TRAFFIC IMPACT AND ACCESS STUDY

PROPOSED DONUT SHOP
METHUEN, MASSACHUSETTS

GPI

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SUBMITTED TO:

Cafua Management Company, LLC
280 Merrimack Street
Methuen, Massachusetts 01844

January 2024

(GPI Project No.: NEX-2021347.00)

Cafua Management Company, LLC
Proposed Donut Shop
Traffic Impact and Access Study
January 31, 2024

TECHNICAL MEMORANDUM

REF: NEX-2021347.00

DATE: January 31, 2024

TO: Mr. Gregory Nolan
Cafua Management Company, LLC
280 Merrimack Street
Methuen, Massachusetts 01844

FROM: Ms. Heather L. Monticup, P.E., Director of Land Development
Ms. Susannah E. Theriault, P.E., Project Engineer

RE: Traffic Impact and Access Study
Proposed Donut Shop
477 & 479 Broadway – Methuen, Massachusetts

INTRODUCTION

Greenman-Pedersen, Inc. (GPI) has prepared this *Traffic Impact and Access Study* (TIAS) for a proposed donut shop to be located at 477 and 479 Broadway (Route 28) in Methuen, Massachusetts. The site is currently vacant. The site, however, was formerly occupied by two 2-story residential homes with detached garages. The project consists of constructing a ±2,100 square foot coffee/donut shop with a drive-through window. Access and egress to the site is currently provided via two residential curb cuts on Broadway. As part of the project, the two residential driveways will be closed, and two new curb cuts are proposed. The proposed southern site driveway will provide access only while the proposed northern site driveway will provide egress only. Proposed access and egress to and from the site was discussed with the Massachusetts Department of Transportation (MassDOT) District 4 Office at a meeting on September 20, 2018. The District Office provided a sketch of what they want to see at the driveways and this was incorporated into the Site Plan for the project. This TIAS evaluates the traffic impacts and access/egress requirements for the proposed development.

The site is bounded by a residential home to the north, Rostrons Liquors to the south, residential homes to the east, and Broadway (Route 28) to the west. The site location in relation to the surrounding roadways is shown on the map on Figure 1.

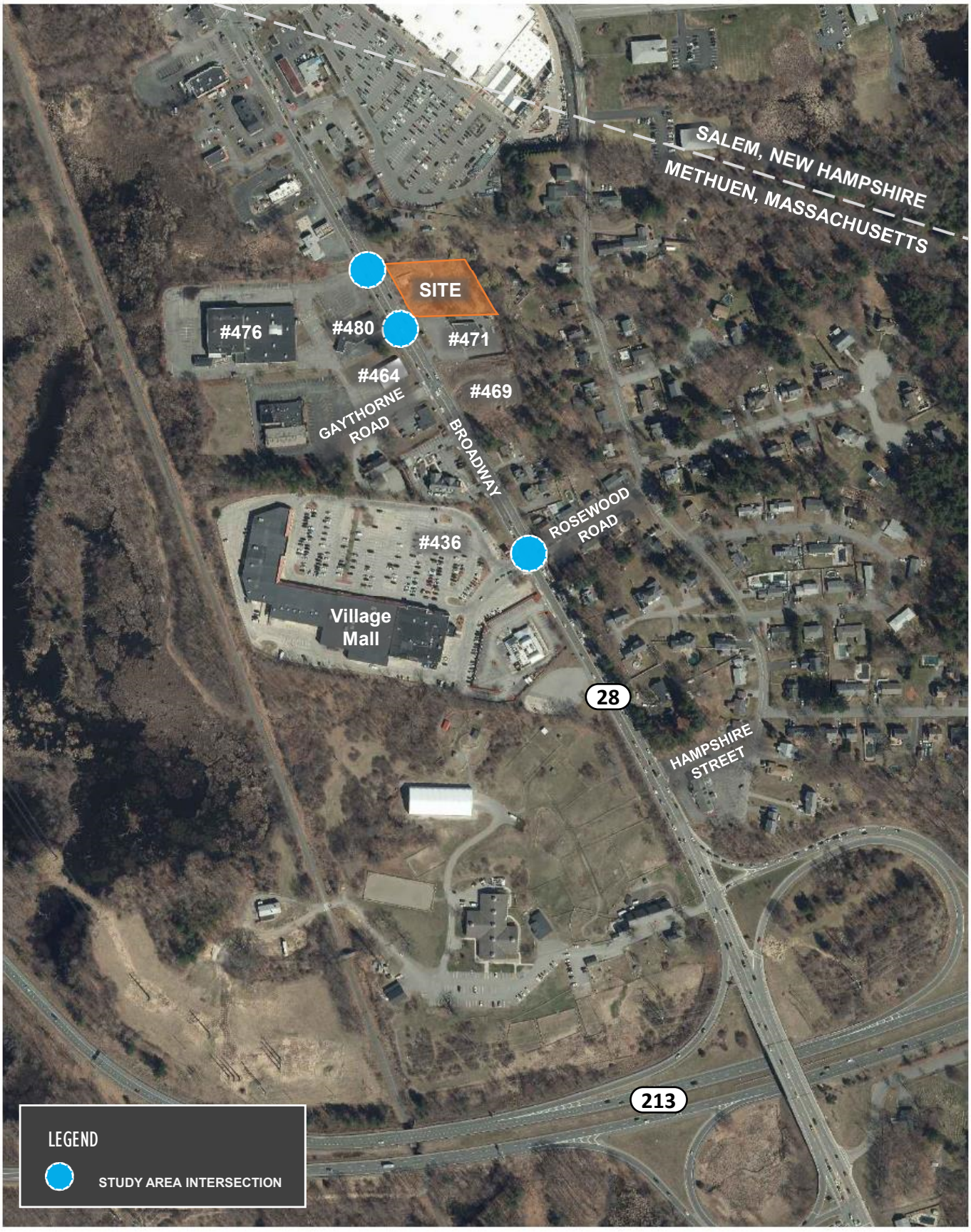


FIGURE 1
SITE LOCATION MAP

EXISTING CONDITIONS

Study Area

Evaluation of the traffic impacts associated with the proposed project requires an evaluation of existing and projected traffic volumes on the adjacent streets, the volume of traffic expected to be generated by the project, and the impact that this traffic will have on the adjacent streets and nearby intersections. In preparing the TIAS for the proposed site, the following intersections have been analyzed and evaluated:

- Broadway (Route 28) at Rosewood Road and the Village Mall Driveway – signalized
- Broadway (Route 28) at Rostrons Liquors exit-only Driveway (471 Broadway)
- Broadway (Route 28) at CREST Collaborative Driveway (464 Broadway)

Broadway (Route 28)

Within the vicinity of the site, Broadway (Route 28) is under the jurisdiction of MassDOT and is classified as an Urban Principal Arterial. Accordingly, an Application for Permit to Access State Highway will need to be submitted for the project. Adjacent to the site, Broadway provides two general purpose lanes in each direction with directional travel separated by a double yellow center line with sidewalks on both sides of the roadway. Shared lane markings are provided for bicyclists in both directions. In addition, sidewalks are provided on both the west and east sides of Broadway (Route 28) to accommodate pedestrians.

Public Transportation

A Merrimack Valley Regional Transit Authority (MVRTA) bus stop for Route 10 (Methuen Square) is located in the Village Mall Plaza, 0.2 miles south of the project site.

The Route 10 service runs Monday through Saturday. The route starts at Buckley Transportation Center in Lawrence and makes stops at Methuen Square, Mystic Street, Village Plaza, and Oakland Avenue at Railroad Street. At the Village Plaza stop, service begins at 5:50 AM and ends at 9:25 PM and Saturday service begins at 7:20 AM and ends at 6:25 PM. All public transportation information is provided in the Appendix.

Traffic Volumes

Base traffic conditions within the study area were developed by conducting manual-turning movement counts (TMCs), vehicle classification counts, and automatic traffic recorder (ATR) counts in January 2024. The TMCs and vehicle classification counts were performed during the weekday AM peak period (7:00 to 9:00 AM), weekday PM peak period (4:00 to 6:00 PM), and Saturday midday peak period (11:00 AM to 2:00 PM). The ATRs were used to obtain weekday and Saturday daily traffic volumes along Broadway (Route 28) adjacent to the site. All traffic-count data are provided in the Appendix.

Traffic on a given roadway typically fluctuates throughout the year depending on the area and the type of roadway. To determine if the January traffic-volume data needed to be adjusted to account for this fluctuation, historical traffic-volume data were reviewed from the New Hampshire Department of Transportation (NHDOT) and MassDOT records.[1] This information revealed that January traffic volumes are below average-month conditions by 5.2% based on the NHDOT count station on NH Route 28 in Windham, New Hampshire, 7.6% based on the MassDOT count station on Interstate 93 (I-93) in Methuen, Massachusetts on the New Hampshire State Line, and 6.0% based on MassDOT weekday seasonal factors for urban principal arterials. Conservatively, the traffic counts were upwardly adjusted by 7.6% to reflect an average-month analysis condition. The seasonal adjustment data is provided in the Appendix.

Table 1 summarizes the existing daily and peak-hour traffic volumes on Broadway (Route 28) adjacent to the site. The 2024 Existing traffic-flow networks for the weekday AM, weekday PM, and Saturday midday peak hours are shown graphically on Figures 2, 3, and 4, respectively.

TABLE 1
Existing Traffic Volume Summary

Location/Time Period	Daily Volume (vpd) [a]	Peak Hour Volume (vph) [b]	K Factor (%) [c]	Directional Distribution [d]
Broadway (Route 28), adjacent to the site:				
Weekday Daily	26,200			
Weekday AM Peak Hour		1,351	5.2	50% SB
Weekday PM Peak Hour		2,161	8.2	54% NB
Saturday Daily	33,200			
Saturday Midday Peak Hour		3,149	9.5	52% SB

[a] In vehicles per day. January traffic counts adjusted upward by 7.6 percent to reflect average-month conditions.

[b] In vehicles per hour. Volumes obtained from Figures 2, 3 and 4.

[c] Percentage of daily traffic occurring during the peak hour.

[d] NB = northbound. Percentages from volumes on Figure 2, 3, and 4.

[1] *NHDOT Traffic Volume Report, 2017*; Station 02489001 – NH 28 at Derry TL (north of Northland Road); Windham.
MassDOT Transportation Data Management System; Station 5096 – Interstate 93 at NH State Line; Methuen, MassDOT Weekday Seasonal Factors, 2019.

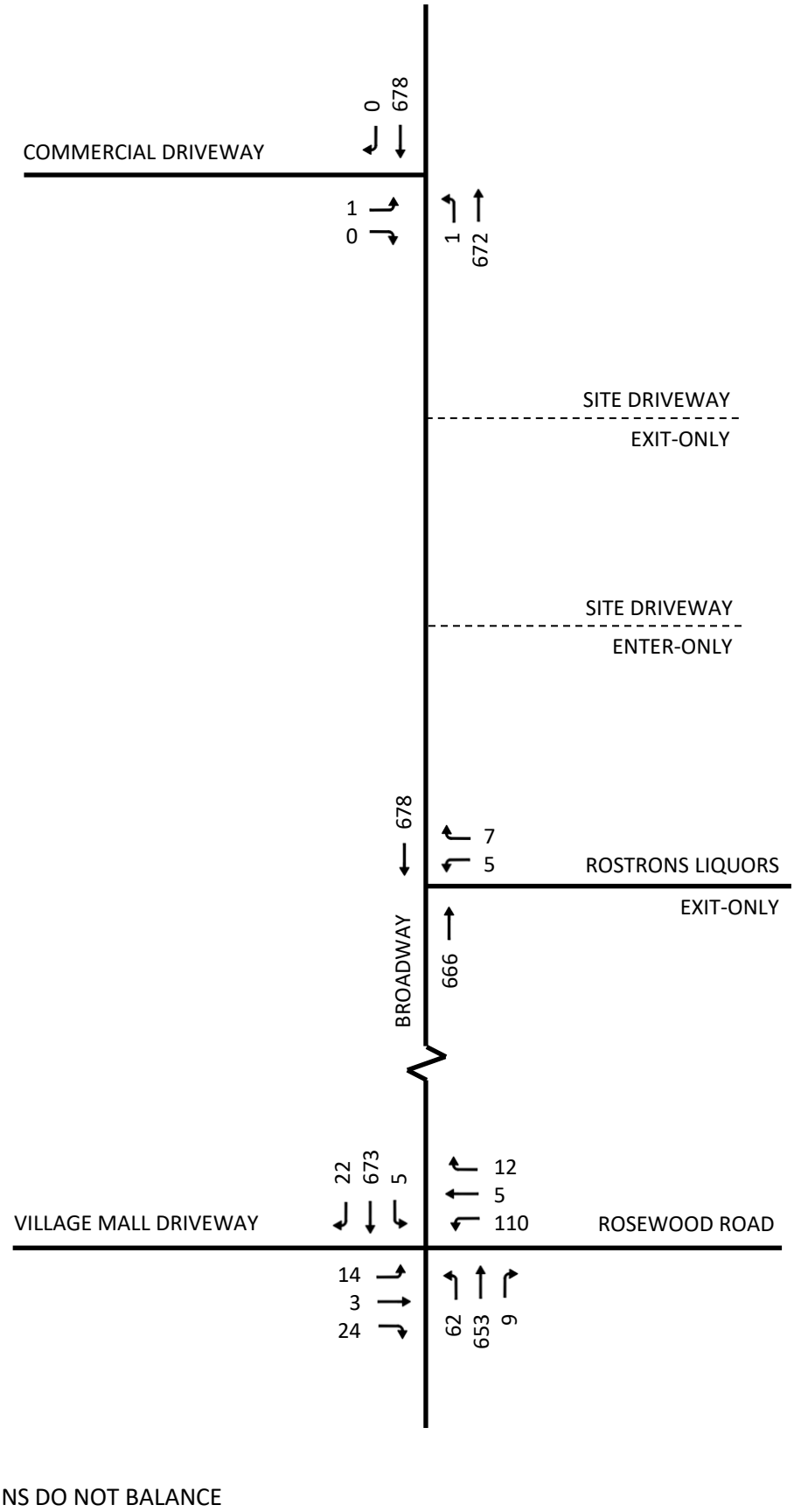
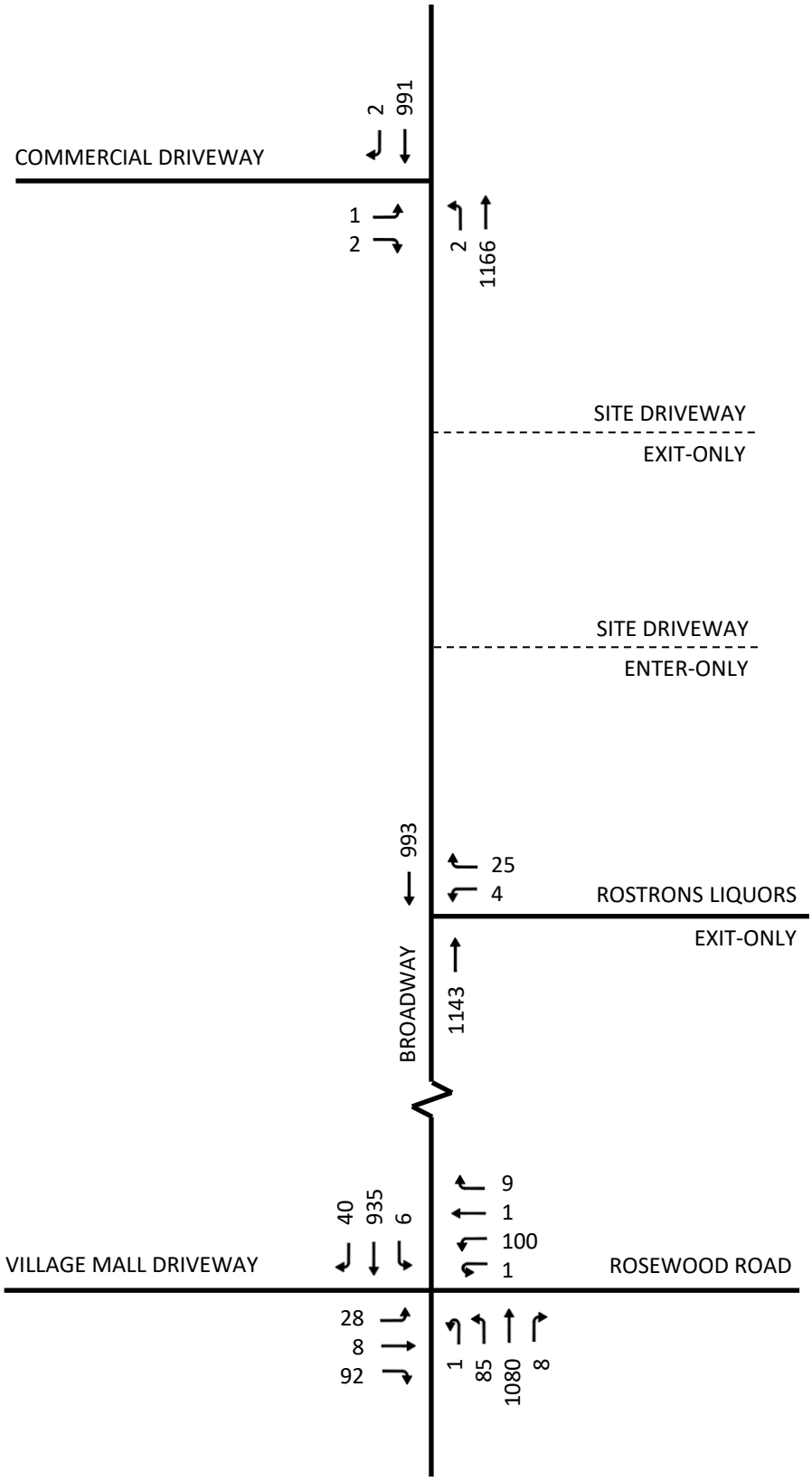


FIGURE 2
2024 EXISTING WEEKDAY AM
PEAK HOUR TRAFFIC VOLUMES



INTERSECTIONS DO NOT BALANCE

FIGURE 3
2024 EXISTING WEEKDAY PM PEAK HOUR TRAFFIC VOLUMES

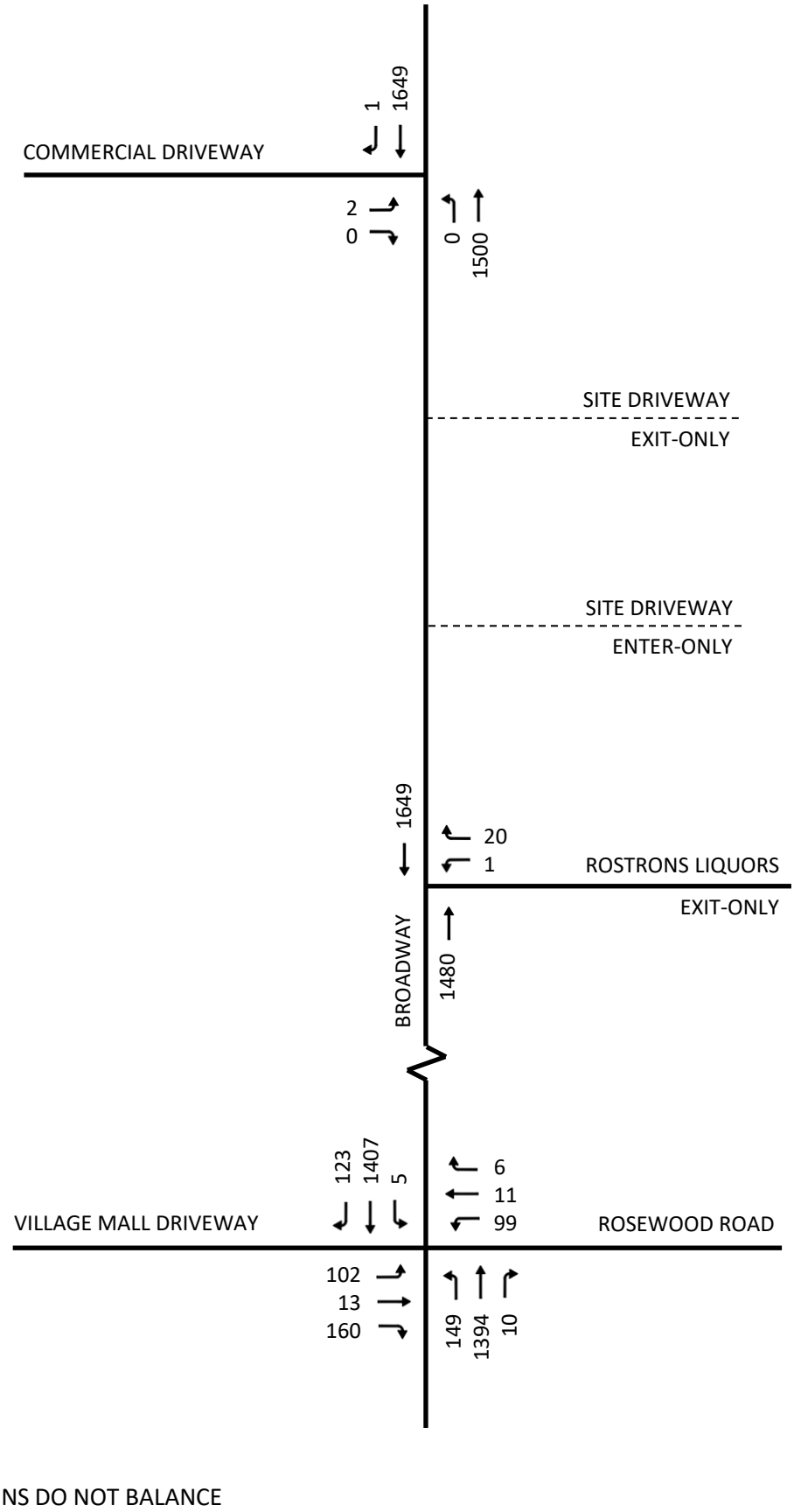


FIGURE 4
2024 EXISTING SATURDAY MIDDAY
PEAK HOUR TRAFFIC VOLUMES

Collisions

Collision data for the study area intersections were obtained from MassDOT for the latest complete five years available (2015 through 2019). A summary of the crash data is provided in Table 2.

In addition to the collision summary, crash occurrence also should be compared to the volume of traffic through a particular intersection to determine any significance. Accordingly, the crash rate was calculated for the study area intersections and compared with the statewide and district-wide averages. An intersection crash rate is a measure of the frequency of collisions compared to the volume of traffic through an intersection and is presented in crashes per million entering vehicles (c/mev). For signalized intersections, the statewide average is 0.78 c/mev and the district-wide (District 4) average is 0.73 c/mev. For unsignalized intersections, the statewide and district-wide average is 0.57 c/mev. A comparison of the calculated crash rate to these averages can be used to establish the significance of collision occurrence and whether or not potential safety problems exist. All crash rate worksheets are provided in the Appendix.

Based on the collision data, the signalized intersection of Broadway at Rosewood Road and Village Mall driveway experienced, on average, 14 collisions per year over the five-year study period. Of the 70 collisions, the majority (54) resulted in property damage only and 16 resulted in personal injury. Twenty-seven crashes were cross movement/angle collisions, 24 were rear-end crashes, 11 were sideswipe crashes, five were head on, one was a single-vehicle crash, and two were not reported. Fourteen percent of the crashes occurred during commuter peak periods and 33 percent of the crashes occurred in wet/icy conditions. The crash rate for the intersection (1.31 c/mev) is above the statewide (0.78 c/mev) and district-wide (0.73 c/mev) averages for signalized intersections. This intersection has been identified as Highway Safety Improvement Plan (HSIP) eligible for 2017-2019. A Road Safety Audit (RSA) was conducted in 2014 for the Route 28 Resurfacing from Rosewood Road to NH State Line (MassDOT Project # 607709). Safety enhancements at the signal included the addition of left-turn pockets on Route 28, providing a left-turn phase for Route 28 southbound, and providing protected only left-turn phasing for Route 28. These are all high-cost, long-term improvements. Accordingly, they were not considered as part of the resurfacing project (Project #607709). Restricting left turns onto Rosewood Road from Route 28 was considered, but not implemented. Investigating and adjusting the signal timings was included as part of the project.

The unsignalized intersection of Broadway at Rostrons Liquors driveways experienced three crashes over the five-year study period. One of the crashes resulted in personal injury. Of the three crashes, one was a rear-end collision, one was a cross movement/angle collision, and one was a single-vehicle crash. The diverse collision types demonstrate no pattern correctable by engineering measures. None of the crashes occurred during commuter peak periods and none occurred in wet/icy conditions. The crash rate for the intersection (0.06 c/mev) is well below the statewide and district-wide averages (0.57 c/mev) for unsignalized intersections.

The unsignalized intersection of Broadway at the CREST Collaborative driveway experienced two crashes over the five-year study period. One of the crashes resulted in personal injury. Of the two crashes, one was a rear-end collision, and one was a sideswipe. The diverse collision types demonstrate no pattern correctable by engineering measures. None of the crashes occurred during commuter peak periods and none occurred in wet/icy conditions. The crash rate for the intersection (0.04 c/mev) is well below the statewide and district-wide averages (0.57 c/mev) for unsignalized intersections.

TABLE 2
Collision Summary

Location	Number of Collisions			Severity [a]				Collision Type [b]						Percent During	
	Total	Average per Year	Crash Rate [c]	PD	PI	F	NR	SS	RE	CM	SV	HO	NR	Commuter Peak [d]	Wet/Icy Conditions [e]
Broadway at Rosewood Road and Village Mall Driveway	70	14.0	1.31	54	16	--	--	11	24	27	1	5	2	14%	33%
Broadway at Rostrons Liquors Exit-Only Driveway	3	0.6	0.06	2	1	--	--	--	1	1	1	--	--	0%	0%
Broadway at CREST Collaborative Driveway	2	0.4	0.04	1	1	--	--	1	1	--	--	--	--	0%	0%

Source: MassDOT (2015-2019).

[a] PD = property damage only; PI = personal injury; F = fatality, NR = not reported.

[b] SS = sideswipe; RE = rear end; CM = cross movement/angle; SV = single vehicle; HO = head on; NR = not reported.

[c] Measured in crashes per million entering vehicles for intersections and in crashes per million vehicle miles traveled for roadway segments.

[d] Percent of vehicle incidents that occurred during the weekday AM (7:00 AM-9:00 AM) and weekday PM (4:00 PM -6:00 PM) commuter peak periods.

[e] Represents the percentage of only “known” collisions occurring during inclement weather conditions.

Vehicle Speeds

Vehicle speed measurements were conducted along Broadway by use of radar. The primary use of this information is explained in the *Sight Distance* section where the speeds are correlated to sight distance measurements taken at the location of the site driveway to assure that adequate sight distances exist at the driveway to provide safe operation. The results of the speed measurements are summarized in Table 3.

TABLE 3
Observed Travel Speeds

Location/Direction	Posted Speed Limit [a]	Average Speed [b]	85th Percentile Speed [c]
Broadway, adjacent to the site:			
Northbound	35	35	40
Southbound	30	34	39

[a] In miles per hour (mph).

[b] Average speed of all observed vehicles.

[c] Speed at, or below which 85 percent of all observed vehicles travel.

As shown in Table 3, the average speeds along Broadway were found to be between 34 mph and 35 mph with the 85th percentile speeds between 39 mph and 40 mph. The speed limit is not posted in the immediate proximity of the site; however, it is posted just south of Route 213 (0.6 miles south of the site) in the northbound direction at 35 mph and also posted in New Hampshire (0.8 miles north of the site) in the southbound direction at 30 mph. The observed speeds were found to be slightly higher than the posted speed limits north and south of the site.

Sight Distance

To identify potential safety concerns associated with site access and egress, sight distances have been evaluated at the proposed exit-only site driveway to determine if the available sight distances for vehicles exiting the site meet or exceed the minimum distances required for approaching vehicles to safely stop. The available sight distances were compared with minimum requirements, as established by the American Association of State Highway and Transportation Officials (AASHTO).[2] AASHTO is the national standard by which vehicle sight distance is calculated, measured, and reported. The MassDOT and the Executive Office of Energy and Environmental Affairs (EEA) require the use of AASHTO sight distance standards when preparing traffic impact assessments and studies, as stated in their guidelines for traffic impact assessments.

Sight distance is the length of roadway ahead that is visible to the driver. Stopping Sight Distance (SSD) is the minimum distance required for a vehicle traveling at a certain speed to safely stop before reaching a stationary object in its path. The values are based on a driver perception and reaction time of 2.5 seconds and a braking distance calculated for wet, level pavements. When the roadway is either on an upgrade or downgrade, grade correction factors are applied. Stopping sight distance is measured from an eye height

[2] *A Policy on Geometric Design of Highways and Streets*; American Association of State Highway and Transportation Officials (AASHTO); 2018.

of 3.5 feet to an object height of 2 feet above street level, equivalent to the taillight height of a passenger car. The SSD is measured along the centerline of the traveled way of the major road.

Intersection sight distance (ISD) is provided on minor street approaches to allow the drivers of stopped vehicles a sufficient view of the major roadway to decide when to enter the major roadway. By definition, ISD is the minimum distance required for a motorist exiting a minor street to turn onto the major street, without being overtaken by an approaching vehicle reducing its speed from the design speed to 70 percent of the design speed. ISD is measured from an eye height of 3.5 feet to an object height of 3.5 feet above street level. The use of an object height equal to the driver eye height makes intersection sight distances reciprocal (i.e., if one driver can see another vehicle, then the driver of that vehicle can also see the first vehicle). When the minor street is on an upgrade that exceeds 3 percent, grade correction factors are applied.

SSD is generally more important as it represents the minimum distance required for safe stopping while ISD is based only upon acceptable speed reductions to the approaching traffic stream. The ISD, however, must be equal to or greater than the minimum required SSD in order to provide safe operations at the intersection. In accordance with the AASHTO manual, *"If the available sight distance for an entering or crossing vehicle is at least equal to the appropriate stopping sight distance for the major road, then drivers have sufficient sight distance to anticipate and avoid collisions. However, in some cases, this may require a major-road vehicle to stop or slow to accommodate the maneuver by a minor-road vehicle. To enhance traffic operations, intersection sight distances that exceed stopping sight distances are desirable along the major road."* Accordingly, ISD should be at least equal to the distance required to allow a driver approaching the minor road to safely stop.

The available SSD and ISD at the proposed exit-only site driveway were measured and compared to minimum requirements as established by AASHTO. Based on the posted and observed speeds, the SSD and ISD requirements at the intersection were calculated. The required minimum sight distances for the driveway are compared to the available distances, as shown in Table 4. The sight distance calculations are provided in the Appendix.

TABLE 4
Sight Distance Summary

	Stopping Sight Distance (feet)		Intersection Sight Distance (feet)		
Location/Direction	**Measured**	**Minimum Required [a]**	**Measured**	**Minimum Required [b]**	**Desirable [c]**
Broadway at Site Driveway:					
South of intersection (NB)	500+	305	500+	305	335
North of intersection (SB)	500+	290	500+	290	355

[a] Values based on AASHTO requirements for minimum SSD based on 85th percentile speed of 40 mph (NB) and 39 mph (SB) on Broadway.

[b] Values based on AASHTO requirements for SSD.

[c] Values based on AASHTO requirements for ISD for posted speed limits of 35 mph (NB) and 30 mph (SB) on Broadway.

As indicated in Table 4, available sight distances at the proposed exit-only site driveway on Broadway exceed the minimum and desirable SSD and ISD requirements for safe operation. In addition, it is recommended that any proposed plantings, vegetation, landscaping, and signing along the site frontage be

kept low to the ground (no more than 3.0 feet above street level) or set back sufficiently from Broadway so as not to inhibit the available sight lines.

FUTURE CONDITIONS

To estimate the impact of site-generated traffic within the study area, existing traffic volumes were projected to the year 2031, representing a seven-year design horizon in accordance with state requirements. The proposed development is expected to be completed and fully operational well within this time frame. Traffic volumes on the roadway network at that time will include existing traffic and new traffic due to normal traffic growth. Consideration of these factors resulted in the development of 2031 No-Build traffic volumes, which assume that the proposed development is not built. The incremental impacts of the proposed project may then be determined by adding site-generated traffic volumes (Build conditions) and making comparisons to the No-Build conditions.

Traffic Growth

To develop the 2031 No-Build forecast volumes, two components of traffic growth were considered. First, an annual growth percentage was determined. Based on historic traffic-volume counts provided by MassDOT and NHDOT, traffic volumes in the area have been increasing at a rate of approximately 0.4 percent per year.[3] Therefore, a 1 percent compounded annual growth was assumed for the project area to be conservative. The historic traffic-volume data are provided in the Appendix.

Second, any planned or approved specific developments in the area that would generate a significant volume of traffic on study area roadways within the next seven years were considered. Based on discussions with the Planning departments in Methuen, MA and Salem, NH, the following projects were identified. All background development data is provided in the Appendix.

- Office Building – 469 Broadway – Construction of a 5,000 square foot office building. Due to the scale of the project, the anticipated traffic volumes associated with this project will be reflected in the general conservative background traffic growth.
- Car Wash – 464 & 480 Broadway – Construction of a 4,859 square foot (1 tunnel) car wash. Traffic volumes associated with the proposed project were generated based on trip rates provided in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition based on LUC 948 (Automated Car Wash) and distributed along the adjacent roadway system.
- Tuscan Village – 79 Rockingham Park Boulevard/11 Central Street, Salem, NH – Redevelopment of an approximately 170-acre parcel currently occupied by the Rockingham Park barns and racetrack. The project is approximately 50 percent occupied. Traffic volumes and methodology associated with the redevelopment were obtained from the TIAS Addendum[4] prepared for the project and 50 percent of the vehicle trips for the entire project were added to the adjacent roadway system.
- Taco John's – 436 Broadway – Construction of a 2,200 square foot drive-through restaurant to be located at the northeasterly portion of the parking lot of the Village Mall Shopping Plaza. Traffic

[3] *MassDOT Transportation Data Management System;* Methuen, MA; *MassDOT Transportation Data Management System;* Salem, NH.

[4] Greenman-Pedersen, Inc. (GPI); Traffic Impact and Access Study – Addendum 8/18/17; Tuscan Village (Phase III), Salem, New Hampshire; August 18, 2017.

volumes and methodology associated with the development were obtained from the TIA[5] prepared for the project and distributed along the adjacent roadway system.

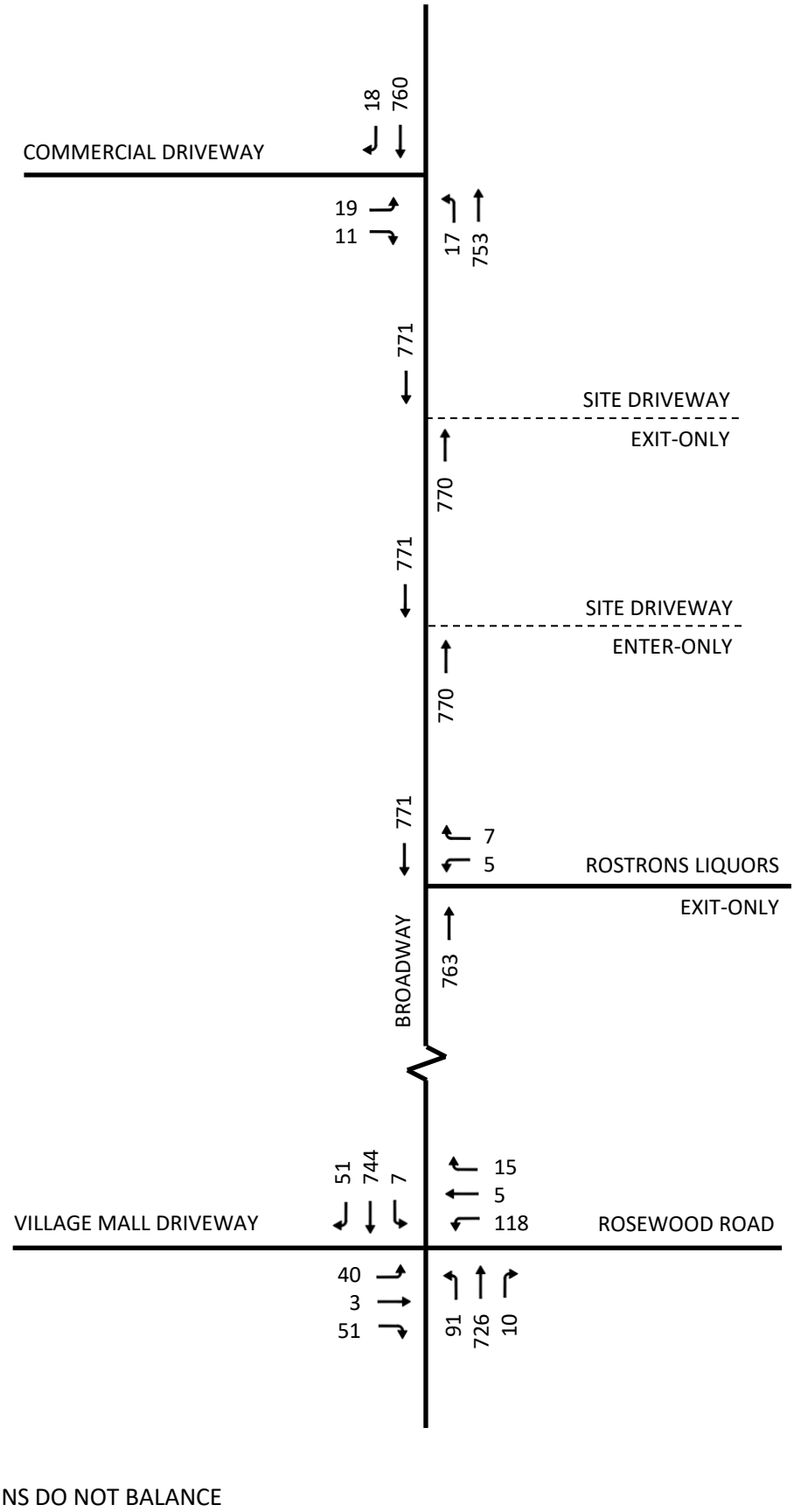
Planned Roadway Improvements

Based on the MassDOT Project Information website, there are currently no roadway improvement projects planned to be constructed within the study area during the design horizons. Based on correspondence with the City Engineering department, no sewer or water work is currently planned in the study area.

No-Build Conditions

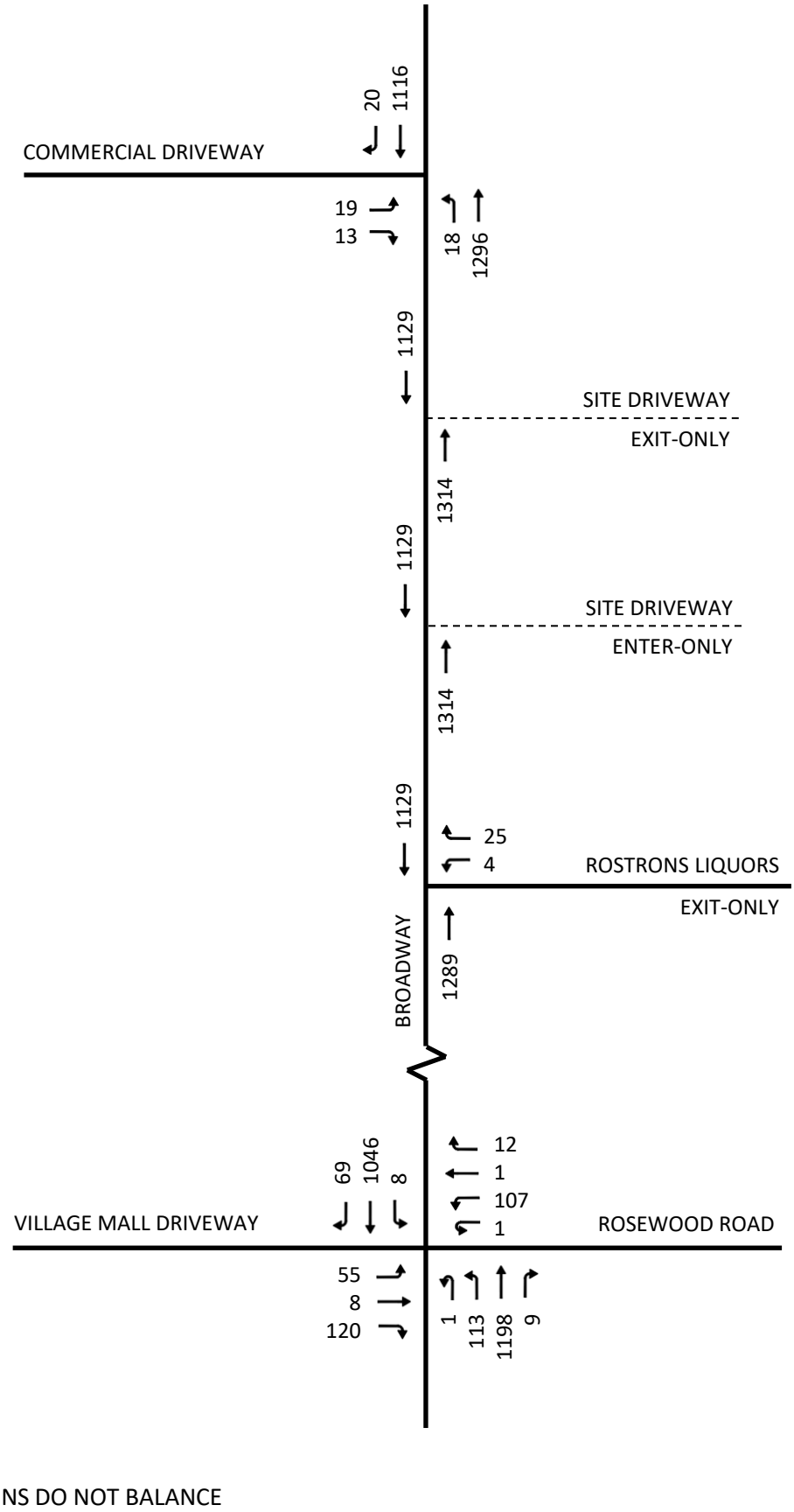
The 2031 No-Build peak-hour traffic volumes were accordingly developed by applying a 1 percent compounded annual traffic growth rate (7.2 percent over seven years) to the 2024 Existing traffic volumes and adding the traffic to be generated by the identified specific developments in the area. The 2031 No-Build traffic volumes are shown graphically on Figures 5, 6 and 7 for the weekday AM, weekday PM, and Saturday midday peak hours, respectively.

[5] ASB Design Group; *Transportation Traffic Impact Assessment; Taco Johns, Methuen, Massachusetts*; July 5, 2023.



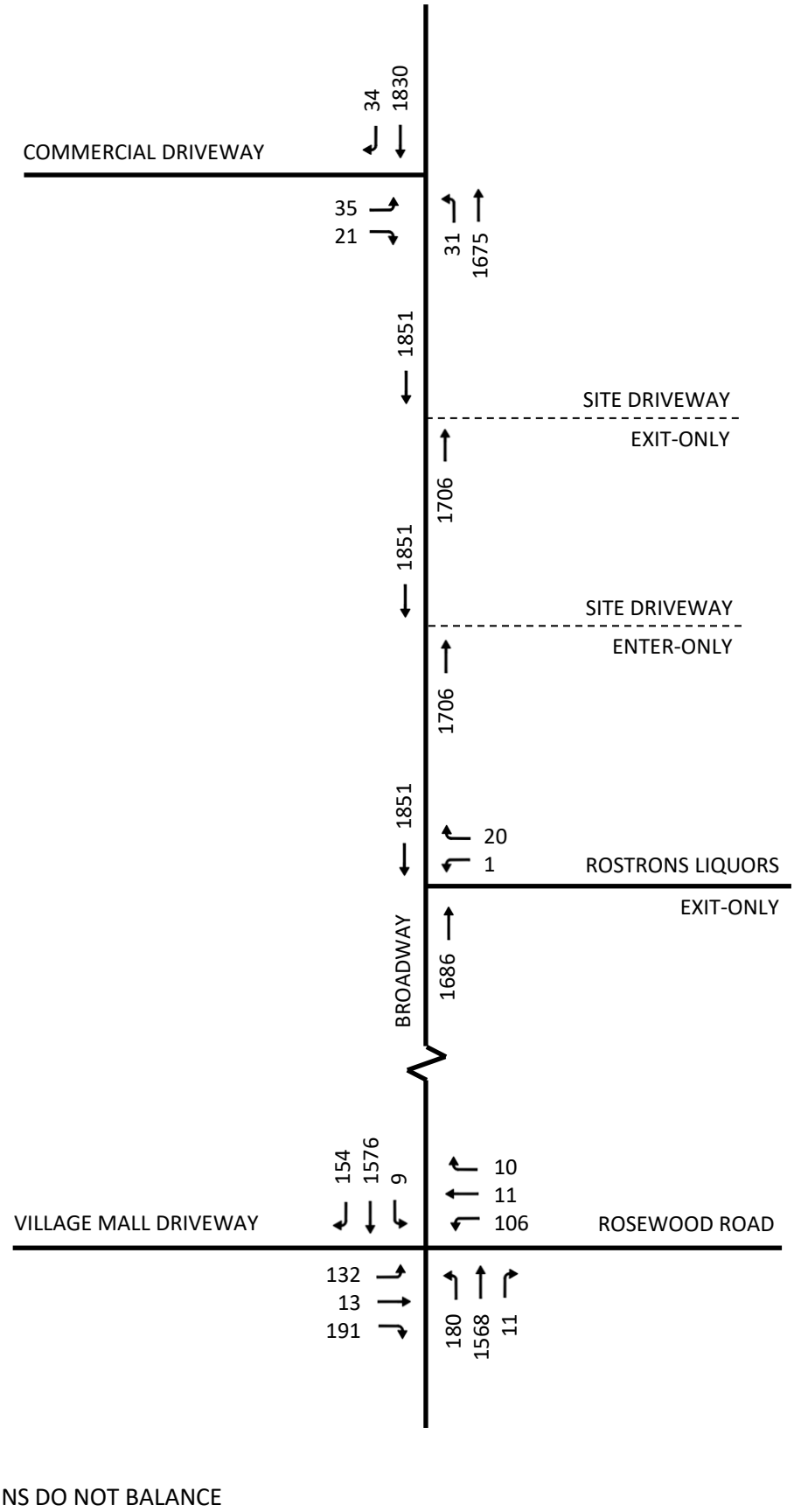
INTERSECTIONS DO NOT BALANCE

FIGURE 5
2031 NO-BUILD WEEKDAY AM PEAK HOUR TRAFFIC VOLUMES



INTERSECTIONS DO NOT BALANCE

FIGURE 6
2031 NO-BUILD WEEKDAY PM PEAK HOUR TRAFFIC VOLUMES



INTERSECTIONS DO NOT BALANCE

FIGURE 7
2031 NO-BUILD SATURDAY MIDDAY PEAK HOUR TRAFFIC VOLUMES

Trip Generation

To estimate the volume of traffic to be generated by the proposed development, trip-generation rates published by the ITE *Trip Generation Manual*[6] were researched. The site is currently vacant. The site, however, was formerly occupied by two 2-story residential homes with detached garages. A credit was not taken for the residential homes. The project consists of constructing a ±2,100 square foot coffee/donut shop with a drive-through window. Land Use Code (LUC) 937 (Coffee/Donut Shop with Drive-Through Window) was used to estimate the potential trip generation of the proposed development:

Not all of the vehicle trips expected to be generated by the proposed development represent *new* trips on the study area roadway system. Studies have shown that for developments such as the one proposed, a substantial portion of the site-generated vehicle trips are already present in the adjacent passing stream of traffic or are diverted from another route to the proposed site. For example, some vehicles which are already on the roadways may decide to visit the site on their way to another destination. Based on information published in the ITE *Trip Generation Manual,* the average *pass-by* trip percentage is 50 percent the weekday AM peak period and 55 percent during the weekday PM peak period for Fast-Food Restaurant with Drive-Through Window (LUC 934). Table 5 summarizes the results of the trip-generation estimates. The *pass-by* data are provided in the Appendix.

TABLE 5
Trip-Generation Summary

Peak Hour/Direction	Total Trips [a]	Pass-By Trips [b]	New Trips [c]
Weekday Daily	1,120	560	560
Weekday AM Peak Hour:			
Enter	92	45	47
Exit	88	45	43
Total	180	90	90
Weekday PM Peak Hour:			
Enter	41	23	18
Exit	41	23	18
Total	82	46	36
Saturday Midday	1,476	738	738
Saturday Midday Peak Hour:			
Enter	93	46	47
Exit	92	46	46
Total	185	92	93

[a] Total trips based on ITE LUC 937 (Coffee/Donut Shop with Drive-Through Window) for 2,100 SF.
[b] 50 percent of Total Trips during the weekday daily, Saturday daily, weekday AM peak hour, and Saturday midday peak hour and 55 percent of Total Trips during the weekday PM peak hour.
[c] Total Trips minus Pass-By Trips.

6 *ITE Trip Generation Manual, 11th Edition*. Institute of Transportation Engineers; Washington, DC; 2021.

As shown in Table 5, the proposed development is expected to generate 90 *new* vehicle trips (47 entering and 43 exiting) during the weekday AM peak hour, 36 *new* vehicle trips (18 entering and 18 exiting) during the weekday PM peak hour, and 93 *new* trips (47 entering and 46 exiting) during the Saturday midday peak hour. It should be noted that the volume of *pass-by* traffic does not reduce the total volume of traffic generated by the development and the external trips will still be realized as turning movements at the site driveways.

Project Environmental Review (MEPA) Thresholds

The trip generation of the proposed project was assessed to determine if the proposed project would meet or exceed any thresholds that would require formal environmental review with respect to traffic under Massachusetts Environmental Policy Act (MEPA). One of the thresholds for MEPA environmental review is the total volume of daily traffic generated by a project. If a proposed development project requires a state permit and generates a total of more than 2,000 new daily vehicle trips, then an Environmental Notification Form (ENF) must be prepared and filed with MEPA. The document must then be subject to both governmental agency and public review and comment, and the primary government entity responsible for reviewing the proposed project plans and issuing the permits and approvals that are required to allow for the construction of the proposed project must take the comments made by other government agencies and the public on these documents into consideration as part of its decision-making process on the proposed project.

The trip generation methodology was described in the *Trip Generation* section of this report. The daily vehicle trips associated with the proposed project are summarized in Table 5. As shown in Table 5, the daily traffic is estimated to be approximately 1,120 trips during a weekday and 1,476 trips during a Saturday. It should also be noted that two residential homes previously occupied the site and no credit was taken for those previous trips. As a result, the project is not expected to exceed the MEPA Transportation review thresholds set forth in 301 CMR 11.10(6)(b) for the preparation of an ENF.

Trip Distribution

Having estimated project-generated vehicle trips, the next step is to determine the distribution of project traffic and assign these trips to the local roadway network. The directional distribution of site traffic is dependent on expected travel route to and from the site and existing travel patterns. Accordingly, 45 percent of the site traffic is expected to/from the north on Broadway, 50 percent to/from the south on Broadway, and 5 percent to/from the east on Rosewood Road.

Drive-Through Lane Vehicle Queuing

The proposed donut shop facility will provide a drive-through window. The drive-through window lane is proposed to be 10-feet wide and provide storage for 14 vehicles without interrupting on-site circulation. Vehicle queue observations were made in Londonderry, New Hampshire and Peabody, Massachusetts at the following locations during the time periods indicated:

- **41 Nashua Road (NH Route 102), Londonderry, NH** – Located within a stand-alone facility in a retail plaza with Home Depot, 99 Restaurant, and Staples. Observations were made during the weekday AM peak period (7:00 AM to 9:00 AM).
- **1 Mohawk Drive (NH Route 102), Londonderry, NH** – Located within a stand-alone facility across from a BP gas station. Observations were made during the weekday AM peak period (7:00 AM to 9:00 AM).

- **256 Andover Street, Peabody, MA** – Located within a stand-alone facility. Observations were made during the weekday AM peak period (7:00 AM to 9:00 AM) and Saturday midday (11:00 AM to 2:00 PM).

These observations revealed the following:

TABLE 6
Drive-Through Queue Observations

Location/Direction	Average Queue	Maximum Queue
41 Nashua Road (Londonderry, NH) [a]		
Weekday AM	4	9
1 Mohawk Drive (Londonderry, NH) b		
Weekday AM	3	8
256 Andover Street (Peabody, MA) c		
Weekday AM	5	10
Saturday Midday	3	8

[a] Observations made on Tuesday, April 15, 2014.

[b] Observations made on Tuesday, April 15, 2014.

[c] Observations made on Tuesday, October 22, 2013 and Saturday, October 19, 2013.

As shown in Table 6, the average queues were between 3 and 5 vehicles and the maximum queues were between 8 and 10 vehicles. Based on the vehicle queue data from Londonderry and Peabody, it is anticipated that the vehicle queue for the drive-through window can be accommodated within the drive-through lane without interrupting traffic flow on site or along the adjacent roadways. The drive-through window queue observation data are provided in the Appendix.

Build Traffic Volumes

Based on the traffic generation and distribution estimates for this project, the traffic volumes associated with the proposed development were assigned to the roadway network. The site-generated traffic networks are shown on Figures 8, 9, and 10 for the weekday AM, weekday PM, and Saturday midday peak hours, respectively. The site-generated traffic volumes were then combined with the 2031 No-Build traffic volumes to develop the 2031 Build peak-hour traffic-volume networks. The 2031 Build weekday AM, weekday PM, and Saturday midday peak hour traffic volumes are illustrated on Figures 11, 12, 13, respectively.

Traffic Increases

The proposed development will result in increases in traffic on the study area roadways. As shown on Figures 8 through 10, traffic-volume increases beyond the study area during the peak hours are expected to be in the range of 2 to 47 vehicles. These increases represent, on average, one additional vehicle approximately every 1.3 minutes to 30 minutes during the peak hours.

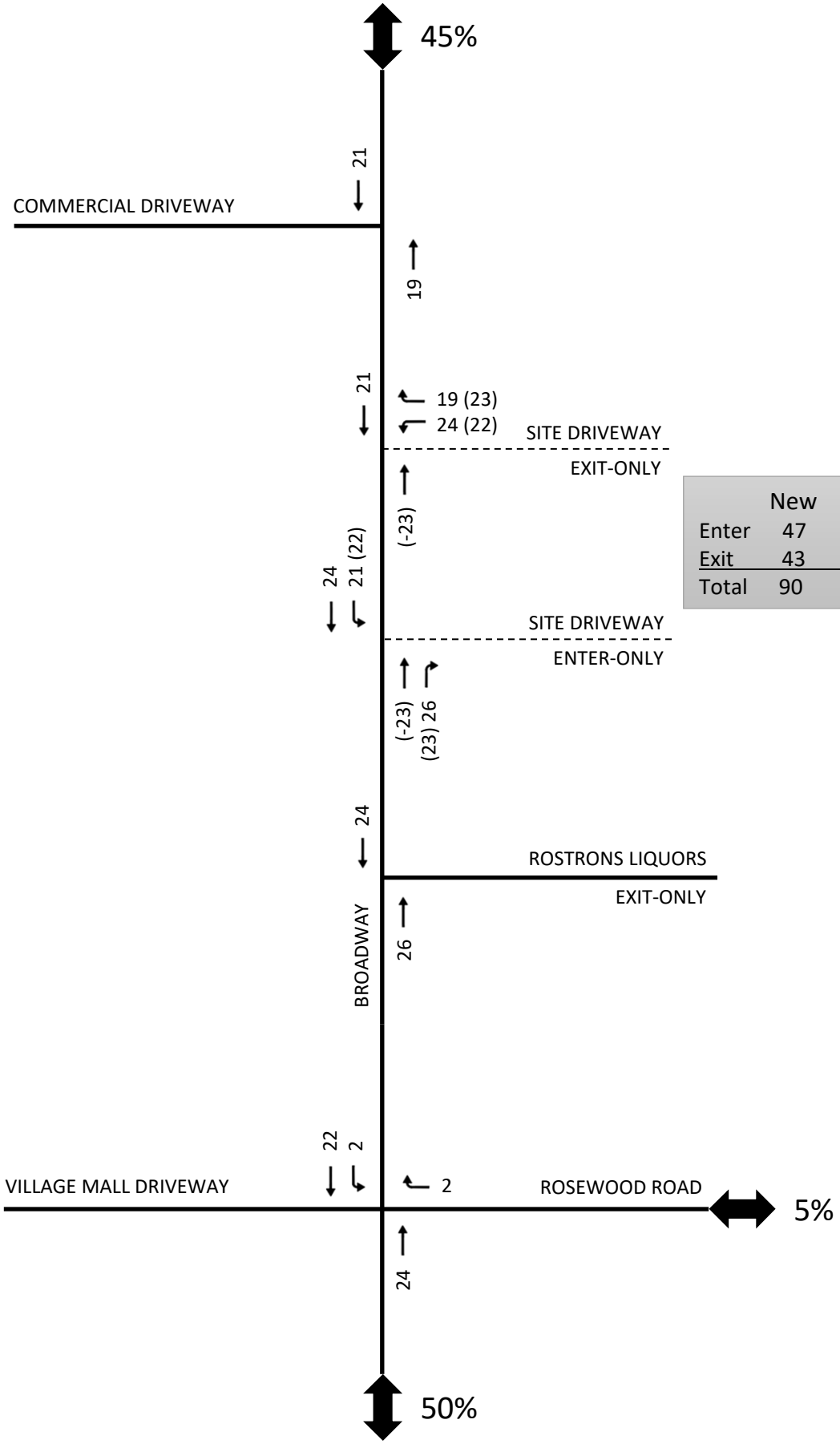


FIGURE 8
SITE GENERATED WEEKDAY AM
PEAK HOUR TRAFFIC VOLUMES

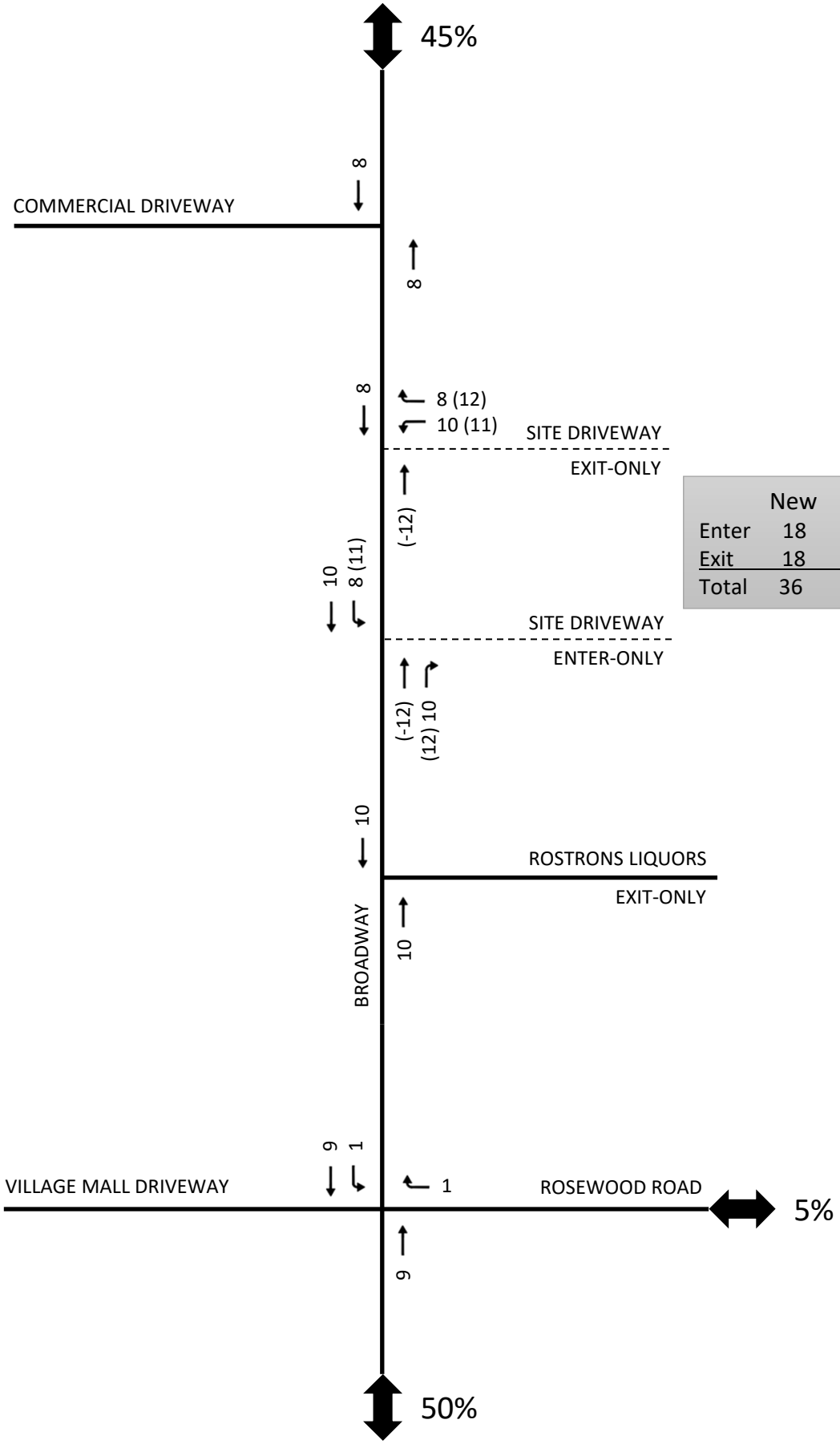


FIGURE 9
SITE GENERATED WEEKDAY PM
PEAK HOUR TRAFFIC VOLUMES

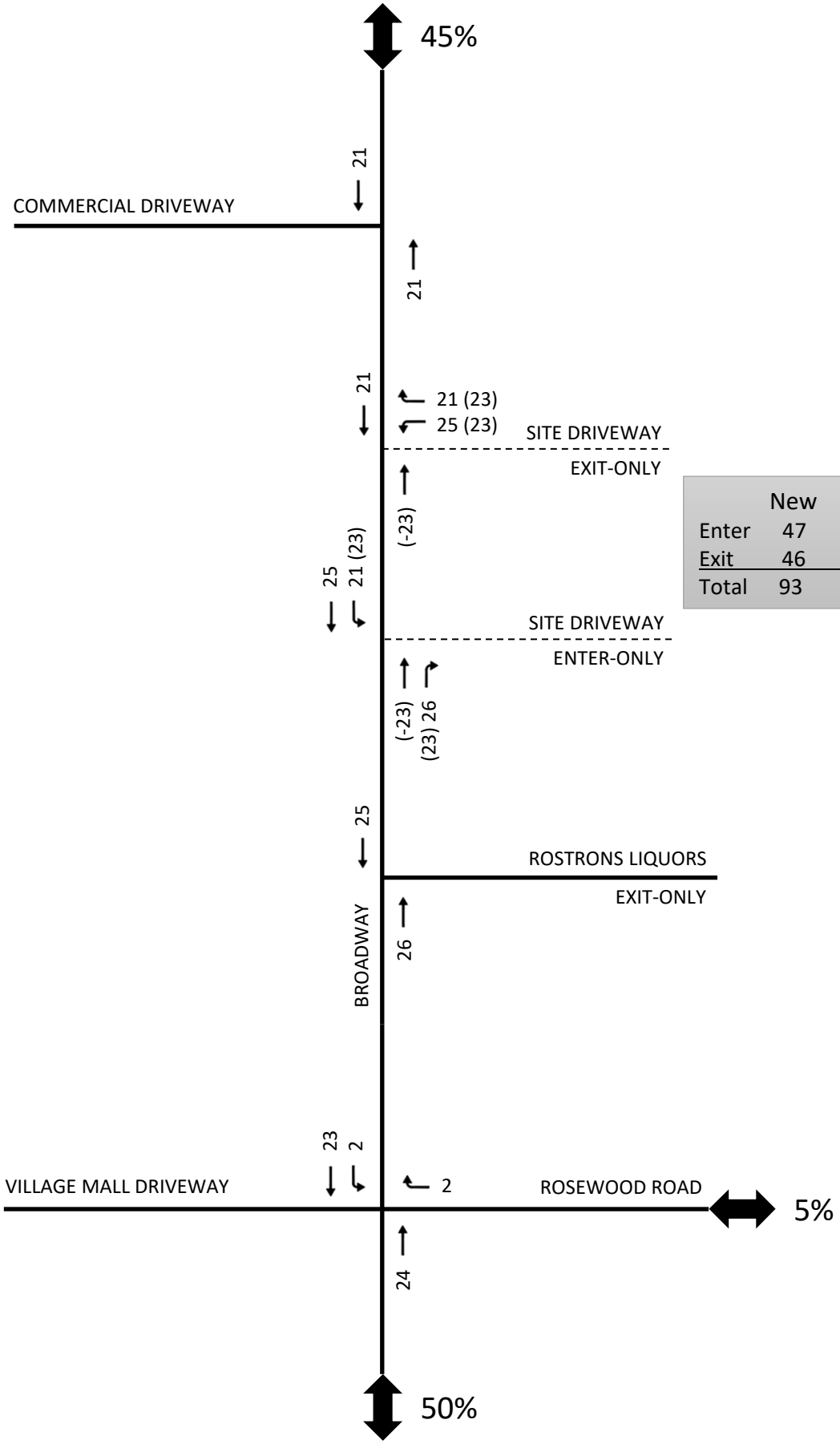


FIGURE 10
SITE GENERATED SATURDAY MIDDAY
PEAK HOUR TRAFFIC VOLUMES

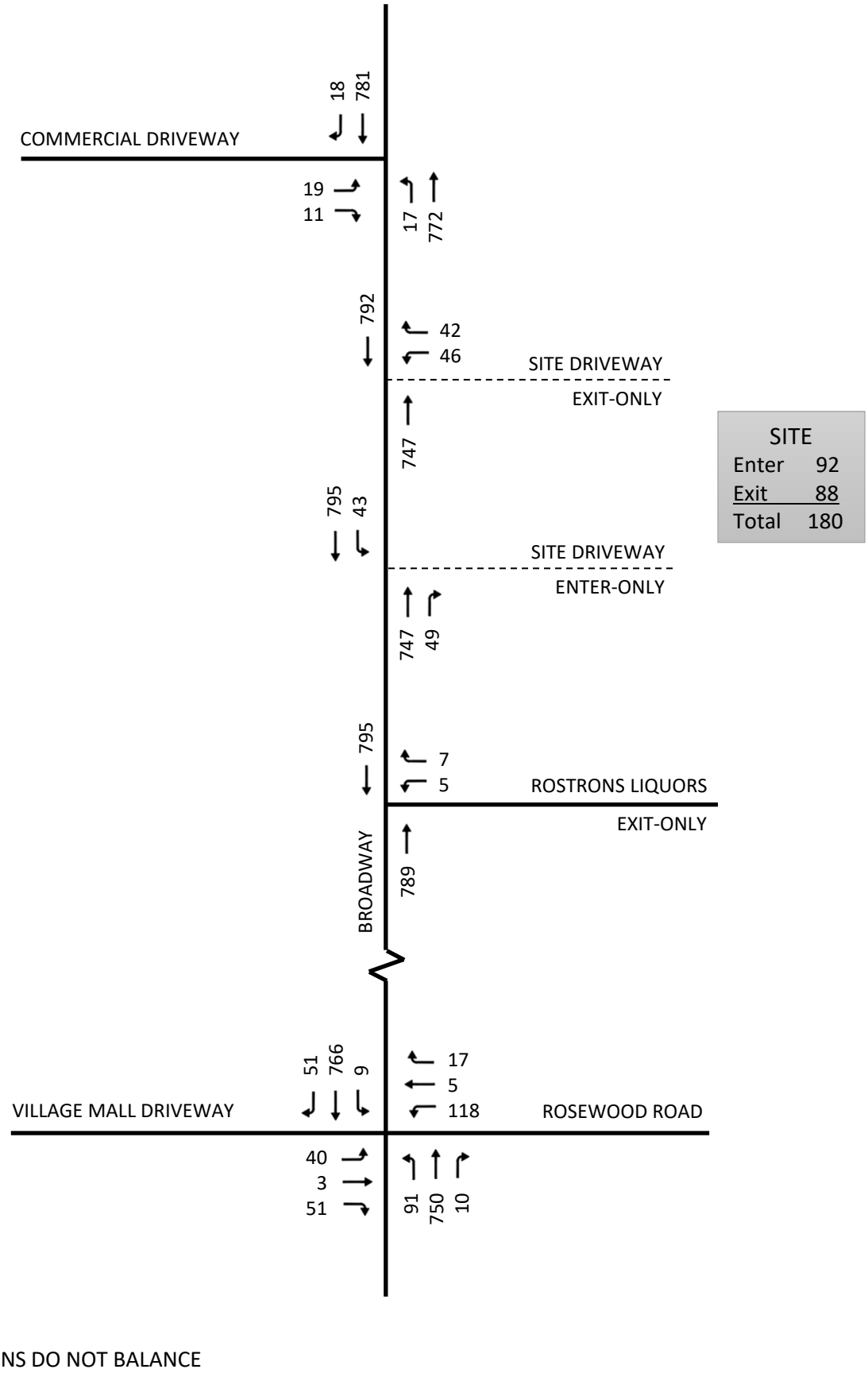
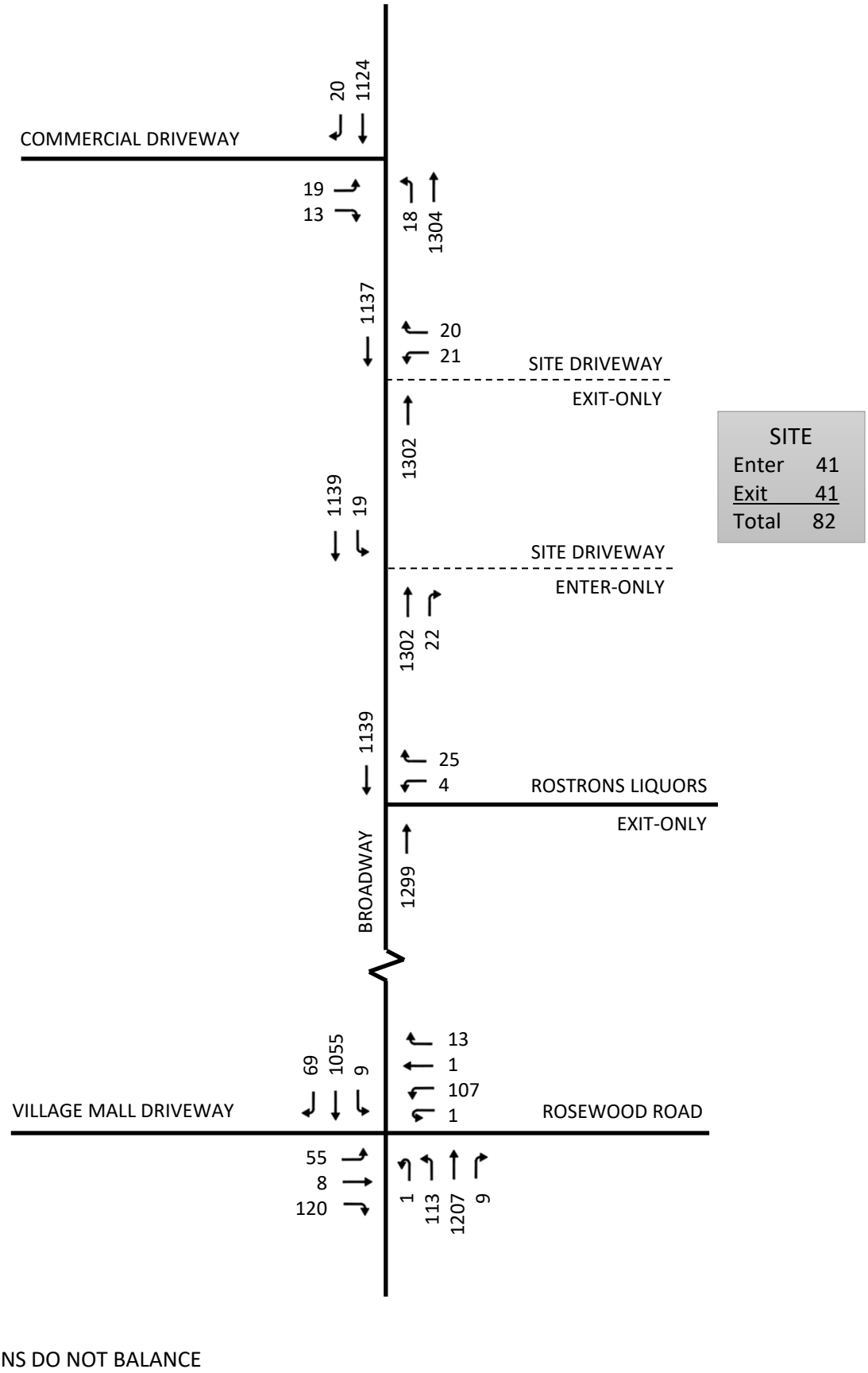


FIGURE 11
2031 BUILD WEEKDAY AM
PEAK HOUR TRAFFIC VOLUMES



INTERSECTIONS DO NOT BALANCE

FIGURE 12
2031 BUILD WEEKDAY PM
PEAK HOUR TRAFFIC VOLUMES

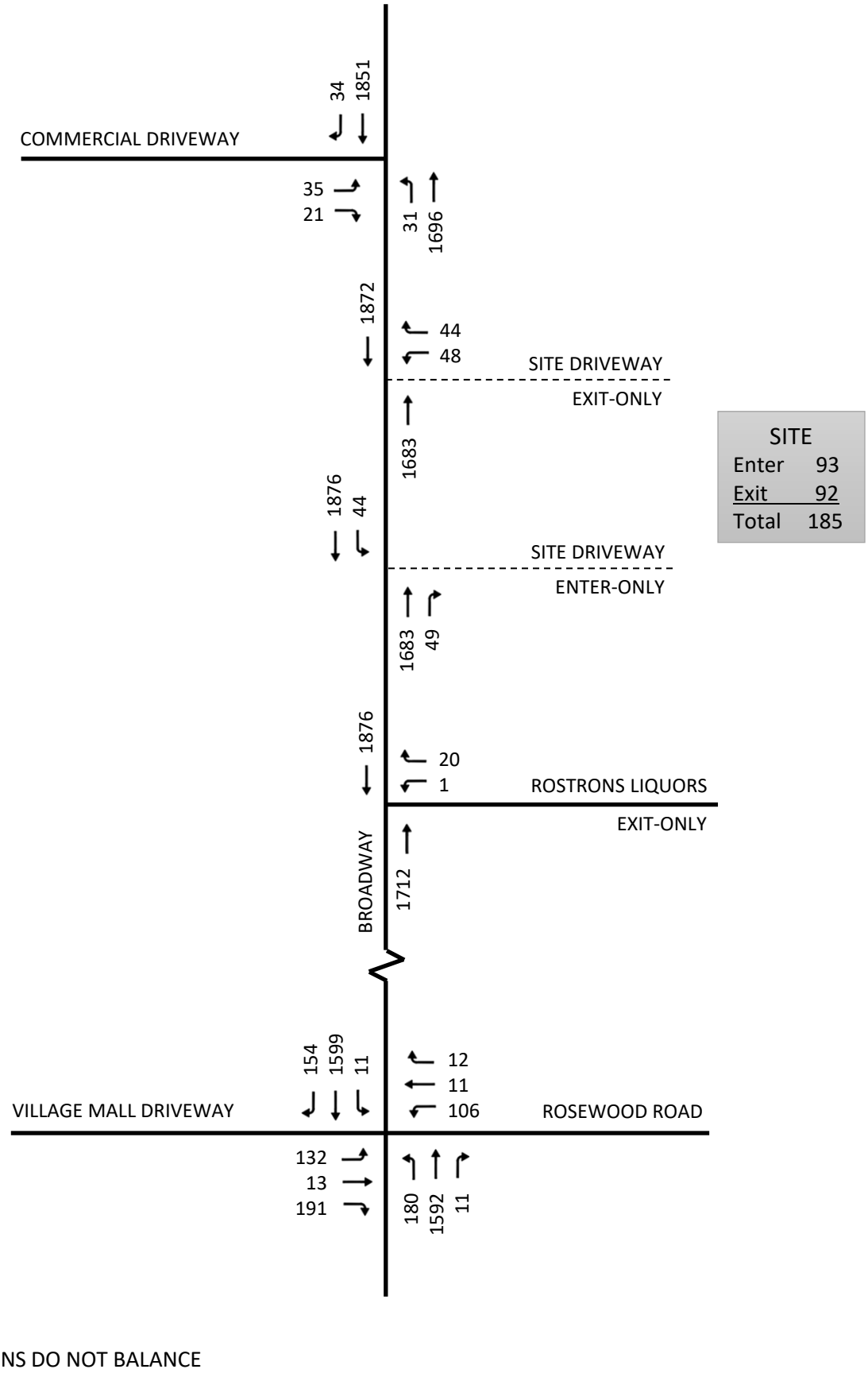


FIGURE 13
2031 BUILD SATURDAY MIDDAY PEAK HOUR TRAFFIC VOLUMES

CAPACITY AND QUEUE ANALYSIS

Capacity and queue analyses were conducted at all study area locations under 2024 Existing, 2031 No-Build, and 2031 Build traffic-volume conditions. The impact of site-generated traffic can be measured by comparing 2031 No-Build conditions to 2031 Build conditions.

Methodology

The capacity analysis methodology is based on the concepts and procedures in the *Highway Capacity Manual* (HCM)7 and is described in the Appendix. The TIAS utilizes the HCM 2000 methodology at the signalized intersection due to the fact that *HCM 6 and HCM 2010 methodology does not support exclusive ped or hold phases.* HCM 2000 methodology was used at the site driveways as well in order to be consistent.

For signalized intersections, the maximum back of queue during a typical (average) signal cycle and a 95th percentile signal cycle were calculated for each lane group during the peak periods studied. The back of queue is the length of a backup of vehicles from the stop line of a signalized intersection to the last vehicle in the queue that is required to stop, regardless of the signal indication. The length of this queue depends on a number of factors including signal timing, vehicle arrival patterns, and the saturation flow rate. For unsignalized intersections, the 95th percentile queue represents the length of queue of the critical minor-street movement that is not expected to be exceeded 95 percent of the time during the analysis period (typically one hour). In this case, the queue length is a function of the capacity of the movement and the movement's degree of saturation.

A stop-delay/queue study was performed from the January 2024 count data. This included doing actual observations during the weekday AM, weekday PM, and Saturday midday peak hours of traffic that measured how long vehicles waited to get out of Rostrons Liquors driveway, as well as how long the average and maximum queues were. Based on the results, motorists exiting the driveways were generally waiting less time than what was identified in the Synchro analysis. Accordingly, this means that motorist are accepting shorter gaps in traffic than the default settings in the Synchro software. Accordingly, the analysis was calibrated at the unsignalized driveways of Rostrons Liquors and the site driveway to reflect the gaps that are being accepted in the field and the delay experienced by motorists. The stop-delay queue study is provided in the Appendix and the calibrated analyses at the unsignalized intersections are summarized in Table 7.

Analysis Results

The results of the level-of-service (LOS) and queue analyses are shown in Table 7 and are discussed below. Capacity and queue analyses were conducted at the study area intersections utilizing *Synchro* software.[8] The capacity and queue analysis worksheets for all conditions are provided in the Appendix.

[7] *Highway Capacity Manual 2000*, Transportation Research Board; Washington, D.C.; 2000.

[8] *Synchro plus SimTraffic 11*; Trafficware LLC.; Sugar Land, TX; 2019.

Broadway (Route 28) at Rosewood Road and Village Mall Driveway

As shown in Table 7, under existing conditions, the signalized intersection of Broadway at Rosewood Road and the Village Mall driveway currently operates over capacity during the Saturday midday peak hour. Regardless of the proposed development project, the intersection could benefit from exclusive left-turn lanes on Broadway. The traffic-volume impacts of the proposed development are less than three percent during the weekday AM peak hour, less than one percent during the weekday PM peak hour, and less than two percent during the Saturday midday peak hour. The typical fluctuation in daily traffic is approximately two percent. Accordingly, the additional traffic as a result of the proposed project falls within that daily fluctuation. The impacts demonstrated in the capacity and queue analysis confirm negligible impact during the weekday AM peak hour and minimal impact during the weekday PM peak hour with an increase in overall delay of less than three seconds. During the Saturday midday peak hour, the increase in overall delay as a result of the project is estimated to be approximately 27 seconds. With the two mainline approaches already projected to be over capacity under the No-Build condition during the Saturday midday peak hour, even the slightest increase in traffic from the project results in an exponential increase in delay. This was proven in additional mitigation analysis, where a one second shift in signal timings resulted in operations better than No-Build conditions. The results of this analysis is shown in Table 8 and the capacity and queue analysis worksheets are provided in the Appendix.

Broadway (Route 28) at Rostrons Liquors (471 Broadway)

Under existing and future traffic-volume conditions, the Rostrons Liquors exit-only driveway is expected to operate at LOS D or better with queue lengths of one vehicle or less. The volume-to-capacity (v/c) ratios on all movements are below 1.00 indicating there will be adequate capacity.

Broadway (Route 28) at Commercial Driveway (464/476/480 Broadway)

Under existing conditions, the commercial driveway at 464/476/480 Broadway has a very low volume of turning movements. Under future traffic-volume conditions, the commercial driveway has been analyzed assuming the fully constructed car wash currently proposed on the site. Accordingly, under future traffic-volume conditions, the driveway is expected to operate with long delays (LOS F) during the weekday PM and Saturday midday peak hours. As a result of the proposed development project, increases in delay on the commercial driveway are expected to be minimal.

Broadway (Route 28) at Exit-Only Site Driveway

Under future traffic-volume conditions, the intersection of Broadway (Route 28) at the proposed exit-only site driveway is expected to operate with movements on Broadway at optimal levels (LOS A) and the site driveway approach is expected to operate at LOS B/C during the weekday peak hours and operate with long delays (LOS F) during the Saturday midday peak hour. Queue lengths during the weekday peak hours are expected to be minimal (one vehicle or less) with longer queue lengths during the Saturday midday peak hour. With traffic flow around the building and two-way traffic allowed in the parking aisles, vehicles can stack on site and not disrupt flow along Broadway (Route 28).

TABLE 7
Intersection Capacity Analysis Summary

	2024 Existing				2031 No-Build				2031 Build			
Intersection/Peak Hour/Lane Group	**V/C [a]**	**Del. [b]**	**LOS [c]**	**Queue [d]**	**V/C**	**Del.**	**LOS**	**Queue**	**V/C**	**Del.**	**LOS**	**Queue**
Broadway (Route 28) at Rosewood Road and Village Mall Driveway												
Weekday AM:												
Village Mall EB left-turn/through	0.07	16.5	B	<25/<25	0.15	20.0	B	<25/45	0.15	20.8	C	<25/47
Village Mall EB right-turn	0.02	13.5	B	<25/<25	0.03	15.3	B	<25/<25	0.03	16.1	B	<25/<25
Rosewood Road WB approach	0.43	19.0	B	28/95	0.47	22.6	C	45/117	0.49	23.6	C	48/125
Broadway NB approach	0.45	6.1	A	63/118	0.55	6.7	A	78/140	0.56	6.8	A	81/144
Broadway SB approach	0.52	10.7	B	58/187	0.56	11.7	B	132/214	0.56	11.6	B	138/221
Overall Intersection	**0.54**	**9.4**	**A**	**--/--**	**0.61**	**10.6**	**B**	**--/--**	**0.62**	**10.7**	**B**	**--/--**
Weekday PM:												
Village Mall EB left-turn/through	0.18	31.8	C	<25/53	0.28	32.3	C	33/96	0.28	32.1	C	33/96
Village Mall EB right-turn	0.06	25.5	C	<25/33	0.08	24.0	C	<25/45	0.08	23.9	C	<25/45
Rosewood Road WB approach	0.53	35.8	D	63/180	0.53	35.3	D	63/196	0.53	35.1	D	64/199
Broadway NB approach	0.76	12.9	B	148/387	0.99	37.8	D	189/665	1.01	41.8	D	193/674
Broadway SB approach	0.60	15.7	B	187/341	0.73	20.0	B	240/467	0.75	20.4	C	244/474
Overall Intersection	**0.72**	**16.1**	**B**	**--/--**	**0.90**	**29.7**	**C**	**--/--**	**0.90**	**31.8**	**C**	**--/--**
Saturday Midday:												
Village Mall EB left-turn/through	0.46	32.2	C	76/212	0.47	31.3	C	77/272	0.46	31.0	C	76/272
Village Mall EB right-turn	0.12	23.1	C	<25/35	0.13	22.4	C	<25/60	0.13	22.3	C	<25/60
Rosewood Road WB approach	0.41	31.6	C	62/219	0.44	31.0	C	66/246	0.44	30.8	C	66/247
Broadway NB approach	1.42	215.6	F	627/900	1.69	335.4	F	946/1095	1.73	352.7	F	972/1113
Broadway SB approach	1.02	55.0	D	488/700	1.42	219.1	F	847/988	1.52	262.9	F	891/1032
Overall Intersection	**1.13**	**122.6**	**F**	**--/--**	**1.30**	**248.4**	**F**	**--/--**	**1.32**	**275.5**	**F**	**--/--**

[a] Volume-to-capacity ratio.

[b] Average control delay in seconds per vehicle.

[c] Level of service.

[d] Average/95th percentile queue length in feet per lane (assuming 25 feet per vehicle).

TABLE 7 (continued)
Intersection Capacity Analysis Summary

	2024 Existing				2031 No-Build				2031 Build			
Intersection/Peak Hour/Lane Group	**V/C [a]**	**Del. [b]**	**LOS [c]**	**Queue [d]**	**V/C**	**Del.**	**LOS**	**Queue**	**V/C**	**Del.**	**LOS**	**Queue**
Broadway (Route 28) at Rostrons Liquors Exit-Only Driveway (471 Broadway)												
Weekday AM:												
Rostrons Liquors WB approach	0.03	10.4	B	--/<25	0.02	10.5	B	--/<25	0.02	10.6	B	--/<25
Weekday PM:												
Rostrons Liquors WB approach	0.08	11.7	B	--/<25	0.06	12.7	B	--/<25	0.06	12.9	B	--/<25
Saturday Midday:												
Rostrons Liquors WB approach	0.07	15.6	C	--/<25	0.14	30.8	D	--/<25	0.16	34.1	D	--/<25
Broadway (Route 28) at Commercial Driveway (464, 476, 480 Broadway)												
Weekday AM:												
Commercial Driveway EB approach	0.02	21.8	C	--/<25	0.14	23.0	C	--/<25	0.15	24.6	C	--/<25
Broadway NB left-turn	0.00	0.0	A	--/<25	0.02	0.8	A	--/<25	0.02	0.8	A	--/<25
Weekday PM:												
Commercial Driveway EB approach	0.02	19.9	C	--/<25	0.35	59.0	F	--/<25	0.36	60.9	F	--/35
Broadway NB left-turn	0.00	0.1	A	--/<25	0.04	1.0	A	--/<25	0.04	1.0	A	--/<25
Saturday Midday:												
Commercial Driveway EB approach	0.16	174.9	F	--/<25	>3.00	Err	F	--/<25	>3.00	Err	F	--/Err
Broadway NB left-turn	0.00	0.0	A	--/<25	0.12	4.4	A	--/<25	0.12	4.6	A	--/<25

[a] Volume-to-capacity ratio.

[b] Average control delay in seconds per vehicle.

[c] Level of service.

[d] Average/95th percentile queue length in feet per lane (assuming 25 feet per vehicle).

TABLE 7 (continued)
Intersection Capacity Analysis Summary

	2024 Existing				2031 No-Build				2031 Build			
Intersection/Peak Hour/Lane Group	**V/C [a]**	**Del. [b]**	**LOS [c]**	**Queue [d]**	**V/C**	**Del.**	**LOS**	**Queue**	**V/C**	**Del.**	**LOS**	**Queue**
Broadway (Route 28) at Exit-Only Site Driveway												
Weekday AM: Site Driveway WB approach	--	--	--	--/--	--	--	--	--/--	0.15	11.6	B	--/<25
Weekday PM: Site Driveway WB approach	--	--	--	--/--	--	--	--	--/--	0.20	24.9	C	--/<25
Saturday Midday: Site Driveway WB approach	--	--	--	--/--	--	--	--	--/--	>3.00	Err	F	--/Err

[a] Volume-to-capacity ratio.

[b] Average control delay in seconds per vehicle.

[c] Level of service.

[d] Average/95th percentile queue length in feet per lane (assuming 25 feet per vehicle).

TABLE 8
Intersection Capacity Analysis Summary – with Mitigation

	2031 No-Build				2031 Build				2031 Build with Mitigation			
Intersection/Peak Hour/Lane Group	**V/C [a]**	**Del. [b]**	**LOS [c]**	**Queue [d]**	**V/C**	**Del.**	**LOS**	**Queue**	**V/C**	**Del.**	**LOS**	**Queue**
Broadway (Route 28) at Rosewood Road and Village Mall Driveway												
Weekday AM:												
Village Mall EB left-turn/through	0.15	20.0	B	<25/45	0.15	20.8	C	<25/47	--	--	--	--/--
Village Mall EB right-turn	0.03	15.3	B	<25/<25	0.03	16.1	B	<25/<25	--	--	--	--/--
Rosewood Road WB approach	0.47	22.6	C	45/117	0.49	23.6	C	48/125	--	--	--	--/--
Broadway NB approach	0.55	6.7	A	78/140	0.56	6.8	A	81/144	--	--	--	--/--
Broadway SB approach	0.56	11.7	B	132/214	0.56	11.6	B	138/221	--	--	--	--/--
Overall Intersection	**0.61**	**10.6**	**B**	**--/--**	**0.62**	**10.7**	**B**	**--/--**	**--**	**--**	**--**	**--/--**
Weekday PM:												
Village Mall EB left-turn/through	0.28	32.3	C	33/96	0.28	32.1	C	33/96	--	--	--	--/--
Village Mall EB right-turn	0.08	24.0	C	<25/45	0.08	23.9	C	<25/45	--	--	--	--/--
Rosewood Road WB approach	0.53	35.3	D	63/196	0.53	35.1	D	64/199	--	--	--	--/--
Broadway NB approach	0.99	37.8	D	189/665	1.01	41.8	D	193/674	--	--	--	--/--
Broadway SB approach	0.73	20.0	B	240/467	0.75	20.4	C	244/474	--	--	--	--/--
Overall Intersection	**0.90**	**29.7**	**C**	**--/--**	**0.90**	**31.8**	**C**	**--/--**	**--**	**--**	**--**	**--/--**
Saturday Midday:												
Village Mall EB left-turn/through	0.47	31.3	C	77/272	0.46	31.0	C	76/272	0.50	32.9	C	81/280
Village Mall EB right-turn	0.13	22.4	C	<25/60	0.13	22.3	C	<25/60	0.13	23.3	C	<25/61
Rosewood Road WB approach	0.44	31.0	C	66/246	0.44	30.8	C	66/247	0.49	33.0	C	70/257
Broadway NB approach	1.69	335.4	F	946/1095	1.73	352.7	F	972/1113	1.67	323.7	F	937/1107
Broadway SB approach	1.42	219.1	F	847/988	1.52	262.9	F	891/1032	1.39	207.9	F	851/997
Overall Intersection	**1.30**	**248.4**	**F**	**--/--**	**1.32**	**275.5**	**F**	**--/--**	**1.31**	**238.6**	**F**	**--/--**

[a] Volume-to-capacity ratio.

[b] Average control delay in seconds per vehicle.

[c] Level of service.

[d] Average/95th percentile queue length in feet per lane (assuming 25 feet per vehicle).

CONCLUSIONS

Existing and future conditions in the study area have been described, analyzed, and evaluated with respect to traffic operations and the impact of the proposed development. Conclusions of this effort are presented below.

- The site is currently vacant. The site, however, was formerly occupied by two 2-story residential homes with detached garages. The project consists of constructing a ±2,100 square foot coffee/donut shop with a drive-through window.

- Access and egress to the site is currently provided via two residential curb cuts on Broadway. As part of the project, the two residential driveways will be closed and two new curb cuts are proposed. The proposed southern site driveway will provide access only while the proposed northern site driveway will provide egress only. Proposed access and egress to and from the site was discussed with the MassDOT District 4 Office at a meeting on September 20, 2018. The District Office provided a sketch of what they want to see at the driveways and this was incorporated into the Site Plan for the project.

- Available sight distances at the proposed exit-only site driveway on Broadway exceed the minimum and desirable SSD and ISD requirements for safe operation. In addition, it is recommended that any proposed plantings, vegetation, landscaping, and signing along the site frontage be kept low to the ground (no more than 3.0 feet above street level) or set back sufficiently from Broadway so as not to inhibit the available sight lines.

- The proposed development is expected to generate 90 *new* vehicle trips (47 entering and 43 exiting) during the weekday AM peak hour, 36 *new* vehicle trips (18 entering and 18 exiting) during the weekday PM peak hour, and 93 *new* trips (47 entering and 46 exiting) during the Saturday midday peak hour. Traffic-volume increases beyond the study area during the peak hours are expected to be in the range of 2 to 47 vehicles. These increases represent, on average, one additional vehicle approximately every 1.3 minutes to 30 minutes during the peak hours.

- Under existing conditions, the signalized intersection of Broadway at Rosewood Road and the Village Mall driveway currently operates over capacity during the Saturday midday peak hour. Regardless of the proposed development project, the intersection could benefit from exclusive left-turn lanes on Broadway. The traffic-volume impacts of the proposed development are less than three percent during the weekday AM peak hour, less than one percent during the weekday PM peak hour, and less than two percent during the Saturday midday peak hour. The typical fluctuation in daily traffic is approximately two percent. Accordingly, the additional traffic as a result of the proposed project falls within that daily fluctuation. The impacts demonstrated in the capacity and queue analysis confirm negligible impact during the weekday AM peak hour and minimal impact during the weekday PM peak hour with an increase in overall delay of less than three seconds. During the Saturday midday peak hour, the increase in overall delay as a result of the project is estimated to be approximately 27 seconds. With the two mainline approaches already projected to be over capacity under the No-Build condition during the Saturday midday peak hour, even the slightest increase in traffic from the project results in an exponential increase in delay. This was proven in additional mitigation analysis, where a one second shift in signal timings resulted in operations better than No-Build conditions.

- Under existing and future traffic-volume conditions, the Rostrons Liquors exit-only driveway is expected to operate at LOS D or better with queue lengths of one vehicle or less. The volume-to-capacity (v/c) ratios on all movements are below 1.00 indicating there will be adequate capacity.

- Under existing conditions, the commercial driveway at 464/476/480 Broadway has a very low volume of turning movements. Under future traffic-volume conditions, the commercial driveway has been analyzed assuming the fully constructed car wash currently proposed on the site. Accordingly, under future traffic-volume conditions, the driveway is expected to operate with long delays (LOS F) during the weekday PM and Saturday midday peak hours. As a result of the proposed development project, increases in delay on the commercial driveway are expected to be minimal.

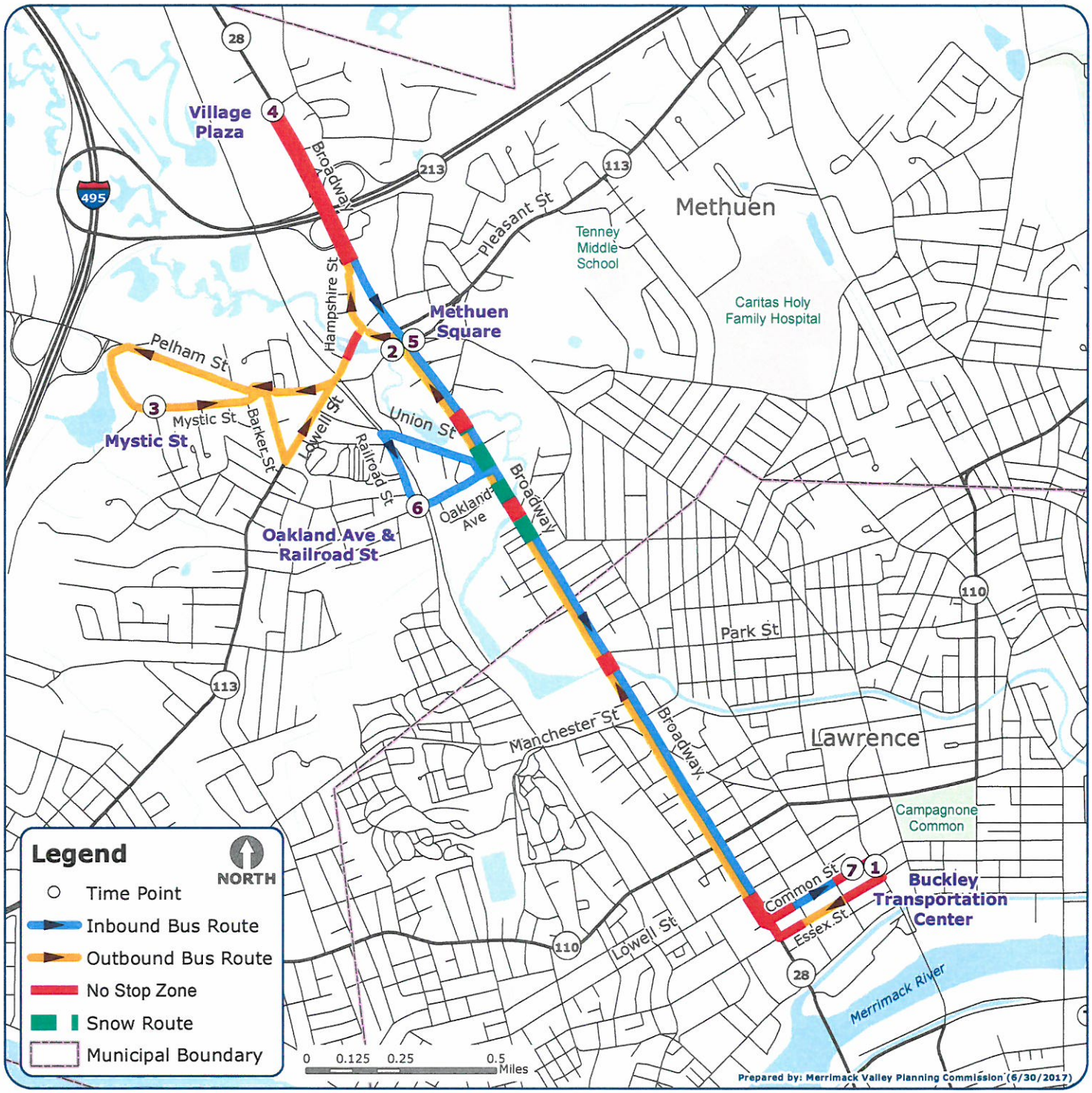
- Under future traffic-volume conditions, the intersection of Broadway (Route 28) at the proposed exit-only site driveway is expected to operate with movements on Broadway at optimal levels (LOS A) and the site driveway approach is expected to operate at LOS B/C during the weekday peak hours and operate with long delays (LOS F) during the Saturday midday peak hour. Queue lengths during the weekday peak hours are expected to be minimal (one vehicle or less) with longer queue lengths during the Saturday midday peak hour. With traffic flow around the building and two-way traffic allowed in the parking aisles, vehicles can stack on site and not disrupt flow along Broadway (Route 28).

- APPENDIX

- ***Public Transportation Information***
- ***Traffic Count Data***
- ***Traffic-Volume Adjustment Data***
- ***MassDOT Crash Rate Worksheets***
- ***Sight Distance Calculations***
- ***Background Development Data***
- ***Trip Generation Calculations***
- ***Drive-Through Lane Vehicle Queuing Data***
- ***Capacity Analysis Methodology***
- ***Stop-Delay/Queue Study***
- ***Capacity and Queue Analysis Worksheets***

PUBLIC TRANSPORTATION INFORMATION

Route 40


Village Plaza
Broadway
Hampshire St
Pleasant St
Methuen
Tenney Middle School
Caritas Holy Family Hospital
Methuen Square
Pelham St
Mystic St
Barker St
Lowell St
Union St
Railroad St
Oakland Ave
Oakland Ave & Railroad St
Park St
Manchester St
Lawrence
Campagnone Common
Common St
Essex St
Buckley Transportation Center
Merrimack River
Legend
NORTH
Time Point
Inbound Bus Route
Outbound Bus Route
No Stop Zone
Snow Route
Municipal Boundary
0 0.125 0.25 0.5 Miles
Prepared by: Merrimack Valley Planning Commission (6/30/2017)

ROUTE 10 OUTBOUND

Methuen Square via Broadway

WEEKDAYS

1	2	3	4
Bus starts at Buckley Transportation Center	Bus Leaves from Methuen Square	Bus Leaves from Mystic St	Bus ends at Village Mall
-	-	5:14	-
5:30	5:40	5:44	5:50
6:00	6:10	6:14	6:20
6:30	6:40	6:44	6:50
7:00	7:10	7:14	7:20
7:30	7:40	7:44	7:50
8:00	8:10	8:14	8:20
8:30	8:40	8:44	8:50
9:00	9:10	9:14	9:20
9:30	9:40	9:44	9:50
10:00	10:10	10:14	10:20
10:30	10:40	10:44	10:50
11:00	11:10	11:14	11:20
11:30	11:40	11:44	11:50
12:00	**12:10**	**12:14**	**12:20**
12:30	**12:40**	**12:44**	**12:50**
1:00	**1:10**	**1:14**	**1:20**
1:30	**1:40**	**1:44**	**1:50**
2:00	**2:10**	**2:14**	**2:20**
2:30	**2:40**	**2:44**	**2:50**
3:00	**3:10**	**3:14**	**3:20**
3:30	**3:40**	**3:44**	**3:50**
4:00	**4:10**	**4:14**	**4:20**
4:30	**4:40**	**4:44**	**4:50**
5:00	**5:10**	**5:14**	**5:20**
5:30	**5:40**	**5:44**	**5:50**
6:00	**6:10**	**6:14**	**6:20**
6:30	**6:40**	**6:44**	**6:50**
7:00	**7:10**	**7:14**	**7:20**
8:00	**8:10**	**8:14**	**8:20**
9:00	**9:10**	**9:14**	**9:20**

SATURDAYS

7:00	7:10	7:14	7:20
8:00	8:10	8:14	8:20
9:00	9:10	9:14	9:20
10:00	10:10	10:14	10:20
11:00	11:10	11:14	11:20
12:00	**12:10**	**12:14**	**12:20**
1:00	**1:10**	**1:14**	**1:20**
2:00	**2:10**	**2:14**	**2:20**
3:00	**3:10**	**3:14**	**3:20**
4:00	**4:10**	**4:14**	**4:20**
5:00	**5:10**	**5:14**	**5:20**
6:00	**6:10**	**6:14**	**6:20**

Updated 08.17.2023

ROUTE 10 INBOUND

Methuen Square via Broadway

WEEKDAYS

4	5	6	7	
Bus starts at Village Mall	Bus Leaves from Methuen Square	Bus Leaves from Broadway & Oakland Ave	Bus ends at Village Mall	Bus continues on as Route
-	5:28	5:31	5:40	9
5:55	5:58	6:01	6:10	9
6:25	6:28	6:31	6:40	9
6:55	6:58	7:01	7:10	9
7:25	7:28	7:31	7:40	9
7:55	7:58	8:01	8:10	9
8:25	8:28	8:31	8:40	9
8:55	8:58	9:01	9:10	9
9:25	9:28	9:31	9:40	9
9:55	9:58	10:01	10:10	9
10:25	10:28	10:31	10:40	9
10:55	10:58	11:01	11:10	9
11:25	11:28	11:31	11:40	9
11:55	11:58	12:01	**12:10**	**9**
12:25	**12:28**	**12:31**	**12:40**	**9**
12:55	**12:58**	**1:01**	**1:10**	**9**
1:25	**1:28**	**1:31**	**1:40**	**9**
1:55	**1:58**	**2:01**	**2:10**	**9**
2:25	**2:28**	**2:31**	**2:40**	**9**
2:55	**2:58**	**3:01**	**3:10**	**9**
3:25	**3:28**	**3:31**	**3:40**	**9**
3:55	**3:58**	**4:01**	**4:10**	**9**
4:25	**4:28**	**4:31**	**4:40**	**9**
4:55	**4:58**	**5:01**	**5:10**	**9**
5:25	**5:28**	**5:31**	**5:40**	**9**
5:55	**5:58**	**6:01**	**6:10**	**9**
6:25	**6:28**	**6:31**	**6:40**	**9**
6:55	**6:58**	**7:01**	**7:10**	**9**
7:55	**7:58**	**8:01**	**8:10**	**9**
8:55	**8:58**	**9:01**	**9:10**	**-**

SATURDAYS

7:25	7:28	7:31	7:40	9
8:25	8:28	8:31	8:40	9
9:25	9:28	9:31	9:40	9
10:25	10:28	10:31	10:40	9
11:25	11:28	11:31	11:40	9
12:25	**12:28**	**12:31**	**12:40**	**9**
1:25	**1:28**	**1:31**	**1:40**	**9**
2:25	**2:28**	**2:31**	**2:40**	**9**
3:25	**3:28**	**3:31**	**3:40**	**9**
4:25	**4:28**	**4:31**	**4:40**	**9**
5:25	**5:28**	**5:31**	**5:40**	**9**
6:25	**6:28**	**6:31**	**6:40**	**-**

Updated 08.17.2023

TRAFFIC COUNT DATA

Location Map: 239766 Methuen, MA

Precision Data Industries, LLC 157 Washington Street, Suite 2, Hudson, MA 01749 ph: 508-875-0100 email: datarequests@pdillc.com

(3) 7-9am/4-6pm TMCs (Tues)
(3) 11am-2pm TMCs (Sat)
(1) 72HR 4L VCU-ATR
(2) HRs

(3) VCUs
(2) HRs

Client:	Engineer:	Site Code:	Date:	PDI Job #	City, State:
GPI	S. Theriault		Sat 1/6 and Tues 1/9	239766	Methuen, MA

Broadway (Route 28)
north of Gaythorne Road
City, State: Methuen, MA
Client: GPI/S. Theriault
Site Code: NEX-2021347

PDI File #: 239766 ATR A

Count Date: Saturday, January 6, 2024
Direction: NB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	18	0	0	0	18
12:15 AM	0	0	20	0	0	1	21
12:30 AM	0	0	17	0	1	0	18
12:45 AM	0	0	18	0	0	1	19
1:00 AM	0	0	8	0	1	0	9
1:15 AM	0	0	9	0	2	0	11
1:30 AM	0	0	5	0	0	0	5
1:45 AM	0	0	5	0	0	0	5
2:00 AM	0	0	7	0	0	0	7
2:15 AM	0	0	5	0	0	0	5
2:30 AM	0	0	4	0	0	0	4
2:45 AM	0	0	4	0	0	0	4
3:00 AM	0	0	4	0	0	0	4
3:15 AM	0	0	1	0	1	1	3
3:30 AM	0	0	5	0	0	0	5
3:45 AM	0	0	9	0	2	0	11
4:00 AM	0	0	5	0	0	1	6
4:15 AM	0	0	8	0	1	0	9
4:30 AM	0	0	13	0	0	1	14
4:45 AM	0	0	16	0	0	0	16
5:00 AM	0	0	12	0	0	0	12
5:15 AM	0	0	15	0	1	0	16
5:30 AM	0	0	25	0	1	1	27
5:45 AM	0	0	34	0	0	0	34
6:00 AM	0	0	36	0	0	2	38
6:15 AM	0	0	50	0	1	0	51
6:30 AM	0	0	67	0	1	1	69
6:45 AM	0	0	94	0	2	0	96
7:00 AM	0	0	98	0	1	1	100
7:15 AM	0	0	104	0	1	1	106
7:30 AM	0	0	111	0	1	1	113
7:45 AM	0	0	140	0	0	0	140
8:00 AM	0	0	141	0	0	0	141
8:15 AM	0	0	182	0	0	0	182
8:30 AM	0	0	188	0	0	0	188
8:45 AM	0	0	272	0	1	1	274
9:00 AM	0	0	225	0	3	0	228
9:15 AM	0	0	263	0	3	0	266
9:30 AM	0	0	233	0	2	0	235
9:45 AM	0	0	290	0	1	0	291
10:00 AM	0	0	344	0	2	0	346
10:15 AM	0	0	362	0	2	0	364
10:30 AM	0	0	367	0	3	0	370
10:45 AM	0	0	339	0	0	0	339
11:00 AM	0	0	337	0	1	0	338
11:15 AM	0	0	308	0	2	0	310
11:30 AM	0	0	336	0	0	1	337
11:45 AM	0	0	330	0	1	0	331
AM Total	**0**	**0**	**5484**	**0**	**38**	**14**	**5536**
Percentage	**0.00%**	**0.00%**	**99.06%**	**0.00%**	**0.69%**	**0.25%**	
AM Peak	**12:00 AM**	**12:00 AM**	**10:00 AM**	**12:00 AM**	**8:45 AM**	**5:15 AM**	**10:00 AM**
Volume	**0**	**0**	**1412**	**0**	**9**	**3**	**1419**

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	331	0	1	0	332
12:15 PM	0	0	375	0	0	0	375
12:30 PM	0	0	353	0	1	0	354
12:45 PM	0	0	332	0	1	0	333
1:00 PM	0	0	335	1	2	0	338
1:15 PM	0	0	325	0	3	0	328
1:30 PM	0	0	342	0	0	1	343
1:45 PM	0	0	386	0	1	0	387
2:00 PM	0	0	348	0	6	0	354
2:15 PM	0	0	405	0	1	0	406
2:30 PM	0	0	347	0	1	0	348
2:45 PM	0	0	378	0	1	1	380
3:00 PM	0	0	324	1	0	0	325
3:15 PM	0	0	335	0	0	0	335
3:30 PM	0	0	325	0	1	0	326
3:45 PM	0	0	325	0	0	0	325
4:00 PM	0	0	300	1	1	1	303
4:15 PM	0	0	283	0	2	0	285
4:30 PM	0	0	274	0	0	0	274
4:45 PM	0	0	334	1	0	0	335
5:00 PM	0	0	265	0	0	0	265
5:15 PM	0	0	240	0	1	1	242
5:30 PM	0	0	216	0	0	0	216
5:45 PM	0	0	181	1	0	0	182
6:00 PM	0	0	208	0	0	0	208
6:15 PM	0	0	188	0	1	0	189
6:30 PM	0	0	162	0	1	0	163
6:45 PM	0	0	132	1	0	0	133
7:00 PM	0	0	133	0	0	0	133
7:15 PM	0	0	122	0	3	0	125
7:30 PM	0	0	129	0	0	0	129
7:45 PM	0	0	114	1	0	0	115
8:00 PM	0	0	90	0	0	0	90
8:15 PM	0	0	87	1	3	0	91
8:30 PM	0	0	92	0	1	0	93
8:45 PM	0	0	64	0	0	0	64
9:00 PM	0	0	66	0	1	0	67
9:15 PM	0	0	68	0	0	0	68
9:30 PM	0	0	53	0	0	0	53
9:45 PM	0	0	46	0	0	0	46
10:00 PM	0	0	48	0	0	0	48
10:15 PM	0	0	46	0	1	0	47
10:30 PM	0	0	37	0	2	0	39
10:45 PM	0	0	31	0	0	0	31
11:00 PM	0	0	28	0	1	1	30
11:15 PM	0	0	23	0	0	0	23
11:30 PM	0	0	21	0	0	0	21
11:45 PM	0	0	24	0	1	0	25
PM Total	**0**	**0**	**9671**	**8**	**38**	**5**	**9722**
Percentage	**0.00%**	**0.00%**	**99.48%**	**0.08%**	**0.39%**	**0.05%**	
PM Peak	**12:00 PM**	**12:00 PM**	**1:45 PM**	**4:00 PM**	**1:15 PM**	**12:45 PM**	**1:45 PM**
Volume	**0**	**0**	**1486**	**2**	**10**	**1**	**1495**
Day Total	**0**	**0**	**15155**	**8**	**76**	**19**	**15258**
Percentage	**0.00%**	**0.00%**	**99.32%**	**0.05%**	**0.50%**	**0.12%**	

Broadway (Route 28)
north of Gaythorne Road
City, State: Methuen, MA
Client: GPI/S. Theriault
Site Code: NEX-2021347

PDI File #: 239766 ATR A

Count Date: Tuesday, January 9, 2024
Direction: NB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	16	0	0	0	16
12:15 AM	0	0	11	0	0	0	11
12:30 AM	0	0	5	0	0	0	5
12:45 AM	0	0	5	0	0	0	5
1:00 AM	0	0	2	0	1	0	3
1:15 AM	0	0	4	0	0	1	5
1:30 AM	0	0	2	0	0	0	2
1:45 AM	0	0	0	0	0	1	1
2:00 AM	0	0	1	0	0	0	1
2:15 AM	0	0	4	0	0	1	5
2:30 AM	0	0	4	0	0	1	5
2:45 AM	0	0	7	0	1	0	8
3:00 AM	0	0	7	0	0	0	7
3:15 AM	0	0	4	0	0	0	4
3:30 AM	0	0	3	0	0	0	3
3:45 AM	0	0	11	0	1	0	12
4:00 AM	0	0	10	0	0	1	11
4:15 AM	0	0	8	0	0	0	8
4:30 AM	0	0	11	0	1	3	15
4:45 AM	0	0	26	0	0	0	26
5:00 AM	0	0	20	0	0	0	20
5:15 AM	0	0	24	0	1	0	25
5:30 AM	0	0	43	0	2	1	46
5:45 AM	0	0	52	0	5	1	58
6:00 AM	0	0	65	0	3	1	69
6:15 AM	0	0	56	0	0	1	57
6:30 AM	0	0	70	0	4	0	74
6:45 AM	0	0	79	0	2	0	81
7:00 AM	0	0	85	1	3	3	92
7:15 AM	0	0	94	0	2	0	96
7:30 AM	0	0	107	0	2	1	110
7:45 AM	0	0	140	5	3	1	149
8:00 AM	0	0	136	8	1	0	145
8:15 AM	0	0	127	6	4	1	138
8:30 AM	0	0	150	4	7	2	163
8:45 AM	0	0	164	4	1	1	170
9:00 AM	0	0	141	5	2	2	150
9:15 AM	0	0	190	0	2	1	193
9:30 AM	0	0	185	2	3	2	192
9:45 AM	0	0	182	2	4	1	189
10:00 AM	0	0	211	2	3	1	217
10:15 AM	0	0	212	1	3	1	217
10:30 AM	0	0	239	1	7	2	249
10:45 AM	0	0	259	0	5	1	265
11:00 AM	0	0	210	0	7	3	220
11:15 AM	0	0	232	1	2	1	236
11:30 AM	0	0	229	1	6	2	238
11:45 AM	0	0	250	1	2	2	255
AM Total	**0**	**0**	**4093**	**44**	**90**	**40**	**4267**
Percentage	**0.00%**	**0.00%**	**95.92%**	**1.03%**	**2.11%**	**0.94%**	
AM Peak	**12:00 AM**	**12:00 AM**	**10:30 AM**	**7:45 AM**	**10:15 AM**	**11:00 AM**	**10:30 AM**
Volume	**0**	**0**	**940**	**23**	**22**	**8**	**970**

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	193	1	5	1	200
12:15 PM	0	0	254	2	4	1	261
12:30 PM	0	0	231	1	7	0	239
12:45 PM	0	0	238	0	6	0	244
1:00 PM	0	0	215	0	2	0	217
1:15 PM	0	0	213	1	1	1	216
1:30 PM	0	0	194	0	3	2	199
1:45 PM	0	0	232	0	3	0	235
2:00 PM	0	0	274	1	6	0	281
2:15 PM	0	0	245	0	3	0	248
2:30 PM	0	0	269	1	5	0	275
2:45 PM	0	0	260	0	2	0	262
3:00 PM	0	0	245	0	2	0	247
3:15 PM	0	0	282	1	1	0	284
3:30 PM	0	0	280	4	4	0	288
3:45 PM	0	0	240	3	5	0	248
4:00 PM	0	0	224	9	0	0	233
4:15 PM	0	0	260	4	2	0	266
4:30 PM	0	0	249	7	0	0	256
4:45 PM	0	0	279	4	6	0	289
5:00 PM	0	0	264	4	8	2	278
5:15 PM	0	0	239	2	1	2	244
5:30 PM	0	0	197	0	5	1	203
5:45 PM	0	0	238	1	2	2	243
6:00 PM	0	0	207	0	0	0	207
6:15 PM	0	0	190	0	1	2	193
6:30 PM	0	0	187	0	1	0	188
6:45 PM	0	0	161	0	1	0	162
7:00 PM	0	0	137	0	2	0	139
7:15 PM	0	0	151	0	0	0	151
7:30 PM	0	0	138	0	0	1	139
7:45 PM	0	0	99	0	0	0	99
8:00 PM	0	0	90	0	2	0	92
8:15 PM	0	0	79	0	1	0	80
8:30 PM	0	0	87	1	0	0	88
8:45 PM	0	0	72	0	1	0	73
9:00 PM	0	0	76	1	0	0	77
9:15 PM	0	0	51	0	0	0	51
9:30 PM	0	0	45	0	0	0	45
9:45 PM	0	0	44	0	0	0	44
10:00 PM	0	0	44	0	1	0	45
10:15 PM	0	0	33	0	0	0	33
10:30 PM	0	0	16	0	0	0	16
10:45 PM	0	0	23	1	0	0	24
11:00 PM	0	0	17	0	0	0	17
11:15 PM	0	0	22	0	0	0	22
11:30 PM	0	0	26	0	0	1	27
11:45 PM	0	0	19	0	0	0	19
PM Total	**0**	**0**	**7829**	**49**	**93**	**16**	**7987**
Percentage	**0.00%**	**0.00%**	**98.02%**	**0.61%**	**1.16%**	**0.20%**	
PM Peak	**12:00 PM**	**12:00 PM**	**2:45 PM**	**4:00 PM**	**12:00 PM**	**5:00 PM**	**4:15 PM**
Volume	**0**	**0**	**1067**	**24**	**22**	**7**	**1089**

Day Total	**0**	**0**	**11922**	**93**	**183**	**56**	**12254**
Percentage	**0.00%**	**0.00%**	**97.29%**	**0.76%**	**1.49%**	**0.46%**	

Broadway (Route 28)
north of Gaythorne Road
City, State: Methuen, MA
Client: GPI/S. Theriault
Site Code: NEX-2021347

PDI File #: 239766 ATR A

Count Date: Saturday, January 6, 2024
Direction: SB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	11	0	0	0	11
12:15 AM	0	0	16	0	0	0	16
12:30 AM	0	0	31	0	0	0	31
12:45 AM	0	0	21	0	0	0	21
1:00 AM	0	0	23	0	0	0	23
1:15 AM	0	0	13	0	0	1	14
1:30 AM	0	0	6	0	1	0	7
1:45 AM	0	0	3	0	0	0	3
2:00 AM	0	0	7	0	0	0	7
2:15 AM	0	0	3	0	0	0	3
2:30 AM	0	0	5	0	0	1	6
2:45 AM	0	0	8	0	0	0	8
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	7	0	0	0	7
3:30 AM	0	0	5	0	0	0	5
3:45 AM	0	0	3	0	0	0	3
4:00 AM	0	0	3	0	0	0	3
4:15 AM	0	0	6	0	0	2	8
4:30 AM	0	0	10	0	0	0	10
4:45 AM	0	0	12	0	1	1	14
5:00 AM	0	0	17	0	0	0	17
5:15 AM	0	0	15	0	3	0	18
5:30 AM	0	0	23	0	0	0	23
5:45 AM	0	0	28	0	1	0	29
6:00 AM	0	0	20	0	1	1	22
6:15 AM	0	0	38	0	0	0	38
6:30 AM	0	0	42	0	1	0	43
6:45 AM	0	0	42	0	1	0	43
7:00 AM	0	0	64	0	1	0	65
7:15 AM	0	0	70	0	1	1	72
7:30 AM	0	0	74	0	1	0	75
7:45 AM	0	0	99	3	0	0	102
8:00 AM	0	0	129	0	3	2	134
8:15 AM	0	0	123	0	0	0	123
8:30 AM	0	0	125	0	0	0	125
8:45 AM	0	0	154	0	1	1	156
9:00 AM	0	0	167	0	0	0	167
9:15 AM	0	0	199	0	0	0	199
9:30 AM	0	0	222	0	2	1	225
9:45 AM	0	0	228	0	3	1	232
10:00 AM	0	0	245	0	2	0	247
10:15 AM	0	0	227	0	2	0	229
10:30 AM	0	0	263	2	4	1	270
10:45 AM	0	1	295	0	2	0	298
11:00 AM	0	0	301	0	2	0	303
11:15 AM	0	0	331	0	1	0	332
11:30 AM	0	0	308	0	1	0	309
11:45 AM	0	0	317	1	0	0	318
AM Total	**0**	**1**	**4359**	**6**	**35**	**13**	**4414**
Percentage	**0.00%**	**0.02%**	**98.75%**	**0.14%**	**0.79%**	**0.29%**	
AM Peak	**12:00 AM**	**10:00 AM**	**11:00 AM**	**7:00 AM**	**9:45 AM**	**4:00 AM**	**11:00 AM**
Volume	**0**	**1**	**1257**	**3**	**11**	**3**	**1262**

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	344	0	0	2	346
12:15 PM	0	0	380	0	0	1	381
12:30 PM	0	0	378	0	0	3	381
12:45 PM	0	0	367	0	0	1	368
1:00 PM	0	0	343	0	2	0	345
1:15 PM	0	0	360	0	7	0	367
1:30 PM	0	0	349	0	2	0	351
1:45 PM	0	0	345	1	1	1	348
2:00 PM	0	0	379	0	1	1	381
2:15 PM	0	0	345	0	1	0	346
2:30 PM	0	0	327	0	3	0	330
2:45 PM	0	0	323	0	2	1	326
3:00 PM	0	0	343	1	3	1	348
3:15 PM	0	0	349	0	1	0	350
3:30 PM	0	0	350	0	0	1	351
3:45 PM	0	0	342	0	1	0	343
4:00 PM	0	3	316	0	1	0	320
4:15 PM	0	0	337	0	5	0	342
4:30 PM	0	0	340	0	0	0	340
4:45 PM	0	0	336	0	3	0	339
5:00 PM	0	0	331	0	0	1	332
5:15 PM	0	0	308	0	2	0	310
5:30 PM	0	0	302	0	0	0	302
5:45 PM	0	0	301	1	1	0	303
6:00 PM	0	0	254	0	0	0	254
6:15 PM	0	0	222	0	0	0	222
6:30 PM	0	0	227	0	0	0	227
6:45 PM	0	0	189	0	0	1	190
7:00 PM	0	0	199	0	1	0	200
7:15 PM	0	0	187	0	2	1	190
7:30 PM	0	0	196	0	1	0	197
7:45 PM	0	0	174	0	0	1	175
8:00 PM	0	0	169	0	0	0	169
8:15 PM	0	0	119	0	0	0	119
8:30 PM	0	0	108	0	1	0	109
8:45 PM	0	0	115	0	3	0	118
9:00 PM	0	0	111	0	0	0	111
9:15 PM	0	0	121	0	0	0	121
9:30 PM	0	0	93	0	1	0	94
9:45 PM	0	0	81	0	1	0	82
10:00 PM	0	0	76	0	1	0	77
10:15 PM	0	0	70	0	2	0	72
10:30 PM	0	0	63	0	1	0	64
10:45 PM	0	0	38	0	1	0	39
11:00 PM	0	0	39	0	0	0	39
11:15 PM	0	0	34	0	1	0	35
11:30 PM	0	0	21	0	0	0	21
11:45 PM	0	0	18	0	1	0	19
PM Total	**0**	**3**	**11119**	**3**	**53**	**16**	**11194**
Percentage	**0.00%**	**0.03%**	**99.33%**	**0.03%**	**0.47%**	**0.14%**	
PM Peak	**12:00 PM**	**3:15 PM**	**12:00 PM**	**1:00 PM**	**1:00 PM**	**12:00 PM**	**12:00 PM**
Volume	**0**	**3**	**1469**	**1**	**12**	**7**	**1476**
Day Total	**0**	**4**	**15478**	**9**	**88**	**29**	**15608**
Percentage	**0.00%**	**0.03%**	**99.17%**	**0.06%**	**0.56%**	**0.19%**	

Broadway (Route 28)
north of Gaythorne Road
City, State: Methuen, MA
Client: GPI/S. Theriault
Site Code: NEX-2021347

PDI File #: 239766 ATR A

Count Date: Tuesday, January 9, 2024
Direction: SB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	6	0	0	1	7
12:15 AM	0	0	8	0	0	0	8
12:30 AM	0	0	10	0	0	1	11
12:45 AM	0	0	5	0	0	0	5
1:00 AM	0	0	5	0	0	0	5
1:15 AM	0	0	4	0	0	0	4
1:30 AM	0	0	4	0	0	0	4
1:45 AM	0	0	1	0	2	1	4
2:00 AM	0	0	1	0	1	1	3
2:15 AM	0	0	4	0	0	1	5
2:30 AM	0	0	5	0	0	0	5
2:45 AM	0	0	8	0	0	0	8
3:00 AM	0	0	6	0	1	0	7
3:15 AM	0	0	4	0	0	0	4
3:30 AM	0	0	3	0	1	0	4
3:45 AM	0	0	4	0	1	0	5
4:00 AM	0	0	11	0	0	0	11
4:15 AM	0	0	6	0	0	0	6
4:30 AM	0	0	16	0	1	0	17
4:45 AM	0	0	34	0	3	0	37
5:00 AM	0	0	47	1	1	0	49
5:15 AM	0	0	58	0	2	0	60
5:30 AM	0	0	53	0	1	0	54
5:45 AM	0	0	65	0	1	3	69
6:00 AM	0	0	63	7	7	1	78
6:15 AM	0	0	84	10	4	1	99
6:30 AM	0	0	97	11	3	0	111
6:45 AM	0	0	105	16	7	1	129
7:00 AM	0	0	123	10	2	1	136
7:15 AM	0	0	145	0	3	0	148
7:30 AM	0	0	142	1	4	2	149
7:45 AM	0	0	184	1	5	1	191
8:00 AM	0	0	157	1	6	1	165
8:15 AM	0	0	123	0	6	3	132
8:30 AM	0	0	175	0	5	1	181
8:45 AM	0	0	150	2	5	0	157
9:00 AM	0	0	137	1	3	3	144
9:15 AM	0	0	169	1	1	1	172
9:30 AM	0	0	152	1	4	0	157
9:45 AM	0	0	158	1	3	3	165
10:00 AM	0	0	147	2	2	2	153
10:15 AM	0	0	162	1	4	1	168
10:30 AM	0	0	165	1	6	2	174
10:45 AM	0	0	178	0	1	2	181
11:00 AM	0	0	189	1	8	2	200
11:15 AM	0	0	185	1	4	1	191
11:30 AM	0	0	187	0	4	1	192
11:45 AM	0	0	217	2	6	2	227
AM Total	**0**	**0**	**3962**	**72**	**118**	**40**	**4192**
Percentage	**0.00%**	**0.00%**	**94.51%**	**1.72%**	**2.81%**	**0.95%**	
AM Peak	**12:00 AM**	**12:00 AM**	**11:00 AM**	**6:15 AM**	**7:45 AM**	**9:45 AM**	**11:00 AM**
Volume	**0**	**0**	**778**	**47**	**22**	**8**	**810**

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	247	1	4	1	253
12:15 PM	0	0	221	0	8	4	233
12:30 PM	0	0	222	1	5	1	229
12:45 PM	0	0	224	1	6	0	231
1:00 PM	0	0	199	1	3	0	203
1:15 PM	0	0	190	2	5	0	197
1:30 PM	0	0	211	7	3	0	221
1:45 PM	0	0	199	5	4	0	208
2:00 PM	0	0	253	7	5	0	265
2:15 PM	0	0	233	5	3	0	241
2:30 PM	0	0	246	0	2	2	250
2:45 PM	0	0	236	0	5	0	241
3:00 PM	0	0	237	0	4	0	241
3:15 PM	0	0	226	0	3	1	230
3:30 PM	0	0	226	0	1	3	230
3:45 PM	0	0	239	0	1	0	240
4:00 PM	0	0	244	0	1	2	247
4:15 PM	0	0	237	0	1	1	239
4:30 PM	0	0	239	1	0	0	240
4:45 PM	0	0	209	0	0	0	209
5:00 PM	0	0	232	0	0	0	232
5:15 PM	0	0	238	0	0	0	238
5:30 PM	0	0	224	0	1	0	225
5:45 PM	0	0	210	0	1	0	211
6:00 PM	0	0	189	0	1	0	190
6:15 PM	0	0	181	0	0	0	181
6:30 PM	0	0	178	0	2	0	180
6:45 PM	0	0	162	0	2	0	164
7:00 PM	0	0	163	0	1	0	164
7:15 PM	0	0	153	0	0	0	153
7:30 PM	0	0	131	0	0	0	131
7:45 PM	0	0	137	0	0	0	137
8:00 PM	0	0	139	0	0	1	140
8:15 PM	0	0	127	0	2	0	129
8:30 PM	0	0	94	0	0	0	94
8:45 PM	0	0	94	0	0	0	94
9:00 PM	0	0	86	0	0	0	86
9:15 PM	0	0	100	0	1	0	101
9:30 PM	0	0	75	0	0	0	75
9:45 PM	0	0	59	0	0	0	59
10:00 PM	0	0	67	0	0	0	67
10:15 PM	0	0	41	0	0	0	41
10:30 PM	0	0	46	0	0	0	46
10:45 PM	0	0	21	0	0	0	21
11:00 PM	0	0	28	0	1	0	29
11:15 PM	0	0	26	0	0	0	26
11:30 PM	0	0	21	0	0	0	21
11:45 PM	0	0	16	0	0	0	16
PM Total	**0**	**0**	**7776**	**31**	**76**	**16**	**7899**
Percentage	**0.00%**	**0.00%**	**98.44%**	**0.39%**	**0.96%**	**0.20%**	
PM Peak	**12:00 PM**	**12:00 PM**	**2:00 PM**	**1:30 PM**	**12:00 PM**	**12:00 PM**	**2:00 PM**
Volume	**0**	**0**	**968**	**24**	**23**	**6**	**997**
Day Total	**0**	**0**	**11738**	**103**	**194**	**56**	**12091**
Percentage	**0.00%**	**0.00%**	**97.08%**	**0.85%**	**1.60%**	**0.46%**	

Broadway (Route 28)
north of Gaythorne Road
City, State: Methuen, MA
Client: GPI/S. Theriault
Site Code: NEX-2021347

PDI File # **239766 ATR A**

Direction: **NB**

Weekly Report

Day	Saturday		Tuesday												Week	
Date	01/06/24		01/09/24												Ave	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
12:00	18	332	16	200	0	0	0	0	0	0	0	0	0	0	17	266
12:15	21	375	11	261	0	0	0	0	0	0	0	0	0	0	16	318
12:30	18	354	5	239	0	0	0	0	0	0	0	0	0	0	12	297
12:45	19	333	5	244	0	0	0	0	0	0	0	0	0	0	12	289
1:00	9	338	3	217	0	0	0	0	0	0	0	0	0	0	6	278
1:15	11	328	5	216	0	0	0	0	0	0	0	0	0	0	8	272
1:30	5	343	2	199	0	0	0	0	0	0	0	0	0	0	4	271
1:45	5	387	1	235	0	0	0	0	0	0	0	0	0	0	3	311
2:00	7	354	1	281	0	0	0	0	0	0	0	0	0	0	4	318
2:15	5	406	5	248	0	0	0	0	0	0	0	0	0	0	5	327
2:30	4	348	5	275	0	0	0	0	0	0	0	0	0	0	5	312
2:45	4	380	8	262	0	0	0	0	0	0	0	0	0	0	6	321
3:00	4	325	7	247	0	0	0	0	0	0	0	0	0	0	6	286
3:15	3	335	4	284	0	0	0	0	0	0	0	0	0	0	4	310
3:30	5	326	3	288	0	0	0	0	0	0	0	0	0	0	4	307
3:45	11	325	12	248	0	0	0	0	0	0	0	0	0	0	12	287
4:00	6	303	11	233	0	0	0	0	0	0	0	0	0	0	9	268
4:15	9	285	8	266	0	0	0	0	0	0	0	0	0	0	9	276
4:30	14	274	15	256	0	0	0	0	0	0	0	0	0	0	15	265
4:45	16	335	26	289	0	0	0	0	0	0	0	0	0	0	21	312
5:00	12	265	20	278	0	0	0	0	0	0	0	0	0	0	16	272
5:15	16	242	25	244	0	0	0	0	0	0	0	0	0	0	21	243
5:30	27	216	46	203	0	0	0	0	0	0	0	0	0	0	37	210
5:45	34	182	58	243	0	0	0	0	0	0	0	0	0	0	46	213
6:00	38	208	69	207	0	0	0	0	0	0	0	0	0	0	54	208
6:15	51	189	57	193	0	0	0	0	0	0	0	0	0	0	54	191
6:30	69	163	74	188	0	0	0	0	0	0	0	0	0	0	72	176
6:45	96	133	81	162	0	0	0	0	0	0	0	0	0	0	89	148
7:00	100	133	92	139	0	0	0	0	0	0	0	0	0	0	96	136
7:15	106	125	96	151	0	0	0	0	0	0	0	0	0	0	101	138
7:30	113	129	110	139	0	0	0	0	0	0	0	0	0	0	112	134
7:45	140	115	149	99	0	0	0	0	0	0	0	0	0	0	145	107
8:00	141	90	145	92	0	0	0	0	0	0	0	0	0	0	143	91
8:15	182	91	138	80	0	0	0	0	0	0	0	0	0	0	160	86
8:30	188	93	163	88	0	0	0	0	0	0	0	0	0	0	176	91
8:45	274	64	170	73	0	0	0	0	0	0	0	0	0	0	222	69
9:00	228	67	150	77	0	0	0	0	0	0	0	0	0	0	189	72
9:15	266	68	193	51	0	0	0	0	0	0	0	0	0	0	230	60
9:30	235	53	192	45	0	0	0	0	0	0	0	0	0	0	214	49
9:45	291	46	189	44	0	0	0	0	0	0	0	0	0	0	240	45
10:00	346	48	217	45	0	0	0	0	0	0	0	0	0	0	282	47
10:15	364	47	217	33	0	0	0	0	0	0	0	0	0	0	291	40
10:30	370	39	249	16	0	0	0	0	0	0	0	0	0	0	310	28
10:45	339	31	265	24	0	0	0	0	0	0	0	0	0	0	302	28
11:00	338	30	220	17	0	0	0	0	0	0	0	0	0	0	279	24
11:15	310	23	236	22	0	0	0	0	0	0	0	0	0	0	273	23
11:30	337	21	238	27	0	0	0	0	0	0	0	0	0	0	288	24
11:45	331	25	255	19	0	0	0	0	0	0	0	0	0	0	293	22
Total	**5536**	**9722**	**4267**	**7987**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4902**	**8855**
Day Total	**15258**		**12254**		**0**		**0**		**0**		**0**		**0**		**13756**	
Peak HR	**10:00 AM**	**1:45 PM**	**10:30 AM**	**4:15 PM**											**10:00 AM**	**2:00 PM**
Volume	**1419**	**1495**	**970**	**1089**											**1184**	**1277**

Broadway (Route 28)
north of Gaythorne Road
City, State: Methuen, MA
Client: GPI/S. Theriault
Site Code: NEX-2021347

PDI File # **239766 ATR A**

Direction: **SB**

Weekly Report

Day	Saturday		Tuesday												Week	
Date	01/06/24		01/09/24												Ave	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
12:00	11	346	7	253	0	0	0	0	0	0	0	0	0	0	9	300
12:15	16	381	8	233	0	0	0	0	0	0	0	0	0	0	12	307
12:30	31	381	11	229	0	0	0	0	0	0	0	0	0	0	21	305
12:45	21	368	5	231	0	0	0	0	0	0	0	0	0	0	13	300
1:00	23	345	5	203	0	0	0	0	0	0	0	0	0	0	14	274
1:15	14	367	4	197	0	0	0	0	0	0	0	0	0	0	9	282
1:30	7	351	4	221	0	0	0	0	0	0	0	0	0	0	6	286
1:45	3	348	4	208	0	0	0	0	0	0	0	0	0	0	4	278
2:00	7	381	3	265	0	0	0	0	0	0	0	0	0	0	5	323
2:15	3	346	5	241	0	0	0	0	0	0	0	0	0	0	4	294
2:30	6	330	5	250	0	0	0	0	0	0	0	0	0	0	6	290
2:45	8	326	8	241	0	0	0	0	0	0	0	0	0	0	8	284
3:00	0	348	7	241	0	0	0	0	0	0	0	0	0	0	4	295
3:15	7	350	4	230	0	0	0	0	0	0	0	0	0	0	6	290
3:30	5	351	4	230	0	0	0	0	0	0	0	0	0	0	5	291
3:45	3	343	5	240	0	0	0	0	0	0	0	0	0	0	4	292
4:00	3	320	11	247	0	0	0	0	0	0	0	0	0	0	7	284
4:15	8	342	6	239	0	0	0	0	0	0	0	0	0	0	7	291
4:30	10	340	17	240	0	0	0	0	0	0	0	0	0	0	14	290
4:45	14	339	37	209	0	0	0	0	0	0	0	0	0	0	26	274
5:00	17	332	49	232	0	0	0	0	0	0	0	0	0	0	33	282
5:15	18	310	60	238	0	0	0	0	0	0	0	0	0	0	39	274
5:30	23	302	54	225	0	0	0	0	0	0	0	0	0	0	39	264
5:45	29	303	69	211	0	0	0	0	0	0	0	0	0	0	49	257
6:00	22	254	78	190	0	0	0	0	0	0	0	0	0	0	50	222
6:15	38	222	99	181	0	0	0	0	0	0	0	0	0	0	69	202
6:30	43	227	111	180	0	0	0	0	0	0	0	0	0	0	77	204
6:45	43	190	129	164	0	0	0	0	0	0	0	0	0	0	86	177
7:00	65	200	136	164	0	0	0	0	0	0	0	0	0	0	101	182
7:15	72	190	148	153	0	0	0	0	0	0	0	0	0	0	110	172
7:30	75	197	149	131	0	0	0	0	0	0	0	0	0	0	112	164
7:45	102	175	191	137	0	0	0	0	0	0	0	0	0	0	147	156
8:00	134	169	165	140	0	0	0	0	0	0	0	0	0	0	150	155
8:15	123	119	132	129	0	0	0	0	0	0	0	0	0	0	128	124
8:30	125	109	181	94	0	0	0	0	0	0	0	0	0	0	153	102
8:45	156	118	157	94	0	0	0	0	0	0	0	0	0	0	157	106
9:00	167	111	144	86	0	0	0	0	0	0	0	0	0	0	156	99
9:15	199	121	172	101	0	0	0	0	0	0	0	0	0	0	186	111
9:30	225	94	157	75	0	0	0	0	0	0	0	0	0	0	191	85
9:45	232	82	165	59	0	0	0	0	0	0	0	0	0	0	199	71
10:00	247	77	153	67	0	0	0	0	0	0	0	0	0	0	200	72
10:15	229	72	168	41	0	0	0	0	0	0	0	0	0	0	199	57
10:30	270	64	174	46	0	0	0	0	0	0	0	0	0	0	222	55
10:45	298	39	181	21	0	0	0	0	0	0	0	0	0	0	240	30
11:00	303	39	200	29	0	0	0	0	0	0	0	0	0	0	252	34
11:15	332	35	191	26	0	0	0	0	0	0	0	0	0	0	262	31
11:30	309	21	192	21	0	0	0	0	0	0	0	0	0	0	251	21
11:45	318	19	227	16	0	0	0	0	0	0	0	0	0	0	273	18
Total	**4414**	**11194**	**4192**	**7899**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4303**	**9547**
Day Total	**15608**		**12091**		**0**		**0**		**0**		**0**		**0**		**13850**	
Peak HR	**11:00 AM**	**12:00 PM**	**11:00 AM**	**2:00 PM**											**11:00 AM**	**12:00 PM**
Volume	**1262**	**1476**	**810**	**997**											**1036**	**1211**

Broadway (Route 28)
north of Gaythorne Road
City, State: Methuen, MA
Client: GPI/S. Theriault
Site Code: NEX/2021347

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

PDI File #: 239766 ATR A (speed)

Count Date
Saturday, January 6, 2024

Speed (60-minute)

NB

Start Time:	1 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70+	Total	85th %ile	Ave Speed
12:00 AM	0	0	0	0	14	35	20	2	5	0	0	0	0	76	44.0	39.0
1:00 AM	0	0	0	2	8	13	7	2	0	0	0	0	0	32	41.0	36.4
2:00 AM	0	0	0	0	6	6	6	3	0	0	0	0	0	21	43.0	37.8
3:00 AM	0	0	0	0	1	15	6	1	0	0	0	0	0	23	40.0	38.3
4:00 AM	0	0	0	2	7	17	9	5	3	2	1	0	0	46	46.8	40.2
5:00 AM	0	0	0	6	20	25	32	6	1	0	0	0	0	90	43.0	37.8
6:00 AM	0	0	0	3	43	113	74	10	3	0	0	0	0	246	42.0	38.1
7:00 AM	0	0	1	8	64	202	133	26	11	0	1	0	0	446	43.0	38.5
8:00 AM	0	0	2	22	141	291	159	34	13	6	0	0	0	668	42.0	37.7
9:00 AM	0	0	3	43	261	392	150	45	9	1	0	0	0	904	41.0	36.5
10:00 AM	2	18	67	220	489	266	68	16	1	1	0	0	0	1148	37.0	32.2
11:00 AM	4	7	48	193	442	299	90	21	1	1	0	0	0	1106	38.0	33.0
12:00 PM	1	12	63	241	433	290	58	10	0	0	0	0	0	1108	37.0	32.1
1:00 PM	4	22	101	207	397	242	66	13	0	0	0	0	0	1052	37.0	31.6
2:00 PM	5	30	141	341	332	132	26	5	0	0	0	0	0	1012	35.0	29.3
3:00 PM	0	11	68	229	424	262	42	9	2	0	0	0	0	1047	37.0	31.8
4:00 PM	3	6	33	209	417	216	53	8	3	1	0	0	0	949	37.0	32.4
5:00 PM	0	1	19	158	354	193	65	11	0	0	0	0	0	801	38.0	33.0
6:00 PM	1	1	11	81	240	204	73	8	1	0	0	0	0	620	39.0	34.2
7:00 PM	0	1	5	36	145	181	85	16	2	0	1	0	0	472	41.0	35.9
8:00 PM	1	1	5	19	89	153	55	13	6	0	0	0	0	342	41.0	36.1
9:00 PM	0	0	2	12	55	102	37	15	3	0	0	0	0	226	41.3	36.8
10:00 PM	0	0	4	9	25	73	41	8	1	0	0	0	0	161	43.0	37.2
11:00 PM	0	0	1	12	40	29	16	3	0	0	0	0	0	101	40.0	34.5
Total	21	110	574	2053	4447	3751	1371	290	65	12	3	0	0	12697	39.0	33.6
Percent	0.17%	0.87%	4.52%	16.17%	35.02%	29.54%	10.80%	2.28%	0.51%	0.09%	0.02%	0.00%	0.00%			
AM Peak	11:00 AM	10:00 AM	10:00 AM	10:00 AM	10:00 AM	9:00 AM	8:00 AM	9:00 AM	8:00 AM	8:00 AM	4:00 AM			10:00 AM		
Volume	4	18	67	220	489	392	159	45	13	6	1	0	0	1148		
PM Peak	2:00 PM	2:00 PM	2:00 PM	2:00 PM	12:00 PM	12:00 PM	7:00 PM	7:00 PM	8:00 PM	4:00 PM	7:00 PM			12:00 PM		
Volume	5	30	141	341	433	290	85	16	6	1	1	0	0	1108		

15th Percentile:	28.0 MPH	Average Speed:	33.6 MPH	Posted Speed Limit:	35 MPH
50th Percentile:	34.0 MPH	10 MPH Pace:	29 to 38 MPH	Number of Vehicles > 35 MPH:	4513
85th Percentile:	39.0 MPH	Number in Pace:	8199	Percent of Vehicles > 35 MPH:	35.5%
95th Percentile:	43.0 MPH	Percent in Pace:	64.6%		

Broadway (Route 28)
north of Gaythorne Road
City, State: Methuen, MA
Client: GPI/S. Theriault
Site Code: NEX/2021347

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

PDI File #: 239766 ATR A (speed)

Count Date
Saturday, January 6, 2024

Speed (60-minute)

SB

Start Time:	1 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70+	Total	85th %ile	Ave Speed
12:00 AM	0	0	2	6	14	29	22	12	2	1	0	0	0	88	45.0	38.6
1:00 AM	0	0	0	0	9	13	22	7	2	0	1	0	0	54	45.1	40.5
2:00 AM	0	0	0	0	5	8	9	2	1	0	0	0	0	25	43.4	39.3
3:00 AM	0	0	0	0	5	5	4	0	1	0	0	0	0	15	42.8	38.1
4:00 AM	0	0	0	0	4	13	9	10	0	0	0	0	0	36	46.0	40.3
5:00 AM	0	0	0	5	24	31	15	13	1	1	0	0	0	90	45.0	37.5
6:00 AM	0	0	0	4	21	75	40	16	0	2	0	0	0	158	43.5	38.7
7:00 AM	0	0	1	13	48	135	90	23	8	1	0	0	0	319	43.0	38.2
8:00 AM	0	2	2	35	135	208	117	28	5	1	1	0	0	534	42.0	36.6
9:00 AM	0	1	9	64	244	307	146	29	5	3	0	0	1	809	41.0	36.0
10:00 AM	3	16	57	180	355	263	86	9	2	0	0	0	0	971	38.0	32.6
11:00 AM	5	22	77	228	414	243	69	19	4	0	0	0	0	1081	37.0	31.8
12:00 PM	19	67	171	243	272	155	27	3	0	0	0	0	0	957	35.0	28.6
1:00 PM	2	44	122	341	398	189	47	6	1	0	0	0	0	1150	36.0	30.1
2:00 PM	32	89	76	23	9	6	2	0	0	0	0	0	0	237	25.0	20.2
3:00 PM	22	83	93	69	40	11	1	0	0	0	0	0	0	319	30.0	22.7
4:00 PM	20	94	167	184	114	40	8	0	0	0	0	0	0	627	32.0	25.4
5:00 PM	10	43	91	195	273	122	25	4	0	1	0	0	0	764	36.0	29.6
6:00 PM	1	5	22	99	325	263	72	15	1	0	0	0	0	803	39.0	33.8
7:00 PM	0	4	14	63	282	242	84	21	3	0	0	0	0	713	40.0	34.6
8:00 PM	0	1	12	37	147	194	70	16	2	1	0	1	1	482	40.0	35.5
9:00 PM	1	3	11	45	118	149	45	8	2	0	0	0	0	382	39.0	34.5
10:00 PM	0	1	6	17	81	95	44	9	4	0	0	0	0	257	41.0	35.7
11:00 PM	0	1	3	15	31	44	16	4	2	0	0	0	0	116	40.0	35.1
Total	115	476	936	1866	3368	2840	1070	254	46	11	2	1	2	10987	39.0	32.1
Percent	1.05%	4.33%	8.52%	16.98%	30.65%	25.85%	9.74%	2.31%	0.42%	0.10%	0.02%	0.01%	0.02%			
AM Peak	11:00 AM	11:00 AM	11:00 AM	11:00 AM	11:00 AM	9:00 AM	9:00 AM	9:00 AM	7:00 AM	9:00 AM	1:00 AM		9:00 AM	11:00 AM		
Volume	5	22	77	228	414	307	146	29	8	3	1	0	1	1081		
PM Peak	2:00 PM	4:00 PM	12:00 PM	1:00 PM	1:00 PM	6:00 PM	7:00 PM	7:00 PM	10:00 PM	5:00 PM		8:00 PM	8:00 PM	1:00 PM		
Volume	32	94	171	341	398	263	84	21	4	1	0	1	1	1150		

15th Percentile:	25.0 MPH	Average Speed:	32.1 MPH	Posted Speed Limit:	35 MPH
50th Percentile:	33.0 MPH	10 MPH Pace:	29 to 38 MPH	Number of Vehicles > 35 MPH:	3522
85th Percentile:	39.0 MPH	Number in Pace:	6235	Percent of Vehicles > 35 MPH:	32.1%
95th Percentile:	43.0 MPH	Percent in Pace:	56.7%		

Broadway (Route 28)
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Site Code: NEX/2021347

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

PDI File #: 239766 ATR A (speed)

Count Date
Saturday, January 6, 2024

Speed (60-minute)

Combined NB and SB

Start Time:	1 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70+	Total	85th %ile	Ave Speed
12:00 AM	0	0	2	6	28	64	42	14	7	1	0	0	0	164	44.0	38.7
1:00 AM	0	0	0	2	17	26	29	9	2	0	1	0	0	86	44.0	39.0
2:00 AM	0	0	0	0	11	14	15	5	1	0	0	0	0	46	43.3	38.6
3:00 AM	0	0	0	0	6	20	10	1	1	0	0	0	0	38	41.5	38.3
4:00 AM	0	0	0	2	11	30	18	15	3	2	1	0	0	82	46.0	40.3
5:00 AM	0	0	0	11	44	56	47	19	2	1	0	0	0	180	44.0	37.7
6:00 AM	0	0	0	7	64	188	114	26	3	2	0	0	0	404	43.0	38.3
7:00 AM	0	0	2	21	112	337	223	49	19	1	1	0	0	765	43.0	38.4
8:00 AM	0	2	4	57	276	499	276	62	18	7	1	0	0	1202	42.0	37.2
9:00 AM	0	1	12	107	505	699	296	74	14	4	0	0	1	1713	41.0	36.3
10:00 AM	5	34	124	400	844	529	154	25	3	1	0	0	0	2119	38.0	32.3
11:00 AM	9	29	125	421	856	542	159	40	5	1	0	0	0	2187	38.0	32.4
12:00 PM	20	79	234	484	705	445	85	13	0	0	0	0	0	2065	36.0	30.5
1:00 PM	6	66	223	548	795	431	113	19	1	0	0	0	0	2202	36.0	30.8
2:00 PM	37	119	217	364	341	138	28	5	0	0	0	0	0	1249	34.0	27.6
3:00 PM	22	94	161	298	464	273	43	9	2	0	0	0	0	1366	36.0	29.7
4:00 PM	23	100	200	393	531	256	61	8	3	1	0	0	0	1576	36.0	29.6
5:00 PM	10	44	110	353	627	315	90	15	0	1	0	0	0	1565	37.0	31.4
6:00 PM	2	6	33	180	565	467	145	23	2	0	0	0	0	1423	39.0	34.0
7:00 PM	0	5	19	99	427	423	169	37	5	0	1	0	0	1185	40.0	35.1
8:00 PM	1	2	17	56	236	347	125	29	8	1	0	1	1	824	41.0	35.8
9:00 PM	1	3	13	57	173	251	82	23	5	0	0	0	0	608	40.0	35.4
10:00 PM	0	1	10	26	106	168	85	17	5	0	0	0	0	418	41.5	36.3
11:00 PM	0	1	4	27	71	73	32	7	2	0	0	0	0	217	40.0	34.8
Total	136	586	1510	3919	7815	6591	2441	544	111	23	5	1	2	23684	39.0	32.9
Percent	0.57%	2.47%	6.38%	16.55%	33.00%	27.83%	10.31%	2.30%	0.47%	0.10%	0.02%	0.00%	0.01%			
AM Peak	11:00 AM	10:00 AM	11:00 AM	11:00 AM	11:00 AM	9:00 AM	9:00 AM	9:00 AM	7:00 AM	8:00 AM	1:00 AM		9:00 AM	11:00 AM		
Volume	9	34	125	421	856	699	296	74	19	7	1	0	1	2187		
PM Peak	2:00 PM	2:00 PM	12:00 PM	1:00 PM	1:00 PM	6:00 PM	7:00 PM	7:00 PM	8:00 PM	4:00 PM	7:00 PM	8:00 PM	8:00 PM	1:00 PM		
Volume	37	119	234	548	795	467	169	37	8	1	1	1	1	2202		

15th Percentile:	27.0 MPH	Average Speed:	32.9 MPH	Posted Speed Limit:	35 MPH
50th Percentile:	33.0 MPH	10 MPH Pace:	29 to 38 MPH	Number of Vehicles > 35 MPH:	8035
85th Percentile:	39.0 MPH	Number in Pace:	14434	Percent of Vehicles > 35 MPH:	33.9%
95th Percentile:	43.0 MPH	Percent in Pace:	60.9%		

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Client: GPI/S. Theriault
Site Code: NEX/2021347

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

PDI File #: 239766 ATR A (speed)

Count Date
Tuesday, January 9, 2024

Speed (60-minute)

NB

Start Time:	1 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70+	Total	85th %ile	Ave Speed
12:00 AM	0	0	1	2	14	19	0	1	0	0	0	0	0	37	37.6	34.6
1:00 AM	0	0	0	1	3	5	2	0	0	0	0	0	0	11	40.5	35.8
2:00 AM	0	0	0	0	6	10	3	0	0	0	0	0	0	19	39.3	35.9
3:00 AM	0	0	0	1	9	12	4	1	1	0	0	0	0	28	41.0	36.6
4:00 AM	0	0	0	4	20	22	13	2	1	1	0	0	0	63	41.7	36.7
5:00 AM	1	0	5	14	48	64	18	3	1	0	0	0	0	154	39.0	34.7
6:00 AM	0	0	2	20	86	110	38	11	4	0	0	0	0	271	41.0	35.9
7:00 AM	0	0	3	11	92	204	116	25	2	1	0	0	0	454	42.0	37.5
8:00 AM	0	0	2	25	167	255	111	23	5	1	0	0	0	589	41.0	36.6
9:00 AM	0	1	3	54	171	295	129	24	0	1	0	0	0	678	41.0	36.1
10:00 AM	0	0	2	61	215	317	125	20	6	0	0	0	0	746	41.0	35.9
11:00 AM	0	1	12	80	303	303	129	30	3	0	0	0	0	861	40.0	35.3
12:00 PM	0	0	4	65	264	345	137	29	3	0	0	0	0	847	41.0	35.8
1:00 PM	0	2	7	79	257	337	134	29	12	1	0	0	0	858	40.0	35.8
2:00 PM	0	0	12	64	286	391	137	21	2	1	0	0	0	914	40.0	35.5
3:00 PM	0	0	11	123	336	344	110	24	4	1	0	0	0	953	39.0	34.8
4:00 PM	0	0	35	140	371	264	89	12	2	1	0	0	0	914	38.1	33.5
5:00 PM	0	0	17	190	365	216	58	9	0	0	0	0	0	855	37.0	32.8
6:00 PM	2	4	78	201	208	106	24	4	1	0	0	0	0	628	36.0	30.3
7:00 PM	1	8	73	200	134	29	0	0	0	0	0	0	0	445	32.0	28.1
8:00 PM	1	0	13	71	129	93	17	7	0	0	0	0	0	331	38.0	32.8
9:00 PM	0	0	3	12	72	84	26	11	2	0	0	0	0	210	40.0	35.8
10:00 PM	0	1	5	6	36	48	26	1	1	0	0	0	0	124	40.0	35.5
11:00 PM	0	0	0	7	19	32	22	5	1	0	1	0	0	87	43.0	37.6
Total	5	17	288	1431	3611	3905	1468	292	51	8	1	0	0	11077	40.0	34.7
Percent	0.05%	0.15%	2.60%	12.92%	32.60%	35.25%	13.25%	2.64%	0.46%	0.07%	0.01%	0.00%	0.00%			
AM Peak	5:00 AM	9:00 AM	11:00 AM	11:00 AM	11:00 AM	10:00 AM	9:00 AM	11:00 AM	10:00 AM	4:00 AM				11:00 AM		
Volume	1	1	12	80	303	317	129	30	6	1	0	0	0	861		
PM Peak	6:00 PM	7:00 PM	6:00 PM	6:00 PM	4:00 PM	2:00 PM	12:00 PM	12:00 PM	1:00 PM	1:00 PM	11:00 PM			3:00 PM		
Volume	2	8	78	201	371	391	137	29	12	1	1	0	0	953		

15th Percentile:	29.0 MPH	Average Speed:	34.7 MPH	Posted Speed Limit:	35 MPH
50th Percentile:	35.0 MPH	10 MPH Pace:	30 to 39 MPH	Number of Vehicles > 35 MPH:	4845
85th Percentile:	40.0 MPH	Number in Pace:	7516	Percent of Vehicles > 35 MPH:	43.7%
95th Percentile:	43.0 MPH	Percent in Pace:	67.9%		

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Count Date
Tuesday, January 9, 2024

Speed (60-minute)

SB

Start Time:	1 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70+	Total	85th %ile	Ave Speed
12:00 AM	0	0	0	4	10	9	4	4	0	0	0	0	0	31	43.0	36.2
1:00 AM	0	0	0	3	7	5	2	0	0	0	0	0	0	17	38.2	34.4
2:00 AM	0	0	1	2	10	5	1	1	0	0	0	0	0	20	37.0	33.5
3:00 AM	0	0	0	0	6	12	2	0	0	0	0	0	0	20	39.0	36.5
4:00 AM	0	0	0	4	24	24	14	6	1	0	0	0	0	73	43.2	37.0
5:00 AM	0	0	1	7	58	102	43	14	3	0	0	0	0	228	42.0	37.1
6:00 AM	0	0	2	62	163	128	38	10	0	0	0	0	0	403	39.0	34.1
7:00 AM	0	0	5	68	203	224	93	23	0	0	0	0	0	616	40.0	35.2
8:00 AM	2	1	8	64	180	236	104	7	5	0	0	0	0	607	40.0	35.2
9:00 AM	1	1	10	83	234	211	84	18	1	0	0	0	0	643	40.0	34.5
10:00 AM	2	3	12	74	203	256	83	14	4	0	0	0	0	651	40.0	34.8
11:00 AM	1	1	18	120	286	275	69	15	2	2	0	0	0	789	39.0	33.9
12:00 PM	2	9	26	120	298	270	95	16	2	0	0	0	0	838	39.0	33.8
1:00 PM	1	1	25	130	369	258	76	11	1	0	1	0	0	873	38.0	33.5
2:00 PM	1	9	50	154	310	261	72	9	4	0	0	0	0	870	38.0	32.9
3:00 PM	1	3	26	131	321	286	94	18	3	1	0	0	0	884	39.0	33.9
4:00 PM	1	4	24	131	326	245	88	12	2	0	0	0	0	833	39.0	33.6
5:00 PM	0	7	31	101	356	241	64	12	1	0	0	0	0	813	38.0	33.4
6:00 PM	3	5	49	122	133	72	29	3	0	0	0	0	0	416	36.0	30.7
7:00 PM	7	14	65	141	111	27	3	0	0	0	0	0	0	368	33.0	27.7
8:00 PM	1	1	17	103	166	107	17	4	0	0	0	0	0	416	37.0	32.1
9:00 PM	0	4	13	46	116	84	21	9	0	0	0	0	0	293	38.0	33.2
10:00 PM	0	2	5	27	57	50	17	3	1	0	0	0	0	162	38.9	33.5
11:00 PM	0	0	3	6	27	31	19	4	2	0	0	0	0	92	42.0	36.2
Total	23	65	391	1703	3974	3419	1132	213	32	3	1	0	0	10956	39.0	33.7
Percent	0.21%	0.59%	3.57%	15.54%	36.27%	31.21%	10.33%	1.94%	0.29%	0.03%	0.01%	0.00%	0.00%			
AM Peak	8:00 AM	10:00 AM	11:00 AM	11:00 AM	11:00 AM	11:00 AM	8:00 AM	7:00 AM	8:00 AM	11:00 AM				11:00 AM		
Volume	2	3	18	120	286	275	104	23	5	2	0	0	0	789		
PM Peak	7:00 PM	7:00 PM	7:00 PM	2:00 PM	1:00 PM	3:00 PM	12:00 PM	3:00 PM	2:00 PM	3:00 PM	1:00 PM			3:00 PM		
Volume	7	14	65	154	369	286	95	18	4	1	1	0	0	884		

15th Percentile:	28.0 MPH	Average Speed:	33.7 MPH	Posted Speed Limit:	35 MPH
50th Percentile:	34.0 MPH	10 MPH Pace:	29 to 38 MPH	Number of Vehicles > 35 MPH:	3879
85th Percentile:	39.0 MPH	Number in Pace:	7444	Percent of Vehicles > 35 MPH:	35.4%
95th Percentile:	42.0 MPH	Percent in Pace:	67.9%		

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Combined NB and SB

Start Time:	1 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70+	Total	85th %ile	Ave Speed
12:00 AM	0	0	1	6	24	28	4	5	0	0	0	0	0	68	39.0	35.3
1:00 AM	0	0	0	4	10	10	4	0	0	0	0	0	0	28	39.0	34.9
2:00 AM	0	0	1	2	16	15	4	1	0	0	0	0	0	39	39.0	34.7
3:00 AM	0	0	0	1	15	24	6	1	1	0	0	0	0	48	40.9	36.5
4:00 AM	0	0	0	8	44	46	27	8	2	1	0	0	0	136	43.0	36.9
5:00 AM	1	0	6	21	106	166	61	17	4	0	0	0	0	382	41.0	36.1
6:00 AM	0	0	4	82	249	238	76	21	4	0	0	0	0	674	39.1	34.8
7:00 AM	0	0	8	79	295	428	209	48	2	1	0	0	0	1070	41.0	36.2
8:00 AM	2	1	10	89	347	491	215	30	10	1	0	0	0	1196	40.0	35.9
9:00 AM	1	2	13	137	405	506	213	42	1	1	0	0	0	1321	40.0	35.4
10:00 AM	2	3	14	135	418	573	208	34	10	0	0	0	0	1397	40.0	35.4
11:00 AM	1	2	30	200	589	578	198	45	5	2	0	0	0	1650	40.0	34.6
12:00 PM	2	9	30	185	562	615	232	45	5	0	0	0	0	1685	40.0	34.8
1:00 PM	1	3	32	209	626	595	210	40	13	1	1	0	0	1731	40.0	34.6
2:00 PM	1	9	62	218	596	652	209	30	6	1	0	0	0	1784	39.0	34.3
3:00 PM	1	3	37	254	657	630	204	42	7	2	0	0	0	1837	39.0	34.3
4:00 PM	1	4	59	271	697	509	177	24	4	1	0	0	0	1747	39.0	33.6
5:00 PM	0	7	48	291	721	457	122	21	1	0	0	0	0	1668	38.0	33.1
6:00 PM	5	9	127	323	341	178	53	7	1	0	0	0	0	1044	36.0	30.5
7:00 PM	8	22	138	341	245	56	3	0	0	0	0	0	0	813	32.0	27.9
8:00 PM	2	1	30	174	295	200	34	11	0	0	0	0	0	747	37.0	32.4
9:00 PM	0	4	16	58	188	168	47	20	2	0	0	0	0	503	39.0	34.3
10:00 PM	0	3	10	33	93	98	43	4	2	0	0	0	0	286	40.0	34.4
11:00 PM	0	0	3	13	46	63	41	9	3	0	1	0	0	179	43.0	36.9
Total	28	82	679	3134	7585	7324	2600	505	83	11	2	0	0	22033	39.0	34.2
Percent	0.13%	0.37%	3.08%	14.22%	34.43%	33.24%	11.80%	2.29%	0.38%	0.05%	0.01%	0.00%	0.00%			
AM Peak	8:00 AM	10:00 AM	11:00 AM	11:00 AM	11:00 AM	11:00 AM	8:00 AM	7:00 AM	8:00 AM	11:00 AM				11:00 AM		
Volume	2	3	30	200	589	578	215	48	10	2	0	0	0	1650		
PM Peak	7:00 PM	7:00 PM	7:00 PM	7:00 PM	5:00 PM	2:00 PM	12:00 PM	12:00 PM	1:00 PM	3:00 PM	1:00 PM			3:00 PM		
Volume	8	22	138	341	721	652	232	45	13	2	1	0	0	1837		

15th Percentile:	29.0 MPH	Average Speed:	34.2 MPH	Posted Speed Limit:	35 MPH
50th Percentile:	34.0 MPH	10 MPH Pace:	30 to 39 MPH	Number of Vehicles > 35 MPH:	8724
85th Percentile:	39.0 MPH	Number in Pace:	14909	Percent of Vehicles > 35 MPH:	39.6%
95th Percentile:	43.0 MPH	Percent in Pace:	67.7%		

PDI File #: **239766 A**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **W: Crest Collaborative Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Saturday, January 6, 2024**
Start Time: **11:00 AM**
End Time: **2:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
11:00 AM	0	319	0	319	339	0	0	339	0	0	0	0	658
11:15 AM	0	338	0	338	314	0	0	314	0	0	0	0	652
11:30 AM	0	312	0	312	334	0	0	334	0	0	0	0	646
11:45 AM	0	333	0	333	350	0	0	350	0	0	0	0	683
Total	0	1302	0	1302	1337	0	0	1337	0	0	0	0	2639
12:00 PM	0	344	0	344	330	0	0	330	0	1	0	1	675
12:15 PM	0	387	0	387	373	0	0	373	0	1	0	1	761
12:30 PM	0	392	0	392	356	0	0	356	0	0	0	0	748
12:45 PM	1	373	0	374	331	0	0	331	0	0	0	0	705
Total	1	1496	0	1497	1390	0	0	1390	0	2	0	2	2889
1:00 PM	0	378	0	378	334	0	0	334	0	1	0	1	713
1:15 PM	1	369	0	370	333	0	0	333	1	0	0	1	704
1:30 PM	0	354	0	354	352	0	0	352	0	0	0	0	706
1:45 PM	0	360	0	360	381	0	0	381	0	0	0	0	741
Total	1	1461	0	1462	1400	0	0	1400	1	1	0	2	2864
Grand Total	2	4259	0	4261	4127	0	0	4127	1	3	0	4	8392
Approach %	0.0	100.0	0.0		100.0	0.0	0.0		25.0	75.0	0.0		
Total %	0.0	50.8	0.0	50.8	49.2	0.0	0.0	49.2	0.0	0.0	0.0	0.0	
Exiting Leg Total				4130				4260				2	8392
Cars	2	4231	0	4233	4110	0	0	4110	1	3	0	4	8347
% Cars	100.0	99.3	0.0	99.3	99.6	0.0	0.0	99.6	100.0	100.0	0.0	100.0	99.5
Exiting Leg Total				4113				4232				2	8347
Heavy Vehicles	0	28	0	28	17	0	0	17	0	0	0	0	45
% Heavy Vehicles	0.0	0.7	0.0	0.7	0.4	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.5
Exiting Leg Total				17				28				0	45

Peak Hour Analysis from 11:00 AM to 02:00 PM begins at:

12:15 PM	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
12:15 PM	0	387	0	387	373	0	0	373	0	1	0	1	761
12:30 PM	0	392	0	392	356	0	0	356	0	0	0	0	748
12:45 PM	1	373	0	374	331	0	0	331	0	0	0	0	705
1:00 PM	0	378	0	378	334	0	0	334	0	1	0	1	713
Total Volume	1	1530	0	1531	1394	0	0	1394	0	2	0	2	2927
% Approach Total	0.1	99.9	0.0		100.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.250	0.976	0.000	0.976	0.934	0.000	0.000	0.934	0.000	0.500	0.000	0.500	0.962
Cars	1	1520	0	1521	1389	0	0	1389	0	2	0	2	2912
Cars %	100.0	99.3	0.0	99.3	99.6	0.0	0.0	99.6	0.0	100.0	0.0	100.0	99.5
Heavy Vehicles	0	10	0	10	5	0	0	5	0	0	0	0	15
Heavy Vehicles %	0.0	0.7	0.0	0.7	0.4	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.5
Cars Enter Leg	1	1520	0	1521	1389	0	0	1389	0	2	0	2	2912
Heavy Enter Leg	0	10	0	10	5	0	0	5	0	0	0	0	15
Total Entering Leg	1	1530	0	1531	1394	0	0	1394	0	2	0	2	2927
Cars Exiting Leg				1391				1520				1	2912
Heavy Exiting Leg				5				10				0	15
Total Exiting Leg				1396				1530				1	2927

PDI File #: **239766 A**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **W: Crest Collaborative Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Saturday, January 6, 2024**
Start Time: **11:00 AM**
End Time: **2:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Cars**

	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
11:00 AM	0	317	0	317	338	0	0	338	0	0	0	0	655
11:15 AM	0	336	0	336	312	0	0	312	0	0	0	0	648
11:30 AM	0	311	0	311	333	0	0	333	0	0	0	0	644
11:45 AM	0	330	0	330	349	0	0	349	0	0	0	0	679
Total	0	1294	0	1294	1332	0	0	1332	0	0	0	0	2626
12:00 PM	0	342	0	342	329	0	0	329	0	1	0	1	672
12:15 PM	0	384	0	384	372	0	0	372	0	1	0	1	757
12:30 PM	0	388	0	388	355	0	0	355	0	0	0	0	743
12:45 PM	1	372	0	373	330	0	0	330	0	0	0	0	703
Total	1	1486	0	1487	1386	0	0	1386	0	2	0	2	2875
1:00 PM	0	376	0	376	332	0	0	332	0	1	0	1	709
1:15 PM	1	365	0	366	330	0	0	330	1	0	0	1	697
1:30 PM	0	352	0	352	351	0	0	351	0	0	0	0	703
1:45 PM	0	358	0	358	379	0	0	379	0	0	0	0	737
Total	1	1451	0	1452	1392	0	0	1392	1	1	0	2	2846
Grand Total	2	4231	0	4233	4110	0	0	4110	1	3	0	4	8347
Approach %	0.0	100.0	0.0		100.0	0.0	0.0		25.0	75.0	0.0		
Total %	0.0	50.7	0.0	50.7	49.2	0.0	0.0	49.2	0.0	0.0	0.0	0.0	
Exiting Leg Total				4113				4232				2	8347

Peak Hour Analysis from 11:00 AM to 02:00 PM begins at:

12:15 PM	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
12:15 PM	0	384	0	384	372	0	0	372	0	1	0	1	757
12:30 PM	0	388	0	388	355	0	0	355	0	0	0	0	743
12:45 PM	1	372	0	373	330	0	0	330	0	0	0	0	703
1:00 PM	0	376	0	376	332	0	0	332	0	1	0	1	709
Total Volume	1	1520	0	1521	1389	0	0	1389	0	2	0	2	2912
% Approach Total	0.1	99.9	0.0		100.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.250	0.979	0.000	0.980	0.933	0.000	0.000	0.933	0.000	0.500	0.000	0.500	0.962
Entering Leg	1	1520	0	1521	1389	0	0	1389	0	2	0	2	2912
Exiting Leg				1391				1520				1	2912
Total				2912				2909				3	5824

PDI File #: **239766 A**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **W: Crest Collaborative Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Saturday, January 6, 2024**
Start Time: **11:00 AM**
End Time: **2:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
11:00 AM	0	2	0	2	1	0	0	1	0	0	0	0	3
11:15 AM	0	2	0	2	2	0	0	2	0	0	0	0	4
11:30 AM	0	1	0	1	1	0	0	1	0	0	0	0	2
11:45 AM	0	3	0	3	1	0	0	1	0	0	0	0	4
Total	0	8	0	8	5	0	0	5	0	0	0	0	13
12:00 PM	0	2	0	2	1	0	0	1	0	0	0	0	3
12:15 PM	0	3	0	3	1	0	0	1	0	0	0	0	4
12:30 PM	0	4	0	4	1	0	0	1	0	0	0	0	5
12:45 PM	0	1	0	1	1	0	0	1	0	0	0	0	2
Total	0	10	0	10	4	0	0	4	0	0	0	0	14
1:00 PM	0	2	0	2	2	0	0	2	0	0	0	0	4
1:15 PM	0	4	0	4	3	0	0	3	0	0	0	0	7
1:30 PM	0	2	0	2	1	0	0	1	0	0	0	0	3
1:45 PM	0	2	0	2	2	0	0	2	0	0	0	0	4
Total	0	10	0	10	8	0	0	8	0	0	0	0	18
Grand Total	0	28	0	28	17	0	0	17	0	0	0	0	45
Approach %	0.0	100.0	0.0		100.0	0.0	0.0		0.0	0.0	0.0		
Total %	0.0	62.2	0.0	62.2	37.8	0.0	0.0	37.8	0.0	0.0	0.0	0.0	
Exiting Leg Total				17				28				0	45
Buses	0	3	0	3	1	0	0	1	0	0	0	0	4
% Buses	0.0	10.7	0.0	10.7	5.9	0.0	0.0	5.9	0.0	0.0	0.0	0.0	8.9
Exiting Leg Total				1				3				0	4
Single-Unit Trucks	0	20	0	20	14	0	0	14	0	0	0	0	34
% Single-Unit	0.0	71.4	0.0	71.4	82.4	0.0	0.0	82.4	0.0	0.0	0.0	0.0	75.6
Exiting Leg Total				14				20				0	34
Articulated Trucks	0	5	0	5	2	0	0	2	0	0	0	0	7
% Articulated	0.0	17.9	0.0	17.9	11.8	0.0	0.0	11.8	0.0	0.0	0.0	0.0	15.6
Exiting Leg Total				2				5				0	7

Peak Hour Analysis from 11:00 AM to 02:00 PM begins at:

12:30 PM	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
12:30 PM	0	4	0	4	1	0	0	1	0	0	0	0	5
12:45 PM	0	1	0	1	1	0	0	1	0	0	0	0	2
1:00 PM	0	2	0	2	2	0	0	2	0	0	0	0	4
1:15 PM	0	4	0	4	3	0	0	3	0	0	0	0	7
Total Volume	0	11	0	11	7	0	0	7	0	0	0	0	18
% Approach Total	0.0	100.0	0.0		100.0	0.0	0.0		0.0	0.0	0.0		
PHF	0.000	0.688	0.000	0.688	0.583	0.000	0.000	0.583	0.000	0.000	0.000	0.000	0.643
Buses	0	0	0	0	1	0	0	1	0	0	0	0	1
Buses %	0.0	0.0	0.0	0.0	14.3	0.0	0.0	14.3	0.0	0.0	0.0	0.0	5.6
Single-Unit Trucks	0	8	0	8	6	0	0	6	0	0	0	0	14
Single-Unit %	0.0	72.7	0.0	72.7	85.7	0.0	0.0	85.7	0.0	0.0	0.0	0.0	77.8
Articulated Trucks	0	3	0	3	0	0	0	0	0	0	0	0	3
Articulated %	0.0	27.3	0.0	27.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7
Buses	0	0	0	0	1	0	0	1	0	0	0	0	1
Single-Unit Trucks	0	8	0	8	6	0	0	6	0	0	0	0	14
Articulated Trucks	0	3	0	3	0	0	0	0	0	0	0	0	3
Total Entering Leg	0	11	0	11	7	0	0	7	0	0	0	0	18
Buses				1				0				0	1
Single-Unit Trucks				6				8				0	14
Articulated Trucks				0				3				0	3
Total Exiting Leg				7				11				0	18

PDI File #: **239766 A**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **W: Crest Collaborative Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Saturday, January 2, 2024**
Start Time: **11:00 AM**
End Time: **2:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Buses**

	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	2	0	2	0	0	0	0	0	0	0	0	2
Total	0	2	0	2	0	0	0	0	0	0	0	0	2
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	1	0	1	1	0	0	1	0	0	0	0	2
Grand Total	0	3	0	3	1	0	0	1	0	0	0	0	4
Approach %	0.0	100.0	0.0		100.0	0.0	0.0		0.0	0.0	0.0		
Total %	0.0	75.0	0.0	75.0	25.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	
Exiting Leg Total				1				3				0	4

Peak Hour Analysis from 11:00 AM to 02:00 PM begins at:

11:00 AM	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	2	0	2	0	0	0	0	0	0	0	0	2
Total Volume	0	2	0	2	0	0	0	0	0	0	0	0	2
% Approach Total	0.0	100.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		
PHF	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
Entering Leg	0	2	0	2	0	0	0	0	0	0	0	0	2
Exiting Leg				0				2				0	2
Total				2				2				0	4

PDI File #: **239766 A**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **W: Crest Collaborative Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Saturday, January 6, 2024**
Start Time: **11:00 AM**
End Time: **2:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Single-Unit Trucks**

	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
11:00 AM	0	2	0	2	1	0	0	1	0	0	0	0	3
11:15 AM	0	2	0	2	2	0	0	2	0	0	0	0	4
11:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	1
11:45 AM	0	1	0	1	1	0	0	1	0	0	0	0	2
Total	0	6	0	6	4	0	0	4	0	0	0	0	10
12:00 PM	0	1	0	1	1	0	0	1	0	0	0	0	2
12:15 PM	0	3	0	3	1	0	0	1	0	0	0	0	4
12:30 PM	0	2	0	2	1	0	0	1	0	0	0	0	3
12:45 PM	0	1	0	1	1	0	0	1	0	0	0	0	2
Total	0	7	0	7	4	0	0	4	0	0	0	0	11
1:00 PM	0	2	0	2	1	0	0	1	0	0	0	0	3
1:15 PM	0	3	0	3	3	0	0	3	0	0	0	0	6
1:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	1
1:45 PM	0	1	0	1	2	0	0	2	0	0	0	0	3
Total	0	7	0	7	6	0	0	6	0	0	0	0	13
Grand Total	0	20	0	20	14	0	0	14	0	0	0	0	34
Approach %	0.0	100.0	0.0		100.0	0.0	0.0		0.0	0.0	0.0		
Total %	0.0	58.8	0.0	58.8	41.2	0.0	0.0	41.2	0.0	0.0	0.0	0.0	
Exiting Leg Total				14				20				0	34

Peak Hour Analysis from 11:00 AM to 02:00 PM begins at:

12:30 PM	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
12:30 PM	0	2	0	2	1	0	0	1	0	0	0	0	3
12:45 PM	0	1	0	1	1	0	0	1	0	0	0	0	2
1:00 PM	0	2	0	2	1	0	0	1	0	0	0	0	3
1:15 PM	0	3	0	3	3	0	0	3	0	0	0	0	6
Total Volume	0	8	0	8	6	0	0	6	0	0	0	0	14
% Approach Total	0.0	100.0	0.0		100.0	0.0	0.0		0.0	0.0	0.0		
PHF	0.000	0.667	0.000	0.667	0.500	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.583
Entering Leg	0	8	0	8	6	0	0	6	0	0	0	0	14
Exiting Leg				6				8				0	14
Total				14				14				0	28

PDI File #: **239766 A**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **W: Crest Collaborative Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Saturday, January 6, 2024**
Start Time: **11:00 AM**
End Time: **2:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Articulated Trucks

	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	1	0	0	1	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	0	1	0	0	0	0	1
12:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	2	0	2	0	0	0	0	0	0	0	0	2
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	3	0	3	0	0	0	0	0	0	0	0	3
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	1
1:30 PM	0	1	0	1	1	0	0	1	0	0	0	0	2
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	2	1	0	0	1	0	0	0	0	3
Grand Total	0	5	0	5	2	0	0	2	0	0	0	0	7
Approach %	0.0	100.0	0.0		100.0	0.0	0.0		0.0	0.0	0.0		
Total %	0.0	71.4	0.0	71.4	28.6	0.0	0.0	28.6	0.0	0.0	0.0	0.0	
Exiting Leg Total				2				5				0	7

Peak Hour Analysis from 11:00 AM to 02:00 PM begins at:

11:45 AM	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	2	0	2	0	0	0	0	0	0	0	0	2
Total Volume	0	3	0	3	0	0	0	0	0	0	0	0	3
% Approach Total	0.0	100.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		
PHF	0.000	0.375	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375
Entering Leg	0	3	0	3	0	0	0	0	0	0	0	0	3
Exiting Leg				0				3				0	3
Total				3				3				0	6

PDI File #: **239766 A**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **W: Crest Collaborative Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Saturday, January 6, 2024**
Start Time: **11:00 AM**
End Time: **2:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

	Broadway (Route 28) from North						Broadway (Route 28) from South						Crest Collaborative Driveway from West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	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
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total						0						0						0	0

Peak Hour Analysis from 11:00 AM to 02:00 PM begins at:

11:00 AM	Broadway (Route 28) from North						Broadway (Route 28) from South						Crest Collaborative Driveway from West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg						0						0						0	0
Total						0						0						0	0

PDI File #: **239766 A**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **W: Crest Collaborative Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Saturday, January 6, 2024**
Start Time: **11:00 AM**
End Time: **2:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

	Broadway (Route 28) from North						Broadway (Route 28) from South						Crest Collaborative Driveway from West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	3
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	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
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0	1	2
1:30 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0	3	0	3	5
Grand Total	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0	4	2	6	8
Approach %	0	0	0	100	0		0	0	0	100	0		0	0	0	66.667	33.333		
Total %	0	0	0	12.5	0	12.5	0	0	0	12.5	0	12.5	0	0	0	50	25	75	
Exiting Leg Total						1						1						6	8

Peak Hour Analysis from 11:00 AM to 02:00 PM begins at:

1:00 PM	Broadway (Route 28) from North						Broadway (Route 28) from South						Crest Collaborative Driveway from West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0	1	2
1:30 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0	3	0	3	5
% Approach Total	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	100.0	0.0		
PHF	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.750	0.000	0.750	0.625
Entering Leg	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0	3	0	3	5
Exiting Leg						1						1						3	5
Total						2						2						6	10

PDI File #: **239766 A**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **W: Crest Collaborative Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Cars and Heavy Vehicles (Combined)

	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:00 AM	0	137	0	137	96	1	0	97	0	0	0	0	234
7:15 AM	0	148	0	148	98	1	0	99	0	0	0	0	247
7:30 AM	0	153	0	153	107	0	0	107	1	0	0	1	261
7:45 AM	0	191	0	191	151	0	0	151	0	0	0	0	342
Total	0	629	0	629	452	2	0	454	1	0	0	1	1084
8:00 AM	0	163	0	163	145	0	0	145	0	0	0	0	308
8:15 AM	0	131	0	131	139	1	0	140	0	0	0	0	271
8:30 AM	0	173	0	173	164	0	0	164	0	1	0	1	338
8:45 AM	0	162	0	162	171	0	0	171	0	0	0	0	333
Total	0	629	0	629	619	1	0	620	0	1	0	1	1250
Grand Total	0	1258	0	1258	1071	3	0	1074	1	1	0	2	2334
Approach %	0.0	100.0	0.0		99.7	0.3	0.0		50.0	50.0	0.0		
Total %	0.0	53.9	0.0	53.9	45.9	0.1	0.0	46.0	0.0	0.0	0.0	0.1	
Exiting Leg Total				1072				1259				3	2334
Cars	0	1205	0	1205	1008	3	0	1011	1	1	0	2	2218
% Cars	0.0	95.8	0.0	95.8	94.1	100.0	0.0	94.1	100.0	100.0	0.0	100.0	95.0
Exiting Leg Total				1009				1206				3	2218
Heavy Vehicles	0	53	0	53	63	0	0	63	0	0	0	0	116
% Heavy Vehicles	0.0	4.2	0.0	4.2	5.9	0.0	0.0	5.9	0.0	0.0	0.0	0.0	5.0
Exiting Leg Total				63				53				0	116

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

7:45 AM	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:45 AM	0	191	0	191	151	0	0	151	0	0	0	0	342
8:00 AM	0	163	0	163	145	0	0	145	0	0	0	0	308
8:15 AM	0	131	0	131	139	1	0	140	0	0	0	0	271
8:30 AM	0	173	0	173	164	0	0	164	0	1	0	1	338
Total Volume	0	658	0	658	599	1	0	600	0	1	0	1	1259
% Approach Total	0.0	100.0	0.0		99.8	0.2	0.0		0.0	100.0	0.0		
PHF	0.000	0.861	0.000	0.861	0.913	0.250	0.000	0.915	0.000	0.250	0.000	0.250	0.920
Cars	0	633	0	633	557	1	0	558	0	1	0	1	1192
Cars %	0.0	96.2	0.0	96.2	93.0	100.0	0.0	93.0	0.0	100.0	0.0	100.0	94.7
Heavy Vehicles	0	25	0	25	42	0	0	42	0	0	0	0	67
Heavy Vehicles %	0.0	3.8	0.0	3.8	7.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0	5.3
Cars Enter Leg	0	633	0	633	557	1	0	558	0	1	0	1	1192
Heavy Enter Leg	0	25	0	25	42	0	0	42	0	0	0	0	67
Total Entering Leg	0	658	0	658	599	1	0	600	0	1	0	1	1259
Cars Exiting Leg				558				633				1	1192
Heavy Exiting Leg				42				25				0	67
Total Exiting Leg				600				658				1	1259

PDI File #: **239766 A**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **W: Crest Collaborative Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Cars**

	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:00 AM	0	124	0	124	88	1	0	89	0	0	0	0	213
7:15 AM	0	145	0	145	96	1	0	97	0	0	0	0	242
7:30 AM	0	145	0	145	103	0	0	103	1	0	0	1	249
7:45 AM	0	184	0	184	141	0	0	141	0	0	0	0	325
Total	0	598	0	598	428	2	0	430	1	0	0	1	1029
8:00 AM	0	159	0	159	136	0	0	136	0	0	0	0	295
8:15 AM	0	123	0	123	129	1	0	130	0	0	0	0	253
8:30 AM	0	167	0	167	151	0	0	151	0	1	0	1	319
8:45 AM	0	158	0	158	164	0	0	164	0	0	0	0	322
Total	0	607	0	607	580	1	0	581	0	1	0	1	1189
Grand Total	0	1205	0	1205	1008	3	0	1011	1	1	0	2	2218
Approach %	0.0	100.0	0.0		99.7	0.3	0.0		50.0	50.0	0.0		
Total %	0.0	54.3	0.0	54.3	45.4	0.1	0.0	45.6	0.0	0.0	0.0	0.1	
Exiting Leg Total				1009				1206				3	2218

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

7:45 AM	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:45 AM	0	184	0	184	141	0	0	141	0	0	0	0	325
8:00 AM	0	159	0	159	136	0	0	136	0	0	0	0	295
8:15 AM	0	123	0	123	129	1	0	130	0	0	0	0	253
8:30 AM	0	167	0	167	151	0	0	151	0	1	0	1	319
Total Volume	0	633	0	633	557	1	0	558	0	1	0	1	1192
% Approach Total	0.0	100.0	0.0		99.8	0.2	0.0		0.0	100.0	0.0		
PHF	0.000	0.860	0.000	0.860	0.922	0.250	0.000	0.924	0.000	0.250	0.000	0.250	0.917
Entering Leg	0	633	0	633	557	1	0	558	0	1	0	1	1192
Exiting Leg				558				633				1	1192
Total				1191				1191				2	2384

PDI File #: **239766 A**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **W: Crest Collaborative Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:00 AM	0	13	0	13	8	0	0	8	0	0	0	0	21
7:15 AM	0	3	0	3	2	0	0	2	0	0	0	0	5
7:30 AM	0	8	0	8	4	0	0	4	0	0	0	0	12
7:45 AM	0	7	0	7	10	0	0	10	0	0	0	0	17
Total	0	31	0	31	24	0	0	24	0	0	0	0	55
8:00 AM	0	4	0	4	9	0	0	9	0	0	0	0	13
8:15 AM	0	8	0	8	10	0	0	10	0	0	0	0	18
8:30 AM	0	6	0	6	13	0	0	13	0	0	0	0	19
8:45 AM	0	4	0	4	7	0	0	7	0	0	0	0	11
Total	0	22	0	22	39	0	0	39	0	0	0	0	61
Grand Total	0	53	0	53	63	0	0	63	0	0	0	0	116
Approach %	0.0	100.0	0.0		100.0	0.0	0.0		0.0	0.0	0.0		
Total %	0.0	45.7	0.0	45.7	54.3	0.0	0.0	54.3	0.0	0.0	0.0	0.0	
Exiting Leg Total				63				53				0	116
Buses	0	15	0	15	27	0	0	27	0	0	0	0	42
% Buses	0.0	28.3	0.0	28.3	42.9	0.0	0.0	42.9	0.0	0.0	0.0	0.0	36.2
Exiting Leg Total				27				15				0	42
Single-Unit Trucks	0	30	0	30	28	0	0	28	0	0	0	0	58
% Single-Unit	0.0	56.6	0.0	56.6	44.4	0.0	0.0	44.4	0.0	0.0	0.0	0.0	50.0
Exiting Leg Total				28				30				0	58
Articulated Trucks	0	8	0	8	8	0	0	8	0	0	0	0	16
% Articulated	0.0	15.1	0.0	15.1	12.7	0.0	0.0	12.7	0.0	0.0	0.0	0.0	13.8
Exiting Leg Total				8				8				0	16

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

7:45 AM	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:45 AM	0	7	0	7	10	0	0	10	0	0	0	0	17
8:00 AM	0	4	0	4	9	0	0	9	0	0	0	0	13
8:15 AM	0	8	0	8	10	0	0	10	0	0	0	0	18
8:30 AM	0	6	0	6	13	0	0	13	0	0	0	0	19
Total Volume	0	25	0	25	42	0	0	42	0	0	0	0	67
% Approach Total	0.0	100.0	0.0		100.0	0.0	0.0		0.0	0.0	0.0		
PHF	0.000	0.781	0.000	0.781	0.808	0.000	0.000	0.808	0.000	0.000	0.000	0.000	0.882
Buses	0	2	0	2	22	0	0	22	0	0	0	0	24
Buses %	0.0	8.0	0.0	8.0	52.4	0.0	0.0	52.4	0.0	0.0	0.0	0.0	35.8
Single-Unit Trucks	0	18	0	18	16	0	0	16	0	0	0	0	34
Single-Unit %	0.0	72.0	0.0	72.0	38.1	0.0	0.0	38.1	0.0	0.0	0.0	0.0	50.7
Articulated Trucks	0	5	0	5	4	0	0	4	0	0	0	0	9
Articulated %	0.0	20.0	0.0	20.0	9.5	0.0	0.0	9.5	0.0	0.0	0.0	0.0	13.4
Buses	0	2	0	2	22	0	0	22	0	0	0	0	24
Single-Unit Trucks	0	18	0	18	16	0	0	16	0	0	0	0	34
Articulated Trucks	0	5	0	5	4	0	0	4	0	0	0	0	9
Total Entering Leg	0	25	0	25	42	0	0	42	0	0	0	0	67
Buses				22				2				0	24
Single-Unit Trucks				16				18				0	34
Articulated Trucks				4				5				0	9
Total Exiting Leg				42				25				0	67

PDI File #: **239766 A**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **W: Crest Collaborative Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Buses**

	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:00 AM	0	10	0	10	1	0	0	1	0	0	0	0	11
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	1
7:45 AM	0	1	0	1	4	0	0	4	0	0	0	0	5
Total	0	12	0	12	5	0	0	5	0	0	0	0	17
8:00 AM	0	1	0	1	8	0	0	8	0	0	0	0	9
8:15 AM	0	0	0	0	6	0	0	6	0	0	0	0	6
8:30 AM	0	0	0	0	4	0	0	4	0	0	0	0	4
8:45 AM	0	2	0	2	4	0	0	4	0	0	0	0	6
Total	0	3	0	3	22	0	0	22	0	0	0	0	25
Grand Total	0	15	0	15	27	0	0	27	0	0	0	0	42
Approach %	0.0	100.0	0.0		100.0	0.0	0.0		0.0	0.0	0.0		
Total %	0.0	35.7	0.0	35.7	64.3	0.0	0.0	64.3	0.0	0.0	0.0	0.0	
Exiting Leg Total				27				15				0	42

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

8:00 AM	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
8:00 AM	0	1	0	1	8	0	0	8	0	0	0	0	9
8:15 AM	0	0	0	0	6	0	0	6	0	0	0	0	6
8:30 AM	0	0	0	0	4	0	0	4	0	0	0	0	4
8:45 AM	0	2	0	2	4	0	0	4	0	0	0	0	6
Total Volume	0	3	0	3	22	0	0	22	0	0	0	0	25
% Approach Total	0.0	100.0	0.0		100.0	0.0	0.0		0.0	0.0	0.0		
PHF	0.000	0.375	0.000	0.375	0.688	0.000	0.000	0.688	0.000	0.000	0.000	0.000	0.694
Entering Leg	0	3	0	3	22	0	0	22	0	0	0	0	25
Exiting Leg				22				3				0	25
Total				25				25				0	50

PDI File #: **239766 A**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **W: Crest Collaborative Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Single-Unit Trucks**

	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:00 AM	0	2	0	2	5	0	0	5	0	0	0	0	7
7:15 AM	0	3	0	3	2	0	0	2	0	0	0	0	5
7:30 AM	0	5	0	5	3	0	0	3	0	0	0	0	8
7:45 AM	0	5	0	5	5	0	0	5	0	0	0	0	10
Total	0	15	0	15	15	0	0	15	0	0	0	0	30
8:00 AM	0	3	0	3	1	0	0	1	0	0	0	0	4
8:15 AM	0	5	0	5	3	0	0	3	0	0	0	0	8
8:30 AM	0	5	0	5	7	0	0	7	0	0	0	0	12
8:45 AM	0	2	0	2	2	0	0	2	0	0	0	0	4
Total	0	15	0	15	13	0	0	13	0	0	0	0	28
Grand Total	0	30	0	30	28	0	0	28	0	0	0	0	58
Approach %	0.0	100.0	0.0		100.0	0.0	0.0		0.0	0.0	0.0		
Total %	0.0	51.7	0.0	51.7	48.3	0.0	0.0	48.3	0.0	0.0	0.0	0.0	
Exiting Leg Total				28				30				0	58

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

7:45 AM	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:45 AM	0	5	0	5	5	0	0	5	0	0	0	0	10
8:00 AM	0	3	0	3	1	0	0	1	0	0	0	0	4
8:15 AM	0	5	0	5	3	0	0	3	0	0	0	0	8
8:30 AM	0	5	0	5	7	0	0	7	0	0	0	0	12
Total Volume	0	18	0	18	16	0	0	16	0	0	0	0	34
% Approach Total	0.0	100.0	0.0		100.0	0.0	0.0		0.0	0.0	0.0		
PHF	0.000	0.900	0.000	0.900	0.571	0.000	0.000	0.571	0.000	0.000	0.000	0.000	0.708
Entering Leg	0	18	0	18	16	0	0	16	0	0	0	0	34
Exiting Leg				16				18				0	34
Total				34				34				0	68

PDI File #: **239766 A**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **W: Crest Collaborative Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Articulated Trucks**

	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:00 AM	0	1	0	1	2	0	0	2	0	0	0	0	3
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	2	0	2	1	0	0	1	0	0	0	0	3
7:45 AM	0	1	0	1	1	0	0	1	0	0	0	0	2
Total	0	4	0	4	4	0	0	4	0	0	0	0	8
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	3	0	3	1	0	0	1	0	0	0	0	4
8:30 AM	0	1	0	1	2	0	0	2	0	0	0	0	3
8:45 AM	0	0	0	0	1	0	0	1	0	0	0	0	1
Total	0	4	0	4	4	0	0	4	0	0	0	0	8
Grand Total	0	8	0	8	8	0	0	8	0	0	0	0	16
Approach %	0.0	100.0	0.0		100.0	0.0	0.0		0.0	0.0	0.0		
Total %	0.0	50.0	0.0	50.0	50.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	
Exiting Leg Total				8				8				0	16

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

7:30 AM	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
7:30 AM	0	2	0	2	1	0	0	1	0	0	0	0	3
7:45 AM	0	1	0	1	1	0	0	1	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	3	0	3	1	0	0	1	0	0	0	0	4
Total Volume	0	6	0	6	3	0	0	3	0	0	0	0	9
% Approach Total	0.0	100.0	0.0		100.0	0.0	0.0		0.0	0.0	0.0		
PHF	0.000	0.500	0.000	0.500	0.750	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.563
Entering Leg	0	6	0	6	3	0	0	3	0	0	0	0	9
Exiting Leg				3				6				0	9
Total				9				9				0	18

PDI File #: **239766 A**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **W: Crest Collaborative Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **7:00 AM**
End Time: **9:00 AM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

	Broadway (Route 28) from North						Broadway (Route 28) from South						Crest Collaborative Driveway from West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total						0						0						0	0

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

7:00 AM	Broadway (Route 28) from North						Broadway (Route 28) from South						Crest Collaborative Driveway from West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg						0						0						0	0
Total						0						0						0	0

PDI File #: **239766 A**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **W: Crest Collaborative Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **7:00 AM**
End Time: **9:00 AM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

	Broadway (Route 28) from North						Broadway (Route 28) from South						Crest Collaborative Driveway from West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	4
Approach %	0	0	0	0	0		0	0	0	0	0		0	0	0	0	100		
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	100	
Exiting Leg Total						0						0						4	4

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

7:00 AM	Broadway (Route 28) from North						Broadway (Route 28) from South						Crest Collaborative Driveway from West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.750	0.750
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3
Exiting Leg						0						0						3	3
Total						0						0						6	6

PDI File #: **239766 A**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **W: Crest Collaborative Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Cars and Heavy Vehicles (Combined)

	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:00 PM	1	243	0	244	231	0	0	231	0	0	0	0	475
4:15 PM	1	242	0	243	263	1	0	264	1	0	0	1	508
4:30 PM	1	235	0	236	258	0	0	258	0	0	0	0	494
4:45 PM	0	213	0	213	282	1	0	283	1	0	0	1	497
Total	3	933	0	936	1034	2	0	1036	2	0	0	2	1974
5:00 PM	0	231	0	231	276	0	0	276	0	1	0	1	508
5:15 PM	0	238	0	238	245	0	0	245	0	2	0	2	485
5:30 PM	0	228	0	228	210	0	0	210	0	0	0	0	438
5:45 PM	0	213	0	213	248	0	0	248	0	0	0	0	461
Total	0	910	0	910	979	0	0	979	0	3	0	3	1892
Grand Total	3	1843	0	1846	2013	2	0	2015	2	3	0	5	3866
Approach %	0.2	99.8	0.0		99.9	0.1	0.0		40.0	60.0	0.0		
Total %	0.1	47.7	0.0	47.7	52.1	0.1	0.0	52.1	0.1	0.1	0.0	0.1	
Exiting Leg Total				2016				1845				5	3866
Cars	2	1832	0	1834	1961	2	0	1963	1	3	0	4	3801
% Cars	66.7	99.4	0.0	99.3	97.4	100.0	0.0	97.4	50.0	100.0	0.0	80.0	98.3
Exiting Leg Total				1964				1833				4	3801
Heavy Vehicles	1	11	0	12	52	0	0	52	1	0	0	1	65
% Heavy Vehicles	33.3	0.6	0.0	0.7	2.6	0.0	0.0	2.6	50.0	0.0	0.0	20.0	1.7
Exiting Leg Total				52				12				1	65

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

4:15 PM	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:15 PM	1	242	0	243	263	1	0	264	1	0	0	1	508
4:30 PM	1	235	0	236	258	0	0	258	0	0	0	0	494
4:45 PM	0	213	0	213	282	1	0	283	1	0	0	1	497
5:00 PM	0	231	0	231	276	0	0	276	0	1	0	1	508
Total Volume	2	921	0	923	1079	2	0	1081	2	1	0	3	2007
% Approach Total	0.2	99.8	0.0		99.8	0.2	0.0		66.7	33.3	0.0		
PHF	0.500	0.951	0.000	0.950	0.957	0.500	0.000	0.955	0.500	0.250	0.000	0.750	0.988
Cars	2	916	0	918	1049	2	0	1051	1	1	0	2	1971
Cars %	100.0	99.5	0.0	99.5	97.2	100.0	0.0	97.2	50.0	100.0	0.0	66.7	98.2
Heavy Vehicles	0	5	0	5	30	0	0	30	1	0	0	1	36
Heavy Vehicles %	0.0	0.5	0.0	0.5	2.8	0.0	0.0	2.8	50.0	0.0	0.0	33.3	1.8
Cars Enter Leg	2	916	0	918	1049	2	0	1051	1	1	0	2	1971
Heavy Enter Leg	0	5	0	5	30	0	0	30	1	0	0	1	36
Total Entering Leg	2	921	0	923	1079	2	0	1081	2	1	0	3	2007
Cars Exiting Leg				1050				917				4	1971
Heavy Exiting Leg				30				6				0	36
Total Exiting Leg				1080				923				4	2007

PDI File #: **239766 A**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **W: Crest Collaborative Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Cars**

	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:00 PM	0	240	0	240	223	0	0	223	0	0	0	0	463
4:15 PM	1	240	0	241	257	1	0	258	0	0	0	0	499
4:30 PM	1	234	0	235	251	0	0	251	0	0	0	0	486
4:45 PM	0	212	0	212	274	1	0	275	1	0	0	1	488
Total	2	926	0	928	1005	2	0	1007	1	0	0	1	1936
5:00 PM	0	230	0	230	267	0	0	267	0	1	0	1	498
5:15 PM	0	237	0	237	239	0	0	239	0	2	0	2	478
5:30 PM	0	227	0	227	205	0	0	205	0	0	0	0	432
5:45 PM	0	212	0	212	245	0	0	245	0	0	0	0	457
Total	0	906	0	906	956	0	0	956	0	3	0	3	1865
Grand Total	2	1832	0	1834	1961	2	0	1963	1	3	0	4	3801
Approach %	0.1	99.9	0.0		99.9	0.1	0.0		25.0	75.0	0.0		
Total %	0.1	48.2	0.0	48.3	51.6	0.1	0.0	51.6	0.0	0.1	0.0	0.1	
Exiting Leg Total				1964				1833				4	3801

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

4:15 PM	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:15 PM	1	240	0	241	257	1	0	258	0	0	0	0	499
4:30 PM	1	234	0	235	251	0	0	251	0	0	0	0	486
4:45 PM	0	212	0	212	274	1	0	275	1	0	0	1	488
5:00 PM	0	230	0	230	267	0	0	267	0	1	0	1	498
Total Volume	2	916	0	918	1049	2	0	1051	1	1	0	2	1971
% Approach Total	0.2	99.8	0.0		99.8	0.2	0.0		50.0	50.0	0.0		
PHF	0.500	0.954	0.000	0.952	0.957	0.500	0.000	0.955	0.250	0.250	0.000	0.500	0.987
Entering Leg	2	916	0	918	1049	2	0	1051	1	1	0	2	1971
Exiting Leg				1050				917				4	1971
Total				1968				1968				6	3942

PDI File #: **239766 A**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **W: Crest Collaborative Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:00 PM	1	3	0	4	8	0	0	8	0	0	0	0	12
4:15 PM	0	2	0	2	6	0	0	6	1	0	0	1	9
4:30 PM	0	1	0	1	7	0	0	7	0	0	0	0	8
4:45 PM	0	1	0	1	8	0	0	8	0	0	0	0	9
Total	1	7	0	8	29	0	0	29	1	0	0	1	38
5:00 PM	0	1	0	1	9	0	0	9	0	0	0	0	10
5:15 PM	0	1	0	1	6	0	0	6	0	0	0	0	7
5:30 PM	0	1	0	1	5	0	0	5	0	0	0	0	6
5:45 PM	0	1	0	1	3	0	0	3	0	0	0	0	4
Total	0	4	0	4	23	0	0	23	0	0	0	0	27
Grand Total	1	11	0	12	52	0	0	52	1	0	0	1	65
Approach %	8.3	91.7	0.0		100.0	0.0	0.0		100.0	0.0	0.0		
Total %	1.5	16.9	0.0	18.5	80.0	0.0	0.0	80.0	1.5	0.0	0.0	1.5	
Exiting Leg Total				52				12				1	65
Buses	0	1	0	1	32	0	0	32	0	0	0	0	33
% Buses	0.0	9.1	0.0	8.3	61.5	0.0	0.0	61.5	0.0	0.0	0.0	0.0	50.8
Exiting Leg Total				32				1				0	33
Single-Unit Trucks	1	8	0	9	12	0	0	12	1	0	0	1	22
% Single-Unit	100.0	72.7	0.0	75.0	23.1	0.0	0.0	23.1	100.0	0.0	0.0	100.0	33.8
Exiting Leg Total				12				9				1	22
Articulated Trucks	0	2	0	2	8	0	0	8	0	0	0	0	10
% Articulated	0.0	18.2	0.0	16.7	15.4	0.0	0.0	15.4	0.0	0.0	0.0	0.0	15.4
Exiting Leg Total				8				2				0	10

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

4:00 PM	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:00 PM	1	3	0	4	8	0	0	8	0	0	0	0	12
4:15 PM	0	2	0	2	6	0	0	6	1	0	0	1	9
4:30 PM	0	1	0	1	7	0	0	7	0	0	0	0	8
4:45 PM	0	1	0	1	8	0	0	8	0	0	0	0	9
Total Volume	1	7	0	8	29	0	0	29	1	0	0	1	38
% Approach Total	12.5	87.5	0.0		100.0	0.0	0.0		100.0	0.0	0.0		
PHF	0.250	0.583	0.000	0.500	0.906	0.000	0.000	0.906	0.250	0.000	0.000	0.250	0.792
Buses	0	1	0	1	23	0	0	23	0	0	0	0	24
Buses %	0.0	14.3	0.0	12.5	79.3	0.0	0.0	79.3	0.0	0.0	0.0	0.0	63.2
Single-Unit Trucks	1	4	0	5	4	0	0	4	1	0	0	1	10
Single-Unit %	100.0	57.1	0.0	62.5	13.8	0.0	0.0	13.8	100.0	0.0	0.0	100.0	26.3
Articulated Trucks	0	2	0	2	2	0	0	2	0	0	0	0	4
Articulated %	0.0	28.6	0.0	25.0	6.9	0.0	0.0	6.9	0.0	0.0	0.0	0.0	10.5
Buses	0	1	0	1	23	0	0	23	0	0	0	0	24
Single-Unit Trucks	1	4	0	5	4	0	0	4	1	0	0	1	10
Articulated Trucks	0	2	0	2	2	0	0	2	0	0	0	0	4
Total Entering Leg	1	7	0	8	29	0	0	29	1	0	0	1	38
Buses				23				1				0	24
Single-Unit Trucks				4				5				1	10
Articulated Trucks				2				2				0	4
Total Exiting Leg				29				8				1	38

PDI File #: **239766 A**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **W: Crest Collaborative Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Buses**

	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	8	0	0	8	0	0	0	0	8
4:15 PM	0	0	0	0	5	0	0	5	0	0	0	0	5
4:30 PM	0	1	0	1	7	0	0	7	0	0	0	0	8
4:45 PM	0	0	0	0	3	0	0	3	0	0	0	0	3
Total	0	1	0	1	23	0	0	23	0	0	0	0	24
5:00 PM	0	0	0	0	6	0	0	6	0	0	0	0	6
5:15 PM	0	0	0	0	2	0	0	2	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	1	0	0	1	0	0	0	0	1
Total	0	0	0	0	9	0	0	9	0	0	0	0	9
Grand Total	0	1	0	1	32	0	0	32	0	0	0	0	33
Approach %	0.0	100.0	0.0		100.0	0.0	0.0		0.0	0.0	0.0		
Total %	0.0	3.0	0.0	3.0	97.0	0.0	0.0	97.0	0.0	0.0	0.0	0.0	
Exiting Leg Total				32				1				0	33

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

4:00 PM	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	8	0	0	8	0	0	0	0	8
4:15 PM	0	0	0	0	5	0	0	5	0	0	0	0	5
4:30 PM	0	1	0	1	7	0	0	7	0	0	0	0	8
4:45 PM	0	0	0	0	3	0	0	3	0	0	0	0	3
Total Volume	0	1	0	1	23	0	0	23	0	0	0	0	24
% Approach Total	0.0	100.0	0.0		100.0	0.0	0.0		0.0	0.0	0.0		
PHF	0.000	0.250	0.000	0.250	0.719	0.000	0.000	0.719	0.000	0.000	0.000	0.000	0.750
Entering Leg	0	1	0	1	23	0	0	23	0	0	0	0	24
Exiting Leg				23				1				0	24
Total				24				24				0	48

PDI File #: **239766 A**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **W: Crest Collaborative Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Single-Unit Trucks**

	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:00 PM	1	2	0	3	0	0	0	0	0	0	0	0	3
4:15 PM	0	1	0	1	1	0	0	1	1	0	0	1	3
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	1	0	1	3	0	0	3	0	0	0	0	4
Total	1	4	0	5	4	0	0	4	1	0	0	1	10
5:00 PM	0	1	0	1	1	0	0	1	0	0	0	0	2
5:15 PM	0	1	0	1	2	0	0	2	0	0	0	0	3
5:30 PM	0	1	0	1	4	0	0	4	0	0	0	0	5
5:45 PM	0	1	0	1	1	0	0	1	0	0	0	0	2
Total	0	4	0	4	8	0	0	8	0	0	0	0	12
Grand Total	1	8	0	9	12	0	0	12	1	0	0	1	22
Approach %	11.1	88.9	0.0		100.0	0.0	0.0		100.0	0.0	0.0		
Total %	4.5	36.4	0.0	40.9	54.5	0.0	0.0	54.5	4.5	0.0	0.0	4.5	
Exiting Leg Total				12				9				1	22

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

4:45 PM	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:45 PM	0	1	0	1	3	0	0	3	0	0	0	0	4
5:00 PM	0	1	0	1	1	0	0	1	0	0	0	0	2
5:15 PM	0	1	0	1	2	0	0	2	0	0	0	0	3
5:30 PM	0	1	0	1	4	0	0	4	0	0	0	0	5
Total Volume	0	4	0	4	10	0	0	10	0	0	0	0	14
% Approach Total	0.0	100.0	0.0		100.0	0.0	0.0		0.0	0.0	0.0		
PHF	0.000	1.000	0.000	1.000	0.625	0.000	0.000	0.625	0.000	0.000	0.000	0.000	0.700
Entering Leg	0	4	0	4	10	0	0	10	0	0	0	0	14
Exiting Leg				10				4				0	14
Total				14				14				0	28

PDI File #: **239766 A**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **W: Crest Collaborative Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Articulated Trucks

	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	1
4:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	2	0	0	2	0	0	0	0	2
Total	0	2	0	2	2	0	0	2	0	0	0	0	4
5:00 PM	0	0	0	0	2	0	0	2	0	0	0	0	2
5:15 PM	0	0	0	0	2	0	0	2	0	0	0	0	2
5:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	1
5:45 PM	0	0	0	0	1	0	0	1	0	0	0	0	1
Total	0	0	0	0	6	0	0	6	0	0	0	0	6
Grand Total	0	2	0	2	8	0	0	8	0	0	0	0	10
Approach %	0.0	100.0	0.0		100.0	0.0	0.0		0.0	0.0	0.0		
Total %	0.0	20.0	0.0	20.0	80.0	0.0	0.0	80.0	0.0	0.0	0.0	0.0	
Exiting Leg Total				8				2				0	10

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

4:45 PM	Broadway (Route 28) from North				Broadway (Route 28) from South				Crest Collaborative Driveway from West				
	Right	Thru	U-Turn	Total	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Total
4:45 PM	0	0	0	0	2	0	0	2	0	0	0	0	2
5:00 PM	0	0	0	0	2	0	0	2	0	0	0	0	2
5:15 PM	0	0	0	0	2	0	0	2	0	0	0	0	2
5:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	1
Total Volume	0	0	0	0	7	0	0	7	0	0	0	0	7
% Approach Total	0.0	0.0	0.0		100.0	0.0	0.0		0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.875	0.000	0.000	0.875	0.000	0.000	0.000	0.000	0.875
Entering Leg	0	0	0	0	7	0	0	7	0	0	0	0	7
Exiting Leg				7				0				0	7
Total				7				7				0	14

PDI File #: **239766 A**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **W: Crest Collaborative Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **4:00 PM**
End Time: **6:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

	Broadway (Route 28) from North						Broadway (Route 28) from South						Crest Collaborative Driveway from West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total						0						0						0	0

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

4:00 PM	Broadway (Route 28) from North						Broadway (Route 28) from South						Crest Collaborative Driveway from West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg						0						0						0	0
Total						0						0						0	0

PDI File #: **239766 A**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **W: Crest Collaborative Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **4:00 PM**
End Time: **6:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

	Broadway (Route 28) from North						Broadway (Route 28) from South						Crest Collaborative Driveway from West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Approach %	0	0	0	0	0		0	0	0	0	0		0	0	0	0	100		
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	100	
Exiting Leg Total						0						0						1	1

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

4:00 PM	Broadway (Route 28) from North						Broadway (Route 28) from South						Crest Collaborative Driveway from West						
	Right	Thru	U-Turn	CW-EB	CW-WB	Total	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.250
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Exiting Leg						0						0						1	1
Total						0						0						2	2

PDI File #: **239766 B**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rostrons Liquors Exit Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Saturday, January 6, 2024**
Start Time: **11:00 AM**
End Time: **2:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
11:00 AM	310	0	0	310	5	0	0	5	0	333	0	333	648
11:15 AM	346	0	0	346	10	1	0	11	0	305	0	305	662
11:30 AM	306	0	0	306	3	0	0	3	0	338	0	338	647
11:45 AM	329	0	0	329	9	0	0	9	0	331	0	331	669
Total	1291	0	0	1291	27	1	0	28	0	1307	0	1307	2626
12:00 PM	344	1	0	345	6	0	0	6	0	325	0	325	676
12:15 PM	388	0	0	388	5	0	0	5	0	372	0	372	765
12:30 PM	391	0	0	391	4	1	0	5	1	350	0	351	747
12:45 PM	384	0	0	384	5	0	0	5	0	324	0	324	713
Total	1507	1	0	1508	20	1	0	21	1	1371	0	1372	2901
1:00 PM	370	0	0	370	6	0	0	6	0	327	0	327	703
1:15 PM	376	0	0	376	12	0	0	12	0	318	0	318	706
1:30 PM	350	0	0	350	4	0	0	4	0	340	0	340	694
1:45 PM	363	0	0	363	3	1	0	4	0	372	0	372	739
Total	1459	0	0	1459	25	1	0	26	0	1357	0	1357	2842
Grand Total	4257	1	0	4258	72	3	0	75	1	4035	0	4036	8369
Approach %	100.0	0.0	0.0		96.0	4.0	0.0		0.0	100.0	0.0		
Total %	50.9	0.0	0.0	50.9	0.9	0.0	0.0	0.9	0.0	48.2	0.0	48.2	
Exiting Leg Total				4107				2				4260	8369
Cars	4226	1	0	4227	72	3	0	75	1	4020	0	4021	8323
% Cars	99.3	100.0	0.0	99.3	100.0	100.0	0.0	100.0	100.0	99.6	0.0	99.6	99.5
Exiting Leg Total				4092				2				4229	8323
Heavy Vehicles	31	0	0	31	0	0	0	0	0	15	0	15	46
% Heavy Vehicles	0.7	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.4	0.5
Exiting Leg Total				15				0				31	46

Peak Hour Analysis from 11:00 AM to 02:00 PM begins at:

12:15 PM	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
12:15 PM	388	0	0	388	5	0	0	5	0	372	0	372	765
12:30 PM	391	0	0	391	4	1	0	5	1	350	0	351	747
12:45 PM	384	0	0	384	5	0	0	5	0	324	0	324	713
1:00 PM	370	0	0	370	6	0	0	6	0	327	0	327	703
Total Volume	1533	0	0	1533	20	1	0	21	1	1373	0	1374	2928
% Approach Total	100.0	0.0	0.0		95.2	4.8	0.0		0.1	99.9	0.0		
PHF	0.980	0.000	0.000	0.980	0.833	0.250	0.000	0.875	0.250	0.923	0.000	0.923	0.957
Cars	1524	0	0	1524	20	1	0	21	1	1369	0	1370	2915
Cars %	99.4	0.0	0.0	99.4	100.0	100.0	0.0	100.0	100.0	99.7	0.0	99.7	99.6
Heavy Vehicles	9	0	0	9	0	0	0	0	0	4	0	4	13
Heavy Vehicles %	0.6	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.4
Cars Enter Leg	1524	0	0	1524	20	1	0	21	1	1369	0	1370	2915
Heavy Enter Leg	9	0	0	9	0	0	0	0	0	4	0	4	13
Total Entering Leg	1533	0	0	1533	20	1	0	21	1	1373	0	1374	2928
Cars Exiting Leg				1389				1				1525	2915
Heavy Exiting Leg				4				0				9	13
Total Exiting Leg				1393				1				1534	2928

PDI File #: **239766 B**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rostrons Liquors Exit Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Saturday, January 2, 2024**
Start Time: **11:00 AM**
End Time: **2:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Cars**

	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
11:00 AM	308	0	0	308	5	0	0	5	0	332	0	332	645
11:15 AM	344	0	0	344	10	1	0	11	0	303	0	303	658
11:30 AM	305	0	0	305	3	0	0	3	0	337	0	337	645
11:45 AM	326	0	0	326	9	0	0	9	0	330	0	330	665
Total	1283	0	0	1283	27	1	0	28	0	1302	0	1302	2613
12:00 PM	342	1	0	343	6	0	0	6	0	324	0	324	673
12:15 PM	385	0	0	385	5	0	0	5	0	372	0	372	762
12:30 PM	388	0	0	388	4	1	0	5	1	349	0	350	743
12:45 PM	383	0	0	383	5	0	0	5	0	323	0	323	711
Total	1498	1	0	1499	20	1	0	21	1	1368	0	1369	2889
1:00 PM	368	0	0	368	6	0	0	6	0	325	0	325	699
1:15 PM	369	0	0	369	12	0	0	12	0	315	0	315	696
1:30 PM	348	0	0	348	4	0	0	4	0	339	0	339	691
1:45 PM	360	0	0	360	3	1	0	4	0	371	0	371	735
Total	1445	0	0	1445	25	1	0	26	0	1350	0	1350	2821
Grand Total	4226	1	0	4227	72	3	0	75	1	4020	0	4021	8323
Approach %	100.0	0.0	0.0		96.0	4.0	0.0		0.0	100.0	0.0		
Total %	50.8	0.0	0.0	50.8	0.9	0.0	0.0	0.9	0.0	48.3	0.0	48.3	
Exiting Leg Total				4092				2				4229	8323

Peak Hour Analysis from 11:00 AM to 02:00 PM begins at:

12:15 PM	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
12:15 PM	385	0	0	385	5	0	0	5	0	372	0	372	762
12:30 PM	388	0	0	388	4	1	0	5	1	349	0	350	743
12:45 PM	383	0	0	383	5	0	0	5	0	323	0	323	711
1:00 PM	368	0	0	368	6	0	0	6	0	325	0	325	699
Total Volume	1524	0	0	1524	20	1	0	21	1	1369	0	1370	2915
% Approach Total	100.0	0.0	0.0		95.2	4.8	0.0		0.1	99.9	0.0		
PHF	0.982	0.000	0.000	0.982	0.833	0.250	0.000	0.875	0.250	0.920	0.000	0.921	0.956
Entering Leg	1524	0	0	1524	20	1	0	21	1	1369	0	1370	2915
Exiting Leg				1389				1				1525	2915
Total				2913				22				2895	5830

PDI File #: **239766 B**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rostrons Liquors Exit Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Saturday, January 6, 2024**
Start Time: **11:00 AM**
End Time: **2:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
11:00 AM	2	0	0	2	0	0	0	0	0	1	0	1	3
11:15 AM	2	0	0	2	0	0	0	0	0	2	0	2	4
11:30 AM	1	0	0	1	0	0	0	0	0	1	0	1	2
11:45 AM	3	0	0	3	0	0	0	0	0	1	0	1	4
Total	8	0	0	8	0	0	0	0	0	5	0	5	13
12:00 PM	2	0	0	2	0	0	0	0	0	1	0	1	3
12:15 PM	3	0	0	3	0	0	0	0	0	0	0	0	3
12:30 PM	3	0	0	3	0	0	0	0	0	1	0	1	4
12:45 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
Total	9	0	0	9	0	0	0	0	0	3	0	3	12
1:00 PM	2	0	0	2	0	0	0	0	0	2	0	2	4
1:15 PM	7	0	0	7	0	0	0	0	0	3	0	3	10
1:30 PM	2	0	0	2	0	0	0	0	0	1	0	1	3
1:45 PM	3	0	0	3	0	0	0	0	0	1	0	1	4
Total	14	0	0	14	0	0	0	0	0	7	0	7	21
Grand Total	31	0	0	31	0	0	0	0	0	15	0	15	46
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
Total %	67.4	0.0	0.0	67.4	0.0	0.0	0.0	0.0	0.0	32.6	0.0	32.6	
Exiting Leg Total				15				0				31	46
Buses	3	0	0	3	0	0	0	0	0	2	0	2	5
% Buses	9.7	0.0	0.0	9.7	0.0	0.0	0.0	0.0	0.0	13.3	0.0	13.3	10.9
Exiting Leg Total				2				0				3	5
Single-Unit Trucks	25	0	0	25	0	0	0	0	0	11	0	11	36
% Single-Unit	80.6	0.0	0.0	80.6	0.0	0.0	0.0	0.0	0.0	73.3	0.0	73.3	78.3
Exiting Leg Total				11				0				25	36
Articulated Trucks	3	0	0	3	0	0	0	0	0	2	0	2	5
% Articulated	9.7	0.0	0.0	9.7	0.0	0.0	0.0	0.0	0.0	13.3	0.0	13.3	10.9
Exiting Leg Total				2				0				3	5

Peak Hour Analysis from 11:00 AM to 02:00 PM begins at:

1:00 PM	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
1:00 PM	2	0	0	2	0	0	0	0	0	2	0	2	4
1:15 PM	7	0	0	7	0	0	0	0	0	3	0	3	10
1:30 PM	2	0	0	2	0	0	0	0	0	1	0	1	3
1:45 PM	3	0	0	3	0	0	0	0	0	1	0	1	4
Total Volume	14	0	0	14	0	0	0	0	0	7	0	7	21
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.500	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.583	0.000	0.583	0.525
Buses	1	0	0	1	0	0	0	0	0	1	0	1	2
Buses %	7.1	0.0	0.0	7.1	0.0	0.0	0.0	0.0	0.0	14.3	0.0	14.3	9.5
Single-Unit Trucks	11	0	0	11	0	0	0	0	0	5	0	5	16
Single-Unit %	78.6	0.0	0.0	78.6	0.0	0.0	0.0	0.0	0.0	71.4	0.0	71.4	76.2
Articulated Trucks	2	0	0	2	0	0	0	0	0	1	0	1	3
Articulated %	14.3	0.0	0.0	14.3	0.0	0.0	0.0	0.0	0.0	14.3	0.0	14.3	14.3
Buses	1	0	0	1	0	0	0	0	0	1	0	1	2
Single-Unit Trucks	11	0	0	11	0	0	0	0	0	5	0	5	16
Articulated Trucks	2	0	0	2	0	0	0	0	0	1	0	1	3
Total Entering Leg	14	0	0	14	0	0	0	0	0	7	0	7	21
Buses				1				0				1	2
Single-Unit Trucks				5				0				11	16
Articulated Trucks				1				0				2	3
Total Exiting Leg				7				0				14	21

PDI File #: **239766 B**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rostrons Liquors Exit Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Saturday, January 6, 2024**
Start Time: **11:00 AM**
End Time: **2:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Buses**

	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
11:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	2	0	0	2	0	0	0	0	0	0	0	0	2
Total	2	0	0	2	0	0	0	0	0	1	0	1	3
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	1	0	0	1	0	0	0	0	0	1	0	1	2
Grand Total	3	0	0	3	0	0	0	0	0	2	0	2	5
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
Total %	60.0	0.0	0.0	60.0	0.0	0.0	0.0	0.0	0.0	40.0	0.0	40.0	
Exiting Leg Total				2				0				3	5

Peak Hour Analysis from 11:00 AM to 02:00 PM begins at:

11:00 AM	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
11:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	2	0	0	2	0	0	0	0	0	0	0	0	2
Total Volume	2	0	0	2	0	0	0	0	0	1	0	1	3
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.375
Entering Leg	2	0	0	2	0	0	0	0	0	1	0	1	3
Exiting Leg				1				0				2	3
Total				3				0				3	6

PDI File #: **239766 B**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rostrons Liquors Exit Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Saturday, January 6, 2024**
Start Time: **11:00 AM**
End Time: **2:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Single-Unit Trucks**

	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
11:00 AM	2	0	0	2	0	0	0	0	0	0	0	0	2
11:15 AM	2	0	0	2	0	0	0	0	0	2	0	2	4
11:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
11:45 AM	1	0	0	1	0	0	0	0	0	1	0	1	2
Total	6	0	0	6	0	0	0	0	0	3	0	3	9
12:00 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
12:15 PM	3	0	0	3	0	0	0	0	0	0	0	0	3
12:30 PM	3	0	0	3	0	0	0	0	0	1	0	1	4
12:45 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
Total	8	0	0	8	0	0	0	0	0	3	0	3	11
1:00 PM	2	0	0	2	0	0	0	0	0	1	0	1	3
1:15 PM	6	0	0	6	0	0	0	0	0	3	0	3	9
1:30 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
1:45 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
Total	11	0	0	11	0	0	0	0	0	5	0	5	16
Grand Total	25	0	0	25	0	0	0	0	0	11	0	11	36
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
Total %	69.4	0.0	0.0	69.4	0.0	0.0	0.0	0.0	0.0	30.6	0.0	30.6	
Exiting Leg Total				11				0				25	36

Peak Hour Analysis from 11:00 AM to 02:00 PM begins at:

12:30 PM	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
12:30 PM	3	0	0	3	0	0	0	0	0	1	0	1	4
12:45 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
1:00 PM	2	0	0	2	0	0	0	0	0	1	0	1	3
1:15 PM	6	0	0	6	0	0	0	0	0	3	0	3	9
Total Volume	12	0	0	12	0	0	0	0	0	6	0	6	18
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.500	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.500	0.500
Entering Leg	12	0	0	12	0	0	0	0	0	6	0	6	18
Exiting Leg				6				0				12	18
Total				18				0				18	36

PDI File #: **239766 B**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rostrons Liquors Exit Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Saturday, January 6, 2024**
Start Time: **11:00 AM**
End Time: **2:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Articulated Trucks

	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	1	0	1	1
12:00 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	0	0	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
1:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	2	0	0	2	0	0	0	0	0	1	0	1	3
Grand Total	3	0	0	3	0	0	0	0	0	2	0	2	5
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
Total %	60.0	0.0	0.0	60.0	0.0	0.0	0.0	0.0	0.0	40.0	0.0	40.0	
Exiting Leg Total				2				0				3	5

Peak Hour Analysis from 11:00 AM to 02:00 PM begins at:

1:00 PM	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
1:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total Volume	2	0	0	2	0	0	0	0	0	1	0	1	3
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.500	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.750
Entering Leg	2	0	0	2	0	0	0	0	0	1	0	1	3
Exiting Leg				1				0				2	3
Total				3				0				3	6

PDI File #: **239766 B**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rostrons Liquors Exit Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Saturday, January 6, 2024**
Start Time: **11:00 AM**
End Time: **2:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

	Broadway (Route 28) from North						Rostrons Liquors Exit Driveway from East						Broadway (Route 28) from South						
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	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
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total						0						0						0	0

Peak Hour Analysis from 11:00 AM to 02:00 PM begins at:

11:00 AM	Broadway (Route 28) from North						Rostrons Liquors Exit Driveway from East						Broadway (Route 28) from South						
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg						0						0						0	0
Total						0						0						0	0

PDI File #: **239766 B**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rostrons Liquors Exit Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Saturday, January 6, 2024**
Start Time: **11:00 AM**
End Time: **2:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

	Broadway (Route 28) from North						Rostrons Liquors Exit Driveway from East						Broadway (Route 28) from South						
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	3
12:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	2
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	0	0	0	1	1	0	0	0	1	4	5	0	0	0	0	0	0	6
Approach %	0	0	0	0	100		0	0	0	20	80		0	0	0	0	0		
Total %	0	0	0	0	16.667	16.667	0	0	0	16.667	66.667	83.333	0	0	0	0	0	0	
Exiting Leg Total						1						5						0	6

Peak Hour Analysis from 11:00 AM to 02:00 PM begins at:

11:15 AM	Broadway (Route 28) from North						Rostrons Liquors Exit Driveway from East						Broadway (Route 28) from South						
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	Total
11:15 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	0	1	3	4	0	0	0	0	0	0	4
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	25.0	75.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.750	1.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000
Entering Leg	0	0	0	0	0	0	0	0	0	1	3	4	0	0	0	0	0	0	4
Exiting Leg						0						4						0	4
Total						0						8						0	8

PDI File #: **239766 B**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rostrons Liquors Exit Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Cars and Heavy Vehicles (Combined)

	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:00 AM	137	0	0	137	0	0	0	0	0	95	0	95	232
7:15 AM	145	0	0	145	1	0	0	1	0	95	0	95	241
7:30 AM	153	0	0	153	0	0	0	0	0	109	0	109	262
7:45 AM	187	0	0	187	0	0	0	0	0	145	0	145	332
Total	622	0	0	622	1	0	0	1	0	444	0	444	1067
8:00 AM	162	0	0	162	1	1	0	2	0	148	0	148	312
8:15 AM	131	0	0	131	3	2	0	5	0	137	0	137	273
8:30 AM	174	0	0	174	2	1	0	3	0	162	0	162	339
8:45 AM	163	0	0	163	1	1	0	2	0	172	0	172	337
Total	630	0	0	630	7	5	0	12	0	619	0	619	1261
Grand Total	1252	0	0	1252	8	5	0	13	0	1063	0	1063	2328
Approach %	100.0	0.0	0.0		61.5	38.5	0.0		0.0	100.0	0.0		
Total %	53.8	0.0	0.0	53.8	0.3	0.2	0.0	0.6	0.0	45.7	0.0	45.7	
Exiting Leg Total				1071				0				1257	2328
Cars	1200	0	0	1200	8	3	0	11	0	1000	0	1000	2211
% Cars	95.8	0.0	0.0	95.8	100.0	60.0	0.0	84.6	0.0	94.1	0.0	94.1	95.0
Exiting Leg Total				1008				0				1203	2211
Heavy Vehicles	52	0	0	52	0	2	0	2	0	63	0	63	117
% Heavy Vehicles	4.2	0.0	0.0	4.2	0.0	40.0	0.0	15.4	0.0	5.9	0.0	5.9	5.0
Exiting Leg Total				63				0				54	117

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

8:00 AM	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
8:00 AM	162	0	0	162	1	1	0	2	0	148	0	148	312
8:15 AM	131	0	0	131	3	2	0	5	0	137	0	137	273
8:30 AM	174	0	0	174	2	1	0	3	0	162	0	162	339
8:45 AM	163	0	0	163	1	1	0	2	0	172	0	172	337
Total Volume	630	0	0	630	7	5	0	12	0	619	0	619	1261
% Approach Total	100.0	0.0	0.0		58.3	41.7	0.0		0.0	100.0	0.0		
PHF	0.905	0.000	0.000	0.905	0.583	0.625	0.000	0.600	0.000	0.900	0.000	0.900	0.930
Cars	609	0	0	609	7	3	0	10	0	579	0	579	1198
Cars %	96.7	0.0	0.0	96.7	100.0	60.0	0.0	83.3	0.0	93.5	0.0	93.5	95.0
Heavy Vehicles	21	0	0	21	0	2	0	2	0	40	0	40	63
Heavy Vehicles %	3.3	0.0	0.0	3.3	0.0	40.0	0.0	16.7	0.0	6.5	0.0	6.5	5.0
Cars Enter Leg	609	0	0	609	7	3	0	10	0	579	0	579	1198
Heavy Enter Leg	21	0	0	21	0	2	0	2	0	40	0	40	63
Total Entering Leg	630	0	0	630	7	5	0	12	0	619	0	619	1261
Cars Exiting Leg				586				0				612	1198
Heavy Exiting Leg				40				0				23	63
Total Exiting Leg				626				0				635	1261

PDI File #: **239766 B**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rostrons Liquors Exit Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Cars**

	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:00 AM	124	0	0	124	0	0	0	0	0	87	0	87	211
7:15 AM	143	0	0	143	1	0	0	1	0	93	0	93	237
7:30 AM	145	0	0	145	0	0	0	0	0	105	0	105	250
7:45 AM	179	0	0	179	0	0	0	0	0	136	0	136	315
Total	591	0	0	591	1	0	0	1	0	421	0	421	1013
8:00 AM	158	0	0	158	1	1	0	2	0	139	0	139	299
8:15 AM	123	0	0	123	3	1	0	4	0	126	0	126	253
8:30 AM	169	0	0	169	2	0	0	2	0	149	0	149	320
8:45 AM	159	0	0	159	1	1	0	2	0	165	0	165	326
Total	609	0	0	609	7	3	0	10	0	579	0	579	1198
Grand Total	1200	0	0	1200	8	3	0	11	0	1000	0	1000	2211
Approach %	100.0	0.0	0.0		72.7	27.3	0.0		0.0	100.0	0.0		
Total %	54.3	0.0	0.0	54.3	0.4	0.1	0.0	0.5	0.0	45.2	0.0	45.2	
Exiting Leg Total				1008				0				1203	2211

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

8:00 AM	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
8:00 AM	158	0	0	158	1	1	0	2	0	139	0	139	299
8:15 AM	123	0	0	123	3	1	0	4	0	126	0	126	253
8:30 AM	169	0	0	169	2	0	0	2	0	149	0	149	320
8:45 AM	159	0	0	159	1	1	0	2	0	165	0	165	326
Total Volume	609	0	0	609	7	3	0	10	0	579	0	579	1198
% Approach Total	100.0	0.0	0.0		70.0	30.0	0.0		0.0	100.0	0.0		
PHF	0.901	0.000	0.000	0.901	0.583	0.750	0.000	0.625	0.000	0.877	0.000	0.877	0.919
Entering Leg	609	0	0	609	7	3	0	10	0	579	0	579	1198
Exiting Leg				586				0				612	1198
Total				1195				10				1191	2396

PDI File #: **239766 B**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rostrons Liquors Exit Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:00 AM	13	0	0	13	0	0	0	0	0	8	0	8	21
7:15 AM	2	0	0	2	0	0	0	0	0	2	0	2	4
7:30 AM	8	0	0	8	0	0	0	0	0	4	0	4	12
7:45 AM	8	0	0	8	0	0	0	0	0	9	0	9	17
Total	31	0	0	31	0	0	0	0	0	23	0	23	54
8:00 AM	4	0	0	4	0	0	0	0	0	9	0	9	13
8:15 AM	8	0	0	8	0	1	0	1	0	11	0	11	20
8:30 AM	5	0	0	5	0	1	0	1	0	13	0	13	19
8:45 AM	4	0	0	4	0	0	0	0	0	7	0	7	11
Total	21	0	0	21	0	2	0	2	0	40	0	40	63
Grand Total	52	0	0	52	0	2	0	2	0	63	0	63	117
Approach %	100.0	0.0	0.0		0.0	100.0	0.0		0.0	100.0	0.0		
Total %	44.4	0.0	0.0	44.4	0.0	1.7	0.0	1.7	0.0	53.8	0.0	53.8	
Exiting Leg Total				63				0				54	117
Buses	15	0	0	15	0	0	0	0	0	27	0	27	42
% Buses	28.8	0.0	0.0	28.8	0.0	0.0	0.0	0.0	0.0	42.9	0.0	42.9	35.9
Exiting Leg Total				27				0				15	42
Single-Unit Trucks	29	0	0	29	0	2	0	2	0	25	0	25	56
% Single-Unit	55.8	0.0	0.0	55.8	0.0	100.0	0.0	100.0	0.0	39.7	0.0	39.7	47.9
Exiting Leg Total				25				0				31	56
Articulated Trucks	8	0	0	8	0	0	0	0	0	11	0	11	19
% Articulated	15.4	0.0	0.0	15.4	0.0	0.0	0.0	0.0	0.0	17.5	0.0	17.5	16.2
Exiting Leg Total				11				0				8	19

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

7:45 AM	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:45 AM	8	0	0	8	0	0	0	0	0	9	0	9	17
8:00 AM	4	0	0	4	0	0	0	0	0	9	0	9	13
8:15 AM	8	0	0	8	0	1	0	1	0	11	0	11	20
8:30 AM	5	0	0	5	0	1	0	1	0	13	0	13	19
Total Volume	25	0	0	25	0	2	0	2	0	42	0	42	69
% Approach Total	100.0	0.0	0.0		0.0	100.0	0.0		0.0	100.0	0.0		
PHF	0.781	0.000	0.000	0.781	0.000	0.500	0.000	0.500	0.000	0.808	0.000	0.808	0.863
Buses	2	0	0	2	0	0	0	0	0	22	0	22	24
Buses %	8.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	52.4	0.0	52.4	34.8
Single-Unit Trucks	18	0	0	18	0	2	0	2	0	15	0	15	35
Single-Unit %	72.0	0.0	0.0	72.0	0.0	100.0	0.0	100.0	0.0	35.7	0.0	35.7	50.7
Articulated Trucks	5	0	0	5	0	0	0	0	0	5	0	5	10
Articulated %	20.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	11.9	0.0	11.9	14.5
Buses	2	0	0	2	0	0	0	0	0	22	0	22	24
Single-Unit Trucks	18	0	0	18	0	2	0	2	0	15	0	15	35
Articulated Trucks	5	0	0	5	0	0	0	0	0	5	0	5	10
Total Entering Leg	25	0	0	25	0	2	0	2	0	42	0	42	69
Buses				22				0				2	24
Single-Unit Trucks				15				0				20	35
Articulated Trucks				5				0				5	10
Total Exiting Leg				42				0				27	69

PDI File #: **239766 B**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rostrons Liquors Exit Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Buses**

	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:00 AM	10	0	0	10	0	0	0	0	0	1	0	1	11
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
7:45 AM	1	0	0	1	0	0	0	0	0	4	0	4	5
Total	12	0	0	12	0	0	0	0	0	5	0	5	17
8:00 AM	1	0	0	1	0	0	0	0	0	8	0	8	9
8:15 AM	0	0	0	0	0	0	0	0	0	6	0	6	6
8:30 AM	0	0	0	0	0	0	0	0	0	4	0	4	4
8:45 AM	2	0	0	2	0	0	0	0	0	4	0	4	6
Total	3	0	0	3	0	0	0	0	0	22	0	22	25
Grand Total	15	0	0	15	0	0	0	0	0	27	0	27	42
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
Total %	35.7	0.0	0.0	35.7	0.0	0.0	0.0	0.0	0.0	64.3	0.0	64.3	
Exiting Leg Total				27				0				15	42

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

8:00 AM	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
8:00 AM	1	0	0	1	0	0	0	0	0	8	0	8	9
8:15 AM	0	0	0	0	0	0	0	0	0	6	0	6	6
8:30 AM	0	0	0	0	0	0	0	0	0	4	0	4	4
8:45 AM	2	0	0	2	0	0	0	0	0	4	0	4	6
Total Volume	3	0	0	3	0	0	0	0	0	22	0	22	25
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.375	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.688	0.000	0.688	0.694
Entering Leg	3	0	0	3	0	0	0	0	0	22	0	22	25
Exiting Leg				22				0				3	25
Total				25				0				25	50

PDI File #: **239766 B**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rostrons Liquors Exit Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Single-Unit Trucks**

	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:00 AM	2	0	0	2	0	0	0	0	0	5	0	5	7
7:15 AM	2	0	0	2	0	0	0	0	0	1	0	1	3
7:30 AM	5	0	0	5	0	0	0	0	0	2	0	2	7
7:45 AM	6	0	0	6	0	0	0	0	0	3	0	3	9
Total	15	0	0	15	0	0	0	0	0	11	0	11	26
8:00 AM	3	0	0	3	0	0	0	0	0	1	0	1	4
8:15 AM	5	0	0	5	0	1	0	1	0	4	0	4	10
8:30 AM	4	0	0	4	0	1	0	1	0	7	0	7	12
8:45 AM	2	0	0	2	0	0	0	0	0	2	0	2	4
Total	14	0	0	14	0	2	0	2	0	14	0	14	30
Grand Total	29	0	0	29	0	2	0	2	0	25	0	25	56
Approach %	100.0	0.0	0.0		0.0	100.0	0.0		0.0	100.0	0.0		
Total %	51.8	0.0	0.0	51.8	0.0	3.6	0.0	3.6	0.0	44.6	0.0	44.6	
Exiting Leg Total				25				0				31	56

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

7:45 AM	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:45 AM	6	0	0	6	0	0	0	0	0	3	0	3	9
8:00 AM	3	0	0	3	0	0	0	0	0	1	0	1	4
8:15 AM	5	0	0	5	0	1	0	1	0	4	0	4	10
8:30 AM	4	0	0	4	0	1	0	1	0	7	0	7	12
Total Volume	18	0	0	18	0	2	0	2	0	15	0	15	35
% Approach Total	100.0	0.0	0.0		0.0	100.0	0.0		0.0	100.0	0.0		
PHF	0.750	0.000	0.000	0.750	0.000	0.500	0.000	0.500	0.000	0.536	0.000	0.536	0.729
Entering Leg	18	0	0	18	0	2	0	2	0	15	0	15	35
Exiting Leg				15				0				20	35
Total				33				2				35	70

PDI File #: **239766 B**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rostrons Liquors Exit Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Articulated Trucks**

	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:00 AM	1	0	0	1	0	0	0	0	0	2	0	2	3
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
7:30 AM	2	0	0	2	0	0	0	0	0	2	0	2	4
7:45 AM	1	0	0	1	0	0	0	0	0	2	0	2	3
Total	4	0	0	4	0	0	0	0	0	7	0	7	11
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	3	0	0	3	0	0	0	0	0	1	0	1	4
8:30 AM	1	0	0	1	0	0	0	0	0	2	0	2	3
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	4	0	0	4	0	0	0	0	0	4	0	4	8
Grand Total	8	0	0	8	0	0	0	0	0	11	0	11	19
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
Total %	42.1	0.0	0.0	42.1	0.0	0.0	0.0	0.0	0.0	57.9	0.0	57.9	
Exiting Leg Total				11				0				8	19

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

7:00 AM	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
7:00 AM	1	0	0	1	0	0	0	0	0	2	0	2	3
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
7:30 AM	2	0	0	2	0	0	0	0	0	2	0	2	4
7:45 AM	1	0	0	1	0	0	0	0	0	2	0	2	3
Total Volume	4	0	0	4	0	0	0	0	0	7	0	7	11
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.500	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.875	0.000	0.875	0.688
Entering Leg	4	0	0	4	0	0	0	0	0	7	0	7	11
Exiting Leg				7				0				4	11
Total				11				0				11	22

PDI File #: **239766 B**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rostrons Liquors Exit Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **7:00 AM**
End Time: **9:00 AM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Bicycles (on Roadway and Crosswalks)

	Broadway (Route 28) from North						Rostrons Liquors Exit Driveway from East						Broadway (Route 28) from South						
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0	
Exiting Leg Total						1						0						0	1

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

7:00 AM	Broadway (Route 28) from North						Rostrons Liquors Exit Driveway from East						Broadway (Route 28) from South						
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.250
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Exiting Leg						1						0						0	1
Total						1						0						1	2

PDI File #: **239766 B**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rostrons Liquors Exit Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **7:00 AM**
End Time: **9:00 AM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

	Broadway (Route 28) from North						Rostrons Liquors Exit Driveway from East						Broadway (Route 28) from South						
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
Total	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	3	0	3	4
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	3	0	3	4
Approach %	0	0	0	100	0		0	0	0	0	0		0	0	0	100	0		
Total %	0	0	0	25	0	25	0	0	0	0	0	0	0	0	0	75	0	75	
Exiting Leg Total						1						0						3	4

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

7:00 AM	Broadway (Route 28) from North						Rostrons Liquors Exit Driveway from East						Broadway (Route 28) from South						
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
Total Volume	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	3	0	3	4
% Approach Total	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	100.0	0.0		
PHF	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.000	0.750	0.500
Entering Leg	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	3	0	3	4
Exiting Leg						1						0						3	4
Total						2						0						6	8

PDI File #: **239766 B**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rostrons Liquors Exit Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Cars and Heavy Vehicles (Combined)

	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	238	0	0	238	4	0	0	4	0	228	0	228	470
4:15 PM	241	0	0	241	6	1	0	7	0	260	0	260	508
4:30 PM	234	0	0	234	9	2	0	11	0	247	0	247	492
4:45 PM	214	0	0	214	5	0	0	5	0	284	0	284	503
Total	927	0	0	927	24	3	0	27	0	1019	0	1019	1973
5:00 PM	231	0	0	231	5	1	0	6	0	271	0	271	508
5:15 PM	241	0	0	241	5	2	0	7	0	241	0	241	489
5:30 PM	221	0	0	221	5	0	0	5	0	201	0	201	427
5:45 PM	213	1	0	214	2	2	0	4	1	245	0	246	464
Total	906	1	0	907	17	5	0	22	1	958	0	959	1888
Grand Total	1833	1	0	1834	41	8	0	49	1	1977	0	1978	3861
Approach %	99.9	0.1	0.0		83.7	16.3	0.0		0.1	99.9	0.0		
Total %	47.5	0.0	0.0	47.5	1.1	0.2	0.0	1.3	0.0	51.2	0.0	51.2	
Exiting Leg Total				2018				2				1841	3861
Cars	1823	1	0	1824	40	8	0	48	1	1924	0	1925	3797
% Cars	99.5	100.0	0.0	99.5	97.6	100.0	0.0	98.0	100.0	97.3	0.0	97.3	98.3
Exiting Leg Total				1964				2				1831	3797
Heavy Vehicles	10	0	0	10	1	0	0	1	0	53	0	53	64
% Heavy Vehicles	0.5	0.0	0.0	0.5	2.4	0.0	0.0	2.0	0.0	2.7	0.0	2.7	1.7
Exiting Leg Total				54				0				10	64

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

4:15 PM	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:15 PM	241	0	0	241	6	1	0	7	0	260	0	260	508
4:30 PM	234	0	0	234	9	2	0	11	0	247	0	247	492
4:45 PM	214	0	0	214	5	0	0	5	0	284	0	284	503
5:00 PM	231	0	0	231	5	1	0	6	0	271	0	271	508
Total Volume	920	0	0	920	25	4	0	29	0	1062	0	1062	2011
% Approach Total	100.0	0.0	0.0		86.2	13.8	0.0		0.0	100.0	0.0		
PHF	0.954	0.000	0.000	0.954	0.694	0.500	0.000	0.659	0.000	0.935	0.000	0.935	0.990
Cars	915	0	0	915	24	4	0	28	0	1031	0	1031	1974
Cars %	99.5	0.0	0.0	99.5	96.0	100.0	0.0	96.6	0.0	97.1	0.0	97.1	98.2
Heavy Vehicles	5	0	0	5	1	0	0	1	0	31	0	31	37
Heavy Vehicles %	0.5	0.0	0.0	0.5	4.0	0.0	0.0	3.4	0.0	2.9	0.0	2.9	1.8
Cars Enter Leg	915	0	0	915	24	4	0	28	0	1031	0	1031	1974
Heavy Enter Leg	5	0	0	5	1	0	0	1	0	31	0	31	37
Total Entering Leg	920	0	0	920	25	4	0	29	0	1062	0	1062	2011
Cars Exiting Leg				1055				0				919	1974
Heavy Exiting Leg				32				0				5	37
Total Exiting Leg				1087				0				924	2011

PDI File #: **239766 B**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rostrons Liquors Exit Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Cars**

	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	235	0	0	235	4	0	0	4	0	220	0	220	459
4:15 PM	239	0	0	239	6	1	0	7	0	253	0	253	499
4:30 PM	233	0	0	233	9	2	0	11	0	240	0	240	484
4:45 PM	213	0	0	213	5	0	0	5	0	276	0	276	494
Total	920	0	0	920	24	3	0	27	0	989	0	989	1936
5:00 PM	230	0	0	230	4	1	0	5	0	262	0	262	497
5:15 PM	241	0	0	241	5	2	0	7	0	236	0	236	484
5:30 PM	220	0	0	220	5	0	0	5	0	195	0	195	420
5:45 PM	212	1	0	213	2	2	0	4	1	242	0	243	460
Total	903	1	0	904	16	5	0	21	1	935	0	936	1861
Grand Total	1823	1	0	1824	40	8	0	48	1	1924	0	1925	3797
Approach %	99.9	0.1	0.0		83.3	16.7	0.0		0.1	99.9	0.0		
Total %	48.0	0.0	0.0	48.0	1.1	0.2	0.0	1.3	0.0	50.7	0.0	50.7	
Exiting Leg Total				1964				2				1831	3797

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

4:15 PM	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:15 PM	239	0	0	239	6	1	0	7	0	253	0	253	499
4:30 PM	233	0	0	233	9	2	0	11	0	240	0	240	484
4:45 PM	213	0	0	213	5	0	0	5	0	276	0	276	494
5:00 PM	230	0	0	230	4	1	0	5	0	262	0	262	497
Total Volume	915	0	0	915	24	4	0	28	0	1031	0	1031	1974
% Approach Total	100.0	0.0	0.0		85.7	14.3	0.0		0.0	100.0	0.0		
PHF	0.957	0.000	0.000	0.957	0.667	0.500	0.000	0.636	0.000	0.934	0.000	0.934	0.989
Entering Leg	915	0	0	915	24	4	0	28	0	1031	0	1031	1974
Exiting Leg				1055				0				919	1974
Total				1970				28				1950	3948

PDI File #: **239766 B**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rostrons Liquors Exit Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	3	0	0	3	0	0	0	0	0	8	0	8	11
4:15 PM	2	0	0	2	0	0	0	0	0	7	0	7	9
4:30 PM	1	0	0	1	0	0	0	0	0	7	0	7	8
4:45 PM	1	0	0	1	0	0	0	0	0	8	0	8	9
Total	7	0	0	7	0	0	0	0	0	30	0	30	37
5:00 PM	1	0	0	1	1	0	0	1	0	9	0	9	11
5:15 PM	0	0	0	0	0	0	0	0	0	5	0	5	5
5:30 PM	1	0	0	1	0	0	0	0	0	6	0	6	7
5:45 PM	1	0	0	1	0	0	0	0	0	3	0	3	4
Total	3	0	0	3	1	0	0	1	0	23	0	23	27
Grand Total	10	0	0	10	1	0	0	1	0	53	0	53	64
Approach %	100.0	0.0	0.0		100.0	0.0	0.0		0.0	100.0	0.0		
Total %	15.6	0.0	0.0	15.6	1.6	0.0	0.0	1.6	0.0	82.8	0.0	82.8	
Exiting Leg Total				54				0				10	64
Buses	1	0	0	1	0	0	0	0	0	32	0	32	33
% Buses	10.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	60.4	0.0	60.4	51.6
Exiting Leg Total				32				0				1	33
Single-Unit Trucks	7	0	0	7	1	0	0	1	0	16	0	16	24
% Single-Unit	70.0	0.0	0.0	70.0	100.0	0.0	0.0	100.0	0.0	30.2	0.0	30.2	37.5
Exiting Leg Total				17				0				7	24
Articulated Trucks	2	0	0	2	0	0	0	0	0	5	0	5	7
% Articulated	20.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	9.4	0.0	9.4	10.9
Exiting Leg Total				5				0				2	7

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

4:00 PM	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	3	0	0	3	0	0	0	0	0	8	0	8	11
4:15 PM	2	0	0	2	0	0	0	0	0	7	0	7	9
4:30 PM	1	0	0	1	0	0	0	0	0	7	0	7	8
4:45 PM	1	0	0	1	0	0	0	0	0	8	0	8	9
Total Volume	7	0	0	7	0	0	0	0	0	30	0	30	37
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.583	0.000	0.000	0.583	0.000	0.000	0.000	0.000	0.000	0.938	0.000	0.938	0.841
Buses	1	0	0	1	0	0	0	0	0	23	0	23	24
Buses %	14.3	0.0	0.0	14.3	0.0	0.0	0.0	0.0	0.0	76.7	0.0	76.7	64.9
Single-Unit Trucks	4	0	0	4	0	0	0	0	0	7	0	7	11
Single-Unit %	57.1	0.0	0.0	57.1	0.0	0.0	0.0	0.0	0.0	23.3	0.0	23.3	29.7
Articulated Trucks	2	0	0	2	0	0	0	0	0	0	0	0	2
Articulated %	28.6	0.0	0.0	28.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4
Buses	1	0	0	1	0	0	0	0	0	23	0	23	24
Single-Unit Trucks	4	0	0	4	0	0	0	0	0	7	0	7	11
Articulated Trucks	2	0	0	2	0	0	0	0	0	0	0	0	2
Total Entering Leg	7	0	0	7	0	0	0	0	0	30	0	30	37
Buses				23				0				1	24
Single-Unit Trucks				7				0				4	11
Articulated Trucks				0				0				2	2
Total Exiting Leg				30				0				7	37

PDI File #: **239766 B**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rostrons Liquors Exit Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Buses

	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	8	0	8	8
4:15 PM	0	0	0	0	0	0	0	0	0	5	0	5	5
4:30 PM	1	0	0	1	0	0	0	0	0	7	0	7	8
4:45 PM	0	0	0	0	0	0	0	0	0	3	0	3	3
Total	1	0	0	1	0	0	0	0	0	23	0	23	24
5:00 PM	0	0	0	0	0	0	0	0	0	6	0	6	6
5:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	0	0	0	9	0	9	9
Grand Total	1	0	0	1	0	0	0	0	0	32	0	32	33
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
Total %	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	97.0	0.0	97.0	
Exiting Leg Total				32				0				1	33

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

4:00 PM	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	8	0	8	8
4:15 PM	0	0	0	0	0	0	0	0	0	5	0	5	5
4:30 PM	1	0	0	1	0	0	0	0	0	7	0	7	8
4:45 PM	0	0	0	0	0	0	0	0	0	3	0	3	3
Total Volume	1	0	0	1	0	0	0	0	0	23	0	23	24
% Approach Total	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.719	0.000	0.719	0.750
Entering Leg	1	0	0	1	0	0	0	0	0	23	0	23	24
Exiting Leg				23				0				1	24
Total				24				0				24	48

PDI File #: **239766 B**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rostrons Liquors Exit Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Single-Unit Trucks

	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	2	0	0	2	0	0	0	0	0	0	0	0	2
4:15 PM	1	0	0	1	0	0	0	0	0	2	0	2	3
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	1	0	0	1	0	0	0	0	0	5	0	5	6
Total	4	0	0	4	0	0	0	0	0	7	0	7	11
5:00 PM	1	0	0	1	1	0	0	1	0	2	0	2	4
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
5:30 PM	1	0	0	1	0	0	0	0	0	5	0	5	6
5:45 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
Total	3	0	0	3	1	0	0	1	0	9	0	9	13
Grand Total	7	0	0	7	1	0	0	1	0	16	0	16	24
Approach %	100.0	0.0	0.0		100.0	0.0	0.0		0.0	100.0	0.0		
Total %	29.2	0.0	0.0	29.2	4.2	0.0	0.0	4.2	0.0	66.7	0.0	66.7	
Exiting Leg Total				17				0				7	24

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

4:45 PM	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:45 PM	1	0	0	1	0	0	0	0	0	5	0	5	6
5:00 PM	1	0	0	1	1	0	0	1	0	2	0	2	4
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
5:30 PM	1	0	0	1	0	0	0	0	0	5	0	5	6
Total Volume	3	0	0	3	1	0	0	1	0	13	0	13	17
% Approach Total	100.0	0.0	0.0		100.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.750	0.000	0.000	0.750	0.250	0.000	0.000	0.250	0.000	0.650	0.000	0.650	0.708
Entering Leg	3	0	0	3	1	0	0	1	0	13	0	13	17
Exiting Leg				14				0				3	17
Total				17				1				16	34

PDI File #: **239766 B**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rostrons Liquors Exit Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **4:00 PM**
End Time: **6:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Articulated Trucks

	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
4:00 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
4:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	0	0	2	0	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
5:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	2
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	0	0	0	5	0	5	5
Grand Total	2	0	0	2	0	0	0	0	0	5	0	5	7
Approach %	100.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
Total %	28.6	0.0	0.0	28.6	0.0	0.0	0.0	0.0	0.0	71.4	0.0	71.4	
Exiting Leg Total				5				0				2	7

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

5:00 PM	Broadway (Route 28) from North				Rostrons Liquors Exit Driveway from East				Broadway (Route 28) from South				
	Thru	Left	U-Turn	Total	Right	Left	U-Turn	Total	Right	Thru	U-Turn	Total	Total
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
5:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	2
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	0	0	0	0	0	5	0	5	5
% Approach Total	0.0	0.0	0.0		0.0	0.0	0.0		0.0	100.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.625	0.000	0.625	0.625
Entering Leg	0	0	0	0	0	0	0	0	0	5	0	5	5
Exiting Leg				5				0				0	5
Total				5				0				5	10

PDI File #: **239766 B**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rostrons Liquors Exit Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **4:00 PM**
End Time: **6:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

	Broadway (Route 28) from North						Rostrons Liquors Exit Driveway from East						Broadway (Route 28) from South						
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total						0						0						0	0

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

4:00 PM	Broadway (Route 28) from North						Rostrons Liquors Exit Driveway from East						Broadway (Route 28) from South						
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg						0						0						0	0
Total						0						0						0	0

PDI File #: **239766 B**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rostrons Liquors Exit Driveway**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **4:00 PM**
End Time: **6:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

	Broadway (Route 28) from North						Rostrons Liquors Exit Driveway from East						Broadway (Route 28) from South						
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	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	
Exiting Leg Total						0						0						0	0

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

4:00 PM	Broadway (Route 28) from North						Rostrons Liquors Exit Driveway from East						Broadway (Route 28) from South						
	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	U-Turn	CW-WB	CW-EB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg						0						0						0	0
Total						0						0						0	0

PDI File #: **239766 C**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rosewood Road W: Village Mall Entrance**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Saturday, January 6, 2024**
Start Time: **11:00 AM**
End Time: **2:00 PM**
Class:

Cars and Heavy Vehicles (Combined)

	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
11:00 AM	30	290	4	0	324	1	2	13	0	16	0	333	40	0	373	37	2	22	0	61	774
11:15 AM	29	310	1	0	340	5	4	24	0	33	1	301	43	0	345	38	4	16	0	58	776
11:30 AM	32	295	0	0	327	2	3	22	0	27	5	317	45	0	367	38	5	32	0	75	796
11:45 AM	19	314	0	0	333	1	4	29	0	34	5	312	44	0	361	32	7	20	0	59	787
Total	110	1209	5	0	1324	9	13	88	0	110	11	1263	172	0	1446	145	18	90	0	253	3133
12:00 PM	25	300	2	0	327	2	5	21	0	28	2	304	52	0	358	46	4	24	0	74	787
12:15 PM	28	308	1	0	337	2	2	24	0	28	4	349	28	0	381	32	2	22	0	56	802
12:30 PM	36	322	1	0	359	2	2	22	0	26	0	326	50	0	376	51	3	34	0	88	849
12:45 PM	26	344	1	0	371	1	1	24	0	26	3	311	35	0	349	43	6	19	0	68	814
Total	115	1274	5	0	1394	7	10	91	0	108	9	1290	165	0	1464	172	15	99	0	286	3252
1:00 PM	33	334	2	0	369	1	6	22	0	29	2	310	36	0	348	34	2	27	0	63	809
1:15 PM	23	344	1	0	368	0	6	15	0	21	1	282	42	0	325	43	4	34	0	81	795
1:30 PM	20	328	1	0	349	4	7	27	0	38	7	325	42	0	374	48	1	17	0	66	827
1:45 PM	33	328	0	0	361	0	1	19	0	20	0	350	27	0	377	34	3	1	0	38	796
Total	109	1334	4	0	1447	5	20	83	0	108	10	1267	147	0	1424	159	10	79	0	248	3227
Grand Total	334	3817	14	0	4165	21	43	262	0	326	30	3820	484	0	4334	476	43	268	0	787	9612
Approach %	8.0	91.6	0.3	0.0		6.4	13.2	80.4	0.0		0.7	88.1	11.2	0.0		60.5	5.5	34.1	0.0		
Total %	3.5	39.7	0.1	0.0	43.3	0.2	0.4	2.7	0.0	3.4	0.3	39.7	5.0	0.0	45.1	5.0	0.4	2.8	0.0	8.2	
Exiting Leg Total					4109					87					4555					861	9612
Cars	334	3789	14	0	4137	21	43	260	0	324	29	3805	478	0	4312	469	43	268	0	780	9553
% Cars	100.0	99.3	100.0	0.0	99.3	100.0	100.0	99.2	0.0	99.4	96.7	99.6	98.8	0.0	99.5	98.5	100.0	100.0	0.0	99.1	99.4
Exiting Leg Total					4094					86					4518					855	9553
Heavy Vehicles	0	28	0	0	28	0	0	2	0	2	1	15	6	0	22	7	0	0	0	7	59
% Heavy Vehicles	0.0	0.7	0.0	0.0	0.7	0.0	0.0	0.8	0.0	0.6	3.3	0.4	1.2	0.0	0.5	1.5	0.0	0.0	0.0	0.9	0.6
Exiting Leg Total					15					1					37					6	59

Peak Hour Analysis from 11:00 AM to 02:00 PM begins at:

12:15 PM	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
12:15 PM	28	308	1	0	337	2	2	24	0	28	4	349	28	0	381	32	2	22	0	56	802
12:30 PM	36	322	1	0	359	2	2	22	0	26	0	326	50	0	376	51	3	34	0	88	849
12:45 PM	26	344	1	0	371	1	1	24	0	26	3	311	35	0	349	43	6	19	0	68	814
1:00 PM	33	334	2	0	369	1	6	22	0	29	2	310	36	0	348	34	2	27	0	63	809
Total Volume	123	1308	5	0	1436	6	11	92	0	109	9	1296	149	0	1454	160	13	102	0	275	3274
% Approach Total	8.6	91.1	0.3	0.0		5.5	10.1	84.4	0.0		0.6	89.1	10.2	0.0		58.2	4.7	37.1	0.0		
PHF	0.854	0.951	0.625	0.000	0.968	0.750	0.458	0.958	0.000	0.940	0.563	0.928	0.745	0.000	0.954	0.784	0.542	0.750	0.000	0.781	0.964
Cars	123	1301	5	0	1429	6	11	91	0	108	9	1293	147	0	1449	157	13	102	0	272	3258
Cars %	100.0	99.5	100.0	0.0	99.5	100.0	100.0	98.9	0.0	99.1	100.0	99.8	98.7	0.0	99.7	98.1	100.0	100.0	0.0	98.9	99.5
Heavy Vehicles	0	7	0	0	7	0	0	1	0	1	0	3	2	0	5	3	0	0	0	3	16
Heavy Vehicles %	0.0	0.5	0.0	0.0	0.5	0.0	0.0	1.1	0.0	0.9	0.0	0.2	1.3	0.0	0.3	1.9	0.0	0.0	0.0	1.1	0.5
Cars Enter Leg	123	1301	5	0	1429	6	11	91	0	108	9	1293	147	0	1449	157	13	102	0	272	3258
Heavy Enter Leg	0	7	0	0	7	0	0	1	0	1	0	3	2	0	5	3	0	0	0	3	16
Total Entering Leg	123	1308	5	0	1436	6	11	92	0	109	9	1296	149	0	1454	160	13	102	0	275	3274
Cars Exiting Leg					1401					27					1549					281	3258
Heavy Exiting Leg					3					0					11					2	16
Total Exiting Leg					1404					27					1560					283	3274

PDI File #: **239766 C**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rosewood Road W: Village Mall Entrance**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Saturday, January 6, 2024**
Start Time: **11:00 AM**
End Time: **2:00 PM**
Class: **Cars**

	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
11:00 AM	30	288	4	0	322	1	2	13	0	16	0	332	40	0	372	36	2	22	0	60	770
11:15 AM	29	307	1	0	337	5	4	24	0	33	1	299	42	0	342	37	4	16	0	57	769
11:30 AM	32	294	0	0	326	2	3	22	0	27	4	316	44	0	364	37	5	32	0	74	791
11:45 AM	19	311	0	0	330	1	4	29	0	34	5	310	43	0	358	32	7	20	0	59	781
Total	110	1200	5	0	1315	9	13	88	0	110	10	1257	169	0	1436	142	18	90	0	250	3111
12:00 PM	25	298	2	0	325	2	5	21	0	28	2	304	52	0	358	46	4	24	0	74	785
12:15 PM	28	307	1	0	336	2	2	24	0	28	4	349	28	0	381	31	2	22	0	55	800
12:30 PM	36	319	1	0	356	2	2	22	0	26	0	325	48	0	373	49	3	34	0	86	841
12:45 PM	26	343	1	0	370	1	1	24	0	26	3	311	35	0	349	43	6	19	0	68	813
Total	115	1267	5	0	1387	7	10	91	0	108	9	1289	163	0	1461	169	15	99	0	283	3239
1:00 PM	33	332	2	0	367	1	6	21	0	28	2	308	36	0	346	34	2	27	0	63	804
1:15 PM	23	339	1	0	363	0	6	15	0	21	1	279	42	0	322	43	4	34	0	81	787
1:30 PM	20	326	1	0	347	4	7	26	0	37	7	323	41	0	371	47	1	17	0	65	820
1:45 PM	33	325	0	0	358	0	1	19	0	20	0	349	27	0	376	34	3	1	0	38	792
Total	109	1322	4	0	1435	5	20	81	0	106	10	1259	146	0	1415	158	10	79	0	247	3203
Grand Total	334	3789	14	0	4137	21	43	260	0	324	29	3805	478	0	4312	469	43	268	0	780	9553
Approach %	8.1	91.6	0.3	0.0		6.5	13.3	80.2	0.0		0.7	88.2	11.1	0.0		60.1	5.5	34.4	0.0		
Total %	3.5	39.7	0.1	0.0	43.3	0.2	0.5	2.7	0.0	3.4	0.3	39.8	5.0	0.0	45.1	4.9	0.5	2.8	0.0	8.2	
Exiting Leg Total					4094					86					4518					855	9553

Peak Hour Analysis from 11:00 AM to 02:00 PM begins at:

12:15 PM	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
12:15 PM	28	307	1	0	336	2	2	24	0	28	4	349	28	0	381	31	2	22	0	55	800
12:30 PM	36	319	1	0	356	2	2	22	0	26	0	325	48	0	373	49	3	34	0	86	841
12:45 PM	26	343	1	0	370	1	1	24	0	26	3	311	35	0	349	43	6	19	0	68	813
1:00 PM	33	332	2	0	367	1	6	21	0	28	2	308	36	0	346	34	2	27	0	63	804
Total Volume	123	1301	5	0	1429	6	11	91	0	108	9	1293	147	0	1449	157	13	102	0	272	3258
% Approach Total	8.6	91.0	0.3	0.0		5.6	10.2	84.3	0.0		0.6	89.2	10.1	0.0		57.7	4.8	37.5	0.0		
PHF	0.854	0.948	0.625	0.000	0.966	0.750	0.458	0.948	0.000	0.964	0.563	0.926	0.766	0.000	0.951	0.801	0.542	0.750	0.000	0.791	0.968
Entering Leg	123	1301	5	0	1429	6	11	91	0	108	9	1293	147	0	1449	157	13	102	0	272	3258
Exiting Leg					1401					27					1549					281	3258
Total					2830					135					2998					553	6516

PDI File #: **239766 C**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rosewood Road W: Village Mall Entrance**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Saturday, January 6, 2024**
Start Time: **11:00 AM**
End Time: **2:00 PM**
Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
11:00 AM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	4
11:15 AM	0	3	0	0	3	0	0	0	0	0	0	2	1	0	3	1	0	0	0	1	7
11:30 AM	0	1	0	0	1	0	0	0	0	0	1	1	1	0	3	1	0	0	0	1	5
11:45 AM	0	3	0	0	3	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	6
Total	0	9	0	0	9	0	0	0	0	0	1	6	3	0	10	3	0	0	0	3	22
12:00 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
12:30 PM	0	3	0	0	3	0	0	0	0	0	0	1	2	0	3	2	0	0	0	2	8
12:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	7	0	0	7	0	0	0	0	0	0	1	2	0	3	3	0	0	0	3	13
1:00 PM	0	2	0	0	2	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	5
1:15 PM	0	5	0	0	5	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	8
1:30 PM	0	2	0	0	2	0	0	1	0	1	0	2	1	0	3	1	0	0	0	1	7
1:45 PM	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	4
Total	0	12	0	0	12	0	0	2	0	2	0	8	1	0	9	1	0	0	0	1	24
Grand Total	0	28	0	0	28	0	0	2	0	2	1	15	6	0	22	7	0	0	0	7	59
Approach %	0.0	100.0	0.0	0.0		0.0	0.0	100.0	0.0		4.5	68.2	27.3	0.0		100.0	0.0	0.0	0.0		
Total %	0.0	47.5	0.0	0.0	47.5	0.0	0.0	3.4	0.0	3.4	1.7	25.4	10.2	0.0	37.3	11.9	0.0	0.0	0.0	11.9	
Exiting Leg Total					15					1					37					6	59
Buses	0	3	0	0	3	0	0	0	0	0	0	1	3	0	4	3	0	0	0	3	10
% Buses	0.0	10.7	0.0	0.0	10.7	0.0	0.0	0.0	0.0	0.0	0.0	6.7	50.0	0.0	18.2	42.9	0.0	0.0	0.0	42.9	16.9
Exiting Leg Total					1					0					6					3	10
Single-Unit Trucks	0	22	0	0	22	0	0	2	0	2	1	13	3	0	17	4	0	0	0	4	45
% Single-Unit	0.0	78.6	0.0	0.0	78.6	0.0	0.0	100.0	0.0	100.0	100.0	86.7	50.0	0.0	77.3	57.1	0.0	0.0	0.0	57.1	76.3
Exiting Leg Total					13					1					28					3	45
Articulated Trucks	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	4
% Articulated	0.0	10.7	0.0	0.0	10.7	0.0	0.0	0.0	0.0	0.0	0.0	6.7	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	6.8
Exiting Leg Total					1					0					3					0	4

Peak Hour Analysis from 11:00 AM to 02:00 PM begins at:

1:00 PM	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
1:00 PM	0	2	0	0	2	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	5
1:15 PM	0	5	0	0	5	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	8
1:30 PM	0	2	0	0	2	0	0	1	0	1	0	2	1	0	3	1	0	0	0	1	7
1:45 PM	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	4
Total Volume	0	12	0	0	12	0	0	2	0	2	0	8	1	0	9	1	0	0	0	1	24
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	100.0	0.0		0.0	88.9	11.1	0.0		100.0	0.0	0.0	0.0		
PHF	0.000	0.600	0.000	0.000	0.600	0.000	0.000	0.500	0.000	0.500	0.000	0.667	0.250	0.000	0.750	0.250	0.000	0.000	0.000	0.250	0.750
Buses	0	1	0	0	1	0	0	0	0	0	0	1	1	0	2	1	0	0	0	1	4
Buses %	0.0	8.3	0.0	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	12.5	100.0	0.0	22.2	100.0	0.0	0.0	0.0	100.0	16.7
Single-Unit Trucks	0	10	0	0	10	0	0	2	0	2	0	6	0	0	6	0	0	0	0	0	18
Single-Unit %	0.0	83.3	0.0	0.0	83.3	0.0	0.0	100.0	0.0	100.0	0.0	75.0	0.0	0.0	66.7	0.0	0.0	0.0	0.0	0.0	75.0
Articulated Trucks	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Articulated %	0.0	8.3	0.0	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	12.5	0.0	0.0	11.1	0.0	0.0	0.0	0.0	0.0	8.3
Buses	0	1	0	0	1	0	0	0	0	0	0	1	1	0	2	1	0	0	0	1	4
Single-Unit Trucks	0	10	0	0	10	0	0	2	0	2	0	6	0	0	6	0	0	0	0	0	18
Articulated Trucks	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Total Entering Leg	0	12	0	0	12	0	0	2	0	2	0	8	1	0	9	1	0	0	0	1	24
Buses					1					0					2					1	4
Single-Unit Trucks					6					0					12					0	18
Articulated Trucks					1					0					1					0	2
Total Exiting Leg					8					0					15					1	24

PDI File #: **239766 C**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rosewood Road W: Village Mall Entrance**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Saturday, January 6, 2024**
Start Time: **11:00 AM**
End Time: **2:00 PM**
Class: **Buses**

	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	2
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	2	0	0	2	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	4
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	2
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	2
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	2
1:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	1	0	0	1	0	0	0	0	0	0	1	1	0	2	1	0	0	0	1	4
Grand Total	0	3	0	0	3	0	0	0	0	0	0	1	3	0	4	3	0	0	0	3	10
Approach %	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	25.0	75.0	0.0		100.0	0.0	0.0	0.0		
Total %	0.0	30.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	30.0	0.0	40.0	30.0	0.0	0.0	0.0	30.0	
Exiting Leg Total					1					0					6					3	10

Peak Hour Analysis from 11:00 AM to 02:00 PM begins at:

11:00 AM	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	2
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total Volume	0	2	0	0	2	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	4
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0		100.0	0.0	0.0	0.0		
PHF	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.250	0.000	0.000	0.000	0.250	0.500
Entering Leg	0	2	0	0	2	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	4
Exiting Leg					0					0					3					1	4
Total					2					0					4					2	8

PDI File #: **239766 C**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rosewood Road W: Village Mall Entrance**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Saturday, January 6, 2024**
Start Time: **11:00 AM**
End Time: **2:00 PM**
Class: **Single-Unit Trucks**

	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
11:00 AM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	4
11:15 AM	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	5
11:30 AM	0	1	0	0	1	0	0	0	0	0	1	1	1	0	3	1	0	0	0	1	5
11:45 AM	0	1	0	0	1	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	4
Total	0	7	0	0	7	0	0	0	0	0	1	6	2	0	9	2	0	0	0	2	18
12:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
12:30 PM	0	3	0	0	3	0	0	0	0	0	0	1	1	0	2	1	0	0	0	1	6
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	5	0	0	5	0	0	0	0	0	0	1	1	0	2	2	0	0	0	2	9
1:00 PM	0	2	0	0	2	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	4
1:15 PM	0	4	0	0	4	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	7
1:30 PM	0	2	0	0	2	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	4
1:45 PM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
Total	0	10	0	0	10	0	0	2	0	2	0	6	0	0	6	0	0	0	0	0	18
Grand Total	0	22	0	0	22	0	0	2	0	2	1	13	3	0	17	4	0	0	0	4	45
Approach %	0.0	100.0	0.0	0.0		0.0	0.0	100.0	0.0		5.9	76.5	17.6	0.0		100.0	0.0	0.0	0.0		
Total %	0.0	48.9	0.0	0.0	48.9	0.0	0.0	4.4	0.0	4.4	2.2	28.9	6.7	0.0	37.8	8.9	0.0	0.0	0.0	8.9	
Exiting Leg Total					13					1					28					3	45

Peak Hour Analysis from 11:00 AM to 02:00 PM begins at:

11:00 AM	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
11:00 AM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	4
11:15 AM	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	5
11:30 AM	0	1	0	0	1	0	0	0	0	0	1	1	1	0	3	1	0	0	0	1	5
11:45 AM	0	1	0	0	1	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	4
Total Volume	0	7	0	0	7	0	0	0	0	0	1	6	2	0	9	2	0	0	0	2	18
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		11.1	66.7	22.2	0.0		100.0	0.0	0.0	0.0		
PHF	0.000	0.583	0.000	0.000	0.583	0.000	0.000	0.000	0.000	0.000	0.250	0.750	0.500	0.000	0.750	0.500	0.000	0.000	0.000	0.500	0.900
Entering Leg	0	7	0	0	7	0	0	0	0	0	1	6	2	0	9	2	0	0	0	2	18
Exiting Leg					6					1					9					2	18
Total					13					1					18					4	36

PDI File #: **239766 C**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rosewood Road W: Village Mall Entrance**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Saturday, January 6, 2024**
Start Time: **11:00 AM**
End Time: **2:00 PM**
Class: **Articulated Trucks**

	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Grand Total	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	4
Approach %	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	75.0	0.0	0.0	75.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total					1					0					3					0	4

Peak Hour Analysis from 11:00 AM to 02:00 PM begins at:

12:45 PM	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
12:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Total Volume	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.500	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.750
Entering Leg	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
Exiting Leg					1					0					2					0	3
Total					3					0					3					0	6

PDI File #: **239766 C**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rosewood Road W: Village Mall Entrance**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Saturday, January 6, 2024**
Start Time: **11:00 AM**
End Time: **2:00 PM**
Class:

Bicycles (on Roadway and Crosswalks)

	Broadway (Route 28) from North							Rosewood Road from East							Broadway (Route 28) from South							Village Mall Entrance from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	100.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	
Exiting Leg Total							0							0							0							1	1

Peak Hour Analysis from 11:00 AM to 02:00 PM begins at:

11:00 AM	Broadway (Route 28) from North							Rosewood Road from East							Broadway (Route 28) from South							Village Mall Entrance from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	100.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.250
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Exiting Leg							0							0							0							1	1
Total							0							0							0							2	2

PDI File #: **239766 C**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rosewood Road W: Village Mall Entrance**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Saturday, January 6, 2024**
Start Time: **11:00 AM**
End Time: **2:00 PM**
Class: **Pedestrians**

	Broadway (Route 28) from North							Rosewood Road from East							Broadway (Route 28) from South							Village Mall Entrance from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
11:00 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
11:45 AM	0	0	0	0	0	1	1	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	0	0	0	0	0	2	2	0	0	0	0	1	4	5	0	0	0	0	0	0	0	0	0	0	0	0	1	1	8
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
12:45 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	1	1	0	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
1:00 PM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	1	1	2	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Grand Total	0	0	0	0	1	4	5	0	0	0	0	3	6	9	0	0	0	0	0	0	0	0	0	0	0	0	1	1	15
Approach %	0	0	0	0	20	80		0	0	0	0	33.3	66.7		0	0	0	0	0	0		0	0	0	0	0	100		
Total %	0	0	0	0	6.67	26.7	33.3	0	0	0	0	20	40	60	0	0	0	0	0	0	0	0	0	0	0	0	6.67	6.67	
Exiting Leg Total							5							9							0							1	15

Peak Hour Analysis from 11:00 AM to 02:00 PM begins at:

11:00 AM	Broadway (Route 28) from North							Rosewood Road from East							Broadway (Route 28) from South							Village Mall Entrance from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
11:00 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
11:45 AM	0	0	0	0	0	1	1	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total Volume	0	0	0	0	0	2	2	0	0	0	0	1	4	5	0	0	0	0	0	0	0	0	0	0	0	0	1	1	8
% Approach Total	0.0	0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	20.0	80.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	100.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.500	0.500	0.000	0.000	0.000	0.000	0.250	0.500	0.417	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.667
Entering Leg	0	0	0	0	0	2	2	0	0	0	0	1	4	5	0	0	0	0	0	0	0	0	0	0	0	0	1	1	8
Exiting Leg							2							5							0							1	8
Total							4							10							0							2	16

PDI File #: **239766 C**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rosewood Road W: Village Mall Entrance**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **7:00 AM**
End Time: **9:00 AM**
Class: **Cars and Heavy Vehicles (Combined)**

	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	2	136	1	0	139	2	0	36	0	38	0	86	2	0	88	2	0	2	0	4	269
7:15 AM	2	133	1	0	136	3	0	32	0	35	2	87	9	0	98	5	0	1	0	6	275
7:30 AM	3	148	2	0	153	2	1	33	0	36	1	106	5	0	112	3	0	3	0	6	307
7:45 AM	5	178	0	0	183	3	2	56	0	61	3	130	5	0	138	6	0	2	0	8	390
Total	12	595	4	0	611	10	3	157	0	170	6	409	21	0	436	16	0	8	0	24	1241
8:00 AM	5	168	2	0	175	4	1	24	0	29	4	143	16	0	163	6	0	3	0	9	376
8:15 AM	5	130	0	0	135	4	1	27	0	32	2	133	19	0	154	5	0	5	0	10	331
8:30 AM	6	153	2	0	161	1	3	30	0	34	0	165	10	0	175	6	1	2	0	9	379
8:45 AM	6	174	1	0	181	2	0	21	0	23	2	166	17	0	185	7	2	4	0	13	402
Total	22	625	5	0	652	11	5	102	0	118	8	607	62	0	677	24	3	14	0	41	1488
Grand Total	34	1220	9	0	1263	21	8	259	0	288	14	1016	83	0	1113	40	3	22	0	65	2729
Approach %	2.7	96.6	0.7	0.0		7.3	2.8	89.9	0.0		1.3	91.3	7.5	0.0		61.5	4.6	33.8	0.0		
Total %	1.2	44.7	0.3	0.0	46.3	0.8	0.3	9.5	0.0	10.6	0.5	37.2	3.0	0.0	40.8	1.5	0.1	0.8	0.0	2.4	
Exiting Leg Total					1059					26					1519					125	2729
Cars	33	1163	9	0	1205	20	8	253	0	281	14	956	75	0	1045	33	3	22	0	58	2589
% Cars	97.1	95.3	100.0	0.0	95.4	95.2	100.0	97.7	0.0	97.6	100.0	94.1	90.4	0.0	93.9	82.5	100.0	100.0	0.0	89.2	94.9
Exiting Leg Total					998					26					1449					116	2589
Heavy Vehicles	1	57	0	0	58	1	0	6	0	7	0	60	8	0	68	7	0	0	0	7	140
% Heavy Vehicles	2.9	4.7	0.0	0.0	4.6	4.8	0.0	2.3	0.0	2.4	0.0	5.9	9.6	0.0	6.1	17.5	0.0	0.0	0.0	10.8	5.1
Exiting Leg Total					61					0					70					9	140

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

8:00 AM	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
8:00 AM	5	168	2	0	175	4	1	24	0	29	4	143	16	0	163	6	0	3	0	9	376
8:15 AM	5	130	0	0	135	4	1	27	0	32	2	133	19	0	154	5	0	5	0	10	331
8:30 AM	6	153	2	0	161	1	3	30	0	34	0	165	10	0	175	6	1	2	0	9	379
8:45 AM	6	174	1	0	181	2	0	21	0	23	2	166	17	0	185	7	2	4	0	13	402
Total Volume	22	625	5	0	652	11	5	102	0	118	8	607	62	0	677	24	3	14	0	41	1488
% Approach Total	3.4	95.9	0.8	0.0		9.3	4.2	86.4	0.0		1.2	89.7	9.2	0.0		58.5	7.3	34.1	0.0		
PHF	0.917	0.898	0.625	0.000	0.901	0.688	0.417	0.850	0.000	0.868	0.500	0.914	0.816	0.000	0.915	0.857	0.375	0.700	0.000	0.788	0.925
Cars	21	601	5	0	627	11	5	99	0	115	8	568	59	0	635	21	3	14	0	38	1415
Cars %	95.5	96.2	100.0	0.0	96.2	100.0	100.0	97.1	0.0	97.5	100.0	93.6	95.2	0.0	93.8	87.5	100.0	100.0	0.0	92.7	95.1
Heavy Vehicles	1	24	0	0	25	0	0	3	0	3	0	39	3	0	42	3	0	0	0	3	73
Heavy Vehicles %	4.5	3.8	0.0	0.0	3.8	0.0	0.0	2.9	0.0	2.5	0.0	6.4	4.8	0.0	6.2	12.5	0.0	0.0	0.0	7.3	4.9
Cars Enter Leg	21	601	5	0	627	11	5	99	0	115	8	568	59	0	635	21	3	14	0	38	1415
Heavy Enter Leg	1	24	0	0	25	0	0	3	0	3	0	39	3	0	42	3	0	0	0	3	73
Total Entering Leg	22	625	5	0	652	11	5	102	0	118	8	607	62	0	677	24	3	14	0	41	1488
Cars Exiting Leg					593					16					721					85	1415
Heavy Exiting Leg					39					0					30					4	73
Total Exiting Leg					632					16					751					89	1488

PDI File #: **239766 C**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rosewood Road W: Village Mall Entrance**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **7:00 AM**
End Time: **9:00 AM**
Class: **Cars**

	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	2	121	1	0	124	1	0	35	0	36	0	80	1	0	81	2	0	2	0	4	245
7:15 AM	2	131	1	0	134	3	0	31	0	34	2	85	7	0	94	3	0	1	0	4	266
7:30 AM	3	141	2	0	146	2	1	32	0	35	1	103	4	0	108	3	0	3	0	6	295
7:45 AM	5	169	0	0	174	3	2	56	0	61	3	120	4	0	127	4	0	2	0	6	368
Total	12	562	4	0	578	9	3	154	0	166	6	388	16	0	410	12	0	8	0	20	1174
8:00 AM	5	166	2	0	173	4	1	23	0	28	4	133	16	0	153	6	0	3	0	9	363
8:15 AM	4	120	0	0	124	4	1	25	0	30	2	123	17	0	142	5	0	5	0	10	306
8:30 AM	6	145	2	0	153	1	3	30	0	34	0	152	10	0	162	4	1	2	0	7	356
8:45 AM	6	170	1	0	177	2	0	21	0	23	2	160	16	0	178	6	2	4	0	12	390
Total	21	601	5	0	627	11	5	99	0	115	8	568	59	0	635	21	3	14	0	38	1415
Grand Total	33	1163	9	0	1205	20	8	253	0	281	14	956	75	0	1045	33	3	22	0	58	2589
Approach %	2.7	96.5	0.7	0.0		7.1	2.8	90.0	0.0		1.3	91.5	7.2	0.0		56.9	5.2	37.9	0.0		
Total %	1.3	44.9	0.3	0.0	46.5	0.8	0.3	9.8	0.0	10.9	0.5	36.9	2.9	0.0	40.4	1.3	0.1	0.8	0.0	2.2	
Exiting Leg Total					998					26					1449					116	2589

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

8:00 AM	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
8:00 AM	5	166	2	0	173	4	1	23	0	28	4	133	16	0	153	6	0	3	0	9	363
8:15 AM	4	120	0	0	124	4	1	25	0	30	2	123	17	0	142	5	0	5	0	10	306
8:30 AM	6	145	2	0	153	1	3	30	0	34	0	152	10	0	162	4	1	2	0	7	356
8:45 AM	6	170	1	0	177	2	0	21	0	23	2	160	16	0	178	6	2	4	0	12	390
Total Volume	21	601	5	0	627	11	5	99	0	115	8	568	59	0	635	21	3	14	0	38	1415
% Approach Total	3.3	95.9	0.8	0.0		9.6	4.3	86.1	0.0		1.3	89.4	9.3	0.0		55.3	7.9	36.8	0.0		
PHF	0.875	0.884	0.625	0.000	0.886	0.688	0.417	0.825	0.000	0.846	0.500	0.888	0.868	0.000	0.892	0.875	0.375	0.700	0.000	0.792	0.907
Entering Leg	21	601	5	0	627	11	5	99	0	115	8	568	59	0	635	21	3	14	0	38	1415
Exiting Leg					593					16					721					85	1415
Total					1220					131					1356					123	2830

PDI File #: **239766 C**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rosewood Road W: Village Mall Entrance**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **7:00 AM**
End Time: **9:00 AM**
Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	0	15	0	0	15	1	0	1	0	2	0	6	1	0	7	0	0	0	0	0	24
7:15 AM	0	2	0	0	2	0	0	1	0	1	0	2	2	0	4	2	0	0	0	2	9
7:30 AM	0	7	0	0	7	0	0	1	0	1	0	3	1	0	4	0	0	0	0	0	12
7:45 AM	0	9	0	0	9	0	0	0	0	0	0	10	1	0	11	2	0	0	0	2	22
Total	0	33	0	0	33	1	0	3	0	4	0	21	5	0	26	4	0	0	0	4	67
8:00 AM	0	2	0	0	2	0	0	1	0	1	0	10	0	0	10	0	0	0	0	0	13
8:15 AM	1	10	0	0	11	0	0	2	0	2	0	10	2	0	12	0	0	0	0	0	25
8:30 AM	0	8	0	0	8	0	0	0	0	0	0	13	0	0	13	2	0	0	0	2	23
8:45 AM	0	4	0	0	4	0	0	0	0	0	0	6	1	0	7	1	0	0	0	1	12
Total	1	24	0	0	25	0	0	3	0	3	0	39	3	0	42	3	0	0	0	3	73
Grand Total	1	57	0	0	58	1	0	6	0	7	0	60	8	0	68	7	0	0	0	7	140
Approach %	1.7	98.3	0.0	0.0		14.3	0.0	85.7	0.0		0.0	88.2	11.8	0.0		100.0	0.0	0.0	0.0		
Total %	0.7	40.7	0.0	0.0	41.4	0.7	0.0	4.3	0.0	5.0	0.0	42.9	5.7	0.0	48.6	5.0	0.0	0.0	0.0	5.0	
Exiting Leg Total					61					0					70					9	140
Buses	0	20	0	0	20	1	0	5	0	6	0	28	5	0	33	4	0	0	0	4	63
% Buses	0.0	35.1	0.0	0.0	34.5	100.0	0.0	83.3	0.0	85.7	0.0	46.7	62.5	0.0	48.5	57.1	0.0	0.0	0.0	57.1	45.0
Exiting Leg Total					29					0					29					5	63
Single-Unit Trucks	0	30	0	0	30	0	0	1	0	1	0	22	3	0	25	2	0	0	0	2	58
% Single-Unit	0.0	52.6	0.0	0.0	51.7	0.0	0.0	16.7	0.0	14.3	0.0	36.7	37.5	0.0	36.8	28.6	0.0	0.0	0.0	28.6	41.4
Exiting Leg Total					22					0					33					3	58
Articulated Trucks	1	7	0	0	8	0	0	0	0	0	0	10	0	0	10	1	0	0	0	1	19
% Articulated	100.0	12.3	0.0	0.0	13.8	0.0	0.0	0.0	0.0	0.0	0.0	16.7	0.0	0.0	14.7	14.3	0.0	0.0	0.0	14.3	13.6
Exiting Leg Total					10					0					8					1	19

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

7:45 AM	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:45 AM	0	9	0	0	9	0	0	0	0	0	0	10	1	0	11	2	0	0	0	2	22
8:00 AM	0	2	0	0	2	0	0	1	0	1	0	10	0	0	10	0	0	0	0	0	13
8:15 AM	1	10	0	0	11	0	0	2	0	2	0	10	2	0	12	0	0	0	0	0	25
8:30 AM	0	8	0	0	8	0	0	0	0	0	0	13	0	0	13	2	0	0	0	2	23
Total Volume	1	29	0	0	30	0	0	3	0	3	0	43	3	0	46	4	0	0	0	4	83
% Approach Total	3.3	96.7	0.0	0.0		0.0	0.0	100.0	0.0		0.0	93.5	6.5	0.0		100.0	0.0	0.0	0.0		
PHF	0.250	0.725	0.000	0.000	0.682	0.000	0.000	0.375	0.000	0.375	0.000	0.827	0.375	0.000	0.885	0.500	0.000	0.000	0.000	0.500	0.830
Buses	0	5	0	0	5	0	0	3	0	3	0	24	3	0	27	2	0	0	0	2	37
Buses %	0.0	17.2	0.0	0.0	16.7	0.0	0.0	100.0	0.0	100.0	0.0	55.8	100.0	0.0	58.7	50.0	0.0	0.0	0.0	50.0	44.6
Single-Unit Trucks	0	19	0	0	19	0	0	0	0	0	0	14	0	0	14	1	0	0	0	1	34
Single-Unit %	0.0	65.5	0.0	0.0	63.3	0.0	0.0	0.0	0.0	0.0	0.0	32.6	0.0	0.0	30.4	25.0	0.0	0.0	0.0	25.0	41.0
Articulated Trucks	1	5	0	0	6	0	0	0	0	0	0	5	0	0	5	1	0	0	0	1	12
Articulated %	100.0	17.2	0.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	11.6	0.0	0.0	10.9	25.0	0.0	0.0	0.0	25.0	14.5
Buses	0	5	0	0	5	0	0	3	0	3	0	24	3	0	27	2	0	0	0	2	37
Single-Unit Trucks	0	19	0	0	19	0	0	0	0	0	0	14	0	0	14	1	0	0	0	1	34
Articulated Trucks	1	5	0	0	6	0	0	0	0	0	0	5	0	0	5	1	0	0	0	1	12
Total Entering Leg	1	29	0	0	30	0	0	3	0	3	0	43	3	0	46	4	0	0	0	4	83
Buses					24					0					10					3	37
Single-Unit Trucks					14					0					20					0	34
Articulated Trucks					5					0					6					1	12
Total Exiting Leg					43					0					36					4	83

PDI File #: **239766 C**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rosewood Road W: Village Mall Entrance**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **7:00 AM**
End Time: **9:00 AM**
Class: **Buses**

	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	0	12	0	0	12	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	14
7:15 AM	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	1	0	0	0	1	3
7:30 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	1	0	0	1	0	0	0	0	0	0	5	1	0	6	1	0	0	0	1	8
Total	0	14	0	0	14	1	0	2	0	3	0	5	2	0	7	2	0	0	0	2	26
8:00 AM	0	1	0	0	1	0	0	1	0	1	0	9	0	0	9	0	0	0	0	0	11
8:15 AM	0	3	0	0	3	0	0	2	0	2	0	6	2	0	8	0	0	0	0	0	13
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	1	0	0	0	1	5
8:45 AM	0	2	0	0	2	0	0	0	0	0	0	4	1	0	5	1	0	0	0	1	8
Total	0	6	0	0	6	0	0	3	0	3	0	23	3	0	26	2	0	0	0	2	37
Grand Total	0	20	0	0	20	1	0	5	0	6	0	28	5	0	33	4	0	0	0	4	63
Approach %	0.0	100.0	0.0	0.0		16.7	0.0	83.3	0.0		0.0	84.8	15.2	0.0		100.0	0.0	0.0	0.0		
Total %	0.0	31.7	0.0	0.0	31.7	1.6	0.0	7.9	0.0	9.5	0.0	44.4	7.9	0.0	52.4	6.3	0.0	0.0	0.0	6.3	
Exiting Leg Total					29					0					29					5	63

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

7:45 AM	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:45 AM	0	1	0	0	1	0	0	0	0	0	0	5	1	0	6	1	0	0	0	1	8
8:00 AM	0	1	0	0	1	0	0	1	0	1	0	9	0	0	9	0	0	0	0	0	11
8:15 AM	0	3	0	0	3	0	0	2	0	2	0	6	2	0	8	0	0	0	0	0	13
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	1	0	0	0	1	5
Total Volume	0	5	0	0	5	0	0	3	0	3	0	24	3	0	27	2	0	0	0	2	37
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	100.0	0.0		0.0	88.9	11.1	0.0		100.0	0.0	0.0	0.0		
PHF	0.000	0.417	0.000	0.000	0.417	0.000	0.000	0.375	0.000	0.375	0.000	0.667	0.375	0.000	0.750	0.500	0.000	0.000	0.000	0.500	0.712
Entering Leg	0	5	0	0	5	0	0	3	0	3	0	24	3	0	27	2	0	0	0	2	37
Exiting Leg					24					0					10					3	37
Total					29					3					37					5	74

PDI File #: **239766 C**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rosewood Road W: Village Mall Entrance**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **7:00 AM**
End Time: **9:00 AM**
Class: **Single-Unit Trucks**

	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	0	2	0	0	2	0	0	0	0	0	0	4	1	0	5	0	0	0	0	0	7
7:15 AM	0	2	0	0	2	0	0	0	0	0	0	1	1	0	2	1	0	0	0	1	5
7:30 AM	0	5	0	0	5	0	0	1	0	1	0	2	1	0	3	0	0	0	0	0	9
7:45 AM	0	6	0	0	6	0	0	0	0	0	0	4	0	0	4	1	0	0	0	1	11
Total	0	15	0	0	15	0	0	1	0	1	0	11	3	0	14	2	0	0	0	2	32
8:00 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
8:15 AM	0	6	0	0	6	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	8
8:30 AM	0	6	0	0	6	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	13
8:45 AM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
Total	0	15	0	0	15	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	26
Grand Total	0	30	0	0	30	0	0	1	0	1	0	22	3	0	25	2	0	0	0	2	58
Approach %	0.0	100.0	0.0	0.0		0.0	0.0	100.0	0.0		0.0	88.0	12.0	0.0		100.0	0.0	0.0	0.0		
Total %	0.0	51.7	0.0	0.0	51.7	0.0	0.0	1.7	0.0	1.7	0.0	37.9	5.2	0.0	43.1	3.4	0.0	0.0	0.0	3.4	
Exiting Leg Total					22					0					33					3	58

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

7:45 AM	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:45 AM	0	6	0	0	6	0	0	0	0	0	0	4	0	0	4	1	0	0	0	1	11
8:00 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
8:15 AM	0	6	0	0	6	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	8
8:30 AM	0	6	0	0	6	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	13
Total Volume	0	19	0	0	19	0	0	0	0	0	0	14	0	0	14	1	0	0	0	1	34
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		100.0	0.0	0.0	0.0		
PHF	0.000	0.792	0.000	0.000	0.792	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.500	0.250	0.000	0.000	0.000	0.250	0.654
Entering Leg	0	19	0	0	19	0	0	0	0	0	0	14	0	0	14	1	0	0	0	1	34
Exiting Leg					14					0					20					0	34
Total					33					0					34					1	68

PDI File #: **239766 C**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rosewood Road W: Village Mall Entrance**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **7:00 AM**
End Time: **9:00 AM**
Class: **Articulated Trucks**

	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:00 AM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
7:30 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
7:45 AM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
Total	0	4	0	0	4	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	9
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	1	1	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4
8:30 AM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	5
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Total	1	3	0	0	4	0	0	0	0	0	0	5	0	0	5	1	0	0	0	1	10
Grand Total	1	7	0	0	8	0	0	0	0	0	0	10	0	0	10	1	0	0	0	1	19
Approach %	12.5	87.5	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		100.0	0.0	0.0	0.0		
Total %	5.3	36.8	0.0	0.0	42.1	0.0	0.0	0.0	0.0	0.0	0.0	52.6	0.0	0.0	52.6	5.3	0.0	0.0	0.0	5.3	
Exiting Leg Total					10					0					8					1	19

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

7:45 AM	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:45 AM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	1	1	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4
8:30 AM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	5
Total Volume	1	5	0	0	6	0	0	0	0	0	0	5	0	0	5	1	0	0	0	1	12
% Approach Total	16.7	83.3	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		100.0	0.0	0.0	0.0		
PHF	0.250	0.625	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.625	0.000	0.000	0.625	0.250	0.000	0.000	0.000	0.250	0.600
Entering Leg	1	5	0	0	6	0	0	0	0	0	0	5	0	0	5	1	0	0	0	1	12
Exiting Leg					5					0					6					1	12
Total					11					0					11					2	24

PDI File #: **239766 C**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rosewood Road W: Village Mall Entrance**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **7:00 AM**
End Time: **9:00 AM**
Class: **Bicycles (on Roadway and Crosswalks)**

	Broadway (Route 28) from North							Rosewood Road from East							Broadway (Route 28) from South							Village Mall Entrance from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0	0	0	0	0	0	0	2
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	50.0	50.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	50.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total							1							0							0							1	2

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

7:00 AM	Broadway (Route 28) from North							Rosewood Road from East							Broadway (Route 28) from South							Village Mall Entrance from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1
Exiting Leg							1							0							0							0	1
Total							1							0							1							0	2

PDI File #: **239766 C**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rosewood Road W: Village Mall Entrance**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **7:00 AM**
End Time: **9:00 AM**
Class: **Pedestrians**

	Broadway (Route 28) from North							Rosewood Road from East							Broadway (Route 28) from South							Village Mall Entrance from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0	0	0	0	0	0		0	0	0	0	0	0		0	0	0	0	0	0		0	0	0	0	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Exiting Leg Total							0							0							0							0	0

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

7:00 AM	Broadway (Route 28) from North							Rosewood Road from East							Broadway (Route 28) from South							Village Mall Entrance from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg							0							0							0							0	0
Total							0							0							0							0	0

PDI File #: **239766 C**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rosewood Road W: Village Mall Entrance**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **4:00 PM**
End Time: **6:00 PM**
Class: **Cars and Heavy Vehicles (Combined)**

	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	12	220	2	0	234	3	1	10	0	14	4	222	17	0	243	28	0	7	0	35	526
4:15 PM	11	235	0	0	246	2	0	27	1	30	3	251	18	1	273	19	4	5	0	28	577
4:30 PM	9	215	2	0	226	3	0	23	0	26	1	221	24	0	246	20	3	8	0	31	529
4:45 PM	11	205	1	0	217	1	1	24	0	26	2	264	17	0	283	27	1	11	0	39	565
Total	43	875	5	0	923	9	2	84	1	96	10	958	76	1	1045	94	8	31	0	133	2197
5:00 PM	9	214	0	0	223	2	0	19	0	21	1	268	26	0	295	26	0	4	0	30	569
5:15 PM	15	236	2	0	253	0	3	25	0	28	1	235	22	0	258	14	2	5	0	21	560
5:30 PM	8	202	1	0	211	1	2	18	0	21	3	195	21	0	219	21	0	13	0	34	485
5:45 PM	13	215	1	0	229	1	0	13	0	14	2	240	15	0	257	10	2	5	0	17	517
Total	45	867	4	0	916	4	5	75	0	84	7	938	84	0	1029	71	4	27	0	102	2131
Grand Total	88	1742	9	0	1839	13	7	159	1	180	17	1896	160	1	2074	165	12	58	0	235	4328
Approach %	4.8	94.7	0.5	0.0		7.2	3.9	88.3	0.6		0.8	91.4	7.7	0.0		70.2	5.1	24.7	0.0		
Total %	2.0	40.2	0.2	0.0	42.5	0.3	0.2	3.7	0.0	4.2	0.4	43.8	3.7	0.0	47.9	3.8	0.3	1.3	0.0	5.4	
Exiting Leg Total					1967					39					2067					255	4328
Cars	88	1734	9	0	1831	13	7	159	1	180	17	1847	155	1	2020	162	12	58	0	232	4263
% Cars	100.0	99.5	100.0	0.0	99.6	100.0	100.0	100.0	100.0	100.0	100.0	97.4	96.9	100.0	97.4	98.2	100.0	100.0	0.0	98.7	98.5
Exiting Leg Total					1918					39					2056					250	4263
Heavy Vehicles	0	8	0	0	8	0	0	0	0	0	0	49	5	0	54	3	0	0	0	3	65
% Heavy Vehicles	0.0	0.5	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	2.6	3.1	0.0	2.6	1.8	0.0	0.0	0.0	1.3	1.5
Exiting Leg Total					49					0					11					5	65

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

4:15 PM	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:15 PM	11	235	0	0	246	2	0	27	1	30	3	251	18	1	273	19	4	5	0	28	577
4:30 PM	9	215	2	0	226	3	0	23	0	26	1	221	24	0	246	20	3	8	0	31	529
4:45 PM	11	205	1	0	217	1	1	24	0	26	2	264	17	0	283	27	1	11	0	39	565
5:00 PM	9	214	0	0	223	2	0	19	0	21	1	268	26	0	295	26	0	4	0	30	569
Total Volume	40	869	3	0	912	8	1	93	1	103	7	1004	85	1	1097	92	8	28	0	128	2240
% Approach Total	4.4	95.3	0.3	0.0		7.8	1.0	90.3	1.0		0.6	91.5	7.7	0.1		71.9	6.3	21.9	0.0		
PHF	0.909	0.924	0.375	0.000	0.927	0.667	0.250	0.861	0.250	0.858	0.583	0.937	0.817	0.250	0.930	0.852	0.500	0.636	0.000	0.821	0.971
Cars	40	866	3	0	909	8	1	93	1	103	7	974	82	1	1064	90	8	28	0	126	2202
Cars %	100.0	99.7	100.0	0.0	99.7	100.0	100.0	100.0	100.0	100.0	100.0	97.0	96.5	100.0	97.0	97.8	100.0	100.0	0.0	98.4	98.3
Heavy Vehicles	0	3	0	0	3	0	0	0	0	0	0	30	3	0	33	2	0	0	0	2	38
Heavy Vehicles %	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.5	0.0	3.0	2.2	0.0	0.0	0.0	1.6	1.7
Cars Enter Leg	40	866	3	0	909	8	1	93	1	103	7	974	82	1	1064	90	8	28	0	126	2202
Heavy Enter Leg	0	3	0	0	3	0	0	0	0	0	0	30	3	0	33	2	0	0	0	2	38
Total Entering Leg	40	869	3	0	912	8	1	93	1	103	7	1004	85	1	1097	92	8	28	0	128	2240
Cars Exiting Leg					1010					19					1050					123	2202
Heavy Exiting Leg					30					0					5					3	38
Total Exiting Leg					1040					19					1055					126	2240

PDI File #: **239766 C**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rosewood Road W: Village Mall Entrance**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **4:00 PM**
End Time: **6:00 PM**
Class: **Cars**

	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	12	217	2	0	231	3	1	10	0	14	4	213	17	0	234	28	0	7	0	35	514
4:15 PM	11	233	0	0	244	2	0	27	1	30	3	246	16	1	266	18	4	5	0	27	567
4:30 PM	9	214	2	0	225	3	0	23	0	26	1	214	24	0	239	20	3	8	0	31	521
4:45 PM	11	205	1	0	217	1	1	24	0	26	2	255	17	0	274	26	1	11	0	38	555
Total	43	869	5	0	917	9	2	84	1	96	10	928	74	1	1013	92	8	31	0	131	2157
5:00 PM	9	214	0	0	223	2	0	19	0	21	1	259	25	0	285	26	0	4	0	30	559
5:15 PM	15	236	2	0	253	0	3	25	0	28	1	231	21	0	253	13	2	5	0	20	554
5:30 PM	8	201	1	0	210	1	2	18	0	21	3	192	21	0	216	21	0	13	0	34	481
5:45 PM	13	214	1	0	228	1	0	13	0	14	2	237	14	0	253	10	2	5	0	17	512
Total	45	865	4	0	914	4	5	75	0	84	7	919	81	0	1007	70	4	27	0	101	2106
Grand Total	88	1734	9	0	1831	13	7	159	1	180	17	1847	155	1	2020	162	12	58	0	232	4263
Approach %	4.8	94.7	0.5	0.0		7.2	3.9	88.3	0.6		0.8	91.4	7.7	0.0		69.8	5.2	25.0	0.0		
Total %	2.1	40.7	0.2	0.0	43.0	0.3	0.2	3.7	0.0	4.2	0.4	43.3	3.6	0.0	47.4	3.8	0.3	1.4	0.0	5.4	
Exiting Leg Total					1918					39					2056					250	4263

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

4:15 PM	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:15 PM	11	233	0	0	244	2	0	27	1	30	3	246	16	1	266	18	4	5	0	27	567
4:30 PM	9	214	2	0	225	3	0	23	0	26	1	214	24	0	239	20	3	8	0	31	521
4:45 PM	11	205	1	0	217	1	1	24	0	26	2	255	17	0	274	26	1	11	0	38	555
5:00 PM	9	214	0	0	223	2	0	19	0	21	1	259	25	0	285	26	0	4	0	30	559
Total Volume	40	866	3	0	909	8	1	93	1	103	7	974	82	1	1064	90	8	28	0	126	2202
% Approach Total	4.4	95.3	0.3	0.0		7.8	1.0	90.3	1.0		0.7	91.5	7.7	0.1		71.4	6.3	22.2	0.0		
PHF	0.909	0.929	0.375	0.000	0.931	0.667	0.250	0.861	0.250	0.858	0.583	0.940	0.820	0.250	0.933	0.865	0.500	0.636	0.000	0.829	0.971
Entering Leg	40	866	3	0	909	8	1	93	1	103	7	974	82	1	1064	90	8	28	0	126	2202
Exiting Leg					1010					19					1050					123	2202
Total					1919					122					2114					249	4404

PDI File #: **239766 C**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rosewood Road W: Village Mall Entrance**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **4:00 PM**
End Time: **6:00 PM**
Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	3	0	0	3	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	12
4:15 PM	0	2	0	0	2	0	0	0	0	0	0	5	2	0	7	1	0	0	0	1	10
4:30 PM	0	1	0	0	1	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	8
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	9	0	0	9	1	0	0	0	1	10
Total	0	6	0	0	6	0	0	0	0	0	0	30	2	0	32	2	0	0	0	2	40
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	9	1	0	10	0	0	0	0	0	10
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	4	1	0	5	1	0	0	0	1	6
5:30 PM	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	4
5:45 PM	0	1	0	0	1	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	5
Total	0	2	0	0	2	0	0	0	0	0	0	19	3	0	22	1	0	0	0	1	25
Grand Total	0	8	0	0	8	0	0	0	0	0	0	49	5	0	54	3	0	0	0	3	65
Approach %	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	90.7	9.3	0.0		100.0	0.0	0.0	0.0		
Total %	0.0	12.3	0.0	0.0	12.3	0.0	0.0	0.0	0.0	0.0	0.0	75.4	7.7	0.0	83.1	4.6	0.0	0.0	0.0	4.6	
Exiting Leg Total					49					0					11					5	65
Buses	0	1	0	0	1	0	0	0	0	0	0	32	5	0	37	2	0	0	0	2	40
% Buses	0.0	12.5	0.0	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.0	65.3	100.0	0.0	68.5	66.7	0.0	0.0	0.0	66.7	61.5
Exiting Leg Total					32					0					3					5	40
Single-Unit Trucks	0	5	0	0	5	0	0	0	0	0	0	10	0	0	10	1	0	0	0	1	16
% Single-Unit	0.0	62.5	0.0	0.0	62.5	0.0	0.0	0.0	0.0	0.0	0.0	20.4	0.0	0.0	18.5	33.3	0.0	0.0	0.0	33.3	24.6
Exiting Leg Total					10					0					6					0	16
Articulated Trucks	0	2	0	0	2	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	9
% Articulated	0.0	25.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	14.3	0.0	0.0	13.0	0.0	0.0	0.0	0.0	0.0	13.8
Exiting Leg Total					7					0					2					0	9

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

4:00 PM	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	3	0	0	3	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	12
4:15 PM	0	2	0	0	2	0	0	0	0	0	0	5	2	0	7	1	0	0	0	1	10
4:30 PM	0	1	0	0	1	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	8
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	9	0	0	9	1	0	0	0	1	10
Total Volume	0	6	0	0	6	0	0	0	0	0	0	30	2	0	32	2	0	0	0	2	40
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	93.8	6.3	0.0		100.0	0.0	0.0	0.0		
PHF	0.000	0.500	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.833	0.250	0.000	0.889	0.500	0.000	0.000	0.000	0.500	0.833
Buses	0	1	0	0	1	0	0	0	0	0	0	23	2	0	25	2	0	0	0	2	28
Buses %	0.0	16.7	0.0	0.0	16.7	0.0	0.0	0.0	0.0	0.0	0.0	76.7	100.0	0.0	78.1	100.0	0.0	0.0	0.0	100.0	70.0
Single-Unit Trucks	0	3	0	0	3	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	9
Single-Unit %	0.0	50.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	18.8	0.0	0.0	0.0	0.0	0.0	22.5
Articulated Trucks	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
Articulated %	0.0	33.3	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	7.5
Buses	0	1	0	0	1	0	0	0	0	0	0	23	2	0	25	2	0	0	0	2	28
Single-Unit Trucks	0	3	0	0	3	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	9
Articulated Trucks	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
Total Entering Leg	0	6	0	0	6	0	0	0	0	0	0	30	2	0	32	2	0	0	0	2	40
Buses					23					0					3					2	28
Single-Unit Trucks					6					0					3					0	9
Articulated Trucks					1					0					2					0	3
Total Exiting Leg					30					0					8					2	40

PDI File #: **239766 C**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rosewood Road W: Village Mall Entrance**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **4:00 PM**
End Time: **6:00 PM**
Class: **Buses**

	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	9
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	4	2	0	6	1	0	0	0	1	7
4:30 PM	0	1	0	0	1	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	8
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	1	0	0	0	1	4
Total	0	1	0	0	1	0	0	0	0	0	0	23	2	0	25	2	0	0	0	2	28
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	6	1	0	7	0	0	0	0	0	7
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	2
Total	0	0	0	0	0	0	0	0	0	0	0	9	3	0	12	0	0	0	0	0	12
Grand Total	0	1	0	0	1	0	0	0	0	0	0	32	5	0	37	2	0	0	0	2	40
Approach %	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	86.5	13.5	0.0		100.0	0.0	0.0	0.0		
Total %	0.0	2.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	80.0	12.5	0.0	92.5	5.0	0.0	0.0	0.0	5.0	
Exiting Leg Total					32					0					3					5	40

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

4:00 PM	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	9
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	4	2	0	6	1	0	0	0	1	7
4:30 PM	0	1	0	0	1	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	8
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	1	0	0	0	1	4
Total Volume	0	1	0	0	1	0	0	0	0	0	0	23	2	0	25	2	0	0	0	2	28
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	92.0	8.0	0.0		100.0	0.0	0.0	0.0		
PHF	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.639	0.250	0.000	0.694	0.500	0.000	0.000	0.000	0.500	0.778
Entering Leg	0	1	0	0	1	0	0	0	0	0	0	23	2	0	25	2	0	0	0	2	28
Exiting Leg					23					0					3					2	28
Total					24					0					28					4	56

PDI File #: **239766 C**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rosewood Road W: Village Mall Entrance**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **4:00 PM**
End Time: **6:00 PM**
Class: **Single-Unit Trucks**

	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	5
Total	0	3	0	0	3	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	9
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
5:30 PM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
5:45 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Total	0	2	0	0	2	0	0	0	0	0	0	4	0	0	4	1	0	0	0	1	7
Grand Total	0	5	0	0	5	0	0	0	0	0	0	10	0	0	10	1	0	0	0	1	16
Approach %	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		100.0	0.0	0.0	0.0		
Total %	0.0	31.3	0.0	0.0	31.3	0.0	0.0	0.0	0.0	0.0	0.0	62.5	0.0	0.0	62.5	6.3	0.0	0.0	0.0	6.3	
Exiting Leg Total					10					0					6					0	16

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

4:45 PM	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	5
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
5:30 PM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
Total Volume	0	1	0	0	1	0	0	0	0	0	0	8	0	0	8	1	0	0	0	1	10
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		100.0	0.0	0.0	0.0		
PHF	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.400	0.000	0.000	0.400	0.250	0.000	0.000	0.000	0.250	0.500
Entering Leg	0	1	0	0	1	0	0	0	0	0	0	8	0	0	8	1	0	0	0	1	10
Exiting Leg					8					0					2					0	10
Total					9					0					10					1	20

PDI File #: **239766 C**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rosewood Road W: Village Mall Entrance**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **4:00 PM**
End Time: **6:00 PM**
Class: **Articulated Trucks**

	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Total	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	6
Grand Total	0	2	0	0	2	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	9
Approach %	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	22.2	0.0	0.0	22.2	0.0	0.0	0.0	0.0	0.0	0.0	77.8	0.0	0.0	77.8	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total					7					0					2					0	9

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

4:45 PM	Broadway (Route 28) from North					Rosewood Road from East					Broadway (Route 28) from South					Village Mall Entrance from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	6
% Approach Total	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.750
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	6
Exiting Leg					6					0					0					0	6
Total					6					0					6					0	12

PDI File #: **239766 C**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rosewood Road W: Village Mall Entrance**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **4:00 PM**
End Time: **6:00 PM**
Class: **Bicycles (on Roadway and Crosswalks)**

	Broadway (Route 28) from North							Rosewood Road from East							Broadway (Route 28) from South							Village Mall Entrance from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total							0							0							0							0	0

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

4:00 PM	Broadway (Route 28) from North							Rosewood Road from East							Broadway (Route 28) from South							Village Mall Entrance from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg							0							0							0							0	0
Total							0							0							0							0	0

PDI File #: **239766 C**
Location: **N: Broadway (Route 28) S: Broadway (Route 28)**
Location: **E: Rosewood Road W: Village Mall Entrance**
City, State: **Methuen, MA**
Client: **GPI/S. Theriault**
Site Code: **NEX-2021347**
Count Date: **Tuesday, January 9, 2024**
Start Time: **4:00 PM**
End Time: **6:00 PM**
Class: **Pedestrians**

	Broadway (Route 28) from North							Rosewood Road from East							Broadway (Route 28) from South							Village Mall Entrance from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Approach %	0	0	0	0	100	0		0	0	0	0	0	0		0	0	0	0	0	0		0	0	0	0	0	0		
Total %	0	0	0	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Exiting Leg Total							2							0							0							0	2

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

4:00 PM	Broadway (Route 28) from North							Rosewood Road from East							Broadway (Route 28) from South							Village Mall Entrance from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:00 PM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
% Approach Total	0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.500	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
Entering Leg	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Exiting Leg							2							0							0							0	2
Total							4							0							0							0	4

TRAFFIC-VOLUME ADJUSTMENT DATA

Year 2019 Monthly Data

Town: Windham
Station: 02489001
Location: NH 28 at Derry TL (north of Northland Rd)
Group: 4

Month	ADT	Adjustment to Average	Adjustment to Peak
January	9,743	1.052	1.144
February	9,890	1.036	1.127
March	10,191	1.005	1.094
April	10,815	0.947	1.031
May	11,145	0.919	1.000
June	11,111	0.922	1.003
July	10,966	0.934	1.016
August	10,848	0.945	1.027
September	10,650	0.962	1.046
October	10,289	0.996	1.083
November	8,674	1.181	1.285
December	8,628	1.188	1.292

AADT: 10,246
Peak Month: 11,145

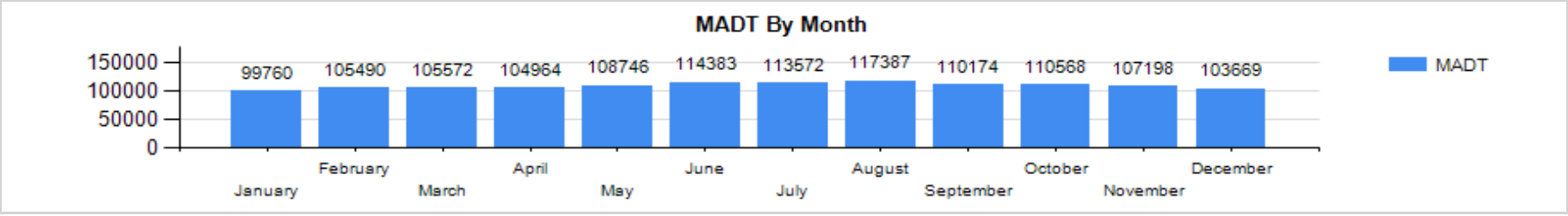
ADT by Day of Week by Month for 1/1/2016 - 12/31/2016
Criteria: Location ID = 5096, From 1/1/1900 To 12/31/2049 12:00:00 AM

District
Community Methuen
County Essex
Factor Group U1-Essex

Location ID 5096
Direction 2-WAY
RoadBed ML

Located On INTERSTATE 93
AADT 108469
Collection Type HPMS
Functional Class (1) Interstate

	Average Daily Number of Vehicles							Avg. Day (Mon-Sun)	Avg. Day as % of Year Avg.	Avg. Weekday (Mon-Thu)	Avg. Day as % of Avg. Weekday (Mon-Thu)	Avg. Weekday (Mon-Fri)	Avg. Day as % of Avg. Weekday (Mon-Fri)	Avg. Day (Mon-Sat)	
	Sun	Mon	Tue	Wed	Thu	Fri	Sat								
JAN	80,272	101,542	107,743	107,148	108,436	103,347	89,833	99,760	91.98%	106,217	93.92%	105,643	94.43%	103,008	7.6%
FEB	95,244	98,820	101,201	105,408	111,210	115,225	111,330	105,490	97.26%	104,160	101.28%	106,373	99.17%	107,199	3.4%
MAR	92,205	101,390	104,546	106,668	110,292	116,995	106,914	105,572	97.34%	105,724	99.86%	107,978	97.77%	107,801	2.8%
APR	86,800	99,574	104,729	110,161	110,182	117,267	106,043	104,964	96.78%	106,162	98.87%	108,383	96.85%	107,993	2.6%
MAY	93,702	102,092	108,916	110,410	115,023	120,261	110,825	108,746	100.27%	109,110	99.67%	111,340	97.67%	111,255	-0.4%
JUN	100,605	112,215	113,600	115,046	119,899	124,864	114,457	114,383	105.46%	115,190	99.30%	117,125	97.66%	116,680	-5.0%
JUL	100,034	105,634	115,131	117,191	120,133	124,741	112,144	113,572	104.72%	114,522	99.17%	116,566	97.43%	115,829	-4.3%
AUG	104,894	116,639	115,761	117,577	123,436	127,218	116,192	117,387	108.23%	118,353	99.18%	120,126	97.72%	119,471	-7.2%
SEP	97,838	102,943	108,295	110,613	116,008	123,251	112,275	110,174	101.58%	109,465	100.65%	112,222	98.18%	112,231	-1.2%
OCT	94,707	108,951	109,571	111,724	113,452	121,631	113,945	110,568	101.95%	110,925	99.68%	113,066	97.79%	113,212	-2.1%
NOV	91,227	107,728	107,725	109,808	108,843	118,204	106,860	107,198	98.84%	108,526	98.78%	110,462	97.05%	109,861	0.9%
DEC	92,393	88,802	105,110	104,297	110,852	115,318	108,920	103,669	95.59%	102,265	101.37%	104,876	98.85%	105,550	5.0%
Year	**94,160**	**103,861**	**108,527**	**110,504**	**113,981**	**119,027**	**109,145**	**108,457**		**109,218**	99.30%	**111,180**	97.55%	**110,841**	



NOTE: VALUES ARE ROUNDED; TOTALS AND PERCENTS MAY NOT ADD UP.

Massachusetts Highway Department

Statewide Traffic Data Collection

2019 Weekday Seasonal Factors

Factor Group	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Axle Factor
R1	1.22	1.14	1.12	1.06	1.00	0.96	0.87	0.85	0.96	0.99	1.04	1.12	0.85
R2	0.95	0.96	0.98	0.97	0.97	0.93	0.97	0.94	0.96	0.90	0.92	0.93	0.96
R3	1.15	1.06	1.07	1.00	0.89	0.88	0.89	0.89	0.95	0.92	1.02	1.01	0.97
R4-R7	1.09	1.09	1.11	1.02	0.96	0.92	0.89	0.89	0.99	0.98	1.09	1.13	0.98
U1-Boston	1.03	1.01	0.98	0.94	0.94	0.92	0.95	0.93	0.94	0.94	0.97	1.04	0.96
U1-Essex	1.09	1.06	1.03	0.99	0.94	0.90	0.88	0.86	0.93	0.94	0.99	1.06	0.93
U1-Southeast	1.06	1.05	1.01	0.97	0.95	0.93	0.93	0.90	0.94	0.94	0.98	1.04	0.98
U1-West	1.19	1.14	1.09	0.95	0.92	0.89	0.89	0.86	0.91	0.95	0.97	1.07	0.84
U1-Worcester	1.02	1.04	0.97	0.94	0.93	0.91	0.95	0.91	0.93	0.92	0.95	1.10	0.88
U2	1.01	1.00	0.94	0.93	0.91	0.89	0.93	0.90	0.90	0.91	0.94	1.02	0.99
U3	1.06	1.03	0.98	0.94	0.93	0.91	0.95	0.91	0.92	0.93	0.97	1.00	0.98
U4-U7	1.01	1.00	0.95	0.92	0.88	0.86	0.92	0.91	0.92	0.94	0.99	1.04	0.99
Rec - East	1.04	1.16	1.12	0.98	0.92	0.88	0.77	0.81	0.94	1.02	1.08	1.12	0.99
Rec - West	1.30	1.23	1.32	1.18	0.95	0.82	0.70	0.69	0.97	0.96	1.16	1.15	0.98

Round off:
0-999 = 10
>1000 = 100

U = Urban
R = Rural

1 - Interstate
2 - Freeway and Expressway
3 - Other Principal Arterial
4 - Minor Arterial
5 - Major Collector
6 - Minor Collector
7 - Local Road and Street

Recreational - East Group - Cape Cod (all towns) including the town of Plymouth south of Route 3A (stations 7014,7079,7080,7090,7091,7092,7093,7094,7095,7096,7097,7108 and 7178), Martha's Vineyard and Nantucket.

Recreational - West Group - Continuous Stations 2 and 189 including stations 1066,1067,1083,1084,1085,1086,1087,1088,1089,1090,1091,1092,1093,1094,1095,1096,1097,1098,1099,1100,1101,1102,1103,1104,1105,1106,1107,1108,1113,1114,1116,2196,2197 and 2198.

5/26/2020

Traffic Growth Factor Worksheet

Count Stations

(Source: Transportation Data Management System)

STA.	CITY/TOWN	ROUTE/STREET	LOCATION	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Average % Growth
5020 [a]	METHUEN, MA	BROADWAY (ROUTE 28)	AT NH STATE LINE	24,903	25,176	24,911			27,723			23,629			-0.6%
82399122 [b]	SALEM, NH	SOUTH BROADWAY (NH ROUTE 28)	AT MASS STATE LINE				24,000			22,000			25,258		0.9%
82399038 [b]	SALEM, NH	SOUTH BROADWAY (NH ROUTE 28)	NORTH OF LAWRENCE RD					22,000			22,413				1.9%
5019 [a]	METHUEN, MA	BROADWAY (ROUTE 28)	SOUTH OF ROUTE 213		21,200			20,918			22,459				1.0%
5096 [a]	METHUEN, MA	INTERSTATE 93	AT NH STATE LINE	107,387	104,680	103,072	103,130	99,949	99,798	103,807	108,469	111,436			0.5%
2489001 [b]	WINDHAM, NH	ROCKINGHAM ROAD (NH ROUTE 28)	SOUTH OF LIBBEY ROAD N	11,932	12,000	11,000	10,978	11,019	10,815	10,647	10,917	11,026	10,914	10,246	-1.5%

[a] Source: MassDOT Transportation Data Management System

[b] Source: NHDOT Transportation Data Management System

Average Growth: 0.4%

Say **1.0%**

MASSDOT CRASH RATE WORKSHEETS

INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Methuen COUNT DATE : Jan-24

DISTRICT : 4 UNSIGNALIZED : SIGNALIZED : X

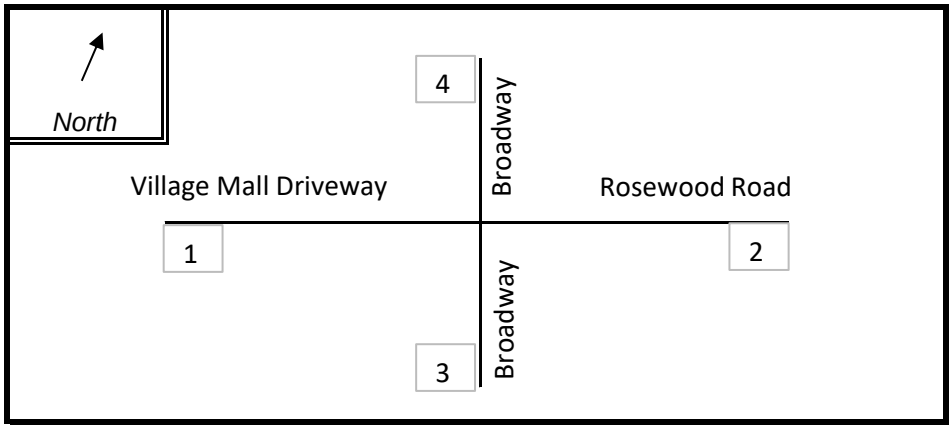
~ INTERSECTION DATA ~

MAJOR STREET : Broadway (Route 28)

MINOR STREET(S) : Rosewood Road

Village Mall Driveway

INTERSECTION DIAGRAM (Label Approaches)



PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	EB	WB	NB	SB		
PEAK HOURLY VOLUMES (AM/PM) :	128	111	1,174	981		**2,394**

" K " FACTOR : **0.082** INTERSECTION ADT (**V**) = TOTAL DAILY APPROACH VOLUME : **29,195**

TOTAL # OF CRASHES : 70 # OF YEARS : 5 AVERAGE # OF CRASHES PER YEAR (**A**) : **14.00**

CRASH RATE CALCULATION : **1.31** RATE = $\frac{(A * 1{,}000{,}000)}{(V * 365)}$

Comments : Weekday PM volumes used

Project Title & Date: NEX-2021347 Methuen, MA - Mixed-Use Development

INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Methuen COUNT DATE : Jan-24

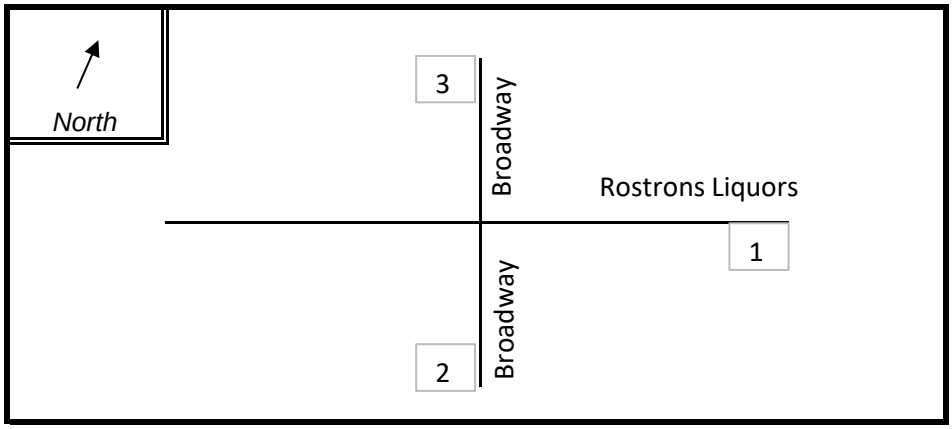
DISTRICT : 4 UNSIGNALIZED : X SIGNALIZED :

~ INTERSECTION DATA ~

MAJOR STREET : Broadway (Route 28)

MINOR STREET(S) : Rostrons Liquors Driveway (471 Broadway)

INTERSECTION DIAGRAM (Label Approaches)



PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	WB	NB	SB			
PEAK HOURLY VOLUMES (AM/PM) :	29	1,143	993			**2,165**

" K " FACTOR : **0.082** INTERSECTION ADT (**V**) = TOTAL DAILY APPROACH VOLUME : **26,402**

TOTAL # OF CRASHES : 3 # OF YEARS : 5 AVERAGE # OF CRASHES PER YEAR (**A**) : **0.60**

CRASH RATE CALCULATION : **0.06** RATE = $\frac{(A * 1{,}000{,}000)}{(V * 365)}$

Comments : Weekday PM volumes used

Project Title & Date: NEX-2021347 Methuen, MA - Mixed-Use Development

INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Methuen COUNT DATE : Jan-24

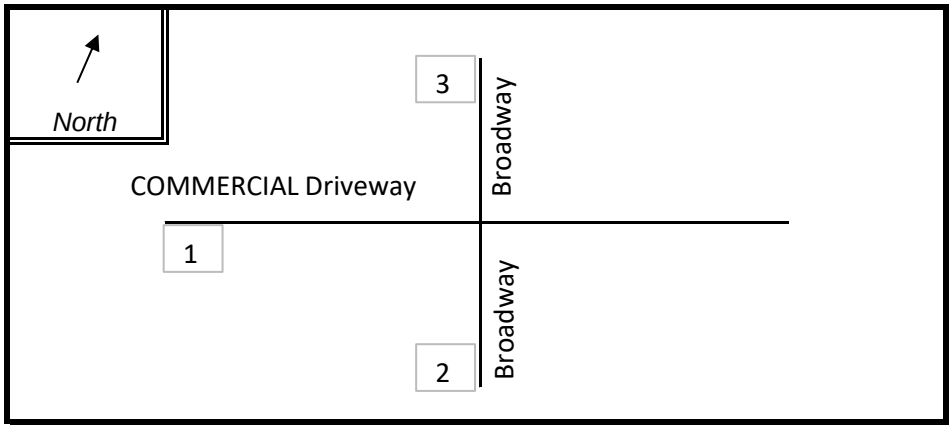
DISTRICT : 4 UNSIGNALIZED : X SIGNALIZED :

~ INTERSECTION DATA ~

MAJOR STREET : Broadway (Route 28)

MINOR STREET(S) : Commercial Driveway (464, 476, 480 Broadway)

INTERSECTION DIAGRAM (Label Approaches)



PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	EB	NB	SB			
PEAK HOURLY VOLUMES (AM/PM) :	3	1,168	993			**2,164**

" K " FACTOR : **0.082**

INTERSECTION ADT (**V**) = TOTAL DAILY APPROACH VOLUME : **26,390**

TOTAL # OF CRASHES : 2

OF YEARS : 5

AVERAGE # OF CRASHES PER YEAR (**A**) : **0.40**

CRASH RATE CALCULATION : **0.04**

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

Comments : Weekday PM volumes used

Project Title & Date: NEX-2021347 Methuen, MA - Mixed-Use Development

SIGHT DISTANCE CALCULATIONS

AASHTO Recommended Sight Distance Summary
(Passenger Vehicles)

LOCATION: Broadway at Exit-Only Site Driveway

Side Street Direction: WB
Number of Lanes on Mainline = 3
Median Width (Feet) = 0

STOPPING SIGHT DISTANCE

Mainline Direction: NB
85th Percentile Speed (V) = 40 MPH
Grade (G) = 0.0%
Apply Grade Adjustment No
Brake Reaction Time (T) = 2.5 seconds
Deceleration Rate (A) = 11.2 ft/s^2
SSD = 1.47 V * T +1.075 V^2/A = 301 FT

SSD =	**305 FT**

Mainline Direction: SB
85th Percentile Speed (V) = 39 MPH
Grade (G) = 0.0%
Apply Grade Adjustment No
Brake Reaction Time (T) = 2.5 seconds
Deceleration Rate (A) = 11.2 ft/s^2
SSD = 1.47 V * T +1.075 V^2/A = 290 FT

SSD =	**290 FT**

INTERSECTION SIGHT DISTANCE

RIGHT TURN FROM STOP: South of Driveway
Posted Speed (V) = 35 MPH
Minor Street Approach Grade (G) = 0.0%
Apply Grade Adjustment No
Time Gap (t_g) = 6.5 seconds
ISD (Right Turn from Stop) = 1.47 * t_g * V = 335 FT

ISD (Right Turn from Stop) =	**335 FT**

LEFT TURN FROM STOP: North of Driveway
Posted Speed (V) = 30 MPH
Minor Street Approach Grade (G) = 0.0%
Apply Grade Adjustment No
Time Gap (t_g) = 8 seconds
ISD (Left Turn from Stop) = 1.47 * t_g * V = 353 FT

ISD (Left Turn from Stop) =	**355 FT**

BACKGROUND DEVELOPMENT DATA

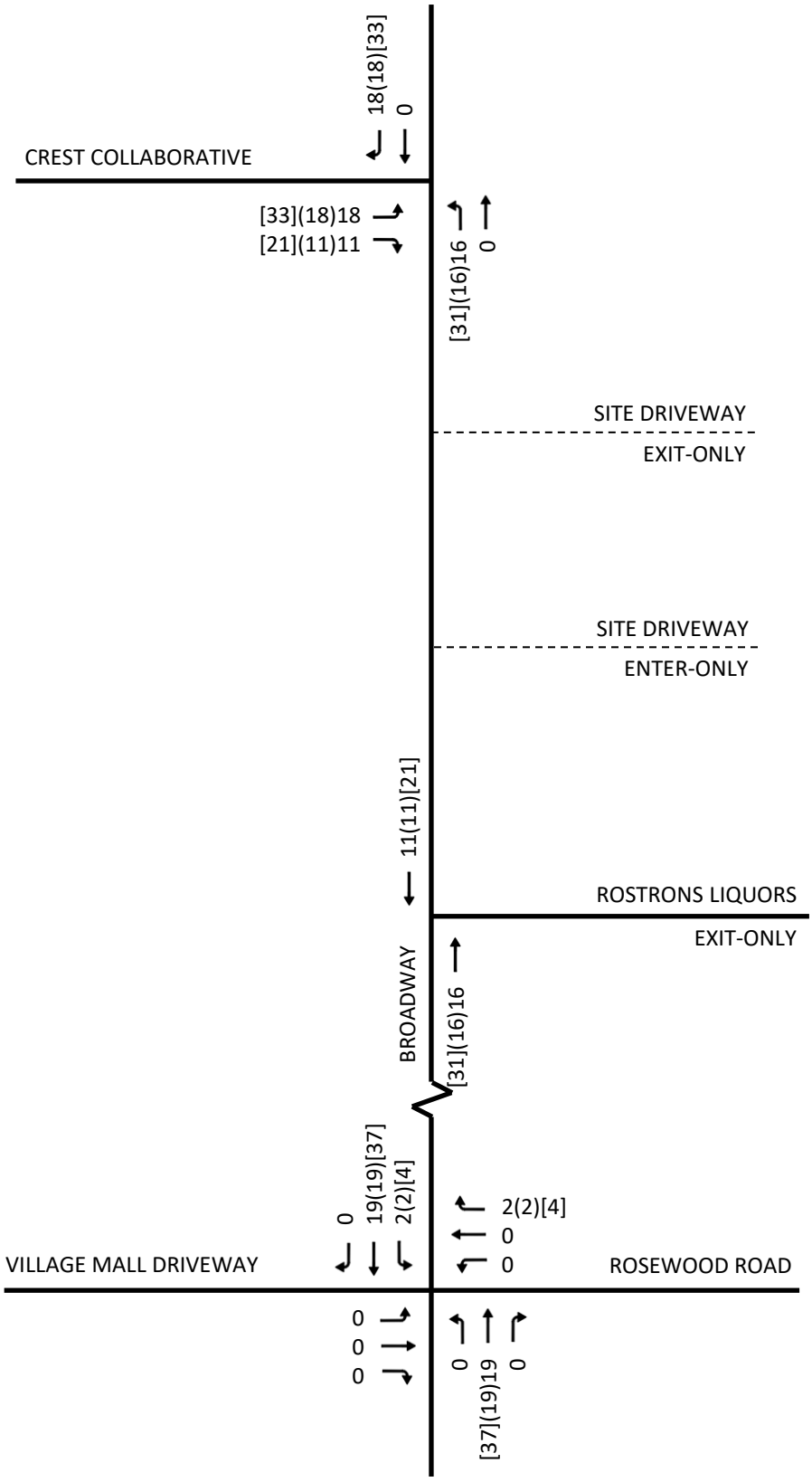


FIGURE A-1
CAR WASH – 464 & 480 BROADWAY
PEAK HOUR TRAFFIC VOLUMES

	LUC 948	
	4,859 SF	1 Tunnels
Weekday		
Enter	673	755
Exit	673	755
Total	1,346	1,510
Weekday PM		
Enter	34	39
Exit	34	39
Total	68	78
Saturday		
Enter	643	179
Exit	643	179
Total	1,286	358
SAT Midday		
Enter	74	19
Exit	74	22
Total	148	41

Note: Choose more conservative trip estimates.

Institute of Transportation Engineers (ITE)

Land Use Code (LUC) 948 - Automated Car Wash

General Urban/Suburban

Average Vehicle Trips Ends vs: 1,000 Sq. Ft. Gross Floor Area
Independent Variable (X): 4.859

WEEKDAY DAILY

$$\frac{\text{ITE LUC 947 Weekday Daily Trip Rate}}{\text{ITE LUC 947 Weekday PM Trip Rate}} = \frac{\text{ITE LUC 948 Weekday Daily Trip Rate}}{\text{ITE LUC 948 Weekday PM Trip Rate}}$$

$$\frac{108.00}{5.54} = \frac{(Y)}{14.20} \qquad Y = 276.82$$

T = Y * 4.859
T = 1345.08
T = 1,346 vehicle trips
with 50% (673 vpd) entering and 50% (673 vpd) exiting.
(same distribution split as ITE LUC 947 during the weekday daily traffic)

WEEKDAY EVENING PEAK HOUR OF ADJACENT STREET TRAFFIC

T = 14.20 * (X)
T = 14.20 * 4.859
T = 69.00
T = 68 vehicle trips
with 50% (34 vpd) entering and 50% (34 vpd) exiting.

SATURDAY DAILY

$$\frac{\text{ITE LUC 947 Saturday Daily Trip Rate}}{\text{ITE LUC 947 Saturday Midday Trip Rate}} = \frac{\text{ITE LUC 948 Saturday Daily Trip Rate}}{\text{ITE LUC 948 Saturday Midday Trip Rate}}$$

$$\frac{132.80}{15.25} = \frac{(Y)}{30.40} \qquad Y = 264.73$$

T = Y * 4.859
T = 1286.32
T = 1,286 vehicle trips
with 50% (643 vpd) entering and 50% (643 vpd) exiting.
(same distribution split as ITE LUC 947 during the saturday daily traffic)

SATURDAY PEAK HOUR OF GENERATOR

T = 30.40 * (X)
T = 30.40 * 4.859
T = 147.71
T = 148 vehicle trips
with 50% (74 vph) entering and 50% (74 vph) exiting.

Institute of Transportation Engineers (ITE)

Land Use Code (LUC) 948 - Automated Car Wash

General Urban/Suburban

Average Vehicle Trips Ends vs: Car Wash Tunnels
Independent Variable (X): 1

WEEKDAY DAILY

$$\frac{\text{ITE LUC 947 Weekday Daily Trip Rate}}{\text{ITE LUC 947 Weekday PM Trip Rate}} = \frac{\text{ITE LUC 948 Weekday Daily Trip Rate}}{\text{ITE LUC 948 Weekday PM Trip Rate}}$$

$$\frac{108.00}{5.54} = \frac{(Y)}{77.50} \qquad Y = 1510.83$$

T = Y * 1
T = 1510.83
T = 1,510 vehicle trips
with 50% (755 vpd) entering and 50% (755 vpd) exiting.
(same distribution split as ITE LUC 947 during the weekday daily traffic)

WEEKDAY EVENING PEAK HOUR OF ADJACENT STREET TRAFFIC

T = 77.50 * (X)
T = 77.50 * 1
T = 77.50
T = 78 vehicle trips
with 50% (39 vpd) entering and 50% (39 vpd) exiting.

SATURDAY DAILY

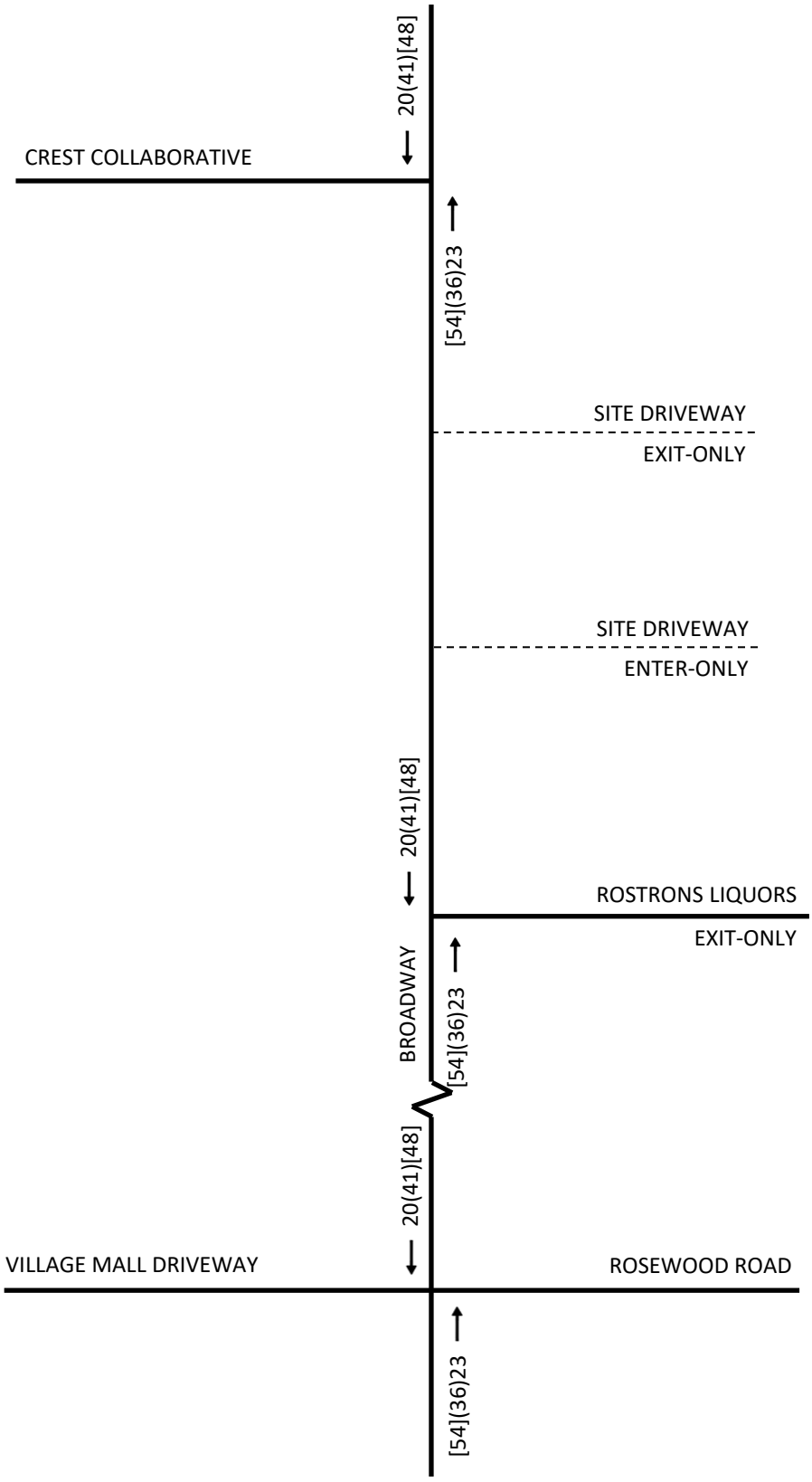
$$\frac{\text{ITE LUC 947 Saturday Daily Trip Rate}}{\text{ITE LUC 947 Saturday Midday Trip Rate}} = \frac{\text{ITE LUC 948 Saturday Daily Trip Rate}}{\text{ITE LUC 948 Saturday Midday Trip Rate}}$$

$$\frac{132.80}{15.25} = \frac{(Y)}{41.00} \qquad Y = 357.04$$

T = Y * 1
T = 357.036
T = 358 vehicle trips
with 50% (179 vpd) entering and 50% (179 vpd) exiting.
(same distribution split as ITE LUC 947 during the saturday daily traffic)

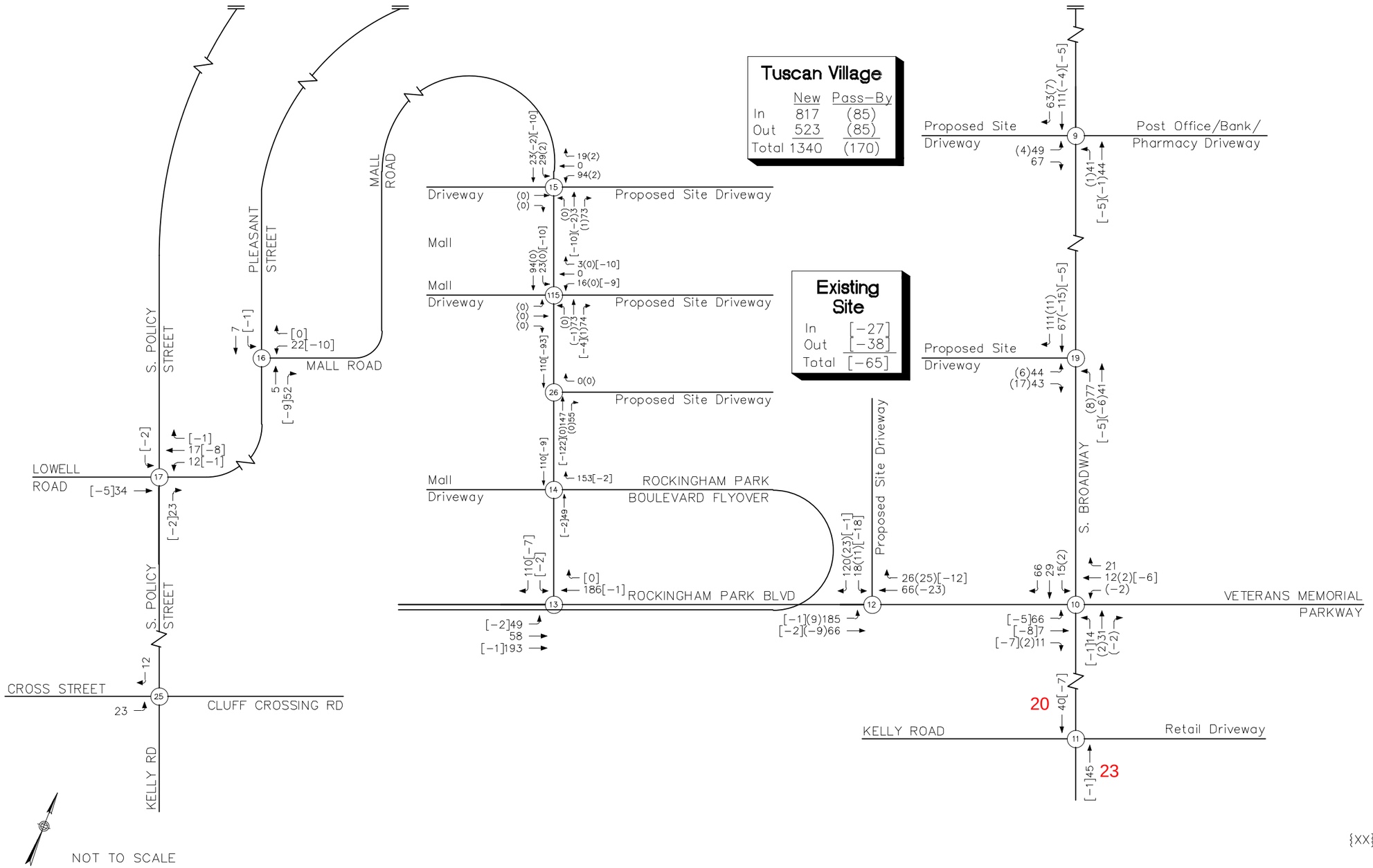
SATURDAY PEAK HOUR OF GENERATOR

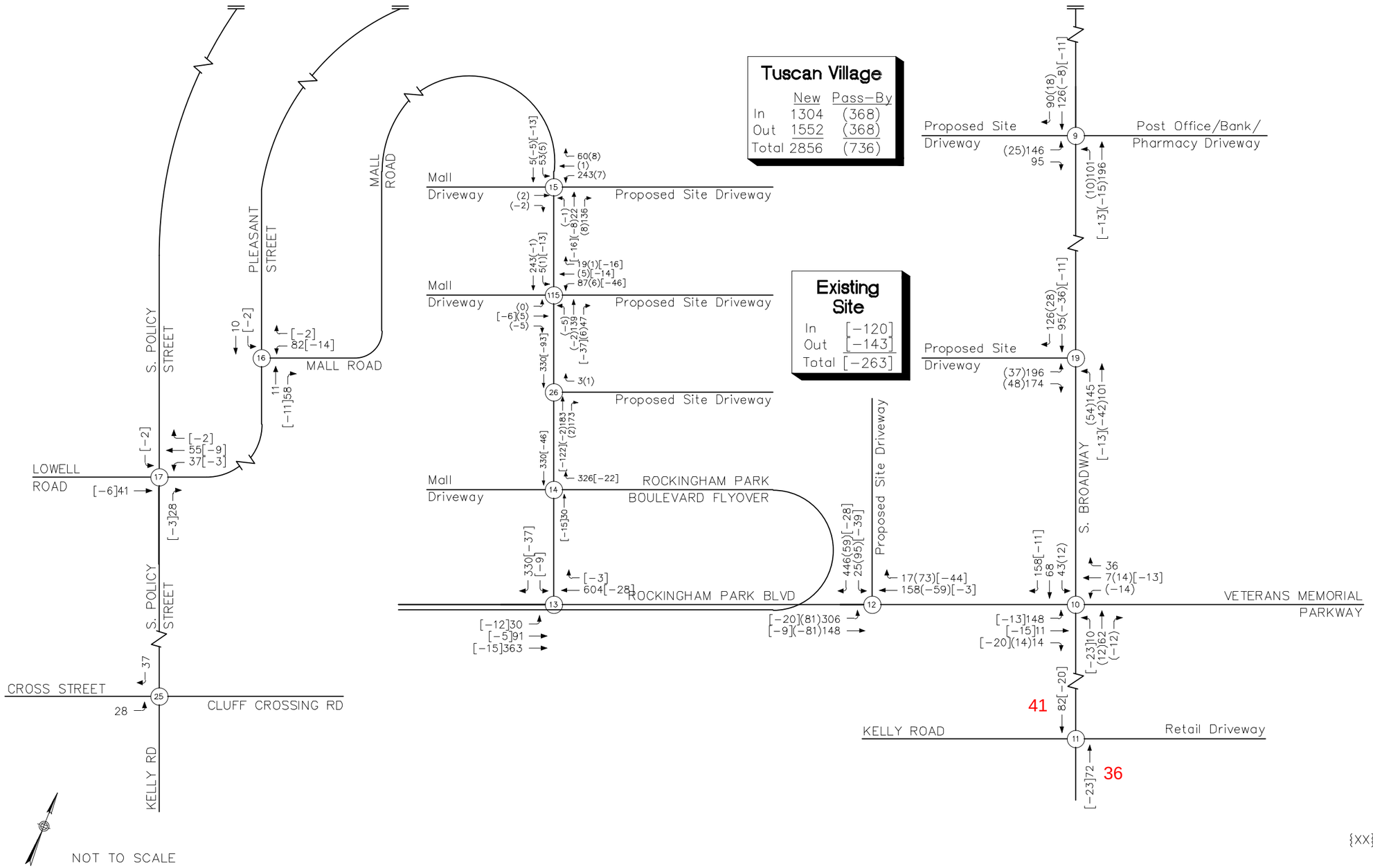
T = 41.00 * (X)
T = 41.00 * 1
T = 41.00
T = 41 vehicle trips
with 46% (19 vph) entering and 54% (22 vph) exiting.

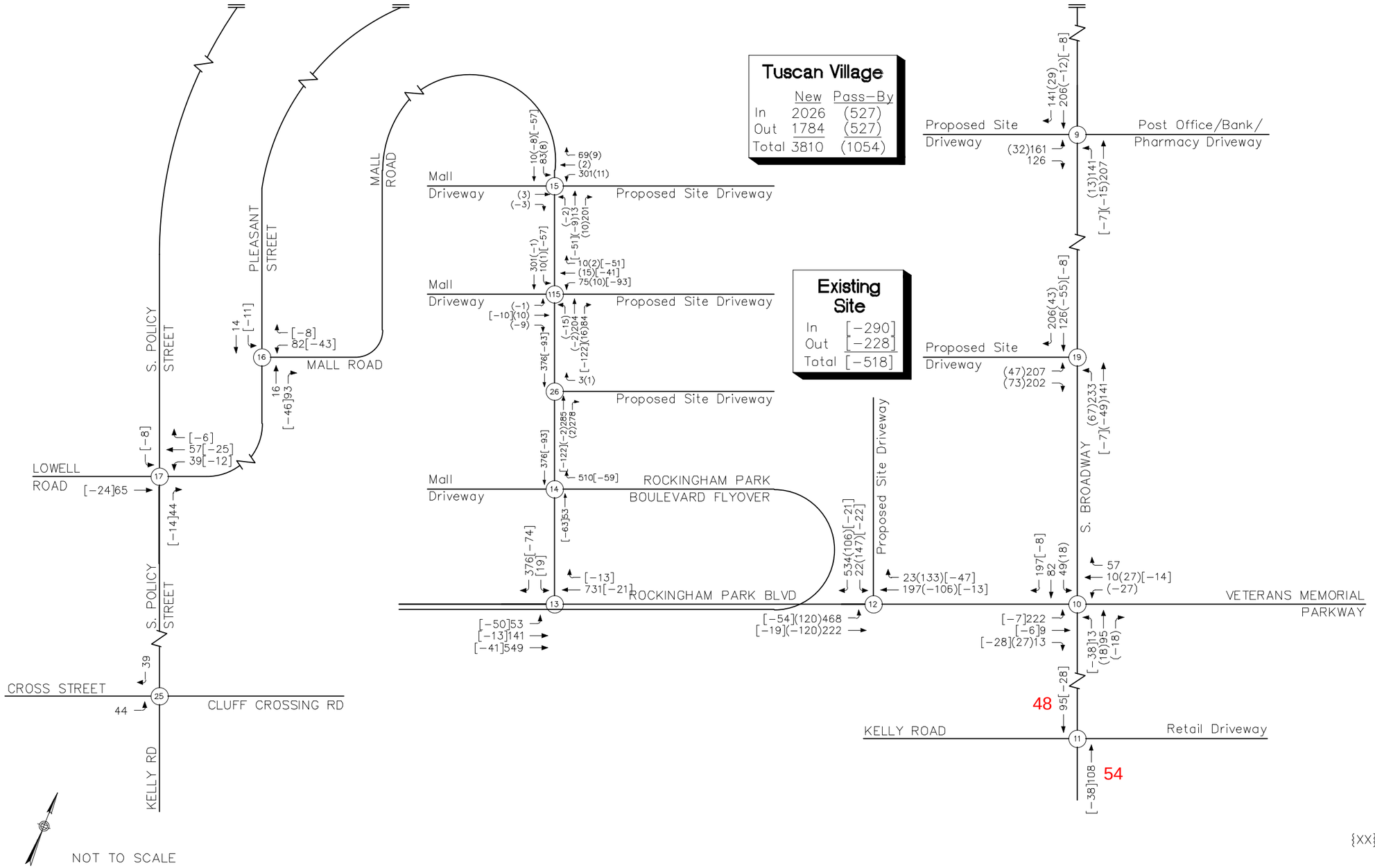


INTERSECTIONS DO NOT BALANCE
AM (PM) [SAT]

FIGURE A-2
TUSCAN VILLAGE – SALEM, NH
PEAK HOUR TRAFFIC VOLUMES


Tuscan Village
New Pass-By
In 817 (85)
Out 523 (85)
Total 1340 (170)
Existing Site
In [-27]
Out [-38]
Total [-65]
S. POLICY STREET
PLEASANT STREET
MALL ROAD
LOWELL ROAD
CROSS STREET
CLUFF CROSSING RD
KELLY RD
Mall Driveway
Proposed Site Driveway
ROCKINGHAM PARK BOULEVARD FLYOVER
ROCKINGHAM PARK BLVD
Proposed Site Driveway
S. BROADWAY
VETERANS MEMORIAL PARKWAY
Post Office/Bank/ Pharmacy Driveway
KELLY ROAD
Retail Driveway
20
23
NOT TO SCALE
{XX} = Redistributed Trips due to Right-in/Right-out

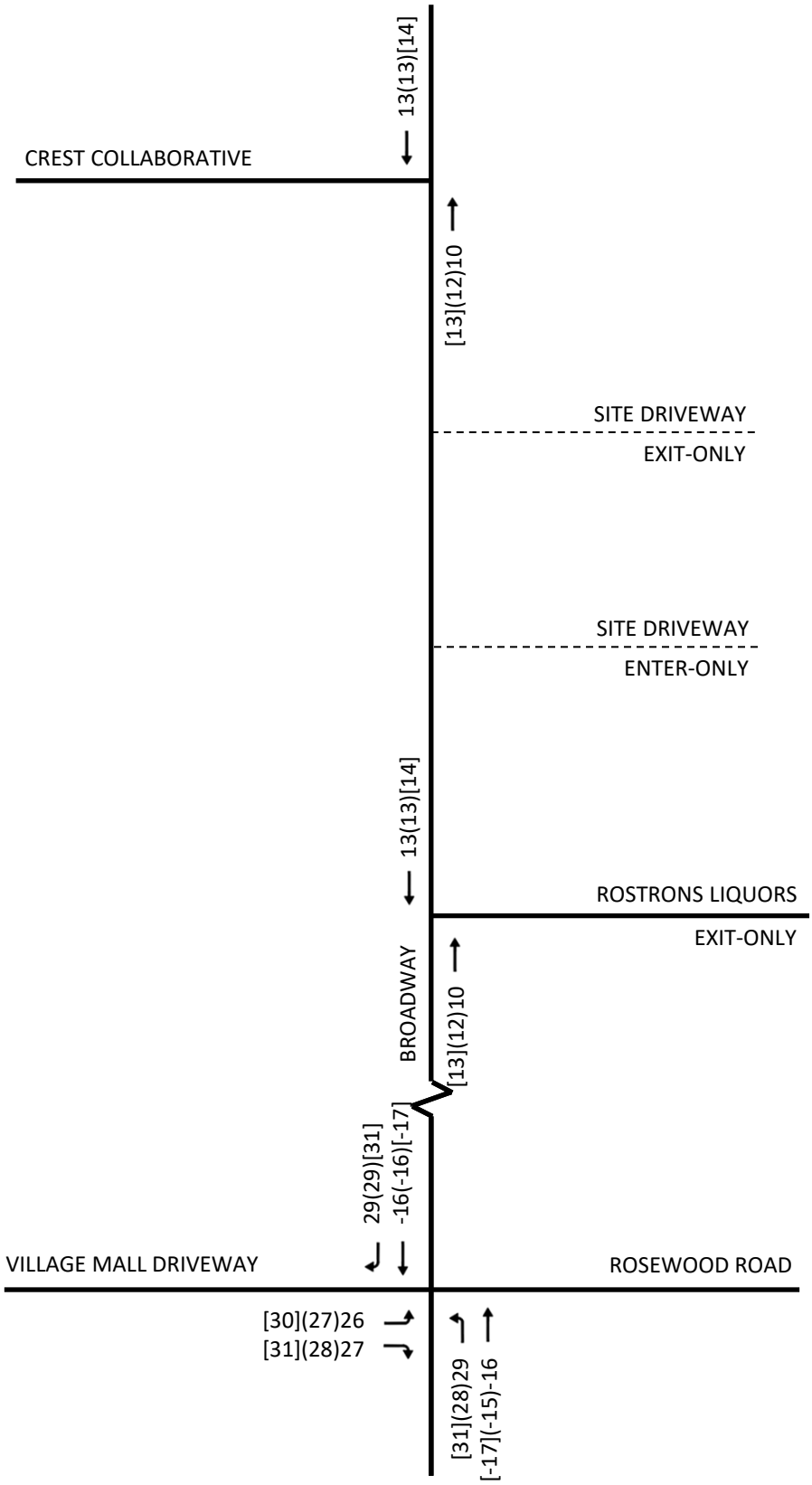

Tuscan Village
New Pass-By
In 1304 (368)
Out 1552 (368)
Total 2856 (736)
Existing Site
In [-120]
Out [-143]
Total [-263]
S. POLICY STREET
PLEASANT STREET
MALL ROAD
LOWELL ROAD
CROSS STREET
CLUFF CROSSING RD
KELLY RD
Mall Driveway
Proposed Site Driveway
ROCKINGHAM PARK BOULEVARD FLYOVER
ROCKINGHAM PARK BLVD
Proposed Site Driveway
Post Office/Bank/ Pharmacy Driveway
S. BROADWAY
VETERANS MEMORIAL PARKWAY
KELLY ROAD
Retail Driveway
41
36
NOT TO SCALE
{XX} = Redistributed Trips due to Right-in/Right-out



{XX} = Redistributed Trips due to Right-in/Right-out

Figure 13B 8/18/2017

Site-Generated
Saturday Midday
Peak Hour Traffic Volumes



INTERSECTIONS DO NOT BALANCE
AM (PM) [SAT]

FIGURE A-3
TACO JOHN'S – METHUEN, MA
PEAK HOUR TRAFFIC VOLUMES

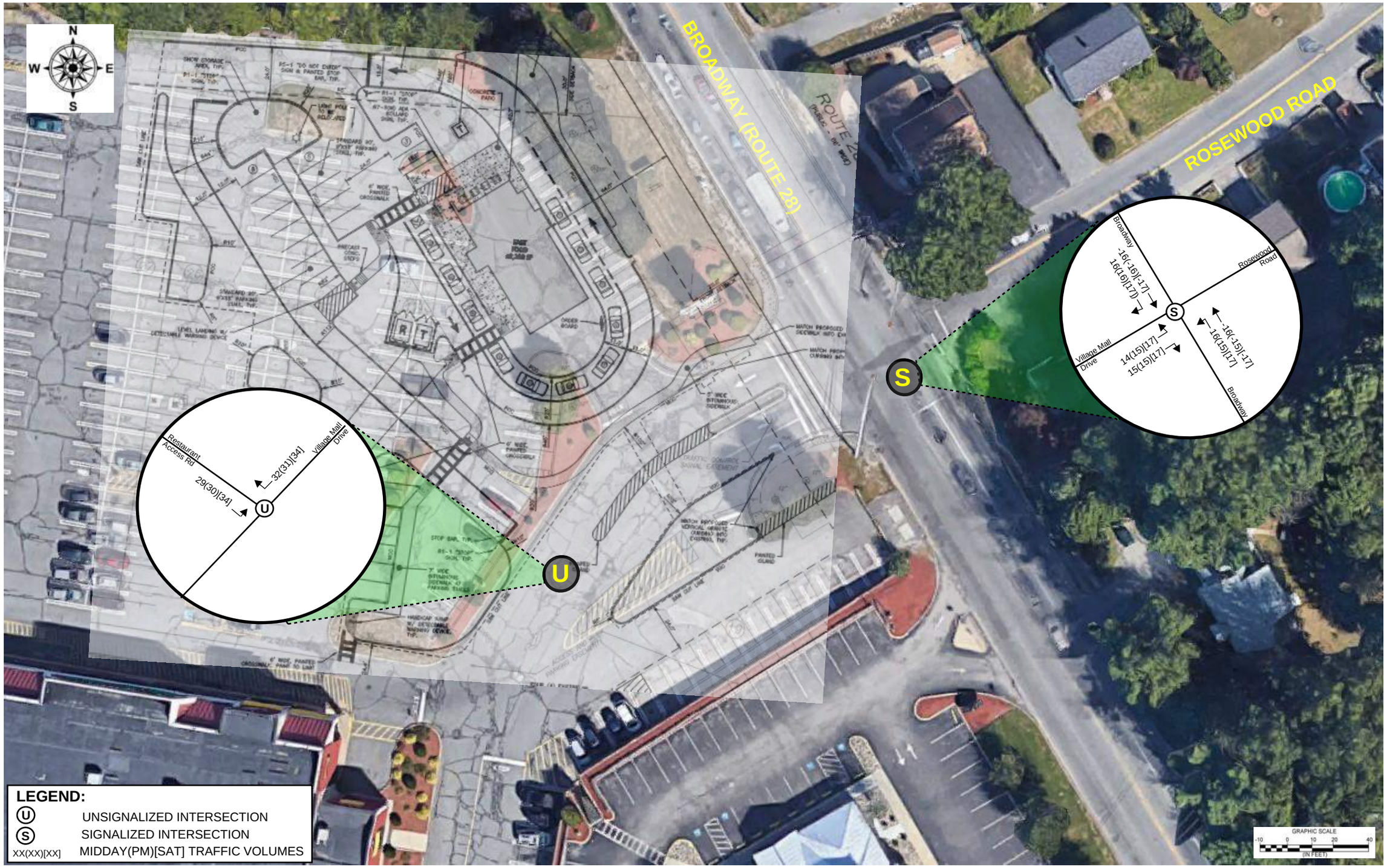


Figure T6: Pass-By Trip Assignment
Taco John's, Methuen, MA

Data Source: MassGIS
ASB Project # 202302

ASB design group

Figure T7: Trip Assignment
Taco John's, Methuen, MA

Data Source: MassGIS
ASB Project # 202302

ASB design group

TRIP-GENERATION CALCULATIONS

Proposed:

2,100 SF Dunkin Donuts LUC 937 Coffee/Donut Shop with Drive-Through Window

		Total Trips	Pass-By Trips	New Trips
		Dunkin Donuts	Dunkin Donuts	Total
Weekday Daily				
	In	560	280	280
	Out	560	280	280
	Total	1,120	560	560
Weekday AM				
	In	92	45	47
	Out	88	45	43
	Total	180	90	90
Weekday PM				
	In	41	23	18
	Out	41	23	18
	Total	82	46	36
Saturday Daily				
	In	738	369	369
	Out	738	369	369
	Total	1,476	738	738
Saturday Midday				
	In	93	46	47
	Out	92	46	46
	Total	185	92	93

AM	50%
PM	55%
SAT	50%

Pass-By

LUC 934 (Fast-Food Restaurant with Drive-Through Window)

Institute of Transportation Engineers (ITE)

Land Use Code (LUC) 937 - Coffee Donut Shop with Drive-Through Window

General Urban/Suburban

Average Vehicle Trips Ends vs: 1,000 Sq. Ft. Gross Floor Area
Independent Variable (X): 2.100

AVERAGE WEEKDAY DAILY

T = 533.57 * (X)
T = 533.57 * 2.10
T = 1,120.50
T = 1,120 vehicle trips
with 50% (560 vph) entering and 50% (560 vph) exiting.

WEEKDAY MORNING PEAK HOUR OF ADJACENT STREET TRAFFIC

T = 85.88 * (X)
T = 85.88 * 2.100
T = 180.35
T = 180 vehicle trips
with 51% (92 vph) entering and 49% (88 vph) exiting.

WEEKDAY EVENING PEAK HOUR OF ADJACENT STREET TRAFFIC

T = 38.99 * (X)
T = 38.99 * 2.100
T = 81.88
T = 82 vehicle trips
with 50% (41 vph) entering and 50% (41 vph) exiting.

SATURDAY DAILY

$$\frac{\text{ITE LUC 934 Saturday Daily Trip Rate}}{\text{ITE LUC 934 Weekday Daily Trip Rate}} = \frac{\text{ITE LUC 937 Saturday Daily Trip Rate}}{\text{ITE LUC 937 Weekday Daily Trip Rate}}$$

$$\frac{616.12}{467.48} = \frac{(Y)}{533.57} \qquad Y = 703.22$$

T = Y * 2.100
T = 1476.77
T = 1,476 vehicle trips
with 50% (738 vpd) entering and 50% (738 vpd) exiting.
(same distribution split as ITE LUC 934 during the Saturday Daily period)

SATURDAY PEAK HOUR OF GENERATOR

T = 87.91 * (X)
T = 87.91 * 2.100
T = 184.61
T = 185 vehicle trips
with 50% (93 vph) entering and 50% (92 vph) exiting.

Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	934
Land Use	Fast-Food Restaurant with Drive-Through Window
Setting	General Urban/Suburban
Time Period	Weekday AM Peak Period
# Data Sites	5
Average Pass-By Rate	50%

Pass-By Characteristics for Individual Sites

GFA (000)	State or Province	Survey Year	# Interviews	Pass-By Trip (%)	Non-Pass-By Trips			Adj Street Peak Hour Volume	Source
					Primary (%)	Diverted (%)	Total (%)		
1.4	Kentucky	1993	—	62	22	16	38	1407	2
3	Kentucky	1993	—	43	14	43	57	2903	2
3.3	--	1996	—	68	—	—	32	—	21
3.6	Kentucky	1993	—	32	47	21	68	437	2
4.2	Indiana	1993	—	46	23	31	54	1049	2

Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	934
Land Use	Fast-Food Restaurant with Drive-Through Window
Setting	General Urban/Suburban
Time Period	Weekday PM Peak Period
# Data Sites	11
Average Pass-By Rate	55%

Pass-By Characteristics for Individual Sites

GFA (000)	State or Province	Survey Year	# Interviews	Pass-By Trip (%)	Non-Pass-By Trips			Adj Street Peak Hour Volume	Source
					Primary (%)	Diverted (%)	Total (%)		
1.3	Kentucky	1993	—	68	22	10	32	2055	2
1.9	Kentucky	1993	33	67	24	9	33	2447	2
2.8	Florida	1995	47	66	—	—	34	—	30
2.9	Florida	1996	271	41	41	18	59	—	30
3	Kentucky	1993	—	31	31	38	69	4250	2
3.1	Florida	1995	28	71	—	—	29	—	30
3.1	Florida	1996	29	38	—	—	62	—	30
3.2	Florida	1996	202	40	39	21	60	—	30
3.3	—	1996	—	62	—	—	38	—	21
4.2	Indiana	1993	—	56	25	19	44	1632	2
4.3	Florida	1994	304	62	—	—	38	—	30

DRIVE-THROUGH LANE VEHICLE QUEUING DATA

Traffic Survey Expedition
106 Sharon Road
N. Quincy, MA 02171
P: 617-448-5686
F: 617-801-8300
www.tsetraffic.com

File Name : 41Nashua
Site Code : 41Nashua
Start Date : 4/15/2014

Ln.	No.	Joined Queue	Released From Queue	Delay
1	7	7:00:18 AM	7:03:07 AM	169
1	8	7:01:16 AM	7:03:25 AM	129
1	9	7:01:24 AM	7:03:41 AM	137
1	10	7:02:51 AM	7:03:46 AM	55
1	11	7:04:07 AM	7:05:37 AM	90
1	12	7:04:08 AM	7:05:47 AM	99
1	13	7:04:22 AM	7:06:04 AM	102
1	14	7:04:23 AM	7:06:35 AM	132
1	15	7:05:12 AM	7:07:09 AM	117
1	16	7:05:53 AM	7:07:28 AM	95
1	17	7:06:27 AM	7:07:47 AM	80
1	18	7:06:29 AM	7:08:04 AM	95
1	19	7:07:06 AM	7:08:40 AM	94
1	20	7:07:07 AM	7:08:49 AM	102
1	21	7:07:07 AM	7:09:01 AM	114
1	22	7:07:44 AM	7:09:30 AM	106
1	23	7:08:28 AM	7:09:43 AM	75
1	24	7:08:33 AM	7:09:57 AM	84
1	25	7:09:22 AM	7:10:48 AM	86
1	26	7:10:01 AM	7:11:16 AM	75
1	27	7:10:11 AM	7:11:29 AM	78
1	28	7:11:39 AM	7:12:20 AM	41
1	29	7:11:46 AM	7:12:32 AM	46
1	30	7:12:10 AM	7:13:05 AM	55
1	31	7:12:14 AM	7:13:28 AM	74
1	32	7:14:00 AM	7:15:43 AM	103
1	33	7:14:23 AM	7:17:01 AM	158
1	34	7:14:24 AM	7:17:41 AM	197
1	35	7:14:44 AM	7:18:27 AM	223

Summary Information:

7:00:00 AM - 7:15:00 AM	Drive-Thru
Total Vehicle Count:	29
Delayed Vehicle Count:	29
Through Vehicle Count:	0
Average Stopped Time:	103.83
Maximum Stopped Time:	223
Min. Secs. for Delay:	0
Average Queue:	2.76
Queue Density:	2.94
Maximum Queue:	7
Delay in Vehicle Hour:	2.76
Total Delay:	3011

Ln.	No.	Joined Queue	Released From Queue	Delay
1	36	7:16:10 AM	7:19:08 AM	178
1	37	7:17:47 AM	7:19:29 AM	102
1	38	7:17:47 AM	7:19:54 AM	127
1	39	7:18:12 AM	7:20:24 AM	132
1	40	7:18:48 AM	7:20:34 AM	106
1	41	7:20:00 AM	7:21:00 AM	60
1	42	7:20:21 AM	7:21:41 AM	80
1	43	7:20:41 AM	7:21:54 AM	73
1	44	7:21:15 AM	7:22:24 AM	69
1	45	7:21:15 AM	7:23:19 AM	124
1	46	7:21:53 AM	7:23:22 AM	89
1	47	7:22:27 AM	7:23:36 AM	69
1	48	7:22:28 AM	7:23:49 AM	81
1	49	7:22:52 AM	7:25:09 AM	137
1	50	7:24:05 AM	7:25:57 AM	112
1	51	7:24:16 AM	7:26:19 AM	123
1	52	7:25:40 AM	7:26:35 AM	55
1	53	7:26:04 AM	7:26:55 AM	51
1	54	7:26:38 AM	7:27:06 AM	28
1	55	7:26:47 AM	7:27:32 AM	45
1	56	7:26:48 AM	7:27:44 AM	56
1	57	7:27:02 AM	7:27:58 AM	56
1	58	7:27:05 AM	7:28:48 AM	103

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106 Sharon Road
N. Quincy, MA 02171
P: 617-448-5686
F: 617-801-8800
www.tsetraffic.com

Ln.	No.	Joined Queue	Released From Queue	Delay
1	59	7:27:54 AM	7:29:01 AM	67
1	60	7:28:11 AM	7:29:20 AM	69
1	61	7:28:37 AM	7:29:48 AM	71
1	62	7:28:42 AM	7:30:12 AM	90
1	63	7:29:24 AM	7:30:33 AM	69

Summary Information:

7:15:00 AM - 7:30:00 AM	Drive-Thru
Total Vehicle Count:	28
Delayed Vehicle Count:	28
Through Vehicle Count:	0
Average Stopped Time:	86.50
Maximum Stopped Time:	178
Min. Secs. for Delay:	0
Average Queue:	2.81
Queue Density:	2.81
Maximum Queue:	5
Delay in Vehicle Hour:	2.81
Total Delay:	2422

Ln.	No.	Joined Queue	Released From Queue	Delay
1	64	7:30:41 AM	7:32:41 AM	120
1	65	7:30:53 AM	7:33:01 AM	128
1	66	7:30:53 AM	7:33:18 AM	145
1	67	7:31:18 AM	7:33:49 AM	151
1	68	7:31:19 AM	7:34:00 AM	161
1	69	7:32:03 AM	7:34:18 AM	135
1	70	7:32:07 AM	7:34:35 AM	148
1	71	7:34:06 AM	7:35:03 AM	57
1	72	7:34:18 AM	7:36:17 AM	119
1	73	7:34:51 AM	7:36:33 AM	102
1	74	7:35:31 AM	7:37:38 AM	127
1	75	7:35:41 AM	7:37:53 AM	132
1	76	7:35:46 AM	7:38:29 AM	163
1	77	7:37:29 AM	7:38:40 AM	71
1	78	7:38:05 AM	7:39:24 AM	79
1	79	7:38:39 AM	7:39:38 AM	59
1	80	7:38:57 AM	7:40:09 AM	72
1	81	7:39:15 AM	7:41:28 AM	133
1	82	7:39:17 AM	7:41:43 AM	146
1	83	7:40:46 AM	7:42:54 AM	128
1	84	7:43:04 AM	7:44:11 AM	67
1	85	7:43:28 AM	7:44:57 AM	89
1	86	7:44:09 AM	7:45:35 AM	86
1	87	7:44:27 AM	7:45:58 AM	91
1	88	7:44:31 AM	7:46:11 AM	100
1	89	7:44:50 AM	7:47:02 AM	132

Summary Information:

7:30:00 AM - 7:45:00 AM	Drive-Thru
Total Vehicle Count:	26
Delayed Vehicle Count:	26
Through Vehicle Count:	0
Average Stopped Time:	113.12
Maximum Stopped Time:	163
Min. Secs. for Delay:	0
Average Queue:	3.00
Queue Density:	3.03
Maximum Queue:	7
Delay in Vehicle Hour:	3.00
Total Delay:	2941

Ln.	No.	Joined Queue	Released From Queue	Delay
1	90	7:45:31 AM	7:47:25 AM	114
1	91	7:46:16 AM	7:48:04 AM	108
1	92	7:46:44 AM	7:48:19 AM	95
1	93	7:47:08 AM	7:49:11 AM	123

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106 Sharon Road
N. Quincy, MA 02171
P: 617-448-5686
F: 617-801-8800
www.tsetraffic.com

Ln.	No.	Joined Queue	Released From Queue	Delay
1	94	7:47:37 AM	7:49:26 AM	109
1	95	7:48:29 AM	7:50:51 AM	142
1	96	7:48:46 AM	7:51:03 AM	137
1	97	7:49:09 AM	7:51:31 AM	142
1	98	7:49:49 AM	7:51:44 AM	115
1	99	7:49:52 AM	7:51:58 AM	126
1	100	7:50:24 AM	7:52:29 AM	125
1	101	7:51:19 AM	7:53:00 AM	101
1	102	7:51:22 AM	7:53:12 AM	110
1	103	7:52:36 AM	7:53:45 AM	69
1	104	7:52:37 AM	7:54:12 AM	95
1	105	7:52:38 AM	7:54:39 AM	121
1	106	7:52:39 AM	7:54:42 AM	123
1	107	7:52:52 AM	7:55:09 AM	137
1	108	7:54:09 AM	7:55:57 AM	108
1	109	7:54:10 AM	7:56:27 AM	137
1	110	7:54:53 AM	7:56:52 AM	119
1	111	7:54:55 AM	7:57:04 AM	129
1	112	7:55:35 AM	7:57:16 AM	101
1	113	7:56:08 AM	7:57:40 AM	92
1	114	7:56:17 AM	7:57:50 AM	93
1	115	7:56:38 AM	7:58:13 AM	95
1	116	7:56:45 AM	7:58:27 AM	102
1	117	7:57:01 AM	7:59:58 AM	177
1	118	7:57:22 AM	8:00:18 AM	176
1	119	7:58:41 AM	8:00:35 AM	114
1	120	7:58:43 AM	8:00:53 AM	130
1	121	7:59:13 AM	8:01:20 AM	127
1	122	7:59:47 AM	8:01:32 AM	105

Summary Information:

7:45:00 AM - 8:00:00 AM	Drive-Thru
Total Vehicle Count:	33
Delayed Vehicle Count:	33
Through Vehicle Count:	0
Average Stopped Time:	118.09
Maximum Stopped Time:	177
Min. Secs. for Delay:	0
Average Queue:	4.05
Queue Density:	4.06
Maximum Queue:	7
Delay in Vehicle Hour:	4.06
Total Delay:	3897

Ln.	No.	Joined Queue	Released From Queue	Delay
1	123	8:00:44 AM	8:01:46 AM	62
1	124	8:01:24 AM	8:02:03 AM	39
1	125	8:01:37 AM	8:02:08 AM	31
1	126	8:01:41 AM	8:03:59 AM	138
1	127	8:02:27 AM	8:04:20 AM	113
1	128	8:02:51 AM	8:04:32 AM	101
1	129	8:02:57 AM	8:04:47 AM	110
1	130	8:02:58 AM	8:05:03 AM	125
1	131	8:03:05 AM	8:05:18 AM	133
1	132	8:04:37 AM	8:05:43 AM	66
1	133	8:04:57 AM	8:05:58 AM	61
1	134	8:04:58 AM	8:06:30 AM	92
1	135	8:05:11 AM	8:07:10 AM	119
1	136	8:05:36 AM	8:08:10 AM	154
1	137	8:06:01 AM	8:08:33 AM	152
1	138	8:06:19 AM	8:09:05 AM	166
1	139	8:07:09 AM	8:09:16 AM	127
1	140	8:07:43 AM	8:09:54 AM	131
1	141	8:08:38 AM	8:10:18 AM	100
1	142	8:09:29 AM	8:10:48 AM	79
1	143	8:09:31 AM	8:11:12 AM	101
1	144	8:09:45 AM	8:11:33 AM	108
1	145	8:09:48 AM	8:11:51 AM	123

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File Name : 41Nashua
Site Code : 41Nashua
Start Date : 4/15/2014

Ln.	No.	Joined Queue	Released From Queue	Delay
1	146	8:10:02 AM	8:12:02 AM	120
1	147	8:10:43 AM	8:12:47 AM	124
1	148	8:11:35 AM	8:13:36 AM	121
1	149	8:11:57 AM	8:13:48 AM	111
1	150	8:11:59 AM	8:13:56 AM	117
1	151	8:12:31 AM	8:14:57 AM	146
1	152	8:12:43 AM	8:15:10 AM	147
1	153	8:13:22 AM	8:15:37 AM	135
1	154	8:13:41 AM	8:16:19 AM	158
1	155	8:13:51 AM	8:16:28 AM	157
1	156	8:14:09 AM	8:16:39 AM	150

Summary Information:

8:00:00 AM - 8:15:00 AM	Drive-Thru
Total Vehicle Count:	34
Delayed Vehicle Count:	34
Through Vehicle Count:	0
Average Stopped Time:	115.21
Maximum Stopped Time:	166
Min. Secs. for Delay:	0
Average Queue:	4.10
Queue Density:	4.10
Maximum Queue:	6
Delay in Vehicle Hour:	4.10
Total Delay:	3917

Ln.	No.	Joined Queue	Released From Queue	Delay
1	157	8:15:24 AM	8:17:05 AM	101
1	158	8:16:44 AM	8:17:32 AM	48
1	159	8:17:06 AM	8:17:49 AM	43
1	160	8:17:21 AM	8:18:47 AM	86
1	161	8:17:46 AM	8:19:26 AM	100
1	162	8:17:52 AM	8:19:44 AM	112
1	163	8:18:36 AM	8:20:02 AM	86
1	164	8:19:18 AM	8:20:31 AM	73
1	165	8:19:42 AM	8:20:42 AM	60
1	166	8:19:43 AM	8:20:50 AM	67
1	167	8:20:00 AM	8:21:21 AM	81
1	168	8:20:13 AM	8:21:57 AM	104
1	169	8:20:40 AM	8:23:08 AM	148
1	170	8:21:43 AM	8:23:23 AM	100
1	171	8:21:54 AM	8:24:01 AM	127
1	172	8:22:06 AM	8:24:37 AM	151
1	173	8:22:30 AM	8:24:49 AM	139
1	174	8:23:40 AM	8:25:06 AM	86
1	175	8:24:43 AM	8:25:23 AM	40
1	176	8:24:44 AM	8:25:50 AM	66
1	177	8:24:50 AM	8:26:28 AM	98
1	178	8:25:27 AM	8:26:53 AM	86
1	179	8:25:48 AM	8:27:03 AM	75
1	180	8:25:54 AM	8:27:18 AM	84
1	181	8:26:17 AM	8:27:49 AM	92
1	182	8:26:40 AM	8:28:38 AM	118
1	183	8:26:40 AM	8:29:34 AM	174
1	184	8:27:07 AM	8:30:01 AM	174
1	185	8:27:16 AM	8:30:15 AM	179
1	186	8:28:01 AM	8:30:33 AM	152
1	187	8:28:42 AM	8:30:54 AM	132
1	188	8:28:47 AM	8:31:11 AM	144
1	189	8:29:08 AM	8:31:40 AM	152
1	190	8:29:46 AM	8:32:24 AM	158
1	191	8:29:48 AM	8:32:34 AM	166

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Summary Information:

8:15:00 AM - 8:30:00 AM	Drive-Thru
Total Vehicle Count:	35
Delayed Vehicle Count:	35
Through Vehicle Count:	0
Average Stopped Time:	108.63
Maximum Stopped Time:	179
Min. Secs. for Delay:	0
Average Queue:	3.69
Queue Density:	3.69
Maximum Queue:	8
Delay in Vehicle Hour:	3.69
Total Delay:	3802

Ln.	No.	Joined Queue	Released From Queue	Delay
1	192	8:31:18 AM	8:33:13 AM	115
1	193	8:31:42 AM	8:34:52 AM	190
1	194	8:32:00 AM	8:34:59 AM	179
1	195	8:32:02 AM	8:35:20 AM	198
1	196	8:32:45 AM	8:35:43 AM	178
1	197	8:33:10 AM	8:36:09 AM	179
1	198	8:33:10 AM	8:36:19 AM	189
1	199	8:33:37 AM	8:36:39 AM	182
1	200	8:33:54 AM	8:36:50 AM	176
1	201	8:35:35 AM	8:36:57 AM	82
1	202	8:36:00 AM	8:37:12 AM	72
1	203	8:36:12 AM	8:37:55 AM	103
1	204	8:37:12 AM	8:38:13 AM	61
1	205	8:37:20 AM	8:38:40 AM	80
1	206	8:37:24 AM	8:38:56 AM	92
1	207	8:37:50 AM	8:39:05 AM	75
1	208	8:38:25 AM	8:39:23 AM	58
1	209	8:39:07 AM	8:39:41 AM	34
1	210	8:39:09 AM	8:41:02 AM	113
1	211	8:39:10 AM	8:41:38 AM	148
1	212	8:40:03 AM	8:42:05 AM	122
1	213	8:41:05 AM	8:43:28 AM	143
1	214	8:41:08 AM	8:43:51 AM	163
1	215	8:41:50 AM	8:44:51 AM	181
1	216	8:41:50 AM	8:45:09 AM	199
1	217	8:42:55 AM	8:46:13 AM	198
1	218	8:43:03 AM	8:46:28 AM	205
1	219	8:44:32 AM	8:46:47 AM	135
1	220	8:44:36 AM	8:47:05 AM	149
1	221	8:44:40 AM	8:47:27 AM	167
1	222	8:44:44 AM	8:48:10 AM	206
1	223	8:44:47 AM	8:49:22 AM	275

Summary Information:

8:30:00 AM - 8:45:00 AM	Drive-Thru
Total Vehicle Count:	32
Delayed Vehicle Count:	32
Through Vehicle Count:	0
Average Stopped Time:	145.22
Maximum Stopped Time:	275
Min. Secs. for Delay:	0
Average Queue:	4.29
Queue Density:	4.29
Maximum Queue:	9
Delay in Vehicle Hour:	4.29
Total Delay:	4647

Ln.	No.	Joined Queue	Released From Queue	Delay
1	224	8:47:17 AM	8:49:37 AM	140
1	225	8:47:30 AM	8:50:06 AM	156
1	226	8:48:54 AM	8:50:32 AM	98
1	227	8:49:13 AM	8:51:03 AM	110
1	228	8:50:22 AM	8:52:08 AM	106

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Ln.	No.	Joined Queue	Released From Queue	Delay
1	229	8:50:24 AM	8:52:23 AM	119
1	230	8:51:22 AM	8:53:02 AM	100
1	231	8:51:35 AM	8:53:15 AM	100
1	232	8:51:53 AM	8:53:32 AM	99
1	233	8:52:03 AM	8:54:39 AM	156
1	234	8:52:05 AM	8:54:46 AM	161
1	235	8:52:14 AM	8:55:20 AM	186
1	236	8:52:15 AM	8:55:34 AM	199
1	237	8:52:38 AM	8:55:58 AM	200
1	238	8:53:13 AM	8:56:10 AM	177
1	239	8:53:48 AM	8:57:06 AM	198
1	240	8:54:31 AM	8:57:35 AM	184
1	241	8:54:32 AM	8:57:52 AM	200

Summary Information:

8:45:00 AM - 8:58:00 AM	Drive-Thru
Total Vehicle Count:	18
Delayed Vehicle Count:	18
Through Vehicle Count:	0
Average Stopped Time:	149.39
Maximum Stopped Time:	200
Min. Secs. for Delay:	0
Average Queue:	4.23
Queue Density:	4.24
Maximum Queue:	9
Delay in Vehicle Hour:	4.23
Total Delay:	2689

Summary Information:

7:00:00 AM - 8:58:00 AM	Drive-Thru
Total Vehicle Count:	235
Delayed Vehicle Count:	235
Through Vehicle Count:	0
Average Stopped Time:	116.28
Maximum Stopped Time:	275
Min. Secs. for Delay:	0
Average Queue:	3.87
Queue Density:	3.92
Maximum Queue:	9
Delay in Vehicle Hour:	3.87
Total Delay:	27326

GPI Project #:
Londonderry, NH
Client: John DeBarros

Traffic Survey Expedition
106 Sharon Road
N. Quincy, MA 02171
P: 617-448-5686
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File Name : Mohawk
Site Code : 1Mohawk
Start Date : 4/15/2014

Ln.	No.	Joined Queue	Released From Queue	Delay
1	2	7:00:51 AM	7:01:08 AM	17
1	3	7:00:52 AM	7:02:29 AM	97
1	4	7:00:52 AM	7:02:29 AM	97
1	5	7:00:53 AM	7:02:41 AM	108
1	6	7:00:53 AM	7:02:43 AM	110
1	7	7:00:54 AM	7:03:28 AM	154
1	8	7:02:02 AM	7:03:30 AM	88
1	9	7:02:15 AM	7:04:10 AM	115
1	10	7:02:30 AM	7:04:12 AM	102
1	11	7:03:31 AM	7:04:25 AM	54
1	12	7:03:48 AM	7:05:26 AM	98
1	13	7:04:03 AM	7:06:23 AM	140
1	14	7:05:05 AM	7:06:59 AM	114
1	15	7:05:06 AM	7:07:15 AM	129
1	16	7:06:00 AM	7:07:15 AM	75
1	17	7:06:00 AM	7:07:19 AM	79
1	18	7:06:41 AM	7:07:45 AM	64
1	19	7:07:03 AM	7:09:06 AM	123
1	20	7:07:03 AM	7:09:08 AM	125
1	21	7:07:13 AM	7:09:24 AM	131
1	22	7:07:35 AM	7:09:36 AM	121
1	23	7:07:59 AM	7:10:07 AM	128
1	24	7:08:44 AM	7:10:42 AM	118
1	25	7:11:12 AM	7:11:24 AM	12
1	26	7:11:34 AM	7:11:53 AM	19
1	27	7:11:50 AM	7:12:43 AM	53
1	28	7:12:01 AM	7:13:10 AM	69
1	29	7:12:06 AM	7:13:32 AM	86
1	30	7:12:27 AM	7:13:44 AM	77
1	31	7:13:07 AM	7:14:05 AM	58
1	32	7:13:17 AM	7:14:29 AM	72
1	33	7:13:25 AM	7:14:55 AM	90
1	34	7:14:12 AM	7:15:10 AM	58
1	35	7:14:17 AM	7:15:40 AM	83

Summary Information:

7:00:00 AM - 7:15:00 AM	Drive-Thru
Total Vehicle Count:	34
Delayed Vehicle Count:	34
Through Vehicle Count:	0
Average Stopped Time:	90.12
Maximum Stopped Time:	154
Min. Secs. for Delay:	0
Average Queue:	3.45
Queue Density:	3.61
Maximum Queue:	7
Delay in Vehicle Hour:	3.45
Total Delay:	3064

Ln.	No.	Joined Queue	Released From Queue	Delay
1	36	7:15:38 AM	7:16:13 AM	35
1	37	7:15:38 AM	7:16:46 AM	68
1	38	7:15:45 AM	7:16:57 AM	72
1	39	7:15:56 AM	7:17:10 AM	74
1	40	7:16:42 AM	7:17:26 AM	44
1	41	7:16:45 AM	7:17:34 AM	49
1	42	7:17:18 AM	7:18:21 AM	63
1	43	7:17:58 AM	7:18:51 AM	53
1	44	7:18:38 AM	7:19:07 AM	29
1	45	7:19:40 AM	7:19:52 AM	12
1	46	7:19:43 AM	7:21:13 AM	90
1	47	7:19:47 AM	7:21:40 AM	113
1	48	7:19:50 AM	7:21:56 AM	126
1	49	7:21:09 AM	7:22:21 AM	72
1	50	7:21:14 AM	7:22:36 AM	82
1	51	7:21:36 AM	7:23:08 AM	92
1	52	7:22:18 AM	7:23:25 AM	67

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Ln.	No.	Joined Queue	Released From Queue	Delay
1	53	7:22:39 AM	7:24:03 AM	84
1	54	7:22:59 AM	7:24:45 AM	106
1	55	7:23:00 AM	7:24:45 AM	105
1	56	7:23:40 AM	7:25:12 AM	92
1	57	7:23:46 AM	7:25:22 AM	96
1	58	7:24:01 AM	7:25:35 AM	94
1	59	7:24:37 AM	7:26:09 AM	92
1	60	7:24:41 AM	7:26:23 AM	102
1	61	7:25:21 AM	7:26:39 AM	78
1	62	7:26:21 AM	7:26:52 AM	31
1	63	7:26:26 AM	7:27:10 AM	44
1	64	7:26:35 AM	7:27:30 AM	55
1	65	7:26:42 AM	7:28:01 AM	79
1	66	7:27:23 AM	7:28:07 AM	44
1	67	7:27:38 AM	7:28:31 AM	53
1	68	7:27:45 AM	7:28:58 AM	73
1	69	7:29:04 AM	7:29:36 AM	32
1	70	7:29:08 AM	7:29:45 AM	37
1	71	7:29:38 AM	7:30:01 AM	23
1	72	7:29:42 AM	7:30:43 AM	61
1	73	7:29:58 AM	7:30:52 AM	54

Summary Information:

7:15:00 AM - 7:30:00 AM	Drive-Thru
Total Vehicle Count:	38
Delayed Vehicle Count:	38
Through Vehicle Count:	0
Average Stopped Time:	67.79
Maximum Stopped Time:	126
Min. Secs. for Delay:	0
Average Queue:	2.82
Queue Density:	2.95
Maximum Queue:	7
Delay in Vehicle Hour:	2.82
Total Delay:	2576

Ln.	No.	Joined Queue	Released From Queue	Delay
1	74	7:31:12 AM	7:31:34 AM	22
1	75	7:31:22 AM	7:31:47 AM	25
1	76	7:31:34 AM	7:32:01 AM	27
1	77	7:31:36 AM	7:32:18 AM	42
1	78	7:32:47 AM	7:33:19 AM	32
1	79	7:33:02 AM	7:33:44 AM	42
1	80	7:33:10 AM	7:34:04 AM	54
1	81	7:33:16 AM	7:34:35 AM	79
1	82	7:34:26 AM	7:34:48 AM	22
1	83	7:34:32 AM	7:35:04 AM	32
1	84	7:35:23 AM	7:35:42 AM	19
1	85	7:35:43 AM	7:37:01 AM	78
1	86	7:35:47 AM	7:37:19 AM	92
1	87	7:35:51 AM	7:38:02 AM	131
1	88	7:36:58 AM	7:38:45 AM	107
1	89	7:37:24 AM	7:39:20 AM	116
1	90	7:38:05 AM	7:40:24 AM	139
1	91	7:38:12 AM	7:40:25 AM	133
1	92	7:38:21 AM	7:41:09 AM	168
1	93	7:38:30 AM	7:41:53 AM	203
1	94	7:38:55 AM	7:42:13 AM	198
1	95	7:39:59 AM	7:42:22 AM	143
1	96	7:40:58 AM	7:42:56 AM	118
1	97	7:41:40 AM	7:43:10 AM	90
1	98	7:42:04 AM	7:43:34 AM	90
1	99	7:42:20 AM	7:44:25 AM	125
1	100	7:42:55 AM	7:45:05 AM	130
1	101	7:43:03 AM	7:45:24 AM	141
1	102	7:44:23 AM	7:45:37 AM	74

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Summary Information:

7:30:00 AM - 7:45:00 AM	Drive-Thru
Total Vehicle Count:	29
Delayed Vehicle Count:	29
Through Vehicle Count:	0
Average Stopped Time:	92.14
Maximum Stopped Time:	203
Min. Secs. for Delay:	0
Average Queue:	3.09
Queue Density:	3.28
Maximum Queue:	6
Delay in Vehicle Hour:	3.09
Total Delay:	2672

Ln.	No.	Joined Queue	Released From Queue	Delay
1	103	7:45:21 AM	7:45:59 AM	38
1	104	7:45:39 AM	7:46:08 AM	29
1	105	7:46:05 AM	7:46:42 AM	37
1	106	7:46:31 AM	7:47:27 AM	56
1	107	7:47:31 AM	7:48:47 AM	76
1	108	7:48:52 AM	7:50:17 AM	85
1	109	7:49:07 AM	7:50:34 AM	87
1	110	7:50:12 AM	7:50:58 AM	46
1	111	7:50:40 AM	7:51:07 AM	27
1	112	7:51:10 AM	7:51:51 AM	41
1	113	7:51:16 AM	7:51:59 AM	43
1	114	7:51:47 AM	7:52:24 AM	37
1	115	7:52:29 AM	7:53:14 AM	45
1	116	7:53:18 AM	7:53:33 AM	15
1	117	7:53:23 AM	7:53:56 AM	33
1	118	7:53:40 AM	7:54:35 AM	55
1	119	7:53:41 AM	7:55:42 AM	121
1	120	7:54:22 AM	7:56:07 AM	105
1	121	7:55:02 AM	7:57:14 AM	132
1	122	7:55:11 AM	7:57:38 AM	147
1	123	7:57:06 AM	7:58:15 AM	69
1	124	7:57:11 AM	7:58:29 AM	78
1	125	7:57:11 AM	7:59:12 AM	121
1	126	7:57:27 AM	7:59:35 AM	128
1	127	7:57:34 AM	7:59:49 AM	135
1	128	7:57:54 AM	8:00:38 AM	164
1	129	7:58:05 AM	8:00:58 AM	173
1	130	7:58:54 AM	8:01:09 AM	135
1	131	7:59:25 AM	8:01:26 AM	121
1	132	7:59:52 AM	8:01:48 AM	116

Summary Information:

7:45:00 AM - 8:00:00 AM	Drive-Thru
Total Vehicle Count:	30
Delayed Vehicle Count:	30
Through Vehicle Count:	0
Average Stopped Time:	83.17
Maximum Stopped Time:	173
Min. Secs. for Delay:	0
Average Queue:	2.53
Queue Density:	2.58
Maximum Queue:	7
Delay in Vehicle Hour:	2.53
Total Delay:	2495

Ln.	No.	Joined Queue	Released From Queue	Delay
1	133	8:00:17 AM	8:02:25 AM	128
1	134	8:01:01 AM	8:02:30 AM	89
1	135	8:01:24 AM	8:02:45 AM	81
1	136	8:01:33 AM	8:02:54 AM	81
1	137	8:01:51 AM	8:03:13 AM	82
1	138	8:01:53 AM	8:04:19 AM	146
1	139	8:02:23 AM	8:04:34 AM	131

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Ln.	No.	Joined Queue	Released From Queue	Delay
1	140	8:04:42 AM	8:05:17 AM	35
1	141	8:04:51 AM	8:05:35 AM	44
1	142	8:05:24 AM	8:05:56 AM	32
1	143	8:05:29 AM	8:07:08 AM	99
1	144	8:06:09 AM	8:07:23 AM	74
1	145	8:07:06 AM	8:07:49 AM	43
1	146	8:07:13 AM	8:08:36 AM	83
1	147	8:07:42 AM	8:08:43 AM	61
1	148	8:08:09 AM	8:09:04 AM	55
1	149	8:08:16 AM	8:09:25 AM	69
1	150	8:09:49 AM	8:10:37 AM	48
1	151	8:09:58 AM	8:12:41 AM	163
1	152	8:11:12 AM	8:13:35 AM	143
1	153	8:11:55 AM	8:14:06 AM	131
1	154	8:12:17 AM	8:14:44 AM	147
1	155	8:12:18 AM	8:15:15 AM	177
1	156	8:12:26 AM	8:15:43 AM	197
1	157	8:12:27 AM	8:15:56 AM	209
1	158	8:13:07 AM	8:16:03 AM	176
1	159	8:14:02 AM	8:16:43 AM	161
1	160	8:14:51 AM	8:16:53 AM	122

Summary Information:

8:00:00 AM - 8:15:00 AM	Drive-Thru
Total Vehicle Count:	28
Delayed Vehicle Count:	28
Through Vehicle Count:	0
Average Stopped Time:	107.39
Maximum Stopped Time:	209
Min. Secs. for Delay:	0
Average Queue:	3.02
Queue Density:	3.12
Maximum Queue:	7
Delay in Vehicle Hour:	3.02
Total Delay:	3007

Ln.	No.	Joined Queue	Released From Queue	Delay
1	161	8:15:01 AM	8:17:18 AM	137
1	162	8:15:05 AM	8:17:28 AM	143
1	163	8:16:18 AM	8:17:40 AM	82
1	164	8:16:32 AM	8:17:57 AM	85
1	165	8:17:23 AM	8:18:13 AM	50
1	166	8:17:24 AM	8:18:33 AM	69
1	167	8:17:32 AM	8:18:56 AM	84
1	168	8:17:54 AM	8:19:32 AM	98
1	169	8:18:54 AM	8:19:55 AM	61
1	170	8:19:04 AM	8:20:24 AM	80
1	171	8:19:41 AM	8:21:02 AM	81
1	172	8:21:20 AM	8:21:41 AM	21
1	173	8:21:49 AM	8:21:59 AM	10
1	174	8:22:04 AM	8:22:24 AM	20
1	175	8:22:16 AM	8:22:44 AM	28
1	176	8:22:42 AM	8:24:25 AM	103
1	177	8:22:43 AM	8:24:39 AM	116
1	178	8:23:28 AM	8:24:59 AM	91
1	179	8:23:35 AM	8:25:32 AM	117
1	180	8:24:19 AM	8:25:52 AM	93
1	181	8:24:51 AM	8:26:27 AM	96
1	182	8:25:35 AM	8:26:42 AM	67
1	183	8:26:14 AM	8:27:03 AM	49
1	184	8:26:46 AM	8:27:12 AM	26
1	185	8:26:57 AM	8:28:12 AM	75
1	186	8:27:28 AM	8:28:42 AM	74
1	187	8:28:07 AM	8:28:53 AM	46
1	188	8:28:41 AM	8:29:27 AM	46
1	189	8:29:05 AM	8:29:39 AM	34
1	190	8:29:05 AM	8:30:23 AM	78
1	191	8:29:23 AM	8:30:35 AM	72

Traffic Survey Expedition
106 Sharon Road
N. Quincy, MA 02171
P: 617-448-5686
F: 617-801-3800
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Summary Information:

8:15:00 AM - 8:30:00 AM	Drive-Thru
Total Vehicle Count:	31
Delayed Vehicle Count:	31
Through Vehicle Count:	0
Average Stopped Time:	72.00
Maximum Stopped Time:	143
Min. Secs. for Delay:	0
Average Queue:	2.39
Queue Density:	2.47
Maximum Queue:	5
Delay in Vehicle Hour:	2.39
Total Delay:	2232

Ln.	No.	Joined Queue	Released From Queue	Delay
1	192	8:30:04 AM	8:30:58 AM	54
1	193	8:30:05 AM	8:31:49 AM	104
1	194	8:30:55 AM	8:32:04 AM	69
1	195	8:31:14 AM	8:32:34 AM	80
1	196	8:31:19 AM	8:33:12 AM	113
1	197	8:31:19 AM	8:33:30 AM	131
1	198	8:31:45 AM	8:33:50 AM	125
1	199	8:32:38 AM	8:34:57 AM	139
1	200	8:33:39 AM	8:36:28 AM	169
1	201	8:35:04 AM	8:36:51 AM	107
1	202	8:36:57 AM	8:37:17 AM	20
1	203	8:37:09 AM	8:37:32 AM	23
1	204	8:37:35 AM	8:38:15 AM	40
1	205	8:37:43 AM	8:39:04 AM	81
1	206	8:39:11 AM	8:39:46 AM	35
1	207	8:39:12 AM	8:40:06 AM	54
1	208	8:39:59 AM	8:40:21 AM	22
1	209	8:41:01 AM	8:41:35 AM	34
1	210	8:41:16 AM	8:42:04 AM	48
1	211	8:41:36 AM	8:42:21 AM	45
1	212	8:41:40 AM	8:42:52 AM	72
1	213	8:42:07 AM	8:43:33 AM	86
1	214	8:42:16 AM	8:44:17 AM	121
1	215	8:42:59 AM	8:44:29 AM	90
1	216	8:44:18 AM	8:44:59 AM	41
1	217	8:44:33 AM	8:45:22 AM	49
1	218	8:44:49 AM	8:46:10 AM	81

Summary Information:

8:30:00 AM - 8:45:00 AM	Drive-Thru
Total Vehicle Count:	27
Delayed Vehicle Count:	27
Through Vehicle Count:	0
Average Stopped Time:	75.30
Maximum Stopped Time:	169
Min. Secs. for Delay:	0
Average Queue:	2.10
Queue Density:	2.24
Maximum Queue:	6
Delay in Vehicle Hour:	2.10
Total Delay:	2033

Ln.	No.	Joined Queue	Released From Queue	Delay
1	219	8:45:08 AM	8:47:26 AM	138
1	220	8:45:24 AM	8:47:41 AM	137
1	221	8:45:50 AM	8:48:30 AM	160
1	222	8:46:07 AM	8:49:08 AM	181
1	223	8:46:07 AM	8:49:54 AM	227
1	224	8:46:25 AM	8:50:13 AM	228
1	225	8:48:02 AM	8:50:41 AM	159
1	226	8:48:16 AM	8:51:02 AM	166
1	227	8:49:32 AM	8:51:26 AM	114
1	228	8:49:36 AM	8:53:27 AM	231

Traffic Survey Expedition
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Ln.	No.	Joined Queue	Released From Queue	Delay
1	229	8:50:15 AM	8:53:54 AM	219
1	230	8:50:31 AM	8:54:15 AM	224
1	231	8:50:42 AM	8:55:21 AM	279
1	232	8:50:48 AM	8:55:51 AM	303
1	233	8:50:48 AM	8:56:20 AM	332
1	234	8:51:50 AM	8:56:40 AM	290
1	235	8:52:16 AM	8:57:00 AM	284
1	236	8:54:02 AM	8:57:30 AM	208
1	237	8:54:11 AM	8:57:55 AM	224
1	238	8:55:54 AM	8:58:24 AM	150
1	239	8:56:22 AM	8:58:53 AM	151
1	240	8:56:43 AM	8:59:11 AM	148
1	241	8:57:33 AM	8:59:34 AM	121

Summary Information:

8:45:00 AM - 9:00:00 AM	Drive-Thru
Total Vehicle Count:	23
Delayed Vehicle Count:	23
Through Vehicle Count:	0
Average Stopped Time:	203.22
Maximum Stopped Time:	332
Min. Secs. for Delay:	0
Average Queue:	5.40
Queue Density:	5.40
Maximum Queue:	8
Delay in Vehicle Hour:	5.40
Total Delay:	4674

Summary Information:

7:00:00 AM - 9:00:00 AM	Drive-Thru
Total Vehicle Count:	240
Delayed Vehicle Count:	240
Through Vehicle Count:	0
Average Stopped Time:	94.80
Maximum Stopped Time:	332
Min. Secs. for Delay:	0
Average Queue:	3.19
Queue Density:	3.33
Maximum Queue:	8
Delay in Vehicle Hour:	3.19
Total Delay:	22753

GPI Project #:
Peabody, MA
Client: John DeBarros

Traffic Survey Expedition
106 Sharon Road
N. Quincy, MA 02171
P: 617-448-5686
F: 617-801-8300
www.tsetraffic.com

File Name : AM Drive Thru Queue
Site Code : 256DD
Start Date : 10/22/2013

Ln.	No.	Joined Queue	Released From Queue	Delay
1	1	7:00:01 AM	7:00:31 AM	30
1	2	7:00:02 AM	7:01:11 AM	69
1	3	7:00:02 AM	7:01:50 AM	108
1	4	7:00:04 AM	7:02:11 AM	127
1	5	7:00:28 AM	7:03:26 AM	178
1	6	7:01:06 AM	7:03:52 AM	166
1	7	7:01:08 AM	7:04:11 AM	183
1	8	7:01:46 AM	7:04:48 AM	182
1	9	7:01:47 AM	7:05:18 AM	211
1	10	7:03:05 AM	7:05:43 AM	158
1	11	7:03:28 AM	7:05:44 AM	136
1	12	7:05:37 AM	7:06:39 AM	62
1	13	7:06:09 AM	7:07:24 AM	75
1	14	7:07:12 AM	7:08:40 AM	88
1	15	7:08:16 AM	7:09:42 AM	86
1	16	7:09:28 AM	7:11:16 AM	108
1	17	7:09:37 AM	7:12:55 AM	198
1	18	7:10:08 AM	7:14:30 AM	262
1	19	7:11:46 AM	7:14:42 AM	176
1	20	7:11:46 AM	7:15:08 AM	202
1	21	7:11:47 AM	7:15:42 AM	235
1	22	7:12:20 AM	7:16:19 AM	239
1	23	7:12:59 AM	7:16:38 AM	219
1	24	7:13:46 AM	7:17:19 AM	213
1	25	7:14:08 AM	7:17:37 AM	209
1	26	7:14:14 AM	7:17:52 AM	218
1	27	7:14:44 AM	7:18:49 AM	245
1	28	7:14:44 AM	7:19:19 AM	275

Summary Information:

7:00:00 AM - 7:15:00 AM	Drive-Thru Queue
Total Vehicle Count:	28
Delayed Vehicle Count:	28
Through Vehicle Count:	0
Average Stopped Time:	166.36
Maximum Stopped Time:	275
Min. Secs. for Delay:	0
Average Queue:	4.02
Queue Density:	4.03
Maximum Queue:	9
Delay in Vehicle Hour:	4.02
Total Delay:	4658

Ln.	No.	Joined Queue	Released From Queue	Delay
1	29	7:15:12 AM	7:19:42 AM	270
1	30	7:15:44 AM	7:20:32 AM	288
1	31	7:16:32 AM	7:21:20 AM	288
1	32	7:16:32 AM	7:22:02 AM	330
1	33	7:18:16 AM	7:22:14 AM	238
1	34	7:18:22 AM	7:22:46 AM	264
1	35	7:21:33 AM	7:23:38 AM	125
1	36	7:22:23 AM	7:23:54 AM	91
1	37	7:22:23 AM	7:23:54 AM	91
1	38	7:23:03 AM	7:25:38 AM	155
1	39	7:23:03 AM	7:26:10 AM	187
1	40	7:23:17 AM	7:26:57 AM	220
1	41	7:23:17 AM	7:27:22 AM	245
1	42	7:24:03 AM	7:28:10 AM	247
1	43	7:24:41 AM	7:28:44 AM	243
1	44	7:24:55 AM	7:29:21 AM	266
1	45	7:25:32 AM	7:29:53 AM	261
1	46	7:25:32 AM	7:30:14 AM	282
1	47	7:27:05 AM	7:31:19 AM	254
1	48	7:27:06 AM	7:31:40 AM	274
1	49	7:28:08 AM	7:32:04 AM	236
1	50	7:28:51 AM	7:32:18 AM	207
1	51	7:29:11 AM	7:32:41 AM	210

Traffic Survey Expedition
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Ln.	No.	Joined Queue	Released From Queue	Delay
1	52	7:29:38 AM	7:33:02 AM	204

Summary Information:

7:15:00 AM - 7:30:00 AM	Drive-Thru Queue
Total Vehicle Count:	24
Delayed Vehicle Count:	24
Through Vehicle Count:	0
Average Stopped Time:	228.17
Maximum Stopped Time:	330
Min. Secs. for Delay:	0
Average Queue:	5.12
Queue Density:	5.12
Maximum Queue:	9
Delay in Vehicle Hour:	5.12
Total Delay:	5476

Ln.	No.	Joined Queue	Released From Queue	Delay
1	53	7:30:18 AM	7:33:25 AM	187
1	54	7:30:34 AM	7:34:07 AM	213
1	55	7:32:00 AM	7:34:17 AM	137
1	56	7:33:13 AM	7:34:41 AM	88
1	57	7:34:14 AM	7:35:13 AM	59
1	58	7:34:14 AM	7:35:19 AM	65
1	59	7:34:23 AM	7:35:40 AM	77
1	60	7:34:28 AM	7:36:14 AM	106
1	61	7:35:04 AM	7:36:39 AM	95
1	62	7:35:20 AM	7:37:10 AM	110
1	63	7:35:47 AM	7:38:00 AM	133
1	64	7:36:16 AM	7:38:27 AM	131
1	65	7:36:17 AM	7:39:14 AM	177
1	66	7:36:36 AM	7:39:42 AM	186
1	67	7:37:56 AM	7:39:58 AM	122
1	68	7:40:52 AM	7:42:19 AM	87
1	69	7:40:53 AM	7:42:53 AM	120
1	70	7:41:26 AM	7:43:12 AM	106
1	71	7:41:35 AM	7:43:42 AM	127
1	72	7:41:45 AM	7:43:55 AM	130
1	73	7:42:16 AM	7:44:20 AM	124
1	74	7:44:07 AM	7:45:29 AM	82
1	75	7:44:49 AM	7:46:05 AM	76

Summary Information:

7:30:00 AM - 7:45:00 AM	Drive-Thru Queue
Total Vehicle Count:	23
Delayed Vehicle Count:	23
Through Vehicle Count:	0
Average Stopped Time:	119.04
Maximum Stopped Time:	213
Min. Secs. for Delay:	0
Average Queue:	2.89
Queue Density:	3.07
Maximum Queue:	6
Delay in Vehicle Hour:	2.89
Total Delay:	2738

Ln.	No.	Joined Queue	Released From Queue	Delay
1	76	7:45:40 AM	7:47:19 AM	99
1	77	7:45:51 AM	7:48:15 AM	144
1	78	7:47:04 AM	7:48:40 AM	96
1	79	7:47:28 AM	7:49:17 AM	109
1	80	7:47:51 AM	7:49:31 AM	100
1	81	7:48:00 AM	7:50:23 AM	143
1	82	7:49:21 AM	7:51:07 AM	106
1	83	7:49:22 AM	7:51:21 AM	119
1	84	7:50:39 AM	7:51:51 AM	72
1	85	7:50:54 AM	7:52:29 AM	95

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Ln.	No.	Joined Queue	Released From Queue	Delay
1	86	7:53:03 AM	7:55:11 AM	128
1	87	7:53:10 AM	7:55:40 AM	150
1	88	7:53:10 AM	7:55:57 AM	167
1	89	7:54:17 AM	7:56:08 AM	111
1	90	7:54:18 AM	7:56:34 AM	136
1	91	7:54:18 AM	7:56:45 AM	147
1	92	7:54:56 AM	7:57:35 AM	159
1	93	7:55:37 AM	7:58:04 AM	147
1	94	7:55:38 AM	7:58:14 AM	156
1	95	7:55:51 AM	7:58:41 AM	170
1	96	7:56:07 AM	8:00:21 AM	254
1	97	7:57:04 AM	8:01:18 AM	254
1	98	7:57:50 AM	8:01:33 AM	223
1	99	7:58:19 AM	8:01:53 AM	214
1	100	7:58:19 AM	8:02:09 AM	230
1	101	7:58:28 AM	8:03:19 AM	291
1	102	7:58:42 AM	8:04:18 AM	336
1	103	7:59:41 AM	8:04:45 AM	304

Summary Information:

7:45:00 AM - 8:00:00 AM	Drive-Thru Queue
Total Vehicle Count:	28
Delayed Vehicle Count:	28
Through Vehicle Count:	0
Average Stopped Time:	166.43
Maximum Stopped Time:	336
Min. Secs. for Delay:	0
Average Queue:	4.07
Queue Density:	4.20
Maximum Queue:	8
Delay in Vehicle Hour:	4.07
Total Delay:	4660

Ln.	No.	Joined Queue	Released From Queue	Delay
1	104	8:00:22 AM	8:05:06 AM	284
1	105	8:02:05 AM	8:05:18 AM	193
1	106	8:03:16 AM	8:05:37 AM	141
1	107	8:03:54 AM	8:06:57 AM	183
1	108	8:05:17 AM	8:07:33 AM	136
1	109	8:06:23 AM	8:07:49 AM	86
1	110	8:06:27 AM	8:08:50 AM	143
1	111	8:06:45 AM	8:09:06 AM	141
1	112	8:09:08 AM	8:10:30 AM	82
1	113	8:09:09 AM	8:11:48 AM	159
1	114	8:10:06 AM	8:13:48 AM	222
1	115	8:12:09 AM	8:14:03 AM	114
1	116	8:12:09 AM	8:14:46 AM	157
1	117	8:12:19 AM	8:15:15 AM	176
1	118	8:12:29 AM	8:15:57 AM	208

Summary Information:

8:00:00 AM - 8:15:00 AM	Drive-Thru Queue
Total Vehicle Count:	15
Delayed Vehicle Count:	15
Through Vehicle Count:	0
Average Stopped Time:	161.67
Maximum Stopped Time:	284
Min. Secs. for Delay:	0
Average Queue:	2.59
Queue Density:	2.60
Maximum Queue:	5
Delay in Vehicle Hour:	2.59
Total Delay:	2425

Ln.	No.	Joined Queue	Released From Queue	Delay
1	119	8:15:26 AM	8:16:31 AM	65

GPI Project #:
Peabody, MA
Client: John DeBarros

Traffic Survey Expedition
106 Sharon Road
N. Quincy, MA 02171
P: 617-448-5686
F: 617-801-8300
www.tsetraffic.com

File Name : AM Drive Thru Queue
Site Code : 256DD
Start Date : 10/22/2013

Ln.	No.	Joined Queue	Released From Queue	Delay
1	120	8:16:16 AM	8:18:05 AM	109
1	121	8:16:30 AM	8:19:06 AM	156
1	122	8:16:49 AM	8:19:33 AM	164
1	123	8:17:39 AM	8:19:48 AM	129
1	124	8:17:39 AM	8:20:39 AM	180
1	125	8:17:47 AM	8:21:17 AM	210
1	126	8:18:06 AM	8:21:31 AM	205
1	127	8:19:30 AM	8:21:55 AM	145
1	128	8:19:49 AM	8:22:28 AM	159
1	129	8:20:03 AM	8:22:56 AM	173
1	130	8:20:50 AM	8:23:21 AM	151
1	131	8:21:14 AM	8:23:45 AM	151
1	132	8:21:15 AM	8:24:50 AM	215
1	133	8:22:08 AM	8:25:46 AM	218
1	134	8:22:24 AM	8:26:09 AM	225
1	135	8:23:01 AM	8:26:51 AM	230
1	136	8:23:48 AM	8:27:21 AM	213
1	137	8:24:21 AM	8:27:53 AM	212
1	138	8:24:21 AM	8:28:30 AM	249
1	139	8:26:27 AM	8:29:35 AM	188
1	140	8:26:27 AM	8:29:52 AM	205
1	141	8:27:48 AM	8:30:27 AM	159
1	142	8:27:48 AM	8:31:18 AM	210
1	143	8:28:31 AM	8:31:55 AM	204
1	144	8:28:31 AM	8:32:16 AM	225

Summary Information:

8:15:00 AM - 8:30:00 AM	Drive-Thru Queue
Total Vehicle Count:	26
Delayed Vehicle Count:	26
Through Vehicle Count:	0
Average Stopped Time:	182.69
Maximum Stopped Time:	249
Min. Secs. for Delay:	0
Average Queue:	4.70
Queue Density:	4.71
Maximum Queue:	8
Delay in Vehicle Hour:	4.70
Total Delay:	4750

Ln.	No.	Joined Queue	Released From Queue	Delay
1	145	8:30:07 AM	8:32:58 AM	171
1	146	8:30:49 AM	8:33:33 AM	164
1	147	8:31:33 AM	8:33:58 AM	145
1	148	8:32:26 AM	8:34:18 AM	112
1	149	8:32:38 AM	8:34:49 AM	131
1	150	8:32:39 AM	8:37:19 AM	280
1	151	8:34:20 AM	8:37:54 AM	214
1	152	8:34:20 AM	8:39:02 AM	282
1	153	8:34:31 AM	8:39:34 AM	303
1	154	8:34:52 AM	8:39:59 AM	307
1	155	8:35:03 AM	8:40:56 AM	353
1	156	8:35:03 AM	8:41:30 AM	387
1	157	8:36:36 AM	8:42:15 AM	339
1	158	8:37:18 AM	8:43:31 AM	373
1	159	8:39:59 AM	8:43:38 AM	219
1	160	8:43:00 AM	8:44:31 AM	91
1	161	8:43:01 AM	8:45:10 AM	129

GPI Project #:
Peabody, MA
Client: John DeBarros

File Name : AM Drive Thru Queue
Site Code : 256DD
Start Date : 10/22/2013

Summary Information:

8:30:00 AM - 8:45:00 AM	Drive-Thru Queue
Total Vehicle Count:	17
Delayed Vehicle Count:	17
Through Vehicle Count:	0
Average Stopped Time:	235.29
Maximum Stopped Time:	387
Min. Secs. for Delay:	0
Average Queue:	4.43
Queue Density:	4.43
Maximum Queue:	9
Delay in Vehicle Hour:	4.43
Total Delay:	4000

Ln.	No.	Joined Queue	Released From Queue	Delay
1	162	8:46:27 AM	8:46:45 AM	18
1	163	8:46:28 AM	8:46:45 AM	17
1	164	8:46:28 AM	8:48:28 AM	120
1	165	8:46:48 AM	8:49:24 AM	156
1	166	8:46:49 AM	8:50:52 AM	243
1	167	8:47:01 AM	8:51:09 AM	248
1	168	8:48:44 AM	8:51:43 AM	179
1	169	8:49:17 AM	8:52:45 AM	208
1	170	8:49:18 AM	8:54:44 AM	326
1	171	8:53:09 AM	8:55:08 AM	119
1	172	8:53:25 AM	8:55:34 AM	129
1	173	8:53:26 AM	8:56:46 AM	200
1	174	8:54:01 AM	8:57:02 AM	181
1	175	8:54:11 AM	8:57:18 AM	187
1	176	8:55:02 AM	8:57:50 AM	168
1	177	8:55:55 AM	8:58:39 AM	164
1	178	8:55:56 AM	8:59:35 AM	219
1	179	8:57:00 AM	8:59:58 AM	178

Summary Information:

8:45:00 AM - 9:00:00 AM	Drive-Thru Queue
Total Vehicle Count:	18
Delayed Vehicle Count:	18
Through Vehicle Count:	0
Average Stopped Time:	170.00
Maximum Stopped Time:	326
Min. Secs. for Delay:	0
Average Queue:	3.77
Queue Density:	3.78
Maximum Queue:	6
Delay in Vehicle Hour:	3.77
Total Delay:	3060

Summary Information:

7:00:00 AM - 9:00:00 AM	Drive-Thru Queue
Total Vehicle Count:	179
Delayed Vehicle Count:	179
Through Vehicle Count:	0
Average Stopped Time:	177.47
Maximum Stopped Time:	387
Min. Secs. for Delay:	0
Average Queue:	4.41
Queue Density:	4.52
Maximum Queue:	10
Delay in Vehicle Hour:	4.41
Total Delay:	31767

GPI Project #:
Peabody, MA
Client: John DeBarros

Traffic Survey Expedition
106 Sharon Road
N. Quincy, MA 02171
P: 617-448-5686
F: 617-801-8800
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File Name : Queue
Site Code : 254DD
Start Date : 10/19/2013

Ln.	No.	Joined Queue	Released From Queue	Delay
1	1	11:00:00 AM	11:02:11 AM	131
1	2	11:00:07 AM	11:03:12 AM	185
1	3	11:01:12 AM	11:04:27 AM	195
1	4	11:01:12 AM	11:04:49 AM	217
1	5	11:01:13 AM	11:05:04 AM	231
1	6	11:01:14 AM	11:05:39 AM	265
1	7	11:02:01 AM	11:06:15 AM	254
1	8	11:02:02 AM	11:07:04 AM	302
1	9	11:02:38 AM	11:08:06 AM	328
1	10	11:04:08 AM	11:09:15 AM	307
1	11	11:06:50 AM	11:09:45 AM	175
1	12	11:06:51 AM	11:10:51 AM	240
1	13	11:06:51 AM	11:13:07 AM	376
1	14	11:09:21 AM	11:13:59 AM	278
1	15	11:09:32 AM	11:14:10 AM	278
1	16	11:10:38 AM	11:14:21 AM	223
1	17	11:11:06 AM	11:16:01 AM	295
1	18	11:12:01 AM	11:16:30 AM	269
1	19	11:13:48 AM	11:16:39 AM	171
1	20	11:14:19 AM	11:17:20 AM	181

Summary Information:

11:00:00 AM - 11:15:00 AM	Drive Thru
Total Vehicle Count:	20
Delayed Vehicle Count:	20
Through Vehicle Count:	0
Average Stopped Time:	245.05
Maximum Stopped Time:	376
Min. Secs. for Delay:	0
Average Queue:	4.71
Queue Density:	4.72
Maximum Queue:	8
Delay in Vehicle Hour:	4.71
Total Delay:	4901

Ln.	No.	Joined Queue	Released From Queue	Delay
1	21	11:15:41 AM	11:18:35 AM	174
1	22	11:15:56 AM	11:19:23 AM	207
1	23	11:16:31 AM	11:20:02 AM	211
1	24	11:18:05 AM	11:20:46 AM	161
1	25	11:21:11 AM	11:23:00 AM	109
1	26	11:23:05 AM	11:24:36 AM	91
1	27	11:23:26 AM	11:25:43 AM	137
1	28	11:24:29 AM	11:26:11 AM	102
1	29	11:24:48 AM	11:27:27 AM	159
1	30	11:25:16 AM	11:27:56 AM	160
1	31	11:27:01 AM	11:32:40 AM	339
1	32	11:29:10 AM	11:34:01 AM	291
1	33	11:29:17 AM	11:34:35 AM	318
1	34	11:29:35 AM	11:35:17 AM	342

Summary Information:

11:15:00 AM - 11:30:00 AM	Drive Thru
Total Vehicle Count:	14
Delayed Vehicle Count:	14
Through Vehicle Count:	0
Average Stopped Time:	200.07
Maximum Stopped Time:	342
Min. Secs. for Delay:	0
Average Queue:	2.38
Queue Density:	2.45
Maximum Queue:	4
Delay in Vehicle Hour:	2.38
Total Delay:	2801

Ln.	No.	Joined Queue	Released From Queue	Delay
1	35	11:33:18 AM	11:35:55 AM	157
1	36	11:34:09 AM	11:36:47 AM	158
1	37	11:35:05 AM	11:38:00 AM	175
1	38	11:36:19 AM	11:38:45 AM	146
1	39	11:37:03 AM	11:39:19 AM	136
1	40	11:38:20 AM	11:40:07 AM	107
1	41	11:40:15 AM	11:41:32 AM	77
1	42	11:42:38 AM	11:43:45 AM	67
1	43	11:43:11 AM	11:46:22 AM	191
1	44	11:43:32 AM	11:46:50 AM	198
1	45	11:43:38 AM	11:47:37 AM	239
1	46	11:43:59 AM	11:49:12 AM	313

Summary Information:

11:30:00 AM - 11:45:00 AM	Drive Thru
Total Vehicle Count:	12
Delayed Vehicle Count:	12
Through Vehicle Count:	0
Average Stopped Time:	163.67
Maximum Stopped Time:	313
Min. Secs. for Delay:	0
Average Queue:	2.06
Queue Density:	2.23
Maximum Queue:	4
Delay in Vehicle Hour:	2.06
Total Delay:	1964

Ln.	No.	Joined Queue	Released From Queue	Delay
1	47	11:45:02 AM	11:49:50 AM	288
1	48	11:46:06 AM	11:50:32 AM	266
1	49	11:46:39 AM	11:51:06 AM	267
1	50	11:47:16 AM	11:51:23 AM	247
1	51	11:47:39 AM	11:51:59 AM	260
1	52	11:49:37 AM	11:52:46 AM	189
1	53	11:50:46 AM	11:53:33 AM	167
1	54	11:51:28 AM	11:53:50 AM	142
1	55	11:51:34 AM	11:54:35 AM	181
1	56	11:56:18 AM	11:58:54 AM	156
1	57	11:58:00 AM	11:59:55 AM	115
1	58	11:59:27 AM	12:01:13 PM	106
1	59	11:59:49 AM	12:02:18 PM	149

Summary Information:

11:45:00 AM - 12:00:00 PM	Drive Thru
Total Vehicle Count:	13
Delayed Vehicle Count:	13
Through Vehicle Count:	0
Average Stopped Time:	194.85
Maximum Stopped Time:	288
Min. Secs. for Delay:	0
Average Queue:	2.44
Queue Density:	2.72
Maximum Queue:	6
Delay in Vehicle Hour:	2.44
Total Delay:	2533

Ln.	No.	Joined Queue	Released From Queue	Delay
1	60	12:01:34 PM	12:02:56 PM	82
1	61	12:02:32 PM	12:03:06 PM	34
1	62	12:02:42 PM	12:05:44 PM	182
1	63	12:03:01 PM	12:07:12 PM	251
1	64	12:05:11 PM	12:07:23 PM	132
1	65	12:08:46 PM	12:10:07 PM	81
1	66	12:10:45 PM	12:12:04 PM	79

GPI Project #:
Peabody, MA
Client: John DeBarros

Traffic Survey Expedition
106 Sharon Road
N. Quincy, MA 02171
P: 617-448-5686
F: 617-801-8800
www.tsetraffic.com

File Name : Queue
Site Code : 254DD
Start Date : 10/19/2013

Summary Information:

12:00:00 PM - 12:15:00 PM	Drive Thru
Total Vehicle Count:	7
Delayed Vehicle Count:	7
Through Vehicle Count:	0
Average Stopped Time:	120.14
Maximum Stopped Time:	251
Min. Secs. for Delay:	0
Average Queue:	1.33
Queue Density:	1.65
Maximum Queue:	3
Delay in Vehicle Hour:	1.33
Total Delay:	841

Ln.	No.	Joined Queue	Released From Queue	Delay
1	67	12:15:19 PM	12:17:57 PM	158
1	68	12:16:31 PM	12:18:52 PM	141
1	69	12:16:32 PM	12:19:28 PM	176
1	70	12:16:47 PM	12:20:25 PM	218
1	71	12:16:57 PM	12:21:01 PM	244
1	72	12:19:42 PM	12:22:27 PM	165
1	73	12:19:56 PM	12:23:12 PM	196
1	74	12:22:03 PM	12:24:39 PM	156
1	75	12:22:03 PM	12:26:18 PM	255
1	76	12:22:37 PM	12:26:46 PM	249
1	77	12:24:10 PM	12:27:59 PM	229
1	78	12:25:02 PM	12:28:39 PM	217
1	79	12:26:37 PM	12:29:01 PM	144
1	80	12:27:07 PM	12:30:04 PM	177
1	81	12:29:28 PM	12:30:21 PM	53
1	82	12:29:31 PM	12:30:40 PM	69
1	83	12:29:47 PM	12:31:31 PM	104

Summary Information:

12:15:00 PM - 12:30:00 PM	Drive Thru
Total Vehicle Count:	17
Delayed Vehicle Count:	17
Through Vehicle Count:	0
Average Stopped Time:	173.59
Maximum Stopped Time:	255
Min. Secs. for Delay:	0
Average Queue:	3.03
Queue Density:	3.04
Maximum Queue:	5
Delay in Vehicle Hour:	3.04
Total Delay:	2951

Ln.	No.	Joined Queue	Released From Queue	Delay
1	84	12:30:45 PM	12:31:31 PM	46
1	85	12:31:17 PM	12:33:10 PM	113
1	86	12:31:17 PM	12:33:58 PM	161
1	87	12:33:14 PM	12:34:25 PM	71
1	88	12:33:23 PM	12:34:57 PM	94
1	89	12:33:48 PM	12:37:02 PM	194
1	90	12:35:30 PM	12:39:00 PM	210
1	91	12:35:35 PM	12:39:56 PM	261
1	92	12:36:18 PM	12:43:25 PM	427
1	93	12:38:12 PM	12:43:46 PM	334
1	94	12:38:12 PM	12:44:13 PM	361
1	95	12:39:23 PM	12:45:05 PM	342
1	96	12:40:44 PM	12:45:20 PM	276
1	97	12:40:45 PM	12:45:40 PM	295
1	98	12:41:29 PM	12:46:20 PM	291

GPI Project #:
Peabody, MA
Client: John DeBarros

Traffic Survey Expedition
106 Sharon Road
N. Quincy, MA 02171
P: 617-448-5686
F: 617-801-8800
www.tsetraffic.com

File Name : Queue
Site Code : 254DD
Start Date : 10/19/2013

Summary Information:

12:30:00 PM - 12:45:00 PM	Drive Thru
Total Vehicle Count:	15
Delayed Vehicle Count:	15
Through Vehicle Count:	0
Average Stopped Time:	231.73
Maximum Stopped Time:	427
Min. Secs. for Delay:	0
Average Queue:	3.72
Queue Density:	3.72
Maximum Queue:	7
Delay in Vehicle Hour:	3.72
Total Delay:	3476

Ln.	No.	Joined Queue	Released From Queue	Delay
1	99	12:45:01 PM	12:47:59 PM	178
1	100	12:45:59 PM	12:48:35 PM	156
1	101	12:47:21 PM	12:50:16 PM	175
1	102	12:47:21 PM	12:51:38 PM	257
1	103	12:48:49 PM	12:52:06 PM	197
1	104	12:50:18 PM	12:54:09 PM	231
1	105	12:50:19 PM	12:55:04 PM	285
1	106	12:50:29 PM	12:55:25 PM	296
1	107	12:52:32 PM	12:56:14 PM	222
1	108	12:53:02 PM	12:56:56 PM	234
1	109	12:54:19 PM	12:57:47 PM	208
1	110	12:54:37 PM	12:58:04 PM	207
1	111	12:58:28 PM	1:00:53 PM	145
1	112	12:59:25 PM	1:01:31 PM	126

Summary Information:

12:45:00 PM - 1:00:00 PM	Drive Thru
Total Vehicle Count:	14
Delayed Vehicle Count:	14
Through Vehicle Count:	0
Average Stopped Time:	208.36
Maximum Stopped Time:	296
Min. Secs. for Delay:	0
Average Queue:	2.95
Queue Density:	3.02
Maximum Queue:	6
Delay in Vehicle Hour:	2.95
Total Delay:	2917

Ln.	No.	Joined Queue	Released From Queue	Delay
1	113	1:05:05 PM	1:06:15 PM	70
1	114	1:07:54 PM	1:09:16 PM	82
1	115	1:08:01 PM	1:09:44 PM	103
1	116	1:08:06 PM	1:11:10 PM	184
1	117	1:09:05 PM	1:12:24 PM	199
1	118	1:11:31 PM	1:13:05 PM	94
1	119	1:12:09 PM	1:13:35 PM	86
1	120	1:12:31 PM	1:14:25 PM	114
1	121	1:13:04 PM	1:15:36 PM	152
1	122	1:13:30 PM	1:15:59 PM	149
1	123	1:13:44 PM	1:16:44 PM	180
1	124	1:14:13 PM	1:17:20 PM	187
1	125	1:14:13 PM	1:17:33 PM	200

GPI Project #:
Peabody, MA
Client: John DeBarros

Traffic Survey Expedition
106 Sharon Road
N. Quincy, MA 02171
P: 617-448-5686
F: 617-801-8800
www.tsetraffic.com

File Name : Queue
Site Code : 254DD
Start Date : 10/19/2013

Summary Information:

1:00:00 PM - 1:15:00 PM	Drive Thru
Total Vehicle Count:	13
Delayed Vehicle Count:	13
Through Vehicle Count:	0
Average Stopped Time:	138.46
Maximum Stopped Time:	200
Min. Secs. for Delay:	0
Average Queue:	2.41
Queue Density:	2.78
Maximum Queue:	6
Delay in Vehicle Hour:	2.41
Total Delay:	1800

Ln.	No.	Joined Queue	Released From Queue	Delay
1	126	1:16:04 PM	1:18:18 PM	134
1	127	1:16:25 PM	1:18:34 PM	129
1	128	1:18:22 PM	1:19:25 PM	63
1	129	1:20:11 PM	1:21:31 PM	80
1	130	1:21:12 PM	1:22:30 PM	78
1	131	1:22:58 PM	1:25:10 PM	132
1	132	1:23:52 PM	1:26:09 PM	137
1	133	1:25:05 PM	1:27:07 PM	122
1	134	1:28:07 PM	1:29:27 PM	80
1	135	1:28:07 PM	1:30:08 PM	121
1	136	1:28:30 PM	1:30:56 PM	146

Summary Information:

1:15:00 PM - 1:30:00 PM	Drive Thru
Total Vehicle Count:	11
Delayed Vehicle Count:	11
Through Vehicle Count:	0
Average Stopped Time:	111.09
Maximum Stopped Time:	146
Min. Secs. for Delay:	0
Average Queue:	1.37
Queue Density:	1.61
Maximum Queue:	3
Delay in Vehicle Hour:	1.37
Total Delay:	1222

Ln.	No.	Joined Queue	Released From Queue	Delay
1	137	1:31:37 PM	1:33:14 PM	97
1	138	1:33:50 PM	1:40:27 PM	397
1	139	1:35:45 PM	1:41:31 PM	346
1	140	1:37:27 PM	1:42:22 PM	295
1	141	1:42:28 PM	1:43:30 PM	62
1	142	1:44:57 PM	1:46:13 PM	76

Summary Information:

1:30:00 PM - 1:45:00 PM	Drive Thru
Total Vehicle Count:	6
Delayed Vehicle Count:	6
Through Vehicle Count:	0
Average Stopped Time:	212.17
Maximum Stopped Time:	397
Min. Secs. for Delay:	0
Average Queue:	1.45
Queue Density:	1.71
Maximum Queue:	3
Delay in Vehicle Hour:	1.45
Total Delay:	1273

Ln.	No.	Joined Queue	Released From Queue	Delay
1	143	1:47:17 PM	1:47:44 PM	27
1	144	1:50:02 PM	1:51:25 PM	83

GPI Project #:
Peabody, MA
Client: John DeBarros

Traffic Survey Expedition
106 Sharon Road
N. Quincy, MA 02171
P: 617-448-5686
F: 617-301-8300
www.tsetraffic.com

File Name : Queue
Site Code : 254DD
Start Date : 10/19/2013

Ln.	No.	Joined Queue	Released From Queue	Delay
1	145	1:50:14 PM	1:51:36 PM	82
1	146	1:50:55 PM	1:52:59 PM	124
1	147	1:51:39 PM	1:53:30 PM	111
1	148	1:51:53 PM	1:55:00 PM	187
1	149	1:52:24 PM	1:55:26 PM	182
1	150	1:55:02 PM	1:56:01 PM	59
1	151	1:56:58 PM	1:57:58 PM	60
1	152	1:57:02 PM	1:59:27 PM	145

Summary Information:

1:45:00 PM - 2:00:00 PM	Drive Thru
Total Vehicle Count:	10
Delayed Vehicle Count:	10
Through Vehicle Count:	0
Average Stopped Time:	106.00
Maximum Stopped Time:	187
Min. Secs. for Delay:	0
Average Queue:	1.45
Queue Density:	1.98
Maximum Queue:	4
Delay in Vehicle Hour:	1.45
Total Delay:	1060

Summary Information:

11:00:00 AM - 2:00:00 PM	Drive Thru
Total Vehicle Count:	152
Delayed Vehicle Count:	152
Through Vehicle Count:	0
Average Stopped Time:	182.49
Maximum Stopped Time:	427
Min. Secs. for Delay:	0
Average Queue:	2.58
Queue Density:	2.97
Maximum Queue:	8
Delay in Vehicle Hour:	2.58
Total Delay:	27739

CAPACITY ANALYSIS METHODOLOGY

CAPACITY ANALYSIS METHODOLOGY

A primary result of capacity analysis is the assignment of levels of service to traffic facilities under various traffic flow conditions. The capacity analysis methodology is based on the concepts and procedures in the *Highway Capacity Manual* (HCM).[9] The concept of level of service (LOS) 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 LOS A representing the best operating conditions and LOS F the worst. 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. A description of the operating condition under each level of service is provided below:

- *LOS A* describes conditions with little to no delay to motorists.
- *LOS B* represents a desirable level with relatively low delay to motorists.
- *LOS C* describes conditions with average delays to motorists.
- *LOS D* describes operations where the influence of congestion becomes more noticeable. Delays are still within an acceptable range.
- *LOS E* represents operating conditions with high delay values. This level is considered by many agencies to be the limit of acceptable delay.
- *LOS F* is considered to be unacceptable to most drivers with high delay values that often occur, when arrival flow rates exceed the capacity of the intersection.

Unsignalized Intersections

Levels of service for unsignalized intersections are calculated using the operational analysis methodology of the HCM. The procedure accounts for lane configuration on both the minor and major street approaches, conflicting traffic stream volumes, and the type of intersection control (STOP, YIELD, or all-way STOP control). The definition of level of service for unsignalized intersections is a function of average *control* delay. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The level-of-service criteria for unsignalized intersections are shown in Table A-1.

Signalized Intersections

Levels of service for signalized intersections are also calculated using the operational analysis methodology of the HCM. The methodology for signalized intersections assesses the effects of signal type, timing, phasing, and progression; vehicle mix; and geometrics on average *control* delay. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Table A-1 summarizes the relationship between level of service and average control delay.

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[9] *Highway Capacity Manual 2000*, Transportation Research Board; Washington, D.C.; 2000.

TABLE A-1
Level-of-Service Criteria for Intersections

Level of Service	Unsignalized Intersection Criteria Average Control Delay (Seconds per Vehicle)	Signalized Intersection Criteria Average Control Delay (Seconds per Vehicle)
A	≤10	≤10
B	>10 and ≤15	>10 and ≤20
C	>15 and ≤25	>20 and ≤35
D	>25 and ≤35	>35 and ≤55
E	>35 and ≤50	>55 and ≤80
F	>50	>80

Source *Highway Capacity Manual 2000*, Transportation Research Board; Washington, D.C.; 2000. Pages 10-16, 20-6, and 17-2.

For signalized intersections, this delay criterion may be applied in assigning level-of-service designations to individual lane groups, to individual intersection approaches, or to the entire intersection. For unsignalized intersections, this delay criterion may be applied in assigning level-of-service designations to individual lane groups or to individual intersection approaches.

STOP-DELAY/QUEUE STUDY

Rostrons Liquor Store North Driveway
exiting on Broadway
Queue/Delay Study
City, State: Methuen, MA
Date: Tues 1/9/2024
Time: 8:00am-9:00am
PDI File#: 239766
Client: GPI/ S. Theriault
Client #: TBA

Vehicle #	Entered Queue	Left Queue	Delay in sec.	Queue Length	Turning Movement	
1	8:02:46 AM	8:03:05 AM	00:19	1	Right	
2	8:03:52 AM	8:03:52 AM	00:00	1	Left	
3	8:16:05 AM	8:16:11 AM	00:06	1	Right	
4	8:19:06 AM	8:19:13 AM	00:07	1	Left	
5	8:19:42 AM	8:19:44 AM	00:02	1	Right	
6	8:22:54 AM	8:23:42 AM	00:48	1	Left	
7	8:25:46 AM	8:25:58 AM	00:12	1	Right	
8	8:36:30 AM	8:36:30 AM	00:00	1	Left	
9	8:38:00 AM	8:38:00 AM	00:00	1	Right	
10	8:42:15 AM	8:42:15 AM	00:00	1	Right	
11	8:55:36 AM	8:55:40 AM	00:04	1	Left	
12	8:59:22 AM	8:59:22 AM	00:00	1	Right	

	Totals
Total Vehicles	12
Ave Stopped Time	00:08
Max Stopped Time	00:48
Average Queue	1.00
Max Queue	1
Total Delay	0:01:38

Rostrons Liquor Store North Driveway
exiting on Broadway
Queue/Delay Study
City, State: Methuen, MA
Date: Tues 1/9/2024
Time: 4:15pm-5:15pm
PDI File#: 239766
Client: GPI/ S. Theriault
Client #: TBA

Vehicle #	Entered Queue	Left Queue	Delay in sec.	Queue Length	Turning Movement
1	4:14:36 PM	4:15:25 PM	00:49	1	Left
2	4:17:23 PM	4:17:23 PM	00:00	1	Right
3	4:17:36 PM	4:18:12 PM	00:36	1	Right
4	4:23:21 PM	4:23:21 PM	00:00	1	Right
5	4:23:56 PM	4:24:08 PM	00:12	1	Right
6	4:29:20 PM	4:29:20 PM	00:00	1	Right
7	4:29:48 PM	4:30:01 PM	00:13	1	Right
8	4:30:55 PM	4:31:09 PM	00:14	1	Right
9	4:31:15 PM	4:31:15 PM	00:00	1	Right
10	4:31:23 PM	4:31:25 PM	00:02	1	Left
11	4:32:16 PM	4:32:16 PM	00:00	1	Right
12	4:33:42 PM	4:33:44 PM	00:02	1	Right
13	4:33:54 PM	4:33:54 PM	00:00	1	Right
14	4:40:29 PM	4:40:29 PM	00:00	1	Right
15	4:41:29 PM	4:41:46 PM	00:17	1	Right
16	4:41:42 PM	4:41:54 PM	00:12	2	Right
17	4:43:45 PM	4:43:59 PM	00:14	1	Left
18	4:44:12 PM	4:44:12 PM	00:00	1	Right
19	4:46:44 PM	4:46:55 PM	00:11	1	Right
20	4:48:25 PM	4:48:25 PM	00:00	1	Right
21	4:51:23 PM	4:51:23 PM	00:00	1	Right
22	4:56:38 PM	4:57:14 PM	00:36	1	Right
23	4:59:34 PM	4:59:39 PM	00:05	1	Right
24	5:02:10 PM	5:02:12 PM	00:02	1	Left
25	5:03:37 PM	5:03:50 PM	00:13	1	Right
26	5:04:25 PM	5:04:25 PM	00:00	1	Right
27	5:06:53 PM	5:06:53 PM	00:00	1	Right
28	5:09:23 PM	5:09:34 PM	00:11	1	Right
29	5:11:09 PM	5:11:09 PM	00:00	1	Right

	Ralph Road Totals
Total Vehicles	29
Ave Stopped Time	00:09
Max Stopped Time	00:49
Average Queue	1.03
Max Queue	2
Total Delay	0:04:09

Rostrons Liquor Store North Driveway
exiting on Broadway
Queue/Delay Study
City, State: Methuen, MA
Date: Sat 1/6/2024
Time: 12:15pm-1:15pm
PDI File#: 239766
Client: GPI/ S. Theriault
Client #: TBA

Vehicle #	Entered Queue	Left Queue	Delay in sec.	Queue Length	Turning Movement	
1	12:16:08 PM	12:16:08 PM	00:00	1	Right	
2	12:17:08 PM	12:17:13 PM	00:05	1	Right	
3	12:19:27 PM	12:19:41 PM	00:14	1	Right	
4	12:28:18 PM	12:28:20 PM	00:02	1	Right	
5	12:28:55 PM	12:28:57 PM	00:02	1	Right	
6	12:30:28 PM	12:30:28 PM	00:00	1	Right	
7	12:34:08 PM	12:34:08 PM	00:00	1	Right	
8	12:37:00 PM	12:37:45 PM	00:45	1	Left	
9	12:39:23 PM	12:39:29 PM	00:06	1	Right	
10	12:42:48 PM	12:43:02 PM	00:14	1	Left	
11	12:43:26 PM	12:43:26 PM	00:00	1	Right	
12	12:45:00 PM	12:45:50 PM	00:50	1	Right	
13	12:45:22 PM	12:45:53 PM	00:31	2	Right	
14	12:46:35 PM	12:46:46 PM	00:11	1	Right	
15	12:51:36 PM	12:51:52 PM	00:16	1	Right	
16	12:54:03 PM	12:54:09 PM	00:06	1	Right	
17	1:00:52 PM	1:00:52 PM	00:00	1	Right	
18	1:02:10 PM	1:02:26 PM	00:16	1	Right	
19	1:06:15 PM	1:06:36 PM	00:21	1	Right	
20	1:09:28 PM	1:09:28 PM	00:00	1	Right	
21	1:11:28 PM	1:11:28 PM	00:00	1	Right	
22	1:13:51 PM	1:14:06 PM	00:15	1	Right	

	Ralph Road Totals
Total Vehicles	22
Ave Stopped Time	00:12
Max Stopped Time	00:50
Average Queue	1.05
Max Queue	2
Total Delay	0:04:14

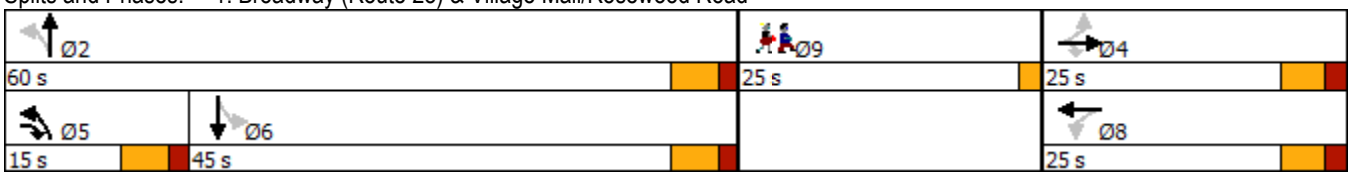
CAPACITY AND QUEUE ANALYSIS WORKSHEETS

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	3	24	110	5	12	62	653	9	5	673	22
Future Volume (vph)	14	3	24	110	5	12	62	653	9	5	673	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	12	12	12	11	11	11	11	11	11
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		542			549			948			737	
Travel Time (s)		12.3			12.5			16.2			12.6	
Peak Hour Factor	0.79	0.79	0.79	0.87	0.87	0.87	0.92	0.92	0.92	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	13%	3%	0%	0%	5%	6%	0%	0%	4%	5%
Shared Lane Traffic (%)												
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	5	8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	3.0	5.0	5.0		3.0	10.0		10.0	10.0	
Minimum Split (s)	10.5	10.5	8.5	10.5	10.5		8.5	15.5		15.5	15.5	
Total Split (s)	25.0	25.0	15.0	25.0	25.0		15.0	60.0		45.0	45.0	
Total Split (%)	22.7%	22.7%	13.6%	22.7%	22.7%		13.6%	54.5%		40.9%	40.9%	
Yellow Time (s)	3.5	3.5	4.0	3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	1.5	2.0	2.0		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)		-1.5	-1.5		-1.5			-1.5			-1.5	
Total Lost Time (s)		4.0	4.0		4.0			4.0			4.0	
Lead/Lag			Lead				Lead			Lag	Lag	
Lead-Lag Optimize?			Yes				Yes			Yes	Yes	
Recall Mode	None	None	None	None	None		None	Min		Min	Min	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 53.6
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Broadway (Route 28) & Village Mall/Rosewood Road



Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Right Turn on Red	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	7.0
Minimum Split (s)	25.0
Total Split (s)	25.0
Total Split (%)	23%
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None

Intersection Summary

Lane Group	EBT	EBR	WBT	NBT	SBT
Lane Group Flow (vph)	22	30	146	787	778
v/c Ratio	0.06	0.04	0.41	0.48	0.49
Control Delay	17.8	2.8	21.3	7.7	12.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	17.8	2.8	21.3	7.7	12.2
Queue Length 50th (ft)	4	0	28	63	58
Queue Length 95th (ft)	20	7	95	118	187
Internal Link Dist (ft)	462		469	868	657
Turn Bay Length (ft)					
Base Capacity (vph)	564	760	558	2619	2524
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.04	0.04	0.26	0.30	0.31

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	3	24	110	5	12	62	653	9	5	673	22
Future Volume (vph)	14	3	24	110	5	12	62	653	9	5	673	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	12	12	12	11	11	11	11	11	11
Total Lost time (s)		4.0	4.0		4.0			4.0			4.0	
Lane Util. Factor		1.00	1.00		1.00			0.95			0.95	
Frt		1.00	0.85		0.99			1.00			1.00	
Flt Protected		0.96	1.00		0.96			1.00			1.00	
Satd. Flow (prot)		1704	1334		1752			3277			3339	
Flt Permitted		0.77	1.00		0.74			0.85			0.95	
Satd. Flow (perm)		1373	1334		1352			2782			3170	
Peak-hour factor, PHF	0.79	0.79	0.79	0.87	0.87	0.87	0.92	0.92	0.92	0.90	0.90	0.90
Adj. Flow (vph)	18	4	30	126	6	14	67	710	10	6	748	24
RTOR Reduction (vph)	0	0	21	0	3	0	0	1	0	0	2	0
Lane Group Flow (vph)	0	22	9	0	143	0	0	786	0	0	776	0
Heavy Vehicles (%)	0%	0%	13%	3%	0%	0%	5%	6%	0%	0%	4%	5%
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		12.5	14.9		12.5			33.4			25.5	
Effective Green, g (s)		14.0	17.9		14.0			34.9			27.0	
Actuated g/C Ratio		0.25	0.31		0.25			0.61			0.47	
Clearance Time (s)		5.5	5.5		5.5			5.5			5.5	
Vehicle Extension (s)		3.0	5.0		3.0			3.0			3.0	
Lane Grp Cap (vph)		337	513		332			1740			1504	
v/s Ratio Prot			0.00					c0.03				
v/s Ratio Perm		0.02	0.01		c0.11			0.25			c0.24	
v/c Ratio		0.07	0.02		0.43			0.45			0.52	
Uniform Delay, d1		16.4	13.4		18.1			5.9			10.4	
Progression Factor		1.00	1.00		1.00			1.00			1.00	
Incremental Delay, d2		0.1	0.0		0.9			0.2			0.3	
Delay (s)		16.5	13.5		19.0			6.1			10.7	
Level of Service		B	B		B			A			B	
Approach Delay (s)		14.8			19.0			6.1			10.7	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	9.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	56.9	Sum of lost time (s)	15.5
Intersection Capacity Utilization	63.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	5	7	666	0	0	678
Future Volume (vph)	5	7	666	0	0	678
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	11	11	11	11
Link Speed (mph)	30		40			40
Link Distance (ft)	667		737			235
Travel Time (s)	15.2		12.6			4.0
Peak Hour Factor	0.60	0.60	0.90	0.90	0.91	0.91
Heavy Vehicles (%)	0%	40%	7%	0%	0%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary

Area Type: Other
Control Type: Unsignalized

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	5	7	666	0	0	678
Future Volume (Veh/h)	5	7	666	0	0	678
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.60	0.60	0.90	0.90	0.91	0.91
Hourly flow rate (vph)	8	12	740	0	0	745
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			737			
pX, platoon unblocked	0.93	0.93			0.93	
vC, conflicting volume	1112	370			740	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	973	176			573	
tC, single (s)	*3.5	*4.4			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.7			2.2	
p0 queue free %	99	98			100	
cM capacity (veh/h)	575	799			940	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	20	370	370	372	372
Volume Left	8	0	0	0	0
Volume Right	12	0	0	0	0
cSH	691	1700	1700	1700	1700
Volume to Capacity	0.03	0.22	0.22	0.22	0.22
Queue Length 95th (ft)	2	0	0	0	0
Control Delay (s)	10.4	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	10.4	0.0		0.0	
Approach LOS	B				

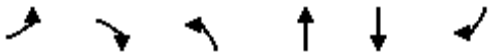
Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	28.7%	ICU Level of Service	A
Analysis Period (min)	15		

* User Entered Value

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1	0	1	672	678	0
Future Volume (vph)	1	0	1	672	678	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Link Speed (mph)	30			40	40	
Link Distance (ft)	720			235	868	
Travel Time (s)	16.4			4.0	14.8	
Confl. Peds. (#/hr)			1			1
Peak Hour Factor	0.25	0.25	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	6%	3%	0%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1	0	1	672	678	0
Future Volume (Veh/h)	1	0	1	672	678	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.25	0.25	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	4	0	1	738	745	0
Pedestrians	1					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				972		
pX, platoon unblocked	0.96					
vC, conflicting volume	1117	374	746			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1045	374	746			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	100	100			
cM capacity (veh/h)	219	629	870			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	4	247	492	497	248
Volume Left	4	1	0	0	0
Volume Right	0	0	0	0	0
cSH	219	870	1700	1700	1700
Volume to Capacity	0.02	0.00	0.29	0.29	0.15
Queue Length 95th (ft)	1	0	0	0	0
Control Delay (s)	21.8	0.0	0.0	0.0	0.0
Lane LOS	C	A			
Approach Delay (s)	21.8	0.0		0.0	
Approach LOS	C				

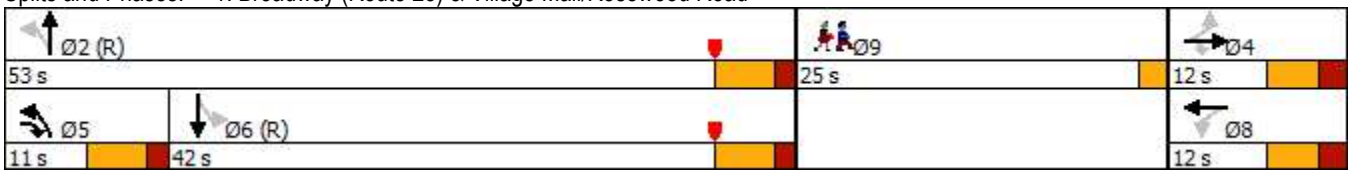
Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	29.3%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	8	92	101	1	9	86	1080	8	6	935	40
Future Volume (vph)	28	8	92	101	1	9	86	1080	8	6	935	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	12	12	12	11	11	11	11	11	11
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		542			549			948			737	
Travel Time (s)		12.3			12.5			16.2			12.6	
Peak Hour Factor	0.82	0.82	0.82	0.86	0.86	0.86	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	2%	0%	0%	0%	4%	3%	0%	0%	1%	0%
Shared Lane Traffic (%)												
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	5	8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	3.0	5.0	5.0		3.0	10.0		10.0	10.0	
Minimum Split (s)	10.5	10.5	8.5	10.5	10.5		8.5	15.5		15.5	15.5	
Total Split (s)	12.0	12.0	11.0	12.0	12.0		11.0	53.0		42.0	42.0	
Total Split (%)	13.3%	13.3%	12.2%	13.3%	13.3%		12.2%	58.9%		46.7%	46.7%	
Yellow Time (s)	3.5	3.5	4.0	3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	1.5	2.0	2.0		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)		-1.5	-1.5		-1.5			-1.5			-1.5	
Total Lost Time (s)		4.0	4.0		4.0			4.0			4.0	
Lead/Lag			Lead				Lead			Lag	Lag	
Lead-Lag Optimize?			Yes				Yes			Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Min		C-Min	C-Min	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 57 (63%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 1: Broadway (Route 28) & Village Mall/Rosewood Road



Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Right Turn on Red	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	7.0
Minimum Split (s)	25.0
Total Split (s)	25.0
Total Split (%)	28%
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None

Intersection Summary

Lane Group	EBT	EBR	WBT	NBT	SBT
Lane Group Flow (vph)	44	112	128	1262	1054
v/c Ratio	0.18	0.21	0.54	0.74	0.57
Control Delay	35.6	6.6	45.0	13.7	15.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	35.6	6.6	45.0	13.7	15.8
Queue Length 50th (ft)	21	0	63	148	187
Queue Length 95th (ft)	53	33	#180	#387	341
Internal Link Dist (ft)	462		469	868	657
Turn Bay Length (ft)					
Base Capacity (vph)	248	544	239	1694	1849
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.18	0.21	0.54	0.74	0.57

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	8	92	101	1	9	86	1080	8	6	935	40
Future Volume (vph)	28	8	92	101	1	9	86	1080	8	6	935	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	12	12	12	11	11	11	11	11	11
Total Lost time (s)		4.0	4.0		4.0			4.0			4.0	
Lane Util. Factor		1.00	1.00		1.00			0.95			0.95	
Frt		1.00	0.85		0.99			1.00			0.99	
Flt Protected		0.96	1.00		0.96			1.00			1.00	
Satd. Flow (prot)		1707	1478		1798			3370			3435	
Flt Permitted		0.79	1.00		0.71			0.71			0.95	
Satd. Flow (perm)		1407	1478		1339			2386			3255	
Peak-hour factor, PHF	0.82	0.82	0.82	0.86	0.86	0.86	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	34	10	112	117	1	10	92	1161	9	6	1005	43
RTOR Reduction (vph)	0	0	83	0	3	0	0	0	0	0	3	0
Lane Group Flow (vph)	0	44	29	0	125	0	0	1262	0	0	1051	0
Heavy Vehicles (%)	0%	0%	2%	0%	0%	0%	4%	3%	0%	0%	1%	0%
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		14.4	20.0		14.4			58.0			46.9	
Effective Green, g (s)		15.9	23.0		15.9			59.5			48.4	
Actuated g/C Ratio		0.18	0.26		0.18			0.66			0.54	
Clearance Time (s)		5.5	5.5		5.5			5.5			5.5	
Vehicle Extension (s)		3.0	5.0		3.0			3.0			3.0	
Lane Grp Cap (vph)		248	443		236			1655			1750	
v/s Ratio Prot			0.01					c0.06				
v/s Ratio Perm		0.03	0.01		c0.09			c0.44			0.32	
v/c Ratio		0.18	0.06		0.53			0.76			0.60	
Uniform Delay, d1		31.5	25.4		33.6			10.4			14.2	
Progression Factor		1.00	1.00		1.00			1.00			1.00	
Incremental Delay, d2		0.3	0.1		2.1			2.5			1.5	
Delay (s)		31.8	25.5		35.8			12.9			15.7	
Level of Service		C	C		D			B			B	
Approach Delay (s)		27.3			35.8			12.9			15.7	
Approach LOS		C			D			B			B	

Intersection Summary

HCM 2000 Control Delay	16.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	82.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	4	25	1143	0	0	993
Future Volume (vph)	4	25	1143	0	0	993
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	11	11	11	11
Link Speed (mph)	30		40			40
Link Distance (ft)	667		737			235
Travel Time (s)	15.2		12.6			4.0
Peak Hour Factor	0.66	0.66	0.94	0.94	0.95	0.95
Heavy Vehicles (%)	0%	4%	3%	0%	0%	1%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary

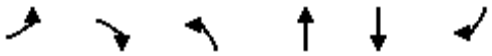
Area Type: Other
Control Type: Unsignalized

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	4	25	1143	0	0	993
Future Volume (Veh/h)	4	25	1143	0	0	993
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.66	0.66	0.94	0.94	0.95	0.95
Hourly flow rate (vph)	6	38	1216	0	0	1045
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			737			
pX, platoon unblocked	0.81	0.81			0.81	
vC, conflicting volume	1738	608			1216	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1434	32			786	
tC, single (s)	*5.2	*5.4			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	97	95			100	
cM capacity (veh/h)	194	841			678	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	44	608	608	522	522
Volume Left	6	0	0	0	0
Volume Right	38	0	0	0	0
cSH	577	1700	1700	1700	1700
Volume to Capacity	0.08	0.36	0.36	0.31	0.31
Queue Length 95th (ft)	6	0	0	0	0
Control Delay (s)	11.7	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	11.7	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	41.6%	ICU Level of Service	A
Analysis Period (min)	15		

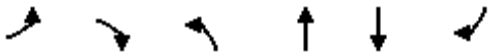
* User Entered Value



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1	2	2	1166	991	2
Future Volume (vph)	1	2	2	1166	991	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Link Speed (mph)	30			40	40	
Link Distance (ft)	720			235	868	
Travel Time (s)	16.4			4.0	14.8	
Confl. Peds. (#/hr)			1			1
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.75	0.75	0.96	0.96	0.95	0.95
Heavy Vehicles (%)	0%	50%	0%	3%	1%	0%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1	2	2	1166	991	2
Future Volume (Veh/h)	1	2	2	1166	991	2
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.75	0.75	0.96	0.96	0.95	0.95
Hourly flow rate (vph)	1	3	2	1215	1043	2
Pedestrians	1					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				972		
pX, platoon unblocked	0.82					
vC, conflicting volume	1656	524	1046			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1354	524	1046			
tC, single (s)	6.8	7.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.8	2.2			
p0 queue free %	99	99	100			
cM capacity (veh/h)	117	391	672			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	4	407	810	695	350
Volume Left	1	2	0	0	0
Volume Right	3	0	0	0	2
cSH	246	672	1700	1700	1700
Volume to Capacity	0.02	0.00	0.48	0.41	0.21
Queue Length 95th (ft)	1	0	0	0	0
Control Delay (s)	19.9	0.1	0.0	0.0	0.0
Lane LOS	C	A			
Approach Delay (s)	19.9	0.0		0.0	
Approach LOS	C				

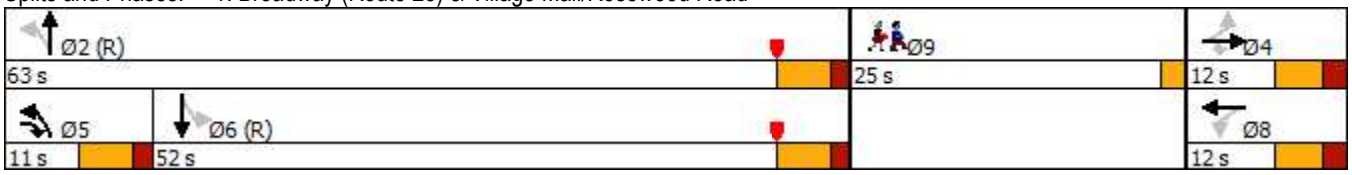
Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	43.6%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	102	13	160	99	11	6	149	1394	10	5	1407	123
Future Volume (vph)	102	13	160	99	11	6	149	1394	10	5	1407	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	12	12	12	11	11	11	11	11	11
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		542			549			948			737	
Travel Time (s)		12.3			12.5			16.2			12.6	
Peak Hour Factor	0.78	0.78	0.78	0.94	0.94	0.94	0.95	0.95	0.95	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	2%	1%	0%	0%	1%	1%	0%	0%	1%	0%
Shared Lane Traffic (%)												
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	5	8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	3.0	5.0	5.0		3.0	10.0		10.0	10.0	
Minimum Split (s)	10.5	10.5	8.5	10.5	10.5		8.5	15.5		15.5	15.5	
Total Split (s)	12.0	12.0	11.0	12.0	12.0		11.0	63.0		52.0	52.0	
Total Split (%)	12.0%	12.0%	11.0%	12.0%	12.0%		11.0%	63.0%		52.0%	52.0%	
Yellow Time (s)	3.5	3.5	4.0	3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	1.5	2.0	2.0		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)		-1.5	-1.5		-1.5			-1.5			-1.5	
Total Lost Time (s)		4.0	4.0		4.0			4.0			4.0	
Lead/Lag			Lead				Lead			Lag	Lag	
Lead-Lag Optimize?			Yes				Yes			Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Min		C-Min	C-Min	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 62 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 1: Broadway (Route 28) & Village Mall/Rosewood Road



Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Right Turn on Red	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	7.0
Minimum Split (s)	25.0
Total Split (s)	25.0
Total Split (%)	25%
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None

Intersection Summary

Lane Group	EBT	EBR	WBT	NBT	SBT
Lane Group Flow (vph)	148	205	123	1635	1583
v/c Ratio	0.46	0.30	0.41	1.39	0.99
Control Delay	41.2	5.8	40.3	201.1	45.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	41.2	5.8	40.3	201.1	45.9
Queue Length 50th (ft)	76	0	62	~627	488
Queue Length 95th (ft)	#212	35	#219	#900	#700
Internal Link Dist (ft)	462		469	868	657
Turn Bay Length (ft)					
Base Capacity (vph)	324	686	297	1177	1599
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.46	0.30	0.41	1.39	0.99

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	102	13	160	99	11	6	149	1394	10	5	1407	123
Future Volume (vph)	102	13	160	99	11	6	149	1394	10	5	1407	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	12	12	12	11	11	11	11	11	11
Total Lost time (s)		4.0	4.0		4.0			4.0			4.0	
Lane Util. Factor		1.00	1.00		1.00			0.95			0.95	
Frt		1.00	0.85		0.99			1.00			0.99	
Flt Protected		0.96	1.00		0.96			1.00			1.00	
Satd. Flow (prot)		1698	1478		1795			3435			3416	
Flt Permitted		0.71	1.00		0.61			0.49			0.95	
Satd. Flow (perm)		1254	1478		1144			1702			3241	
Peak-hour factor, PHF	0.78	0.78	0.78	0.94	0.94	0.94	0.95	0.95	0.95	0.97	0.97	0.97
Adj. Flow (vph)	131	17	205	105	12	6	157	1467	11	5	1451	127
RTOR Reduction (vph)	0	0	136	0	1	0	0	0	0	0	6	0
Lane Group Flow (vph)	0	148	69	0	122	0	0	1635	0	0	1577	0
Heavy Vehicles (%)	0%	0%	2%	1%	0%	0%	1%	1%	0%	0%	1%	0%
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		24.4	30.8		24.4			58.0			46.1	
Effective Green, g (s)		25.9	33.8		25.9			59.5			47.6	
Actuated g/C Ratio		0.26	0.34		0.26			0.60			0.48	
Clearance Time (s)		5.5	5.5		5.5			5.5			5.5	
Vehicle Extension (s)		3.0	5.0		3.0			3.0			3.0	
Lane Grp Cap (vph)		324	558		296			1149			1542	
v/s Ratio Prot			0.01					c0.11				
v/s Ratio Perm		c0.12	0.04		0.11			c0.73			0.49	
v/c Ratio		0.46	0.12		0.41			1.42			1.02	
Uniform Delay, d1		31.1	22.9		30.7			20.2			26.2	
Progression Factor		1.00	1.00		1.00			1.00			1.00	
Incremental Delay, d2		1.0	0.2		0.9			195.3			28.8	
Delay (s)		32.2	23.1		31.6			215.6			55.0	
Level of Service		C	C		C			F			D	
Approach Delay (s)		26.9			31.6			215.6			55.0	
Approach LOS		C			C			F			D	

Intersection Summary

HCM 2000 Control Delay	122.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	109.2%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	1	20	1480	0	0	1649
Future Volume (vph)	1	20	1480	0	0	1649
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	11	11	11	11
Link Speed (mph)	30		40			40
Link Distance (ft)	667		737			235
Travel Time (s)	15.2		12.6			4.0
Confl. Peds. (#/hr)				1	1	
Peak Hour Factor	0.88	0.88	0.92	0.92	0.98	0.98
Heavy Vehicles (%)	0%	0%	1%	0%	0%	1%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary

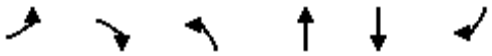
Area Type: Other
Control Type: Unsignalized

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1	20	1480	0	0	1649
Future Volume (Veh/h)	1	20	1480	0	0	1649
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.88	0.88	0.92	0.92	0.98	0.98
Hourly flow rate (vph)	1	23	1609	0	0	1683
Pedestrians	1					
Lane Width (ft)	16.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	0					
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			737			
pX, platoon unblocked	0.63	0.63			0.63	
vC, conflicting volume	2452	806			1610	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2129	0			793	
tC, single (s)	*6.6	*6.7			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	97	97			100	
cM capacity (veh/h)	31	686			526	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	24	804	804	842	842
Volume Left	1	0	0	0	0
Volume Right	23	0	0	0	0
cSH	364	1700	1700	1700	1700
Volume to Capacity	0.07	0.47	0.47	0.49	0.49
Queue Length 95th (ft)	5	0	0	0	0
Control Delay (s)	15.6	0.0	0.0	0.0	0.0
Lane LOS	C				
Approach Delay (s)	15.6	0.0		0.0	
Approach LOS	C				

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	55.6%	ICU Level of Service	B
Analysis Period (min)	15		

* User Entered Value



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2	0	0	1500	1649	1
Future Volume (vph)	2	0	0	1500	1649	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Link Speed (mph)	30			40	40	
Link Distance (ft)	720			235	868	
Travel Time (s)	16.4			4.0	14.8	
Peak Hour Factor	0.50	0.50	0.93	0.93	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	1%	1%	0%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	0	0	1500	1649	1
Future Volume (Veh/h)	2	0	0	1500	1649	1
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.50	0.50	0.93	0.93	0.98	0.98
Hourly flow rate (vph)	4	0	0	1613	1683	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				972		
pX, platoon unblocked	0.63					
vC, conflicting volume	2490	842	1684			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2193	842	1684			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	84	100	100			
cM capacity (veh/h)	25	312	385			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	4	538	1075	1122	562
Volume Left	4	0	0	0	0
Volume Right	0	0	0	0	1
cSH	25	385	1700	1700	1700
Volume to Capacity	0.16	0.00	0.63	0.66	0.33
Queue Length 95th (ft)	12	0	0	0	0
Control Delay (s)	174.9	0.0	0.0	0.0	0.0
Lane LOS	F				
Approach Delay (s)	174.9	0.0		0.0	
Approach LOS	F				

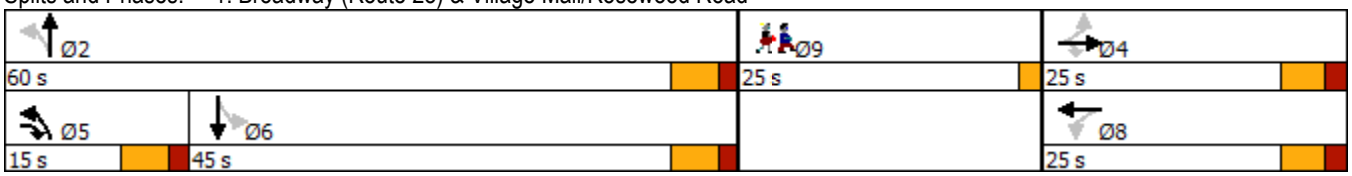
Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	55.6%	ICU Level of Service	B
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	3	51	118	5	15	91	726	10	7	744	51
Future Volume (vph)	40	3	51	118	5	15	91	726	10	7	744	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	12	12	12	11	11	11	11	11	11
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		542			549			948			737	
Travel Time (s)		12.3			12.5			16.2			12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	13%	3%	0%	0%	5%	6%	0%	0%	4%	5%
Shared Lane Traffic (%)												
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	5	8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	3.0	5.0	5.0		3.0	10.0		10.0	10.0	
Minimum Split (s)	10.5	10.5	8.5	10.5	10.5		8.5	15.5		15.5	15.5	
Total Split (s)	25.0	25.0	15.0	25.0	25.0		15.0	60.0		45.0	45.0	
Total Split (%)	22.7%	22.7%	13.6%	22.7%	22.7%		13.6%	54.5%		40.9%	40.9%	
Yellow Time (s)	3.5	3.5	4.0	3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	1.5	2.0	2.0		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)		-1.5	-1.5		-1.5			-1.5			-1.5	
Total Lost Time (s)		4.0	4.0		4.0			4.0			4.0	
Lead/Lag			Lead				Lead			Lag	Lag	
Lead-Lag Optimize?			Yes				Yes			Yes	Yes	
Recall Mode	None	None	None	None	None		None	Min		Min	Min	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 62.5
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Broadway (Route 28) & Village Mall/Rosewood Road



Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Right Turn on Red	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	7.0
Minimum Split (s)	25.0
Total Split (s)	25.0
Total Split (%)	23%
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None

Intersection Summary

Lane Group	EBT	EBR	WBT	NBT	SBT
Lane Group Flow (vph)	46	55	149	899	872
v/c Ratio	0.14	0.09	0.46	0.57	0.54
Control Delay	22.1	4.7	26.4	8.1	13.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	22.1	4.7	26.4	8.1	13.7
Queue Length 50th (ft)	13	0	45	78	132
Queue Length 95th (ft)	45	20	117	140	214
Internal Link Dist (ft)	462		469	868	657
Turn Bay Length (ft)					
Base Capacity (vph)	459	681	463	2203	2142
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.10	0.08	0.32	0.41	0.41

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	3	51	118	5	15	91	726	10	7	744	51
Future Volume (vph)	40	3	51	118	5	15	91	726	10	7	744	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	12	12	12	11	11	11	11	11	11
Total Lost time (s)		4.0	4.0		4.0			4.0			4.0	
Lane Util. Factor		1.00	1.00		1.00			0.95			0.95	
Frt		1.00	0.85		0.99			1.00			0.99	
Flt Protected		0.96	1.00		0.96			0.99			1.00	
Satd. Flow (prot)		1694	1334		1750			3274			3321	
Flt Permitted		0.74	1.00		0.72			0.74			0.95	
Satd. Flow (perm)		1320	1334		1321			2428			3145	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	3	55	128	5	16	99	789	11	8	809	55
RTOR Reduction (vph)	0	0	38	0	4	0	0	1	0	0	4	0
Lane Group Flow (vph)	0	46	17	0	145	0	0	898	0	0	868	0
Heavy Vehicles (%)	0%	0%	13%	3%	0%	0%	5%	6%	0%	0%	4%	5%
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		13.5	17.5		13.5			40.1			30.6	
Effective Green, g (s)		15.0	20.5		15.0			41.6			32.1	
Actuated g/C Ratio		0.23	0.32		0.23			0.64			0.50	
Clearance Time (s)		5.5	5.5		5.5			5.5			5.5	
Vehicle Extension (s)		3.0	5.0		3.0			3.0			3.0	
Lane Grp Cap (vph)		306	505		306			1635			1562	
v/s Ratio Prot			0.00					c0.05				
v/s Ratio Perm		0.03	0.01		c0.11			c0.31			0.28	
v/c Ratio		0.15	0.03		0.47			0.55			0.56	
Uniform Delay, d1		19.7	15.2		21.4			6.3			11.3	
Progression Factor		1.00	1.00		1.00			1.00			1.00	
Incremental Delay, d2		0.2	0.1		1.2			0.4			0.4	
Delay (s)		20.0	15.3		22.6			6.7			11.7	
Level of Service		B	B		C			A			B	
Approach Delay (s)		17.4			22.6			6.7			11.7	
Approach LOS		B			C			A			B	

Intersection Summary

HCM 2000 Control Delay	10.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	64.6	Sum of lost time (s)	15.5
Intersection Capacity Utilization	69.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	5	7	763	0	0	771
Future Volume (vph)	5	7	763	0	0	771
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	11	11	11	11
Link Speed (mph)	30		40			40
Link Distance (ft)	667		737			235
Travel Time (s)	15.2		12.6			4.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	40%	7%	0%	0%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary

Area Type: Other
Control Type: Unsignalized

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	5	7	763	0	0	771
Future Volume (Veh/h)	5	7	763	0	0	771
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	8	829	0	0	838
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			737			
pX, platoon unblocked	0.92	0.92			0.92	
vC, conflicting volume	1248	414			829	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1088	179			631	
tC, single (s)	*3.5	*4.4			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.7			2.2	
p0 queue free %	99	99			100	
cM capacity (veh/h)	530	785			881	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	13	414	414	419	419
Volume Left	5	0	0	0	0
Volume Right	8	0	0	0	0
cSH	662	1700	1700	1700	1700
Volume to Capacity	0.02	0.24	0.24	0.25	0.25
Queue Length 95th (ft)	2	0	0	0	0
Control Delay (s)	10.5	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	10.5	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	31.3%	ICU Level of Service	A
Analysis Period (min)	15		

* User Entered Value

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	19	11	17	753	760	18
Future Volume (vph)	19	11	17	753	760	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Link Speed (mph)	30			40	40	
Link Distance (ft)	720			235	868	
Travel Time (s)	16.4			4.0	14.8	
Confl. Peds. (#/hr)			1			1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	6%	3%	0%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	19	11	17	753	760	18
Future Volume (Veh/h)	19	11	17	753	760	18
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	21	12	18	818	826	20
Pedestrians	1					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				972		
pX, platoon unblocked	0.94					
vC, conflicting volume	1282	424	847			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1171	424	847			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	88	98	98			
cM capacity (veh/h)	173	584	798			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	33	291	545	551	295
Volume Left	21	18	0	0	0
Volume Right	12	0	0	0	20
cSH	233	798	1700	1700	1700
Volume to Capacity	0.14	0.02	0.32	0.32	0.17
Queue Length 95th (ft)	12	2	0	0	0
Control Delay (s)	23.0	0.8	0.0	0.0	0.0
Lane LOS	C	A			
Approach Delay (s)	23.0	0.3		0.0	
Approach LOS	C				

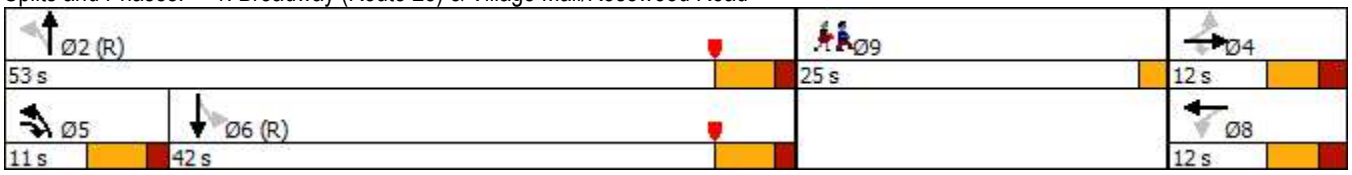
Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	43.0%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	8	120	108	1	12	114	1198	9	8	1046	69
Future Volume (vph)	55	8	120	108	1	12	114	1198	9	8	1046	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	12	12	12	11	11	11	11	11	11
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		542			549			948			737	
Travel Time (s)		12.3			12.5			16.2			12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	2%	0%	0%	0%	4%	3%	0%	0%	1%	0%
Shared Lane Traffic (%)												
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	5	8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	3.0	5.0	5.0		3.0	10.0		10.0	10.0	
Minimum Split (s)	10.5	10.5	8.5	10.5	10.5		8.5	15.5		15.5	15.5	
Total Split (s)	12.0	12.0	11.0	12.0	12.0		11.0	53.0		42.0	42.0	
Total Split (%)	13.3%	13.3%	12.2%	13.3%	13.3%		12.2%	58.9%		46.7%	46.7%	
Yellow Time (s)	3.5	3.5	4.0	3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	1.5	2.0	2.0		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)		-1.5	-1.5		-1.5			-1.5			-1.5	
Total Lost Time (s)		4.0	4.0		4.0			4.0			4.0	
Lead/Lag			Lead				Lead			Lag	Lag	
Lead-Lag Optimize?			Yes				Yes			Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Min		C-Min	C-Min	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 57 (63%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 1: Broadway (Route 28) & Village Mall/Rosewood Road



Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Right Turn on Red	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	7.0
Minimum Split (s)	25.0
Total Split (s)	25.0
Total Split (%)	28%
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None

Intersection Summary

Lane Group	EBT	EBR	WBT	NBT	SBT
Lane Group Flow (vph)	69	130	131	1436	1221
v/c Ratio	0.28	0.23	0.53	0.97	0.71
Control Delay	37.9	6.3	44.4	31.9	20.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	37.9	6.3	44.4	31.9	20.0
Queue Length 50th (ft)	33	0	63	189	240
Queue Length 95th (ft)	#96	45	#196	#665	#467
Internal Link Dist (ft)	462		469	868	657
Turn Bay Length (ft)					
Base Capacity (vph)	246	566	245	1478	1716
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.28	0.23	0.53	0.97	0.71

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	8	120	108	1	12	114	1198	9	8	1046	69
Future Volume (vph)	55	8	120	108	1	12	114	1198	9	8	1046	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	12	12	12	11	11	11	11	11	11
Total Lost time (s)		4.0	4.0		4.0			4.0			4.0	
Lane Util. Factor		1.00	1.00		1.00			0.95			0.95	
Frt		1.00	0.85		0.99			1.00			0.99	
Flt Protected		0.96	1.00		0.96			1.00			1.00	
Satd. Flow (prot)		1699	1478		1794			3368			3424	
Flt Permitted		0.76	1.00		0.70			0.59			0.94	
Satd. Flow (perm)		1341	1478		1312			2007			3222	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	60	9	130	117	1	13	124	1302	10	9	1137	75
RTOR Reduction (vph)	0	0	94	0	4	0	0	0	0	0	4	0
Lane Group Flow (vph)	0	69	36	0	127	0	0	1436	0	0	1217	0
Heavy Vehicles (%)	0%	0%	2%	0%	0%	0%	4%	3%	0%	0%	1%	0%
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		15.0	22.1		15.0			57.4			44.8	
Effective Green, g (s)		16.5	25.1		16.5			58.9			46.3	
Actuated g/C Ratio		0.18	0.28		0.18			0.65			0.51	
Clearance Time (s)		5.5	5.5		5.5			5.5			5.5	
Vehicle Extension (s)		3.0	5.0		3.0			3.0			3.0	
Lane Grp Cap (vph)		245	477		240			1443			1657	
v/s Ratio Prot			0.01					c0.10				
v/s Ratio Perm		0.05	0.02		c0.10			c0.56			0.38	
v/c Ratio		0.28	0.08		0.53			0.99			0.73	
Uniform Delay, d1		31.6	23.9		33.2			15.4			17.0	
Progression Factor		1.00	1.00		1.00			1.00			1.00	
Incremental Delay, d2		0.6	0.1		2.1			22.4			2.9	
Delay (s)		32.3	24.0		35.3			37.8			20.0	
Level of Service		C	C		D			D			B	
Approach Delay (s)		26.9			35.3			37.8			20.0	
Approach LOS		C			D			D			B	

Intersection Summary

HCM 2000 Control Delay	29.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	91.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	4	25	1289	0	0	1129
Future Volume (vph)	4	25	1289	0	0	1129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	11	11	11	11
Link Speed (mph)	30		40			40
Link Distance (ft)	667		737			235
Travel Time (s)	15.2		12.6			4.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	3%	0%	0%	1%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary

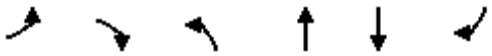
Area Type: Other
Control Type: Unsignalized

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	4	25	1289	0	0	1129
Future Volume (Veh/h)	4	25	1289	0	0	1129
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	4	27	1401	0	0	1227
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			737			
pX, platoon unblocked	0.75	0.75			0.75	
vC, conflicting volume	2014	700			1401	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1685	0			866	
tC, single (s)	*5.2	*5.4			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	97	97			100	
cM capacity (veh/h)	137	808			589	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	31	700	700	614	614
Volume Left	4	0	0	0	0
Volume Right	27	0	0	0	0
cSH	496	1700	1700	1700	1700
Volume to Capacity	0.06	0.41	0.41	0.36	0.36
Queue Length 95th (ft)	5	0	0	0	0
Control Delay (s)	12.7	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	12.7	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	45.6%	ICU Level of Service	A
Analysis Period (min)	15		

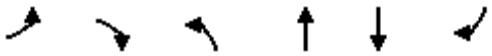
* User Entered Value



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	19	13	18	1296	1116	20
Future Volume (vph)	19	13	18	1296	1116	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Link Speed (mph)	30			40	40	
Link Distance (ft)	720			235	868	
Travel Time (s)	16.4			4.0	14.8	
Confl. Peds. (#/hr)			1			1
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	50%	0%	3%	1%	0%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	19	13	18	1296	1116	20
Future Volume (Veh/h)	19	13	18	1296	1116	20
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	21	14	20	1409	1213	22
Pedestrians	1					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				972		
pX, platoon unblocked	0.75					
vC, conflicting volume	1970	618	1236			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1629	618	1236			
tC, single (s)	6.8	7.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.8	2.2			
p0 queue free %	69	96	96			
cM capacity (veh/h)	68	332	570			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	35	490	939	809	426
Volume Left	21	20	0	0	0
Volume Right	14	0	0	0	22
cSH	100	570	1700	1700	1700
Volume to Capacity	0.35	0.04	0.55	0.48	0.25
Queue Length 95th (ft)	34	3	0	0	0
Control Delay (s)	59.0	1.0	0.0	0.0	0.0
Lane LOS	F	A			
Approach Delay (s)	59.0	0.3		0.0	
Approach LOS	F				

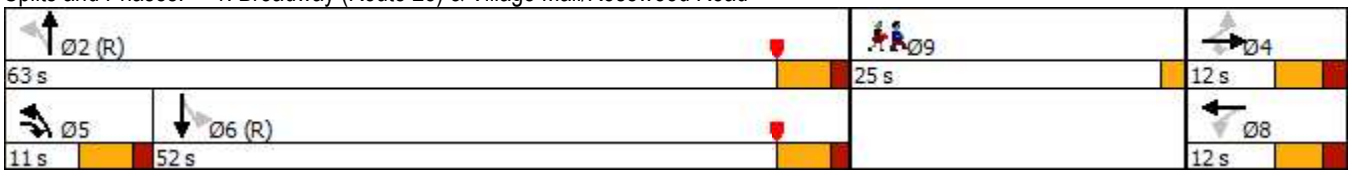
Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	58.5%	ICU Level of Service	B
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	132	13	191	106	11	10	180	1568	11	9	1576	154
Future Volume (vph)	132	13	191	106	11	10	180	1568	11	9	1576	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	12	12	12	11	11	11	11	11	11
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		542			549			948			737	
Travel Time (s)		12.3			12.5			16.2			12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	2%	1%	0%	0%	1%	1%	0%	0%	1%	0%
Shared Lane Traffic (%)												
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	5	8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	3.0	5.0	5.0		3.0	10.0		10.0	10.0	
Minimum Split (s)	10.5	10.5	8.5	10.5	10.5		8.5	15.5		15.5	15.5	
Total Split (s)	12.0	12.0	11.0	12.0	12.0		11.0	63.0		52.0	52.0	
Total Split (%)	12.0%	12.0%	11.0%	12.0%	12.0%		11.0%	63.0%		52.0%	52.0%	
Yellow Time (s)	3.5	3.5	4.0	3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	1.5	2.0	2.0		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)		-1.5	-1.5		-1.5			-1.5			-1.5	
Total Lost Time (s)		4.0	4.0		4.0			4.0			4.0	
Lead/Lag			Lead				Lead			Lag	Lag	
Lead-Lag Optimize?			Yes				Yes			Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Min		C-Min	C-Min	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 62 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 1: Broadway (Route 28) & Village Mall/Rosewood Road



Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Right Turn on Red	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	7.0
Minimum Split (s)	25.0
Total Split (s)	25.0
Total Split (%)	25%
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None

Intersection Summary

Lane Group	EBT	EBR	WBT	NBT	SBT
Lane Group Flow (vph)	157	208	138	1912	1890
v/c Ratio	0.47	0.30	0.45	1.65	1.37
Control Delay	40.1	5.6	39.6	317.7	196.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	40.1	5.6	39.6	317.7	196.9
Queue Length 50th (ft)	77	0	66	~946	~847
Queue Length 95th (ft)	#272	60	#246	#1095	#988
Internal Link Dist (ft)	462		469	868	657
Turn Bay Length (ft)					
Base Capacity (vph)	336	702	308	1158	1379
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.47	0.30	0.45	1.65	1.37

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	132	13	191	106	11	10	180	1568	11	9	1576	154
Future Volume (vph)	132	13	191	106	11	10	180	1568	11	9	1576	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	12	12	12	11	11	11	11	11	11
Total Lost time (s)		4.0	4.0		4.0			4.0			4.0	
Lane Util. Factor		1.00	1.00		1.00			0.95			0.95	
Frt		1.00	0.85		0.99			1.00			0.99	
Flt Protected		0.96	1.00		0.96			0.99			1.00	
Satd. Flow (prot)		1696	1478		1789			3434			3412	
Flt Permitted		0.69	1.00		0.60			0.50			0.84	
Satd. Flow (perm)		1227	1478		1118			1730			2856	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	143	14	208	115	12	11	196	1704	12	10	1713	167
RTOR Reduction (vph)	0	0	135	0	2	0	0	0	0	0	7	0
Lane Group Flow (vph)	0	157	73	0	136	0	0	1912	0	0	1883	0
Heavy Vehicles (%)	0%	0%	2%	1%	0%	0%	1%	1%	0%	0%	1%	0%
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		25.9	31.9		25.9			56.5			45.0	
Effective Green, g (s)		27.4	34.9		27.4			58.0			46.5	
Actuated g/C Ratio		0.27	0.35		0.27			0.58			0.46	
Clearance Time (s)		5.5	5.5		5.5			5.5			5.5	
Vehicle Extension (s)		3.0	5.0		3.0			3.0			3.0	
Lane Grp Cap (vph)		336	574		306			1131			1328	
v/s Ratio Prot			0.01					c0.13				
v/s Ratio Perm		c0.13	0.04		0.12			c0.85			0.66	
v/c Ratio		0.47	0.13		0.44			1.69			1.42	
Uniform Delay, d1		30.2	22.2		30.0			21.0			26.8	
Progression Factor		1.00	1.00		1.00			1.00			1.00	
Incremental Delay, d2		1.0	0.2		1.0			314.4			192.4	
Delay (s)		31.3	22.4		31.0			335.4			219.1	
Level of Service		C	C		C			F			F	
Approach Delay (s)		26.2			31.0			335.4			219.1	
Approach LOS		C			C			F			F	

Intersection Summary

HCM 2000 Control Delay	248.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.30		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	121.4%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	1	20	1686	0	0	1851
Future Volume (vph)	1	20	1686	0	0	1851
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	11	11	11	11
Link Speed (mph)	30		40			40
Link Distance (ft)	667		737			235
Travel Time (s)	15.2		12.6			4.0
Confl. Peds. (#/hr)				1	1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	1%	0%	0%	1%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary

Area Type: Other
Control Type: Unsignalized

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1	20	1686	0	0	1851
Future Volume (Veh/h)	1	20	1686	0	0	1851
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	22	1833	0	0	2012
Pedestrians	1					
Lane Width (ft)	16.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	0					
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			737			
pX, platoon unblocked	0.46	0.46			0.46	
vC, conflicting volume	2840	918			1834	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2653	0			468	
tC, single (s)	*6.6	*6.7			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	90	96			100	
cM capacity (veh/h)	10	502			508	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	23	916	916	1006	1006
Volume Left	1	0	0	0	0
Volume Right	22	0	0	0	0
cSH	162	1700	1700	1700	1700
Volume to Capacity	0.14	0.54	0.54	0.59	0.59
Queue Length 95th (ft)	12	0	0	0	0
Control Delay (s)	30.8	0.0	0.0	0.0	0.0
Lane LOS	D				
Approach Delay (s)	30.8	0.0		0.0	
Approach LOS	D				

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	61.2%	ICU Level of Service	B
Analysis Period (min)	15		

* User Entered Value

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	35	21	31	1675	1830	34
Future Volume (vph)	35	21	31	1675	1830	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Link Speed (mph)	30			40	40	
Link Distance (ft)	720			235	868	
Travel Time (s)	16.4			4.0	14.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	1%	1%	0%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	35	21	31	1675	1830	34
Future Volume (Veh/h)	35	21	31	1675	1830	34
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	38	23	34	1821	1989	37
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				972		
pX, platoon unblocked	0.47					
vC, conflicting volume	2986	1013	2026			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2970	1013	2026			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	0	90	88			
cM capacity (veh/h)	5	240	284			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	61	641	1214	1326	700
Volume Left	38	34	0	0	0
Volume Right	23	0	0	0	37
cSH	8	284	1700	1700	1700
Volume to Capacity	8.09	0.12	0.71	0.78	0.41
Queue Length 95th (ft)	Err	10	0	0	0
Control Delay (s)	Err	4.4	0.0	0.0	0.0
Lane LOS	F	A			
Approach Delay (s)	Err	1.5		0.0	
Approach LOS	F				

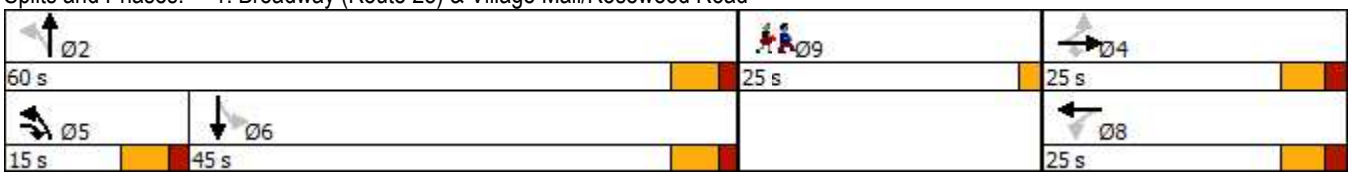
Intersection Summary			
Average Delay	155.5		
Intersection Capacity Utilization	78.3%	ICU Level of Service	D
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	3	51	118	5	17	91	750	10	9	766	51
Future Volume (vph)	40	3	51	118	5	17	91	750	10	9	766	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	12	12	12	11	11	11	11	11	11
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		542			549			948			737	
Travel Time (s)		12.3			12.5			16.2			12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	13%	3%	0%	0%	5%	6%	0%	0%	4%	5%
Shared Lane Traffic (%)												
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	5	8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	3.0	5.0	5.0		3.0	10.0		10.0	10.0	
Minimum Split (s)	10.5	10.5	8.5	10.5	10.5		8.5	15.5		15.5	15.5	
Total Split (s)	25.0	25.0	15.0	25.0	25.0		15.0	60.0		45.0	45.0	
Total Split (%)	22.7%	22.7%	13.6%	22.7%	22.7%		13.6%	54.5%		40.9%	40.9%	
Yellow Time (s)	3.5	3.5	4.0	3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	1.5	2.0	2.0		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)		-1.5	-1.5		-1.5			-1.5			-1.5	
Total Lost Time (s)		4.0	4.0		4.0			4.0			4.0	
Lead/Lag			Lead				Lead			Lag	Lag	
Lead-Lag Optimize?			Yes				Yes			Yes	Yes	
Recall Mode	None	None	None	None	None		None	Min		Min	Min	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 64.6
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Broadway (Route 28) & Village Mall/Rosewood Road



Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Right Turn on Red	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	7.0
Minimum Split (s)	25.0
Total Split (s)	25.0
Total Split (%)	23%
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None

Intersection Summary

Lane Group	EBT	EBR	WBT	NBT	SBT
Lane Group Flow (vph)	46	55	151	925	898
v/c Ratio	0.15	0.09	0.48	0.58	0.54
Control Delay	23.3	5.0	28.0	8.1	13.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	23.3	5.0	28.0	8.1	13.5
Queue Length 50th (ft)	14	0	48	81	138
Queue Length 95th (ft)	47	22	125	144	221
Internal Link Dist (ft)	462		469	868	657
Turn Bay Length (ft)					
Base Capacity (vph)	444	665	449	2153	2081
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.10	0.08	0.34	0.43	0.43

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	3	51	118	5	17	91	750	10	9	766	51
Future Volume (vph)	40	3	51	118	5	17	91	750	10	9	766	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	12	12	12	11	11	11	11	11	11
Total Lost time (s)		4.0	4.0		4.0			4.0			4.0	
Lane Util. Factor		1.00	1.00		1.00			0.95			0.95	
Frt		1.00	0.85		0.98			1.00			0.99	
Flt Protected		0.96	1.00		0.96			0.99			1.00	
Satd. Flow (prot)		1694	1334		1749			3274			3322	
Flt Permitted		0.74	1.00		0.73			0.73			0.94	
Satd. Flow (perm)		1317	1334		1324			2413			3136	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	3	55	128	5	18	99	815	11	10	833	55
RTOR Reduction (vph)	0	0	38	0	4	0	0	1	0	0	3	0
Lane Group Flow (vph)	0	46	17	0	147	0	0	924	0	0	895	0
Heavy Vehicles (%)	0%	0%	13%	3%	0%	0%	5%	6%	0%	0%	4%	5%
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		13.7	17.7		13.7			42.0			32.5	
Effective Green, g (s)		15.2	20.7		15.2			43.5			34.0	
Actuated g/C Ratio		0.23	0.31		0.23			0.65			0.51	
Clearance Time (s)		5.5	5.5		5.5			5.5			5.5	
Vehicle Extension (s)		3.0	5.0		3.0			3.0			3.0	
Lane Grp Cap (vph)		300	494		301			1644			1598	
v/s Ratio Prot			0.00					c0.05				
v/s Ratio Perm		0.03	0.01		c0.11			c0.32			0.29	
v/c Ratio		0.15	0.03		0.49			0.56			0.56	
Uniform Delay, d1		20.6	16.0		22.4			6.4			11.2	
Progression Factor		1.00	1.00		1.00			1.00			1.00	
Incremental Delay, d2		0.2	0.1		1.3			0.4			0.4	
Delay (s)		20.8	16.1		23.6			6.8			11.6	
Level of Service		C	B		C			A			B	
Approach Delay (s)		18.3			23.6			6.8			11.6	
Approach LOS		B			C			A			B	

Intersection Summary

HCM 2000 Control Delay	10.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	66.7	Sum of lost time (s)	15.5
Intersection Capacity Utilization	71.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	5	7	789	0	0	795
Future Volume (vph)	5	7	789	0	0	795
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	11	11	11	11
Link Speed (mph)	30		40			40
Link Distance (ft)	667		737			127
Travel Time (s)	15.2		12.6			2.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	40%	7%	0%	0%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary

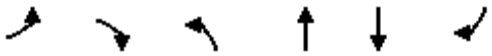
Area Type: Other
Control Type: Unsignalized

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	5	7	789	0	0	795
Future Volume (Veh/h)	5	7	789	0	0	795
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	8	858	0	0	864
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			737			
pX, platoon unblocked	0.91	0.91			0.91	
vC, conflicting volume	1290	429			858	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1121	175			646	
tC, single (s)	*3.5	*4.4			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.7			2.2	
p0 queue free %	99	99			100	
cM capacity (veh/h)	517	781			863	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	13	429	429	432	432
Volume Left	5	0	0	0	0
Volume Right	8	0	0	0	0
cSH	653	1700	1700	1700	1700
Volume to Capacity	0.02	0.25	0.25	0.25	0.25
Queue Length 95th (ft)	2	0	0	0	0
Control Delay (s)	10.6	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	10.6	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	32.0%	ICU Level of Service	A
Analysis Period (min)	15		

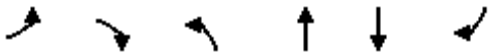
* User Entered Value



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	19	11	17	772	781	18
Future Volume (vph)	19	11	17	772	781	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Link Speed (mph)	30			40	40	
Link Distance (ft)	720			108	868	
Travel Time (s)	16.4			1.8	14.8	
Confl. Peds. (#/hr)			1			1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	6%	3%	0%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	19	11	17	772	781	18
Future Volume (Veh/h)	19	11	17	772	781	18
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	21	12	18	839	849	20
Pedestrians	1					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				972		
pX, platoon unblocked	0.96					
vC, conflicting volume	1316	436	870			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1237	436	870			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	87	98	98			
cM capacity (veh/h)	159	574	783			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	33	298	559	566	303
Volume Left	21	18	0	0	0
Volume Right	12	0	0	0	20
cSH	216	783	1700	1700	1700
Volume to Capacity	0.15	0.02	0.33	0.33	0.18
Queue Length 95th (ft)	13	2	0	0	0
Control Delay (s)	24.6	0.8	0.0	0.0	0.0
Lane LOS	C	A			
Approach Delay (s)	24.6	0.3		0.0	
Approach LOS	C				

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	43.5%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	46	42	747	0	0	792
Future Volume (vph)	46	42	747	0	0	792
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	587		127			108
Travel Time (s)	13.3		2.9			2.5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	7%	2%	2%	3%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary

Area Type: Other
Control Type: Unsignalized

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	46	42	747	0	0	792
Future Volume (Veh/h)	46	42	747	0	0	792
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	50	46	812	0	0	861
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			864			
pX, platoon unblocked	0.94	0.94			0.94	
vC, conflicting volume	1242	406			812	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1137	250			681	
tC, single (s)	*3.5	*4.4			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	91	95			100	
cM capacity (veh/h)	529	844			856	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	96	406	406	430	430
Volume Left	50	0	0	0	0
Volume Right	46	0	0	0	0
cSH	644	1700	1700	1700	1700
Volume to Capacity	0.15	0.24	0.24	0.25	0.25
Queue Length 95th (ft)	13	0	0	0	0
Control Delay (s)	11.6	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	11.6	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	33.7%	ICU Level of Service	A
Analysis Period (min)	15		

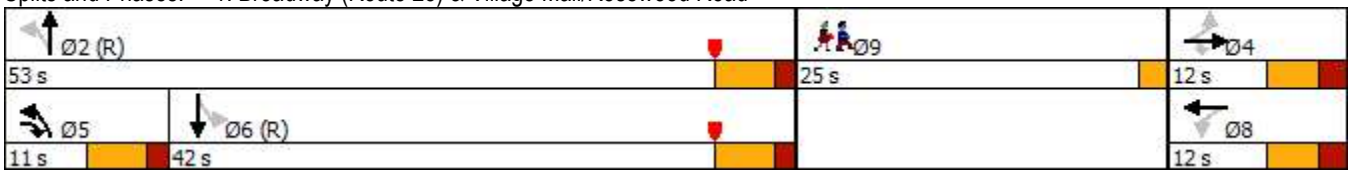
* User Entered Value

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	8	120	108	1	13	114	1207	9	9	1055	69
Future Volume (vph)	55	8	120	108	1	13	114	1207	9	9	1055	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	12	12	12	11	11	11	11	11	11
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		542			549			948			737	
Travel Time (s)		12.3			12.5			16.2			12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	2%	0%	0%	0%	4%	3%	0%	0%	1%	0%
Shared Lane Traffic (%)												
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	5	8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	3.0	5.0	5.0		3.0	10.0		10.0	10.0	
Minimum Split (s)	10.5	10.5	8.5	10.5	10.5		8.5	15.5		15.5	15.5	
Total Split (s)	12.0	12.0	11.0	12.0	12.0		11.0	53.0		42.0	42.0	
Total Split (%)	13.3%	13.3%	12.2%	13.3%	13.3%		12.2%	58.9%		46.7%	46.7%	
Yellow Time (s)	3.5	3.5	4.0	3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	1.5	2.0	2.0		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)		-1.5	-1.5		-1.5			-1.5			-1.5	
Total Lost Time (s)		4.0	4.0		4.0			4.0			4.0	
Lead/Lag			Lead				Lead			Lag	Lag	
Lead-Lag Optimize?			Yes				Yes			Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Min		C-Min	C-Min	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 57 (63%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 1: Broadway (Route 28) & Village Mall/Rosewood Road



Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Right Turn on Red	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	7.0
Minimum Split (s)	25.0
Total Split (s)	25.0
Total Split (%)	28%
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None

Intersection Summary

Lane Group	EBT	EBR	WBT	NBT	SBT
Lane Group Flow (vph)	69	130	132	1446	1232
v/c Ratio	0.28	0.23	0.53	0.98	0.72
Control Delay	37.9	6.3	44.2	34.8	20.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	37.9	6.3	44.2	34.8	20.4
Queue Length 50th (ft)	33	0	64	193	244
Queue Length 95th (ft)	#96	45	#199	#674	#474
Internal Link Dist (ft)	462		469	868	657
Turn Bay Length (ft)					
Base Capacity (vph)	247	568	247	1469	1707
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.28	0.23	0.53	0.98	0.72

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	8	120	108	1	13	114	1207	9	9	1055	69
Future Volume (vph)	55	8	120	108	1	13	114	1207	9	9	1055	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	12	12	12	11	11	11	11	11	11
Total Lost time (s)		4.0	4.0		4.0			4.0			4.0	
Lane Util. Factor		1.00	1.00		1.00			0.95			0.95	
Frt		1.00	0.85		0.99			1.00			0.99	
Flt Protected		0.96	1.00		0.96			1.00			1.00	
Satd. Flow (prot)		1699	1478		1793			3368			3425	
Flt Permitted		0.75	1.00		0.70			0.59			0.94	
Satd. Flow (perm)		1337	1478		1313			1996			3214	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	60	9	130	117	1	14	124	1312	10	10	1147	75
RTOR Reduction (vph)	0	0	93	0	4	0	0	0	0	0	4	0
Lane Group Flow (vph)	0	69	37	0	128	0	0	1446	0	0	1228	0
Heavy Vehicles (%)	0%	0%	2%	0%	0%	0%	4%	3%	0%	0%	1%	0%
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		15.2	22.3		15.2			57.2			44.6	
Effective Green, g (s)		16.7	25.3		16.7			58.7			46.1	
Actuated g/C Ratio		0.19	0.28		0.19			0.65			0.51	
Clearance Time (s)		5.5	5.5		5.5			5.5			5.5	
Vehicle Extension (s)		3.0	5.0		3.0			3.0			3.0	
Lane Grp Cap (vph)		248	481		243			1432			1646	
v/s Ratio Prot			0.01					c0.10				
v/s Ratio Perm		0.05	0.02		c0.10			c0.56			0.38	
v/c Ratio		0.28	0.08		0.53			1.01			0.75	
Uniform Delay, d1		31.5	23.8		33.1			15.6			17.3	
Progression Factor		1.00	1.00		1.00			1.00			1.00	
Incremental Delay, d2		0.6	0.1		2.1			26.1			3.1	
Delay (s)		32.1	23.9		35.1			41.8			20.4	
Level of Service		C	C		D			D			C	
Approach Delay (s)		26.7			35.1			41.8			20.4	
Approach LOS		C			D			D			C	

Intersection Summary

HCM 2000 Control Delay	31.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	92.1%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	4	25	1299	0	0	1139
Future Volume (vph)	4	25	1299	0	0	1139
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	11	11	11	11
Link Speed (mph)	30		40			40
Link Distance (ft)	667		737			127
Travel Time (s)	15.2		12.6			2.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	3%	0%	0%	1%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary

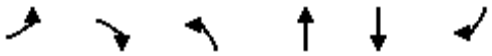
Area Type: Other
Control Type: Unsignalized

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	4	25	1299	0	0	1139
Future Volume (Veh/h)	4	25	1299	0	0	1139
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	4	27	1412	0	0	1238
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			737			
pX, platoon unblocked	0.74	0.74			0.74	
vC, conflicting volume	2031	706			1412	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1698	0			866	
tC, single (s)	*5.2	*5.4			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	97	97			100	
cM capacity (veh/h)	135	802			585	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	31	706	706	619	619
Volume Left	4	0	0	0	0
Volume Right	27	0	0	0	0
cSH	489	1700	1700	1700	1700
Volume to Capacity	0.06	0.42	0.42	0.36	0.36
Queue Length 95th (ft)	5	0	0	0	0
Control Delay (s)	12.9	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	12.9	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	45.9%	ICU Level of Service	A
Analysis Period (min)	15		

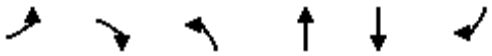
* User Entered Value



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	19	13	18	1304	1124	20
Future Volume (vph)	19	13	18	1304	1124	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Link Speed (mph)	30			40	40	
Link Distance (ft)	720			108	868	
Travel Time (s)	16.4			1.8	14.8	
Confl. Peds. (#/hr)			1			1
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	50%	0%	3%	1%	0%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	19	13	18	1304	1124	20
Future Volume (Veh/h)	19	13	18	1304	1124	20
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	21	14	20	1417	1222	22
Pedestrians	1					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	0					
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				972		
pX, platoon unblocked	0.75					
vC, conflicting volume	1982	623	1245			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1645	623	1245			
tC, single (s)	6.8	7.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.8	2.2			
p0 queue free %	69	96	96			
cM capacity (veh/h)	67	329	566			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	35	492	945	815	429
Volume Left	21	20	0	0	0
Volume Right	14	0	0	0	22
cSH	98	566	1700	1700	1700
Volume to Capacity	0.36	0.04	0.56	0.48	0.25
Queue Length 95th (ft)	35	3	0	0	0
Control Delay (s)	60.9	1.0	0.0	0.0	0.0
Lane LOS	F	A			
Approach Delay (s)	60.9	0.3		0.0	
Approach LOS	F				

Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	58.8%	ICU Level of Service	B
Analysis Period (min)	15		

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	21	20	1302	0	0	1137
Future Volume (vph)	21	20	1302	0	0	1137
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		30			30
Link Distance (ft)	587		127			108
Travel Time (s)	13.3		2.9			2.5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	3%	2%	2%	1%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary

Area Type: Other
Control Type: Unsignalized

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	21	20	1302	0	0	1137
Future Volume (Veh/h)	21	20	1302	0	0	1137
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	23	22	1415	0	0	1236
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			864			
pX, platoon unblocked	0.75	0.75			0.75	
vC, conflicting volume	2033	708			1415	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1710	0			885	
tC, single (s)	*5.2	*5.4			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	83	97			100	
cM capacity (veh/h)	134	813			570	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	45	708	708	618	618
Volume Left	23	0	0	0	0
Volume Right	22	0	0	0	0
cSH	226	1700	1700	1700	1700
Volume to Capacity	0.20	0.42	0.42	0.36	0.36
Queue Length 95th (ft)	18	0	0	0	0
Control Delay (s)	24.9	0.0	0.0	0.0	0.0
Lane LOS	C				
Approach Delay (s)	24.9	0.0		0.0	
Approach LOS	C				

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	46.0%	ICU Level of Service	A
Analysis Period (min)	15		

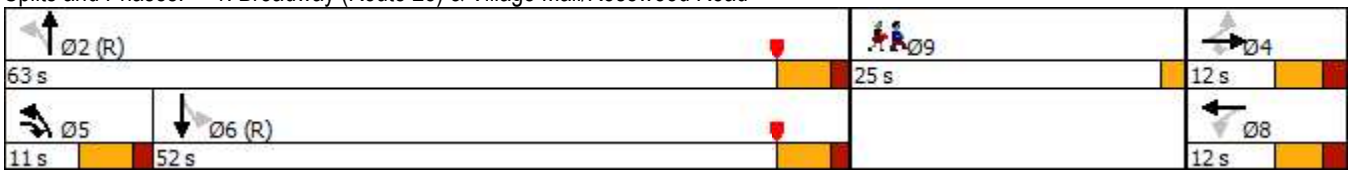
* User Entered Value

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	132	13	191	106	11	12	180	1592	11	11	1599	154
Future Volume (vph)	132	13	191	106	11	12	180	1592	11	11	1599	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	12	12	12	11	11	11	11	11	11
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		542			549			948			737	
Travel Time (s)		12.3			12.5			16.2			12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	2%	1%	0%	0%	1%	1%	0%	0%	1%	0%
Shared Lane Traffic (%)												
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	5	8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	3.0	5.0	5.0		3.0	10.0		10.0	10.0	
Minimum Split (s)	10.5	10.5	8.5	10.5	10.5		8.5	15.5		15.5	15.5	
Total Split (s)	12.0	12.0	11.0	12.0	12.0		11.0	63.0		52.0	52.0	
Total Split (%)	12.0%	12.0%	11.0%	12.0%	12.0%		11.0%	63.0%		52.0%	52.0%	
Yellow Time (s)	3.5	3.5	4.0	3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	1.5	2.0	2.0		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)		-1.5	-1.5		-1.5			-1.5			-1.5	
Total Lost Time (s)		4.0	4.0		4.0			4.0			4.0	
Lead/Lag			Lead				Lead			Lag	Lag	
Lead-Lag Optimize?			Yes				Yes			Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Min		C-Min	C-Min	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 62 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 1: Broadway (Route 28) & Village Mall/Rosewood Road



Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Right Turn on Red	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	7.0
Minimum Split (s)	25.0
Total Split (s)	25.0
Total Split (%)	25%
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None

Intersection Summary

Lane Group	EBT	EBR	WBT	NBT	SBT
Lane Group Flow (vph)	157	208	140	1938	1917
v/c Ratio	0.46	0.30	0.45	1.68	1.46
Control Delay	39.9	5.6	39.0	332.2	237.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	39.9	5.6	39.0	332.2	237.3
Queue Length 50th (ft)	76	0	66	~972	~891
Queue Length 95th (ft)	#272	60	#247	#1113	#1032
Internal Link Dist (ft)	462		469	868	657
Turn Bay Length (ft)					
Base Capacity (vph)	338	703	314	1151	1311
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.46	0.30	0.45	1.68	1.46

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	132	13	191	106	11	12	180	1592	11	11	1599	154
Future Volume (vph)	132	13	191	106	11	12	180	1592	11	11	1599	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	12	12	12	11	11	11	11	11	11
Total Lost time (s)		4.0	4.0		4.0			4.0			4.0	
Lane Util. Factor		1.00	1.00		1.00			0.95			0.95	
Frt		1.00	0.85		0.99			1.00			0.99	
Flt Protected		0.96	1.00		0.96			0.99			1.00	
Satd. Flow (prot)		1696	1478		1787			3435			3412	
Flt Permitted		0.69	1.00		0.61			0.50			0.80	
Satd. Flow (perm)		1222	1478		1128			1728			2717	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	143	14	208	115	12	13	196	1730	12	12	1738	167
RTOR Reduction (vph)	0	0	135	0	3	0	0	0	0	0	8	0
Lane Group Flow (vph)	0	157	73	0	137	0	0	1938	0	0	1909	0
Heavy Vehicles (%)	0%	0%	2%	1%	0%	0%	1%	1%	0%	0%	1%	0%
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		26.2	32.0		26.2			56.2			44.9	
Effective Green, g (s)		27.7	35.0		27.7			57.7			46.4	
Actuated g/C Ratio		0.28	0.35		0.28			0.58			0.46	
Clearance Time (s)		5.5	5.5		5.5			5.5			5.5	
Vehicle Extension (s)		3.0	5.0		3.0			3.0			3.0	
Lane Grp Cap (vph)		338	576		312			1121			1260	
v/s Ratio Prot			0.01					c0.13				
v/s Ratio Perm		c0.13	0.04		0.12			c0.87			0.70	
v/c Ratio		0.46	0.13		0.44			1.73			1.52	
Uniform Delay, d1		30.0	22.1		29.8			21.1			26.8	
Progression Factor		1.00	1.00		1.00			1.00			1.00	
Incremental Delay, d2		1.0	0.2		1.0			331.6			236.1	
Delay (s)		31.0	22.3		30.8			352.7			262.9	
Level of Service		C	C		C			F			F	
Approach Delay (s)		26.1			30.8			352.7			262.9	
Approach LOS		C			C			F			F	

Intersection Summary

HCM 2000 Control Delay	275.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.32		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	122.9%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	1	20	1712	0	0	1876
Future Volume (vph)	1	20	1712	0	0	1876
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	11	11	11	11
Link Speed (mph)	30		40			40
Link Distance (ft)	667		737			127
Travel Time (s)	15.2		12.6			2.2
Confl. Peds. (#/hr)				1	1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	1%	0%	0%	1%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary

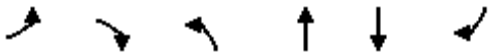
Area Type: Other
Control Type: Unsignalized

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1	20	1712	0	0	1876
Future Volume (Veh/h)	1	20	1712	0	0	1876
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	22	1861	0	0	2039
Pedestrians	1					
Lane Width (ft)	16.0					
Walking Speed (ft/s)	3.5					
Percent Blockage	0					
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			737			
pX, platoon unblocked	0.46	0.46			0.46	
vC, conflicting volume	2882	932			1862	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2741	0			516	
tC, single (s)	*6.6	*6.7			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	89	96			100	
cM capacity (veh/h)	9	499			485	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	23	930	930	1020	1020
Volume Left	1	0	0	0	0
Volume Right	22	0	0	0	0
cSH	146	1700	1700	1700	1700
Volume to Capacity	0.16	0.55	0.55	0.60	0.60
Queue Length 95th (ft)	13	0	0	0	0
Control Delay (s)	34.1	0.0	0.0	0.0	0.0
Lane LOS	D				
Approach Delay (s)	34.1	0.0		0.0	
Approach LOS	D				

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	61.9%	ICU Level of Service	B
Analysis Period (min)	15		

* User Entered Value



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	35	21	31	1696	1851	34
Future Volume (vph)	35	21	31	1696	1851	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Link Speed (mph)	30			40	40	
Link Distance (ft)	720			108	868	
Travel Time (s)	16.4			1.8	14.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	0%	1%	1%	0%
Shared Lane Traffic (%)						
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	35	21	31	1696	1851	34
Future Volume (Veh/h)	35	21	31	1696	1851	34
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	38	23	34	1843	2012	37
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				972		
pX, platoon unblocked	0.47					
vC, conflicting volume	3020	1024	2049			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3043	1024	2049			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	0	90	88			
cM capacity (veh/h)	4	236	278			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	61	648	1229	1341	708
Volume Left	38	34	0	0	0
Volume Right	23	0	0	0	37
cSH	7	278	1700	1700	1700
Volume to Capacity	9.09	0.12	0.72	0.79	0.42
Queue Length 95th (ft)	Err	10	0	0	0
Control Delay (s)	Err	4.6	0.0	0.0	0.0
Lane LOS	F	A			
Approach Delay (s)	Err	1.6		0.0	
Approach LOS	F				

Intersection Summary			
Average Delay	153.7		
Intersection Capacity Utilization	78.9%	ICU Level of Service	D
Analysis Period (min)	15		

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	48	44	1683	0	0	1872
Future Volume (vph)	48	44	1683	0	0	1872
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		40			40
Link Distance (ft)	587		127			108
Travel Time (s)	13.3		2.2			1.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	1%	2%	2%	1%
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary

Area Type: Other
Control Type: Unsignalized

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	48	44	1683	0	0	1872
Future Volume (Veh/h)	48	44	1683	0	0	1872
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	52	48	1829	0	0	2035
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			864			
pX, platoon unblocked	0.47	0.47			0.47	
vC, conflicting volume	2846	914			1829	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2671	0			488	
tC, single (s)	*6.6	*6.7			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	0	91			100	
cM capacity (veh/h)	10	505			499	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	100	914	914	1018	1018
Volume Left	52	0	0	0	0
Volume Right	48	0	0	0	0
cSH	19	1700	1700	1700	1700
Volume to Capacity	5.27	0.54	0.54	0.60	0.60
Queue Length 95th (ft)	Err	0	0	0	0
Control Delay (s)	Err	0.0	0.0	0.0	0.0
Lane LOS	F				
Approach Delay (s)	Err	0.0		0.0	
Approach LOS	F				

Intersection Summary			
Average Delay	252.2		
Intersection Capacity Utilization	63.8%	ICU Level of Service	B
Analysis Period (min)	15		

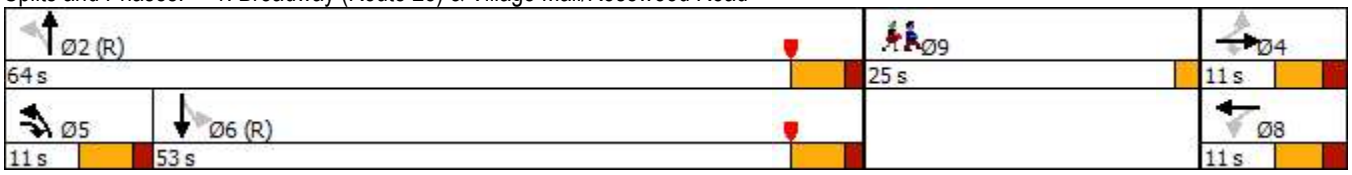
* User Entered Value

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	132	13	191	106	11	12	180	1592	11	11	1599	154
Future Volume (vph)	132	13	191	106	11	12	180	1592	11	11	1599	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	12	12	12	11	11	11	11	11	11
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			30			40			40	
Link Distance (ft)		542			549			948			737	
Travel Time (s)		12.3			12.5			16.2			12.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	0%	2%	1%	0%	0%	1%	1%	0%	0%	1%	0%
Shared Lane Traffic (%)												
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	5	8	8		5	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	3.0	5.0	5.0		3.0	10.0		10.0	10.0	
Minimum Split (s)	10.5	10.5	8.5	10.5	10.5		8.5	15.5		15.5	15.5	
Total Split (s)	11.0	11.0	11.0	11.0	11.0		11.0	64.0		53.0	53.0	
Total Split (%)	11.0%	11.0%	11.0%	11.0%	11.0%		11.0%	64.0%		53.0%	53.0%	
Yellow Time (s)	3.5	3.5	4.0	3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	1.5	2.0	2.0		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)		-1.5	-1.5		-1.5			-1.5			-1.5	
Total Lost Time (s)		4.0	4.0		4.0			4.0			4.0	
Lead/Lag			Lead				Lead			Lag	Lag	
Lead-Lag Optimize?			Yes				Yes			Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Min		C-Min	C-Min	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 62 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 1: Broadway (Route 28) & Village Mall/Rosewood Road



Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Right Turn on Red	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	7.0
Minimum Split (s)	25.0
Total Split (s)	25.0
Total Split (%)	25%
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None

Intersection Summary

Lane Group	EBT	EBR	WBT	NBT	SBT
Lane Group Flow (vph)	157	208	140	1938	1917
v/c Ratio	0.50	0.30	0.50	1.63	1.35
Control Delay	42.5	5.9	42.5	305.8	186.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	42.5	5.9	42.5	305.8	186.3
Queue Length 50th (ft)	81	0	70	~937	~851
Queue Length 95th (ft)	#280	61	#257	#1107	#997
Internal Link Dist (ft)	462		469	868	657
Turn Bay Length (ft)					
Base Capacity (vph)	315	684	281	1192	1423
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.50	0.30	0.50	1.63	1.35

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	132	13	191	106	11	12	180	1592	11	11	1599	154
Future Volume (vph)	132	13	191	106	11	12	180	1592	11	11	1599	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	12	12	12	11	11	11	11	11	11
Total Lost time (s)		4.0	4.0		4.0			4.0			4.0	
Lane Util. Factor		1.00	1.00		1.00			0.95			0.95	
Frt		1.00	0.85		0.99			1.00			0.99	
Flt Protected		0.96	1.00		0.96			0.99			1.00	
Satd. Flow (prot)		1696	1478		1787			3435			3412	
Flt Permitted		0.69	1.00		0.58			0.50			0.84	
Satd. Flow (perm)		1230	1478		1086			1726			2861	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	143	14	208	115	12	13	196	1730	12	12	1738	167
RTOR Reduction (vph)	0	0	138	0	3	0	0	0	0	0	7	0
Lane Group Flow (vph)	0	157	70	0	137	0	0	1938	0	0	1910	0
Heavy Vehicles (%)	0%	0%	2%	1%	0%	0%	1%	1%	0%	0%	1%	0%
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		24.2	30.5		24.2			58.2			46.4	
Effective Green, g (s)		25.7	33.5		25.7			59.7			47.9	
Actuated g/C Ratio		0.26	0.34		0.26			0.60			0.48	
Clearance Time (s)		5.5	5.5		5.5			5.5			5.5	
Vehicle Extension (s)		3.0	5.0		3.0			3.0			3.0	
Lane Grp Cap (vph)		316	554		279			1163			1370	
v/s Ratio Prot			0.01					c0.13				
v/s Ratio Perm		c0.13	0.04		0.13			c0.86			0.67	
v/c Ratio		0.50	0.13		0.49			1.67			1.39	
Uniform Delay, d1		31.6	23.1		31.6			20.1			26.1	
Progression Factor		1.00	1.00		1.00			1.00			1.00	
Incremental Delay, d2		1.2	0.2		1.4			303.5			181.8	
Delay (s)		32.9	23.3		33.0			323.7			207.9	
Level of Service		C	C		C			F			F	
Approach Delay (s)		27.4			33.0			323.7			207.9	
Approach LOS		C			C			F			F	

Intersection Summary

HCM 2000 Control Delay	238.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.31		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	122.9%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group