

June 2, 2025

Mr. Stephen Rolle  
Transportation & Mobility Commissioner  
City of Worcester  
76 East Worcester Street  
Worcester, MA 01604

RE: Worcester - June Street at Brownell Street / Hadwen Road  
Link to Site in Google Maps:  
<http://maps.google.com/maps?q=42.26636518257271,-71.83047934548587>  
All Way Stop Control (AWSC)  
MassDOT District 3

Dear Mr. Rolle:

**Greenman-Pedersen, Inc. (GPI)**, on behalf of MassDOT, has completed its review of the above-referenced intersection in Worcester, MA, for eligibility to convert to All-Way Stop Control (AWSC) for this project cycle. MassDOT is collaborating with communities to identify, investigate, and assist in converting municipally owned intersections from two-way stop control to all-way stop control, to address known safety issues. The intersection of June Street at Brownell Street / Hadwen Road was identified as eligible for further assessment based on its crash history, a preliminary evaluation of the existing conditions, and community interest in participating in the program.

This evaluation found that the intersection of June Street at Brownell Street / Hadwen Road is **recommended for moving forward with conversion to All-Way Stop Control**. The following provides a summary of the report's key findings and details regarding the logistics for implementing the AWSC conversion for locations that were deemed suitable.

### **GENERAL DESCRIPTION OF THE INTERSECTION**

June Street at Brownell Street / Hadwen Road consists of four (4) approaches, and recent crash statistics indicate eight (8) angle crashes that are susceptible to correction with AWSC, between January 1, 2019, and December 31, 2021. The crash history meets MUTCD warrant A (Crash Experience) for all-way stop control.

The intersection is in a residential urban environment of closely spaced single family homes. Buffered sidewalks with crosswalks cross all four legs of the intersection. An overhead cobra head luminaire is present at the intersection. On-street parking occurs along June Street; however, it is restricted southbound in the vicinity of the intersection. A bus stop is at the intersection on June Street southbound. Brownell Street and Hadwen Street intersect June Street at a modest skew angle. There are numerous residential driveways near the intersection.

The all-way stop control intersection of Brownell Street, Berkman Street, and Lovell Street is located approximately 210 feet to the east.

**Table 1** provides an overview of the observed conditions at the intersection.

**Table 1 – Intersection Characteristics**

Road	Speed Regulation Present	Speed Reg. or Posted Limit (mph) <sup>a</sup>	85 <sup>th</sup> % (mph)	50 <sup>th</sup> % (mph)	Statutory Speed (mph) <sup>b</sup>	Design Speed	Federal Functional Classification	ADT <sup>c</sup>
<b>June Street<sup>d</sup></b>	No	25	35	30	25	35	Major Collector	9,557
<b>Brownell Street / Hadwen Road</b>	No	N/A	N/A	N/A	25	25	Local	N/A

<sup>a</sup> If Speed Regulation is not present, the posted speed limit value shown is from the MassDOT Road Inventory Speed Limit field, and the posting is not supported by a Regulation; N/A indicates data is not available

<sup>b</sup> Municipality has opted in for Chapter 90 Section 17C (25mph Statutory Speed)

<sup>c</sup> Average daily traffic major approach only; see appendix for minor approach turning movement counts

<sup>d</sup> Major Street

### General Speed Limit Considerations

All posted speed limits must be established by and conform to a Special Speed Regulation (SSR). It is recommended that for road segments with SSRs, the community should replace any non-compliant posted speed limit signs with appropriate signs in the correct locations so that the speed limits can be enforced, and citations adjudicated accordingly. If there is no SSR for the roadway segment, the statutory speed limit prevails, and any posted speed limit signs should be removed.

### TRAFFIC OPERATIONS EVALUATION

A peak-hour operations analysis of unadjusted turning movement counts at the intersection was conducted for the morning and evening peak hours to determine the impacts of converting the intersection to an All-Way Stop Control. The operations analysis was conducted utilizing the methodologies outlined in the Highway Capacity Manual 7<sup>th</sup> Edition (HCM)<sup>1</sup> with analysis tools of Synchro<sup>2</sup> or Highway Capacity Software<sup>3</sup>. **Table 2** presents the worst case predicted Levels of Service (LOS) along the main line and side street approaches, as well as an overall intersection LOS. Raw traffic count data, along with the full traffic operations analysis outputs, are included in the appendix.

If the operations analysis indicates that LOS D or better occurs along all approaches, the intersection is rated as acceptable for AWSC operations. If LOS E is anticipated along the currently free-flowing major street approach, the intersection will require further assessments to determine if AWSC would be appropriate, and if any currently free-flowing major street approach operates at a LOS F (failing), it was determined that AWSC would not be an appropriate measure.

**Table 2 - Level of Service Operations**

OPERATIONS ANALYSIS SCENARIO	LOS RESULTS
<b>Major Street: (June Street) Worst Case LOS:</b>	D
<b>Minor Street: (Brownell Street / Hadwen Road) Worst Case LOS:</b>	B
<b><u>Overall Intersection Worst Case LOS:</u></b>	<u>C</u>
<b>Recommendation based on LOS:</b>	Pass

<sup>1</sup> Highway Capacity Manual 7<sup>th</sup> Edition Transportation Research Board; Washington, D.C.; 2022

<sup>2</sup> Synchro plus SimTraffic 11; Trafficware Ltd.; Sugar Land, TX.; 2018

<sup>3</sup> Highway Capacity Software 7; McTrans; Gainesville, FL; 2022

## SITE ASSESSMENT

A desktop assessment was conducted for all locations that met the traffic operation evaluation criteria to determine whether the site conditions at the intersection are suitable for AWSC conversion. This assessment considered intersection and approach geometry, sight distance, existing access management, interaction with nearby intersections, and other important factors. **Table 3** provides a summary of some of the common assessment features considered at each location. It should be noted that the information listed in Table 3 is intended to help inform the recommendation for AWSC conversion; however, it is not an all-encompassing list.

A field assessment was conducted at all locations identified as suitable based on the desktop assessment to confirm the findings and investigate intersection features not suitable for desktop review. The field assessment of the intersection was conducted on April 29, 2025.

**Table 3 – Site Assessment Summary**

EVALUATION CONDITION	RESULT
Is there an intersection where spillback occurs? (Could be a result of AWSC queueing or adjacent intersection queues impacting AWSC location)	No
Is there an at-grade railroad crossing along any approaches to the intersection?	No
Is the minor road at an awkward skew or are there any other issues requiring widely separated STOP positions?	Yes
Does the placement of curb ramps impact STOP locations or operations?	Yes
Will the AWSC hinder any adjacent driveways or streets?	Yes
Are dedicated turn lanes provided on any approaches?	No
Are bike lanes provided on any approaches?	No
Is there any roadway superelevation? (Typically, may occur on higher speed/volume mainline approaches)	No
Are there any site conditions that could impact sign placement? (Limited ROW, physical obstructions, shaded area for LED, etc.)	No
Does the available sight distance approaching the intersection exceed the minimal stopping sight distance based on the Design Speed from Table 1? (Main Road > 250 ', Minor Road > 155 ')	Yes

## AWSC CONVERSION RECOMMENDATION

Based on the engineering analysis and site visit, this intersection is **recommended for moving forward with conversion to All-Way Stop Control**.

The proposed stop bars on June Street shall be a minimum of four feet from the crosswalk. It is recommended that the City review parking restrictions on June Street near the intersection to ensure adequate sight distance for the STOP signs. The westbound queues on Brownell Street are anticipated to be relatively short, and spillback into the upstream Berkman Street intersection is low risk. Predicted queues along June Street during peak travel periods may periodically block residential driveways near the intersection, particularly in the southbound direction. The modest skew of the intersection is not expected to hinder AWSC operations. The proximity of the bus stop to the intersection may limit the visibility of the new stop sign, and stopped buses will periodically impede AWSC traffic operations. Coordination with WRTA for the possible relocation of the bus stop is recommended. Selective limb clearing is recommended to ensure sufficient sunlight reaches the LED STOP sign in the southeast corner of the intersection.

## NEXT STEPS

For intersections recommended for AWSC conversion, a design package has been prepared and included in the appendix of this memorandum that provides the necessary details for the conversion. The design package includes an aerial plan,

standard details, and a summary of materials that will be supplied by MassDOT. The aerial plan will indicate the Work Items required for AWSC conversion. The work items are divided into two categories:

- *Work Items supplied by MassDOT, installed by the community,*
- *and Work Items supplied and installed by the community.*

If the community agrees with the findings and recommendations in this memorandum, it must perform the necessary internal steps to gain approval for an intersection control and relay confirmation of that approval to GPI and MassDOT.

The standard AWSC conversion sign package includes LED stop signs on both the major and minor street intersection approaches. LED stop signs are an effective tool to improve intersection safety by gaining driver attention and increasing the intersection's conspicuity. However, LED stop signs require continuing maintenance to ensure effective operation, including battery and solar panel maintenance and routine vegetation clearing to ensure adequate sunlight for charging. The flashing lights along the LED stop sign border may also result in concerns from residents adjacent to the intersection. Traditional static STOP signs may be provided and installed as an alternative, if specifically requested by the municipality. **It is essential that communities review the LED STOP signs proposed in the AWSC conversion sign package to ensure site conditions have been considered and to determine if LED STOP signs are still preferred for this location.**

A Memorandum of Agreement (MOA) between Worcester and MassDOT will need to be executed. This MOA will establish the agreed-upon conditions under which the assets provided by MassDOT to Worcester will be installed, and agreement to complete the required community element tasks identified in the attached plan. Upon executing this MOA, MassDOT will fabricate and deliver the proposed signs and materials identified in this memorandum (see the **Appendix** for the list of proposed signs).

All improvements shown on the enclosed design plan, some of which will be provided by MassDOT and others by the community as indicated, are required for the AWSC conversion. Other optional treatments are described in the report that the community can choose to install at their cost to supplement the required elements. **If the community has any concerns or requests for changes to the proposed design, please bring them to our attention within 5 days of receipt of this report as this project is advancing on a tight timeline.**

The following is a summary of the Work Items included in this project. Please refer to the design package for detailed information on the **Work Items**.

#### **Required Work Items:**

The proposed signs and quantities to be provided by MassDOT for the municipality to install are shown in **Table 4**. All new STOP signs, either LED or standard, will be supplemented with red signpost reflectors. Note – the proposed sign locations indicated in the Design Plan (see appendix) are intended to conform to MUTCD guidance, but should be modified in the field as needed to optimize their visibility and to accommodate roadside features such as lawns, landscaping, driveways, building entrances, pedestrian ramps, and any other features that might be considered sensitive.

**Table 4 – Quantities**

TYPE OF SIGN	QUANTITY
LED Stop Sign (R1-1)	6
Stop Ahead Sign (W3-1)	6
All-Way Placard (R1-3P)	6
New Traffic Pattern Ahead (W23-2)	2
Total Number of Square Tube Signposts	14

Required Work Items supplied and installed by the Community:

- STOP bars are to be provided along each approach according to the Design Plan.

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- Existing lane markings to be removed where needed to conform to new stop bar locations.
- Removal or relocation of existing signage as noted on the provided plans.
- Selective limb clearing for LED STOP signs

**Optional Work Items:**

Optional Work for consideration by the municipality includes:

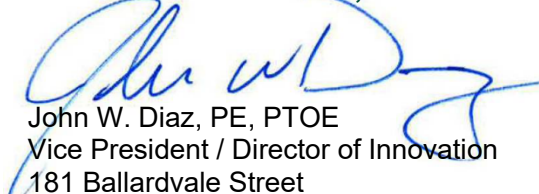
- NEW plaques on STOP signs on new controlled approaches (W16-15p)
- Yellow signpost reflectors on STOP AHEAD signposts
- NEW TRAFFIC PATTERN AHEAD signs on minor approaches – recommend removal after 6 months
- Warning flags on STOP AHEAD signs on new control approaches
- Pavement Markings – install STOP and STOP AHEAD stencils
- Changeable message signs – install prior to conversion for advance notice to drivers
  - Recommended 2 weeks in advance and 2 weeks after installation
- Optical speed bars – install for speed management on intersection approaches
- Speed study – perform speed measurements after the acclimatization period to determine if a speed limit change on the new stopped approaches would be supported
- City to discuss potential bus stop relocation with WRTA

Included in the memorandum appendix is an ***informational flyer that provides best practices and recommendations*** for changing an intersection control within a community as well as the traffic volume, LOS analysis and speed data collected for the intersection of June Street at Brownell Street / Hadwen Road as part of the project. The municipality is strongly encouraged to notify the community of the upcoming change in traffic control prior to implementing the change.

Should you have any questions or concerns, please contact me directly at [jdiaz@gpinet.com](mailto:jdiaz@gpinet.com) or at 978-570-2953.

Sincerely,

**GREENMAN-PEDERSEN, INC.**



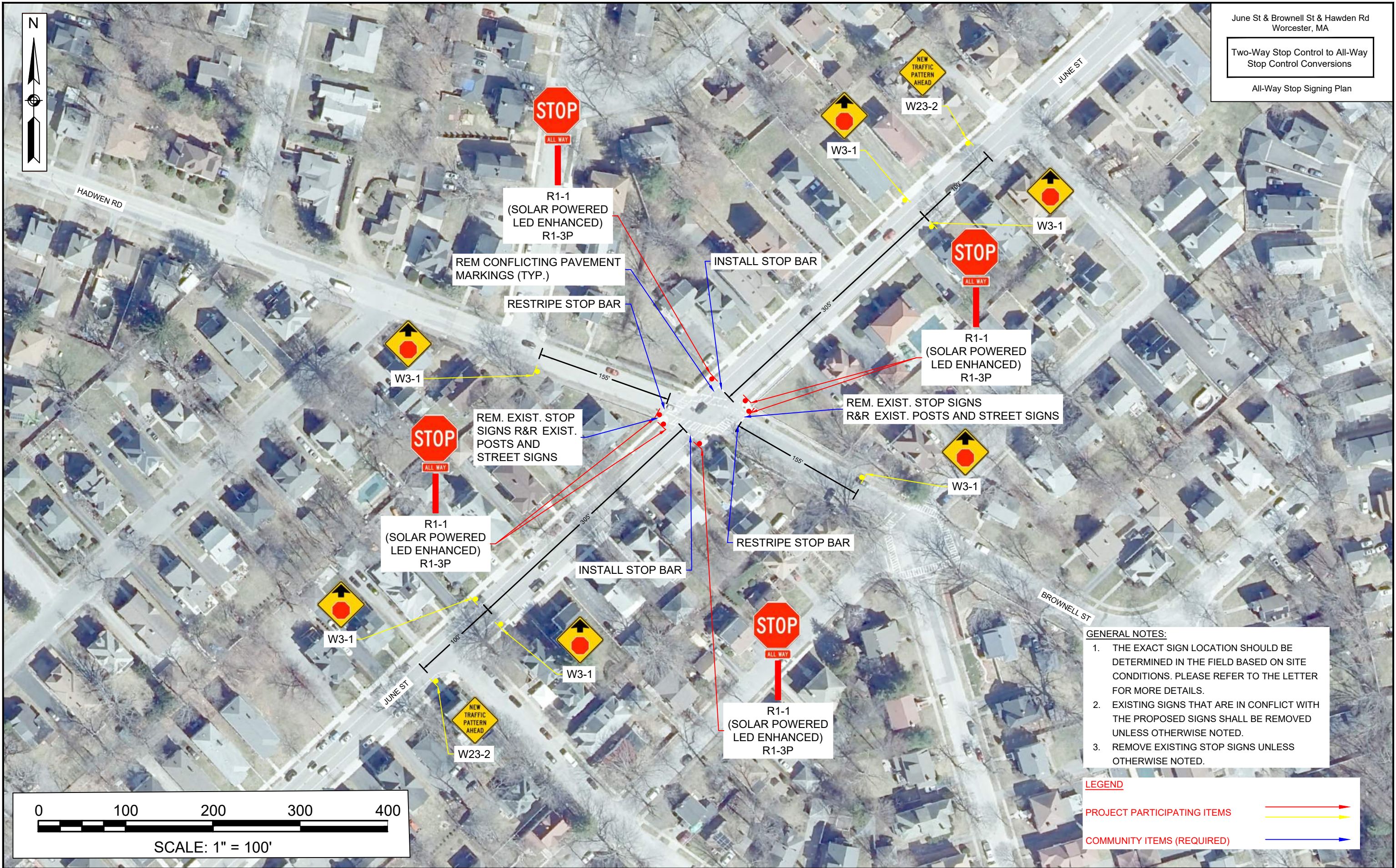
John W. Diaz, PE, PTOE  
Vice President / Director of Innovation  
181 Ballardvale Street  
Suite 202  
Wilmington, MA 01887

enclosure(s)

cc: Bonnie Polin  
Dakota DelSignore

# **DESIGN PLAN & SIGN SUMMARY**











Two-Way Stop Control to All-Way  
Stop Control Conversions

All-Way Stop Signing Plan

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)		NUMBER OF SIGNS REQUIRED	COLOR			POST SIZE AND NUMBER REQUIRED	UNIT AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING		BACK- GROUND	LEGEND	BORDER		
R1-1 (LED)	30"	30"		MUTCD STANDARD		6	RED	WHITE	WHITE	P5 (6 REQ'D)	6.25
R1-3P	18"	6"		MUTCD STANDARD		6	RED	WHITE	WHITE	6 MNT w/ R1-1	0.75
W3-1	30"	30"		MUTCD STANDARD		6	YELLOW	RED BLACK	BLACK	P5 (6 REQ'D)	6.25
W23-2	36"	36"		MUTCD STANDARD		2	YELLOW	BLACK	BLACK	P5 (2 REQ'D)	9.00

GENERAL NOTES:

- 1. RED SIGN POST REFLECTORS WILL BE PLACED ON EACH STOP SIGN POST FACING TRAFFIC
- 2. REFER TO INTERSECTION LAYOUT PLAN AND THE EVALUATION REPORT FOR COMPLETE LIST OF REQUIRED AND OPTIONAL ITEMS AND MEASURES TO BE DONE BY THE COMMUNITY.
- 3. NEW TRAFFIC PATTERN AHEAD SIGNS ARE TEMPORARY AND SHOULD STAY IN PLACE FOR APPROXIMATELY 6 MONTHS
- 4. SIGNS SHALL BE INSTALLED MINIMUM OF 6' FROM THE EDGE OF ROADWAY AND AT A MOUNTING HEIGHT OF 7' FROM THE BOTTOM EDGE OF THE SIGN TO THE ROADWAY SURFACE. SIGN POSITIONS SHALL CONFORM TO MUTCD FIGURES 2A-2 AND 2A-3.



**INFORMATIONAL FLYER  
&  
SIGN INSTALLATION DETAILS**

## BEST PRACTICES WHEN CHANGING AN INTERSECTION CONTROL

When an existing two-way stop-controlled intersection has safety performance issues, changing the intersection control type to All-Way stop-controlled may be a cost-effective method to improve safety by reducing the potential for severe crashes. However, introducing a STOP sign on a roadway at an intersection that was previously uncontrolled can create new safety concerns if not implemented properly. This informational flyer is designed to provide communities with tools to help introduce the change in intersection control in a safe and effective manner. Many of these treatments are referenced in the memorandum, and the community would be responsible for supplying and implementing them, unless specifically noted otherwise. This toolbox consists of three categories to help perform this change:

- Actions to perform prior to changing the intersection control
- Permanent treatments for previously uncontrolled approaches
- Temporary treatments to implement after installation

## GENERAL INFORMATION

The traffic control devices (signage and pavement markings) and changeable message boards referenced in this memorandum and flyers shall comply with the requirements outlined in the Manual on Uniform Traffic Control Devices (MUTCD), published by the Federal Highway Administration and available as a free public document. The MUTCD can be accessed via the following link: <https://mutcd.fhwa.dot.gov/>. In addition to the traffic conspicuity treatments noted in this document, other treatments are cited in Section 2A.11 Enhanced conspicuity for standard signs in the MUTCD. MassDOT also has an amendment to the MUTCD that can be accessed via the following address: <https://www.mass.gov/doc/massachusetts-amendments-to-the-mutcd-2022/download>.

## ACTIONS TO PERFORM PRIOR TO CHANGING THE INTERSECTION CONTROL

Advance warning and community outreach to inform of a change in traffic control is critical for the successful implementation of the control change. This gives road users the information necessary for them to change their expectations prior to the implementation of the traffic control change. The visual cues for transitioning from a two-way stop control to an all-way stop control are primarily limited to changes in signage and pavement markings, which can be easily overlooked by the driver when not anticipated. A comprehensive application of permanent and temporary treatments combined with a public outreach effort is needed to provide the groundwork for a smooth control transition. The following are messaging tools that can be conducted prior to implementing a control change.

- **CHANGEABLE MESSAGE BOARDS** – Changeable message boards can be installed along all approaches preceding the intersection, informing of the upcoming traffic change. It is recommended that the boards be installed at least two weeks prior to making the change to capture the majority of frequent commuters, and be left in place for one month after the conversion. For effective messaging, it's best that the message be limited to two phrases, with each phrase consisting of no more than three lines of text. Each phrase should be understood by itself, and the meaning of the entire message should be the same regardless of the sequence in which the phrases are read. An example of All-Way Stop Control messaging would be:

Message before conversion

TRAFFIC
CHANGE
MM/DD
ALL
WAY
STOP

Message after conversion

NEW
TRAFFIC
PATTERN
ALL
WAY
STOP

- **DIGITAL MEDIA OUTREACH** - Digital media is an effective tool for informing the public about upcoming changes and reaching community members. An announcement can be posted on the City/Town website and shared through social media platforms, including Facebook, X (Twitter), and Nextdoor. Email alerts can be used to notify residents through email lists or newsletters. Also, local news websites can be used to publicize press releases or announcements.
- **PHYSICAL AND PUBLIC SIGNAGE** - Flyers and posters can be posted or distributed at community centers, libraries, businesses, or other public places.

## PERMANENT TREATMENTS ON PREVIOUSLY UNCONTROLLED APPROACHES

The following are treatments the community can undertake to increase the STOP control conspicuity and manage speeds approaching the intersection. An excerpt from MUTCD that provides images of some of these details is included on the final page of the document.

- **Vertical Retroreflective Strip on Signpost** – A strip of retroreflective material can be used on a sign support to increase the sign's conspicuity. It must be two inches in width and extend the full length of the support from the sign to within two feet above the near edge of the roadway. It should match the background color of the sign, except for YIELD and DO NOT ENTER signs, where the strip shall be red.
- **Red or Orange Flags** – One or more red or orange flags can be added above a regulatory or warning sign to help gain the driver's attention to the marked sign. They shall be oriented at 45 degrees to the vertical and can be either cloth or retroreflective sheeting.
- **Dual Signing** – Dual signing of a standard regulatory, warning, or guide sign can be conducted by adding a second identical sign on the left-hand side of the roadway, even with the standard right-hand side sign. Dual signing is an effective tool to improve drivers' recognition of a sign's message. It is also an effective tool to use on curvilinear roadways where the left-hand side of the road is visible first, allowing the driver to react earlier to the sign's message.
- **STOP and STOP AHEAD Pavement Markings** – Stenciled pavement markings can be installed in advance of the STOP and STOP AHEAD signs to supplement the traffic control device. Stenciled pavement markings can improve the recognition of a traffic control condition by having the intended messages directly within the driver's perceptual vision cone. See MUTCD Section 3B.21.



- **Optical Speed Bars** – Optical speed bars, also referred to as Speed Reduction Markings, are transverse pavement markings placed with progressively reduced spacing on both sides of the travel way to create the perception of increased speed. This illusion encourages drivers to slow down as they pass the markings. These markings can be used in advance of the intersection to manage speeds on the approach to the stop condition. This treatment is suitable for locations where the uncontrolled approach operating speeds are generally higher and not in long tangent sections. See MUTCD Section 3B.28
- **Warning Beacon**—Flashing circular yellow warning beacons can be added to standard regulatory signs (other than STOP, DO NOT ENTER, Wrong Way, or Speed Limit Signs), warning signs, or guide signs to indicate to drivers to pay extra attention to the message contained thereon. The installation of warning beacons must adhere to the criteria outlined in the MUTCD Chapter 4S.

## TEMPORARY TREATMENTS TO IMPLEMENT AFTER INSTALLATION

Once an intersection control change has been implemented, it is critical that the traffic control devices enforcing the change in traffic control are not only perceived by the driver, but also that the driver recognizes the change has occurred. The utilization of these temporary treatments is uniquely valuable for locations where all-way stop control is being implemented, as the change in control is not accompanied by a construction period or changes in roadway features that are typically associated with the installation of a signal or roundabout that would allow the occasional road user to easily recognize and prepare for the control change. Temporary treatments can be used to provide the driver with advanced warning of a change and identify new traffic control devices. **These treatments should be left in place for no longer than six months.**

- **NEW plaques (W16-15p)** – A NEW plaque can be mounted above a regulatory sign (STOP sign) when a new regulation takes effect to alert road users to the new traffic regulation. A NEW plaque may also be mounted above an advance warning sign (STOP AHEAD) to warn about a new traffic condition.
- **NEW TRAFFIC PATTERN AHEAD (W23-2)** – A NEW TRAFFIC PATTERN AHEAD sign may be used on the approach to an intersection or along a section of roadway to provide advance warning of a change in traffic patterns, such as changing an intersection control or a change in roadway geometry.

**Figure 2A-1. Examples of Enhanced Conspicuity for Signs**

A – W16-15P plaque above a regulatory or warning sign if the regulation or condition is new



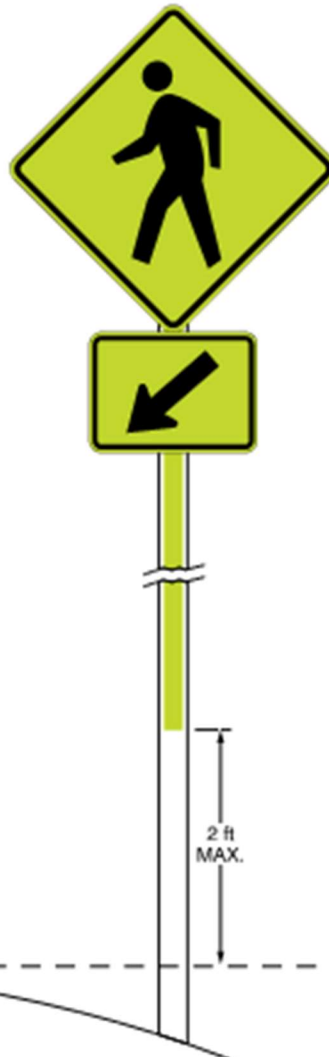
C – W16-18P plaque above a regulatory sign



D – Solid yellow, solid fluorescent yellow, or diagonally striped black and yellow (or black and fluorescent yellow) strip of retroreflective sheeting around a warning sign



E – Vertical retroreflective strip on sign support

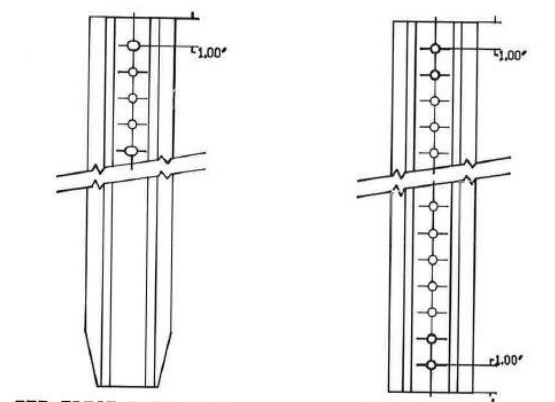


F – Supplemental beacon



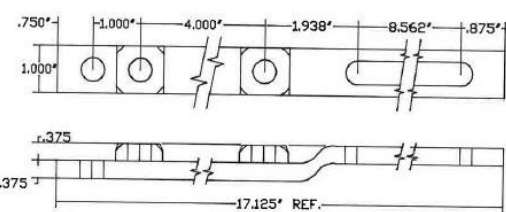
G – LEDs in border





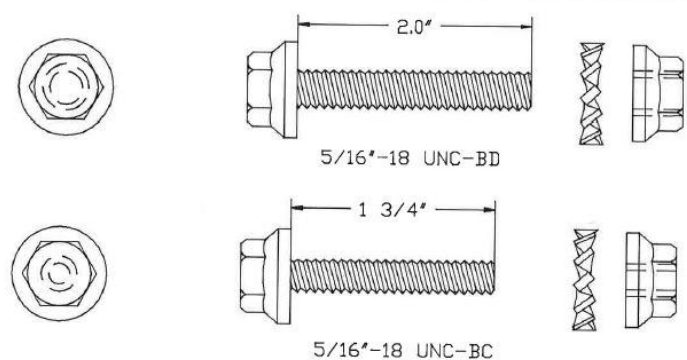
**EZE-ERECT BASE POST**  
3/8" Dia. Holes on 1.00" Center, Except First and Fifth are 3/8" x 1/2" slots  
Punched 18 Holes  
Bottom Flanged  
Available in 2.5, 3.0 & 4.0 lb./ft  
Length -3'6" and 4'0"

**EZE-ERECT SIGN POST**  
3/8" Dia. Holes on 1.00" Centers  
Punched Full Length Available  
in 2.0, 2.25, 2.5, 3.0 & 4.0 lb./ft  
Length -6'0", 7'0", 8'0", 9'0",  
10'0", 11'0", and 12'0"



**RETAINER-SPACER STRAP**  
For All Weights of Sign Posts  
Material-Mild Steel  
Finish-Hot Dip Galvanize Per ASTM A-123

**HEX HEAD-INTEGRAL FLANGE BOLT, NUT AND LOCKWASHER**

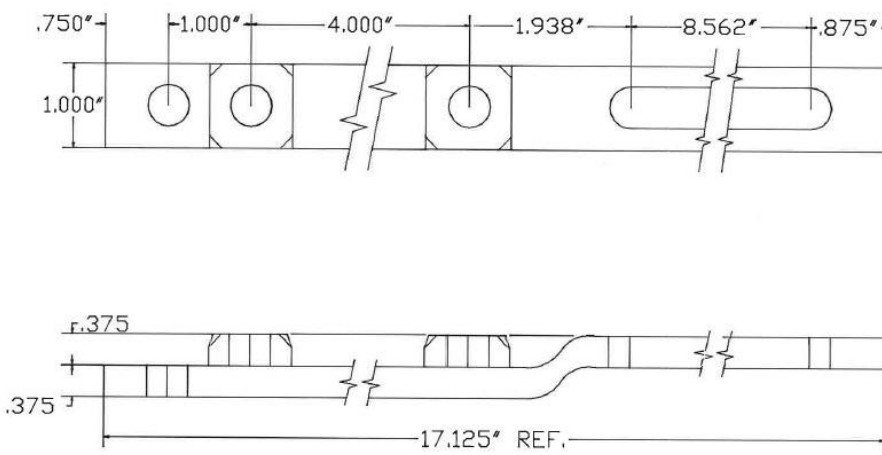


5/16"-18 UNC x 2.0' Long (for 4.0 lb. posts) or 5/16"-  
18 UNC x 1 3/4' (for 2.0, 2.25, 2.5 & 3.0 lb. posts)  
Bolt per ASTM A354, Grade BD or Grade BC  
Nut per ASTM A563, Grade DH  
Lockwasher is heavy duty external toothed.  
Finish-Cadmium plated per ASTM A165-80, Type DS, except  
using clear chromate

SIGN SIZE	CHANNEL POST POST-WITH STRAP (EZE-ERECT)
5 S.F. AND UNDER	1-2 LB./FT.
OVER 5 S.F. UP TO 10 S.F.	1-2.25 LB./FT.
* OVER 10 S.F. UP TO 20 S.F.	2-2.25 LB./FT.

\* **NOTE:** Signs with a width of 4' and over  
shall require 2 posts.

**GALVANIZING FINISH**  
Galvanizing Shall Conform with ASTM Specification A123-73.  
It Shall Be Galvanized After All Fabrication and Punching,  
Has Been Completed.



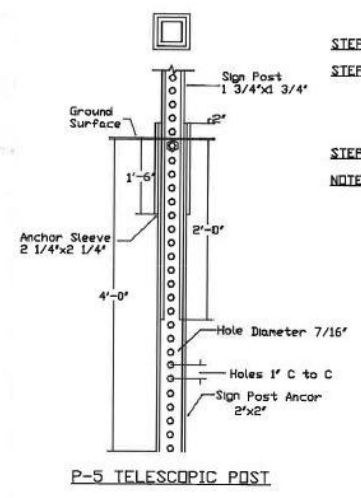
**RETAINER-SPACER STRAP**  
For 2.5 and 4.0 lb/ft Sign Posts  
Material-Mild Steel  
Finish-Hot Dip Galvanize Per ASTM A-123

**NOTES:**

DETAILS PROVIDED ARE FROM THE COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS  
STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, 1990 ED.

ALL-WAY STOP CONTROL  
PROGRAM  
  
STANDARD SIGN  
INSTALLATION DETAILS





- GROUND INSTALLATION METHOD OF INSTALLATION**
- STEP 1** Drive Sign Post Anchor To Within 3 Or 4" Of Surface.
  - STEP 2** Pre-cut Anchor Sleeve So That The Holes Will Match And Still Be Flush With Top Of Sign Post's Anchor. Drive Anchor Sleeve Until Holes Match As Noted Above, Then Drive Both The Sign Post Anchor And Anchor Sleeve Until One Hole Is Exposed Above Ground For Bolt Connection.
  - STEP 3** Insert Sign Post And Bolt In Place.
  - NOTE:** Driving Caps Must Be Used To Drive Posts. Retain 4'-0" Depth To Reach Theoretical Frost Line.

**GENERAL NOTES**

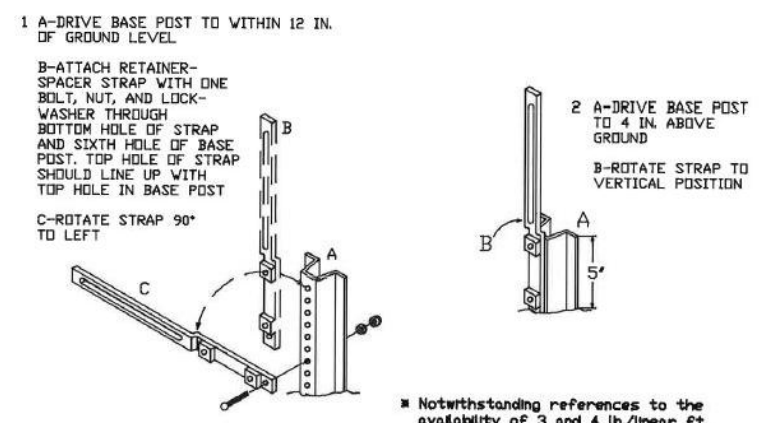
BREAKAWAY SIGN SUPPORTS SHALL BE FABRICATED FROM STEEL AND SHALL CONFORM TO THE BREAKAWAY DESIGN SHOWN ON THIS SHEET OR "GROUND MOUNTED SIGN SUPPORTS BREAKAWAY DESIGN FOR SIGNS WITH AREA 20 SQ. FT. AND BELOW" AND THE MASS. DEPT. OF PUBLIC WORKS "STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES".

THE STEEL POSTS SHALL CONFORM TO ASTM-A366. THE CROSS SECTION OF THE POST SHALL BE SQUARE TUBE FORMED OF 12 GAUGE (305" U.S.S. GAUGE) COLD-ROLLED CARBON STEEL SHEETS WHICH HAVE BEEN ZINC COATED (G25 oz) CONFORMING TO ASTM-A525, CAREFULLY ROLLED TO SIZE AND WELDED DIRECTLY IN THE CORNER BY HIGH FREQUENCY RESISTANCE WELDING OR EQUAL AND EXTERNALLY SCARFED TO AGREE WITH CORNER RADI. STANDARD OUTSIDE CORNER CORNER RADIUS SHALL BE 5/32" PLUS OR MINUS 1/64".

ALL BOLTS SHALL CONFORM TO ASTM-A307, CLASS A. ALL BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED AS PER ASTM-A153.

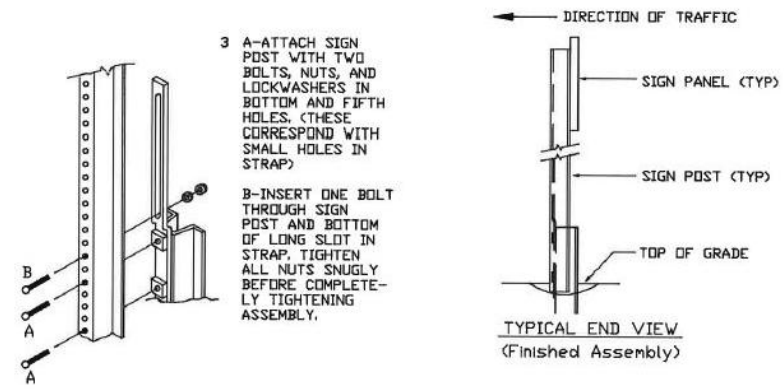
**EZE-ERECT SIGN POST INSTALLATION \***

BOLTS: 5/16"-18 UNC x 2", GRBD, FOR 4.0 LB POSTS  
5/16"-18 UNC x 1 3/4", GRBC, FOR 2.0, 2.25, 2.5 & 3.0 LB. POSTS  
DO NOT USE 5/16" GRBC BOLTS ON 4.0 LB POSTS

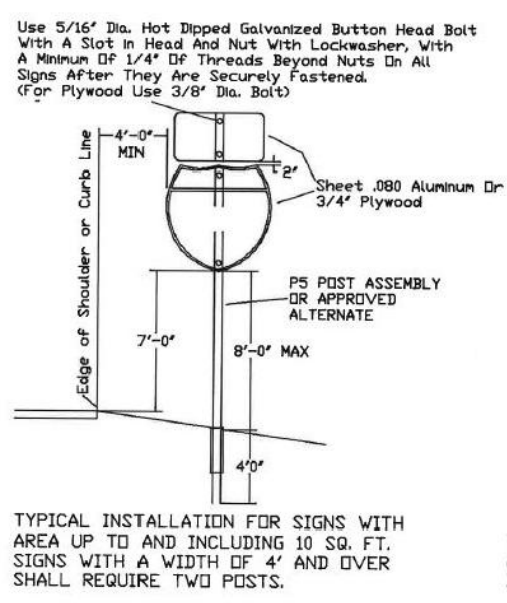
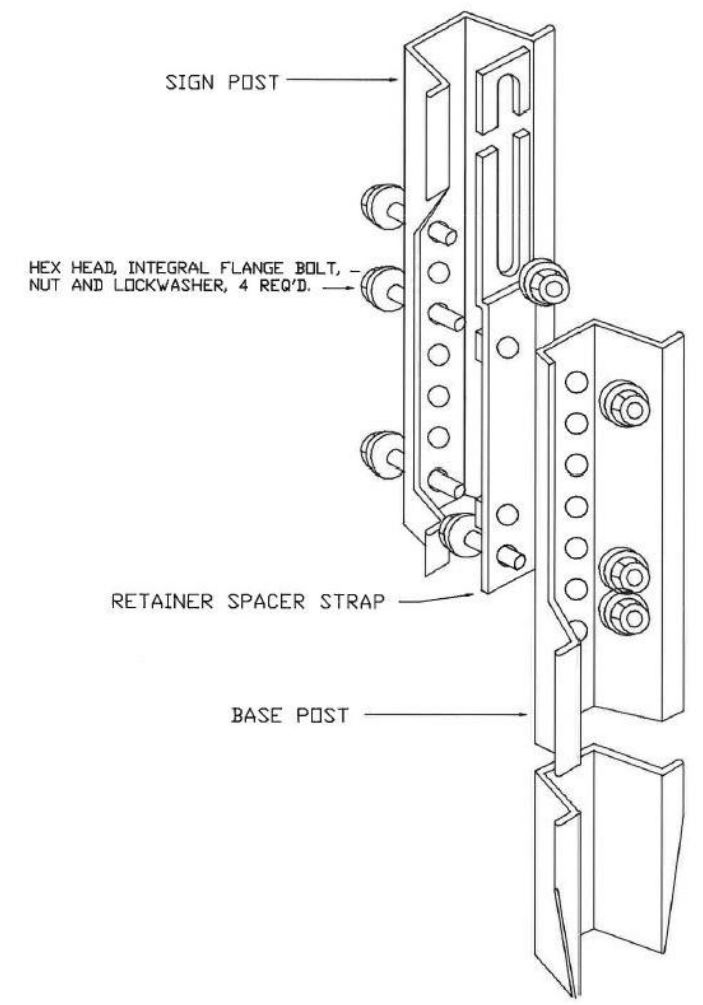


\* Notwithstanding references to the availability of 3 and 4 lb./linear ft. posts, the sign size vs. post weight table on page 50 shall govern.

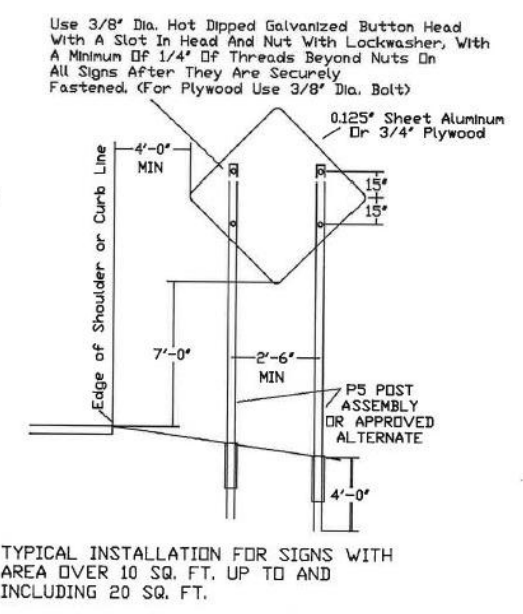
**ATTACHMENT OF SIGN POST TO BASE POST**



- 3 A-ATTACH SIGN POST WITH TWO BOLTS, NUTS, AND LOCKWASHERS IN BOTTOM AND FIFTH HOLES. (THESE CORRESPOND WITH SMALL HOLES IN STRAP)**
- B-INSERT ONE BOLT THROUGH SIGN POST AND BOTTOM OF LONG SLOT IN STRAP. TIGHTEN ALL NUTS SNUGLY BEFORE COMPLETELY TIGHTENING ASSEMBLY.**



TYPICAL INSTALLATION FOR SIGNS WITH AREA UP TO AND INCLUDING 10 SQ. FT. SIGNS WITH A WIDTH OF 4' AND OVER SHALL REQUIRE TWO POSTS.



TYPICAL INSTALLATION FOR SIGNS WITH AREA OVER 10 SQ. FT. UP TO AND INCLUDING 20 SQ. FT.

**TYPICAL INSTALLATION FOR SMALL SIGNS (UP TO 20 SQ.FT.)**

NOTES:

DETAILS PROVIDED ARE FROM THE COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, 1990 ED.

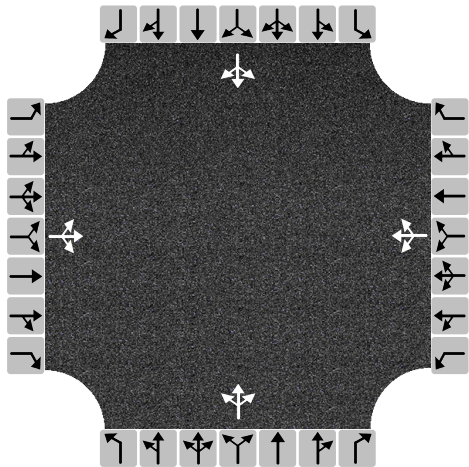
## **OPERATIONS ANALYSIS**

# HCS All-Way Stop Control Report

## General and Site Information

Analyst	BG
Agency/Co.	GPI
Date Performed	4/16/2025
Analysis Year	2025
Analysis Time Period (hrs)	1.00
Time Analyzed	7:45 AM - 8:45 AM
Project Description	TWSC to AWSC
Intersection	June St at Brownell St
Jurisdiction	Worcester
East/West Street	Brownell Street / Hawden Road
North/South Street	June Street
Peak Hour Factor	0.85

## Lanes



## Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	119	12	27	1	14	57	16	340	2	14	318	120
% Thrus in Shared Lane												

## Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	186			85			421			532		
Percent Heavy Vehicles	1			3			6			2		
Initial Departure Headway, h <sub>d</sub> (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.165			0.075			0.374			0.473		
Final Departure Headway, h <sub>d</sub> (s)	6.76			6.65			5.83			5.46		
Final Degree of Utilization, x	0.349			0.156			0.682			0.807		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t <sub>s</sub> (s)	4.76			4.65			3.83			3.46		

## Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	186			85			421			532		
Capacity (veh/h)	532			542			618			659		
95% Queue Length, Q <sub>95</sub> (veh)	1.6			0.6			6.1			10.7		
Control Delay (s/veh)	13.4			10.9			21.1			30.0		
Level of Service, LOS	B			B			C			D		
Approach Delay (s/veh)   LOS	13.4	B		10.9	B		21.1	C		30.0	D	
Intersection Delay (s/veh)   LOS	23.1						C					

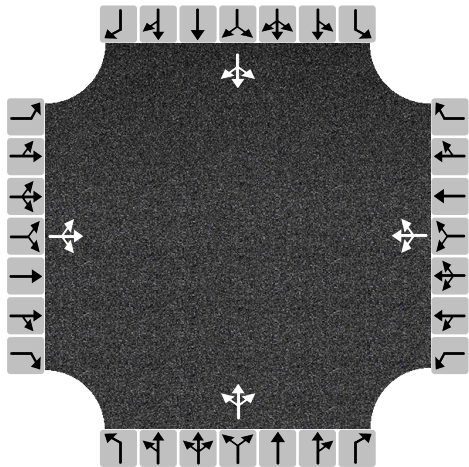


HCS All-Way Stop Control Report

General and Site Information

Analyst	BG
Agency/Co.	GPI
Date Performed	4/16/2025
Analysis Year	2025
Analysis Time Period (hrs)	1.00
Time Analyzed	4:00 PM - 5:00 PM
Project Description	TWSC to AWSC
Intersection	June St at Brownell St
Jurisdiction	Worcester
East/West Street	Brownell Street / Hawden Road
North/South Street	June Street
Peak Hour Factor	0.88

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	68	10	14	1	18	55	13	322	6	20	398	113
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	105			84			388			603		
Percent Heavy Vehicles	1			0			3			2		
Initial Departure Headway, h <sub>d</sub> (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.093			0.075			0.344			0.536		
Final Departure Headway, h <sub>d</sub> (s)	6.67			6.24			5.42			5.02		
Final Degree of Utilization, x	0.194			0.146			0.583			0.842		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t <sub>s</sub> (s)	4.67			4.24			3.42			3.02		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	105			84			388			603		
Capacity (veh/h)	539			577			664			716		
95% Queue Length, Q <sub>95</sub> (veh)	0.7			0.5			4.1			13.0		
Control Delay (s/veh)	11.3			10.3			15.9			32.7		
Level of Service, LOS	B			B			C			D		
Approach Delay (s/veh)   LOS	11.3		B	10.3		B	15.9		C	32.7		D
Intersection Delay (s/veh)   LOS	23.7						C					

## TRAFFIC DATA

PDI File #: **250531 (6)**  
 Location: **N: June Street S: June Street**  
 Location: **E: Brownell Street W: Hawden Road**  
 City, State: **Worcester, MA**  
 Client: **GPI/ B. Gomes**  
 Site Code: **AWSC-Round 4**  
 Count Date: **Wednesday, April 2, 2025**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Cars and Heavy Vehicles (Combined)

	June Street					Brownell Street					June Street					Hawden Road					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:00 AM	10	70	1	0	81	12	1	0	0	13	0	74	1	0	75	3	0	22	0	25	194
7:15 AM	12	64	2	0	78	6	3	0	0	9	0	49	0	0	49	6	4	9	0	19	155
7:30 AM	23	54	0	0	77	7	3	0	0	10	0	79	1	0	80	3	1	38	0	42	209
7:45 AM	27	67	4	0	98	15	4	0	0	19	1	94	0	0	95	2	3	32	0	37	249
Total	72	255	7	0	334	40	11	0	0	51	1	296	2	0	299	14	8	101	0	123	807
8:00 AM	37	91	3	0	131	16	5	0	0	21	0	81	2	0	83	1	0	14	0	15	250
8:15 AM	36	76	5	0	117	15	3	0	0	18	0	95	11	0	106	17	7	41	0	65	306
8:30 AM	20	84	2	0	106	11	2	1	0	14	1	70	3	0	74	7	2	32	0	41	235
8:45 AM	19	70	3	0	92	7	8	0	0	15	1	73	1	0	75	7	0	10	0	17	199
Total	112	321	13	0	446	49	18	1	0	68	2	319	17	0	338	32	9	97	0	138	990
Grand Total	184	576	20	0	780	89	29	1	0	119	3	615	19	0	637	46	17	198	0	261	1797
Approach %	23.6	73.8	2.6	0.0		74.8	24.4	0.8	0.0		0.5	96.5	3.0	0.0		17.6	6.5	75.9	0.0		
Total %	10.2	32.1	1.1	0.0	43.4	5.0	1.6	0.1	0.0	6.6	0.2	34.2	1.1	0.0	35.4	2.6	0.9	11.0	0.0	14.5	
Exiting Leg Total	902					40					623					232					1797
Cars	182	563	19	0	764	87	27	1	0	115	3	589	18	0	610	45	17	197	0	259	1748
% Cars	98.9	97.7	95.0	0.0	97.9	97.8	93.1	100.0	0.0	96.6	100.0	95.8	94.7	0.0	95.8	97.8	100.0	99.5	0.0	99.2	97.3
Exiting Leg Total	873					39					609					227					1748
Heavy Vehicles	2	13	1	0	16	2	2	0	0	4	0	26	1	0	27	1	0	1	0	2	49
% Heavy Vehicles	1.1	2.3	5.0	0.0	2.1	2.2	6.9	0.0	0.0	3.4	0.0	4.2	5.3	0.0	4.2	2.2	0.0	0.5	0.0	0.8	2.7
Exiting Leg Total	29					1					14					5					49

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:45 AM	June Street					Brownell Street					June Street					Hawden Road					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:45 AM	27	67	4	0	98	15	4	0	0	19	1	94	0	0	95	2	3	32	0	37	249
8:00 AM	37	91	3	0	131	16	5	0	0	21	0	81	2	0	83	1	0	14	0	15	250
8:15 AM	36	76	5	0	117	15	3	0	0	18	0	95	11	0	106	17	7	41	0	65	306
8:30 AM	20	84	2	0	106	11	2	1	0	14	1	70	3	0	74	7	2	32	0	41	235
Total Volume	120	318	14	0	452	57	14	1	0	72	2	340	16	0	358	27	12	119	0	158	1040
% Approach Total	26.5	70.4	3.1	0.0		79.2	19.4	1.4	0.0		0.6	95.0	4.5	0.0		17.1	7.6	75.3	0.0		
PHF	0.811	0.874	0.700	0.000	0.863	0.891	0.700	0.250	0.000	0.857	0.500	0.895	0.364	0.000	0.844	0.397	0.429	0.726	0.000	0.608	0.850
Cars	118	310	13	0	441	56	13	1	0	70	2	321	15	0	338	26	12	118	0	156	1005
Cars %	98.3	97.5	92.9	0.0	97.6	98.2	92.9	100.0	0.0	97.2	100.0	94.4	93.8	0.0	94.4	96.3	100.0	99.2	0.0	98.7	96.6
Heavy Vehicles	2	8	1	0	11	1	1	0	0	2	0	19	1	0	20	1	0	1	0	2	35
Heavy Vehicles %	1.7	2.5	7.1	0.0	2.4	1.8	7.1	0.0	0.0	2.8	0.0	5.6	6.3	0.0	5.6	3.7	0.0	0.8	0.0	1.3	3.4
Cars Enter Leg	118	310	13	0	441	56	13	1	0	70	2	321	15	0	338	26	12	118	0	156	1005
Heavy Enter Leg	2	8	1	0	11	1	1	0	0	2	0	19	1	0	20	1	0	1	0	2	35
Total Entering Leg	120	318	14	0	452	57	14	1	0	72	2	340	16	0	358	27	12	119	0	158	1040
Cars Exiting Leg	495					27					337					146					1005
Heavy Exiting Leg	21					1					9					4					35
Total Exiting Leg	516					28					346					150					1040



PDI File #: **250531 (6)**  
 Location: **N: June Street S: June Street**  
 Location: **E: Brownell Street W: Hawden Road**  
 City, State: **Worcester, MA**  
 Client: **GPI/ B. Gomes**  
 Site Code: **AWSC-Round 4**  
 Count Date: **Wednesday, April 2, 2025**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Cars

	June Street					Brownell Street					June Street					Hawden Road					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:00 AM	10	67	1	0	78	12	1	0	0	13	0	72	1	0	73	3	0	22	0	25	189
7:15 AM	12	63	2	0	77	5	3	0	0	8	0	46	0	0	46	6	4	9	0	19	150
7:30 AM	23	54	0	0	77	7	3	0	0	10	0	79	1	0	80	3	1	38	0	42	209
7:45 AM	26	64	4	0	94	15	4	0	0	19	1	92	0	0	93	2	3	32	0	37	243
Total	71	248	7	0	326	39	11	0	0	50	1	289	2	0	292	14	8	101	0	123	791
8:00 AM	37	90	3	0	130	15	4	0	0	19	0	79	2	0	81	1	0	14	0	15	245
8:15 AM	35	74	5	0	114	15	3	0	0	18	0	87	10	0	97	16	7	40	0	63	292
8:30 AM	20	82	1	0	103	11	2	1	0	14	1	63	3	0	67	7	2	32	0	41	225
8:45 AM	19	69	3	0	91	7	7	0	0	14	1	71	1	0	73	7	0	10	0	17	195
Total	111	315	12	0	438	48	16	1	0	65	2	300	16	0	318	31	9	96	0	136	957
Grand Total	182	563	19	0	764	87	27	1	0	115	3	589	18	0	610	45	17	197	0	259	1748
Approach %	23.8	73.7	2.5	0.0		75.7	23.5	0.9	0.0		0.5	96.6	3.0	0.0		17.4	6.6	76.1	0.0		
Total %	10.4	32.2	1.1	0.0	43.7	5.0	1.5	0.1	0.0	6.6	0.2	33.7	1.0	0.0	34.9	2.6	1.0	11.3	0.0	14.8	
Exiting Leg Total	873					39					609					227					1748

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:45 AM	June Street					Brownell Street					June Street					Hawden Road					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:45 AM	26	64	4	0	94	15	4	0	0	19	1	92	0	0	93	2	3	32	0	37	243
8:00 AM	37	90	3	0	130	15	4	0	0	19	0	79	2	0	81	1	0	14	0	15	245
8:15 AM	35	74	5	0	114	15	3	0	0	18	0	87	10	0	97	16	7	40	0	63	292
8:30 AM	20	82	1	0	103	11	2	1	0	14	1	63	3	0	67	7	2	32	0	41	225
Total Volume	118	310	13	0	441	56	13	1	0	70	2	321	15	0	338	26	12	118	0	156	1005
% Approach Total	26.8	70.3	2.9	0.0		80.0	18.6	1.4	0.0		0.6	95.0	4.4	0.0		16.7	7.7	75.6	0.0		
PHF	0.797	0.861	0.650	0.000	0.848	0.933	0.813	0.250	0.000	0.921	0.500	0.872	0.375	0.000	0.871	0.406	0.429	0.738	0.000	0.619	0.860
Entering Leg	118	310	13	0	441	56	13	1	0	70	2	321	15	0	338	26	12	118	0	156	1005
Exiting Leg	495					27					337					146					1005
Total	936					97					675					302					2010

PDI File #: **250531 (6)**  
 Location: **N: June Street S: June Street**  
 Location: **E: Brownell Street W: Hawden Road**  
 City, State: **Worcester, MA**  
 Client: **GPI/ B. Gomes**  
 Site Code: **AWSC-Round 4**  
 Count Date: **Wednesday, April 2, 2025**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

	June Street					Brownell Street					June Street					Hawden Road					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:00 AM	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	5
7:15 AM	0	1	0	0	1	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	5
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	1	3	0	0	4	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	6
Total	1	7	0	0	8	1	0	0	0	1	0	7	0	0	7	0	0	0	0	0	16
8:00 AM	0	1	0	0	1	1	1	0	0	2	0	2	0	0	2	0	0	0	0	0	5
8:15 AM	1	2	0	0	3	0	0	0	0	0	0	8	1	0	9	1	0	1	0	2	14
8:30 AM	0	2	1	0	3	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	10
8:45 AM	0	1	0	0	1	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	4
Total	1	6	1	0	8	1	2	0	0	3	0	19	1	0	20	1	0	1	0	2	33
Grand Total	2	13	1	0	16	2	2	0	0	4	0	26	1	0	27	1	0	1	0	2	49
Approach %	12.5	81.3	6.3	0.0		50.0	50.0	0.0	0.0		0.0	96.3	3.7	0.0		50.0	0.0	50.0	0.0		
Total %	4.1	26.5	2.0	0.0	32.7	4.1	4.1	0.0	0.0	8.2	0.0	53.1	2.0	0.0	55.1	2.0	0.0	2.0	0.0	4.1	
Exiting Leg Total	29					1					14					5					49
Buses	1	7	1	0	9	0	1	0	0	1	0	13	0	0	13	1	0	1	0	2	25
% Buses	50.0	53.8	100.0	0.0	56.3	0.0	50.0	0.0	0.0	25.0	0.0	50.0	0.0	0.0	48.1	100.0	0.0	100.0	0.0	100.0	51.0
Exiting Leg Total	14					1					8					2					25
Single-Unit Trucks	1	6	0	0	7	1	0	0	0	1	0	10	1	0	11	0	0	0	0	0	19
% Single-Unit	50.0	46.2	0.0	0.0	43.8	50.0	0.0	0.0	0.0	25.0	0.0	38.5	100.0	0.0	40.7	0.0	0.0	0.0	0.0	0.0	38.8
Exiting Leg Total	11					0					6					2					19
Articulated Trucks	0	0	0	0	0	1	1	0	0	2	0	3	0	0	3	0	0	0	0	0	5
% Articulated	0.0	0.0	0.0	0.0	0.0	50.0	50.0	0.0	0.0	50.0	0.0	11.5	0.0	0.0	11.1	0.0	0.0	0.0	0.0	0.0	10.2
Exiting Leg Total	4					0					0					1					5

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:45 AM	June Street					Brownell Street					June Street					Hawden Road					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:45 AM	1	3	0	0	4	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	6
8:00 AM	0	1	0	0	1	1	1	0	0	2	0	2	0	0	2	0	0	0	0	0	5
8:15 AM	1	2	0	0	3	0	0	0	0	0	0	8	1	0	9	1	0	1	0	2	14
8:30 AM	0	2	1	0	3	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	10
Total Volume	2	8	1	0	11	1	1	0	0	2	0	19	1	0	20	1	0	1	0	2	35
% Approach Total	18.2	72.7	9.1	0.0		50.0	50.0	0.0	0.0		0.0	95.0	5.0	0.0		50.0	0.0	50.0	0.0		
PHF	0.500	0.667	0.250	0.000	0.688	0.250	0.250	0.000	0.000	0.250	0.000	0.594	0.250	0.000	0.556	0.250	0.000	0.250	0.000	0.250	0.625
Buses	1	3	1	0	5	0	0	0	0	0	0	10	0	0	10	1	0	1	0	2	17
Buses %	50.0	37.5	100.0	0.0	45.5	0.0	0.0	0.0	0.0	0.0	0.0	52.6	0.0	0.0	50.0	100.0	0.0	100.0	0.0	100.0	48.6
Single-Unit Trucks	1	5	0	0	6	0	0	0	0	0	0	6	1	0	7	0	0	0	0	0	13
Single-Unit %	50.0	62.5	0.0	0.0	54.5	0.0	0.0	0.0	0.0	0.0	0.0	31.6	100.0	0.0	35.0	0.0	0.0	0.0	0.0	0.0	37.1
Articulated Trucks	0	0	0	0	0	1	1	0	0	2	0	3	0	0	3	0	0	0	0	0	5
Articulated %	0.0	0.0	0.0	0.0	0.0	100.0	100.0	0.0	0.0	100.0	0.0	15.8	0.0	0.0	15.0	0.0	0.0	0.0	0.0	0.0	14.3
Buses	1	3	1	0	5	0	0	0	0	0	0	10	0	0	10	1	0	1	0	2	17
Single-Unit Trucks	1	5	0	0	6	0	0	0	0	0	0	6	1	0	7	0	0	0	0	0	13
Articulated Trucks	0	0	0	0	0	1	1	0	0	2	0	3	0	0	3	0	0	0	0	0	5
Total Entering Leg	2	8	1	0	11	1	1	0	0	2	0	19	1	0	20	1	0	1	0	2	35
Buses	11					1					4					1					17
Single-Unit Trucks	6					0					5					2					13
Articulated Trucks	4					0					0					1					5
Total Exiting Leg	21					1					9					4					35

PDI File #: **250531 (6)**  
 Location: **N: June Street S: June Street**  
 Location: **E: Brownell Street W: Hawden Road**  
 City, State: **Worcester, MA**  
 Client: **GPI/ B. Gomes**  
 Site Code: **AWSC-Round 4**  
 Count Date: **Wednesday, April 2, 2025**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Buses

	June Street					Brownell Street					June Street					Hawden Road					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:00 AM	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	4
7:15 AM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	5	0	0	5	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	8
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
8:15 AM	1	1	0	0	2	0	0	0	0	0	0	5	0	0	5	1	0	1	0	2	9
8:30 AM	0	1	1	0	2	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	6
8:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	1	2	1	0	4	0	1	0	0	1	0	10	0	0	10	1	0	1	0	2	17
Grand Total	1	7	1	0	9	0	1	0	0	1	0	13	0	0	13	1	0	1	0	2	25
Approach %	11.1	77.8	11.1	0.0		0.0	100.0	0.0	0.0		0.0	100.0	0.0	0.0		50.0	0.0	50.0	0.0		
Total %	4.0	28.0	4.0	0.0	36.0	0.0	4.0	0.0	0.0	4.0	0.0	52.0	0.0	0.0	52.0	4.0	0.0	4.0	0.0	8.0	
Exiting Leg Total	14					1					8					2					25

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:45 AM	June Street					Brownell Street					June Street					Hawden Road					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:45 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
8:15 AM	1	1	0	0	2	0	0	0	0	0	0	5	0	0	5	1	0	1	0	2	9
8:30 AM	0	1	1	0	2	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	6
Total Volume	1	3	1	0	5	0	0	0	0	0	0	10	0	0	10	1	0	1	0	2	17
% Approach Total	20.0	60.0	20.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		50.0	0.0	50.0	0.0		
PHF	0.250	0.750	0.250	0.000	0.625	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.500	0.250	0.000	0.250	0.000	0.250	0.472
Entering Leg	1	3	1	0	5	0	0	0	0	0	0	10	0	0	10	1	0	1	0	2	17
Exiting Leg	11					1					4					1					17
Total	16					1					14					3					34

PDI File #: **250531 (6)**  
 Location: **N: June Street S: June Street**  
 Location: **E: Brownell Street W: Hawden Road**  
 City, State: **Worcester, MA**  
 Client: **GPI/ B. Gomes**  
 Site Code: **AWSC-Round 4**  
 Count Date: **Wednesday, April 2, 2025**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Single-Unit Trucks

	June Street					Brownell Street					June Street					Hawden Road					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	1	2	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	5
Total	1	2	0	0	3	1	0	0	0	1	0	4	0	0	4	0	0	0	0	0	8
8:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	1	0	0	1	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	4
8:30 AM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
8:45 AM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
Total	0	4	0	0	4	0	0	0	0	0	0	6	1	0	7	0	0	0	0	0	11
Grand Total	1	6	0	0	7	1	0	0	0	1	0	10	1	0	11	0	0	0	0	0	19
Approach %	14.3	85.7	0.0	0.0		100.0	0.0	0.0	0.0		0.0	90.9	9.1	0.0		0.0	0.0	0.0	0.0		
Total %	5.3	31.6	0.0	0.0	36.8	5.3	0.0	0.0	0.0	5.3	0.0	52.6	5.3	0.0	57.9	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	11					0					6					2					19

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:45 AM	June Street					Brownell Street					June Street					Hawden Road					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:45 AM	1	2	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	5
8:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	1	0	0	1	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	4
8:30 AM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
Total Volume	1	5	0	0	6	0	0	0	0	0	0	6	1	0	7	0	0	0	0	0	13
% Approach Total	16.7	83.3	0.0	0.0		0.0	0.0	0.0	0.0		0.0	85.7	14.3	0.0		0.0	0.0	0.0	0.0		
PHF	0.250	0.625	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.250	0.000	0.583	0.000	0.000	0.000	0.000	0.000	0.650
Entering Leg	1	5	0	0	6	0	0	0	0	0	0	6	1	0	7	0	0	0	0	0	13
Exiting Leg	6					0					5					2					13
Total	12					0					12					2					26



PDI File #: **250531 (6)**  
 Location: **N: June Street S: June Street**  
 Location: **E: Brownell Street W: Hawden Road**  
 City, State: **Worcester, MA**  
 Client: **GPI/ B. Gomes**  
 Site Code: **AWSC-Round 4**  
 Count Date: **Wednesday, April 2, 2025**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Articulated Trucks

	June Street					Brownell Street					June Street					Hawden Road					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	1	1	0	0	2	0	1	0	0	1	0	0	0	0	0	3
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
8:45 AM	0	0	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	1	1	0	0	2	0	3	0	0	3	0	0	0	0	0	5
Grand Total	0	0	0	0	0	1	1	0	0	2	0	3	0	0	3	0	0	0	0	0	5
Approach %	0.0	0.0	0.0	0.0		50.0	50.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	20.0	20.0	0.0	0.0	40.0	0.0	60.0	0.0	0.0	60.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	4					0					0					1					5

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:45 AM	June Street					Brownell Street					June Street					Hawden Road					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	1	1	0	0	2	0	1	0	0	1	0	0	0	0	0	3
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Total Volume	0	0	0	0	0	1	1	0	0	2	0	3	0	0	3	0	0	0	0	0	5
% Approach Total	0.0	0.0	0.0	0.0		50.0	50.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.250	0.000	0.750	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.417
Entering Leg	0	0	0	0	0	1	1	0	0	2	0	3	0	0	3	0	0	0	0	0	5
Exiting Leg	4					0					0					1					5
Total	4					2					3					1					10

PDI File #: **250531 (6)**  
 Location: **N: June Street S: June Street**  
 Location: **E: Brownell Street W: Hawden Road**  
 City, State: **Worcester, MA**  
 Client: **GPI/ B. Gomes**  
 Site Code: **AWSC-Round 4**  
 Count Date: **Wednesday, April 2, 2025**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Bicycles (on Roadway and Crosswalks)

	June Street							Brownell Street							June Street							Hawden Road							Total
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	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	0.0	0.0	0.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	0							1							0							0							1

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:00 AM	June Street							Brownell Street							June Street							Hawden Road							Total
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.250
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Exiting Leg	0							1							0							0							1
Total	0							2							0							0							2

PDI File #: **250531 (6)**  
 Location: **N: June Street S: June Street**  
 Location: **E: Brownell Street W: Hawden Road**  
 City, State: **Worcester, MA**  
 Client: **GPI/ B. Gomes**  
 Site Code: **AWSC-Round 4**  
 Count Date: **Wednesday, April 2, 2025**  
 Start Time: **7:00 AM**  
 End Time: **9:00 AM**  
 Class:



### Pedestrians

	June Street							Brownell Street							June Street							Hawden Road							Total
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
7:00 AM	0	0	0	0	1	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	3	4	0	0	0	0	2	0	2	0	0	0	0	0	1	1	7
Total	0	0	0	0	1	0	1	0	0	0	0	1	4	5	0	0	0	0	2	0	2	0	0	0	0	0	3	3	11
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	3	4	0	0	0	0	0	1	1	0	0	0	0	2	0	2	7
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	0	0	0	0	3	0	3	0	0	0	0	3	4	7	0	0	0	0	0	1	1	0	0	0	0	2	0	2	13
Grand Total	0	0	0	0	4	0	4	0	0	0	0	4	8	12	0	0	0	0	2	1	3	0	0	0	0	2	3	5	24
Approach %	0	0	0	0	100	0		0	0	0	0	33.3	66.7		0	0	0	0	66.7	33.3		0	0	0	0	40	60		
Total %	0	0	0	0	16.7	0	16.7	0	0	0	0	16.7	33.3	50	0	0	0	0	8.33	4.17	12.5	0	0	0	0	8.33	12.5	20.8	
Exiting Leg Total	4							12							3							5							24

Peak Hour Analysis from 07:00 AM to 09:00 AM begins at:

7:45 AM	June Street							Brownell Street							June Street							Hawden Road							Total
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	3	4	0	0	0	0	2	0	2	0	0	0	0	1	1	7	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	3	4	0	0	0	0	0	1	1	0	0	0	0	2	0	2	7
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total Volume	0	0	0	0	3	0	3	0	0	0	0	2	6	8	0	0	0	0	2	1	3	0	0	0	0	2	1	3	17
% Approach Total	0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	25.0	75.0		0.0	0.0	0.0	0.0	66.7	33.3		0.0	0.0	0.0	0.0	66.7	33.3		
PHF	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.500	0.500	0.500	0.000	0.000	0.000	0.000	0.250	0.250	0.375	0.000	0.000	0.000	0.000	0.250	0.250	0.375	0.607
Entering Leg	0	0	0	0	3	0	3	0	0	0	0	2	6	8	0	0	0	0	2	1	3	0	0	0	0	2	1	3	17
Exiting Leg	3							8							3							3							17
Total	6							16							6							6							34

PDI File #: **250531 (6)**  
 Location: **N: June Street S: June Street**  
 Location: **E: Brownell Street W: Hawden Road**  
 City, State: **Worcester, MA**  
 Client: **GPI/ B. Gomes**  
 Site Code: **AWSC-Round 4**  
 Count Date: **Wednesday, April 2, 2025**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Cars and Heavy Vehicles (Combined)

	June Street					Brownell Street					June Street					Hawden Road					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	33	107	7	0	147	14	3	0	0	17	3	94	6	0	103	4	3	21	0	28	295
4:15 PM	30	100	2	0	132	14	4	0	0	18	2	81	4	0	87	3	5	18	0	26	263
4:30 PM	26	104	2	0	132	10	6	1	0	17	0	70	3	0	73	4	0	19	0	23	245
4:45 PM	24	87	9	0	120	17	5	0	0	22	1	77	0	0	78	3	2	10	0	15	235
Total	113	398	20	0	531	55	18	1	0	74	6	322	13	0	341	14	10	68	0	92	1038
5:00 PM	29	84	5	0	118	7	3	0	0	10	1	78	4	0	83	5	1	13	0	19	230
5:15 PM	35	93	5	1	134	16	5	1	0	22	0	62	5	0	67	8	4	11	0	23	246
5:30 PM	26	93	7	1	127	12	6	0	0	18	1	69	2	0	72	3	2	19	0	24	241
5:45 PM	25	96	5	0	126	10	5	1	0	16	0	74	4	0	78	10	3	11	0	24	244
Total	115	366	22	2	505	45	19	2	0	66	2	283	15	0	300	26	10	54	0	90	961
Grand Total	228	764	42	2	1036	100	37	3	0	140	8	605	28	0	641	40	20	122	0	182	1999
Approach %	22.0	73.7	4.1	0.2		71.4	26.4	2.1	0.0		1.2	94.4	4.4	0.0		22.0	11.0	67.0	0.0		
Total %	11.4	38.2	2.1	0.1	51.8	5.0	1.9	0.2	0.0	7.0	0.4	30.3	1.4	0.0	32.1	2.0	1.0	6.1	0.0	9.1	
Exiting Leg Total	829					70					807					293					1999
Cars	226	752	41	2	1021	99	37	3	0	139	7	592	27	0	626	39	20	122	0	181	1967
% Cars	99.1	98.4	97.6	100.0	98.6	99.0	100.0	100.0	0.0	99.3	87.5	97.9	96.4	0.0	97.7	97.5	100.0	100.0	0.0	99.5	98.4
Exiting Leg Total	815					68					794					290					1967
Heavy Vehicles	2	12	1	0	15	1	0	0	0	1	1	13	1	0	15	1	0	0	0	1	32
% Heavy Vehicles	0.9	1.6	2.4	0.0	1.4	1.0	0.0	0.0	0.0	0.7	12.5	2.1	3.6	0.0	2.3	2.5	0.0	0.0	0.0	0.5	1.6
Exiting Leg Total	14					2					13					3					32

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	June Street					Brownell Street					June Street					Hawden Road					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	33	107	7	0	147	14	3	0	0	17	3	94	6	0	103	4	3	21	0	28	295
4:15 PM	30	100	2	0	132	14	4	0	0	18	2	81	4	0	87	3	5	18	0	26	263
4:30 PM	26	104	2	0	132	10	6	1	0	17	0	70	3	0	73	4	0	19	0	23	245
4:45 PM	24	87	9	0	120	17	5	0	0	22	1	77	0	0	78	3	2	10	0	15	235
Total Volume	113	398	20	0	531	55	18	1	0	74	6	322	13	0	341	14	10	68	0	92	1038
% Approach Total	21.3	75.0	3.8	0.0		74.3	24.3	1.4	0.0		1.8	94.4	3.8	0.0		15.2	10.9	73.9	0.0		
PHF	0.856	0.930	0.556	0.000	0.903	0.809	0.750	0.250	0.000	0.841	0.500	0.856	0.542	0.000	0.828	0.875	0.500	0.810	0.000	0.821	0.880
Cars	111	392	19	0	522	55	18	1	0	74	5	314	12	0	331	13	10	68	0	91	1018
Cars %	98.2	98.5	95.0	0.0	98.3	100.0	100.0	100.0	0.0	100.0	83.3	97.5	92.3	0.0	97.1	92.9	100.0	100.0	0.0	98.9	98.1
Heavy Vehicles	2	6	1	0	9	0	0	0	0	0	1	8	1	0	10	1	0	0	0	1	20
Heavy Vehicles %	1.8	1.5	5.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	16.7	2.5	7.7	0.0	2.9	7.1	0.0	0.0	0.0	1.1	1.9
Cars Enter Leg	111	392	19	0	522	55	18	1	0	74	5	314	12	0	331	13	10	68	0	91	1018
Heavy Enter Leg	2	6	1	0	9	0	0	0	0	0	1	8	1	0	10	1	0	0	0	1	20
Total Entering Leg	113	398	20	0	531	55	18	1	0	74	6	322	13	0	341	14	10	68	0	92	1038
Cars Exiting Leg	437					34					406					141					1018
Heavy Exiting Leg	8					2					7					3					20
Total Exiting Leg	445					36					413					144					1038



PDI File #: **250531 (6)**  
 Location: **N: June Street S: June Street**  
 Location: **E: Brownell Street W: Hawden Road**  
 City, State: **Worcester, MA**  
 Client: **GPI/ B. Gomes**  
 Site Code: **AWSC-Round 4**  
 Count Date: **Wednesday, April 2, 2025**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



**Cars**

	June Street					Brownell Street					June Street					Hawden Road					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	32	105	7	0	144	14	3	0	0	17	2	90	5	0	97	3	3	21	0	27	285
4:15 PM	30	97	2	0	129	14	4	0	0	18	2	77	4	0	83	3	5	18	0	26	256
4:30 PM	26	103	2	0	131	10	6	1	0	17	0	70	3	0	73	4	0	19	0	23	244
4:45 PM	23	87	8	0	118	17	5	0	0	22	1	77	0	0	78	3	2	10	0	15	233
Total	111	392	19	0	522	55	18	1	0	74	5	314	12	0	331	13	10	68	0	91	1018
5:00 PM	29	82	5	0	116	7	3	0	0	10	1	76	4	0	81	5	1	13	0	19	226
5:15 PM	35	91	5	1	132	16	5	1	0	22	0	62	5	0	67	8	4	11	0	23	244
5:30 PM	26	93	7	1	127	11	6	0	0	17	1	66	2	0	69	3	2	19	0	24	237
5:45 PM	25	94	5	0	124	10	5	1	0	16	0	74	4	0	78	10	3	11	0	24	242
Total	115	360	22	2	499	44	19	2	0	65	2	278	15	0	295	26	10	54	0	90	949
Grand Total	226	752	41	2	1021	99	37	3	0	139	7	592	27	0	626	39	20	122	0	181	1967
Approach %	22.1	73.7	4.0	0.2		71.2	26.6	2.2	0.0		1.1	94.6	4.3	0.0		21.5	11.0	67.4	0.0		
Total %	11.5	38.2	2.1	0.1	51.9	5.0	1.9	0.2	0.0	7.1	0.4	30.1	1.4	0.0	31.8	2.0	1.0	6.2	0.0	9.2	
Exiting Leg Total	815					68					794					290					1967

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	June Street					Brownell Street					June Street					Hawden Road					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	32	105	7	0	144	14	3	0	0	17	2	90	5	0	97	3	3	21	0	27	285
4:15 PM	30	97	2	0	129	14	4	0	0	18	2	77	4	0	83	3	5	18	0	26	256
4:30 PM	26	103	2	0	131	10	6	1	0	17	0	70	3	0	73	4	0	19	0	23	244
4:45 PM	23	87	8	0	118	17	5	0	0	22	1	77	0	0	78	3	2	10	0	15	233
Total Volume	111	392	19	0	522	55	18	1	0	74	5	314	12	0	331	13	10	68	0	91	1018
% Approach Total	21.3	75.1	3.6	0.0		74.3	24.3	1.4	0.0		1.5	94.9	3.6	0.0		14.3	11.0	74.7	0.0		
PHF	0.867	0.933	0.594	0.000	0.906	0.809	0.750	0.250	0.000	0.841	0.625	0.872	0.600	0.000	0.853	0.813	0.500	0.810	0.000	0.843	0.893
Entering Leg	111	392	19	0	522	55	18	1	0	74	5	314	12	0	331	13	10	68	0	91	1018
Exiting Leg	437					34					406					141					1018
Total	959					108					737					232					2036

PDI File #: **250531 (6)**  
 Location: **N: June Street S: June Street**  
 Location: **E: Brownell Street W: Hawden Road**  
 City, State: **Worcester, MA**  
 Client: **GPI/ B. Gomes**  
 Site Code: **AWSC-Round 4**  
 Count Date: **Wednesday, April 2, 2025**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

	June Street					Brownell Street					June Street					Hawden Road					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	1	2	0	0	3	0	0	0	0	0	1	4	1	0	6	1	0	0	0	1	10
4:15 PM	0	3	0	0	3	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	7
4:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	2	6	1	0	9	0	0	0	0	0	1	8	1	0	10	1	0	0	0	1	20
5:00 PM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4
5:15 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	4
5:45 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	6	0	0	6	1	0	0	0	1	0	5	0	0	5	0	0	0	0	0	12
Grand Total	2	12	1	0	15	1	0	0	0	1	1	13	1	0	15	1	0	0	0	1	32
Approach %	13.3	80.0	6.7	0.0		100.0	0.0	0.0	0.0		6.7	86.7	6.7	0.0		100.0	0.0	0.0	0.0		
Total %	6.3	37.5	3.1	0.0	46.9	3.1	0.0	0.0	0.0	3.1	3.1	40.6	3.1	0.0	46.9	3.1	0.0	0.0	0.0	3.1	
Exiting Leg Total	14					2					13					3					32
Buses	1	5	0	0	6	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	12
% Buses	50.0	41.7	0.0	0.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	46.2	0.0	0.0	40.0	0.0	0.0	0.0	0.0	0.0	37.5
Exiting Leg Total	6					0					5					1					12
Single-Unit Trucks	1	7	1	0	9	1	0	0	0	1	1	7	1	0	9	1	0	0	0	1	20
% Single-Unit	50.0	58.3	100.0	0.0	60.0	100.0	0.0	0.0	0.0	100.0	100.0	53.8	100.0	0.0	60.0	100.0	0.0	0.0	0.0	100.0	62.5
Exiting Leg Total	8					2					8					2					20
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Articulated	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exiting Leg Total	0					0					0					0					0

### Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	June Street					Brownell Street					June Street					Hawden Road					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	1	2	0	0	3	0	0	0	0	0	1	4	1	0	6	1	0	0	0	1	10
4:15 PM	0	3	0	0	3	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	7
4:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total Volume	2	6	1	0	9	0	0	0	0	0	1	8	1	0	10	1	0	0	0	1	20
% Approach Total	22.2	66.7	11.1	0.0		0.0	0.0	0.0	0.0		10.0	80.0	10.0	0.0		100.0	0.0	0.0	0.0		
PHF	0.500	0.500	0.250	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.250	0.500	0.250	0.000	0.417	0.250	0.000	0.000	0.000	0.250	0.500
Buses	1	3	0	0	4	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	9
Buses %	50.0	50.0	0.0	0.0	44.4	0.0	0.0	0.0	0.0	0.0	0.0	62.5	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	45.0
Single-Unit Trucks	1	3	1	0	5	0	0	0	0	0	1	3	1	0	5	1	0	0	0	1	11
Single-Unit %	50.0	50.0	100.0	0.0	55.6	0.0	0.0	0.0	0.0	0.0	100.0	37.5	100.0	0.0	50.0	100.0	0.0	0.0	0.0	100.0	55.0
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Articulated %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Buses	1	3	0	0	4	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	9
Single-Unit Trucks	1	3	1	0	5	0	0	0	0	0	1	3	1	0	5	1	0	0	0	1	11
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Entering Leg	2	6	1	0	9	0	0	0	0	0	1	8	1	0	10	1	0	0	0	1	20
Buses	5					0					3					1					9
Single-Unit Trucks	3					2					4					2					11
Articulated Trucks	0					0					0					0					0
Total Exiting Leg	8					2					7					3					20

PDI File #: **250531 (6)**  
 Location: **N: June Street S: June Street**  
 Location: **E: Brownell Street W: Hawden Road**  
 City, State: **Worcester, MA**  
 Client: **GPI/ B. Gomes**  
 Site Code: **AWSC-Round 4**  
 Count Date: **Wednesday, April 2, 2025**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Buses

	June Street					Brownell Street					June Street					Hawden Road					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	1	2	0	0	3	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	6
4:15 PM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	3	0	0	4	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	9
5:00 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
Grand Total	1	5	0	0	6	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	12
Approach %	16.7	83.3	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	8.3	41.7	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	6					0					5					1					12

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	June Street					Brownell Street					June Street					Hawden Road					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	1	2	0	0	3	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	6
4:15 PM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	3	0	0	4	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	9
% Approach Total	25.0	75.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.250	0.375	0.000	0.000	0.333	0.000	0.000	0.000	0.000	0.000	0.000	0.417	0.000	0.000	0.417	0.000	0.000	0.000	0.000	0.000	0.375
Entering Leg	1	3	0	0	4	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	9
Exiting Leg	5					0					3					1					9
Total	9					0					8					1					18

PDI File #: **250531 (6)**  
 Location: **N: June Street S: June Street**  
 Location: **E: Brownell Street W: Hawden Road**  
 City, State: **Worcester, MA**  
 Client: **GPI/ B. Gomes**  
 Site Code: **AWSC-Round 4**  
 Count Date: **Wednesday, April 2, 2025**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Single-Unit Trucks

	June Street					Brownell Street					June Street					Hawden Road					Total	
	from North					from East					from South					from West						
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total		
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	1	0	3	1	0	0	0	0	1	4
4:15 PM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	4
4:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	1	3	1	0	5	0	0	0	0	0	1	3	1	0	5	1	0	0	0	0	1	11
5:00 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
5:15 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	0	4
5:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	4	0	0	4	1	0	0	0	1	0	4	0	0	4	0	0	0	0	0	0	9
Grand Total	1	7	1	0	9	1	0	0	0	1	1	7	1	0	9	1	0	0	0	0	1	20
Approach %	11.1	77.8	11.1	0.0		100.0	0.0	0.0	0.0		11.1	77.8	11.1	0.0		100.0	0.0	0.0	0.0			
Total %	5.0	35.0	5.0	0.0	45.0	5.0	0.0	0.0	0.0	5.0	5.0	35.0	5.0	0.0	45.0	5.0	0.0	0.0	0.0	5.0		
Exiting Leg Total	8					2					8					2					20	

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	June Street					Brownell Street					June Street					Hawden Road					Total	
	from North					from East					from South					from West						
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total		
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	1	0	3	1	0	0	0	0	1	4
4:15 PM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	4
4:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total Volume	1	3	1	0	5	0	0	0	0	0	1	3	1	0	5	1	0	0	0	0	1	11
% Approach Total	20.0	60.0	20.0	0.0		0.0	0.0	0.0	0.0	0.0	20.0	60.0	20.0	0.0		100.0	0.0	0.0	0.0	0.0		
PHF	0.250	0.375	0.250	0.000	0.625	0.000	0.000	0.000	0.000	0.000	0.250	0.375	0.250	0.000	0.417	0.250	0.000	0.000	0.000	0.250		0.688
Entering Leg	1	3	1	0	5	0	0	0	0	0	1	3	1	0	5	1	0	0	0	0	1	11
Exiting Leg					3					2				4						2		11
Total					8					2				9						3		22

PDI File #: **250531 (6)**  
 Location: **N: June Street S: June Street**  
 Location: **E: Brownell Street W: Hawden Road**  
 City, State: **Worcester, MA**  
 Client: **GPI/ B. Gomes**  
 Site Code: **AWSC-Round 4**  
 Count Date: **Wednesday, April 2, 2025**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Articulated Trucks

	June Street					Brownell Street					June Street					Hawden Road					Total
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	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	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0		0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total	0					0					0					0					0

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	June Street					Brownell Street					June Street					Hawden Road					Total	
	from North					from East					from South					from West						
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% Approach Total	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0			
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Exiting Leg	0					0					0					0					0	0
Total	0					0					0					0					0	0



PDI File #: 250531 (6)  
 Location: N: June Street S: June Street  
 Location: E: Brownell Street W: Hawden Road  
 City, State: Worcester, MA  
 Client: GPI/ B. Gomes  
 Site Code: AWSC-Round 4  
 Count Date: Wednesday, April 2, 2025  
 Start Time: 4:00 PM  
 End Time: 6:00 PM  
 Class:



### Bicycles (on Roadway and Crosswalks)

	June Street							Brownell Street							June Street							Hawden Road							Total	
	from North							from East							from South							from West								
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	3	3	4
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	2	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2	4	6	8
5:00 PM	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2	4	6	9	
Approach %	100.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	33.3	66.7			
Total %	11.1	0.0	0.0	0.0	0.0	0.0	11.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.2	22.2	0.0	0.0	0.0	0.0	22.2	44.4	66.7		
Exiting Leg Total	0							0							2							7							9	

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	June Street							Brownell Street							June Street							Hawden Road							Total	
	from North							from East							from South							from West								
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	3	3	4
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	2	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2	4	6	8
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	33.3	66.7			
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.500	0.000	0.000	0.000	0.000	0.500	0.333	0.500	0.500	
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2	4	6	8	
Exiting Leg	0							0							2							6							8	
Total	0							0							4							12							16	

PDI File #: **250531 (6)**  
 Location: **N: June Street S: June Street**  
 Location: **E: Brownell Street W: Hawden Road**  
 City, State: **Worcester, MA**  
 Client: **GPI/ B. Gomes**  
 Site Code: **AWSC-Round 4**  
 Count Date: **Wednesday, April 2, 2025**  
 Start Time: **4:00 PM**  
 End Time: **6:00 PM**  
 Class:



### Pedestrians

	June Street								Brownell Street								June Street								Hawden Road								Total
	from North								from East								from South								from West								
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total					
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	2	0	2	6				
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	5	1	6	0	0	0	0	0	2	2	0	0	0	0	1	3	4	12				
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	1	0	0	0	0	0	1	1	3				
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
Total	0	0	0	0	0	0	0	0	0	0	0	11	1	12	0	0	0	0	0	3	3	0	0	0	0	3	4	7	22				
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1	2	4				
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	3	5	8	9				
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	0	2	3				
5:45 PM	0	0	0	0	1	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4	4	6				
Total	0	0	0	0	1	0	1	0	0	0	0	1	1	2	0	0	0	0	1	2	3	0	0	0	0	6	10	16	22				
Grand Total	0	0	0	0	1	0	1	0	0	0	0	12	2	14	0	0	0	0	1	5	6	0	0	0	0	9	14	23	44				
Approach %	0	0	0	0	100	0		0	0	0	0	85.7	14.3		0	0	0	0	16.7	83.3		0	0	0	0	39.1	60.9						
Total %	0	0	0	0	2.27	0	2.27	0	0	0	0	27.3	4.55	31.8	0	0	0	0	2.27	11.4	13.6	0	0	0	0	20.5	31.8	52.3					
Exiting Leg Total	1								14								6								23								44

Peak Hour Analysis from 04:00 PM to 06:00 PM begins at:

4:00 PM	June Street								Brownell Street								June Street								Hawden Road								Total
	from North								from East								from South								from West								
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total					
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	2	0	2	6				
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	5	1	6	0	0	0	0	0	0	2	2	0	0	0	0	1	3	4	12			
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	1	1	3			
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1			
Total Volume	0	0	0	0	0	0	0	0	0	0	0	11	1	12	0	0	0	0	0	0	3	3	0	0	0	0	3	4	7	22			
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	91.7	8.3		0.0	0.0	0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	42.9	57.1					
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.550	0.250	0.500	0.000	0.000	0.000	0.000	0.000	0.375	0.375	0.000	0.000	0.000	0.000	0.375	0.333	0.438		0.458			
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	11	1	12	0	0	0	0	0	0	3	3	0	0	0	0	3	4	7	22			
Exiting Leg	0								12								3								7								22
Total	0								24								6								14								44

June Street  
south of Brownell Street  
City, State: Worcester, MA  
Client: GPI/B. Gomes  
Site Code: AWSC-Round 4



Count Date: Wednesday, April 2, 2025  
Direction: NB

AM	Cars	Single Unit Heavy	Multi Unit Heavy	Total	PM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	7	0	0	7	12:00 PM	69	2	0	71
12:15 AM	6	0	0	6	12:15 PM	79	3	0	82
12:30 AM	5	0	0	5	12:30 PM	75	2	0	77
12:45 AM	5	0	0	5	12:45 PM	48	5	1	54
1:00 AM	6	0	0	6	1:00 PM	67	2	1	70
1:15 AM	3	0	0	3	1:15 PM	63	1	0	64
1:30 AM	3	0	0	3	1:30 PM	69	5	0	74
1:45 AM	0	1	0	1	1:45 PM	85	1	0	86
2:00 AM	3	0	0	3	2:00 PM	81	2	0	83
2:15 AM	0	0	0	0	2:15 PM	78	2	0	80
2:30 AM	1	0	0	1	2:30 PM	85	1	0	86
2:45 AM	5	0	0	5	2:45 PM	78	3	0	81
3:00 AM	4	1	0	5	3:00 PM	93	6	0	99
3:15 AM	3	0	0	3	3:15 PM	88	1	0	89
3:30 AM	1	0	0	1	3:30 PM	82	2	0	84
3:45 AM	2	0	0	2	3:45 PM	96	0	0	96
4:00 AM	5	0	0	5	4:00 PM	96	6	0	102
4:15 AM	9	0	0	9	4:15 PM	82	4	0	86
4:30 AM	10	1	0	11	4:30 PM	74	0	0	74
4:45 AM	11	0	0	11	4:45 PM	77	0	0	77
5:00 AM	19	0	0	19	5:00 PM	83	2	0	85
5:15 AM	17	1	0	18	5:15 PM	67	0	0	67
5:30 AM	27	0	0	27	5:30 PM	69	2	0	71
5:45 AM	19	0	0	19	5:45 PM	80	0	0	80
6:00 AM	33	1	0	34	6:00 PM	66	1	0	67
6:15 AM	49	0	0	49	6:15 PM	62	0	0	62
6:30 AM	60	4	0	64	6:30 PM	64	2	0	66
6:45 AM	66	3	0	69	6:45 PM	51	0	0	51
7:00 AM	70	1	0	71	7:00 PM	54	0	0	54
7:15 AM	46	2	0	48	7:15 PM	42	1	0	43
7:30 AM	77	0	0	77	7:30 PM	46	0	0	46
7:45 AM	92	2	0	94	7:45 PM	45	1	0	46
8:00 AM	82	1	0	83	8:00 PM	43	0	0	43
8:15 AM	100	6	0	106	8:15 PM	38	0	0	38
8:30 AM	73	4	0	77	8:30 PM	26	0	0	26
8:45 AM	71	2	0	73	8:45 PM	27	1	0	28
9:00 AM	58	1	0	59	9:00 PM	24	0	0	24
9:15 AM	68	1	0	69	9:15 PM	22	0	0	22
9:30 AM	65	2	0	67	9:30 PM	27	0	0	27
9:45 AM	60	3	0	63	9:45 PM	20	0	0	20
10:00 AM	45	1	0	46	10:00 PM	23	0	0	23
10:15 AM	48	1	0	49	10:15 PM	20	0	0	20
10:30 AM	69	2	0	71	10:30 PM	18	0	0	18
10:45 AM	76	4	0	80	10:45 PM	12	0	0	12
11:00 AM	45	2	0	47	11:00 PM	10	0	0	10
11:15 AM	66	1	0	67	11:15 PM	9	0	0	9
11:30 AM	67	4	0	71	11:30 PM	5	0	0	5
11:45 AM	69	1	0	70	11:45 PM	6	0	0	6
AM Total	1726	53	0	1779	PM Total	2624	58	2	2684
Percentage	97.02%	2.98%	0.00%		Percentage	97.76%	2.16%	0.07%	
AM Peak	7:30 AM	7:45 AM	12:00 AM	7:30 AM	PM Peak	3:15 PM	12:45 PM	12:15 PM	3:15 PM
Volume	351	13	0	360	Volume	362	13	2	371
Day Total					Day Total	4350	111	2	4463
Percentage					Percentage	97.47%	2.49%	0.04%	

June Street  
south of Brownell Street  
City, State: Worcester, MA  
Client: GPI/B. Gomes  
Site Code: AWSC-Round 4



Count Date: Wednesday, April 2, 2025  
Direction: SB

AM	Cars	Single Unit Heavy	Multi Unit Heavy	Total	PM	Cars	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	6	0	0	6	12:00 PM	80	4	0	84
12:15 AM	16	1	0	17	12:15 PM	91	1	0	92
12:30 AM	4	0	0	4	12:30 PM	72	4	0	76
12:45 AM	5	0	0	5	12:45 PM	84	0	0	84
1:00 AM	3	0	0	3	1:00 PM	79	2	1	82
1:15 AM	2	0	0	2	1:15 PM	71	0	0	71
1:30 AM	5	0	0	5	1:30 PM	45	1	0	46
1:45 AM	0	0	0	0	1:45 PM	84	1	0	85
2:00 AM	0	0	0	0	2:00 PM	98	3	0	101
2:15 AM	1	0	0	1	2:15 PM	92	4	0	96
2:30 AM	1	0	0	1	2:30 PM	100	0	0	100
2:45 AM	3	0	0	3	2:45 PM	110	1	0	111
3:00 AM	2	0	0	2	3:00 PM	105	2	0	107
3:15 AM	2	0	0	2	3:15 PM	76	0	0	76
3:30 AM	3	0	0	3	3:30 PM	114	4	0	118
3:45 AM	4	0	0	4	3:45 PM	102	3	0	105
4:00 AM	4	0	0	4	4:00 PM	109	3	0	112
4:15 AM	4	0	0	4	4:15 PM	103	2	0	105
4:30 AM	3	0	0	3	4:30 PM	109	1	0	110
4:45 AM	7	0	0	7	4:45 PM	93	0	0	93
5:00 AM	5	0	0	5	5:00 PM	88	2	0	90
5:15 AM	9	1	0	10	5:15 PM	107	0	0	107
5:30 AM	12	0	0	12	5:30 PM	96	0	0	96
5:45 AM	13	2	0	15	5:45 PM	107	1	0	108
6:00 AM	10	0	0	10	6:00 PM	91	1	0	92
6:15 AM	21	2	0	23	6:15 PM	102	1	0	103
6:30 AM	31	0	0	31	6:30 PM	72	2	0	74
6:45 AM	29	4	0	33	6:45 PM	77	1	0	78
7:00 AM	70	4	0	74	7:00 PM	69	2	0	71
7:15 AM	69	1	0	70	7:15 PM	71	0	0	71
7:30 AM	55	0	0	55	7:30 PM	75	1	0	76
7:45 AM	65	4	0	69	7:45 PM	55	0	0	55
8:00 AM	91	1	0	92	8:00 PM	58	0	0	58
8:15 AM	92	4	0	96	8:15 PM	58	0	0	58
8:30 AM	99	2	0	101	8:30 PM	65	1	0	66
8:45 AM	77	1	0	78	8:45 PM	43	0	0	43
9:00 AM	78	2	0	80	9:00 PM	42	0	0	42
9:15 AM	76	4	0	80	9:15 PM	50	0	0	50
9:30 AM	60	4	0	64	9:30 PM	42	0	0	42
9:45 AM	73	2	0	75	9:45 PM	25	0	0	25
10:00 AM	57	3	0	60	10:00 PM	28	0	0	28
10:15 AM	60	3	0	63	10:15 PM	22	1	0	23
10:30 AM	58	1	0	59	10:30 PM	20	0	0	20
10:45 AM	68	2	1	71	10:45 PM	16	0	0	16
11:00 AM	58	3	0	61	11:00 PM	20	0	0	20
11:15 AM	65	3	0	68	11:15 PM	22	0	0	22
11:30 AM	68	1	0	69	11:30 PM	21	0	0	21
11:45 AM	69	1	0	70	11:45 PM	15	0	0	15
AM Total	1613	56	1	1670	PM Total	3374	49	1	3424
Percentage	96.59%	3.35%	0.06%		Percentage	98.54%	1.43%	0.03%	
AM Peak	8:00 AM	9:15 AM	10:00 AM	8:00 AM	PM Peak	3:30 PM	3:30 PM	12:15 PM	3:30 PM
Volume	359	13	1	367	Volume	428	12	1	440
Day Total					Day Total	4987	105	2	5094
Percentage					Percentage	97.90%	2.06%	0.04%	

## **SPEED DATA**



June Street  
south of Brownell Street  
City, State: Worcester, MA  
Client: GPI/B. Gomes  
Site Code: AWSC-Round 4



PDI File #: 250531 ATR 6 (Speed)

Count Date  
Wednesday, April 2, 2025

Speed (60-minute)

SB																
Start Time:	1 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70+	Total	85th %ile	Ave Speed
12:00 AM	1	0	0	7	12	8	2	0	0	1	0	0	0	31	37.5	33.0
1:00 AM	0	0	0	4	4	1	0	1	0	0	0	0	0	10	34.7	31.8
2:00 AM	0	0	0	1	4	0	0	0	0	0	0	0	0	5	34.0	31.4
3:00 AM	1	0	1	0	6	4	0	0	0	0	0	0	0	12	37.4	31.4
4:00 AM	0	0	1	2	4	4	5	2	0	0	0	0	0	18	41.9	36.1
5:00 AM	0	0	0	8	15	9	4	4	1	1	0	0	0	42	43.7	35.5
6:00 AM	0	0	3	15	39	34	3	1	0	0	0	0	0	95	36.0	32.8
7:00 AM	1	0	4	33	113	70	18	2	0	0	0	0	0	241	37.0	33.3
8:00 AM	1	1	12	81	139	65	8	0	0	0	0	0	0	307	36.0	31.5
9:00 AM	2	4	10	70	118	57	9	0	0	0	0	0	0	270	36.0	31.2
10:00 AM	0	8	4	37	123	49	11	1	0	0	0	0	0	233	36.0	32.1
11:00 AM	0	2	12	57	120	39	11	0	0	0	0	0	0	241	36.0	31.6
12:00 PM	3	4	11	71	146	49	8	0	0	0	0	0	0	292	35.0	30.8
1:00 PM	3	2	11	68	121	46	5	0	0	0	0	0	0	256	35.0	30.9
2:00 PM	4	3	21	133	157	36	3	0	0	0	0	0	0	357	34.0	29.8
3:00 PM	3	4	32	137	121	42	5	0	0	0	0	0	0	344	34.0	29.3
4:00 PM	6	4	24	121	158	38	4	0	0	0	0	0	0	355	34.0	29.7
5:00 PM	3	1	30	134	142	36	5	2	1	0	0	0	0	354	34.0	29.8
6:00 PM	3	0	11	93	137	56	3	0	0	0	0	0	0	303	35.0	30.9
7:00 PM	2	1	3	65	129	50	5	0	0	0	0	0	0	255	35.0	31.5
8:00 PM	0	0	7	53	108	31	9	1	0	1	0	0	0	210	36.0	31.8
9:00 PM	2	0	3	42	68	35	5	2	0	0	0	0	0	157	36.0	31.9
10:00 PM	0	2	4	24	34	14	5	1	0	0	0	0	0	84	35.6	31.3
11:00 PM	0	0	3	16	37	14	2	1	1	0	0	0	0	74	36.1	32.2
Total	35	36	207	1272	2055	787	130	18	3	3	0	0	0	4546	35.0	31.0
Percent	0.77%	0.79%	4.55%	27.98%	45.20%	17.31%	2.86%	0.40%	0.07%	0.07%	0.00%	0.00%	0.00%			

AM Peak	9:00 AM	10:00 AM	8:00 AM	8:00 AM	8:00 AM	7:00 AM	7:00 AM	5:00 AM	5:00 AM	12:00 AM					8:00 AM
Volume	2	8	12	81	139	70	18	4	1	1	0	0	0	307	

PM Peak	4:00 PM	12:00 PM	3:00 PM	3:00 PM	4:00 PM	6:00 PM	8:00 PM	5:00 PM	5:00 PM	8:00 PM					2:00 PM
Volume	6	4	32	137	158	56	9	2	1	1	0	0	0	357	

15th Percentile:	27.0 MPH	Average Speed:	31.0 MPH	Posted Speed Limit:	30 MPH
50th Percentile:	31.0 MPH	10 MPH Pace:	27 to 36 MPH	Number of Vehicles > 30 MPH:	2604
85th Percentile:	35.0 MPH	Number in Pace:	3505	Percent of Vehicles > 30 MPH:	57.3%
95th Percentile:	39.0 MPH	Percent in Pace:	77.1%		

June Street  
south of Brownell Street  
City, State: Worcester, MA  
Client: GPI/B. Gomes  
Site Code: AWSC-Round 4



PDI File #: 250531 ATR 6 (Speed)

Count Date  
Wednesday, April 2, 2025

Speed (60-minute)

NB																
Start Time:	1 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70+	Total	85th %ile	Ave Speed
12:00 AM	0	0	2	2	12	7	3	0	0	0	0	0	0	26	36.5	33.3
1:00 AM	0	0	1	1	4	2	5	2	0	0	0	0	0	15	43.8	36.7
2:00 AM	0	0	0	1	3	2	3	0	0	0	0	0	0	9	41.8	36.4
3:00 AM	1	0	0	0	2	6	2	0	0	0	0	0	0	11	40.0	34.6
4:00 AM	0	2	0	1	7	19	7	3	1	0	1	0	0	41	41.0	37.2
5:00 AM	0	0	2	5	27	37	13	1	0	3	0	0	0	88	40.0	36.1
6:00 AM	0	0	4	27	106	76	15	5	1	0	1	0	0	235	38.0	34.2
7:00 AM	0	3	4	29	125	102	25	7	0	0	0	0	0	295	38.0	34.0
8:00 AM	0	2	20	78	148	70	16	0	1	0	0	0	0	335	36.0	31.6
9:00 AM	0	9	5	37	127	75	19	1	0	0	0	0	0	273	37.2	32.9
10:00 AM	0	0	5	52	121	58	10	0	0	1	0	0	0	247	36.0	32.5
11:00 AM	0	1	1	42	132	69	18	4	3	1	0	0	0	271	38.0	33.6
12:00 PM	1	2	6	61	141	74	5	1	0	0	0	0	0	291	36.0	32.2
1:00 PM	2	2	14	54	106	101	13	3	0	0	0	1	0	296	37.0	32.8
2:00 PM	2	3	8	64	147	98	14	1	1	0	0	1	0	339	37.0	32.5
3:00 PM	1	5	14	85	160	83	12	1	3	0	0	0	0	364	36.0	31.9
4:00 PM	1	3	17	75	159	74	5	1	1	1	0	0	0	337	35.0	31.6
5:00 PM	3	2	16	82	131	45	14	1	0	0	0	0	0	294	35.0	31.1
6:00 PM	0	4	13	47	123	52	9	1	0	0	0	0	0	249	36.0	31.8
7:00 PM	3	2	8	44	91	44	5	1	0	0	0	0	0	198	37.0	31.4
8:00 PM	1	1	4	38	66	28	9	1	0	0	0	0	0	148	37.0	31.9
9:00 PM	1	1	4	20	35	34	6	1	0	0	0	0	0	102	38.0	33.0
10:00 PM	0	0	0	14	28	21	7	1	1	1	0	0	0	73	38.0	34.1
11:00 PM	0	0	0	6	12	9	4	0	0	0	0	0	0	31	38.5	34.1
Total	16	42	148	865	2013	1186	239	36	12	7	2	2	0	4568	37.0	32.6
Percent	0.35%	0.92%	3.24%	18.94%	44.07%	25.96%	5.23%	0.79%	0.26%	0.15%	0.04%	0.04%	0.00%			

AM Peak	3:00 AM	9:00 AM	8:00 AM	8:00 AM	8:00 AM	7:00 AM	7:00 AM	7:00 AM	11:00 AM	5:00 AM	4:00 AM			8:00 AM
Volume	1	9	20	78	148	102	25	7	3	3	1	0	0	335

PM Peak	5:00 PM	3:00 PM	4:00 PM	3:00 PM	3:00 PM	1:00 PM	2:00 PM	1:00 PM	3:00 PM	4:00 PM		1:00 PM		3:00 PM
Volume	3	5	17	85	160	101	14	3	3	1	0	1	0	364

15th Percentile:	28.0 MPH	Average Speed:	32.6 MPH	Posted Speed Limit:	30 MPH
50th Percentile:	33.0 MPH	10 MPH Pace:	28 to 37 MPH	Number of Vehicles > 30 MPH:	3196
85th Percentile:	37.0 MPH	Number in Pace:	3466	Percent of Vehicles > 30 MPH:	70.0%
95th Percentile:	40.0 MPH	Percent in Pace:	75.9%		

June Street  
south of Brownell Street  
City, State: Worcester, MA  
Client: GPI/B. Gomes  
Site Code: AWSC-Round 4



PDI File #: 250531 ATR 6 (Speed)

Count Date  
Wednesday, April 2, 2025

Speed (60-minute)																
Combined SB and NB																
Start Time:	1 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70+	Total	85th %ile	Ave Speed
12:00 AM	1	0	2	9	24	15	5	0	0	1	0	0	0	57	37.6	33.1
1:00 AM	0	0	1	5	8	3	5	3	0	0	0	0	0	25	42.8	34.7
2:00 AM	0	0	0	2	7	2	3	0	0	0	0	0	0	14	41.1	34.6
3:00 AM	2	0	1	0	8	10	2	0	0	0	0	0	0	23	39.0	33.0
4:00 AM	0	2	1	3	11	23	12	5	1	0	1	0	0	59	41.6	36.9
5:00 AM	0	0	2	13	42	46	17	5	1	4	0	0	0	130	41.0	35.9
6:00 AM	0	0	7	42	145	110	18	6	1	0	1	0	0	330	37.0	33.8
7:00 AM	1	3	8	62	238	172	43	9	0	0	0	0	0	536	38.0	33.7
8:00 AM	1	3	32	159	287	135	24	0	1	0	0	0	0	642	36.0	31.5
9:00 AM	2	13	15	107	245	132	28	1	0	0	0	0	0	543	36.0	32.1
10:00 AM	0	8	9	89	244	107	21	1	0	1	0	0	0	480	36.0	32.3
11:00 AM	0	3	13	99	252	108	29	4	3	1	0	0	0	512	37.0	32.6
12:00 PM	4	6	17	132	287	123	13	1	0	0	0	0	0	583	36.0	31.5
1:00 PM	5	4	25	122	227	147	18	3	0	0	0	1	0	552	36.0	31.9
2:00 PM	6	6	29	197	304	134	17	1	1	0	0	1	0	696	36.0	31.1
3:00 PM	4	9	46	222	281	125	17	1	3	0	0	0	0	708	35.0	30.6
4:00 PM	7	7	41	196	317	112	9	1	1	1	0	0	0	692	35.0	30.6
5:00 PM	6	3	46	216	273	81	19	3	1	0	0	0	0	648	35.0	30.4
6:00 PM	3	4	24	140	260	108	12	1	0	0	0	0	0	552	35.0	31.3
7:00 PM	5	3	11	109	220	94	10	1	0	0	0	0	0	453	36.0	31.5
8:00 PM	1	1	11	91	174	59	18	2	0	1	0	0	0	358	36.0	31.8
9:00 PM	3	1	7	62	103	69	11	3	0	0	0	0	0	259	37.0	32.3
10:00 PM	0	2	4	38	62	35	12	2	1	1	0	0	0	157	37.0	32.6
11:00 PM	0	0	3	22	49	23	6	1	1	0	0	0	0	105	37.0	32.8
Total	51	78	355	2137	4068	1973	369	54	15	10	2	2	0	9114	36.0	31.8
Percent	0.56%	0.86%	3.90%	23.45%	44.63%	21.65%	4.05%	0.59%	0.16%	0.11%	0.02%	0.02%	0.00%			

AM Peak	3:00 AM	9:00 AM	8:00 AM	8:00 AM	8:00 AM	7:00 AM	7:00 AM	7:00 AM	11:00 AM	5:00 AM	4:00 AM			8:00 AM
Volume	2	13	32	159	287	172	43	9	3	4	1	0	0	642

PM Peak	4:00 PM	3:00 PM	3:00 PM	3:00 PM	4:00 PM	1:00 PM	5:00 PM	1:00 PM	3:00 PM	4:00 PM		1:00 PM		3:00 PM
Volume	7	9	46	222	317	147	19	3	3	1	0	1	0	708

15th Percentile:	27.0 MPH	Average Speed:	31.8 MPH	Posted Speed Limit:	30 MPH
50th Percentile:	32.0 MPH	10 MPH Pace:	27 to 36 MPH	Number of Vehicles > 30 MPH:	5800
85th Percentile:	36.0 MPH	Number in Pace:	6894	Percent of Vehicles > 30 MPH:	63.6%
95th Percentile:	39.0 MPH	Percent in Pace:	75.6%		