

# Transportation Impact Assessment

The Cottages at Old Oaken Bucket  
279 and 281 Old Oaken Bucket Road  
Scituate, Massachusetts

*Prepared for:*

Lovendale LLC  
Duxbury, Massachusetts

June 2022

*Prepared by:*



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

Dear Reviewer:

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

Sincerely,

VANASSE & ASSOCIATES, INC.



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

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## EXECUTIVE SUMMARY

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Vanasse & Associates, Inc. (VAI) has conducted a Transportation Impact Assessment (TIA) in order to determine the potential impacts on the transportation infrastructure associated with the proposed construction of a residential community to be known as The Cottages at Old Oaken Bucket and located at 279-281 Old Oaken Bucket Road in Scituate, Massachusetts (hereafter referred to as the Project). This assessment was prepared in consultation with the Town of Scituate and the Massachusetts Department of Transportation (MassDOT), and was performed in accordance with MassDOT's *Transportation Impact Assessment (TIA) Guidelines* and the standards of the Traffic Engineering and Transportation Planning professions for the preparation of such reports.

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

1. Using trip-generation statistics published by the Institute of Transportation Engineers (ITE),<sup>1</sup> the Project is expected to generate approximately 240 vehicle trips on an average weekday (two-way, 24-hour volume), with 15 vehicle trips expected during the weekday morning peak-hour and 20 vehicle trips expected during the weekday evening peak-hour;
2. The Project will not result in a significant impact (increase) on motorist delays or vehicle queuing over anticipated future conditions without the Project (No-Build condition), with Project-related impacts defined as an increase in average motorist delay of up to 2.5 seconds with no (0) increase in vehicle queuing predicted to occur;
3. Project-related impacts to the Scituate Rotary were defined as an increase of 5 to 7 vehicles during the weekday peak hours, or approximately one (1) additional vehicle every 9 to 12 minutes, a level of impact that would not be perceivable over existing conditions;
4. Independent of the Project, the Old Oaken Bucket Road approach to Cornet Stetson Road (Route 123) is predicted to operate at capacity (defined as level-of-service (LOS) "E") during both the weekday morning and evening peak hours under No-Build conditions;
5. All movements exiting the Project site driveway to Old Oaken Bucket Road are predicted to operate at LOS A during the peak hours with negligible vehicle queuing;

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

6. Independent of the Project, both the Old Oaken Bucket Road/Maple Street/Winter Street and the Route 123/Old Oaken Bucket Road intersections were found to have a motor vehicle crash rate that is above the MassDOT average crash rates for similar intersections. As such, specific recommendations have been provided to advance safety related improvements at these intersections; and
7. Lines of sight at the Project site driveway intersection with Old Oaken Bucket Road were found to exceed or could be made to exceed the recommended minimum sight distance to function in a safe manner based on the appropriate approach speed.

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

## **RECOMMENDATIONS**

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

### **Project Access**

Access to the Project site will be provided by way of a full-access driveway that will intersect the south side of Old Oaken Bucket Road at the approximate location of the existing driveway that serves 279 Old Oaken Bucket Road. The following recommendations are offered with respect to the design and operation of the Project site access and internal circulation:

- The Project site driveway and internal circulating roads should be 24 feet in width and designed to accommodate the turning and maneuvering requirements of the largest anticipated responding emergency vehicle.
- Vehicles exiting the Project site should be placed under STOP-sign control with a marked STOP-line provided.
- All signs and pavement markings to be installed within the Project site should conform to the applicable standards of the *Manual on Uniform Traffic Control Devices (MUTCD)*.<sup>2</sup>
- Pedestrian walkways are proposed within the Project site that will extend to Old Oaken Bucket Road and will include marked crosswalks with Americans with Disabilities Act (ADA)-compliant wheelchair ramps at all pedestrian crossings.
- Driveways to the residential units should be a minimum of 21 feet long measured between the garage door and the far edge of the sidewalk (edge closest to the residence) where a sidewalk is provided, and 23 feet measured between the garage door and the edge of the traveled-way in locations without a sidewalk.

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



- Signs and landscaping to be installed as a part of the Project within the intersection sight triangle areas of the Project site driveway should be designed and maintained so as not to restrict lines of sight.
- Snow accumulation (windrows) within sight triangle areas of the Project site driveway should be promptly removed where such accumulations would impede sight lines.
- Existing trees and vegetation located along the south side of Old Oaken Bucket Road within the intersection triangle areas of the Project site driveway should be selectively trimmed or removed and maintained, and the existing embankment to the east of the Project site driveway along the south side of Old Oaken Bucket Road should be regraded in order to provide the required line of sight.

### **Off-Site**

#### **Old Oaken Bucket Road/Maple Street/Winter Street and Route 123/Old Oaken Bucket Road**

Independent of the Project, the Old Oaken Bucket Road/Maple Street/Winter Street and Route 123/Old Oaken Bucket Road intersections were identified to have motor vehicle crash histories that warrant further review and advancement of specific improvements to enhance safety. In an effort to advance safety-related improvements at these intersections, the Project proponent will: i) facilitate the completion of a Road Safety Audit (RSA) at the intersections in order identify improvement strategies, and ii) provide a financial contribution to the Town for the design and construction of the short-term improvements that are suggested as an outcome of the RSA that is commensurate with the identified impact of the Project at the intersections over No-Build conditions (i.e., a “fair-share” contribution).

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

# **INTRODUCTION**

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Vanasse & Associates, Inc. (VAI) has conducted a Transportation Impact Assessment (TIA) in order to determine the potential impacts on the transportation infrastructure associated with the proposed construction of a residential community to be known as The Cottages at Old Oaken Bucket and located at 279-281 Old Oaken Bucket Road in Scituate, Massachusetts (hereafter referred to as the Project). This study evaluates the following specific areas as they relate to the Project: i) access requirements; ii) potential off-site improvements; and iii) safety considerations; and identifies and analyzes existing traffic conditions and future traffic conditions, both with and without the Project, along Old Oaken Bucket Road and at the following specific intersections: Old Oaken Bucket Road at Maple Street and Winter Street and Corner Stetson Road (Route 123) at Old Oaken Bucket Road. In addition, a qualitative assessment of Project-related impacts to the Scituate Rotary (Chief Justice Cushing Highway (Route 3A) at Route 123, New Driftway and County Road) was also undertaken.

## **PROJECT DESCRIPTION**

The Project will entail the construction of a 32-unit residential community to be known as The Cottages at Old Oaken Bucket and located at 279-281 Old Oaken Bucket Road in Scituate, Massachusetts. As proposed, the residential units will include ten (10) detached single-family cottages and 11 attached duplex cottages (22 units total). The Project site encompasses approximately 11.3± acres of land that is generally bounded and by Old Oaken Bucket Road and residential properties to the north; residential properties and areas of open wooded space to the east and west; and areas of open and wooded space to the south. Figure 1 depicts the Project site location in relation to the existing roadway network. The Project site currently contains two (2) single-family homes and associated appurtenances located at 279 and 281 Old Oaken Bucket Road that will be removed to accommodate the Project.

Access to the Project site will be provided by way of a full-access driveway that will intersect the south side of Old Oaken Bucket Road at the approximate location of the existing driveway that serves 279 Old Oaken Bucket Road.

Off-street parking will be provided in individual garages and driveways that will accommodate a minimum of two (2) vehicles per unit, which is consistent with the parking requirements for

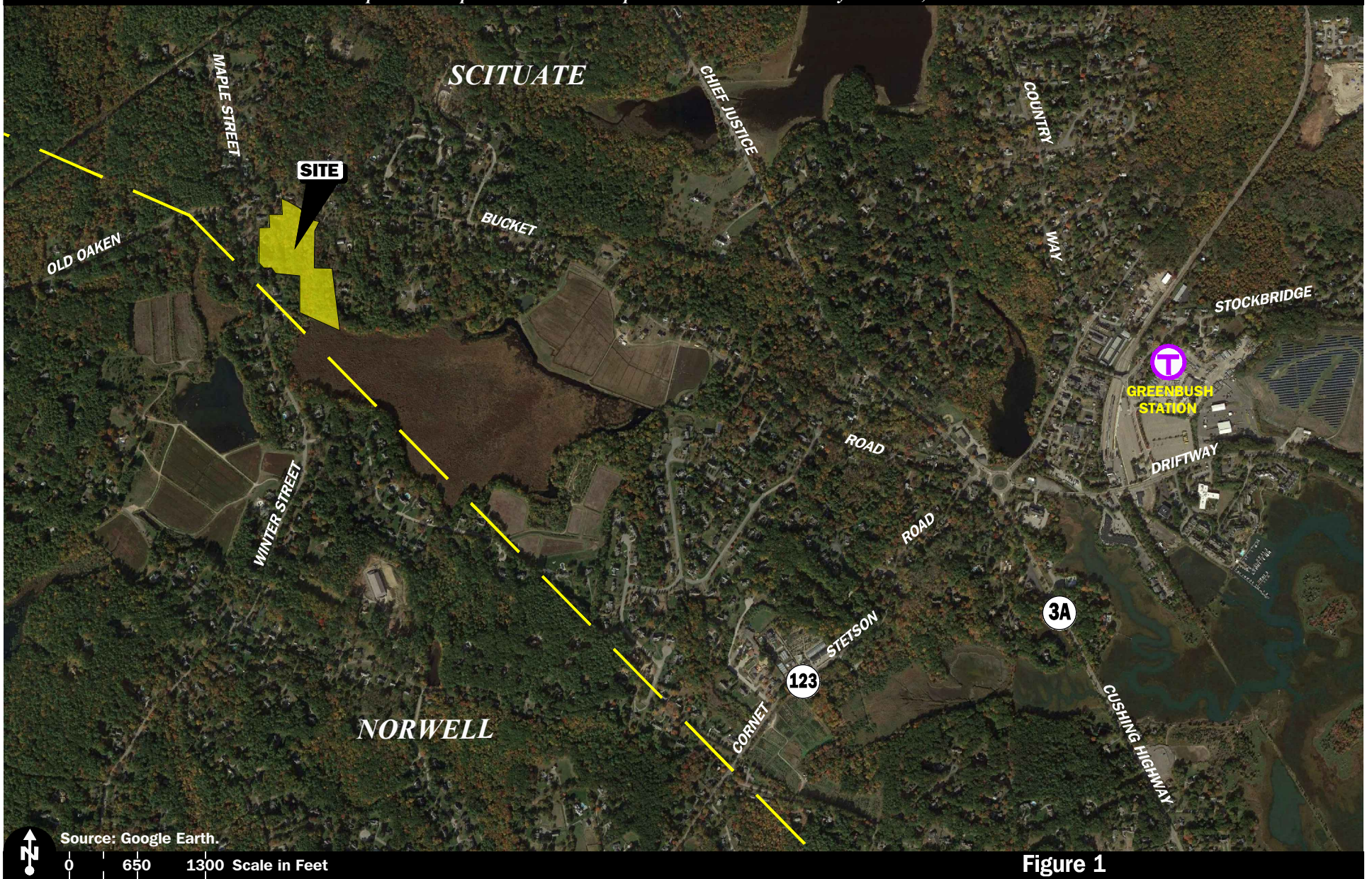


Figure 1  
Site Location Map

single-family and two-family homes as specified in Section 760.6, *Parking Requirements*, of the Town of Scituate Zoning Bylaws.<sup>3</sup>

## **STUDY METHODOLOGY**

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

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

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

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

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<sup>3</sup>The Zoning bylaw requires that 2.0 parking spaces be provided for a single-family home and that 4.0 parking spaces be provided for a two-family home.

## **EXISTING CONDITIONS**

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A comprehensive field inventory of existing conditions within the study area was conducted in August, November and December 2021. The field investigation consisted of an inventory of existing roadway geometrics; pedestrian and bicycle facilities; public transportation services; traffic volumes; and operating characteristics; as well as posted speed limits and land use information within the study area. The study area that was assessed for the Project consisted of Old Oaken Bucket Road and the following specific intersections: Old Oaken Bucket Road at Maple Street and Winter Street and Cornet Stetson Road (Route 123) at Old Oaken Bucket Road. In addition, a review of the motor vehicle crash history and a qualitative analysis of potential impacts resulting from the Project was completed at the Scituate Rotary (Chief Justice Cushing Highway (Route 3A) at Route 123, New Driftway and County Road).

The following describes the study area roadway and intersections.

### **ROADWAY**

#### **Old Oaken Bucket Road**

- Two-lane urban collector roadway that is under Town jurisdiction;
- Traverses the study area in a general east-west direction;
- Provides two 12-foot wide travel lanes that are separated by a double-yellow centerline with no marked shoulders provided;
- The posted speed limit is 30 miles per hour (mph) in the vicinity of the Project site;
- Sidewalks are not provided within the study area;
- Illumination is provided intermittently by way of streetlights mounted on wooden poles; and
- Land use within the study area consists of the Project site, residential and agricultural properties, and areas of open and wooded space.

## INTERSECTIONS

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

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

| <b>Intersection</b>                         | <b>Traffic Control Type<sup>a</sup></b> | <b>No. of Travel Lanes Provided</b>               | <b>Shoulder Provided? (Yes/No/Width)</b> | <b>Pedestrian Accommodations? (Yes/No/Description)</b>                                                                         | <b>Bicycle Accommodations? (Yes/No/Description)</b>                             |
|---------------------------------------------|-----------------------------------------|---------------------------------------------------|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| Old Oaken Bucket Rd./ Maple St./ Winter St. | S (All-Way)                             | One general-purpose travel lane on all approaches | No                                       | No                                                                                                                             | No                                                                              |
| Rte. 123/ Old Oaken Bucket Rd.              | S                                       | One general-purpose travel lane on all approaches | Yes; 2 feet on Route 123                 | Yes; sidewalks along the north side of Route 123 east of Old Oaken Bucket Rd.; crosswalks provided across Old Oaken Bucket Rd. | Yes; Shared traveled-way <sup>b</sup> on Route 123 east of Old Oaken Bucket Rd. |

<sup>a</sup>S = STOP-sign control.

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

## TRAFFIC VOLUMES

In order to determine existing traffic-volume demands and flow patterns within the study area, automatic traffic recorder (ATR) counts, turning movement counts (TMCs), and vehicle classification counts were completed in November 2021. The ATR counts were conducted on November 3<sup>rd</sup> through 4<sup>th</sup>, 2021 (Wednesday through Thursday, inclusive) on Old Oaken Bucket Road in the vicinity of the Project site in order to record weekday traffic conditions over an extended period, with weekday morning (7:00 to 9:00 AM) and evening (4:00 to 6:00 PM) peak-period TMCs performed at the study area intersections on November 3<sup>rd</sup>, 2021 (Wednesday). These time periods were selected for analysis purposes as they are representative of the peak-traffic-volume hours for both the Project and the adjacent roadway network.

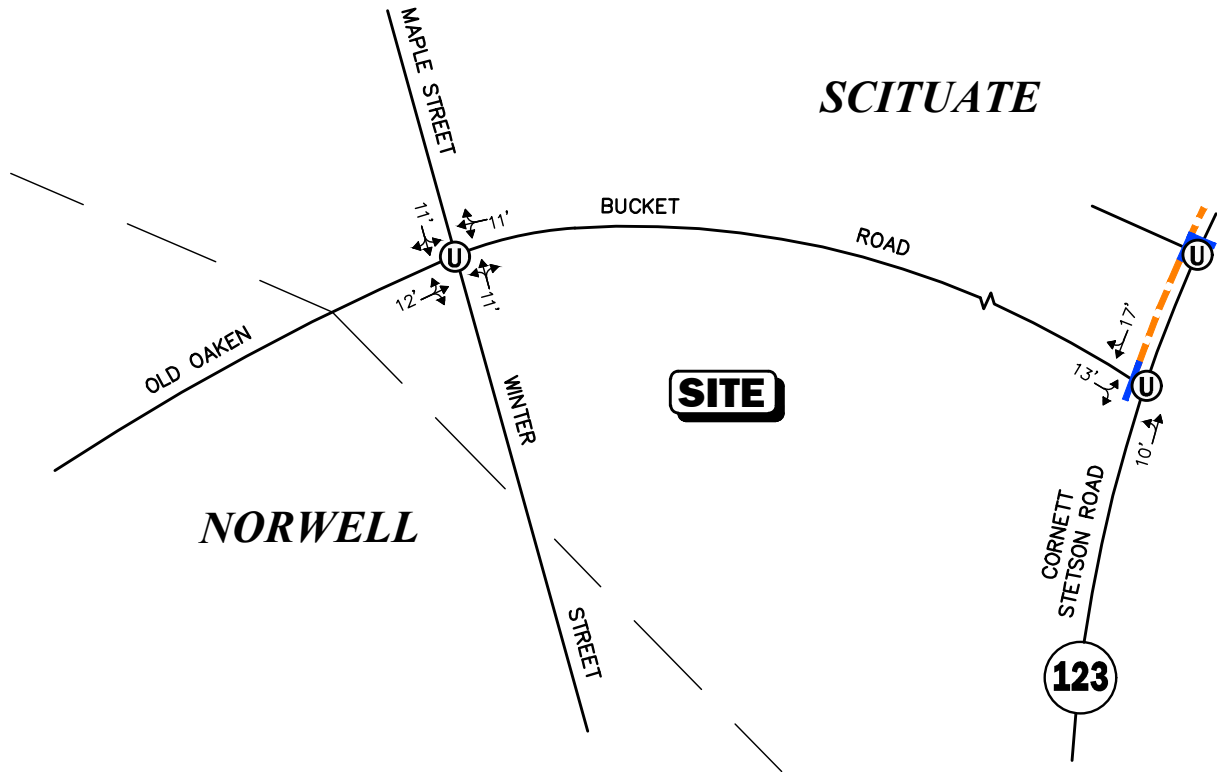
### Traffic-Volume Adjustments

In order to evaluate the potential for seasonal fluctuation of traffic volumes within the study area, traffic-volume data from MassDOT Continuous Count Station No. 7318 located on Southeast Expressway (Route 3) in Hingham were reviewed.<sup>4</sup> Based on a review of this data, it was determined that traffic volumes during the month of November are approximately 2.9 percent

<sup>4</sup>MassDOT Traffic Volumes for the Commonwealth of Massachusetts; 2021.

**Legend:**

- Ⓢ Unsignalized Intersection
- Sidewalk
- Crosswalk
- xx'↔ Lane Use and Tavel Lane Width



Not To Scale



**Figure 2**  
Existing Intersection Lane Use, Travel Lane Width, and Pedestrian Facilities

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below average-month conditions. As such, the November traffic volumes were adjusted upward by 2.9 percent in order to be representative of average-month conditions.

In order to account for the impact on traffic volumes and trip patterns resulting from the COVID-19 pandemic, traffic volume data collected at MassDOT Continuous Count Station No. 6255 in November 2018 was adjusted to the year 2019 by applying the traffic growth procedure detailed in the April 2020 “Guidance on Traffic Counting Data” published by MassDOT in order to allow for a comparison between the projected November 2019 data<sup>5</sup> to the November 2021 traffic volumes that were collected at the same location. Based on this pre- and post-COVID-19 traffic-volume comparison, the traffic-volume data that was collected as part of this assessment was found to be within the range of daily and seasonal traffic-volume conditions that existed prior to the COVID-19 pandemic. As such, no additional adjustment was made to the seasonally adjusted November traffic counts to account for the COVID-19 pandemic.

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

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

| Location/Peak Hour                                  | AWT <sup>a</sup> | VPH <sup>b</sup> | K Factor <sup>c</sup> | Directional Distribution <sup>d</sup> |
|-----------------------------------------------------|------------------|------------------|-----------------------|---------------------------------------|
| <i>Old Oaken Bucket Road, west of Maple Street:</i> | 4,025            | --               | --                    | --                                    |
| Weekday Morning (8:00 – 9:00 AM)                    | --               | 340              | 8.5                   | 65.6% WB                              |
| Weekday Evening (4:00 – 5:00 PM)                    | --               | 406              | 10.1                  | 55.9% EB                              |

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

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

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

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

WB = westbound, EB = eastbound.

As can be seen in Table 2, Old Oaken Bucket Road in the vicinity of the Project site was found to accommodate approximately 4,025 vehicles on an average weekday (two-way, 24-hour volume), with approximately 340 vehicles per hour (vph) during the weekday morning peak hour and 406 vph during the weekday evening peak hour.

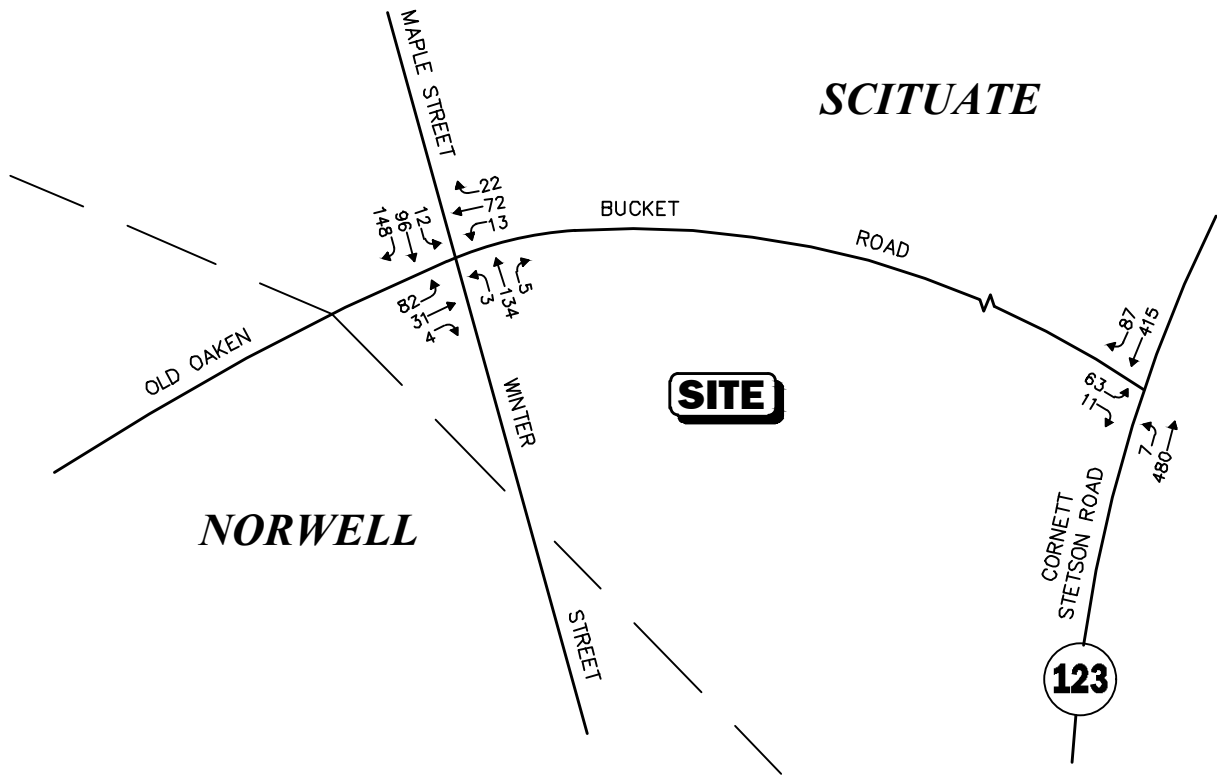
**PEDESTRIAN AND BICYCLE FACILITIES**

A comprehensive field inventory of pedestrian and bicycle facilities within the study area was undertaken in August 2021. The field inventory consisted of a review of the location of sidewalks and pedestrian crossing locations along the study roadway and at the study intersections, as well as the location of existing and planned future bicycle facilities. As detailed on Figure 2, sidewalks

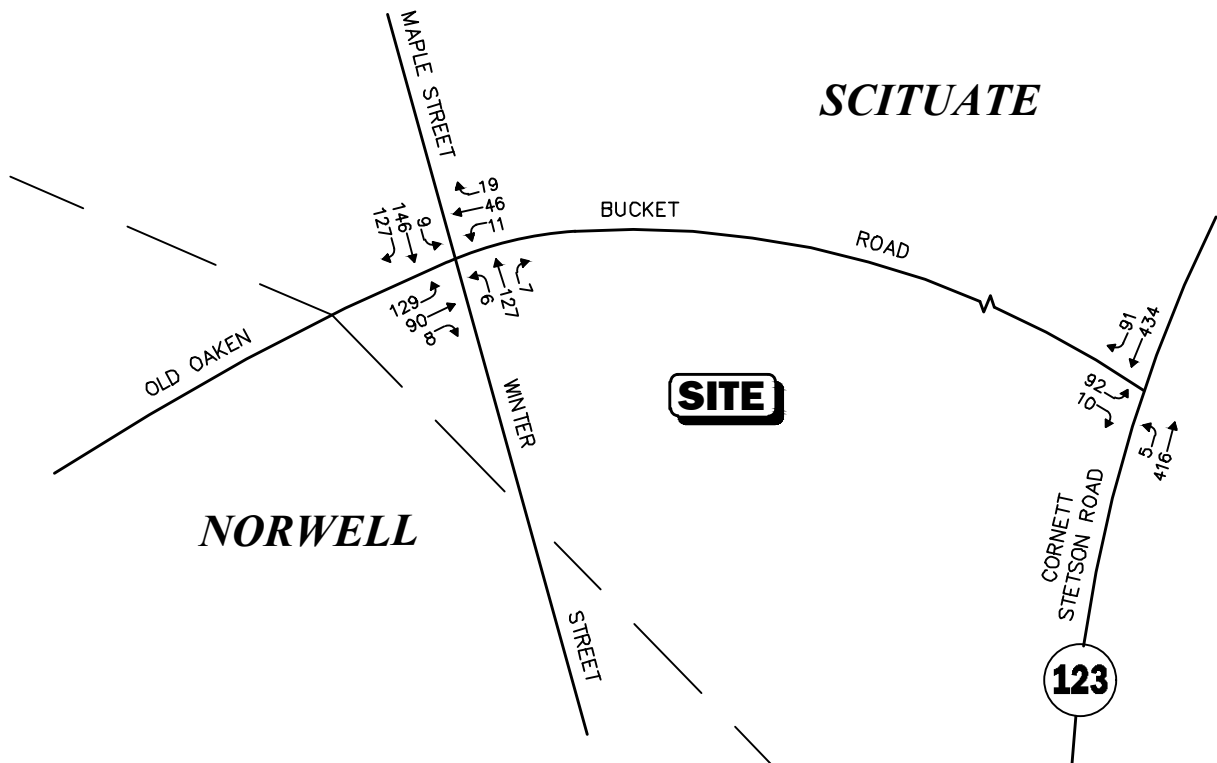
<sup>5</sup>MassDOT considers 2019 traffic volume data to be representative of “existing” conditions had the COVID-19 pandemic not occurred.



WEEKDAY MORNING PEAK HOUR (8:00 - 9:00 AM)



WEEKDAY EVENING PEAK HOUR (4:00 - 5:00 PM)



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

**Figure 3**  
 2021 Existing Peak-Hour Traffic Volumes



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are not provided along Old Oaken Bucket Road within the study area. A sidewalk is provided along the north side of Route 123 east of Old Oaken Bucket Road that includes a crosswalk across Old Oaken Bucket Road. Formal bicycle facilities are not currently provided within the study area and the study area roadways do not provide sufficient width (combined travel lane and shoulder) on a continuous basis to support bicycle travel in a shared traveled-way configuration.<sup>6</sup>

### **PUBLIC TRANSPORTATION**

Regularly scheduled public transportation services are provided to the Town of Scituate but are not currently available at the Project site. The Massachusetts Bay Transit Authority (MBTA) provides Commuter Rail service to South Station in Boston on the Greenbush Line from Greenbush Station in Scituate, which is located at 247 Old Driftway (an approximate 4-minute driving distance to the east of the Project site). In addition, the MBTA provides The RIDE paratransit services to eligible persons who cannot use fixed-route transit (bus, subway, trolley) due to a physical, cognitive, or mental disability in compliance with the Americans with Disabilities Act (ADA), and the Scituate Council on Aging (COA) provides transportation services to Scituate residents age 60+ and those who meet ADA requirements for medical appointments, COA events, shopping, and recreational activities.

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

### **SPOT SPEED MEASUREMENTS**

Vehicle travel speed measurements were performed on Old Oaken Road in the vicinity of the Project site on November 3<sup>rd</sup> through 4<sup>th</sup>, 2021 (Wednesday through Thursday, inclusive). Table 3 summarizes the vehicle travel speed measurements.

**Table 3**  
**VEHICLE TRAVEL SPEED MEASUREMENTS**

|                                         | Old Oaken Bucket Road |           |
|-----------------------------------------|-----------------------|-----------|
|                                         | Eastbound             | Westbound |
| Mean Travel Speed (mph)                 | 34                    | 35        |
| 85 <sup>th</sup> Percentile Speed (mph) | 38                    | 38        |
| Posted Speed Limit (mph)                | 30                    | 30        |

mph = miles per hour.

As can be seen in Table 3, the mean vehicle travel speed along Old Oaken Bucket Road in the vicinity of the Project site was found to be 34 mph in the eastbound direction and 35 mph westbound. The measured 85<sup>th</sup> percentile vehicle travel speed, or the speed at which 85 percent of

<sup>6</sup>A minimum combined travel lane and paved shoulder width of 14-feet is required to support bicycle travel in a shared traveled-way condition.

the observed vehicles traveled at or below, was found to be 38 mph in both the east and westbound directions, which is 8 mph above the posted speed limit (30 mph). The 85<sup>th</sup> percentile speed is used as the basis of engineering design and in the evaluation of sight distances and is often used in establishing posted speed limits.

### **MOTOR VEHICLE CRASH DATA**

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

As can be seen in Table 4, the study area intersections were found to have experienced an average of 3.2 or fewer motor vehicle crashes per year over the five-year review period, the majority of which occurred on a weekday; during daylight under clear weather conditions; and involved angle-type collisions that resulted in property damage only. The Old Oaken Bucket Road/Maple Street/Winter Street and the Route 123/Old Oaken Bucket Road intersections were found to have a motor vehicle crash rate that is above both the MassDOT statewide and District average crash rates for similar intersections for the MassDOT Highway Division District in which the intersections are located (District 5). As such, specific safety-related improvements have been identified for these intersections that will be undertaken as a part of the Project (discussed in the *Recommendations* section of this assessment).

The Scituate Rotary was reported to have experience a total of 18 crashes over the five-year review period, or an average of 3.6 crashes per year, the majority of which occurred on a weekday; during daylight under clear weather conditions; and involved rear-end type collisions that resulted in property damage only. A Road Safety Audit (RSA) was conducted for the Scituate Rotary in December 2021.<sup>7</sup> The RSA provided specific suggestions for improvements to be advanced at the rotary to enhance safety, the implementation of which is expected to result in a reduction in crash frequency and severity.

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

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

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<sup>7</sup>*Road Safety Audit*, Scituate Rotary, Town of Scituate; VHB, Inc; December 2021.

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

|                                    | Old Oaken<br>Bucket Road/<br>Maple Street/<br>Winter Street | Route 123/<br>Old Oaken<br>Bucket Road | Old Oaken<br>Bucket Road/<br>Project Driveway | Scituate Rotary <sup>f</sup> |
|------------------------------------|-------------------------------------------------------------|----------------------------------------|-----------------------------------------------|------------------------------|
| Traffic Control Type: <sup>b</sup> | U                                                           | U                                      | U                                             | U                            |
| <i>Year:</i>                       |                                                             |                                        |                                               |                              |
| 2015                               | 3                                                           | 2                                      | 0                                             | 3                            |
| 2016                               | 1                                                           | 3                                      | 0                                             | 6                            |
| 2017                               | 4                                                           | 3                                      | 1                                             | 6                            |
| 2018                               | 6                                                           | 5                                      | 0                                             | 3                            |
| 2019                               | <u>2</u>                                                    | <u>1</u>                               | <u>0</u>                                      | <u>0</u>                     |
| Total                              | 16                                                          | 14                                     | 1                                             | 18                           |
| Average                            | 3.2                                                         | 2.8                                    | 0.2                                           | 3.6                          |
| Rate <sup>c</sup>                  | 1.09                                                        | 0.66                                   | 0.27                                          | --                           |
| MassDOT Crash Rate: <sup>d</sup>   | 0.57/0.57                                                   | 0.57/0.57                              | 0.57/0.57                                     | --                           |
| Significant? <sup>e</sup>          | Yes                                                         | Yes                                    | No                                            | --                           |
| <i>Type:</i>                       |                                                             |                                        |                                               |                              |
| Angle                              | 12                                                          | 7                                      | 0                                             | 3                            |
| Rear-End                           | 0                                                           | 3                                      | 0                                             | 9                            |
| Head-On                            | 0                                                           | 0                                      | 0                                             | 0                            |
| Sideswipe                          | 3                                                           | 2                                      | 0                                             | 1                            |
| Fixed Object                       | 0                                                           | 2                                      | 1                                             | 3                            |
| Pedestrian/Bicycle                 | 0                                                           | 0                                      | 0                                             | 1                            |
| Unknown/Other                      | <u>1</u>                                                    | <u>0</u>                               | <u>0</u>                                      | <u>1</u>                     |
| Total                              | 16                                                          | 14                                     | 1                                             | 18                           |
| <i>Conditions:</i>                 |                                                             |                                        |                                               |                              |
| Clear                              | 9                                                           | 7                                      | 0                                             | 9                            |
| Cloudy                             | 5                                                           | 1                                      | 0                                             | 6                            |
| Rain                               | 1                                                           | 2                                      | 0                                             | 1                            |
| Fog/Smog/Smoke                     | 0                                                           | 1                                      | 0                                             | 0                            |
| Snow/Ice                           | <u>1</u>                                                    | <u>3</u>                               | <u>1</u>                                      | <u>2</u>                     |
| Total                              | 16                                                          | 14                                     | 1                                             | 18                           |
| <i>Lighting:</i>                   |                                                             |                                        |                                               |                              |
| Daylight                           | 13                                                          | 11                                     | 1                                             | 14                           |
| Dawn/Dusk                          | 1                                                           | 1                                      | 0                                             | 1                            |
| Dark (Road Lit)                    | 1                                                           | 1                                      | 0                                             | 3                            |
| Dark (Road Unlit)                  | <u>1</u>                                                    | <u>1</u>                               | <u>0</u>                                      | <u>0</u>                     |
| Total                              | 16                                                          | 14                                     | 1                                             | 18                           |
| <i>Day of Week:</i>                |                                                             |                                        |                                               |                              |
| Monday through Friday              | 11                                                          | 11                                     | 1                                             | 16                           |
| Saturday                           | 1                                                           | 2                                      | 0                                             | 1                            |
| Sunday                             | <u>4</u>                                                    | <u>1</u>                               | <u>0</u>                                      | <u>1</u>                     |
| Total                              | 16                                                          | 14                                     | 1                                             | 18                           |
| <i>Severity:</i>                   |                                                             |                                        |                                               |                              |
| Property Damage Only               | 10                                                          | 12                                     | 1                                             | 12                           |
| Personal Injury                    | 5                                                           | 2                                      | 0                                             | 2                            |
| Fatality                           | 0                                                           | 0                                      | 0                                             | 0                            |
| Unknown                            | <u>1</u>                                                    | <u>0</u>                               | <u>0</u>                                      | <u>4</u>                     |
| Total                              | 16                                                          | 14                                     | 1                                             | 18                           |

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

<sup>b</sup>Traffic Control Type: U = unsignalized; TS = traffic signal.

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

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

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

<sup>f</sup>Expanded study area intersection.

## **FUTURE CONDITIONS**

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

### **FUTURE TRAFFIC GROWTH**

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

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

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

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

The Town of Scituate was consulted in order to determine if there were any projects planned within the study area that would have an impact on future traffic volumes at the study intersections. Based on this discussion, the following projects were identified for review in conjunction with this assessment:

- ***Greenbush Mixed-Use Development, New Driftway, Scituate, Massachusetts.*** This project will entail the construction of 78 multifamily residential units and approximately 10,593 square feet (sf) of retail space that will include a 2,010± sf coffee shop, 2,012± sf

of commercial space and 6,571± sf of retail space to be situated within an underutilized parking lot that serves the MBTA Greenbush Commuter Rail Station. Traffic volumes associated with this project within the study area were obtained from the traffic study prepared for the project and were incorporated into the future condition traffic volumes.<sup>8</sup>

- ***Proposed Mixed-Use Development, 48-52 New Driftway, Scituate, Massachusetts.*** This project entails the construction of a mixed-use commercial development that includes a four pump, eight vehicle fueling position fueling facility, a 4,000± sf convenience store, and 1,500± sf of retail/restaurant space. Based on a review of the traffic study that was prepared for the project,<sup>9</sup> traffic volumes associated with this project within the study area of this assessment are expected to be relatively minor and would be reflected in the general background growth rate (discussion follows).
- ***Proposed Residential Development, 7 New Driftway, Scituate, Massachusetts.*** This proposed project entails the construction of a four-story, 21-unit multifamily residential building located at 7 New Driftway. Based on a review of the Traffic Assessment that was prepared for the project,<sup>10</sup> the multifamily development will result in an overall reduction in traffic when compared to the former medical office building that operated within the site.

No other developments were identified at this time that are expected to result in an increase in traffic within the study area beyond the general background traffic growth rate.

### **General Background Traffic Growth**

Traffic-volume data compiled by MassDOT from permanent count stations located in the region were reviewed in order to determine general traffic growth trends in the area. This data indicates that traffic volumes have fluctuated over the past several years (2015 to 2019), ranging from a decrease of 0.5 percent to an increase of 2.0 percent, with the average growth rate found to be approximately 0.7 percent. In order to provide a prudent planning condition for the Project, a slightly higher 1.0 percent per year compounded annual background traffic growth rate was used in order to account for future traffic growth and presently unforeseen development within the study area.

### **Roadway Improvement Projects**

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

### **No-Build Traffic Volumes**

The 2029 No-Build condition peak-hour traffic volumes were developed by applying the 1.0 percent per year compounded annual background traffic growth rate to the 2021 Existing peak-hour traffic volumes and then adding the peak-hour traffic volumes associated with the

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<sup>8</sup>*Traffic Impact and Access Study*, Proposed Mixed-Use Development, Scituate, Massachusetts; VHB; January 2019.

<sup>9</sup>*Traffic Impact and Access Study*, Proposed Mixed-Use Development, Scituate, Massachusetts; VHB; July 2020.

<sup>10</sup>*Traffic Assessment*, Proposed Multifamily Residential Development, Scituate, Massachusetts; Gillon Associates; October 2021.

identified specific development project by others. The resulting 2029 No-Build weekday morning and evening peak-hour traffic volumes are shown on Figure 4.

## **PROJECT-GENERATED TRAFFIC**

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

As proposed, the Project will entail the construction of a 32-unit residential community that will consist of ten (10) detached single-family cottages and 11 attached duplex cottages (22 units total). In order to develop the traffic characteristics of the Project, trip-generation statistics published by the ITE<sup>11</sup> for similar land uses as those proposed were used. ITE Land Use Codes (LUCs) 210, *Single-Family Detached Housing*, and 215, *Single-Family Attached Housing*, were used to develop the traffic characteristics of the Project, the results of which are summarized in Table 5.

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

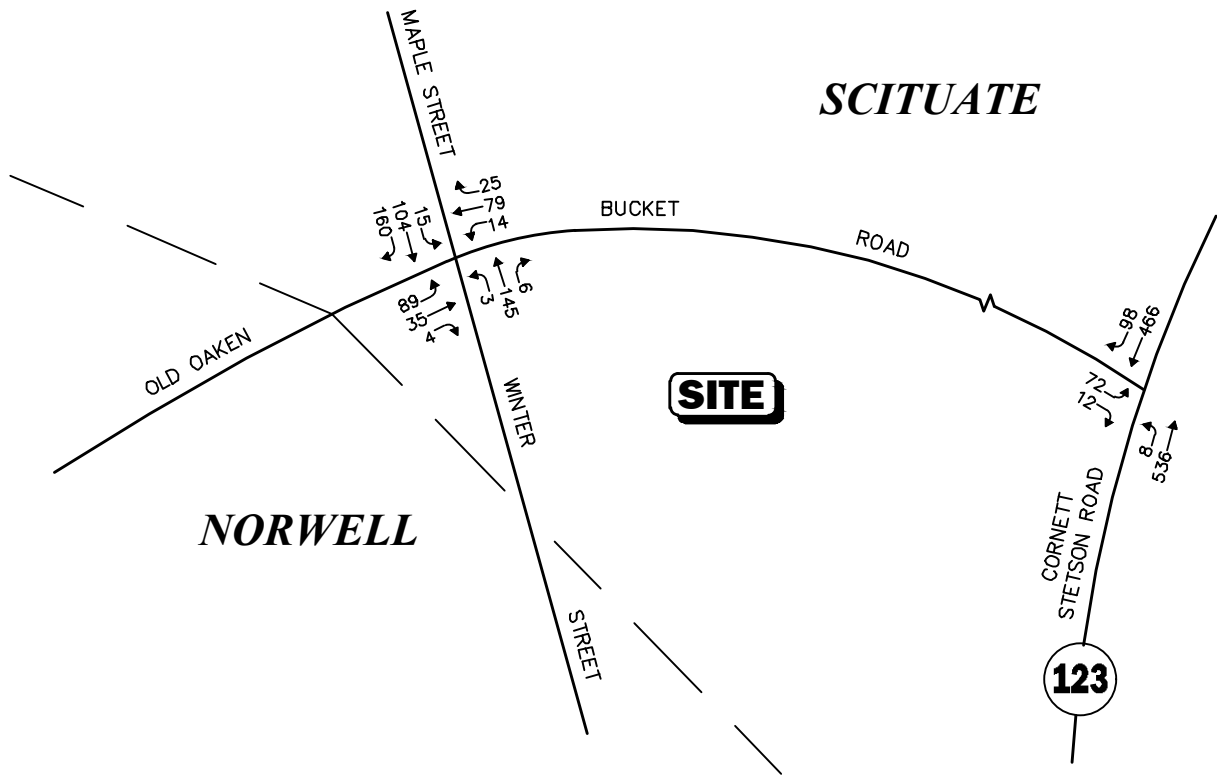
| Time Period/Direction             | (A)<br>Single-Family<br>Detached Housing<br>(10 Dwellings) <sup>a</sup> | (B)<br>Single-Family<br>Attached Housing<br>(22 Dwellings) <sup>b</sup> | (C = A+B)<br>Total Trips |
|-----------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|--------------------------|
| <i>Average Weekday Daily:</i>     |                                                                         |                                                                         |                          |
| Entering                          | 61                                                                      | 59                                                                      | 120                      |
| <u>Exiting</u>                    | <u>61</u>                                                               | <u>59</u>                                                               | <u>120</u>               |
| Total                             | 122                                                                     | 118                                                                     | 240                      |
| <i>Weekday Morning Peak Hour:</i> |                                                                         |                                                                         |                          |
| Entering                          | 2                                                                       | 2                                                                       | 4                        |
| <u>Exiting</u>                    | <u>7</u>                                                                | <u>4</u>                                                                | <u>11</u>                |
| Total                             | 9                                                                       | 6                                                                       | 15                       |
| <i>Weekday Evening Peak Hour:</i> |                                                                         |                                                                         |                          |
| Entering                          | 7                                                                       | 5                                                                       | 12                       |
| <u>Exiting</u>                    | <u>4</u>                                                                | <u>4</u>                                                                | <u>8</u>                 |
| Total                             | 11                                                                      | 9                                                                       | 20                       |

<sup>a</sup>Based on ITE LUC 210, *Single-Family Detached Housing*.

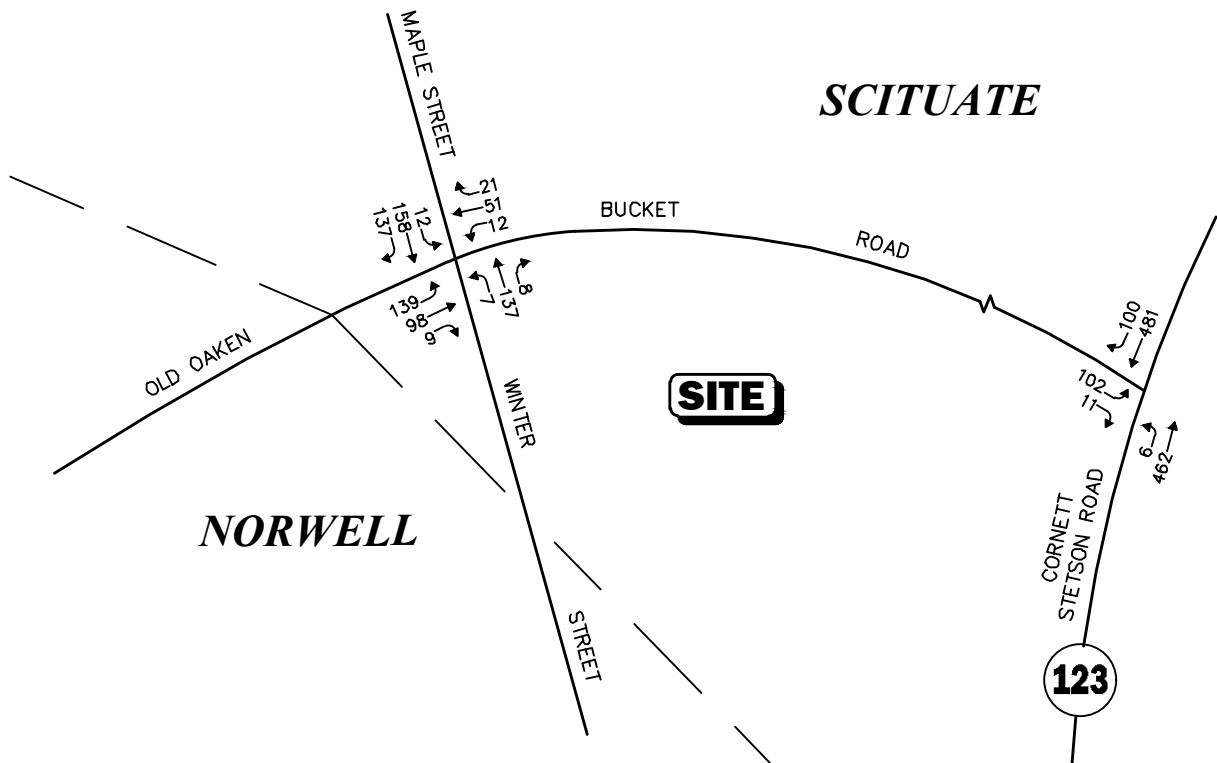
<sup>b</sup>Based on ITE LUC 215, *Single-Family Attached Housing*.

<sup>11</sup>Ibid 1.

WEEKDAY MORNING PEAK HOUR (8:00 - 9:00 AM)



WEEKDAY EVENING PEAK HOUR (4:00 - 5:00 PM)



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

**Figure 4**  
 2029 No-Build  
 Peak-Hour Traffic Volumes



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

As can be seen in Table 5, the Project is expected to generate approximately 240 vehicle trips on an average weekday (two-way, 24-hour volume, or 120 vehicles entering and 120 exiting), with 15 vehicle trips (4 vehicles entering and 11 exiting) expected during the weekday morning peak-hour and 20 vehicle trips (12 vehicles entering and 8 exiting) expected during the weekday evening peak-hour.

### **TRIP DISTRIBUTION AND ASSIGNMENT**

The directional distribution of generated trips to and from the Project site was determined based on a review of Journey-to-Work data obtained from the U.S. Census for persons residing in the Town of Scituate and then refined based on existing traffic patterns within the study area. This methodology is consistent with the residential nature of the Project. The general trip distribution for the Project is graphically depicted on Figure 5. The additional traffic expected to be generated by the Project was assigned on the study area roadway network as shown in Figure 6.

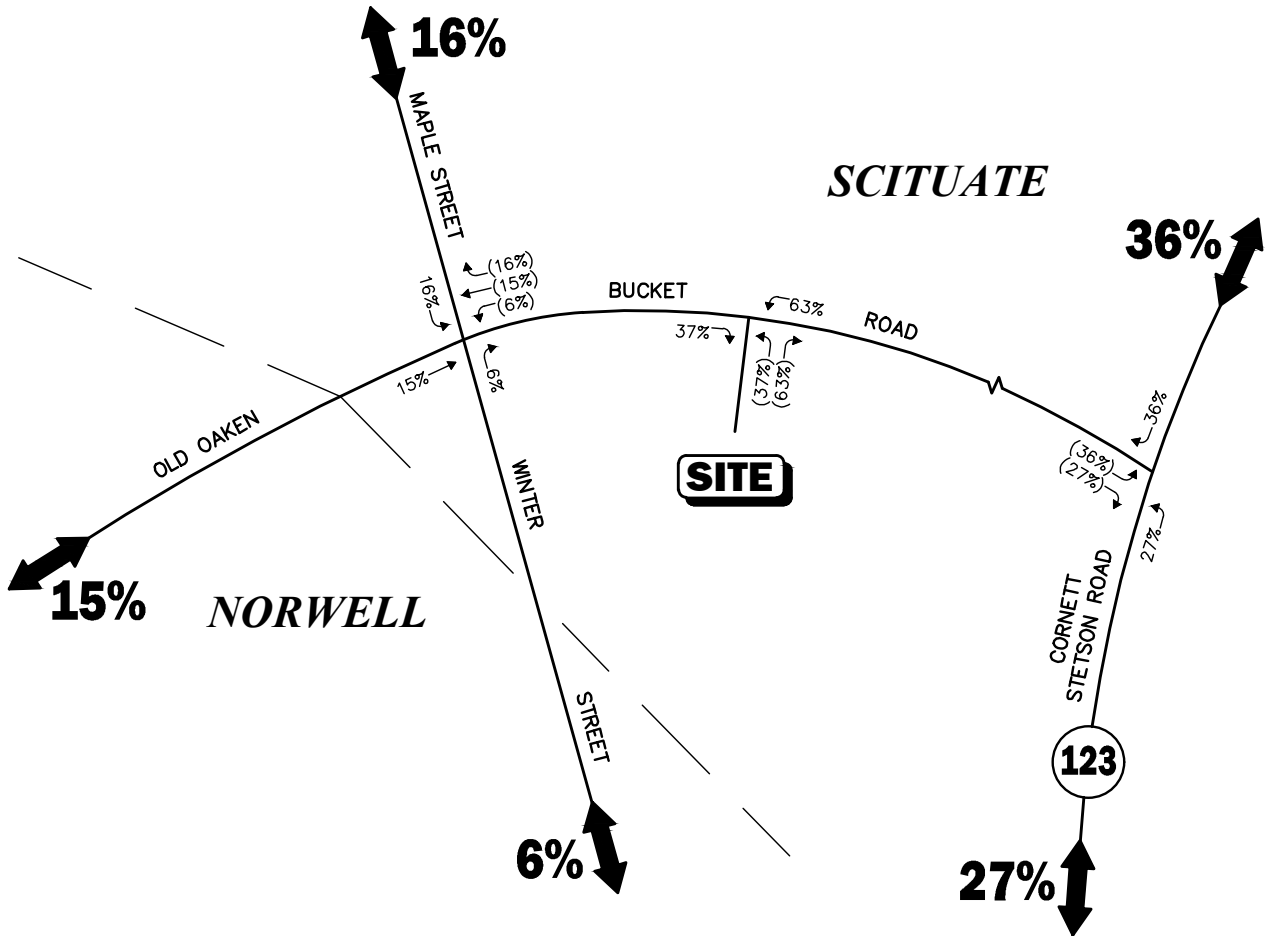
### **FUTURE TRAFFIC VOLUMES - BUILD CONDITION**

The 2029 Build condition traffic volumes consist of the 2029 No-Build traffic volumes with the additional traffic expected to be generated by the Project added to them. The 2029 Build weekday morning and evening peak-hour traffic volumes are graphically depicted on Figure 7.

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

**Legend:**

- XX Entering Trips
- (XX) Exiting Trips



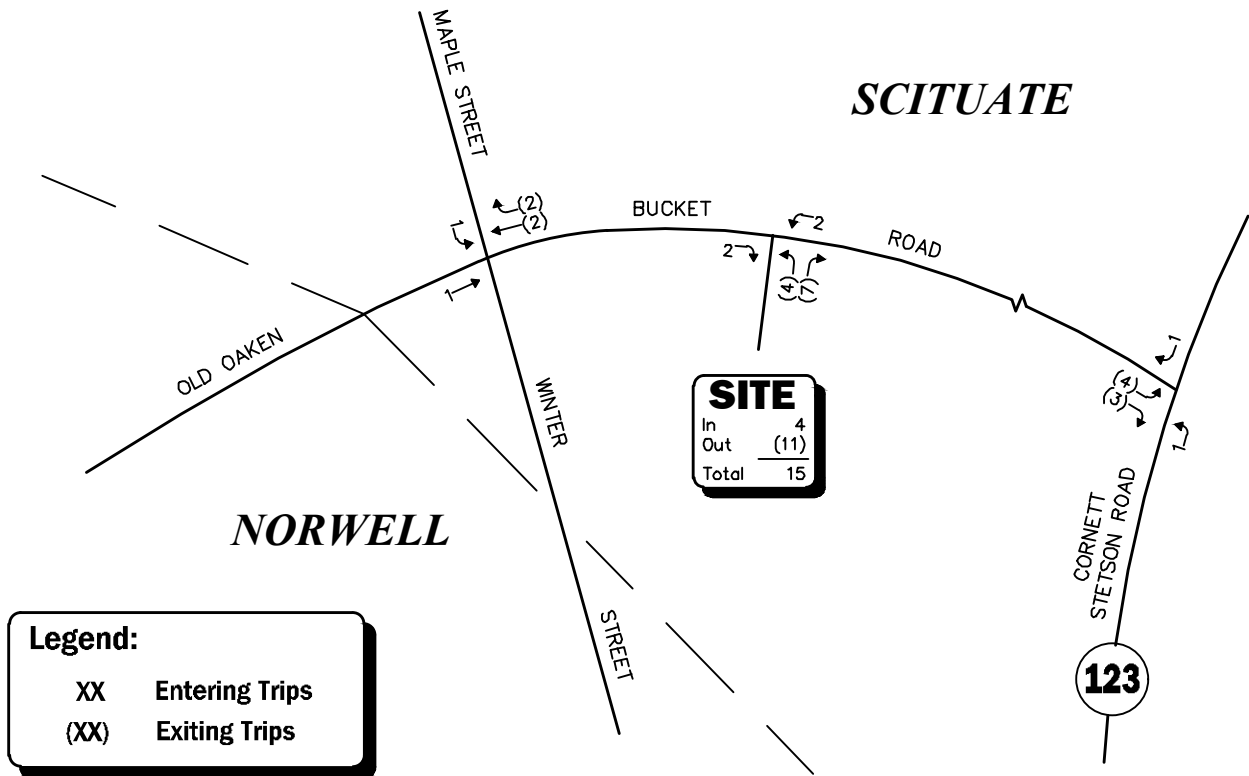
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**Figure 5**  
Trip Distribution Map

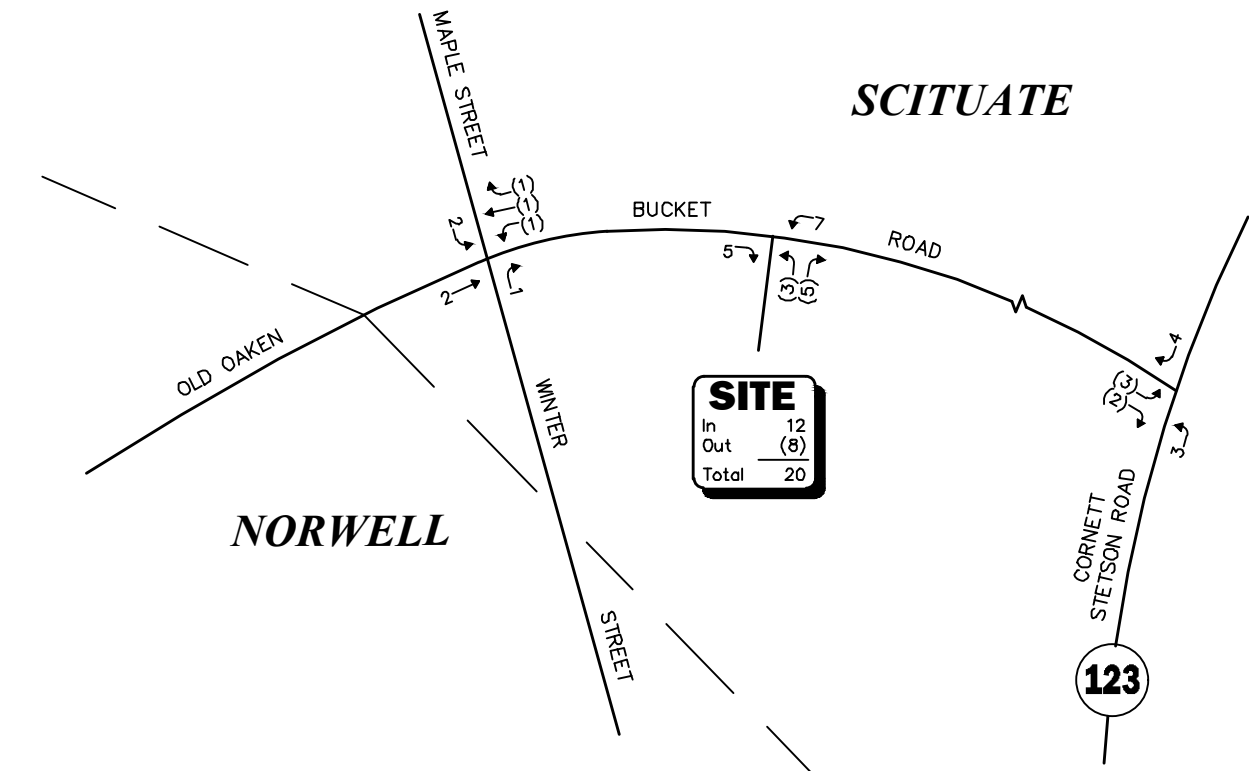


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WEEKDAY MORNING PEAK HOUR (8:00 - 9:00 AM)



WEEKDAY EVENING PEAK HOUR (4:00 - 5:00 PM)



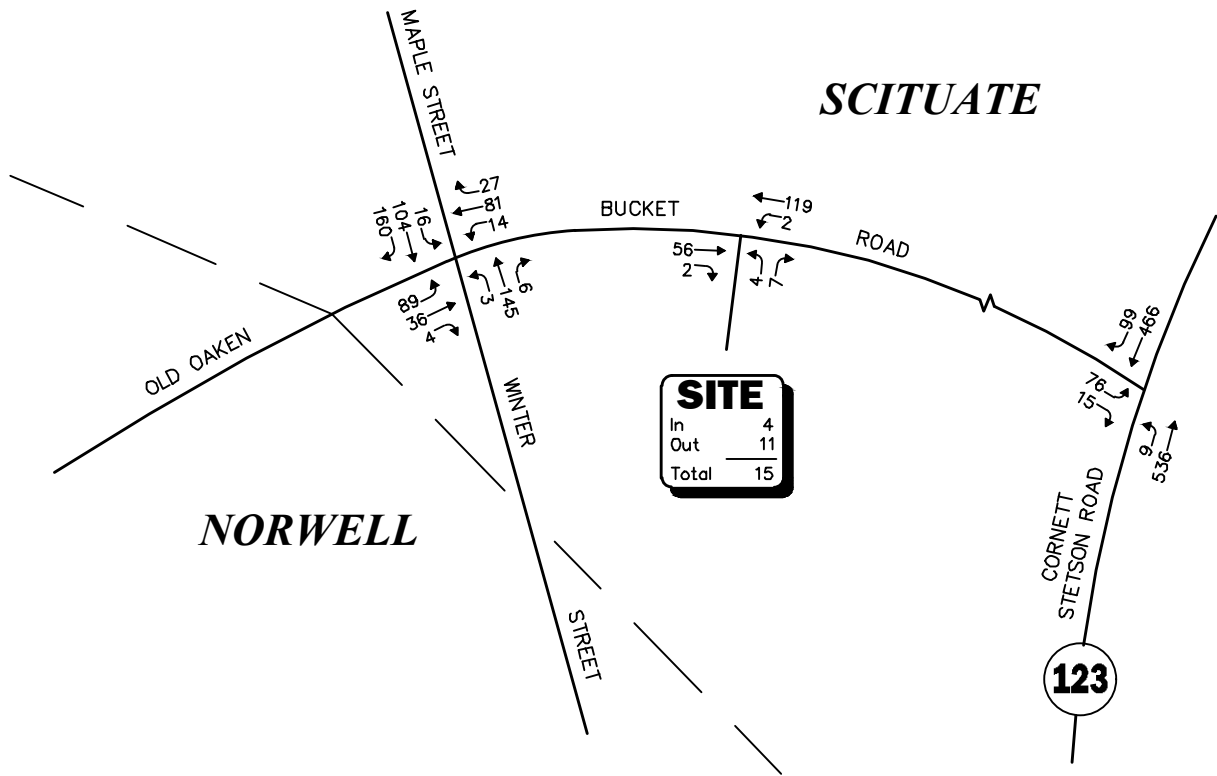
Not To Scale Figure 6



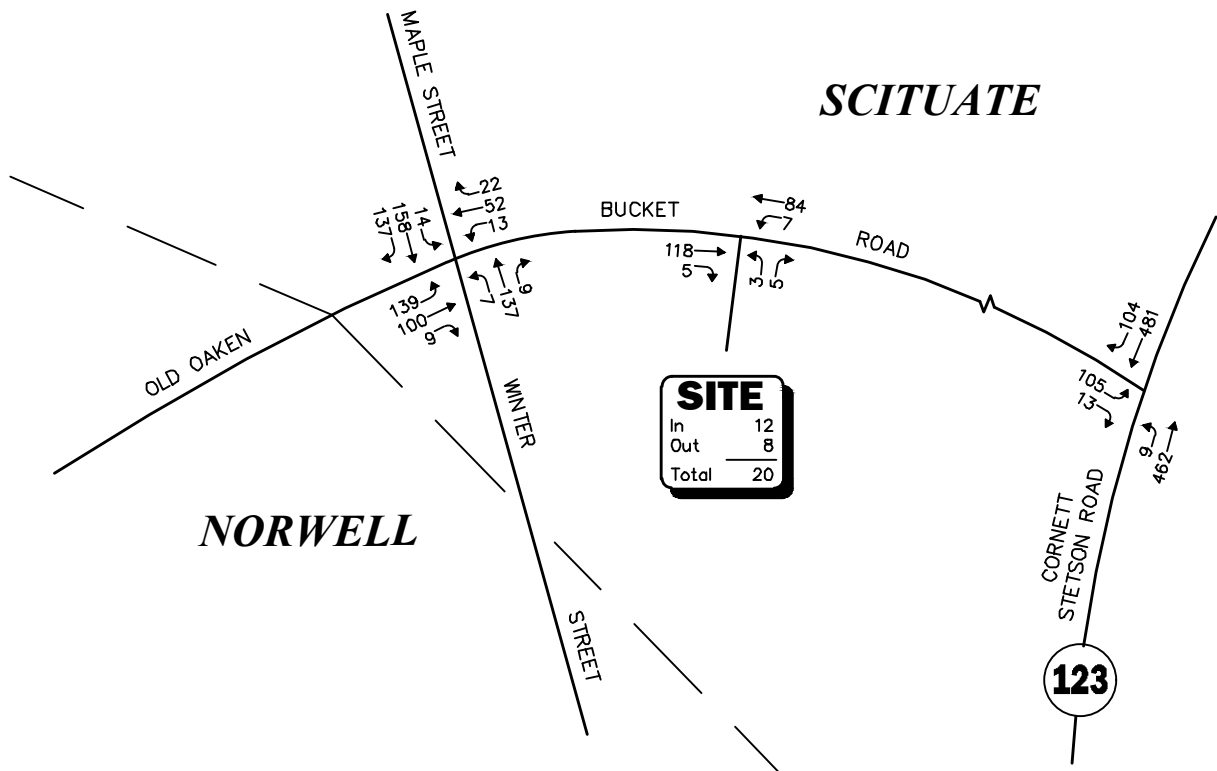
Project-Generated Peak-Hour Traffic Volumes

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WEEKDAY MORNING PEAK HOUR (8:00 - 9:00 AM)



WEEKDAY EVENING PEAK HOUR (4:00 - 5:00 PM)



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

**Figure 7**  
 2029 Build  
 Peak-Hour Traffic Volumes



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

| Location/Peak Hour                                    | 2021 Existing | 2029 No-Build | 2029 Build | Traffic-Volume Increase Over No-Build | Percent Increase Over No-Build |
|-------------------------------------------------------|---------------|---------------|------------|---------------------------------------|--------------------------------|
| <i>Maple Street, north of Old Oaken Bucket Road:</i>  |               |               |            |                                       |                                |
| Weekday Morning                                       | 494           | 535           | 538        | 3                                     | 0.6                            |
| Weekday Evening                                       | 557           | 600           | 603        | 3                                     | 0.5                            |
| <i>Winter Street, south of Old Oaken Bucket Road:</i> |               |               |            |                                       |                                |
| Weekday Morning                                       | 255           | 273           | 273        | 0                                     | 0.0                            |
| Weekday Evening                                       | 305           | 328           | 330        | 2                                     | 0.6                            |
| <i>Old Oaken Bucket Road, west of Maple Street:</i>   |               |               |            |                                       |                                |
| Weekday Morning                                       | 340           | 367           | 370        | 3                                     | 0.8                            |
| Weekday Evening                                       | 406           | 437           | 440        | 3                                     | 0.7                            |
| <i>Route 123, south of Old Oaken Bucket Road:</i>     |               |               |            |                                       |                                |
| Weekday Morning                                       | 913           | 1,014         | 1,018      | 4                                     | 0.4                            |
| Weekday Evening                                       | 865           | 950           | 955        | 5                                     | 0.5                            |
| <i>Route 123, north of Old Oaken Bucket Road:</i>     |               |               |            |                                       |                                |
| Weekday Morning                                       | 1,046         | 1,163         | 1,168      | 5                                     | 0.4                            |
| Weekday Evening                                       | 1,034         | 1,137         | 1,144      | 7                                     | 0.6                            |

As shown in Table 6, Project-related traffic-volume increases outside of the study area relative to 2029 No-Build conditions are anticipated to range from 0.0 to 0.8 percent during the peak periods, with vehicle increases shown to range from 0 to 7 vehicles. ***When distributed over the peak-hour, the predicted traffic volume increases would not result in a significant impact (increase) on motorist delays or vehicle queuing outside of the immediate study area that is the subject of this assessment.***

With specific regard to impacts at the Scituate Rotary, the Project is expected to add 5 to 7 vehicles to the rotary during the weekday peak hours, or approximately one (1) additional vehicle every 9 to 12 minutes, a level of impact that would not be perceivable over existing conditions.

# **TRAFFIC OPERATIONS ANALYSIS**

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Measuring existing and future traffic volumes quantifies traffic flow within the study area. To assess quality of flow, roadway capacity and vehicle queue analyses were conducted under 2021 Existing, 2029 No-Build, and 2029 Build traffic-volume conditions. Capacity analyses provide an indication of how well the roadway facilities serve the traffic demands placed upon them, with vehicle queue analyses providing a secondary measure of the operational characteristics of an intersection or section of roadway under study.

## **METHODOLOGY**

### **Levels of Service**

A primary result of capacity analyses is the assignment of level of service to traffic facilities under various traffic-flow conditions.<sup>12</sup> The concept of level of service is defined as a qualitative measure describing operational conditions within a traffic stream and their perception by motorists and/or passengers. A level-of-service definition provides an index to quality of traffic flow in terms of such factors as speed, travel time, freedom to maneuver, traffic interruptions, comfort, convenience, and safety.

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

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

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<sup>12</sup>The capacity analysis methodology is based on the concepts and procedures presented in the *Highway Capacity Manual*; Transportation Research Board; Washington, DC; 2010.

## Unsignalized Intersections

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

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

The levels of service of unsignalized intersections are determined by application of a procedure described in the 2010 *Highway Capacity Manual*.<sup>13</sup> Level of service is measured in terms of average control delay. Mathematically, control delay is a function of the capacity and degree of saturation of the lane group and/or approach under study and is a quantification of motorist delay associated with traffic control devices such as traffic signals and STOP signs. Control delay includes the effects of initial deceleration delay approaching a STOP sign, stopped delay, queue move-up time, and final acceleration delay from a stopped condition. Definitions for level of service at unsignalized intersections are also given in the 2010 *Highway Capacity Manual*. Table 7 summarizes the relationship between level of service and average control delay for two-way stop controlled and all-way stop controlled intersections.

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

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

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

<sup>13</sup>*Highway Capacity Manual*; Transportation Research Board; Washington, DC; 2010.

## **Vehicle Queue Analysis**

Vehicle queue analyses are a direct measurement of an intersection's ability to process vehicles under various traffic control and volume scenarios and lane use arrangements. The vehicle queue analysis was performed using the Synchro® intersection capacity analysis software which is based upon the methodology and procedures presented in the 2010 *Highway Capacity Manual*. The Synchro® vehicle queue analysis methodology is a simulation based model which reports the number of vehicles that experience a delay of 6 seconds or more at an intersection. For signalized intersections, Synchro® reports both the average (50<sup>th</sup> percentile) the 95<sup>th</sup> percentile vehicle queue. For unsignalized intersections, Synchro® reports the 95<sup>th</sup> percentile vehicle queue. Vehicle queue lengths are a function of the capacity of the movement under study and the volume of traffic being processed by the intersection during the analysis period. The 95<sup>th</sup> percentile vehicle queue is the vehicle queue length that will be exceeded only 5 percent of the time, or approximately 3 minutes out of 60 minutes during the peak one hour of the day (during the remaining 57 minutes, the vehicle queue length will be less than the 95<sup>th</sup> percentile queue length).

## **ANALYSIS RESULTS**

Level-of-service and vehicle queue analyses were conducted for 2021 Existing, 2029 No-Build, and 2029 Build conditions for the intersections within the study area. The results of the intersection capacity and vehicle queue analyses are summarized on Table 8, with the detailed analysis results presented in the Appendix.

The following is a summary of the level-of-service and vehicle queue analyses for the intersections within the study area. For context, we note that an LOS of "D" or better is generally defined as "acceptable" operating conditions. Project-related impacts at the study area intersections are shown on Table 8 and are defined as follows:

### **Old Oaken Bucket Road/Maple Street/Winter Street**

No change in level-of-service or vehicle queuing is predicted to occur for any movement over No-Build conditions, with all movements continuing to operate at LOS B or better and Project-related impacts defined as an increase in average motorist delay of less than 1.0 seconds.

### **Route 123/Old Oaken Bucket Road**

No change in level-of-service or vehicle queuing is predicted to occur for any movement over No-Build conditions, with Project-related impacts defined as an increase in average motorist delay of up to 2.5 seconds. Independent of the Project, it was noted that the Old Oaken Bucket Road approach is predicted to operate at its design capacity (i.e., LOS "E") during both the weekday morning and evening peak hours under No-Build conditions, with residual vehicle queues of up to four (4) vehicles.

### **Old Oaken Bucket Road/Project Site Driveway**

All movements at the Project site driveway intersection with Old Oaken Bucket Road were shown to operate at LOS A during the peak hours with negligible vehicle queuing.



**Table 8**  
**UNSIGNALIZED INTERSECTION LEVEL-OF-SERVICE AND VEHICLE QUEUE SUMMARY**

| Unsignalized Intersection/<br>Peak Hour/Movement        | 2021 Existing       |                    |                  |                                        | 2029 No-Build |       |     |                           | 2029 Build |       |     |                           |
|---------------------------------------------------------|---------------------|--------------------|------------------|----------------------------------------|---------------|-------|-----|---------------------------|------------|-------|-----|---------------------------|
|                                                         | Demand <sup>a</sup> | Delay <sup>b</sup> | LOS <sup>c</sup> | Queue <sup>d</sup><br>95 <sup>th</sup> | Demand        | Delay | LOS | Queue<br>95 <sup>th</sup> | Demand     | Delay | LOS | Queue<br>95 <sup>th</sup> |
| <b>Old Oaken Bucket Road/Maple Street/Winter Street</b> |                     |                    |                  |                                        |               |       |     |                           |            |       |     |                           |
| <i>Weekday Morning:</i>                                 |                     |                    |                  |                                        |               |       |     |                           |            |       |     |                           |
| Old Oaken Bucket Road EB LT/TH/RT                       | 117                 | 9.5                | A                | 1                                      | 128           | 10.0  | A   | 1                         | 129        | 10.0  | A   | 1                         |
| Old Oaken Bucket Road WB LT/TH/RT                       | 107                 | 9.3                | A                | 1                                      | 118           | 9.8   | A   | 1                         | 122        | 9.8   | A   | 1                         |
| Winter Street NB LT/TH/RT                               | 142                 | 9.4                | A                | 1                                      | 154           | 9.9   | A   | 1                         | 154        | 10.0  | A   | 1                         |
| Maple Street SB LT/TH/RT                                | 256                 | 10.5               | B                | 2                                      | 279           | 11.4  | B   | 2                         | 280        | 11.5  | B   | 2                         |
| <i>Weekday Evening:</i>                                 |                     |                    |                  |                                        |               |       |     |                           |            |       |     |                           |
| Old Oaken Bucket Road EB LT/TH/RT                       | 227                 | 12.2               | B                | 2                                      | 246           | 13.3  | B   | 3                         | 248        | 13.4  | B   | 3                         |
| Old Oaken Bucket Road WB LT/TH/RT                       | 76                  | 9.9                | A                | 1                                      | 84            | 10.4  | B   | 1                         | 92         | 10.5  | B   | 1                         |
| Winter Street NB LT/TH/RT                               | 140                 | 10.7               | B                | 1                                      | 152           | 11.4  | B   | 1                         | 153        | 11.5  | B   | 1                         |
| Maple Street SB LT/TH/RT                                | 282                 | 12.1               | B                | 3                                      | 307           | 13.4  | B   | 3                         | 309        | 13.6  | B   | 3                         |
| <b>Route 123/Old Oaken Bucket Road</b>                  |                     |                    |                  |                                        |               |       |     |                           |            |       |     |                           |
| <i>Weekday Morning:</i>                                 |                     |                    |                  |                                        |               |       |     |                           |            |       |     |                           |
| Old Oaken Bucket Road EB LT/RT                          | 74                  | 26.6               | D                | 2                                      | 84            | 36.9  | E   | 3                         | 91         | 38.9  | E   | 3                         |
| Route 123 NB LT/TH                                      | 487                 | 0.1                | A                | 0                                      | 544           | 0.1   | A   | 0                         | 545        | 0.1   | A   | 0                         |
| Route 123 SB TH/RT                                      | 502                 | 0.0                | A                | 0                                      | 564           | 0.0   | A   | 0                         | 565        | 0.0   | A   | 0                         |
| <i>Weekday Evening:</i>                                 |                     |                    |                  |                                        |               |       |     |                           |            |       |     |                           |
| Old Oaken Bucket Road EB LT/RT                          | 102                 | 30.5               | D                | 2                                      | 113           | 43.9  | E   | 4                         | 118        | 46.4  | E   | 4                         |
| Route 123 NB LT/TH                                      | 421                 | 0.1                | A                | 0                                      | 468           | 0.1   | A   | 0                         | 471        | 0.2   | A   | 0                         |
| Route 123 SB TH/RT                                      | 525                 | 0.0                | A                | 0                                      | 581           | 0.0   | A   | 0                         | 585        | 0.0   | A   | 0                         |
| <b>Old Oaken Bucket Road/Project Driveway</b>           |                     |                    |                  |                                        |               |       |     |                           |            |       |     |                           |
| <i>Weekday Morning:</i>                                 |                     |                    |                  |                                        |               |       |     |                           |            |       |     |                           |
| Old Oaken Bucket Road EB TH/RT                          | --                  | --                 | --               | --                                     | --            | --    | --  | --                        | 58         | 0.0   | A   | 0                         |
| Old Oaken Bucket Road WB LT/TH                          | --                  | --                 | --               | --                                     | --            | --    | --  | --                        | 121        | 0.1   | A   | 0                         |
| Project Driveway NB LT/RT                               | --                  | --                 | --               | --                                     | --            | --    | --  | --                        | 11         | 9.0   | A   | 0                         |
| <i>Weekday Evening:</i>                                 |                     |                    |                  |                                        |               |       |     |                           |            |       |     |                           |
| Old Oaken Bucket Road EB TH/RT                          | --                  | --                 | --               | --                                     | --            | --    | --  | --                        | 123        | 0.0   | A   | 0                         |
| Old Oaken Bucket Road WB LT/TH                          | --                  | --                 | --               | --                                     | --            | --    | --  | --                        | 91         | 0.5   | A   | 0                         |
| Project Driveway NB LT/RT                               | --                  | --                 | --               | --                                     | --            | --    | --  | --                        | 8          | 9.4   | A   | 0                         |

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

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

<sup>c</sup>Level of service.

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

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

## SIGHT DISTANCE EVALUATION

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Sight distance measurements were performed at the Project site driveway intersection with Old Oaken Bucket Road in accordance with MassDOT and American Association of State Highway and Transportation Officials (AASHTO)<sup>14</sup> requirements. Both stopping sight distance (SSD) and intersection sight distance (ISD) measurements were performed. In brief, SSD is the distance required by a vehicle traveling at the design speed of a roadway, on wet pavement, to stop prior to striking an object in its travel path. ISD or corner sight distance (CSD) is the sight distance required by a driver entering or crossing an intersecting roadway to perceive an on-coming vehicle and safely complete a turning or crossing maneuver with oncoming traffic. In accordance with AASHTO standards, if the measured ISD is at least equal to the required SSD value for the appropriate design speed, the intersection can operate in a safe manner. Table 9 presents the measured SSD and ISD at the subject intersection.

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<sup>14</sup>*A Policy on Geometric Design of Highway and Streets*, 7<sup>th</sup> Edition; American Association of State Highway and Transportation Officials (AASHTO); Washington D.C.; 2018.

**Table 9**  
**SIGHT DISTANCE MEASUREMENTS<sup>a</sup>**

| Intersection/Sight Distance Measurement                          | Feet                   |                              |                       |
|------------------------------------------------------------------|------------------------|------------------------------|-----------------------|
|                                                                  | Required Minimum (SSD) | Desirable (ISD) <sup>b</sup> | Measured              |
| <b><i>Old Oaken Bucket Road at the Project Site Driveway</i></b> |                        |                              |                       |
| <i>Stopping Sight Distance:</i>                                  |                        |                              |                       |
| Old Oaken Bucket Road approaching from the east                  | 305                    | --                           | 336                   |
| Old Oaken Bucket Road approaching from the west                  | 305                    | --                           | 362                   |
| <i>Intersection Sight Distance:</i>                              |                        |                              |                       |
| Looking to the east from the Project Driveway                    | 305                    | 445                          | 216/500+ <sup>c</sup> |
| Looking to the west from the Project Driveway                    | 305                    | 385                          | 321                   |

<sup>a</sup>Recommended minimum values obtained from *A Policy on Geometric Design of Highways and Streets*, 7<sup>th</sup> Edition; American Association of State Highway and Transportation Officials (AASHTO); 2018; and based on a 40 mph approach speed on Old Oaken Bucket Road.

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

<sup>c</sup>Available sight distance with the selective trimming/removal of trees and vegetation located within the sight triangle area and the regrading of the embankment to the east of the Project site driveway along the south side of Old Oaken Bucket Road.

As can be seen in Table 9, with the selective trimming or removal of trees and vegetation located along within the sight triangle areas of the Project site driveway and the regrading of the existing embankment to the east of the Project site driveway along the south side of Old Oaken Bucket Road, the available lines of sight to and from the Project site driveway intersection with Old Oaken Bucket Road were found to exceed the recommended minimum sight distances to function in a safe (SSD) manner based on a 40 mph appropriate approach speed, which is consistent with the measured 85<sup>th</sup> percentile vehicle travel speed (38 mph) and 10 mph above the posted speed limit (30 mph).

# **CONCLUSIONS AND RECOMMENDATIONS**

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## **CONCLUSIONS**

VAI has completed a detailed assessment of the potential impacts on the transportation infrastructure associated with the proposed construction of a residential community to be known as The Cottages at Old Oaken Bucket and located at 279-281 Old Oaken Bucket Road in Scituate, Massachusetts. The following specific areas have been evaluated as they relate to the Project: i) access requirements; ii) potential off-site improvements; and iii) safety considerations; under existing and future conditions, both with and without the Project. Based on this assessment, we have concluded the following with respect to the Project:

1. Using trip-generation statistics published by the ITE,<sup>15</sup> the Project is expected to generate approximately 240 vehicle trips on an average weekday (two-way, 24-hour volume), with 15 vehicle trips expected during the weekday morning peak-hour and 20 vehicle trips expected during the weekday evening peak-hour;
2. The Project will not result in a significant impact (increase) on motorist delays or vehicle queuing over anticipated future conditions without the Project (No-Build condition), with Project-related impacts defined as an increase in average motorist delay of up to 2.5 seconds with no (0) increase in vehicle queuing predicted to occur;
3. Project-related impacts to the Scituate Rotary were defined as an increase of 5 to 7 vehicles during the weekday peak hours, or approximately one (1) additional vehicle every 9 to 12 minutes, a level of impact that would not be perceivable over existing conditions;
4. Independent of the Project, the Old Oaken Bucket Road approach to Cornet Stetson Road (Route 123) is predicted to operate at capacity (defined as LOS “E”) during both the weekday morning and evening peak hours under No-Build conditions;
5. All movements exiting the Project site driveway to Old Oaken Bucket Road are predicted to operate at LOS A during the peak hours with negligible vehicle queuing;

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<sup>15</sup>Ibid 1.

6. Independent of the Project, both the Old Oaken Bucket Road/Maple Street/Winter Street and the Route 123/Old Oaken Bucket Road intersections were found to have a motor vehicle crash rate that is above the MassDOT average crash rates for similar intersections. As such, specific recommendations have been provided to advance safety related improvements at these intersections; and
7. Lines of sight at the Project site driveway intersection with Old Oaken Bucket Road were found to exceed or could be made to exceed the recommended minimum sight distance to function in a safe manner based on the appropriate approach speed.

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

## **RECOMMENDATIONS**

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

### **Project Access**

Access to the Project site will be provided by way of a full-access driveway that will intersect the south side of Old Oaken Bucket Road at the approximate location of the existing driveway that serves 279 Old Oaken Bucket Road. The following recommendations are offered with respect to the design and operation of the Project site access and internal circulation:

- The Project site driveway and internal circulating roads should be 24 feet in width and designed to accommodate the turning and maneuvering requirements of the largest anticipated responding emergency vehicle.
- Vehicles exiting the Project site should be placed under STOP-sign control with a marked STOP-line provided.
- All signs and pavement markings to be installed within the Project site should conform to the applicable standards of the *Manual on Uniform Traffic Control Devices* (MUTCD).<sup>16</sup>
- Pedestrian walkways are proposed within the Project site that will extend to Old Oaken Bucket Road and will include marked crosswalks with Americans with Disabilities Act (ADA) compliant wheelchair ramps at all pedestrian crossings.
- Driveways to the residential units should be a minimum of 21 feet long measured between the garage door and the far edge of the sidewalk (edge closest to the residence) where a sidewalk is provided, and 23 feet measured between the garage door and the edge of the traveled-way in locations without a sidewalk.

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<sup>16</sup>Ibid 2.

- Signs and landscaping to be installed as a part of the Project within the intersection sight triangle areas of the Project site driveway should be designed and maintained so as not to restrict lines of sight.
- Snow accumulation (windrows) within sight triangle areas of the Project site driveway should be promptly removed where such accumulations would impede sight lines.
- Existing trees and vegetation located along the south side of Old Oaken Bucket Road within the intersection triangle areas of the Project site driveway should be selectively trimmed or removed and maintained, and the existing embankment to the east of the Project site driveway along the south side of Old Oaken Bucket Road should be regraded in order to provide the required line of sight.

### **Off-Site**

#### **Old Oaken Bucket Road/Maple Street/Winter Street and Route 123/Old Oaken Bucket Road**

Independent of the Project, the Old Oaken Bucket Road/Maple Street/Winter Street and Route 123/Old Oaken Bucket Road intersections were identified to have motor vehicle crash histories that warrant further review and advancement of specific improvements to enhance safety. In an effort to advance safety-related improvements at these intersections, the Project proponent will: i) facilitate the completion of a Road Safety Audit (RSA) at the intersections in order identify improvement strategies, and ii) provide a financial contribution to the Town for the design and construction of the short-term improvements that are suggested as an outcome of the RSA that is commensurate with the identified impact of the Project at the intersections over No-Build conditions (i.e., a “fair-share” contribution).

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

## APPENDIX

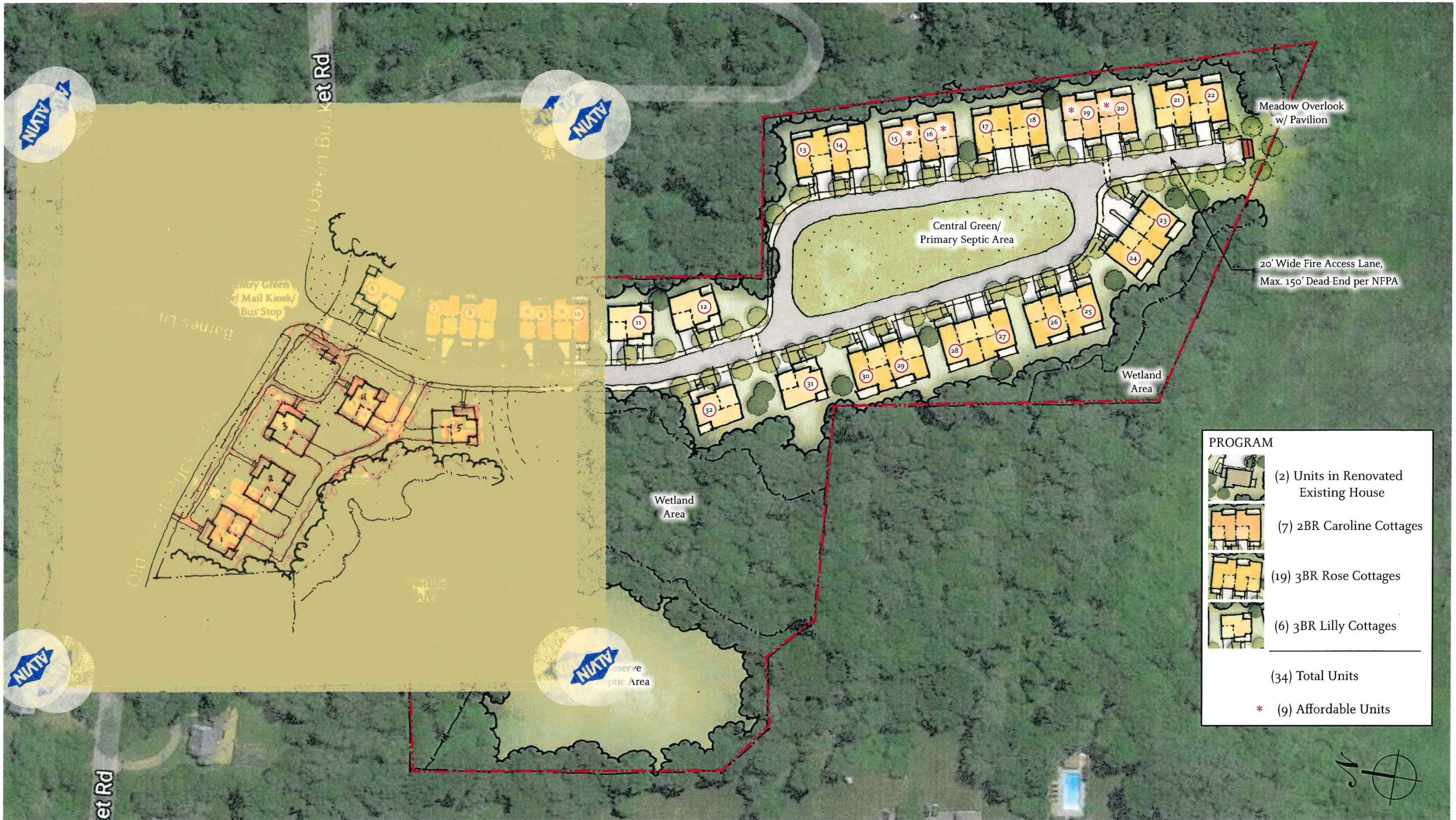
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PROJECT SITE PLAN  
AUTOMATIC TRAFFIC RECORDER COUNT DATA  
TURNING MOVEMENT COUNT DATA  
SEASONAL ADJUSTMENT DATA  
COVID ADJUSTMENT  
VEHICLE TRAVEL SPEED DATA  
MASSDOT CRASH RATE WORKSHEETS AND HIGH CRASH LOCATION MAPPING  
GENERAL BACKGROUND TRAFFIC GROWTH  
BACKGROUND DEVELOPMENT TRAFFIC-VOLUMES NETWORKS  
TRIP-GENERATION CALCULATIONS  
JOURNEY TO WORK TRIP DISTRIBUTION  
CAPACITY ANALYSIS WORKSHEETS

**PROJECT SITE PLAN**

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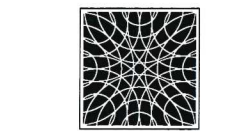
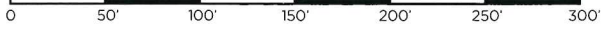
| PROGRAM |                                       |
|---------|---------------------------------------|
|         | (2) Units in Renovated Existing House |
|         | (7) 2BR Caroline Cottages             |
|         | (19) 3BR Rose Cottages                |
|         | (6) 3BR Lilly Cottages                |
| <hr/>   |                                       |
|         | (34) Total Units                      |
|         | * (9) Affordable Units                |

# THE COTTAGES AT OLD OAKEN BUCKET

PROPOSED SITE LAYOUT

OCTOBER 14, 2021

SCALE: 1"=100'-0"



AUTOMATIC TRAFFIC RECORDER COUNT DATA

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Location : Old Oaken Bucket Road  
 Location : West of Winter Street  
 City/State: Scituate, MA

90900001

| 11/3/2021<br>Time | WB,     |           | Hour Totals |           | EB,     |           | Hour Totals |           | Combined Totals |           |
|-------------------|---------|-----------|-------------|-----------|---------|-----------|-------------|-----------|-----------------|-----------|
|                   | Morning | Afternoon | Morning     | Afternoon | Morning | Afternoon | Morning     | Afternoon | Morning         | Afternoon |
| 12:00             | 0       | 32        |             |           | 3       | 37        |             |           |                 |           |
| 12:15             | 0       | 30        |             |           | 4       | 30        |             |           |                 |           |
| 12:30             | 2       | 30        |             |           | 3       | 33        |             |           |                 |           |
| 12:45             | 0       | 33        | 2           | 125       | 1       | 43        | 11          | 143       | 13              | 268       |
| 1:00              | 0       | 18        |             |           | 2       | 27        |             |           |                 |           |
| 1:15              | 2       | 12        |             |           | 0       | 27        |             |           |                 |           |
| 1:30              | 0       | 24        |             |           | 0       | 29        |             |           |                 |           |
| 1:45              | 0       | 27        | 2           | 81        | 3       | 42        | 5           | 125       | 7               | 206       |
| 2:00              | 0       | 20        |             |           | 0       | 45        |             |           |                 |           |
| 2:15              | 1       | 30        |             |           | 0       | 28        |             |           |                 |           |
| 2:30              | 0       | 31        |             |           | 1       | 35        |             |           |                 |           |
| 2:45              | 1       | 32        | 2           | 113       | 0       | 46        | 1           | 154       | 3               | 267       |
| 3:00              | 1       | 37        |             |           | 0       | 40        |             |           |                 |           |
| 3:15              | 0       | 38        |             |           | 0       | 39        |             |           |                 |           |
| 3:30              | 1       | 25        |             |           | 0       | 78        |             |           |                 |           |
| 3:45              | 0       | 48        | 2           | 148       | 2       | 44        | 2           | 201       | 4               | 349       |
| 4:00              | 1       | 33        |             |           | 2       | 66        |             |           |                 |           |
| 4:15              | 3       | 31        |             |           | 0       | 50        |             |           |                 |           |
| 4:30              | 6       | 29        |             |           | 0       | 50        |             |           |                 |           |
| 4:45              | 10      | 23        | 20          | 116       | 0       | 51        | 2           | 217       | 22              | 333       |
| 5:00              | 5       | 22        |             |           | 1       | 64        |             |           |                 |           |
| 5:15              | 9       | 49        |             |           | 2       | 49        |             |           |                 |           |
| 5:30              | 14      | 29        |             |           | 2       | 56        |             |           |                 |           |
| 5:45              | 17      | 24        | 45          | 124       | 2       | 51        | 7           | 220       | 52              | 344       |
| 6:00              | 23      | 30        |             |           | 3       | 42        |             |           |                 |           |
| 6:15              | 25      | 14        |             |           | 7       | 52        |             |           |                 |           |
| 6:30              | 39      | 22        |             |           | 6       | 44        |             |           |                 |           |
| 6:45              | 37      | 17        | 124         | 83        | 23      | 37        | 39          | 175       | 163             | 258       |
| 7:00              | 39      | 13        |             |           | 12      | 46        |             |           |                 |           |
| 7:15              | 46      | 8         |             |           | 17      | 41        |             |           |                 |           |
| 7:30              | 42      | 14        |             |           | 24      | 20        |             |           |                 |           |
| 7:45              | 34      | 14        | 161         | 49        | 36      | 37        | 89          | 144       | 250             | 193       |
| 8:00              | 52      | 3         |             |           | 30      | 23        |             |           |                 |           |
| 8:15              | 35      | 3         |             |           | 19      | 22        |             |           |                 |           |
| 8:30              | 47      | 9         |             |           | 33      | 20        |             |           |                 |           |
| 8:45              | 42      | 7         | 176         | 22        | 28      | 14        | 110         | 79        | 286             | 101       |
| 9:00              | 38      | 5         |             |           | 26      | 16        |             |           |                 |           |
| 9:15              | 36      | 3         |             |           | 23      | 11        |             |           |                 |           |
| 9:30              | 48      | 2         |             |           | 22      | 19        |             |           |                 |           |
| 9:45              | 43      | 4         | 165         | 14        | 11      | 10        | 82          | 56        | 247             | 70        |
| 10:00             | 38      | 4         |             |           | 18      | 8         |             |           |                 |           |
| 10:15             | 29      | 4         |             |           | 24      | 9         |             |           |                 |           |
| 10:30             | 29      | 2         |             |           | 21      | 5         |             |           |                 |           |
| 10:45             | 30      | 4         | 126         | 14        | 33      | 5         | 96          | 27        | 222             | 41        |
| 11:00             | 31      | 2         |             |           | 30      | 8         |             |           |                 |           |
| 11:15             | 32      | 0         |             |           | 30      | 3         |             |           |                 |           |
| 11:30             | 24      | 0         |             |           | 28      | 1         |             |           |                 |           |
| 11:45             | 30      | 0         | 117         | 2         | 31      | 3         | 119         | 15        | 236             | 17        |
| Total             | 942     | 891       |             |           | 563     | 1556      |             |           | 1505            | 2447      |
| Percent           | 51.4%   | 48.6%     |             |           | 26.6%   | 73.4%     |             |           | 38.1%           | 61.9%     |

Location : Old Oaken Bucket Road  
 Location : West of Winter Street  
 City/State: Scituate, MA

90900001

| 11/4/2021   |         | WB,        |         | Hour Totals |         | EB,       |         | Hour Totals |         | Combined Totals |  |
|-------------|---------|------------|---------|-------------|---------|-----------|---------|-------------|---------|-----------------|--|
| Time        | Morning | Afternoon  | Morning | Afternoon   | Morning | Afternoon | Morning | Afternoon   | Morning | Afternoon       |  |
| 12:00       | 1       | 37         |         |             | 3       | 32        |         |             |         |                 |  |
| 12:15       | 1       | 21         |         |             | 4       | 33        |         |             |         |                 |  |
| 12:30       | 3       | 29         |         |             | 2       | 26        |         |             |         |                 |  |
| 12:45       | 0       | 22         | 5       | 109         | 4       | 37        | 13      | 128         | 18      | 237             |  |
| 1:00        | 1       | 22         |         |             | 1       | 27        |         |             |         |                 |  |
| 1:15        | 1       | 23         |         |             | 1       | 40        |         |             |         |                 |  |
| 1:30        | 1       | 23         |         |             | 1       | 42        |         |             |         |                 |  |
| 1:45        | 1       | 25         | 4       | 93          | 0       | 38        | 3       | 147         | 7       | 240             |  |
| 2:00        | 0       | 32         |         |             | 1       | 33        |         |             |         |                 |  |
| 2:15        | 0       | 26         |         |             | 0       | 51        |         |             |         |                 |  |
| 2:30        | 0       | 33         |         |             | 1       | 34        |         |             |         |                 |  |
| 2:45        | 0       | 22         | 0       | 113         | 0       | 43        | 2       | 161         | 2       | 274             |  |
| 3:00        | 0       | 38         |         |             | 1       | 42        |         |             |         |                 |  |
| 3:15        | 1       | 34         |         |             | 0       | 48        |         |             |         |                 |  |
| 3:30        | 0       | 19         |         |             | 1       | 39        |         |             |         |                 |  |
| 3:45        | 1       | 29         | 2       | 120         | 2       | 63        | 4       | 192         | 6       | 312             |  |
| 4:00        | 2       | 38         |         |             | 1       | 32        |         |             |         |                 |  |
| 4:15        | 0       | 32         |         |             | 2       | 53        |         |             |         |                 |  |
| 4:30        | 7       | 27         |         |             | 1       | 46        |         |             |         |                 |  |
| 4:45        | 8       | 26         | 17      | 123         | 1       | 54        | 5       | 185         | 22      | 308             |  |
| 5:00        | 5       | 32         |         |             | 2       | 48        |         |             |         |                 |  |
| 5:15        | 10      | 26         |         |             | 2       | 49        |         |             |         |                 |  |
| 5:30        | 15      | 24         |         |             | 2       | 56        |         |             |         |                 |  |
| 5:45        | 21      | 19         | 51      | 101         | 3       | 34        | 9       | 187         | 60      | 288             |  |
| 6:00        | 23      | 20         |         |             | 5       | 55        |         |             |         |                 |  |
| 6:15        | 26      | 12         |         |             | 5       | 38        |         |             |         |                 |  |
| 6:30        | 36      | 20         |         |             | 8       | 27        |         |             |         |                 |  |
| 6:45        | 33      | 17         | 118     | 69          | 19      | 44        | 37      | 164         | 155     | 233             |  |
| 7:00        | 30      | 10         |         |             | 17      | 44        |         |             |         |                 |  |
| 7:15        | 41      | 16         |         |             | 22      | 30        |         |             |         |                 |  |
| 7:30        | 33      | 10         |         |             | 27      | 30        |         |             |         |                 |  |
| 7:45        | 36      | 9          | 140     | 45          | 44      | 37        | 110     | 141         | 250     | 186             |  |
| 8:00        | 45      | 4          |         |             | 28      | 24        |         |             |         |                 |  |
| 8:15        | 45      | 9          |         |             | 22      | 27        |         |             |         |                 |  |
| 8:30        | 47      | 8          |         |             | 38      | 24        |         |             |         |                 |  |
| 8:45        | 47      | 10         | 184     | 31          | 21      | 17        | 109     | 92          | 293     | 123             |  |
| 9:00        | 32      | 7          |         |             | 27      | 21        |         |             |         |                 |  |
| 9:15        | 40      | 5          |         |             | 28      | 9         |         |             |         |                 |  |
| 9:30        | 34      | 5          |         |             | 31      | 14        |         |             |         |                 |  |
| 9:45        | 38      | 2          | 144     | 19          | 16      | 9         | 102     | 53          | 246     | 72              |  |
| 10:00       | 30      | 2          |         |             | 28      | 11        |         |             |         |                 |  |
| 10:15       | 35      | 3          |         |             | 23      | 13        |         |             |         |                 |  |
| 10:30       | 32      | 2          |         |             | 30      | 7         |         |             |         |                 |  |
| 10:45       | 34      | 2          | 131     | 9           | 29      | 8         | 110     | 39          | 241     | 48              |  |
| 11:00       | 30      | 2          |         |             | 23      | 9         |         |             |         |                 |  |
| 11:15       | 26      | 0          |         |             | 26      | 3         |         |             |         |                 |  |
| 11:30       | 35      | 0          |         |             | 30      | 1         |         |             |         |                 |  |
| 11:45       | 20      | 0          | 111     | 2           | 34      | 7         | 113     | 20          | 224     | 22              |  |
| Total       | 907     | 834        |         |             | 617     | 1509      |         |             | 1524    | 2343            |  |
| Percent     | 52.1%   | 47.9%      |         |             | 29.0%   | 71.0%     |         |             | 39.4%   | 60.6%           |  |
| Grand Total | 1849    | 1725       |         |             | 1180    | 3065      |         |             | 3029    | 4790            |  |
| Percent     | 51.7%   | 48.3%      |         |             | 27.8%   | 72.2%     |         |             | 38.7%   | 61.3%           |  |
| ADT         |         | ADT: 3,910 |         | AADT: 3,910 |         |           |         |             |         |                 |  |



TURNING MOVEMENT COUNT DATA

---

# Accurate Counts

978-664-2565

N/S Street : Maple St / Winter St  
 E/W Street : Old Oaken Bucket Rd  
 City/State : Scituate, MA  
 Weather : Clear

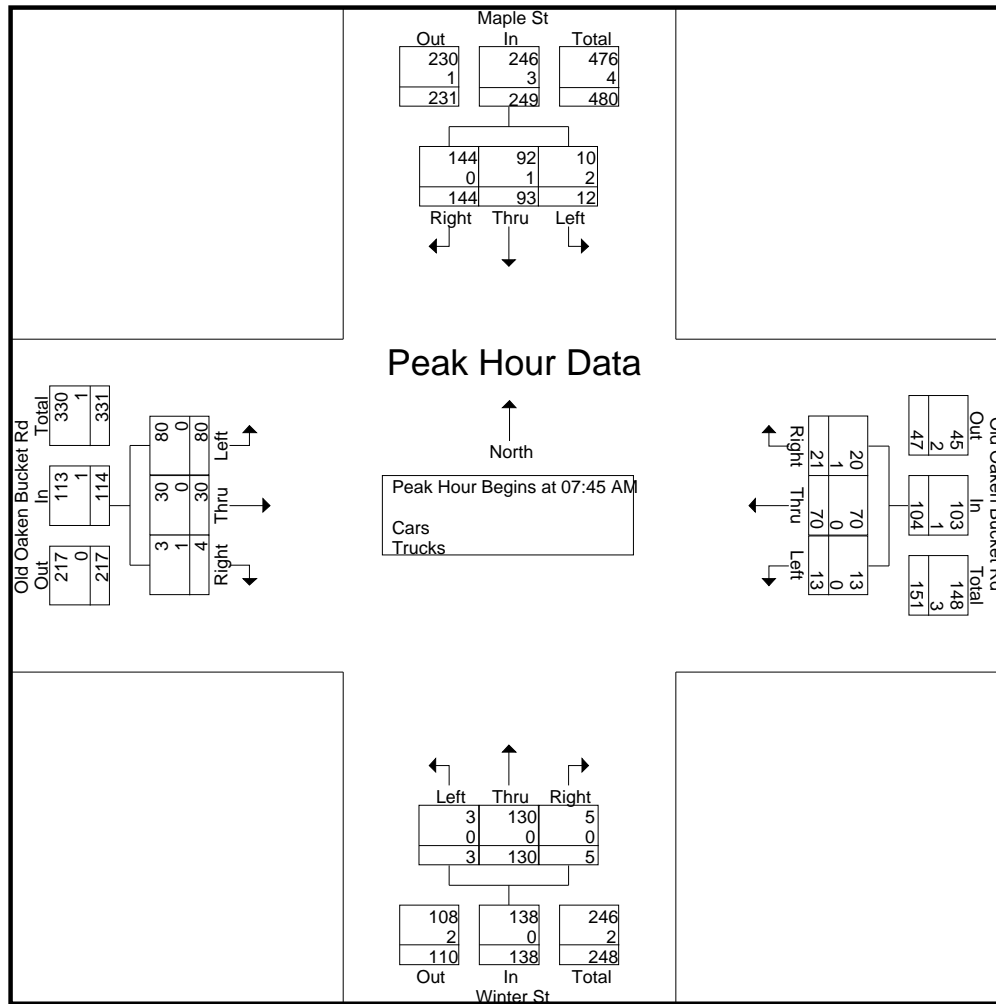
File Name : 90900001  
 Site Code : 90900001  
 Start Date : 11/3/2021  
 Page No : 1

### Groups Printed- Cars - Trucks

| Start Time         | Maple St<br>From North |            |            | Old Oaken Bucket Rd<br>From East |            |           | Winter St<br>From South |            |           | Old Oaken Bucket Rd<br>From West |           |          | Int. Total  |
|--------------------|------------------------|------------|------------|----------------------------------|------------|-----------|-------------------------|------------|-----------|----------------------------------|-----------|----------|-------------|
|                    | Left                   | Thru       | Right      | Left                             | Thru       | Right     | Left                    | Thru       | Right     | Left                             | Thru      | Right    |             |
| 07:00 AM           | 2                      | 13         | 23         | 0                                | 20         | 0         | 0                       | 19         | 0         | 9                                | 5         | 0        | 91          |
| 07:15 AM           | 1                      | 13         | 26         | 2                                | 25         | 1         | 4                       | 30         | 2         | 11                               | 5         | 0        | 120         |
| 07:30 AM           | 1                      | 24         | 35         | 0                                | 14         | 4         | 1                       | 33         | 4         | 17                               | 9         | 1        | 143         |
| 07:45 AM           | 2                      | 20         | 35         | 2                                | 12         | 2         | 1                       | 34         | 2         | 22                               | 7         | 0        | 139         |
| <b>Total</b>       | <b>6</b>               | <b>70</b>  | <b>119</b> | <b>4</b>                         | <b>71</b>  | <b>7</b>  | <b>6</b>                | <b>116</b> | <b>8</b>  | <b>59</b>                        | <b>26</b> | <b>1</b> | <b>493</b>  |
| 08:00 AM           | 5                      | 25         | 36         | 2                                | 27         | 4         | 0                       | 34         | 2         | 21                               | 7         | 2        | 165         |
| 08:15 AM           | 3                      | 23         | 32         | 3                                | 16         | 8         | 2                       | 38         | 1         | 17                               | 8         | 1        | 152         |
| 08:30 AM           | 2                      | 25         | 41         | 6                                | 15         | 7         | 0                       | 24         | 0         | 20                               | 8         | 1        | 149         |
| 08:45 AM           | 0                      | 20         | 38         | 3                                | 13         | 4         | 3                       | 25         | 1         | 17                               | 6         | 2        | 132         |
| <b>Total</b>       | <b>10</b>              | <b>93</b>  | <b>147</b> | <b>14</b>                        | <b>71</b>  | <b>23</b> | <b>5</b>                | <b>121</b> | <b>4</b>  | <b>75</b>                        | <b>29</b> | <b>6</b> | <b>598</b>  |
| <b>Grand Total</b> | <b>16</b>              | <b>163</b> | <b>266</b> | <b>18</b>                        | <b>142</b> | <b>30</b> | <b>11</b>               | <b>237</b> | <b>12</b> | <b>134</b>                       | <b>55</b> | <b>7</b> | <b>1091</b> |
| Apprch %           | 3.6                    | 36.6       | 59.8       | 9.5                              | 74.7       | 15.8      | 4.2                     | 91.2       | 4.6       | 68.4                             | 28.1      | 3.6      |             |
| Total %            | 1.5                    | 14.9       | 24.4       | 1.6                              | 13         | 2.7       | 1                       | 21.7       | 1.1       | 12.3                             | 5         | 0.6      |             |
| Cars               | 13                     | 159        | 265        | 18                               | 141        | 29        | 11                      | 236        | 12        | 134                              | 55        | 6        | 1079        |
| % Cars             | 81.2                   | 97.5       | 99.6       | 100                              | 99.3       | 96.7      | 100                     | 99.6       | 100       | 100                              | 100       | 85.7     | 98.9        |
| Trucks             | 3                      | 4          | 1          | 0                                | 1          | 1         | 0                       | 1          | 0         | 0                                | 0         | 1        | 12          |
| % Trucks           | 18.8                   | 2.5        | 0.4        | 0                                | 0.7        | 3.3       | 0                       | 0.4        | 0         | 0                                | 0         | 14.3     | 1.1         |

| Start Time                                                        | Maple St<br>From North |           |            |            | Old Oaken Bucket Rd<br>From East |           |           |            | Winter St<br>From South |            |          |            | Old Oaken Bucket Rd<br>From West |           |          |            | Int. Total |
|-------------------------------------------------------------------|------------------------|-----------|------------|------------|----------------------------------|-----------|-----------|------------|-------------------------|------------|----------|------------|----------------------------------|-----------|----------|------------|------------|
|                                                                   | Left                   | Thru      | Right      | App. Total | Left                             | Thru      | Right     | App. Total | Left                    | Thru       | Right    | App. Total | Left                             | Thru      | Right    | App. Total |            |
| <b>Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1</b> |                        |           |            |            |                                  |           |           |            |                         |            |          |            |                                  |           |          |            |            |
| <b>Peak Hour for Entire Intersection Begins at 07:45 AM</b>       |                        |           |            |            |                                  |           |           |            |                         |            |          |            |                                  |           |          |            |            |
| 07:45 AM                                                          | 2                      | 20        | 35         | 57         | 2                                | 12        | 2         | 16         | 1                       | 34         | 2        | 37         | 22                               | 7         | 0        | 29         | 139        |
| 08:00 AM                                                          | 5                      | 25        | 36         | 66         | 2                                | 27        | 4         | 33         | 0                       | 34         | 2        | 36         | 21                               | 7         | 2        | 30         | 165        |
| 08:15 AM                                                          | 3                      | 23        | 32         | 58         | 3                                | 16        | 8         | 27         | 2                       | 38         | 1        | 41         | 17                               | 8         | 1        | 26         | 152        |
| 08:30 AM                                                          | 2                      | 25        | 41         | 68         | 6                                | 15        | 7         | 28         | 0                       | 24         | 0        | 24         | 20                               | 8         | 1        | 29         | 149        |
| <b>Total Volume</b>                                               | <b>12</b>              | <b>93</b> | <b>144</b> | <b>249</b> | <b>13</b>                        | <b>70</b> | <b>21</b> | <b>104</b> | <b>3</b>                | <b>130</b> | <b>5</b> | <b>138</b> | <b>80</b>                        | <b>30</b> | <b>4</b> | <b>114</b> | <b>605</b> |
| % App. Total                                                      | 4.8                    | 37.3      | 57.8       |            | 12.5                             | 67.3      | 20.2      |            | 2.2                     | 94.2       | 3.6      |            | 70.2                             | 26.3      | 3.5      |            |            |
| PHF                                                               | .600                   | .930      | .878       | .915       | .542                             | .648      | .656      | .788       | .375                    | .855       | .625     | .841       | .909                             | .938      | .500     | .950       | .917       |
| Cars                                                              | 10                     | 92        | 144        | 246        | 13                               | 70        | 20        | 103        | 3                       | 130        | 5        | 138        | 80                               | 30        | 3        | 113        | 600        |
| % Cars                                                            | 83.3                   | 98.9      | 100        | 98.8       | 100                              | 100       | 95.2      | 99.0       | 100                     | 100        | 100      | 100        | 100                              | 100       | 75.0     | 99.1       | 99.2       |
| Trucks                                                            | 2                      | 1         | 0          | 3          | 0                                | 0         | 1         | 1          | 0                       | 0          | 0        | 0          | 0                                | 0         | 1        | 1          | 5          |
| % Trucks                                                          | 16.7                   | 1.1       | 0          | 1.2        | 0                                | 0         | 4.8       | 1.0        | 0                       | 0          | 0        | 0          | 0                                | 0         | 25.0     | 0.9        | 0.8        |

N/S Street : Maple St / Winter St  
E/W Street : Old Oaken Bucket Rd  
City/State : Scituate, MA  
Weather : Clear

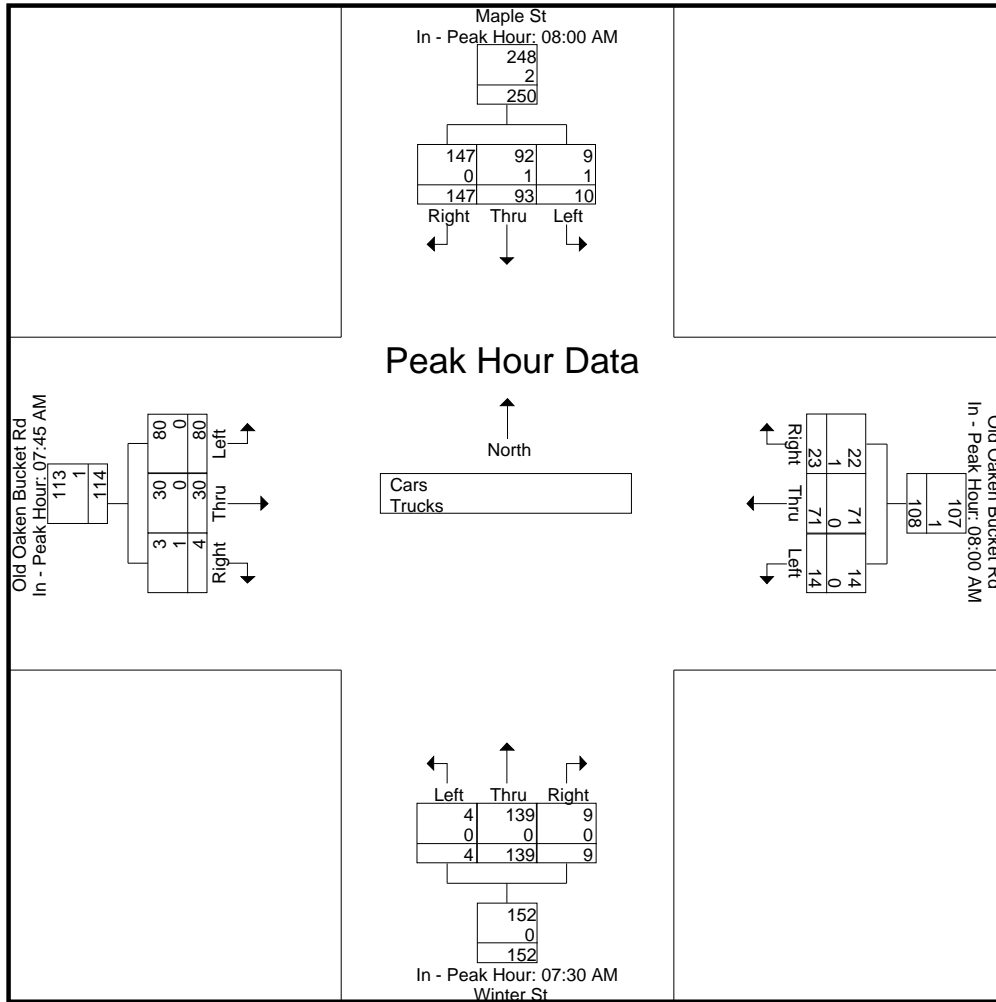


Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

|              | 08:00 AM |      |      |      | 08:00 AM |      |      |      | 07:30 AM |      |      |      | 07:45 AM |      |      |      |
|--------------|----------|------|------|------|----------|------|------|------|----------|------|------|------|----------|------|------|------|
| +0 mins.     | 5        | 25   | 36   | 66   | 2        | 27   | 4    | 33   | 1        | 33   | 4    | 38   | 22       | 7    | 0    | 29   |
| +15 mins.    | 3        | 23   | 32   | 58   | 3        | 16   | 8    | 27   | 1        | 34   | 2    | 37   | 21       | 7    | 2    | 30   |
| +30 mins.    | 2        | 25   | 41   | 68   | 6        | 15   | 7    | 28   | 0        | 34   | 2    | 36   | 17       | 8    | 1    | 26   |
| +45 mins.    | 0        | 20   | 38   | 58   | 3        | 13   | 4    | 20   | 2        | 38   | 1    | 41   | 20       | 8    | 1    | 29   |
| Total Volume | 10       | 93   | 147  | 250  | 14       | 71   | 23   | 108  | 4        | 139  | 9    | 152  | 80       | 30   | 4    | 114  |
| % App. Total | 4        | 37.2 | 58.8 |      | 13       | 65.7 | 21.3 |      | 2.6      | 91.4 | 5.9  |      | 70.2     | 26.3 | 3.5  |      |
| PHF          | .500     | .930 | .896 | .919 | .583     | .657 | .719 | .818 | .500     | .914 | .563 | .927 | .909     | .938 | .500 | .950 |
| Cars         | 9        | 92   | 147  | 248  | 14       | 71   | 22   | 107  | 4        | 139  | 9    | 152  | 80       | 30   | 3    | 113  |
| % Cars       | 90       | 98.9 | 100  | 99.2 | 100      | 100  | 95.7 | 99.1 | 100      | 100  | 100  | 100  | 100      | 100  | 75   | 99.1 |
| Trucks       | 1        | 1    | 0    | 2    | 0        | 0    | 1    | 1    | 0        | 0    | 0    | 0    | 0        | 0    | 1    | 1    |
| % Trucks     | 10       | 1.1  | 0    | 0.8  | 0        | 0    | 4.3  | 0.9  | 0        | 0    | 0    | 0    | 0        | 0    | 25   | 0.9  |



N/S Street : Maple St / Winter St  
E/W Street : Old Oaken Bucket Rd  
City/State : Scituate, MA  
Weather : Clear



**Accurate Counts**  
978-664-2565

N/S Street : Maple St / Winter St  
E/W Street : Old Oaken Bucket Rd  
City/State : Scituate, MA  
Weather : Clear

File Name : 90900001  
Site Code : 90900001  
Start Date : 11/3/2021  
Page No : 4

Groups Printed- Cars

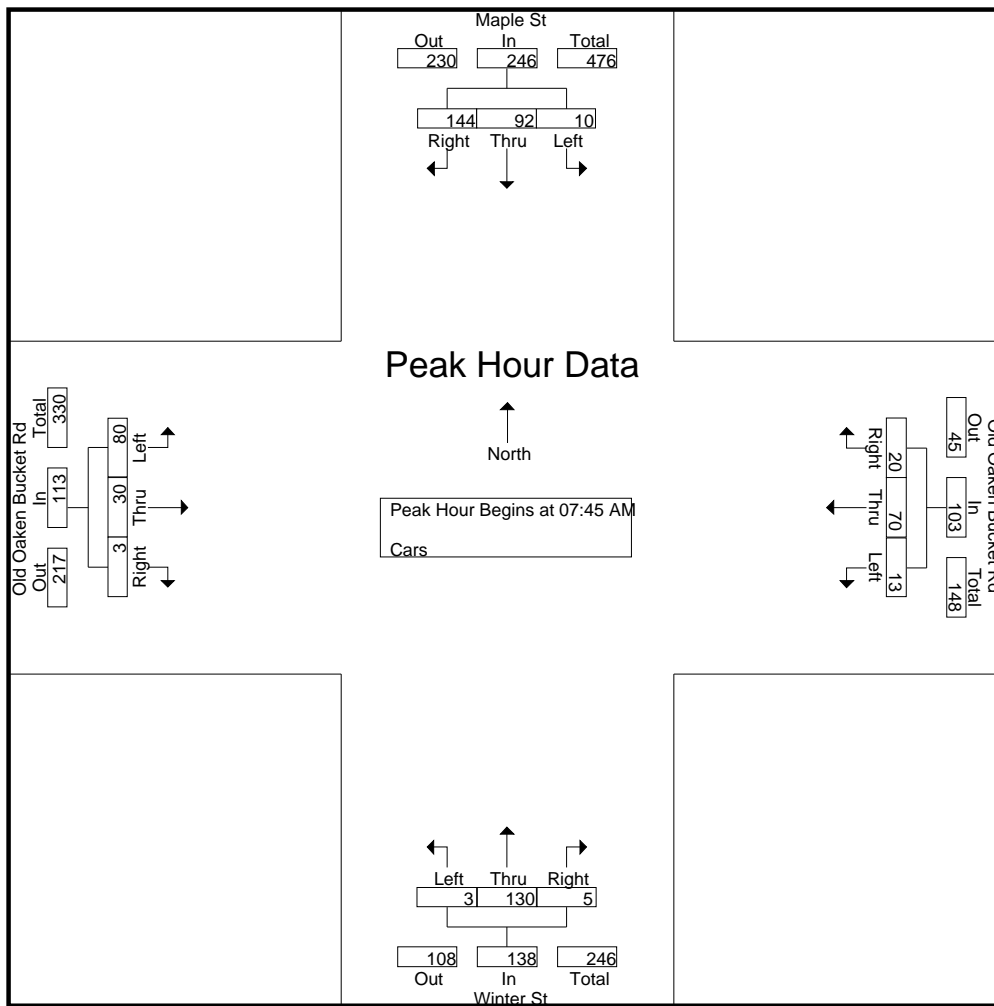
| Start Time         | Maple St<br>From North |            |            | Old Oaken Bucket Rd<br>From East |            |           | Winter St<br>From South |            |           | Old Oaken Bucket Rd<br>From West |           |          | Int. Total  |
|--------------------|------------------------|------------|------------|----------------------------------|------------|-----------|-------------------------|------------|-----------|----------------------------------|-----------|----------|-------------|
|                    | Left                   | Thru       | Right      | Left                             | Thru       | Right     | Left                    | Thru       | Right     | Left                             | Thru      | Right    |             |
| 07:00 AM           | 2                      | 13         | 22         | 0                                | 19         | 0         | 0                       | 19         | 0         | 9                                | 5         | 0        | 89          |
| 07:15 AM           | 0                      | 11         | 26         | 2                                | 25         | 1         | 4                       | 29         | 2         | 11                               | 5         | 0        | 116         |
| 07:30 AM           | 1                      | 23         | 35         | 0                                | 14         | 4         | 1                       | 33         | 4         | 17                               | 9         | 1        | 142         |
| 07:45 AM           | 1                      | 20         | 35         | 2                                | 12         | 2         | 1                       | 34         | 2         | 22                               | 7         | 0        | 138         |
| <b>Total</b>       | <b>4</b>               | <b>67</b>  | <b>118</b> | <b>4</b>                         | <b>70</b>  | <b>7</b>  | <b>6</b>                | <b>115</b> | <b>8</b>  | <b>59</b>                        | <b>26</b> | <b>1</b> | <b>485</b>  |
| 08:00 AM           | 5                      | 25         | 36         | 2                                | 27         | 4         | 0                       | 34         | 2         | 21                               | 7         | 2        | 165         |
| 08:15 AM           | 2                      | 23         | 32         | 3                                | 16         | 7         | 2                       | 38         | 1         | 17                               | 8         | 1        | 150         |
| 08:30 AM           | 2                      | 24         | 41         | 6                                | 15         | 7         | 0                       | 24         | 0         | 20                               | 8         | 0        | 147         |
| 08:45 AM           | 0                      | 20         | 38         | 3                                | 13         | 4         | 3                       | 25         | 1         | 17                               | 6         | 2        | 132         |
| <b>Total</b>       | <b>9</b>               | <b>92</b>  | <b>147</b> | <b>14</b>                        | <b>71</b>  | <b>22</b> | <b>5</b>                | <b>121</b> | <b>4</b>  | <b>75</b>                        | <b>29</b> | <b>5</b> | <b>594</b>  |
| <b>Grand Total</b> | <b>13</b>              | <b>159</b> | <b>265</b> | <b>18</b>                        | <b>141</b> | <b>29</b> | <b>11</b>               | <b>236</b> | <b>12</b> | <b>134</b>                       | <b>55</b> | <b>6</b> | <b>1079</b> |
| Apprch %           | 3                      | 36.4       | 60.6       | 9.6                              | 75         | 15.4      | 4.2                     | 91.1       | 4.6       | 68.7                             | 28.2      | 3.1      |             |
| Total %            | 1.2                    | 14.7       | 24.6       | 1.7                              | 13.1       | 2.7       | 1                       | 21.9       | 1.1       | 12.4                             | 5.1       | 0.6      |             |

| Start Time                                                 | Maple St<br>From North |      |       |            | Old Oaken Bucket Rd<br>From East |      |       |            | Winter St<br>From South |      |       |            | Old Oaken Bucket Rd<br>From West |      |       |            | Int. Total |
|------------------------------------------------------------|------------------------|------|-------|------------|----------------------------------|------|-------|------------|-------------------------|------|-------|------------|----------------------------------|------|-------|------------|------------|
|                                                            | Left                   | Thru | Right | App. Total | Left                             | Thru | Right | App. Total | Left                    | Thru | Right | App. Total | Left                             | Thru | Right | App. Total |            |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                        |      |       |            |                                  |      |       |            |                         |      |       |            |                                  |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 07:45 AM       |                        |      |       |            |                                  |      |       |            |                         |      |       |            |                                  |      |       |            |            |
| 07:45 AM                                                   | 1                      | 20   | 35    | 56         | 2                                | 12   | 2     | 16         | 1                       | 34   | 2     | 37         | 22                               | 7    | 0     | 29         | 138        |
| 08:00 AM                                                   | 5                      | 25   | 36    | 66         | 2                                | 27   | 4     | 33         | 0                       | 34   | 2     | 36         | 21                               | 7    | 2     | 30         | 165        |
| 08:15 AM                                                   | 2                      | 23   | 32    | 57         | 3                                | 16   | 7     | 26         | 2                       | 38   | 1     | 41         | 17                               | 8    | 1     | 26         | 150        |
| 08:30 AM                                                   | 2                      | 24   | 41    | 67         | 6                                | 15   | 7     | 28         | 0                       | 24   | 0     | 24         | 20                               | 8    | 0     | 28         | 147        |
| Total Volume                                               | 10                     | 92   | 144   | 246        | 13                               | 70   | 20    | 103        | 3                       | 130  | 5     | 138        | 80                               | 30   | 3     | 113        | 600        |
| % App. Total                                               | 4.1                    | 37.4 | 58.5  |            | 12.6                             | 68   | 19.4  |            | 2.2                     | 94.2 | 3.6   |            | 70.8                             | 26.5 | 2.7   |            |            |
| PHF                                                        | .500                   | .920 | .878  | .918       | .542                             | .648 | .714  | .780       | .375                    | .855 | .625  | .841       | .909                             | .938 | .375  | .942       | .909       |

**Accurate Counts**  
978-664-2565

File Name : 90900001  
Site Code : 90900001  
Start Date : 11/3/2021  
Page No : 5

N/S Street : Maple St / Winter St  
E/W Street : Old Oaken Bucket Rd  
City/State : Scituate, MA  
Weather : Clear



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

|              | 08:00 AM |      |      |      | 08:00 AM |      |      |      | 07:30 AM |      |      |      | 07:45 AM |      |      |      |
|--------------|----------|------|------|------|----------|------|------|------|----------|------|------|------|----------|------|------|------|
| +0 mins.     | 5        | 25   | 36   | 66   | 2        | 27   | 4    | 33   | 1        | 33   | 4    | 38   | 22       | 7    | 0    | 29   |
| +15 mins.    | 2        | 23   | 32   | 57   | 3        | 16   | 7    | 26   | 1        | 34   | 2    | 37   | 21       | 7    | 2    | 30   |
| +30 mins.    | 2        | 24   | 41   | 67   | 6        | 15   | 7    | 28   | 0        | 34   | 2    | 36   | 17       | 8    | 1    | 26   |
| +45 mins.    | 0        | 20   | 38   | 58   | 3        | 13   | 4    | 20   | 2        | 38   | 1    | 41   | 20       | 8    | 0    | 28   |
| Total Volume | 9        | 92   | 147  | 248  | 14       | 71   | 22   | 107  | 4        | 139  | 9    | 152  | 80       | 30   | 3    | 113  |
| % App. Total | 3.6      | 37.1 | 59.3 |      | 13.1     | 66.4 | 20.6 |      | 2.6      | 91.4 | 5.9  |      | 70.8     | 26.5 | 2.7  |      |
| PHF          | .450     | .920 | .896 | .925 | .583     | .657 | .786 | .811 | .500     | .914 | .563 | .927 | .909     | .938 | .375 | .942 |

# Accurate Counts

978-664-2565

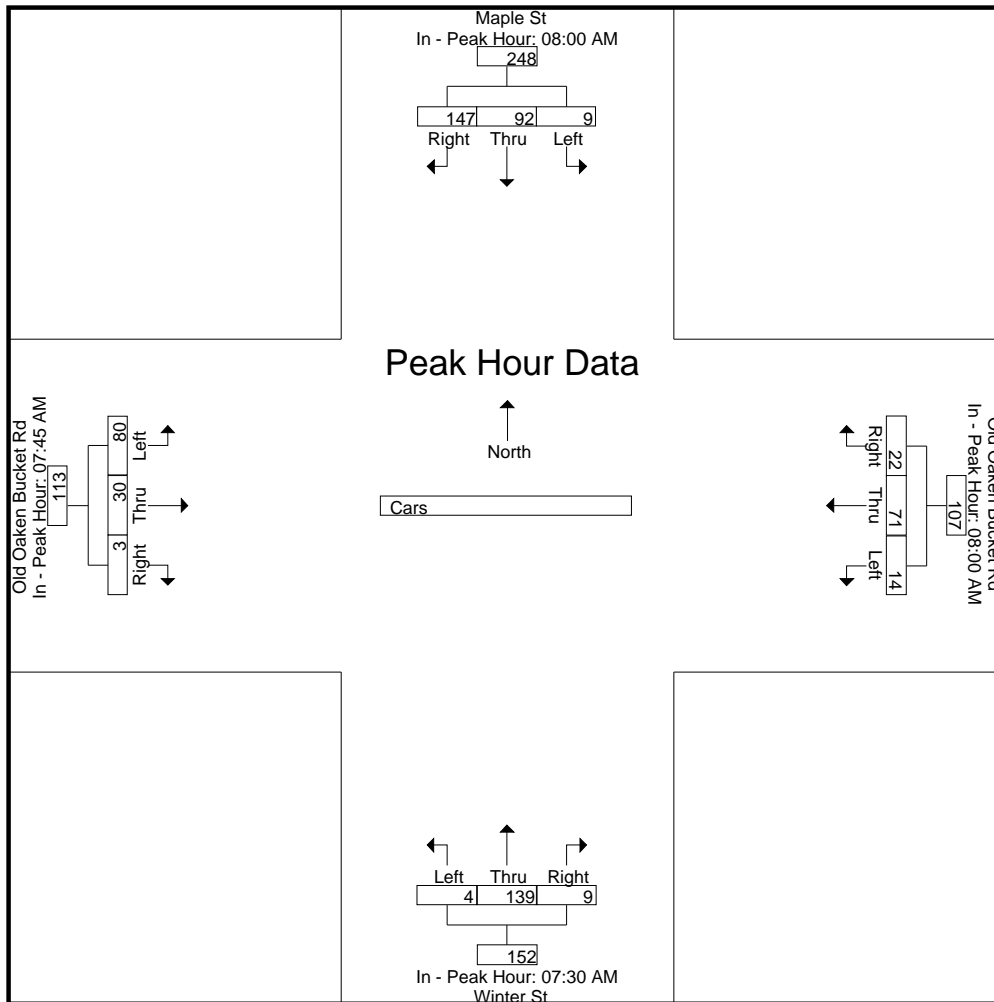
File Name : 90900001

Site Code : 90900001

Start Date : 11/3/2021

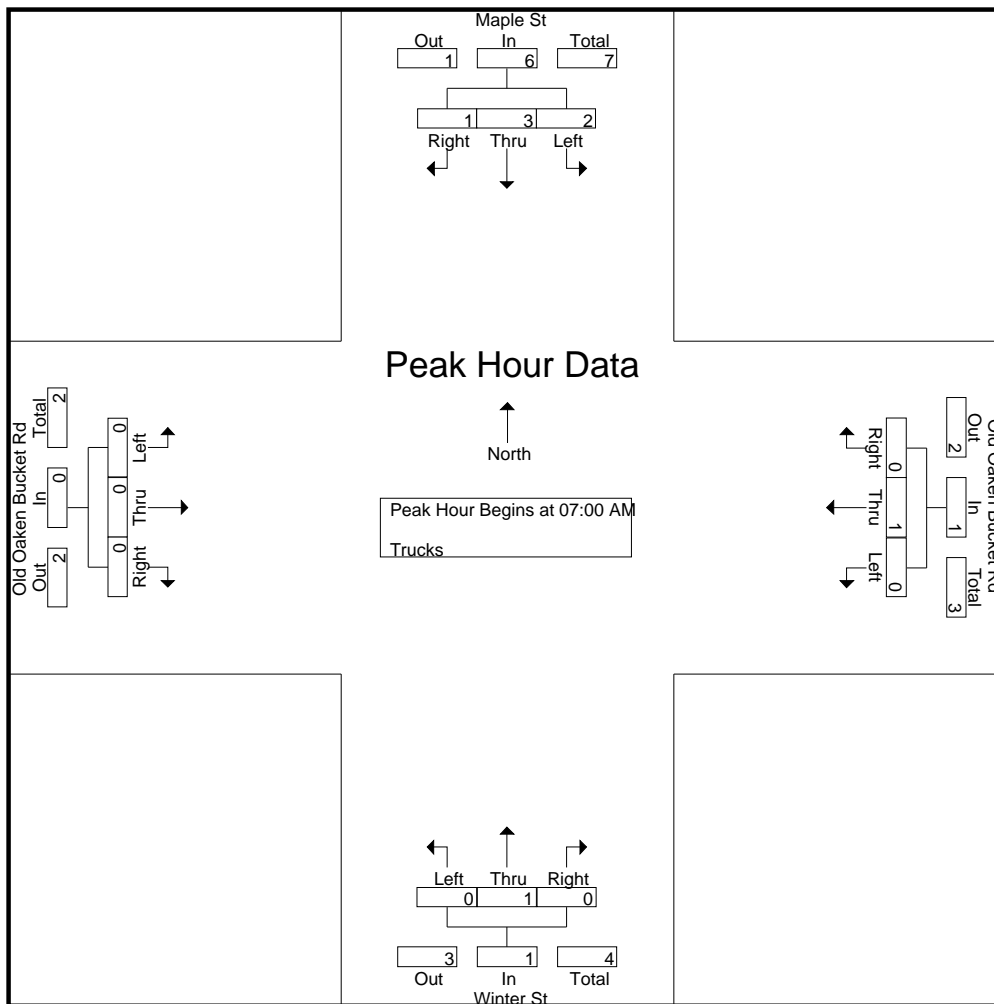
Page No : 6

N/S Street : Maple St / Winter St  
 E/W Street : Old Oaken Bucket Rd  
 City/State : Scituate, MA  
 Weather : Clear





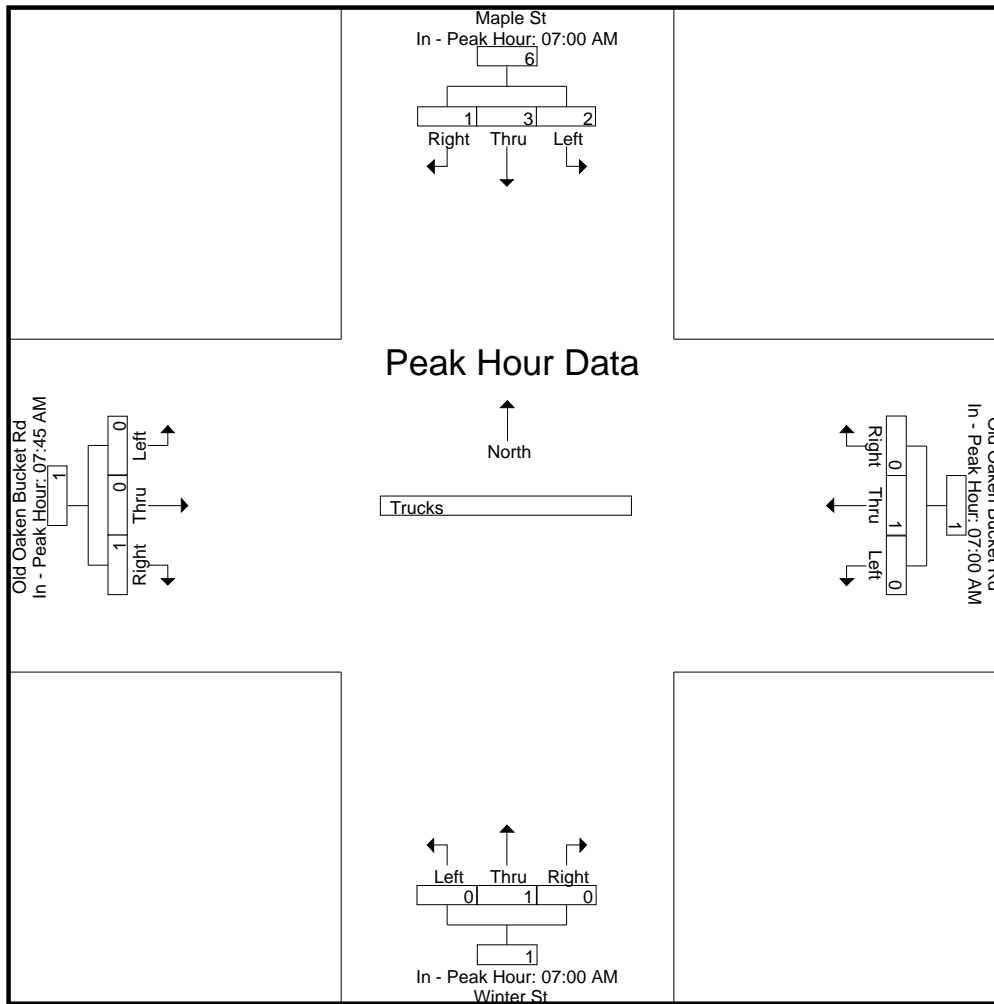
N/S Street : Maple St / Winter St  
E/W Street : Old Oaken Bucket Rd  
City/State : Scituate, MA  
Weather : Clear



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

|              | 07:00 AM |      |      |      | 07:00 AM |      |      |      | 07:00 AM |      |      |      | 07:45 AM |      |      |      |
|--------------|----------|------|------|------|----------|------|------|------|----------|------|------|------|----------|------|------|------|
| +0 mins.     | 0        | 0    | 1    | 1    | 0        | 1    | 0    | 1    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    |
| +15 mins.    | 1        | 2    | 0    | 3    | 0        | 0    | 0    | 0    | 0        | 1    | 0    | 1    | 0        | 0    | 0    | 0    |
| +30 mins.    | 0        | 1    | 0    | 1    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    |
| +45 mins.    | 1        | 0    | 0    | 1    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    | 0        | 0    | 1    | 1    |
| Total Volume | 2        | 3    | 1    | 6    | 0        | 1    | 0    | 1    | 0        | 1    | 0    | 1    | 0        | 0    | 1    | 1    |
| % App. Total | 33.3     | 50   | 16.7 |      | 0        | 100  | 0    |      | 0        | 100  | 0    |      | 0        | 0    | 100  |      |
| PHF          | .500     | .375 | .250 | .500 | .000     | .250 | .000 | .250 | .000     | .250 | .000 | .250 | .000     | .000 | .250 | .250 |

N/S Street : Maple St / Winter St  
E/W Street : Old Oaken Bucket Rd  
City/State : Scituate, MA  
Weather : Clear



**Accurate Counts**  
978-664-2565

N/S Street : Maple St / Winter St  
E/W Street : Old Oaken Bucket Rd  
City/State : Scituate, MA  
Weather : Clear

File Name : 90900001  
Site Code : 90900001  
Start Date : 11/3/2021  
Page No : 10

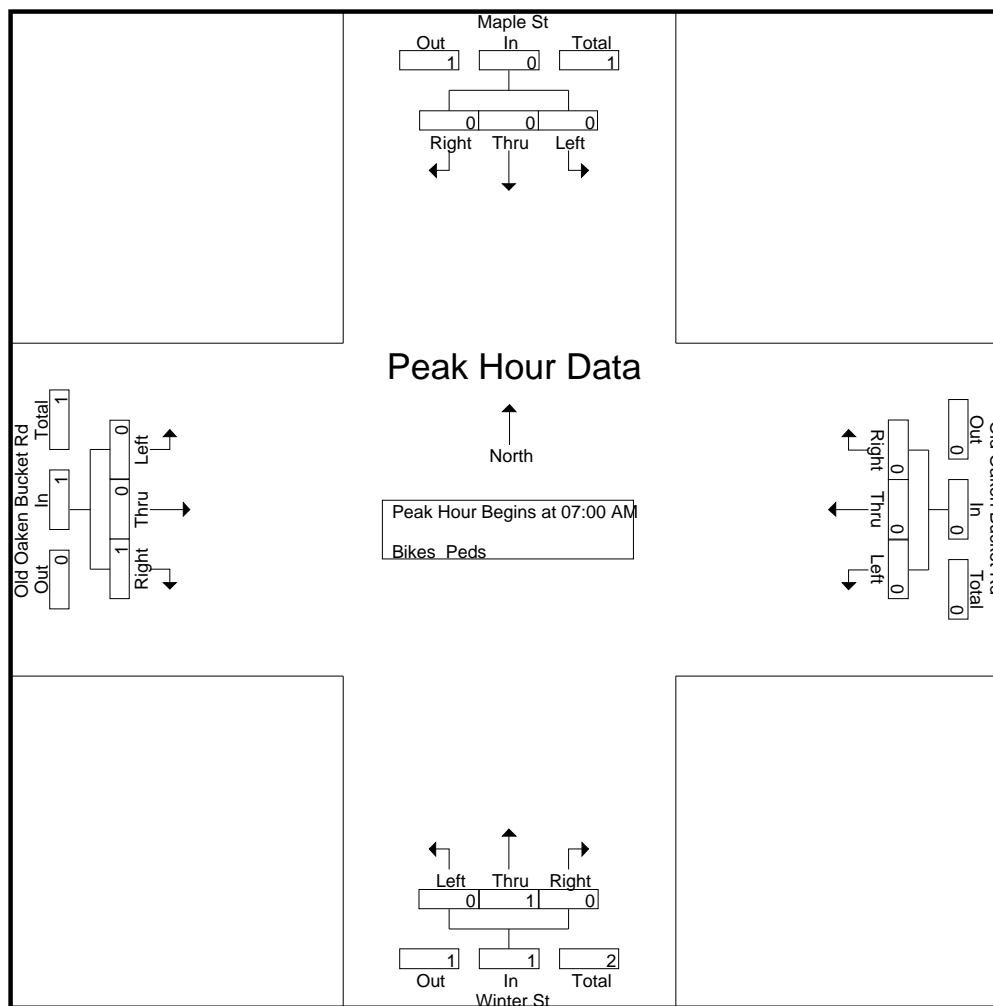
Groups Printed- Bikes Peds

| Start Time         | Maple St<br>From North |      |       |      | Old Oaken Bucket Rd<br>From East |      |       |      | Winter St<br>From South |      |       |      | Old Oaken Bucket Rd<br>From West |      |       |      | Exclu. Total | Inclu. Total | Int. Total |
|--------------------|------------------------|------|-------|------|----------------------------------|------|-------|------|-------------------------|------|-------|------|----------------------------------|------|-------|------|--------------|--------------|------------|
|                    | Left                   | Thru | Right | Peds | Left                             | Thru | Right | Peds | Left                    | Thru | Right | Peds | Left                             | Thru | Right | Peds |              |              |            |
| 07:00 AM           | 0                      | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0                       | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0            | 0            | 0          |
| 07:15 AM           | 0                      | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0                       | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0            | 0            | 0          |
| 07:30 AM           | 0                      | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0                       | 1    | 0     | 0    | 0                                | 0    | 0     | 0    | 0            | 1            | 1          |
| 07:45 AM           | 0                      | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0                       | 0    | 0     | 0    | 0                                | 0    | 1     | 0    | 0            | 1            | 1          |
| <b>Total</b>       | 0                      | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0                       | 1    | 0     | 0    | 0                                | 0    | 1     | 0    | 0            | 2            | 2          |
| 08:00 AM           | 0                      | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0                       | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0            | 0            | 0          |
| 08:15 AM           | 0                      | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0                       | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0            | 0            | 0          |
| 08:30 AM           | 0                      | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0                       | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0            | 0            | 0          |
| 08:45 AM           | 0                      | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0                       | 0    | 0     | 0    | 0                                | 1    | 0     | 0    | 0            | 1            | 1          |
| <b>Total</b>       | 0                      | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0                       | 0    | 0     | 0    | 0                                | 1    | 0     | 0    | 0            | 1            | 1          |
| <b>Grand Total</b> | 0                      | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0                       | 1    | 0     | 0    | 0                                | 1    | 1     | 0    | 0            | 3            | 3          |
| Apprch %           | 0                      | 0    | 0     |      | 0                                | 0    | 0     |      | 0                       | 100  | 0     |      | 0                                | 50   | 50    |      |              |              |            |
| Total %            | 0                      | 0    | 0     |      | 0                                | 0    | 0     |      | 0                       | 33.3 | 0     |      | 0                                | 33.3 | 33.3  |      | 0            | 100          |            |

| Start Time                                                 | Maple St<br>From North |      |       |            | Old Oaken Bucket Rd<br>From East |      |       |            | Winter St<br>From South |      |       |            | Old Oaken Bucket Rd<br>From West |      |       |            | Int. Total |
|------------------------------------------------------------|------------------------|------|-------|------------|----------------------------------|------|-------|------------|-------------------------|------|-------|------------|----------------------------------|------|-------|------------|------------|
|                                                            | Left                   | Thru | Right | App. Total | Left                             | Thru | Right | App. Total | Left                    | Thru | Right | App. Total | Left                             | Thru | Right | App. Total |            |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                        |      |       |            |                                  |      |       |            |                         |      |       |            |                                  |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 07:00 AM       |                        |      |       |            |                                  |      |       |            |                         |      |       |            |                                  |      |       |            |            |
| 07:00 AM                                                   | 0                      | 0    | 0     | 0          | 0                                | 0    | 0     | 0          | 0                       | 0    | 0     | 0          | 0                                | 0    | 0     | 0          | 0          |
| 07:15 AM                                                   | 0                      | 0    | 0     | 0          | 0                                | 0    | 0     | 0          | 0                       | 0    | 0     | 0          | 0                                | 0    | 0     | 0          | 0          |
| 07:30 AM                                                   | 0                      | 0    | 0     | 0          | 0                                | 0    | 0     | 0          | 0                       | 1    | 0     | 1          | 0                                | 0    | 0     | 0          | 1          |
| 07:45 AM                                                   | 0                      | 0    | 0     | 0          | 0                                | 0    | 0     | 0          | 0                       | 0    | 0     | 0          | 0                                | 0    | 1     | 1          | 1          |
| <b>Total Volume</b>                                        | 0                      | 0    | 0     | 0          | 0                                | 0    | 0     | 0          | 0                       | 1    | 0     | 1          | 0                                | 0    | 1     | 1          | 2          |
| <b>% App. Total</b>                                        | 0                      | 0    | 0     |            | 0                                | 0    | 0     |            | 0                       | 100  | 0     |            | 0                                | 0    | 100   |            |            |
| PHF                                                        | .000                   | .000 | .000  | .000       | .000                             | .000 | .000  | .000       | .000                    | .250 | .000  | .250       | .000                             | .000 | .250  | .250       | .500       |



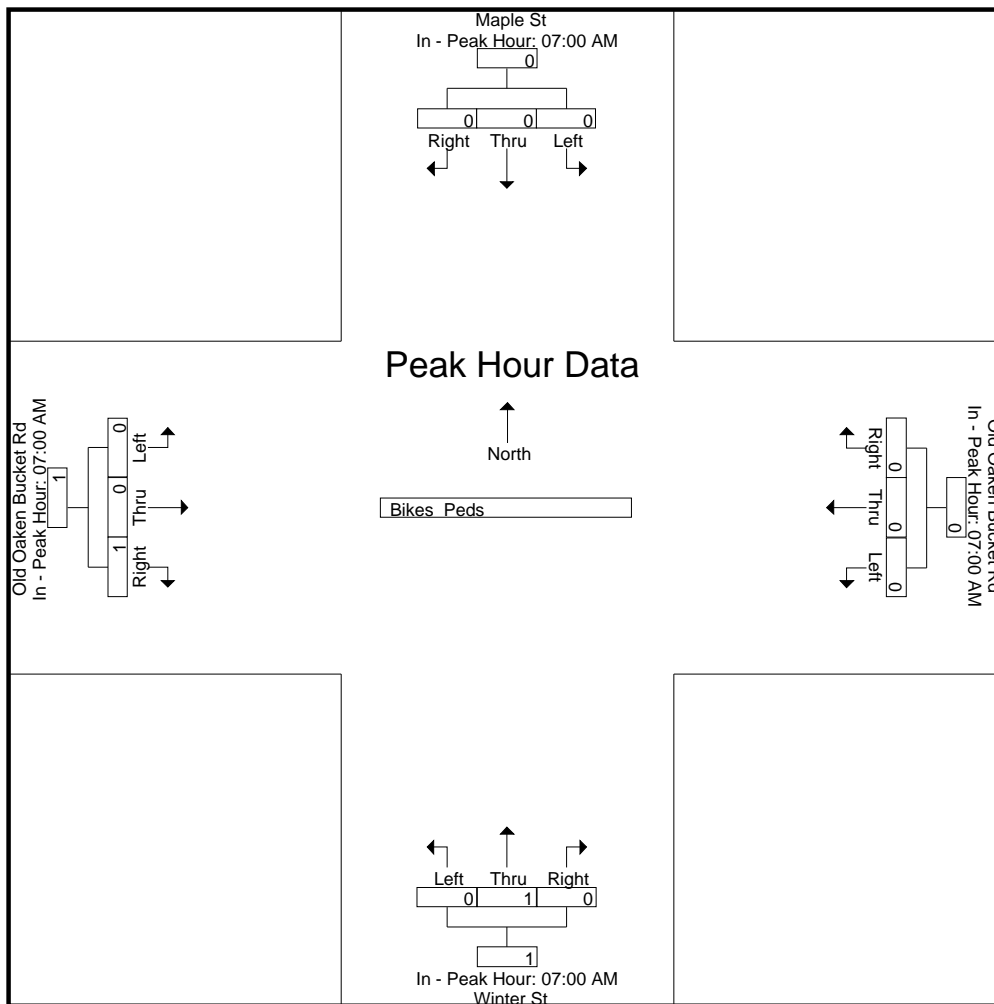
N/S Street : Maple St / Winter St  
E/W Street : Old Oaken Bucket Rd  
City/State : Scituate, MA  
Weather : Clear



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

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

N/S Street : Maple St / Winter St  
E/W Street : Old Oaken Bucket Rd  
City/State : Scituate, MA  
Weather : Clear



# Accurate Counts

978-664-2565

N/S Street : Maple St / Winter St  
 E/W Street : Old Oaken Bucket Rd  
 City/State : Scituate, MA  
 Weather : Clear

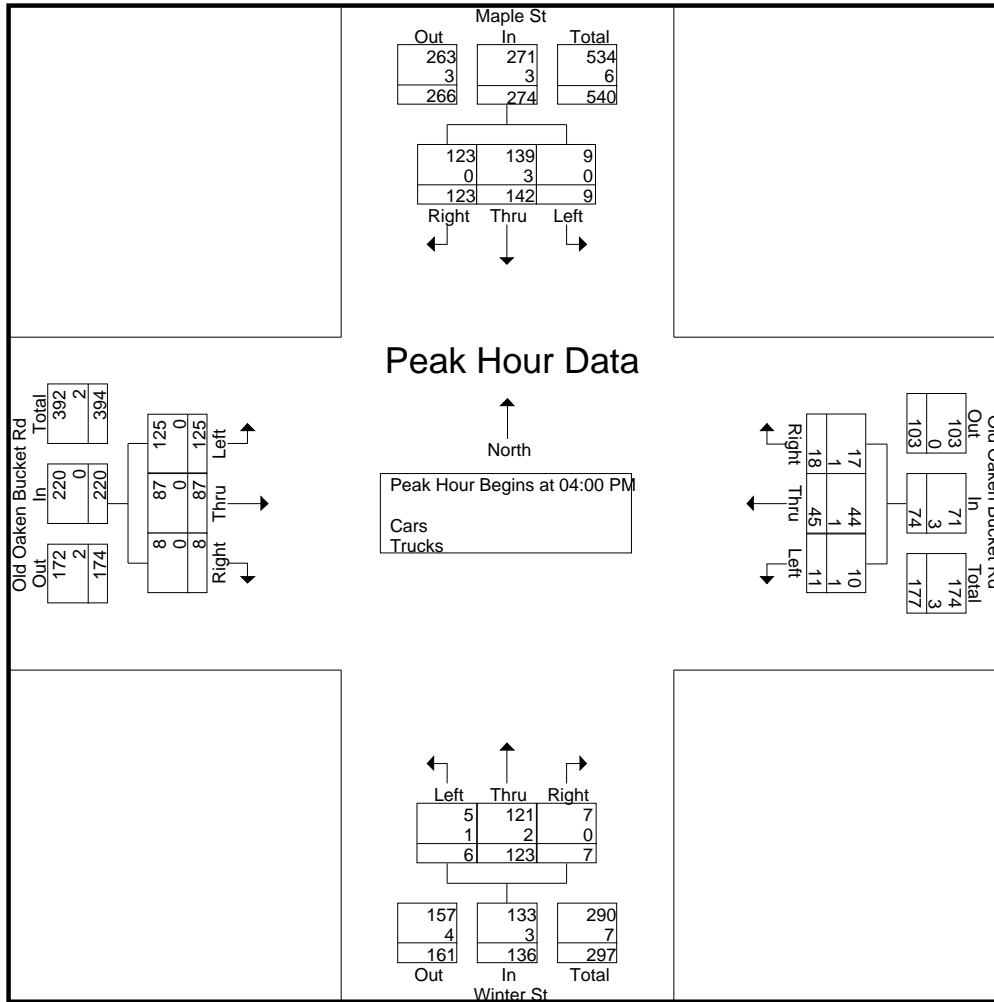
File Name : 90900001  
 Site Code : 90900001  
 Start Date : 11/3/2021  
 Page No : 1

### Groups Printed- Cars - Trucks

| Start Time         | Maple St<br>From North |            |            | Old Oaken Bucket Rd<br>From East |           |           | Winter St<br>From South |            |           | Old Oaken Bucket Rd<br>From West |            |          | Int. Total  |
|--------------------|------------------------|------------|------------|----------------------------------|-----------|-----------|-------------------------|------------|-----------|----------------------------------|------------|----------|-------------|
|                    | Left                   | Thru       | Right      | Left                             | Thru      | Right     | Left                    | Thru       | Right     | Left                             | Thru       | Right    |             |
| 04:00 PM           | 1                      | 35         | 44         | 5                                | 14        | 7         | 1                       | 35         | 3         | 38                               | 24         | 2        | 209         |
| 04:15 PM           | 3                      | 41         | 31         | 3                                | 7         | 2         | 1                       | 27         | 0         | 29                               | 27         | 3        | 174         |
| 04:30 PM           | 3                      | 37         | 29         | 2                                | 10        | 2         | 2                       | 29         | 2         | 24                               | 21         | 2        | 163         |
| 04:45 PM           | 2                      | 29         | 19         | 1                                | 14        | 7         | 2                       | 32         | 2         | 34                               | 15         | 1        | 158         |
| <b>Total</b>       | <b>9</b>               | <b>142</b> | <b>123</b> | <b>11</b>                        | <b>45</b> | <b>18</b> | <b>6</b>                | <b>123</b> | <b>7</b>  | <b>125</b>                       | <b>87</b>  | <b>8</b> | <b>704</b>  |
| 05:00 PM           | 3                      | 32         | 22         | 4                                | 13        | 1         | 1                       | 32         | 1         | 41                               | 22         | 0        | 172         |
| 05:15 PM           | 1                      | 34         | 34         | 3                                | 21        | 3         | 2                       | 40         | 1         | 30                               | 18         | 1        | 188         |
| 05:30 PM           | 0                      | 27         | 29         | 2                                | 9         | 5         | 1                       | 32         | 3         | 39                               | 16         | 0        | 163         |
| 05:45 PM           | 4                      | 26         | 16         | 0                                | 9         | 5         | 2                       | 28         | 2         | 32                               | 18         | 0        | 142         |
| <b>Total</b>       | <b>8</b>               | <b>119</b> | <b>101</b> | <b>9</b>                         | <b>52</b> | <b>14</b> | <b>6</b>                | <b>132</b> | <b>7</b>  | <b>142</b>                       | <b>74</b>  | <b>1</b> | <b>665</b>  |
| <b>Grand Total</b> | <b>17</b>              | <b>261</b> | <b>224</b> | <b>20</b>                        | <b>97</b> | <b>32</b> | <b>12</b>               | <b>255</b> | <b>14</b> | <b>267</b>                       | <b>161</b> | <b>9</b> | <b>1369</b> |
| Apprch %           | 3.4                    | 52         | 44.6       | 13.4                             | 65.1      | 21.5      | 4.3                     | 90.7       | 5         | 61.1                             | 36.8       | 2.1      |             |
| Total %            | 1.2                    | 19.1       | 16.4       | 1.5                              | 7.1       | 2.3       | 0.9                     | 18.6       | 1         | 19.5                             | 11.8       | 0.7      |             |
| Cars               | 17                     | 256        | 222        | 19                               | 96        | 31        | 11                      | 253        | 14        | 266                              | 160        | 9        | 1354        |
| % Cars             | 100                    | 98.1       | 99.1       | 95                               | 99        | 96.9      | 91.7                    | 99.2       | 100       | 99.6                             | 99.4       | 100      | 98.9        |
| Trucks             | 0                      | 5          | 2          | 1                                | 1         | 1         | 1                       | 2          | 0         | 1                                | 1          | 0        | 15          |
| % Trucks           | 0                      | 1.9        | 0.9        | 5                                | 1         | 3.1       | 8.3                     | 0.8        | 0         | 0.4                              | 0.6        | 0        | 1.1         |

| Start Time                                                        | Maple St<br>From North |            |            |            | Old Oaken Bucket Rd<br>From East |           |           |            | Winter St<br>From South |            |          |            | Old Oaken Bucket Rd<br>From West |           |          |            | Int. Total |
|-------------------------------------------------------------------|------------------------|------------|------------|------------|----------------------------------|-----------|-----------|------------|-------------------------|------------|----------|------------|----------------------------------|-----------|----------|------------|------------|
|                                                                   | Left                   | Thru       | Right      | App. Total | Left                             | Thru      | Right     | App. Total | Left                    | Thru       | Right    | App. Total | Left                             | Thru      | Right    | App. Total |            |
| <b>Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1</b> |                        |            |            |            |                                  |           |           |            |                         |            |          |            |                                  |           |          |            |            |
| <b>Peak Hour for Entire Intersection Begins at 04:00 PM</b>       |                        |            |            |            |                                  |           |           |            |                         |            |          |            |                                  |           |          |            |            |
| 04:00 PM                                                          | 1                      | 35         | <b>44</b>  | <b>80</b>  | <b>5</b>                         | <b>14</b> | <b>7</b>  | <b>26</b>  | <b>1</b>                | <b>35</b>  | <b>3</b> | <b>39</b>  | <b>38</b>                        | 24        | 2        | <b>64</b>  | <b>209</b> |
| 04:15 PM                                                          | <b>3</b>               | <b>41</b>  | 31         | 75         | 3                                | 7         | 2         | 12         | 1                       | 27         | 0        | 28         | 29                               | <b>27</b> | <b>3</b> | 59         | 174        |
| 04:30 PM                                                          | 3                      | 37         | 29         | 69         | 2                                | 10        | 2         | 14         | <b>2</b>                | 29         | 2        | 33         | 24                               | 21        | 2        | 47         | 163        |
| 04:45 PM                                                          | 2                      | 29         | 19         | 50         | 1                                | 14        | 7         | 22         | 2                       | 32         | 2        | 36         | 34                               | 15        | 1        | 50         | 158        |
| <b>Total Volume</b>                                               | <b>9</b>               | <b>142</b> | <b>123</b> | <b>274</b> | <b>11</b>                        | <b>45</b> | <b>18</b> | <b>74</b>  | <b>6</b>                | <b>123</b> | <b>7</b> | <b>136</b> | <b>125</b>                       | <b>87</b> | <b>8</b> | <b>220</b> | <b>704</b> |
| % App. Total                                                      | 3.3                    | 51.8       | 44.9       |            | 14.9                             | 60.8      | 24.3      |            | 4.4                     | 90.4       | 5.1      |            | 56.8                             | 39.5      | 3.6      |            |            |
| PHF                                                               | .750                   | .866       | .699       | .856       | .550                             | .804      | .643      | .712       | .750                    | .879       | .583     | .872       | .822                             | .806      | .667     | .859       | .842       |
| Cars                                                              | 9                      | 139        | 123        | 271        | 10                               | 44        | 17        | 71         | 5                       | 121        | 7        | 133        | 125                              | 87        | 8        | 220        | 695        |
| % Cars                                                            | 100                    | 97.9       | 100        | 98.9       | 90.9                             | 97.8      | 94.4      | 95.9       | 83.3                    | 98.4       | 100      | 97.8       | 100                              | 100       | 100      | 100        | 98.7       |
| Trucks                                                            | 0                      | 3          | 0          | 3          | 1                                | 1         | 1         | 3          | 1                       | 2          | 0        | 3          | 0                                | 0         | 0        | 0          | 9          |
| % Trucks                                                          | 0                      | 2.1        | 0          | 1.1        | 9.1                              | 2.2       | 5.6       | 4.1        | 16.7                    | 1.6        | 0        | 2.2        | 0                                | 0         | 0        | 0          | 1.3        |

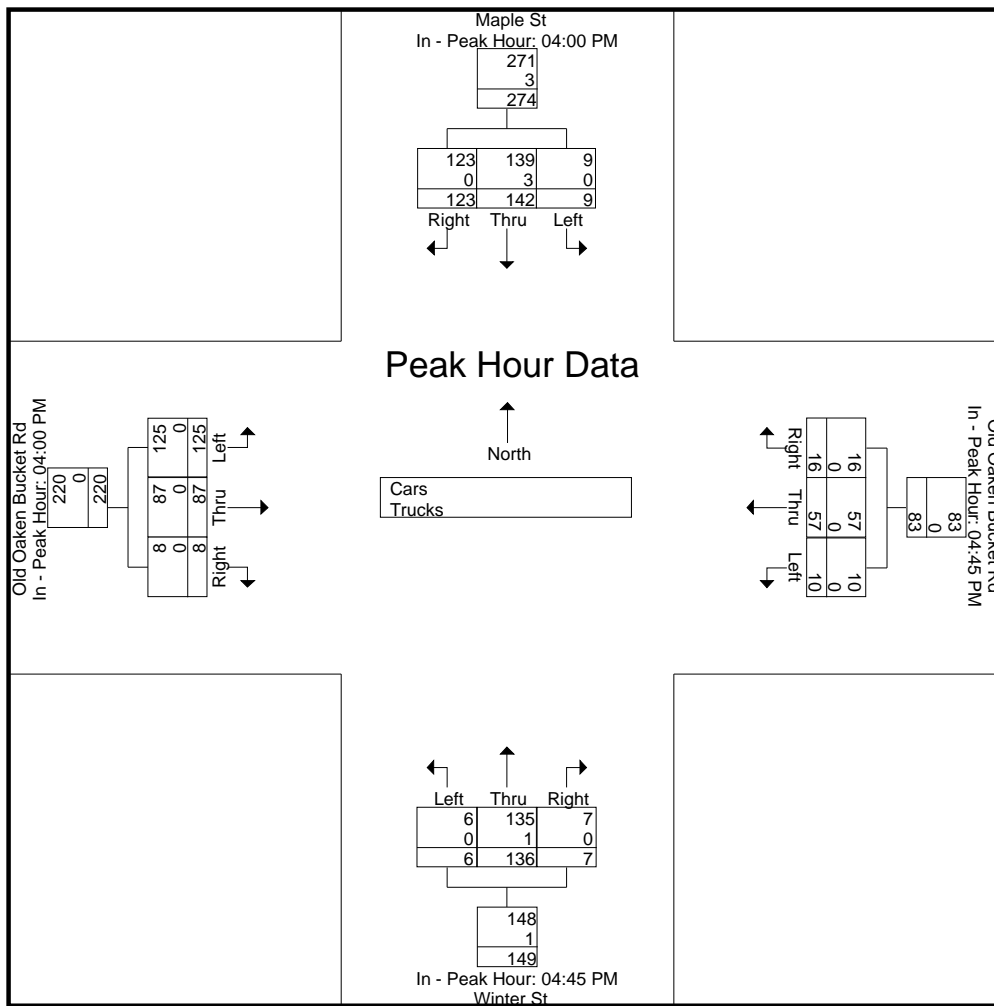
N/S Street : Maple St / Winter St  
E/W Street : Old Oaken Bucket Rd  
City/State : Scituate, MA  
Weather : Clear



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

|              | 04:00 PM |           |           |           | 04:45 PM |           |          |           | 04:45 PM |           |          |           | 04:00 PM  |           |          |           |
|--------------|----------|-----------|-----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|-----------|-----------|----------|-----------|
| +0 mins.     | 1        | 35        | <b>44</b> | <b>80</b> | 1        | 14        | <b>7</b> | 22        | <b>2</b> | 32        | 2        | 36        | <b>38</b> | 24        | 2        | <b>64</b> |
| +15 mins.    | <b>3</b> | <b>41</b> | 31        | 75        | <b>4</b> | 13        | 1        | 18        | 1        | 32        | 1        | 34        | 29        | <b>27</b> | <b>3</b> | 59        |
| +30 mins.    | 3        | 37        | 29        | 69        | 3        | <b>21</b> | 3        | <b>27</b> | 2        | <b>40</b> | 1        | <b>43</b> | 24        | 21        | 2        | 47        |
| +45 mins.    | 2        | 29        | 19        | 50        | 2        | 9         | 5        | 16        | 1        | 32        | <b>3</b> | 36        | 34        | 15        | 1        | 50        |
| Total Volume | 9        | 142       | 123       | 274       | 10       | 57        | 16       | 83        | 6        | 136       | 7        | 149       | 125       | 87        | 8        | 220       |
| % App. Total | 3.3      | 51.8      | 44.9      |           | 12       | 68.7      | 19.3     |           | 4        | 91.3      | 4.7      |           | 56.8      | 39.5      | 3.6      |           |
| PHF          | .750     | .866      | .699      | .856      | .625     | .679      | .571     | .769      | .750     | .850      | .583     | .866      | .822      | .806      | .667     | .859      |
| Cars         | 9        | 139       | 123       | 271       | 10       | 57        | 16       | 83        | 6        | 135       | 7        | 148       | 125       | 87        | 8        | 220       |
| % Cars       | 100      | 97.9      | 100       | 98.9      | 100      | 100       | 100      | 100       | 100      | 99.3      | 100      | 99.3      | 100       | 100       | 100      | 100       |
| Trucks       | 0        | 3         | 0         | 3         | 0        | 0         | 0        | 0         | 0        | 1         | 0        | 1         | 0         | 0         | 0        | 0         |
| % Trucks     | 0        | 2.1       | 0         | 1.1       | 0        | 0         | 0        | 0         | 0        | 0.7       | 0        | 0.7       | 0         | 0         | 0        | 0         |

N/S Street : Maple St / Winter St  
E/W Street : Old Oaken Bucket Rd  
City/State : Scituate, MA  
Weather : Clear



# Accurate Counts

978-664-2565

N/S Street : Maple St / Winter St  
 E/W Street : Old Oaken Bucket Rd  
 City/State : Scituate, MA  
 Weather : Clear

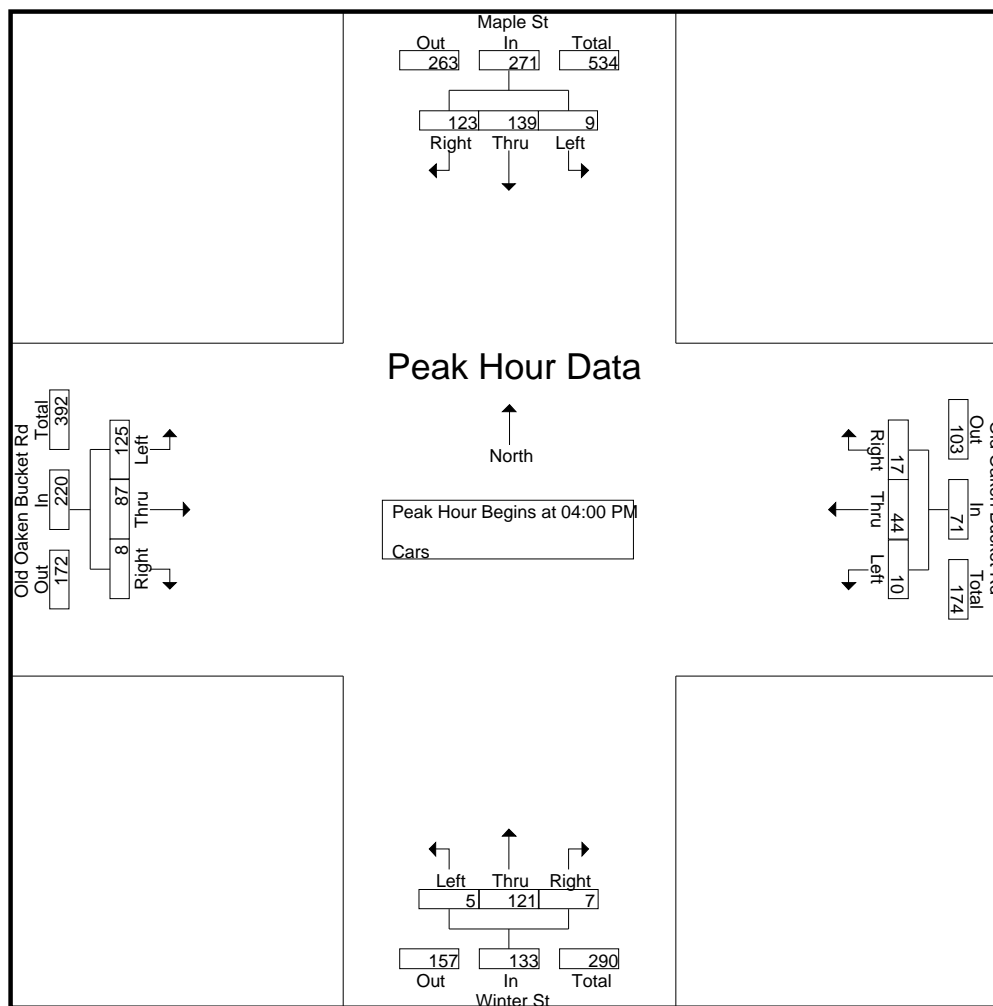
File Name : 90900001  
 Site Code : 90900001  
 Start Date : 11/3/2021  
 Page No : 4

## Groups Printed- Cars

| Start Time         | Maple St<br>From North |            |            | Old Oaken Bucket Rd<br>From East |           |           | Winter St<br>From South |            |           | Old Oaken Bucket Rd<br>From West |            |          | Int. Total  |
|--------------------|------------------------|------------|------------|----------------------------------|-----------|-----------|-------------------------|------------|-----------|----------------------------------|------------|----------|-------------|
|                    | Left                   | Thru       | Right      | Left                             | Thru      | Right     | Left                    | Thru       | Right     | Left                             | Thru       | Right    |             |
| 04:00 PM           | 1                      | 35         | 44         | 4                                | 14        | 6         | 1                       | 34         | 3         | 38                               | 24         | 2        | 206         |
| 04:15 PM           | 3                      | 41         | 31         | 3                                | 6         | 2         | 0                       | 27         | 0         | 29                               | 27         | 3        | 172         |
| 04:30 PM           | 3                      | 34         | 29         | 2                                | 10        | 2         | 2                       | 29         | 2         | 24                               | 21         | 2        | 160         |
| 04:45 PM           | 2                      | 29         | 19         | 1                                | 14        | 7         | 2                       | 31         | 2         | 34                               | 15         | 1        | 157         |
| <b>Total</b>       | <b>9</b>               | <b>139</b> | <b>123</b> | <b>10</b>                        | <b>44</b> | <b>17</b> | <b>5</b>                | <b>121</b> | <b>7</b>  | <b>125</b>                       | <b>87</b>  | <b>8</b> | <b>695</b>  |
| 05:00 PM           | 3                      | 32         | 22         | 4                                | 13        | 1         | 1                       | 32         | 1         | 41                               | 21         | 0        | 171         |
| 05:15 PM           | 1                      | 33         | 34         | 3                                | 21        | 3         | 2                       | 40         | 1         | 30                               | 18         | 1        | 187         |
| 05:30 PM           | 0                      | 26         | 28         | 2                                | 9         | 5         | 1                       | 32         | 3         | 38                               | 16         | 0        | 160         |
| 05:45 PM           | 4                      | 26         | 15         | 0                                | 9         | 5         | 2                       | 28         | 2         | 32                               | 18         | 0        | 141         |
| <b>Total</b>       | <b>8</b>               | <b>117</b> | <b>99</b>  | <b>9</b>                         | <b>52</b> | <b>14</b> | <b>6</b>                | <b>132</b> | <b>7</b>  | <b>141</b>                       | <b>73</b>  | <b>1</b> | <b>659</b>  |
| <b>Grand Total</b> | <b>17</b>              | <b>256</b> | <b>222</b> | <b>19</b>                        | <b>96</b> | <b>31</b> | <b>11</b>               | <b>253</b> | <b>14</b> | <b>266</b>                       | <b>160</b> | <b>9</b> | <b>1354</b> |
| Apprch %           | 3.4                    | 51.7       | 44.8       | 13                               | 65.8      | 21.2      | 4                       | 91         | 5         | 61.1                             | 36.8       | 2.1      |             |
| Total %            | 1.3                    | 18.9       | 16.4       | 1.4                              | 7.1       | 2.3       | 0.8                     | 18.7       | 1         | 19.6                             | 11.8       | 0.7      |             |

| Start Time                                                 | Maple St<br>From North |             |             |            | Old Oaken Bucket Rd<br>From East |           |             |            | Winter St<br>From South |            |            |            | Old Oaken Bucket Rd<br>From West |             |            |            | Int. Total |
|------------------------------------------------------------|------------------------|-------------|-------------|------------|----------------------------------|-----------|-------------|------------|-------------------------|------------|------------|------------|----------------------------------|-------------|------------|------------|------------|
|                                                            | Left                   | Thru        | Right       | App. Total | Left                             | Thru      | Right       | App. Total | Left                    | Thru       | Right      | App. Total | Left                             | Thru        | Right      | App. Total |            |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                        |             |             |            |                                  |           |             |            |                         |            |            |            |                                  |             |            |            |            |
| Peak Hour for Entire Intersection Begins at 04:00 PM       |                        |             |             |            |                                  |           |             |            |                         |            |            |            |                                  |             |            |            |            |
| 04:00 PM                                                   | 1                      | 35          | 44          | 80         | 4                                | 14        | 6           | 24         | 1                       | 34         | 3          | 38         | 38                               | 24          | 2          | 64         | 206        |
| 04:15 PM                                                   | 3                      | 41          | 31          | 75         | 3                                | 6         | 2           | 11         | 0                       | 27         | 0          | 27         | 29                               | 27          | 3          | 59         | 172        |
| 04:30 PM                                                   | 3                      | 34          | 29          | 66         | 2                                | 10        | 2           | 14         | 2                       | 29         | 2          | 33         | 24                               | 21          | 2          | 47         | 160        |
| 04:45 PM                                                   | 2                      | 29          | 19          | 50         | 1                                | 14        | 7           | 22         | 2                       | 31         | 2          | 35         | 34                               | 15          | 1          | 50         | 157        |
| <b>Total Volume</b>                                        | <b>9</b>               | <b>139</b>  | <b>123</b>  | <b>271</b> | <b>10</b>                        | <b>44</b> | <b>17</b>   | <b>71</b>  | <b>5</b>                | <b>121</b> | <b>7</b>   | <b>133</b> | <b>125</b>                       | <b>87</b>   | <b>8</b>   | <b>220</b> | <b>695</b> |
| <b>% App. Total</b>                                        | <b>3.3</b>             | <b>51.3</b> | <b>45.4</b> |            | <b>14.1</b>                      | <b>62</b> | <b>23.9</b> |            | <b>3.8</b>              | <b>91</b>  | <b>5.3</b> |            | <b>56.8</b>                      | <b>39.5</b> | <b>3.6</b> |            |            |
| PHF                                                        | .750                   | .848        | .699        | .847       | .625                             | .786      | .607        | .740       | .625                    | .890       | .583       | .875       | .822                             | .806        | .667       | .859       | .843       |

N/S Street : Maple St / Winter St  
E/W Street : Old Oaken Bucket Rd  
City/State : Scituate, MA  
Weather : Clear



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

|              | 04:00 PM |           |           |           | 04:45 PM |           |          |           | 04:45 PM |           |          |           | 04:00 PM  |           |          |           |
|--------------|----------|-----------|-----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|-----------|-----------|----------|-----------|
| +0 mins.     | 1        | 35        | <b>44</b> | <b>80</b> | 1        | 14        | <b>7</b> | 22        | <b>2</b> | 31        | 2        | 35        | <b>38</b> | 24        | 2        | <b>64</b> |
| +15 mins.    | <b>3</b> | <b>41</b> | 31        | 75        | <b>4</b> | 13        | 1        | 18        | 1        | 32        | 1        | 34        | 29        | <b>27</b> | <b>3</b> | 59        |
| +30 mins.    | 3        | 34        | 29        | 66        | 3        | <b>21</b> | 3        | <b>27</b> | 2        | <b>40</b> | 1        | <b>43</b> | 24        | 21        | 2        | 47        |
| +45 mins.    | 2        | 29        | 19        | 50        | 2        | 9         | 5        | 16        | 1        | 32        | <b>3</b> | 36        | 34        | 15        | 1        | 50        |
| Total Volume | 9        | 139       | 123       | 271       | 10       | 57        | 16       | 83        | 6        | 135       | 7        | 148       | 125       | 87        | 8        | 220       |
| % App. Total | 3.3      | 51.3      | 45.4      |           | 12       | 68.7      | 19.3     |           | 4.1      | 91.2      | 4.7      |           | 56.8      | 39.5      | 3.6      |           |
| PHF          | .750     | .848      | .699      | .847      | .625     | .679      | .571     | .769      | .750     | .844      | .583     | .860      | .822      | .806      | .667     | .859      |

# Accurate Counts

978-664-2565

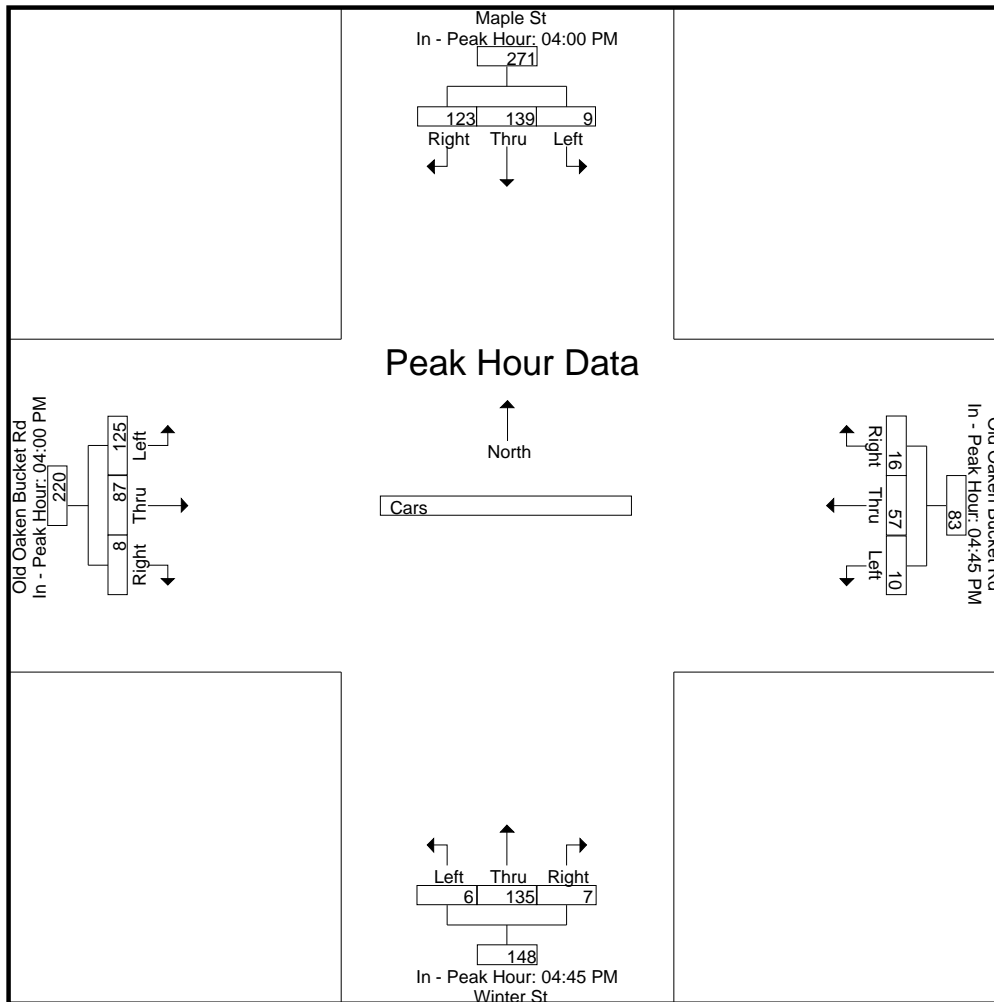
File Name : 90900001

Site Code : 90900001

Start Date : 11/3/2021

Page No : 6

N/S Street : Maple St / Winter St  
 E/W Street : Old Oaken Bucket Rd  
 City/State : Scituate, MA  
 Weather : Clear





# Accurate Counts

978-664-2565

N/S Street : Maple St / Winter St  
 E/W Street : Old Oaken Bucket Rd  
 City/State : Scituate, MA  
 Weather : Clear

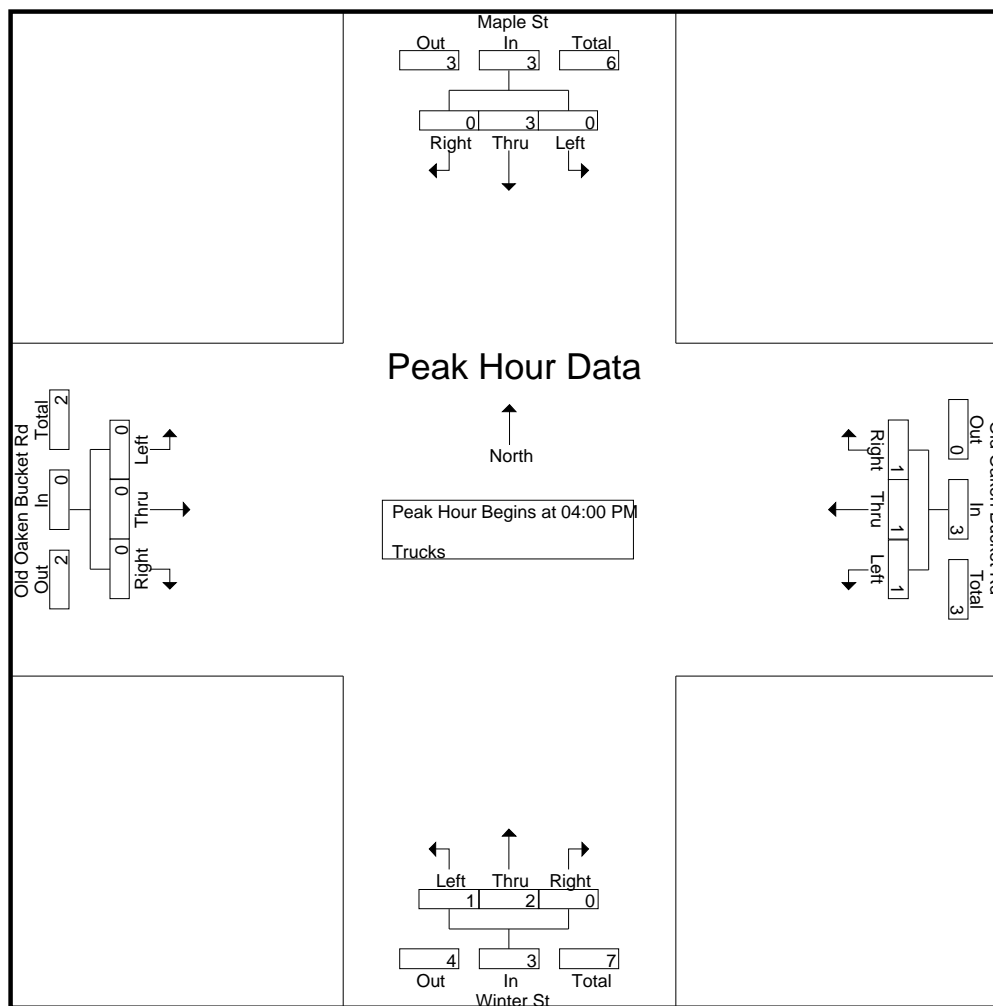
File Name : 90900001  
 Site Code : 90900001  
 Start Date : 11/3/2021  
 Page No : 7

### Groups Printed- Trucks

| Start Time         | Maple St<br>From North |          |          | Old Oaken Bucket Rd<br>From East |          |          | Winter St<br>From South |          |          | Old Oaken Bucket Rd<br>From West |          |          | Int. Total |
|--------------------|------------------------|----------|----------|----------------------------------|----------|----------|-------------------------|----------|----------|----------------------------------|----------|----------|------------|
|                    | Left                   | Thru     | Right    | Left                             | Thru     | Right    | Left                    | Thru     | Right    | Left                             | Thru     | Right    |            |
| 04:00 PM           | 0                      | 0        | 0        | 1                                | 0        | 1        | 0                       | 1        | 0        | 0                                | 0        | 0        | 3          |
| 04:15 PM           | 0                      | 0        | 0        | 0                                | 1        | 0        | 1                       | 0        | 0        | 0                                | 0        | 0        | 2          |
| 04:30 PM           | 0                      | 3        | 0        | 0                                | 0        | 0        | 0                       | 0        | 0        | 0                                | 0        | 0        | 3          |
| 04:45 PM           | 0                      | 0        | 0        | 0                                | 0        | 0        | 0                       | 1        | 0        | 0                                | 0        | 0        | 1          |
| <b>Total</b>       | <b>0</b>               | <b>3</b> | <b>0</b> | <b>1</b>                         | <b>1</b> | <b>1</b> | <b>1</b>                | <b>2</b> | <b>0</b> | <b>0</b>                         | <b>0</b> | <b>0</b> | <b>9</b>   |
| 05:00 PM           | 0                      | 0        | 0        | 0                                | 0        | 0        | 0                       | 0        | 0        | 0                                | 1        | 0        | 1          |
| 05:15 PM           | 0                      | 1        | 0        | 0                                | 0        | 0        | 0                       | 0        | 0        | 0                                | 0        | 0        | 1          |
| 05:30 PM           | 0                      | 1        | 1        | 0                                | 0        | 0        | 0                       | 0        | 0        | 1                                | 0        | 0        | 3          |
| 05:45 PM           | 0                      | 0        | 1        | 0                                | 0        | 0        | 0                       | 0        | 0        | 0                                | 0        | 0        | 1          |
| <b>Total</b>       | <b>0</b>               | <b>2</b> | <b>2</b> | <b>0</b>                         | <b>0</b> | <b>0</b> | <b>0</b>                | <b>0</b> | <b>0</b> | <b>1</b>                         | <b>1</b> | <b>0</b> | <b>6</b>   |
| <b>Grand Total</b> | <b>0</b>               | <b>5</b> | <b>2</b> | <b>1</b>                         | <b>1</b> | <b>1</b> | <b>1</b>                | <b>2</b> | <b>0</b> | <b>1</b>                         | <b>1</b> | <b>0</b> | <b>15</b>  |
| Apprch %           | 0                      | 71.4     | 28.6     | 33.3                             | 33.3     | 33.3     | 33.3                    | 66.7     | 0        | 50                               | 50       | 0        |            |
| Total %            | 0                      | 33.3     | 13.3     | 6.7                              | 6.7      | 6.7      | 6.7                     | 13.3     | 0        | 6.7                              | 6.7      | 0        |            |

| Start Time                                                 | Maple St<br>From North |            |          |            | Old Oaken Bucket Rd<br>From East |             |             |             | Winter St<br>From South |             |          |            | Old Oaken Bucket Rd<br>From West |          |          |            | Int. Total |
|------------------------------------------------------------|------------------------|------------|----------|------------|----------------------------------|-------------|-------------|-------------|-------------------------|-------------|----------|------------|----------------------------------|----------|----------|------------|------------|
|                                                            | Left                   | Thru       | Right    | App. Total | Left                             | Thru        | Right       | App. Total  | Left                    | Thru        | Right    | App. Total | Left                             | Thru     | Right    | App. Total |            |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                        |            |          |            |                                  |             |             |             |                         |             |          |            |                                  |          |          |            |            |
| Peak Hour for Entire Intersection Begins at 04:00 PM       |                        |            |          |            |                                  |             |             |             |                         |             |          |            |                                  |          |          |            |            |
| 04:00 PM                                                   | 0                      | 0          | 0        | 0          | 1                                | 0           | 1           | 2           | 0                       | 1           | 0        | 1          | 0                                | 0        | 0        | 0          | 3          |
| 04:15 PM                                                   | 0                      | 0          | 0        | 0          | 0                                | 1           | 0           | 1           | 1                       | 0           | 0        | 1          | 0                                | 0        | 0        | 0          | 2          |
| 04:30 PM                                                   | 0                      | 3          | 0        | 3          | 0                                | 0           | 0           | 0           | 0                       | 0           | 0        | 0          | 0                                | 0        | 0        | 0          | 3          |
| 04:45 PM                                                   | 0                      | 0          | 0        | 0          | 0                                | 0           | 0           | 0           | 0                       | 1           | 0        | 1          | 0                                | 0        | 0        | 0          | 1          |
| <b>Total Volume</b>                                        | <b>0</b>               | <b>3</b>   | <b>0</b> | <b>3</b>   | <b>1</b>                         | <b>1</b>    | <b>1</b>    | <b>3</b>    | <b>1</b>                | <b>2</b>    | <b>0</b> | <b>3</b>   | <b>0</b>                         | <b>0</b> | <b>0</b> | <b>0</b>   | <b>9</b>   |
| <b>% App. Total</b>                                        | <b>0</b>               | <b>100</b> | <b>0</b> | <b>0</b>   | <b>33.3</b>                      | <b>33.3</b> | <b>33.3</b> | <b>33.3</b> | <b>33.3</b>             | <b>66.7</b> | <b>0</b> | <b>0</b>   | <b>0</b>                         | <b>0</b> | <b>0</b> | <b>0</b>   | <b>0</b>   |
| PHF                                                        | .000                   | .250       | .000     | .250       | .250                             | .250        | .250        | .375        | .250                    | .500        | .000     | .750       | .000                             | .000     | .000     | .000       | .750       |

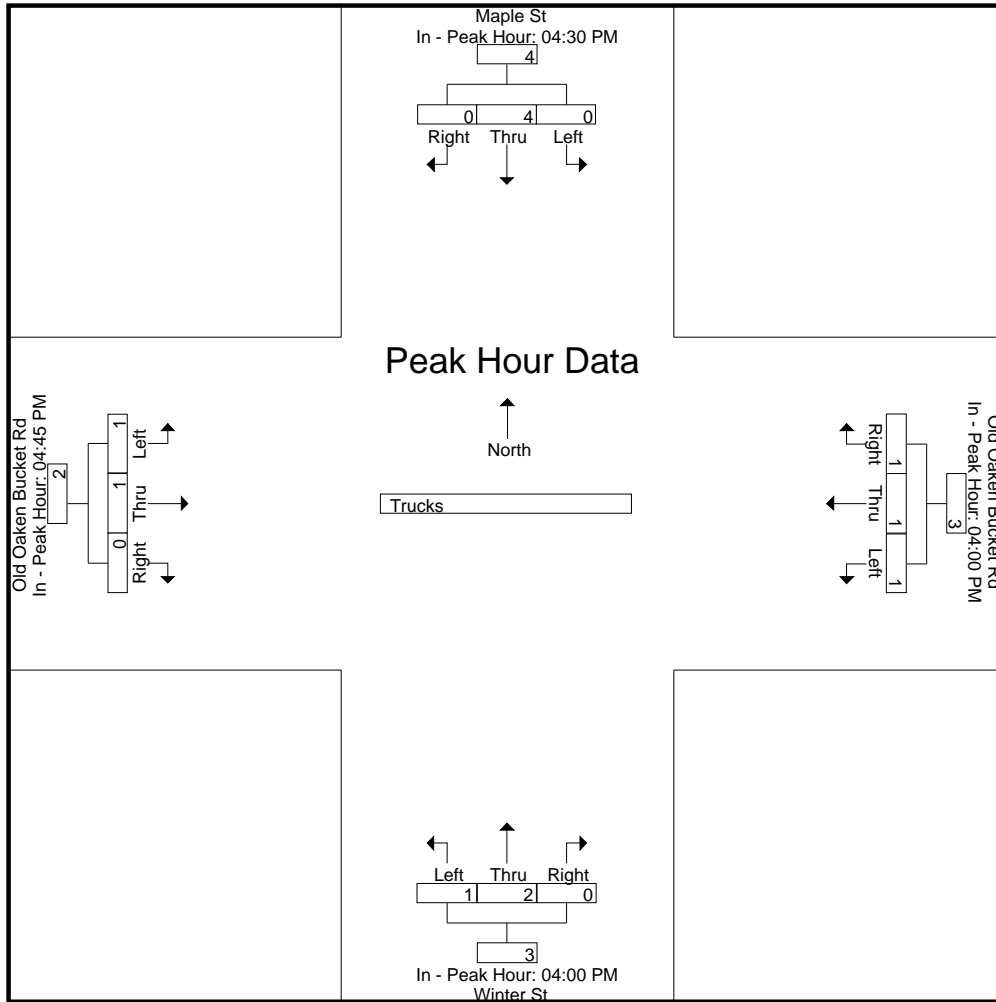
N/S Street : Maple St / Winter St  
E/W Street : Old Oaken Bucket Rd  
City/State : Scituate, MA  
Weather : Clear



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

|              | 04:30 PM |      |      |      | 04:00 PM |      |      |      | 04:00 PM |      |      |      | 04:45 PM |      |      |      |
|--------------|----------|------|------|------|----------|------|------|------|----------|------|------|------|----------|------|------|------|
| +0 mins.     | 0        | 3    | 0    | 3    | 1        | 0    | 1    | 2    | 0        | 1    | 0    | 1    | 0        | 0    | 0    | 0    |
| +15 mins.    | 0        | 0    | 0    | 0    | 0        | 1    | 0    | 1    | 1        | 0    | 0    | 1    | 0        | 1    | 0    | 1    |
| +30 mins.    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    |
| +45 mins.    | 0        | 1    | 0    | 1    | 0        | 0    | 0    | 0    | 0        | 1    | 0    | 1    | 1        | 0    | 0    | 1    |
| Total Volume | 0        | 4    | 0    | 4    | 1        | 1    | 1    | 3    | 1        | 2    | 0    | 3    | 1        | 1    | 0    | 2    |
| % App. Total | 0        | 100  | 0    |      | 33.3     | 33.3 | 33.3 |      | 33.3     | 66.7 | 0    |      | 50       | 50   | 0    |      |
| PHF          | .000     | .333 | .000 | .333 | .250     | .250 | .250 | .375 | .250     | .500 | .000 | .750 | .250     | .250 | .000 | .500 |

N/S Street : Maple St / Winter St  
E/W Street : Old Oaken Bucket Rd  
City/State : Scituate, MA  
Weather : Clear



**Accurate Counts**  
978-664-2565

N/S Street : Maple St / Winter St  
E/W Street : Old Oaken Bucket Rd  
City/State : Scituate, MA  
Weather : Clear

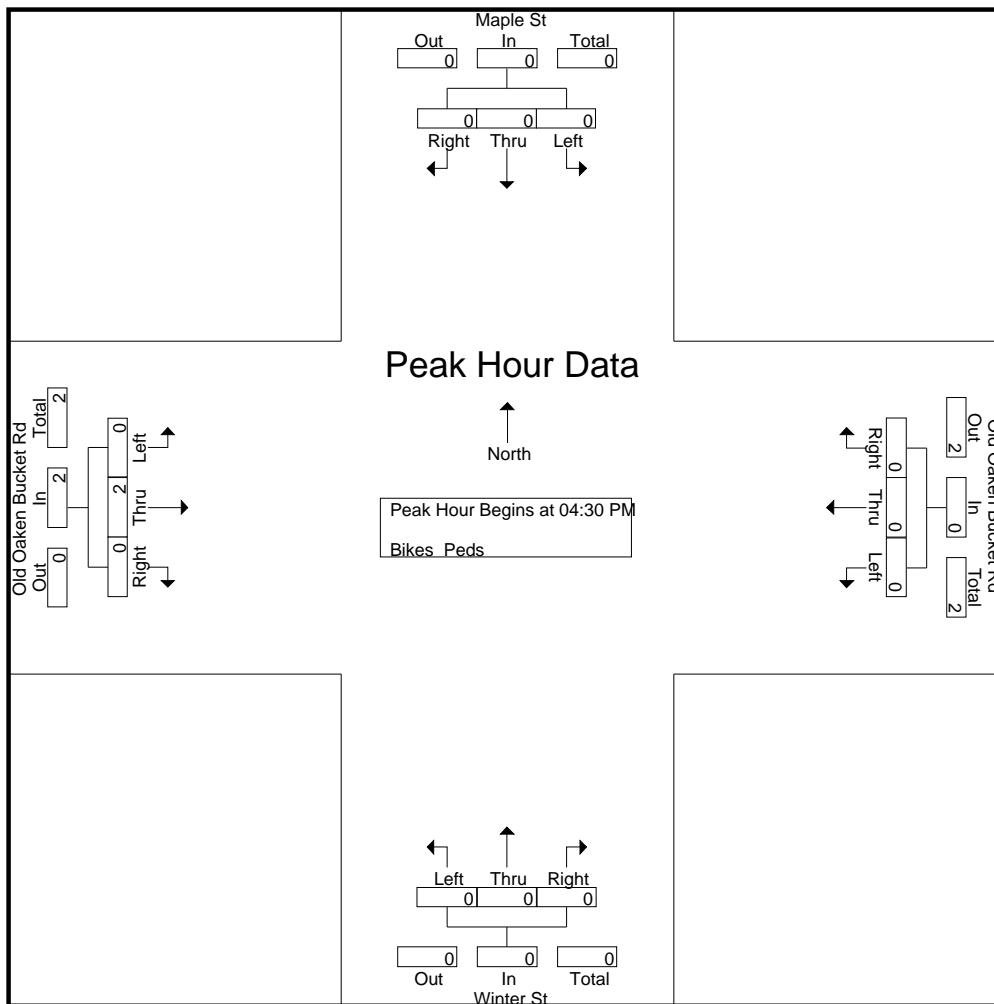
File Name : 90900001  
Site Code : 90900001  
Start Date : 11/3/2021  
Page No : 10

Groups Printed- Bikes Peds

| Start Time         | Maple St<br>From North |      |       |      | Old Oaken Bucket Rd<br>From East |      |       |      | Winter St<br>From South |      |       |      | Old Oaken Bucket Rd<br>From West |      |       |      | Exclu. Total | Inclu. Total | Int. Total |
|--------------------|------------------------|------|-------|------|----------------------------------|------|-------|------|-------------------------|------|-------|------|----------------------------------|------|-------|------|--------------|--------------|------------|
|                    | Left                   | Thru | Right | Peds | Left                             | Thru | Right | Peds | Left                    | Thru | Right | Peds | Left                             | Thru | Right | Peds |              |              |            |
| 04:00 PM           | 0                      | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0                       | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0            | 0            | 0          |
| 04:15 PM           | 0                      | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0                       | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0            | 0            | 0          |
| 04:30 PM           | 0                      | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0                       | 0    | 0     | 0    | 0                                | 1    | 0     | 0    | 0            | 1            | 1          |
| 04:45 PM           | 0                      | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0                       | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0            | 0            | 0          |
| <b>Total</b>       | 0                      | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0                       | 0    | 0     | 0    | 0                                | 1    | 0     | 0    | 0            | 1            | 1          |
| 05:00 PM           | 0                      | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0                       | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0            | 0            | 0          |
| 05:15 PM           | 0                      | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0                       | 0    | 0     | 0    | 0                                | 1    | 0     | 0    | 0            | 1            | 1          |
| 05:30 PM           | 0                      | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0                       | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0            | 0            | 0          |
| 05:45 PM           | 0                      | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0                       | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0            | 0            | 0          |
| <b>Total</b>       | 0                      | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0                       | 0    | 0     | 0    | 0                                | 1    | 0     | 0    | 0            | 1            | 1          |
| <b>Grand Total</b> | 0                      | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0                       | 0    | 0     | 0    | 0                                | 2    | 0     | 0    | 0            | 2            | 2          |
| Apprch %           | 0                      | 0    | 0     |      | 0                                | 0    | 0     |      | 0                       | 0    | 0     |      | 0                                | 100  | 0     |      |              |              |            |
| Total %            | 0                      | 0    | 0     |      | 0                                | 0    | 0     |      | 0                       | 0    | 0     |      | 0                                | 100  | 0     |      |              | 100          |            |

| Start Time                                                 | Maple St<br>From North |      |       |            | Old Oaken Bucket Rd<br>From East |      |       |            | Winter St<br>From South |      |       |            | Old Oaken Bucket Rd<br>From West |      |       |            | Int. Total |
|------------------------------------------------------------|------------------------|------|-------|------------|----------------------------------|------|-------|------------|-------------------------|------|-------|------------|----------------------------------|------|-------|------------|------------|
|                                                            | Left                   | Thru | Right | App. Total | Left                             | Thru | Right | App. Total | Left                    | Thru | Right | App. Total | Left                             | Thru | Right | App. Total |            |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                        |      |       |            |                                  |      |       |            |                         |      |       |            |                                  |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 04:30 PM       |                        |      |       |            |                                  |      |       |            |                         |      |       |            |                                  |      |       |            |            |
| 04:30 PM                                                   | 0                      | 0    | 0     | 0          | 0                                | 0    | 0     | 0          | 0                       | 0    | 0     | 0          | 0                                | 1    | 0     | 1          | 1          |
| 04:45 PM                                                   | 0                      | 0    | 0     | 0          | 0                                | 0    | 0     | 0          | 0                       | 0    | 0     | 0          | 0                                | 0    | 0     | 0          | 0          |
| 05:00 PM                                                   | 0                      | 0    | 0     | 0          | 0                                | 0    | 0     | 0          | 0                       | 0    | 0     | 0          | 0                                | 0    | 0     | 0          | 0          |
| 05:15 PM                                                   | 0                      | 0    | 0     | 0          | 0                                | 0    | 0     | 0          | 0                       | 0    | 0     | 0          | 0                                | 1    | 0     | 1          | 1          |
| <b>Total Volume</b>                                        | 0                      | 0    | 0     | 0          | 0                                | 0    | 0     | 0          | 0                       | 0    | 0     | 0          | 0                                | 2    | 0     | 2          | 2          |
| <b>% App. Total</b>                                        | 0                      | 0    | 0     |            | 0                                | 0    | 0     |            | 0                       | 0    | 0     |            | 0                                | 100  | 0     |            |            |
| PHF                                                        | .000                   | .000 | .000  | .000       | .000                             | .000 | .000  | .000       | .000                    | .000 | .000  | .000       | .000                             | .500 | .000  | .500       | .500       |

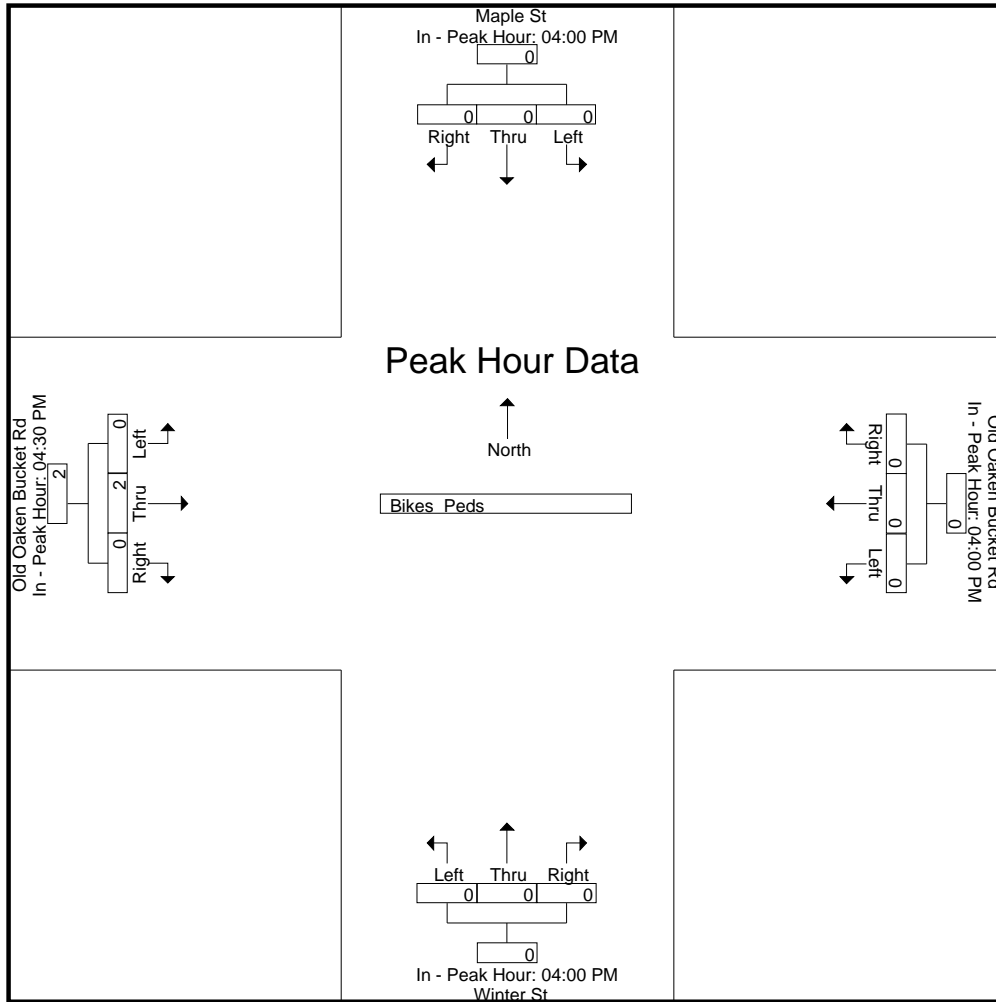
N/S Street : Maple St / Winter St  
E/W Street : Old Oaken Bucket Rd  
City/State : Scituate, MA  
Weather : Clear



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

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

N/S Street : Maple St / Winter St  
E/W Street : Old Oaken Bucket Rd  
City/State : Scituate, MA  
Weather : Clear



# Accurate Counts

978-664-2565

N/S Street : Route 3A / Cornet Stetson Rd  
 E/W Street : Cornet Stetson Rd / Old Oaken Buck  
 City/State : Scituate, MA  
 Weather : Clear

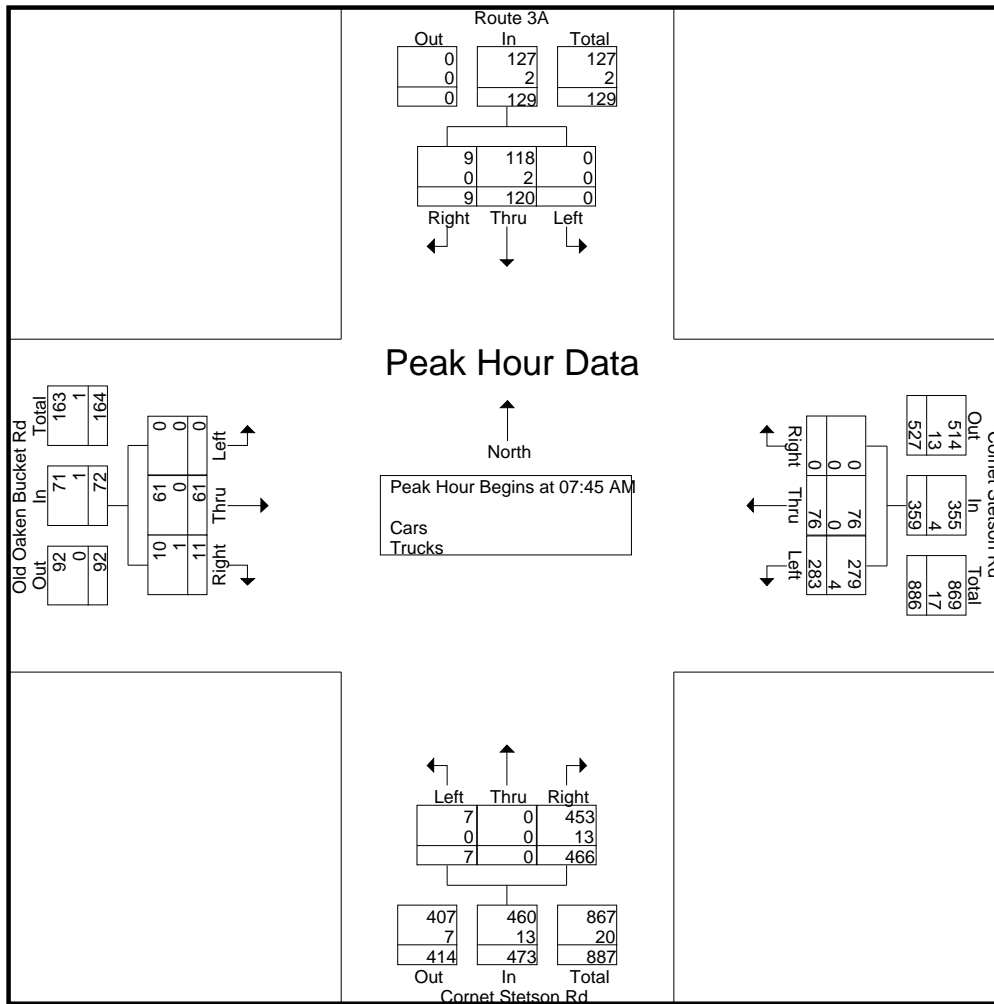
File Name : 90900002  
 Site Code : 90900002  
 Start Date : 11/3/2021  
 Page No : 1

### Groups Printed- Cars - Trucks

| Start Time         | Route 3A<br>From North |            |           | Cornet Stetson Rd<br>From East |            |          | Cornet Stetson Rd<br>From South |          |            | Old Oaken Bucket Rd<br>From West |            |           | Int. Total  |
|--------------------|------------------------|------------|-----------|--------------------------------|------------|----------|---------------------------------|----------|------------|----------------------------------|------------|-----------|-------------|
|                    | Left                   | Thru       | Right     | Left                           | Thru       | Right    | Left                            | Thru     | Right      | Left                             | Thru       | Right     |             |
| 07:00 AM           | 0                      | 9          | 2         | 61                             | 20         | 0        | 0                               | 0        | 95         | 0                                | 14         | 0         | 201         |
| 07:15 AM           | 1                      | 9          | 1         | 44                             | 22         | 0        | 0                               | 0        | 78         | 0                                | 9          | 1         | 165         |
| 07:30 AM           | 0                      | 13         | 0         | 50                             | 19         | 0        | 0                               | 0        | 103        | 0                                | 15         | 1         | 201         |
| 07:45 AM           | 0                      | 27         | 5         | 72                             | 16         | 0        | 2                               | 0        | 98         | 0                                | 11         | 0         | 231         |
| <b>Total</b>       | <b>1</b>               | <b>58</b>  | <b>8</b>  | <b>227</b>                     | <b>77</b>  | <b>0</b> | <b>2</b>                        | <b>0</b> | <b>374</b> | <b>0</b>                         | <b>49</b>  | <b>2</b>  | <b>798</b>  |
| 08:00 AM           | 0                      | 39         | 2         | 78                             | 19         | 0        | 4                               | 0        | 122        | 0                                | 19         | 5         | 288         |
| 08:15 AM           | 0                      | 41         | 1         | 75                             | 18         | 0        | 1                               | 0        | 112        | 0                                | 15         | 3         | 266         |
| 08:30 AM           | 0                      | 13         | 1         | 58                             | 23         | 0        | 0                               | 0        | 134        | 0                                | 16         | 3         | 248         |
| 08:45 AM           | 0                      | 17         | 3         | 51                             | 15         | 0        | 0                               | 0        | 105        | 0                                | 13         | 1         | 205         |
| <b>Total</b>       | <b>0</b>               | <b>110</b> | <b>7</b>  | <b>262</b>                     | <b>75</b>  | <b>0</b> | <b>5</b>                        | <b>0</b> | <b>473</b> | <b>0</b>                         | <b>63</b>  | <b>12</b> | <b>1007</b> |
| <b>Grand Total</b> | <b>1</b>               | <b>168</b> | <b>15</b> | <b>489</b>                     | <b>152</b> | <b>0</b> | <b>7</b>                        | <b>0</b> | <b>847</b> | <b>0</b>                         | <b>112</b> | <b>14</b> | <b>1805</b> |
| Apprch %           | 0.5                    | 91.3       | 8.2       | 76.3                           | 23.7       | 0        | 0.8                             | 0        | 99.2       | 0                                | 88.9       | 11.1      |             |
| Total %            | 0.1                    | 9.3        | 0.8       | 27.1                           | 8.4        | 0        | 0.4                             | 0        | 46.9       | 0                                | 6.2        | 0.8       |             |
| Cars               | 1                      | 166        | 15        | 484                            | 151        | 0        | 7                               | 0        | 824        | 0                                | 112        | 12        | 1772        |
| % Cars             | 100                    | 98.8       | 100       | 99                             | 99.3       | 0        | 100                             | 0        | 97.3       | 0                                | 100        | 85.7      | 98.2        |
| Trucks             | 0                      | 2          | 0         | 5                              | 1          | 0        | 0                               | 0        | 23         | 0                                | 0          | 2         | 33          |
| % Trucks           | 0                      | 1.2        | 0         | 1                              | 0.7        | 0        | 0                               | 0        | 2.7        | 0                                | 0          | 14.3      | 1.8         |

| Start Time                                                        | Route 3A<br>From North |           |          |            | Cornet Stetson Rd<br>From East |           |       |            | Cornet Stetson Rd<br>From South |      |            |            | Old Oaken Bucket Rd<br>From West |           |          |            | Int. Total |
|-------------------------------------------------------------------|------------------------|-----------|----------|------------|--------------------------------|-----------|-------|------------|---------------------------------|------|------------|------------|----------------------------------|-----------|----------|------------|------------|
|                                                                   | Left                   | Thru      | Right    | App. Total | Left                           | Thru      | Right | App. Total | Left                            | Thru | Right      | App. Total | Left                             | Thru      | Right    | App. Total |            |
| <b>Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1</b> |                        |           |          |            |                                |           |       |            |                                 |      |            |            |                                  |           |          |            |            |
| <b>Peak Hour for Entire Intersection Begins at 07:45 AM</b>       |                        |           |          |            |                                |           |       |            |                                 |      |            |            |                                  |           |          |            |            |
| 07:45 AM                                                          | 0                      | 27        | <b>5</b> | 32         | 72                             | 16        | 0     | 88         | 2                               | 0    | 98         | 100        | 0                                | 11        | 0        | 11         | 231        |
| 08:00 AM                                                          | 0                      | 39        | 2        | 41         | <b>78</b>                      | 19        | 0     | <b>97</b>  | <b>4</b>                        | 0    | 122        | 126        | 0                                | <b>19</b> | <b>5</b> | <b>24</b>  | <b>288</b> |
| 08:15 AM                                                          | 0                      | <b>41</b> | 1        | <b>42</b>  | 75                             | 18        | 0     | 93         | 1                               | 0    | 112        | 113        | 0                                | 15        | 3        | 18         | 266        |
| 08:30 AM                                                          | 0                      | 13        | 1        | 14         | 58                             | <b>23</b> | 0     | 81         | 0                               | 0    | <b>134</b> | <b>134</b> | 0                                | 16        | 3        | 19         | 248        |
| <b>Total Volume</b>                                               | 0                      | 120       | 9        | 129        | 283                            | 76        | 0     | 359        | 7                               | 0    | 466        | 473        | 0                                | 61        | 11       | 72         | 1033       |
| % App. Total                                                      | 0                      | 93        | 7        |            | 78.8                           | 21.2      | 0     |            | 1.5                             | 0    | 98.5       |            | 0                                | 84.7      | 15.3     |            |            |
| PHF                                                               | .000                   | .732      | .450     | .768       | .907                           | .826      | .000  | .925       | .438                            | .000 | .869       | .882       | .000                             | .803      | .550     | .750       | .897       |
| Cars                                                              | 0                      | 118       | 9        | 127        | 279                            | 76        | 0     | 355        | 7                               | 0    | 453        | 460        | 0                                | 61        | 10       | 71         | 1013       |
| % Cars                                                            | 0                      | 98.3      | 100      | 98.4       | 98.6                           | 100       | 0     | 98.9       | 100                             | 0    | 97.2       | 97.3       | 0                                | 100       | 90.9     | 98.6       | 98.1       |
| Trucks                                                            | 0                      | 2         | 0        | 2          | 4                              | 0         | 0     | 4          | 0                               | 0    | 13         | 13         | 0                                | 0         | 1        | 1          | 20         |
| % Trucks                                                          | 0                      | 1.7       | 0        | 1.6        | 1.4                            | 0         | 0     | 1.1        | 0                               | 0    | 2.8        | 2.7        | 0                                | 0         | 9.1      | 1.4        | 1.9        |

N/S Street : Route 3A / Cornet Stetson Rd  
E/W Street : Cornet Stetson Rd / Old Oaken Buck  
City/State : Scituate, MA  
Weather : Clear

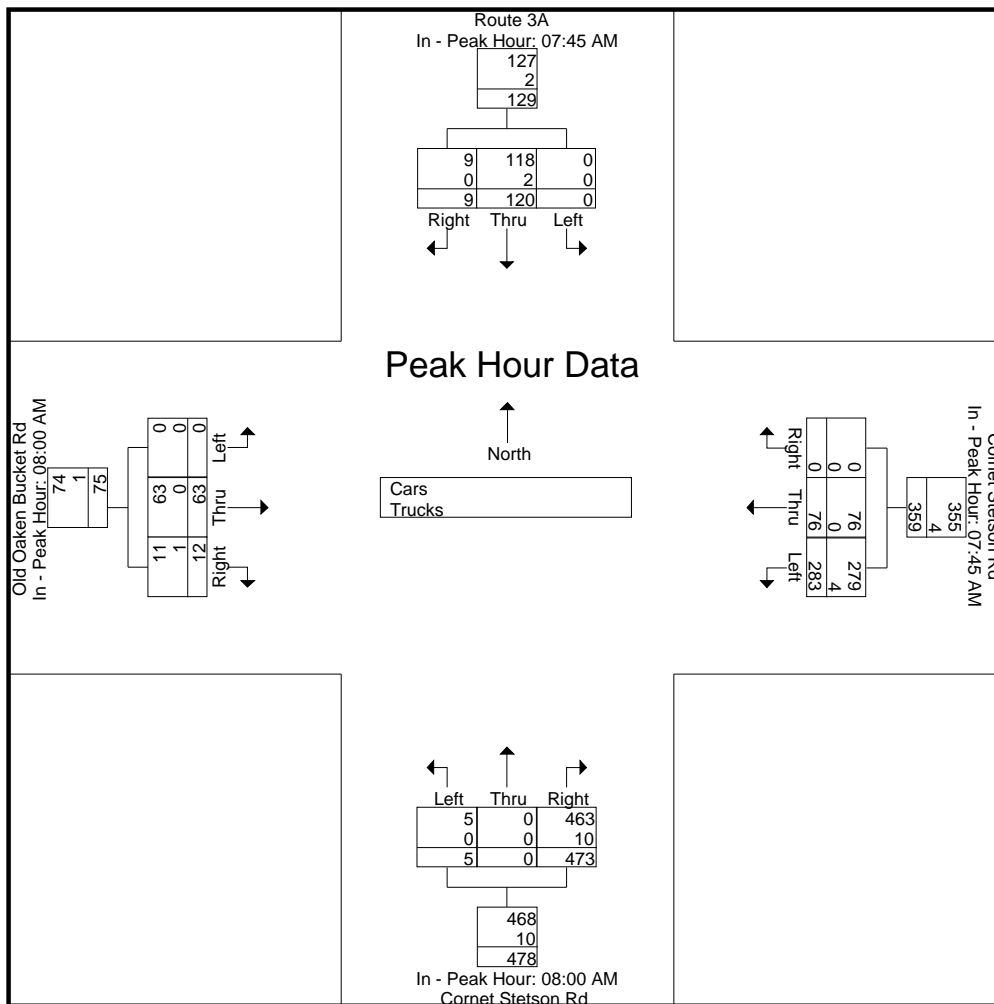


Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

|              | 07:45 AM |      |      |      | 08:00 AM |      |      |      | 08:00 AM |      |      |      |      |      |      |      |
|--------------|----------|------|------|------|----------|------|------|------|----------|------|------|------|------|------|------|------|
| +0 mins.     | 0        | 27   | 5    | 32   | 72       | 16   | 0    | 88   | 4        | 0    | 122  | 126  | 0    | 19   | 5    | 24   |
| +15 mins.    | 0        | 39   | 2    | 41   | 78       | 19   | 0    | 97   | 1        | 0    | 112  | 113  | 0    | 15   | 3    | 18   |
| +30 mins.    | 0        | 41   | 1    | 42   | 75       | 18   | 0    | 93   | 0        | 0    | 134  | 134  | 0    | 16   | 3    | 19   |
| +45 mins.    | 0        | 13   | 1    | 14   | 58       | 23   | 0    | 81   | 0        | 0    | 105  | 105  | 0    | 13   | 1    | 14   |
| Total Volume | 0        | 120  | 9    | 129  | 283      | 76   | 0    | 359  | 5        | 0    | 473  | 478  | 0    | 63   | 12   | 75   |
| % App. Total | 0        | 93   | 7    |      | 78.8     | 21.2 | 0    |      | 1        | 0    | 99   |      | 0    | 84   | 16   |      |
| PHF          | .000     | .732 | .450 | .768 | .907     | .826 | .000 | .925 | .313     | .000 | .882 | .892 | .000 | .829 | .600 | .781 |
| Cars         | 0        | 118  | 9    | 127  | 279      | 76   | 0    | 355  | 5        | 0    | 463  | 468  | 0    | 63   | 11   | 74   |
| % Cars       | 0        | 98.3 | 100  | 98.4 | 98.6     | 100  | 0    | 98.9 | 100      | 0    | 97.9 | 97.9 | 0    | 100  | 91.7 | 98.7 |
| Trucks       | 0        | 2    | 0    | 2    | 4        | 0    | 0    | 4    | 0        | 0    | 10   | 10   | 0    | 0    | 1    | 1    |
| % Trucks     | 0        | 1.7  | 0    | 1.6  | 1.4      | 0    | 0    | 1.1  | 0        | 0    | 2.1  | 2.1  | 0    | 0    | 8.3  | 1.3  |



N/S Street : Route 3A / Cornet Stetson Rd  
E/W Street : Cornet Stetson Rd / Old Oaken Buck  
City/State : Scituate, MA  
Weather : Clear



# Accurate Counts

978-664-2565

N/S Street : Route 3A / Cornet Stetson Rd  
 E/W Street : Cornet Stetson Rd / Old Oaken Buck  
 City/State : Scituate, MA  
 Weather : Clear

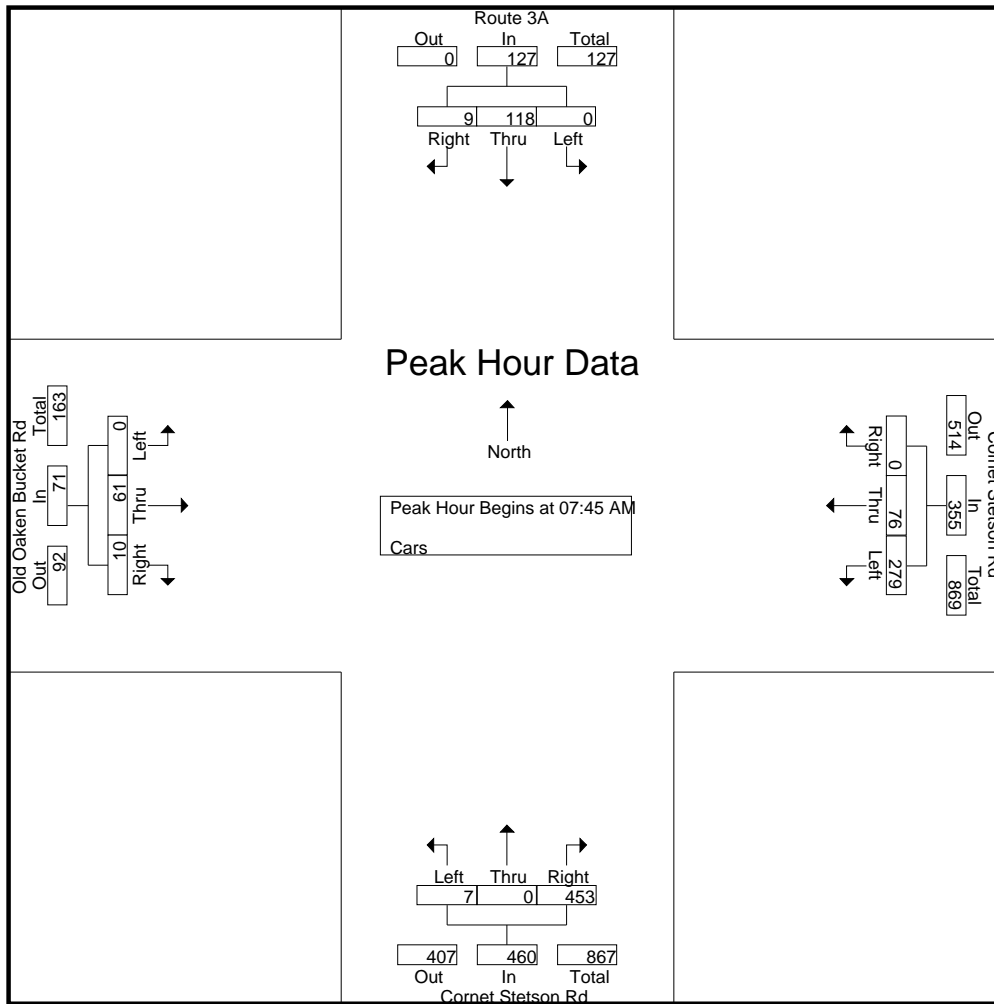
File Name : 90900002  
 Site Code : 90900002  
 Start Date : 11/3/2021  
 Page No : 4

## Groups Printed- Cars

| Start Time         | Route 3A<br>From North |            |           | Cornet Stetson Rd<br>From East |            |          | Cornet Stetson Rd<br>From South |          |            | Old Oaken Bucket Rd<br>From West |            |           | Int. Total  |
|--------------------|------------------------|------------|-----------|--------------------------------|------------|----------|---------------------------------|----------|------------|----------------------------------|------------|-----------|-------------|
|                    | Left                   | Thru       | Right     | Left                           | Thru       | Right    | Left                            | Thru     | Right      | Left                             | Thru       | Right     |             |
| 07:00 AM           | 0                      | 9          | 2         | 60                             | 19         | 0        | 0                               | 0        | 92         | 0                                | 14         | 0         | 196         |
| 07:15 AM           | 1                      | 9          | 1         | 44                             | 22         | 0        | 0                               | 0        | 76         | 0                                | 9          | 0         | 162         |
| 07:30 AM           | 0                      | 13         | 0         | 50                             | 19         | 0        | 0                               | 0        | 98         | 0                                | 15         | 1         | 196         |
| 07:45 AM           | 0                      | 27         | 5         | 71                             | 16         | 0        | 2                               | 0        | 95         | 0                                | 11         | 0         | 227         |
| <b>Total</b>       | <b>1</b>               | <b>58</b>  | <b>8</b>  | <b>225</b>                     | <b>76</b>  | <b>0</b> | <b>2</b>                        | <b>0</b> | <b>361</b> | <b>0</b>                         | <b>49</b>  | <b>1</b>  | <b>781</b>  |
| 08:00 AM           | 0                      | 37         | 2         | 77                             | 19         | 0        | 4                               | 0        | 119        | 0                                | 19         | 4         | 281         |
| 08:15 AM           | 0                      | 41         | 1         | 73                             | 18         | 0        | 1                               | 0        | 109        | 0                                | 15         | 3         | 261         |
| 08:30 AM           | 0                      | 13         | 1         | 58                             | 23         | 0        | 0                               | 0        | 130        | 0                                | 16         | 3         | 244         |
| 08:45 AM           | 0                      | 17         | 3         | 51                             | 15         | 0        | 0                               | 0        | 105        | 0                                | 13         | 1         | 205         |
| <b>Total</b>       | <b>0</b>               | <b>108</b> | <b>7</b>  | <b>259</b>                     | <b>75</b>  | <b>0</b> | <b>5</b>                        | <b>0</b> | <b>463</b> | <b>0</b>                         | <b>63</b>  | <b>11</b> | <b>991</b>  |
| <b>Grand Total</b> | <b>1</b>               | <b>166</b> | <b>15</b> | <b>484</b>                     | <b>151</b> | <b>0</b> | <b>7</b>                        | <b>0</b> | <b>824</b> | <b>0</b>                         | <b>112</b> | <b>12</b> | <b>1772</b> |
| Apprch %           | 0.5                    | 91.2       | 8.2       | 76.2                           | 23.8       | 0        | 0.8                             | 0        | 99.2       | 0                                | 90.3       | 9.7       |             |
| Total %            | 0.1                    | 9.4        | 0.8       | 27.3                           | 8.5        | 0        | 0.4                             | 0        | 46.5       | 0                                | 6.3        | 0.7       |             |

| Start Time                                                 | Route 3A<br>From North |           |          |            | Cornet Stetson Rd<br>From East |           |       |            | Cornet Stetson Rd<br>From South |      |            |            | Old Oaken Bucket Rd<br>From West |           |          |            | Int. Total |
|------------------------------------------------------------|------------------------|-----------|----------|------------|--------------------------------|-----------|-------|------------|---------------------------------|------|------------|------------|----------------------------------|-----------|----------|------------|------------|
|                                                            | Left                   | Thru      | Right    | App. Total | Left                           | Thru      | Right | App. Total | Left                            | Thru | Right      | App. Total | Left                             | Thru      | Right    | App. Total |            |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                        |           |          |            |                                |           |       |            |                                 |      |            |            |                                  |           |          |            |            |
| Peak Hour for Entire Intersection Begins at 07:45 AM       |                        |           |          |            |                                |           |       |            |                                 |      |            |            |                                  |           |          |            |            |
| 07:45 AM                                                   | 0                      | 27        | <b>5</b> | 32         | 71                             | 16        | 0     | 87         | 2                               | 0    | 95         | 97         | 0                                | 11        | 0        | 11         | 227        |
| 08:00 AM                                                   | 0                      | 37        | 2        | 39         | <b>77</b>                      | 19        | 0     | <b>96</b>  | <b>4</b>                        | 0    | 119        | 123        | 0                                | <b>19</b> | <b>4</b> | <b>23</b>  | <b>281</b> |
| 08:15 AM                                                   | 0                      | <b>41</b> | 1        | <b>42</b>  | 73                             | 18        | 0     | 91         | 1                               | 0    | 109        | 110        | 0                                | 15        | 3        | 18         | 261        |
| 08:30 AM                                                   | 0                      | 13        | 1        | 14         | 58                             | <b>23</b> | 0     | 81         | 0                               | 0    | <b>130</b> | <b>130</b> | 0                                | 16        | 3        | 19         | 244        |
| Total Volume                                               | 0                      | 118       | 9        | 127        | 279                            | 76        | 0     | 355        | 7                               | 0    | 453        | 460        | 0                                | 61        | 10       | 71         | 1013       |
| % App. Total                                               | 0                      | 92.9      | 7.1      |            | 78.6                           | 21.4      | 0     |            | 1.5                             | 0    | 98.5       |            | 0                                | 85.9      | 14.1     |            |            |
| PHF                                                        | .000                   | .720      | .450     | .756       | .906                           | .826      | .000  | .924       | .438                            | .000 | .871       | .885       | .000                             | .803      | .625     | .772       | .901       |

N/S Street : Route 3A / Cornet Stetson Rd  
E/W Street : Cornet Stetson Rd / Old Oaken Buck  
City/State : Scituate, MA  
Weather : Clear



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

|              | 07:45 AM |      |      |      | 07:45 AM |      |      |      | 08:00 AM |      |      |      | 08:00 AM |      |      |      |
|--------------|----------|------|------|------|----------|------|------|------|----------|------|------|------|----------|------|------|------|
| +0 mins.     | 0        | 27   | 5    | 32   | 71       | 16   | 0    | 87   | 4        | 0    | 119  | 123  | 0        | 19   | 4    | 23   |
| +15 mins.    | 0        | 37   | 2    | 39   | 77       | 19   | 0    | 96   | 1        | 0    | 109  | 110  | 0        | 15   | 3    | 18   |
| +30 mins.    | 0        | 41   | 1    | 42   | 73       | 18   | 0    | 91   | 0        | 0    | 130  | 130  | 0        | 16   | 3    | 19   |
| +45 mins.    | 0        | 13   | 1    | 14   | 58       | 23   | 0    | 81   | 0        | 0    | 105  | 105  | 0        | 13   | 1    | 14   |
| Total Volume | 0        | 118  | 9    | 127  | 279      | 76   | 0    | 355  | 5        | 0    | 463  | 468  | 0        | 63   | 11   | 74   |
| % App. Total | 0        | 92.9 | 7.1  |      | 78.6     | 21.4 | 0    |      | 1.1      | 0    | 98.9 |      | 0        | 85.1 | 14.9 |      |
| PHF          | .000     | .720 | .450 | .756 | .906     | .826 | .000 | .924 | .313     | .000 | .890 | .900 | .000     | .829 | .688 | .804 |

# Accurate Counts

978-664-2565

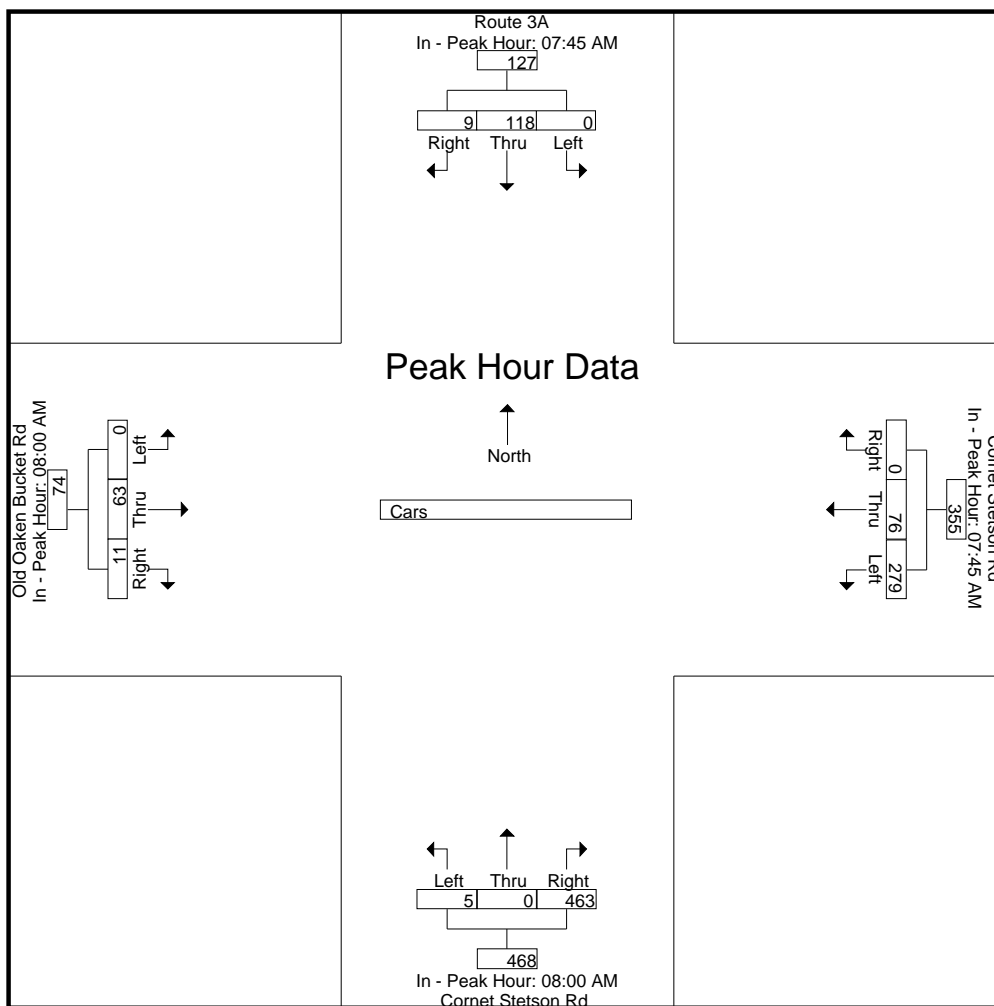
File Name : 90900002

Site Code : 90900002

Start Date : 11/3/2021

Page No : 6

N/S Street : Route 3A / Cornet Stetson Rd  
E/W Street : Cornet Stetson Rd / Old Oaken Buck  
City/State : Scituate, MA  
Weather : Clear



# Accurate Counts

978-664-2565

N/S Street : Route 3A / Cornet Stetson Rd  
 E/W Street : Cornet Stetson Rd / Old Oaken Buck  
 City/State : Scituate, MA  
 Weather : Clear

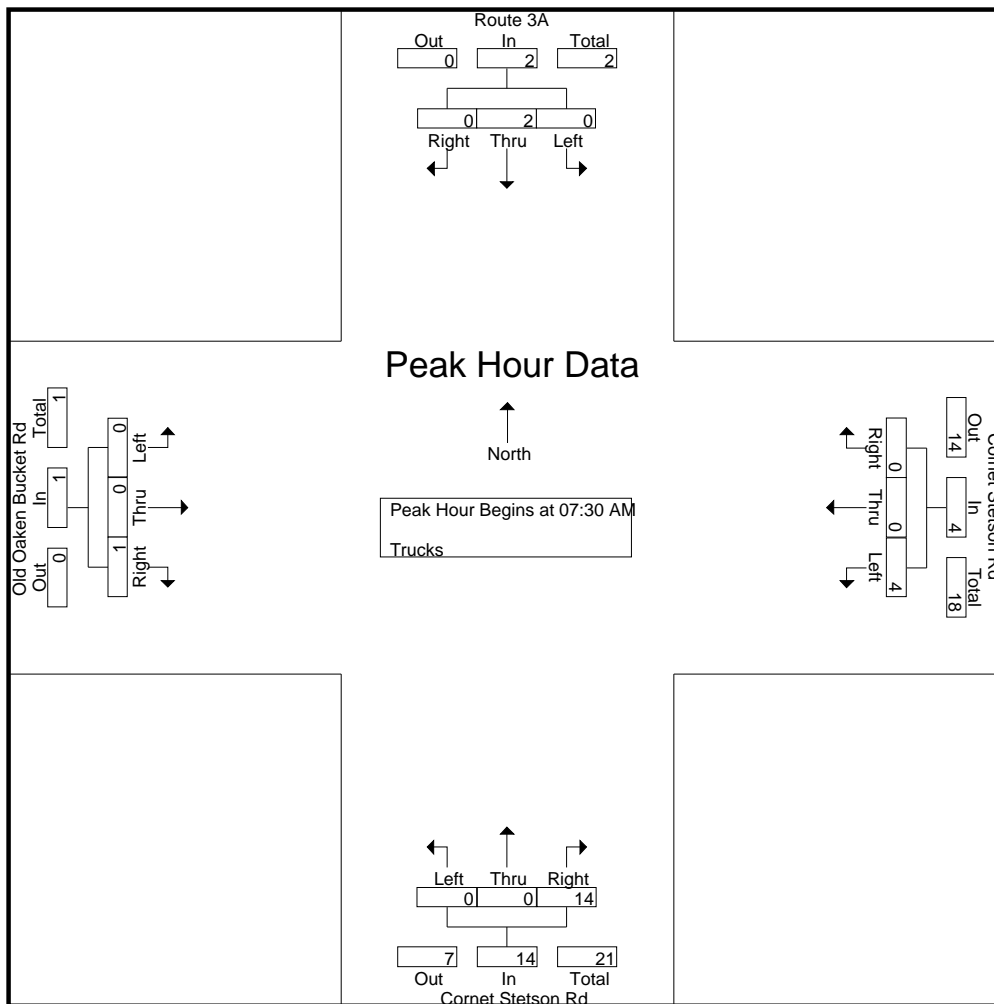
File Name : 90900002  
 Site Code : 90900002  
 Start Date : 11/3/2021  
 Page No : 7

## Groups Printed- Trucks

| Start Time         | Route 3A<br>From North |      |       | Cornet Stetson Rd<br>From East |      |       | Cornet Stetson Rd<br>From South |      |       | Old Oaken Bucket Rd<br>From West |      |       | Int. Total |
|--------------------|------------------------|------|-------|--------------------------------|------|-------|---------------------------------|------|-------|----------------------------------|------|-------|------------|
|                    | Left                   | Thru | Right | Left                           | Thru | Right | Left                            | Thru | Right | Left                             | Thru | Right |            |
| 07:00 AM           | 0                      | 0    | 0     | 1                              | 1    | 0     | 0                               | 0    | 3     | 0                                | 0    | 0     | 5          |
| 07:15 AM           | 0                      | 0    | 0     | 0                              | 0    | 0     | 0                               | 0    | 2     | 0                                | 0    | 1     | 3          |
| 07:30 AM           | 0                      | 0    | 0     | 0                              | 0    | 0     | 0                               | 0    | 5     | 0                                | 0    | 0     | 5          |
| 07:45 AM           | 0                      | 0    | 0     | 1                              | 0    | 0     | 0                               | 0    | 3     | 0                                | 0    | 0     | 4          |
| <b>Total</b>       | 0                      | 0    | 0     | 2                              | 1    | 0     | 0                               | 0    | 13    | 0                                | 0    | 1     | 17         |
| 08:00 AM           | 0                      | 2    | 0     | 1                              | 0    | 0     | 0                               | 0    | 3     | 0                                | 0    | 1     | 7          |
| 08:15 AM           | 0                      | 0    | 0     | 2                              | 0    | 0     | 0                               | 0    | 3     | 0                                | 0    | 0     | 5          |
| 08:30 AM           | 0                      | 0    | 0     | 0                              | 0    | 0     | 0                               | 0    | 4     | 0                                | 0    | 0     | 4          |
| 08:45 AM           | 0                      | 0    | 0     | 0                              | 0    | 0     | 0                               | 0    | 0     | 0                                | 0    | 0     | 0          |
| <b>Total</b>       | 0                      | 2    | 0     | 3                              | 0    | 0     | 0                               | 0    | 10    | 0                                | 0    | 1     | 16         |
| <b>Grand Total</b> | 0                      | 2    | 0     | 5                              | 1    | 0     | 0                               | 0    | 23    | 0                                | 0    | 2     | 33         |
| Apprch %           | 0                      | 100  | 0     | 83.3                           | 16.7 | 0     | 0                               | 0    | 100   | 0                                | 0    | 100   |            |
| Total %            | 0                      | 6.1  | 0     | 15.2                           | 3    | 0     | 0                               | 0    | 69.7  | 0                                | 0    | 6.1   |            |

| Start Time                                                 | Route 3A<br>From North |      |       |            | Cornet Stetson Rd<br>From East |      |       |            | Cornet Stetson Rd<br>From South |      |       |            | Old Oaken Bucket Rd<br>From West |      |       |            | Int. Total |      |
|------------------------------------------------------------|------------------------|------|-------|------------|--------------------------------|------|-------|------------|---------------------------------|------|-------|------------|----------------------------------|------|-------|------------|------------|------|
|                                                            | Left                   | Thru | Right | App. Total | Left                           | Thru | Right | App. Total | Left                            | Thru | Right | App. Total | Left                             | Thru | Right | App. Total |            |      |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                        |      |       |            |                                |      |       |            |                                 |      |       |            |                                  |      |       |            |            |      |
| Peak Hour for Entire Intersection Begins at 07:30 AM       |                        |      |       |            |                                |      |       |            |                                 |      |       |            |                                  |      |       |            |            |      |
| 07:30 AM                                                   | 0                      | 0    | 0     | 0          | 0                              | 0    | 0     | 0          | 0                               | 0    | 0     | 5          | 5                                | 0    | 0     | 0          | 0          | 5    |
| 07:45 AM                                                   | 0                      | 0    | 0     | 0          | 1                              | 0    | 0     | 1          | 0                               | 0    | 3     | 3          | 0                                | 0    | 0     | 0          | 0          | 4    |
| 08:00 AM                                                   | 0                      | 2    | 0     | 2          | 1                              | 0    | 0     | 1          | 0                               | 0    | 3     | 3          | 0                                | 0    | 1     | 1          | 0          | 7    |
| 08:15 AM                                                   | 0                      | 0    | 0     | 0          | 2                              | 0    | 0     | 2          | 0                               | 0    | 3     | 3          | 0                                | 0    | 0     | 0          | 0          | 5    |
| <b>Total Volume</b>                                        | 0                      | 2    | 0     | 2          | 4                              | 0    | 0     | 4          | 0                               | 0    | 14    | 14         | 0                                | 0    | 1     | 1          | 0          | 21   |
| <b>% App. Total</b>                                        | 0                      | 100  | 0     | 0          | 100                            | 0    | 0     | 0          | 0                               | 0    | 100   | 100        | 0                                | 0    | 100   | 0          | 0          | 0    |
| PHF                                                        | .000                   | .250 | .000  | .250       | .500                           | .000 | .000  | .500       | .000                            | .000 | .700  | .700       | .000                             | .000 | .250  | .250       | .000       | .750 |

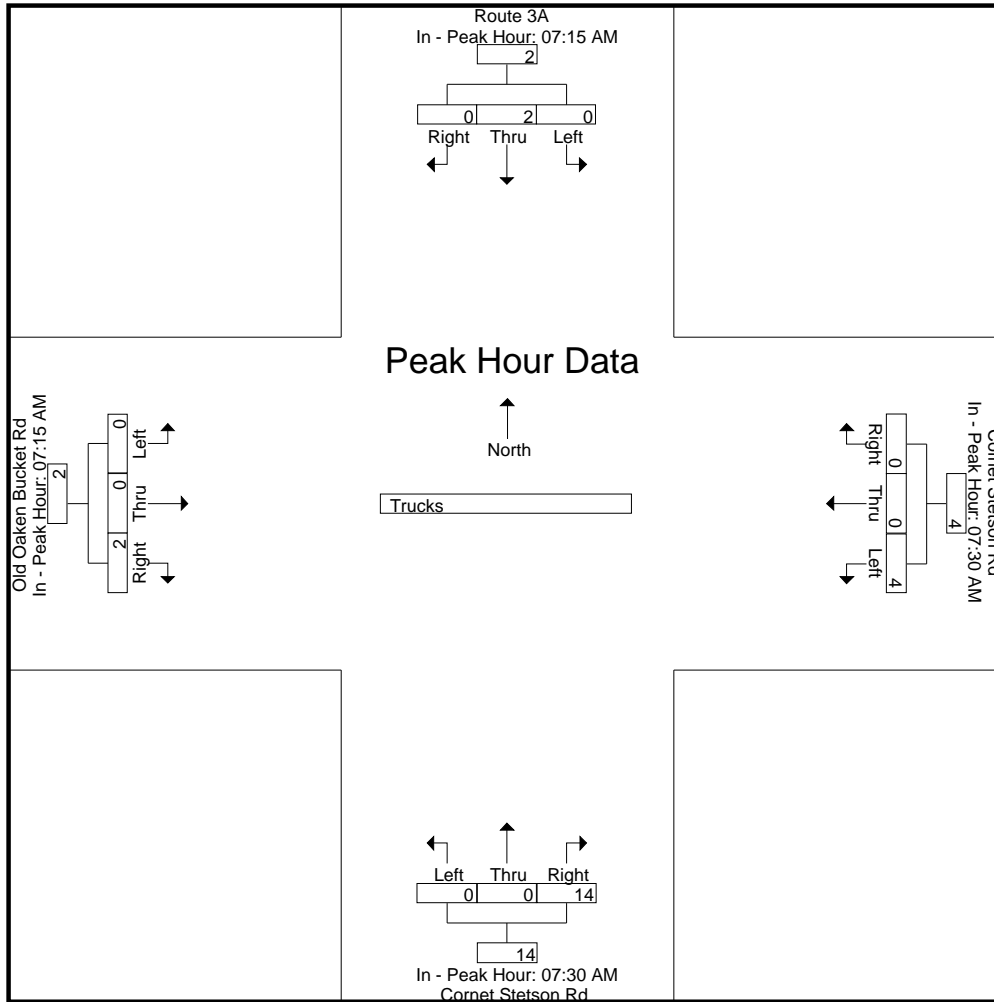
N/S Street : Route 3A / Cornet Stetson Rd  
E/W Street : Cornet Stetson Rd / Old Oaken Buck  
City/State : Scituate, MA  
Weather : Clear



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

|              | 07:15 AM |      |      |      | 07:30 AM |      |      |      | 07:30 AM |      |      |      | 07:15 AM |      |      |      |
|--------------|----------|------|------|------|----------|------|------|------|----------|------|------|------|----------|------|------|------|
| +0 mins.     | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    | 0        | 0    | 5    | 5    | 0        | 0    | 1    | 1    |
| +15 mins.    | 0        | 0    | 0    | 0    | 1        | 0    | 0    | 1    | 0        | 0    | 3    | 3    | 0        | 0    | 0    | 0    |
| +30 mins.    | 0        | 0    | 0    | 0    | 1        | 0    | 0    | 1    | 0        | 0    | 3    | 3    | 0        | 0    | 0    | 0    |
| +45 mins.    | 0        | 2    | 0    | 2    | 2        | 0    | 0    | 2    | 0        | 0    | 3    | 3    | 0        | 0    | 1    | 1    |
| Total Volume | 0        | 2    | 0    | 2    | 4        | 0    | 0    | 4    | 0        | 0    | 14   | 14   | 0        | 0    | 2    | 2    |
| % App. Total | 0        | 100  | 0    |      | 100      | 0    | 0    |      | 0        | 0    | 100  |      | 0        | 0    | 100  |      |
| PHF          | .000     | .250 | .000 | .250 | .500     | .000 | .000 | .500 | .000     | .000 | .700 | .700 | .000     | .000 | .500 | .500 |

N/S Street : Route 3A / Cornet Stetson Rd  
E/W Street : Cornet Stetson Rd / Old Oaken Buck  
City/State : Scituate, MA  
Weather : Clear



**Accurate Counts**  
978-664-2565

N/S Street : Route 3A / Cornet Stetson Rd  
E/W Street : Cornet Stetson Rd / Old Oaken Buck  
City/State : Scituate, MA  
Weather : Clear

File Name : 90900002  
Site Code : 90900002  
Start Date : 11/3/2021  
Page No : 10

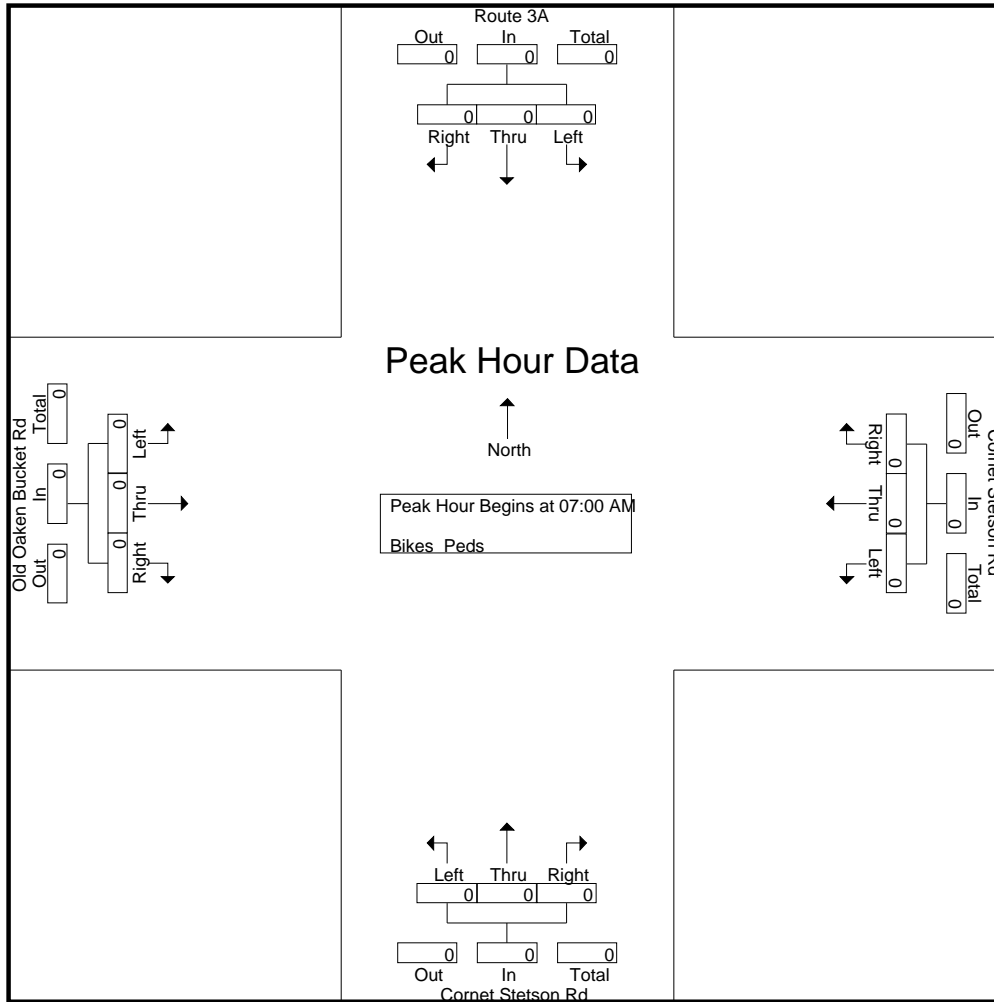
Groups Printed- Bikes Peds

| Start Time  | Route 3A<br>From North |      |       |      | Cornet Stetson Rd<br>From East |      |       |      | Cornet Stetson Rd<br>From South |      |       |      | Old Oaken Bucket Rd<br>From West |      |       |      | Exclu. Total | Inclu. Total | Int. Total |
|-------------|------------------------|------|-------|------|--------------------------------|------|-------|------|---------------------------------|------|-------|------|----------------------------------|------|-------|------|--------------|--------------|------------|
|             | Left                   | Thru | Right | Peds | Left                           | Thru | Right | Peds | Left                            | Thru | Right | Peds | Left                             | Thru | Right | Peds |              |              |            |
| 07:00 AM    | 0                      | 0    | 0     | 0    | 0                              | 0    | 0     | 0    | 0                               | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0            | 0            | 0          |
| 07:15 AM    | 0                      | 0    | 0     | 0    | 0                              | 0    | 0     | 0    | 0                               | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0            | 0            | 0          |
| 07:30 AM    | 0                      | 0    | 0     | 0    | 0                              | 0    | 0     | 0    | 0                               | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0            | 0            | 0          |
| 07:45 AM    | 0                      | 0    | 0     | 0    | 0                              | 0    | 0     | 0    | 0                               | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0            | 0            | 0          |
| Total       | 0                      | 0    | 0     | 0    | 0                              | 0    | 0     | 0    | 0                               | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0            | 0            | 0          |
| 08:00 AM    | 0                      | 0    | 0     | 1    | 0                              | 0    | 0     | 0    | 0                               | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 1            | 0            | 1          |
| 08:15 AM    | 0                      | 0    | 0     | 0    | 0                              | 0    | 0     | 0    | 0                               | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0            | 0            | 0          |
| 08:30 AM    | 0                      | 0    | 0     | 0    | 0                              | 0    | 0     | 0    | 0                               | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0            | 0            | 0          |
| 08:45 AM    | 0                      | 0    | 0     | 0    | 0                              | 0    | 0     | 0    | 0                               | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0            | 0            | 0          |
| Total       | 0                      | 0    | 0     | 1    | 0                              | 0    | 0     | 0    | 0                               | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 1            | 0            | 1          |
| Grand Total | 0                      | 0    | 0     | 1    | 0                              | 0    | 0     | 0    | 0                               | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 1            | 0            | 1          |
| Apprch %    | 0                      | 0    | 0     |      | 0                              | 0    | 0     |      | 0                               | 0    | 0     |      | 0                                | 0    | 0     |      |              |              |            |
| Total %     |                        |      |       |      |                                |      |       |      |                                 |      |       |      |                                  |      |       |      | 100          | 0            |            |

| Start Time                                                 | Route 3A<br>From North |      |       |            | Cornet Stetson Rd<br>From East |      |       |            | Cornet Stetson Rd<br>From South |      |       |            | Old Oaken Bucket Rd<br>From West |      |       |            | Int. Total |      |
|------------------------------------------------------------|------------------------|------|-------|------------|--------------------------------|------|-------|------------|---------------------------------|------|-------|------------|----------------------------------|------|-------|------------|------------|------|
|                                                            | Left                   | Thru | Right | App. Total | Left                           | Thru | Right | App. Total | Left                            | Thru | Right | App. Total | Left                             | Thru | Right | App. Total |            |      |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                        |      |       |            |                                |      |       |            |                                 |      |       |            |                                  |      |       |            |            |      |
| Peak Hour for Entire Intersection Begins at 07:00 AM       |                        |      |       |            |                                |      |       |            |                                 |      |       |            |                                  |      |       |            |            |      |
| 07:00 AM                                                   | 0                      | 0    | 0     | 0          | 0                              | 0    | 0     | 0          | 0                               | 0    | 0     | 0          | 0                                | 0    | 0     | 0          | 0          | 0    |
| 07:15 AM                                                   | 0                      | 0    | 0     | 0          | 0                              | 0    | 0     | 0          | 0                               | 0    | 0     | 0          | 0                                | 0    | 0     | 0          | 0          | 0    |
| 07:30 AM                                                   | 0                      | 0    | 0     | 0          | 0                              | 0    | 0     | 0          | 0                               | 0    | 0     | 0          | 0                                | 0    | 0     | 0          | 0          | 0    |
| 07:45 AM                                                   | 0                      | 0    | 0     | 0          | 0                              | 0    | 0     | 0          | 0                               | 0    | 0     | 0          | 0                                | 0    | 0     | 0          | 0          | 0    |
| Total Volume                                               | 0                      | 0    | 0     | 0          | 0                              | 0    | 0     | 0          | 0                               | 0    | 0     | 0          | 0                                | 0    | 0     | 0          | 0          | 0    |
| % App. Total                                               | 0                      | 0    | 0     |            | 0                              | 0    | 0     |            | 0                               | 0    | 0     |            | 0                                | 0    | 0     |            |            |      |
| PHF                                                        | .000                   | .000 | .000  | .000       | .000                           | .000 | .000  | .000       | .000                            | .000 | .000  | .000       | .000                             | .000 | .000  | .000       | .000       | .000 |



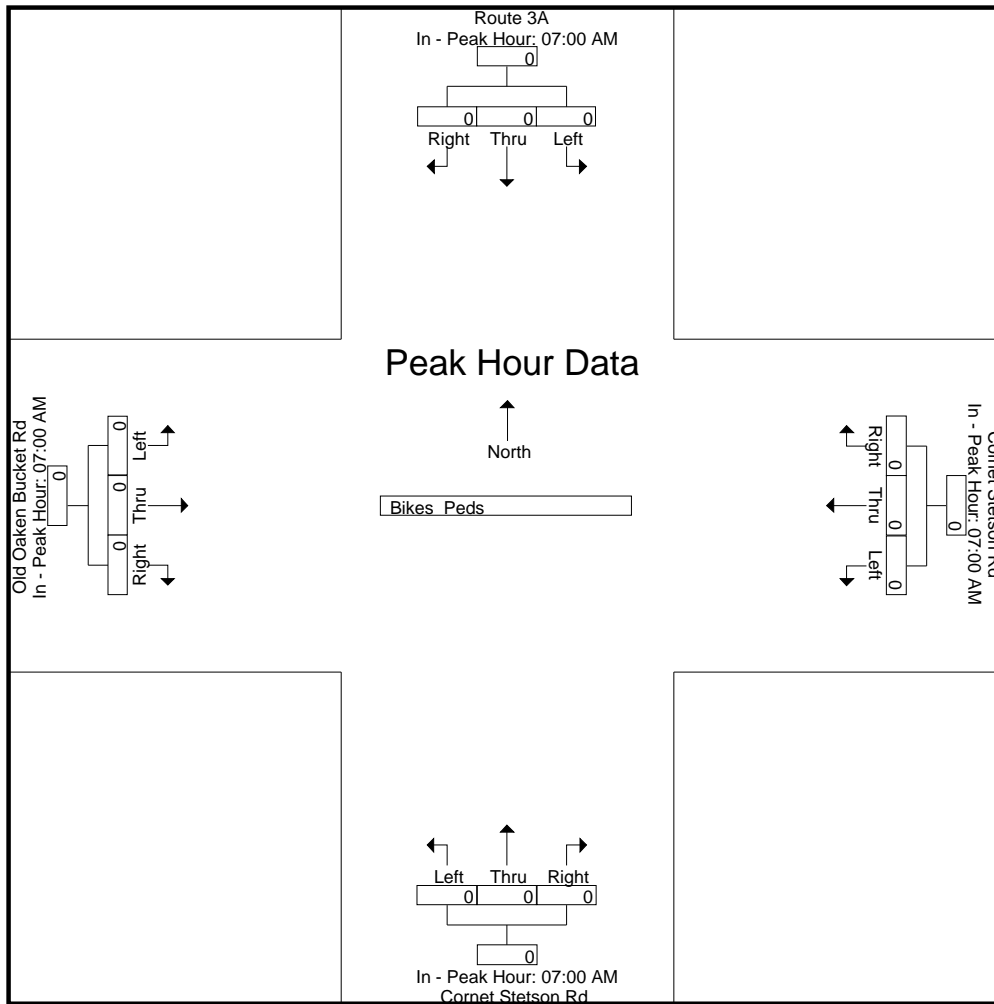
N/S Street : Route 3A / Cornet Stetson Rd  
E/W Street : Cornet Stetson Rd / Old Oaken Buck  
City/State : Scituate, MA  
Weather : Clear



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

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

N/S Street : Route 3A / Cornet Stetson Rd  
E/W Street : Cornet Stetson Rd / Old Oaken Buck  
City/State : Scituate, MA  
Weather : Clear



# Accurate Counts

978-664-2565

N/S Street : Route 3A / Cornet Stetson Rd  
 E/W Street : Cornet Stetson Rd / Old Oaken Buck  
 City/State : Scituate, MA  
 Weather : Clear

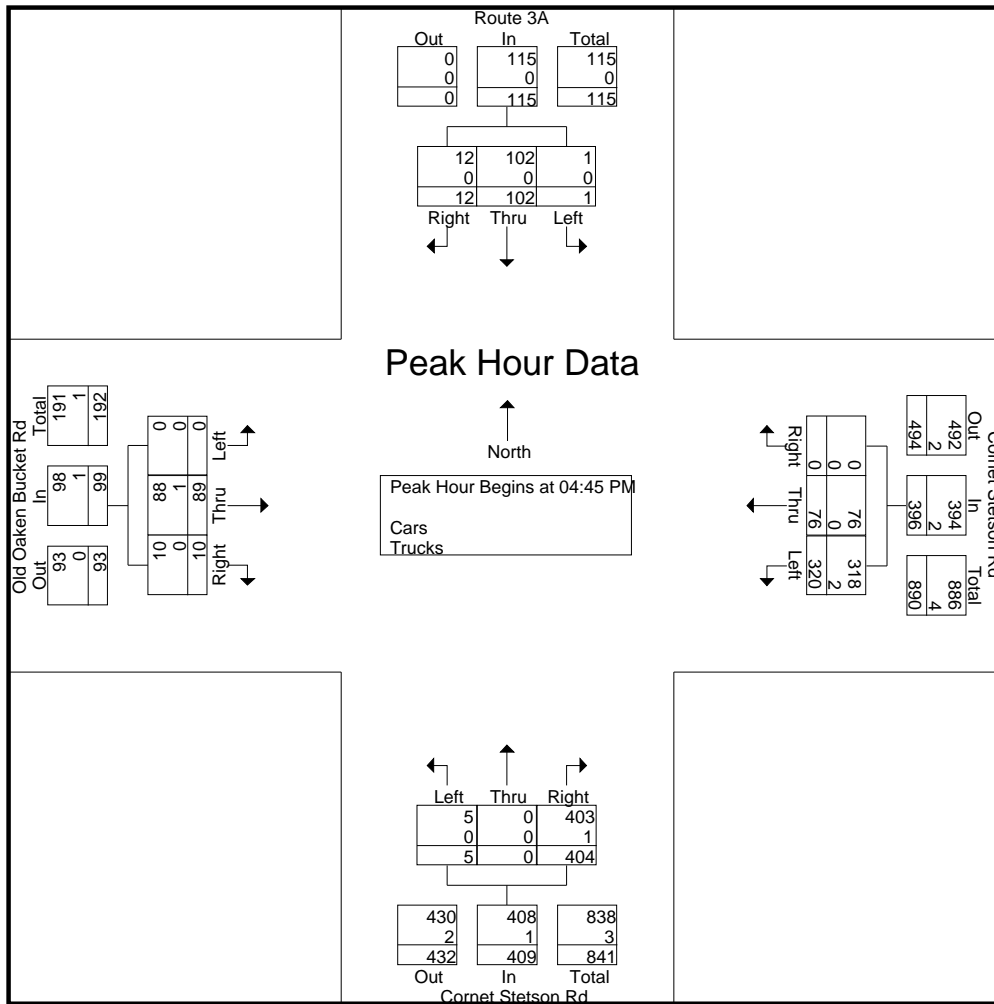
File Name : 90900002  
 Site Code : 90900002  
 Start Date : 11/3/2021  
 Page No : 1

### Groups Printed- Cars - Trucks

| Start Time         | Route 3A<br>From North |            |           | Cornet Stetson Rd<br>From East |            |          | Cornet Stetson Rd<br>From South |          |            | Old Oaken Bucket Rd<br>From West |            |           | Int. Total  |
|--------------------|------------------------|------------|-----------|--------------------------------|------------|----------|---------------------------------|----------|------------|----------------------------------|------------|-----------|-------------|
|                    | Left                   | Thru       | Right     | Left                           | Thru       | Right    | Left                            | Thru     | Right      | Left                             | Thru       | Right     |             |
| 04:00 PM           | 0                      | 24         | 1         | 95                             | 11         | 0        | 2                               | 0        | 106        | 0                                | 27         | 1         | 267         |
| 04:15 PM           | 0                      | 29         | 2         | 79                             | 18         | 0        | 1                               | 0        | 108        | 0                                | 32         | 1         | 270         |
| 04:30 PM           | 0                      | 23         | 0         | 76                             | 13         | 0        | 2                               | 0        | 109        | 0                                | 25         | 0         | 248         |
| 04:45 PM           | 0                      | 20         | 2         | 68                             | 14         | 0        | 2                               | 0        | 104        | 0                                | 20         | 3         | 233         |
| <b>Total</b>       | <b>0</b>               | <b>96</b>  | <b>5</b>  | <b>318</b>                     | <b>56</b>  | <b>0</b> | <b>7</b>                        | <b>0</b> | <b>427</b> | <b>0</b>                         | <b>104</b> | <b>5</b>  | <b>1018</b> |
| 05:00 PM           | 1                      | 26         | 3         | 77                             | 15         | 0        | 0                               | 0        | 92         | 0                                | 24         | 2         | 240         |
| 05:15 PM           | 0                      | 37         | 2         | 94                             | 34         | 0        | 0                               | 0        | 103        | 0                                | 20         | 2         | 292         |
| 05:30 PM           | 0                      | 19         | 5         | 81                             | 13         | 0        | 3                               | 0        | 105        | 0                                | 25         | 3         | 254         |
| 05:45 PM           | 0                      | 13         | 3         | 64                             | 13         | 0        | 0                               | 0        | 115        | 0                                | 21         | 1         | 230         |
| <b>Total</b>       | <b>1</b>               | <b>95</b>  | <b>13</b> | <b>316</b>                     | <b>75</b>  | <b>0</b> | <b>3</b>                        | <b>0</b> | <b>415</b> | <b>0</b>                         | <b>90</b>  | <b>8</b>  | <b>1016</b> |
| <b>Grand Total</b> | <b>1</b>               | <b>191</b> | <b>18</b> | <b>634</b>                     | <b>131</b> | <b>0</b> | <b>10</b>                       | <b>0</b> | <b>842</b> | <b>0</b>                         | <b>194</b> | <b>13</b> | <b>2034</b> |
| Apprch %           | 0.5                    | 91         | 8.6       | 82.9                           | 17.1       | 0        | 1.2                             | 0        | 98.8       | 0                                | 93.7       | 6.3       |             |
| Total %            | 0                      | 9.4        | 0.9       | 31.2                           | 6.4        | 0        | 0.5                             | 0        | 41.4       | 0                                | 9.5        | 0.6       |             |
| Cars               | 1                      | 190        | 18        | 627                            | 130        | 0        | 10                              | 0        | 840        | 0                                | 193        | 13        | 2022        |
| % Cars             | 100                    | 99.5       | 100       | 98.9                           | 99.2       | 0        | 100                             | 0        | 99.8       | 0                                | 99.5       | 100       | 99.4        |
| Trucks             | 0                      | 1          | 0         | 7                              | 1          | 0        | 0                               | 0        | 2          | 0                                | 1          | 0         | 12          |
| % Trucks           | 0                      | 0.5        | 0         | 1.1                            | 0.8        | 0        | 0                               | 0        | 0.2        | 0                                | 0.5        | 0         | 0.6         |

| Start Time                                                 | Route 3A<br>From North |            |           |            | Cornet Stetson Rd<br>From East |           |          |            | Cornet Stetson Rd<br>From South |          |            |            | Old Oaken Bucket Rd<br>From West |           |           |            | Int. Total  |
|------------------------------------------------------------|------------------------|------------|-----------|------------|--------------------------------|-----------|----------|------------|---------------------------------|----------|------------|------------|----------------------------------|-----------|-----------|------------|-------------|
|                                                            | Left                   | Thru       | Right     | App. Total | Left                           | Thru      | Right    | App. Total | Left                            | Thru     | Right      | App. Total | Left                             | Thru      | Right     | App. Total |             |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                        |            |           |            |                                |           |          |            |                                 |          |            |            |                                  |           |           |            |             |
| Peak Hour for Entire Intersection Begins at 04:45 PM       |                        |            |           |            |                                |           |          |            |                                 |          |            |            |                                  |           |           |            |             |
| 04:45 PM                                                   | 0                      | 20         | 2         | 22         | 68                             | 14        | 0        | 82         | 2                               | 0        | 104        | 106        | 0                                | 20        | <b>3</b>  | 23         | 233         |
| 05:00 PM                                                   | <b>1</b>               | 26         | 3         | 30         | 77                             | 15        | 0        | 92         | 0                               | 0        | 92         | 92         | 0                                | 24        | 2         | 26         | 240         |
| 05:15 PM                                                   | 0                      | <b>37</b>  | 2         | <b>39</b>  | <b>94</b>                      | <b>34</b> | 0        | <b>128</b> | 0                               | 0        | 103        | 103        | 0                                | 20        | 2         | 22         | <b>292</b>  |
| 05:30 PM                                                   | 0                      | 19         | <b>5</b>  | 24         | 81                             | 13        | 0        | 94         | <b>3</b>                        | 0        | <b>105</b> | <b>108</b> | 0                                | <b>25</b> | 3         | <b>28</b>  | 254         |
| <b>Total Volume</b>                                        | <b>1</b>               | <b>102</b> | <b>12</b> | <b>115</b> | <b>320</b>                     | <b>76</b> | <b>0</b> | <b>396</b> | <b>5</b>                        | <b>0</b> | <b>404</b> | <b>409</b> | <b>0</b>                         | <b>89</b> | <b>10</b> | <b>99</b>  | <b>1019</b> |
| % App. Total                                               | 0.9                    | 88.7       | 10.4      |            | 80.8                           | 19.2      | 0        |            | 1.2                             | 0        | 98.8       |            | 0                                | 89.9      | 10.1      |            |             |
| PHF                                                        | .250                   | .689       | .600      | .737       | .851                           | .559      | .000     | .773       | .417                            | .000     | .962       | .947       | .000                             | .890      | .833      | .884       | .872        |
| Cars                                                       | 1                      | 102        | 12        | 115        | 318                            | 76        | 0        | 394        | 5                               | 0        | 403        | 408        | 0                                | 88        | 10        | 98         | 1015        |
| % Cars                                                     | 100                    | 100        | 100       | 100        | 99.4                           | 100       | 0        | 99.5       | 100                             | 0        | 99.8       | 99.8       | 0                                | 98.9      | 100       | 99.0       | 99.6        |
| Trucks                                                     | 0                      | 0          | 0         | 0          | 2                              | 0         | 0        | 2          | 0                               | 0        | 1          | 1          | 0                                | 1         | 0         | 1          | 4           |
| % Trucks                                                   | 0                      | 0          | 0         | 0          | 0.6                            | 0         | 0        | 0.5        | 0                               | 0        | 0.2        | 0.2        | 0                                | 1.1       | 0         | 1.0        | 0.4         |

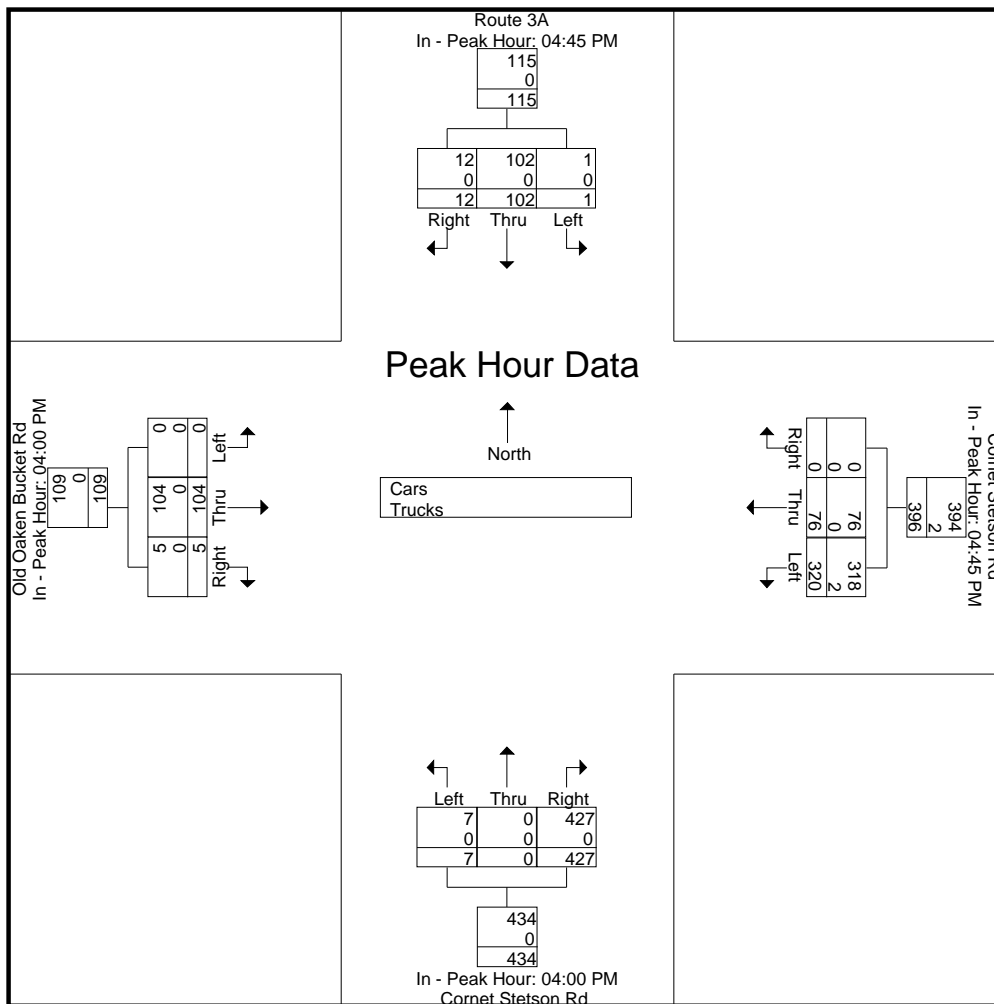
N/S Street : Route 3A / Cornet Stetson Rd  
E/W Street : Cornet Stetson Rd / Old Oaken Buck  
City/State : Scituate, MA  
Weather : Clear



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

|              | 04:45 PM |      |      |      | 04:00 PM |      |      |      | 04:00 PM |      |      |      |      |      |      |      |
|--------------|----------|------|------|------|----------|------|------|------|----------|------|------|------|------|------|------|------|
| +0 mins.     | 0        | 20   | 2    | 22   | 68       | 14   | 0    | 82   | 2        | 0    | 106  | 108  | 0    | 27   | 1    | 28   |
| +15 mins.    | 1        | 26   | 3    | 30   | 77       | 15   | 0    | 92   | 1        | 0    | 108  | 109  | 0    | 32   | 1    | 33   |
| +30 mins.    | 0        | 37   | 2    | 39   | 94       | 34   | 0    | 128  | 2        | 0    | 109  | 111  | 0    | 25   | 0    | 25   |
| +45 mins.    | 0        | 19   | 5    | 24   | 81       | 13   | 0    | 94   | 2        | 0    | 104  | 106  | 0    | 20   | 3    | 23   |
| Total Volume | 1        | 102  | 12   | 115  | 320      | 76   | 0    | 396  | 7        | 0    | 427  | 434  | 0    | 104  | 5    | 109  |
| % App. Total | 0.9      | 88.7 | 10.4 |      | 80.8     | 19.2 | 0    |      | 1.6      | 0    | 98.4 |      | 0    | 95.4 | 4.6  |      |
| PHF          | .250     | .689 | .600 | .737 | .851     | .559 | .000 | .773 | .875     | .000 | .979 | .977 | .000 | .813 | .417 | .826 |
| Cars         | 1        | 102  | 12   | 115  | 318      | 76   | 0    | 394  | 7        | 0    | 427  | 434  | 0    | 104  | 5    | 109  |
| % Cars       | 100      | 100  | 100  | 100  | 99.4     | 100  | 0    | 99.5 | 100      | 0    | 100  | 100  | 0    | 100  | 100  | 100  |
| Trucks       | 0        | 0    | 0    | 0    | 2        | 0    | 0    | 2    | 0        | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| % Trucks     | 0        | 0    | 0    | 0    | 0.6      | 0    | 0    | 0.5  | 0        | 0    | 0    | 0    | 0    | 0    | 0    | 0    |

N/S Street : Route 3A / Cornet Stetson Rd  
E/W Street : Cornet Stetson Rd / Old Oaken Buck  
City/State : Scituate, MA  
Weather : Clear



# Accurate Counts

978-664-2565

N/S Street : Route 3A / Cornet Stetson Rd  
 E/W Street : Cornet Stetson Rd / Old Oaken Buck  
 City/State : Scituate, MA  
 Weather : Clear

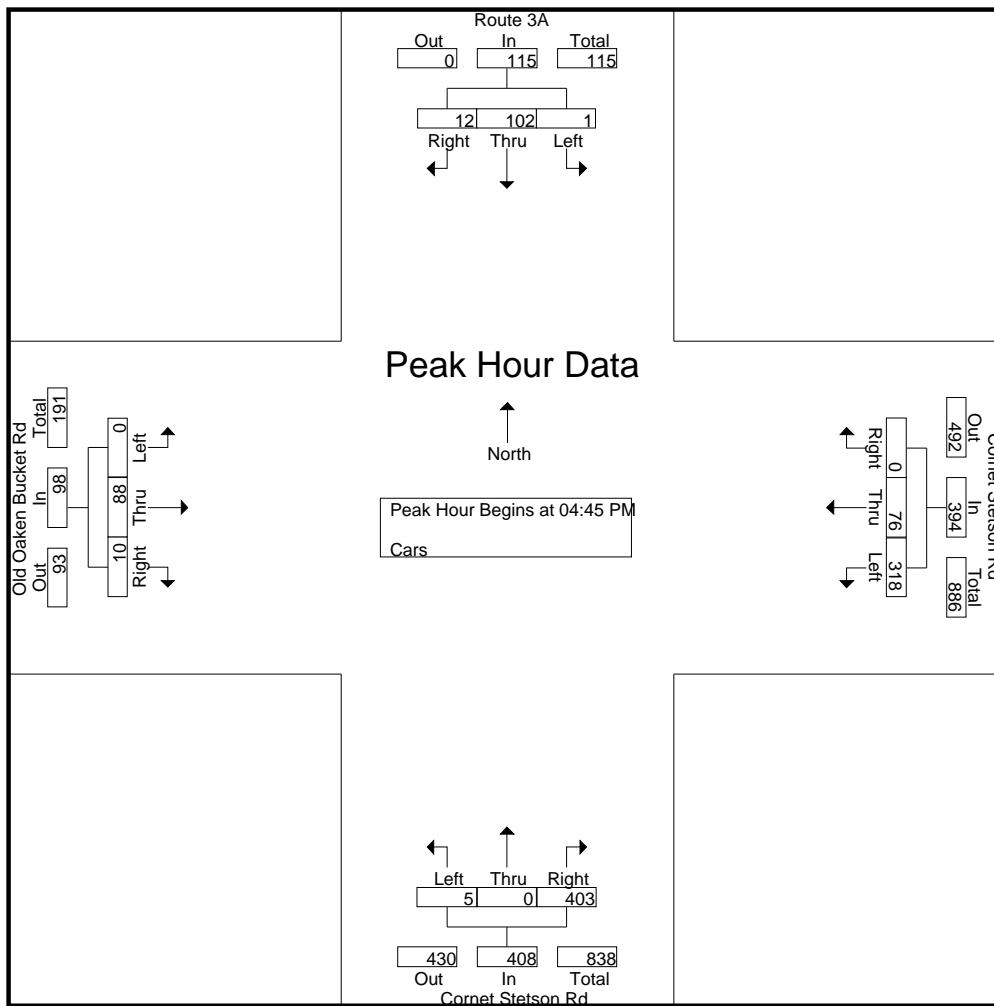
File Name : 90900002  
 Site Code : 90900002  
 Start Date : 11/3/2021  
 Page No : 4

## Groups Printed- Cars

| Start Time         | Route 3A<br>From North |            |           | Cornet Stetson Rd<br>From East |            |          | Cornet Stetson Rd<br>From South |          |            | Old Oaken Bucket Rd<br>From West |            |           | Int. Total  |
|--------------------|------------------------|------------|-----------|--------------------------------|------------|----------|---------------------------------|----------|------------|----------------------------------|------------|-----------|-------------|
|                    | Left                   | Thru       | Right     | Left                           | Thru       | Right    | Left                            | Thru     | Right      | Left                             | Thru       | Right     |             |
| 04:00 PM           | 0                      | 23         | 1         | 94                             | 11         | 0        | 2                               | 0        | 106        | 0                                | 27         | 1         | 265         |
| 04:15 PM           | 0                      | 29         | 2         | 78                             | 18         | 0        | 1                               | 0        | 108        | 0                                | 32         | 1         | 269         |
| 04:30 PM           | 0                      | 23         | 0         | 73                             | 12         | 0        | 2                               | 0        | 109        | 0                                | 25         | 0         | 244         |
| 04:45 PM           | 0                      | 20         | 2         | 67                             | 14         | 0        | 2                               | 0        | 104        | 0                                | 20         | 3         | 232         |
| <b>Total</b>       | <b>0</b>               | <b>95</b>  | <b>5</b>  | <b>312</b>                     | <b>55</b>  | <b>0</b> | <b>7</b>                        | <b>0</b> | <b>427</b> | <b>0</b>                         | <b>104</b> | <b>5</b>  | <b>1010</b> |
| 05:00 PM           | 1                      | 26         | 3         | 77                             | 15         | 0        | 0                               | 0        | 92         | 0                                | 23         | 2         | 239         |
| 05:15 PM           | 0                      | 37         | 2         | 93                             | 34         | 0        | 0                               | 0        | 102        | 0                                | 20         | 2         | 290         |
| 05:30 PM           | 0                      | 19         | 5         | 81                             | 13         | 0        | 3                               | 0        | 105        | 0                                | 25         | 3         | 254         |
| 05:45 PM           | 0                      | 13         | 3         | 64                             | 13         | 0        | 0                               | 0        | 114        | 0                                | 21         | 1         | 229         |
| <b>Total</b>       | <b>1</b>               | <b>95</b>  | <b>13</b> | <b>315</b>                     | <b>75</b>  | <b>0</b> | <b>3</b>                        | <b>0</b> | <b>413</b> | <b>0</b>                         | <b>89</b>  | <b>8</b>  | <b>1012</b> |
| <b>Grand Total</b> | <b>1</b>               | <b>190</b> | <b>18</b> | <b>627</b>                     | <b>130</b> | <b>0</b> | <b>10</b>                       | <b>0</b> | <b>840</b> | <b>0</b>                         | <b>193</b> | <b>13</b> | <b>2022</b> |
| Apprch %           | 0.5                    | 90.9       | 8.6       | 82.8                           | 17.2       | 0        | 1.2                             | 0        | 98.8       | 0                                | 93.7       | 6.3       |             |
| Total %            | 0                      | 9.4        | 0.9       | 31                             | 6.4        | 0        | 0.5                             | 0        | 41.5       | 0                                | 9.5        | 0.6       |             |

| Start Time                                                 | Route 3A<br>From North |           |          |            | Cornet Stetson Rd<br>From East |           |       |            | Cornet Stetson Rd<br>From South |      |            |            | Old Oaken Bucket Rd<br>From West |           |          |            | Int. Total |
|------------------------------------------------------------|------------------------|-----------|----------|------------|--------------------------------|-----------|-------|------------|---------------------------------|------|------------|------------|----------------------------------|-----------|----------|------------|------------|
|                                                            | Left                   | Thru      | Right    | App. Total | Left                           | Thru      | Right | App. Total | Left                            | Thru | Right      | App. Total | Left                             | Thru      | Right    | App. Total |            |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                        |           |          |            |                                |           |       |            |                                 |      |            |            |                                  |           |          |            |            |
| Peak Hour for Entire Intersection Begins at 04:45 PM       |                        |           |          |            |                                |           |       |            |                                 |      |            |            |                                  |           |          |            |            |
| 04:45 PM                                                   | 0                      | 20        | 2        | 22         | 67                             | 14        | 0     | 81         | 2                               | 0    | 104        | 106        | 0                                | 20        | <b>3</b> | 23         | 232        |
| 05:00 PM                                                   | 1                      | 26        | 3        | 30         | 77                             | 15        | 0     | 92         | 0                               | 0    | 92         | 92         | 0                                | 23        | 2        | 25         | 239        |
| 05:15 PM                                                   | 0                      | <b>37</b> | 2        | <b>39</b>  | <b>93</b>                      | <b>34</b> | 0     | <b>127</b> | 0                               | 0    | 102        | 102        | 0                                | 20        | 2        | 22         | <b>290</b> |
| 05:30 PM                                                   | 0                      | 19        | <b>5</b> | 24         | 81                             | 13        | 0     | 94         | <b>3</b>                        | 0    | <b>105</b> | <b>108</b> | 0                                | <b>25</b> | 3        | <b>28</b>  | 254        |
| Total Volume                                               | 1                      | 102       | 12       | 115        | 318                            | 76        | 0     | 394        | 5                               | 0    | 403        | 408        | 0                                | 88        | 10       | 98         | 1015       |
| % App. Total                                               | 0.9                    | 88.7      | 10.4     |            | 80.7                           | 19.3      | 0     |            | 1.2                             | 0    | 98.8       |            | 0                                | 89.8      | 10.2     |            |            |
| PHF                                                        | .250                   | .689      | .600     | .737       | .855                           | .559      | .000  | .776       | .417                            | .000 | .960       | .944       | .000                             | .880      | .833     | .875       | .875       |

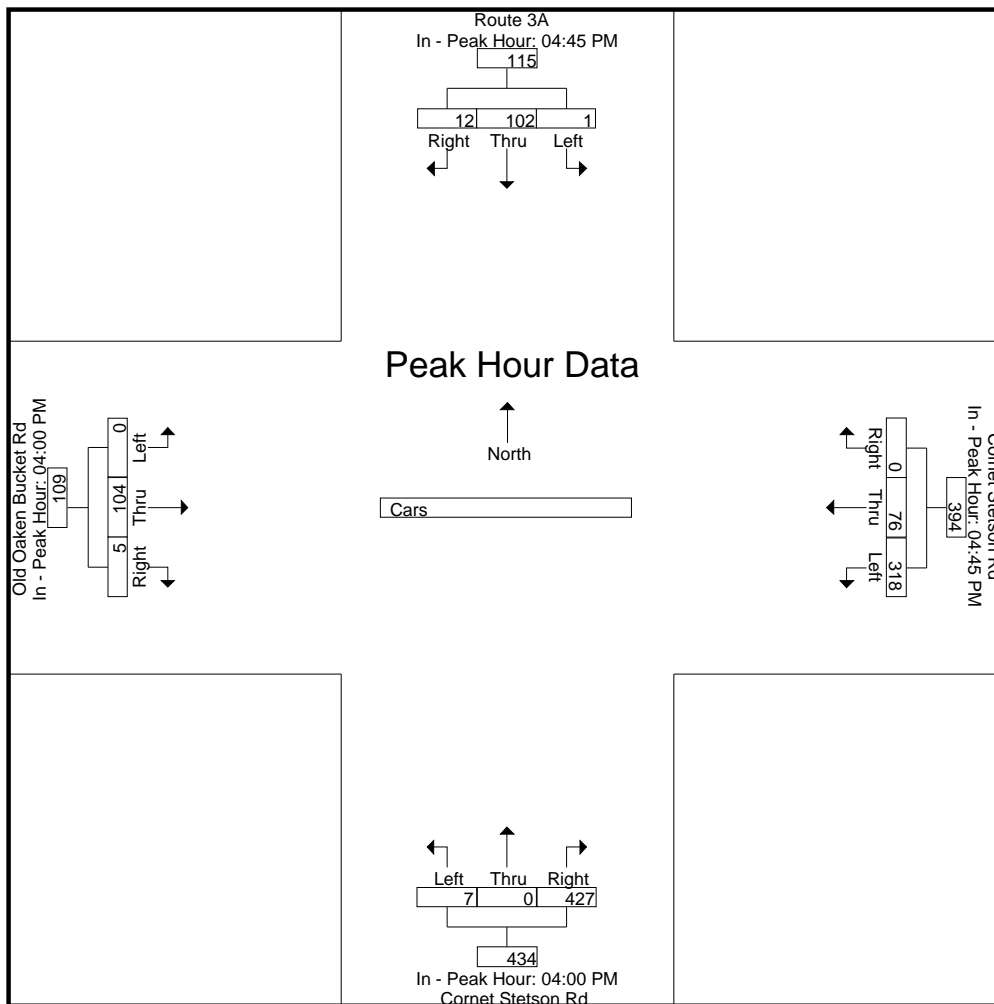
N/S Street : Route 3A / Cornet Stetson Rd  
E/W Street : Cornet Stetson Rd / Old Oaken Buck  
City/State : Scituate, MA  
Weather : Clear



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

|              | 04:45 PM |      |      |      | 04:45 PM |      |      |      | 04:00 PM |      |      |      | 04:00 PM |      |      |      |
|--------------|----------|------|------|------|----------|------|------|------|----------|------|------|------|----------|------|------|------|
| +0 mins.     | 0        | 20   | 2    | 22   | 67       | 14   | 0    | 81   | 2        | 0    | 106  | 108  | 0        | 27   | 1    | 28   |
| +15 mins.    | 1        | 26   | 3    | 30   | 77       | 15   | 0    | 92   | 1        | 0    | 108  | 109  | 0        | 32   | 1    | 33   |
| +30 mins.    | 0        | 37   | 2    | 39   | 93       | 34   | 0    | 127  | 2        | 0    | 109  | 111  | 0        | 25   | 0    | 25   |
| +45 mins.    | 0        | 19   | 5    | 24   | 81       | 13   | 0    | 94   | 2        | 0    | 104  | 106  | 0        | 20   | 3    | 23   |
| Total Volume | 1        | 102  | 12   | 115  | 318      | 76   | 0    | 394  | 7        | 0    | 427  | 434  | 0        | 104  | 5    | 109  |
| % App. Total | 0.9      | 88.7 | 10.4 |      | 80.7     | 19.3 | 0    |      | 1.6      | 0    | 98.4 |      | 0        | 95.4 | 4.6  |      |
| PHF          | .250     | .689 | .600 | .737 | .855     | .559 | .000 | .776 | .875     | .000 | .979 | .977 | .000     | .813 | .417 | .826 |

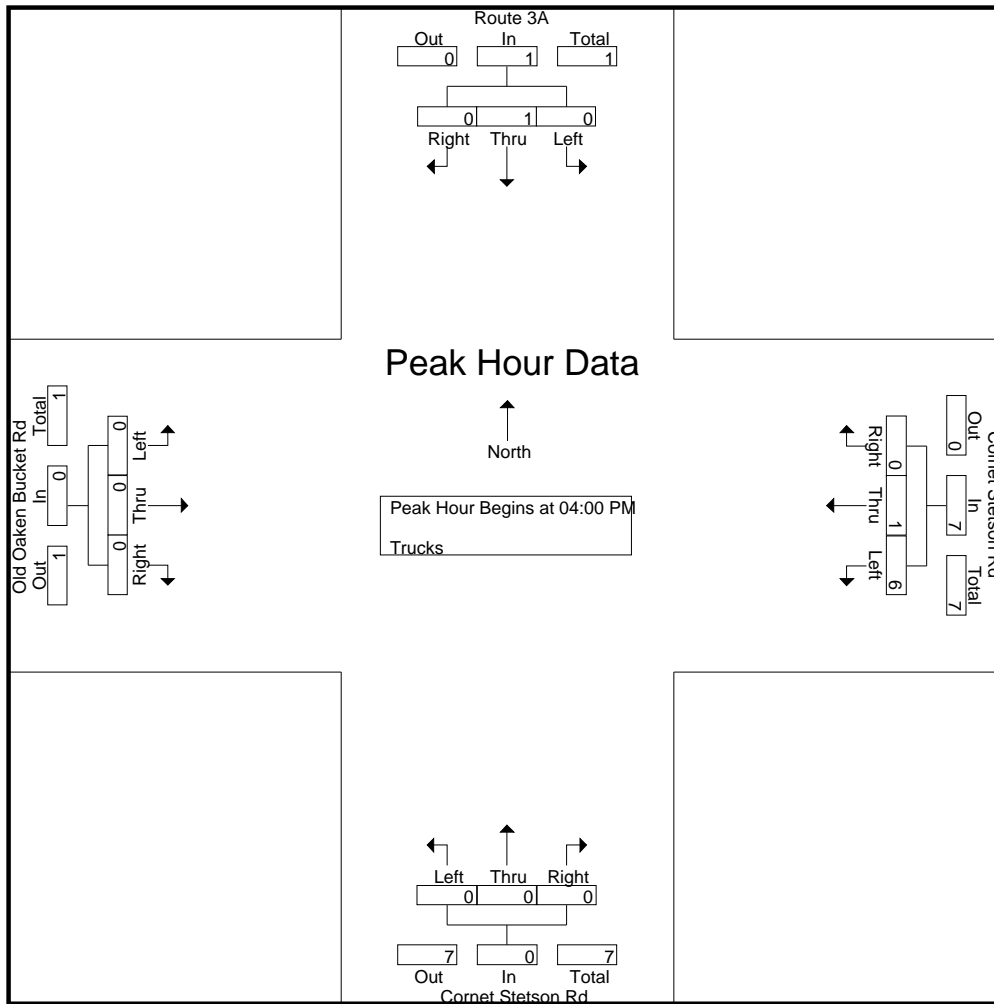
N/S Street : Route 3A / Cornet Stetson Rd  
E/W Street : Cornet Stetson Rd / Old Oaken Buck  
City/State : Scituate, MA  
Weather : Clear







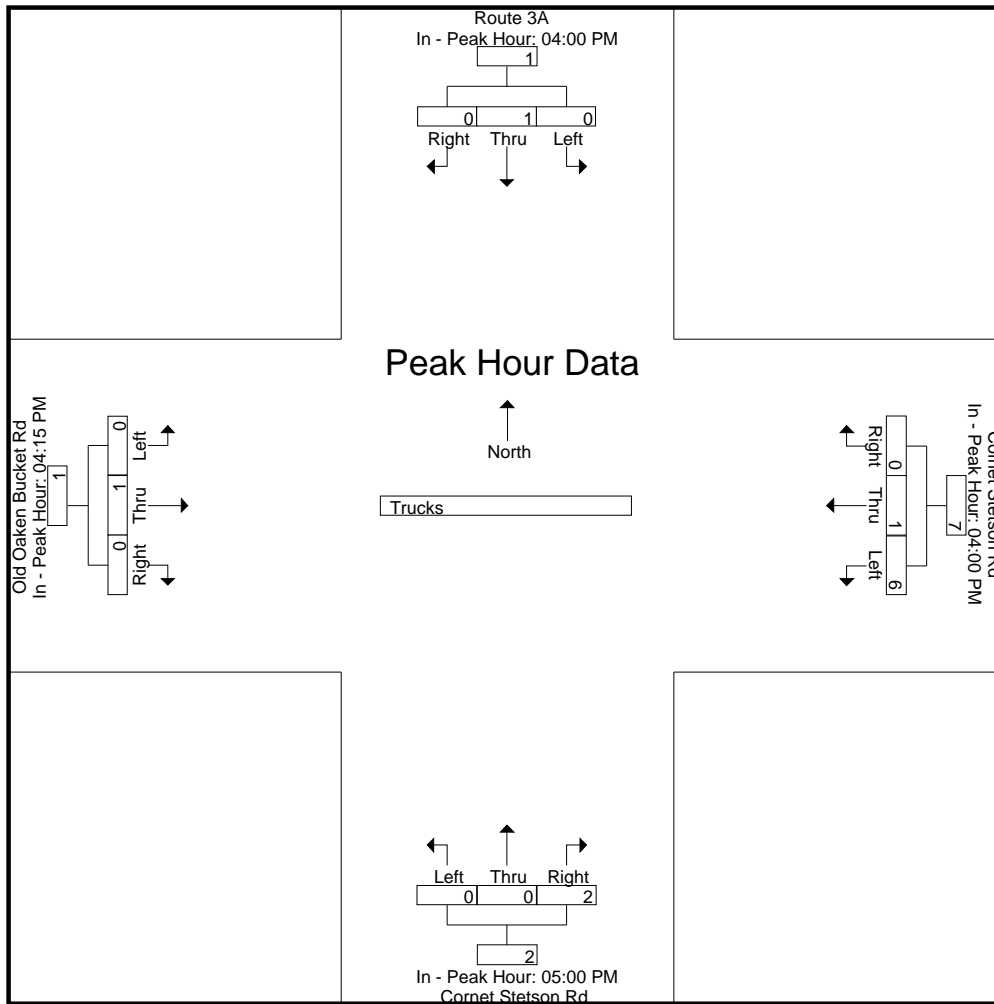
N/S Street : Route 3A / Cornet Stetson Rd  
E/W Street : Cornet Stetson Rd / Old Oaken Buck  
City/State : Scituate, MA  
Weather : Clear



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

|              | 04:00 PM |      |      |      | 04:00 PM |      |      |      | 05:00 PM |      |      |      | 04:15 PM |      |      |      |
|--------------|----------|------|------|------|----------|------|------|------|----------|------|------|------|----------|------|------|------|
| +0 mins.     | 0        | 1    | 0    | 1    | 1        | 0    | 0    | 1    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    |
| +15 mins.    | 0        | 0    | 0    | 0    | 1        | 0    | 0    | 1    | 0        | 0    | 1    | 1    | 0        | 0    | 0    | 0    |
| +30 mins.    | 0        | 0    | 0    | 0    | 3        | 1    | 0    | 4    | 0        | 0    | 0    | 0    | 0        | 0    | 0    | 0    |
| +45 mins.    | 0        | 0    | 0    | 0    | 1        | 0    | 0    | 1    | 0        | 0    | 1    | 1    | 0        | 1    | 0    | 1    |
| Total Volume | 0        | 1    | 0    | 1    | 6        | 1    | 0    | 7    | 0        | 0    | 2    | 2    | 0        | 1    | 0    | 1    |
| % App. Total | 0        | 100  | 0    |      | 85.7     | 14.3 | 0    |      | 0        | 0    | 100  |      | 0        | 100  | 0    |      |
| PHF          | .000     | .250 | .000 | .250 | .500     | .250 | .000 | .438 | .000     | .000 | .500 | .500 | .000     | .250 | .000 | .250 |

N/S Street : Route 3A / Cornet Stetson Rd  
E/W Street : Cornet Stetson Rd / Old Oaken Buck  
City/State : Scituate, MA  
Weather : Clear



**Accurate Counts**  
978-664-2565

N/S Street : Route 3A / Cornet Stetson Rd  
E/W Street : Cornet Stetson Rd / Old Oaken Buck  
City/State : Scituate, MA  
Weather : Clear

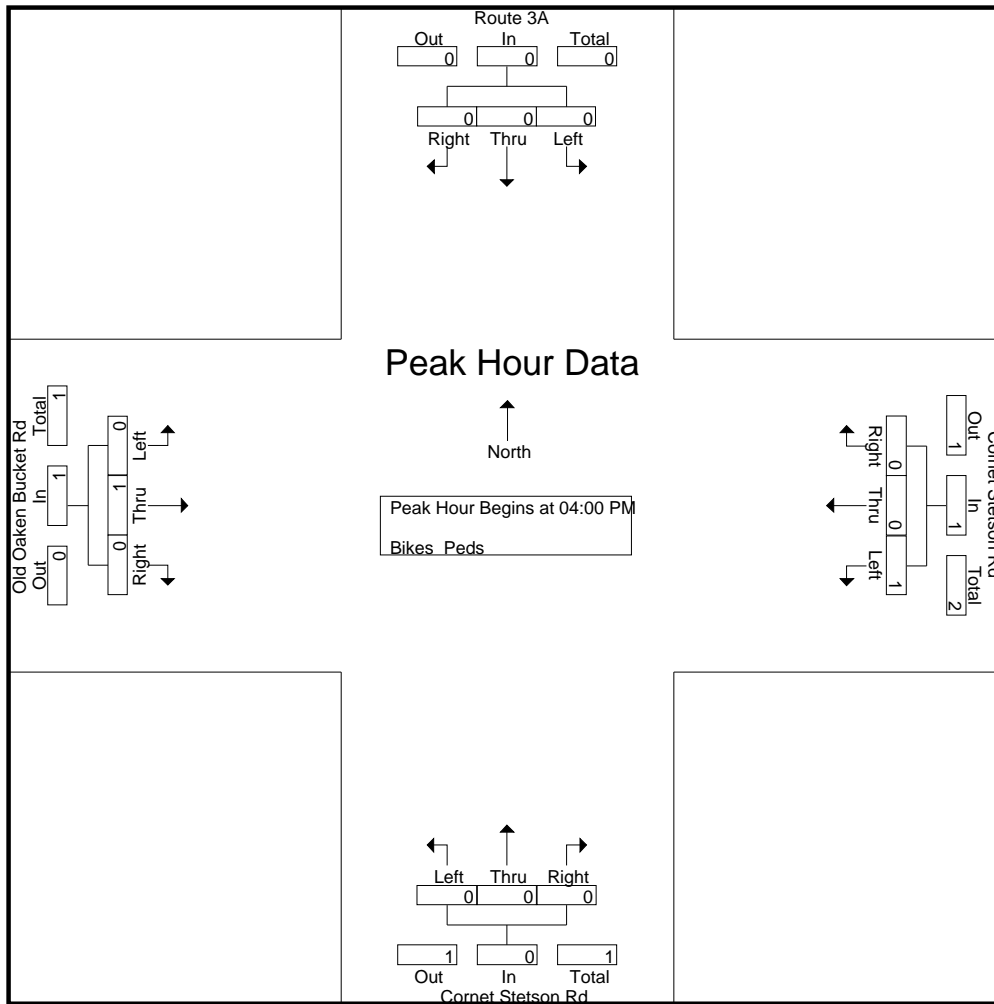
File Name : 90900002  
Site Code : 90900002  
Start Date : 11/3/2021  
Page No : 10

Groups Printed- Bikes Peds

| Start Time         | Route 3A<br>From North |      |       |      | Cornet Stetson Rd<br>From East |      |       |      | Cornet Stetson Rd<br>From South |      |       |      | Old Oaken Bucket Rd<br>From West |      |       |      | Exclu. Total | Inclu. Total | Int. Total |   |   |   |   |   |
|--------------------|------------------------|------|-------|------|--------------------------------|------|-------|------|---------------------------------|------|-------|------|----------------------------------|------|-------|------|--------------|--------------|------------|---|---|---|---|---|
|                    | Left                   | Thru | Right | Peds | Left                           | Thru | Right | Peds | Left                            | Thru | Right | Peds | Left                             | Thru | Right | Peds |              |              |            |   |   |   |   |   |
| 04:00 PM           | 0                      | 0    | 0     | 0    | 1                              | 0    | 0     | 0    | 0                               | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0            | 0            | 1          | 0 | 0 | 0 | 1 | 0 |
| 04:15 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 |
| 04:30 PM           | 0                      | 0    | 0     | 0    | 0                              | 0    | 0     | 0    | 0                               | 0    | 0     | 0    | 0                                | 1    | 0     | 0    | 0            | 1            | 0          | 0 | 0 | 1 | 0 | 0 |
| 04:45 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 |
| <b>Total</b>       | 0                      | 0    | 0     | 0    | 1                              | 0    | 0     | 0    | 0                               | 0    | 0     | 0    | 0                                | 1    | 0     | 0    | 0            | 2            | 0          | 0 | 0 | 2 | 0 | 0 |
| 05:00 PM           | 0                      | 0    | 0     | 0    | 0                              | 0    | 0     | 0    | 0                               | 0    | 0     | 0    | 0                                | 0    | 0     | 0    | 0            | 0            | 0          | 0 | 0 | 0 | 0 | 0 |
| 05:15 PM           | 0                      | 0    | 0     | 1    | 0                              | 0    | 0     | 0    | 0                               | 0    | 0     | 0    | 0                                | 0    | 0     | 1    | 2            | 0            | 0          | 1 | 2 | 0 | 0 | 2 |
| 05:30 PM           | 0                      | 0    | 0     | 1    | 0                              | 0    | 0     | 0    | 0                               | 0    | 0     | 0    | 0                                | 1    | 0     | 0    | 1            | 1            | 0          | 0 | 1 | 1 | 0 | 2 |
| 05:45 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 |
| <b>Total</b>       | 0                      | 0    | 0     | 2    | 0                              | 0    | 0     | 0    | 0                               | 0    | 0     | 0    | 0                                | 1    | 0     | 1    | 3            | 1            | 0          | 1 | 3 | 1 | 0 | 4 |
| <b>Grand Total</b> | 0                      | 0    | 0     | 2    | 1                              | 0    | 0     | 0    | 0                               | 0    | 0     | 0    | 0                                | 2    | 0     | 1    | 3            | 3            | 0          | 1 | 3 | 3 | 0 | 6 |
| Apprch %           | 0                      | 0    | 0     |      | 100                            | 0    | 0     |      | 0                               | 0    | 0     |      | 0                                | 100  | 0     |      |              |              |            |   |   |   |   |   |
| Total %            | 0                      | 0    | 0     |      | 33.3                           | 0    | 0     |      | 0                               | 0    | 0     |      | 0                                | 66.7 | 0     |      | 50           | 50           |            |   |   |   |   |   |

| Start Time                                                 | Route 3A<br>From North |      |       |            | Cornet Stetson Rd<br>From East |      |       |            | Cornet Stetson Rd<br>From South |      |       |            | Old Oaken Bucket Rd<br>From West |      |       |            | Int. Total |      |      |      |      |
|------------------------------------------------------------|------------------------|------|-------|------------|--------------------------------|------|-------|------------|---------------------------------|------|-------|------------|----------------------------------|------|-------|------------|------------|------|------|------|------|
|                                                            | Left                   | Thru | Right | App. Total | Left                           | Thru | Right | App. Total | Left                            | Thru | Right | App. Total | Left                             | Thru | Right | App. Total |            |      |      |      |      |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                        |      |       |            |                                |      |       |            |                                 |      |       |            |                                  |      |       |            |            |      |      |      |      |
| Peak Hour for Entire Intersection Begins at 04:00 PM       |                        |      |       |            |                                |      |       |            |                                 |      |       |            |                                  |      |       |            |            |      |      |      |      |
| 04:00 PM                                                   | 0                      | 0    | 0     | 0          | 1                              | 0    | 0     | 1          | 0                               | 0    | 0     | 0          | 0                                | 0    | 0     | 0          | 0          | 0    | 0    | 0    | 1    |
| 04:15 PM                                                   | 0                      | 0    | 0     | 0          | 0                              | 0    | 0     | 0          | 0                               | 0    | 0     | 0          | 0                                | 0    | 0     | 0          | 0          | 0    | 0    | 0    | 0    |
| 04:30 PM                                                   | 0                      | 0    | 0     | 0          | 0                              | 0    | 0     | 0          | 0                               | 0    | 0     | 0          | 0                                | 1    | 0     | 0          | 0          | 1    | 0    | 0    | 1    |
| 04:45 PM                                                   | 0                      | 0    | 0     | 0          | 0                              | 0    | 0     | 0          | 0                               | 0    | 0     | 0          | 0                                | 0    | 0     | 0          | 0          | 0    | 0    | 0    | 0    |
| <b>Total Volume</b>                                        | 0                      | 0    | 0     | 0          | 1                              | 0    | 0     | 1          | 0                               | 0    | 0     | 0          | 0                                | 1    | 0     | 0          | 0          | 1    | 0    | 0    | 2    |
| <b>% App. Total</b>                                        | 0                      | 0    | 0     |            | 100                            | 0    | 0     |            | 0                               | 0    | 0     |            | 0                                | 100  | 0     |            |            |      |      |      |      |
| PHF                                                        | .000                   | .000 | .000  | .000       | .250                           | .000 | .000  | .250       | .000                            | .000 | .000  | .000       | .000                             | .250 | .000  | .000       | .000       | .250 | .000 | .250 | .500 |

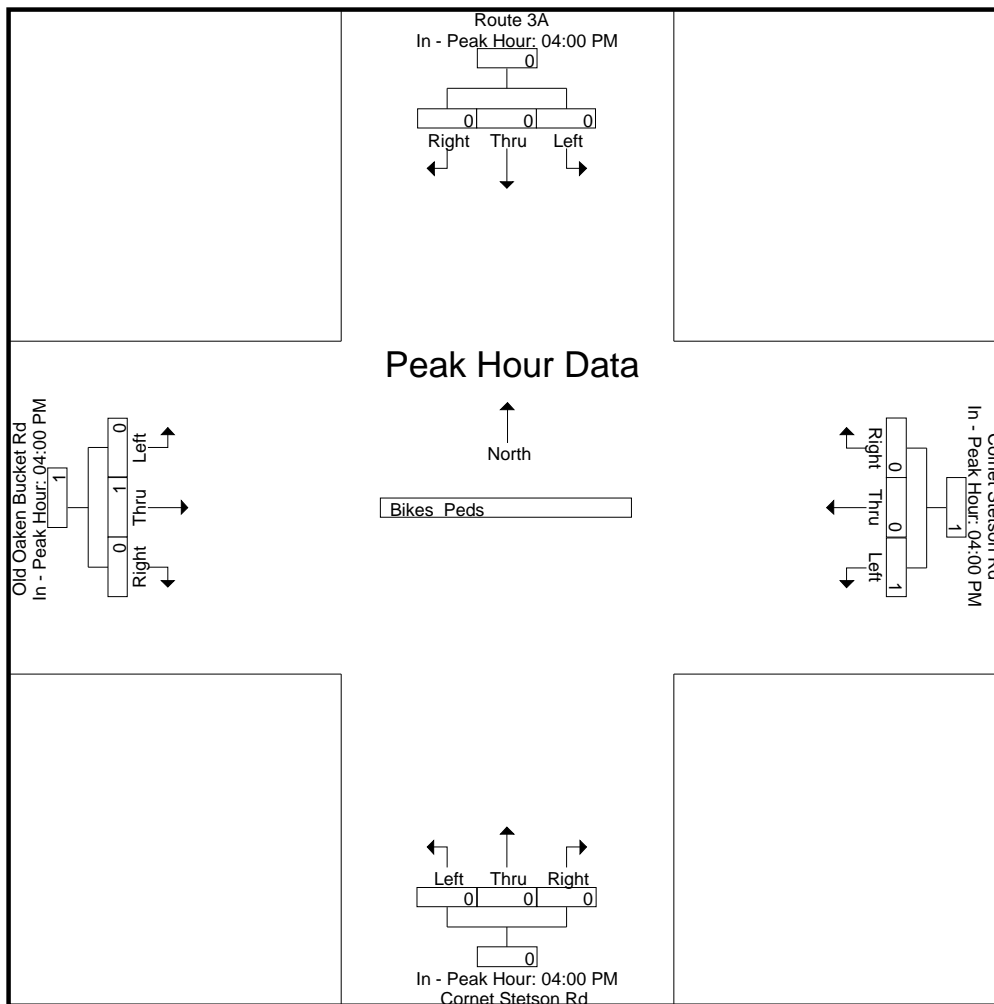
N/S Street : Route 3A / Cornet Stetson Rd  
E/W Street : Cornet Stetson Rd / Old Oaken Buck  
City/State : Scituate, MA  
Weather : Clear



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

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

N/S Street : Route 3A / Cornet Stetson Rd  
E/W Street : Cornet Stetson Rd / Old Oaken Buck  
City/State : Scituate, MA  
Weather : Clear



SEASONAL ADJUSTMENT DATA

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# Massachusetts Highway Department

## 7318: Monthly Hourly Volume for November 2018

**Location ID:** 7318  
**County:** Plymouth  
**Functional Class:** 2  
**Location:** SOUTHEAST EXPRESSWAY  
**Seasonal Factor Group:** U2  
**Daily Factor Group:**  
**Axle Factor Group:** U2  
**Growth Factor Group:**

|    | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | TOTAL  | QC Status       |                     |
|----|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-----------------|---------------------|
| 1  | 449  | 309  | 227  | 436  | 1552 | 4480 | 5172 | 5773 | 5897 | 5507 | 5500  | 5562  | 5652  | 5914  | 6628  | 6905  | 6999  | 7206  | 6124  | 4632  | 3314  | 2665  | 1878  | 1357  | 100138 | Accepted        |                     |
| 2  | 706  | 317  | 241  | 406  | 1385 | 4007 | 4629 | 4898 | 5322 | 5346 | 5445  | 5660  | 5766  | 5884  | 6489  | 6548  | 7069  | 6804  | 5830  | 4426  | 3181  | 2569  | 2159  | 1442  | 96529  | Accepted        |                     |
| 3  | 927  | 543  | 312  | 293  | 588  | 1261 | 1906 | 2850 | 4167 | 4845 | 5624  | 5988  | 6123  | 6117  | 6285  | 6402  | 6247  | 6144  | 5211  | 3826  | 3119  | 2624  | 2346  | 1796  | 85544  | Accepted        |                     |
| 4  | 1142 | 652  | 329  | 216  | 210  | 362  | 799  | 1654 | 2492 | 3538 | 4986  | 6087  | 6590  | 6740  | 6306  | 6559  | 6661  | 6170  | 5858  | 4680  | 3667  | 2475  | 1564  | 1169  | 80906  | Accepted        |                     |
| 5  | 808  | 733  | 442  | 230  | 409  | 1639 | 4652 | 5330 | 5192 | 5671 | 5255  | 5045  | 5209  | 5304  | 5618  | 6180  | 6759  | 6505  | 6590  | 5460  | 4119  | 2832  | 1914  | 1510  | 93406  | Accepted        |                     |
| 6  | 973  | 516  | 248  | 217  | 369  | 1522 | 4390 | 4745 | 4948 | 5183 | 5340  | 5149  | 5089  | 5453  | 5587  | 6061  | 6264  | 6409  | 6223  | 5470  | 4410  | 2890  | 2089  | 1377  | 90922  | Accepted        |                     |
| 7  | 1091 | 779  | 309  | 195  | 355  | 1558 | 4509 | 5105 | 4763 | 5723 | 5414  | 5360  | 5483  | 5487  | 5840  | 5504  | 6552  | 7077  | 6593  | 5883  | 4522  | 3433  | 2292  | 1577  | 95404  | Accepted        |                     |
| 8  | 1165 | 571  | 291  | 221  | 414  | 1601 | 4475 | 5090 | 5827 | 5744 | 5611  | 5392  | 5433  | 5610  | 5914  | 6617  | 6864  | 7168  | 7064  | 5775  | 4575  | 3479  | 2660  | 1907  | 99468  | Accepted        |                     |
| 9  | 1401 | 699  | 365  | 265  | 456  | 1433 | 4196 | 4873 | 5681 | 5807 | 5634  | 5649  | 5892  | 6308  | 6358  | 6639  | 6793  | 6817  | 6445  | 5109  | 4683  | 3283  | 2448  | 1934  | 99168  | Accepted        |                     |
| 10 | 1455 | 983  | 485  | 335  | 378  | 647  | 1381 | 2163 | 3557 | 4816 | 5526  | 6240  | 6431  | 6404  | 6517  | 6676  | 6733  | 6586  | 6214  | 4905  | 3675  | 2894  | 2645  | 2464  | 90110  | Accepted        |                     |
| 11 | 1859 | 1219 | 593  | 345  | 270  | 305  | 660  | 1344 | 1930 | 3115 | 4336  | 5545  | 6542  | 6298  | 6151  | 5400  | 5372  | 5977  | 5710  | 4279  | 3256  | 2539  | 1777  | 1460  | 76282  | Accepted        |                     |
| 12 | 970  | 523  | 280  | 198  | 320  | 984  | 2781 | 3857 | 4982 | 5397 | 5392  | 5796  | 5511  | 6611  | 6260  | 6541  | 6986  | 6890  | 6668  | 5268  | 3738  | 2750  | 1887  | 1259  | 91849  | Accepted        |                     |
| 13 |      |      |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |                 |                     |
| 14 | 492  | 306  | 195  | 384  | 1615 | 4585 | 5219 | 5733 | 5718 | 5417 | 5314  | 5415  | 5581  | 6085  | 6386  | 6885  | 7044  | 6981  | 5872  | 4517  | 3444  | 2713  | 1820  | 1067  | 98788  | Accepted        |                     |
| 15 | 642  | 384  | 244  | 422  | 1553 | 4404 | 5685 | 6356 | 6300 | 5719 | 5342  | 5710  | 5787  | 6150  | 6576  | 6791  | 7098  | 6872  | 5689  | 4047  | 2862  | 2281  | 1386  | 964   | 99264  | Accepted        |                     |
| 16 | 684  | 490  | 350  | 417  | 1316 | 3672 | 4592 | 5585 | 5409 | 5033 | 5051  | 5188  | 5623  | 5962  | 6405  | 6842  | 6929  | 6874  | 5619  | 3954  | 3019  | 2363  | 2261  | 1714  | 95352  | Accepted        |                     |
| 17 | 1041 | 585  | 342  | 340  | 588  | 1381 | 2382 | 3671 | 5133 | 5768 | 6531  | 6560  | 6571  | 6466  | 6912  | 6818  | 6396  | 6064  | 5036  | 3755  | 2990  | 2720  | 2759  | 1756  | 92565  | Accepted        |                     |
| 18 | 999  | 613  | 349  | 267  | 351  | 728  | 1384 | 1993 | 2890 | 4169 | 5315  | 6352  | 6712  | 6524  | 6339  | 6387  | 6159  | 5340  | 4392  | 3595  | 2452  | 1712  | 1156  | 752   | 76930  | Accepted        |                     |
| 19 | 435  | 251  | 212  | 352  | 1529 | 4353 | 4823 | 5113 | 5245 | 5542 | 5000  | 5575  | 5707  | 5894  | 6512  | 6782  | 6844  | 6823  | 5759  | 4635  | 3320  | 2190  | 1525  | 1005  | 95426  | Accepted        |                     |
| 20 | 540  | 297  | 232  | 342  | 1464 | 4259 | 4792 | 5029 | 4978 | 5315 | 5656  | 5898  | 5825  | 6055  | 6264  | 6397  | 6397  | 6468  | 5814  | 4617  | 4009  | 2784  | 2126  | 1435  | 96993  | Accepted        |                     |
| 21 | 802  | 461  | 278  | 392  | 1335 | 3645 | 4590 | 5475 | 5586 | 5464 | 5996  | 6750  | 6648  | 6713  | 6600  | 6579  | 6344  | 5766  | 4317  | 3519  | 2957  | 2372  | 1995  | 1352  | 95936  | Accepted        |                     |
| 22 | 815  | 520  | 323  | 267  | 362  | 611  | 1510 | 2056 | 2890 | 4364 | 6437  | 7563  | 6776  | 6419  | 5632  | 4023  | 4847  | 6670  | 7536  | 6467  | 6564  | 4118  | 2487  | 1681  | 90938  | Accepted        |                     |
| 23 | 1408 | 897  | 901  | 1076 | 1603 | 2915 | 3832 | 4813 | 5172 | 5775 | 7208  | 6849  | 6149  | 6044  | 6467  | 6502  | 6220  | 5767  | 4710  | 3635  | 2971  | 2824  | 2325  | 1783  | 97846  | Accepted        |                     |
| 24 | 1024 | 615  | 376  | 376  | 529  | 1033 | 1890 | 2732 | 3905 | 5075 | 6222  | 6781  | 6816  | 6355  | 6238  | 5773  | 6221  | 5879  | 4858  | 3758  | 3158  | 2512  | 2196  | 1579  | 85901  | Accepted        |                     |
| 25 | 931  | 545  | 317  | 299  | 394  | 731  | 1245 | 1736 | 2579 | 3844 | 5128  | 5306  | 5937  | 4872  | 5379  | 5079  | 5270  | 5131  | 4124  | 3291  | 2456  | 1614  | 1045  | 711   | 67964  | Accepted        |                     |
| 26 | 395  | 233  | 184  | 411  | 1687 | 4509 | 5004 | 5368 | 5252 | 4627 | 5191  | 5405  | 5323  | 5516  | 6429  | 6590  | 6724  | 6167  | 5244  | 3888  | 2602  | 1749  | 1237  | 849   | 90584  | Accepted        |                     |
| 27 | 437  | 249  | 214  | 391  | 1567 | 4205 | 4815 | 4734 | 4994 | 4817 | 5231  | 5319  | 5563  | 5775  | 6270  | 6667  | 6899  | 6746  | 5748  | 4295  | 3016  | 2229  | 1503  | 902   | 92586  | Accepted        |                     |
| 28 | 508  | 275  | 228  | 370  | 1532 | 4436 | 5052 | 5719 | 5581 | 5404 | 5295  | 5329  | 5522  | 5850  | 6349  | 6629  | 6780  | 6742  | 5828  | 4318  | 3137  | 2089  | 1572  | 981   | 95526  | Accepted        |                     |
| 29 | 566  | 290  | 203  | 395  | 1513 | 4394 | 4672 | 4928 | 5570 | 5538 | 5573  | 5529  | 5780  | 5998  | 6664  | 6882  | 7119  | 7066  | 5821  | 4728  | 3607  | 2645  | 1863  | 1324  | 98668  | Accepted        |                     |
| 30 | 806  | 366  | 251  | 351  | 1463 | 4135 | 4961 | 5797 | 5857 | 5605 | 5747  | 5913  | 6314  | 6485  | 6781  | 7026  | 7071  | 6842  | 5887  | 4186  | 3219  | 2677  | 2213  | 1692  | 101645 | Accepted        |                     |
|    |      |      |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        | <b>92160</b>    | <b>Nov 2018 ADT</b> |
|    |      |      |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        | <b>94947</b>    | <b>2018 AADT</b>    |
|    |      |      |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        | <b>0.970646</b> | <b>2.9</b>          |



## COVID ADJUSTMENT

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# Massachusetts Highway Department

## 6255: Monthly Hourly Volume for November 2018

**Location ID:** 6255  
**County:** Norfolk  
**Functional Class:** 2  
**Location:** PILGRIM HIGHWAY

**Seasonal Factor Group:** UR2  
**Daily Factor Group:**  
**Axle Factor Group:** UR2  
**Growth Factor Group:**

|    | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | TOTAL  | QC Status |
|----|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-----------|
| 1  | 1082 | 644  | 515  | 761  | 2304 | 6655 | 8020 | 8439 | 8567 | 7985 | 7786  | 7768  | 7663  | 8125  | 8743  | 9154  | 8940  | 9000  | 8263  | 6649  | 5057  | 4160  | 3215  | 2445  | 141940 | Accepted  |
| 2  | 1351 | 890  | 551  | 761  | 2070 | 6117 | 7511 | 6586 | 8305 | 7810 | 7638  | 7609  | 8035  | 7980  | 8381  | 8344  | 8810  | 8797  | 7997  | 6328  | 4747  | 4208  | 3440  | 2556  | 136822 | Accepted  |
| 3  | 1760 | 1066 | 749  | 620  | 995  | 2062 | 3110 | 4346 | 5723 | 6577 | 7784  | 8175  | 8707  | 8515  | 8721  | 8619  | 8494  | 7981  | 7410  | 5814  | 4905  | 4193  | 3931  | 3072  | 123329 | Accepted  |
| 4  | 2180 | 1342 | 814  | 512  | 430  | 632  | 1292 | 2716 | 3762 | 5019 | 7004  | 8135  | 8573  | 9159  | 8564  | 8553  | 8425  | 8444  | 7921  | 6714  | 5347  | 3851  | 2754  | 2159  | 114302 | Accepted  |
| 5  | 1707 | 1663 | 888  | 500  | 729  | 2309 | 6731 | 7890 | 8250 | 8432 | 7795  | 7341  | 7320  | 7379  | 7633  | 8608  | 8518  | 8520  | 8566  | 7257  | 5834  | 4427  | 3272  | 2727  | 134296 | Accepted  |
| 6  | 1858 | 1023 | 525  | 453  | 661  | 2155 | 6343 | 7358 | 7740 | 8026 | 7763  | 7004  | 7570  | 7666  | 7849  | 8184  | 8128  | 8188  | 8203  | 7311  | 6118  | 4557  | 3503  | 2587  | 130773 | Accepted  |
| 7  | 2069 | 1507 | 647  | 434  | 657  | 2220 | 6497 | 7711 | 7950 | 8549 | 8083  | 7527  | 7664  | 7477  | 8037  | 8487  | 8324  | 8566  | 8834  | 7590  | 6425  | 5256  | 3646  | 2847  | 137004 | Accepted  |
| 8  | 2209 | 1166 | 536  | 459  | 777  | 2292 | 6703 | 7939 | 8612 | 8343 | 8090  | 7520  | 7672  | 7676  | 8073  | 8503  | 8559  | 8649  | 8958  | 7602  | 6387  | 5017  | 4229  | 3155  | 139126 | Accepted  |
| 9  | 2469 | 1307 | 746  | 523  | 816  | 2156 | 6320 | 8019 | 8652 | 8422 | 8041  | 7809  | 8013  | 8333  | 8496  | 8846  | 8843  | 8478  | 8267  | 6933  | 6271  | 4744  | 4012  | 3327  | 139843 | Accepted  |
| 10 | 2646 | 1819 | 1030 | 768  | 746  | 1137 | 2364 | 3626 | 5089 | 6615 | 7870  | 8243  | 8606  | 8969  | 8830  | 9002  | 8926  | 8734  | 8411  | 7001  | 5592  | 4616  | 4108  | 3973  | 128721 | Accepted  |
| 11 | 3226 | 2251 | 1226 | 888  | 624  | 562  | 1111 | 2235 | 3301 | 4607 | 6288  | 7711  | 8708  | 8859  | 8366  | 7926  | 7578  | 8199  | 7771  | 6270  | 5006  | 4079  | 3035  | 2722  | 112549 | Accepted  |
| 12 | 1795 | 1183 | 659  | 410  | 601  | 1545 | 4162 | 6404 | 7713 | 7956 | 7572  | 8005  | 7743  | 8726  | 8562  | 8614  | 9224  | 8695  | 8900  | 7239  | 5359  | 4145  | 3222  | 2461  | 130895 | Accepted  |
| 13 |      |      |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |           |
| 14 | 1022 | 594  | 419  | 735  | 2333 | 6691 | 7920 | 8290 | 7943 | 8205 | 7619  | 7680  | 7661  | 8324  | 8695  | 8590  | 8589  | 8844  | 7802  | 6233  | 5237  | 4334  | 3196  | 2102  | 139058 | Accepted  |
| 15 | 1268 | 693  | 539  | 798  | 2205 | 6615 | 8081 | 8474 | 8549 | 8223 | 7898  | 7903  | 7944  | 8253  | 8415  | 8688  | 8525  | 8761  | 7645  | 5870  | 4567  | 3702  | 2759  | 2268  | 138643 | Accepted  |
| 16 | 1424 | 780  | 682  | 809  | 1956 | 5581 | 7171 | 8048 | 7669 | 7295 | 7148  | 7410  | 7671  | 7717  | 8227  | 8337  | 8643  | 8790  | 7536  | 5717  | 4580  | 3899  | 3728  | 3123  | 133941 | Accepted  |
| 17 | 2120 | 1182 | 816  | 753  | 1112 | 2490 | 3872 | 5458 | 7016 | 7789 | 8693  | 9033  | 9071  | 8772  | 9303  | 9338  | 8890  | 8562  | 7537  | 5682  | 4697  | 4227  | 4350  | 2994  | 133757 | Accepted  |
| 18 | 1885 | 1343 | 946  | 604  | 662  | 1187 | 2267 | 3503 | 4634 | 6259 | 7568  | 8666  | 8921  | 8759  | 8445  | 8591  | 8247  | 7370  | 6295  | 5357  | 3846  | 2963  | 2231  | 1540  | 112089 | Accepted  |
| 19 | 916  | 572  | 447  | 673  | 2200 | 6282 | 7543 | 7781 | 8062 | 8117 | 7401  | 7718  | 7931  | 8102  | 8583  | 8674  | 8317  | 8622  | 7521  | 6421  | 4970  | 3616  | 2762  | 1905  | 135136 | Accepted  |
| 20 | 1081 | 625  | 450  | 653  | 2085 | 6208 | 7414 | 7645 | 7584 | 7602 | 7837  | 7991  | 7848  | 8016  | 8107  | 7740  | 7949  | 8150  | 7611  | 6519  | 5350  | 4309  | 3457  | 2573  | 134804 | Accepted  |
| 21 | 1584 | 913  | 604  | 805  | 1971 | 5916 | 7511 | 8180 | 7746 | 7724 | 8059  | 8653  | 8602  | 8188  | 7793  | 8108  | 7849  | 7453  | 6006  | 4721  | 4649  | 3740  | 3370  | 2572  | 132717 | Accepted  |
| 22 | 1639 | 1080 | 724  | 637  | 579  | 825  | 1991 | 2469 | 3477 | 5034 | 7186  | 8349  | 8588  | 7760  | 6526  | 5187  | 5993  | 7393  | 8274  | 8024  | 8025  | 5384  | 3575  | 2412  | 111131 | Accepted  |
| 23 | 1770 | 1163 | 1180 | 1248 | 1764 | 3459 | 4399 | 5341 | 6107 | 7110 | 8335  | 8636  | 8406  | 8472  | 8664  | 8413  | 8214  | 7943  | 6713  | 5600  | 4760  | 3976  | 3516  | 2816  | 128005 | Accepted  |
| 24 | 1825 | 1160 | 753  | 733  | 889  | 1846 | 3072 | 4448 | 5652 | 7094 | 8250  | 8943  | 8878  | 8538  | 8332  | 8386  | 8369  | 8075  | 7051  | 5620  | 4924  | 4032  | 3614  | 2884  | 123368 | Accepted  |
| 25 | 1804 | 1117 | 799  | 618  | 730  | 1244 | 2184 | 2845 | 3867 | 5681 | 6922  | 7656  | 8524  | 7700  | 7609  | 7186  | 7304  | 6753  | 6019  | 5038  | 3903  | 2790  | 2057  | 1410  | 101760 | Accepted  |
| 26 | 867  | 486  | 392  | 686  | 2379 | 6626 | 7841 | 7828 | 7829 | 7573 | 7500  | 7379  | 7468  | 7422  | 8249  | 8303  | 8202  | 8183  | 6669  | 5701  | 4279  | 3109  | 2273  | 1656  | 128900 | Accepted  |
| 27 | 982  | 538  | 442  | 695  | 2245 | 6254 | 7078 | 7511 | 6704 | 7982 | 7348  | 7547  | 7621  | 7718  | 8278  | 8063  | 8194  | 8789  | 7527  | 5834  | 4665  | 3729  | 2709  | 1820  | 130273 | Accepted  |
| 28 | 1069 | 579  | 465  | 665  | 2203 | 6716 | 7793 | 8212 | 8464 | 7938 | 7671  | 7660  | 7552  | 7860  | 8429  | 8307  | 8390  | 8422  | 7634  | 6011  | 5015  | 3771  | 2889  | 1953  | 135668 | Accepted  |
| 29 | 1212 | 601  | 473  | 713  | 2170 | 5885 | 7133 | 8215 | 8583 | 8162 | 7792  | 7799  | 8072  | 7838  | 8527  | 8671  | 8520  | 8897  | 7500  | 6323  | 5214  | 4294  | 3227  | 2491  | 138312 | Accepted  |
| 30 | 1532 | 777  | 592  | 703  | 2107 | 6304 | 8006 | 8725 | 8458 | 7950 | 7905  | 8145  | 8232  | 8428  | 8549  | 8694  | 8887  | 8588  | 7569  | 6183  | 4829  | 4290  | 3894  | 3053  | 142400 | Accepted  |

129984.9 Nov 2018 ADT

# Massachusetts Highway Department

## 6255: Monthly Hourly Volume for November 2021

**Location ID:** 6255  
**County:** Norfolk  
**Functional Class:** 2  
**Location:** PILGRIM HIGHWAY

**Seasonal Factor Group:** UR2  
**Daily Factor Group:**  
**Axle Factor Group:** UR2  
**Growth Factor Group:**

|    | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | TOTAL  | QC Status |              |
|----|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-----------|--------------|
| 1  | 769  | 687  | 444  | 610  | 2165 | 5959 | 7715 | 8656 | 8084 | 7419 | 7112  | 7429  | 7644  | 8085  | 8922  | 9326  | 8675  | 9343  | 7918  | 5563  | 4047  | 2612  | 2152  | 1314  | 132650 | Accepted  |              |
| 2  | 743  | 421  | 324  | 581  | 2162 | 6026 | 7865 | 9075 | 8285 | 7501 | 7335  | 7418  | 7867  | 8430  | 9376  | 9607  | 9869  | 9547  | 7971  | 5767  | 4210  | 2951  | 2086  | 1414  | 136831 | Accepted  |              |
| 3  | 666  | 361  | 308  | 557  | 2189 | 5942 | 7979 | 8582 | 8191 | 7896 | 7502  | 7013  | 8311  | 8154  | 9562  | 9315  | 9168  | 9516  | 8454  | 6097  | 4426  | 3163  | 2178  | 1532  | 137062 | Accepted  |              |
| 4  | 725  | 426  | 344  | 578  | 2132 | 5838 | 7560 | 8816 | 8656 | 7942 | 7835  | 7876  | 8115  | 8683  | 9392  | 10027 | 10026 | 9947  | 8313  | 6341  | 4659  | 3485  | 2758  | 1731  | 142205 | Accepted  |              |
| 5  | 876  | 450  | 401  | 625  | 2136 | 5515 | 7529 | 8685 | 8425 | 7729 | 7798  | 8296  | 8896  | 9106  | 9388  | 9230  | 9308  | 9378  | 8309  | 6435  | 4737  | 3972  | 3180  | 2283  | 142687 | Accepted  |              |
| 6  | 1378 | 753  | 522  | 474  | 877  | 2005 | 3264 | 5018 | 6799 | 8121 | 9242  | 9481  | 9372  | 9115  | 9469  | 9267  | 9263  | 8820  | 7207  | 6461  | 4697  | 3917  | 3368  | 2523  | 131413 | Accepted  |              |
| 7  | 1420 | 1374 | 342  | 339  | 499  | 1177 | 2394 | 3448 | 5147 | 6915 | 8783  | 9566  | 9413  | 9074  | 8669  | 8599  | 8996  | 8088  | 6335  | 5089  | 3529  | 2438  | 1867  | 1220  | 114721 | Accepted  |              |
| 8  | 674  | 388  | 344  | 534  | 2234 | 6074 | 8038 | 8429 | 8212 | 7267 | 7387  | 7486  | 7641  | 8149  | 8799  | 9294  | 9188  | 9206  | 7061  | 5027  | 3524  | 2445  | 1715  | 1212  | 130328 | Accepted  |              |
| 9  | 656  | 385  | 368  | 557  | 2171 | 6186 | 6111 | 5263 | 8618 | 7705 | 7657  | 7772  | 8061  | 8283  | 9298  | 9407  | 9860  | 9322  | 7875  | 5647  | 4050  | 2939  | 2385  | 1449  | 132025 | Accepted  |              |
| 10 | 646  | 394  | 334  | 550  | 2249 | 6134 | 7880 | 8639 | 8604 | 7814 | 7502  | 7812  | 8210  | 8667  | 9409  | 9338  | 9752  | 9519  | 7839  | 6735  | 4430  | 3248  | 2430  | 1585  | 139720 | Accepted  |              |
| 11 | 830  | 505  | 362  | 552  | 1412 | 3712 | 6643 | 7826 | 8060 | 8253 | 8753  | 9263  | 9052  | 8866  | 9539  | 9754  | 9646  | 8931  | 7359  | 5493  | 4236  | 3124  | 2724  | 1577  | 136472 | Accepted  |              |
| 12 | 844  | 515  | 389  | 570  | 2008 | 5331 | 7328 | 8178 | 8132 | 7642 | 7777  | 8147  | 8036  | 8260  | 8214  | 8195  | 8207  | 8461  | 7219  | 5044  | 4026  | 3229  | 2967  | 2026  | 130745 | Accepted  |              |
| 13 | 1190 | 693  | 553  | 486  | 907  | 2016 | 3363 | 5004 | 6804 | 8309 | 9254  | 9745  | 9253  | 9190  | 9315  | 9497  | 8896  | 8320  | 6352  | 5206  | 4178  | 3714  | 3130  | 2324  | 127699 | Accepted  |              |
| 14 | 1375 | 794  | 505  | 441  | 510  | 1084 | 2058 | 3209 | 4668 | 6730 | 8545  | 9550  | 9763  | 8833  | 8730  | 8575  | 8669  | 7981  | 6533  | 4740  | 3468  | 2444  | 2047  | 1169  | 112421 | Accepted  |              |
| 15 | 657  | 431  | 360  | 535  | 2122 | 5939 | 7616 | 8307 | 7928 | 7326 | 7322  | 7354  | 7657  | 8244  | 9042  | 9754  | 9272  | 8941  | 6906  | 4965  | 3592  | 2476  | 1763  | 1243  | 129752 | Accepted  |              |
| 16 | 646  | 360  | 327  | 572  | 2072 | 6019 | 7942 | 8133 | 8094 | 7355 | 7461  | 7490  | 7849  | 8265  | 9025  | 8113  | 9649  | 9348  | 7005  | 6322  | 4344  | 3075  | 2139  | 1443  | 133048 | Accepted  |              |
| 17 | 681  | 400  | 289  | 531  | 2113 | 6084 | 8024 | 8349 | 8181 | 7785 | 7517  | 7950  | 8066  | 8326  | 9357  | 9976  | 9620  | 9441  | 7763  | 5691  | 4432  | 3096  | 2273  | 1509  | 137454 | Accepted  |              |
| 18 | 767  | 417  | 354  | 579  | 1855 | 6019 | 7978 | 8838 | 8642 | 7921 | 7902  | 8159  | 8230  | 8504  | 9372  | 9501  | 9703  | 9517  | 8246  | 6104  | 4568  | 3219  | 2432  | 1738  | 140565 | Accepted  |              |
| 19 | 912  | 538  | 396  | 569  | 2082 | 5361 | 7744 | 8642 | 8125 | 7834 | 8078  | 8621  | 8296  | 8886  | 9266  | 8773  | 9834  | 9550  | 8217  | 6345  | 4957  | 3841  | 3296  | 2192  | 142355 | Accepted  |              |
| 20 | 1637 | 803  | 527  | 530  | 896  | 2089 | 3742 | 5786 | 7574 | 8620 | 9371  | 9442  | 9261  | 9593  | 9380  | 9475  | 9433  | 8883  | 7160  | 5550  | 4574  | 3907  | 3566  | 2441  | 134240 | Accepted  |              |
| 21 | 1479 | 874  | 599  | 467  | 521  | 1096 | 2168 | 3399 | 4883 | 6805 | 8457  | 9280  | 9672  | 9439  | 9212  | 8969  | 8840  | 7440  | 6102  | 4851  | 3515  | 2604  | 2114  | 1252  | 114038 | Accepted  |              |
| 22 | 655  | 408  | 359  | 512  | 2138 | 5646 | 6836 | 8653 | 7899 | 7445 | 7278  | 7646  | 8096  | 8542  | 9257  | 9534  | 9284  | 9181  | 7167  | 5352  | 3983  | 2818  | 2103  | 1449  | 132241 | Accepted  |              |
| 23 | 820  | 402  | 356  | 581  | 2117 | 5852 | 7793 | 8779 | 8305 | 8035 | 8336  | 8795  | 8739  | 9072  | 9225  | 9262  | 9529  | 8931  | 8058  | 7115  | 5196  | 3598  | 2543  | 1677  | 143116 | Accepted  |              |
| 24 | 980  | 545  | 380  | 600  | 1968 | 5283 | 7184 | 7940 | 7884 | 7827 | 8661  | 9305  | 9357  | 8902  | 8529  | 8527  | 8694  | 8256  | 6466  | 5211  | 4204  | 3155  | 2655  | 1994  | 134507 | Accepted  |              |
| 25 | 1168 | 758  | 460  | 382  | 435  | 837  | 1744 | 2346 | 3503 | 5352 | 7863  | 9113  | 9031  | 7980  | 6013  | 5282  | 6138  | 7492  | 8158  | 7494  | 6956  | 4415  | 2635  | 1537  | 107092 | Accepted  |              |
| 26 | 753  | 456  | 328  | 445  | 1098 | 2808 | 3670 | 4602 | 5619 | 6969 | 8513  | 8868  | 8480  | 9502  | 9292  | 8742  | 8249  | 8019  | 6230  | 4755  | 3836  | 3031  | 2518  | 1738  | 118521 | Accepted  |              |
| 27 | 1083 | 700  | 493  | 481  | 771  | 1509 | 2617 | 3972 | 5533 | 7361 | 8923  | 9203  | 9221  | 9166  | 8958  | 8971  | 8869  | 8388  | 6815  | 5228  | 4385  | 3473  | 3030  | 2424  | 121574 | Accepted  |              |
| 28 | 1376 | 816  | 581  | 486  | 646  | 1135 | 2145 | 3165 | 4516 | 6606 | 8279  | 8513  | 9531  | 8666  | 8180  | 7893  | 8057  | 7722  | 5838  | 4637  | 3412  | 2274  | 1892  | 1090  | 107456 | Accepted  |              |
| 29 | 626  | 395  | 328  | 574  | 2241 | 5848 | 7855 | 8912 | 8074 | 7283 | 7151  | 7340  | 7625  | 7854  | 9165  | 9572  | 9041  | 8802  | 6801  | 4786  | 3541  | 2395  | 1582  | 1157  | 128948 | Accepted  |              |
| 30 | 636  | 364  | 328  | 569  | 2207 | 5819 | 7774 | 8464 | 8533 | 7383 | 7407  | 7499  | 7680  | 8123  | 9012  | 9628  | 9422  | 9344  | 7574  | 5286  | 3878  | 2709  | 2313  | 1645  | 133597 | Accepted  |              |
|    |      |      |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        | 130182.8  | Nov 2021 ADT |

## **2018 Average Count Data – Sta. 6255**

November ADT: 129,985

November 2019 ADT = 129,985 x (1.01) = 131,285

## **2021 Average Count Data – Sta. 6255**

November ADT: 130,183

## **COVID Adjustment**

$$1 - \frac{131,285}{130,183} = -0.00846$$

VEHICLE TRAVEL SPEED DATA

---

Location : Old Oaken Bucket Road  
 Location : West of Winter Street  
 City/State: Scituate, MA  
 Direction: WB,

90900001

| 11/3/2021    | 0 - 15   | > 15 -   | > 20 -    | > 25 -     | > 30 -     | > 35 -     | > 40 -     | > 45 -    | > 50 -   | > 55 -   | > 60 -   | > 65 -   | > 70     | Total       |
|--------------|----------|----------|-----------|------------|------------|------------|------------|-----------|----------|----------|----------|----------|----------|-------------|
| Time         | MPH      | 20 MPH   | 25 MPH    | 30 MPH     | 35 MPH     | 40 MPH     | 45 MPH     | 50 MPH    | 55 MPH   | 60 MPH   | 65 MPH   | 70 MPH   | MPH      |             |
| 12:00 AM     | 0        | 0        | 0         | 0          | 2          | 0          | 0          | 0         | 0        | 0        | 0        | 0        | 0        | 2           |
| 1:00         | 0        | 0        | 0         | 2          | 0          | 0          | 0          | 0         | 0        | 0        | 0        | 0        | 0        | 2           |
| 2:00         | 0        | 0        | 0         | 0          | 0          | 2          | 0          | 0         | 0        | 0        | 0        | 0        | 0        | 2           |
| 3:00         | 0        | 0        | 0         | 0          | 0          | 0          | 1          | 1         | 0        | 0        | 0        | 0        | 0        | 2           |
| 4:00         | 1        | 0        | 0         | 3          | 7          | 7          | 2          | 0         | 0        | 0        | 0        | 0        | 0        | 20          |
| 5:00         | 1        | 0        | 1         | 0          | 17         | 20         | 6          | 0         | 0        | 0        | 0        | 0        | 0        | 45          |
| 6:00         | 0        | 0        | 0         | 10         | 55         | 42         | 12         | 4         | 1        | 0        | 0        | 0        | 0        | 124         |
| 7:00         | 0        | 0        | 1         | 10         | 59         | 81         | 9          | 1         | 0        | 0        | 0        | 0        | 0        | 161         |
| 8:00         | 0        | 1        | 2         | 16         | 83         | 64         | 10         | 0         | 0        | 0        | 0        | 0        | 0        | 176         |
| 9:00         | 0        | 1        | 2         | 17         | 85         | 54         | 5          | 1         | 0        | 0        | 0        | 0        | 0        | 165         |
| 10:00        | 0        | 0        | 0         | 13         | 60         | 43         | 9          | 1         | 0        | 0        | 0        | 0        | 0        | 126         |
| 11:00        | 0        | 0        | 0         | 16         | 57         | 38         | 5          | 1         | 0        | 0        | 0        | 0        | 0        | 117         |
| 12:00 PM     | 0        | 0        | 4         | 19         | 58         | 39         | 4          | 1         | 0        | 0        | 0        | 0        | 0        | 125         |
| 1:00         | 1        | 2        | 1         | 8          | 34         | 32         | 3          | 0         | 0        | 0        | 0        | 0        | 0        | 81          |
| 2:00         | 0        | 0        | 4         | 7          | 49         | 45         | 8          | 0         | 0        | 0        | 0        | 0        | 0        | 113         |
| 3:00         | 1        | 0        | 4         | 13         | 60         | 63         | 7          | 0         | 0        | 0        | 0        | 0        | 0        | 148         |
| 4:00         | 0        | 0        | 1         | 12         | 58         | 40         | 5          | 0         | 0        | 0        | 0        | 0        | 0        | 116         |
| 5:00         | 0        | 0        | 0         | 14         | 60         | 43         | 5          | 2         | 0        | 0        | 0        | 0        | 0        | 124         |
| 6:00         | 0        | 0        | 0         | 12         | 39         | 28         | 4          | 0         | 0        | 0        | 0        | 0        | 0        | 83          |
| 7:00         | 0        | 0        | 0         | 6          | 30         | 12         | 1          | 0         | 0        | 0        | 0        | 0        | 0        | 49          |
| 8:00         | 0        | 0        | 0         | 5          | 12         | 5          | 0          | 0         | 0        | 0        | 0        | 0        | 0        | 22          |
| 9:00         | 0        | 0        | 1         | 1          | 4          | 4          | 3          | 1         | 0        | 0        | 0        | 0        | 0        | 14          |
| 10:00        | 0        | 0        | 0         | 0          | 7          | 5          | 2          | 0         | 0        | 0        | 0        | 0        | 0        | 14          |
| 11:00        | 0        | 0        | 0         | 1          | 0          | 1          | 0          | 0         | 0        | 0        | 0        | 0        | 0        | 2           |
| <b>Total</b> | <b>4</b> | <b>4</b> | <b>21</b> | <b>185</b> | <b>836</b> | <b>668</b> | <b>101</b> | <b>13</b> | <b>1</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>1833</b> |

|                      |       |      |      |      |
|----------------------|-------|------|------|------|
| Percentile           | 15th  | 50th | 85th | 95th |
| Speed                | 30.3  | 34.1 | 38.4 | 40.3 |
| Mean Speed (Average) | 34.3  |      |      |      |
| 10 MPH Pace Speed    | 30-39 |      |      |      |
| Number in Pace       | 1494  |      |      |      |
| Percent in Pace      | 81.5% |      |      |      |
| Number > 35 MPH      | 783   |      |      |      |
| Percent > 35 MPH     | 42.7% |      |      |      |



Location : Old Oaken Bucket Road  
 Location : West of Winter Street  
 City/State: Scituate, MA  
 Direction: EB,

90900001

| 11/3/2021    | 0 - 15    | > 15 -    | > 20 -    | > 25 -     | > 30 -     | > 35 -     | > 40 -     | > 45 -    | > 50 -   | > 55 -   | > 60 -   | > 65 -   | > 70     | Total       |
|--------------|-----------|-----------|-----------|------------|------------|------------|------------|-----------|----------|----------|----------|----------|----------|-------------|
| Time         | MPH       | 20 MPH    | 25 MPH    | 30 MPH     | 35 MPH     | 40 MPH     | 45 MPH     | 50 MPH    | 55 MPH   | 60 MPH   | 65 MPH   | 70 MPH   | MPH      |             |
| 12:00 AM     | 0         | 0         | 0         | 0          | 5          | 6          | 0          | 0         | 0        | 0        | 0        | 0        | 0        | 11          |
| 1:00         | 0         | 0         | 0         | 0          | 4          | 0          | 1          | 0         | 0        | 0        | 0        | 0        | 0        | 5           |
| 2:00         | 0         | 0         | 0         | 0          | 0          | 1          | 0          | 0         | 0        | 0        | 0        | 0        | 0        | 1           |
| 3:00         | 0         | 0         | 0         | 1          | 0          | 1          | 0          | 0         | 0        | 0        | 0        | 0        | 0        | 2           |
| 4:00         | 0         | 0         | 0         | 0          | 0          | 2          | 0          | 0         | 0        | 0        | 0        | 0        | 0        | 2           |
| 5:00         | 0         | 0         | 0         | 1          | 1          | 3          | 2          | 0         | 0        | 0        | 0        | 0        | 0        | 7           |
| 6:00         | 3         | 1         | 0         | 7          | 8          | 13         | 7          | 0         | 0        | 0        | 0        | 0        | 0        | 39          |
| 7:00         | 1         | 0         | 0         | 7          | 32         | 43         | 6          | 0         | 0        | 0        | 0        | 0        | 0        | 89          |
| 8:00         | 8         | 0         | 1         | 5          | 42         | 44         | 8          | 2         | 0        | 0        | 0        | 0        | 0        | 110         |
| 9:00         | 0         | 0         | 0         | 5          | 33         | 37         | 7          | 0         | 0        | 0        | 0        | 0        | 0        | 82          |
| 10:00        | 0         | 0         | 4         | 8          | 41         | 36         | 6          | 1         | 0        | 0        | 0        | 0        | 0        | 96          |
| 11:00        | 0         | 0         | 2         | 18         | 47         | 39         | 12         | 1         | 0        | 0        | 0        | 0        | 0        | 119         |
| 12:00 PM     | 3         | 3         | 3         | 9          | 48         | 70         | 6          | 1         | 0        | 0        | 0        | 0        | 0        | 143         |
| 1:00         | 0         | 0         | 1         | 12         | 45         | 57         | 10         | 0         | 0        | 0        | 0        | 0        | 0        | 125         |
| 2:00         | 0         | 2         | 3         | 11         | 66         | 62         | 7          | 3         | 0        | 0        | 0        | 0        | 0        | 154         |
| 3:00         | 2         | 1         | 9         | 30         | 82         | 65         | 10         | 2         | 0        | 0        | 0        | 0        | 0        | 201         |
| 4:00         | 0         | 3         | 2         | 35         | 83         | 80         | 12         | 2         | 0        | 0        | 0        | 0        | 0        | 217         |
| 5:00         | 0         | 1         | 0         | 13         | 88         | 99         | 18         | 1         | 0        | 0        | 0        | 0        | 0        | 220         |
| 6:00         | 0         | 2         | 10        | 26         | 100        | 34         | 2          | 1         | 0        | 0        | 0        | 0        | 0        | 175         |
| 7:00         | 4         | 2         | 4         | 11         | 54         | 58         | 11         | 0         | 0        | 0        | 0        | 0        | 0        | 144         |
| 8:00         | 0         | 0         | 5         | 9          | 24         | 34         | 7          | 0         | 0        | 0        | 0        | 0        | 0        | 79          |
| 9:00         | 0         | 0         | 1         | 1          | 19         | 30         | 5          | 0         | 0        | 0        | 0        | 0        | 0        | 56          |
| 10:00        | 0         | 0         | 0         | 1          | 14         | 7          | 5          | 0         | 0        | 0        | 0        | 0        | 0        | 27          |
| 11:00        | 0         | 0         | 0         | 0          | 5          | 6          | 3          | 1         | 0        | 0        | 0        | 0        | 0        | 15          |
| <b>Total</b> | <b>21</b> | <b>15</b> | <b>45</b> | <b>210</b> | <b>841</b> | <b>827</b> | <b>145</b> | <b>15</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>2119</b> |

|                      |       |      |      |      |
|----------------------|-------|------|------|------|
| Percentile           | 15th  | 50th | 85th | 95th |
| Speed                | 30.3  | 34.7 | 38.4 | 40.9 |
| Mean Speed (Average) | 34.2  |      |      |      |
| 10 MPH Pace Speed    | 30-39 |      |      |      |
| Number in Pace       | 1656  |      |      |      |
| Percent in Pace      | 78.2% |      |      |      |
| Number > 35 MPH      | 987   |      |      |      |
| Percent > 35 MPH     | 46.6% |      |      |      |



Location : Old Oaken Bucket Road  
 Location : West of Winter Street  
 City/State: Scituate, MA  
 Direction: EB,

90900001

| 11/4/2021    | 0 - 15    | > 15 -   | > 20 -    | > 25 -     | > 30 -     | > 35 -     | > 40 -     | > 45 -   | > 50 -   | > 55 -   | > 60 -   | > 65 -   | > 70     | Total       |
|--------------|-----------|----------|-----------|------------|------------|------------|------------|----------|----------|----------|----------|----------|----------|-------------|
| Time         | MPH       | 20 MPH   | 25 MPH    | 30 MPH     | 35 MPH     | 40 MPH     | 45 MPH     | 50 MPH   | 55 MPH   | 60 MPH   | 65 MPH   | 70 MPH   | MPH      |             |
| 12:00 AM     | 0         | 0        | 0         | 0          | 3          | 9          | 1          | 0        | 0        | 0        | 0        | 0        | 0        | 13          |
| 1:00         | 0         | 0        | 0         | 0          | 1          | 1          | 0          | 1        | 0        | 0        | 0        | 0        | 0        | 3           |
| 2:00         | 0         | 0        | 0         | 0          | 1          | 1          | 0          | 0        | 0        | 0        | 0        | 0        | 0        | 2           |
| 3:00         | 0         | 0        | 0         | 2          | 0          | 0          | 2          | 0        | 0        | 0        | 0        | 0        | 0        | 4           |
| 4:00         | 0         | 0        | 0         | 0          | 0          | 4          | 0          | 0        | 0        | 0        | 1        | 0        | 0        | 5           |
| 5:00         | 0         | 0        | 0         | 1          | 3          | 5          | 0          | 0        | 0        | 0        | 0        | 0        | 0        | 9           |
| 6:00         | 2         | 0        | 1         | 7          | 14         | 10         | 2          | 1        | 0        | 0        | 0        | 0        | 0        | 37          |
| 7:00         | 0         | 0        | 2         | 15         | 33         | 51         | 8          | 1        | 0        | 0        | 0        | 0        | 0        | 110         |
| 8:00         | 18        | 3        | 0         | 10         | 35         | 36         | 7          | 0        | 0        | 0        | 0        | 0        | 0        | 109         |
| 9:00         | 0         | 0        | 0         | 6          | 45         | 46         | 5          | 0        | 0        | 0        | 0        | 0        | 0        | 102         |
| 10:00        | 0         | 1        | 2         | 11         | 52         | 36         | 7          | 1        | 0        | 0        | 0        | 0        | 0        | 110         |
| 11:00        | 0         | 0        | 1         | 7          | 55         | 43         | 7          | 0        | 0        | 0        | 0        | 0        | 0        | 113         |
| 12:00 PM     | 0         | 3        | 1         | 14         | 49         | 53         | 8          | 0        | 0        | 0        | 0        | 0        | 0        | 128         |
| 1:00         | 1         | 0        | 4         | 16         | 60         | 51         | 15         | 0        | 0        | 0        | 0        | 0        | 0        | 147         |
| 2:00         | 0         | 0        | 0         | 23         | 80         | 49         | 8          | 1        | 0        | 0        | 0        | 0        | 0        | 161         |
| 3:00         | 0         | 0        | 1         | 32         | 91         | 64         | 4          | 0        | 0        | 0        | 0        | 0        | 0        | 192         |
| 4:00         | 0         | 0        | 0         | 13         | 65         | 91         | 16         | 0        | 0        | 0        | 0        | 0        | 0        | 185         |
| 5:00         | 0         | 0        | 1         | 15         | 82         | 78         | 10         | 1        | 0        | 0        | 0        | 0        | 0        | 187         |
| 6:00         | 0         | 0        | 4         | 29         | 81         | 43         | 7          | 0        | 0        | 0        | 0        | 0        | 0        | 164         |
| 7:00         | 0         | 0        | 0         | 5          | 57         | 73         | 6          | 0        | 0        | 0        | 0        | 0        | 0        | 141         |
| 8:00         | 0         | 0        | 1         | 1          | 39         | 43         | 8          | 0        | 0        | 0        | 0        | 0        | 0        | 92          |
| 9:00         | 0         | 0        | 0         | 3          | 16         | 28         | 3          | 3        | 0        | 0        | 0        | 0        | 0        | 53          |
| 10:00        | 0         | 0        | 1         | 1          | 11         | 16         | 9          | 0        | 1        | 0        | 0        | 0        | 0        | 39          |
| 11:00        | 0         | 0        | 0         | 0          | 7          | 11         | 2          | 0        | 0        | 0        | 0        | 0        | 0        | 20          |
| <b>Total</b> | <b>21</b> | <b>7</b> | <b>19</b> | <b>211</b> | <b>880</b> | <b>842</b> | <b>135</b> | <b>9</b> | <b>1</b> | <b>0</b> | <b>1</b> | <b>0</b> | <b>0</b> | <b>2126</b> |

|                      |       |      |      |      |
|----------------------|-------|------|------|------|
| Percentile           | 15th  | 50th | 85th | 95th |
| Speed                | 30.3  | 34.7 | 37.8 | 40.3 |
| Mean Speed (Average) | 34.4  |      |      |      |
| 10 MPH Pace Speed    | 30-39 |      |      |      |
| Number in Pace       | 1709  |      |      |      |
| Percent in Pace      | 80.4% |      |      |      |
| Number > 35 MPH      | 988   |      |      |      |
| Percent > 35 MPH     | 46.5% |      |      |      |

|                      |           |           |           |            |             |             |            |           |          |          |          |          |          |             |
|----------------------|-----------|-----------|-----------|------------|-------------|-------------|------------|-----------|----------|----------|----------|----------|----------|-------------|
| <b>Grand Total</b>   | <b>42</b> | <b>22</b> | <b>64</b> | <b>421</b> | <b>1721</b> | <b>1669</b> | <b>280</b> | <b>24</b> | <b>1</b> | <b>0</b> | <b>1</b> | <b>0</b> | <b>0</b> | <b>4245</b> |
| Stats                |           |           |           |            |             |             |            |           |          |          |          |          |          |             |
| Percentile           | 15th      | 50th      | 85th      | 95th       |             |             |            |           |          |          |          |          |          |             |
| Speed                | 30.3      | 34.7      | 38.4      | 40.9       |             |             |            |           |          |          |          |          |          |             |
| Mean Speed (Average) | 34.3      |           |           |            |             |             |            |           |          |          |          |          |          |             |
| 10 MPH Pace Speed    | 30-39     |           |           |            |             |             |            |           |          |          |          |          |          |             |
| Number in Pace       | 3365      |           |           |            |             |             |            |           |          |          |          |          |          |             |
| Percent in Pace      | 79.3%     |           |           |            |             |             |            |           |          |          |          |          |          |             |
| Number > 35 MPH      | 1975      |           |           |            |             |             |            |           |          |          |          |          |          |             |
| Percent > 35 MPH     | 46.5%     |           |           |            |             |             |            |           |          |          |          |          |          |             |

Location : Old Oaken Bucket Road  
 Location : West of Winter Street  
 City/State: Scituate, MA  
 Direction: Combined

90900001

| 11/3/2021    | 0 - 15    | > 15 -    | > 20 -    | > 25 -     | > 30 -      | > 35 -      | > 40 -     | > 45 -    | > 50 -   | > 55 -   | > 60 -   | > 65 -   | > 70     | Total       |
|--------------|-----------|-----------|-----------|------------|-------------|-------------|------------|-----------|----------|----------|----------|----------|----------|-------------|
| Time         | MPH       | 20 MPH    | 25 MPH    | 30 MPH     | 35 MPH      | 40 MPH      | 45 MPH     | 50 MPH    | 55 MPH   | 60 MPH   | 65 MPH   | 70 MPH   | MPH      |             |
| 12:00 AM     | 0         | 0         | 0         | 0          | 7           | 6           | 0          | 0         | 0        | 0        | 0        | 0        | 0        | 13          |
| 1:00         | 0         | 0         | 0         | 2          | 4           | 0           | 1          | 0         | 0        | 0        | 0        | 0        | 0        | 7           |
| 2:00         | 0         | 0         | 0         | 0          | 0           | 3           | 0          | 0         | 0        | 0        | 0        | 0        | 0        | 3           |
| 3:00         | 0         | 0         | 0         | 1          | 0           | 1           | 1          | 1         | 0        | 0        | 0        | 0        | 0        | 4           |
| 4:00         | 1         | 0         | 0         | 3          | 7           | 9           | 2          | 0         | 0        | 0        | 0        | 0        | 0        | 22          |
| 5:00         | 1         | 0         | 1         | 1          | 18          | 23          | 8          | 0         | 0        | 0        | 0        | 0        | 0        | 52          |
| 6:00         | 3         | 1         | 0         | 17         | 63          | 55          | 19         | 4         | 1        | 0        | 0        | 0        | 0        | 163         |
| 7:00         | 1         | 0         | 1         | 17         | 91          | 124         | 15         | 1         | 0        | 0        | 0        | 0        | 0        | 250         |
| 8:00         | 8         | 1         | 3         | 21         | 125         | 108         | 18         | 2         | 0        | 0        | 0        | 0        | 0        | 286         |
| 9:00         | 0         | 1         | 2         | 22         | 118         | 91          | 12         | 1         | 0        | 0        | 0        | 0        | 0        | 247         |
| 10:00        | 0         | 0         | 4         | 21         | 101         | 79          | 15         | 2         | 0        | 0        | 0        | 0        | 0        | 222         |
| 11:00        | 0         | 0         | 2         | 34         | 104         | 77          | 17         | 2         | 0        | 0        | 0        | 0        | 0        | 236         |
| 12:00 PM     | 3         | 3         | 7         | 28         | 106         | 109         | 10         | 2         | 0        | 0        | 0        | 0        | 0        | 268         |
| 1:00         | 1         | 2         | 2         | 20         | 79          | 89          | 13         | 0         | 0        | 0        | 0        | 0        | 0        | 206         |
| 2:00         | 0         | 2         | 7         | 18         | 115         | 107         | 15         | 3         | 0        | 0        | 0        | 0        | 0        | 267         |
| 3:00         | 3         | 1         | 13        | 43         | 142         | 128         | 17         | 2         | 0        | 0        | 0        | 0        | 0        | 349         |
| 4:00         | 0         | 3         | 3         | 47         | 141         | 120         | 17         | 2         | 0        | 0        | 0        | 0        | 0        | 333         |
| 5:00         | 0         | 1         | 0         | 27         | 148         | 142         | 23         | 3         | 0        | 0        | 0        | 0        | 0        | 344         |
| 6:00         | 0         | 2         | 10        | 38         | 139         | 62          | 6          | 1         | 0        | 0        | 0        | 0        | 0        | 258         |
| 7:00         | 4         | 2         | 4         | 17         | 84          | 70          | 12         | 0         | 0        | 0        | 0        | 0        | 0        | 193         |
| 8:00         | 0         | 0         | 5         | 14         | 36          | 39          | 7          | 0         | 0        | 0        | 0        | 0        | 0        | 101         |
| 9:00         | 0         | 0         | 2         | 2          | 23          | 34          | 8          | 1         | 0        | 0        | 0        | 0        | 0        | 70          |
| 10:00        | 0         | 0         | 0         | 1          | 21          | 12          | 7          | 0         | 0        | 0        | 0        | 0        | 0        | 41          |
| 11:00        | 0         | 0         | 0         | 1          | 5           | 7           | 3          | 1         | 0        | 0        | 0        | 0        | 0        | 17          |
| <b>Total</b> | <b>25</b> | <b>19</b> | <b>66</b> | <b>395</b> | <b>1677</b> | <b>1495</b> | <b>246</b> | <b>28</b> | <b>1</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>3952</b> |

|                      |       |      |      |      |
|----------------------|-------|------|------|------|
| Percentile           | 15th  | 50th | 85th | 95th |
| Speed                | 30.3  | 34.7 | 38.4 | 40.9 |
| Mean Speed (Average) | 34.3  |      |      |      |
| 10 MPH Pace Speed    | 30-39 |      |      |      |
| Number in Pace       | 3150  |      |      |      |
| Percent in Pace      | 79.7% |      |      |      |
| Number > 35 MPH      | 1770  |      |      |      |
| Percent > 35 MPH     | 44.8% |      |      |      |



MASSDOT CRASH RATE WORKSHEETS AND HIGH CRASH LOCATION MAPPING



## INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Scituate COUNT DATE : Nov-21

DISTRICT : 5 UNSIGNALIZED :  SIGNALIZED :

~ INTERSECTION DATA ~

MAJOR STREET : Route 123

MINOR STREET(S) : Old Oaken Bucket Road

**INTERSECTION  
 DIAGRAM**  
 (Label Approaches)



**PEAK HOUR VOLUMES**

| APPROACH :                    | 1   | 2   | 3   | 4 | 5 | Total Peak Hourly Approach Volume |
|-------------------------------|-----|-----|-----|---|---|-----------------------------------|
| DIRECTION :                   | NB  | SB  | EB  |   |   |                                   |
| PEAK HOURLY VOLUMES (AM/PM) : | 421 | 525 | 103 |   |   | <b>1,049</b>                      |

" K " FACTOR :  INTERSECTION ADT ( V ) = TOTAL DAILY APPROACH VOLUME :

TOTAL # OF CRASHES :  # OF YEARS :  AVERAGE # OF CRASHES PER YEAR ( A ) :

**CRASH RATE CALCULATION :**  RATE =  $\frac{( A * 1,000,000 )}{( V * 365 )}$

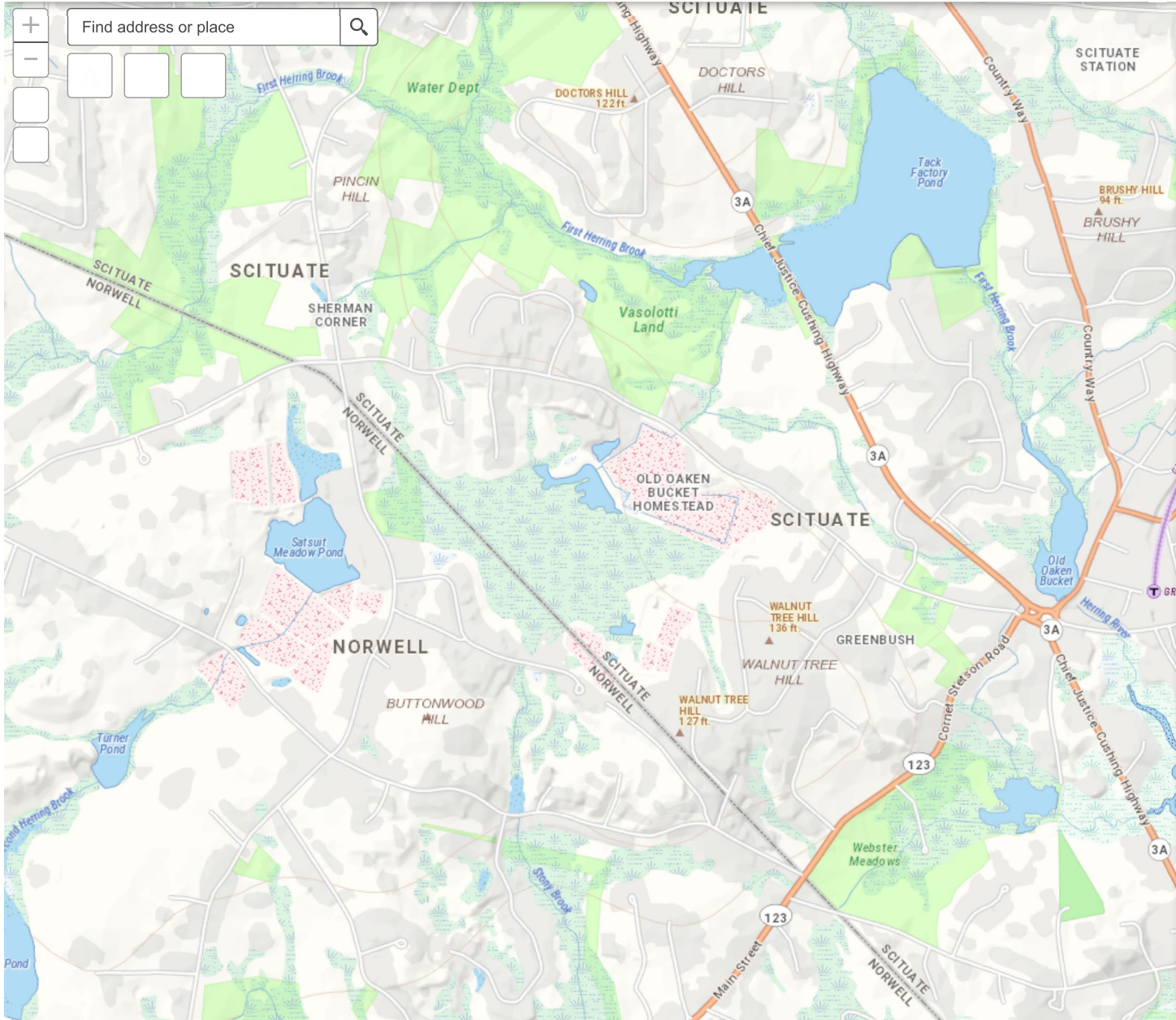
Comments : Above District & Statewide crash rates

Project Title & Date: 9090 - Scituate



# Top Crash Locations

Accessible Version



## Legend

### Crash Clusters

Top 200 Crash Clusters 2017-2019



2017-2019 HSIP Cluster



2010-2019 HSIP Bicycle Cluster



2010-2019 HSIP Pedestrian Cluster





GENERAL BACKGROUND TRAFFIC GROWTH

---

# Massachusetts Highway Department

## 28 Annual Growth Rate 2015-2019

|                  |                    |                          |
|------------------|--------------------|--------------------------|
| Location ID:     | 28                 | Seasonal Factor Group U4 |
| County:          | Plymouth           | Daily Factor Group:      |
| Functional Class | (4) Minor Arterial | Axle Factor Group: U4    |
| Location:        | WHITING STREET     | Growth Factor Group U4   |

| n              | Year | AADT  | Growth       |
|----------------|------|-------|--------------|
| 5              | 2019 | 14372 | -0.401940402 |
| 4              | 2018 | 14430 | 1.128320135  |
| 3              | 2017 | 14269 | 1.19858156   |
| 2              | 2016 | 14100 | 6.198689463  |
| 1              | 2015 | 13277 |              |
| <b>Average</b> |      |       | 2.030912689  |

A= AADT (n- (n-1))

# Massachusetts Highway Department

## 7318 Annual Growth Rate 2015-2019

**Location ID:** 7318                      **Seasonal Factor Group:** U2  
**County:** Plymouth                      **Daily Factor Group:**  
**Functional Class:** (4) Minor Arterial    **Axle Factor Group:** U2  
**Location:** SOUTHEAST EXPRESS    **Growth Factor Group:** U2

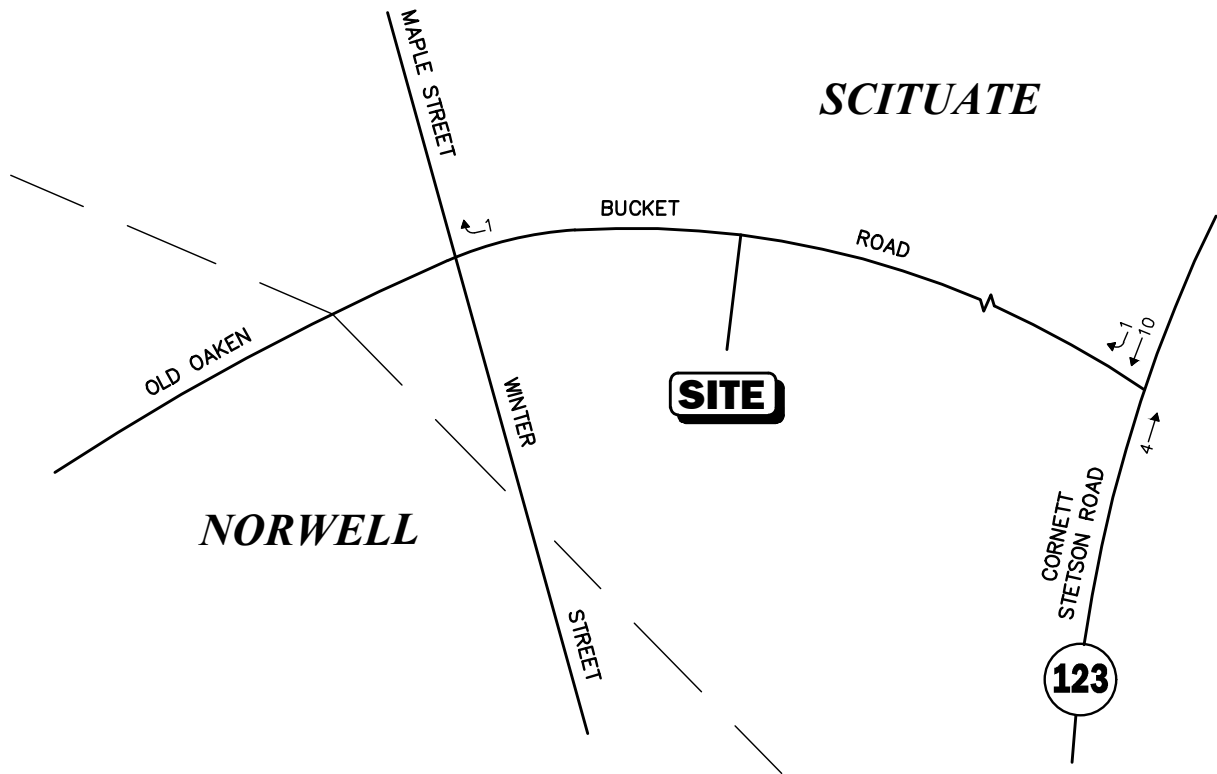
| n              | Year | AADT  | Growth       |
|----------------|------|-------|--------------|
| 5              | 2019 | 93915 | -1.086922178 |
| 4              | 2018 | 94947 | -1.110266318 |
| 3              | 2017 | 96013 | 1.446473099  |
| 2              | 2016 | 94644 | -1.635868549 |
| 1              | 2015 | 96218 |              |
| <b>Average</b> |      |       | -0.596645986 |

A= AADT (n- (n-1))

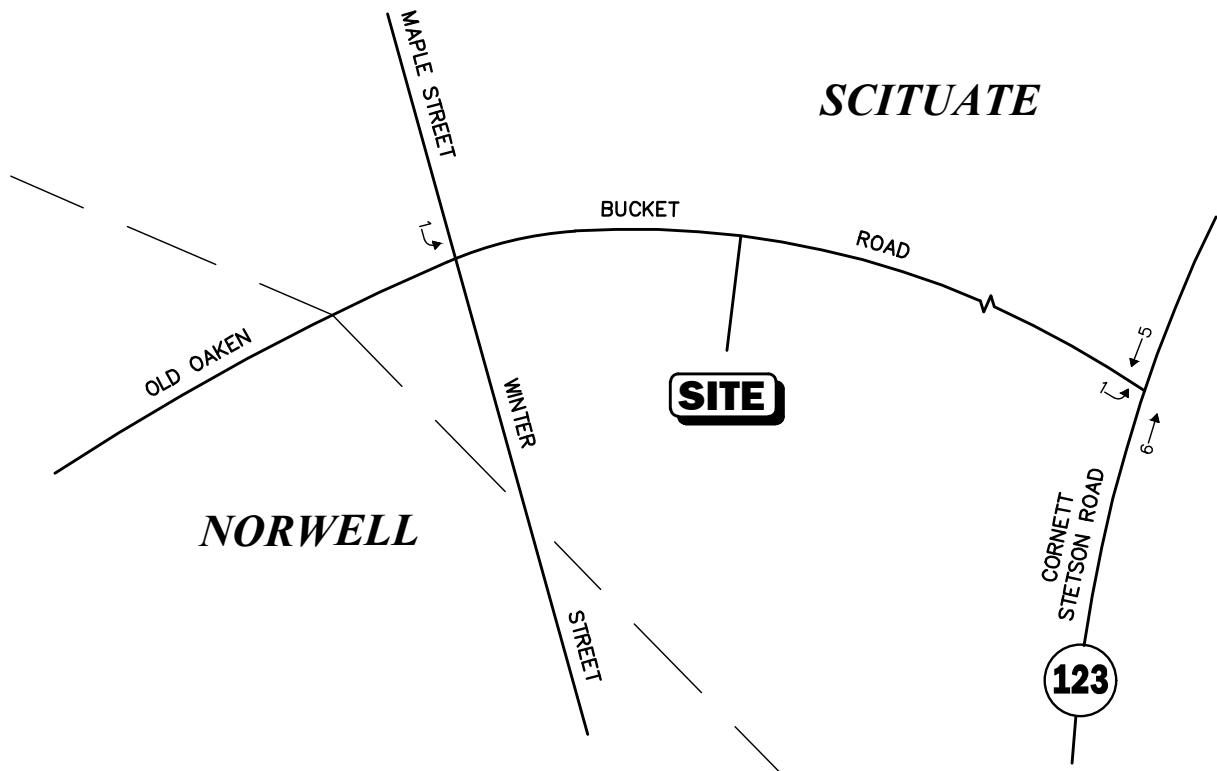
**BACKGROUND DEVELOPMENT TRAFFIC-VOLUMES NETWORKS**

---

MORNING PEAK HOUR



EVENING PEAK HOUR



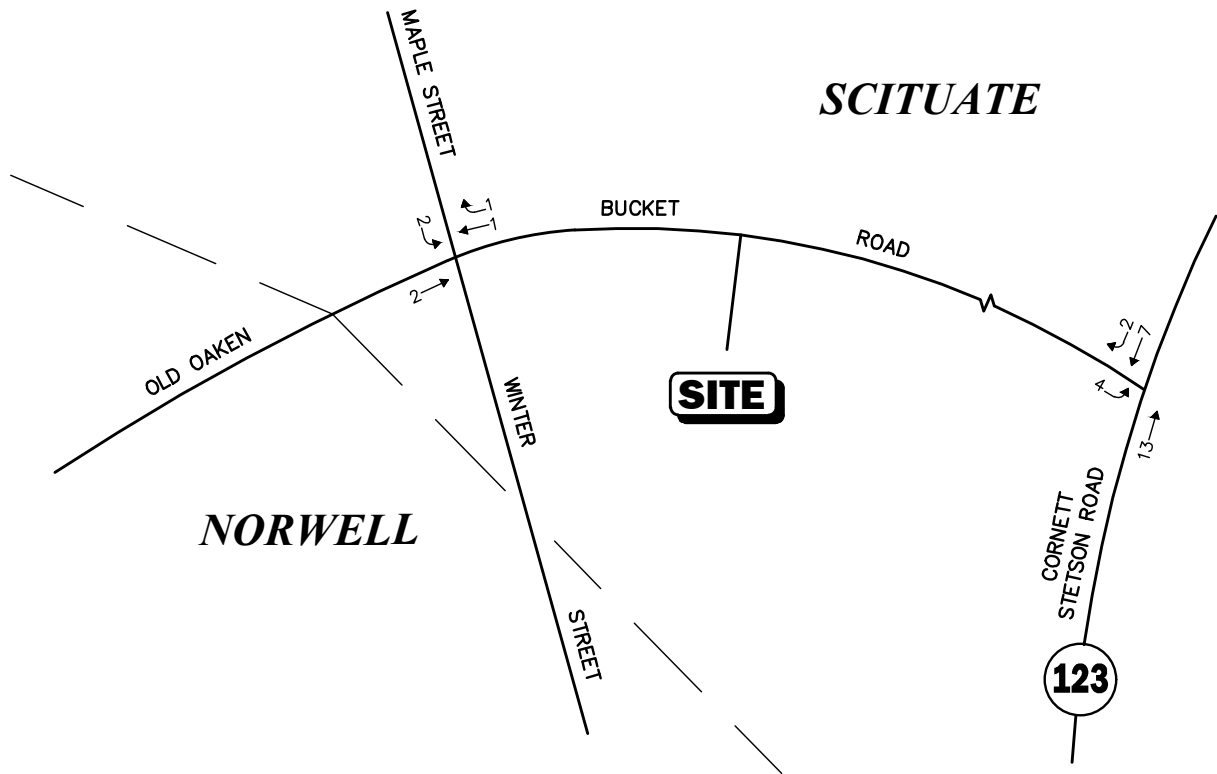
Not To Scale



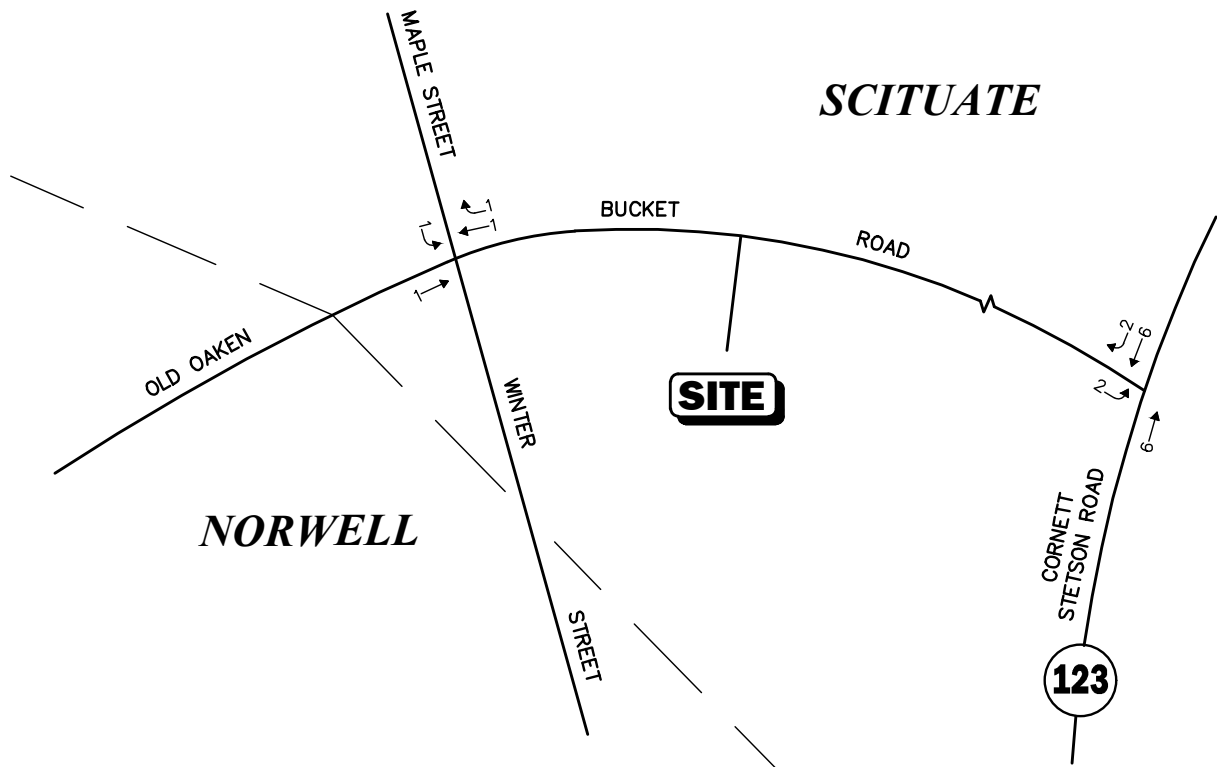
Figure A-1

Trip-Generated  
Proposed Mixed-Use Development  
(Residential)  
Weekday  
Peak-Hour Traffic Volumes

WEEKDAY MORNING PEAK HOUR (8:00 - 9:00 AM)



WEEKDAY EVENING PEAK HOUR (4:00 - 5:00 PM)



Not To Scale



Figure A-2  
Trip-Generated  
Proposed Mixed-Use Development  
(Retail)  
Weekday  
Peak-Hour Traffic Volumes

R:\9090\9090NT1.dwg, 12/13/2021 11:27:34 AM

TRIP-GENERATION CALCULATIONS

---

Query

Filter

## DATA SOURCE:

Trip Generation Manual, 11th Ed

## SEARCH BY LAND USE CODE:

210



## LAND USE GROUP:

(200-299) Residential

## LAND USE :

210 - Single-Family Detached Housing

## LAND USE SUBCATEGORY:

All Sites

## SETTING/LOCATION:

General Urban/Suburban

## INDEPENDENT VARIABLE (IV):

Dwelling Units

## TIME PERIOD:

Weekday

## TRIP TYPE:

Vehicle

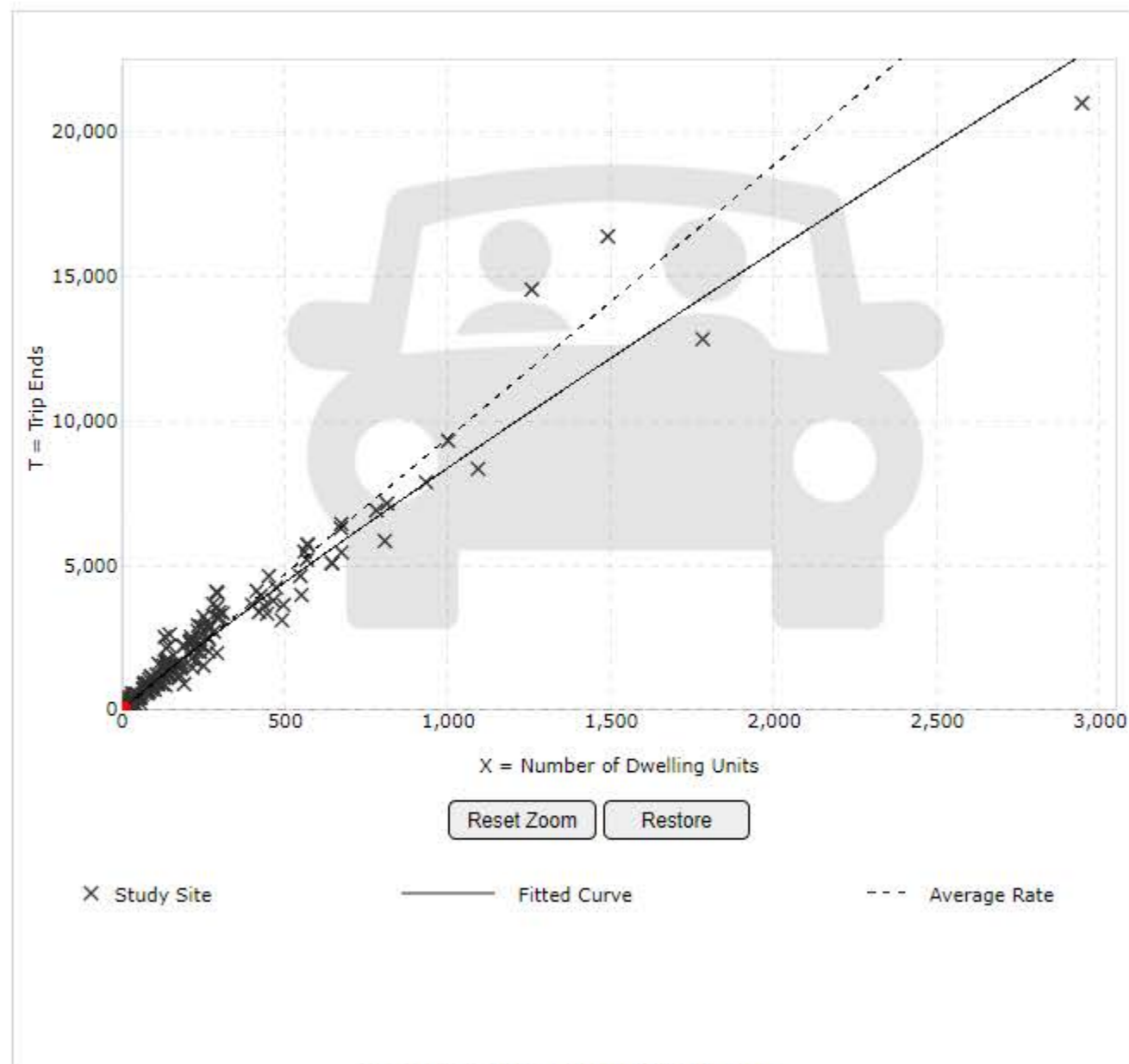
Weekday

## ENTER IV VALUE TO CALCULATE TRIPS:

10

Calculate

## Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.  
 Hover the mouse pointer on data points to view X and T values.

## DATA STATISTICS

## Land Use:

Single-Family Detached Housing (210) [Click for Description and Data Plots](#)

## Independent Variable:

Dwelling Units

## Time Period:

Weekday

## Setting/Location:

General Urban/Suburban

## Trip Type:

Vehicle

## Number of Studies:

174

## Avg. Num. of Dwelling Units:

246

## Average Rate:

9.43

## Range of Rates:

4.45 - 22.61

## Standard Deviation:

2.13

## Fitted Curve Equation:

 $\ln(T) = 0.92 \ln(X) + 2.68$  $R^2$ :

0.95

## Directional Distribution:

50% entering, 50% exiting

## Calculated Trip Ends:

Average Rate: 94 (Total), 47 (Entry), 47 (Exit)

Fitted Curve: 121 (Total), 60 (Entry), 61 (Exit)



Query

Filter

## DATA SOURCE:

Trip Generation Manual, 11th Ed

## SEARCH BY LAND USE CODE:

210



## LAND USE GROUP:

(200-299) Residential

## LAND USE :

210 - Single-Family Detached Housing

## LAND USE SUBCATEGORY:

All Sites

## SETTING/LOCATION:

General Urban/Suburban

## INDEPENDENT VARIABLE (IV):

Dwelling Units

## TIME PERIOD:

Weekday, Peak Hour of Adjacent Street Traffic

## TRIP TYPE:

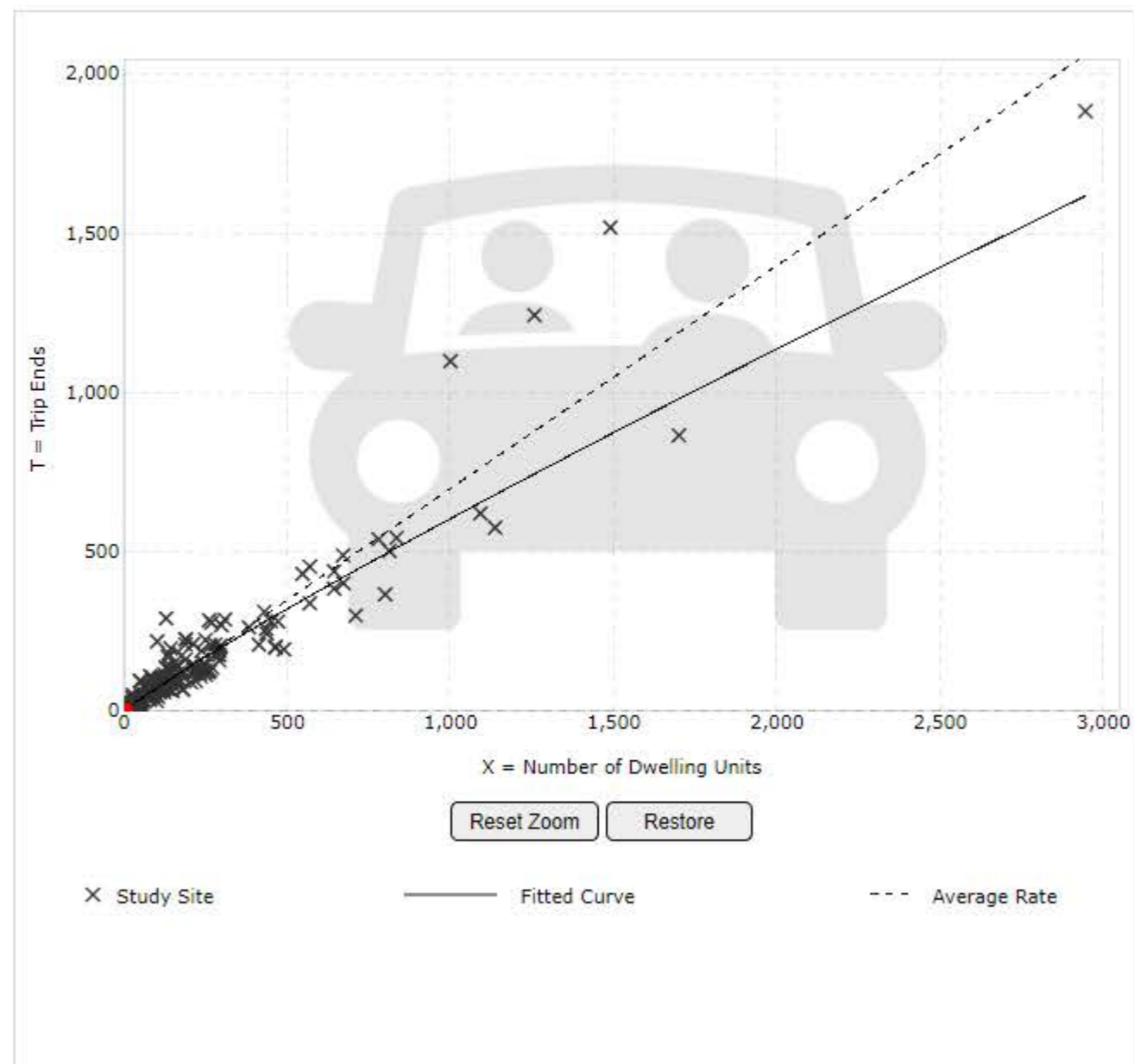
Vehicle

## ENTER IV VALUE TO CALCULATE TRIPS:

10

Calculate

## Data Plot and Equation



## DATA STATISTICS

## Land Use:

Single-Family Detached Housing (210) [Click for Description and Data Plots](#)

## Independent Variable:

Dwelling Units

## Time Period:

Weekday

Peak Hour of Adjacent Street Traffic  
One Hour Between 7 and 9 a.m.

## Setting/Location:

General Urban/Suburban

## Trip Type:

Vehicle

## Number of Studies:

192

## Avg. Num. of Dwelling Units:

226

## Average Rate:

0.70

## Range of Rates:

0.27 - 2.27

## Standard Deviation:

0.24

## Fitted Curve Equation:

 $\ln(T) = 0.91 \ln(X) + 0.12$  $R^2$ :

0.90

## Directional Distribution:

26% entering, 74% exiting

## Calculated Trip Ends:

Average Rate: 7 (Total), 2 (Entry), 5 (Exit)

Fitted Curve: 9 (Total), 2 (Entry), 7 (Exit)

Query

Filter

## DATA SOURCE:

Trip Generation Manual, 11th Ed

## SEARCH BY LAND USE CODE:

210



## LAND USE GROUP:

(200-299) Residential

## LAND USE :

210 - Single-Family Detached Housing

## LAND USE SUBCATEGORY:

All Sites

## SETTING/LOCATION:

General Urban/Suburban

## INDEPENDENT VARIABLE (IV):

Dwelling Units

## TIME PERIOD:

Weekday, Peak Hour of Adjacent Street Traffic

## TRIP TYPE:

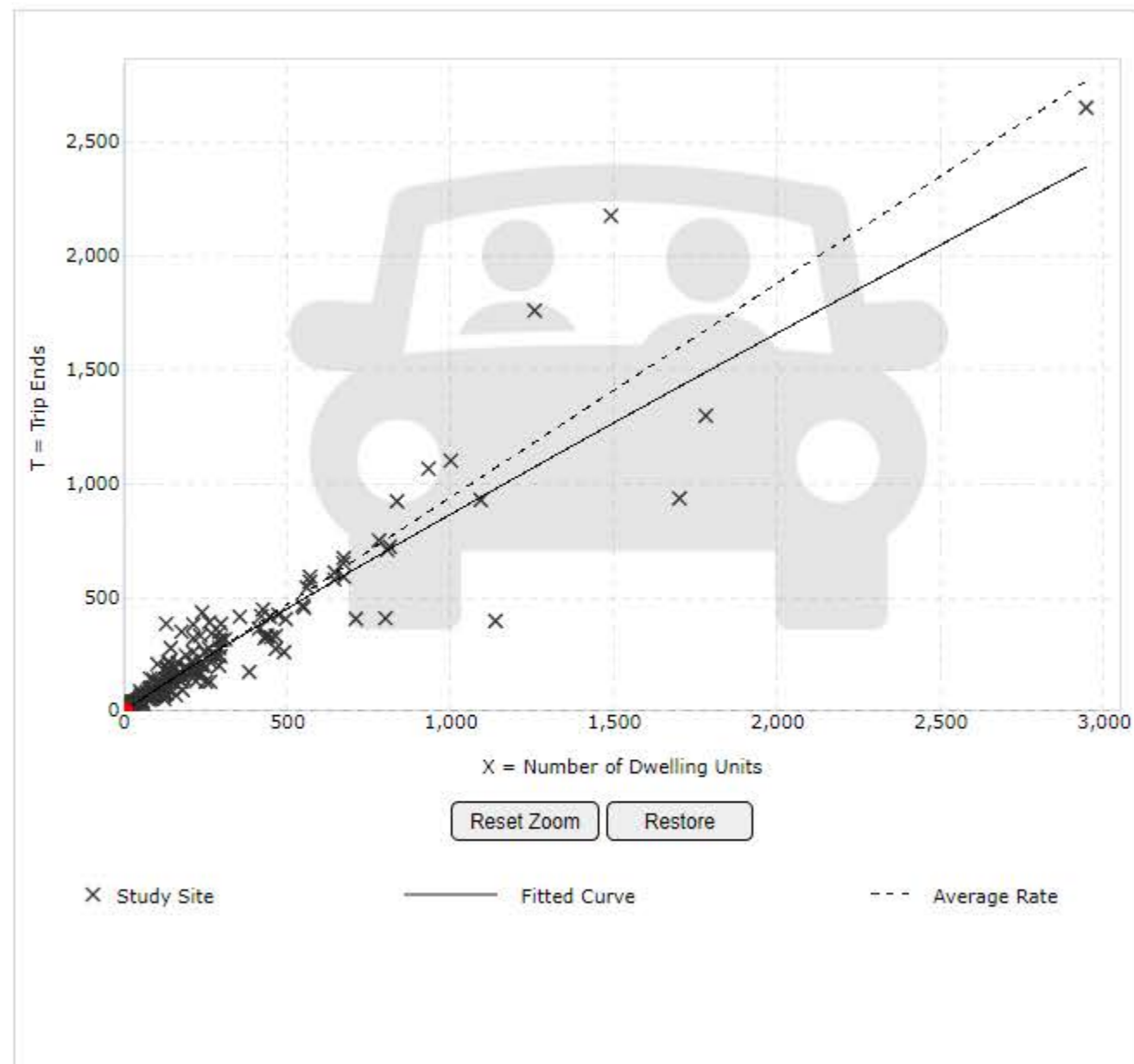
Vehicle

## ENTER IV VALUE TO CALCULATE TRIPS:

10

Calculate

## Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.  
 Hover the mouse pointer on data points to view X and T values.

## DATA STATISTICS

## Land Use:

Single-Family Detached Housing (210) [Click for Description and Data Plots](#)

## Independent Variable:

Dwelling Units

## Time Period:

Weekday

Peak Hour of Adjacent Street Traffic  
 One Hour Between 4 and 6 p.m.

## Setting/Location:

General Urban/Suburban

## Trip Type:

Vehicle

## Number of Studies:

208

## Avg. Num. of Dwelling Units:

248

## Average Rate:

0.94

## Range of Rates:

0.35 - 2.98

## Standard Deviation:

0.31

## Fitted Curve Equation:

$$\ln(T) = 0.94 \ln(X) + 0.27$$
 $R^2$ :

0.92

## Directional Distribution:

63% entering, 37% exiting

## Calculated Trip Ends:

Average Rate: 9 (Total), 6 (Entry), 3 (Exit)

Fitted Curve: 11 (Total), 7 (Entry), 4 (Exit)

Query

Filter

## DATA SOURCE:

Trip Generation Manual, 11th Ed

## SEARCH BY LAND USE CODE:

215



## LAND USE GROUP:

(200-299) Residential

## LAND USE :

215 - Single-Family Attached Housing

## LAND USE SUBCATEGORY:

All Sites

## SETTING/LOCATION:

General Urban/Suburban

## INDEPENDENT VARIABLE (IV):

Dwelling Units

## TIME PERIOD:

Weekday

## TRIP TYPE:

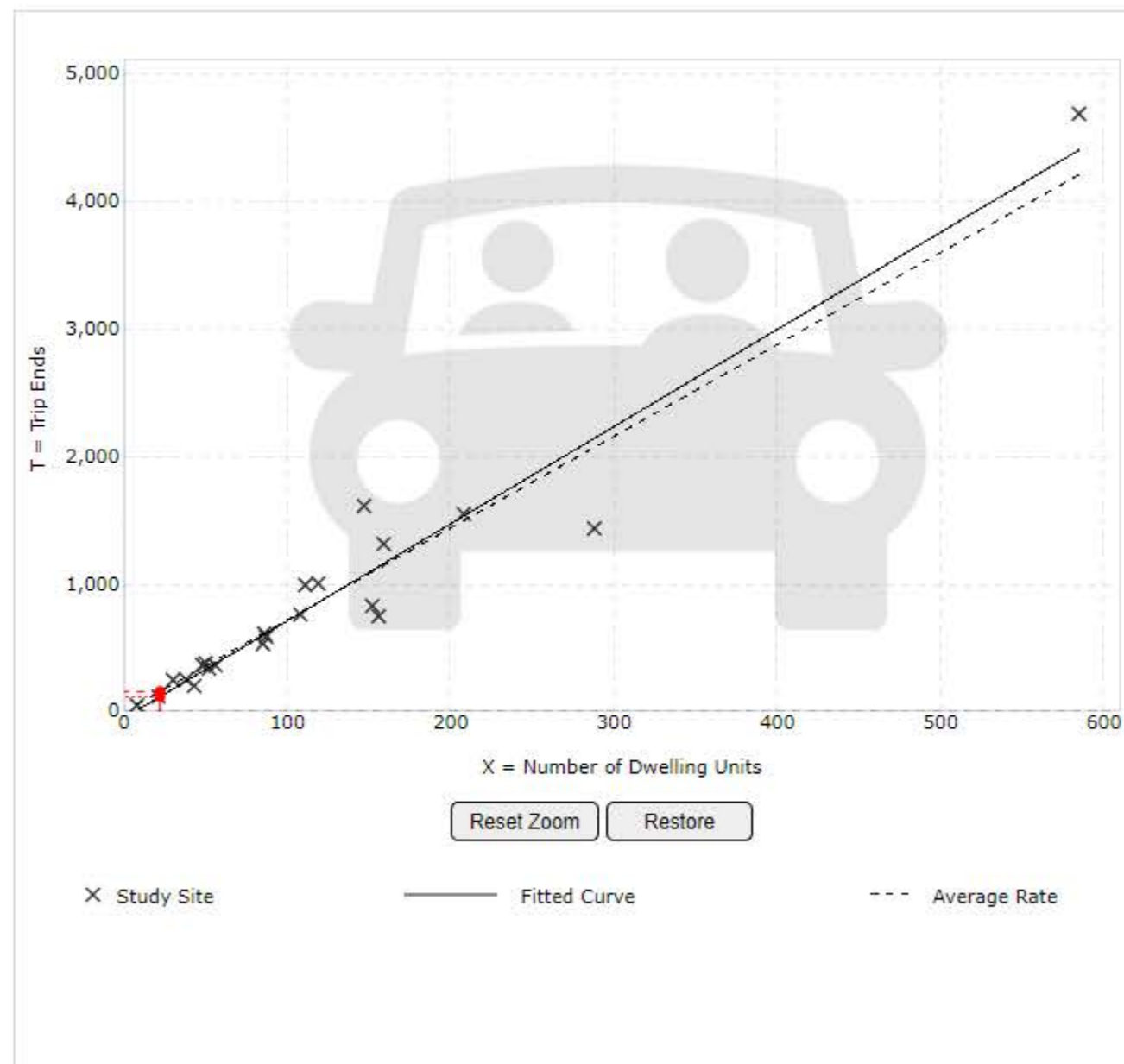
Vehicle

## ENTER IV VALUE TO CALCULATE TRIPS:

22

Calculate

## Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.  
 Hover the mouse pointer on data points to view X and T values.

## DATA STATISTICS

## Land Use:

Single-Family Attached Housing (215) [Click for Description and Data Plots](#)

## Independent Variable:

Dwelling Units

## Time Period:

Weekday

## Setting/Location:

General Urban/Suburban

## Trip Type:

Vehicle

## Number of Studies:

22

## Avg. Num. of Dwelling Units:

120

## Average Rate:

7.20

## Range of Rates:

4.70 - 10.97

## Standard Deviation:

1.61

## Fitted Curve Equation:

 $T = 7.62(X) - 50.48$  $R^2$ :

0.94

## Directional Distribution:

50% entering, 50% exiting

## Calculated Trip Ends:

Average Rate: 158 (Total), 79 (Entry), 79 (Exit)

Fitted Curve: 117 (Total), 58 (Entry), 59 (Exit)

Query

Filter

## DATA SOURCE:

Trip Generation Manual, 11th Ed

## SEARCH BY LAND USE CODE:

215



## LAND USE GROUP:

(200-299) Residential

## LAND USE :

215 - Single-Family Attached Housing

## LAND USE SUBCATEGORY:

All Sites

## SETTING/LOCATION:

General Urban/Suburban

## INDEPENDENT VARIABLE (IV):

Dwelling Units

## TIME PERIOD:

Weekday, Peak Hour of Adjacent Street Traffic

## TRIP TYPE:

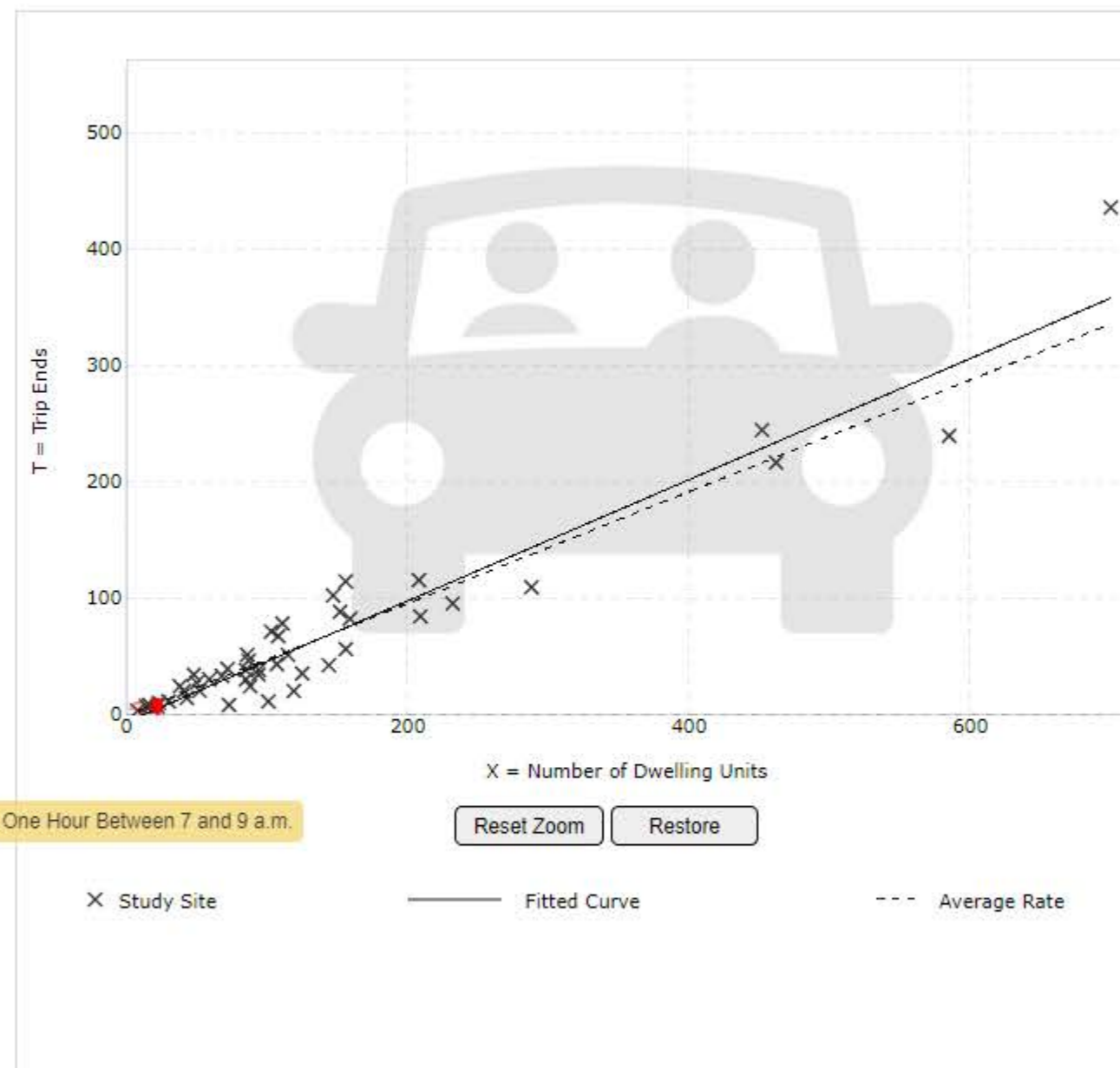
Vehicle

## ENTER IV VALUE TO CALCULATE TRIPS:

22

Calculate

## Data Plot and Equation



## DATA STATISTICS

## Land Use:

Single-Family Attached Housing (215) [Click for Description and Data Plots](#)

## Independent Variable:

Dwelling Units

## Time Period:

Weekday

Peak Hour of Adjacent Street Traffic  
One Hour Between 7 and 9 a.m.

## Setting/Location:

General Urban/Suburban

## Trip Type:

Vehicle

## Number of Studies:

46

## Avg. Num. of Dwelling Units:

135

## Average Rate:

0.48

## Range of Rates:

0.12 - 0.74

## Standard Deviation:

0.14

## Fitted Curve Equation:

 $T = 0.52(X) - 5.70$  $R^2$ :

0.92

## Directional Distribution:

31% entering, 69% exiting

## Calculated Trip Ends:

Average Rate: 11 (Total), 3 (Entry), 8 (Exit)

Fitted Curve: 6 (Total), 2 (Entry), 4 (Exit)

Query

Filter

## DATA SOURCE:

Trip Generation Manual, 11th Ed

## SEARCH BY LAND USE CODE:

215



## LAND USE GROUP:

(200-299) Residential

## LAND USE :

215 - Single-Family Attached Housing

## LAND USE SUBCATEGORY:

All Sites

## SETTING/LOCATION:

General Urban/Suburban

## INDEPENDENT VARIABLE (IV):

Dwelling Units

## TIME PERIOD:

Weekday, Peak Hour of Adjacent Street Traffic

## TRIP TYPE:

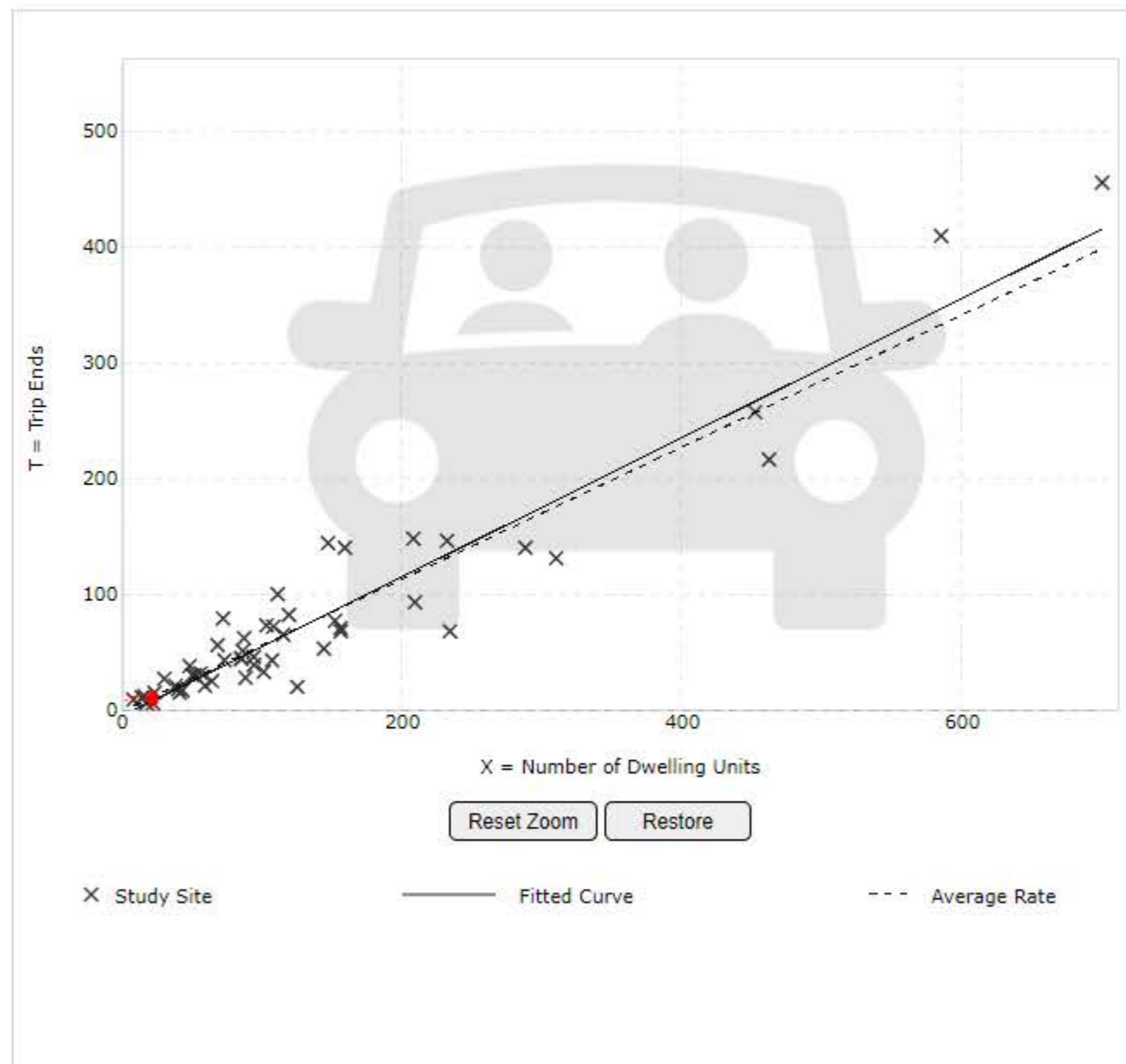
Vehicle

## ENTER IV VALUE TO CALCULATE TRIPS:

22

Calculate

## Data Plot and Equation



## DATA STATISTICS

## Land Use:

Single-Family Attached Housing (215) [Click for Description and Data Plots](#)

## Independent Variable:

Dwelling Units

## Time Period:

Weekday

Peak Hour of Adjacent Street Traffic  
One Hour Between 4 and 6 p.m.

## Setting/Location:

General Urban/Suburban

## Trip Type:

Vehicle

## Number of Studies:

51

## Avg. Num. of Dwelling Units:

136

## Average Rate:

0.57

## Range of Rates:

0.17 - 1.25

## Standard Deviation:

0.18

## Fitted Curve Equation:

 $T = 0.60(X) - 3.93$  $R^2$ :

0.91

## Directional Distribution:

57% entering, 43% exiting

## Calculated Trip Ends:

Average Rate: 13 (Total), 7 (Entry), 6 (Exit)

Fitted Curve: 9 (Total), 5 (Entry), 4 (Exit)

## JOURNEY TO WORK TRIP DISTRIBUTION

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Proposed Residential Community  
Scituate, Massachusetts

| Residence     | Workplace           | Number     | Maple Street (North) |            | Old Oaken Bucket Road (West) |            | Winter Street (South) |           | Route 123 (West) |            | Route 123 (East) |            |
|---------------|---------------------|------------|----------------------|------------|------------------------------|------------|-----------------------|-----------|------------------|------------|------------------|------------|
| Scituate town | Scituate town       | 1,923      | 20%                  | 385        |                              | 0          |                       | 0         | 20%              | 385        | 60%              | 1154       |
| Scituate town | Boston city         | 1,727      | 20%                  | 345        | 20%                          | 345        |                       | 0         | 20%              | 345        | 40%              | 691        |
| Scituate town | Hingham town        | 681        | 20%                  | 136        | 20%                          | 136        |                       | 0         | 20%              | 136        | 40%              | 272        |
| Scituate town | Quincy city         | 360        | 20%                  | 72         | 20%                          | 72         |                       | 0         | 20%              | 72         | 40%              | 144        |
| Scituate town | Cohasset town       | 314        | 50%                  | 157        |                              | 0          |                       | 0         |                  | 0          | 50%              | 157        |
| Scituate town | Braintree Town city | 280        |                      | 0          | 50%                          | 140        |                       | 0         | 50%              | 140        |                  | 0          |
| Scituate town | Weymouth Town city  | 248        |                      | 0          | 50%                          | 124        |                       | 0         | 50%              | 124        |                  | 0          |
| Scituate town | Hanover town        | 235        |                      | 0          |                              | 0          | 50%                   | 118       | 50%              | 118        |                  | 0          |
| Scituate town | Norwell town        | 209        |                      | 0          |                              | 0          | 50%                   | 105       | 50%              | 105        |                  | 0          |
| Scituate town | Cambridge city      | 202        | 20%                  | 40         | 20%                          | 40         |                       | 0         | 20%              | 40         | 40%              | 81         |
| Scituate town | Marshfield town     | 167        |                      | 0          |                              | 0          |                       | 0         | 50%              | 84         | 50%              | 84         |
| Scituate town | Canton town         | 117        |                      | 0          | 50%                          | 59         |                       | 0         | 50%              | 59         |                  | 0          |
| Scituate town | Brockton city       | 113        |                      | 0          |                              | 0          | 50%                   | 57        | 50%              | 57         |                  | 0          |
| Scituate town | Wellesley town      | 109        |                      | 0          | 50%                          | 55         |                       | 0         | 50%              | 55         |                  | 0          |
| Scituate town | Plymouth town       | 109        |                      | 0          |                              | 0          |                       | 0         | 50%              | 55         | 50%              | 55         |
| Scituate town | Rockland town       | 106        |                      | 0          | 50%                          | 53         | 50%                   | 53        |                  | 0          |                  | 0          |
| Scituate town | Duxbury town        | 80         |                      | 0          |                              | 0          |                       | 0         | 50%              | 40         | 50%              | 40         |
| Scituate town | Newton city         | 77         |                      | 0          | 50%                          | 39         |                       | 0         | 50%              | 39         |                  | 0          |
| Scituate town | Kingston town       | 77         |                      | 0          |                              | 0          |                       | 0         | 50%              | 39         | 50%              | 39         |
| Scituate town | Needham town        | 54         |                      | 0          | 50%                          | 27         |                       | 0         | 50%              | 27         |                  | 0          |
| Scituate town | Norwood town        | 52         |                      | 0          | 50%                          | 26         |                       | 0         | 50%              | 26         |                  | 0          |
| Scituate town | Waltham city        | 50         |                      | 0          | 50%                          | 25         |                       | 0         | 50%              | 25         |                  | 0          |
| Scituate town | Abington town       | 47         |                      | 0          |                              | 0          | 50%                   | 24        | 50%              | 24         |                  | 0          |
| Scituate town | Somerville city     | 45         | 20%                  | 9          | 20%                          | 9          |                       | 0         | 20%              | 9          | 40%              | 18         |
| Scituate town | Lexington town      | 44         | 20%                  | 9          | 20%                          | 9          |                       | 0         | 20%              | 9          | 40%              | 18         |
|               |                     | 7,426      |                      | 1,153      |                              | 1,158      |                       | 355       |                  | 2,008      |                  | 2,751      |
|               |                     |            |                      | 15.5%      |                              | 15.6%      |                       | 4.8%      |                  | 27.0%      |                  | 37.0%      |
|               |                     | <u>SAY</u> |                      | <b>16%</b> |                              | <b>15%</b> |                       | <b>6%</b> |                  | <b>27%</b> |                  | <b>36%</b> |

## CAPACITY ANALYSIS WORKSHEETS

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Old Oaken Bucket Road/Maple Street/Winter Street  
Route 123/Old Oaken Bucket Road  
Old Oaken Bucket Road/Project Site Driveway



Old Oaken Bucket Road/Maple Street/Winter Street

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2021 Existing Weekday Morning  
1: Winter Street/Maple Street & Old Oaken Bucket Road

05/13/2022

| Intersection              |     |
|---------------------------|-----|
| Intersection Delay, s/veh | 9.8 |
| Intersection LOS          | A   |

| Movement            | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      | ↕    |      |      | ↕    |      |      | ↕    |      |      | ↕    |      |
| Traffic Vol, veh/h  | 82   | 31   | 4    | 13   | 72   | 22   | 3    | 134  | 5    | 12   | 96   | 148  |
| Future Vol, veh/h   | 82   | 31   | 4    | 13   | 72   | 22   | 3    | 134  | 5    | 12   | 96   | 148  |
| Peak Hour Factor    | 0.95 | 0.95 | 0.95 | 0.78 | 0.78 | 0.78 | 0.84 | 0.84 | 0.84 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, %   | 0    | 0    | 25   | 0    | 0    | 5    | 0    | 0    | 0    | 17   | 1    | 0    |
| Mvmt Flow           | 86   | 33   | 4    | 17   | 92   | 28   | 4    | 160  | 6    | 13   | 104  | 161  |
| Number of Lanes     | 0    | 1    | 0    | 0    | 1    | 0    | 0    | 1    | 0    | 0    | 1    | 0    |

| Approach                   | EB  | WB  | NB  | SB   |
|----------------------------|-----|-----|-----|------|
| Opposing Approach          | WB  | EB  | SB  | NB   |
| Opposing Lanes             | 1   | 1   | 1   | 1    |
| Conflicting Approach Left  | SB  | NB  | EB  | WB   |
| Conflicting Lanes Left     | 1   | 1   | 1   | 1    |
| Conflicting Approach Right | NB  | SB  | WB  | EB   |
| Conflicting Lanes Right    | 1   | 1   | 1   | 1    |
| HCM Control Delay          | 9.5 | 9.3 | 9.4 | 10.5 |
| HCM LOS                    | A   | A   | A   | B    |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 2%    | 70%   | 12%   | 5%    |
| Vol Thru, %            | 94%   | 26%   | 67%   | 38%   |
| Vol Right, %           | 4%    | 3%    | 21%   | 58%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 142   | 117   | 107   | 256   |
| LT Vol                 | 3     | 82    | 13    | 12    |
| Through Vol            | 134   | 31    | 72    | 96    |
| RT Vol                 | 5     | 4     | 22    | 148   |
| Lane Flow Rate         | 169   | 123   | 137   | 278   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.23  | 0.18  | 0.192 | 0.365 |
| Departure Headway (Hd) | 4.888 | 5.266 | 5.033 | 4.725 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 729   | 674   | 705   | 754   |
| Service Time           | 2.963 | 3.355 | 3.119 | 2.793 |
| HCM Lane V/C Ratio     | 0.232 | 0.182 | 0.194 | 0.369 |
| HCM Control Delay      | 9.4   | 9.5   | 9.3   | 10.5  |
| HCM Lane LOS           | A     | A     | A     | B     |
| HCM 95th-tile Q        | 0.9   | 0.7   | 0.7   | 1.7   |

2021 Existing Weekday Evening  
1: Winter Street/Maple Street & Old Oaken Bucket Road

05/13/2022

| Intersection              |      |
|---------------------------|------|
| Intersection Delay, s/veh | 11.6 |
| Intersection LOS          | B    |

| Movement            | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      | ↕    |      |      | ↕    |      |      | ↕    |      |      | ↕    |      |
| Traffic Vol, veh/h  | 129  | 90   | 8    | 11   | 46   | 19   | 6    | 127  | 7    | 9    | 146  | 127  |
| Future Vol, veh/h   | 129  | 90   | 8    | 11   | 46   | 19   | 6    | 127  | 7    | 9    | 146  | 127  |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.71 | 0.71 | 0.71 | 0.87 | 0.87 | 0.87 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 0    | 0    | 0    | 9    | 2    | 6    | 17   | 2    | 0    | 0    | 2    | 0    |
| Mvmt Flow           | 150  | 105  | 9    | 15   | 65   | 27   | 7    | 146  | 8    | 10   | 170  | 148  |
| Number of Lanes     | 0    | 1    | 0    | 0    | 1    | 0    | 0    | 1    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB  | NB   | SB   |
|----------------------------|------|-----|------|------|
| Opposing Approach          | WB   | EB  | SB   | NB   |
| Opposing Lanes             | 1    | 1   | 1    | 1    |
| Conflicting Approach Left  | SB   | NB  | EB   | WB   |
| Conflicting Lanes Left     | 1    | 1   | 1    | 1    |
| Conflicting Approach Right | NB   | SB  | WB   | EB   |
| Conflicting Lanes Right    | 1    | 1   | 1    | 1    |
| HCM Control Delay          | 12.2 | 9.9 | 10.7 | 12.1 |
| HCM LOS                    | B    | A   | B    | B    |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 4%    | 57%   | 14%   | 3%    |
| Vol Thru, %            | 91%   | 40%   | 61%   | 52%   |
| Vol Right, %           | 5%    | 4%    | 25%   | 45%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 140   | 227   | 76    | 282   |
| LT Vol                 | 6     | 129   | 11    | 9     |
| Through Vol            | 127   | 90    | 46    | 146   |
| RT Vol                 | 7     | 8     | 19    | 127   |
| Lane Flow Rate         | 161   | 264   | 107   | 328   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.256 | 0.401 | 0.169 | 0.452 |
| Departure Headway (Hd) | 5.72  | 5.475 | 5.695 | 4.963 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 628   | 657   | 628   | 725   |
| Service Time           | 3.76  | 3.513 | 3.743 | 2.997 |
| HCM Lane V/C Ratio     | 0.256 | 0.402 | 0.17  | 0.452 |
| HCM Control Delay      | 10.7  | 12.2  | 9.9   | 12.1  |
| HCM Lane LOS           | B     | B     | A     | B     |
| HCM 95th-tile Q        | 1     | 1.9   | 0.6   | 2.4   |

2029 No-Build Weekday Morning  
 1: Winter Street/Maple Street & Old Oaken Bucket Road

05/13/2022

| Intersection              |      |
|---------------------------|------|
| Intersection Delay, s/veh | 10.5 |
| Intersection LOS          | B    |

| Movement            | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      | ↕    |      |      | ↕    |      |      | ↕    |      |      | ↕    |      |
| Traffic Vol, veh/h  | 89   | 35   | 4    | 14   | 79   | 25   | 3    | 145  | 6    | 15   | 104  | 160  |
| Future Vol, veh/h   | 89   | 35   | 4    | 14   | 79   | 25   | 3    | 145  | 6    | 15   | 104  | 160  |
| Peak Hour Factor    | 0.95 | 0.95 | 0.95 | 0.78 | 0.78 | 0.78 | 0.84 | 0.84 | 0.84 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, %   | 0    | 0    | 25   | 0    | 0    | 5    | 0    | 0    | 0    | 17   | 1    | 0    |
| Mvmt Flow           | 94   | 37   | 4    | 18   | 101  | 32   | 4    | 173  | 7    | 16   | 113  | 174  |
| Number of Lanes     | 0    | 1    | 0    | 0    | 1    | 0    | 0    | 1    | 0    | 0    | 1    | 0    |

| Approach                   | EB | WB  | NB  | SB   |
|----------------------------|----|-----|-----|------|
| Opposing Approach          | WB | EB  | SB  | NB   |
| Opposing Lanes             | 1  | 1   | 1   | 1    |
| Conflicting Approach Left  | SB | NB  | EB  | WB   |
| Conflicting Lanes Left     | 1  | 1   | 1   | 1    |
| Conflicting Approach Right | NB | SB  | WB  | EB   |
| Conflicting Lanes Right    | 1  | 1   | 1   | 1    |
| HCM Control Delay          | 10 | 9.8 | 9.9 | 11.4 |
| HCM LOS                    | A  | A   | A   | B    |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 2%    | 70%   | 12%   | 5%    |
| Vol Thru, %            | 94%   | 27%   | 67%   | 37%   |
| Vol Right, %           | 4%    | 3%    | 21%   | 57%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 154   | 128   | 118   | 279   |
| LT Vol                 | 3     | 89    | 14    | 15    |
| Through Vol            | 145   | 35    | 79    | 104   |
| RT Vol                 | 6     | 4     | 25    | 160   |
| Lane Flow Rate         | 183   | 135   | 151   | 303   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.26  | 0.206 | 0.221 | 0.416 |
| Departure Headway (Hd) | 5.102 | 5.513 | 5.268 | 4.937 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 704   | 651   | 682   | 734   |
| Service Time           | 3.128 | 3.544 | 3.299 | 2.937 |
| HCM Lane V/C Ratio     | 0.26  | 0.207 | 0.221 | 0.413 |
| HCM Control Delay      | 9.9   | 10    | 9.8   | 11.4  |
| HCM Lane LOS           | A     | A     | A     | B     |
| HCM 95th-tile Q        | 1     | 0.8   | 0.8   | 2.1   |

2029 No-Build Weekday Evening  
 1: Winter Street/Maple Street & Old Oaken Bucket Road

05/13/2022

| Intersection              |      |
|---------------------------|------|
| Intersection Delay, s/veh | 12.6 |
| Intersection LOS          | B    |

| Movement            | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      | ↕    |      |      | ↕    |      |      | ↕    |      |      | ↕    |      |
| Traffic Vol, veh/h  | 139  | 98   | 9    | 12   | 51   | 21   | 7    | 137  | 8    | 12   | 158  | 137  |
| Future Vol, veh/h   | 139  | 98   | 9    | 12   | 51   | 21   | 7    | 137  | 8    | 12   | 158  | 137  |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.71 | 0.71 | 0.71 | 0.87 | 0.87 | 0.87 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 0    | 0    | 0    | 9    | 2    | 6    | 17   | 2    | 0    | 0    | 2    | 0    |
| Mvmt Flow           | 162  | 114  | 10   | 17   | 72   | 30   | 8    | 157  | 9    | 14   | 184  | 159  |
| Number of Lanes     | 0    | 1    | 0    | 0    | 1    | 0    | 0    | 1    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB   | NB   | SB   |
|----------------------------|------|------|------|------|
| Opposing Approach          | WB   | EB   | SB   | NB   |
| Opposing Lanes             | 1    | 1    | 1    | 1    |
| Conflicting Approach Left  | SB   | NB   | EB   | WB   |
| Conflicting Lanes Left     | 1    | 1    | 1    | 1    |
| Conflicting Approach Right | NB   | SB   | WB   | EB   |
| Conflicting Lanes Right    | 1    | 1    | 1    | 1    |
| HCM Control Delay          | 13.3 | 10.4 | 11.4 | 13.4 |
| HCM LOS                    | B    | B    | B    | B    |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 5%    | 57%   | 14%   | 4%    |
| Vol Thru, %            | 90%   | 40%   | 61%   | 51%   |
| Vol Right, %           | 5%    | 4%    | 25%   | 45%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 152   | 246   | 84    | 307   |
| LT Vol                 | 7     | 139   | 12    | 12    |
| Through Vol            | 137   | 98    | 51    | 158   |
| RT Vol                 | 8     | 9     | 21    | 137   |
| Lane Flow Rate         | 175   | 286   | 118   | 357   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.287 | 0.449 | 0.195 | 0.509 |
| Departure Headway (Hd) | 5.922 | 5.657 | 5.92  | 5.133 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 605   | 635   | 603   | 700   |
| Service Time           | 3.983 | 3.709 | 3.984 | 3.182 |
| HCM Lane V/C Ratio     | 0.289 | 0.45  | 0.196 | 0.51  |
| HCM Control Delay      | 11.4  | 13.3  | 10.4  | 13.4  |
| HCM Lane LOS           | B     | B     | B     | B     |
| HCM 95th-tile Q        | 1.2   | 2.3   | 0.7   | 2.9   |

2029 Build Weekday Morning  
 1: Winter Street/Maple Street & Old Oaken Bucket Road

05/13/2022

| Intersection              |      |
|---------------------------|------|
| Intersection Delay, s/veh | 10.6 |
| Intersection LOS          | B    |

| Movement            | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      | ↕    |      |      | ↕    |      |      | ↕    |      |      | ↕    |      |
| Traffic Vol, veh/h  | 89   | 36   | 4    | 14   | 81   | 27   | 3    | 145  | 6    | 16   | 104  | 160  |
| Future Vol, veh/h   | 89   | 36   | 4    | 14   | 81   | 27   | 3    | 145  | 6    | 16   | 104  | 160  |
| Peak Hour Factor    | 0.95 | 0.95 | 0.95 | 0.78 | 0.78 | 0.78 | 0.84 | 0.84 | 0.84 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles, %   | 0    | 0    | 25   | 0    | 0    | 5    | 0    | 0    | 0    | 17   | 1    | 0    |
| Mvmt Flow           | 94   | 38   | 4    | 18   | 104  | 35   | 4    | 173  | 7    | 17   | 113  | 174  |
| Number of Lanes     | 0    | 1    | 0    | 0    | 1    | 0    | 0    | 1    | 0    | 0    | 1    | 0    |

| Approach                   | EB | WB  | NB | SB   |
|----------------------------|----|-----|----|------|
| Opposing Approach          | WB | EB  | SB | NB   |
| Opposing Lanes             | 1  | 1   | 1  | 1    |
| Conflicting Approach Left  | SB | NB  | EB | WB   |
| Conflicting Lanes Left     | 1  | 1   | 1  | 1    |
| Conflicting Approach Right | NB | SB  | WB | EB   |
| Conflicting Lanes Right    | 1  | 1   | 1  | 1    |
| HCM Control Delay          | 10 | 9.9 | 10 | 11.5 |
| HCM LOS                    | A  | A   | A  | B    |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 2%    | 69%   | 11%   | 6%    |
| Vol Thru, %            | 94%   | 28%   | 66%   | 37%   |
| Vol Right, %           | 4%    | 3%    | 22%   | 57%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 154   | 129   | 122   | 280   |
| LT Vol                 | 3     | 89    | 14    | 16    |
| Through Vol            | 145   | 36    | 81    | 104   |
| RT Vol                 | 6     | 4     | 27    | 160   |
| Lane Flow Rate         | 183   | 136   | 156   | 304   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.261 | 0.209 | 0.229 | 0.419 |
| Departure Headway (Hd) | 5.124 | 5.528 | 5.271 | 4.962 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 700   | 649   | 680   | 730   |
| Service Time           | 3.154 | 3.561 | 3.304 | 2.962 |
| HCM Lane V/C Ratio     | 0.261 | 0.21  | 0.229 | 0.416 |
| HCM Control Delay      | 10    | 10    | 9.9   | 11.5  |
| HCM Lane LOS           | A     | A     | A     | B     |
| HCM 95th-tile Q        | 1     | 0.8   | 0.9   | 2.1   |

2029 Build Weekday Evening  
 1: Winter Street/Maple Street & Old Oaken Bucket Road

05/13/2022

| Intersection              |      |
|---------------------------|------|
| Intersection Delay, s/veh | 12.7 |
| Intersection LOS          | B    |

| Movement            | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      | ↕    |      |      | ↕    |      |      | ↕    |      |      | ↕    |      |
| Traffic Vol, veh/h  | 139  | 100  | 9    | 13   | 52   | 22   | 7    | 137  | 9    | 14   | 158  | 137  |
| Future Vol, veh/h   | 139  | 100  | 9    | 13   | 52   | 22   | 7    | 137  | 9    | 14   | 158  | 137  |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.71 | 0.71 | 0.71 | 0.87 | 0.87 | 0.87 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 0    | 0    | 0    | 9    | 2    | 6    | 17   | 2    | 0    | 0    | 2    | 0    |
| Mvmt Flow           | 162  | 116  | 10   | 18   | 73   | 31   | 8    | 157  | 10   | 16   | 184  | 159  |
| Number of Lanes     | 0    | 1    | 0    | 0    | 1    | 0    | 0    | 1    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB   | NB   | SB   |
|----------------------------|------|------|------|------|
| Opposing Approach          | WB   | EB   | SB   | NB   |
| Opposing Lanes             | 1    | 1    | 1    | 1    |
| Conflicting Approach Left  | SB   | NB   | EB   | WB   |
| Conflicting Lanes Left     | 1    | 1    | 1    | 1    |
| Conflicting Approach Right | NB   | SB   | WB   | EB   |
| Conflicting Lanes Right    | 1    | 1    | 1    | 1    |
| HCM Control Delay          | 13.4 | 10.5 | 11.5 | 13.6 |
| HCM LOS                    | B    | B    | B    | B    |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 5%    | 56%   | 15%   | 5%    |
| Vol Thru, %            | 90%   | 40%   | 60%   | 51%   |
| Vol Right, %           | 6%    | 4%    | 25%   | 44%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 153   | 248   | 87    | 309   |
| LT Vol                 | 7     | 139   | 13    | 14    |
| Through Vol            | 137   | 100   | 52    | 158   |
| RT Vol                 | 9     | 9     | 22    | 137   |
| Lane Flow Rate         | 176   | 288   | 123   | 359   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.291 | 0.455 | 0.202 | 0.515 |
| Departure Headway (Hd) | 5.951 | 5.681 | 5.942 | 5.162 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 601   | 632   | 600   | 697   |
| Service Time           | 4.014 | 3.736 | 4.012 | 3.215 |
| HCM Lane V/C Ratio     | 0.293 | 0.456 | 0.205 | 0.515 |
| HCM Control Delay      | 11.5  | 13.4  | 10.5  | 13.6  |
| HCM Lane LOS           | B     | B     | B     | B     |
| HCM 95th-tile Q        | 1.2   | 2.4   | 0.7   | 3     |

Route 123/Old Oaken Bucket Road

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2021 Existing Weekday Morning  
2: Route 123 & Old Oaken Bucket Road

05/13/2022

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.2  |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 63   | 11   | 7    | 480  | 415  | 87   |
| Future Vol, veh/h        | 63   | 11   | 7    | 480  | 415  | 87   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 75   | 75   | 88   | 88   | 89   | 89   |
| Heavy Vehicles, %        | 0    | 9    | 0    | 3    | 2    | 0    |
| Mvmt Flow                | 84   | 15   | 8    | 545  | 466  | 98   |

| Major/Minor          | Minor2 | Major1 | Major2 |   |   |   |
|----------------------|--------|--------|--------|---|---|---|
| Conflicting Flow All | 1076   | 515    | 564    | 0 | - | 0 |
| Stage 1              | 515    | -      | -      | - | - | - |
| Stage 2              | 561    | -      | -      | - | - | - |
| Critical Hdwy        | 6.4    | 6.29   | 4.1    | - | - | - |
| Critical Hdwy Stg 1  | 5.4    | -      | -      | - | - | - |
| Critical Hdwy Stg 2  | 5.4    | -      | -      | - | - | - |
| Follow-up Hdwy       | 3.5    | 3.381  | 2.2    | - | - | - |
| Pot Cap-1 Maneuver   | 245    | 546    | 1018   | - | - | - |
| Stage 1              | 604    | -      | -      | - | - | - |
| Stage 2              | 575    | -      | -      | - | - | - |
| Platoon blocked, %   |        |        |        | - | - | - |
| Mov Cap-1 Maneuver   | 242    | 546    | 1018   | - | - | - |
| Mov Cap-2 Maneuver   | 242    | -      | -      | - | - | - |
| Stage 1              | 597    | -      | -      | - | - | - |
| Stage 2              | 575    | -      | -      | - | - | - |

| Approach             | EB   | NB  | SB |
|----------------------|------|-----|----|
| HCM Control Delay, s | 26.6 | 0.1 | 0  |
| HCM LOS              | D    |     |    |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 1018  | -   | 264   | -   | -   |
| HCM Lane V/C Ratio    | 0.008 | -   | 0.374 | -   | -   |
| HCM Control Delay (s) | 8.6   | 0   | 26.6  | -   | -   |
| HCM Lane LOS          | A     | A   | D     | -   | -   |
| HCM 95th %tile Q(veh) | 0     | -   | 1.7   | -   | -   |

2021 Existing Weekday Evening  
2: Route 123 & Old Oaken Bucket Road

05/13/2022

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.9  |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | T    |      |      | T    |      | T    |
| Traffic Vol, veh/h       | 92   | 10   | 5    | 416  | 434  | 91   |
| Future Vol, veh/h        | 92   | 10   | 5    | 416  | 434  | 91   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 88   | 88   | 95   | 95   | 76   | 76   |
| Heavy Vehicles, %        | 1    | 0    | 0    | 0    | 1    | 0    |
| Mvmt Flow                | 105  | 11   | 5    | 438  | 571  | 120  |

| Major/Minor          | Minor2 | Major1 | Major2 |   |   |   |
|----------------------|--------|--------|--------|---|---|---|
| Conflicting Flow All | 1079   | 631    | 691    | 0 | - | 0 |
| Stage 1              | 631    | -      | -      | - | - | - |
| Stage 2              | 448    | -      | -      | - | - | - |
| Critical Hdwy        | 6.41   | 6.2    | 4.1    | - | - | - |
| Critical Hdwy Stg 1  | 5.41   | -      | -      | - | - | - |
| Critical Hdwy Stg 2  | 5.41   | -      | -      | - | - | - |
| Follow-up Hdwy       | 3.509  | 3.3    | 2.2    | - | - | - |
| Pot Cap-1 Maneuver   | 243    | 485    | 913    | - | - | - |
| Stage 1              | 532    | -      | -      | - | - | - |
| Stage 2              | 646    | -      | -      | - | - | - |
| Platoon blocked, %   |        |        |        | - | - | - |
| Mov Cap-1 Maneuver   | 241    | 485    | 913    | - | - | - |
| Mov Cap-2 Maneuver   | 241    | -      | -      | - | - | - |
| Stage 1              | 528    | -      | -      | - | - | - |
| Stage 2              | 646    | -      | -      | - | - | - |

| Approach             | EB   | NB  | SB |
|----------------------|------|-----|----|
| HCM Control Delay, s | 30.5 | 0.1 | 0  |
| HCM LOS              | D    |     |    |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 913   | -   | 254   | -   | -   |
| HCM Lane V/C Ratio    | 0.006 | -   | 0.456 | -   | -   |
| HCM Control Delay (s) | 9     | 0   | 30.5  | -   | -   |
| HCM Lane LOS          | A     | A   | D     | -   | -   |
| HCM 95th %tile Q(veh) | 0     | -   | 2.2   | -   | -   |

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 3.1  |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | T    |      | T    |      | T    |      |
| Traffic Vol, veh/h       | 72   | 12   | 8    | 536  | 466  | 98   |
| Future Vol, veh/h        | 72   | 12   | 8    | 536  | 466  | 98   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 75   | 75   | 88   | 88   | 89   | 89   |
| Heavy Vehicles, %        | 0    | 9    | 0    | 3    | 2    | 0    |
| Mvmt Flow                | 96   | 16   | 9    | 609  | 524  | 110  |

| Major/Minor          | Minor2 | Major1 | Major2 |   |   |   |
|----------------------|--------|--------|--------|---|---|---|
| Conflicting Flow All | 1206   | 579    | 634    | 0 | - | 0 |
| Stage 1              | 579    | -      | -      | - | - | - |
| Stage 2              | 627    | -      | -      | - | - | - |
| Critical Hdwy        | 6.4    | 6.29   | 4.1    | - | - | - |
| Critical Hdwy Stg 1  | 5.4    | -      | -      | - | - | - |
| Critical Hdwy Stg 2  | 5.4    | -      | -      | - | - | - |
| Follow-up Hdwy       | 3.5    | 3.381  | 2.2    | - | - | - |
| Pot Cap-1 Maneuver   | 205    | 502    | 959    | - | - | - |
| Stage 1              | 564    | -      | -      | - | - | - |
| Stage 2              | 536    | -      | -      | - | - | - |
| Platoon blocked, %   |        |        |        | - | - | - |
| Mov Cap-1 Maneuver   | 202    | 502    | 959    | - | - | - |
| Mov Cap-2 Maneuver   | 202    | -      | -      | - | - | - |
| Stage 1              | 556    | -      | -      | - | - | - |
| Stage 2              | 536    | -      | -      | - | - | - |

| Approach             | EB   | NB  | SB |
|----------------------|------|-----|----|
| HCM Control Delay, s | 36.9 | 0.1 | 0  |
| HCM LOS              | E    |     |    |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 959   | -   | 221   | -   | -   |
| HCM Lane V/C Ratio    | 0.009 | -   | 0.507 | -   | -   |
| HCM Control Delay (s) | 8.8   | 0   | 36.9  | -   | -   |
| HCM Lane LOS          | A     | A   | E     | -   | -   |
| HCM 95th %tile Q(veh) | 0     | -   | 2.6   | -   | -   |

2029 No-Build Weekday Evening  
2: Route 123 & Old Oaken Bucket Road

05/13/2022

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 4.1  |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | T    |      |      | T    |      | T    |
| Traffic Vol, veh/h       | 102  | 11   | 6    | 462  | 481  | 100  |
| Future Vol, veh/h        | 102  | 11   | 6    | 462  | 481  | 100  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 88   | 88   | 95   | 95   | 76   | 76   |
| Heavy Vehicles, %        | 1    | 0    | 0    | 0    | 1    | 0    |
| Mvmt Flow                | 116  | 13   | 6    | 486  | 633  | 132  |

| Major/Minor          | Minor2 | Major1 |     | Major2 |   |
|----------------------|--------|--------|-----|--------|---|
| Conflicting Flow All | 1197   | 699    | 765 | 0      | 0 |
| Stage 1              | 699    | -      | -   | -      | - |
| Stage 2              | 498    | -      | -   | -      | - |
| Critical Hdwy        | 6.41   | 6.2    | 4.1 | -      | - |
| Critical Hdwy Stg 1  | 5.41   | -      | -   | -      | - |
| Critical Hdwy Stg 2  | 5.41   | -      | -   | -      | - |
| Follow-up Hdwy       | 3.509  | 3.3    | 2.2 | -      | - |
| Pot Cap-1 Maneuver   | 206    | 443    | 857 | -      | - |
| Stage 1              | 495    | -      | -   | -      | - |
| Stage 2              | 613    | -      | -   | -      | - |
| Platoon blocked, %   |        |        |     | -      | - |
| Mov Cap-1 Maneuver   | 204    | 443    | 857 | -      | - |
| Mov Cap-2 Maneuver   | 204    | -      | -   | -      | - |
| Stage 1              | 490    | -      | -   | -      | - |
| Stage 2              | 613    | -      | -   | -      | - |

| Approach             | EB   | NB  | SB |
|----------------------|------|-----|----|
| HCM Control Delay, s | 43.9 | 0.1 | 0  |
| HCM LOS              | E    |     |    |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 857   | -   | 215   | -   | -   |
| HCM Lane V/C Ratio    | 0.007 | -   | 0.597 | -   | -   |
| HCM Control Delay (s) | 9.2   | 0   | 43.9  | -   | -   |
| HCM Lane LOS          | A     | A   | E     | -   | -   |
| HCM 95th %tile Q(veh) | 0     | -   | 3.4   | -   | -   |

2029 Build Weekday Morning  
2: Route 123 & Old Oaken Bucket Road

05/13/2022

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 3.5  |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 76   | 15   | 9    | 536  | 466  | 99   |
| Future Vol, veh/h        | 76   | 15   | 9    | 536  | 466  | 99   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 75   | 75   | 88   | 88   | 89   | 89   |
| Heavy Vehicles, %        | 0    | 9    | 0    | 3    | 2    | 0    |
| Mvmt Flow                | 101  | 20   | 10   | 609  | 524  | 111  |

| Major/Minor          | Minor2 | Major1 | Major2 |   |   |   |
|----------------------|--------|--------|--------|---|---|---|
| Conflicting Flow All | 1209   | 580    | 635    | 0 | - | 0 |
| Stage 1              | 580    | -      | -      | - | - | - |
| Stage 2              | 629    | -      | -      | - | - | - |
| Critical Hdwy        | 6.4    | 6.29   | 4.1    | - | - | - |
| Critical Hdwy Stg 1  | 5.4    | -      | -      | - | - | - |
| Critical Hdwy Stg 2  | 5.4    | -      | -      | - | - | - |
| Follow-up Hdwy       | 3.5    | 3.381  | 2.2    | - | - | - |
| Pot Cap-1 Maneuver   | 204    | 501    | 958    | - | - | - |
| Stage 1              | 564    | -      | -      | - | - | - |
| Stage 2              | 535    | -      | -      | - | - | - |
| Platoon blocked, %   |        |        |        | - | - | - |
| Mov Cap-1 Maneuver   | 201    | 501    | 958    | - | - | - |
| Mov Cap-2 Maneuver   | 201    | -      | -      | - | - | - |
| Stage 1              | 555    | -      | -      | - | - | - |
| Stage 2              | 535    | -      | -      | - | - | - |

| Approach             | EB   | NB  | SB |
|----------------------|------|-----|----|
| HCM Control Delay, s | 38.9 | 0.1 | 0  |
| HCM LOS              | E    |     |    |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 958   | -   | 223   | -   | -   |
| HCM Lane V/C Ratio    | 0.011 | -   | 0.544 | -   | -   |
| HCM Control Delay (s) | 8.8   | 0   | 38.9  | -   | -   |
| HCM Lane LOS          | A     | A   | E     | -   | -   |
| HCM 95th %tile Q(veh) | 0     | -   | 2.9   | -   | -   |

2029 Build Weekday Evening  
2: Route 123 & Old Oaken Bucket Road

05/13/2022

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 4.5  |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | T    |      |      | T    |      | T    |
| Traffic Vol, veh/h       | 105  | 13   | 9    | 462  | 481  | 104  |
| Future Vol, veh/h        | 105  | 13   | 9    | 462  | 481  | 104  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 88   | 88   | 95   | 95   | 76   | 76   |
| Heavy Vehicles, %        | 1    | 0    | 0    | 0    | 1    | 0    |
| Mvmt Flow                | 119  | 15   | 9    | 486  | 633  | 137  |

| Major/Minor          | Minor2 | Major1 |     | Major2 |   |
|----------------------|--------|--------|-----|--------|---|
| Conflicting Flow All | 1206   | 702    | 770 | 0      | 0 |
| Stage 1              | 702    | -      | -   | -      | - |
| Stage 2              | 504    | -      | -   | -      | - |
| Critical Hdwy        | 6.41   | 6.2    | 4.1 | -      | - |
| Critical Hdwy Stg 1  | 5.41   | -      | -   | -      | - |
| Critical Hdwy Stg 2  | 5.41   | -      | -   | -      | - |
| Follow-up Hdwy       | 3.509  | 3.3    | 2.2 | -      | - |
| Pot Cap-1 Maneuver   | 204    | 442    | 854 | -      | - |
| Stage 1              | 493    | -      | -   | -      | - |
| Stage 2              | 609    | -      | -   | -      | - |
| Platoon blocked, %   |        |        |     | -      | - |
| Mov Cap-1 Maneuver   | 201    | 442    | 854 | -      | - |
| Mov Cap-2 Maneuver   | 201    | -      | -   | -      | - |
| Stage 1              | 486    | -      | -   | -      | - |
| Stage 2              | 609    | -      | -   | -      | - |

| Approach             | EB   | NB  | SB |
|----------------------|------|-----|----|
| HCM Control Delay, s | 46.4 | 0.2 | 0  |
| HCM LOS              | E    |     |    |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 854   | -   | 214   | -   | -   |
| HCM Lane V/C Ratio    | 0.011 | -   | 0.627 | -   | -   |
| HCM Control Delay (s) | 9.3   | 0   | 46.4  | -   | -   |
| HCM Lane LOS          | A     | A   | E     | -   | -   |
| HCM 95th %tile Q(veh) | 0     | -   | 3.7   | -   | -   |

Old Oaken Bucket Road/Project Site Driveway

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2029 Build Weekday Morning  
 3: Project Driveway & Old Oaken Bucket Road

05/13/2022

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.5  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 56   | 2    | 2    | 119  | 4    | 7    |
| Future Vol, veh/h        | 56   | 2    | 2    | 119  | 4    | 7    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 93   | 92   | 92   | 78   | 92   | 92   |
| Heavy Vehicles, %        | 4    | 2    | 2    | 1    | 2    | 2    |
| Mvmt Flow                | 60   | 2    | 2    | 153  | 4    | 8    |

| Major/Minor          | Major1 | Major2 | Minor1 |   |             |
|----------------------|--------|--------|--------|---|-------------|
| Conflicting Flow All | 0      | 0      | 62     | 0 | 218 61      |
| Stage 1              | -      | -      | -      | - | 61 -        |
| Stage 2              | -      | -      | -      | - | 157 -       |
| Critical Hdwy        | -      | -      | 4.12   | - | 6.42 6.22   |
| Critical Hdwy Stg 1  | -      | -      | -      | - | 5.42 -      |
| Critical Hdwy Stg 2  | -      | -      | -      | - | 5.42 -      |
| Follow-up Hdwy       | -      | -      | 2.218  | - | 3.518 3.318 |
| Pot Cap-1 Maneuver   | -      | -      | 1541   | - | 770 1004    |
| Stage 1              | -      | -      | -      | - | 962 -       |
| Stage 2              | -      | -      | -      | - | 871 -       |
| Platoon blocked, %   | -      | -      | -      | - | -           |
| Mov Cap-1 Maneuver   | -      | -      | 1541   | - | 769 1004    |
| Mov Cap-2 Maneuver   | -      | -      | -      | - | 769 -       |
| Stage 1              | -      | -      | -      | - | 962 -       |
| Stage 2              | -      | -      | -      | - | 870 -       |

| Approach             | EB | WB  | NB |
|----------------------|----|-----|----|
| HCM Control Delay, s | 0  | 0.1 | 9  |
| HCM LOS              |    |     | A  |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 904   | -   | -   | 1541  | -   |
| HCM Lane V/C Ratio    | 0.013 | -   | -   | 0.001 | -   |
| HCM Control Delay (s) | 9     | -   | -   | 7.3   | 0   |
| HCM Lane LOS          | A     | -   | -   | A     | A   |
| HCM 95th %tile Q(veh) | 0     | -   | -   | 0     | -   |



2029 Build Weekday Evening  
 3: Project Driveway & Old Oaken Bucket Road

05/13/2022

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.5  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 118  | 5    | 7    | 84   | 3    | 5    |
| Future Vol, veh/h        | 118  | 5    | 7    | 84   | 3    | 5    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 86   | 92   | 92   | 71   | 92   | 92   |
| Heavy Vehicles, %        | 0    | 0    | 2    | 0    | 2    | 2    |
| Mvmt Flow                | 137  | 5    | 8    | 118  | 3    | 5    |

| Major/Minor          | Major1 | Major2 | Minor1 | Minor2 | Minor3 |
|----------------------|--------|--------|--------|--------|--------|
| Conflicting Flow All | 0      | 0      | 142    | 0      | 274    |
| Stage 1              | -      | -      | -      | -      | 140    |
| Stage 2              | -      | -      | -      | -      | 134    |
| Critical Hdwy        | -      | -      | 4.12   | -      | 6.42   |
| Critical Hdwy Stg 1  | -      | -      | -      | -      | 5.42   |
| Critical Hdwy Stg 2  | -      | -      | -      | -      | 5.42   |
| Follow-up Hdwy       | -      | -      | 2.218  | -      | 3.518  |
| Pot Cap-1 Maneuver   | -      | -      | 1441   | -      | 716    |
| Stage 1              | -      | -      | -      | -      | 887    |
| Stage 2              | -      | -      | -      | -      | 892    |
| Platoon blocked, %   | -      | -      | -      | -      | -      |
| Mov Cap-1 Maneuver   | -      | -      | 1441   | -      | 712    |
| Mov Cap-2 Maneuver   | -      | -      | -      | -      | 712    |
| Stage 1              | -      | -      | -      | -      | 887    |
| Stage 2              | -      | -      | -      | -      | 887    |

| Approach             | EB | WB  | NB  |
|----------------------|----|-----|-----|
| HCM Control Delay, s | 0  | 0.5 | 9.4 |
| HCM LOS              |    |     | A   |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 823   | -   | -   | 1441  | -   |
| HCM Lane V/C Ratio    | 0.011 | -   | -   | 0.005 | -   |
| HCM Control Delay (s) | 9.4   | -   | -   | 7.5   | 0   |
| HCM Lane LOS          | A     | -   | -   | A     | A   |
| HCM 95th %tile Q(veh) | 0     | -   | -   | 0     | -   |