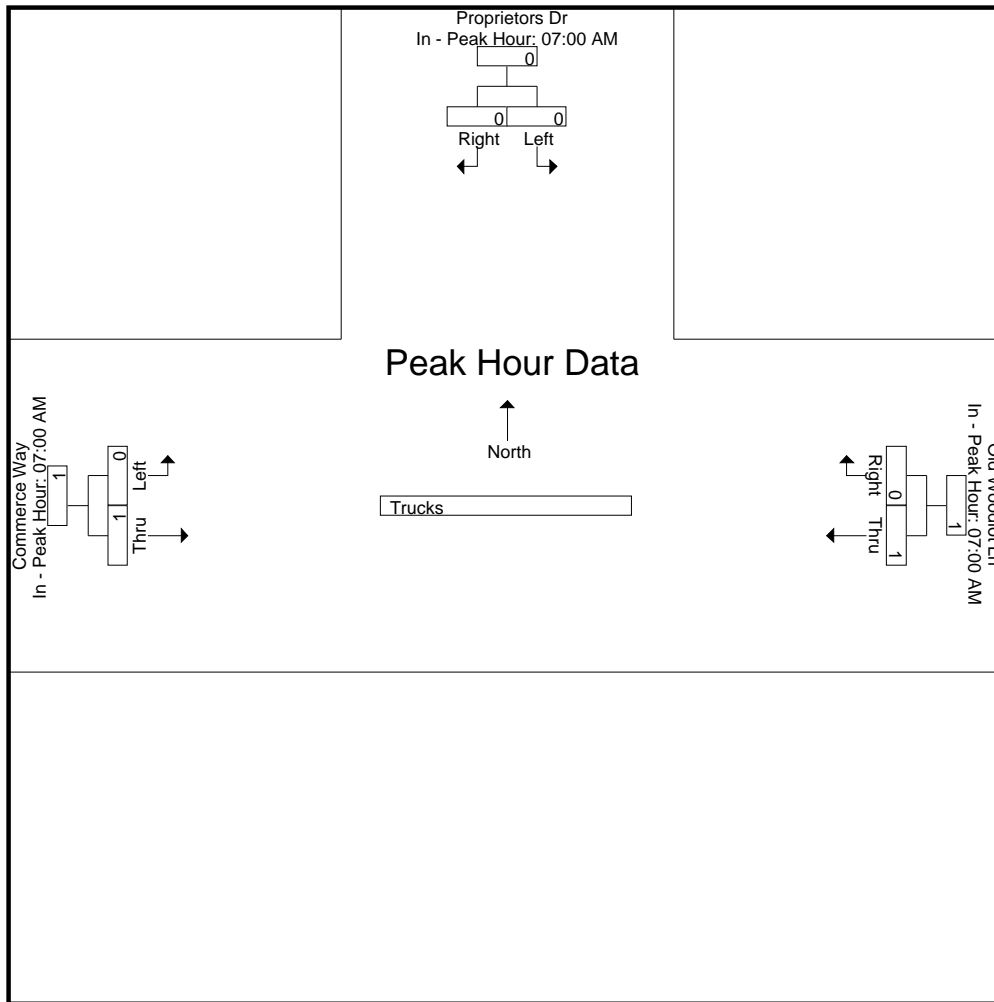


Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	1	0	1	0	0	0
+30 mins.	0	0	0	0	0	0	0	1	1
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	1	0	1	0	1	1
% App. Total	0	0		100	0		0	100	
PHF	.000	.000	.000	.250	.000	.250	.000	.250	.250



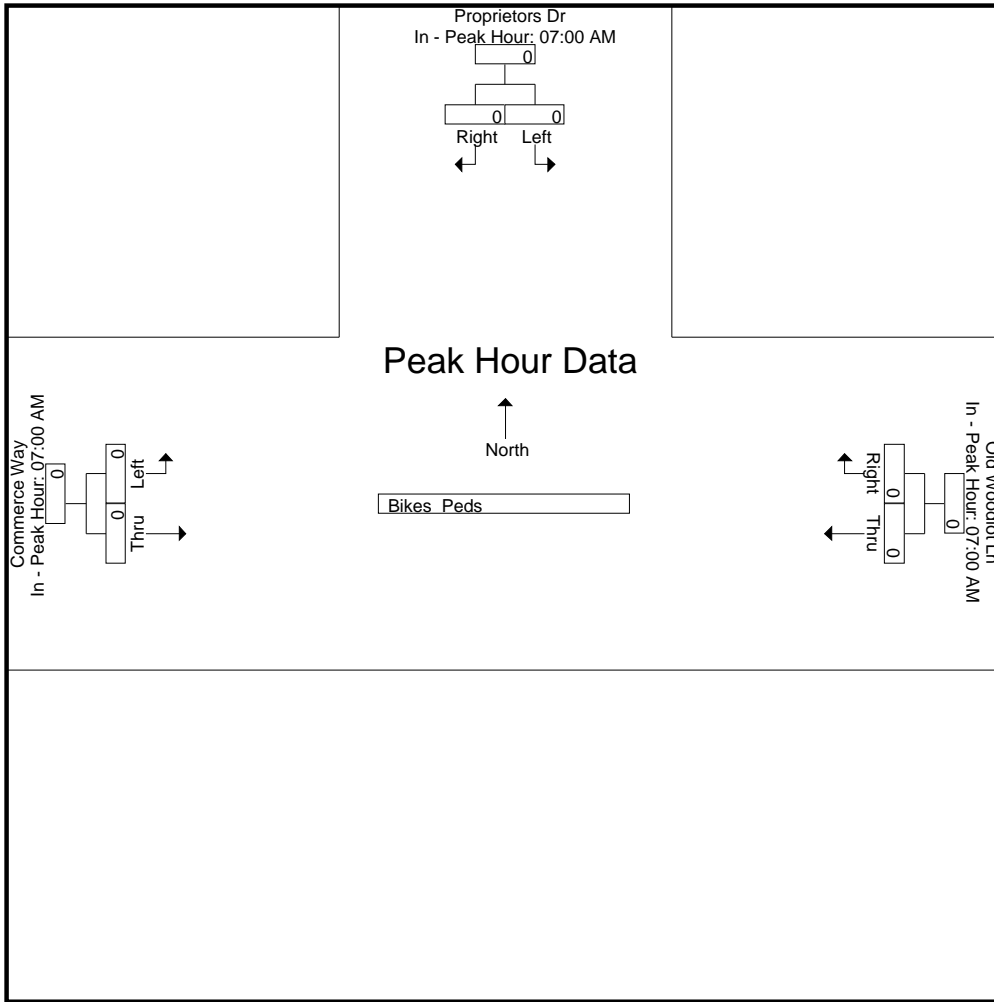
N/S Street : Proprietors Drive  
E/W Street : Old Woodlot Ln / Commerce Way  
City/State : Marshfield, MA  
Weather : Rain







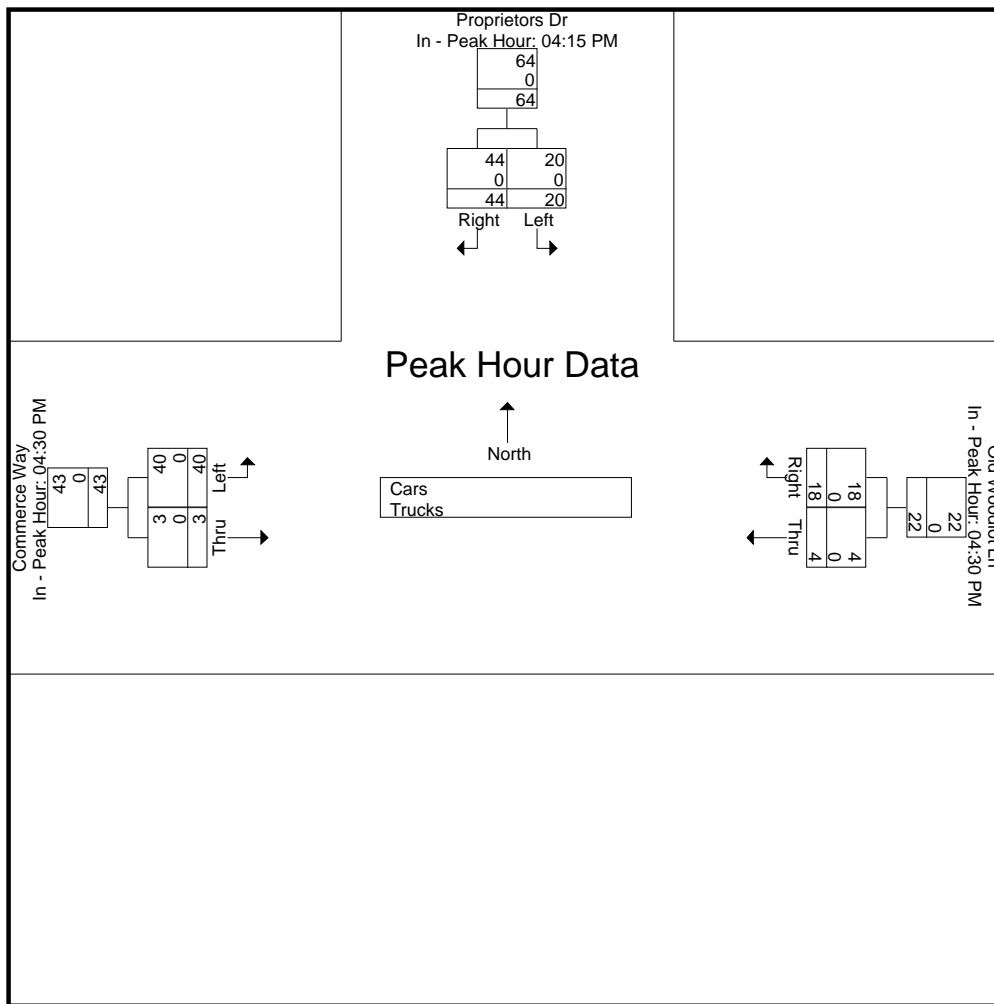
N/S Street : Proprietors Drive  
E/W Street : Old Woodlot Ln / Commerce Way  
City/State : Marshfield, MA  
Weather : Rain







N/S Street : Proprietors Drive  
E/W Street : Old Woodlot Ln / Commerce Way  
City/State : Marshfield, MA  
Weather : Rain



# Accurate Counts

978-664-2565

N/S Street : Proprietors Drive  
 E/W Street : Old Woodlot Ln / Commerce Way  
 City/State : Marshfield, MA  
 Weather : Rain

File Name : 90960004  
 Site Code : 90960004  
 Start Date : 9/16/2021  
 Page No : 4

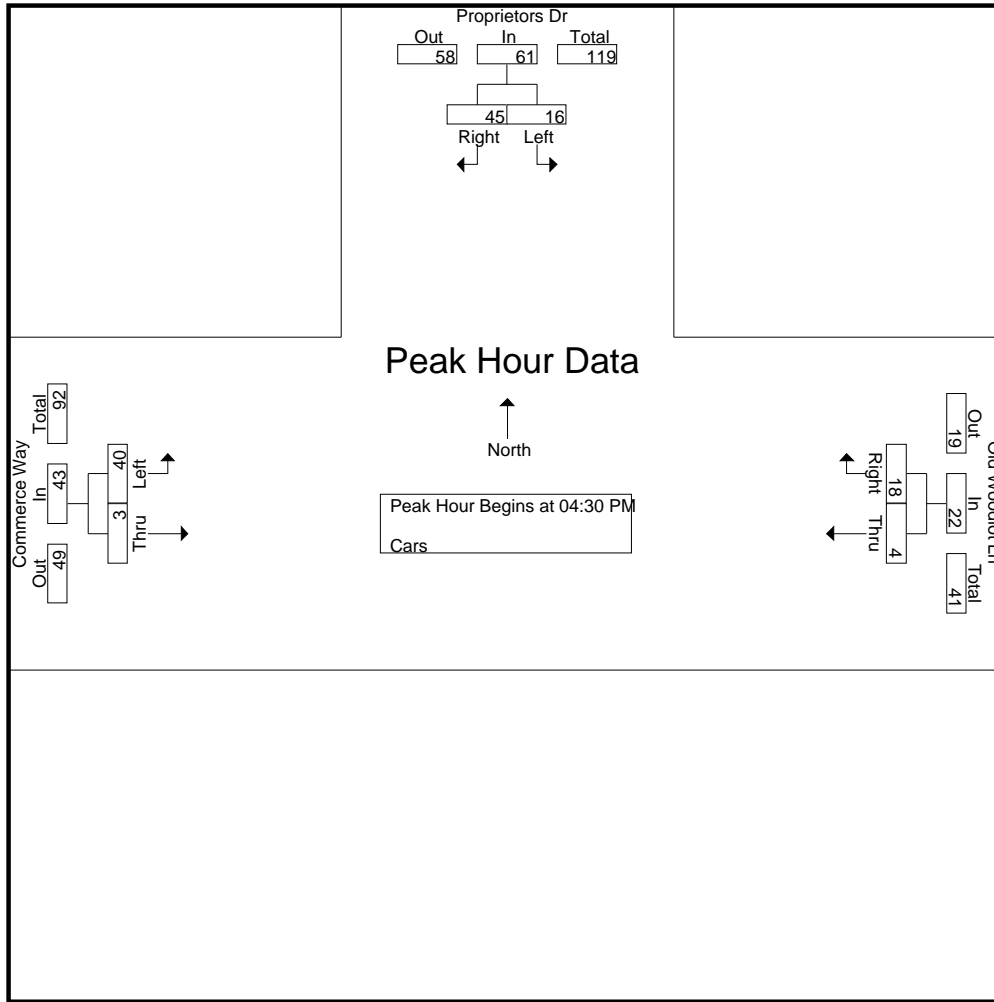
## Groups Printed- Cars

Start Time	Proprietors Dr From North		Old Woodlot Ln From East		Commerce Way From West		Int. Total
	Left	Right	Thru	Right	Left	Thru	
04:00 PM	4	8	0	2	7	3	24
04:15 PM	7	9	0	2	7	0	25
04:30 PM	5	10	2	8	10	1	36
04:45 PM	5	13	0	3	7	2	30
<b>Total</b>	<b>21</b>	<b>40</b>	<b>2</b>	<b>15</b>	<b>31</b>	<b>6</b>	<b>115</b>
05:00 PM	3	12	1	0	11	0	27
05:15 PM	3	10	1	7	12	0	33
05:30 PM	2	7	0	2	7	2	20
05:45 PM	2	12	0	3	6	1	24
<b>Total</b>	<b>10</b>	<b>41</b>	<b>2</b>	<b>12</b>	<b>36</b>	<b>3</b>	<b>104</b>
<b>Grand Total</b>	<b>31</b>	<b>81</b>	<b>4</b>	<b>27</b>	<b>67</b>	<b>9</b>	<b>219</b>
Apprch %	27.7	72.3	12.9	87.1	88.2	11.8	
Total %	14.2	37	1.8	12.3	30.6	4.1	

Start Time	Proprietors Dr From North			Old Woodlot Ln From East			Commerce Way From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	<b>5</b>	10	15	<b>2</b>	<b>8</b>	<b>10</b>	10	1	11	<b>36</b>
04:45 PM	5	<b>13</b>	<b>18</b>	0	3	3	7	<b>2</b>	9	30
05:00 PM	3	12	15	1	0	1	11	0	11	27
05:15 PM	3	10	13	1	7	8	<b>12</b>	0	<b>12</b>	33
Total Volume	16	45	61	4	18	22	40	3	43	126
% App. Total	26.2	73.8		18.2	81.8		93	7		
PHF	.800	.865	.847	.500	.563	.550	.833	.375	.896	.875



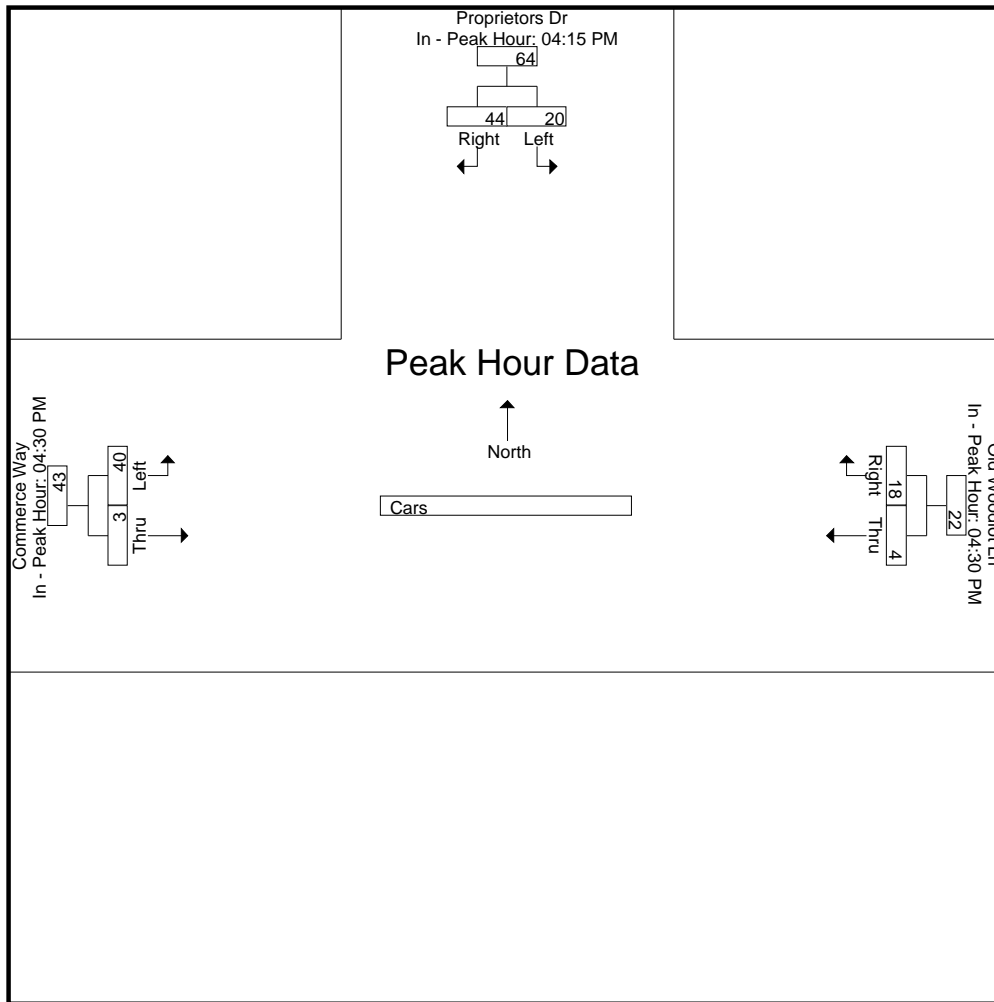
N/S Street : Proprietors Drive  
E/W Street : Old Woodlot Ln / Commerce Way  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	04:15 PM			04:30 PM			04:30 PM		
+0 mins.	7	9	16	2	8	10	10	1	11
+15 mins.	5	10	15	0	3	3	7	2	9
+30 mins.	5	13	18	1	0	1	11	0	11
+45 mins.	3	12	15	1	7	8	12	0	12
Total Volume	20	44	64	4	18	22	40	3	43
% App. Total	31.2	68.8		18.2	81.8		93	7	
PHF	.714	.846	.889	.500	.563	.550	.833	.375	.896

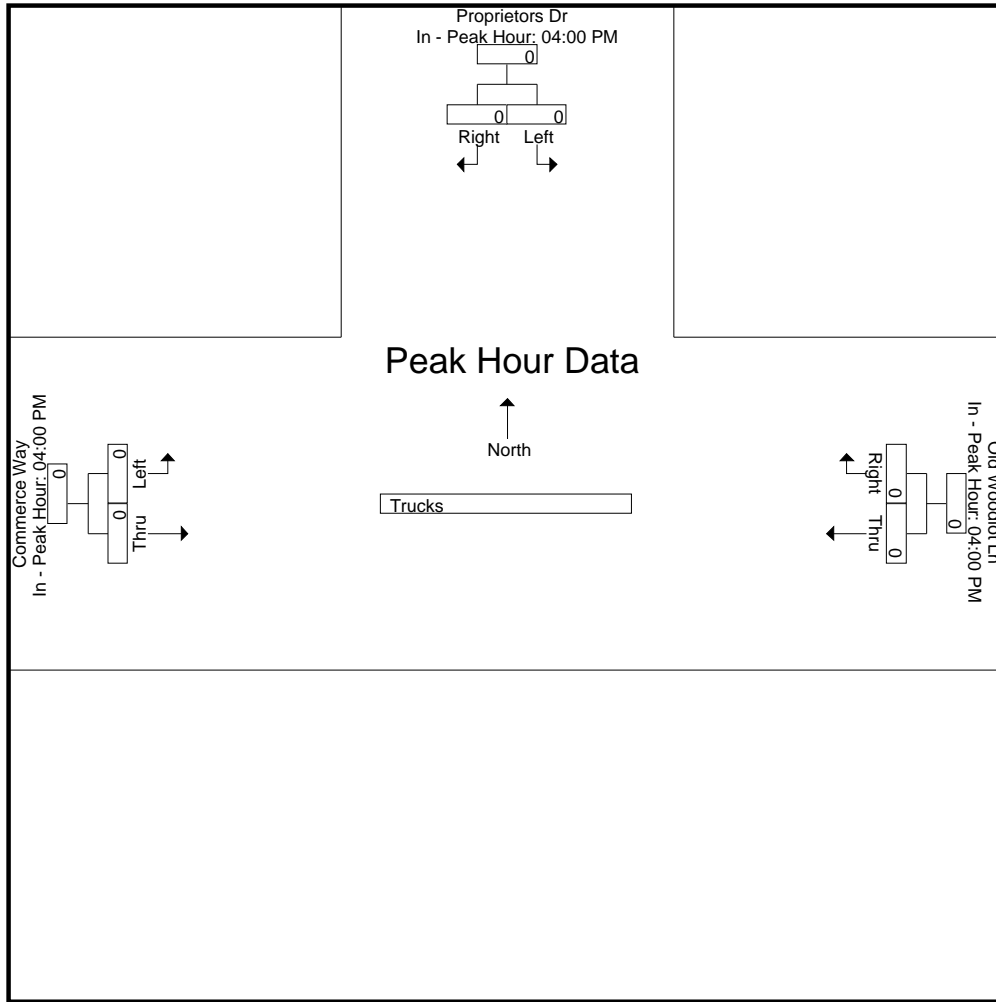
N/S Street : Proprietors Drive  
E/W Street : Old Woodlot Ln / Commerce Way  
City/State : Marshfield, MA  
Weather : Rain







N/S Street : Proprietors Drive  
E/W Street : Old Woodlot Ln / Commerce Way  
City/State : Marshfield, MA  
Weather : Rain



# Accurate Counts

978-664-2565

N/S Street : Proprietors Drive  
 E/W Street : Old Woodlot Ln / Commerce Way  
 City/State : Marshfield, MA  
 Weather : Rain

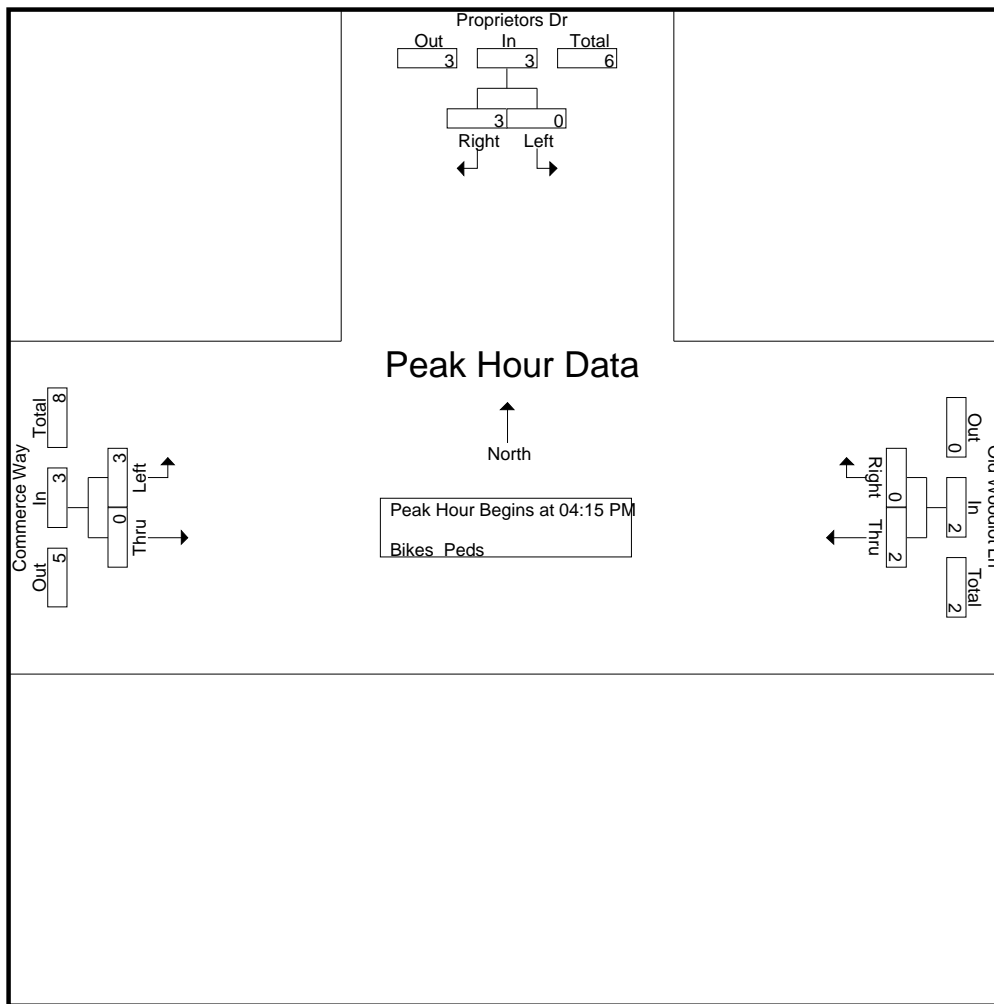
File Name : 90960004  
 Site Code : 90960004  
 Start Date : 9/16/2021  
 Page No : 10

### Groups Printed- Bikes Peds

Start Time	Proprietors Dr From North			Old Woodlot Ln From East			Commerce Way From West			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds			
04:00 PM	0	0	0	0	0	0	0	0	1	1	0	1
04:15 PM	0	0	0	2	0	0	0	0	1	1	2	3
04:30 PM	0	0	1	0	0	0	3	0	0	1	3	4
04:45 PM	0	0	0	0	0	0	0	0	1	1	0	1
<b>Total</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>9</b>
05:00 PM	0	3	2	0	0	0	0	0	0	2	3	5
05:15 PM	0	0	0	0	0	0	1	0	0	0	1	1
05:30 PM	0	0	1	0	0	0	0	0	0	1	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>4</b>	<b>7</b>
<b>Grand Total</b>	<b>0</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>3</b>	<b>7</b>	<b>9</b>	<b>16</b>
Apprch %	0	100		100	0		100	0				
Total %	0	33.3		22.2	0		44.4	0		43.8	56.2	

Start Time	Proprietors Dr From North			Old Woodlot Ln From East			Commerce Way From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	0	0	0	2	0	2	0	0	0	2
04:30 PM	0	0	0	0	0	0	3	0	3	3
04:45 PM	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	3	3	0	0	0	0	0	0	3
Total Volume	0	3	3	2	0	2	3	0	3	8
% App. Total	0	100		100	0		100	0		
PHF	.000	.250	.250	.250	.000	.250	.250	.000	.250	.667

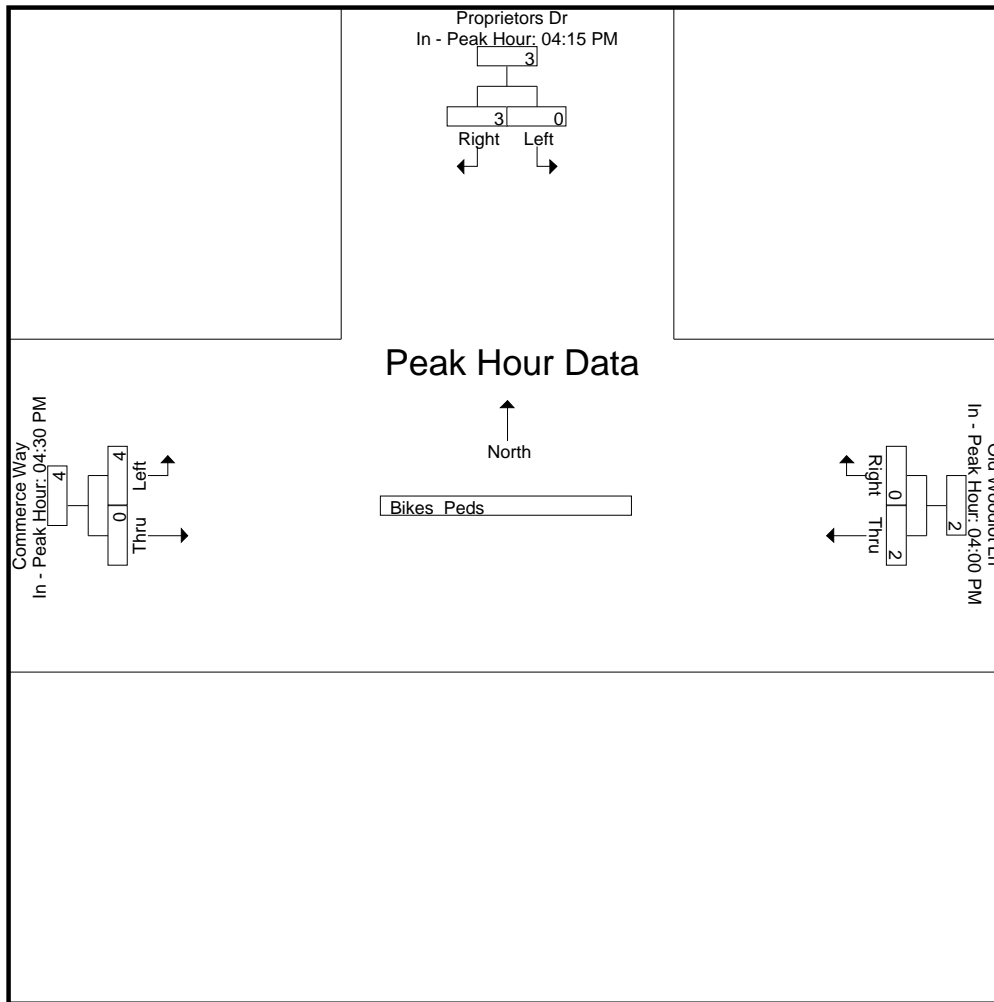
N/S Street : Proprietors Drive  
E/W Street : Old Woodlot Ln / Commerce Way  
City/State : Marshfield, MA  
Weather : Rain



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	04:15 PM			04:00 PM			04:30 PM		
+0 mins.	0	0	0	0	0	0	<b>3</b>	0	<b>3</b>
+15 mins.	0	0	0	<b>2</b>	0	<b>2</b>	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	<b>3</b>	<b>3</b>	0	0	0	1	0	1
Total Volume	0	3	3	2	0	2	4	0	4
% App. Total	0	100		100	0		100	0	
PHF	.000	.250	.250	.250	.000	.250	.333	.000	.333

N/S Street : Proprietors Drive  
E/W Street : Old Woodlot Ln / Commerce Way  
City/State : Marshfield, MA  
Weather : Rain

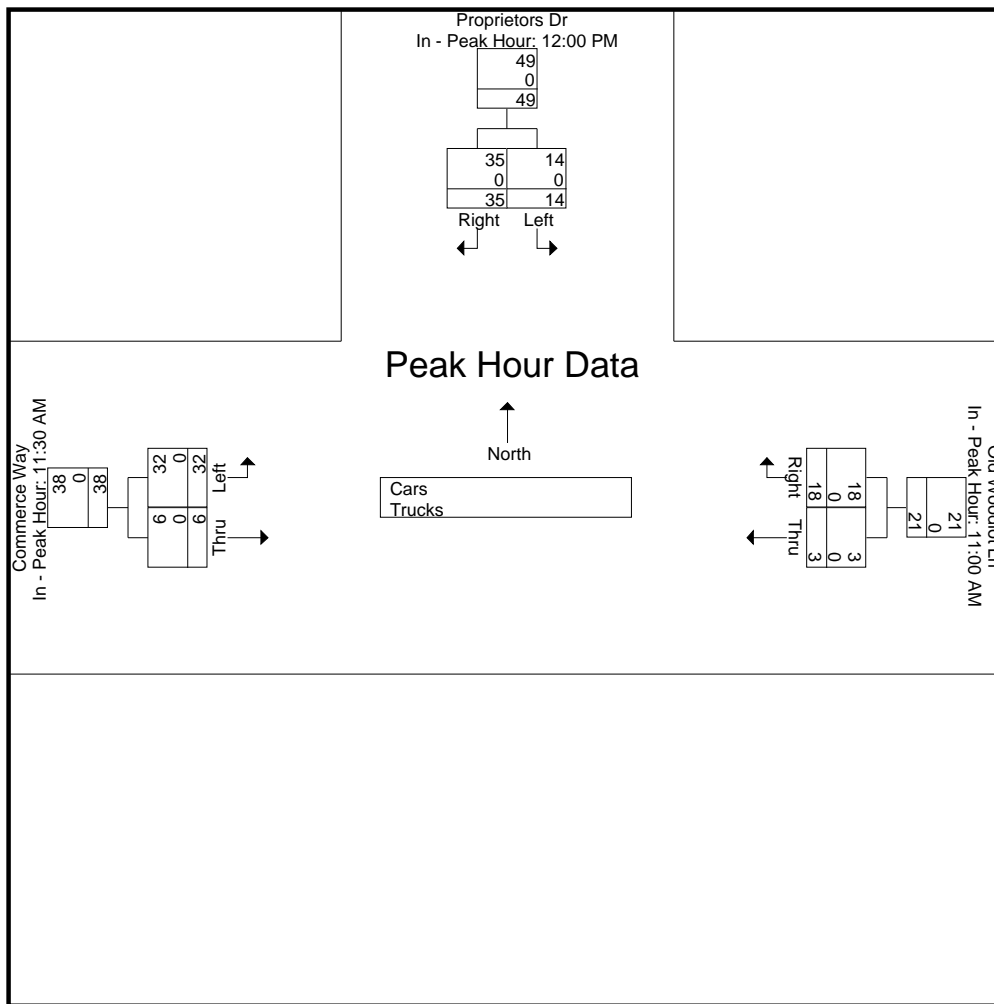








N/S Street : Proprietors Drive  
E/W Street : Old Woodlot Ln / Commerce Way  
City/State : Marshfield, MA  
Weather : Cloudy



# Accurate Counts

978-664-2565

N/S Street : Proprietors Drive  
 E/W Street : Old Woodlot Ln / Commerce Way  
 City/State : Marshfield, MA  
 Weather : Cloudy

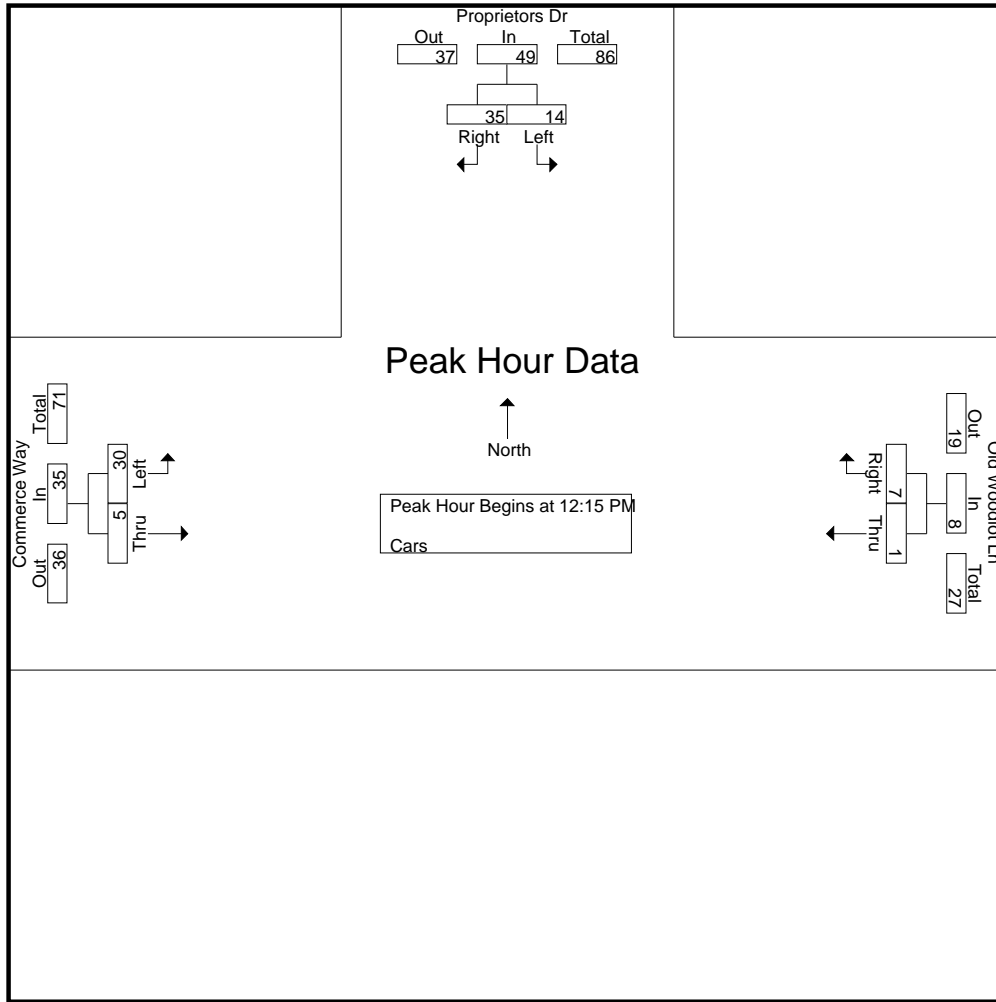
File Name : 909600S4  
 Site Code : 90960004  
 Start Date : 9/18/2021  
 Page No : 4

## Groups Printed- Cars

Start Time	Proprietors Dr From North		Old Woodlot Ln From East		Commerce Way From West		Int. Total
	Left	Right	Thru	Right	Left	Thru	
11:00 AM	7	6	1	7	9	0	30
11:15 AM	4	11	1	6	4	0	26
11:30 AM	2	5	0	3	9	1	20
11:45 AM	3	2	1	2	7	0	15
<b>Total</b>	<b>16</b>	<b>24</b>	<b>3</b>	<b>18</b>	<b>29</b>	<b>1</b>	<b>91</b>
12:00 PM	3	8	0	4	8	1	24
12:15 PM	2	9	1	1	8	4	25
12:30 PM	5	11	0	2	4	0	22
12:45 PM	4	7	0	1	7	1	20
<b>Total</b>	<b>14</b>	<b>35</b>	<b>1</b>	<b>8</b>	<b>27</b>	<b>6</b>	<b>91</b>
01:00 PM	3	8	0	3	11	0	25
01:15 PM	3	6	0	3	5	2	19
01:30 PM	2	7	1	3	5	0	18
01:45 PM	2	5	0	0	7	1	15
<b>Total</b>	<b>10</b>	<b>26</b>	<b>1</b>	<b>9</b>	<b>28</b>	<b>3</b>	<b>77</b>
<b>Grand Total</b>	<b>40</b>	<b>85</b>	<b>5</b>	<b>35</b>	<b>84</b>	<b>10</b>	<b>259</b>
Apprch %	32	68	12.5	87.5	89.4	10.6	
Total %	15.4	32.8	1.9	13.5	32.4	3.9	

Start Time	Proprietors Dr From North			Old Woodlot Ln From East			Commerce Way From West			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 12:15 PM										
12:15 PM	2	9	11	1	1	2	8	4	12	25
12:30 PM	5	11	16	0	2	2	4	0	4	22
12:45 PM	4	7	11	0	1	1	7	1	8	20
01:00 PM	3	8	11	0	3	3	11	0	11	25
<b>Total Volume</b>	<b>14</b>	<b>35</b>	<b>49</b>	<b>1</b>	<b>7</b>	<b>8</b>	<b>30</b>	<b>5</b>	<b>35</b>	<b>92</b>
<b>% App. Total</b>	<b>28.6</b>	<b>71.4</b>		<b>12.5</b>	<b>87.5</b>		<b>85.7</b>	<b>14.3</b>		
PHF	.700	.795	.766	.250	.583	.667	.682	.313	.729	.920

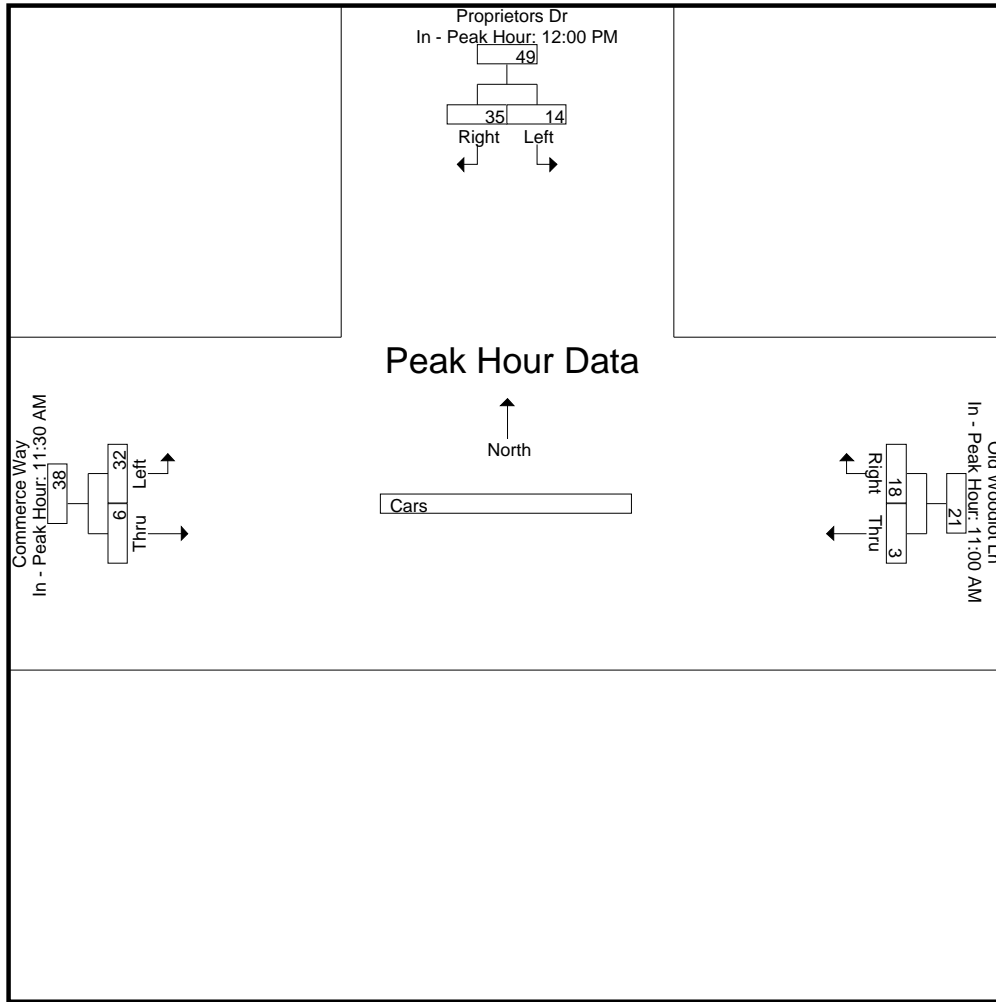
N/S Street : Proprietors Drive  
E/W Street : Old Woodlot Ln / Commerce Way  
City/State : Marshfield, MA  
Weather : Cloudy



Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	12:00 PM			11:00 AM			11:30 AM		
+0 mins.	3	8	11	1	7	8	9	1	10
+15 mins.	2	9	11	1	6	7	7	0	7
+30 mins.	5	11	16	0	3	3	8	1	9
+45 mins.	4	7	11	1	2	3	8	4	12
Total Volume	14	35	49	3	18	21	32	6	38
% App. Total	28.6	71.4		14.3	85.7		84.2	15.8	
PHF	.700	.795	.766	.750	.643	.656	.889	.375	.792

N/S Street : Proprietors Drive  
E/W Street : Old Woodlot Ln / Commerce Way  
City/State : Marshfield, MA  
Weather : Cloudy

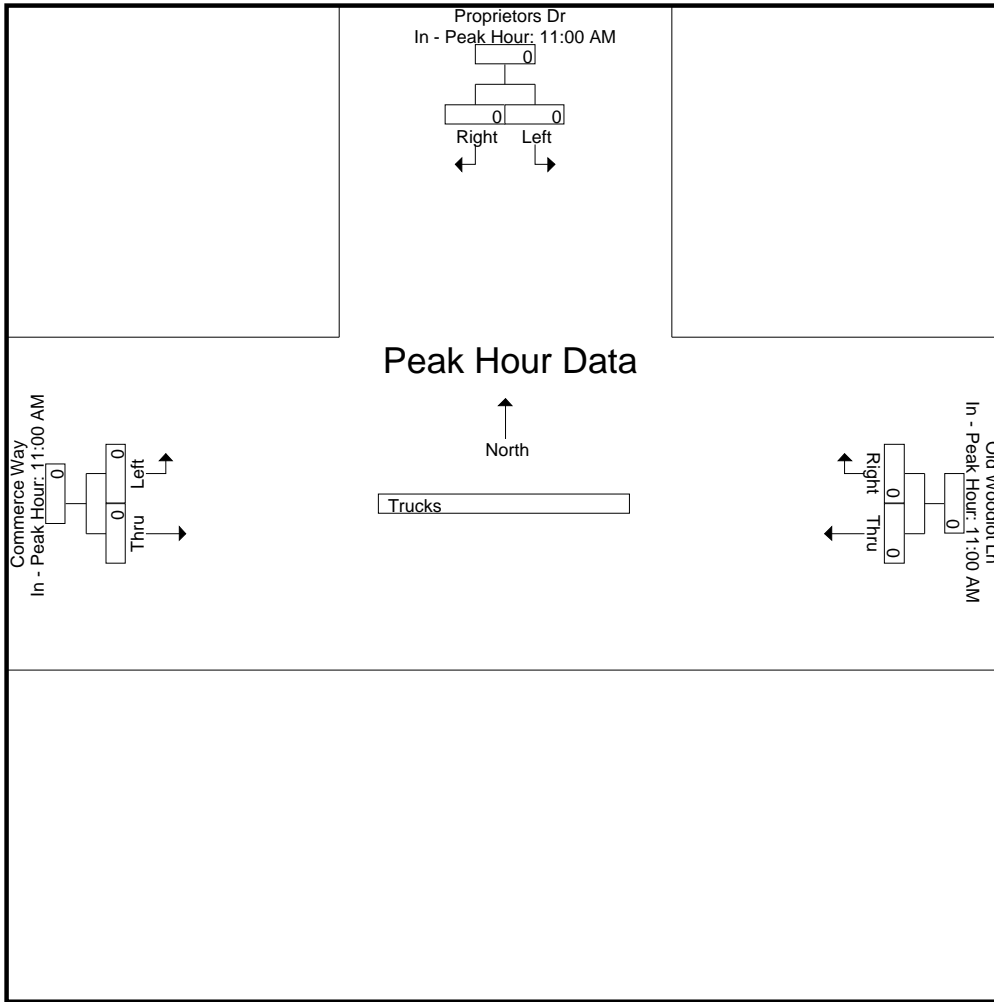








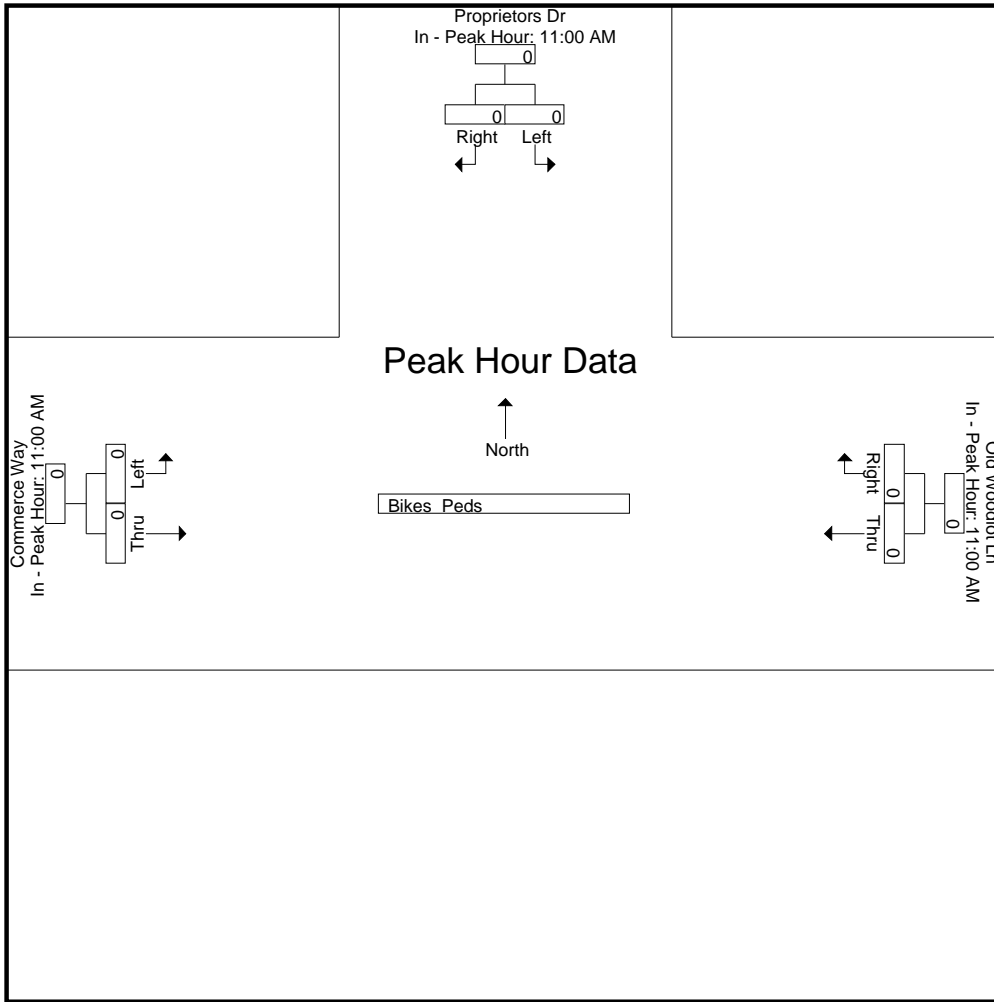
N/S Street : Proprietors Drive  
E/W Street : Old Woodlot Ln / Commerce Way  
City/State : Marshfield, MA  
Weather : Cloudy







N/S Street : Proprietors Drive  
E/W Street : Old Woodlot Ln / Commerce Way  
City/State : Marshfield, MA  
Weather : Cloudy



SEASONAL ADJUSTMENT DATA

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# Massachusetts Highway Department

## 20: Monthly Hourly Volume for September 2019

**Location ID:** 20  
**County:** Plymouth  
**Functional Class:** 2  
**Location:** PILGRIM HIGHWAY  
**Seasonal Factor Group:** U2  
**Daily Factor Group:**  
**Axle Factor Group:** U2  
**Growth Factor Group:**

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	TOTAL	QC Status			
1	482	256	161	121	215	377	717	1296	1973	2877	3493	3597	3678	3278	3230	3020	3160	2862	2879	2660	2618	1937	1219	703	46809	Accepted			
2	389	173	106	120	227	505	868	1769	2408	2781	2769	2989	3225	2762	2496	3056	2822	2603	2565	2032	1909	1056	586	319	40535	Accepted			
3																													
4	260	110	90	131	463	1149	2264	3217	3059	2618	2700	2746	2608	2720	2793	2945	3179	3153	2306	1708	1323	900	567	373	43382	Accepted			
5	247	122	111	142	462	1145	2387	3149	2846	2695	2770	2792	2675	2712	2832	3389	3406	3271	2397	1905	1639	1093	703	425	45315	Accepted			
6	230	138	105	158	411	997	2176	2957	2607	2629	2656	2990	3068	2921	3252	3348	3369	3083	2215	2073	1639	1186	709	554	45471	Accepted			
7	308	160	99	87	186	400	818	1205	1497	1961	2609	2905	2910	2766	2709	2682	2525	2287	2124	1765	1531	1240	918	636	36328	Accepted			
8	359	195	135	147	183	413	883	1311	1882	2807	3334	3390	3445	3499	3298	3133	3342	3462	2795	2266	1506	862	529	374	43550	Accepted			
9	225	167	123	162	516	1191	2441	3033	2836	2559	2573	2599	2601	2499	2806	2927	3161	2966	2129	1597	1178	731	521	338	41879	Accepted			
10	204	108	85	149	457	1132	2334	3105	2911	2698	2470	2615	2484	2429	2702	2964	3325	3027	2201	1649	1171	862	554	311	41947	Accepted			
11	174	105	96	121	406	1125	2324	3142	2896	2523	2644	2683	2530	2499	2734	3103	3226	3112	2251	1765	1399	940	608	348	42754	Accepted			
12	214	95	105	132	453	1046	2291	3116	2794	2554	2537	2636	2732	2693	2868	2984	3175	3031	2225	1789	1415	1050	733	417	43085	Accepted			
13	250	117	112	148	365	982	2146	2907	2650	2684	2789	2964	3167	3050	3211	3125	3310	3257	2869	2647	2226	1642	1037	736	48391	Accepted			
14	457	218	129	122	242	509	1074	1968	2585	3095	3511	3402	3435	3225	3180	3041	3054	2835	2352	1923	1650	1329	928	660	44924	Accepted			
15	379	203	118	130	178	403	685	1203	1918	2830	3228	3531	3430	3233	3118	3165	3338	3342	2798	2235	1761	1078	583	330	43217	Accepted			
16	187	103	99	163	564	1264	2271	3179	2835	2597	2605	2642	2538	2476	2766	2787	3181	3039	2102	1644	1087	775	430	277	41611	Accepted			
17	170	87	69	139	469	1159	2312	3172	2836	2537	2453	2556	2423	2349	2679	3024	3159	3004	2193	1642	1139	831	535	340	41277	Accepted			
18	236	106	107	139	451	1118	2201	3059	2856	2645	2522	2617	2506	2427	2826	3090	3201	3047	2127	1711	1355	942	573	338	42200	Accepted			
19	243	97	98	127	426	1069	2251	3077	2913	2566	2652	2543	2697	2630	2823	3088	3259	3264	2459	1823	1604	1202	679	442	44032	Accepted			
20	219	133	100	146	402	983	2118	2879	2835	2638	2943	3004	3012	3041	3152	3284	3444	3429	2996	2629	2177	1494	965	684	48707	Accepted			
21	378	231	108	113	270	526	1112	1994	2474	3134	3492	3518	3241	3019	3049	3013	3035	2846	2417	2092	1856	1379	1044	666	45007	Accepted			
22	343	200	135	155	185	381	749	1302	2106	2955	3417	3399	3366	3194	3273	3301	3503	3414	3178	2868	1918	1078	587	301	45308	Accepted			
23	179	99	92	147	480	1223	2404	3157	2744	2619	2529	2756	2657	2533	2815	2905	3228	3053	2155	1580	1142	766	488	285	42036	Accepted			
24	144	99	89	128	448	1058	2289	3014	2803	2415	2461	2515	2395	2413	2606	3080	3241	3083	2216	1572	1264	753	478	272	40836	Accepted			
25	159	92	74	110	449	1112	2284	3052	2837	2446	2366	2416	2366	2472	2597	2950	3073	3068	2229	1699	1378	951	592	357	41129	Accepted			
26	177	115	74	144	390	1069	2240	3045	2850	2585	2562	2680	2533	2622	2773	3125	3187	3170	2311	1610	1455	1056	696	371	42840	Accepted			
27	201	117	112	161	413	948	2041	2937	2693	2709	2776	3043	3014	3019	3220	3264	3403	3318	3043	2503	2134	1444	922	634	48069	Accepted			
28	407	183	126	134	209	510	969	1761	2356	3016	3462	3381	3217	3111	2891	3060	2930	2804	2428	1973	1615	1301	918	556	43318	Accepted			
29	321	188	146	115	143	325	669	1164	1957	2847	3188	3445	3301	3178	2889	2916	2978	3293	2676	2175	1549	1004	530	296	41293	Accepted			
30	166	90	92	161	493	1222	2316	2986	2733	2484	2387	2564	2474	2461	2756	2936	3113	2783	2049	1533	998	701	439	261	40198	Accepted			
																									<b>September Average</b>	<b>43291</b>			
																										<b>2019 AADT</b>	<b>40215</b>		
																											<b>Seasonal Adjustment</b>	<b>0.929</b>	

COVID-19 ADJUSTMENT DATA

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## **Covid Adjustment for Route 139, East of Enterprise Drive**

### **November 2019 Turning Movement Counts**

*Weekday Morning Peak Hour Volume* = 1,654

*Weekday Evening Peak Hour Volume* = 2,087

November Seasonal Adjustment: 0.97 [MassDOT 2019 Weekday Seasonal Factors – U3]

Growth Rate (2019-2020): 0.0% [MassDOT Guidance on Traffic Count Data]

Growth Rate (2020-2021): 1.0% [Assumed]

*Growth Adjustment* =  $(1.00) \times (1.01) = 1.010$

*Weekday Morning* =  $1,654 \times (0.97) \times (1.010) = 1,620$

*Weekday Evening* =  $2,087 \times (0.97) \times (1.010) = 2,045$

### **September 2021 Turning Movement Counts**

*Weekday Morning Peak Hour Volume* = 1,804

*Weekday Evening Peak Hour Volume* = 2,341

September Seasonal Adjustment: 0.92 [MassDOT 2019 Weekday Seasonal Factors – U3]

*Weekday Morning* =  $1,804 \times (0.92) = 1,660$

*Weekday Evening* =  $2,341 \times (0.92) = 2,154$

### **September Covid Adjustment**

*Weekday Morning* =  $\frac{1,620}{1,660} = 0.976$

*Weekday Evening* =  $\frac{2,045}{2,154} = 0.949$



Client: Vanessa Kello  
 Project #: 510\_058\_HSH  
 BTS #: Location 3  
 Location: Marshfield, MA  
 Street 1: Plain Street  
 Street 2: Enterprise Drive & Fox Run  
 Count Date: 11/19/2019  
 Day of Week: Tuesday  
 Weather: Rain, 45°F



**PASSENGER CARS & HEAVY VEHICLES COMBINED**

Start Time	Enterprise Drive Northbound			Fox Run Southbound			Plain Street Eastbound			Plain Street Westbound		
	U-Turn	Thru	Right	U-Turn	Thru	Right	U-Turn	Thru	Right	U-Turn	Thru	Right
7:00 AM	0	1	3	0	3	1	0	1	18	0	6	2
7:15 AM	0	5	0	0	2	5	0	0	24	0	7	2
7:30 AM	0	4	4	0	7	4	0	1	23	0	11	1
7:45 AM	0	9	3	0	2	3	0	1	23	0	14	2
8:00 AM	0	19	3	0	5	1	0	2	35	0	8	1
8:15 AM	0	6	2	0	6	4	0	1	23	0	5	6
8:30 AM	0	7	5	0	2	5	0	2	31	0	8	3
8:45 AM	0	11	5	0	4	4	0	1	17	0	14	3

Start Time	Enterprise Drive Northbound			Fox Run Southbound			Plain Street Eastbound			Plain Street Westbound		
	U-Turn	Thru	Right	U-Turn	Thru	Right	U-Turn	Thru	Right	U-Turn	Thru	Right
4:00 PM	0	30	7	0	8	3	0	7	12	0	4	5
4:15 PM	0	18	9	0	6	5	0	0	11	0	8	1
4:30 PM	0	37	15	0	3	7	0	5	7	0	5	4
4:45 PM	0	20	12	0	5	1	0	7	7	0	6	5
5:00 PM	0	52	9	0	3	3	0	3	6	0	4	2
5:15 PM	0	25	12	0	3	2	0	6	12	0	7	6
5:30 PM	0	17	12	0	8	2	0	4	12	0	4	2
5:45 PM	0	9	2	0	3	3	0	3	8	0	7	2

AM PEAK HOUR 7:45 AM to 8:45 AM PHF HV %	Enterprise Drive Northbound			Fox Run Southbound			Plain Street Eastbound			Plain Street Westbound		
	U-Turn	Thru	Right	U-Turn	Thru	Right	U-Turn	Thru	Right	U-Turn	Thru	Right
	0	41	13	0	15	11	0	6	112	0	35	12
	0.0%	24.4%	23.1%	0.0%	0.65	0.0%	0.0%	0.92	7.1%	0.0%	2.9%	0.0%

PM PEAK HOUR 4:00 PM to 5:00 PM PHF HV %	Enterprise Drive Northbound			Fox Run Southbound			Plain Street Eastbound			Plain Street Westbound		
	U-Turn	Thru	Right	U-Turn	Thru	Right	U-Turn	Thru	Right	U-Turn	Thru	Right
	0	105	43	0	22	16	0	19	37	0	23	15
	0.0%	3.8%	4.7%	0.0%	0.83	6.3%	0.0%	0.92	8.1%	0.0%	1.1%	6.7%

PUBLIC TRANSPORTATION SCHEDULES

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## RULES OF CONDUCT

- Proper behavior is expected at all times.
- Objectionable Persons  
GATRA reserves the right to refuse transportation to any person under the influence of intoxicating beverages or drugs or to a person whose conduct or personal hygiene would make them objectionable to other passengers.

## TIPS FOR RIDING THE BUS

- Respect fellow passengers.
- Food and Beverages are prohibited while riding the bus.
- Music must be listened to with headphones and cell phone use should only be during limited or emergency situations.
- After boarding the bus, please sit down. (If there is standing room only, please stand behind the line and keep aisles clear.)
- Please reserve front seats for persons with disabilities or seniors.
- Strollers and shopping carts must be folded and removed from the aisle.
- Only service animals are allowed on buses.
- Do not cross in front of the bus after exiting; wait until the bus has departed.
- Drivers have the authority to insure the safety and comfort of all passengers.
- Rude, loud and abusive language will not be allowed.

**GIVE US A WAVE!**

*We'll get you there!*

**Board the bus anywhere  
along the route where it is  
safe to do so.**

*No service on Sundays and the following holidays:  
New Years Day, Memorial Day, Independence Day, Labor Day,  
Columbus Day, Thanksgiving Day and Christmas Day.*

The Greater Attleboro Taunton Regional  
Transit Authority (GATRA) provides  
comprehensive quality public transportation  
services to meet the mobility needs of people  
throughout 28 member communities.

## SERVICE HOURS:

Monday through Friday  
5:50 am to 7:00 pm  
Saturday  
8:45 to 6:55 pm

## FARE INFORMATION

### Exact Fare Required – Cash Fares

Regular.....	\$1.50
Senior (over 60).....	\$ .75
Disabled / Medicare Cardholders.....	\$ .75
Students (up to high school).....	\$ .75
Children (6 & under, with adult).....	FREE

One Transfer (within 90 minutes).....FREE

### 1-Day Pass

Regular.....	\$4.00
Senior (over 60).....	\$2.00
Disabled / Medicare Cardholders.....	\$2.00
Students*.....	\$2.00

### 10-Ride Pass

Regular.....	\$13.00
Senior (over 60).....	\$6.50
Disabled / Medicare Cardholders.....	\$6.50
Students (up to high school).....	\$6.50

### 31-Day Pass

Regular.....	\$40.00
Senior (over 60).....	\$20.00
Disabled / Medicare Cardholders.....	\$20.00
Students (up to high school).....	\$20.00

The 31-Day Pass allows unlimited rides on GATRA for 31 days when activated. Activation takes place the first time you use it on the bus. Contact GATRA for information about purchasing the 31-Day Pass.

### FLAG STOPS

In addition to designated stops on the schedule, passengers may board anywhere along the bus route by waving to the driver as the vehicle approaches.

### ACCESSIBILITY

All GATRA transportation is equipped with accessibility for wheelchairs.

### STATEWIDE ACCESS PASS

Statewide access passes for individuals with disabilities are issued by GATRA. The access pass offers half-fares on public bus transportation systems throughout MA, including GATRA and the MBTA.

A Personal Care Attendant (PCA) may ride free when accompanying an individual with a disability on the fixed-route service. If you require a PCA, please contact the GATRA office.



Greater Attleboro Taunton  
Regional Transit Authority



## KINGSTON

Kingston Center • Kingston Collection  
Kingsbury Plaza • MBTA Rail Station

## DUXBURY

Hall's Corner • Foodie's • Town Hall  
Duxbury High School • Island Creek

## MARSHFIELD

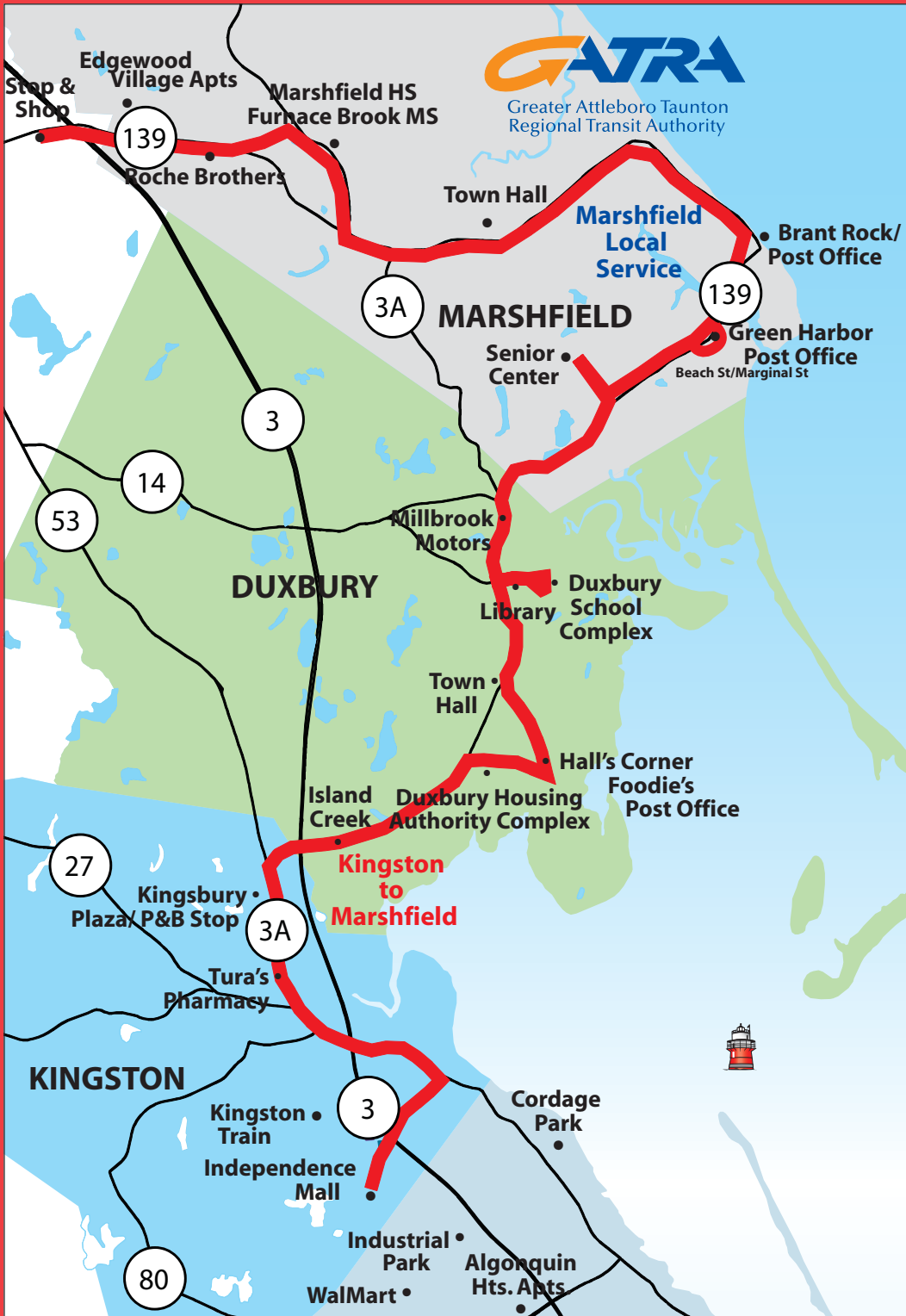
Marshfield Center • Brant Rock  
Walgreen's • Green Harbor General Store  
Marshfield High School  
Stop & Shop/Kohl's Plaza

**Effective February 4, 2019**

**Plymouth 978-393-4404**

**Toll Free 844-358-4422**

**[www.gatra.org](http://www.gatra.org)**



### MARSHFIELD TO DUXBURY TO KINGSTON SOUTHBOUND WEEKDAY SCHEDULE

Stop & Shop	Roche Bros.	Webster Sq	Winslow Apts	Brant Rock	Beach St., Green Harbor Gnl Store	Marshfield Senior Ctr	Millbrook Motors	Duxbury Library	Halls Corner Foodie's	Island Creek	Kingsbury Plaza	Kingston Train	Kingston Collection
AM	-	-	6:10	6:17	6:22	6:27	6:31	6:36	6:40	6:48	-	7:02	7:10
7:00	7:07	7:18	7:25	7:30	7:32	-	7:36	7:41	7:48	7:56	8:02	8:10	8:15
8:00	8:07	8:18	8:25	8:30	8:32	8:36	8:41	8:46	8:53	9:01	9:07	-	9:20
9:00	9:07	9:18	9:25	9:30	9:32	9:36	9:41	9:46	9:53	10:01	10:07	-	10:20
10:00	10:07	10:18	10:25	10:30	10:32	10:36	10:41	10:46	10:53	11:01	11:07	-	11:20
11:00	11:07	11:18	11:25	11:30	11:32	11:36	11:41	11:46	11:53	12:01	12:07	-	12:20
PM	12:00	12:07	12:18	12:25	12:30	12:32	12:41	12:46	12:53	1:01	1:07	-	1:20
1:00	1:07	1:18	1:25	1:30	1:32	1:36	1:41	1:46	1:53	2:01	2:07	-	2:20
2:15	2:22	2:33	2:40	2:45	2:47	2:51	2:56	3:01	3:08	3:16	3:22	-	3:35
3:00	3:07	3:18	3:25	3:30	3:32	3:36	3:41	3:46	3:53	4:01	4:07	-	4:20
4:00	4:07	4:18	4:25	4:30	4:32	4:36	4:41	4:46	4:53	5:01	5:07	-	5:20
5:10	5:17	5:28	5:35	5:40	5:42	-	5:47	5:52	5:59	6:07	6:13	-	6:26

### SATURDAY

AM	8:30	8:37	8:48	8:55	9:00	9:02	9:07	9:12	9:19	9:27	9:33	-	9:46
10:00	10:07	10:18	10:25	10:30	10:32	-	10:37	10:42	10:49	10:57	11:03	-	11:16
11:30	11:37	11:48	11:55	12:00	12:02	-	12:07	12:12	12:19	12:27	12:33	-	12:46
1:00	1:07	1:18	1:25	1:30	1:32	-	1:37	1:42	1:49	1:57	2:03	-	2:16
2:30	2:37	2:48	2:55	3:00	3:02	-	3:07	3:12	3:19	3:27	3:33	-	3:46
4:00	4:07	4:18	4:25	4:30	4:32	-	4:37	4:42	4:49	4:57	5:03	-	5:16
5:30	5:37	5:48	5:55	6:00	6:02	-	6:07	6:12	6:19	6:27	6:33	-	6:46

### KINGSTON TO DUXBURY TO MARSHFIELD NORTHBOUND WEEKDAY SCHEDULE

Kingston Collection	Kingston Train	Kingsbury Plaza	Island Creek	Halls Corner Foodie's	Duxbury Library	Millbrook Motors	Marshfield Senior Ctr	Beach St., Green Harbor Gnl Store	Brant Rock	Winslow Apts	Webster Sq	Roche Bros.	Stop & Shop Kohl's
AM	-	-	6:05	6:13	6:18	6:22	-	6:26	6:31	6:38	6:45	6:56	7:03
7:30	-	7:41	7:47	7:55	8:00	8:04	8:09	8:13	8:18	8:25	8:32	8:43	8:50
8:30	-	8:41	8:47	8:55	9:00	9:04	9:09	9:13	9:18	9:25	9:32	9:43	9:50
9:30	-	9:41	9:47	9:55	10:00	10:04	10:09	10:13	10:18	10:25	10:32	10:43	10:50
10:30	-	10:41	10:47	10:55	11:00	11:04	11:09	11:13	11:18	11:25	11:32	11:43	11:50
PM	11:30	-	11:41	11:47	11:55	12:00	12:04	12:09	12:13	12:18	12:25	12:32	12:43
12:30	-	12:41	12:47	12:55	1:00	1:04	1:09	1:13	1:18	1:25	1:32	1:43	1:50
1:30	-	1:41	1:47	1:55	2:00	2:04	2:09	2:13	2:18	2:25	2:32	2:43	2:50
2:30	-	2:41	2:47	2:55	3:00	3:04	3:09	3:13	3:18	3:25	3:32	3:43	3:50
3:42	3:47	3:58	4:04	4:12	4:17	4:21	4:26	4:30	4:35	4:42	4:49	5:00	5:07
4:30	-	4:41	4:47	4:55	5:00	5:04	-	5:08	5:13	5:20	5:27	5:38	5:45
5:20	5:25	5:36	5:42	Will continue to Marshfield on Demand.		-	-	5:08	5:13	5:20	5:27	5:38	5:45
6:35	6:42	6:53	6:57	-	-	-	-	-	-	-	-	-	-

### SATURDAY

AM	8:30	-	8:41	8:47	8:55	9:00	9:04	-	9:08	9:13	9:20	9:27	9:38	9:45
10:00	-	10:11	10:17	10:25	10:30	10:34	-	10:38	10:43	10:50	10:57	11:08	11:15	
PM	11:30	-	11:41	11:47	11:55	12:00	12:04	-	12:08	12:13	12:20	12:27	12:38	12:45
1:00	-	1:11	1:17	1:25	1:30	1:34	-	1:38	1:43	1:50	1:57	2:08	2:15	
2:30	-	2:41	2:47	2:55	3:00	3:04	-	3:08	3:13	3:20	3:27	3:38	3:45	
4:00	-	4:11	4:17	4:25	4:30	4:34	-	4:38	4:43	4:50	4:57	5:08	5:15	
5:30	-	5:41	5:47	5:55	6:00	6:04	-	6:08	6:13	6:20	6:27	6:38	6:45	

VEHICLE TRAVEL SPEED DATA

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Accurate Counts

Location : Route 139 EB  
 Location : West of Enterprise Drive  
 City/State: Marshfield, MA  
 Direction: Combined

9096EB01

9/16/2021	0 - 15	> 15 -	> 20 -	> 25 -	> 30 -	> 35 -	> 40 -	> 45 -	> 50 -	> 55 -	> 60 -	> 65 -	> 70	Total
Time	MPH	20 MPH	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	70 MPH	MPH	
12:00 AM	0	1	1	4	6	12	24	13	2	0	0	0	0	63
1:00	0	2	0	1	3	7	6	3	1	0	0	0	0	23
2:00	1	0	0	0	1	3	4	3	3	3	1	0	0	19
3:00	0	0	0	3	1	8	4	5	0	0	1	0	0	22
4:00	7	0	1	3	7	9	10	8	5	1	0	0	0	51
5:00	21	3	2	3	16	52	52	22	6	1	0	0	0	178
6:00	29	14	3	32	44	135	101	49	14	5	0	0	0	426
7:00	20	38	37	95	99	204	116	54	12	1	0	0	0	676
8:00	23	30	63	126	165	156	125	37	9	2	1	0	0	737
9:00	30	41	73	120	185	168	112	32	5	0	0	0	0	766
10:00	11	23	45	100	153	184	169	49	11	1	0	0	0	746
11:00	29	47	64	102	183	256	166	49	10	1	0	0	0	907
12:00 PM	34	27	108	134	202	233	195	90	9	3	0	0	0	1035
1:00	23	28	75	118	162	237	235	83	9	0	0	0	0	970
2:00	43	52	64	146	197	240	180	60	13	1	0	0	0	996
3:00	33	34	91	160	222	339	178	47	8	2	0	0	0	1114
4:00	53	57	138	173	215	233	195	50	7	1	0	0	0	1122
5:00	77	49	101	153	243	255	149	62	9	0	0	0	0	1098
6:00	30	45	78	133	159	198	198	107	5	1	0	0	0	954
7:00	3	21	34	86	134	240	202	61	15	0	0	0	0	796
8:00	0	5	17	38	104	176	171	52	15	2	1	0	0	581
9:00	5	5	3	17	33	93	111	62	5	1	0	0	0	335
10:00	2	2	3	11	11	47	66	32	4	3	0	0	0	181
11:00	4	0	1	8	11	39	49	29	5	2	1	0	0	149
Total	478	524	1002	1766	2556	3524	2818	1059	182	31	5	0	0	13945

Percentile	15th	50th	85th	95th
Speed	25.4	35.9	42.8	46.5
Mean Speed (Average)	34.5			
10 MPH Pace Speed	35-44			
Number in Pace	6337			
Percent in Pace	45.4%			
Number > 35 MPH	7619			
Percent > 35 MPH	54.6%			

Location : Route 139 EB  
 Location : West of Enterprise Drive  
 City/State: Marshfield, MA  
 Direction: Combined

9096EB01

9/17/2021	0 - 15	> 15 -	> 20 -	> 25 -	> 30 -	> 35 -	> 40 -	> 45 -	> 50 -	> 55 -	> 60 -	> 65 -	> 70	Total
Time	MPH	20 MPH	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	70 MPH	MPH	
12:00 AM	0	0	0	2	3	15	22	9	4	1	0	0	0	56
1:00	1	0	1	0	6	9	16	6	0	0	0	0	0	39
2:00	1	2	0	0	3	4	8	4	1	0	0	0	0	23
3:00	0	0	0	0	4	4	10	4	2	0	0	0	0	24
4:00	8	3	2	1	1	16	8	9	3	2	0	0	0	53
5:00	29	4	3	6	40	47	50	15	6	1	0	0	0	201
6:00	34	9	19	34	87	113	148	63	12	0	0	0	0	519
7:00	37	24	62	101	90	228	162	91	9	4	1	0	0	809
8:00	45	35	81	117	161	168	153	27	7	1	0	0	0	795
9:00	26	36	83	93	157	236	185	35	12	0	0	0	0	863
10:00	42	42	55	89	149	210	194	77	9	0	0	0	0	867
11:00	45	25	70	110	145	298	163	53	4	0	0	0	0	913
12:00 PM	46	49	101	203	193	253	107	45	3	0	0	0	0	1000
1:00	31	66	137	197	166	208	123	59	10	4	0	0	0	1001
2:00	54	47	112	165	185	224	131	43	2	1	0	0	0	964
3:00	38	85	117	154	202	311	186	32	8	2	0	0	0	1135
4:00	103	79	107	199	159	224	87	44	4	1	0	0	0	1007
5:00	63	89	148	231	204	208	124	26	23	1	0	0	0	1117
6:00	17	39	91	147	156	258	189	69	15	7	1	0	0	989
7:00	7	15	34	107	150	234	157	48	7	0	0	0	0	759
8:00	8	6	12	67	81	188	144	43	4	1	0	0	0	554
9:00	3	2	6	24	49	93	119	44	10	2	1	0	0	353
10:00	4	4	4	23	54	79	109	43	9	6	1	0	0	336
11:00	2	1	2	11	29	50	79	34	6	3	0	0	0	217
Total	644	662	1247	2081	2474	3678	2674	923	170	37	4	0	0	14594

Percentile	15th	50th	85th	95th
Speed	24.1	35.3	42.8	46.5
Mean Speed (Average)	33.5			
10 MPH Pace Speed	35-44			
Number in Pace	6348			
Percent in Pace	43.5%			
Number > 35 MPH	7486			
Percent > 35 MPH	51.3%			





Location : Route 139 WB  
 Location : West of Enterprise Drive  
 City/State: Marshfield, MA  
 Direction: Combined

9096WB01

9/16/2021	0 - 15	> 15 -	> 20 -	> 25 -	> 30 -	> 35 -	> 40 -	> 45 -	> 50 -	> 55 -	> 60 -	> 65 -	> 70	Total
Time	MPH	20 MPH	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	70 MPH	MPH	
12:00 AM	3	0	3	5	9	10	6	2	1	0	0	0	0	39
1:00	2	0	1	6	7	7	2	0	2	0	0	0	0	27
2:00	2	0	2	2	1	4	9	1	3	3	0	0	0	27
3:00	2	0	0	0	6	8	12	9	5	1	2	0	0	45
4:00	3	0	1	3	11	42	41	53	24	7	3	1	0	189
5:00	27	0	4	8	44	117	131	99	63	19	3	0	0	515
6:00	51	0	15	37	119	260	253	78	36	5	0	0	0	854
7:00	54	11	44	154	303	276	206	70	8	1	0	0	0	1127
8:00	64	22	71	100	276	251	165	54	16	1	0	0	0	1020
9:00	37	8	69	133	309	258	147	53	5	0	0	0	0	1019
10:00	34	4	25	109	304	324	142	63	20	0	1	0	0	1026
11:00	46	2	39	137	335	332	146	42	10	2	0	0	0	1091
12:00 PM	31	2	50	164	232	353	174	64	14	1	0	0	0	1085
1:00	40	6	46	118	284	333	183	59	13	0	0	0	0	1082
2:00	34	18	37	179	344	363	161	36	7	1	0	0	0	1180
3:00	29	14	33	197	287	289	148	47	23	2	1	0	0	1070
4:00	38	21	45	135	309	268	219	47	12	0	0	0	0	1094
5:00	26	1	28	137	345	343	158	50	10	3	0	0	0	1101
6:00	28	0	13	75	165	225	142	71	21	1	2	0	0	743
7:00	15	1	10	54	144	178	117	46	6	1	0	0	0	572
8:00	16	0	5	26	79	133	76	25	9	1	0	0	0	370
9:00	5	0	5	14	33	73	54	32	5	1	0	0	0	222
10:00	9	2	3	9	23	45	36	13	9	0	0	0	0	149
11:00	7	0	0	4	5	17	15	5	4	0	0	0	0	57
<b>Total</b>	<b>603</b>	<b>112</b>	<b>549</b>	<b>1806</b>	<b>3974</b>	<b>4509</b>	<b>2743</b>	<b>1019</b>	<b>326</b>	<b>50</b>	<b>12</b>	<b>1</b>	<b>0</b>	<b>15704</b>

Percentile	15th	50th	85th	95th
Speed	29.1	35.9	42.8	47.1
Mean Speed (Average)	35.2			
10 MPH Pace Speed	30-39			
Number in Pace	8429			
Percent in Pace	53.7%			
Number > 35 MPH	8660			
Percent > 35 MPH	55.1%			

Location : Route 139 WB  
 Location : West of Enterprise Drive  
 City/State: Marshfield, MA  
 Direction: Combined

9096WB01

9/17/2021	0 - 15	> 15 -	> 20 -	> 25 -	> 30 -	> 35 -	> 40 -	> 45 -	> 50 -	> 55 -	> 60 -	> 65 -	> 70	Total
Time	MPH	20 MPH	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	70 MPH	MPH	
12:00 AM	7	0	6	6	6	8	4	2	2	1	0	0	0	42
1:00	2	0	0	2	1	5	9	2	1	0	0	0	0	22
2:00	1	0	1	2	2	6	4	3	1	0	0	0	0	20
3:00	1	0	1	1	4	8	10	3	8	4	0	1	0	41
4:00	7	0	0	5	5	30	43	40	24	13	2	0	0	169
5:00	30	0	3	17	42	88	128	108	60	8	2	0	0	486
6:00	37	0	10	53	147	276	237	123	19	5	0	0	1	908
7:00	57	15	56	99	224	364	215	87	21	1	1	0	0	1140
8:00	54	7	47	100	301	321	199	28	16	1	0	0	0	1074
9:00	53	8	15	88	275	338	229	61	5	0	0	0	0	1072
10:00	33	4	19	79	191	389	196	44	15	2	0	0	0	972
11:00	41	6	31	79	281	375	197	79	12	2	1	0	0	1104
12:00 PM	42	7	28	256	411	337	142	30	8	0	0	0	0	1261
1:00	42	5	39	118	377	384	144	37	19	2	2	0	0	1169
2:00	44	17	58	195	385	343	126	40	5	0	1	0	0	1214
3:00	27	6	43	139	374	392	182	41	16	0	0	0	0	1220
4:00	47	11	34	160	423	244	148	49	8	0	0	0	0	1124
5:00	27	2	55	121	290	280	147	56	6	1	0	0	0	985
6:00	30	9	30	90	244	226	125	61	9	3	0	0	0	827
7:00	22	0	15	83	177	163	107	34	3	0	0	0	1	605
8:00	10	1	8	27	95	117	94	25	3	1	0	0	0	381
9:00	18	0	4	21	55	74	73	17	8	0	0	0	0	270
10:00	13	0	2	23	46	60	55	23	7	1	0	0	0	230
11:00	5	1	0	10	21	38	31	16	1	0	1	0	0	124
<b>Total</b>	<b>650</b>	<b>99</b>	<b>505</b>	<b>1774</b>	<b>4377</b>	<b>4866</b>	<b>2845</b>	<b>1009</b>	<b>277</b>	<b>45</b>	<b>10</b>	<b>1</b>	<b>2</b>	<b>16460</b>

Percentile	15th	50th	85th	95th
Speed	29.1	35.9	42.2	46.5
Mean Speed (Average)	35.2			
10 MPH Pace Speed	30-39			
Number in Pace	9181			
Percent in Pace	55.8%			
Number > 35 MPH	9055			
Percent > 35 MPH	55.0%			



Location : Enterprise Drive  
 Location : South of Route 139  
 City/State: Marshfield, MA  
 Direction: NB,

90960002

9/16/2021	0 - 3	> 3 - 6	> 6 - 9	> 9 - 12	> 12 - 15	> 15 - 18	> 18 - 21	> 21 - 24	> 24 - 27	> 27 - 30	> 30 - 33	> 33 - 36	> 36 - 39	> 39	Total
Time	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	
12:00 AM	0	0	0	0	0	0	1	0	0	1	1	0	0	0	3
1:00	0	0	0	0	0	1	0	1	0	0	0	0	0	0	2
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	1	2	0	0	0	0	0	0	0	3
4:00	0	0	0	0	0	2	2	3	1	0	0	1	0	0	9
5:00	0	0	0	1	1	1	7	5	5	3	2	0	0	0	25
6:00	0	0	0	0	2	2	8	16	18	8	1	0	0	0	55
7:00	0	0	0	0	1	1	16	22	16	9	3	0	0	0	68
8:00	0	0	0	0	2	3	16	17	20	17	7	2	0	0	84
9:00	0	0	0	0	2	4	12	21	22	6	3	0	1	0	71
10:00	0	0	1	0	1	8	6	15	20	7	3	1	1	0	63
11:00	0	0	1	0	1	6	21	28	17	5	1	1	1	0	82
12:00 PM	0	0	0	1	0	2	8	25	22	13	2	2	0	0	75
1:00	0	0	0	0	1	3	8	22	16	15	7	0	0	0	72
2:00	0	0	0	0	0	3	11	23	24	15	5	1	0	0	82
3:00	0	0	0	0	1	6	13	24	36	20	4	3	0	0	107
4:00	0	0	0	0	0	0	13	29	42	19	10	2	0	0	115
5:00	0	0	0	0	0	2	18	26	35	21	5	2	0	0	109
6:00	0	0	0	1	1	3	23	41	30	12	9	0	0	0	120
7:00	0	0	0	0	1	8	22	24	10	6	1	0	0	0	72
8:00	0	0	0	0	0	3	11	6	7	3	1	0	0	0	31
9:00	0	0	0	0	0	2	5	4	6	1	1	0	0	0	19
10:00	0	0	0	0	0	0	2	1	4	1	0	0	0	0	8
11:00	0	0	0	0	3	1	1	3	3	0	0	0	0	0	11
Total	0	0	2	3	17	62	226	356	354	182	66	15	3	0	1286

Percentile	15th	50th	85th	95th
Speed	19.2	23.5	27.9	30.3
Mean Speed (Average)	23.9			
10 MPH Pace Speed	18-27			
Number in Pace	993			
Percent in Pace	77.2%			
Number > 24 MPH	620			
Percent > 24 MPH	48.2%			

Location : Enterprise Drive  
 Location : South of Route 139  
 City/State: Marshfield, MA  
 Direction: NB,

90960002

9/17/2021	0 - 3	> 3 - 6	> 6 - 9	> 9 - 12	> 12 - 15	> 15 - 18	> 18 - 21	> 21 - 24	> 24 - 27	> 27 - 30	> 30 - 33	> 33 - 36	> 36 - 39	> 39	Total
Time	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	2	0	0	1	0	0	0	3
2:00	0	0	1	0	0	0	0	0	1	0	0	0	0	0	2
3:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
4:00	0	0	0	0	0	0	1	0	3	0	1	0	0	0	5
5:00	0	0	0	0	1	1	7	7	6	4	5	1	0	0	32
6:00	0	0	0	0	0	1	13	12	14	7	4	0	0	0	51
7:00	0	0	0	0	1	4	10	16	22	9	1	0	0	0	63
8:00	0	0	0	0	0	4	21	23	17	14	3	1	0	0	83
9:00	0	0	0	1	4	2	19	18	18	7	1	0	0	0	70
10:00	0	0	0	1	1	1	14	11	18	6	4	1	0	0	57
11:00	0	0	0	2	4	3	7	27	19	7	1	2	0	0	72
12:00 PM	0	0	1	0	1	3	18	22	18	20	6	2	0	0	91
1:00	0	0	1	2	2	3	15	20	12	17	4	1	0	0	77
2:00	0	0	0	1	5	7	18	15	15	17	6	1	0	0	85
3:00	0	0	1	1	2	6	28	41	31	17	5	2	0	0	134
4:00	0	0	0	0	0	4	16	26	36	21	10	2	1	0	116
5:00	0	0	0	2	1	2	20	35	51	20	3	1	0	0	135
6:00	0	0	0	0	0	3	18	30	19	4	6	1	0	0	81
7:00	0	0	1	0	2	5	14	18	15	4	1	0	0	0	60
8:00	0	0	0	0	0	3	11	13	11	0	1	0	0	0	39
9:00	0	0	0	0	0	4	7	5	6	2	0	1	1	0	26
10:00	0	0	0	0	0	1	6	1	2	3	0	0	0	0	13
11:00	0	0	0	0	0	0	2	1	0	1	0	0	0	0	4
Total	0	0	5	10	24	57	265	343	334	181	63	16	2	0	1300

Percentile	15th	50th	85th	95th
Speed	19.2	23.5	27.9	30.3
Mean Speed (Average)	23.6			
10 MPH Pace Speed	18-27			
Number in Pace	998			
Percent in Pace	76.8%			
Number > 24 MPH	596			
Percent > 24 MPH	45.8%			



Location : Enterprise Drive  
 Location : South of Route 139  
 City/State: Marshfield, MA  
 Direction: SB,

90960002

9/16/2021	0 - 3	> 3 - 6	> 6 - 9	> 9 - 12	> 12 - 15	> 15 - 18	> 18 - 21	> 21 - 24	> 24 - 27	> 27 - 30	> 30 - 33	> 33 - 36	> 36 - 39	> 39	Total
Time	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	
12:00 AM	0	0	0	0	0	0	0	0	4	2	0	0	0	0	6
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	2	0	2	0	0	0	4
4:00	0	0	0	0	0	0	0	2	4	3	2	0	0	0	11
5:00	0	0	0	0	0	0	2	6	11	21	14	3	2	2	61
6:00	0	0	0	0	0	0	1	4	9	26	15	5	0	0	60
7:00	0	0	1	0	1	1	2	7	27	21	19	3	0	1	83
8:00	0	0	0	0	0	0	3	5	12	19	16	5	0	0	60
9:00	0	0	0	0	0	0	1	5	20	27	16	4	0	0	73
10:00	0	0	0	0	0	0	5	2	14	8	13	2	0	0	44
11:00	0	0	0	0	0	2	2	6	15	22	8	1	1	2	59
12:00 PM	0	0	0	0	0	1	2	9	15	23	13	2	0	0	65
1:00	0	0	0	0	0	0	0	4	24	16	14	5	0	0	63
2:00	0	0	0	0	0	3	3	2	20	17	16	1	1	0	63
3:00	0	0	0	0	1	0	1	15	18	20	17	4	1	2	79
4:00	0	0	0	0	0	0	2	3	28	28	22	1	1	0	85
5:00	0	0	0	0	0	0	0	6	40	42	28	2	0	0	118
6:00	0	0	0	0	0	1	0	9	15	21	14	5	2	1	68
7:00	0	0	0	0	0	0	1	3	11	21	7	0	1	1	45
8:00	0	0	0	0	0	0	1	4	10	8	5	1	0	1	30
9:00	0	0	0	0	0	0	1	3	3	1	4	1	0	0	13
10:00	0	0	0	0	0	0	0	1	3	2	4	0	0	0	10
11:00	0	0	0	0	0	0	1	2	0	4	0	0	1	0	8
Total	0	0	1	0	2	8	28	98	305	352	249	45	10	10	1108

Percentile	15th	50th	85th	95th
Speed	24.1	27.9	31.6	33.5
Mean Speed (Average)	28.9			
10 MPH Pace Speed	23-32			
Number in Pace	934			
Percent in Pace	84.3%			
Number > 24 MPH	971			
Percent > 24 MPH	87.6%			

Location : Enterprise Drive  
 Location : South of Route 139  
 City/State: Marshfield, MA  
 Direction: SB,

90960002

9/17/2021	0 - 3	> 3 - 6	> 6 - 9	> 9 - 12	> 12 - 15	> 15 - 18	> 18 - 21	> 21 - 24	> 24 - 27	> 27 - 30	> 30 - 33	> 33 - 36	> 36 - 39	> 39	Total
Time	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	
12:00 AM	0	0	0	0	0	0	0	1	1	1	1	0	0	0	4
1:00	0	0	0	0	0	0	1	0	0	0	3	0	1	0	5
2:00	0	0	2	0	0	0	0	0	1	1	0	0	0	0	4
3:00	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2
4:00	0	0	0	0	0	0	0	0	4	3	1	1	0	0	9
5:00	0	0	0	0	0	0	1	1	16	23	15	3	2	2	63
6:00	0	0	0	0	1	0	2	7	17	27	20	2	1	0	77
7:00	0	0	0	0	0	2	0	8	18	30	24	3	3	1	89
8:00	0	0	0	0	0	1	2	3	18	23	16	3	3	1	70
9:00	0	0	0	0	0	1	2	6	19	29	19	2	1	0	79
10:00	0	0	0	0	0	0	1	3	4	10	11	4	0	1	34
11:00	0	0	0	1	0	1	4	6	9	16	10	4	0	1	52
12:00 PM	0	0	0	0	1	0	3	3	10	20	18	0	0	0	55
1:00	0	0	1	0	0	0	1	6	20	21	23	1	1	0	74
2:00	0	0	0	0	0	4	3	11	24	12	10	2	0	0	66
3:00	0	0	0	0	0	0	3	4	24	28	20	2	2	2	85
4:00	0	0	0	0	0	0	1	4	17	37	27	2	2	1	91
5:00	0	0	0	0	0	0	3	5	34	35	23	5	0	0	105
6:00	0	0	0	0	0	0	2	11	15	22	11	5	1	0	67
7:00	0	0	0	0	0	0	0	5	17	16	3	2	0	0	43
8:00	0	0	0	0	0	0	1	5	11	7	2	0	0	0	26
9:00	0	0	0	0	0	0	0	1	8	4	3	0	0	0	16
10:00	0	0	0	0	0	0	0	4	5	1	1	0	0	0	11
11:00	0	0	0	0	0	1	1	1	3	1	1	0	0	0	8
Total	0	0	3	1	2	10	31	96	295	367	263	41	17	9	1135

Percentile	15th	50th	85th	95th
Speed	24.1	27.9	31.6	34.1
Mean Speed (Average)	28.8			
10 MPH Pace Speed	23-32			
Number in Pace	951			
Percent in Pace	83.8%			
Number > 24 MPH	992			
Percent > 24 MPH	87.4%			





Location : Enterprise Drive  
 Location : South of Route 139  
 City/State: Marshfield, MA  
 Direction: Combined

90960002

9/16/2021	0 - 3	> 3 - 6	> 6 - 9	> 9 - 12	> 12 - 15	> 15 - 18	> 18 - 21	> 21 - 24	> 24 - 27	> 27 - 30	> 30 - 33	> 33 - 36	> 36 - 39	> 39	Total
Time	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	
12:00 AM	0	0	0	0	0	0	1	0	4	3	1	0	0	0	9
1:00	0	0	0	0	0	1	0	1	0	0	0	0	0	0	2
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	1	2	0	2	0	2	0	0	0	7
4:00	0	0	0	0	0	2	2	5	5	3	2	1	0	0	20
5:00	0	0	0	1	1	1	9	11	16	24	16	3	2	2	86
6:00	0	0	0	0	2	2	9	20	27	34	16	5	0	0	115
7:00	0	0	1	0	2	2	18	29	43	30	22	3	0	1	151
8:00	0	0	0	0	2	3	19	22	32	36	23	7	0	0	144
9:00	0	0	0	0	2	4	13	26	42	33	19	4	1	0	144
10:00	0	0	1	0	1	8	11	17	34	15	16	3	1	0	107
11:00	0	0	1	0	1	8	23	34	32	27	9	2	2	2	141
12:00 PM	0	0	0	1	0	3	10	34	37	36	15	4	0	0	140
1:00	0	0	0	0	1	3	8	26	40	31	21	5	0	0	135
2:00	0	0	0	0	0	6	14	25	44	32	21	2	1	0	145
3:00	0	0	0	0	2	6	14	39	54	40	21	7	1	2	186
4:00	0	0	0	0	0	0	15	32	70	47	32	3	1	0	200
5:00	0	0	0	0	0	2	18	32	75	63	33	4	0	0	227
6:00	0	0	0	1	1	4	23	50	45	33	23	5	2	1	188
7:00	0	0	0	0	1	8	23	27	21	27	8	0	1	1	117
8:00	0	0	0	0	0	3	12	10	17	11	6	1	0	1	61
9:00	0	0	0	0	0	2	6	7	9	2	5	1	0	0	32
10:00	0	0	0	0	0	0	2	2	7	3	4	0	0	0	18
11:00	0	0	0	0	3	1	2	5	3	4	0	0	1	0	19
Total	0	0	3	3	19	70	254	454	659	534	315	60	13	10	2394

Percentile	15th	50th	85th	95th
Speed	21	25.4	30.3	32.2
Mean Speed (Average)	26.2			
10 MPH Pace Speed	21-30			
Number in Pace	1750			
Percent in Pace	73.1%			
Number > 24 MPH	1591			
Percent > 24 MPH	66.5%			

Accurate Counts

Location : Enterprise Drive  
 Location : South of Route 139  
 City/State: Marshfield, MA  
 Direction: Combined

90960002

9/17/2021	0 - 3	> 3 - 6	> 6 - 9	> 9 - 12	> 12 - 15	> 15 - 18	> 18 - 21	> 21 - 24	> 24 - 27	> 27 - 30	> 30 - 33	> 33 - 36	> 36 - 39	> 39	Total
Time	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	
12:00 AM	0	0	0	0	0	0	0	1	1	1	1	0	0	0	4
1:00	0	0	0	0	0	0	1	2	0	0	4	0	1	0	8
2:00	0	0	3	0	0	0	0	0	2	1	0	0	0	0	6
3:00	0	0	0	0	0	0	0	1	0	1	1	0	0	0	3
4:00	0	0	0	0	0	0	1	0	7	3	2	1	0	0	14
5:00	0	0	0	0	1	1	8	8	22	27	20	4	2	2	95
6:00	0	0	0	0	1	1	15	19	31	34	24	2	1	0	128
7:00	0	0	0	0	1	6	10	24	40	39	25	3	3	1	152
8:00	0	0	0	0	0	5	23	26	35	37	19	4	3	1	153
9:00	0	0	0	1	4	3	21	24	37	36	20	2	1	0	149
10:00	0	0	0	1	1	1	15	14	22	16	15	5	0	1	91
11:00	0	0	0	3	4	4	11	33	28	23	11	6	0	1	124
12:00 PM	0	0	1	0	2	3	21	25	28	40	24	2	0	0	146
1:00	0	0	2	2	2	3	16	26	32	38	27	2	1	0	151
2:00	0	0	0	1	5	11	21	26	39	29	16	3	0	0	151
3:00	0	0	1	1	2	6	31	45	55	45	25	4	2	2	219
4:00	0	0	0	0	0	4	17	30	53	58	37	4	3	1	207
5:00	0	0	0	2	1	2	23	40	85	55	26	6	0	0	240
6:00	0	0	0	0	0	3	20	41	34	26	17	6	1	0	148
7:00	0	0	1	0	2	5	14	23	32	20	4	2	0	0	103
8:00	0	0	0	0	0	3	12	18	22	7	3	0	0	0	65
9:00	0	0	0	0	0	4	7	6	14	6	3	1	1	0	42
10:00	0	0	0	0	0	1	6	5	7	4	1	0	0	0	24
11:00	0	0	0	0	0	1	3	2	3	2	1	0	0	0	12
Total	0	0	8	11	26	67	296	439	629	548	326	57	19	9	2435

Percentile	15th	50th	85th	95th
Speed	20.4	25.4	30.3	32.8
Mean Speed (Average)	26.0			
10 MPH Pace Speed	21-30			
Number in Pace	1724			
Percent in Pace	70.8%			
Number > 24 MPH	1588			
Percent > 24 MPH	65.2%			



Accurate Counts

Location : Commerce Way  
 Location : East of Enterprise Drive  
 City/State: Marshfield, MA  
 Direction: EB,

90960003

9/16/2021	0 - 3	> 3 - 6	> 6 - 9	> 9 - 12	> 12 - 15	> 15 - 18	> 18 - 21	> 21 - 24	> 24 - 27	> 27 - 30	> 30 - 33	> 33 - 36	> 36 - 39	> 39	Total
Time	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	
12:00 AM	0	0	0	0	0	0	1	1	2	1	0	1	0	0	6
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	1	0	0	0	0	1	0	0	0	0	1	3
4:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
5:00	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2
6:00	0	0	0	0	0	1	2	0	0	2	3	0	0	0	8
7:00	0	0	0	0	0	2	2	3	2	8	1	0	2	0	20
8:00	0	0	0	0	0	0	2	2	8	6	4	2	0	0	24
9:00	0	0	0	0	1	1	3	5	6	4	7	0	0	0	27
10:00	0	1	0	0	1	4	2	1	5	4	1	0	2	0	21
11:00	0	0	1	0	0	1	3	9	7	9	3	0	0	0	33
12:00 PM	0	0	0	0	0	1	6	9	12	11	5	2	0	1	47
1:00	0	0	0	0	1	2	1	2	9	5	5	1	0	0	26
2:00	0	0	0	1	0	0	4	10	4	9	5	2	1	0	36
3:00	0	0	0	0	0	1	0	15	10	19	4	2	0	0	51
4:00	0	0	0	0	0	1	2	11	14	13	3	2	0	1	47
5:00	0	0	0	0	0	3	1	2	12	18	16	2	1	0	55
6:00	0	0	0	1	0	1	3	7	11	6	5	3	0	1	38
7:00	0	0	0	0	0	0	1	5	9	16	4	2	1	0	38
8:00	0	0	0	0	0	1	1	10	13	5	4	0	1	0	35
9:00	0	0	0	0	0	1	2	2	4	3	4	1	0	0	17
10:00	0	0	0	0	0	1	3	4	1	2	1	0	0	0	12
11:00	0	0	0	0	1	1	2	1	1	0	2	0	0	0	8
Total	0	1	1	3	4	22	42	100	133	141	77	20	8	4	556

Percentile	15th	50th	85th	95th
Speed	21.4	26.3	30.5	33.2
Mean Speed (Average)	26.9			
10 MPH Pace Speed	21-30			
Number in Pace	398			
Percent in Pace	71.6%			
Number > 24 MPH	383			
Percent > 24 MPH	68.9%			

Location : Commerce Way  
 Location : East of Enterprise Drive  
 City/State: Marshfield, MA  
 Direction: EB,

90960003

9/17/2021	0 - 3	> 3 - 6	> 6 - 9	> 9 - 12	> 12 - 15	> 15 - 18	> 18 - 21	> 21 - 24	> 24 - 27	> 27 - 30	> 30 - 33	> 33 - 36	> 36 - 39	> 39	Total
Time	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	
12:00 AM	0	0	0	0	0	0	0	0	2	2	0	0	0	0	4
1:00	0	0	0	0	0	0	0	1	0	2	0	0	0	1	4
2:00	0	0	1	0	0	0	0	0	0	2	0	0	0	0	3
3:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	0	0	0	0	1	1	0	1	0	0	0	3
6:00	0	0	0	0	0	1	1	1	5	2	0	1	0	0	11
7:00	0	0	0	0	0	1	0	1	9	7	3	3	0	0	24
8:00	0	0	0	0	0	0	2	4	8	6	3	1	0	0	24
9:00	0	0	0	0	0	0	3	8	10	12	2	2	0	0	37
10:00	0	0	0	0	0	1	1	4	2	5	4	1	0	0	18
11:00	0	0	1	0	0	0	3	1	7	9	3	3	1	0	28
12:00 PM	0	0	1	1	0	1	2	1	12	13	3	0	0	0	34
1:00	0	0	0	0	0	0	3	3	7	18	8	6	1	0	46
2:00	0	0	0	0	1	1	2	4	4	15	6	2	0	0	35
3:00	0	0	0	0	2	0	4	11	19	11	8	4	1	0	60
4:00	0	0	0	0	0	1	0	3	18	23	5	2	1	1	54
5:00	0	0	1	0	0	1	3	5	13	16	9	6	0	0	54
6:00	0	0	0	0	0	0	4	2	10	12	6	1	1	1	37
7:00	0	0	0	0	1	1	1	5	9	6	4	2	0	0	29
8:00	0	0	0	0	0	1	1	4	8	4	6	3	0	0	27
9:00	0	0	0	0	0	0	2	2	7	6	2	2	0	0	21
10:00	0	0	0	0	0	0	1	3	6	3	2	0	0	1	16
11:00	0	0	0	0	0	0	0	3	3	2	1	0	0	0	9
Total	0	0	4	1	4	9	33	68	160	176	76	39	5	4	579

Percentile	15th	50th	85th	95th
Speed	22.5	27.1	30.9	34
Mean Speed (Average)	27.7			
10 MPH Pace Speed	23-32			
Number in Pace	434			
Percent in Pace	75.0%			
Number > 24 MPH	460			
Percent > 24 MPH	79.4%			



Accurate Counts

Location : Commerce Way  
 Location : East of Enterprise Drive  
 City/State: Marshfield, MA  
 Direction: WB,

90960003

9/16/2021	> 12 - 15	> 15 - 18	> 18 - 21	> 21 - 24	> 24 - 27	> 27 - 30	> 30 - 33	> 33 - 36	> 36 - 39	> 39	Total				
Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	MPH	MPH	MPH	MPH	MPH	MPH					
12:00 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2
1:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
4:00	0	0	0	0	0	0	1	1	3	3	2	0	0	0	10
5:00	0	0	0	0	0	0	0	0	1	10	3	1	0	0	15
6:00	0	0	0	0	0	0	5	2	8	9	13	2	0	0	39
7:00	0	0	0	0	0	0	0	4	16	15	10	5	1	0	51
8:00	0	0	0	0	1	0	2	1	9	13	21	3	3	1	54
9:00	0	0	0	0	0	1	1	2	5	12	6	4	2	0	33
10:00	0	0	0	0	0	0	5	2	6	8	10	6	1	0	38
11:00	0	0	0	0	0	2	2	3	7	11	10	4	0	1	40
12:00 PM	0	0	0	0	0	0	1	0	7	12	9	7	1	0	37
1:00	0	0	0	0	1	0	1	5	10	8	6	4	1	0	36
2:00	0	0	0	0	0	0	0	5	4	9	4	2	1	0	25
3:00	0	0	0	0	0	1	0	1	9	14	9	1	0	1	36
4:00	0	0	0	0	0	0	0	2	11	14	8	3	0	0	38
5:00	0	0	0	0	0	0	2	5	10	15	5	3	0	0	40
6:00	0	0	0	0	0	0	0	3	9	12	11	4	1	0	40
7:00	0	0	0	0	0	0	2	5	2	4	6	2	0	0	21
8:00	0	0	0	0	0	1	1	2	2	4	3	1	0	0	14
9:00	0	0	0	0	0	0	2	2	2	2	1	0	0	0	9
10:00	0	0	0	0	0	0	0	5	2	0	0	0	0	0	7
11:00	0	0	0	0	0	0	0	0	2	1	0	0	0	0	3
Total	0	0	0	0	2	5	25	52	127	176	138	52	11	3	591

Percentile	15th	50th	85th	95th
Speed	24	28.3	32.3	34.7
Mean Speed (Average)	28.8			
10 MPH Pace Speed	24-33			
Number in Pace	458			
Percent in Pace	77.5%			
Number > 24 MPH	507			
Percent > 24 MPH	85.8%			



Location : Commerce Way  
 Location : East of Enterprise Drive  
 City/State: Marshfield, MA  
 Direction: WB,

90960003

9/17/2021	0 - 3	> 3 - 6	> 6 - 9	> 9 - 12	> 12 - 15	> 15 - 18	> 18 - 21	> 21 - 24	> 24 - 27	> 27 - 30	> 30 - 33	> 33 - 36	> 36 - 39	> 39	Total
Time	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2
2:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
3:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
4:00	0	0	0	0	0	0	0	0	0	2	3	0	0	0	5
5:00	0	0	0	0	0	0	1	2	3	6	5	4	1	1	23
6:00	0	0	0	0	0	1	0	0	1	20	9	3	2	0	36
7:00	0	0	0	0	0	0	0	3	8	10	13	7	2	0	43
8:00	0	0	0	0	0	0	0	7	14	12	11	9	0	0	53
9:00	0	0	0	0	0	1	0	5	10	13	4	3	0	0	36
10:00	0	0	0	0	0	0	1	3	4	7	8	2	0	0	25
11:00	0	0	0	1	0	0	0	5	9	8	11	3	0	0	37
12:00 PM	0	0	0	1	0	0	1	5	21	9	4	6	0	1	48
1:00	0	0	0	0	0	1	1	6	6	10	8	4	0	1	37
2:00	0	0	0	0	0	0	1	2	5	8	6	5	1	1	29
3:00	0	0	0	0	1	0	2	3	6	10	9	2	3	0	36
4:00	0	0	0	0	0	0	0	2	8	17	11	4	1	1	44
5:00	0	0	0	0	0	0	0	3	8	15	7	1	4	0	38
6:00	0	0	0	0	0	0	1	3	6	12	4	1	1	1	29
7:00	0	0	0	1	0	0	2	5	0	5	4	0	0	0	17
8:00	0	0	0	0	0	0	0	3	3	5	1	1	1	0	14
9:00	0	0	0	0	0	0	1	3	4	4	1	0	0	0	13
10:00	0	0	0	0	0	0	0	1	0	2	1	3	0	0	7
11:00	0	0	0	0	0	0	0	1	2	0	0	0	0	0	3
Total	0	0	0	3	1	3	12	62	119	177	120	58	16	6	577

Percentile	15th	50th	85th	95th
Speed	24.1	28.6	32.6	35.3
Mean Speed (Average)	29.6			
10 MPH Pace Speed	23-32			
Number in Pace	435			
Percent in Pace	75.4%			
Number > 24 MPH	496			
Percent > 24 MPH	86.0%			

Location : Commerce Way  
 Location : East of Enterprise Drive  
 City/State: Marshfield, MA  
 Direction: WB,

90960003

9/18/2021	> 12 - 15	> 15 - 18	> 18 - 21	> 21 - 24	> 24 - 27	> 27 - 30	> 30 - 33	> 33 - 36	> 36 - 39	> 39	Total				
Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH				
12:00 AM	0	0	0	0	0	0	0	0	0	0	1				
1:00	0	0	0	0	0	0	0	0	0	0	1				
2:00	0	0	0	0	0	0	0	0	0	0	0				
3:00	0	0	0	0	0	0	0	0	0	0	0				
4:00	0	0	0	0	0	0	1	1	0	0	4				
5:00	0	0	0	0	0	0	1	2	0	3	6				
6:00	0	0	0	0	0	1	0	1	3	4	14				
7:00	0	0	0	0	0	0	6	4	9	6	25				
8:00	0	0	0	0	0	0	6	4	8	12	35				
9:00	0	0	0	0	0	1	2	4	16	12	55				
10:00	0	0	0	0	0	0	1	2	6	14	37				
11:00	0	0	0	0	0	0	2	6	16	14	50				
12:00 PM	0	0	0	0	0	0	4	5	17	8	40				
1:00	0	0	0	0	0	0	1	2	9	11	31				
2:00	0	0	0	0	0	0	1	2	8	5	26				
3:00	0	0	0	0	0	0	0	3	6	11	26				
4:00	0	0	0	0	0	0	0	2	5	6	24				
5:00	0	0	0	0	0	0	0	0	6	6	22				
6:00	0	0	0	0	0	0	0	1	2	4	16				
7:00	0	0	0	0	0	0	1	3	8	10	27				
8:00	0	0	0	0	0	0	0	2	3	3	9				
9:00	0	0	0	0	0	0	1	1	0	5	9				
10:00	0	0	0	0	0	0	0	1	4	3	10				
11:00	0	0	0	0	0	0	0	0	1	1	2				
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>9</b>	<b>48</b>	<b>111</b>	<b>144</b>	<b>98</b>	<b>38</b>	<b>18</b>	<b>2</b>	<b>470</b>
Percentile		15th	50th	85th	95th										
Speed		24.5	28.3	32.4	35.3										
Mean Speed (Average)		29.0													
10 MPH Pace Speed		23-32													
Number in Pace		367													
Percent in Pace		78.1%													
Number > 24 MPH		411													
Percent > 24 MPH		87.4%													
<b>Grand Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>10</b>	<b>46</b>	<b>162</b>	<b>357</b>	<b>497</b>	<b>356</b>	<b>148</b>	<b>45</b>	<b>11</b>	<b>1638</b>
Stats		Percentile	15th	50th	85th	95th									
Speed		24.1	28.4	32.4	35.1										
Mean Speed (Average)		29.2													
10 MPH Pace Speed		24-33													
Number in Pace		1260													
Percent in Pace		76.9%													
Number > 24 MPH		1414													
Percent > 24 MPH		86.3%													

Location : Commerce Way  
 Location : East of Enterprise Drive  
 City/State: Marshfield, MA  
 Direction: Combined

90960003

9/16/2021	0 - 3	> 3 - 6	> 6 - 9	> 9 - 12	> 12 - 15	> 15 - 18	> 18 - 21	> 21 - 24	> 24 - 27	> 27 - 30	> 30 - 33	> 33 - 36	> 36 - 39	> 39	Total
Time	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	
12:00 AM	0	0	0	0	0	0	1	1	3	1	1	1	0	0	8
1:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	1	0	0	0	1	2	0	0	0	0	1	5
4:00	0	0	0	0	0	0	1	1	5	3	2	0	0	0	12
5:00	0	0	0	0	0	0	1	1	1	10	3	1	0	0	17
6:00	0	0	0	0	0	1	7	2	8	11	16	2	0	0	47
7:00	0	0	0	0	0	2	2	7	18	23	11	5	3	0	71
8:00	0	0	0	0	1	0	4	3	17	19	25	5	3	1	78
9:00	0	0	0	0	1	2	4	7	11	16	13	4	2	0	60
10:00	0	1	0	0	1	4	7	3	11	12	11	6	3	0	59
11:00	0	0	1	0	0	3	5	12	14	20	13	4	0	1	73
12:00 PM	0	0	0	0	0	1	7	9	19	23	14	9	1	1	84
1:00	0	0	0	0	2	2	2	7	19	13	11	5	1	0	62
2:00	0	0	0	1	0	0	4	15	8	18	9	4	2	0	61
3:00	0	0	0	0	0	2	0	16	19	33	13	3	0	1	87
4:00	0	0	0	0	0	1	2	13	25	27	11	5	0	1	85
5:00	0	0	0	0	0	3	3	7	22	33	21	5	1	0	95
6:00	0	0	0	1	0	1	3	10	20	18	16	7	1	1	78
7:00	0	0	0	0	0	0	3	10	11	20	10	4	1	0	59
8:00	0	0	0	0	0	2	2	12	15	9	7	1	1	0	49
9:00	0	0	0	0	0	1	4	4	6	5	5	1	0	0	26
10:00	0	0	0	0	0	1	3	9	3	2	1	0	0	0	19
11:00	0	0	0	0	1	1	2	1	3	1	2	0	0	0	11
Total	0	1	1	3	6	27	67	152	260	317	215	72	19	7	1147

Percentile	15th	50th	85th	95th
Speed	22.4	27.4	31.5	34.3
Mean Speed (Average)	27.9			
10 MPH Pace Speed	23-32			
Number in Pace	841			
Percent in Pace	73.3%			
Number > 24 MPH	890			
Percent > 24 MPH	77.6%			

Location : Commerce Way  
 Location : East of Enterprise Drive  
 City/State: Marshfield, MA  
 Direction: Combined

90960003

9/17/2021	> 12 - 15	> 15 - 18	> 18 - 21	> 21 - 24	> 24 - 27	> 27 - 30	> 30 - 33	> 33 - 36	> 36 - 39	> 39	Total
Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH
12:00 AM	0	0	0	0	0	0	0	0	0	0	4
1:00	0	0	0	0	0	0	1	1	0	3	6
2:00	0	0	1	0	0	0	0	0	1	2	4
3:00	0	0	0	0	0	0	1	0	1	0	2
4:00	0	0	0	0	0	0	0	0	2	3	5
5:00	0	0	0	0	0	0	1	3	4	6	26
6:00	0	0	0	0	0	2	1	1	6	22	47
7:00	0	0	0	0	0	1	0	4	17	17	67
8:00	0	0	0	0	0	0	2	11	22	18	77
9:00	0	0	0	0	0	1	3	13	20	25	73
10:00	0	0	0	0	0	1	2	7	6	12	43
11:00	0	0	1	1	0	0	3	6	16	17	65
12:00 PM	0	0	1	2	0	1	3	6	33	22	82
1:00	0	0	0	0	0	1	4	9	13	28	83
2:00	0	0	0	0	1	1	3	6	9	23	64
3:00	0	0	0	0	3	0	6	14	25	21	96
4:00	0	0	0	0	0	1	0	5	26	40	98
5:00	0	0	1	0	0	1	3	8	21	31	92
6:00	0	0	0	0	0	0	5	5	16	24	66
7:00	0	0	0	1	1	1	3	10	9	11	46
8:00	0	0	0	0	0	1	1	7	11	9	41
9:00	0	0	0	0	0	0	3	5	11	10	34
10:00	0	0	0	0	0	0	1	4	6	5	23
11:00	0	0	0	0	0	0	0	4	5	2	12
Total	0	0	4	4	5	12	45	130	279	353	1156

Percentile	15th	50th	85th	95th
Speed	23.4	27.8	31.9	34.5
Mean Speed (Average)	28.7			
10 MPH Pace Speed	23-32			
Number in Pace	869			
Percent in Pace	75.2%			
Number > 24 MPH	956			
Percent > 24 MPH	82.7%			



Accurate Counts

Location : Proprietors Way  
 Location : South of Route 139  
 City/State: Marshfield, MA  
 Direction: SB,

90960004

9/23/2021	> 12 - 15	> 15 - 18	> 18 - 21	> 21 - 24	> 24 - 27	> 27 - 30	> 30 - 33	> 33 - 36	> 36 - 39	> 39	Total					
Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	MPH	MPH	MPH	MPH	MPH	MPH						
12:00 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	2		
1:00	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	1	0	2	2	0	0	0	0	5
5:00	0	0	0	0	0	0	0	0	1	2	3	3	1	0	0	10
6:00	0	0	0	0	0	1	0	2	6	11	8	11	1	0	0	40
7:00	0	0	0	0	0	2	2	16	16	22	12	2	0	0	0	72
8:00	0	0	0	0	0	5	6	14	26	35	13	8	1	0	0	108
9:00	0	0	0	0	0	1	3	7	8	22	32	15	3	2	0	93
10:00	0	0	0	0	0	0	2	2	10	17	16	16	4	2	0	69
11:00	0	0	0	0	0	1	3	7	19	41	25	6	2	2	0	106
12:00 PM	0	0	1	0	2	4	5	16	39	32	9	2	1	0	0	111
1:00	0	0	0	0	0	4	5	15	27	22	9	2	0	2	0	86
2:00	0	0	0	0	0	1	3	3	21	31	27	14	2	2	0	104
3:00	0	0	0	0	0	2	3	7	23	37	35	20	10	0	1	138
4:00	0	0	0	0	0	5	8	22	58	49	27	1	1	0	0	171
5:00	0	0	0	0	0	2	3	4	28	58	50	14	7	5	0	171
6:00	0	0	0	0	0	1	6	7	15	36	35	13	1	1	1	116
7:00	0	0	0	0	0	1	4	4	9	21	23	3	3	0	0	68
8:00	0	0	0	0	0	0	1	1	4	7	15	8	3	0	0	39
9:00	0	0	0	0	0	0	0	3	1	4	5	4	1	0	0	18
10:00	0	0	0	0	0	0	0	1	2	1	3	2	1	1	0	11
11:00	0	0	0	0	0	0	0	1	0	0	1	2	1	1	0	6
Total	0	0	1	0	12	48	76	230	457	441	202	55	20	4	0	1546

Percentile	15th	50th	85th	95th
Speed	22.3	26.6	30.4	33.1
Mean Speed (Average)	26.9			
10 MPH Pace Speed	21-30			
Number in Pace	1191			
Percent in Pace	77.0%			
Number > 45 MPH	4			
Percent > 45 MPH	0.3%			

Location : Proprietors Way  
 Location : South of Route 139  
 City/State: Marshfield, MA  
 Direction: SB,

90960004

9/24/2021	0 - 3	> 3 - 6	> 6 - 9	> 9 - 12	> 12 - 15	> 15 - 18	> 18 - 21	> 21 - 24	> 24 - 27	> 27 - 30	> 30 - 33	> 33 - 36	> 36 - 39	> 39	Total
Time	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	
12:00 AM	0	0	0	0	0	0	0	3	0	0	0	0	1	0	4
1:00	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2
2:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
3:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
4:00	0	0	0	0	0	0	0	0	1	1	1	0	0	1	4
5:00	0	0	0	0	0	0	1	0	2	4	4	2	0	0	13
6:00	0	0	0	0	0	1	1	4	6	14	2	2	0	0	30
7:00	0	0	0	0	2	1	2	10	13	33	13	1	0	0	75
8:00	0	0	0	0	1	4	3	17	19	32	17	3	0	2	98
9:00	0	0	0	0	0	1	7	17	20	26	10	4	0	0	85
10:00	0	0	0	1	0	2	7	17	19	26	10	3	0	0	85
11:00	0	0	0	0	1	9	3	28	27	19	13	2	0	0	102
12:00 PM	0	0	0	1	3	5	6	22	31	20	15	4	1	1	109
1:00	0	0	0	0	1	3	11	17	30	22	13	1	0	0	98
2:00	0	0	0	0	3	5	4	13	30	37	11	5	1	0	109
3:00	0	0	0	1	1	6	3	24	33	37	20	3	1	0	129
4:00	0	1	0	1	0	7	4	20	54	49	17	3	1	0	157
5:00	0	0	0	0	0	4	15	32	50	33	17	1	2	1	155
6:00	0	0	0	0	0	4	13	27	39	26	10	5	1	0	125
7:00	0	0	0	0	1	2	9	24	27	20	5	4	0	1	93
8:00	0	0	0	0	0	1	4	7	14	14	4	1	1	0	46
9:00	0	0	0	0	0	0	0	3	10	9	5	3	0	0	30
10:00	0	0	0	0	0	1	1	3	1	5	2	2	1	0	16
11:00	0	0	0	0	0	0	0	0	6	4	3	1	1	0	15
Total	0	1	0	4	13	56	94	289	432	434	192	50	11	6	1582

Percentile	15th	50th	85th	95th
Speed	21.9	26.2	30.1	32.6
Mean Speed (Average)	26.6			
10 MPH Pace Speed	21-30			
Number in Pace	1216			
Percent in Pace	76.9%			
Number > 45 MPH	6			
Percent > 45 MPH	0.4%			





Accurate Counts

Location : Proprietors Way  
 Location : South of Route 139  
 City/State: Marshfield, MA  
 Direction: NB,

90960004

9/23/2021	0 - 3	> 3 - 6	> 6 - 9	> 9 - 12	> 12 - 15	> 15 - 18	> 18 - 21	> 21 - 24	> 24 - 27	> 27 - 30	> 30 - 33	> 33 - 36	> 36 - 39	> 39	Total
Time	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
5:00	0	0	0	0	0	0	0	0	2	2	1	1	1	0	7
6:00	0	0	0	0	0	0	1	3	6	4	7	8	4	2	35
7:00	0	0	0	0	1	1	2	6	14	12	14	13	7	2	72
8:00	0	0	0	0	0	2	4	5	18	20	13	11	3	3	79
9:00	0	0	0	0	0	1	5	11	17	16	13	8	6	1	78
10:00	0	0	0	0	0	2	7	7	13	13	12	13	6	1	74
11:00	0	0	0	1	1	2	8	17	21	27	20	6	2	2	107
12:00 PM	0	0	0	1	0	1	7	5	23	23	12	6	2	2	82
1:00	0	0	0	0	0	1	6	21	21	17	19	10	3	2	100
2:00	0	0	0	0	0	3	9	12	23	26	21	13	3	1	111
3:00	0	0	1	0	0	0	6	18	30	37	21	8	2	1	124
4:00	0	0	0	0	3	5	10	16	42	54	32	10	2	3	177
5:00	0	0	0	0	1	2	6	14	36	30	35	9	3	0	136
6:00	0	0	1	0	0	5	11	19	24	16	10	3	3	1	93
7:00	0	0	0	0	0	2	18	21	24	24	7	6	2	0	104
8:00	0	0	0	0	2	0	6	16	17	16	3	2	0	1	63
9:00	0	0	0	0	1	0	5	12	6	11	6	3	1	1	46
10:00	0	0	0	0	0	0	0	7	5	1	0	4	0	0	17
11:00	0	0	0	0	0	0	1	1	6	2	2	1	1	0	14
Total	0	0	2	2	9	27	113	211	350	352	248	135	51	23	1523

Percentile	15th	50th	85th	95th
Speed	22.3	27.2	32.6	35.8
Mean Speed (Average)	29.1			
10 MPH Pace Speed	23-32			
Number in Pace	1019			
Percent in Pace	66.9%			
Number > 45 MPH	22			
Percent > 45 MPH	1.4%			

Location : Proprietors Way  
 Location : South of Route 139  
 City/State: Marshfield, MA  
 Direction: NB,

90960004

9/24/2021	0 - 3	> 3 - 6	> 6 - 9	> 9 - 12	> 12 - 15	> 15 - 18	> 18 - 21	> 21 - 24	> 24 - 27	> 27 - 30	> 30 - 33	> 33 - 36	> 36 - 39	> 39	Total
Time	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	
12:00 AM	0	0	0	0	0	0	0	2	1	1	0	0	0	0	4
1:00	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
2:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
3:00	0	0	0	0	0	0	0	0	1	1	1	0	1	0	4
4:00	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2
5:00	0	0	0	0	0	0	0	0	0	2	0	2	1	1	6
6:00	0	0	0	0	1	0	0	1	4	10	13	4	2	3	38
7:00	0	0	0	0	0	2	1	7	7	12	18	16	10	2	75
8:00	0	0	0	0	0	1	3	8	22	15	12	7	3	3	74
9:00	0	0	0	0	0	0	4	8	17	21	13	8	6	2	79
10:00	0	0	0	0	2	1	4	12	24	18	19	9	3	0	92
11:00	0	0	0	1	0	3	9	14	16	14	22	5	4	2	90
12:00 PM	0	0	0	0	0	0	6	17	26	23	15	8	3	0	98
1:00	0	0	0	1	0	2	11	18	17	23	20	5	7	2	106
2:00	0	1	0	0	0	3	14	17	34	24	20	6	1	1	121
3:00	0	0	1	0	0	1	5	15	28	25	23	4	4	2	108
4:00	0	0	1	0	0	3	4	24	44	39	35	17	7	3	177
5:00	0	0	0	2	2	2	10	16	35	27	23	14	2	1	134
6:00	1	1	0	1	2	1	6	25	33	17	17	10	2	1	117
7:00	1	0	1	0	0	9	8	19	26	18	11	7	0	0	100
8:00	0	0	1	0	0	1	19	22	15	14	7	2	0	0	81
9:00	0	0	0	0	2	1	7	15	23	15	5	2	1	2	73
10:00	0	0	0	0	0	0	4	4	13	8	3	3	0	0	35
11:00	0	0	0	0	0	0	0	1	5	5	7	2	1	0	21
Total	2	2	4	5	9	30	116	245	391	333	285	133	58	25	1638

Percentile	15th	50th	85th	95th
Speed	22.3	27	32.5	35.9
Mean Speed (Average)	29.0			
10 MPH Pace Speed	23-32			
Number in Pace	1089			
Percent in Pace	66.5%			
Number > 45 MPH	24			
Percent > 45 MPH	1.5%			

Location : Proprietors Way  
 Location : South of Route 139  
 City/State: Marshfield, MA  
 Direction: NB,

90960004

9/25/2021	> 12 - 15	> 15 - 18	> 18 - 21	> 21 - 24	> 24 - 27	> 27 - 30	> 30 - 33	> 33 - 36	> 36 - 39	> 39	Total					
Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH					
12:00 AM	0	0	0	0	0	0	2	0	0	1	0	1	0	0	4	
1:00	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	
2:00	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	
3:00	0	0	0	0	0	0	0	0	0	1	0	1	0	1	3	
4:00	0	0	0	0	0	0	0	1	0	1	0	0	0	1	3	
5:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
6:00	0	0	0	0	0	0	1	0	1	6	5	3	1	0	17	
7:00	0	0	0	0	0	2	2	0	5	9	7	7	3	1	36	
8:00	0	0	0	0	0	1	5	8	12	10	17	8	4	1	66	
9:00	0	0	0	0	0	2	3	6	11	17	9	8	7	2	65	
10:00	0	0	0	1	2	1	2	7	24	18	17	9	0	0	81	
11:00	0	0	0	0	1	1	6	12	22	16	17	10	2	1	88	
12:00 PM	0	0	0	1	1	1	1	16	15	20	14	6	2	2	79	
1:00	0	0	0	0	0	4	7	7	30	27	23	6	2	4	110	
2:00	0	0	0	2	1	5	8	14	25	25	21	3	3	2	109	
3:00	0	0	0	0	0	1	6	14	26	23	15	4	4	3	96	
4:00	0	0	1	0	1	4	5	16	26	34	17	9	2	1	116	
5:00	0	0	0	0	1	1	8	10	21	26	14	6	0	0	87	
6:00	0	0	0	1	0	3	12	15	23	23	7	2	3	1	90	
7:00	0	0	0	0	4	5	20	34	22	7	6	1	1	1	101	
8:00	0	0	0	0	1	3	15	9	14	8	6	0	1	0	57	
9:00	0	0	0	0	1	2	8	9	13	8	3	0	0	0	44	
10:00	0	0	0	0	0	0	3	10	5	9	4	1	0	0	32	
11:00	0	0	0	0	0	0	0	4	1	5	4	1	0	0	15	
Total	0	0	1	5	13	36	114	192	297	296	208	86	37	19	1304	
Percentile		15th	50th	85th	95th											
Speed		21.4	26.9	32	35.5											
Mean Speed (Average)		28.5														
10 MPH Pace Speed		23-32														
Number in Pace		864														
Percent in Pace		66.3%														
Number > 45 MPH		18														
Percent > 45 MPH		1.4%														
Grand Total	2	2	7	12	31	93	343	648	1038	981	741	354	146	67	4465	
Stats		Percentile	15th	50th	85th	95th										
Speed		22.1	27.1	32.4	35.8											
Mean Speed (Average)		28.9														
10 MPH Pace Speed		23-32														
Number in Pace		2973														
Percent in Pace		66.6%														
Number > 45 MPH		65														
Percent > 45 MPH		1.5%														

Location : Proprietors Way  
 Location : South of Route 139  
 City/State: Marshfield, MA  
 Direction: Combined

90960004

9/23/2021	0 - 3	> 3 - 6	> 6 - 9	> 9 - 12	> 12 - 15	> 15 - 18	> 18 - 21	> 21 - 24	> 24 - 27	> 27 - 30	> 30 - 33	> 33 - 36	> 36 - 39	> 39	Total
Time	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	
12:00 AM	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2
1:00	0	0	0	0	0	0	0	0	1	2	0	0	1	0	4
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:00	0	0	0	0	0	0	1	0	3	2	0	0	0	0	6
5:00	0	0	0	0	0	0	0	1	4	5	4	2	1	0	17
6:00	0	0	0	0	1	0	3	9	17	12	18	9	4	2	75
7:00	0	0	0	0	1	3	4	22	30	34	26	15	7	2	144
8:00	0	0	0	0	0	7	10	19	44	55	26	19	4	3	187
9:00	0	0	0	0	1	4	12	19	39	48	28	11	8	1	171
10:00	0	0	0	0	0	4	9	17	30	29	28	17	8	1	143
11:00	0	0	0	1	2	5	15	36	62	52	26	8	4	2	213
12:00 PM	0	0	1	1	2	5	12	21	62	55	21	8	3	2	193
1:00	0	0	0	0	0	5	11	36	48	39	28	12	3	4	186
2:00	0	0	0	0	1	6	12	33	54	53	35	15	5	1	215
3:00	0	0	1	0	2	3	13	41	67	72	41	18	2	2	262
4:00	0	0	0	0	3	10	18	38	100	103	59	11	3	3	348
5:00	0	0	0	0	3	5	10	42	94	80	49	16	8	0	307
6:00	0	0	1	0	1	11	18	34	60	51	23	4	4	2	209
7:00	0	0	0	0	1	6	22	30	45	47	10	9	2	0	172
8:00	0	0	0	0	2	1	7	20	24	31	11	5	0	1	102
9:00	0	0	0	0	1	0	8	13	10	16	10	4	1	1	64
10:00	0	0	0	0	0	0	1	9	6	4	2	5	1	0	28
11:00	0	0	0	0	0	0	2	1	6	3	4	2	2	0	20
Total	0	0	3	2	21	75	189	441	807	793	450	190	71	27	3069

Percentile	15th	50th	85th	95th
Speed	22.3	26.9	31.4	34.6
Mean Speed (Average)	28.0			
10 MPH Pace Speed	23-32			
Number in Pace	2197			
Percent in Pace	71.6%			
Number > 45 MPH	26			
Percent > 45 MPH	0.8%			

Location : Proprietors Way  
 Location : South of Route 139  
 City/State: Marshfield, MA  
 Direction: Combined

90960004

9/24/2021	> 12 - 15	> 15 - 18	> 18 - 21	> 21 - 24	> 24 - 27	> 27 - 30	> 30 - 33	> 33 - 36	> 36 - 39	> 39	Total				
Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	MPH	MPH	MPH	MPH	MPH	MPH					
12:00 AM	0	0	0	0	0	0	5	1	1	0	0	1	0	8	
1:00	0	0	0	0	0	0	0	1	0	1	1	1	0	4	
2:00	0	0	0	0	0	0	1	0	0	1	0	0	0	2	
3:00	0	0	0	0	0	0	0	0	1	2	1	0	1	5	
4:00	0	0	0	0	0	0	0	1	2	1	1	0	1	6	
5:00	0	0	0	0	0	0	1	0	2	6	4	4	1	19	
6:00	0	0	0	0	1	1	1	5	10	24	15	6	2	68	
7:00	0	0	0	0	2	3	3	17	20	45	31	17	10	2	150
8:00	0	0	0	0	1	5	6	25	41	47	29	10	3	5	172
9:00	0	0	0	0	0	1	11	25	37	47	23	12	6	2	164
10:00	0	0	0	1	2	3	11	29	43	44	29	12	3	0	177
11:00	0	0	0	1	1	12	12	42	43	33	35	7	4	2	192
12:00 PM	0	0	0	1	3	5	12	39	57	43	30	12	4	1	207
1:00	0	0	0	1	1	5	22	35	47	45	33	6	7	2	204
2:00	0	1	0	0	3	8	18	30	64	61	31	11	2	1	230
3:00	0	0	1	1	1	7	8	39	61	62	43	7	5	2	237
4:00	0	1	1	1	0	10	8	44	98	88	52	20	8	3	334
5:00	0	0	0	2	2	6	25	48	85	60	40	15	4	2	289
6:00	1	1	0	1	2	5	19	52	72	43	27	15	3	1	242
7:00	1	0	1	0	1	11	17	43	53	38	16	11	0	1	193
8:00	0	0	1	0	0	2	23	29	29	28	11	3	1	0	127
9:00	0	0	0	0	2	1	7	18	33	24	10	5	1	2	103
10:00	0	0	0	0	0	1	5	7	14	13	5	5	1	0	51
11:00	0	0	0	0	0	0	0	1	11	9	10	3	2	0	36
Total	2	3	4	9	22	86	210	534	823	767	477	183	69	31	3220

Percentile	15th	50th	85th	95th
Speed	22.1	26.6	31.3	34.5
Mean Speed (Average)	27.8			
10 MPH Pace Speed	21-30			
Number in Pace	2274			
Percent in Pace	70.6%			
Number > 45 MPH	30			
Percent > 45 MPH	0.9%			

Location : Proprietors Way  
 Location : South of Route 139  
 City/State: Marshfield, MA  
 Direction: Combined

90960004

9/25/2021	> 12 - 15	> 15 - 18	> 18 - 21	> 21 - 24	> 24 - 27	> 27 - 30	> 30 - 33	> 33 - 36	> 36 - 39	> 39	Total					
Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH					
12:00 AM	0	0	0	0	0	0	2	1	0	1	0	1	1	0	6	
1:00	0	0	0	0	0	0	0	0	0	1	2	0	0	0	3	
2:00	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	
3:00	0	0	0	0	0	0	0	0	0	1	0	1	0	2	4	
4:00	0	0	0	0	0	0	0	1	1	1	0	0	1	0	4	
5:00	0	0	0	0	0	1	0	0	0	2	2	2	2	0	7	
6:00	0	0	0	0	0	0	1	3	4	18	8	5	1	0	40	
7:00	0	0	0	0	0	3	3	2	17	19	16	12	4	2	78	
8:00	0	1	0	0	0	1	8	19	23	22	23	13	5	1	116	
9:00	0	0	0	0	0	3	8	21	31	42	21	12	7	2	147	
10:00	0	0	0	1	2	6	7	28	49	35	34	12	0	0	174	
11:00	0	0	0	1	4	2	15	31	51	40	24	13	2	1	184	
12:00 PM	0	0	0	1	2	5	6	33	48	52	21	9	2	2	181	
1:00	0	0	0	0	2	10	11	21	63	49	32	8	2	4	202	
2:00	0	0	0	2	1	9	16	27	54	38	38	8	6	2	201	
3:00	0	0	0	0	1	5	10	32	58	59	34	7	4	3	213	
4:00	0	0	1	0	1	4	16	31	71	72	25	14	4	2	241	
5:00	0	0	0	0	1	5	19	32	71	63	25	10	0	1	227	
6:00	0	0	0	1	1	6	21	39	50	38	14	3	3	1	177	
7:00	0	0	0	0	4	9	26	50	52	19	11	2	1	3	177	
8:00	0	0	0	0	1	4	17	15	20	19	8	3	2	0	89	
9:00	0	0	0	0	1	2	8	14	15	14	6	2	0	1	63	
10:00	0	0	0	0	0	0	3	15	6	10	9	1	1	0	45	
11:00	0	0	0	0	0	0	0	6	1	8	6	4	0	0	25	
Total	0	1	1	6	21	75	197	421	687	624	359	141	48	25	2606	
Percentile		15th	50th	85th	95th											
Speed		21.8	26.4	31.2	34.1											
Mean Speed (Average)		27.6														
10 MPH Pace Speed		21-30														
Number in Pace		1846														
Percent in Pace		70.8%														
Number > 45 MPH		24														
Percent > 45 MPH		0.9%														
Grand Total	2	4	8	17	64	236	596	1396	2317	2184	1286	514	188	83	8895	
Stats		Percentile	15th	50th	85th	95th										
Speed		22.1	26.7	31.3	34.5											
Mean Speed (Average)		27.8														
10 MPH Pace Speed		21-30														
Number in Pace		6303														
Percent in Pace		70.9%														
Number > 45 MPH		81														
Percent > 45 MPH		0.9%														

MASSDOT CRASH RATE WORKSHEETS AND HIGH CRASH LOCATION MAPPING







## INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN :           Marshfield                COUNT DATE :           Sep-21          

DISTRICT :       5            UNSIGNALIZED :       SIGNALIZED :

~ INTERSECTION DATA ~

MAJOR STREET :           Route 139          

MINOR STREET(S) :           Enterprise Drive          

          Fox Run          

**INTERSECTION  
 DIAGRAM  
 (Label Approaches)**



**PEAK HOUR VOLUMES**

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	SB	EB	WB		
PEAK HOURLY VOLUMES (PM) :	149	35	1,366	1,016		2,566

" K " FACTOR :       INTERSECTION ADT ( V ) = TOTAL DAILY APPROACH VOLUME :

TOTAL # OF CRASHES :       # OF YEARS :       AVERAGE # OF CRASHES PER YEAR ( A ) :

**CRASH RATE CALCULATION :**            RATE =  $\frac{( A * 1,000,000 )}{( V * 365 )}$

Comments :           Below Statewide and District Crash Rates          

Project Title & Date:           Proposed Multifamily Residential Community

## INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN :           Marshfield                COUNT DATE :           Sep-21            
 DISTRICT :       5            UNSIGNALIZED :       SIGNALIZED :

~ INTERSECTION DATA ~

MAJOR STREET :           Route 139            
 MINOR STREET(S) :           Proprietors Drive            
          Furnace Street          

**INTERSECTION  
 DIAGRAM**  
 (Label Approaches)



**PEAK HOUR VOLUMES**

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	SB	EB	WB		
PEAK HOURLY VOLUMES (PM) :	347	416	1,303	709		<b>2,775</b>

" K " FACTOR :       INTERSECTION ADT ( V ) = TOTAL DAILY APPROACH VOLUME :

TOTAL # OF CRASHES :       # OF YEARS :       AVERAGE # OF CRASHES PER YEAR ( A ) :

**CRASH RATE CALCULATION :**            RATE =  $\frac{( A * 1,000,000 )}{( V * 365 )}$

Comments :           Below Statewide and District Crash Rates            
 Project Title & Date:           Proposed Multifamily Residential Community

## INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN :           Marshfield                COUNT DATE :           Sep-21          

DISTRICT :           5                UNSIGNALIZED :       SIGNALIZED :

~ INTERSECTION DATA ~

MAJOR STREET :           Route 139          

MINOR STREET(S) :           Forest Street          

**INTERSECTION  
 DIAGRAM**  
 (Label Approaches)



**PEAK HOUR VOLUMES**

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	SB	EB	WB			
PEAK HOURLY VOLUMES (PM) :	48	1,048	812			1,908

" K " FACTOR :       INTERSECTION ADT ( V ) = TOTAL DAILY APPROACH VOLUME :

TOTAL # OF CRASHES :       # OF YEARS :       AVERAGE # OF CRASHES PER YEAR ( A ) :

**CRASH RATE CALCULATION :**            RATE =  $\frac{( A * 1,000,000 )}{( V * 365 )}$

Comments :           Below Statewide and District Crash Rates          

Project Title & Date:           Proposed Multifamily Residential Community

## INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN :           Marshfield                COUNT DATE :           Sep-21          

DISTRICT :       5            UNSIGNALIZED :       SIGNALIZED :

~ INTERSECTION DATA ~

MAJOR STREET :           Enterprise Drive          

MINOR STREET(S) :           Commerce Way          

**INTERSECTION  
 DIAGRAM**  
 (Label Approaches)



**PEAK HOUR VOLUMES**

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	SB	WB			
PEAK HOURLY VOLUMES (PM) :	3	54	42			99

" K " FACTOR :       INTERSECTION ADT ( V ) = TOTAL DAILY APPROACH VOLUME :

TOTAL # OF CRASHES :       # OF YEARS :       AVERAGE # OF CRASHES PER YEAR ( A ) :

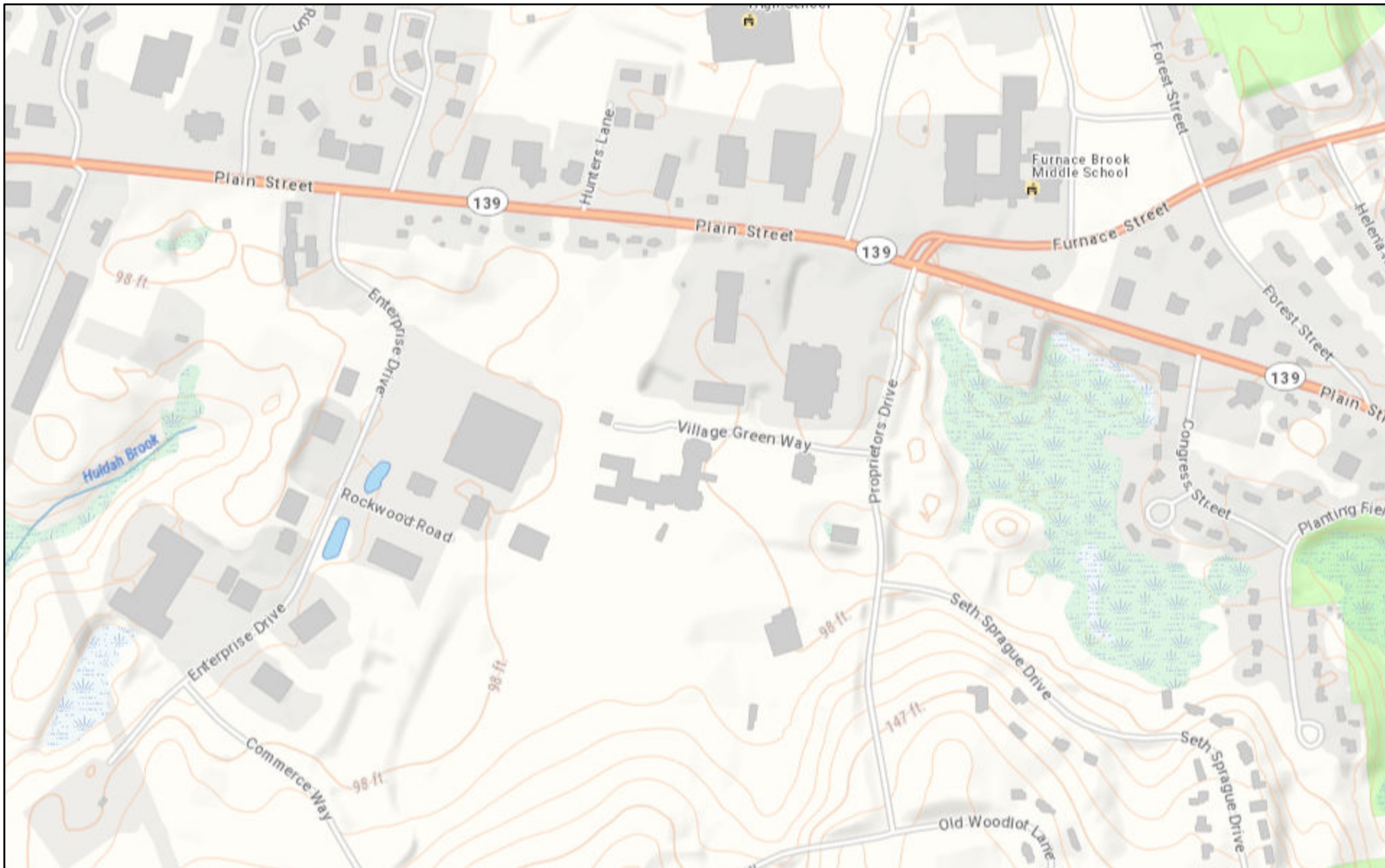
**CRASH RATE CALCULATION :**       RATE =  $\frac{( A * 1,000,000 )}{( V * 365 )}$

Comments :           Below Statewide and District Crash Rates          

Project Title & Date:           Proposed Multifamily Residential Community

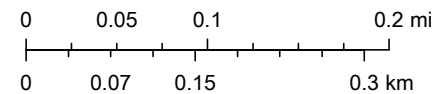


# MassDOT Top Crash Locations



12/15/2021, 4:11:39 PM

1:9,028



MassGIS

# ROAD SAFETY AUDIT

Plain Street (Route 139) at Furnace Street and  
Proprietors Drive

Town of Marshfield

June 9, 2017

Prepared for:

MassDOT



On Behalf of:

Vanasse & Associates, Inc.

35 New England Business Center Drive, Suite 140

Andover, MA 01810-1066

Prepared by:

Toole Design Group

2 Oliver Street, Suite 305

Boston, MA 02109



Table 3: Potential Safety Enhancement Summary

Safety Issue	Potential Safety Enhancement	Safety Payoff	Time Frame	Cost	Responsible Agency
Intersection Control	Evaluate the left-turn volumes to determine if providing a protected left turn signal phase for both Furnace Street and Proprietors Drive is warranted.	High	Mid-Term	High	MassDOT
	Consider lengthening the green signal phase for Furnace Street and Proprietors Drive.	Medium	Short-Term	Low	MassDOT
	Consider targeted enforcement at the signalized intersection to deter red light running.	Medium	Short-Term	Low	Town of Marshfield
	Evaluate all signal clearance intervals and update to MassDOT/ITE standards if current intervals are insufficient.	Medium	Short-Term	Low	MassDOT
	Evaluate the current pedestrian signal clearance interval and if required, update the exclusive pedestrian flashing “DON’T WALK” time to meet MUTCD standards.	Medium	Short-Term	Low	MassDOT
Intersection Geometry	Consider changing the lane assignments on Furnace Street as it approaches the intersection. This will require additional traffic capacity analysis to be performed for the intersection.	Medium	Short-term	Low	MassDOT/Town of Marshfield
	Consider adding dotted left turn extension lines as guide markings for northbound and southbound left turning vehicles.	Medium	Short-Term	Low	MassDOT
	Evaluate the need to reconfigure the traffic lanes and islands on Furnace Street and Proprietors Drive to better align the left-turn lanes.	High	Long-term	High	MassDOT

Safety Issue	Potential Safety Enhancement	Safety Payoff	Time Frame	Cost	Responsible Agency
Intersection Geometry	Consider reducing the northwest corner radius of the intersection to align the Furnace Street southbound approach to intersect Route 139 at a more 90 degree angle to slow right turn movements. Further study would be needed to evaluate the minimum corner radius needed to accommodate southbound, right-turning truck traffic through the intersection.	High	Long-term	High	MassDOT
	Relocate the southbound Furnace Street stop bars and loop detectors closer to the intersection.	Medium	Short-term	Low	MassDOT
Intersection Sight Distance	Evaluate regarding the embankment on the northwest corner of the intersection to give Furnace Street a clear sightline to the crosswalk on the western leg of the intersection.	Medium	Long-term	High	Town of Marshfield
	Consider changing the landscaping in the Furnace Street median such that it allows for clear sight lines to the east from the Furnace Street southbound left turn lane.	Medium	Short-term	Low	Town of Marshfield
	Consider removal of the Furnace Street median to allow for clear sight lines to the east from the Furnace Street southbound left turn lane and facilitate better alignment with the Proprietors Drive northbound left turn lane.	High	Mid-term	High	Town of Marshfield/MassDOT
	Consider trimming back the vegetation at the northeast and southeast corner of the intersection to provide a better sight line looking east from Furnace Street.	Low	Short-term	Low	Town of Marshfield
	Remove the temporary sign from the southeast corner of the intersection.	Low	Short-term	Low	Town of Marshfield
Traffic Signal Equipment	Replace pedestrian signals with LED pedestrian signal heads with symbols meeting current MUTCD and ADA design standards and countdown timers.	High	Short-term	Medium	MassDOT



Safety Issue	Potential Safety Enhancement	Safety Payoff	Time Frame	Cost	Responsible Agency
Traffic Signal Equipment	Replace pedestrian push buttons with ADA compliant audible push buttons.	High	Short-term	Medium	MassDOT
Traffic Signal Equipment	Evaluate the current location of the push button on the northwest corner of the intersection based on current ADA standards. Consider relocating the push button if current location is deemed too far from the adjacent crosswalk ramp.	High	Short-term	Medium	MassDOT
Traffic Signal Equipment	Consider adding LED “NO TURN ON RED” signage for the Route 139 eastbound right-turn lane.	High	Short-term	Medium	MassDOT
Traffic Signal Equipment	Consider restricting right turns on red for the northbound, southbound, and eastbound approaches during all signal phases.	High	Short-term	Medium	MassDOT
Traffic Signal Equipment	Consider installing a “NO TURN ON RED” sign (R10-11) for the Proprietors Drive northbound right-turn movement.	High	Short-term	Low	MassDOT
Traffic Signal Equipment	Verify that the emergency vehicle preemption system is operating correctly, and correct any defects that are currently present.	High	Short-term	Low	MassDOT
Traffic Signal Equipment	Investigate the red left-turn arrow for Route 139 WB. Clean / repair / replace the signal as necessary.	Medium	Short-term	Low	MassDOT
Traffic Signal Equipment	Evaluate the height of the LED “NO TURN ON RED” sign facing the Furnace Street southbound approach.	Medium	Short-term	Low	MassDOT
Signage	Remove and replace all non-compliant MUTCD signs. All new signs should conform to current MUTCD standards.	Medium	Short-term	Low	MassDOT

Safety Issue	Potential Safety Enhancement	Safety Payoff	Time Frame	Cost	Responsible Agency
	Remove and replace the lane use sign on Furnace Street southbound with a sign indicating the correct lane designations.	Medium	Short-term	Low	MassDOT
	Consider adding advanced school crossing signage (S1-1) to Furnace Street and Route 139 near the intersection.	Medium	Short-term	Low	MassDOT
Pedestrian Accommodations	Evaluate the construction of a sidewalk along the northern side of Route 139, east of the intersection.	High	Long-term	High	MassDOT
	Remove debris from the curb ramps and adjacent areas. Evaluate any existing drainage issues.	Medium	Short-term	Low	MassDOT
	Install detectable warning panels for the existing wheelchair ramps to meet ADA compliance.	Medium	Short-term	Low	MassDOT
Pedestrian Accommodations	Consider adding pedestrian scale lighting in the project area, especially at crosswalks.	High	Mid-term	High	MassDOT
	Consider increasing enforcement at the beginning and end of the school day, when pedestrian traffic is highest.	Medium	Short-Term	Low	Town of Marshfield
	Consider a bicycle/pedestrian/driver safety program with the nearby schools, Boys and Girls Club, and other community groups to help educate roadway users about safe ways to travel.	Medium	Mid-Term	High	Town of Marshfield
	Consider replacing all existing crosswalks with high-visibility thermoplastic materials and striping the crosswalks as a high-visibility ladder style in place of the current standard style crosswalk.	High	Short-term	Low	MassDOT
Lack of Bicycle Accommodations	Consider including bike lanes to increase connectivity as part of a comprehensive future project for the Route 139 corridor.	High	Long-term	High	MassDOT

Safety Issue	Potential Safety Enhancement	Safety Payoff	Time Frame	Cost	Responsible Agency
Pavement Condition and Markings	Refresh existing roadway pavement markings to increase visibility.	High	Short-term	Low	MassDOT
Pavement Condition and Markings	Fill pavement ruts and local areas that would accumulate water, snow, and ice.	High	Short-term	Low	MassDOT
Pavement Condition and Markings	Consider mill and overlay of existing pavement within vicinity of study area.	High	Mid-term	High	MassDOT

GENERAL BACKGROUND TRAFFIC GROWTH

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**General Background Traffic Growth - Daily Traffic Volumes**

CITY/TOWN	ROUTE/STREET	LOCATION	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Annual Growth Rate
Marshfield	Route 3A	at the Duxbury Town Line							3,132	3,173	3,208	3,253	3,266	<b>1.09%</b>
Marshfield	Route 3	at the Pembroke Town Line	57,165	52,900	53,627	53,500	53,371	54,225	56,394	59,101	59,574	60,170	61,373	<b>1.24%</b>
Marshfield	Route 139	West of Route 3A	19,940	20,000	20,364	18,035	18,364	19,374	17,555	17,783	17,979	18,231	18,304	<b>-1.05%</b>
Marshfield	Route 139	East of Webster Street	13,702	15,700	16,067	15,335	15,119	15,588	15,947	15,520	15,784	15,831	17,477	<b>1.39%</b>
Marshfield	Route 139	West of Landing Road	4,667	4,338	7,390	7,672	7,741	7,032	7,194	7,640	6,094	6,112	6,088	<b>2.76%</b>
Marshfield	Route 139	Between Hutchinson Road and Arkansas Street	6,000	5,769	6,052				5,105	5,422	5,514	4,639	4,620	<b>-2.30%</b>
Pembroke	Pleasant Street	East of Washington Street							5,463	5,802	5,901	5,919	5,895	<b>1.79%</b>
<b>0.70%</b>														

## TRIP-GENERATION CALCULATIONS

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# Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

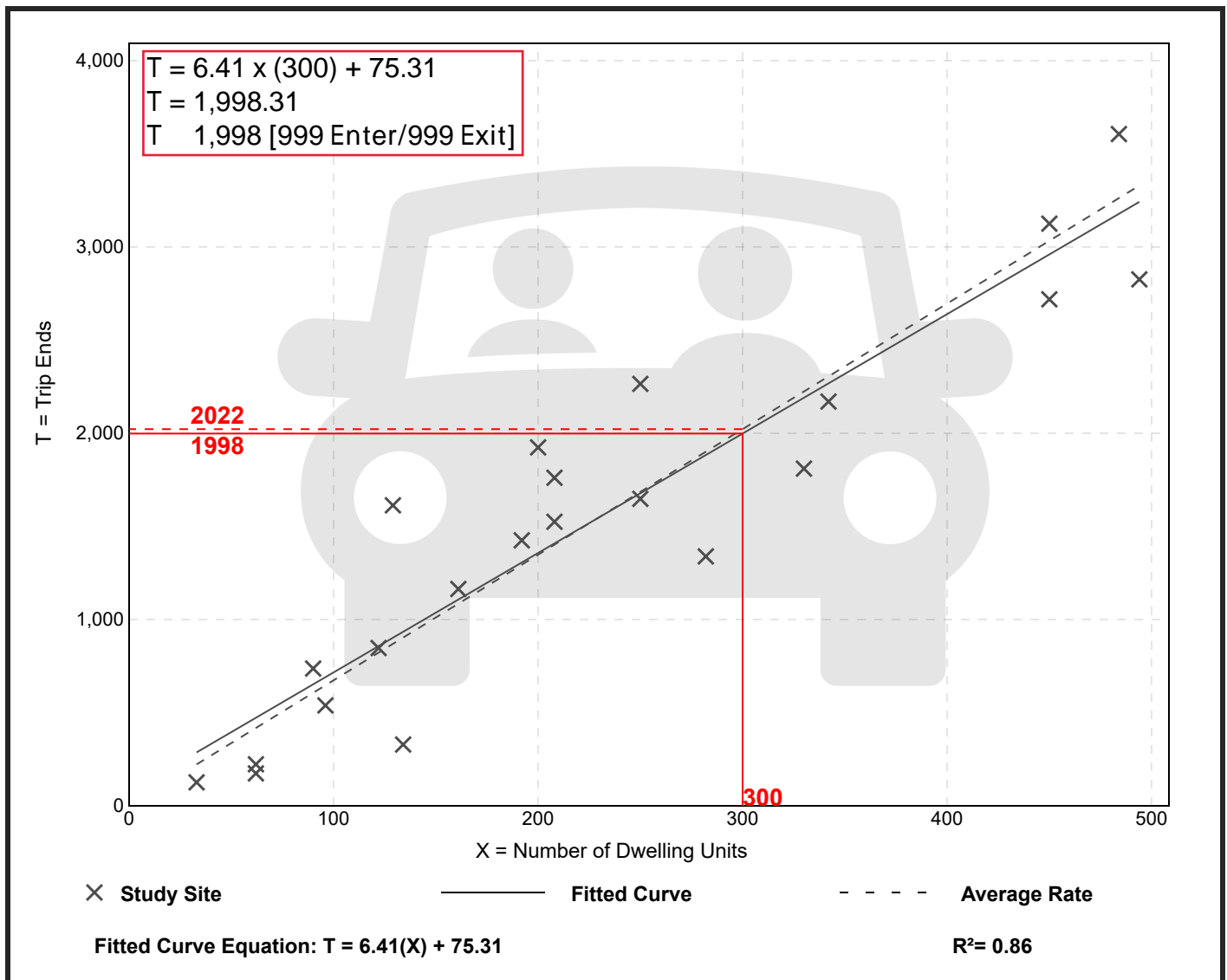
Vehicle Trip Ends vs: Dwelling Units  
On a: Weekday

Setting/Location: General Urban/Suburban  
Number of Studies: 22  
Avg. Num. of Dwelling Units: 229  
Directional Distribution: 50% entering, 50% exiting

## Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
6.74	2.46 - 12.50	1.79

## Data Plot and Equation



# Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units  
 On a: Weekday,  
 Peak Hour of Adjacent Street Traffic,  
 One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 49

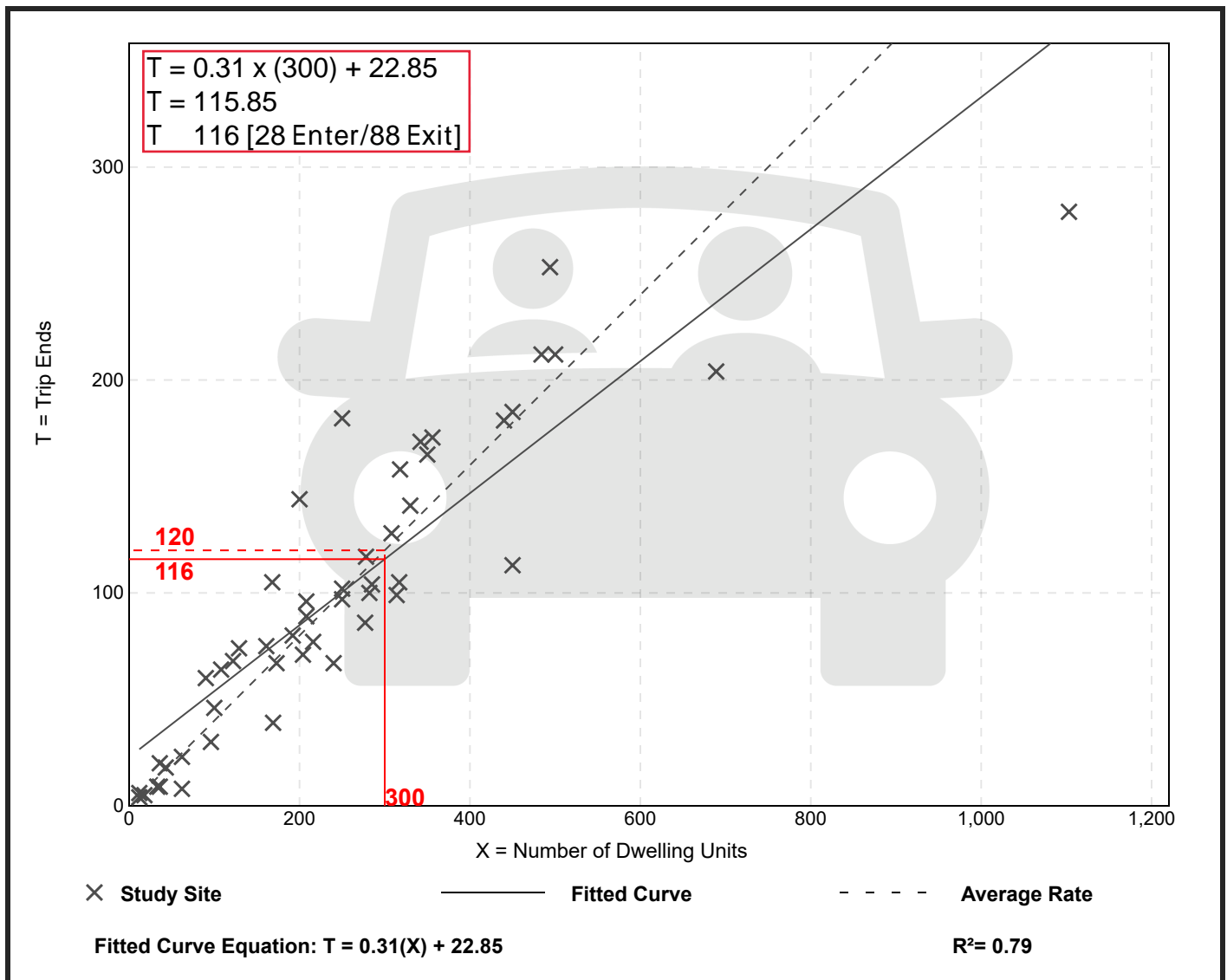
Avg. Num. of Dwelling Units: 249

Directional Distribution: 24% entering, 76% exiting

## Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.40	0.13 - 0.73	0.12

## Data Plot and Equation





# Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units  
 On a: Weekday,  
 Peak Hour of Adjacent Street Traffic,  
 One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 59

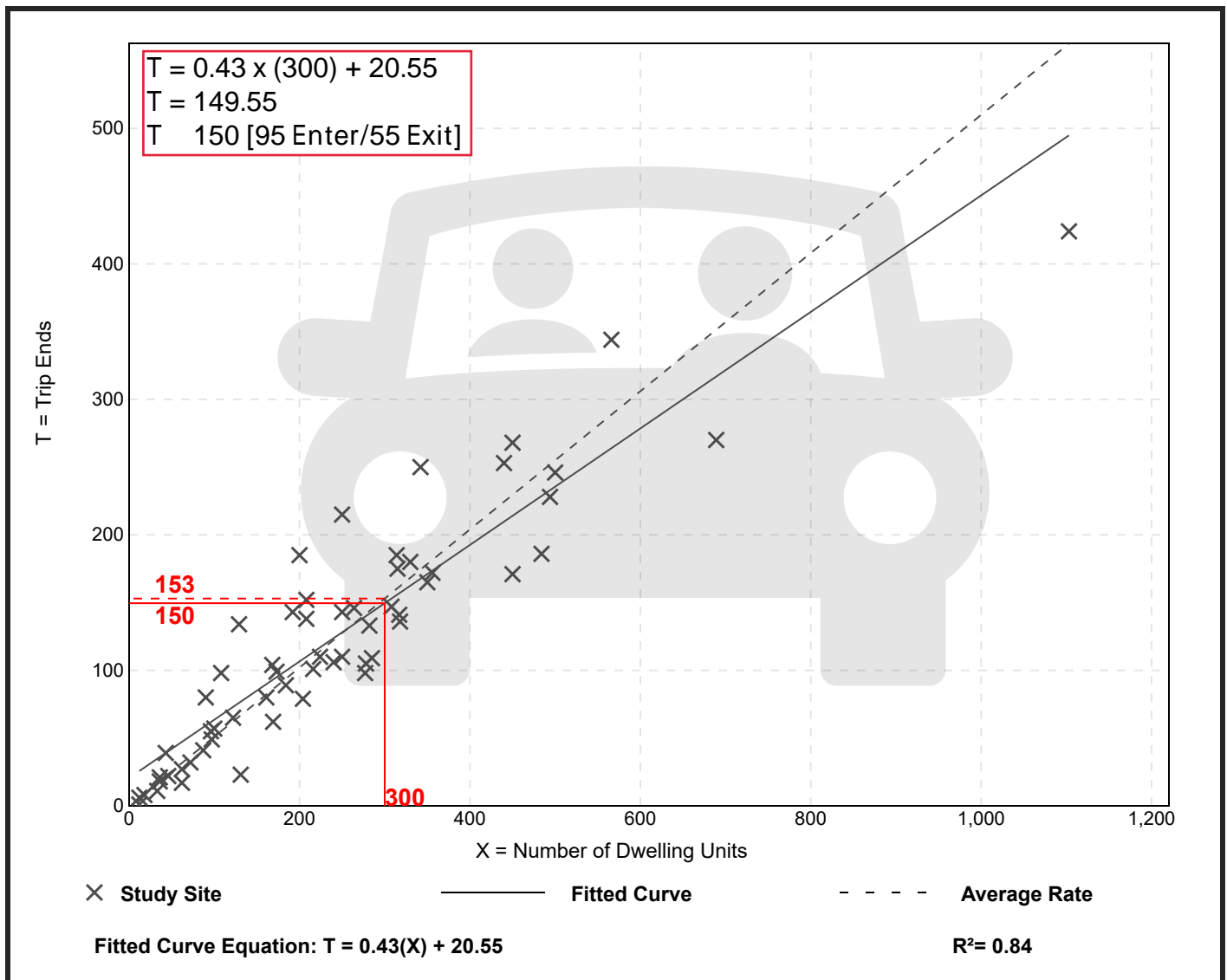
Avg. Num. of Dwelling Units: 241

Directional Distribution: 63% entering, 37% exiting

## Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.51	0.08 - 1.04	0.15

## Data Plot and Equation



# Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units  
On a: Saturday

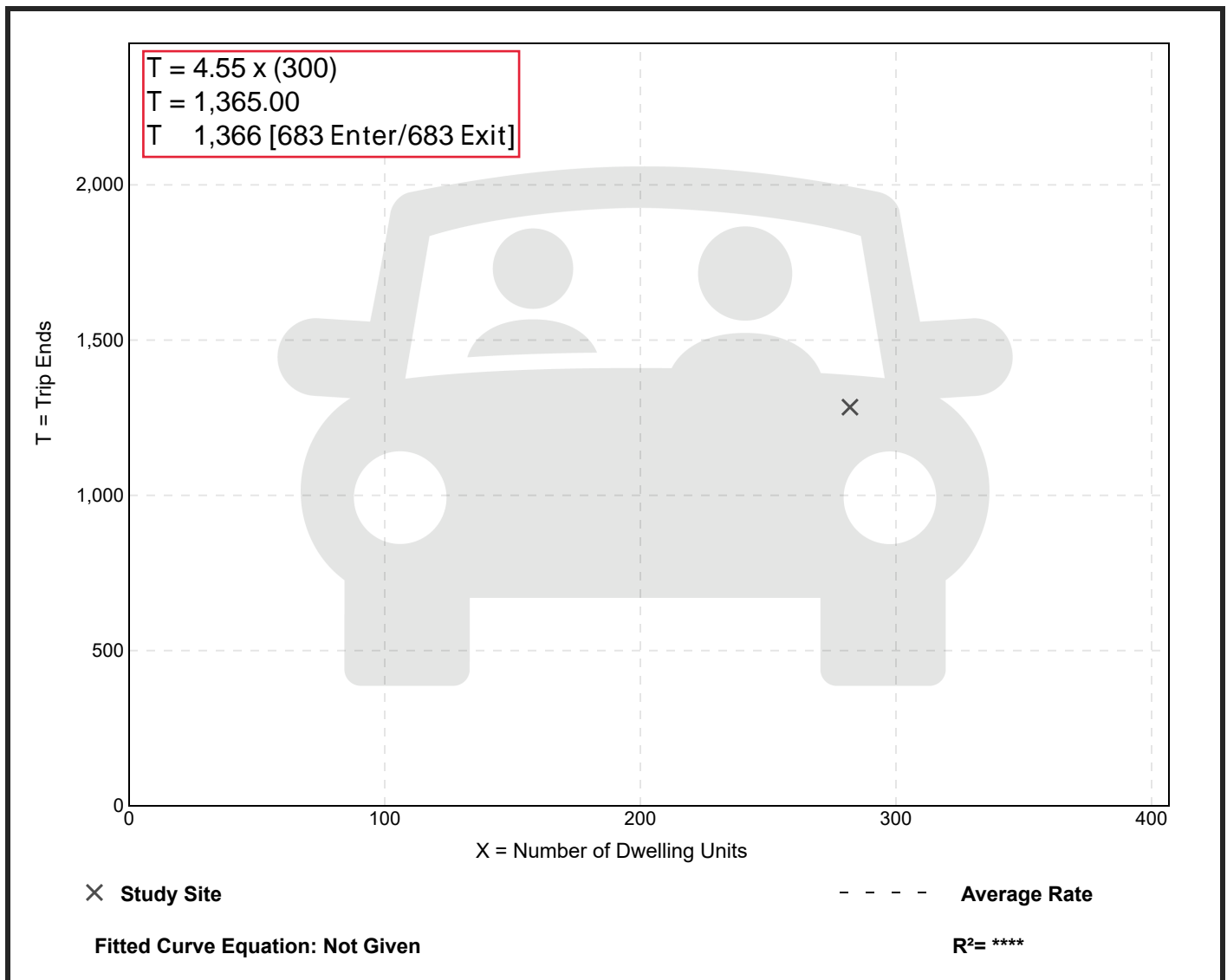
Setting/Location: General Urban/Suburban  
Number of Studies: 1  
Avg. Num. of Dwelling Units: 282  
Directional Distribution: 50% entering, 50% exiting

## Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
4.55	4.55 - 4.55	*

## Data Plot and Equation

Caution – Small Sample Size



# Multifamily Housing (Low-Rise) Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units  
On a: Saturday, Peak Hour of Generator

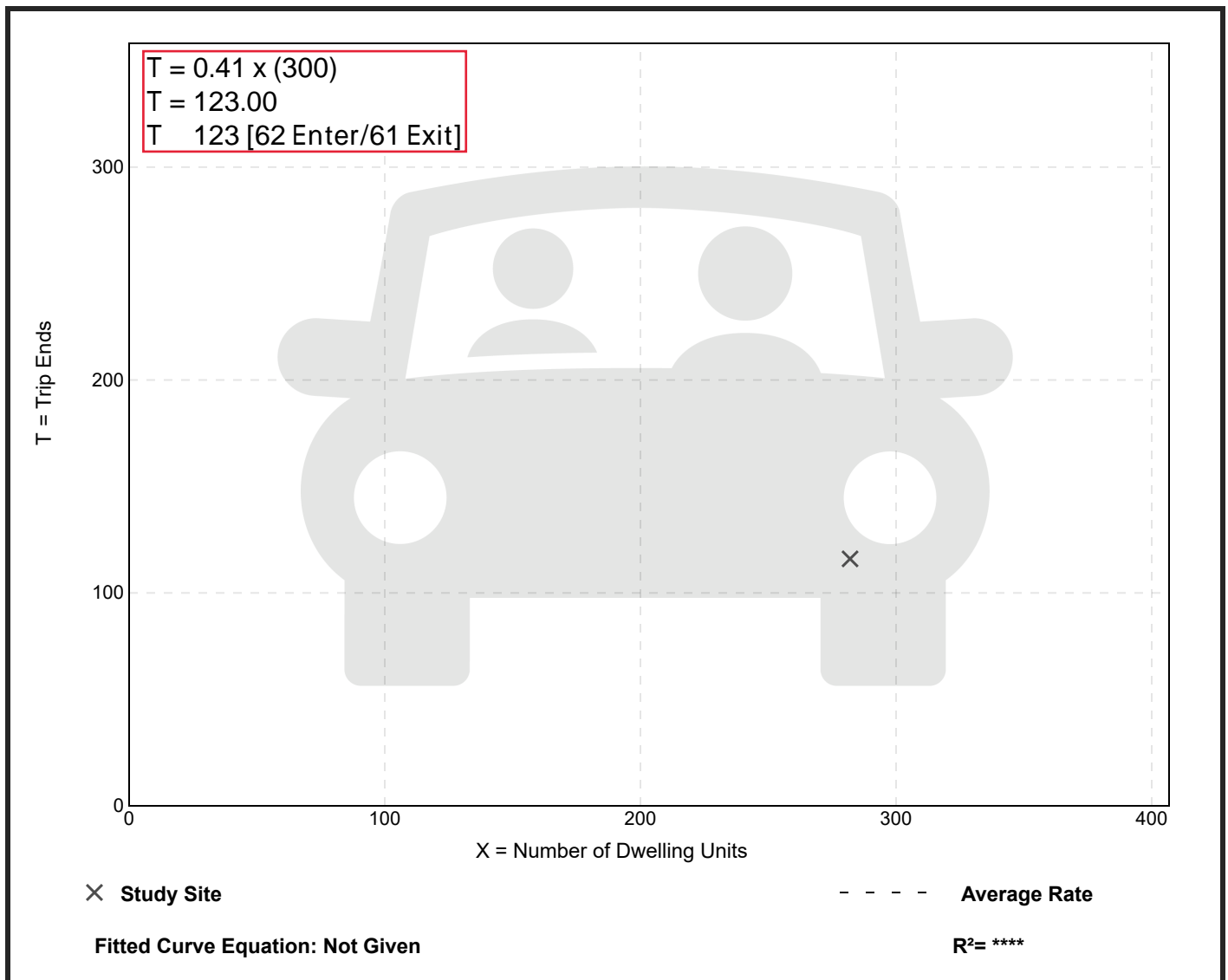
Setting/Location: General Urban/Suburban  
Number of Studies: 1  
Avg. Num. of Dwelling Units: 282  
Directional Distribution: Not Available

## Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.41	0.41 - 0.41	*

## Data Plot and Equation

Caution – Small Sample Size



JOURNEY TO WORK TRIP DISTRIBUTION

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Proposed Multifamily Residential  
Marshfield, Massachusetts

Residence	Workplace	Number	Route 139 (East)		Route 139 (West)		School Street (North)		Furnace Street (North)	
Marshfield town	Marshfield town	3,132	80%	2506		0	5%	157	15%	470
Marshfield town	Boston city	2,058		0	100%	2058		0		0
Marshfield town	Pembroke town	623		0	100%	623		0		0
Marshfield town	Plymouth town	623		0	100%	623		0		0
Marshfield town	Hingham town	622		0	75%	467		0	25%	156
Marshfield town	Hanover town	478		0	100%	478		0		0
Marshfield town	Norwell town	463		0	50%	232		0	50%	232
Marshfield town	Brockton city	457		0	100%	457		0		0
Marshfield town	Quincy city	453		0	100%	453		0		0
Marshfield town	Duxbury town	432	100%	432		0		0		0
Marshfield town	Braintree Town city	430		0	100%	430		0		0
Marshfield town	Weymouth Town city	349		0	100%	349		0		0
Marshfield town	Scituate town	298		0		0		0	100%	298
Marshfield town	Rockland town	254		0	100%	254		0		0
Marshfield town	Kingston town	191	75%	143	25%	48		0		0
Marshfield town	Cohasset town	172		0		0		0	100%	172
Marshfield town	Westwood town	117		0	100%	117		0		0
Marshfield town	Waltham city	106		0	100%	106		0		0
Marshfield town	Norwood town	103		0	100%	103		0		0
Marshfield town	Canton town	97		0	100%	97		0		0
Marshfield town	Needham town	97		0	100%	97		0		0
Marshfield town	Dedham town	93		0	100%	93		0		0
Marshfield town	Hull town	90		0	25%	23		0	75%	68
Marshfield town	Middleborough town	83		0	100%	83		0		0
Marshfield town	Wareham town	68		0	100%	68		0		0
Marshfield town	Newton city	60		0	100%	60		0		0
Marshfield town	Freetown town	59		0	100%	59		0		0
Marshfield town	West Bridgewater town	58		0	100%	58		0		0
Marshfield town	Cambridge city	55		0	100%	55		0		0
Marshfield town	Natick town	48		0	100%	48		0		0
Marshfield town	Wellesley town	44		0	100%	44		0		0
Marshfield town	Randolph town	43		0	100%	43		0		0
Marshfield town	Malden city	40		0	100%	40		0		0
Marshfield town	Winchester town	40		0	100%	40		0		0
Marshfield town	Tewksbury town	38		0	100%	38		0		0
Marshfield town	Hanson town	38		0	100%	38		0		0
Marshfield town	Barnstable Town city	35		0	100%	35		0		0
Marshfield town	Wrentham town	33		0	100%	33		0		0
Marshfield town	East Bridgewater town	32		0	100%	32		0		0
		12,512		3,081		7,880		157		1,394
				24.6%		63.0%		1.3%		11.1%
		<u>SAY</u>		<u>25%</u>		<u>63%</u>		<u>1%</u>		<u>11%</u>

## CAPACITY ANALYSIS WORKSHEETS

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Route 139 at School Street

Route 139 at Enterprise Drive

Route 139 at Proprietors Drive and Furnace Street

Route 139 at Forest Street

Enterprise Drive at Commerce Way

Proprietors Drive at Commerce Way and Old Woodlot Road

Commerce Way at the Project Site Driveway



Route 139 at School Street

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2021 Existing Weekday Morning Peak Hour  
1: Route 139 & School Street

Intersection						
Int Delay, s/veh	2.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	108	825	1088	44	16	132
Future Vol, veh/h	108	825	1088	44	16	132
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	185	-	-	-	0	70
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	97	97	88	88
Heavy Vehicles, %	1	4	2	0	0	1
Mvmt Flow	115	878	1122	45	18	150

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1167	0	-	0	1814
Stage 1	-	-	-	-	1145
Stage 2	-	-	-	-	669
Critical Hdwy	4.12	-	-	-	6.8
Critical Hdwy Stg 1	-	-	-	-	5.8
Critical Hdwy Stg 2	-	-	-	-	5.8
Follow-up Hdwy	2.21	-	-	-	3.5
Pot Cap-1 Maneuver	600	-	-	-	71
Stage 1	-	-	-	-	270
Stage 2	-	-	-	-	476
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	600	-	-	-	57
Mov Cap-2 Maneuver	-	-	-	-	57
Stage 1	-	-	-	-	218
Stage 2	-	-	-	-	476

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	25.2
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	600	-	-	-	57	457
HCM Lane V/C Ratio	0.191	-	-	-	0.319	0.328
HCM Control Delay (s)	12.4	-	-	-	95.3	16.7
HCM Lane LOS	B	-	-	-	F	C
HCM 95th %tile Q(veh)	0.7	-	-	-	1.1	1.4



2021 Existing Weekday Evening Peak Hour  
1: Route 139 & School Street

Intersection						
Int Delay, s/veh	2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↑↑	↑↑		↘	↘
Traffic Vol, veh/h	138	1395	1057	61	13	15
Future Vol, veh/h	138	1395	1057	61	13	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	185	-	-	-	0	70
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	97	97	88	88	84	84
Heavy Vehicles, %	0	1	2	2	0	1
Mvmt Flow	142	1438	1201	69	15	18

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1270	0	-	0	2239 635
Stage 1	-	-	-	-	1236 -
Stage 2	-	-	-	-	1003 -
Critical Hdwy	4.1	-	-	-	6.8 6.92
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.31
Pot Cap-1 Maneuver	554	-	-	-	37 424
Stage 1	-	-	-	-	241 -
Stage 2	-	-	-	-	320 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	554	-	-	-	28 424
Mov Cap-2 Maneuver	-	-	-	-	28 -
Stage 1	-	-	-	-	179 -
Stage 2	-	-	-	-	320 -

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	118
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	554	-	-	-	28	424
HCM Lane V/C Ratio	0.257	-	-	-	0.553	0.042
HCM Control Delay (s)	13.7	-	-	-	238.1	13.9
HCM Lane LOS	B	-	-	-	F	B
HCM 95th %tile Q(veh)	1	-	-	-	1.8	0.1

2021 Existing Saturday Midday Peak Hour  
1: Route 139 & School Street

Intersection						
Int Delay, s/veh	3.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↑↑	↑↑		↘	↘
Traffic Vol, veh/h	113	1161	1208	72	19	139
Future Vol, veh/h	113	1161	1208	72	19	139
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	185	-	-	-	0	70
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	93	93	88	88
Heavy Vehicles, %	0	1	1	0	0	0
Mvmt Flow	123	1262	1299	77	22	158

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1376	0	-	0	2215 688
Stage 1	-	-	-	-	1338 -
Stage 2	-	-	-	-	877 -
Critical Hdwy	4.1	-	-	-	6.8 6.9
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	505	-	-	-	38 393
Stage 1	-	-	-	-	213 -
Stage 2	-	-	-	-	372 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	505	-	-	-	29 393
Mov Cap-2 Maneuver	-	-	-	-	29 -
Stage 1	-	-	-	-	161 -
Stage 2	-	-	-	-	372 -

Approach	EB	WB	SB
HCM Control Delay, s	1.3	0	51.9
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	505	-	-	-	29	393
HCM Lane V/C Ratio	0.243	-	-	-	0.745	0.402
HCM Control Delay (s)	14.4	-	-	-	283.5	20.2
HCM Lane LOS	B	-	-	-	F	C
HCM 95th %tile Q(veh)	0.9	-	-	-	2.4	1.9

2029 No Build Weekday Morning Peak Hour  
1: Route 139 & School Street

Intersection						
Int Delay, s/veh	3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	117	893	1178	48	17	143
Future Vol, veh/h	117	893	1178	48	17	143
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	185	-	-	-	0	70
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	97	97	88	88
Heavy Vehicles, %	1	4	2	0	0	1
Mvmt Flow	124	950	1214	49	19	163

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1263	0	-	0	1962 632
Stage 1	-	-	-	-	1239 -
Stage 2	-	-	-	-	723 -
Critical Hdwy	4.12	-	-	-	6.8 6.92
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	2.21	-	-	-	3.5 3.31
Pot Cap-1 Maneuver	552	-	-	-	57 426
Stage 1	-	-	-	-	240 -
Stage 2	-	-	-	-	447 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	552	-	-	-	44 426
Mov Cap-2 Maneuver	-	-	-	-	44 -
Stage 1	-	-	-	-	186 -
Stage 2	-	-	-	-	447 -

Approach	EB	WB	SB
HCM Control Delay, s	1.6	0	31.5
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	552	-	-	-	44	426
HCM Lane V/C Ratio	0.225	-	-	-	0.439	0.381
HCM Control Delay (s)	13.4	-	-	-	139.8	18.6
HCM Lane LOS	B	-	-	-	F	C
HCM 95th %tile Q(veh)	0.9	-	-	-	1.6	1.8

2029 No Build Weekday Evening Peak Hour  
1: Route 139 & School Street

Intersection						
Int Delay, s/veh	3.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↑↑	↑↑		↘	↘
Traffic Vol, veh/h	149	1510	1145	66	14	16
Future Vol, veh/h	149	1510	1145	66	14	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	185	-	-	-	0	70
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	97	97	88	88	84	84
Heavy Vehicles, %	0	1	2	2	0	1
Mvmt Flow	154	1557	1301	75	17	19

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1376	0	-	0	2426 688
Stage 1	-	-	-	-	1339 -
Stage 2	-	-	-	-	1087 -
Critical Hdwy	4.1	-	-	-	6.8 6.92
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.31
Pot Cap-1 Maneuver	505	-	-	-	27 391
Stage 1	-	-	-	-	213 -
Stage 2	-	-	-	-	289 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	505	-	-	-	19 391
Mov Cap-2 Maneuver	-	-	-	-	19 -
Stage 1	-	-	-	-	148 -
Stage 2	-	-	-	-	289 -

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	214
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	505	-	-	-	19	391
HCM Lane V/C Ratio	0.304	-	-	-	0.877	0.049
HCM Control Delay (s)	15.2	-	-	-	441.7	14.7
HCM Lane LOS	C	-	-	-	F	B
HCM 95th %tile Q(veh)	1.3	-	-	-	2.4	0.2

2029 No Build Saturday Midday Peak Hour  
 1: Route 139 & School Street

Intersection						
Int Delay, s/veh	5.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↗↗	↗↖		↖	↖
Traffic Vol, veh/h	122	1257	1308	78	21	151
Future Vol, veh/h	122	1257	1308	78	21	151
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	185	-	-	-	0	70
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	93	93	88	88
Heavy Vehicles, %	0	1	1	0	0	0
Mvmt Flow	133	1366	1406	84	24	172

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1490	0	-	0	2397 745
Stage 1	-	-	-	-	1448 -
Stage 2	-	-	-	-	949 -
Critical Hdwy	4.1	-	-	-	6.8 6.9
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	457	-	-	-	29 361
Stage 1	-	-	-	-	186 -
Stage 2	-	-	-	-	341 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	457	-	-	-	~ 21 361
Mov Cap-2 Maneuver	-	-	-	-	~ 21 -
Stage 1	-	-	-	-	132 -
Stage 2	-	-	-	-	341 -

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	82.4
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	457	-	-	-	21	361
HCM Lane V/C Ratio	0.29	-	-	-	1.136	0.475
HCM Control Delay (s)	16.1	-	-	-	\$ 504.8	23.7
HCM Lane LOS	C	-	-	-	F	C
HCM 95th %tile Q(veh)	1.2	-	-	-	3.2	2.5

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

2029 Build Weekday Morning Peak Hour  
1: Route 139 & School Street

Intersection						
Int Delay, s/veh	3.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↑↑	↑↑		↘	↘
Traffic Vol, veh/h	117	911	1233	49	17	143
Future Vol, veh/h	117	911	1233	49	17	143
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	185	-	-	-	0	70
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	97	97	88	88
Heavy Vehicles, %	1	4	2	0	0	1
Mvmt Flow	124	969	1271	51	19	163

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1322	0	-	0	2030 661
Stage 1	-	-	-	-	1297 -
Stage 2	-	-	-	-	733 -
Critical Hdwy	4.12	-	-	-	6.8 6.92
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	2.21	-	-	-	3.5 3.31
Pot Cap-1 Maneuver	524	-	-	-	51 407
Stage 1	-	-	-	-	224 -
Stage 2	-	-	-	-	442 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	524	-	-	-	39 407
Mov Cap-2 Maneuver	-	-	-	-	39 -
Stage 1	-	-	-	-	171 -
Stage 2	-	-	-	-	442 -

Approach	EB	WB	SB
HCM Control Delay, s	1.6	0	35.2
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	524	-	-	-	39	407
HCM Lane V/C Ratio	0.238	-	-	-	0.495	0.399
HCM Control Delay (s)	14	-	-	-	166.7	19.6
HCM Lane LOS	B	-	-	-	F	C
HCM 95th %tile Q(veh)	0.9	-	-	-	1.7	1.9

2029 Build Weekday Evening Peak Hour  
1: Route 139 & School Street

Intersection						
Int Delay, s/veh	3.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↑↑	↑↑		↘	↘
Traffic Vol, veh/h	149	1570	1180	66	15	16
Future Vol, veh/h	149	1570	1180	66	15	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	185	-	-	-	0	70
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	97	97	88	88	84	84
Heavy Vehicles, %	0	1	2	2	0	1
Mvmt Flow	154	1619	1341	75	18	19

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1416	0	-	0	2497 708
Stage 1	-	-	-	-	1379 -
Stage 2	-	-	-	-	1118 -
Critical Hdwy	4.1	-	-	-	6.8 6.92
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.31
Pot Cap-1 Maneuver	487	-	-	-	25 379
Stage 1	-	-	-	-	203 -
Stage 2	-	-	-	-	279 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	487	-	-	-	~ 17 379
Mov Cap-2 Maneuver	-	-	-	-	~ 17 -
Stage 1	-	-	-	-	139 -
Stage 2	-	-	-	-	279 -

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	271.3
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	487	-	-	-	17	379
HCM Lane V/C Ratio	0.315	-	-	-	1.05	0.05
HCM Control Delay (s)	15.8	-	-	-	\$ 544.7	15
HCM Lane LOS	C	-	-	-	F	C
HCM 95th %tile Q(veh)	1.3	-	-	-	2.6	0.2

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

2029 Build Saturday Midday Peak Hour  
1: Route 139 & School Street

Intersection						
Int Delay, s/veh	7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↑↑	↑↑		↘	↘
Traffic Vol, veh/h	122	1296	1346	79	22	151
Future Vol, veh/h	122	1296	1346	79	22	151
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	185	-	-	-	0	70
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	93	93	88	88
Heavy Vehicles, %	0	1	1	0	0	0
Mvmt Flow	133	1409	1447	85	25	172

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1532	0	-	0	2461 766
Stage 1	-	-	-	-	1490 -
Stage 2	-	-	-	-	971 -
Critical Hdwy	4.1	-	-	-	6.8 6.9
Critical Hdwy Stg 1	-	-	-	-	5.8 -
Critical Hdwy Stg 2	-	-	-	-	5.8 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	440	-	-	-	26 350
Stage 1	-	-	-	-	177 -
Stage 2	-	-	-	-	333 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	440	-	-	-	~ 18 350
Mov Cap-2 Maneuver	-	-	-	-	~ 18 -
Stage 1	-	-	-	-	124 -
Stage 2	-	-	-	-	333 -

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	105.2
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	440	-	-	-	18	350
HCM Lane V/C Ratio	0.301	-	-	-	1.389	0.49
HCM Control Delay (s)	16.7	-	-	-	656.7	24.8
HCM Lane LOS	C	-	-	-	F	C
HCM 95th %tile Q(veh)	1.3	-	-	-	3.5	2.6

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon



Route 139 at Enterprise Drive

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2021 Existing Weekday Morning Peak Hour  
2: Enterprise Drive & Route 139

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	684	87	20	1066	4	71	0	14	16	1	15
Future Volume (vph)	7	684	87	20	1066	4	71	0	14	16	1	15
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.983			0.999				0.850		0.936	
Flt Protected	0.950			0.950				0.950			0.976	
Satd. Flow (prot)	1805	3420	0	1662	3571	0	0	1752	1509	0	1794	0
Flt Permitted	0.950			0.950				0.731			0.805	
Satd. Flow (perm)	1805	3420	0	1662	3571	0	0	1348	1509	0	1479	0
Satd. Flow (RTOR)		13							96		19	
Adj. Flow (vph)	7	728	93	22	1184	4	90	0	18	20	1	19
Lane Group Flow (vph)	7	821	0	22	1188	0	0	90	18	0	40	0
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2		2	6		
Detector Phase	7	4		3	8		2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	1.0	12.0		1.0	12.0		12.0	12.0	12.0	12.0	12.0	
Minimum Split (s)	7.0	18.0		7.0	18.0		18.0	18.0	18.0	18.0	18.0	
Total Split (s)	16.0	57.0		16.0	57.0		25.0	25.0	25.0	25.0	25.0	
Total Split (%)	12.8%	45.6%		12.8%	45.6%		20.0%	20.0%	20.0%	20.0%	20.0%	
Maximum Green (s)	10.0	51.0		10.0	51.0		19.0	19.0	19.0	19.0	19.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	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		0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0	6.0		6.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	None	None	None	None	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.03	0.42		0.10	0.55			0.25	0.04		0.10	
Control Delay	39.7	15.1		38.4	14.6			31.6	0.1		21.6	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	39.7	15.1		38.4	14.6			31.6	0.1		21.6	
Queue Length 50th (ft)	2	69		6	116			22	0		5	
Queue Length 95th (ft)	22	327		45	514			104	0		41	
Internal Link Dist (ft)		2720			2020			2120			220	
Turn Bay Length (ft)	75			275					300			
Base Capacity (vph)	379	2901		349	3027			539	661		602	
Starvation Cap Reductn	0	0		0	0			0	0		0	
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.02	0.28		0.06	0.39			0.17	0.03		0.07	
<b>Intersection Summary</b>												
Cycle Length: 125												

2021 Existing Weekday Morning Peak Hour  
 2: Enterprise Drive & Route 139

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Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Satd. Flow (RTOR)	
Adj. Flow (vph)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	27.0
Total Split (s)	27.0
Total Split (%)	22%
Maximum Green (s)	25.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	7.0
Flash Dont Walk (s)	18.0
Pedestrian Calls (#/hr)	4
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
<b>Intersection Summary</b>	

## 2021 Existing Weekday Morning Peak Hour 2: Enterprise Drive & Route 139

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Actuated Cycle Length: 61.3





















Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Splits and Phases: 2: Enterprise Drive & Route 139

 Ø2 25 s	 Ø3 16 s	 Ø4 57 s	 Ø9 27 s
 Ø6 25 s	 Ø7 16 s	 Ø8 57 s	

2021 Existing Weekday Morning Peak Hour  
2: Enterprise Drive & Route 139

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	684	87	20	1066	4	71	0	14	16	1	15
Future Volume (vph)	7	684	87	20	1066	4	71	0	14	16	1	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	11	12	12	12	12	12	13	13	13
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0	6.0		6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	1.00		1.00	
Frt	1.00	0.98		1.00	1.00			1.00	0.85		0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00		0.98	
Satd. Flow (prot)	1805	3420		1662	3573			1752	1509		1793	
Flt Permitted	0.95	1.00		0.95	1.00			0.73	1.00		0.80	
Satd. Flow (perm)	1805	3420		1662	3573			1348	1509		1479	
Peak-hour factor, PHF	0.94	0.94	0.94	0.90	0.90	0.90	0.79	0.79	0.79	0.80	0.80	0.80
Adj. Flow (vph)	7	728	93	22	1184	4	90	0	18	20	1	19
RTOR Reduction (vph)	0	7	0	0	0	0	0	0	15	0	16	0
Lane Group Flow (vph)	7	814	0	22	1188	0	0	90	3	0	24	0
Heavy Vehicles (%)	0%	4%	2%	5%	1%	0%	3%	0%	7%	0%	0%	0%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2		2	6		
Actuated Green, G (s)	0.7	32.8		2.3	34.4			10.3	10.3		10.3	
Effective Green, g (s)	0.7	32.8		2.3	34.4			10.3	10.3		10.3	
Actuated g/C Ratio	0.01	0.48		0.03	0.51			0.15	0.15		0.15	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0	6.0		6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	18	1652		56	1810			204	228		224	
v/s Ratio Prot	0.00	0.24		c0.01	c0.33							
v/s Ratio Perm								c0.07	0.00		0.02	
v/c Ratio	0.39	0.49		0.39	0.66			0.44	0.01		0.11	
Uniform Delay, d1	33.4	11.9		32.1	12.4			26.2	24.5		24.8	
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	13.4	0.2		4.5	0.9			1.5	0.0		0.2	
Delay (s)	46.7	12.1		36.6	13.2			27.7	24.5		25.0	
Level of Service	D	B		D	B			C	C		C	
Approach Delay (s)		12.4			13.7			27.2			25.0	
Approach LOS		B			B			C			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			14.1		HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio			0.58									
Actuated Cycle Length (s)			67.9		Sum of lost time (s)				20.0			
Intersection Capacity Utilization			56.7%		ICU Level of Service				B			
Analysis Period (min)			15									

c Critical Lane Group

2021 Existing Weekday Evening Peak Hour  
2: Enterprise Drive & Route 139

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	1256	93	51	946	19	100	2	47	22	0	13
Future Volume (vph)	17	1256	93	51	946	19	100	2	47	22	0	13
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.990			0.997				0.850		0.951	
Flt Protected	0.950			0.950				0.953			0.969	
Satd. Flow (prot)	1805	3574	0	1745	3564	0	0	1793	1615	0	1809	0
Flt Permitted	0.950			0.950				0.691			0.750	
Satd. Flow (perm)	1805	3574	0	1745	3564	0	0	1300	1615	0	1400	0
Satd. Flow (RTOR)		7			2				100		100	
Adj. Flow (vph)	18	1336	99	54	1006	20	123	2	58	33	0	19
Lane Group Flow (vph)	18	1435	0	54	1026	0	0	125	58	0	52	0
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2		2	6		
Detector Phase	7	4		3	8		2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	1.0	12.0		1.0	12.0		12.0	12.0	12.0	12.0	12.0	
Minimum Split (s)	7.0	18.0		7.0	18.0		18.0	18.0	18.0	18.0	18.0	
Total Split (s)	12.0	52.0		12.0	52.0		29.0	29.0	29.0	29.0	29.0	
Total Split (%)	10.0%	43.3%		10.0%	43.3%		24.2%	24.2%	24.2%	24.2%	24.2%	
Maximum Green (s)	6.0	46.0		6.0	46.0		23.0	23.0	23.0	23.0	23.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	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		0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0	6.0		6.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	None	None	None	None	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.15	0.74		0.44	0.48			0.57	0.16		0.16	
Control Delay	48.4	22.0		56.8	15.1			47.2	2.5		1.5	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	48.4	22.0		56.8	15.1			47.2	2.5		1.5	
Queue Length 50th (ft)	9	272		28	101			62	0		0	
Queue Length 95th (ft)	39	#774		#104	440			135	2		0	
Internal Link Dist (ft)		2720			2020			2120			220	
Turn Bay Length (ft)	75			275					300			
Base Capacity (vph)	126	1928		122	2127			350	507		450	
Starvation Cap Reductn	0	0		0	0			0	0		0	
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.14	0.74		0.44	0.48			0.36	0.11		0.12	
<b>Intersection Summary</b>												
Cycle Length: 120												

2021 Existing Weekday Evening Peak Hour  
 2: Enterprise Drive & Route 139

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Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Satd. Flow (RTOR)	
Adj. Flow (vph)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	27.0
Total Split (s)	27.0
Total Split (%)	23%
Maximum Green (s)	25.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	7.0
Flash Dont Walk (s)	18.0
Pedestrian Calls (#/hr)	4
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
<b>Intersection Summary</b>	

## 2021 Existing Weekday Evening Peak Hour 2: Enterprise Drive & Route 139

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Actuated Cycle Length: 88.1

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

# 95th percentile volume exceeds capacity, queue may be longer.





















Queue shown is maximum after two cycles.

Splits and Phases: 2: Enterprise Drive & Route 139

 Ø2 29 s	 Ø3 12 s	 Ø4 52 s	 Ø9 27 s
 Ø6 29 s	 Ø7 12 s	 Ø8 52 s	



2021 Existing Weekday Evening Peak Hour  
2: Enterprise Drive & Route 139

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	1256	93	51	946	19	100	2	47	22	0	13
Future Volume (vph)	17	1256	93	51	946	19	100	2	47	22	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	11	12	12	12	12	12	13	13	13
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0	6.0		6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	1.00		1.00	
Frt	1.00	0.99		1.00	1.00			1.00	0.85		0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00		0.97	
Satd. Flow (prot)	1805	3573		1745	3564			1793	1615		1809	
Flt Permitted	0.95	1.00		0.95	1.00			0.69	1.00		0.75	
Satd. Flow (perm)	1805	3573		1745	3564			1301	1615		1399	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.81	0.81	0.81	0.67	0.67	0.67
Adj. Flow (vph)	18	1336	99	54	1006	20	123	2	58	33	0	19
RTOR Reduction (vph)	0	3	0	0	1	0	0	0	49	0	44	0
Lane Group Flow (vph)	18	1432	0	54	1025	0	0	125	9	0	8	0
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2		2	6		
Actuated Green, G (s)	2.1	50.0		4.7	52.6			15.0	15.0		15.0	
Effective Green, g (s)	2.1	50.0		4.7	52.6			15.0	15.0		15.0	
Actuated g/C Ratio	0.02	0.54		0.05	0.56			0.16	0.16		0.16	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0	6.0		6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	40	1912		87	2007			208	259		224	
v/s Ratio Prot	0.01	c0.40		c0.03	c0.29							
v/s Ratio Perm								c0.10	0.01		0.01	
v/c Ratio	0.45	0.75		0.62	0.51			0.60	0.04		0.04	
Uniform Delay, d1	45.1	16.8		43.5	12.5			36.4	33.1		33.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	7.9	1.6		13.0	0.2			4.8	0.1		0.1	
Delay (s)	52.9	18.5		56.4	12.7			41.2	33.2		33.2	
Level of Service	D	B		E	B			D	C		C	
Approach Delay (s)		18.9			14.9			38.7			33.2	
Approach LOS		B			B			D			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			18.9			HCM 2000 Level of Service				B		
HCM 2000 Volume to Capacity ratio			0.67									
Actuated Cycle Length (s)			93.4			Sum of lost time (s)			20.0			
Intersection Capacity Utilization			72.7%			ICU Level of Service			C			
Analysis Period (min)			15									

c Critical Lane Group

2021 Existing Saturday Midday Peak Hour  
2: Enterprise Drive & Route 139

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	1034	80	139	1129	9	106	1	118	16	0	25
Future Volume (vph)	18	1034	80	139	1129	9	106	1	118	16	0	25
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989			0.999				0.850		0.918	
Flt Protected	0.950			0.950				0.953			0.981	
Satd. Flow (prot)	1805	3535	0	1745	3571	0	0	1811	1615	0	1768	0
Flt Permitted	0.950			0.950				0.747			0.663	
Satd. Flow (perm)	1805	3535	0	1745	3571	0	0	1419	1615	0	1195	0
Satd. Flow (RTOR)		8			1				295		96	
Adj. Flow (vph)	19	1112	86	146	1188	9	265	3	295	27	0	42
Lane Group Flow (vph)	19	1198	0	146	1197	0	0	268	295	0	69	0
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2		2	6		
Detector Phase	7	4		3	8		2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	1.0	12.0		1.0	12.0		12.0	12.0	12.0	12.0	12.0	
Minimum Split (s)	7.0	18.0		7.0	18.0		18.0	18.0	18.0	18.0	18.0	
Total Split (s)	16.0	57.0		16.0	57.0		25.0	25.0	25.0	25.0	25.0	
Total Split (%)	12.8%	45.6%		12.8%	45.6%		20.0%	20.0%	20.0%	20.0%	20.0%	
Maximum Green (s)	10.0	51.0		10.0	51.0		19.0	19.0	19.0	19.0	19.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	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		0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0	6.0		6.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	None	None	None	None	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.14	0.80		0.74	0.61		0.88	0.51			0.21	
Control Delay	48.1	28.2		64.8	18.4		66.1	8.4			5.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay	48.1	28.2		64.8	18.4		66.1	8.4			5.7	
Queue Length 50th (ft)	10	269		76	164		137	0			0	
Queue Length 95th (ft)	40	542		#266	531		130	0			0	
Internal Link Dist (ft)		2720			2020		2120				220	
Turn Bay Length (ft)	75			275					300			
Base Capacity (vph)	205	2052		198	2100		306	580			333	
Starvation Cap Reductn	0	0		0	0		0	0			0	
Spillback Cap Reductn	0	0		0	0		0	0			0	
Storage Cap Reductn	0	0		0	0		0	0			0	
Reduced v/c Ratio	0.09	0.58		0.74	0.57		0.88	0.51			0.21	
<b>Intersection Summary</b>												
Cycle Length: 125												

2021 Existing Saturday Midday Peak Hour  
 2: Enterprise Drive & Route 139

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Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Satd. Flow (RTOR)	
Adj. Flow (vph)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	27.0
Total Split (s)	27.0
Total Split (%)	22%
Maximum Green (s)	25.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	7.0
Flash Dont Walk (s)	18.0
Pedestrian Calls (#/hr)	3
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
<b>Intersection Summary</b>	

## 2021 Existing Saturday Midday Peak Hour 2: Enterprise Drive & Route 139

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Actuated Cycle Length: 90.8

Natural Cycle: 110

Control Type: Actuated-Uncoordinated




















# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: Enterprise Drive & Route 139

 Ø2 25 s	 Ø3 16 s	 Ø4 57 s	 Ø9 27 s
 Ø6 25 s	 Ø7 16 s	 Ø8 57 s	

2021 Existing Saturday Midday Peak Hour  
2: Enterprise Drive & Route 139

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	1034	80	139	1129	9	106	1	118	16	0	25
Future Volume (vph)	18	1034	80	139	1129	9	106	1	118	16	0	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	11	12	12	12	12	12	13	13	13
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0	6.0		6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	1.00		1.00	
Frt	1.00	0.99		1.00	1.00			1.00	0.85		0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00		0.98	
Satd. Flow (prot)	1805	3536		1745	3570			1810	1615		1767	
Flt Permitted	0.95	1.00		0.95	1.00			0.75	1.00		0.66	
Satd. Flow (perm)	1805	3536		1745	3570			1420	1615		1195	
Peak-hour factor, PHF	0.93	0.93	0.93	0.95	0.95	0.95	0.40	0.40	0.40	0.60	0.60	0.60
Adj. Flow (vph)	19	1112	86	146	1188	9	265	2	295	27	0	42
RTOR Reduction (vph)	0	4	0	0	0	0	0	0	235	0	55	0
Lane Group Flow (vph)	19	1194	0	146	1197	0	0	268	60	0	14	0
Heavy Vehicles (%)	0%	1%	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2		6		6
Permitted Phases							2		2		6	
Actuated Green, G (s)	2.7	42.5		10.3	50.1			19.6	19.6		19.6	
Effective Green, g (s)	2.7	42.5		10.3	50.1			19.6	19.6		19.6	
Actuated g/C Ratio	0.03	0.44		0.11	0.52			0.20	0.20		0.20	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0	6.0		6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	50	1565		187	1863			289	329		243	
v/s Ratio Prot	0.01	c0.34		c0.08	c0.34							
v/s Ratio Perm								c0.19	0.04		0.01	
v/c Ratio	0.38	0.76		0.78	0.64			0.93	0.18		0.06	
Uniform Delay, d1	45.8	22.5		41.7	16.5			37.5	31.6		30.8	
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	4.8	2.3		18.8	0.8			34.0	0.3		0.1	
Delay (s)	50.6	24.8		60.5	17.3			71.5	31.9		30.9	
Level of Service	D	C		E	B			E	C		C	
Approach Delay (s)		25.2			22.0			50.7			30.9	
Approach LOS		C			C			D			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			28.5		HCM 2000 Level of Service				C			
HCM 2000 Volume to Capacity ratio			0.77									
Actuated Cycle Length (s)			96.0		Sum of lost time (s)				20.0			
Intersection Capacity Utilization			66.4%		ICU Level of Service				C			
Analysis Period (min)			15									

c Critical Lane Group

2029 No Build Weekday Morning Peak Hour  
2: Enterprise Drive & Route 139

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	741	94	22	1154	4	77	0	15	16	1	15
Future Volume (vph)	7	741	94	22	1154	4	77	0	15	16	1	15
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.983							0.850		0.936	
Flt Protected	0.950			0.950				0.950			0.976	
Satd. Flow (prot)	1805	3420	0	1662	3574	0	0	1752	1509	0	1794	0
Flt Permitted	0.950			0.950				0.731			0.800	
Satd. Flow (perm)	1805	3420	0	1662	3574	0	0	1348	1509	0	1470	0
Satd. Flow (RTOR)		13							96		19	
Adj. Flow (vph)	7	788	100	24	1282	4	97	0	19	20	1	19
Lane Group Flow (vph)	7	888	0	24	1286	0	0	97	19	0	40	0
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2		2	6		
Detector Phase	7	4		3	8		2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	1.0	12.0		1.0	12.0		12.0	12.0	12.0	12.0	12.0	
Minimum Split (s)	7.0	18.0		7.0	18.0		18.0	18.0	18.0	18.0	18.0	
Total Split (s)	16.0	57.0		16.0	57.0		25.0	25.0	25.0	25.0	25.0	
Total Split (%)	12.8%	45.6%		12.8%	45.6%		20.0%	20.0%	20.0%	20.0%	20.0%	
Maximum Green (s)	10.0	51.0		10.0	51.0		19.0	19.0	19.0	19.0	19.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	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		0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0	6.0		6.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	None	None	None	None	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.03	0.45		0.12	0.58			0.29	0.04		0.11	
Control Delay	40.7	15.3		38.9	15.0			33.1	0.2		22.1	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	40.7	15.3		38.9	15.0			33.1	0.2		22.1	
Queue Length 50th (ft)	2	77		7	132			26	0		5	
Queue Length 95th (ft)	22	363		47	577			110	0		41	
Internal Link Dist (ft)		2720			2020			2120			220	
Turn Bay Length (ft)	75			275					300			
Base Capacity (vph)	350	2835		323	2960			498	618		554	
Starvation Cap Reductn	0	0		0	0			0	0		0	
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.02	0.31		0.07	0.43			0.19	0.03		0.07	
<b>Intersection Summary</b>												
Cycle Length: 125												

2029 No Build Weekday Morning Peak Hour  
 2: Enterprise Drive & Route 139

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Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Satd. Flow (RTOR)	
Adj. Flow (vph)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	27.0
Total Split (s)	27.0
Total Split (%)	22%
Maximum Green (s)	25.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	7.0
Flash Dont Walk (s)	18.0
Pedestrian Calls (#/hr)	4
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
<b>Intersection Summary</b>	

## 2029 No Build Weekday Morning Peak Hour 2: Enterprise Drive & Route 139

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Actuated Cycle Length: 64

Natural Cycle: 90




















Control Type: Actuated-Uncoordinated

Splits and Phases: 2: Enterprise Drive & Route 139

 Ø2 25 s	 Ø3 16 s	 Ø4 57 s	 Ø9 27 s
 Ø6 25 s	 Ø7 16 s	 Ø8 57 s	



2029 No Build Weekday Morning Peak Hour  
2: Enterprise Drive & Route 139

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	7	741	94	22	1154	4	77	0	15	16	1	15	
Future Volume (vph)	7	741	94	22	1154	4	77	0	15	16	1	15	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width	12	12	12	11	12	12	12	12	12	13	13	13	
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0	6.0		6.0		
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	1.00		1.00		
Frt	1.00	0.98		1.00	1.00			1.00	0.85		0.94		
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00		0.98		
Satd. Flow (prot)	1805	3420		1662	3573			1752	1509		1793		
Flt Permitted	0.95	1.00		0.95	1.00			0.73	1.00		0.80		
Satd. Flow (perm)	1805	3420		1662	3573			1348	1509		1470		
Peak-hour factor, PHF	0.94	0.94	0.94	0.90	0.90	0.90	0.79	0.79	0.79	0.80	0.80	0.80	
Adj. Flow (vph)	7	788	100	24	1282	4	97	0	19	20	1	19	
RTOR Reduction (vph)	0	6	0	0	0	0	0	0	16	0	16	0	
Lane Group Flow (vph)	7	882	0	24	1286	0	0	97	3	0	24	0	
Heavy Vehicles (%)	0%	4%	2%	5%	1%	0%	3%	0%	7%	0%	0%	0%	
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA		
Protected Phases	7	4		3	8			2			6		
Permitted Phases							2		2	6			
Actuated Green, G (s)	0.7	35.6		2.4	37.3			10.3	10.3		10.3		
Effective Green, g (s)	0.7	35.6		2.4	37.3			10.3	10.3		10.3		
Actuated g/C Ratio	0.01	0.50		0.03	0.53			0.15	0.15		0.15		
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0	6.0		6.0		
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0		
Lane Grp Cap (vph)	17	1717		56	1879			195	219		213		
v/s Ratio Prot	0.00	0.26		c0.01	c0.36								
v/s Ratio Perm								c0.07	0.00		0.02		
v/c Ratio	0.41	0.51		0.43	0.68			0.50	0.01		0.11		
Uniform Delay, d1	34.9	11.8		33.6	12.4			27.9	25.9		26.3		
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00		
Incremental Delay, d2	15.4	0.3		5.2	1.0			2.0	0.0		0.2		
Delay (s)	50.3	12.1		38.8	13.5			29.9	26.0		26.6		
Level of Service	D	B		D	B			C	C		C		
Approach Delay (s)		12.4			14.0			29.3			26.6		
Approach LOS		B			B			C			C		
<b>Intersection Summary</b>													
HCM 2000 Control Delay			14.3									HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.62										
Actuated Cycle Length (s)			70.9									Sum of lost time (s)	20.0
Intersection Capacity Utilization			58.5%									ICU Level of Service	B
Analysis Period (min)			15										

c Critical Lane Group

2029 No Build Weekday Evening Peak Hour  
2: Enterprise Drive & Route 139

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	1360	101	55	1024	19	108	2	51	22	0	13
Future Volume (vph)	17	1360	101	55	1024	19	108	2	51	22	0	13
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.990			0.997				0.850		0.951	
Flt Protected	0.950			0.950				0.953			0.969	
Satd. Flow (prot)	1805	3574	0	1745	3564	0	0	1793	1615	0	1809	0
Flt Permitted	0.950			0.950				0.691			0.746	
Satd. Flow (perm)	1805	3574	0	1745	3564	0	0	1300	1615	0	1393	0
Satd. Flow (RTOR)		7			2				100		100	
Adj. Flow (vph)	18	1447	107	59	1089	20	133	2	63	33	0	19
Lane Group Flow (vph)	18	1554	0	59	1109	0	0	135	63	0	52	0
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2		2	6		
Detector Phase	7	4		3	8		2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	1.0	12.0		1.0	12.0		12.0	12.0	12.0	12.0	12.0	
Minimum Split (s)	7.0	18.0		7.0	18.0		18.0	18.0	18.0	18.0	18.0	
Total Split (s)	12.0	52.0		12.0	52.0		29.0	29.0	29.0	29.0	29.0	
Total Split (%)	10.0%	43.3%		10.0%	43.3%		24.2%	24.2%	24.2%	24.2%	24.2%	
Maximum Green (s)	6.0	46.0		6.0	46.0		23.0	23.0	23.0	23.0	23.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	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		0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0	6.0		6.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	None	None	None	None	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.15	0.81		0.48	0.52			0.60	0.17		0.16	
Control Delay	48.6	24.2		58.9	15.9			48.5	3.5		1.5	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	48.6	24.2		58.9	15.9			48.5	3.5		1.5	
Queue Length 50th (ft)	9	319		31	116			67	0		0	
Queue Length 95th (ft)	39	#877		#115	488			144	6		0	
Internal Link Dist (ft)		2720			2020			2120			220	
Turn Bay Length (ft)	75			275					300			
Base Capacity (vph)	126	1921		122	2119			348	506		446	
Starvation Cap Reductn	0	0		0	0			0	0		0	
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.14	0.81		0.48	0.52			0.39	0.12		0.12	
<b>Intersection Summary</b>												
Cycle Length: 120												

2029 No Build Weekday Evening Peak Hour  
 2: Enterprise Drive & Route 139

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Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Satd. Flow (RTOR)	
Adj. Flow (vph)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	27.0
Total Split (s)	27.0
Total Split (%)	23%
Maximum Green (s)	25.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	7.0
Flash Dont Walk (s)	18.0
Pedestrian Calls (#/hr)	4
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
<b>Intersection Summary</b>	

## 2029 No Build Weekday Evening Peak Hour 2: Enterprise Drive & Route 139

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Actuated Cycle Length: 88.4

Natural Cycle: 100

Control Type: Actuated-Uncoordinated




















# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: Enterprise Drive & Route 139

 Ø2 29 s	 Ø3 12 s	 Ø4 52 s	 Ø9 27 s
 Ø6 29 s	 Ø7 12 s	 Ø8 52 s	

2029 No Build Weekday Evening Peak Hour  
2: Enterprise Drive & Route 139

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	1360	101	55	1024	19	108	2	51	22	0	13
Future Volume (vph)	17	1360	101	55	1024	19	108	2	51	22	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	11	12	12	12	12	12	13	13	13
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0	6.0		6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	1.00		1.00	
Fr <sub>t</sub>	1.00	0.99		1.00	1.00			1.00	0.85		0.95	
Fl <sub>t</sub> Protected	0.95	1.00		0.95	1.00			0.95	1.00		0.97	
Satd. Flow (prot)	1805	3573		1745	3565			1793	1615		1809	
Fl <sub>t</sub> Permitted	0.95	1.00		0.95	1.00			0.69	1.00		0.75	
Satd. Flow (perm)	1805	3573		1745	3565			1300	1615		1393	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.81	0.81	0.81	0.67	0.67	0.67
Adj. Flow (vph)	18	1447	107	59	1089	20	133	2	63	33	0	19
RTOR Reduction (vph)	0	3	0	0	1	0	0	0	53	0	44	0
Lane Group Flow (vph)	18	1551	0	59	1108	0	0	135	10	0	8	0
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2		2		6	
Actuated Green, G (s)	2.1	50.0		4.7	52.6			15.3	15.3		15.3	
Effective Green, g (s)	2.1	50.0		4.7	52.6			15.3	15.3		15.3	
Actuated g/C Ratio	0.02	0.53		0.05	0.56			0.16	0.16		0.16	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0	6.0		6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	40	1906		87	2001			212	263		227	
v/s Ratio Prot	0.01	c0.43		c0.03	c0.31							
v/s Ratio Perm								c0.10	0.01		0.01	
v/c Ratio	0.45	0.81		0.68	0.55			0.64	0.04		0.04	
Uniform Delay, d <sub>1</sub>	45.2	18.0		43.8	13.1			36.6	33.0		33.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d <sub>2</sub>	7.9	2.8		19.0	0.3			6.1	0.1		0.1	
Delay (s)	53.1	20.8		62.7	13.4			42.7	33.1		33.1	
Level of Service	D	C		E	B			D	C		C	
Approach Delay (s)		21.2			15.9			39.7			33.1	
Approach LOS		C			B			D			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			20.5		HCM 2000 Level of Service				C			
HCM 2000 Volume to Capacity ratio			0.73									
Actuated Cycle Length (s)			93.7		Sum of lost time (s)				20.0			
Intersection Capacity Utilization			75.8%		ICU Level of Service				D			
Analysis Period (min)			15									

c Critical Lane Group

2029 No Build Saturday Midday Peak Hour  
2: Enterprise Drive & Route 139

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	1120	87	151	1223	9	115	1	128	16	0	25
Future Volume (vph)	18	1120	87	151	1223	9	115	1	128	16	0	25
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989			0.999				0.850		0.918	
Flt Protected	0.950			0.950				0.953			0.981	
Satd. Flow (prot)	1805	3535	0	1745	3571	0	0	1811	1615	0	1768	0
Flt Permitted	0.950			0.950				0.744			0.555	
Satd. Flow (perm)	1805	3535	0	1745	3571	0	0	1414	1615	0	1000	0
Satd. Flow (RTOR)		8			1				320		96	
Adj. Flow (vph)	19	1204	94	159	1287	9	288	3	320	27	0	42
Lane Group Flow (vph)	19	1298	0	159	1296	0	0	291	320	0	69	0
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2		2	6		
Detector Phase	7	4		3	8		2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	1.0	12.0		1.0	12.0		12.0	12.0	12.0	12.0	12.0	
Minimum Split (s)	7.0	18.0		7.0	18.0		18.0	18.0	18.0	18.0	18.0	
Total Split (s)	16.0	57.0		16.0	57.0		25.0	25.0	25.0	25.0	25.0	
Total Split (%)	12.8%	45.6%		12.8%	45.6%		20.0%	20.0%	20.0%	20.0%	20.0%	
Maximum Green (s)	10.0	51.0		10.0	51.0		19.0	19.0	19.0	19.0	19.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	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		0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0	6.0		6.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	None	None	None	None	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.15	0.81		0.85	0.63			1.01	0.55		0.25	
Control Delay	50.2	28.2		81.5	18.6			97.0	8.8		6.3	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	50.2	28.2		81.5	18.6			97.0	8.8		6.3	
Queue Length 50th (ft)	10	305		90	185			167	0		0	
Queue Length 95th (ft)	40	#616		#291	597			141	0		0	
Internal Link Dist (ft)		2720			2020			2120			220	
Turn Bay Length (ft)	75			275					300			
Base Capacity (vph)	193	1939		187	2069			288	584		280	
Starvation Cap Reductn	0	0		0	0			0	0		0	
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.10	0.67		0.85	0.63			1.01	0.55		0.25	
<b>Intersection Summary</b>												
Cycle Length: 125												

2029 No Build Saturday Midday Peak Hour  
 2: Enterprise Drive & Route 139

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Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Satd. Flow (RTOR)	
Adj. Flow (vph)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	27.0
Total Split (s)	27.0
Total Split (%)	22%
Maximum Green (s)	25.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	7.0
Flash Dont Walk (s)	18.0
Pedestrian Calls (#/hr)	3
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
<b>Intersection Summary</b>	

## 2029 No Build Saturday Midday Peak Hour 2: Enterprise Drive & Route 139

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Actuated Cycle Length: 95.4

Natural Cycle: 130

Control Type: Actuated-Uncoordinated

# 95th percentile volume exceeds capacity, queue may be longer.




















Queue shown is maximum after two cycles.

Splits and Phases: 2: Enterprise Drive & Route 139

 25 s	 16 s	 57 s	 27 s
 25 s	 16 s	 57 s	



2029 No Build Saturday Midday Peak Hour  
2: Enterprise Drive & Route 139

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	1120	87	151	1223	9	115	1	128	16	0	25
Future Volume (vph)	18	1120	87	151	1223	9	115	1	128	16	0	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	11	12	12	12	12	12	13	13	13
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0	6.0		6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	1.00		1.00	
Frt	1.00	0.99		1.00	1.00			1.00	0.85		0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00		0.98	
Satd. Flow (prot)	1805	3535		1745	3571			1810	1615		1767	
Flt Permitted	0.95	1.00		0.95	1.00			0.74	1.00		0.55	
Satd. Flow (perm)	1805	3535		1745	3571			1414	1615		1000	
Peak-hour factor, PHF	0.93	0.93	0.93	0.95	0.95	0.95	0.40	0.40	0.40	0.60	0.60	0.60
Adj. Flow (vph)	19	1204	94	159	1287	9	288	2	320	27	0	42
RTOR Reduction (vph)	0	4	0	0	0	0	0	0	258	0	56	0
Lane Group Flow (vph)	19	1294	0	159	1296	0	0	291	62	0	13	0
Heavy Vehicles (%)	0%	1%	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2		2		6	
Actuated Green, G (s)	2.8	47.3		10.2	54.7			19.5	19.5		19.5	
Effective Green, g (s)	2.8	47.3		10.2	54.7			19.5	19.5		19.5	
Actuated g/C Ratio	0.03	0.47		0.10	0.54			0.19	0.19		0.19	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0	6.0		6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	50	1658		176	1937			273	312		193	
v/s Ratio Prot	0.01	c0.37		c0.09	0.36							
v/s Ratio Perm								c0.21	0.04		0.01	
v/c Ratio	0.38	0.78		0.90	0.67			1.07	0.20		0.07	
Uniform Delay, d1	48.1	22.4		44.8	16.5			40.6	34.1		33.2	
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	4.8	2.5		41.2	0.9			73.0	0.3		0.2	
Delay (s)	52.9	24.9		86.0	17.4			113.6	34.4		33.4	
Level of Service	D	C		F	B			F	C		C	
Approach Delay (s)		25.3			24.9			72.1			33.4	
Approach LOS		C			C			E			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			33.6			HCM 2000 Level of Service				C		
HCM 2000 Volume to Capacity ratio			0.83									
Actuated Cycle Length (s)			100.8			Sum of lost time (s)			20.0			
Intersection Capacity Utilization			70.2%			ICU Level of Service				C		
Analysis Period (min)			15									

c Critical Lane Group

2029 Build Weekday Morning Peak Hour  
2: Enterprise Drive & Route 139

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	741	112	22	1154	4	133	0	15	16	1	15
Future Volume (vph)	7	741	112	22	1154	4	133	0	15	16	1	15
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.980							0.850		0.936	
Flt Protected	0.950			0.950				0.950			0.976	
Satd. Flow (prot)	1805	3410	0	1662	3574	0	0	1752	1509	0	1794	0
Flt Permitted	0.950			0.950				0.731			0.818	
Satd. Flow (perm)	1805	3410	0	1662	3574	0	0	1348	1509	0	1503	0
Satd. Flow (RTOR)		16							96		19	
Adj. Flow (vph)	7	788	119	24	1282	4	168	0	19	20	1	19
Lane Group Flow (vph)	7	907	0	24	1286	0	0	168	19	0	40	0
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2		2	6		
Detector Phase	7	4		3	8		2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	1.0	12.0		1.0	12.0		12.0	12.0	12.0	12.0	12.0	
Minimum Split (s)	7.0	18.0		7.0	18.0		18.0	18.0	18.0	18.0	18.0	
Total Split (s)	16.0	57.0		16.0	57.0		25.0	25.0	25.0	25.0	25.0	
Total Split (%)	12.8%	45.6%		12.8%	45.6%		20.0%	20.0%	20.0%	20.0%	20.0%	
Maximum Green (s)	10.0	51.0		10.0	51.0		19.0	19.0	19.0	19.0	19.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	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		0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0	6.0		6.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	None	None	None	None	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.04	0.56		0.14	0.70			0.52	0.04		0.11	
Control Delay	42.9	18.1		41.6	18.6			37.1	0.2		21.7	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	42.9	18.1		41.6	18.6			37.1	0.2		21.7	
Queue Length 50th (ft)	2	100		8	166			52	0		6	
Queue Length 95th (ft)	22	373		47	577			#195	0		41	
Internal Link Dist (ft)		2720			2020			2120			220	
Turn Bay Length (ft)	75			275					300			
Base Capacity (vph)	278	2625		256	2748			394	509		453	
Starvation Cap Reductn	0	0		0	0			0	0		0	
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.03	0.35		0.09	0.47			0.43	0.04		0.09	
<b>Intersection Summary</b>												
Cycle Length: 125												

2029 Build Weekday Morning Peak Hour  
 2: Enterprise Drive & Route 139

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Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Satd. Flow (RTOR)	
Adj. Flow (vph)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	27.0
Total Split (s)	27.0
Total Split (%)	22%
Maximum Green (s)	25.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	7.0
Flash Dont Walk (s)	18.0
Pedestrian Calls (#/hr)	4
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
<b>Intersection Summary</b>	

## 2029 Build Weekday Morning Peak Hour 2: Enterprise Drive & Route 139

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Actuated Cycle Length: 72.1

Natural Cycle: 90

Control Type: Actuated-Uncoordinated




















# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: Enterprise Drive & Route 139

 Ø2 25 s	 Ø3 16 s	 Ø4 57 s	 Ø9 27 s
 Ø6 25 s	 Ø7 16 s	 Ø8 57 s	

2029 Build Weekday Morning Peak Hour  
2: Enterprise Drive & Route 139

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	741	112	22	1154	4	133	0	15	16	1	15
Future Volume (vph)	7	741	112	22	1154	4	133	0	15	16	1	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	11	12	12	12	12	12	13	13	13
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0	6.0		6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	1.00		1.00	
Frt	1.00	0.98		1.00	1.00			1.00	0.85		0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00		0.98	
Satd. Flow (prot)	1805	3411		1662	3573			1752	1509		1793	
Flt Permitted	0.95	1.00		0.95	1.00			0.73	1.00		0.82	
Satd. Flow (perm)	1805	3411		1662	3573			1348	1509		1504	
Peak-hour factor, PHF	0.94	0.94	0.94	0.90	0.90	0.90	0.79	0.79	0.79	0.80	0.80	0.80
Adj. Flow (vph)	7	788	119	24	1282	4	168	0	19	20	1	19
RTOR Reduction (vph)	0	9	0	0	0	0	0	0	15	0	15	0
Lane Group Flow (vph)	7	898	0	24	1286	0	0	168	4	0	25	0
Heavy Vehicles (%)	0%	4%	2%	5%	1%	0%	3%	0%	7%	0%	0%	0%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2		2	6		
Actuated Green, G (s)	0.8	35.0		2.6	36.8			17.2	17.2		17.2	
Effective Green, g (s)	0.8	35.0		2.6	36.8			17.2	17.2		17.2	
Actuated g/C Ratio	0.01	0.45		0.03	0.47			0.22	0.22		0.22	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0	6.0		6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	18	1534		55	1690			298	333		332	
v/s Ratio Prot	0.00	0.26		c0.01	c0.36							
v/s Ratio Perm								c0.12	0.00		0.02	
v/c Ratio	0.39	0.59		0.44	0.76			0.56	0.01		0.08	
Uniform Delay, d1	38.3	16.0		36.9	16.9			27.0	23.7		24.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	13.4	0.6		5.5	2.1			2.4	0.0		0.1	
Delay (s)	51.6	16.6		42.3	19.0			29.4	23.7		24.1	
Level of Service	D	B		D	B			C	C		C	
Approach Delay (s)		16.8			19.4			28.8			24.1	
Approach LOS		B			B			C			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			19.2		HCM 2000 Level of Service				B			
HCM 2000 Volume to Capacity ratio			0.67									
Actuated Cycle Length (s)			77.8		Sum of lost time (s)				20.0			
Intersection Capacity Utilization			59.1%		ICU Level of Service				B			
Analysis Period (min)			15									

c Critical Lane Group

2029 Build Weekday Evening Peak Hour  
2: Enterprise Drive & Route 139

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	1360	162	55	1024	19	143	2	51	22	0	13
Future Volume (vph)	17	1360	162	55	1024	19	143	2	51	22	0	13
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.984			0.997				0.850		0.951	
Flt Protected	0.950			0.950				0.953			0.969	
Satd. Flow (prot)	1805	3552	0	1745	3564	0	0	1793	1615	0	1809	0
Flt Permitted	0.950			0.950				0.690			0.710	
Satd. Flow (perm)	1805	3552	0	1745	3564	0	0	1298	1615	0	1326	0
Satd. Flow (RTOR)		12			2				100		100	
Adj. Flow (vph)	18	1447	172	59	1089	20	177	2	63	33	0	19
Lane Group Flow (vph)	18	1619	0	59	1109	0	0	179	63	0	52	0
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2		2	6		
Detector Phase	7	4		3	8		2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	1.0	12.0		1.0	12.0		12.0	12.0	12.0	12.0	12.0	
Minimum Split (s)	7.0	18.0		7.0	18.0		18.0	18.0	18.0	18.0	18.0	
Total Split (s)	12.0	52.0		12.0	52.0		29.0	29.0	29.0	29.0	29.0	
Total Split (%)	10.0%	43.3%		10.0%	43.3%		24.2%	24.2%	24.2%	24.2%	24.2%	
Maximum Green (s)	6.0	46.0		6.0	46.0		23.0	23.0	23.0	23.0	23.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	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		0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0	6.0		6.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	None	None	None	None	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.15	0.87		0.50	0.54			0.71	0.16		0.15	
Control Delay	49.8	28.2		61.1	17.0			53.3	3.3		1.4	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	49.8	28.2		61.1	17.0			53.3	3.3		1.4	
Queue Length 50th (ft)	10	385		32	138			92	0		0	
Queue Length 95th (ft)	39	#935		#115	488			189	6		0	
Internal Link Dist (ft)		2720			2020			2120			220	
Turn Bay Length (ft)	75			275					300			
Base Capacity (vph)	123	1862		119	2062			339	496		420	
Starvation Cap Reductn	0	0		0	0			0	0		0	
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.15	0.87		0.50	0.54			0.53	0.13		0.12	
<b>Intersection Summary</b>												
Cycle Length: 120												

2029 Build Weekday Evening Peak Hour  
 2: Enterprise Drive & Route 139

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Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Satd. Flow (RTOR)	
Adj. Flow (vph)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	27.0
Total Split (s)	27.0
Total Split (%)	23%
Maximum Green (s)	25.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	7.0
Flash Dont Walk (s)	18.0
Pedestrian Calls (#/hr)	4
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
<b>Intersection Summary</b>	

## 2029 Build Weekday Evening Peak Hour 2: Enterprise Drive & Route 139

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Actuated Cycle Length: 90.7

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

# 95th percentile volume exceeds capacity, queue may be longer.




















Queue shown is maximum after two cycles.

Splits and Phases: 2: Enterprise Drive & Route 139

 Ø2 29 s	 Ø3 12 s	 Ø4 52 s	 Ø9 27 s
 Ø6 29 s	 Ø7 12 s	 Ø8 52 s	



2029 Build Weekday Evening Peak Hour  
2: Enterprise Drive & Route 139

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	1360	162	55	1024	19	143	2	51	22	0	13
Future Volume (vph)	17	1360	162	55	1024	19	143	2	51	22	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	11	12	12	12	12	12	13	13	13
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0	6.0		6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	1.00		1.00	
Fr <sub>t</sub>	1.00	0.98		1.00	1.00			1.00	0.85		0.95	
Fl <sub>t</sub> Protected	0.95	1.00		0.95	1.00			0.95	1.00		0.97	
Satd. Flow (prot)	1805	3552		1745	3565			1793	1615		1809	
Fl <sub>t</sub> Permitted	0.95	1.00		0.95	1.00			0.69	1.00		0.71	
Satd. Flow (perm)	1805	3552		1745	3565			1299	1615		1325	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.81	0.81	0.81	0.67	0.67	0.67
Adj. Flow (vph)	18	1447	172	59	1089	20	177	2	63	33	0	19
RTOR Reduction (vph)	0	6	0	0	1	0	0	0	51	0	42	0
Lane Group Flow (vph)	18	1613	0	59	1108	0	0	179	12	0	10	0
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2		2		6	
Actuated Green, G (s)	2.1	49.9		4.6	52.4			17.6	17.6		17.6	
Effective Green, g (s)	2.1	49.9		4.6	52.4			17.6	17.6		17.6	
Actuated g/C Ratio	0.02	0.52		0.05	0.55			0.18	0.18		0.18	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0	6.0		6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	39	1848		83	1947			238	296		243	
v/s Ratio Prot	0.01	c0.45		c0.03	0.31							
v/s Ratio Perm								c0.14	0.01		0.01	
v/c Ratio	0.46	0.87		0.71	0.57			0.75	0.04		0.04	
Uniform Delay, d <sub>1</sub>	46.3	20.2		45.0	14.3			37.1	32.2		32.2	
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d <sub>2</sub>	8.4	4.9		24.8	0.4			12.6	0.1		0.1	
Delay (s)	54.8	25.1		69.8	14.7			49.7	32.3		32.3	
Level of Service	D	C		E	B			D	C		C	
Approach Delay (s)		25.4			17.5			45.1			32.3	
Approach LOS		C			B			D			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			24.1			HCM 2000 Level of Service				C		
HCM 2000 Volume to Capacity ratio			0.79									
Actuated Cycle Length (s)			95.9			Sum of lost time (s)			20.0			
Intersection Capacity Utilization			77.8%			ICU Level of Service			D			
Analysis Period (min)			15									

c Critical Lane Group

2029 Build Saturday Midday Peak Hour  
2: Enterprise Drive & Route 139



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↕		↖	↕			↕	↗		↕	
Traffic Volume (vph)	18	1120	127	151	1223	9	154	1	128	16	0	25
Future Volume (vph)	18	1120	127	151	1223	9	154	1	128	16	0	25
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.985			0.999				0.850		0.918	
Flt Protected	0.950			0.950				0.953			0.981	
Satd. Flow (prot)	1805	3521	0	1745	3571	0	0	1811	1615	0	1768	0
Flt Permitted	0.950			0.950				0.741			0.258	
Satd. Flow (perm)	1805	3521	0	1745	3571	0	0	1408	1615	0	465	0
Satd. Flow (RTOR)		12			1				320		96	
Adj. Flow (vph)	19	1204	137	159	1287	9	385	3	320	27	0	42
Lane Group Flow (vph)	19	1341	0	159	1296	0	0	388	320	0	69	0
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2		2	6		
Detector Phase	7	4		3	8		2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	1.0	12.0		1.0	12.0		12.0	12.0	12.0	12.0	12.0	
Minimum Split (s)	7.0	18.0		7.0	18.0		18.0	18.0	18.0	18.0	18.0	
Total Split (s)	16.0	57.0		16.0	57.0		25.0	25.0	25.0	25.0	25.0	
Total Split (%)	12.8%	45.6%		12.8%	45.6%		20.0%	20.0%	20.0%	20.0%	20.0%	
Maximum Green (s)	10.0	51.0		10.0	51.0		19.0	19.0	19.0	19.0	19.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	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		0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0	6.0		6.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	None	None	None	None	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.15	0.81		0.88	0.62			1.40	0.56		0.41	
Control Delay	51.0	28.1		87.5	18.3			230.3	8.9		11.6	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	51.0	28.1		87.5	18.3			230.3	8.9		11.6	
Queue Length 50th (ft)	11	321		95	185			~310	0		0	
Queue Length 95th (ft)	40	#684		#291	597			#198	0		0	
Internal Link Dist (ft)		2720			2020			2120			220	
Turn Bay Length (ft)	75			275					300			
Base Capacity (vph)	188	1876		181	2083			278	576		169	
Starvation Cap Reductn	0	0		0	0			0	0		0	
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.10	0.71		0.88	0.62			1.40	0.56		0.41	

Intersection Summary

Cycle Length: 125

2029 Build Saturday Midday Peak Hour  
 2: Enterprise Drive & Route 139

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Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Satd. Flow (RTOR)	
Adj. Flow (vph)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	27.0
Total Split (s)	27.0
Total Split (%)	22%
Maximum Green (s)	25.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	7.0
Flash Dont Walk (s)	18.0
Pedestrian Calls (#/hr)	3
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
<b>Intersection Summary</b>	

## 2029 Build Saturday Midday Peak Hour 2: Enterprise Drive & Route 139

Actuated Cycle Length: 97.9

Natural Cycle: 150

Control Type: Actuated-Uncoordinated

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.




















# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: Enterprise Drive & Route 139

 Ø2 25 s	 Ø3 16 s	 Ø4 57 s	 Ø9 27 s
 Ø6 25 s	 Ø7 16 s	 Ø8 57 s	

2029 Build Saturday Midday Peak Hour  
2: Enterprise Drive & Route 139

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	1120	127	151	1223	9	154	1	128	16	0	25
Future Volume (vph)	18	1120	127	151	1223	9	154	1	128	16	0	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	11	12	12	12	12	12	13	13	13
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0	6.0		6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	1.00		1.00	
Frt	1.00	0.98		1.00	1.00			1.00	0.85		0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00		0.98	
Satd. Flow (prot)	1805	3519		1745	3571			1810	1615		1767	
Flt Permitted	0.95	1.00		0.95	1.00			0.74	1.00		0.26	
Satd. Flow (perm)	1805	3519		1745	3571			1408	1615		465	
Peak-hour factor, PHF	0.93	0.93	0.93	0.95	0.95	0.95	0.40	0.40	0.40	0.60	0.60	0.60
Adj. Flow (vph)	19	1204	137	159	1287	9	385	2	320	27	0	42
RTOR Reduction (vph)	0	6	0	0	0	0	0	0	260	0	56	0
Lane Group Flow (vph)	19	1335	0	159	1296	0	0	388	60	0	13	0
Heavy Vehicles (%)	0%	1%	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2		2	6		
Actuated Green, G (s)	2.8	49.7		10.2	57.1			19.4	19.4		19.4	
Effective Green, g (s)	2.8	49.7		10.2	57.1			19.4	19.4		19.4	
Actuated g/C Ratio	0.03	0.48		0.10	0.55			0.19	0.19		0.19	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0	6.0		6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	48	1694		172	1975			264	303		87	
v/s Ratio Prot	0.01	c0.38		c0.09	0.36							
v/s Ratio Perm								c0.28	0.04		0.03	
v/c Ratio	0.40	0.79		0.92	0.66			1.47	0.20		0.15	
Uniform Delay, d1	49.4	22.3		46.1	16.2			41.9	35.3		35.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	5.3	2.5		46.9	0.8			230.9	0.3		0.8	
Delay (s)	54.7	24.9		93.0	17.0			272.8	35.7		35.8	
Level of Service	D	C		F	B			F	D		D	
Approach Delay (s)		25.3			25.3			165.6			35.8	
Approach LOS		C			C			F			D	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			53.1			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			0.93									
Actuated Cycle Length (s)			103.2			Sum of lost time (s)			20.0			
Intersection Capacity Utilization			73.6%			ICU Level of Service				D		
Analysis Period (min)			15									

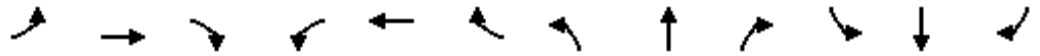
c Critical Lane Group

Route 139 at Proprietors Drive and Furnace Street

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2021 Existing Weekday Morning Peak Hour  
 3: Proprietors Drive/Furnace Street & Route 139



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	438	48	50	652	4	38	28	35	28	28	358
Future Volume (vph)	190	438	48	50	652	4	38	28	35	28	28	358
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>			0.850		0.999			0.916				0.850
Fl <sub>t</sub> Protected	0.950			0.950			0.950				0.976	
Satd. Flow (prot)	1656	3539	1545	1745	3571	0	1752	1717	0	0	1875	1672
Fl <sub>t</sub> Permitted	0.950			0.950			0.714				0.801	
Satd. Flow (perm)	1656	3539	1545	1745	3571	0	1317	1717	0	0	1539	1672
Satd. Flow (RTOR)			79					44				426
Adj. Flow (vph)	213	492	54	54	701	4	48	35	44	33	33	426
Lane Group Flow (vph)	213	492	54	54	705	0	48	79	0	0	66	426
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			2			6	7
Permitted Phases			4				2			6		6
Detector Phase	7	4	4	3	8		2	2		6	6	7
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)	10.0	23.0	23.0	10.0	23.0		23.0	23.0		29.0	29.0	10.0
Total Split (s)	24.0	46.0	46.0	22.0	44.0		30.0	30.0		30.0	30.0	24.0
Total Split (%)	19.4%	37.1%	37.1%	17.7%	35.5%		24.2%	24.2%		24.2%	24.2%	19.4%
Maximum Green (s)	19.0	41.0	41.0	17.0	39.0		25.0	25.0		25.0	25.0	19.0
Yellow Time (s)	3.0	3.0	3.0	3.0	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	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	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	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag							Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min		None	None		None	None	None
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.46	0.22	0.05	0.22	0.58		0.24	0.26			0.28	0.42
Control Delay	22.9	8.6	1.7	27.4	18.6		27.7	16.3			27.8	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	0.0
Total Delay	22.9	8.6	1.7	27.4	18.6		27.7	16.3			27.8	2.6
Queue Length 50th (ft)	61	52	0	17	105		15	11			21	0
Queue Length 95th (ft)	137	93	10	51	177		41	40			55	30
Internal Link Dist (ft)		2020			1820			2120			220	
Turn Bay Length (ft)	380		120	300			100					125
Base Capacity (vph)	622	2634	1170	587	2563		651	871			761	1124
Starvation Cap Reductn	0	0	0	0	0		0	0			0	0
Spillback Cap Reductn	0	0	0	0	0		0	0			0	0
Storage Cap Reductn	0	0	0	0	0		0	0			0	0
Reduced v/c Ratio	0.34	0.19	0.05	0.09	0.28		0.07	0.09			0.09	0.38

Intersection Summary

Cycle Length: 124

2021 Existing Weekday Morning Peak Hour  
 3: Proprietors Drive/Furnace Street & Route 139

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Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Satd. Flow (RTOR)	
Adj. Flow (vph)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	18.0
Total Split (s)	26.0
Total Split (%)	21%
Maximum Green (s)	24.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	5.0
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	0
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	



2021 Existing Weekday Morning Peak Hour  
 3: Proprietors Drive/Furnace Street & Route 139








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Actuated Cycle Length: 55.1






















Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Splits and Phases: 3: Proprietors Drive/Furnace Street & Route 139

 Ø2 30 s	 Ø3 22 s	 Ø4 46 s	 Ø9 26 s
 Ø6 30 s	 Ø7 24 s	 Ø8 44 s	

2021 Existing Weekday Morning Peak Hour  
 3: Proprietors Drive/Furnace Street & Route 139

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	438	48	50	652	4	38	28	35	28	28	358
Future Volume (vph)	190	438	48	50	652	4	38	28	35	28	28	358
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	13	11	12	12	12	14	14	14	14	14
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0			5.0	5.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00			1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.92			1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00			0.98	1.00
Satd. Flow (prot)	1656	3539	1545	1745	3571		1752	1718			1874	1672
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.71	1.00			0.80	1.00
Satd. Flow (perm)	1656	3539	1545	1745	3571		1317	1718			1539	1672
Peak-hour factor, PHF	0.89	0.89	0.89	0.93	0.93	0.93	0.79	0.79	0.79	0.84	0.84	0.84
Adj. Flow (vph)	213	492	54	54	701	4	48	35	44	33	33	426
RTOR Reduction (vph)	0	0	24	0	0	0	0	39	0	0	0	266
Lane Group Flow (vph)	213	492	30	54	705	0	48	40	0	0	66	160
Heavy Vehicles (%)	9%	2%	8%	0%	1%	0%	3%	7%	9%	4%	7%	3%
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			2			6	7
Permitted Phases			4				2			6		6
Actuated Green, G (s)	15.4	32.4	32.4	4.5	21.5		6.5	6.5			6.5	21.9
Effective Green, g (s)	15.4	32.4	32.4	4.5	21.5		6.5	6.5			6.5	21.9
Actuated g/C Ratio	0.26	0.55	0.55	0.08	0.37		0.11	0.11			0.11	0.37
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0			5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	436	1963	857	134	1314		146	191			171	770
v/s Ratio Prot	c0.13	0.14		0.03	c0.20			0.02				0.05
v/s Ratio Perm			0.02				0.04				c0.04	0.04
v/c Ratio	0.49	0.25	0.03	0.40	0.54		0.33	0.21			0.39	0.21
Uniform Delay, d1	18.2	6.7	5.9	25.7	14.5		23.9	23.6			24.1	12.4
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	0.9	0.1	0.0	2.0	0.4		1.3	0.5			1.4	0.1
Delay (s)	19.0	6.8	5.9	27.7	15.0		25.3	24.2			25.5	12.5
Level of Service	B	A	A	C	B		C	C			C	B
Approach Delay (s)		10.2			15.9			24.6			14.3	
Approach LOS		B			B			C			B	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			14.0	HCM 2000 Level of Service				B				
HCM 2000 Volume to Capacity ratio			0.52									
Actuated Cycle Length (s)			58.4	Sum of lost time (s)				17.0				
Intersection Capacity Utilization			57.0%	ICU Level of Service				B				
Analysis Period (min)			15									

c Critical Lane Group

2021 Existing Weekday Evening Peak Hour  
 3: Proprietors Drive/Furnace Street & Route 139

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	268	885	150	98	603	8	101	102	144	55	91	270
Future Volume (vph)	268	885	150	98	603	8	101	102	144	55	91	270
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Fr't			0.850		0.998			0.912				0.850
Flt Protected	0.950			0.950			0.950				0.982	
Satd. Flow (prot)	1805	3610	1669	1745	3568	0	1787	1848	0	0	1990	1723
Flt Permitted	0.950			0.950			0.531				0.648	
Satd. Flow (perm)	1805	3610	1669	1745	3568	0	999	1848	0	0	1313	1723
Satd. Flow (RTOR)			81		1			51				403
Adj. Flow (vph)	279	922	156	110	678	9	110	111	157	82	136	403
Lane Group Flow (vph)	279	922	156	110	687	0	110	268	0	0	218	403
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			2			6	7
Permitted Phases			4				2			6		6
Detector Phase	7	4	4	3	8		2	2		6	6	7
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)	10.0	23.0	23.0	10.0	23.0		23.0	23.0		29.0	29.0	10.0
Total Split (s)	24.0	46.0	46.0	22.0	44.0		30.0	30.0		30.0	30.0	24.0
Total Split (%)	19.4%	37.1%	37.1%	17.7%	35.5%		24.2%	24.2%		24.2%	24.2%	19.4%
Maximum Green (s)	19.0	41.0	41.0	17.0	39.0		25.0	25.0		25.0	25.0	19.0
Yellow Time (s)	3.0	3.0	3.0	3.0	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	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	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	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag							Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min		None	None		None	None	None
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.70	0.68	0.23	0.50	0.69		0.38	0.47			0.57	0.35
Control Delay	44.8	27.2	11.6	45.8	32.0		33.9	26.4			37.0	2.7
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	0.0
Total Delay	44.8	27.2	11.6	45.8	32.0		33.9	26.4			37.0	2.7
Queue Length 50th (ft)	129	203	25	52	164		43	86			91	0
Queue Length 95th (ft)	#375	388	87	132	278		134	238			171	0
Internal Link Dist (ft)		2020			1820			2120			220	
Turn Bay Length (ft)	380		120	300			100					125
Base Capacity (vph)	400	1728	841	346	1626		291	575			383	1158
Starvation Cap Reductn	0	0	0	0	0		0	0			0	0
Spillback Cap Reductn	0	0	0	0	0		0	0			0	0
Storage Cap Reductn	0	0	0	0	0		0	0			0	0
Reduced v/c Ratio	0.70	0.53	0.19	0.32	0.42		0.38	0.47			0.57	0.35
<b>Intersection Summary</b>												
Cycle Length: 124												

2021 Existing Weekday Evening Peak Hour  
 3: Proprietors Drive/Furnace Street & Route 139

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Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Satd. Flow (RTOR)	
Adj. Flow (vph)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	18.0
Total Split (s)	26.0
Total Split (%)	21%
Maximum Green (s)	24.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	5.0
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	2
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

## 2021 Existing Weekday Evening Peak Hour 3: Proprietors Drive/Furnace Street & Route 139

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Actuated Cycle Length: 87.7








Natural Cycle: 90

Control Type: Actuated-Uncoordinated






















# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: Proprietors Drive/Furnace Street & Route 139

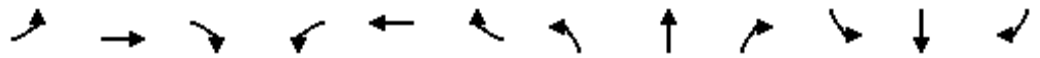
 Ø2 30 s	 Ø3 22 s	 Ø4 46 s	 Ø9 26 s
 Ø6 30 s	 Ø7 24 s	 Ø8 44 s	

2021 Existing Weekday Evening Peak Hour  
 3: Proprietors Drive/Furnace Street & Route 139

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	268	885	150	98	603	8	101	102	144	55	91	270
Future Volume (vph)	268	885	150	98	603	8	101	102	144	55	91	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	13	11	12	12	12	14	14	14	14	14
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0			5.0	5.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00			1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.91			1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00			0.98	1.00
Satd. Flow (prot)	1805	3610	1669	1745	3568		1787	1849			1989	1723
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.53	1.00			0.65	1.00
Satd. Flow (perm)	1805	3610	1669	1745	3568		999	1849			1314	1723
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.92	0.92	0.92	0.67	0.67	0.67
Adj. Flow (vph)	279	922	156	110	678	9	110	111	157	82	136	403
RTOR Reduction (vph)	0	0	51	0	1	0	0	36	0	0	0	199
Lane Group Flow (vph)	279	922	105	110	686	0	110	232	0	0	218	204
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			2			6	7
Permitted Phases			4				2			6		6
Actuated Green, G (s)	19.5	32.8	32.8	11.2	24.5		25.6	25.6			25.6	45.1
Effective Green, g (s)	19.5	32.8	32.8	11.2	24.5		25.6	25.6			25.6	45.1
Actuated g/C Ratio	0.22	0.37	0.37	0.13	0.28		0.29	0.29			0.29	0.51
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0			5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	395	1330	615	219	982		287	531			377	969
v/s Ratio Prot	c0.15	c0.26		0.06	0.19			0.13				0.05
v/s Ratio Perm			0.06				0.11				c0.17	0.07
v/c Ratio	0.71	0.69	0.17	0.50	0.70		0.38	0.44			0.58	0.21
Uniform Delay, d1	32.1	23.8	18.9	36.3	28.9		25.4	25.8			27.1	12.1
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	5.7	1.6	0.1	1.8	2.2		0.9	0.6			2.1	0.1
Delay (s)	37.8	25.4	19.1	38.1	31.1		26.2	26.4			29.2	12.2
Level of Service	D	C	B	D	C		C	C			C	B
Approach Delay (s)		27.2			32.1			26.4			18.2	
Approach LOS		C			C			C			B	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			26.6			HCM 2000 Level of Service					C	
HCM 2000 Volume to Capacity ratio			0.66									
Actuated Cycle Length (s)			89.0			Sum of lost time (s)			17.0			
Intersection Capacity Utilization			70.5%			ICU Level of Service					C	
Analysis Period (min)			15									

c Critical Lane Group

2021 Existing Saturday Midday Peak Hour  
 3: Proprietors Drive/Furnace Street & Route 139



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗		↖	↗			↖	↗
Traffic Volume (vph)	264	784	106	87	713	14	85	72	88	40	74	385
Future Volume (vph)	264	784	106	87	713	14	85	72	88	40	74	385
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Fr't			0.850		0.997			0.918				0.850
Flt Protected	0.950			0.950			0.950				0.983	
Satd. Flow (prot)	1787	3574	1669	1745	3599	0	1805	1860	0	0	1992	1706
Flt Permitted	0.950			0.950			0.676				0.690	
Satd. Flow (perm)	1787	3574	1669	1745	3599	0	1284	1860	0	0	1398	1706
Satd. Flow (RTOR)			79		2			44				428
Adj. Flow (vph)	278	825	112	91	743	15	102	87	106	44	82	428
Lane Group Flow (vph)	278	825	112	91	758	0	102	193	0	0	126	428
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			2			6	7
Permitted Phases			4				2			6		6
Detector Phase	7	4	4	3	8		2	2		6	6	7
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)	10.0	23.0	23.0	10.0	23.0		23.0	23.0		29.0	29.0	10.0
Total Split (s)	24.0	46.0	46.0	22.0	44.0		30.0	30.0		30.0	30.0	24.0
Total Split (%)	19.4%	37.1%	37.1%	17.7%	35.5%		24.2%	24.2%		24.2%	24.2%	19.4%
Maximum Green (s)	19.0	41.0	41.0	17.0	39.0		25.0	25.0		25.0	25.0	19.0
Yellow Time (s)	3.0	3.0	3.0	3.0	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	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	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	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag							Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min		None	None		None	None	None
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.58	0.47	0.13	0.39	0.68		0.46	0.54			0.53	0.39
Control Delay	34.1	17.3	7.5	38.8	26.3		38.1	29.5			39.3	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	0.0
Total Delay	34.1	17.3	7.5	38.8	26.3		38.1	29.5			39.3	3.0
Queue Length 50th (ft)	96	118	7	35	139		38	55			47	0
Queue Length 95th (ft)	#354	318	53	111	302		109	149			142	59
Internal Link Dist (ft)		2020			1820			2120			220	
Turn Bay Length (ft)	380		120	300			100					125
Base Capacity (vph)	483	2086	1006	422	1999		456	690			497	1084
Starvation Cap Reductn	0	0	0	0	0		0	0			0	0
Spillback Cap Reductn	0	0	0	0	0		0	0			0	0
Storage Cap Reductn	0	0	0	0	0		0	0			0	0
Reduced v/c Ratio	0.58	0.40	0.11	0.22	0.38		0.22	0.28			0.25	0.39

Intersection Summary

Cycle Length: 124

2021 Existing Saturday Midday Peak Hour  
 3: Proprietors Drive/Furnace Street & Route 139

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Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Satd. Flow (RTOR)	
Adj. Flow (vph)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	18.0
Total Split (s)	26.0
Total Split (%)	21%
Maximum Green (s)	24.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	5.0
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	5
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	



## 2021 Existing Saturday Midday Peak Hour 3: Proprietors Drive/Furnace Street & Route 139

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Actuated Cycle Length: 74.2








Natural Cycle: 90

Control Type: Actuated-Uncoordinated






















# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: Proprietors Drive/Furnace Street & Route 139

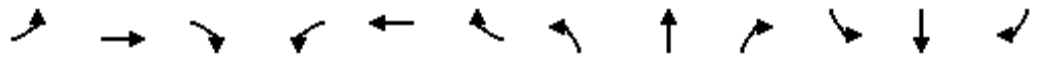
 Ø2 30 s	 Ø3 22 s	 Ø4 46 s	 Ø9 26 s
 Ø6 30 s	 Ø7 24 s	 Ø8 44 s	

2021 Existing Saturday Midday Peak Hour  
 3: Proprietors Drive/Furnace Street & Route 139

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	264	784	106	87	713	14	85	72	88	40	74	385
Future Volume (vph)	264	784	106	87	713	14	85	72	88	40	74	385
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	13	11	12	12	12	14	14	14	14	14
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0			5.0	5.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00			1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.92			1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00			0.98	1.00
Satd. Flow (prot)	1787	3574	1669	1745	3599		1805	1860			1992	1706
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.68	1.00			0.69	1.00
Satd. Flow (perm)	1787	3574	1669	1745	3599		1285	1860			1398	1706
Peak-hour factor, PHF	0.95	0.95	0.95	0.96	0.96	0.96	0.83	0.83	0.83	0.90	0.90	0.90
Adj. Flow (vph)	278	825	112	91	743	15	102	87	106	44	82	428
RTOR Reduction (vph)	0	0	42	0	1	0	0	37	0	0	0	243
Lane Group Flow (vph)	278	825	70	91	757	0	102	156	0	0	126	185
Heavy Vehicles (%)	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			2			6	7
Permitted Phases			4				2			6		6
Actuated Green, G (s)	20.1	36.2	36.2	8.2	24.3		12.8	12.8			12.8	32.9
Effective Green, g (s)	20.1	36.2	36.2	8.2	24.3		12.8	12.8			12.8	32.9
Actuated g/C Ratio	0.26	0.47	0.47	0.11	0.32		0.17	0.17			0.17	0.43
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0			5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	470	1695	791	187	1146		215	312			234	847
v/s Ratio Prot	c0.16	0.23		0.05	c0.21			0.08				0.06
v/s Ratio Perm			0.04				0.08				c0.09	0.05
v/c Ratio	0.59	0.49	0.09	0.49	0.66		0.47	0.50			0.54	0.22
Uniform Delay, d1	24.5	13.7	11.0	32.1	22.4		28.7	28.8			29.0	13.6
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	2.0	0.2	0.0	2.0	1.4		1.7	1.3			2.4	0.1
Delay (s)	26.5	13.9	11.1	34.1	23.9		30.4	30.1			31.4	13.8
Level of Service	C	B	B	C	C		C	C			C	B
Approach Delay (s)		16.5			25.0			30.2			17.8	
Approach LOS		B			C			C			B	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			20.6			HCM 2000 Level of Service					C	
HCM 2000 Volume to Capacity ratio			0.59									
Actuated Cycle Length (s)			76.3			Sum of lost time (s)			17.0			
Intersection Capacity Utilization			66.7%			ICU Level of Service					C	
Analysis Period (min)			15									

c Critical Lane Group

2029 No Build Weekday Morning Peak Hour  
 3: Proprietors Drive/Furnace Street & Route 139



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	206	474	52	54	706	4	41	30	38	30	30	388
Future Volume (vph)	206	474	52	54	706	4	41	30	38	30	30	388
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>			0.850		0.999			0.916				0.850
Fl <sub>t</sub> Protected	0.950			0.950			0.950				0.976	
Satd. Flow (prot)	1656	3539	1545	1745	3571	0	1752	1717	0	0	1875	1672
Fl <sub>t</sub> Permitted	0.950			0.950			0.710				0.798	
Satd. Flow (perm)	1656	3539	1545	1745	3571	0	1310	1717	0	0	1533	1672
Satd. Flow (RTOR)			79					46				442
Adj. Flow (vph)	231	533	58	58	759	4	52	38	48	36	36	462
Lane Group Flow (vph)	231	533	58	58	763	0	52	86	0	0	72	462
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			2			6	7
Permitted Phases			4				2			6		6
Detector Phase	7	4	4	3	8		2	2		6	6	7
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)	10.0	23.0	23.0	10.0	23.0		23.0	23.0		29.0	29.0	10.0
Total Split (s)	24.0	46.0	46.0	22.0	44.0		30.0	30.0		30.0	30.0	24.0
Total Split (%)	19.4%	37.1%	37.1%	17.7%	35.5%		24.2%	24.2%		24.2%	24.2%	19.4%
Maximum Green (s)	19.0	41.0	41.0	17.0	39.0		25.0	25.0		25.0	25.0	19.0
Yellow Time (s)	3.0	3.0	3.0	3.0	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	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	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	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag							Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min		None	None		None	None	None
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.48	0.24	0.06	0.24	0.62		0.27	0.29			0.31	0.45
Control Delay	24.3	8.7	1.9	29.3	19.5		29.6	17.4			29.8	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	0.0
Total Delay	24.3	8.7	1.9	29.3	19.5		29.6	17.4			29.8	3.0
Queue Length 50th (ft)	70	58	0	20	126		18	13			25	3
Queue Length 95th (ft)	157	103	11	57	196		45	44			61	37
Internal Link Dist (ft)		2020			1820			2120			220	
Turn Bay Length (ft)	380		120	300			100					125
Base Capacity (vph)	576	2512	1119	544	2446		600	812			702	1090
Starvation Cap Reductn	0	0	0	0	0		0	0			0	0
Spillback Cap Reductn	0	0	0	0	0		0	0			0	0
Storage Cap Reductn	0	0	0	0	0		0	0			0	0
Reduced v/c Ratio	0.40	0.21	0.05	0.11	0.31		0.09	0.11			0.10	0.42

Intersection Summary

Cycle Length: 124

2029 No Build Weekday Morning Peak Hour  
 3: Proprietors Drive/Furnace Street & Route 139

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Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Satd. Flow (RTOR)	
Adj. Flow (vph)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	18.0
Total Split (s)	26.0
Total Split (%)	21%
Maximum Green (s)	24.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	5.0
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	0
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

2029 No Build Weekday Morning Peak Hour  
 3: Proprietors Drive/Furnace Street & Route 139








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Actuated Cycle Length: 58.8






















Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Splits and Phases: 3: Proprietors Drive/Furnace Street & Route 139

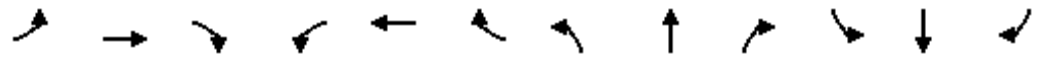
 Ø2 30 s	 Ø3 22 s	 Ø4 46 s	 Ø9 26 s
 Ø6 30 s	 Ø7 24 s	 Ø8 44 s	

2029 No Build Weekday Morning Peak Hour  
 3: Proprietors Drive/Furnace Street & Route 139

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	206	474	52	54	706	4	41	30	38	30	30	388
Future Volume (vph)	206	474	52	54	706	4	41	30	38	30	30	388
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	13	11	12	12	12	14	14	14	14	14
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0			5.0	5.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00			1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.92			1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00			0.98	1.00
Satd. Flow (prot)	1656	3539	1545	1745	3572		1752	1718			1874	1672
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.71	1.00			0.80	1.00
Satd. Flow (perm)	1656	3539	1545	1745	3572		1310	1718			1532	1672
Peak-hour factor, PHF	0.89	0.89	0.89	0.93	0.93	0.93	0.79	0.79	0.79	0.84	0.84	0.84
Adj. Flow (vph)	231	533	58	58	759	4	52	38	48	36	36	462
RTOR Reduction (vph)	0	0	25	0	0	0	0	41	0	0	0	271
Lane Group Flow (vph)	231	533	33	58	763	0	52	45	0	0	72	191
Heavy Vehicles (%)	9%	2%	8%	0%	1%	0%	3%	7%	9%	4%	7%	3%
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			2			6	7
Permitted Phases			4				2			6		6
Actuated Green, G (s)	17.1	35.5	35.5	4.7	23.1		6.9	6.9			6.9	24.0
Effective Green, g (s)	17.1	35.5	35.5	4.7	23.1		6.9	6.9			6.9	24.0
Actuated g/C Ratio	0.28	0.57	0.57	0.08	0.37		0.11	0.11			0.11	0.39
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0			5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	456	2023	883	132	1328		145	190			170	780
v/s Ratio Prot	c0.14	0.15		0.03	c0.21			0.03				0.07
v/s Ratio Perm			0.02				0.04				c0.05	0.05
v/c Ratio	0.51	0.26	0.04	0.44	0.57		0.36	0.24			0.42	0.24
Uniform Delay, d1	18.9	6.7	5.8	27.4	15.6		25.6	25.2			25.7	12.9
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	0.9	0.1	0.0	2.3	0.6		1.5	0.6			1.7	0.2
Delay (s)	19.8	6.8	5.8	29.8	16.2		27.1	25.8			27.4	13.1
Level of Service	B	A	A	C	B		C	C			C	B
Approach Delay (s)		10.4			17.1			26.3			15.0	
Approach LOS		B			B			C			B	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			14.8			HCM 2000 Level of Service				B		
HCM 2000 Volume to Capacity ratio			0.55									
Actuated Cycle Length (s)			62.1			Sum of lost time (s)			17.0			
Intersection Capacity Utilization			60.3%			ICU Level of Service				B		
Analysis Period (min)			15									

c Critical Lane Group

2029 No Build Weekday Evening Peak Hour  
 3: Proprietors Drive/Furnace Street & Route 139



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	290	958	162	106	653	9	109	110	156	60	99	292
Future Volume (vph)	290	958	162	106	653	9	109	110	156	60	99	292
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>			0.850		0.998			0.912				0.850
Fl <sub>t</sub> Protected	0.950			0.950			0.950				0.981	
Satd. Flow (prot)	1805	3610	1669	1745	3568	0	1787	1848	0	0	1988	1723
Fl <sub>t</sub> Permitted	0.950			0.950			0.490				0.567	
Satd. Flow (perm)	1805	3610	1669	1745	3568	0	922	1848	0	0	1149	1723
Satd. Flow (RTOR)			81		1			52				436
Adj. Flow (vph)	302	998	169	119	734	10	118	120	170	90	148	436
Lane Group Flow (vph)	302	998	169	119	744	0	118	290	0	0	238	436
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			2			6	7
Permitted Phases			4				2			6		6
Detector Phase	7	4	4	3	8		2	2		6	6	7
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)	10.0	23.0	23.0	10.0	23.0		23.0	23.0		29.0	29.0	10.0
Total Split (s)	24.0	46.0	46.0	22.0	44.0		30.0	30.0		30.0	30.0	24.0
Total Split (%)	19.4%	37.1%	37.1%	17.7%	35.5%		24.2%	24.2%		24.2%	24.2%	19.4%
Maximum Green (s)	19.0	41.0	41.0	17.0	39.0		25.0	25.0		25.0	25.0	19.0
Yellow Time (s)	3.0	3.0	3.0	3.0	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	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	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	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag							Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min		None	None		None	None	None
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.78	0.72	0.24	0.53	0.70		0.45	0.52			0.73	0.38
Control Delay	51.1	28.0	12.1	47.8	31.7		37.7	28.6			47.3	2.8
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	0.0
Total Delay	51.1	28.0	12.1	47.8	31.7		37.7	28.6			47.3	2.8
Queue Length 50th (ft)	151	230	29	60	182		50	103			112	0
Queue Length 95th (ft)	#416	430	97	142	304		147	261			#203	0
Internal Link Dist (ft)		2020			1820			2120			220	
Turn Bay Length (ft)	380		120	300			100					125
Base Capacity (vph)	388	1678	819	336	1578		261	561			325	1151
Starvation Cap Reductn	0	0	0	0	0		0	0			0	0
Spillback Cap Reductn	0	0	0	0	0		0	0			0	0
Storage Cap Reductn	0	0	0	0	0		0	0			0	0
Reduced v/c Ratio	0.78	0.59	0.21	0.35	0.47		0.45	0.52			0.73	0.38

Intersection Summary

Cycle Length: 124

2029 No Build Weekday Evening Peak Hour  
 3: Proprietors Drive/Furnace Street & Route 139

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Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Satd. Flow (RTOR)	
Adj. Flow (vph)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	18.0
Total Split (s)	26.0
Total Split (%)	21%
Maximum Green (s)	24.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	5.0
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	2
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	



# 2029 No Build Weekday Evening Peak Hour

## 3: Proprietors Drive/Furnace Street & Route 139

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Actuated Cycle Length: 90








Natural Cycle: 90

Control Type: Actuated-Uncoordinated






















# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: Proprietors Drive/Furnace Street & Route 139

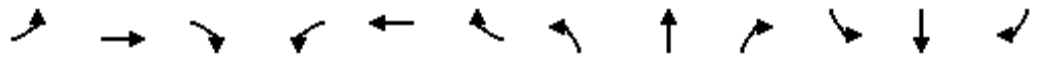
 Ø2 30 s	 Ø3 22 s	 Ø4 46 s	 Ø9 26 s
 Ø6 30 s	 Ø7 24 s	 Ø8 44 s	

2029 No Build Weekday Evening Peak Hour  
 3: Proprietors Drive/Furnace Street & Route 139

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	290	958	162	106	653	9	109	110	156	60	99	292
Future Volume (vph)	290	958	162	106	653	9	109	110	156	60	99	292
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	13	11	12	12	12	14	14	14	14	14
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0			5.0	5.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00			1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.91			1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00			0.98	1.00
Satd. Flow (prot)	1805	3610	1669	1745	3568		1787	1848			1989	1723
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.49	1.00			0.57	1.00
Satd. Flow (perm)	1805	3610	1669	1745	3568		922	1848			1149	1723
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.92	0.92	0.92	0.67	0.67	0.67
Adj. Flow (vph)	302	998	169	119	734	10	118	120	170	90	148	436
RTOR Reduction (vph)	0	0	50	0	1	0	0	37	0	0	0	222
Lane Group Flow (vph)	302	998	119	119	743	0	118	253	0	0	238	214
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			2			6	7
Permitted Phases			4				2			6		6
Actuated Green, G (s)	19.4	34.8	34.8	11.6	27.0		25.5	25.5			25.5	44.9
Effective Green, g (s)	19.4	34.8	34.8	11.6	27.0		25.5	25.5			25.5	44.9
Actuated g/C Ratio	0.21	0.38	0.38	0.13	0.30		0.28	0.28			0.28	0.49
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0			5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	383	1374	635	221	1054		257	515			320	940
v/s Ratio Prot	c0.17	c0.28		0.07	0.21			0.14				0.05
v/s Ratio Perm			0.07				0.13				c0.21	0.08
v/c Ratio	0.79	0.73	0.19	0.54	0.71		0.46	0.49			0.74	0.23
Uniform Delay, d1	34.1	24.2	18.9	37.4	28.7		27.2	27.5			30.0	13.3
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	10.3	1.9	0.1	2.5	2.2		1.3	0.7			9.0	0.1
Delay (s)	44.4	26.2	19.0	39.9	30.8		28.5	28.3			39.0	13.4
Level of Service	D	C	B	D	C		C	C			D	B
Approach Delay (s)		29.1			32.1			28.3			22.5	
Approach LOS		C			C			C			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			28.4			HCM 2000 Level of Service				C		
HCM 2000 Volume to Capacity ratio			0.75									
Actuated Cycle Length (s)			91.4			Sum of lost time (s)			17.0			
Intersection Capacity Utilization			74.9%			ICU Level of Service				D		
Analysis Period (min)			15									

c Critical Lane Group

2029 No Build Saturday Midday Peak Hour  
 3: Proprietors Drive/Furnace Street & Route 139



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑		↘	↗			↗	↘
Traffic Volume (vph)	286	849	115	94	772	15	92	78	95	43	80	417
Future Volume (vph)	286	849	115	94	772	15	92	78	95	43	80	417
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>			0.850		0.997			0.918				0.850
Fl <sub>t</sub> Protected	0.950			0.950			0.950				0.983	
Satd. Flow (prot)	1787	3574	1669	1745	3599	0	1805	1860	0	0	1992	1706
Fl <sub>t</sub> Permitted	0.950			0.950			0.649				0.659	
Satd. Flow (perm)	1787	3574	1669	1745	3599	0	1233	1860	0	0	1336	1706
Satd. Flow (RTOR)			79		2			44				437
Adj. Flow (vph)	301	894	121	98	804	16	111	94	114	48	89	463
Lane Group Flow (vph)	301	894	121	98	820	0	111	208	0	0	137	463
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			2			6	7
Permitted Phases			4				2			6		6
Detector Phase	7	4	4	3	8		2	2		6	6	7
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)	10.0	23.0	23.0	10.0	23.0		23.0	23.0		29.0	29.0	10.0
Total Split (s)	24.0	46.0	46.0	22.0	44.0		30.0	30.0		30.0	30.0	24.0
Total Split (%)	19.4%	37.1%	37.1%	17.7%	35.5%		24.2%	24.2%		24.2%	24.2%	19.4%
Maximum Green (s)	19.0	41.0	41.0	17.0	39.0		25.0	25.0		25.0	25.0	19.0
Yellow Time (s)	3.0	3.0	3.0	3.0	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	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	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	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag							Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min		None	None		None	None	None
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.66	0.51	0.14	0.42	0.70		0.49	0.55			0.56	0.43
Control Delay	38.7	18.9	8.4	41.3	27.5		39.3	30.2			40.9	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	0.0
Total Delay	38.7	18.9	8.4	41.3	27.5		39.3	30.2			40.9	3.6
Queue Length 50th (ft)	118	142	10	40	161		44	65			55	5
Queue Length 95th (ft)	#417	370	62	123	345		119	163			155	74
Internal Link Dist (ft)		2020			1820			2120			220	
Turn Bay Length (ft)	380		120	300			100					125
Base Capacity (vph)	459	1986	962	400	1898		416	657			451	1083
Starvation Cap Reductn	0	0	0	0	0		0	0			0	0
Spillback Cap Reductn	0	0	0	0	0		0	0			0	0
Storage Cap Reductn	0	0	0	0	0		0	0			0	0
Reduced v/c Ratio	0.66	0.45	0.13	0.24	0.43		0.27	0.32			0.30	0.43

Intersection Summary

Cycle Length: 124

2029 No Build Saturday Midday Peak Hour  
 3: Proprietors Drive/Furnace Street & Route 139

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Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Satd. Flow (RTOR)	
Adj. Flow (vph)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	18.0
Total Split (s)	26.0
Total Split (%)	21%
Maximum Green (s)	24.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	5.0
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	5
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

## 2029 No Build Saturday Midday Peak Hour 3: Proprietors Drive/Furnace Street & Route 139

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Actuated Cycle Length: 78.1








Natural Cycle: 90

Control Type: Actuated-Uncoordinated






















# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: Proprietors Drive/Furnace Street & Route 139

 Ø2 30 s	 Ø3 22 s	 Ø4 46 s	 Ø9 26 s
 Ø6 30 s	 Ø7 24 s	 Ø8 44 s	

2029 No Build Saturday Midday Peak Hour  
 3: Proprietors Drive/Furnace Street & Route 139

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	286	849	115	94	772	15	92	78	95	43	80	417
Future Volume (vph)	286	849	115	94	772	15	92	78	95	43	80	417
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	13	11	12	12	12	14	14	14	14	14
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0			5.0	5.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00			1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.92			1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00			0.98	1.00
Satd. Flow (prot)	1787	3574	1669	1745	3599		1805	1860			1992	1706
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.65	1.00			0.66	1.00
Satd. Flow (perm)	1787	3574	1669	1745	3599		1233	1860			1335	1706
Peak-hour factor, PHF	0.95	0.95	0.95	0.96	0.96	0.96	0.83	0.83	0.83	0.90	0.90	0.90
Adj. Flow (vph)	301	894	121	98	804	16	111	94	114	48	89	463
RTOR Reduction (vph)	0	0	42	0	1	0	0	36	0	0	0	249
Lane Group Flow (vph)	301	894	79	98	819	0	111	172	0	0	137	214
Heavy Vehicles (%)	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			2			6	7
Permitted Phases			4				2			6		6
Actuated Green, G (s)	20.1	38.1	38.1	8.7	26.7		14.4	14.4			14.4	34.5
Effective Green, g (s)	20.1	38.1	38.1	8.7	26.7		14.4	14.4			14.4	34.5
Actuated g/C Ratio	0.25	0.47	0.47	0.11	0.33		0.18	0.18			0.18	0.43
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0			5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	446	1693	790	188	1195		220	333			239	838
v/s Ratio Prot	c0.17	0.25		0.06	c0.23			0.09				0.06
v/s Ratio Perm			0.05				0.09				c0.10	0.06
v/c Ratio	0.67	0.53	0.10	0.52	0.69		0.50	0.52			0.57	0.25
Uniform Delay, d1	27.2	14.8	11.7	33.9	23.2		29.8	29.8			30.2	14.7
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	4.0	0.3	0.1	2.6	1.6		1.8	1.4			3.3	0.2
Delay (s)	31.2	15.1	11.7	36.5	24.9		31.6	31.2			33.5	14.9
Level of Service	C	B	B	D	C		C	C			C	B
Approach Delay (s)		18.5			26.1			31.3			19.1	
Approach LOS		B			C			C			B	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			22.1			HCM 2000 Level of Service				C		
HCM 2000 Volume to Capacity ratio			0.63									
Actuated Cycle Length (s)			80.4			Sum of lost time (s)			17.0			
Intersection Capacity Utilization			70.8%			ICU Level of Service				C		
Analysis Period (min)			15									

c Critical Lane Group

2029 Build Weekday Morning Peak Hour  
 3: Proprietors Drive/Furnace Street & Route 139



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	206	474	52	61	706	4	41	40	60	30	33	388
Future Volume (vph)	206	474	52	61	706	4	41	40	60	30	33	388
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>			0.850		0.999			0.910				0.850
Fl <sub>t</sub> Protected	0.950			0.950			0.950				0.977	
Satd. Flow (prot)	1656	3539	1545	1745	3571	0	1752	1705	0	0	1876	1672
Fl <sub>t</sub> Permitted	0.950			0.950			0.708				0.784	
Satd. Flow (perm)	1656	3539	1545	1745	3571	0	1306	1705	0	0	1505	1672
Satd. Flow (RTOR)			79					54				442
Adj. Flow (vph)	231	533	58	66	759	4	52	51	76	36	39	462
Lane Group Flow (vph)	231	533	58	66	763	0	52	127	0	0	75	462
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			2			6	7
Permitted Phases			4				2			6		6
Detector Phase	7	4	4	3	8		2	2		6	6	7
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)	10.0	23.0	23.0	10.0	23.0		23.0	23.0		29.0	29.0	10.0
Total Split (s)	24.0	46.0	46.0	22.0	44.0		30.0	30.0		30.0	30.0	24.0
Total Split (%)	19.4%	37.1%	37.1%	17.7%	35.5%		24.2%	24.2%		24.2%	24.2%	19.4%
Maximum Green (s)	19.0	41.0	41.0	17.0	39.0		25.0	25.0		25.0	25.0	19.0
Yellow Time (s)	3.0	3.0	3.0	3.0	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	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	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	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag							Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min		None	None		None	None	None
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.51	0.29	0.07	0.29	0.64		0.28	0.43			0.34	0.44
Control Delay	25.5	10.4	2.0	30.1	20.6		29.8	21.7			30.6	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	0.0
Total Delay	25.5	10.4	2.0	30.1	20.6		29.8	21.7			30.6	2.9
Queue Length 50th (ft)	71	59	0	23	127		18	25			26	3
Queue Length 95th (ft)	162	107	12	63	200		45	63			63	38
Internal Link Dist (ft)		2020			1820			2120			220	
Turn Bay Length (ft)	380		120	300			100					125
Base Capacity (vph)	519	2395	1071	489	2299		538	735			620	1107
Starvation Cap Reductn	0	0	0	0	0		0	0			0	0
Spillback Cap Reductn	0	0	0	0	0		0	0			0	0
Storage Cap Reductn	0	0	0	0	0		0	0			0	0
Reduced v/c Ratio	0.45	0.22	0.05	0.13	0.33		0.10	0.17			0.12	0.42

Intersection Summary

Cycle Length: 124

2029 Build Weekday Morning Peak Hour  
 3: Proprietors Drive/Furnace Street & Route 139

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Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Satd. Flow (RTOR)	
Adj. Flow (vph)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	18.0
Total Split (s)	26.0
Total Split (%)	21%
Maximum Green (s)	24.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	5.0
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	0
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	



2029 Build Weekday Morning Peak Hour  
 3: Proprietors Drive/Furnace Street & Route 139








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Actuated Cycle Length: 62






















Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Splits and Phases: 3: Proprietors Drive/Furnace Street & Route 139

 Ø2 30 s	 Ø3 22 s	 Ø4 46 s	 Ø9 26 s
 Ø6 30 s	 Ø7 24 s	 Ø8 44 s	

2029 Build Weekday Morning Peak Hour  
 3: Proprietors Drive/Furnace Street & Route 139

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	206	474	52	61	706	4	41	40	60	30	33	388
Future Volume (vph)	206	474	52	61	706	4	41	40	60	30	33	388
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	13	11	12	12	12	14	14	14	14	14
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0			5.0	5.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00			1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.91			1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00			0.98	1.00
Satd. Flow (prot)	1656	3539	1545	1745	3572		1752	1705			1875	1672
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.71	1.00			0.78	1.00
Satd. Flow (perm)	1656	3539	1545	1745	3572		1306	1705			1505	1672
Peak-hour factor, PHF	0.89	0.89	0.89	0.93	0.93	0.93	0.79	0.79	0.79	0.84	0.84	0.84
Adj. Flow (vph)	231	533	58	66	759	4	52	51	76	36	39	462
RTOR Reduction (vph)	0	0	28	0	0	0	0	46	0	0	0	260
Lane Group Flow (vph)	231	533	30	66	763	0	52	81	0	0	75	202
Heavy Vehicles (%)	9%	2%	8%	0%	1%	0%	3%	7%	9%	4%	7%	3%
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			2			6	7
Permitted Phases			4				2			6		6
Actuated Green, G (s)	16.9	32.2	32.2	6.7	22.0		9.0	9.0			9.0	25.9
Effective Green, g (s)	16.9	32.2	32.2	6.7	22.0		9.0	9.0			9.0	25.9
Actuated g/C Ratio	0.27	0.51	0.51	0.11	0.35		0.14	0.14			0.14	0.41
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0			5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	444	1811	790	185	1249		186	243			215	821
v/s Ratio Prot	c0.14	0.15		0.04	c0.21			0.05				0.07
v/s Ratio Perm			0.02				0.04				c0.05	0.05
v/c Ratio	0.52	0.29	0.04	0.36	0.61		0.28	0.33			0.35	0.25
Uniform Delay, d1	19.6	8.8	7.6	26.1	16.9		24.1	24.2			24.3	12.1
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	1.1	0.1	0.0	1.2	0.9		0.8	0.8			1.0	0.2
Delay (s)	20.7	8.9	7.7	27.3	17.8		24.9	25.1			25.3	12.3
Level of Service	C	A	A	C	B		C	C			C	B
Approach Delay (s)		12.1			18.6			25.0			14.1	
Approach LOS		B			B			C			B	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			15.8				HCM 2000 Level of Service				B	
HCM 2000 Volume to Capacity ratio			0.55									
Actuated Cycle Length (s)			62.9				Sum of lost time (s)			17.0		
Intersection Capacity Utilization			62.0%				ICU Level of Service			B		
Analysis Period (min)			15									

c Critical Lane Group

2029 Build Weekday Evening Peak Hour  
 3: Proprietors Drive/Furnace Street & Route 139

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	290	958	162	130	653	9	109	116	170	60	109	292
Future Volume (vph)	290	958	162	130	653	9	109	116	170	60	109	292
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Fr't			0.850		0.998			0.911				0.850
Flt Protected	0.950			0.950			0.950				0.983	
Satd. Flow (prot)	1805	3610	1669	1745	3568	0	1787	1846	0	0	1992	1723
Flt Permitted	0.950			0.950			0.462				0.528	
Satd. Flow (perm)	1805	3610	1669	1745	3568	0	869	1846	0	0	1070	1723
Satd. Flow (RTOR)			81		1			53				436
Adj. Flow (vph)	302	998	169	146	734	10	118	126	185	90	163	436
Lane Group Flow (vph)	302	998	169	146	744	0	118	311	0	0	253	436
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			2			6	7
Permitted Phases			4				2			6		6
Detector Phase	7	4	4	3	8		2	2		6	6	7
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)	10.0	23.0	23.0	10.0	23.0		23.0	23.0		29.0	29.0	10.0
Total Split (s)	24.0	46.0	46.0	22.0	44.0		30.0	30.0		30.0	30.0	24.0
Total Split (%)	19.4%	37.1%	37.1%	17.7%	35.5%		24.2%	24.2%		24.2%	24.2%	19.4%
Maximum Green (s)	19.0	41.0	41.0	17.0	39.0		25.0	25.0		25.0	25.0	19.0
Yellow Time (s)	3.0	3.0	3.0	3.0	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	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	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	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag							Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min		None	None		None	None	None
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.79	0.73	0.25	0.60	0.68		0.49	0.56			0.84	0.38
Control Delay	52.3	28.9	12.4	49.5	31.1		39.9	30.3			59.7	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	0.0
Total Delay	52.3	28.9	12.4	49.5	31.1		39.9	30.3			59.7	2.9
Queue Length 50th (ft)	156	237	30	75	182		53	118			129	0
Queue Length 95th (ft)	#416	430	97	170	304		#159	284			#236	0
Internal Link Dist (ft)		2020			1820			2120			220	
Turn Bay Length (ft)	380		120	300			100					125
Base Capacity (vph)	384	1661	811	333	1562		243	556			300	1144
Starvation Cap Reductn	0	0	0	0	0		0	0			0	0
Spillback Cap Reductn	0	0	0	0	0		0	0			0	0
Storage Cap Reductn	0	0	0	0	0		0	0			0	0
Reduced v/c Ratio	0.79	0.60	0.21	0.44	0.48		0.49	0.56			0.84	0.38
<b>Intersection Summary</b>												
Cycle Length: 124												

2029 Build Weekday Evening Peak Hour  
 3: Proprietors Drive/Furnace Street & Route 139

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Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Satd. Flow (RTOR)	
Adj. Flow (vph)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	18.0
Total Split (s)	26.0
Total Split (%)	21%
Maximum Green (s)	24.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	5.0
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	2
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

## 2029 Build Weekday Evening Peak Hour 3: Proprietors Drive/Furnace Street & Route 139

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Actuated Cycle Length: 91








Natural Cycle: 90

Control Type: Actuated-Uncoordinated

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: Proprietors Drive/Furnace Street & Route 139

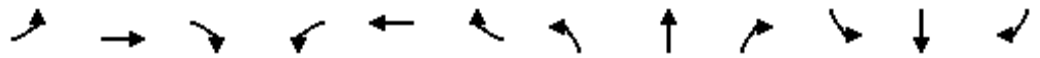
 Ø2 30 s	 Ø3 22 s	 Ø4 46 s	 Ø9 26 s
 Ø6 30 s	 Ø7 24 s	 Ø8 44 s	

2029 Build Weekday Evening Peak Hour  
 3: Proprietors Drive/Furnace Street & Route 139

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	290	958	162	130	653	9	109	116	170	60	109	292
Future Volume (vph)	290	958	162	130	653	9	109	116	170	60	109	292
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	13	11	12	12	12	14	14	14	14	14
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0			5.0	5.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00			1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.91			1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00			0.98	1.00
Satd. Flow (prot)	1805	3610	1669	1745	3568		1787	1846			1991	1723
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.46	1.00			0.53	1.00
Satd. Flow (perm)	1805	3610	1669	1745	3568		870	1846			1071	1723
Peak-hour factor, PHF	0.96	0.96	0.96	0.89	0.89	0.89	0.92	0.92	0.92	0.67	0.67	0.67
Adj. Flow (vph)	302	998	169	146	734	10	118	126	185	90	163	436
RTOR Reduction (vph)	0	0	51	0	1	0	0	38	0	0	0	224
Lane Group Flow (vph)	302	998	118	146	743	0	118	273	0	0	253	212
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			2			6	7
Permitted Phases			4				2			6		6
Actuated Green, G (s)	19.4	34.5	34.5	12.8	27.9		25.5	25.5			25.5	44.9
Effective Green, g (s)	19.4	34.5	34.5	12.8	27.9		25.5	25.5			25.5	44.9
Actuated g/C Ratio	0.21	0.37	0.37	0.14	0.30		0.28	0.28			0.28	0.49
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0			5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	379	1349	623	241	1078		240	510			295	931
v/s Ratio Prot	c0.17	c0.28		0.08	0.21			0.15				0.05
v/s Ratio Perm			0.07				0.14				c0.24	0.08
v/c Ratio	0.80	0.74	0.19	0.61	0.69		0.49	0.53			0.86	0.23
Uniform Delay, d1	34.6	25.0	19.5	37.4	28.4		28.0	28.4			31.7	13.7
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	11.1	2.2	0.1	4.3	1.9		1.6	1.1			21.0	0.1
Delay (s)	45.6	27.2	19.6	41.6	30.2		29.6	29.4			52.7	13.8
Level of Service	D	C	B	D	C		C	C			D	B
Approach Delay (s)		30.1			32.1			29.5			28.1	
Approach LOS		C			C			C			C	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			30.1			HCM 2000 Level of Service				C		
HCM 2000 Volume to Capacity ratio			0.79									
Actuated Cycle Length (s)			92.3			Sum of lost time (s)			17.0			
Intersection Capacity Utilization			76.7%			ICU Level of Service				D		
Analysis Period (min)			15									

c Critical Lane Group

2029 Build Saturday Midday Peak Hour  
 3: Proprietors Drive/Furnace Street & Route 139



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	286	849	115	109	772	15	92	85	110	43	87	417
Future Volume (vph)	286	849	115	109	772	15	92	85	110	43	87	417
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Fr't			0.850		0.997			0.915				0.850
Flt Protected	0.950			0.950			0.950				0.984	
Satd. Flow (prot)	1787	3574	1669	1745	3599	0	1805	1854	0	0	1994	1706
Flt Permitted	0.950			0.950			0.635				0.641	
Satd. Flow (perm)	1787	3574	1669	1745	3599	0	1206	1854	0	0	1299	1706
Satd. Flow (RTOR)			79		2			47				437
Adj. Flow (vph)	301	894	121	114	804	16	111	102	133	48	97	463
Lane Group Flow (vph)	301	894	121	114	820	0	111	235	0	0	145	463
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			2			6	7
Permitted Phases			4				2			6		6
Detector Phase	7	4	4	3	8		2	2		6	6	7
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)	10.0	23.0	23.0	10.0	23.0		23.0	23.0		29.0	29.0	10.0
Total Split (s)	24.0	46.0	46.0	22.0	44.0		30.0	30.0		30.0	30.0	24.0
Total Split (%)	19.4%	37.1%	37.1%	17.7%	35.5%		24.2%	24.2%		24.2%	24.2%	19.4%
Maximum Green (s)	19.0	41.0	41.0	17.0	39.0		25.0	25.0		25.0	25.0	19.0
Yellow Time (s)	3.0	3.0	3.0	3.0	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	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	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	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag							Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min		None	None		None	None	None
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.67	0.58	0.16	0.47	0.70		0.47	0.59			0.57	0.43
Control Delay	40.2	21.3	8.8	42.1	28.1		38.6	31.3			41.3	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	0.0
Total Delay	40.2	21.3	8.8	42.1	28.1		38.6	31.3			41.3	3.6
Queue Length 50th (ft)	123	152	11	49	167		45	77			60	5
Queue Length 95th (ft)	#417	375	63	139	345		119	185			165	74
Internal Link Dist (ft)		2020			1820			2120			220	
Turn Bay Length (ft)	380		120	300			100					125
Base Capacity (vph)	449	1938	941	392	1857		398	644			429	1088
Starvation Cap Reductn	0	0	0	0	0		0	0			0	0
Spillback Cap Reductn	0	0	0	0	0		0	0			0	0
Storage Cap Reductn	0	0	0	0	0		0	0			0	0
Reduced v/c Ratio	0.67	0.46	0.13	0.29	0.44		0.28	0.36			0.34	0.43

Intersection Summary

Cycle Length: 124

2029 Build Saturday Midday Peak Hour  
 3: Proprietors Drive/Furnace Street & Route 139

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Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Satd. Flow (RTOR)	
Adj. Flow (vph)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	18.0
Total Split (s)	26.0
Total Split (%)	21%
Maximum Green (s)	24.0
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	5.0
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	5
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	



# 2029 Build Saturday Midday Peak Hour

## 3: Proprietors Drive/Furnace Street & Route 139

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Actuated Cycle Length: 79.7








Natural Cycle: 90

Control Type: Actuated-Uncoordinated






















# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: Proprietors Drive/Furnace Street & Route 139

 Ø2 30 s	 Ø3 22 s	 Ø4 46 s	 Ø9 26 s
 Ø6 30 s	 Ø7 24 s	 Ø8 44 s	

2029 Build Saturday Midday Peak Hour  
 3: Proprietors Drive/Furnace Street & Route 139

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	286	849	115	109	772	15	92	85	110	43	87	417
Future Volume (vph)	286	849	115	109	772	15	92	85	110	43	87	417
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	13	11	12	12	12	14	14	14	14	14
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0			5.0	5.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00			1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.92			1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00			0.98	1.00
Satd. Flow (prot)	1787	3574	1669	1745	3599		1805	1855			1994	1706
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.64	1.00			0.64	1.00
Satd. Flow (perm)	1787	3574	1669	1745	3599		1207	1855			1299	1706
Peak-hour factor, PHF	0.95	0.95	0.95	0.96	0.96	0.96	0.83	0.83	0.83	0.90	0.90	0.90
Adj. Flow (vph)	301	894	121	114	804	16	111	102	133	48	97	463
RTOR Reduction (vph)	0	0	45	0	1	0	0	38	0	0	0	244
Lane Group Flow (vph)	301	894	76	114	819	0	111	197	0	0	145	219
Heavy Vehicles (%)	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	7	4		3	8			2			6	7
Permitted Phases			4				2			6		6
Actuated Green, G (s)	20.0	34.6	34.6	11.2	25.8		15.6	15.6			15.6	35.6
Effective Green, g (s)	20.0	34.6	34.6	11.2	25.8		15.6	15.6			15.6	35.6
Actuated g/C Ratio	0.25	0.43	0.43	0.14	0.32		0.19	0.19			0.19	0.44
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0			5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	443	1534	716	242	1152		233	359			251	859
v/s Ratio Prot	c0.17	0.25		0.07	c0.23			0.11				0.06
v/s Ratio Perm			0.05				0.09				c0.11	0.07
v/c Ratio	0.68	0.58	0.11	0.47	0.71		0.48	0.55			0.58	0.25
Uniform Delay, d1	27.4	17.5	13.8	32.0	24.1		28.9	29.3			29.5	14.2
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	4.1	0.6	0.1	1.4	2.1		1.5	1.7			3.2	0.2
Delay (s)	31.5	18.1	13.8	33.4	26.2		30.4	31.0			32.7	14.3
Level of Service	C	B	B	C	C		C	C			C	B
Approach Delay (s)		20.8			27.1			30.8			18.7	
Approach LOS		C			C			C			B	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			23.3			HCM 2000 Level of Service					C	
HCM 2000 Volume to Capacity ratio			0.64									
Actuated Cycle Length (s)			80.6			Sum of lost time (s)				17.0		
Intersection Capacity Utilization			72.5%			ICU Level of Service				C		
Analysis Period (min)			15									

c Critical Lane Group

Route 139 at Forest Street

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2021 Existing Weekday Morning Peak Hour  
4: Route 139 & Forest Street

Intersection						
Int Delay, s/veh	1.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	2	399	791	68	27	5
Future Vol, veh/h	2	399	791	68	27	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	86	86	67	67
Heavy Vehicles, %	0	8	2	10	0	0
Mvmt Flow	3	512	920	79	40	7

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	999	0	-	0	1478 960
Stage 1	-	-	-	-	960 -
Stage 2	-	-	-	-	518 -
Critical Hdwy	4.1	-	-	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	701	-	-	-	140 314
Stage 1	-	-	-	-	375 -
Stage 2	-	-	-	-	602 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	701	-	-	-	139 314
Mov Cap-2 Maneuver	-	-	-	-	139 -
Stage 1	-	-	-	-	373 -
Stage 2	-	-	-	-	602 -

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	39.2
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	701	-	-	-	152
HCM Lane V/C Ratio	0.004	-	-	-	0.314
HCM Control Delay (s)	10.2	0	-	-	39.2
HCM Lane LOS	B	A	-	-	E
HCM 95th %tile Q(veh)	0	-	-	-	1.3

2021 Existing Weekday Evening Peak Hour  
4: Route 139 & Forest Street

Intersection						
Int Delay, s/veh	4.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	12	1036	717	95	40	8
Future Vol, veh/h	12	1036	717	95	40	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	95	95	80	80
Heavy Vehicles, %	0	0	1	0	0	0
Mvmt Flow	14	1177	755	100	50	10

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	855	0	-	0	2010
Stage 1	-	-	-	-	805
Stage 2	-	-	-	-	1205
Critical Hdwy	4.1	-	-	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	2.2	-	-	-	3.5
Pot Cap-1 Maneuver	793	-	-	-	66
Stage 1	-	-	-	-	443
Stage 2	-	-	-	-	286
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	793	-	-	-	63
Mov Cap-2 Maneuver	-	-	-	-	63
Stage 1	-	-	-	-	420
Stage 2	-	-	-	-	286

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	155.1
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	793	-	-	-	73
HCM Lane V/C Ratio	0.017	-	-	-	0.822
HCM Control Delay (s)	9.6	0	-	-	155.1
HCM Lane LOS	A	A	-	-	F
HCM 95th %tile Q(veh)	0.1	-	-	-	4

2021 Existing Saturday Midday Peak Hour  
4: Route 139 & Forest Street

Intersection						
Int Delay, s/veh	2.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	6	905	822	64	37	4
Future Vol, veh/h	6	905	822	64	37	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	98	98	79	79
Heavy Vehicles, %	0	0	1	0	0	0
Mvmt Flow	6	953	839	65	47	5

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	904	0	-	0	1837 872
Stage 1	-	-	-	-	872 -
Stage 2	-	-	-	-	965 -
Critical Hdwy	4.1	-	-	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	761	-	-	-	84 353
Stage 1	-	-	-	-	412 -
Stage 2	-	-	-	-	373 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	761	-	-	-	83 353
Mov Cap-2 Maneuver	-	-	-	-	83 -
Stage 1	-	-	-	-	405 -
Stage 2	-	-	-	-	373 -

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	89.2
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	761	-	-	-	90
HCM Lane V/C Ratio	0.008	-	-	-	0.577
HCM Control Delay (s)	9.8	0	-	-	89.2
HCM Lane LOS	A	A	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	2.6

2029 No Build Weekday Morning Peak Hour  
4: Route 139 & Forest Street

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	2	432	857	74	29	5
Future Vol, veh/h	2	432	857	74	29	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	86	86	67	67
Heavy Vehicles, %	0	8	2	10	0	0
Mvmt Flow	3	554	997	86	43	7

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1083	0	-	0	1600 1040
Stage 1	-	-	-	-	1040 -
Stage 2	-	-	-	-	560 -
Critical Hdwy	4.1	-	-	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	652	-	-	-	118 282
Stage 1	-	-	-	-	344 -
Stage 2	-	-	-	-	576 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	652	-	-	-	117 282
Mov Cap-2 Maneuver	-	-	-	-	117 -
Stage 1	-	-	-	-	342 -
Stage 2	-	-	-	-	576 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	50.5
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	652	-	-	-	128
HCM Lane V/C Ratio	0.004	-	-	-	0.396
HCM Control Delay (s)	10.5	0	-	-	50.5
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	1.7

2029 No Build Weekday Evening Peak Hour  
4: Route 139 & Forest Street

Intersection						
Int Delay, s/veh	8.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	13	1122	776	103	43	9
Future Vol, veh/h	13	1122	776	103	43	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	95	95	80	80
Heavy Vehicles, %	0	0	1	0	0	0
Mvmt Flow	15	1275	817	108	54	11

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	925	0	-	0	2176 871
Stage 1	-	-	-	-	871 -
Stage 2	-	-	-	-	1305 -
Critical Hdwy	4.1	-	-	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	747	-	-	-	~ 52 353
Stage 1	-	-	-	-	413 -
Stage 2	-	-	-	-	256 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	747	-	-	-	~ 48 353
Mov Cap-2 Maneuver	-	-	-	-	~ 48 -
Stage 1	-	-	-	-	385 -
Stage 2	-	-	-	-	256 -

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	292.2
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	747	-	-	-	56
HCM Lane V/C Ratio	0.02	-	-	-	1.161
HCM Control Delay (s)	9.9	0	-	-	292.2
HCM Lane LOS	A	A	-	-	F
HCM 95th %tile Q(veh)	0.1	-	-	-	5.5

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon



2029 No Build Saturday Midday Peak Hour  
4: Route 139 & Forest Street

Intersection						
Int Delay, s/veh	4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	6	980	890	64	40	4
Future Vol, veh/h	6	980	890	64	40	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	98	98	79	79
Heavy Vehicles, %	0	0	1	0	0	0
Mvmt Flow	6	1032	908	65	51	5

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	973	0	-	0	1985 941
Stage 1	-	-	-	-	941 -
Stage 2	-	-	-	-	1044 -
Critical Hdwy	4.1	-	-	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	717	-	-	-	68 322
Stage 1	-	-	-	-	383 -
Stage 2	-	-	-	-	342 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	717	-	-	-	67 322
Mov Cap-2 Maneuver	-	-	-	-	67 -
Stage 1	-	-	-	-	375 -
Stage 2	-	-	-	-	342 -

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	145.5
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	717	-	-	-	72
HCM Lane V/C Ratio	0.009	-	-	-	0.774
HCM Control Delay (s)	10.1	0	-	-	145.5
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	3.7

2029 Build Weekday Morning Peak Hour  
4: Route 139 & Forest Street

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	2	454	864	74	29	5
Future Vol, veh/h	2	454	864	74	29	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	86	86	67	67
Heavy Vehicles, %	0	8	2	10	0	0
Mvmt Flow	3	582	1005	86	43	7

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1091	0	-	0	1636 1048
Stage 1	-	-	-	-	1048 -
Stage 2	-	-	-	-	588 -
Critical Hdwy	4.1	-	-	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	647	-	-	-	112 279
Stage 1	-	-	-	-	341 -
Stage 2	-	-	-	-	559 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	647	-	-	-	111 279
Mov Cap-2 Maneuver	-	-	-	-	111 -
Stage 1	-	-	-	-	339 -
Stage 2	-	-	-	-	559 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	54.1
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	647	-	-	-	122
HCM Lane V/C Ratio	0.004	-	-	-	0.416
HCM Control Delay (s)	10.6	0	-	-	54.1
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	1.8

2029 Build Weekday Evening Peak Hour  
4: Route 139 & Forest Street

Intersection						
Int Delay, s/veh	9.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	13	1136	800	103	43	9
Future Vol, veh/h	13	1136	800	103	43	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	95	95	80	80
Heavy Vehicles, %	0	0	1	0	0	0
Mvmt Flow	15	1291	842	108	54	11

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	950	0	-	0	2217 896
Stage 1	-	-	-	-	896 -
Stage 2	-	-	-	-	1321 -
Critical Hdwy	4.1	-	-	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	731	-	-	-	~ 49 342
Stage 1	-	-	-	-	402 -
Stage 2	-	-	-	-	252 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	731	-	-	-	~ 45 342
Mov Cap-2 Maneuver	-	-	-	-	~ 45 -
Stage 1	-	-	-	-	373 -
Stage 2	-	-	-	-	252 -

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	\$ 324.1
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	731	-	-	-	53
HCM Lane V/C Ratio	0.02	-	-	-	1.226
HCM Control Delay (s)	10	0	-	-	\$ 324.1
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0.1	-	-	-	5.7

Notes  
 ~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

2029 Build Saturday Midday Peak Hour  
4: Route 139 & Forest Street

Intersection						
Int Delay, s/veh	4.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	6	995	905	64	40	4
Future Vol, veh/h	6	995	905	64	40	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	98	98	79	79
Heavy Vehicles, %	0	0	1	0	0	0
Mvmt Flow	6	1047	923	65	51	5

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	988	0	-	0	2015 956
Stage 1	-	-	-	-	956 -
Stage 2	-	-	-	-	1059 -
Critical Hdwy	4.1	-	-	-	6.4 6.2
Critical Hdwy Stg 1	-	-	-	-	5.4 -
Critical Hdwy Stg 2	-	-	-	-	5.4 -
Follow-up Hdwy	2.2	-	-	-	3.5 3.3
Pot Cap-1 Maneuver	708	-	-	-	65 316
Stage 1	-	-	-	-	376 -
Stage 2	-	-	-	-	336 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	708	-	-	-	64 316
Mov Cap-2 Maneuver	-	-	-	-	64 -
Stage 1	-	-	-	-	368 -
Stage 2	-	-	-	-	336 -

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	158.1
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	708	-	-	-	69
HCM Lane V/C Ratio	0.009	-	-	-	0.807
HCM Control Delay (s)	10.1	0	-	-	158.1
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	3.8

Enterprise Drive at Commerce Way

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2021 Existing Weekday Morning Peak Hour  
5: Enterprise Drive & Commerce Way

Intersection						
Int Delay, s/veh	7.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	1	51	0	4	20	3
Future Vol, veh/h	1	51	0	4	20	3
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	81	81	100	100	82	82
Heavy Vehicles, %	0	2	0	0	5	0
Mvmt Flow	1	63	0	4	24	4

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	54	2	0	0	4	0
Stage 1	2	-	-	-	-	-
Stage 2	52	-	-	-	-	-
Critical Hdwy	6.4	6.22	-	-	4.15	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.318	-	-	2.245	-
Pot Cap-1 Maneuver	959	1082	-	-	1598	-
Stage 1	1026	-	-	-	-	-
Stage 2	976	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	945	1082	-	-	1598	-
Mov Cap-2 Maneuver	945	-	-	-	-	-
Stage 1	1026	-	-	-	-	-
Stage 2	961	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.5	0	6.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	1079	1598
HCM Lane V/C Ratio	-	-	0.059	0.015
HCM Control Delay (s)	-	-	8.5	7.3
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0

2021 Existing Weekday Evening Peak Hour  
5: Enterprise Drive & Commerce Way

Intersection						
Int Delay, s/veh	7.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	2	40	1	2	52	2
Future Vol, veh/h	2	40	1	2	52	2
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	75	75	75	75
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	45	1	3	69	3

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	144	3	0	0	4
Stage 1	3	-	-	-	-
Stage 2	141	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2
Pot Cap-1 Maneuver	853	1087	-	-	1631
Stage 1	1025	-	-	-	-
Stage 2	891	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	817	1087	-	-	1631
Mov Cap-2 Maneuver	817	-	-	-	-
Stage 1	1025	-	-	-	-
Stage 2	854	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.5	0	7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	1070	1631
HCM Lane V/C Ratio	-	-	0.045	0.043
HCM Control Delay (s)	-	-	8.5	7.3
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1

2021 Existing Saturday Midday Peak Hour  
5: Enterprise Drive & Commerce Way

Intersection						
Int Delay, s/veh	7.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	1	48	1	4	27	4
Future Vol, veh/h	1	48	1	4	27	4
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	64	64	42	42	78	78
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	75	2	10	35	5

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	82	7	0	0	12	0
Stage 1	7	-	-	-	-	-
Stage 2	75	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	925	1081	-	-	1620	-
Stage 1	1021	-	-	-	-	-
Stage 2	953	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	905	1081	-	-	1620	-
Mov Cap-2 Maneuver	905	-	-	-	-	-
Stage 1	1021	-	-	-	-	-
Stage 2	932	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.6	0	6.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	1077	1620
HCM Lane V/C Ratio	-	-	0.071	0.021
HCM Control Delay (s)	-	-	8.6	7.3
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1



2029 No Build Weekday Morning Peak Hour  
5: Enterprise Drive & Commerce Way

Intersection						
Int Delay, s/veh	7.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	55	0	4	22	3
Future Vol, veh/h	1	55	0	4	22	3
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	81	81	100	100	82	82
Heavy Vehicles, %	0	2	0	0	5	0
Mvmt Flow	1	68	0	4	27	4

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	60	2	0	0	4
Stage 1	2	-	-	-	-
Stage 2	58	-	-	-	-
Critical Hdwy	6.4	6.22	-	-	4.15
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.318	-	-	2.245
Pot Cap-1 Maneuver	952	1082	-	-	1598
Stage 1	1026	-	-	-	-
Stage 2	970	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	936	1082	-	-	1598
Mov Cap-2 Maneuver	936	-	-	-	-
Stage 1	1026	-	-	-	-
Stage 2	954	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.6	0	6.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	1079	1598
HCM Lane V/C Ratio	-	-	0.064	0.017
HCM Control Delay (s)	-	-	8.6	7.3
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1

2029 No Build Weekday Evening Peak Hour  
 5: Enterprise Drive & Commerce Way

Intersection						
Int Delay, s/veh	7.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	2	43	1	2	56	2
Future Vol, veh/h	2	43	1	2	56	2
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	75	75	75	75
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	49	1	3	75	3

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	156	3	0	0	4
Stage 1	3	-	-	-	-
Stage 2	153	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2
Pot Cap-1 Maneuver	840	1087	-	-	1631
Stage 1	1025	-	-	-	-
Stage 2	880	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	801	1087	-	-	1631
Mov Cap-2 Maneuver	801	-	-	-	-
Stage 1	1025	-	-	-	-
Stage 2	840	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.5	0	7.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	1070	1631
HCM Lane V/C Ratio	-	-	0.048	0.046
HCM Control Delay (s)	-	-	8.5	7.3
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1

2029 No Build Saturday Midday Peak Hour  
5: Enterprise Drive & Commerce Way

Intersection						
Int Delay, s/veh	7.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	52	1	4	29	4
Future Vol, veh/h	1	52	1	4	29	4
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	64	64	42	42	78	78
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	81	2	10	37	5

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	86	7	0	0	12
Stage 1	7	-	-	-	-
Stage 2	79	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2
Pot Cap-1 Maneuver	920	1081	-	-	1620
Stage 1	1021	-	-	-	-
Stage 2	949	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	899	1081	-	-	1620
Mov Cap-2 Maneuver	899	-	-	-	-
Stage 1	1021	-	-	-	-
Stage 2	927	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.6	0	6.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	1077	1620
HCM Lane V/C Ratio	-	-	0.077	0.023
HCM Control Delay (s)	-	-	8.6	7.3
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1

2029 Build Weekday Morning Peak Hour  
 5: Enterprise Drive & Commerce Way

Intersection						
Int Delay, s/veh	8.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	T		T		T	
Traffic Vol, veh/h	1	111	0	4	40	3
Future Vol, veh/h	1	111	0	4	40	3
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	81	81	100	100	82	82
Heavy Vehicles, %	0	2	0	0	5	0
Mvmt Flow	1	137	0	4	49	4

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	104	2	0	0	4
Stage 1	2	-	-	-	-
Stage 2	102	-	-	-	-
Critical Hdwy	6.4	6.22	-	-	4.15
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.318	-	-	2.245
Pot Cap-1 Maneuver	899	1082	-	-	1598
Stage 1	1026	-	-	-	-
Stage 2	927	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	871	1082	-	-	1598
Mov Cap-2 Maneuver	871	-	-	-	-
Stage 1	1026	-	-	-	-
Stage 2	898	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.8	0	6.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	1080	1598
HCM Lane V/C Ratio	-	-	0.128	0.031
HCM Control Delay (s)	-	-	8.8	7.3
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1

2029 Build Weekday Evening Peak Hour  
 5: Enterprise Drive & Commerce Way

Intersection						
Int Delay, s/veh	7.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	2	78	1	2	117	2
Future Vol, veh/h	2	78	1	2	117	2
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	75	75	75	75
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	89	1	3	156	3

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	318	3	0	0	4
Stage 1	3	-	-	-	-
Stage 2	315	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2
Pot Cap-1 Maneuver	679	1087	-	-	1631
Stage 1	1025	-	-	-	-
Stage 2	744	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	614	1087	-	-	1631
Mov Cap-2 Maneuver	614	-	-	-	-
Stage 1	1025	-	-	-	-
Stage 2	673	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.7	0	7.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	1066	1631
HCM Lane V/C Ratio	-	-	0.085	0.096
HCM Control Delay (s)	-	-	8.7	7.4
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.3

2029 Build Saturday Midday Peak Hour  
 5: Enterprise Drive & Commerce Way

Intersection						
Int Delay, s/veh	7.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	91	1	4	69	4
Future Vol, veh/h	1	91	1	4	69	4
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	64	64	42	42	78	78
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	142	2	10	88	5

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	188	7	0	0	12	0
Stage 1	7	-	-	-	-	-
Stage 2	181	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	806	1081	-	-	1620	-
Stage 1	1021	-	-	-	-	-
Stage 2	855	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	762	1081	-	-	1620	-
Mov Cap-2 Maneuver	762	-	-	-	-	-
Stage 1	1021	-	-	-	-	-
Stage 2	809	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	6.9
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	1076	1620
HCM Lane V/C Ratio	-	-	0.134	0.055
HCM Control Delay (s)	-	-	8.9	7.4
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.2

Proprietors Drive at Commerce Way and Old Woodlot Road



2021 Existing Weekday Morning Peak Hour  
 6: Commerce Way/Old Woodlot Lane & Proprietors Drive

Intersection	
Intersection Delay, s/veh	7.1
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↔		↕	
Traffic Vol, veh/h	22	3	2	11	6	24
Future Vol, veh/h	22	3	2	11	6	24
Peak Hour Factor	0.62	0.62	0.81	0.81	0.83	0.83
Heavy Vehicles, %	0	33	50	0	0	0
Mvmt Flow	35	5	2	14	7	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	7.4	7.4	6.7
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	88%	0%	20%
Vol Thru, %	12%	15%	0%
Vol Right, %	0%	85%	80%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	25	13	30
LT Vol	22	0	6
Through Vol	3	2	0
RT Vol	0	11	24
Lane Flow Rate	40	16	36
Geometry Grp	1	1	1
Degree of Util (X)	0.046	0.019	0.036
Departure Headway (Hd)	4.151	4.336	3.557
Convergence, Y/N	Yes	Yes	Yes
Cap	865	827	1004
Service Time	2.163	2.353	1.586
HCM Lane V/C Ratio	0.046	0.019	0.036
HCM Control Delay	7.4	7.4	6.7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.1	0.1	0.1



2021 Existing Weekday Evening Peak Hour  
 6: Commerce Way/Old Woodlot Lane & Proprietors Drive

Intersection	
Intersection Delay, s/veh	7.1
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↔		↕	
Traffic Vol, veh/h	40	3	4	18	16	45
Future Vol, veh/h	40	3	4	18	16	45
Peak Hour Factor	0.90	0.90	0.55	0.55	0.85	0.85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	44	3	7	33	19	53
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	7.5	6.7	7
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	93%	0%	26%
Vol Thru, %	7%	18%	0%
Vol Right, %	0%	82%	74%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	43	22	61
LT Vol	40	0	16
Through Vol	3	4	0
RT Vol	0	18	45
Lane Flow Rate	48	40	72
Geometry Grp	1	1	1
Degree of Util (X)	0.056	0.04	0.073
Departure Headway (Hd)	4.244	3.571	3.661
Convergence, Y/N	Yes	Yes	Yes
Cap	845	1001	975
Service Time	2.265	1.6	1.695
HCM Lane V/C Ratio	0.057	0.04	0.074
HCM Control Delay	7.5	6.7	7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.2	0.1	0.2

2021 Existing Saturday Midday Peak Hour  
 6: Commerce Way/Old Woodlot Lane & Proprietors Drive

Intersection	
Intersection Delay, s/veh	7.1
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↔		↕	
Traffic Vol, veh/h	30	5	1	7	14	35
Future Vol, veh/h	30	5	1	7	14	35
Peak Hour Factor	0.73	0.73	0.67	0.67	0.77	0.77
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	41	7	1	10	18	45
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	7.5	6.6	6.9
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	86%	0%	29%
Vol Thru, %	14%	12%	0%
Vol Right, %	0%	88%	71%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	35	8	49
LT Vol	30	0	14
Through Vol	5	1	0
RT Vol	0	7	35
Lane Flow Rate	48	12	64
Geometry Grp	1	1	1
Degree of Util (X)	0.056	0.012	0.064
Departure Headway (Hd)	4.193	3.523	3.633
Convergence, Y/N	Yes	Yes	Yes
Cap	856	1015	984
Service Time	2.208	1.548	1.661
HCM Lane V/C Ratio	0.056	0.012	0.065
HCM Control Delay	7.5	6.6	6.9
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.2	0	0.2

2029 No Build Weekday Morning Peak Hour  
 6: Commerce Way/Old Woodlot Lane & Proprietors Drive

Intersection	
Intersection Delay, s/veh	7.1
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↔		↕	
Traffic Vol, veh/h	24	3	2	11	6	26
Future Vol, veh/h	24	3	2	11	6	26
Peak Hour Factor	0.62	0.62	0.81	0.81	0.83	0.83
Heavy Vehicles, %	0	33	50	0	0	0
Mvmt Flow	39	5	2	14	7	31
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	7.4	7.4	6.7
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	89%	0%	19%
Vol Thru, %	11%	15%	0%
Vol Right, %	0%	85%	81%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	27	13	32
LT Vol	24	0	6
Through Vol	3	2	0
RT Vol	0	11	26
Lane Flow Rate	44	16	39
Geometry Grp	1	1	1
Degree of Util (X)	0.05	0.019	0.038
Departure Headway (Hd)	4.157	4.343	3.553
Convergence, Y/N	Yes	Yes	Yes
Cap	864	826	1005
Service Time	2.169	2.36	1.584
HCM Lane V/C Ratio	0.051	0.019	0.039
HCM Control Delay	7.4	7.4	6.7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.2	0.1	0.1

2029 No Build Weekday Evening Peak Hour  
 6: Commerce Way/Old Woodlot Lane & Proprietors Drive

Intersection	
Intersection Delay, s/veh	7.1
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	43	3	4	18	16	49
Future Vol, veh/h	43	3	4	18	16	49
Peak Hour Factor	0.90	0.90	0.55	0.55	0.85	0.85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	48	3	7	33	19	58
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	7.5	6.8	7
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	93%	0%	25%
Vol Thru, %	7%	18%	0%
Vol Right, %	0%	82%	75%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	46	22	65
LT Vol	43	0	16
Through Vol	3	4	0
RT Vol	0	18	49
Lane Flow Rate	51	40	76
Geometry Grp	1	1	1
Degree of Util (X)	0.06	0.04	0.078
Departure Headway (Hd)	4.252	3.581	3.654
Convergence, Y/N	Yes	Yes	Yes
Cap	843	997	977
Service Time	2.276	1.614	1.69
HCM Lane V/C Ratio	0.06	0.04	0.078
HCM Control Delay	7.5	6.8	7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.2	0.1	0.3

2029 No Build Saturday Midday Peak Hour  
 6: Commerce Way/Old Woodlot Lane & Proprietors Drive

Intersection	
Intersection Delay, s/veh	7.1
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↔		↕	
Traffic Vol, veh/h	32	5	1	7	14	38
Future Vol, veh/h	32	5	1	7	14	38
Peak Hour Factor	0.73	0.73	0.67	0.67	0.77	0.77
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	44	7	1	10	18	49
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	7.5	6.6	6.9
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	86%	0%	27%
Vol Thru, %	14%	12%	0%
Vol Right, %	0%	88%	73%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	37	8	52
LT Vol	32	0	14
Through Vol	5	1	0
RT Vol	0	7	38
Lane Flow Rate	51	12	68
Geometry Grp	1	1	1
Degree of Util (X)	0.059	0.012	0.068
Departure Headway (Hd)	4.201	3.531	3.624
Convergence, Y/N	Yes	Yes	Yes
Cap	854	1012	987
Service Time	2.218	1.559	1.653
HCM Lane V/C Ratio	0.06	0.012	0.069
HCM Control Delay	7.5	6.6	6.9
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.2	0	0.2

2029 Build Weekday Morning Peak Hour  
 6: Commerce Way/Old Woodlot Lane & Proprietors Drive

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↔		↕	
Traffic Vol, veh/h	56	3	2	11	6	36
Future Vol, veh/h	56	3	2	11	6	36
Peak Hour Factor	0.62	0.62	0.81	0.81	0.83	0.83
Heavy Vehicles, %	0	33	50	0	0	0
Mvmt Flow	90	5	2	14	7	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	7.7	7.5	6.9
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	95%	0%	14%
Vol Thru, %	5%	15%	0%
Vol Right, %	0%	85%	86%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	59	13	42
LT Vol	56	0	6
Through Vol	3	2	0
RT Vol	0	11	36
Lane Flow Rate	95	16	51
Geometry Grp	1	1	1
Degree of Util (X)	0.111	0.02	0.051
Departure Headway (Hd)	4.191	4.404	3.606
Convergence, Y/N	Yes	Yes	Yes
Cap	857	811	982
Service Time	2.208	2.438	1.668
HCM Lane V/C Ratio	0.111	0.02	0.052
HCM Control Delay	7.7	7.5	6.9
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.4	0.1	0.2

2029 Build Weekday Evening Peak Hour  
 6: Commerce Way/Old Woodlot Lane & Proprietors Drive

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↔		↕	
Traffic Vol, veh/h	63	3	4	18	16	83
Future Vol, veh/h	63	3	4	18	16	83
Peak Hour Factor	0.90	0.90	0.55	0.55	0.85	0.85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	70	3	7	33	19	98
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	6.9	7.2
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	95%	0%	16%
Vol Thru, %	5%	18%	0%
Vol Right, %	0%	82%	84%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	66	22	99
LT Vol	63	0	16
Through Vol	3	4	0
RT Vol	0	18	83
Lane Flow Rate	73	40	116
Geometry Grp	1	1	1
Degree of Util (X)	0.088	0.041	0.117
Departure Headway (Hd)	4.328	3.67	3.624
Convergence, Y/N	Yes	Yes	Yes
Cap	827	969	981
Service Time	2.358	1.716	1.678
HCM Lane V/C Ratio	0.088	0.041	0.118
HCM Control Delay	7.8	6.9	7.2
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.3	0.1	0.4

2029 Build Saturday Midday Peak Hour  
 6: Commerce Way/Old Woodlot Lane & Proprietors Drive

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↔		↕	
Traffic Vol, veh/h	54	5	1	7	14	60
Future Vol, veh/h	54	5	1	7	14	60
Peak Hour Factor	0.73	0.73	0.67	0.67	0.77	0.77
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	74	7	1	10	18	78
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	6.7	7
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	92%	0%	19%
Vol Thru, %	8%	12%	0%
Vol Right, %	0%	88%	81%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	59	8	74
LT Vol	54	0	14
Through Vol	5	1	0
RT Vol	0	7	60
Lane Flow Rate	81	12	96
Geometry Grp	1	1	1
Degree of Util (X)	0.096	0.012	0.096
Departure Headway (Hd)	4.261	3.604	3.612
Convergence, Y/N	Yes	Yes	Yes
Cap	841	987	985
Service Time	2.283	1.647	1.661
HCM Lane V/C Ratio	0.096	0.012	0.097
HCM Control Delay	7.7	6.7	7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.3	0	0.3



Commerce Way at the Project Site Driveway

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2029 Build Weekday Morning Peak Hour  
7: Project Site Driveway & Commerce Way

Intersection						
Int Delay, s/veh	4.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	27	18	10	28	56	32
Future Vol, veh/h	27	18	10	28	56	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	62	92	92	83	92	92
Heavy Vehicles, %	4	2	2	4	2	2
Mvmt Flow	44	20	11	34	61	35

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	64	0	110
Stage 1	-	-	-	-	54
Stage 2	-	-	-	-	56
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	-	-	1538	-	887
Stage 1	-	-	-	-	969
Stage 2	-	-	-	-	967
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1538	-	881
Mov Cap-2 Maneuver	-	-	-	-	881
Stage 1	-	-	-	-	969
Stage 2	-	-	-	-	960

Approach	EB	WB	NB
HCM Control Delay, s	0	1.8	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	925	-	-	1538	-
HCM Lane V/C Ratio	0.103	-	-	0.007	-
HCM Control Delay (s)	9.3	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-

2029 Build Weekday Evening Peak Hour  
7: Project Site Driveway & Commerce Way

Intersection						
Int Delay, s/veh	3.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	46	61	34	53	35	20
Future Vol, veh/h	46	61	34	53	35	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	92	92	83	92	92
Heavy Vehicles, %	0	2	2	0	2	2
Mvmt Flow	51	66	37	64	38	22

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	117	0	222 84
Stage 1	-	-	-	-	84 -
Stage 2	-	-	-	-	138 -
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	-	-	1471	-	766 975
Stage 1	-	-	-	-	939 -
Stage 2	-	-	-	-	889 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1471	-	746 975
Mov Cap-2 Maneuver	-	-	-	-	746 -
Stage 1	-	-	-	-	939 -
Stage 2	-	-	-	-	866 -

Approach	EB	WB	NB
HCM Control Delay, s	0	2.8	9.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	816	-	-	1471	-
HCM Lane V/C Ratio	0.073	-	-	0.025	-
HCM Control Delay (s)	9.8	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

2029 Build Saturday Midday Peak Hour  
7: Project Site Driveway & Commerce Way

Intersection						
Int Delay, s/veh	3.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	37	40	22	39	39	22
Future Vol, veh/h	37	40	22	39	39	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	73	92	92	77	92	92
Heavy Vehicles, %	0	2	2	0	2	2
Mvmt Flow	51	43	24	51	42	24

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	94	0	172 73
Stage 1	-	-	-	-	73 -
Stage 2	-	-	-	-	99 -
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	-	-	1500	-	818 989
Stage 1	-	-	-	-	950 -
Stage 2	-	-	-	-	925 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1500	-	805 989
Mov Cap-2 Maneuver	-	-	-	-	805 -
Stage 1	-	-	-	-	950 -
Stage 2	-	-	-	-	910 -

Approach	EB	WB	NB
HCM Control Delay, s	0	2.4	9.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	863	-	-	1500	-
HCM Lane V/C Ratio	0.077	-	-	0.016	-
HCM Control Delay (s)	9.5	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

TRAFFIC SIGNAL WARRANTS ANALYSIS

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# HCS7 Warrants Report

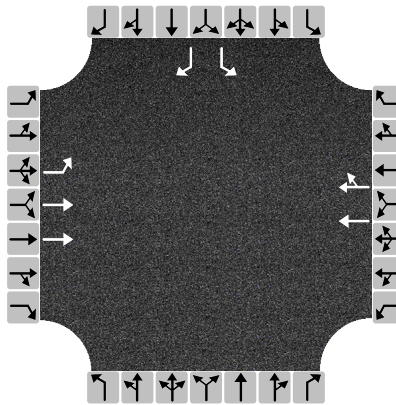
## Project Information

Analyst	AJA	Date	1/12/2022
Agency	Vanasse and Assoc., Inc.	Analysis Year	2021
Jurisdiction	Marshfield	Time Period Analyzed	2021 Existing
Project Description	Moderna II		

## General

Major Street Direction	East-West	Population < 10,000	No
Starting Time Interval	7	Coordinated Signal System	No
Median Type	Undivided	Crashes (crashes/year)	2
Major Street Speed (mi/h)	45	Adequate Trials of Crash Exp. Alt.	No
Nearest Signal (ft)	2800		

## Geometry and Traffic



Approach	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Movement												
Number of Lanes, N	1	2	0	0	2	0	0	0	0	1	0	1
Lane Usage	L	T			TR					L		R
Vehicle Volumes Averages (veh/h)	37	301	0	0	351	17	0	0	0	4	0	42
Pedestrian Averages (peds/h)	0			0			0			0		
Gap Averages (gaps/h)	0			0			0			0		
Delay (s/veh)	0.0			0.0			0.0			0.0		
Delay (veh-hrs)	0.0			0.0			0.0			0.0		

## School Crossing and Roadway Network

Number of Students in Highest Hour	0	Two or More Major Routes	No
Number of Adequate Gaps in Period	0	Weekend Counts	No
Number of Minutes in Period	0	5-year Growth Factor (%)	0

## Railroad Crossing

Grade Crossing Approach	None	Rail Traffic (trains/day)	4
Highest Volume Hour with Trains	Unknown	High Occupancy Buses (%)	0
Distance to Stop Line (ft)		Tractor-Trailer Trucks (%)	10

# HCS7 Warrants Report

## Volume Summary

Hour	Major Volume	Minor Volume	Total Volume	Peds/h	Gaps/h	1A (70%)	1A (56%)	1B (70%)	1B (56%)	2 (70%)	3A (70%)	3B (70%)	4A (70%)	4B (70%)
07 - 08	1920	143	2063	0	0	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
08 - 09	1379	137	1516	0	0	No	Yes	Yes	Yes	Yes	No	Yes	No	No
09 - 10	0	0	0	0	0	No	No	No	No	No	No	No	No	No
10 - 11	0	0	0	0	0	No	No	No	No	No	No	No	No	No
11 - 12	0	0	0	0	0	No	No	No	No	No	No	No	No	No
12 - 13	0	0	0	0	0	No	No	No	No	No	No	No	No	No
13 - 14	0	0	0	0	0	No	No	No	No	No	No	No	No	No
14 - 15	0	0	0	0	0	No	No	No	No	No	No	No	No	No
15 - 16	0	0	0	0	0	No	No	No	No	No	No	No	No	No
16 - 17	2622	163	2785	1	0	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No
17 - 18	2575	118	2693	2	0	No	Yes	Yes	Yes	Yes	No	Yes	No	No
18 - 19	0	0	0	0	0	No	No	No	No	No	No	No	No	No
Total	8496	561	9057	3	0	2	4	4	4	4	0	4	0	0

## Warrants

### Warrant 1: Eight-Hour Vehicular Volume

A. Minimum Vehicular Volumes (Both major approaches --and-- higher minor approach) --or--

B. Interruption of Continuous Traffic (Both major approaches --and-- higher minor approach) --or--

56% Vehicular --and-- Interruption Volumes (Both major approaches --and-- higher minor approach)

### Warrant 2: Four-Hour Vehicular Volume

Four-Hour Vehicular Volume (Both major approaches --and-- higher minor approach)

✓

✓

### Warrant 3: Peak Hour

A. Peak-Hour Conditions (Minor delay -- and-- minor volume --and-- total volume) --or--

B. Peak-Hour Vehicular Volumes (Both major approaches --and-- higher minor approach)

✓

✓

### Warrant 4: Pedestrian Volume

A. Four Hour Volumes --or--

B. One-Hour Volumes

### Warrant 5: School Crossing

Gaps Same Period --and--

Student Volumes

Nearest Traffic Control Signal (optional)

✓

### Warrant 6: Coordinated Signal System

Degree of Platooning (Predominant direction or both directions)

### Warrant 7: Crash Experience

A. Adequate trials of alternatives, observance and enforcement failed --and--

B. Reported crashes susceptible to correction by signal (12-month period) --and--

C. 56% Volumes for Warrants 1A, 1B, --or-- 4 are satisfied

### Warrant 8: Roadway Network

A. Weekday Volume (Peak hour total --and-- projected warrants 1, 2, or 3) --or--

B. Weekend Volume (Five hours total)

### Warrant 9: Grade Crossing

A. Grade Crossing within 140 ft --and--

B. Peak-Hour Vehicular Volumes