December 29, 2023
Revised September 16, 2024

Mr. Robert Rocchio, P.E.
Chief Engineer of Infrastructure
Rhode Island Department of Transportation
Two Capitol Hill
Providence, RI 02903

Re: Proposed Mixed-Use Development - *The MET*
500 Veterans Memorial Parkway
East Providence, Rhode Island
Traffic Impact Assessment

Dear Mr. Rocchio:

Crossman Engineering has been retained by *Metacomet Development, LLC*, the applicant for a proposed major land development project on Veterans Memorial Parkway in the City of East Providence, RI. As you are aware, we have been working with local officials and residents, the owner and site engineer, Bohler Engineering as part of the state and local review process. In accordance with Crossman's most recent coordination meeting with the Department regarding final review of the Preliminary Physical Alteration Permit (PAP) submitted to your office, and meetings held with the East Providence Waterfront Commission over the last several months as part of the local approvals, we have updated our original December, 2023 study for final review by both agencies. The Crossman study was prepared as a supplement to a March, 2023 Traffic Impact and Access Study (TIAS) prepared by Vanasse & Associates, Inc (VAI), that had been developed for the City of East Providence as part of the initial planning stage efforts with the city that began in 2020 for redevelopment of the former *Metacomet Country Club* property.

As part of our current effort, Crossman is responsible for updating the data and analysis, and advancing the preliminary recommendations originally made in the VAI planning level study for site access alternatives, including potential off-site mitigation requirements along state and local roads to support the project. Our office will be completing the final design phase of the development. This effort includes the required permitting with the Rhode Island Department of Transportation (RIDOT), other applicable state agencies, and the City of East Providence for the design of the site access driveways and potential off-site roadway improvements. Ongoing coordination efforts over the last several months with both state and local officials as part of the Preliminary PAP and site development reviews as noted, requires a minor update of our initial traffic impact assessment.

This update is being submitted to the city and the RIDOT in order to provide additional information and documentation of the potential traffic impacts and the operational analysis in support of the recommended roadway infrastructure design. The traffic impact assessment included herein provides a

summary of the roadway mitigation requirements necessary to advance the project at the local level, and through the formal final design Physical Alteration Permit application process for construction of the recommended improvements. In addition to this updated traffic assessment to address initial city and state review comments, a supplemental Vissim analysis will also be submitted along with this document as part of the formal PAP Application. At the request of the Department in your June 21, 2024 letter of concurrence with the proposed roundabout design concept, a detailed traffic simulation model will be prepared and submitted in support of the final roundabout and roadway design elements developed for the formal permit application.

Project Summary

Briefly describing the project, the 138-acre property is located along the easterly side of Veterans Memorial Parkway abutting Lyon Avenue to the north and Fort Street to the east. Refer to Figure 1 on the following page for project location in East Providence. The property is the former *Metacomet Country Club,* a private, 18-hole golf course that had been operating on the site for over 100 years. The development proposal includes maintaining 9 holes of the former course along the waterfront area to the south, and developing the upland portion of the site along Veterans Memorial Parkway and Lyon Avenue with a mixture of residential and commercial uses. Access is proposed from new driveways on both of these roadways.

The study data and plans included herein support the design for modifications to Veterans Memorial Parkway between South Broadway and Mercer Street that are necessary to provide efficient operations and safe and adequate access along the Parkway and on Lyon Avenue within the immediate project area. The improvements propose intersection upgrades at two major junctions, and minor movement restrictions at another. The modifications include installation of a modern roundabout at Lyon Avenue, and geometric improvements at South Broadway, while also implementing limited left turn restrictions through signage and pavement markings at Mercer Street.

The Lyon Avenue junction will become the major intersection along the Parkway as envisioned in the *East Providence Comprehensive Plan,* 2015 update. Upgrade to intersection control at this location has long been considered including the design of a "context sensitive" roundabout controlled junction that was identified in the plan, and originally proposed as part of the Chevron property development, *Village on the Waterfront,* over 15 years ago. In order to be consistent with the city's long-term vision of the Parkway to promote where practical, an uninterrupted flow facility, and the desire to provide future access to the waterfront at this location, the current proposal does not propose to introduce a new major junction to a private development project that requires driveway control on the Parkway, and would adversely impact that intent. This goal was a key consideration in the design for access to the site and the minimization of required roadway modifications to the Parkway. The access design proposal for the development utilizes a *context sensitive* roundabout alternative, at an existing intersection that had been planned, in order to accommodate the future estimated traffic demands along the Parkway.

In addition to the changes at Lyon Avenue, the existing access driveway to the Metacomet site on Veterans Memorial Parkway will be relocated further to the south to provide greater separation from Lyon Avenue, and will have restrictive movements to limit operational impacts. In order to accommodate left turning traffic from the site at the roundabout as means of access to the Parkway,

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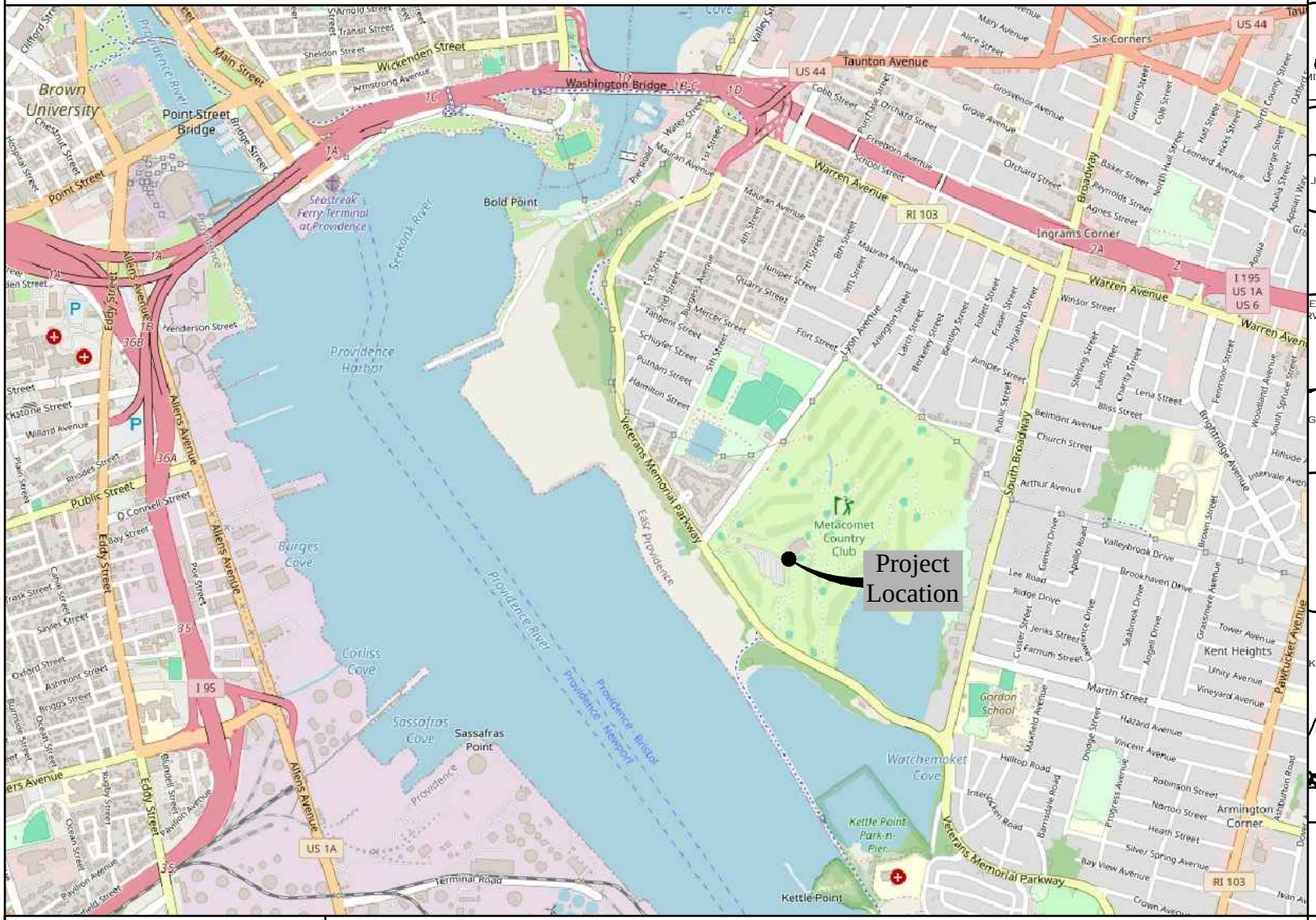

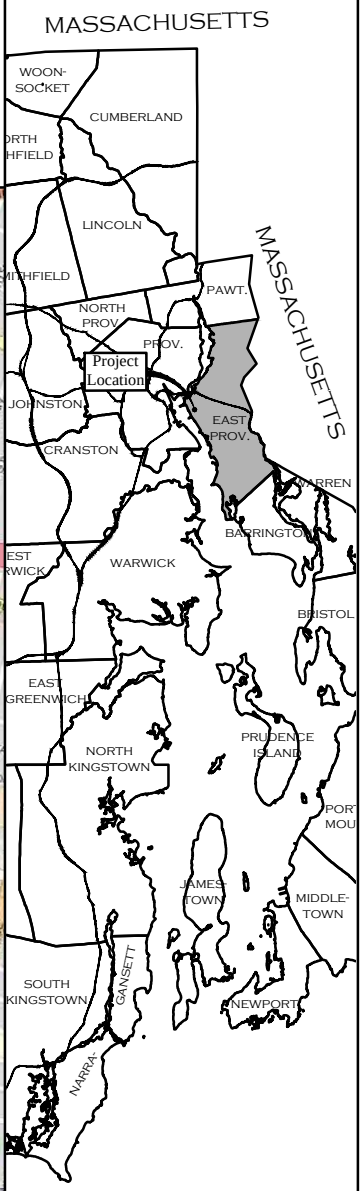

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Project Location Map

Figure 1

two new driveways are proposed on Lyon Avenue for a total of three points of access to the project. As part of the Veterans Memorial Parkway intersection designs noted, the roadway is proposed to be widened approximately 20 feet to allow for four lanes south of 5th Street through Lyon Avenue and the site access road, where it will taper back to two lanes. In addition to the improvements along the site frontage, further south, the South Broadway intersection will be modified to provide a simplified and more conventional 3-way junction with traffic calming measures to enhance safety at the intersection. These improvements are depicted in the figures provided in Attachment E at the end of the document.

To the north, the unconventional Y-type, Mercer Street intersection with the Parkway is also proposed to be restricted to right turns in and out of the minor side street. The turn restrictions will be an immediate measure to aid in limiting potential traffic from the development cutting through the neighborhood, while also improving safety due to sight line restrictions that presently exist at the junction. This improvement can easily be implemented with limited signing and pavement marking changes as it is presently channelized in a manner that promotes right turn only movements. Additional long-term measures along Mercer Street designed to limit use of this local road, have been discussed with city officials and can also be seamlessly constructed to limit the impact of the additional site related traffic, while also enhancing pedestrian and vehicular safety within the neighborhood. Implementation of traffic calming options will be evaluated through a long-term monitoring program as the project is developed over time and mitigation determined to be warranted.

The planning level VAI TIAS provided a comprehensive review of the immediate project area including an assessment of the local and state infrastructure, a safety analysis of the project area roadways and intersections, and an operational analysis of existing and future traffic conditions along with general recommendations for appropriate mitigation, where determined necessary. The following analysis provides an update of the information presented in the VAI report, focusing on the segments of roadways and the intersections identified as potentially warranting mitigation that are primarily under the jurisdiction of RIDOT, though city streets intersecting with state roads were also included as they require review and approvals. These areas are further defined and analyzed under existing and future build conditions to assist in the design of the appropriate infrastructure mitigation to support the project. A defined summary of the potential project impacts and appropriate recommendations, including detailed plans to provide safe and efficient access to *The MET* mixed-use development are included herein. The study includes a summary of the project area roadways servicing the property, and provides new traffic counts, trip generation estimates and operational analyses as an update and supplement to the original planning level VAI study that has also been submitted with the application to the city for local approvals.

Project Area

As previously noted, the subject property is situated along the easterly side of Veterans Memorial Parkway between Lyon Avenue and South Broadway. The 138-acre site was the location of the former *Metacomet Country Club*, an 18-hole private golf course. Other land uses in the immediate area of the development proposal can be described as primarily residential along the frontage of Veterans Memorial Parkway between I-195 and Pawtucket Avenue, with numerous side street intersections providing access to residential neighborhoods to the east. Commercial uses such as the *Metacomet Office Park* in the vicinity of Lyon Avenue are also present along the roadway.

Industrial uses were previously located to the west along the waterfront, including the Chevron property (former *Cumberland Farms/Gulf Oil* site) opposite the subject lot that is currently under consideration for a mixed-use development, and the former *BP/Amoco* facility, on the *Kettle Point* property. These heavy commercial uses have since been abandoned, and the properties have been incorporated into the Southern Waterfront Redevelopment District established by the city, which extends south of the I-195 corridor. This southern district is divided into three Special Development Sub-Districts including from the south; Kettle Point, Veterans Memorial Parkway and Bold Point Harbor sub-districts.

The redevelopment stages of each sub-district vary with *Kettle Point* recently becoming fully redeveloped with residential townhouses and apartments, and a medical office facility, *University Orthopedics*. The Chevron property within the Veterans Memorial Parkway sub-district, has been remediated and is available for redevelopment as noted. This property, along with Bold Point and the South Quay are under the same ownership and are presently undergoing initial phases of development that include a *Live Nation* concert venue, and use as an off-shore wind support facility. The *Wilkes Barre Pier* adjacent to *Bold Point Park* remains an active shipping pier.

Recreational uses in the area include the *Squantum Woods Reservation* and a city owned open space park to the immediate south of *Kettle Point*. The former *Metacomet Country Club* that recently opened a nine-hole public golf course as part of the first phase of the redevelopment project, and the *Pierce Field* athletic complex are situated along Lyon Avenue. The East Bay Bike Path parallels the Parkway along the westerly side of the road.

Based upon the good operating characteristics of the immediate servicing roadways including Veterans Memorial Parkway, Lyon Avenue, Mercer Street and Fort Street and adjacent local neighborhood streets, in combination with the estimated traffic volumes associated with the proposed development, a study impact area was defined for this project. The limits of our analysis focused on the main roadways providing access to the development; Veterans Memorial Parkway between Mauran Avenue and Interlocken Road, and the immediate adjacent roadways including South Broadway, Lyon Avenue, Mercer Street and Fort Street. Several intersections including the Parkway intersections with Mauren Avenue and Mercer Street did not require further capacity analyses due to good operations identified in the VAI study, the low volumes serviced, and the measures being proposed as noted to restrict movements and further reduce use of these local streets.

The local neighborhood streets abutting the development were reviewed in the original VAI study and found to operate very efficiently and in an acceptable manner. Specifically, several of the higher volume neighborhood intersections including the Lyon Avenue junctions with Mercer Street and Fort Street were found to operate at a good Level of Service B or better under future build conditions. Therefore, these intersections do not require a further analysis of capacity herein, as the VAI study data was determined to be conservative and comparable to values utilized in this updated study, yielding similar results. But, in order to provide a full understanding of the operational impacts on the local streets and how their functioning would potentially impact the distribution of traffic along state routes, as part of this document, the higher volume four-way stop-controlled intersection analysis of Lyon Avenue with Fort Street was included in this study. The analysis is also provided for reference purposes in determining the need for any mitigation on these local roads. Figure 2 on the following page depicts the subject site and the general project area under consideration as part of this study.

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Project Area Map

Figure 2

ROADWAYS

Veterans Memorial Parkway

Veterans Memorial Parkway serves as a state owned and maintained urban minor arterial extending between I-195 and Pawtucket Avenue in the western section of the City of East Providence. It provides immediate local access to abutting properties but also links to higher order facilities including Interstate 195 to the north and Pawtucket Avenue to the south. The 2.3-mile Parkway meanders between a north/south and east/west orientation in the project area, and for this study will be referenced as a north/south route. The Parkway was constructed between 1910 and 1920 and is an example of the "Parkway Movement" of the early twentieth century. It was designed by the firm of *Frederic Law Olmstead*, which designed *Central Park* in New York City. Veterans Memorial Parkway was designated as a "Scenic Roadway" in 1992 by the Rhode Island Scenic Roadway Board. It is a state roadway and is maintained by the Rhode Island Department of Environmental Management (RIDEM) in cooperation with the RIDOT.

Veterans Memorial Parkway in the project area is a 40 mph, 40-foot wide, two-lane roadway consisting of one 13-foot travel lane and a 7-foot shoulder in each direction. South of the site, through the cove area to Pawtucket Avenue it is posted at 35 mph. The pavement condition of the Parkway can be classified as fair to poor in some limited areas, and is clearly delineated with a double yellow centerline, and white shoulder markings. Bituminous berm is provided along both sides of the road to control stormwater runoff, though adjacent erosion along the edge of pavement from stormwater runoff was evident.

The adjacent photograph depicts the typical characteristics of Veterans Memorial Parkway along the property frontage shown on the left, looking south from the existing site driveway. As can be seen, the roadway alignment is relatively straight and level along the property frontage, though to the south it becomes curvilinear and declines to the waterfront along the cove. The bike path is situated on the right side of the photograph running between the roadway and *Chevron* property along the waterfront of the Providence River. No sidewalks are available for pedestrians, though the East Bay Bike Path runs parallel along the westerly side of the road in this area. The utility corridor is located underground, with a few service poles at cross streets and to properties. Lighting is available on individual aluminum pole standards along the easterly side of the Parkway for nighttime illumination of the roadway and intersections.

It should be noted that the RIDOT has the roadway scheduled for upgrade in the summer of 2024 as part of the department's Pavement Management Program. The work associated with this project will be limited to pavement resurfacing, stormwater treatment measures and minor safety enhancements as appropriate.

South Broadway

South Broadway is classified as an urban minor arterial extending from Veterans Memorial Parkway at its southerly terminus, to Warren Avenue adjacent to the I-195 interchange. The roadway links local intersecting neighborhood side streets to higher order roadways including I-195 and Veterans Memorial Parkway. South Broadway is a two lane 36-foot wide roadway consisting of an 18-foot travel lane in each direction. The road is delineated with a double yellow centerline with no defined shoulder or parking lane. The roadway alignment can be defined as straight and generally level with minor undulating curvature and an upgrade from south to north.

There is granite curbing and concrete sidewalks on both sides of the road within the project area. The pavement surface was determined to be in fair to poor condition with cracking, rutting with signs of deterioration and numerous utility patches that are failing. The roadway is posted at 25 mph and there are signed parking restrictions in defined areas on both sides along the road. The roadway is also serviced by the Rhode Island Public Transit Authority (RIPTA), though no bus shelters or pullouts are available to transit riders and buses. Utility poles are situated along the westerly side of the road with lighting fixtures located sporadically on the poles for nighttime illumination.

Lyon Avenue

Lyon Avenue is a local city street, operating as a collector roadway within the grid pattern of residential neighborhood streets between Warren Avenue and Veterans Memorial Parkway. It provides immediate local access to abutting residential, recreational and commercial properties, but also links to higher order facilities including Veterans Memorial Parkway to the west and Warren Avenue to the northeast, where it is signalized. Along its length, Lyon Avenue is a two lane 28-foot roadway consisting of a 12-foot travel lane and a 2-foot shoulder in each direction. The road is delineated with a double yellow centerline and white shoulder pavement markings. The roadway alignment is relatively straight and level, though there is a minor crest curve to the immediate east of Veterans Memorial Parkway.

There is no curbing or sidewalk on either side of the road along the property frontage, but both are introduced east of Mercer Street extending to Warren Avenue. The pavement surface was determined to be in good condition with no observed cracking or signs of deterioration. The roadway is posted at 25 mph and there are signed parking restrictions on both sides along the segment between Veterans Memorial Parkway and Mercer Street where no homes are present. Utility poles are situated along the northerly side of the road with lighting fixtures located sporadically on the poles for nighttime illumination. The above photograph depicts the noted features looking east from Veterans Memorial Parkway, with the subject property on the right.

It should be noted that the city has the roadway scheduled for upgrade in the summer of 2024 as part of the DPW roadway maintenance program. The work associated with this project will include pavement resurfacing, new curbing and sidewalk installations, signing, and pavement markings. Crossman has met with the DPW representatives and are coordinating potential traffic calming measures and minor safety enhancements as appropriate for near- and long-term traffic demands.

Fort Street

Fort Street is a local city street extending between South Broadway and 1st Street. It provides immediate local access to abutting residential homes and side streets in the grid pattern neighborhood. The road abuts the subject property between South Broadway and Lyon Avenue. Along its length, Fort Street is a two lane 24-foot undelineated roadway. The roadway vertical and horizontal alignment can be defined as is relatively level and straight with a single horizontal curve in the vicinity of Bently Street where parking is restricted.

There is sporadic granite curbing and mixture of bituminous and concrete sidewalk along the road. The pavement surface was determined to be in fair to good condition with minor observed cracking and utility patches. The roadway is posted at 25 mph. Utility poles are situated along the westerly/southerly side of the road with lighting fixtures located sporadically on the poles for nighttime illumination.

Mercer Street

Mercer Street is a local city street extending between Lyon Avenue and Veterans Memorial Parkway. It provides immediate local access to abutting residential homes and side streets while also providing access to the Pierce Memorial Field Recreational Complex and the Agnes B. Hennessey Elementary School. The road abuts the north east corner of the subject property. Along its length, Mercer Street is a two lane 24-foot undelineated roadway. The roadway vertical and horizontal alignment can be defined as is relatively level and straight.

There are segments of granite curbing and mixture of bituminous and concrete sidewalk along the road. The pavement surface was determined to be in good condition in the vicinity of the school and recreational facility, though to the north there were pavement areas in fair to poor condition with extended utility patches, cracking and signs of deterioration. The roadway is posted at 20 mph in the vicinity of the elementary school where vehicle access is restricted for several hours during school arrival and dismissal periods. Utility poles are situated along the westerly side of the road with lighting fixtures located sporadically on the poles for nighttime illumination.

INTERSECTIONS

Veterans Memorial Parkway at Lyon Avenue

The major intersection under review as part of this study is the junction of the Parkway with Lyon Avenue due its location in relation to the site and the proposed access driveways to the development. This intersection will service a large percentage of the site related traffic, while also potentially linking to the waterfront from the Chevron property to the west as was previously noted. Lyon Avenue intersects Veterans Memorial Parkway, to form an unsignalized 3-way, "T" type junction with stop control on the minor Lyon Avenue approach. The Veterans Memorial Parkway northbound and southbound approaches to the intersection provide a single all-purpose lane. In addition, the Lyon Avenue

westbound approach also provides a single lane for both right and left turning vehicles. A *Stop* line and *Stop* sign mounted on a utility pole is provided for intersection control.

Veterans Memorial Parkway at South Broadway

South Broadway intersects the Parkway to form an unsignalized 3-way "T" type junction with stop control on the minor South Broadway approach. The Veterans Memorial Parkway northbound approach to the intersection provides single all-purpose lane. The southbound approach has two lanes including a separate left turn lane that was recently added through restriping of the Parkway as part of the *Kettle Point* development project. This additional lane provides a refuge for turning vehicles, while allowing unimpeded through traffic flow on the main roadway. The South Broadway westbound approach contains a separate left turn and right turn lane for improved efficiency. These features can be seen in the adjacent aerial photograph of the junction.

It should be noted that there are several geometric factors that impact operations of the intersection, specifically a sharp curve introduced on South Broadway at the terminus of the road, hindering sight lines for westbound vehicles approaching the intersection, and their ability to see stopped vehicles at the stop line. In addition, there is a large landscaped median island that contains a stone memorial plaque for a veteran. This large median affects left turns both exiting off the Parkway and turning from South Broadway. The median creates a large separation of entering and exiting traffic for South Broadway, where the southbound left turn lane on the Parkway extends beyond the side street exiting approach. This creates a segmented left turn lane that permits exiting traffic from South Broadway to turn if a single left turning vehicle is queued past the minor approach. This operation can be more efficient if there is only one southbound vehicle turning left, where it allows both movements to operate simultaneously in a northbound gap in traffic. Though this operation allows for more efficient use of available gaps in main street traffic, it often creates confusion to drivers on the appropriate location to turn from the main road, and when to turn during periods of longer southbound left turn lane queues.

South Broadway at Fort Street

Fort Street intersects South Broadway to form an unsignalized 3-way "T" type junction with stop control on the minor Fort Street approach. The South Broadway northbound and southbound approaches to the intersection provide a single all-purpose lane. In addition, the Fort Street eastbound approach also provides a single lane for both right and left turning vehicles. A *Stop* sign is posted on the minor street approach though no *Stop* line is visible. It appears the pavement marking is worn along with the markings for a crosswalk across the minor approach. It is recommended that these markings be reviewed in coordination with the city and replaced as appropriate.

Lyon Avenue at Fort Street

Fort Street intersects Lyon Avenue to form an unsignalized 4-way "T" type junction with All-Way stop control. The Lyon Avenue approaches to the intersection provide single all-purpose lanes. The Fort Street approaches also provide single all-purpose lanes. *Stop* lines are present on each of the approaches and crosswalk markings are available across both Fort Street approaches and across the eastbound Lyon Avenue approach. *Stop* signs with *All-Way* plaques are placed on each approach, though they are in poor condition and should be replaced. The VAI study noted the need to replace the signs and pavement markings with enhanced visibility measures including ladder style crosswalks and LED style *Stop* signs. These measures should aid in reducing the higher crash rate observed at this location due to failure to yield conditions at a four-way stop, though crashes were typically low speed, and limited to property damage only.

Traffic Volumes

Existing traffic flow characteristics for this area were developed from a traffic counting program conducted by Crossman and review of available record data from the RIDOT, the VAI TIAS, and from previous traffic studies completed along the Parkway in the immediate project area. The data collection for this updated effort included Automatic Traffic Recorder (ATR) counts on Veterans Memorial Parkway, Lyon Avenue and South Broadway, and Manual Turning Movement Counts (TMC) at the Veterans Memorial Parkway intersections with Lyon Avenue and with South Broadway during the weekday morning and afternoon peak periods and Saturday, mid-day period, consistent with the previous data collection effort completed by VAI. This updated traffic data was also utilized as a basis for adjusting and balancing base volumes for local streets and intersections that were originally reviewed in the VAI study and included herein for reference.

It was necessary to update this base data as the counts utilized in the VAI study were collected during the pandemic period when traffic volumes were not representative of average daily traffic demand conditions. This new information provides the opportunity to use post pandemic data instead of adjusted data that is not reflective of current conditions, as commuting travel patterns have typically changed. As indicated, data was also reviewed from record information available from the RIDOT and from multiple studies completed for projects along the Parkway over the last two decades. Review of this information determined that daily traffic volumes along the Parkway have remained relatively consistent since the year 2000, though as expected are slightly lower during peak periods due to recent changes in commuting patterns over the last several years. In addition, it was determined that the base data in the original VAI study that was adjusted higher for the pandemic period, resulted in a conservatively higher volume of traffic utilized in their analysis than is currently experienced along the local roadways. RIDOT Seasonal Adjustment Factors were also reviewed to determine if adjustment of the base volumes was necessary. Based upon this review, it was determined that data collected in October typically represents higher than average traffic conditions for the arterial roadway classification, and therefore volumes were not adjusted lower to reflect average conditions, resulting in a conservative analysis.

Based upon the November 2023 ATR count program, Veterans Memorial Parkway was found to service approximately 16,500 vehicles per day (vpd) on an average weekday and 13,200 vpd on a Saturday. On a typical weekday along the Parkway just south of Lyon Avenue, traffic volumes begin to increase at 6:00

AM, with a morning peak hour of approximately 1,300 vehicles occurring between 7:00 and 8:00 AM. After 9:00 AM, the volumes decreased to between 850 and 950 vehicles per hour (vph), before increasing to the afternoon peak after 2:00 PM. The afternoon peak hour occurred between 4:00 and 5:00 PM with similar peak volumes of approximately 1,300 vph. On a Saturday there is no defined AM and PM peak as volumes gradually increase over the day, peaking in the mid-day period between 10:00 AM and 4:00 PM where volumes average between 850 and 950 vph.

Lyon Avenue was found to service approximately 1,050 vehicles per day during the week and 600 vpd on a Saturday. On a typical weekday along the Lyon Avenue, traffic volumes begin to increase at 6:00 AM, with a morning peak hour of approximately 100 vehicles occurring between 8:00 and 9:00 AM. After 9:00 AM, the volumes decreased to between 60 and 80 vehicles per hour, before increasing to the afternoon peak. The afternoon peak hour occurred between 4:00 and 5:00 PM with similar peak volumes of approximately 100 vph. On a Saturday there is no defined AM and PM peak as volumes gradually increase over the day peaking in the mid-day period between 10:00 AM and 4:00 PM where volumes average between 35 and 55 vph.

South Broadway was found to service approximately 5,900 vehicles per day during the week and 4,100 on a Saturday. On a typical weekday along the roadway, traffic volumes begin to increase at 6:00 AM, with a morning peak hour of approximately 600 vehicles occurring between 8:00 and 9:00 AM. After 9:00 AM, the volumes decreased to between 350 and 450 vehicles per hour, before increasing to the afternoon peak after 2:00 PM. The afternoon peak hour occurred between 4:00 and 5:00 PM with similar peak volumes of approximately 550 vph. On a Saturday there is no defined AM and PM peak as volumes gradually increase over the day, peaking in the mid-day period between 11:00 AM and 3:00 PM where volumes average between 290 and 320 vph.

A manual turning movement count program was also conducted in November 2023 to confirm current traffic conditions at key project study intersections. The counts were completed at the Veterans Memorial Parkway intersections with Lyon Avenue and with South Broadway and compared to the VAI and historical count data as post COVID conditions have impacted commuter travel patterns and associated volumes on a daily basis. Data was collected during the weekday morning peak from 7:00 to 9:00 AM, the weekday afternoon peak from 3:00 to 6:00 PM and a Saturday from 11:00 to 2:00 PM. Figure 3 on the following page depicts the peak hour turning movement volumes for the weekday morning, afternoon and Saturday peak periods at the study intersections.

Based upon the turning movement count data, Veterans Memorial Parkway between Lyon Avenue and South Broadway, was found to service approximately 1,535 vehicles during the morning peak hour typically between 7:30 and 8:30 AM with 730 northbound and 805 southbound. During the afternoon peak hour approximately 1,415 vehicles were recorded between 4:30 and 5:30 PM, with 560 northbound and 855 southbound. During the Saturday mid-day peak hour between 11:30 and 12:30 PM approximately 1,090 vehicles were recorded, with 550 northbound and 540 southbound.

As can be seen, the manual counts were found to be consistent with the ATR data and general volumes from previous studies within the project area, though are slightly lower as noted earlier. The Fort Street and Mercer Street intersections are also depicted on the figure where the new ATR and intersection counts were used to update these volumes that were found to be generally consistent with the new data and did not require new counts due to the low volumes and good operations defined in the VAI study. The volumes included in this study were rounded and balanced between junctions using the

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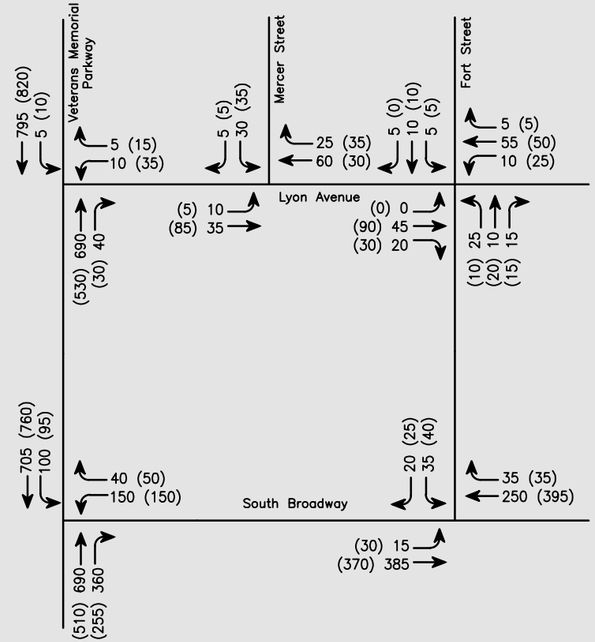
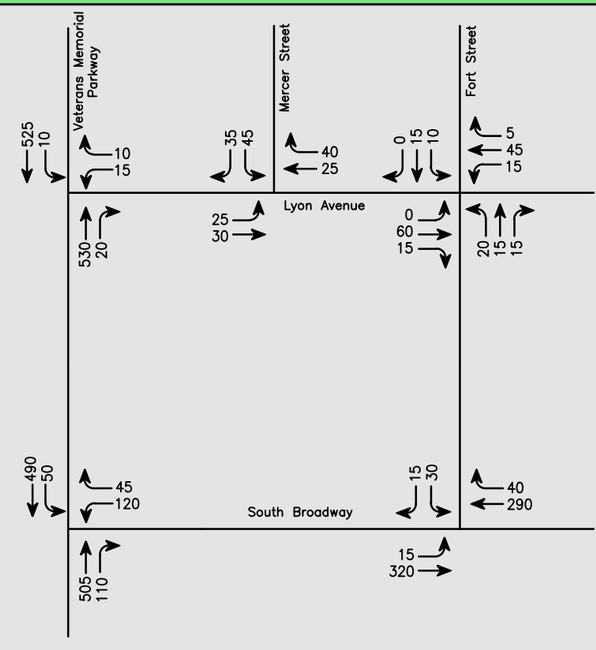
Weekday Volumes



Saturday Volumes (11:30 - 12:30)



LEGEND:

- TURN LANE
- XXX AM PEAK VOLUMES (7:30 TO 8:30)
- (XXX) PM PEAK VOLUMES (4:30 TO 5:30)
- STUDY INTERSECTION

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Existing Traffic Volumes

Figure 3

higher values, whether record or new to be conservative. Complete count information including Automatic Traffic Recorder (ATR) counts and Manual Turning Movement Counts (TMC) are provided in Attachment A for reference.

Trip Generation

To understand the potential traffic impact of a proposed development, estimates of anticipated traffic to be generated by that particular land use must be calculated. As previously discussed, the site development proposal includes construction of multiple buildings containing both residential and commercial uses. The residential component will include 844 apartments and 46 townhouses for a total of 890 residential units The commercial component will include a shopping center of approximately 153,000 square feet containing an 85,000 square foot grocery market as the major anchor, and a mixture of retail, restaurant and professional service businesses in multiple buildings along the Parkway. A pedestrian oriented walkable *village* area containing a small cluster of buildings is proposed abutting a nine-hole public golf course that will cover over 48-acres of the site, maintaining a public recreational area along Watchemoket Cove utilizing the current course with a modified layout. This area, due to the benefit of the existing topography, will also contain an overlook/amphitheater element that will provide vistas of the golf course and the cove. The open space overlook area is being provided as a site amenity for use by neighborhood residents and visitors to the businesses. An open space buffer area of approximately 10-acres will also be created in the northeast corner of the property extending along both the Fort Street and Lyon Avenue frontages. Figure 4 on the following page depicts the site layout and access plan, prepared by *Bohler Engineering*.

As can be seen in the figure, access to the development will be provided from a single driveway on Veterans Memorial Parkway and two driveways on Lyon Avenue. The commercial component of the project situated along the Parkway frontage, will be serviced by the Parkway driveway and the western driveway on Lyon Avenue, which directly access this area of the site. The eastern driveway on Lyon Avenue will primarily accommodate the residential component of the project as the homes and apartments are situated in the northeast corner of the site. Residents destined to the site from points other than the south would be expected to utilize this driveway. All traffic from the south is estimated to enter the development at the Parkway driveway, but as noted, the driveway is a right turn only exit. This design requires drivers destined to the south from the site to exit onto Lyon Avenue and turn at the roundabout to head south.

There is one main internal roadway which extends easterly from the Parkway through the center of the site, providing primary access to the many different elements of the development. As noted, full access from the Parkway is proposed, but exiting traffic is limited to right turns only. Within the site there is a main four-way intersection with the westerly driveway on Lyon Avenue that is yield controlled at a circle. The eastern access road from Lyon Avenue intersects the main internal road at a four-way stop condition. This main access or collector road within the site, has been designed with multiple driveways to the pockets of commercial and residential components of the project, leading to both surface and underground parking lots that are in conformance with current zoning requirements. This design will create efficient operations with a greater distribution of site traffic, limiting the concentration of vehicles to only the main access driveway intersections at the Parkway and Lyon Avenue as defined, which have been designed with lane configurations and control to accommodate the future traffic demands.

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Site Plan

Figure 4

In addition to addressing vehicular traffic demands, all of these internal roadways will be designed to include pedestrian accommodations with accessible sidewalks or walking/biking trails and connections between elements of the project and to the adjacent servicing roadways that will create a pedestrian friendly environment within the development. External to the site, new sidewalks, where there are presently none, are also proposed along the Lyon Avenue frontage. The Lyon Avenue sidewalk will connect to a new combined pedestrian/bike path that provides access to the site along the Parkway, and to the East Bay Bike Path through a new roadway crossing proposed at the roundabout. This crossing of the Parkway, which links to the East Bay Bike Path, is a primary element of the future roadway/roundabout design. Presently there are no pedestrian crossings along Veterans Memorial Parkway from the large residential neighborhoods on the east to the East Bay Bike Path, a major transportation route that links to the waterfront, numerous East Bay communities and the City of Providence. The design of the crossing will be coordinated with the RIDOT and the Scenic Roadways Board during the formal PAP review process, to potentially provide enhanced signage or control due to the high-speed nature of the facility and its prominence and linkage with the East Bay Bike Path.

For this site, projected traffic volumes for the mixed-use project were based on use of trip generation factors. These factors are taken from the "*Trip Generation"* manual, an informational report published by the Institute of Transportation Engineers (ITE), a national professional organization for traffic and transportation engineers. The data provided in the ITE report are based on extensive traffic studies for various types of land uses (residential, commercial, industrial, etc.). This data has been found to be very reliable and provides a sound basis for estimating future trips to new developments.

For the proposed 890 residential unit component of the project, Land Use Code 215 Single Family Attached Housing (46 units), Land Use Code 220 Multifamily Housing - Low-Rise (240 units) and Land Use Code 221 Multifamily Housing - Mid-Rise (604 units) were reviewed for applicability in developing an estimate of site related vehicles trips. For the golf course and retail components of the project Land Use Code 430 Golf Course (9-holes) and Land Use Code 821 Shopping Center with Supermarket (153,000 square feet) were utilized respectively. The appropriate worksheets from the manual are included in the Attachments along with the trip estimate calculations. Table 1 provides a summary of the peak hour volumes estimated for the proposed large scale mixed-use project utilizing the ITE factors.

As can be seen in Table 1, the development project, with the mixture and size of uses proposed, will generate a maximum of roughly 1,800 trips during the defined peak periods of traffic. It is very important to note that the trip volumes referenced in the table represent highly conservative design level values utilized as a basis for the roadway infrastructure design mitigation. This was done to ensure that the study roadways and intersections will efficiently accommodate future traffic demands along the Parkway. Actual realized trip values will be less as several factors will influence future volumes serviced on the driveways and that are added to the adjacent roadways. These include both *pass-by* and *internal capture* factors associated with a mixed-use development. These factors can account for between 20 and 55 percent of the commercial component generated vehicle trips. Putting it into perspective, the commercial component of the project as seen in the table, will account for approximately 75 percent of the total site trips generated during the daily peak hours of traffic.

In a mixed-use development such as The MET, the residential component of the project is expected to contribute a significant amount of the trips to and from the commercial uses proposed within, resulting in one element of the *internal capture* factor. Specifically, the grocery market and other smaller service-oriented retailers proposed within the neighborhood shopping center element, would be patronized by customers already within the site. These inter-related trips from the residents to the businesses do not

generate trips at the site driveway intersections, or on to the adjacent roads, they are all internal to the site, but have been presented in the table to demonstrate the anticipated customer demand of the commercial uses. These internal vehicle trips that would circulate within the site to the commercial element, can also be expected to be less, as based upon the site layout and design, pedestrians walking within the site from the residents to the commercial uses would be a common occurrence, and is not factored in to lessen the estimate. In addition to the internal capture of trips that do not leave the site, vehicular traffic already on the servicing roadways will also patronize the commercial component of the project. These *pass-by* trips will not be new to the Parkway or Lyon Avenue, but will be diverted to the site driveway to patronize a business, then continue on to their destination, therefore not generating new traffic to these roadways. Depending on the type of commercial uses (retail/restaurant), this can range to between 40 and 55 percent of the business-related trips, where businesses often factor in the existing traffic demands of the adjacent roadways when determining to locate to a property.

TABLE 1

Trip Generation Summary

	Description	Enter	Exit	Total
AM PEAK HOUR				
ITE Land Use Code 215	Single Family Attached	7	15	22
ITE Land Use Code 220	Multifamily (Low-Rise)	23	73	96
ITE Land Use Code 221	Multifamily (Mid-Rise)	52	172	224
ITE Land Use Code 430	Golf Course	13	3	16
ITE Land Use Code 821	Shopping Plaza w/Market	335	205	540
	TOTAL	430	468	898
PM PEAK HOUR				
ITE Land Use Code 215	Single Family Attached	15	11	26
ITE Land Use Code 220	Multifamily (Low-Rise)	77	45	122
ITE Land Use Code 221	Multifamily (Mid-Rise)	144	92	236
ITE Land Use Code 430	Golf Course	14	12	26
ITE Land Use Code 821	Shopping Plaza w/Market	662	718	1,380
	TOTAL	912	878	1,790
SATURDAY MD PEAK HOUR				
ITE Land Use Code 215	Single Family Attached	12	14	26
ITE Land Use Code 220	Multifamily (Low-Rise)	50	48	98
ITE Land Use Code 221	Multifamily (Mid-Rise)	120	116	236
ITE Land Use Code 430	Golf Course	13	14	27
ITE Land Use Code 821	Shopping Plaza w/Market	722	693	1,415
	TOTAL	917	885	1,802

As noted, the *internal trip* and *pass-by* factors were not applied to reduce intersection volumes for analysis purposes. This approach was done to ensure appropriate intersection design and off-site mitigation treatments in order to provide for safe and efficient access to the property and along the adjacent servicing roadways. This is an appropriate method of design as these *factors* can be highly variable depending on the final makeup of inter-related uses within a mixed-use site.

It should be noted that a trip is defined as a one-way vehicle movement, therefore driving to and from the site, for example is equivalent to two trips. In developing the intersection volumes to be analyzed under build conditions, a directional distribution of the site traffic was estimated. The distribution was consistent with the VAI study and was based on East Providence Journey to Work Census data, location of available similar competing commercial uses, and traffic data collected defining the current traffic patterns at the study intersections and routes available to higher order roadways.

In addition, due to the mixture of uses proposed, differing trip patterns were utilized for the commercial and residential elements where it was estimated that the commercial uses would be distributed roughly 60/40 to the north/south and the residential 80/20 to the north/south respectively. The smaller internal commercial uses are expected to be local neighborhood stores that would accommodate the immediate residential neighborhoods and pass-by traffic serviced by Veterans Memorial Parkway, South Broadway, Pawtucket Avenue and Warren Avenue and the residents within the development. The larger grocer use, which is the major commercial traffic generator for the site, is also expected to service this general draw area, as there are numerous similar competing businesses along the Route 6 corridor in Seekonk and also in large plazas at *Carpenters Corners* on Taunton Avenue to the north and east. These stores include; Shaw's, Stop & Shop (2 locations), BJ's, Walmart, and the proposed Whole Foods that are all within a 2-to-2.5-mile radius of the subject property.

As a result of this high level of competition that services the community and those areas to the north of I-195 and to the east, it is anticipated that the grocer element of the project would most likely draw from the immediate neighborhoods abutting the property between Warren Avenue and the Parkway, and from residential neighborhoods to the south. It was determined that there are limited grocery shopping opportunities to the south, where from Pawtucket Avenue and Willet Avenue in the Riverside section of the city, including the Bullocks Point area extending into West Barrington, there is only a single, small and outdated Shaw's grocery store for competition. This situation creates a desire for this large area of residential properties in the southern part of the community to travel north to *Carpenters Corners* or the Route 6 corridor to shop for groceries as the small store in Riverside offers less selection at higher prices. These residents would have an additional opportunity to shop at the new store and would be diverted from Pawtucket Avenue in the south to the Parkway to access the site. In regard to the specific driveway volume distributions, the new turning volumes differed slightly from the VAI study to account for the changes made relating to turning restrictions recommended along Veterans Memorial Parkway, and measures noted to reduce site related traffic along neighborhood streets. The distribution values and resultant estimated driveway volumes utilized for the study intersections are provided in Attachment B for reference.

Operational Analysis

The key to any traffic impact analysis is the evaluation of roadway operations during peak traffic periods on the servicing roadway system. This situation would occur when the site-generated traffic, combined with the traffic volumes on the main roadways result in the highest one-hour volume serviced along a roadway segment, or through an intersection. Review of the traffic data and proposed land use found

that the weekday morning and afternoon peak hours along with the Saturday mid-day peak period would represent this worst-case combination of site-generated traffic with the servicing roadway peak traffic conditions.

As part of this study, we focused the main intersections within the project area including the Veterans Memorial Parkway intersections with Lyon Avenue and with South Broadway, South Broadway with Fort Street and Fort Street with Lyon Avenue. In addition, the new site driveway intersections with both Veterans Memorial Parkway and with Lyon Avenue were analyzed in order to design the appropriate geometric and traffic control treatments. The existing intersections as noted, were analyzed for existing traffic conditions in order to provide a basis of comparison of current operations versus the proposed future mitigation condition.

In order to properly assess the impacts of a development, future traffic conditions of area roadways should be estimated for the period when the development is constructed and fully occupied. Typically, the expansion of base traffic is calculated when a project is to be constructed over an extended period (+3 to 5 years). In all instances, area growth that may affect capacity results should be considered. For this project a future five-year design period was estimated for the project. It is not anticipated that base traffic volumes along the adjacent servicing roadways will discernably change from existing conditions as the adjacent neighborhoods and properties in this section of the city are substantially built, where little to no growth should occur along the immediate roadways servicing the property. As noted earlier, the *Kettle Point* property has been fully developed as of the summer of 2023. This was also coordinated with the city where no known projects are under construction or review that would impact traffic conditions in the immediate project area.

One area which could potentially impact traffic conditions in the future, is development along the waterfront. Though no proposals are presently under consideration by the city, the potential for future development exists. Therefore, to be conservative in our analysis, existing volumes were expanded by 1.5 percent per year for the five-year design period that is consistent with the previous study. For this project, a No-Build analysis scenario was not completed as the scale of the off-site mitigation is being designed to accommodate the future build condition, and it is not necessary to define the need and scale, or lack thereof, to provide improvements along the servicing roadways, absent of the subject project. Figure 5 on the following page depicts the estimated future traffic volumes at the study intersections.

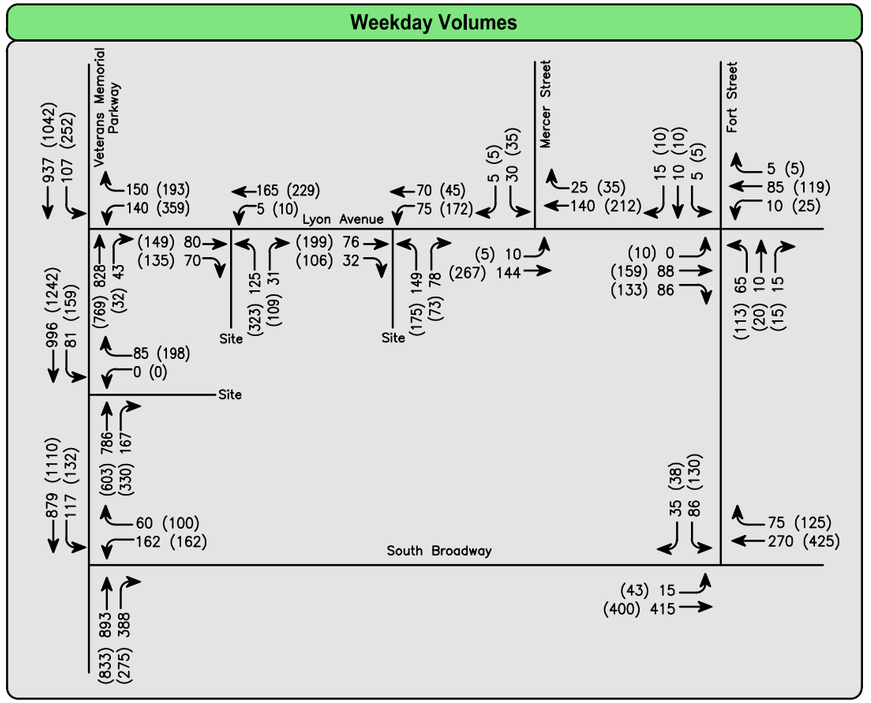
Based upon the increase in traffic during peak periods related to full development of the subject property, it is apparent that improvements are necessary along Veterans Memorial Parkway and at key intersections. As previously discussed, this main arterial is different than most roadways under state jurisdiction, where property access and design elements require careful consideration and coordination with appropriate agencies as it was designated as a Scenic Roadway in 1992. Introduction of new driveways and potential intersection control have been discouraged where possible as outlined in the *Veterans Memorial Parkway Stewardship Plan* prepared by the Rhode Island Scenic Roadways Board in 1999. The design for this project has been considerate of those concerns for changes to the general scenic character of the Parkway and design elements proposed will be consistent with the goals of the *Plan,* and be approved by the agency to mitigate any potential adverse impacts.

As such, a new driveway to the site with control (roundabout or traffic signal), has not been proposed along Veterans Memorial Parkway. The existing driveway will be modified and shifted further south away from the Lyon Avenue intersection while maintaining the stop-controlled driveway approach. The Lyon Avenue junction will now become the major intersection along the Parkway as improvements at

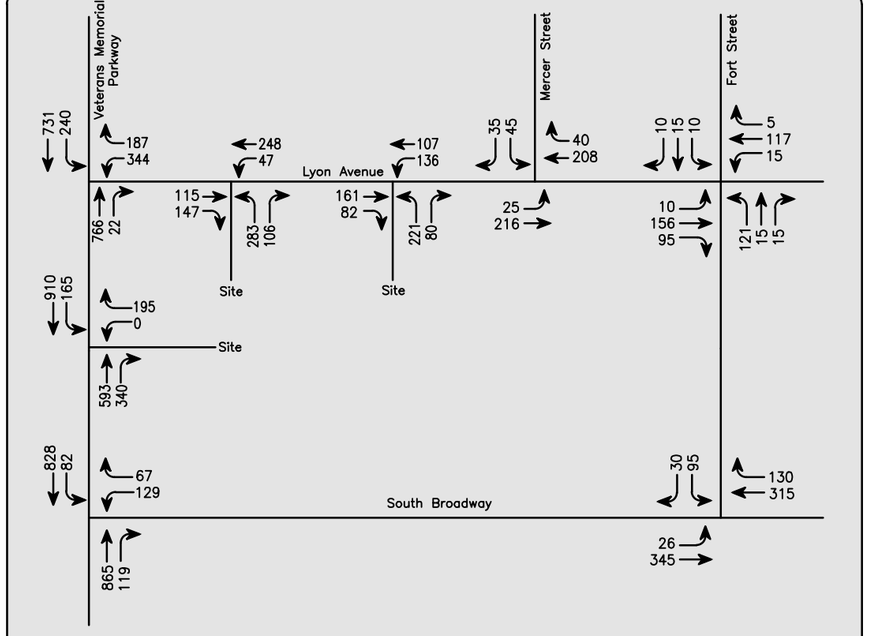
The MET

EAST PROVIDENCE, RHODE ISLAND

Weekday Volumes



Saturday Volumes



LEGEND:

- TURN LANE
- XXX AM PEAK VOLUMES
- (XXX) PM PEAK VOLUMES
- STUDY INTERSECTION

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Proposed Traffic Volumes

Figure 5

this location have long been considered and were defined in the *East Providence Comprehensive Plan* 2015 update, including a recommendation for an upgrade to a "context sensitive" roundabout that was reviewed as part of the Chevron property development, *Village on the Waterfront,* proposed over 15 years ago. Development of the Chevron site is still anticipated and their access to the Parkway would be preferred at Lyon Avenue to meet the goals of the city and Waterfront Commission, minimizing new intersections requiring vehicle control and preserving the Parkways scenic character. Considering both projects and the sensitivity of the introduction of new intersections and the type of intersection control, it is more prudent and appropriate to limit changes to the Parkway to this existing intersection location, and propose the appropriate context-sensitive roundabout control design.

Eliminating the need for operational control with a roundabout or traffic signal at the site access road on Veterans Memorial Parkway was attained by restricting left turning traffic exiting the site. The left turn restriction will limit exiting traffic to right turns only, which can easily be accommodated as designed. Shifting the left turn exiting traffic (southbound) to Lyon Avenue eliminates the need for a roundabout or traffic signal control at the site access road, which would be warranted under full access conditions. Also, it is important to note, that upgrade to vehicle control to a roundabout or traffic signal at the Lyon Avenue intersection would be warranted to accommodate future traffic demands for any type of development of the subject property relative to its acreage with access to Lyon Avenue and for access to the waterfront. With the design proposed, vehicle control (roundabout), is limited to only one location and at an existing intersection that will also benefit access to the waterfront and the motoring public that travel these roadways on a daily basis.

The proposed roundabout requires two entry lanes on all approaches to accommodate the demand as shown in Figure 5 during daily peak conditions. The mitigation plan presented in the Attachments depicts the modifications to a 1,600-foot section of Veterans Memorial Parkway to transition to the two-lane approaches and back to a single lane in each direction. Southbound traffic will be permitted to turn left and enter at the site access road location to help distribute site related traffic between the commercial and residential components of the development. The need for this southbound left turn into the site and its design was a comment from the Department as part of the preliminary PAP review, but for purposes of this study has been included for analysis to be conservative. The supplemental Vissim simulation analysis will support the future design to be reviewed as part of the formal PAP application, and the Department has indicated that if installed, future monitoring of the left turn into the site would be required to ensure that this movement provides for safe and adequate access.

Two new driveways are proposed on Lyon Avenue, a primary driveway to the commercial area and a secondary driveway further to the east to service the residential apartments. It is estimated that much of the residential traffic will utilize Lyon Avenue as a primary access/egress route due to the location of the residential component at the easterly end of the site closer to Fort Street as previously discussed.

Also as noted and as discussed with the city, left turn restrictions will be requested from the RIDOT at the Veterans Memorial Parkway intersection with Mercer Street in order to enhance safety at the junction and also reduce potential site related cut-thru traffic in the neighborhood. Long term measures could also easily be implemented between the 5th and 7th street block to extend existing daily school related restrictions, or to restrict or eliminate vehicle travel in this concentrated area of pedestrian traffic in front of the elementary school and Pierce Memorial Field complex.

The results of the design analysis for existing and future traffic conditions are presented in Table 2 and Table 3 respectfully. The existing conditions analysis evaluates peak conditions for the unsignalized conditions at each study intersection. The future build analysis evaluates the proposed design condition

with a roundabout at Lyon Avenue, and unsignalized conditions at the existing junctions and proposed points of access to the development.

Table 2 - Existing Level of Service Summary

Location / Movement	2023 EXISTING CONDITIONS											
	AM Peak Hour				PM Peak Hour				Saturday MD Peak Hour			
	LOS	Delay	95th % Queue Length (veh.)	v/c	LOS	Delay	95th % Queue Length (veh.)	v/c	LOS	Delay	95th % Queue Length (veh)	v/c
Veterans Memorial Parkway at Lyon Ave (U)												
Parkway SB Left	A	9.3	1	0.01	A	8.7	1	0.01	A	8.7	1	0.01
Lyon Ave WB Left/Right	D	26.6	1	0.14	E	35.9	2	0.32	C	19.6	1	0.10
Veterans Memorial Parkway at South Broadway (U)												
Parkway SB Left	B	12.0	1	0.18	B	10.1	1	0.13	A	9.1	1	0.06
SBroadway WB Left	F	115.9	8	0.97	F	61.1	6	0.76	C	21.2	2	0.37
SBroadway WB Right	B	12.9	1	0.09	B	11.4	1	0.09	B	10.8	1	0.07
South Broadway at Fort Street (U)												
SBroadway NB Left	A	7.9	1	0.01	A	8.4	1	0.03	A	8.0	1	0.01
Fort EB Left/Right	B	13.9	1	0.13	C	17.1	1	0.19	B	13.7	1	0.11
Lyon Avenue at Fort Street (U)												
Lyon Ave EB All	A	7.3	1	0.1	A	7.7	1	0.1	A	7.4	1	0.1
Lyon Ave WB All	A	7.5	1	0.1	A	7.7	1	0.1	A	7.5	1	0.1
Fort St NB All	A	7.4	1	0.1	A	7.5	1	0.1	A	7.4	1	0.1
Fort St SB All	A	7.3	1	0.0	A	7.6	1	0.0	A	7.5	1	0.0
OVERALL	A	7.4	-	-	A	7.6	-	-	A	7.5	-	-

As can be seen in Table 2, traffic along the main roadways is unimpeded and operates with limited delay for left turning traffic during all peak traffic conditions reviewed for this project. The movements that do experience greater delays and operate at LOS E and F during peak traffic conditions are the minor side street approaches trying to access the high volume arterial of Veterans Memorial Parkway. The delays at Lyon Avenue do not result in traffic congestion or extended queuing due to the low volume of traffic currently serviced on the minor approach. The delays also do not result in reduced safety with minor approach drivers attempting to access gaps that are insufficient to traverse that often occurs at congested locations.

The South Broadway intersection which services much higher volumes on the minor approach, experiences greater delays and queuing with 4 to 6 vehicles typically queued during peak hours and observed maximum queue of up to 11 vehicles. Regarding safety, the crash rate involving angle crashes

at this location is higher due to the greater congested condition, coupled with the unconventional geometry previously described. The Fort Street intersections with South Broadway and Lyon Avenue operate in an acceptable manor with minor delays during all analysis periods.

The Future Build condition operational results defined in Table 3 includes a number of roadway improvements as previously defined that will efficiently accommodate future estimated design volumes. As can be seen, the intersections as designed all operate in an efficient manner at an acceptable level of service, including the roundabout at Lyon Avenue and the unsignalized site driveway intersections with Veterans Memorial Parkway and with Lyon Avenue.

The only intersection that currently and in the future, will continue to operate with extended vehicle delays for the minor approach traffic, is at South Broadway. Improvements were investigated at this location including a roundabout and traffic signalization. Due to environmental and geometric constraints at this location, it does not appear to be feasible to construct the required two-lane roundabout without extensive environmental and property impacts because of required grading and its location along Watchemoket Cove. It is therefore recommended that initial improvements be limited to geometric modifications that will address the issue previously defined relating to operations and safety. These improvements would lend to future safety enhancements including signalization of an existing intersection of two major routes in this area of the city that presently operates in a constrained manner during peak traffic conditions.

This approach is consistent with the Stewardship Plan prepared by the Scenic Roadways Board that recommends that “signalization should only be considered when essential for traffic safety”. The base underground infrastructure for a traffic signal could be included in the initial improvements, and when determined appropriate based upon an additional future study and detailed safety and operational analysis of the intersection, when warranted a traffic signal could easily be installed. The signal equipment would be designed in a context -sensitive manner with black features and as appropriate, ornamental equipment consistent with historical area installations.

As indicated earlier, the intent of this supplemental study is to demonstrate that the project can be constructed with the mitigation proposed to limit any potential adverse impacts to the servicing roadways. The results of the operational analysis determined that the estimated increase in traffic during the peak periods resulting from the proposed mixed-use project can be accommodated along the Veterans Memorial Parkway and Lyon Avenue including their major junction, with the defined improvements.

Safety Analysis

The physical characteristics of the project area roadways providing access to the site including Veterans Memorial Parkway and Lyon Avenue were investigated to determine if there are any limiting factors affecting safety. These limiting factors would potentially include horizontal or vertical alignment changes or roadside obstructions that limit sight distances for vehicles traveling along the road or entering the road from a side street or driveway location. In this instance, the *Stopping Sight Distance* requirement is a design standard necessary to permit turning vehicles to safely enter and exit the development at the proposed site access road intersections with Veterans Memorial Parkway and Lyon Avenue and at the existing study intersections.

Table 3 - Future Build Level of Service Summary

Location / Movement	2028 FUTURE BUILD CONDITIONS											
	AM Peak Hour				PM Peak Hour				Saturday MD Peak Hour			
	LOS	Delay	95th % Queue Length (veh.)	v/c	LOS	Delay	95th % Queue Length (veh.)	v/c	LOS	Delay	95th % Queue Length (veh)	v/c
Veterans Memorial Parkway at Lyon Ave (R)												
Parkway SB Left/Thru	A	7.9	3	0.48	C	16.0	7	0.73	B	10.3	4	0.54
Parkway NB Thru/Right	A	6.3	2	0.39	A	7.3	3	0.42	A	7.1	2	0.41
Lyon Ave WB Left/Right	A	9.1	2	0.28	B	12.5	3	0.51	B	12.0	3	0.49
OVERALL	A	7.5	-	-	B	12.6	-	-	A	9.6	-	-
Veterans Memorial Parkway at Site Access Road (U)												
Parkway SB Left	B	10.1	1	0.11	A	9.7	1	0.18	A	9.7	1	0.19
Site Access Dr WB Right	C	18.4	1	0.26	C	19.0	3	0.46	C	18.5	3	0.45
Veterans Memorial Parkway at South Broadway (U)												
Parkway SB Left	B	11.1	1	0.18	B	10.8	1	0.19	B	10.6	1	0.12
SBroadway WB Left	F	>50	12	1.32	F	>50	14	1.64	F	>50	6	0.85
SBroadway WB Right	B	13.5	1	0.13	B	13.8	1	0.21	B	13.4	1	0.14
South Broadway at Fort Street (U)												
SBroadway NB Left	A	8.1	0	0.01	A	8.8	1	0.05	A	8.4	1	0.03
Fort EB Left/Right	C	18.2	2	0.33	E	42.1	5	0.68	C	20.3	2	0.37
Lyon at Fort Street (U)												
Lyon EB All	A	8.1	1	0.8	B	10.2	2	0.4	A	9.7	2	0.3
Lyon WB All	A	8.1	1	0.5	A	9.1	1	0.2	A	8.9	1	0.2
Fort NB All	A	8.3	1	0.4	A	9.7	1	0.2	A	9.6	1	0.2
Fort SB All	A	7.6	1	0.1	A	8.3	1	0.0	A	8.3	1	0.1
OVERALL	A	8.1	-	-	A	9.7	-	-	A	9.4	-	-
Lyon at West Site Driveway (U)												
Lyon WB Left	A	7.6	0	0.00	A	8.0	0	0.01	A	8.0	1	0.04
Site Access NB Left	B	11.2	1	0.19	C	20.4	5	0.61	C	22.2	4	0.60
Site Access NB Right	A	8.8	1	0.03	A	9.7	1	0.13	A	9.4	1	0.12
Lyon at East Site Driveway (U)												
Lyon WB Left	A	7.6	1	0.06	A	8.6	1	0.16	A	8.2	1	0.12
Site Access NB Left	B	12.8	1	0.26	D	27.6	4	0.55	D	27.6	4	0.61
Site Access NB Right	A	9.1	1	0.09	B	10.2	1	0.10	A	9.9	1	0.11

STOPPING SIGHT DISTANCE

Stopping Sight Distance (SSD) is the minimum distance that a driver travelling along a roadway at or near the design speed, requires in order to adequately perceive, react and safely come to a stop prior to reaching an object in its travel path and avoid a collision. The available and required SSD are a function of the roadway geometry and design speed respectively, and are factored in when determining the appropriate and safe location of a site driveway or roadway intersection.

A review of the existing roadway geometry of Veterans Memorial Parkway in the defined project area, found that the horizontal and vertical alignment of Veterans Memorial Parkway in the immediate vicinity of the proposed site access driveway can be described as generally straight and level with a crest curve and gradual decline to the south to the cove area. To the north through the Lyon Avenue intersection, the roadway is also straight and level resulting in no physical features affecting sight lines in this immediate area. These physical features can be seen in the adjacent photograph looking north from the existing site driveway to Lyon Avenue on the right.

The horizontal and vertical alignment of Lyon Avenue in the immediate vicinity of the proposed site access driveways can be described as generally straight with a gradual undulating profile between the Parkway and Mercer Street. These physical features can be seen in the photograph below looking west in the vicinity of the proposed easterly site driveway.

Based upon the roadway geometry as described and the available sight distances determined at the study intersections, a review of the required stopping sight distance was undertaken to ensure safe operations. The *required* SSD is based upon the speed of traffic travelling along the roadway and this value is compared to the available or *measured* SSD to determine if this safety measure is satisfied. In determining the required SSD, the design speed of the roadway must be established. The most recent edition of the American Association of State Highway and Transportation Official's (AASHTO's) publication *A Policy on Geometric Design of Highways and Streets, Table 3-1* is referenced in determining the required stopping sight distances, which is based on the design speeds for each roadway.

One method of determining the design speed of a roadway is referenced in the *RIDOT Highway Design Manual*. On roadways with a posted speed limit less than 40 mph, the design speed is estimated to be the posted speed limit, plus 5 mph in urban areas, and plus 10 mph in rural areas. On roadways where the posted speed limit is 40 mph or above, the design speed is estimated to be the posted speed limit, plus 10 mph. To determine if the minimum requirements for safe SSDs were met in this study, a design speed of 50 mph was utilized for evaluating the stopping sight distance on Veterans Memorial Parkway in the vicinity of the new site access driveway and 30 mph for Lyon Avenue.

In addition to evaluating the SSD based upon the posted *speed limit* and resultant *design speed*, to be conservative, actual speed data was also obtained to determine the 85th percentile speed for drivers travelling along Veterans Memorial Parkway and Lyon Avenue in the vicinity of the proposed access driveways. The 85th percentile speed represents the speed at which 85 percent of drivers are travelling at or slower and is utilized when available in the analysis of required sight distances. Based on speed data obtained as part of the data collection program, the 85th percentile speed for Veterans Memorial Parkway with a posted speed limit of 40 mph was determined to be 44 miles per hour for both northbound and southbound traffic. For Lyon Avenue with a posted speed limit of 25 mph, the 85th percentile speed was determined to be 34 miles per hour in both directions.

Based upon the roadway geometry as defined for Veterans Memorial Parkway, the available sight distances at the proposed site access road intersection were determined to be in excess of 550 feet to the north through the Lyon Avenue intersection and 475 feet to the south of the proposed site access drive intersection. These values are greater than the required safe stopping sight distance of 305 feet based on the posted speed of 40 mph, 425 feet for the AASHTO requirements for a design speed of 50 mph established per RIDOT policy, and the 349 feet for the 85th percentile travel speeds of 44 mph recorded along this section of road.

It should be noted that the future posted speed limit may be reduced by the Department based upon the changes being proposed along this section of road. Presently the Parkway is posted at 35 mph to the immediate south of the site through the Pawtucket Avenue intersection and potentially this would be extended for the length of the Parkway given the geometric changes being made and introduction of a low-speed roundabout intersection at Lyon Avenue. It is anticipated that actual travel speeds will be substantially reduced along this section of the Parkway with the introduction of the roundabout control, where today, free, uninterrupted flow travel conditions exist. At this new roundabout junction, the required stopping, entering and circulating sight distances will be provided for the appropriate design speed as recommended by the RIDOT for the Parkway.

The geometry of Lyon Avenue as described provides sight distances in excess of 800 feet to the east and west of the easterly driveway. These values are greater than the required safe stopping sight distance of 155 feet based on the posted speed of 25 mph, 200 feet for the AASHTO requirements for a design speed of 30 mph established per RIDOT policy, and the 239 feet for the 85th percentile travel speeds of 34 mph recorded along this section of road. At the western driveway, closer to the Parkway the available sight distances are over 800 feet to the east and 350 feet to the west through the proposed roundabout junction. These values also satisfy the AASHTO requirements for the design speed and actual travel speed of vehicles along Lyon Avenue, though speeds will be lower due to the controlled Parkway junction with Lyon Avenue.

In addition to the proposed intersections, a review of existing intersections within the immediate project area was completed as part of this study and the VAI TIAS planning study. The VAI study recommended safety enhancement at the Lyon Avenue intersections with both Mercer Street and Fort Street to include enhanced warning and regulatory signs to improve intersection visibility within the urban street network. These include LED *Stop* signs and upgraded *Stop* lines and crosswalks. As previously noted, Crossman is also working with the city as part of their Lyon Avenue roadway improvement project to ensure these minor measures are incorporated where practical into the project.

Another intersection that is recommended to be modified for safety and operational improvements is the junction of Veterans Memorial Parkway with Mercer Street. This intersection is an unconventional Y-type configuration with limited visibility and sight lines created by the horizontal and vertical alignment of the Parkway. Though serving minor volumes, the side street is on the inside of the horizontal curve that is also highly vegetated with trees that limit visibility of the intersection to under the safe stopping sight distance of 349 feet. This condition with limited visibility of potential vehicle conflicts for vehicles travelling northbound along the Parkway, and for vehicles turning left to determine safe maneuvers, should be addressed.

In addition to this existing condition, with the potential increase in traffic on the side street resulting from the subject development, modifications to enhance safety while also deterring the potential use of Mercer Street by site related vehicles is recommended as was previously discussed. A minor, easily implemented measure can be made by restricting movements at the intersection to right turns both in and out. The "Y-type" geometry of the intersection is currently configured to promote these right turn movements, and only proper signing and pavement markings are required to implement this change. Discussions have been ongoing with the city on this measure and the change will be incorporated into the formal PAP application for modifications to the Parkway.

As a result of the preliminary evaluation of the existing roadway geometry and physical features, it does not appear that any significant physical roadway safety deficiencies exist within the defined study area other than those defined and recommended for mitigation. Crossman will continue to work with the city and the RIDOT in order to incorporate additional safety enhancements for both vehicular and pedestrian traffic within the project area. This effort will be completed through the duration of the development construction process to ensure the appropriateness and effectiveness of design and to make adjustments as necessary to address actual future conditions.

A substantial effort and level of coordination has been completed to advance the design to this phase through the Preliminary PAP review, and we will continue to work extensively with the Department through the formal Physical Alteration Permit review process. In accordance with the June 21, 2024 RIDOT letter of concurrence with the conceptual design for the roundabout and improvements to Veterans Memorial Parkway, we have updated our study herein to incorporate the preliminary comments and provide this report in support of the final design and formal application. The letter is provided in the Attachment for reference. Crossman will also be submitting separately a Vissim simulation model and support documentation prepared by WSP, an approved roundabout designer, as part of the formal application to address detailed roundabout design requirements per RIDOT design policy guidelines as requested. We will also be working with the Scenic Roadways Board, and the City of East Providence and immediate abutters as we proceed through the final design process to ensure all impacted parties are partners in the enhancements being proposed.

Very truly yours,
Crossman Engineering, Inc.

Paul J. Bannon
Senior Project Director

Attachment

Cc: Steve Pristawa, Josh Berlinsky, Paul Pisano

ATTACHMENTS

A. Traffic Data

B. Trip Generation

C. Operational Analysis

D. Coordination

E. Off-Site Mitigation Plan

ATTACHMENT A – Traffic Data

Automatic Traffic Recorder Counts

- Veterans Memorial Parkway
- Lyon Avenue
- South Broadway

Intersection Turning Movement Counts

- Veterans Memorial Parkway at Lyon Avenue
- Veterans Memorial Parkway at South Broadway
- South Broadway at Fort Street
- Lyon Avenue at Fort Street

A

Automatic Traffic Recorder Counts

Veterans Memorial Parkway

Lyon Avenue

South Broadway

Veterans Memorial Parkway

Traffic Volumes

Transportation Data Corporation
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Veterans Memorial Parkway
east of Lyon Avenue
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774CVOLUME
Site Code: 2814

Start Time	23-Oct-23 Mon	24-Oct-23 Tue	25-Oct-23 Wed	26-Oct-23 Thu	27-Oct-23 Fri	28-Oct-23 Sat	29-Oct-23 Sun	Week Average
12:00 AM	*	93	76	89	128	217	190	132
01:00	*	47	48	55	72	132	131	81
02:00	*	30	30	39	30	76	68	46
03:00	*	30	38	34	40	52	32	38
04:00	*	81	104	135	105	52	31	85
05:00	*	246	276	285	251	111	80	208
06:00	*	753	807	758	721	255	189	580
07:00	*	**1259**	**1356**	**1319**	**1214**	432	259	973
08:00	*	1168	1262	1283	1198	556	417	981
09:00	*	877	927	1012	891	727	553	831
10:00	*	838	835	851	850	850	739	827
11:00	*	850	870	893	903	**877**	**766**	860
12:00 PM	*	941	837	976	966	907	**964**	932
01:00	*	938	952	962	995	849	816	919
02:00	*	1261	1250	1270	1239	932	810	1127
03:00	*	**1327**	**1294**	**1345**	**1260**	**951**	867	1174
04:00	*	1182	1249	1263	1202	928	756	1097
05:00	*	1185	1237	1211	1101	848	729	1052
06:00	*	976	910	967	877	853	753	889
07:00	*	662	647	712	753	685	676	689
08:00	*	533	537	576	606	564	522	556
09:00	*	331	446	412	476	485	368	420
10:00	*	255	238	279	406	466	282	321
11:00	*	180	181	218	341	355	168	240
Total	0	16043	16407	16944	16625	13160	11166	
Percentage	0.0%	106.5%	109.0%	112.5%	110.4%	87.4%	74.2%	
AM Peak	-	07:00	07:00	07:00	07:00	11:00	11:00	-
Vol.	-	1259	1356	1319	1214	877	766	-
PM Peak	-	15:00	15:00	15:00	15:00	15:00	12:00	-
Vol.	-	1327	1294	1345	1260	951	964	-

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Veterans Memorial Parkway
east of Lyon Avenue
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774CVOLUME
Site Code: 2814

Start Time	30-Oct-23 Mon	31-Oct-23 Tue	01-Nov-23 Wed	02-Nov-23 Thu	03-Nov-23 Fri	04-Nov-23 Sat	05-Nov-23 Sun	Week Average
12:00 AM	86	*	*	*	*	*	*	86
01:00	48	*	*	*	*	*	*	48
02:00	34	*	*	*	*	*	*	34
03:00	39	*	*	*	*	*	*	39
04:00	91	*	*	*	*	*	*	91
05:00	257	*	*	*	*	*	*	257
06:00	691	*	*	*	*	*	*	691
07:00	**1259**	*	*	*	*	*	*	1259
08:00	1168	*	*	*	*	*	*	1168
09:00	837	*	*	*	*	*	*	837
10:00	786	*	*	*	*	*	*	786
11:00	788	*	*	*	*	*	*	788
12:00 PM	824	*	*	*	*	*	*	824
01:00	886	*	*	*	*	*	*	886
02:00	1105	*	*	*	*	*	*	1105
03:00	1210	*	*	*	*	*	*	1210
04:00	**1238**	*	*	*	*	*	*	1238
05:00	1153	*	*	*	*	*	*	1153
06:00	806	*	*	*	*	*	*	806
07:00	631	*	*	*	*	*	*	631
08:00	485	*	*	*	*	*	*	485
09:00	339	*	*	*	*	*	*	339
10:00	219	*	*	*	*	*	*	219
11:00	179	*	*	*	*	*	*	179
Total	15159	0	0	0	0	0	0	
Percentage	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	-	-	-	-	-	-	-
Vol.	1259	-	-	-	-	-	-	-
PM Peak	16:00	-	-	-	-	-	-	-
Vol.	1238	-	-	-	-	-	-	-

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Veterans Memorial Parkway
east of Lyon Avenue
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774Cvolume
Site Code: 2814

Start	23-Oct-23		Tue		Wed		Thu		Fri		Weekday Average		Sat		Sun	
Time	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00 AM	*	*	68	25	47	29	53	36	81	47	62	34	137	80	116	74
01:00	*	*	32	15	36	12	36	19	52	20	39	16	86	46	87	44
02:00	*	*	18	12	19	11	22	17	14	16	18	14	51	25	44	24
03:00	*	*	9	21	17	21	18	16	20	20	16	20	28	24	21	11
04:00	*	*	27	54	22	82	34	101	28	77	28	78	19	33	12	19
05:00	*	*	61	185	81	195	75	210	73	178	72	192	30	81	30	50
06:00	*	*	282	471	282	525	263	495	264	457	273	487	90	165	74	115
07:00	*	*	**647**	**612**	**692**	**664**	**677**	642	**583**	631	**650**	637	161	271	108	151
08:00	*	*	558	610	598	664	589	**694**	534	**664**	570	**658**	229	327	192	225
09:00	*	*	406	471	387	540	454	558	372	519	405	522	250	477	219	334
10:00	*	*	395	443	372	463	369	482	382	468	380	464	349	501	315	424
11:00	*	*	386	464	411	459	402	491	427	476	406	472	**374**	**503**	**324**	**442**
12:00 PM	*	*	451	490	408	429	464	512	468	498	448	482	437	470	441	**523**
01:00	*	*	474	464	463	489	489	473	540	455	492	470	395	454	406	410
02:00	*	*	625	**636**	640	**610**	593	**677**	605	**634**	616	**639**	459	**473**	414	396
03:00	*	*	**765**	562	687	607	**785**	560	666	594	**726**	581	**505**	446	**483**	384
04:00	*	*	707	475	715	534	730	533	**713**	489	716	508	484	444	408	348
05:00	*	*	731	454	**773**	464	731	480	636	465	718	466	438	410	404	325
06:00	*	*	527	449	504	406	512	455	445	432	497	436	427	426	385	368
07:00	*	*	371	291	365	282	401	311	387	366	381	312	385	300	354	322
08:00	*	*	322	211	309	228	347	229	307	299	321	242	274	290	282	240
09:00	*	*	184	147	247	199	245	167	279	197	239	178	282	203	199	169
10:00	*	*	154	101	142	96	166	113	242	164	176	118	240	226	173	109
11:00	*	*	115	65	120	61	137	81	218	123	148	82	217	138	106	62
Total	0	0	8315	7728	8337	8070	8592	8352	8336	8289	8397	8108	6347	6813	5597	5569
Day	0		16043		16407		16944		16625		16505		13160		11166	
AM Peak	-	-	07:00	07:00	07:00	07:00	07:00	08:00	07:00	08:00	07:00	08:00	11:00	11:00	11:00	11:00
Vol.	-	-	647	612	692	664	677	694	583	664	650	658	374	503	324	442
PM Peak	-	-	15:00	14:00	17:00	14:00	15:00	14:00	16:00	14:00	15:00	14:00	15:00	14:00	15:00	12:00
Vol.	-	-	765	636	773	610	785	677	713	634	726	639	505	473	483	523

Transportation Data Corporation
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Veterans Memorial Parkway
east of Lyon Avenue
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774Cvolume
Site Code: 2814

Start	30-Oct-23		Tue		Wed		Thu		Fri		Weekday Average		Sat		Sun	
Time	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00 AM	66	20	*	*	*	*	*	*	*	*	66	20	*	*	*	*
01:00	33	15	*	*	*	*	*	*	*	*	33	15	*	*	*	*
02:00	22	12	*	*	*	*	*	*	*	*	22	12	*	*	*	*
03:00	18	21	*	*	*	*	*	*	*	*	18	21	*	*	*	*
04:00	20	71	*	*	*	*	*	*	*	*	20	71	*	*	*	*
05:00	74	183	*	*	*	*	*	*	*	*	74	183	*	*	*	*
06:00	241	450	*	*	*	*	*	*	*	*	241	450	*	*	*	*
07:00	**647**	**612**	*	*	*	*	*	*	*	*	**647**	**612**	*	*	*	*
08:00	579	589	*	*	*	*	*	*	*	*	579	589	*	*	*	*
09:00	389	448	*	*	*	*	*	*	*	*	389	448	*	*	*	*
10:00	379	407	*	*	*	*	*	*	*	*	379	407	*	*	*	*
11:00	356	432	*	*	*	*	*	*	*	*	356	432	*	*	*	*
12:00 PM	416	408	*	*	*	*	*	*	*	*	416	408	*	*	*	*
01:00	479	407	*	*	*	*	*	*	*	*	479	407	*	*	*	*
02:00	588	**517**	*	*	*	*	*	*	*	*	588	**517**	*	*	*	*
03:00	697	513	*	*	*	*	*	*	*	*	697	513	*	*	*	*
04:00	**735**	503	*	*	*	*	*	*	*	*	**735**	503	*	*	*	*
05:00	704	449	*	*	*	*	*	*	*	*	704	449	*	*	*	*
06:00	396	410	*	*	*	*	*	*	*	*	396	410	*	*	*	*
07:00	337	294	*	*	*	*	*	*	*	*	337	294	*	*	*	*
08:00	276	209	*	*	*	*	*	*	*	*	276	209	*	*	*	*
09:00	212	127	*	*	*	*	*	*	*	*	212	127	*	*	*	*
10:00	138	81	*	*	*	*	*	*	*	*	138	81	*	*	*	*
11:00	125	54	*	*	*	*	*	*	*	*	125	54	*	*	*	*
Total	7927	7232	0	0	0	0	0	0	0	0	7927	7232	0	0	0	0
Day	15159		0		0		0		0		15159		0		0	
AM Peak	07:00	07:00	-	-	-	-	-	-	-	-	07:00	07:00	-	-	-	-
Vol.	647	612	-	-	-	-	-	-	-	-	647	612	-	-	-	-
PM Peak	16:00	14:00	-	-	-	-	-	-	-	-	16:00	14:00	-	-	-	-
Vol.	735	517	-	-	-	-	-	-	-	-	735	517	-	-	-	-

Comb. Total	15159	16043	16407	16944	16625	31664	13160	11166

ADT ADT 16,236 AADT 16,236

Vehicle Speeds

Transportation Data Corporation

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Veterans Memorial Parkway
east of Lyon Avenue
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774Cspeed
Site Code: 2814

Eastbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/24/23	1	0	0	0	4	21	30	9	2	1	0	0	0	68	45	49
01:00	0	0	0	0	4	11	10	5	1	0	**1**	0	0	32	47	52
02:00	0	0	0	1	1	6	5	3	0	1	1	0	0	18	48	60
03:00	0	0	1	0	1	2	5	0	0	0	0	0	0	9	43	44
04:00	0	0	0	0	1	12	9	3	1	1	0	0	0	27	46	53
05:00	0	0	0	0	4	10	36	9	1	1	0	0	0	61	46	49
06:00	8	0	0	1	10	80	134	**42**	**5**	**2**	0	0	0	282	45	49
07:00	**31**	0	4	23	**126**	**275**	**156**	29	3	0	0	0	0	**647**	42	44
08:00	27	**3**	**16**	**47**	125	210	110	18	2	0	0	0	0	558	42	44
09:00	12	3	11	27	74	146	115	15	3	0	0	0	0	406	43	44
10:00	11	0	7	28	72	166	95	13	3	0	0	0	0	395	42	44
11:00	14	1	4	30	51	139	115	30	2	0	0	0	0	386	43	47
12 PM	16	0	**3**	3	23	160	207	35	3	**1**	0	0	0	451	44	47
13:00	17	0	0	6	34	197	187	31	2	0	0	0	0	474	43	46
14:00	26	0	0	7	68	243	226	**52**	3	0	0	0	0	625	44	47
15:00	27	0	1	**20**	69	327	**286**	31	3	1	0	0	0	**765**	43	44
16:00	**28**	0	1	6	**97**	286	261	27	1	0	0	0	0	707	43	44
17:00	20	0	1	7	93	**345**	245	19	1	0	0	0	0	731	43	44
18:00	9	0	0	3	63	244	181	22	4	1	0	0	0	527	43	45
19:00	3	0	0	1	35	163	129	35	4	1	0	0	0	371	44	48
20:00	3	0	0	5	27	126	135	23	2	1	0	0	0	322	44	47
21:00	3	0	0	0	11	68	75	21	5	1	0	0	0	184	44	49
22:00	1	0	0	2	7	49	62	26	**6**	1	0	0	0	154	46	49
23:00	0	0	1	0	8	26	58	17	5	0	0	0	0	115	46	49
Total	257	7	50	217	1008	3312	2872	515	62	13	2	0	0	8315		
Percent	3.1%	0.1%	0.6%	2.6%	12.1%	39.8%	34.5%	6.2%	0.7%	0.2%	0.0%	0.0%	0.0%			
AM Peak	07:00	08:00	08:00	08:00	07:00	07:00	07:00	06:00	06:00	06:00	01:00			07:00		
Vol.	31	3	16	47	126	275	156	42	5	2	1			647		
PM Peak	16:00		12:00	15:00	16:00	17:00	15:00	14:00	22:00	12:00				15:00		
Vol.	28		3	20	97	345	286	52	6	1				765		

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Veterans Memorial Parkway
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City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774Cspeed
Site Code: 2814

Eastbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/25/23	0	0	0	1	2	16	19	7	1	0	0	**1**	0	47	46	49
01:00	0	0	0	1	5	12	14	2	1	**1**	0	0	0	36	44	51
02:00	0	0	0	1	2	7	5	3	1	0	0	0	0	19	46	50
03:00	0	0	0	0	0	10	2	4	0	1	0	0	0	17	48	55
04:00	0	0	0	2	1	3	10	4	1	1	0	0	0	22	48	54
05:00	2	0	0	0	6	21	36	11	5	0	0	0	0	81	46	50
06:00	10	0	0	3	32	99	112	25	1	0	0	0	0	282	44	47
07:00	**32**	0	0	5	44	**325**	**257**	27	2	0	0	0	0	**692**	43	44
08:00	31	0	0	**7**	**53**	246	228	31	2	0	0	0	0	598	43	45
09:00	10	0	**1**	2	20	122	173	**51**	**7**	1	0	0	0	387	45	48
10:00	12	0	1	0	29	135	148	43	4	0	0	0	0	372	44	48
11:00	10	0	0	6	46	145	158	41	4	0	0	0	**1**	411	44	47
12 PM	10	0	0	4	24	147	158	**54**	**11**	0	0	0	0	408	45	49
13:00	9	**1**	0	2	32	185	191	36	7	0	0	0	0	463	44	47
14:00	24	0	0	2	44	287	**232**	49	2	0	0	0	0	640	44	46
15:00	27	0	0	8	82	304	226	39	1	0	0	0	0	687	43	45
16:00	**29**	0	0	10	71	347	230	27	1	0	0	0	0	715	43	44
17:00	25	0	**1**	9	110	**398**	212	16	1	0	0	0	**1**	**773**	42	44
18:00	12	0	0	9	**116**	252	103	12	0	0	0	0	0	504	41	44
19:00	9	0	1	**11**	54	169	108	12	0	**1**	0	0	0	365	43	44
20:00	2	0	0	2	29	137	109	25	3	1	0	**1**	0	309	44	47
21:00	7	0	0	3	20	90	95	27	5	0	0	0	0	247	44	48
22:00	0	0	0	0	13	49	53	21	6	0	0	0	0	142	46	49
23:00	0	0	0	1	4	38	53	17	6	0	**1**	0	0	120	46	50
Total	261	1	4	89	839	3544	2932	584	72	6	1	2	2	8337		
Percent	3.1%	0.0%	0.0%	1.1%	10.1%	42.5%	35.2%	7.0%	0.9%	0.1%	0.0%	0.0%	0.0%			
AM Peak	07:00		09:00	08:00	08:00	07:00	07:00	09:00	09:00	01:00		00:00	11:00	07:00		
Vol.	32		1	7	53	325	257	51	7	1		1	1	692		
PM Peak	16:00	13:00	17:00	19:00	18:00	17:00	14:00	12:00	12:00	19:00	23:00	20:00	17:00	17:00		
Vol.	29	1	1	11	116	398	232	54	11	1	1	1	1	773		

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Veterans Memorial Parkway
east of Lyon Avenue
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774Cspeed
Site Code: 2814

Eastbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/26/23	0	0	0	2	10	17	16	3	2	**3**	0	0	0	53	45	55
01:00	0	0	0	1	5	12	16	1	0	1	0	0	0	36	43	46
02:00	0	0	0	0	2	7	8	2	3	0	0	0	0	22	49	53
03:00	0	0	0	0	1	7	3	3	3	0	0	0	**1**	18	50	53
04:00	0	0	**1**	0	0	12	15	4	1	1	0	0	0	34	46	51
05:00	2	0	0	0	1	27	29	14	2	0	0	0	0	75	46	49
06:00	16	0	0	0	26	76	105	35	5	0	0	0	0	263	45	48
07:00	**31**	0	1	**23**	58	**276**	**252**	29	**6**	1	0	0	0	**677**	43	45
08:00	28	0	0	6	**70**	256	199	26	4	0	0	0	0	589	43	45
09:00	19	0	0	3	44	167	179	37	5	0	0	0	0	454	44	47
10:00	12	0	0	3	31	113	165	**42**	3	0	0	0	0	369	44	48
11:00	9	0	0	5	31	144	179	28	6	0	0	0	0	402	44	47
12 PM	15	0	0	1	57	167	189	31	3	0	0	**1**	0	464	44	46
13:00	16	0	**1**	5	34	199	187	39	**6**	1	0	0	**1**	489	44	47
14:00	24	0	0	3	60	269	193	**40**	3	1	0	0	0	593	43	46
15:00	28	0	0	**10**	122	362	**246**	15	2	0	0	0	0	**785**	42	44
16:00	**30**	0	0	9	**133**	342	187	29	0	0	0	0	0	730	42	44
17:00	25	0	1	6	82	**377**	230	10	0	0	0	0	0	731	42	44
18:00	10	0	0	10	79	267	123	23	0	0	0	0	0	512	42	44
19:00	10	0	0	9	57	185	114	24	2	0	0	0	0	401	43	46
20:00	9	0	0	5	42	156	114	20	0	1	0	0	0	347	43	45
21:00	5	0	0	2	14	95	102	20	5	**2**	0	0	0	245	44	48
22:00	0	0	0	0	10	70	58	25	2	1	0	0	0	166	45	48
23:00	1	0	1	0	4	41	70	18	2	0	0	0	0	137	44	48
Total	290	0	5	103	973	3644	2979	518	65	12	0	1	2	8592		
Percent	3.4%	0.0%	0.1%	1.2%	11.3%	42.4%	34.7%	6.0%	0.8%	0.1%	0.0%	0.0%	0.0%			
AM Peak	07:00		04:00	07:00	08:00	07:00	07:00	10:00	07:00	00:00			03:00	07:00		
Vol.	31		1	23	70	276	252	42	6	3			1	677		
PM Peak	16:00		13:00	15:00	16:00	17:00	15:00	14:00	13:00	21:00		12:00	13:00	15:00		
Vol.	30		1	10	133	377	246	40	6	2		1	1	785		

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Veterans Memorial Parkway
east of Lyon Avenue
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774Cspeed
Site Code: 2814

Eastbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/27/23	0	0	1	1	10	33	22	11	2	**1**	0	0	0	81	45	49
01:00	0	0	0	1	7	19	20	4	1	0	0	0	0	52	44	48
02:00	0	0	0	0	0	8	3	1	2	0	0	0	0	14	49	53
03:00	0	0	0	1	2	11	3	1	1	0	0	0	**1**	20	43	50
04:00	0	0	1	0	2	12	8	4	1	0	0	0	0	28	46	49
05:00	1	0	0	0	5	23	37	6	1	0	0	0	0	73	44	47
06:00	11	0	0	2	18	88	110	30	4	1	0	0	0	264	44	48
07:00	**27**	0	1	6	69	**223**	**212**	40	5	0	0	0	0	**583**	43	46
08:00	26	0	**2**	**21**	**91**	211	154	28	0	0	0	0	1	534	43	45
09:00	13	0	0	3	23	116	167	**45**	4	0	**1**	0	0	372	44	48
10:00	9	0	0	6	46	122	155	35	**8**	1	0	0	0	382	44	48
11:00	13	0	1	3	55	168	155	24	8	0	0	0	0	427	43	47
12 PM	14	**1**	0	13	54	180	171	30	5	0	0	0	0	468	43	46
13:00	**24**	0	0	7	48	229	169	**57**	6	0	0	0	0	540	44	48
14:00	23	1	0	4	67	246	211	47	3	**3**	0	0	0	605	44	47
15:00	18	0	0	10	**90**	251	**243**	53	1	0	0	0	0	666	44	46
16:00	24	0	2	11	90	**349**	200	30	**7**	0	0	0	0	**713**	43	45
17:00	18	0	**5**	**18**	65	281	209	36	4	0	0	0	0	636	43	46
18:00	8	0	1	6	68	193	142	26	1	0	0	0	0	445	43	45
19:00	14	0	1	5	44	169	116	33	5	0	0	0	0	387	44	47
20:00	7	0	0	1	29	134	122	13	0	1	0	0	0	307	43	44
21:00	5	0	0	2	28	107	108	29	0	0	0	0	0	279	44	47
22:00	0	0	0	2	29	92	93	22	4	0	0	0	0	242	44	48
23:00	2	0	0	1	13	89	89	21	2	1	0	0	0	218	44	48
Total	257	2	15	124	953	3354	2919	626	75	8	1	0	2	8336		
Percent	3.1%	0.0%	0.2%	1.5%	11.4%	40.2%	35.0%	7.5%	0.9%	0.1%	0.0%	0.0%	0.0%			
AM Peak	07:00		08:00	08:00	08:00	07:00	07:00	09:00	10:00	00:00	09:00		03:00	07:00		
Vol.	27		2	21	91	223	212	45	8	1	1		1	583		
PM Peak	13:00	12:00	17:00	17:00	15:00	16:00	15:00	13:00	16:00	14:00				16:00		
Vol.	24	1	5	18	90	349	243	57	7	3				713		

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Veterans Memorial Parkway
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Client: Crossman/P. Bannon

05774Cspeed
Site Code: 2814

Eastbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/28/23	0	0	0	0	10	49	58	18	2	0	0	0	0	137	44	48
01:00	0	0	0	0	6	34	28	15	3	0	0	0	0	86	46	49
02:00	0	0	0	0	5	24	14	6	2	0	0	0	0	51	45	49
03:00	0	0	0	0	2	10	7	5	3	0	**1**	0	0	28	49	54
04:00	0	0	0	1	3	8	7	0	0	0	0	0	0	19	42	44
05:00	0	0	0	0	1	12	11	3	3	0	0	0	0	30	47	52
06:00	0	0	0	0	4	31	35	15	3	1	1	0	0	90	47	50
07:00	2	0	0	1	5	32	66	45	5	**4**	1	0	0	161	48	51
08:00	0	0	0	**4**	17	59	91	46	**10**	2	0	0	0	229	47	50
09:00	6	0	0	2	8	51	120	53	8	2	0	0	0	250	47	49
10:00	**10**	0	0	4	**33**	97	166	33	6	0	0	0	0	349	44	48
11:00	8	0	0	1	14	**103**	**178**	**65**	5	0	0	0	0	**374**	46	48
12 PM	7	0	0	2	34	160	170	54	8	1	**1**	0	0	437	44	48
13:00	8	0	0	3	18	111	192	60	3	0	0	0	0	395	45	48
14:00	9	0	0	4	19	137	**218**	**63**	**9**	0	0	0	0	459	45	48
15:00	10	0	0	4	49	**203**	185	49	4	1	0	0	0	**505**	44	47
16:00	**14**	0	0	1	31	172	218	39	7	**2**	0	0	0	484	44	48
17:00	13	1	0	6	41	170	165	36	6	0	0	0	0	438	44	47
18:00	9	**3**	**1**	**9**	**58**	188	127	29	3	0	0	0	0	427	43	46
19:00	5	0	0	7	34	140	150	46	2	0	1	0	0	385	44	48
20:00	2	0	0	1	14	101	119	34	2	1	0	0	0	274	44	48
21:00	4	0	1	2	19	101	122	28	5	0	0	0	0	282	44	48
22:00	3	0	0	0	18	93	101	20	5	0	0	0	0	240	44	48
23:00	4	0	0	0	14	72	98	23	6	0	0	0	0	217	44	48
Total	114	4	2	52	457	2158	2646	785	110	14	5	0	0	6347		
Percent	1.8%	0.1%	0.0%	0.8%	7.2%	34.0%	41.7%	12.4%	1.7%	0.2%	0.1%	0.0%	0.0%			
AM Peak	10:00			08:00	10:00	11:00	11:00	11:00	08:00	07:00	03:00			11:00		
Vol.	10			4	33	103	178	65	10	4	1			374		
PM Peak	16:00	18:00	18:00	18:00	18:00	15:00	14:00	14:00	14:00	16:00	12:00			15:00		
Vol.	14	3	1	9	58	203	218	63	9	2	1			505		

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Veterans Memorial Parkway
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Client: Crossman/P. Bannon

05774Cspeed
Site Code: 2814

Eastbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/29/23	1	0	0	2	9	42	39	18	4	1	0	0	0	116	46	49
01:00	0	0	**2**	1	8	32	32	11	1	0	0	0	0	87	44	48
02:00	0	0	0	2	5	17	11	6	3	0	0	0	0	44	46	51
03:00	0	0	0	1	1	8	6	3	0	2	0	0	0	21	48	57
04:00	0	0	0	0	2	5	4	1	0	0	0	0	0	12	43	46
05:00	0	**1**	0	0	1	7	10	7	3	1	0	0	0	30	49	54
06:00	1	0	0	1	1	10	34	22	5	0	0	0	0	74	48	51
07:00	0	0	0	1	2	28	45	22	**7**	2	**1**	0	0	108	48	53
08:00	2	0	0	1	12	57	77	34	7	2	0	0	0	192	47	49
09:00	5	0	0	**3**	13	86	79	27	6	0	0	0	0	219	45	49
10:00	**10**	0	0	1	29	115	**114**	36	7	**3**	0	0	0	315	44	49
11:00	6	0	0	1	**42**	**120**	109	**40**	5	1	0	0	0	**324**	44	48
12 PM	15	0	0	**8**	55	195	124	34	8	**2**	0	0	0	441	44	48
13:00	12	0	0	7	38	168	141	37	2	0	0	**1**	0	406	44	47
14:00	5	0	0	6	**60**	175	131	33	4	0	0	0	0	414	44	47
15:00	**18**	**1**	**3**	4	41	**197**	**182**	34	3	0	0	0	0	**483**	44	46
16:00	10	1	1	7	54	144	157	32	1	0	0	1	0	408	44	47
17:00	5	0	0	4	50	152	154	35	4	0	0	0	0	404	44	47
18:00	7	0	0	4	24	115	179	**42**	**12**	2	0	0	0	385	44	49
19:00	4	0	0	2	25	137	137	40	8	1	0	0	0	354	44	48
20:00	4	0	0	1	46	115	89	21	5	1	0	0	0	282	44	48
21:00	3	0	0	2	20	77	74	20	3	0	0	0	0	199	44	48
22:00	2	0	0	1	27	69	47	20	4	1	**2**	0	0	173	45	49
23:00	0	0	0	2	12	33	45	11	3	0	0	0	0	106	44	48
Total	110	3	6	62	577	2104	2020	586	105	19	3	2	0	5597		
Percent	2.0%	0.1%	0.1%	1.1%	10.3%	37.6%	36.1%	10.5%	1.9%	0.3%	0.1%	0.0%	0.0%			
AM Peak	10:00	05:00	01:00	09:00	11:00	11:00	10:00	11:00	07:00	10:00	07:00			11:00		
Vol.	10	1	2	3	42	120	114	40	7	3	1			324		
PM Peak	15:00	15:00	15:00	12:00	14:00	15:00	15:00	18:00	18:00	12:00	22:00	13:00		15:00		
Vol.	18	1	3	8	60	197	182	42	12	2	2	1		483		

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05774Cspeed
Site Code: 2814

Eastbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/30/23	0	0	1	7	8	19	26	3	2	0	0	0	0	66	44	47
01:00	0	0	0	1	6	14	7	4	0	0	**1**	0	0	33	45	49
02:00	0	0	0	1	3	5	10	2	1	0	0	0	0	22	44	49
03:00	0	0	1	0	1	7	5	4	0	0	0	0	0	18	46	48
04:00	0	0	0	0	0	10	8	1	1	0	0	0	0	20	44	50
05:00	1	1	0	0	2	10	37	14	**9**	0	0	0	0	74	49	52
06:00	3	0	0	5	14	68	102	**42**	7	0	0	0	0	241	46	49
07:00	**29**	0	0	9	**147**	**275**	**158**	25	3	**1**	0	0	0	**647**	42	44
08:00	15	**2**	6	23	110	270	132	20	1	0	0	0	0	579	42	44
09:00	7	0	6	22	63	154	111	23	3	0	0	0	0	389	43	46
10:00	6	0	7	**28**	66	145	107	17	3	0	0	0	0	379	43	45
11:00	8	0	**9**	22	51	134	99	28	5	0	0	0	0	356	43	47
12 PM	13	1	11	26	62	154	114	**29**	**5**	0	0	0	**1**	416	43	47
13:00	21	0	2	15	107	197	114	22	1	0	0	0	0	479	42	44
14:00	23	0	9	29	143	270	100	14	0	0	0	0	0	588	41	44
15:00	**28**	0	14	**73**	178	253	132	18	1	0	0	0	0	697	41	44
16:00	23	**6**	**20**	54	**189**	292	136	15	0	0	0	0	0	**735**	41	44
17:00	17	1	11	28	109	**334**	**180**	22	2	0	0	0	0	704	42	44
18:00	13	1	0	4	32	159	154	29	4	0	0	0	0	396	44	47
19:00	1	0	1	0	45	134	130	24	2	0	0	0	0	337	44	46
20:00	1	0	2	7	27	123	93	19	1	**3**	0	0	0	276	44	47
21:00	3	0	1	3	42	103	55	3	2	0	0	0	0	212	42	44
22:00	1	0	2	4	14	72	36	6	3	0	0	0	0	138	43	46
23:00	2	0	0	1	18	56	41	6	1	0	0	0	0	125	43	45
Total	215	12	103	362	1437	3258	2087	390	57	4	1	0	1	7927		
Percent	2.7%	0.2%	1.3%	4.6%	18.1%	41.1%	26.3%	4.9%	0.7%	0.1%	0.0%	0.0%	0.0%			
AM Peak	07:00	08:00	11:00	10:00	07:00	07:00	07:00	06:00	05:00	07:00	01:00			07:00		
Vol.	29	2	9	28	147	275	158	42	9	1	1			647		
PM Peak	15:00	16:00	16:00	15:00	16:00	17:00	17:00	12:00	12:00	20:00			12:00	16:00		
Vol.	28	6	20	73	189	334	180	29	5	3			1	735		
Grand Total	1504	29	185	1009	6244	21374	18455	4004	546	76	13	5	7	53451		
Percent	2.8%	0.1%	0.3%	1.9%	11.7%	40.0%	34.5%	7.5%	1.0%	0.1%	0.0%	0.0%	0.0%			

15th Percentile : 34 MPH
50th Percentile : 39 MPH
85th Percentile : 44 MPH
95th Percentile : 47 MPH

Stats

10 MPH Pace Speed : 36-45 MPH

Number of Vehicles > 40 MPH : 23106
Percent of Vehicles > 40 MPH : 43.2%
Mean Speed(Average) : 39 MPH

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Site Code: 2814

Westbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/24/23	0	0	0	0	3	6	9	3	3	1	0	0	0	25	50	54
01:00	0	0	1	0	3	3	5	3	0	0	0	0	0	15	46	48
02:00	0	0	1	0	3	0	4	3	1	0	0	0	0	12	48	51
03:00	0	0	0	1	1	0	15	1	2	1	0	0	0	21	49	54
04:00	0	0	0	1	0	11	22	10	9	1	0	0	0	54	51	54
05:00	1	0	0	0	3	33	81	46	17	**3**	**1**	0	0	185	49	53
06:00	8	0	0	4	20	118	**233**	**69**	**18**	0	1	0	0	471	46	49
07:00	**27**	0	7	20	47	218	233	51	7	2	0	0	0	**612**	44	47
08:00	23	1	**18**	**37**	86	**263**	156	21	3	2	0	0	0	610	42	44
09:00	12	1	7	37	67	185	126	29	6	0	1	0	0	471	43	47
10:00	11	**11**	10	30	**96**	187	81	15	2	0	0	0	0	443	41	44
11:00	13	0	6	32	90	167	130	23	2	1	0	0	0	464	43	45
12 PM	11	0	0	17	110	207	121	21	2	0	0	**1**	0	490	42	44
13:00	16	0	0	10	72	210	135	17	3	**1**	0	0	0	464	43	44
14:00	20	0	4	**27**	**150**	**275**	138	19	2	0	0	0	**1**	**636**	42	44
15:00	**21**	**2**	1	21	88	236	155	33	4	0	**1**	0	0	562	43	46
16:00	10	1	2	9	50	197	**164**	**41**	0	1	0	0	0	475	44	47
17:00	18	1	1	7	78	203	131	13	2	0	0	0	0	454	42	44
18:00	15	0	3	27	132	175	80	15	2	0	0	0	0	449	41	44
19:00	4	0	**7**	16	38	133	77	13	3	0	0	0	0	291	43	45
20:00	3	0	1	6	28	76	82	13	2	0	0	0	0	211	43	46
21:00	3	0	0	0	20	60	41	17	**5**	1	0	0	0	147	45	49
22:00	1	0	0	0	4	35	45	13	3	0	0	0	0	101	45	49
23:00	0	0	0	1	14	18	21	8	2	1	0	0	0	65	45	49
Total	217	17	69	303	1203	3016	2285	497	100	15	4	1	1	7728		
Percent	2.8%	0.2%	0.9%	3.9%	15.6%	39.0%	29.6%	6.4%	1.3%	0.2%	0.1%	0.0%	0.0%			
AM Peak	07:00	10:00	08:00	08:00	10:00	08:00	06:00	06:00	06:00	05:00	05:00			07:00		
Vol.	27	11	18	37	96	263	233	69	18	3	1			612		
PM Peak	15:00	15:00	19:00	14:00	14:00	14:00	16:00	16:00	21:00	13:00	15:00	12:00	14:00	14:00		
Vol.	21	2	7	27	150	275	164	41	5	1	1	1	1	636		

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Veterans Memorial Parkway
east of Lyon Avenue
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774Cspeed
Site Code: 2814

Westbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/25/23	0	0	2	0	4	9	5	8	1	0	0	0	0	29	47	49
01:00	0	0	0	1	0	6	3	2	0	0	0	0	0	12	45	48
02:00	0	0	0	0	5	1	3	2	0	0	0	0	0	11	45	48
03:00	0	0	0	0	2	7	10	2	0	0	0	0	0	21	44	47
04:00	0	0	0	1	2	17	39	17	3	1	0	**1**	**1**	82	47	51
05:00	1	0	0	0	8	43	88	**48**	**6**	1	0	0	0	195	47	49
06:00	11	0	0	9	48	259	161	33	3	1	0	0	0	525	43	46
07:00	20	0	**11**	26	103	287	**180**	31	5	1	0	0	0	**664**	43	45
08:00	**25**	2	8	**28**	**137**	**303**	137	21	1	1	**1**	0	0	664	42	44
09:00	12	0	3	6	89	267	142	15	5	1	0	0	0	540	42	44
10:00	16	**6**	9	24	90	194	100	19	4	1	0	0	0	463	42	45
11:00	12	0	3	25	78	201	121	14	3	**2**	0	0	0	459	42	44
12 PM	7	0	0	17	75	200	99	24	**5**	**1**	0	**1**	0	429	43	46
13:00	12	0	5	20	110	194	117	29	2	0	0	0	0	489	43	46
14:00	**29**	**2**	8	28	116	236	155	**33**	3	0	0	0	0	**610**	43	45
15:00	23	0	9	25	84	**278**	**164**	19	4	0	0	1	0	607	42	44
16:00	18	0	3	11	47	255	163	32	3	1	**1**	0	0	534	43	46
17:00	20	0	1	34	**120**	181	88	18	1	0	1	0	0	464	42	44
18:00	12	0	6	**36**	108	167	70	6	1	0	0	0	0	406	41	44
19:00	6	0	**11**	6	71	121	53	14	0	0	0	0	0	282	42	44
20:00	6	0	0	9	43	81	70	15	4	0	0	0	0	228	43	47
21:00	1	0	0	2	68	71	48	7	1	0	0	0	**1**	199	42	44
22:00	1	0	1	1	17	30	34	9	3	0	0	0	0	96	44	48
23:00	0	0	0	1	4	18	28	8	2	0	0	0	0	61	45	49
Total	232	10	80	310	1429	3426	2078	426	60	11	3	3	2	8070		
Percent	2.9%	0.1%	1.0%	3.8%	17.7%	42.5%	25.7%	5.3%	0.7%	0.1%	0.0%	0.0%	0.0%			
AM Peak	08:00	10:00	07:00	08:00	08:00	08:00	07:00	05:00	05:00	11:00	08:00	04:00	04:00	07:00		
Vol.	25	6	11	28	137	303	180	48	6	2	1	1	1	664		
PM Peak	14:00	14:00	19:00	18:00	17:00	15:00	15:00	14:00	12:00	12:00	16:00	12:00	21:00	14:00		
Vol.	29	2	11	36	120	278	164	33	5	1	1	1	1	610		

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Client: Crossman/P. Bannon

05774Cspeed
Site Code: 2814

Westbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/26/23	0	0	0	0	4	9	15	7	1	0	0	0	0	36	46	49
01:00	0	0	0	1	0	7	0	8	2	1	0	0	0	19	50	55
02:00	0	0	1	0	1	5	6	4	0	0	0	0	0	17	46	48
03:00	0	0	0	1	1	3	5	5	1	0	0	0	0	16	48	50
04:00	0	0	0	0	0	24	44	23	8	**2**	0	0	0	101	48	53
05:00	0	0	0	0	11	50	97	40	**9**	1	0	**1**	**1**	210	47	50
06:00	8	**1**	0	**19**	86	183	164	28	4	1	1	0	0	495	43	46
07:00	**24**	1	1	7	106	263	**196**	**41**	2	0	1	0	0	642	43	46
08:00	23	0	2	19	**162**	**311**	154	20	1	0	0	1	1	**694**	42	44
09:00	10	1	**4**	16	114	265	130	17	1	0	0	0	0	558	42	44
10:00	13	0	4	12	102	204	128	12	6	1	0	0	0	482	42	44
11:00	6	0	2	12	88	199	145	32	4	1	**2**	0	0	491	43	47
12 PM	14	2	2	**24**	97	246	100	25	1	1	0	0	0	512	42	45
13:00	9	0	2	22	**143**	169	104	22	2	0	0	0	0	473	42	45
14:00	**21**	**3**	4	24	116	**302**	175	29	3	0	0	0	0	**677**	43	44
15:00	20	0	5	17	80	215	183	31	**6**	1	**1**	0	**1**	560	43	46
16:00	20	0	1	16	59	201	**193**	**37**	6	0	0	0	0	533	44	47
17:00	20	0	**7**	16	92	200	123	18	3	0	0	**1**	0	480	42	44
18:00	14	0	0	12	116	188	99	25	0	0	0	0	1	455	42	45
19:00	10	2	3	7	75	119	81	11	2	1	0	0	0	311	42	44
20:00	7	1	1	8	46	80	69	12	4	1	0	0	0	229	43	47
21:00	3	0	3	4	20	69	51	15	2	0	0	0	0	167	44	47
22:00	0	0	0	2	9	39	43	13	4	**3**	0	0	0	113	46	51
23:00	2	0	1	1	7	27	28	12	3	0	0	0	0	81	46	49
Total	224	11	43	240	1535	3378	2333	487	75	14	5	3	4	8352		
Percent	2.7%	0.1%	0.5%	2.9%	18.4%	40.4%	27.9%	5.8%	0.9%	0.2%	0.1%	0.0%	0.0%			
AM Peak	07:00	06:00	09:00	06:00	08:00	08:00	07:00	07:00	05:00	04:00	11:00	05:00	05:00	08:00		
Vol.	24	1	4	19	162	311	196	41	9	2	2	1	1	694		
PM Peak	14:00	14:00	17:00	12:00	13:00	14:00	16:00	16:00	15:00	22:00	15:00	17:00	15:00	14:00		
Vol.	21	3	7	24	143	302	193	37	6	3	1	1	1	677		

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05774Cspeed
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Westbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/27/23	0	0	0	0	5	10	24	7	1	0	0	0	0	47	45	49
01:00	0	0	0	1	4	7	7	0	1	0	0	0	0	20	43	50
02:00	0	0	0	0	3	5	6	1	1	0	0	0	0	16	44	50
03:00	0	0	0	1	0	4	8	7	0	0	0	0	0	20	47	49
04:00	1	0	0	1	2	15	33	22	2	**1**	0	0	0	77	48	49
05:00	0	0	0	0	5	44	100	21	**7**	1	0	0	0	178	45	49
06:00	7	0	**13**	23	65	148	**172**	**24**	5	0	0	0	0	457	43	46
07:00	21	1	3	25	129	293	142	16	1	0	0	0	0	631	42	44
08:00	**23**	0	2	**35**	**160**	**303**	121	14	4	0	**1**	**1**	0	**664**	41	44
09:00	14	**4**	9	29	126	184	135	16	1	0	0	1	0	519	42	44
10:00	6	0	11	27	98	199	117	9	1	0	0	0	0	468	42	44
11:00	10	2	0	20	94	224	100	23	1	1	0	1	0	476	42	45
12 PM	6	0	3	23	108	243	87	22	6	0	0	0	0	498	42	45
13:00	11	0	3	**32**	**119**	167	95	24	4	0	0	0	0	455	42	46
14:00	**20**	0	0	17	102	**275**	**166**	**50**	4	0	0	0	0	**634**	43	47
15:00	18	**1**	1	9	119	232	164	40	6	**3**	0	**1**	0	594	43	47
16:00	17	1	1	15	89	194	139	27	6	0	0	0	0	489	43	46
17:00	19	0	0	22	76	202	111	30	5	0	0	0	0	465	43	46
18:00	8	0	**4**	13	117	191	82	15	2	0	0	0	0	432	42	44
19:00	10	0	0	9	63	169	101	10	4	0	0	0	0	366	42	44
20:00	2	0	0	6	43	121	109	15	2	1	0	0	0	299	43	46
21:00	5	0	1	6	23	90	55	14	2	1	0	0	0	197	43	47
22:00	2	0	1	4	14	72	58	12	1	0	0	0	0	164	43	46
23:00	1	0	0	0	9	58	32	16	**7**	0	0	0	0	123	46	50
Total	201	9	52	318	1573	3450	2164	435	74	8	1	4	0	8289		
Percent	2.4%	0.1%	0.6%	3.8%	19.0%	41.6%	26.1%	5.2%	0.9%	0.1%	0.0%	0.0%	0.0%			
AM Peak	08:00	09:00	06:00	08:00	08:00	08:00	06:00	06:00	05:00	04:00	08:00	08:00		08:00		
Vol.	23	4	13	35	160	303	172	24	7	1	1	1		664		
PM Peak	14:00	15:00	18:00	13:00	13:00	14:00	14:00	14:00	23:00	15:00		15:00		14:00		
Vol.	20	1	4	32	119	275	166	50	7	3		1		634		

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05774Cspeed
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Westbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/28/23	1	0	0	6	15	23	23	9	3	0	0	0	0	80	45	49
01:00	0	0	0	2	3	16	11	11	0	**2**	**1**	0	0	46	48	56
02:00	1	0	0	0	7	10	5	2	0	0	0	0	0	25	43	46
03:00	0	0	0	0	3	5	13	2	1	0	0	0	0	24	44	49
04:00	0	0	0	0	4	8	19	2	0	0	0	0	0	33	44	45
05:00	0	0	0	0	5	32	29	14	0	1	0	0	0	81	46	48
06:00	1	0	0	2	5	58	77	14	7	1	0	0	0	165	44	49
07:00	2	0	0	0	18	92	104	44	8	2	1	0	0	271	46	49
08:00	7	0	**2**	1	13	117	126	**51**	**9**	0	0	**1**	0	327	46	49
09:00	6	0	0	8	64	183	**174**	37	5	0	0	0	0	477	44	47
10:00	9	0	0	**11**	55	**239**	142	39	4	2	0	0	0	501	43	47
11:00	**11**	**1**	0	8	**80**	210	161	28	2	1	0	1	0	**503**	43	46
12 PM	10	0	2	**19**	**84**	153	156	39	7	0	0	0	0	470	44	47
13:00	2	0	2	17	63	166	158	**43**	3	0	0	0	0	454	44	47
14:00	11	0	0	6	73	181	158	36	7	**1**	0	0	0	**473**	44	47
15:00	**14**	3	4	12	60	160	146	39	**8**	0	0	0	0	446	44	48
16:00	12	2	**5**	16	56	156	**172**	22	3	0	0	0	0	444	43	45
17:00	4	0	5	18	77	174	108	23	1	0	0	0	0	410	43	45
18:00	14	**4**	4	18	77	**193**	103	11	1	1	0	0	0	426	42	44
19:00	5	0	2	9	45	136	87	11	3	1	**1**	0	0	300	43	45
20:00	4	0	2	14	73	108	67	21	1	0	0	0	0	290	43	46
21:00	5	0	0	5	42	77	63	9	2	0	0	0	0	203	43	45
22:00	3	0	0	4	29	114	57	16	3	0	0	0	0	226	43	47
23:00	2	0	0	3	25	56	42	7	3	0	0	0	0	138	43	47
Total	124	10	28	179	976	2667	2201	530	81	12	3	2	0	6813		
Percent	1.8%	0.1%	0.4%	2.6%	14.3%	39.1%	32.3%	7.8%	1.2%	0.2%	0.0%	0.0%	0.0%			
AM Peak	11:00	11:00	08:00	10:00	11:00	10:00	09:00	08:00	08:00	01:00	01:00	08:00		11:00		
Vol.	11	1	2	11	80	239	174	51	9	2	1	1		503		
PM Peak	15:00	18:00	16:00	12:00	12:00	18:00	16:00	13:00	15:00	14:00	19:00			14:00		
Vol.	14	4	5	19	84	193	172	43	8	1	1			473		

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Westbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/29/23	2	0	0	3	7	28	20	12	2	0	0	0	0	74	46	49
01:00	0	0	0	3	8	14	11	4	4	0	0	0	0	44	46	52
02:00	0	0	0	2	3	6	3	4	2	2	**2**	0	0	24	55	61
03:00	0	0	0	0	1	4	4	2	0	0	0	0	0	11	45	48
04:00	0	0	0	0	0	5	5	5	4	0	0	0	0	19	51	53
05:00	0	0	0	0	0	9	20	14	7	0	0	0	0	50	49	53
06:00	1	0	0	0	0	13	46	41	**11**	**3**	0	0	0	115	49	53
07:00	0	0	0	0	6	36	61	41	7	0	0	0	0	151	48	49
08:00	2	0	0	0	6	47	118	40	10	2	0	0	0	225	47	50
09:00	8	0	1	**6**	31	104	145	34	5	0	0	0	0	334	44	48
10:00	**15**	0	1	1	23	151	**183**	**43**	7	0	0	0	0	424	44	48
11:00	7	0	**4**	6	**39**	**179**	158	38	10	1	0	0	0	**442**	44	48
12 PM	12	**1**	2	5	34	**194**	**221**	49	5	0	0	0	0	**523**	44	47
13:00	12	0	**7**	4	23	141	175	42	6	0	0	0	0	410	44	48
14:00	11	0	3	**19**	36	117	147	51	11	1	0	0	0	396	45	49
15:00	**17**	0	1	2	11	132	149	58	13	1	0	0	0	384	46	49
16:00	6	1	1	6	32	78	147	66	9	2	0	0	0	348	46	49
17:00	4	0	0	3	17	92	141	52	15	1	0	0	0	325	46	49
18:00	9	0	1	4	20	72	164	**77**	**16**	**5**	0	0	0	368	47	50
19:00	11	1	0	1	15	102	138	46	7	0	0	0	**1**	322	45	49
20:00	3	0	0	1	**38**	109	71	14	3	1	0	0	0	240	43	47
21:00	3	0	0	2	21	59	57	25	2	0	0	0	0	169	45	48
22:00	0	0	0	2	17	31	41	14	3	1	0	0	0	109	45	49
23:00	0	0	0	3	6	21	19	9	3	0	**1**	0	0	62	47	51
Total	123	3	21	73	394	1744	2244	781	162	20	3	0	1	5569		
Percent	2.2%	0.1%	0.4%	1.3%	7.1%	31.3%	40.3%	14.0%	2.9%	0.4%	0.1%	0.0%	0.0%			
AM Peak	10:00		11:00	09:00	11:00	11:00	10:00	10:00	06:00	06:00	02:00			11:00		
Vol.	15		4	6	39	179	183	43	11	3	2			442		
PM Peak	15:00	12:00	13:00	14:00	20:00	12:00	12:00	18:00	18:00	18:00	23:00		19:00	12:00		
Vol.	17	1	7	19	38	194	221	77	16	5	1		1	523		

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Westbound

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10/30/23	0	1	0	0	2	5	8	3	1	0	0	0	0	20	46	50
01:00	0	0	0	0	3	6	3	2	0	1	0	0	0	15	46	56
02:00	0	0	0	2	2	2	1	5	0	0	0	0	0	12	48	49
03:00	0	0	0	0	1	5	7	3	4	1	0	0	0	21	52	54
04:00	0	0	0	0	3	11	28	20	7	**2**	0	0	0	71	49	53
05:00	1	0	0	0	0	24	94	48	15	1	0	0	0	183	48	52
06:00	8	1	0	2	9	91	**233**	**84**	**20**	2	0	0	0	450	47	49
07:00	**39**	2	2	17	36	208	230	70	6	1	**1**	0	0	**612**	44	48
08:00	27	1	**12**	23	**89**	**242**	164	29	2	0	0	0	0	589	43	45
09:00	17	1	8	27	54	178	130	29	3	0	1	0	0	448	43	46
10:00	5	**8**	9	**34**	60	152	115	22	1	1	0	0	0	407	43	45
11:00	11	2	5	23	44	176	125	44	2	0	0	0	0	432	44	47
12 PM	9	1	1	11	44	140	154	37	9	0	**1**	0	**1**	408	44	48
13:00	9	1	**14**	27	37	151	131	30	6	1	0	0	0	407	44	47
14:00	**27**	**2**	8	**34**	**100**	178	144	21	2	0	0	0	1	**517**	43	44
15:00	16	1	3	18	70	**191**	173	39	1	1	0	0	0	513	43	46
16:00	24	1	2	17	70	165	162	56	4	0	1	0	1	503	44	48
17:00	16	0	1	7	37	126	**190**	57	**12**	**3**	0	0	0	449	45	49
18:00	9	0	0	4	19	140	167	**62**	8	1	0	0	0	410	45	49
19:00	6	0	1	6	22	96	111	43	8	1	0	0	0	294	45	49
20:00	0	1	0	1	20	86	74	21	6	0	0	0	0	209	44	48
21:00	2	0	1	1	31	45	38	6	3	0	0	0	0	127	43	47
22:00	1	0	0	3	11	30	25	8	2	1	0	0	0	81	44	49
23:00	0	0	1	1	4	16	22	5	4	0	1	0	0	54	46	52
Total	227	23	68	258	768	2464	2529	744	126	17	5	0	3	7232		
Percent	3.1%	0.3%	0.9%	3.6%	10.6%	34.1%	35.0%	10.3%	1.7%	0.2%	0.1%	0.0%	0.0%			
AM Peak	07:00	10:00	08:00	10:00	08:00	08:00	06:00	06:00	06:00	04:00	07:00			07:00		
Vol.	39	8	12	34	89	242	233	84	20	2	1			612		
PM Peak	14:00	14:00	13:00	14:00	14:00	15:00	17:00	18:00	17:00	17:00	12:00		12:00	14:00		
Vol.	27	2	14	34	100	191	190	62	12	3	1		1	517		
Grand Total	1348	83	361	1681	7878	20145	15834	3900	678	97	24	13	11	52053		
Percent	2.6%	0.2%	0.7%	3.2%	15.1%	38.7%	30.4%	7.5%	1.3%	0.2%	0.0%	0.0%	0.0%			

	15th Percentile :	32 MPH
	50th Percentile :	38 MPH
	85th Percentile :	44 MPH
	95th Percentile :	47 MPH
Stats	10 MPH Pace Speed :	36-45 MPH
	Number of Vehicles > 40 MPH :	20557
	Percent of Vehicles > 40 MPH :	39.5%
	Mean Speed(Average) :	39 MPH

Lyon Avenue

Traffic Volumes

Transportation Data Corporation
Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

Lyon Avenue north of
Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774AVOLUME
Site Code: 05774

Start Time	23-Oct-23 Mon	24-Oct-23 Tue	25-Oct-23 Wed	26-Oct-23 Thu	27-Oct-23 Fri	28-Oct-23 Sat	29-Oct-23 Sun	Week Average
12:00 AM	*	3	3	4	12	19	**33**	12
01:00	*	7	6	6	13	11	29	12
02:00	*	2	2	1	0	3	2	2
03:00	*	0	0	0	2	4	1	1
04:00	*	4	4	2	5	0	2	3
05:00	*	4	1	7	4	1	3	3
06:00	*	13	11	14	15	4	4	10
07:00	*	51	45	44	54	12	11	36
08:00	*	**100**	**102**	**103**	**106**	24	10	74
09:00	*	66	72	76	61	23	19	53
10:00	*	65	67	72	74	**44**	19	57
11:00	*	73	79	71	66	40	29	60
12:00 PM	*	60	66	79	71	41	20	56
01:00	*	58	61	82	89	35	19	57
02:00	*	86	89	95	81	35	**30**	69
03:00	*	**103**	**98**	97	**95**	46	26	78
04:00	*	70	78	**106**	76	**52**	26	68
05:00	*	84	92	85	68	41	22	65
06:00	*	38	48	47	52	34	20	40
07:00	*	33	30	42	28	26	13	29
08:00	*	30	23	28	22	19	19	24
09:00	*	10	27	22	23	18	17	20
10:00	*	17	12	6	29	30	17	18
11:00	*	9	11	12	21	26	18	16
Total	0	986	1027	1101	1067	588	409	
Percentage	0.0%	114.3%	119.0%	127.6%	123.6%	68.1%	47.4%	
AM Peak	-	08:00	08:00	08:00	08:00	10:00	00:00	-
Vol.	-	100	102	103	106	44	33	-
PM Peak	-	15:00	15:00	16:00	15:00	16:00	14:00	-
Vol.	-	103	98	106	95	52	30	-

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Lyon Avenue north of
Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774AVOLUME
Site Code: 05774

Start Time	30-Oct-23 Mon	31-Oct-23 Tue	01-Nov-23 Wed	02-Nov-23 Thu	03-Nov-23 Fri	04-Nov-23 Sat	05-Nov-23 Sun	Week Average
12:00 AM	23	*	*	*	*	*	*	23
01:00	12	*	*	*	*	*	*	12
02:00	2	*	*	*	*	*	*	2
03:00	3	*	*	*	*	*	*	3
04:00	2	*	*	*	*	*	*	2
05:00	1	*	*	*	*	*	*	1
06:00	13	*	*	*	*	*	*	13
07:00	47	*	*	*	*	*	*	47
08:00	**95**	*	*	*	*	*	*	95
09:00	69	*	*	*	*	*	*	69
10:00	78	*	*	*	*	*	*	78
11:00	77	*	*	*	*	*	*	77
12:00 PM	68	*	*	*	*	*	*	68
01:00	71	*	*	*	*	*	*	71
02:00	**96**	*	*	*	*	*	*	96
03:00	80	*	*	*	*	*	*	80
04:00	74	*	*	*	*	*	*	74
05:00	66	*	*	*	*	*	*	66
06:00	33	*	*	*	*	*	*	33
07:00	18	*	*	*	*	*	*	18
08:00	16	*	*	*	*	*	*	16
09:00	13	*	*	*	*	*	*	13
10:00	7	*	*	*	*	*	*	7
11:00	11	*	*	*	*	*	*	11
Total	975	0	0	0	0	0	0	
Percentage	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	-	-	-	-	-	-	-
Vol.	95	-	-	-	-	-	-	-
PM Peak	14:00	-	-	-	-	-	-	-
Vol.	96	-	-	-	-	-	-	-

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Lyon Avenue north of
Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774Avolume
Site Code: 05774

Start	23-Oct-23		Tue		Wed		Thu		Fri		Weekday Average		Sat		Sun	
Time	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	*	*	2	1	3	0	0	4	6	6	3	3	7	12	**19**	14
01:00	*	*	0	7	2	4	2	4	2	11	2	6	4	7	4	**25**
02:00	*	*	1	1	1	1	0	1	0	0	0	1	1	2	1	1
03:00	*	*	0	0	0	0	0	0	1	1	0	0	2	2	0	1
04:00	*	*	2	2	1	3	1	1	2	3	2	2	0	0	1	1
05:00	*	*	1	3	0	1	3	4	1	3	1	3	0	1	1	2
06:00	*	*	9	4	5	6	10	4	8	7	8	5	3	1	3	1
07:00	*	*	34	17	29	16	30	14	39	15	33	16	8	4	9	2
08:00	*	*	**78**	22	**78**	24	**76**	27	**70**	36	**76**	27	7	**17**	4	6
09:00	*	*	41	25	39	33	39	**37**	35	26	38	30	13	10	9	10
10:00	*	*	37	28	36	31	43	29	33	**41**	37	32	**29**	15	11	8
11:00	*	*	33	**40**	35	**44**	34	37	33	33	34	**38**	23	17	14	15
12:00 PM	*	*	32	28	33	33	38	41	35	36	34	34	17	**24**	12	8
01:00	*	*	26	32	35	26	48	34	44	**45**	38	34	20	15	14	5
02:00	*	*	46	40	42	47	45	**50**	42	39	44	44	20	15	**19**	11
03:00	*	*	**52**	**51**	**48**	**50**	50	47	**58**	37	**52**	**46**	25	21	10	**16**
04:00	*	*	27	43	37	41	**58**	48	39	37	40	42	**33**	19	17	9
05:00	*	*	36	48	43	49	42	43	32	36	38	44	23	18	12	10
06:00	*	*	24	14	27	21	21	26	32	20	26	20	26	8	10	10
07:00	*	*	15	18	20	10	18	24	16	12	17	16	17	9	6	7
08:00	*	*	16	14	17	6	14	14	11	11	14	11	14	5	14	5
09:00	*	*	4	6	17	10	10	12	15	8	12	9	10	8	10	7
10:00	*	*	6	11	3	9	4	2	11	18	6	10	21	9	9	8
11:00	*	*	5	4	7	4	7	5	10	11	7	6	16	10	11	7
Total	0	0	527	459	558	469	593	508	575	492	562	479	339	249	220	189
Day	0		986		1027		1101		1067		1041		588		409	
AM Peak	-	-	08:00	11:00	08:00	11:00	08:00	09:00	08:00	10:00	08:00	11:00	10:00	08:00	00:00	01:00
Vol.	-	-	78	40	78	44	76	37	70	41	76	38	29	17	19	25
PM Peak	-	-	15:00	15:00	15:00	15:00	16:00	14:00	15:00	13:00	15:00	15:00	16:00	12:00	14:00	15:00
Vol.	-	-	52	51	48	50	58	50	58	45	52	46	33	24	19	16

Transportation Data Corporation
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Lyon Avenue north of
Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774Avolume
Site Code: 05774

Start	30-Oct-23		Tue		Wed		Thu		Fri		Weekday Average		Sat		Sun	
Time	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	9	14	*	*	*	*	*	*	*	*	9	14	*	*	*	*
01:00	1	11	*	*	*	*	*	*	*	*	1	11	*	*	*	*
02:00	1	1	*	*	*	*	*	*	*	*	1	1	*	*	*	*
03:00	1	2	*	*	*	*	*	*	*	*	1	2	*	*	*	*
04:00	0	2	*	*	*	*	*	*	*	*	0	2	*	*	*	*
05:00	0	1	*	*	*	*	*	*	*	*	0	1	*	*	*	*
06:00	9	4	*	*	*	*	*	*	*	*	9	4	*	*	*	*
07:00	31	16	*	*	*	*	*	*	*	*	31	16	*	*	*	*
08:00	**68**	27	*	*	*	*	*	*	*	*	**68**	27	*	*	*	*
09:00	41	28	*	*	*	*	*	*	*	*	41	28	*	*	*	*
10:00	43	35	*	*	*	*	*	*	*	*	43	35	*	*	*	*
11:00	37	**40**	*	*	*	*	*	*	*	*	37	**40**	*	*	*	*
12:00 PM	31	37	*	*	*	*	*	*	*	*	31	37	*	*	*	*
01:00	38	33	*	*	*	*	*	*	*	*	38	33	*	*	*	*
02:00	**44**	**52**	*	*	*	*	*	*	*	*	**44**	**52**	*	*	*	*
03:00	33	47	*	*	*	*	*	*	*	*	33	47	*	*	*	*
04:00	43	31	*	*	*	*	*	*	*	*	43	31	*	*	*	*
05:00	24	42	*	*	*	*	*	*	*	*	24	42	*	*	*	*
06:00	15	18	*	*	*	*	*	*	*	*	15	18	*	*	*	*
07:00	10	8	*	*	*	*	*	*	*	*	10	8	*	*	*	*
08:00	7	9	*	*	*	*	*	*	*	*	7	9	*	*	*	*
09:00	5	8	*	*	*	*	*	*	*	*	5	8	*	*	*	*
10:00	5	2	*	*	*	*	*	*	*	*	5	2	*	*	*	*
11:00	4	7	*	*	*	*	*	*	*	*	4	7	*	*	*	*
Total	500	475	0	0	0	0	0	0	0	0	500	475	0	0	0	0
Day	975		0		0		0		0		975		0		0	
AM Peak	08:00	11:00	-	-	-	-	-	-	-	-	08:00	11:00	-	-	-	-
Vol.	68	40	-	-	-	-	-	-	-	-	68	40	-	-	-	-
PM Peak	14:00	14:00	-	-	-	-	-	-	-	-	14:00	14:00	-	-	-	-
Vol.	44	52	-	-	-	-	-	-	-	-	44	52	-	-	-	-

Comb. Total	975	986	1027	1101	1067	2016	588	409

ADT ADT 1,031 AADT 1,031

Vehicle Speeds

Transportation Data Corporation
Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

Lyon Avenue north of
Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774Aspeed
Site Code: 05774

Northbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/24/23	0	1	1	0	0	0	0	0	0	0	0	0	0	2	23	24
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1	34	34
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	1	1	0	0	0	0	0	0	0	2	38	39
05:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1	34	34
06:00	**1**	1	3	0	3	1	0	0	0	0	0	0	0	9	34	37
07:00	0	0	6	12	13	3	0	0	0	0	0	0	0	34	34	37
08:00	0	**5**	**12**	**18**	**26**	**17**	0	0	0	0	0	0	0	**78**	36	38
09:00	0	0	11	18	10	2	0	0	0	0	0	0	0	41	32	34
10:00	0	3	12	10	11	0	**1**	0	0	0	0	0	0	37	32	34
11:00	0	1	6	10	13	3	0	0	0	0	0	0	0	33	34	37
12 PM	0	0	**13**	8	8	2	1	0	0	0	0	0	0	32	33	38
13:00	0	**4**	5	10	3	4	0	0	0	0	0	0	0	26	35	38
14:00	**2**	4	8	**24**	5	3	0	0	0	0	0	0	0	46	31	36
15:00	0	0	8	24	13	**7**	0	0	0	0	0	0	0	**52**	34	38
16:00	0	1	1	8	8	7	**2**	0	0	0	0	0	0	27	38	41
17:00	0	0	3	13	**14**	6	0	0	0	0	0	0	0	36	35	38
18:00	0	0	4	10	9	1	0	0	0	0	0	0	0	24	33	34
19:00	1	0	6	1	4	3	0	0	0	0	0	0	0	15	36	38
20:00	0	0	2	5	7	1	0	**1**	0	0	0	0	0	16	34	45
21:00	0	0	2	1	1	0	0	0	0	0	0	0	0	4	32	33
22:00	0	0	0	1	2	3	0	0	0	0	0	0	0	6	38	39
23:00	0	0	1	1	1	1	1	0	0	0	0	0	0	5	41	43
Total	4	20	104	174	154	65	5	1	0	0	0	0	0	527		
Percent	0.8%	3.8%	19.7%	33.0%	29.2%	12.3%	0.9%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	06:00	08:00	08:00	08:00	08:00	08:00	10:00							08:00		
Vol.	1	5	12	18	26	17	1							78		
PM Peak	14:00	13:00	12:00	14:00	17:00	15:00	16:00	20:00						15:00		
Vol.	2	4	13	24	14	7	2	1						52		

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Lyon Avenue north of
Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774Aspeed
Site Code: 05774

Northbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/25/23	0	0	0	2	1	0	0	0	0	0	0	0	0	3	32	34
01:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2	19	19
02:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1	29	29
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1	34	34
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00	0	2	0	2	0	1	0	0	0	0	0	0	0	5	36	38
07:00	0	2	3	11	9	3	**1**	0	0	0	0	0	0	29	34	39
08:00	0	1	7	**29**	**27**	**13**	1	0	0	0	0	0	0	**78**	35	38
09:00	0	0	7	22	6	4	0	0	0	0	0	0	0	39	33	37
10:00	0	**4**	4	16	9	2	1	0	0	0	0	0	0	36	33	38
11:00	0	0	**8**	12	11	4	0	0	0	0	0	0	0	35	34	37
12 PM	0	0	11	15	6	1	0	0	0	0	0	0	0	33	31	34
13:00	2	0	**12**	10	8	3	0	0	0	0	0	0	0	35	33	37
14:00	**4**	1	6	**18**	10	3	0	0	0	0	0	0	0	42	33	36
15:00	1	**3**	4	17	13	**8**	**2**	0	0	0	0	0	0	**48**	36	39
16:00	2	0	2	17	9	5	2	0	0	0	0	0	0	37	36	40
17:00	0	0	6	12	**21**	3	0	**1**	0	0	0	0	0	43	34	38
18:00	0	0	6	15	4	1	1	0	0	0	0	0	0	27	32	38
19:00	0	1	2	10	5	1	1	0	0	0	0	0	0	20	34	40
20:00	0	0	4	7	3	2	1	0	0	0	0	0	0	17	36	40
21:00	0	2	2	4	5	3	1	0	0	0	0	0	0	17	37	40
22:00	0	0	1	2	0	0	0	0	0	0	0	0	0	3	28	29
23:00	0	1	0	1	2	2	1	0	0	0	0	0	0	7	39	43
Total	9	19	85	223	150	59	12	1	0	0	0	0	0	558		
Percent	1.6%	3.4%	15.2%	40.0%	26.9%	10.6%	2.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak		10:00	11:00	08:00	08:00	08:00	07:00							08:00		
Vol.		4	8	29	27	13	1							78		
PM Peak	14:00	15:00	13:00	14:00	17:00	15:00	15:00	17:00						15:00		
Vol.	4	3	12	18	21	8	2	1						48		

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Lyon Avenue north of
Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774Aspeed
Site Code: 05774

Northbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/26/23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	0	0	1	1	0	0	0	0	0	0	0	2	38	39
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	1	0	0	0	0	0	0	1	44	44
05:00	0	0	0	0	2	1	0	0	0	0	0	0	0	3	37	39
06:00	0	2	2	4	2	0	0	0	0	0	0	0	0	10	31	33
07:00	0	0	6	12	10	1	1	0	0	0	0	0	0	30	33	37
08:00	0	**3**	7	**28**	**24**	**8**	**6**	0	0	0	0	0	0	**76**	36	41
09:00	0	0	7	17	13	2	0	0	0	0	0	0	0	39	33	35
10:00	**1**	0	**11**	17	10	2	1	**1**	0	0	0	0	0	43	33	39
11:00	0	0	9	16	6	3	0	0	0	0	0	0	0	34	33	37
12 PM	**1**	1	10	12	12	2	0	0	0	0	0	0	0	38	33	35
13:00	1	**2**	**12**	18	13	2	0	0	0	0	0	0	0	48	33	34
14:00	1	0	6	**22**	10	4	2	0	0	0	0	0	0	45	34	39
15:00	0	1	9	20	19	0	1	0	0	0	0	0	0	50	33	34
16:00	1	1	5	20	**21**	**5**	**4**	0	0	**1**	0	0	0	**58**	36	42
17:00	0	0	5	15	16	4	1	**1**	0	0	0	0	0	42	34	39
18:00	0	0	5	6	5	2	3	0	0	0	0	0	0	21	39	43
19:00	0	2	3	8	2	3	0	0	0	0	0	0	0	18	35	38
20:00	0	0	0	2	9	3	0	0	0	0	0	0	0	14	36	38
21:00	0	0	0	6	2	2	0	0	0	0	0	0	0	10	36	38
22:00	0	0	0	1	0	3	0	0	0	0	0	0	0	4	39	39
23:00	1	0	1	0	2	1	2	0	0	0	0	0	0	7	42	44
Total	6	12	98	224	179	49	22	2	0	1	0	0	0	593		
Percent	1.0%	2.0%	16.5%	37.8%	30.2%	8.3%	3.7%	0.3%	0.0%	0.2%	0.0%	0.0%	0.0%			
AM Peak	10:00	08:00	10:00	08:00	08:00	08:00	08:00	10:00						08:00		
Vol.	1	3	11	28	24	8	6	1						76		
PM Peak	12:00	13:00	13:00	14:00	16:00	16:00	16:00	17:00		16:00				16:00		
Vol.	1	2	12	22	21	5	4	1		1				58		

Transportation Data Corporation
Mario Perone, mperone1@verizon.net
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Lyon Avenue north of
Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774Aspeed
Site Code: 05774

Northbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/27/23	0	1	2	0	1	2	0	0	0	0	0	0	0	6	37	39
01:00	0	0	0	0	2	0	0	0	0	0	0	0	0	2	34	34
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1	34	34
04:00	0	0	1	0	1	0	0	0	0	0	0	0	0	2	33	34
05:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1	34	34
06:00	0	1	1	3	2	1	0	0	0	0	0	0	0	8	34	37
07:00	0	1	7	13	14	2	**2**	0	0	0	0	0	0	39	34	40
08:00	**1**	3	**9**	**21**	**28**	**8**	0	0	0	0	0	0	0	**70**	34	37
09:00	0	**4**	7	14	7	2	1	0	0	0	0	0	0	35	33	38
10:00	0	4	5	14	7	3	0	0	0	0	0	0	0	33	33	37
11:00	0	1	5	11	13	3	0	0	0	0	0	0	0	33	34	37
12 PM	0	0	**9**	11	11	4	0	0	0	0	0	0	0	35	34	37
13:00	0	**2**	8	20	11	3	0	0	0	0	0	0	0	44	33	36
14:00	0	2	8	16	13	3	0	0	0	0	0	0	0	42	33	36
15:00	0	1	6	**21**	**19**	**10**	**1**	0	0	0	0	0	0	**58**	36	39
16:00	1	2	3	13	15	5	0	0	0	0	0	0	0	39	34	38
17:00	**3**	1	4	8	14	2	0	0	0	0	0	0	0	32	33	35
18:00	1	0	1	17	10	2	1	0	0	0	0	0	0	32	34	38
19:00	0	1	1	10	2	2	0	0	0	0	0	0	0	16	33	37
20:00	0	0	2	4	4	1	0	0	0	0	0	0	0	11	34	37
21:00	0	1	2	4	4	4	0	0	0	0	0	0	0	15	37	39
22:00	0	1	0	5	3	2	0	0	0	0	0	0	0	11	35	38
23:00	0	0	3	1	4	1	0	**1**	0	0	0	0	0	10	37	47
Total	6	26	84	206	187	60	5	1	0	0	0	0	0	575		
Percent	1.0%	4.5%	14.6%	35.8%	32.5%	10.4%	0.9%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	09:00	08:00	08:00	08:00	08:00	07:00							08:00		
Vol.	1	4	9	21	28	8	2							70		
PM Peak	17:00	13:00	12:00	15:00	15:00	15:00	15:00	23:00						15:00		
Vol.	3	2	9	21	19	10	1	1						58		

Transportation Data Corporation
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Lyon Avenue north of
Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774Aspeed
Site Code: 05774

Northbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/28/23	0	0	1	3	2	0	1	0	0	0	0	0	0	7	34	43
01:00	0	0	0	1	3	0	0	0	0	0	0	0	0	4	34	34
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1	34	34
03:00	0	0	0	1	1	0	0	0	0	0	0	0	0	2	33	34
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00	0	0	1	1	0	1	0	0	0	0	0	0	0	3	37	39
07:00	0	0	1	2	4	1	0	0	0	0	0	0	0	8	34	37
08:00	0	0	2	2	1	2	0	0	0	0	0	0	0	7	37	39
09:00	0	**1**	4	3	2	2	1	0	0	0	0	0	0	13	37	41
10:00	0	1	**5**	**11**	6	**4**	**2**	0	0	0	0	0	0	**29**	37	41
11:00	0	1	2	8	**8**	1	2	0	**1**	0	0	0	0	23	37	44
12 PM	0	0	2	7	6	2	0	0	0	0	0	0	0	17	34	37
13:00	0	0	**5**	1	12	2	0	0	0	0	0	0	0	20	34	37
14:00	0	**1**	1	**11**	4	3	0	0	0	0	0	0	0	20	35	38
15:00	**3**	0	4	6	8	3	1	0	0	0	0	0	0	25	35	39
16:00	1	0	2	7	**13**	**8**	1	**1**	0	0	0	0	0	**33**	38	41
17:00	3	0	3	5	9	2	1	0	0	0	0	0	0	23	34	39
18:00	0	0	2	9	11	3	1	0	0	0	0	0	0	26	35	39
19:00	0	0	5	6	3	3	0	0	0	0	0	0	0	17	35	38
20:00	0	1	0	8	3	2	0	0	0	0	0	0	0	14	34	38
21:00	0	1	2	2	2	3	0	0	0	0	0	0	0	10	37	39
22:00	1	0	4	5	3	3	**2**	0	**1**	0	**2**	0	0	21	44	62
23:00	0	1	3	4	7	1	0	0	0	0	0	0	0	16	33	35
Total	8	7	49	103	109	46	12	1	2	0	2	0	0	339		
Percent	2.4%	2.1%	14.5%	30.4%	32.2%	13.6%	3.5%	0.3%	0.6%	0.0%	0.6%	0.0%	0.0%			
AM Peak		09:00	10:00	10:00	11:00	10:00	10:00		11:00					10:00		
Vol.		1	5	11	8	4	2		1					29		
PM Peak	15:00	14:00	13:00	14:00	16:00	16:00	22:00	16:00	22:00		22:00			16:00		
Vol.	3	1	5	11	13	8	2	1	1		2			33		

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Lyon Avenue north of
Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774Aspeed
Site Code: 05774

Northbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/29/23	**1**	**1**	**2**	2	**11**	**2**	0	0	0	0	0	0	0	**19**	34	37
01:00	0	0	0	0	2	1	0	**1**	0	0	0	0	0	4	47	48
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1	34	34
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1	29	29
05:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1	34	34
06:00	0	0	1	0	2	0	0	0	0	0	0	0	0	3	33	34
07:00	0	0	2	**4**	1	1	1	0	0	0	0	0	0	9	38	42
08:00	0	1	1	0	1	1	0	0	0	0	0	0	0	4	37	39
09:00	0	0	2	2	4	1	0	0	0	0	0	0	0	9	34	37
10:00	0	0	1	1	7	1	1	0	0	0	0	0	0	11	36	42
11:00	0	0	1	4	5	1	**3**	0	0	0	0	0	0	14	41	43
12 PM	0	0	2	2	6	2	0	0	0	0	0	0	0	12	35	38
13:00	0	0	3	**6**	4	1	0	0	0	0	0	0	0	14	33	36
14:00	0	0	2	3	6	**8**	0	0	0	0	0	0	0	**19**	38	39
15:00	0	0	1	3	3	2	0	0	**1**	0	0	0	0	10	38	52
16:00	0	0	2	5	**8**	2	0	0	0	0	0	0	0	17	34	37
17:00	0	0	1	5	3	1	**1**	0	0	0	**1**	0	0	12	40	61
18:00	0	0	**4**	5	1	0	0	0	0	0	0	0	0	10	29	32
19:00	0	0	1	2	0	2	1	0	0	0	0	0	0	6	40	43
20:00	0	1	1	3	8	1	0	0	0	0	0	0	0	14	34	36
21:00	0	**2**	3	3	2	0	0	0	0	0	0	0	0	10	31	33
22:00	0	0	2	5	0	1	1	0	0	0	0	0	0	9	38	42
23:00	0	0	1	4	4	2	0	0	0	0	0	0	0	11	35	38
Total	1	5	33	60	80	30	8	1	1	0	1	0	0	220		
Percent	0.5%	2.3%	15.0%	27.3%	36.4%	13.6%	3.6%	0.5%	0.5%	0.0%	0.5%	0.0%	0.0%			
AM Peak	00:00	00:00	00:00	07:00	00:00	00:00	11:00	01:00						00:00		
Vol.	1	1	2	4	11	2	3	1						19		
PM Peak		21:00	18:00	13:00	16:00	14:00	17:00		15:00		17:00			14:00		
Vol.		2	4	6	8	8	1		1		1			19		

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Lyon Avenue north of
Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774Aspeed
Site Code: 05774

Northbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/30/23	0	0	2	1	4	2	0	0	0	0	0	0	0	9	36	38
01:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1	34	34
02:00	**1**	0	0	0	0	0	0	0	0	0	0	0	0	1	12	14
03:00	0	0	0	0	0	1	0	0	0	0	0	0	0	1	39	39
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00	0	2	4	3	0	0	0	0	0	0	0	0	0	9	27	29
07:00	0	2	4	10	10	5	0	0	0	0	0	0	0	31	35	38
08:00	0	**4**	**10**	**26**	**20**	**8**	0	0	0	0	0	0	0	**68**	34	37
09:00	0	1	10	15	11	4	0	0	0	0	0	0	0	41	34	37
10:00	0	3	2	25	10	3	0	0	0	0	0	0	0	43	33	36
11:00	0	3	4	17	13	0	0	0	0	0	0	0	0	37	32	34
12 PM	**1**	2	6	14	5	3	0	0	0	0	0	0	0	31	33	37
13:00	0	**4**	5	13	13	3	0	0	0	0	0	0	0	38	33	36
14:00	0	0	**10**	11	**16**	**6**	1	0	0	0	0	0	0	**44**	35	39
15:00	0	1	7	13	8	4	0	0	0	0	0	0	0	33	34	37
16:00	1	1	4	**16**	16	1	**4**	0	0	0	0	0	0	43	34	42
17:00	0	1	3	10	9	1	0	0	0	0	0	0	0	24	33	34
18:00	0	0	3	8	4	0	0	0	0	0	0	0	0	15	32	34
19:00	0	2	2	5	1	0	0	0	0	0	0	0	0	10	29	32
20:00	0	0	2	3	1	0	0	**1**	0	0	0	0	0	7	34	48
21:00	0	0	2	3	0	0	0	0	0	0	0	0	0	5	28	29
22:00	0	1	3	1	0	0	0	0	0	0	0	0	0	5	26	28
23:00	0	0	1	2	1	0	0	0	0	0	0	0	0	4	32	34
Total	3	27	84	196	143	41	5	1	0	0	0	0	0	500		
Percent	0.6%	5.4%	16.8%	39.2%	28.6%	8.2%	1.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	02:00	08:00	08:00	08:00	08:00	08:00								08:00		
Vol.	1	4	10	26	20	8								68		
PM Peak	12:00	13:00	14:00	16:00	14:00	14:00	16:00	20:00						14:00		
Vol.	1	4	10	16	16	6	4	1						44		
Grand Total	37	116	537	1186	1002	350	69	8	3	1	3	0	0	3312		
Percent	1.1%	3.5%	16.2%	35.8%	30.3%	10.6%	2.1%	0.2%	0.1%	0.0%	0.1%	0.0%	0.0%			

15th Percentile : 23 MPH
50th Percentile : 29 MPH
85th Percentile : 34 MPH
95th Percentile : 38 MPH

Stats

10 MPH Pace Speed : 26-35 MPH

Number of Vehicles > 30 MPH : 1436
Percent of Vehicles > 30 MPH : 43.4%
Mean Speed(Average) : 30 MPH

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Lyon Avenue north of
Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774Aspeed
Site Code: 05774

Southbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/24/23	0	0	0	0	0	1	0	0	0	0	0	0	0	1	39	39
01:00	0	0	2	2	3	0	0	0	0	0	0	0	0	7	33	34
02:00	0	0	0	0	0	1	0	0	0	0	0	0	0	1	39	39
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	2	0	0	0	0	0	0	0	0	0	2	29	29
05:00	0	0	2	0	1	0	0	0	0	0	0	0	0	3	32	34
06:00	0	1	0	2	1	0	0	0	0	0	0	0	0	4	32	34
07:00	0	0	0	7	5	3	**2**	0	0	0	0	0	0	17	39	42
08:00	0	1	1	9	6	**5**	0	0	0	0	0	0	0	22	36	38
09:00	0	0	4	10	4	4	2	**1**	0	0	0	0	0	25	39	44
10:00	**1**	**2**	5	14	5	1	0	0	0	0	0	0	0	28	31	34
11:00	0	2	**12**	**16**	**8**	1	1	0	0	0	0	0	0	**40**	32	35
12 PM	0	0	7	10	9	1	1	0	0	0	0	0	0	28	33	38
13:00	0	**2**	5	11	8	6	0	0	0	0	0	0	0	32	36	38
14:00	**3**	1	9	15	8	4	0	0	0	0	0	0	0	40	33	37
15:00	1	2	**14**	16	8	**9**	1	0	0	0	0	0	0	**51**	36	39
16:00	1	1	14	16	7	4	0	0	0	0	0	0	0	43	33	37
17:00	0	1	8	**18**	**12**	7	**2**	0	0	0	0	0	0	48	36	39
18:00	0	0	3	5	2	3	1	0	0	0	0	0	0	14	38	41
19:00	0	0	3	6	6	2	1	0	0	0	0	0	0	18	35	40
20:00	0	1	2	2	4	5	0	0	0	0	0	0	0	14	37	39
21:00	1	0	0	2	1	2	0	0	0	0	0	0	0	6	37	39
22:00	1	0	0	3	5	2	0	0	0	0	0	0	0	11	35	38
23:00	0	0	1	0	2	1	0	0	0	0	0	0	0	4	37	39
Total	8	14	92	166	105	62	11	1	0	0	0	0	0	459		
Percent	1.7%	3.1%	20.0%	36.2%	22.9%	13.5%	2.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	10:00	11:00	11:00	11:00	08:00	07:00	09:00						11:00		
Vol.	1	2	12	16	8	5	2	1						40		
PM Peak	14:00	13:00	15:00	17:00	17:00	15:00	17:00							15:00		
Vol.	3	2	14	18	12	9	2							51		

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Lyon Avenue north of
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Client: Crossman/P. Bannon

05774Aspeed
Site Code: 05774

Southbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/25/23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
01:00	0	0	1	0	0	1	**2**	0	0	0	0	0	0	4	43	44
02:00	0	0	0	0	0	1	0	0	0	0	0	0	0	1	39	39
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3	22	24
05:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1	24	24
06:00	0	1	1	2	1	1	0	0	0	0	0	0	0	6	35	38
07:00	0	0	2	3	7	3	0	**1**	0	0	0	0	0	16	37	45
08:00	0	0	4	7	6	**5**	1	1	0	0	0	0	0	24	38	44
09:00	0	0	**11**	12	7	1	1	1	0	0	0	0	0	33	33	41
10:00	0	1	7	15	8	0	0	0	0	0	0	0	0	31	32	34
11:00	0	**3**	9	**20**	**9**	2	1	0	0	0	0	0	0	**44**	33	37
12 PM	0	2	1	18	8	3	0	**1**	0	0	0	0	0	33	34	38
13:00	0	0	5	9	7	5	0	0	0	0	0	0	0	26	36	38
14:00	0	0	**12**	18	14	3	0	0	0	0	0	0	0	47	33	36
15:00	**1**	1	7	**22**	11	**7**	**1**	0	0	0	0	0	0	**50**	35	38
16:00	1	**3**	11	15	8	3	0	0	0	0	0	0	0	41	33	36
17:00	0	3	6	17	**19**	4	0	0	0	0	0	0	0	49	34	36
18:00	0	0	5	8	7	1	0	0	0	0	0	0	0	21	33	34
19:00	0	0	3	4	2	0	1	0	0	0	0	0	0	10	33	42
20:00	0	0	0	2	3	1	0	0	0	0	0	0	0	6	35	38
21:00	0	0	3	5	0	2	0	0	0	0	0	0	0	10	36	38
22:00	1	0	0	2	5	0	0	1	0	0	0	0	0	9	34	47
23:00	0	1	0	1	1	0	1	0	0	0	0	0	0	4	42	44
Total	3	17	90	180	123	43	8	5	0	0	0	0	0	469		
Percent	0.6%	3.6%	19.2%	38.4%	26.2%	9.2%	1.7%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak		11:00	09:00	11:00	11:00	08:00	01:00	07:00						11:00		
Vol.		3	11	20	9	5	2	1						44		
PM Peak	15:00	16:00	14:00	15:00	17:00	15:00	15:00	12:00						15:00		
Vol.	1	3	12	22	19	7	1	1						50		

Transportation Data Corporation
Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

Lyon Avenue north of
Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774Aspeed
Site Code: 05774

Southbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/26/23	0	0	0	1	1	2	0	0	0	0	0	0	0	4	38	39
01:00	0	0	0	0	2	1	**1**	0	0	0	0	0	0	4	42	43
02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1	24	24
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1	19	19
05:00	0	0	0	4	0	0	0	0	0	0	0	0	0	4	29	29
06:00	0	0	1	0	2	1	0	0	0	0	0	0	0	4	37	39
07:00	**1**	0	2	5	3	2	1	0	0	0	0	0	0	14	37	41
08:00	0	0	7	8	5	**7**	0	0	0	0	0	0	0	27	37	39
09:00	0	**3**	**10**	14	6	4	0	0	0	0	0	0	0	**37**	33	37
10:00	0	0	10	11	5	2	1	0	0	0	0	0	0	29	33	38
11:00	0	2	9	**16**	**8**	1	1	0	0	0	0	0	0	37	32	35
12 PM	0	0	9	17	11	4	0	0	0	0	0	0	0	41	34	37
13:00	0	1	8	14	8	3	0	0	0	0	0	0	0	34	33	37
14:00	**3**	**4**	5	21	12	4	**1**	0	0	0	0	0	0	**50**	33	38
15:00	1	3	**15**	12	10	**5**	1	0	0	0	0	0	0	47	34	38
16:00	2	0	13	**22**	9	1	0	**1**	0	0	0	0	0	48	32	34
17:00	0	2	8	10	**17**	5	1	0	0	0	0	0	0	43	34	38
18:00	1	2	2	10	9	2	0	0	0	0	0	0	0	26	33	36
19:00	0	1	4	11	8	0	0	0	0	0	0	0	0	24	32	34
20:00	2	0	1	4	4	3	0	0	0	0	0	0	0	14	36	38
21:00	0	0	0	5	6	1	0	0	0	0	0	0	0	12	34	36
22:00	0	0	0	0	2	0	0	0	0	0	0	0	0	2	34	34
23:00	1	0	1	0	2	1	0	0	0	0	0	0	0	5	36	38
Total	11	19	106	185	130	49	7	1	0	0	0	0	0	508		
Percent	2.2%	3.7%	20.9%	36.4%	25.6%	9.6%	1.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	09:00	09:00	11:00	11:00	08:00	01:00							09:00		
Vol.	1	3	10	16	8	7	1							37		
PM Peak	14:00	14:00	15:00	16:00	17:00	15:00	14:00	16:00						14:00		
Vol.	3	4	15	22	17	5	1	1						50		

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Lyon Avenue north of
Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774Aspeed
Site Code: 05774

Southbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/27/23	0	0	0	4	0	1	0	**1**	0	0	0	0	0	6	45	48
01:00	0	**1**	0	2	4	3	0	1	0	0	0	0	0	11	38	47
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	1	0	0	0	0	0	0	0	1	39	39
04:00	0	1	0	1	0	0	**1**	0	0	0	0	0	0	3	42	44
05:00	0	0	0	3	0	0	0	0	0	0	0	0	0	3	29	29
06:00	0	0	0	3	3	1	0	0	0	0	0	0	0	7	34	38
07:00	0	0	2	5	5	2	1	0	0	0	0	0	0	15	36	41
08:00	**1**	1	**13**	11	5	**4**	1	0	0	0	0	0	0	36	34	39
09:00	0	0	9	12	4	1	0	0	0	0	0	0	0	26	31	34
10:00	0	1	10	**22**	5	2	1	0	0	0	0	0	0	**41**	31	37
11:00	0	0	8	14	**9**	2	0	0	0	0	0	0	0	33	33	35
12 PM	0	0	6	17	11	0	**1**	**1**	0	0	0	0	0	36	33	41
13:00	0	0	**11**	17	**14**	3	0	0	0	0	0	0	0	**45**	33	36
14:00	1	0	6	**18**	10	3	1	0	0	0	0	0	0	39	34	38
15:00	0	**3**	8	15	7	3	1	0	0	0	0	0	0	37	33	38
16:00	0	1	11	15	5	5	0	0	0	0	0	0	0	37	34	38
17:00	**2**	0	7	14	6	**6**	1	0	0	0	0	0	0	36	36	39
18:00	0	1	2	8	8	1	0	0	0	0	0	0	0	20	33	35
19:00	0	1	2	2	6	0	1	0	0	0	0	0	0	12	34	41
20:00	0	0	1	3	6	0	0	0	0	0	**1**	0	0	11	34	62
21:00	0	0	1	3	3	1	0	0	0	0	0	0	0	8	34	37
22:00	0	0	3	7	5	1	1	1	0	0	0	0	0	18	36	45
23:00	1	0	0	1	5	3	1	0	0	0	0	0	0	11	38	42
Total	5	10	100	197	121	43	11	4	0	0	1	0	0	492		
Percent	1.0%	2.0%	20.3%	40.0%	24.6%	8.7%	2.2%	0.8%	0.0%	0.0%	0.2%	0.0%	0.0%			
AM Peak	08:00	01:00	08:00	10:00	11:00	08:00	04:00	00:00						10:00		
Vol.	1	1	13	22	9	4	1	1						41		
PM Peak	17:00	15:00	13:00	14:00	13:00	17:00	12:00	12:00			20:00			13:00		
Vol.	2	3	11	18	14	6	1	1			1			45		

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Lyon Avenue north of
Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774Aspeed
Site Code: 05774

Southbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/28/23	0	0	1	1	**6**	3	**1**	0	0	0	0	0	0	12	38	41
01:00	0	0	0	3	3	1	0	0	0	0	0	0	0	7	34	38
02:00	0	0	0	2	0	0	0	0	0	0	0	0	0	2	29	29
03:00	0	0	0	0	2	0	0	0	0	0	0	0	0	2	34	34
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1	29	29
06:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1	29	29
07:00	0	0	**2**	2	0	0	0	0	0	0	0	0	0	4	28	29
08:00	0	**2**	0	**7**	5	3	0	0	0	0	0	0	0	**17**	35	38
09:00	0	1	2	2	3	1	1	0	0	0	0	0	0	10	37	42
10:00	0	0	2	6	3	4	0	0	0	0	0	0	0	15	37	39
11:00	**1**	0	0	5	6	**5**	0	0	0	0	0	0	0	17	37	39
12 PM	0	0	2	**7**	**9**	**6**	0	0	0	0	0	0	0	**24**	37	39
13:00	0	1	**3**	4	5	2	0	0	0	0	0	0	0	15	34	38
14:00	0	**3**	2	2	5	1	**1**	**1**	0	0	0	0	0	15	38	46
15:00	0	1	2	6	9	2	1	0	0	0	0	0	0	21	34	39
16:00	0	0	1	4	9	5	0	0	0	0	0	0	0	19	37	39
17:00	0	0	0	7	7	3	1	0	0	0	0	0	0	18	37	40
18:00	0	2	1	2	3	0	0	0	0	0	0	0	0	8	33	34
19:00	0	0	1	2	4	2	0	0	0	0	0	0	0	9	36	38
20:00	0	0	1	2	1	1	0	0	0	0	0	0	0	5	36	38
21:00	0	1	2	1	4	0	0	0	0	0	0	0	0	8	33	34
22:00	0	1	1	3	2	1	1	0	0	0	0	0	0	9	38	42
23:00	0	0	2	3	3	2	0	0	0	0	0	0	0	10	36	38
Total	1	12	25	73	89	42	6	1	0	0	0	0	0	249		
Percent	0.4%	4.8%	10.0%	29.3%	35.7%	16.9%	2.4%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	08:00	07:00	08:00	00:00	11:00	00:00							08:00		
Vol.	1	2	2	7	6	5	1							17		
PM Peak		14:00	13:00	12:00	12:00	12:00	14:00	14:00						12:00		
Vol.		3	3	7	9	6	1	1						24		

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Lyon Avenue north of
Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774Aspeed
Site Code: 05774

Southbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/29/23	0	0	0	2	6	**5**	**1**	0	0	0	0	0	0	14	38	41
01:00	**1**	0	**2**	**7**	**8**	5	1	**1**	0	0	0	0	0	**25**	38	43
02:00	0	0	0	0	0	0	1	0	0	0	0	0	0	1	44	44
03:00	0	0	0	0	0	1	0	0	0	0	0	0	0	1	39	39
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1	34	34
05:00	0	0	0	2	0	0	0	0	0	0	0	0	0	2	29	29
06:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1	29	29
07:00	0	0	0	2	0	0	0	0	0	0	0	0	0	2	29	29
08:00	0	0	1	2	3	0	0	0	0	0	0	0	0	6	33	34
09:00	0	0	1	4	5	0	0	0	0	0	0	0	0	10	33	34
10:00	0	0	0	1	6	0	1	0	0	0	0	0	0	8	34	43
11:00	0	**1**	2	6	5	1	0	0	0	0	0	0	0	15	33	36
12 PM	0	0	1	4	3	0	0	0	0	0	0	0	0	8	33	34
13:00	0	0	1	1	2	1	0	0	0	0	0	0	0	5	36	38
14:00	0	**1**	0	4	4	1	0	**1**	0	0	0	0	0	11	36	47
15:00	0	0	1	**5**	**8**	**2**	0	0	0	0	0	0	0	**16**	34	37
16:00	0	0	1	2	4	2	0	0	0	0	0	0	0	9	36	38
17:00	0	0	1	1	7	1	0	0	0	0	0	0	0	10	34	37
18:00	0	0	**2**	3	4	0	**1**	0	0	0	0	0	0	10	34	42
19:00	0	0	0	3	3	1	0	0	0	0	0	0	0	7	34	38
20:00	0	0	0	4	1	0	0	0	0	0	0	0	0	5	31	33
21:00	0	0	2	3	2	0	0	0	0	0	0	0	0	7	32	34
22:00	0	0	0	4	3	1	0	0	0	0	0	0	0	8	34	37
23:00	**1**	0	0	4	2	0	0	0	0	0	0	0	0	7	32	34
Total	2	2	15	65	77	21	5	2	0	0	0	0	0	189		
Percent	1.1%	1.1%	7.9%	34.4%	40.7%	11.1%	2.6%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	01:00	11:00	01:00	01:00	01:00	00:00	00:00	01:00						01:00		
Vol.	1	1	2	7	8	5	1	1						25		
PM Peak	23:00	14:00	18:00	15:00	15:00	15:00	18:00	14:00						15:00		
Vol.	1	1	2	5	8	2	1	1						16		

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Lyon Avenue north of
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City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774Aspeed
Site Code: 05774

Southbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/30/23	0	0	1	7	5	0	1	0	0	0	0	0	0	14	33	41
01:00	0	0	1	3	1	**2**	**3**	**1**	0	0	0	0	0	11	43	47
02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1	24	24
03:00	0	0	1	1	0	0	0	0	0	0	0	0	0	2	28	29
04:00	0	1	0	1	0	0	0	0	0	0	0	0	0	2	28	29
05:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1	29	29
06:00	0	0	0	2	1	1	0	0	0	0	0	0	0	4	37	38
07:00	0	**2**	2	3	6	2	1	0	0	0	0	0	0	16	36	41
08:00	0	2	9	7	6	2	1	0	0	0	0	0	0	27	34	39
09:00	0	1	8	13	4	1	0	1	0	0	0	0	0	28	32	38
10:00	0	2	10	**18**	5	0	0	0	0	0	0	0	0	35	29	33
11:00	0	2	**11**	17	**10**	0	0	0	0	0	0	0	0	**40**	32	34
12 PM	0	**2**	11	16	7	1	0	0	0	0	0	0	0	37	31	34
13:00	0	2	7	11	11	2	0	0	0	0	0	0	0	33	33	35
14:00	0	1	11	**28**	9	3	0	0	0	0	0	0	0	**52**	32	35
15:00	0	1	**15**	14	**13**	4	0	0	0	0	0	0	0	47	33	37
16:00	0	1	8	13	4	**5**	0	0	0	0	0	0	0	31	35	38
17:00	0	0	7	22	11	2	0	0	0	0	0	0	0	42	33	34
18:00	0	1	1	9	5	1	**1**	0	0	0	0	0	0	18	34	40
19:00	0	0	2	2	2	2	0	0	0	0	0	0	0	8	37	39
20:00	0	0	1	3	4	1	0	0	0	0	0	0	0	9	34	37
21:00	0	0	0	3	2	1	1	**1**	0	0	0	0	0	8	44	48
22:00	0	0	0	2	0	0	0	0	0	0	0	0	0	2	29	29
23:00	**1**	0	1	0	2	3	0	0	0	0	0	0	0	7	38	39
Total	1	18	108	196	108	33	8	3	0	0	0	0	0	475		
Percent	0.2%	3.8%	22.7%	41.3%	22.7%	6.9%	1.7%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak		07:00	11:00	10:00	11:00	01:00	01:00	01:00						11:00		
Vol.		2	11	18	10	2	3	1						40		
PM Peak	23:00	12:00	15:00	14:00	15:00	16:00	18:00	21:00						14:00		
Vol.	1	2	15	28	13	5	1	1						52		
Grand Total	31	92	536	1062	753	293	56	17	0	0	1	0	0	2841		
Percent	1.1%	3.2%	18.9%	37.4%	26.5%	10.3%	2.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%			

	15th Percentile :	22 MPH
	50th Percentile :	28 MPH
	85th Percentile :	34 MPH
	95th Percentile :	38 MPH
Stats	10 MPH Pace Speed :	26-35 MPH
	Number of Vehicles > 30 MPH :	1120
	Percent of Vehicles > 30 MPH :	39.4%
	Mean Speed(Average) :	29 MPH

South Broadway

Traffic Volumes

Transportation Data Corporation
Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

S. Broadway
south of Martin Street
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774BVOLUME
Site Code: 2814

Start Time	23-Oct-23 Mon	24-Oct-23 Tue	25-Oct-23 Wed	26-Oct-23 Thu	27-Oct-23 Fri	28-Oct-23 Sat	29-Oct-23 Sun	Week Average
12:00 AM	*	12	16	19	24	48	43	27
01:00	*	12	11	11	19	19	30	17
02:00	*	14	4	10	11	18	29	14
03:00	*	5	8	5	6	13	16	9
04:00	*	15	14	23	16	7	13	15
05:00	*	42	47	48	39	29	15	37
06:00	*	149	144	158	164	65	44	121
07:00	*	485	496	491	398	128	80	346
08:00	*	**651**	**561**	**565**	**478**	196	119	428
09:00	*	365	336	309	287	230	165	282
10:00	*	272	307	311	296	288	179	276
11:00	*	270	338	305	324	**322**	**245**	301
12:00 PM	*	344	327	371	373	292	**245**	325
01:00	*	345	322	330	343	270	210	303
02:00	*	414	446	437	496	311	189	382
03:00	*	515	499	**592**	**519**	**318**	188	438
04:00	*	**578**	**510**	543	463	283	205	430
05:00	*	534	483	588	456	302	185	425
06:00	*	323	332	351	321	262	151	290
07:00	*	219	218	232	242	219	154	214
08:00	*	144	160	175	176	154	94	150
09:00	*	78	112	108	122	142	88	108
10:00	*	56	53	61	103	123	67	77
11:00	*	31	38	56	75	74	30	51
Total	0	5873	5782	6099	5751	4113	2784	
Percentage	0.0%	115.9%	114.1%	120.4%	113.5%	81.2%	55.0%	
AM Peak	-	08:00	08:00	08:00	08:00	11:00	11:00	-
Vol.	-	651	561	565	478	322	245	-
PM Peak	-	16:00	16:00	15:00	15:00	15:00	12:00	-
Vol.	-	578	510	592	519	318	245	-

Transportation Data Corporation
Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

S. Broadway
south of Martin Street
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774BVOLUME
Site Code: 2814

Start Time	30-Oct-23 Mon	31-Oct-23 Tue	01-Nov-23 Wed	02-Nov-23 Thu	03-Nov-23 Fri	04-Nov-23 Sat	05-Nov-23 Sun	Week Average
12:00 AM	16	*	*	*	*	*	*	16
01:00	10	*	*	*	*	*	*	10
02:00	8	*	*	*	*	*	*	8
03:00	7	*	*	*	*	*	*	7
04:00	19	*	*	*	*	*	*	19
05:00	40	*	*	*	*	*	*	40
06:00	147	*	*	*	*	*	*	147
07:00	477	*	*	*	*	*	*	477
08:00	**550**	*	*	*	*	*	*	550
09:00	296	*	*	*	*	*	*	296
10:00	256	*	*	*	*	*	*	256
11:00	310	*	*	*	*	*	*	310
12:00 PM	284	*	*	*	*	*	*	284
01:00	283	*	*	*	*	*	*	283
02:00	394	*	*	*	*	*	*	394
03:00	487	*	*	*	*	*	*	487
04:00	**497**	*	*	*	*	*	*	497
05:00	445	*	*	*	*	*	*	445
06:00	253	*	*	*	*	*	*	253
07:00	183	*	*	*	*	*	*	183
08:00	103	*	*	*	*	*	*	103
09:00	80	*	*	*	*	*	*	80
10:00	38	*	*	*	*	*	*	38
11:00	37	*	*	*	*	*	*	37
Total	5220	0	0	0	0	0	0	
Percentage	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	-	-	-	-	-	-	-
Vol.	550	-	-	-	-	-	-	-
PM Peak	16:00	-	-	-	-	-	-	-
Vol.	497	-	-	-	-	-	-	-

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S. Broadway
south of Martin Street
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774Bvolume
Site Code: 2814

Start	23-Oct-23		Tue		Wed		Thu		Fri		Weekday Average		Sat		Sun	
Time	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	*	*	5	7	9	7	8	11	11	13	8	10	19	29	20	23
01:00	*	*	6	6	5	6	7	4	11	8	7	6	9	10	17	13
02:00	*	*	5	9	2	2	6	4	5	6	4	5	9	9	18	11
03:00	*	*	3	2	5	3	2	3	2	4	3	3	7	6	5	11
04:00	*	*	9	6	6	8	12	11	9	7	9	8	2	5	7	6
05:00	*	*	26	16	32	15	29	19	25	14	28	16	14	15	9	6
06:00	*	*	67	82	70	74	69	89	77	87	71	83	36	29	23	21
07:00	*	*	355	130	343	153	352	139	259	139	327	140	83	45	50	30
08:00	*	*	**483**	**168**	**395**	**166**	**386**	**179**	**296**	**182**	**390**	**174**	118	78	57	62
09:00	*	*	205	160	192	144	174	135	152	135	181	144	124	106	88	77
10:00	*	*	141	131	171	136	169	142	171	125	163	134	**169**	119	97	82
11:00	*	*	158	112	192	146	167	138	178	146	174	136	165	**157**	**129**	**116**
12:00 PM	*	*	178	166	174	153	205	166	194	179	188	166	144	148	**114**	**131**
01:00	*	*	176	169	152	170	158	172	171	172	164	171	124	146	97	113
02:00	*	*	241	173	257	**189**	245	**192**	286	**210**	257	**191**	160	**151**	92	97
03:00	*	*	338	177	321	178	402	190	**342**	177	**351**	180	**169**	149	90	98
04:00	*	*	**398**	180	**324**	186	357	186	304	159	346	178	140	143	110	95
05:00	*	*	344	**190**	301	182	**426**	162	287	169	340	176	167	135	95	90
06:00	*	*	189	134	192	140	192	159	195	126	192	140	138	124	84	67
07:00	*	*	109	110	109	109	124	108	97	145	110	118	102	117	83	71
08:00	*	*	70	74	69	91	80	95	92	84	78	86	64	90	44	50
09:00	*	*	44	34	46	66	54	54	54	68	50	56	71	71	42	46
10:00	*	*	28	28	20	33	29	32	53	50	32	36	68	55	33	34
11:00	*	*	11	20	19	19	34	22	37	38	25	25	41	33	13	17
Total	0	0	3589	2284	3406	2376	3687	2412	3308	2443	3498	2382	2143	1970	1417	1367
Day	0		5873		5782		6099		5751		5880		4113		2784	
AM Peak	-	-	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	10:00	11:00	11:00	11:00
Vol.	-	-	483	168	395	166	386	179	296	182	390	174	169	157	129	116
PM Peak	-	-	16:00	17:00	16:00	14:00	17:00	14:00	15:00	14:00	15:00	14:00	15:00	14:00	12:00	12:00
Vol.	-	-	398	190	324	189	426	192	342	210	351	191	169	151	114	131

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S. Broadway
south of Martin Street
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774Bvolume
Site Code: 2814

Start	30-Oct-23		Tue		Wed		Thu		Fri		Weekday Average		Sat		Sun	
Time	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	4	12	*	*	*	*	*	*	*	*	4	12	*	*	*	*
01:00	5	5	*	*	*	*	*	*	*	*	5	5	*	*	*	*
02:00	5	3	*	*	*	*	*	*	*	*	5	3	*	*	*	*
03:00	4	3	*	*	*	*	*	*	*	*	4	3	*	*	*	*
04:00	12	7	*	*	*	*	*	*	*	*	12	7	*	*	*	*
05:00	22	18	*	*	*	*	*	*	*	*	22	18	*	*	*	*
06:00	73	74	*	*	*	*	*	*	*	*	73	74	*	*	*	*
07:00	344	133	*	*	*	*	*	*	*	*	344	133	*	*	*	*
08:00	**392**	**158**	*	*	*	*	*	*	*	*	**392**	**158**	*	*	*	*
09:00	174	122	*	*	*	*	*	*	*	*	174	122	*	*	*	*
10:00	139	117	*	*	*	*	*	*	*	*	139	117	*	*	*	*
11:00	161	149	*	*	*	*	*	*	*	*	161	149	*	*	*	*
12:00 PM	127	157	*	*	*	*	*	*	*	*	127	157	*	*	*	*
01:00	141	142	*	*	*	*	*	*	*	*	141	142	*	*	*	*
02:00	236	158	*	*	*	*	*	*	*	*	236	158	*	*	*	*
03:00	312	**175**	*	*	*	*	*	*	*	*	312	**175**	*	*	*	*
04:00	**349**	148	*	*	*	*	*	*	*	*	**349**	148	*	*	*	*
05:00	297	148	*	*	*	*	*	*	*	*	297	148	*	*	*	*
06:00	125	128	*	*	*	*	*	*	*	*	125	128	*	*	*	*
07:00	95	88	*	*	*	*	*	*	*	*	95	88	*	*	*	*
08:00	41	62	*	*	*	*	*	*	*	*	41	62	*	*	*	*
09:00	36	44	*	*	*	*	*	*	*	*	36	44	*	*	*	*
10:00	20	18	*	*	*	*	*	*	*	*	20	18	*	*	*	*
11:00	18	19	*	*	*	*	*	*	*	*	18	19	*	*	*	*
Total	3132	2088	0	0	0	0	0	0	0	0	3132	2088	0	0	0	0
Day	5220		0		0		0		0		5220		0		0	
AM Peak	08:00	08:00	-	-	-	-	-	-	-	-	08:00	08:00	-	-	-	-
Vol.	392	158	-	-	-	-	-	-	-	-	392	158	-	-	-	-
PM Peak	16:00	15:00	-	-	-	-	-	-	-	-	16:00	15:00	-	-	-	-
Vol.	349	175	-	-	-	-	-	-	-	-	349	175	-	-	-	-

Comb. Total	5220	5873	5782	6099	5751	11100	4113	2784

ADT ADT 5,745 AADT 5,745

Vehicle Speeds

Transportation Data Corporation
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S. Broadway
south of Martin Street
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774Bspeed
Site Code: 2814

Northbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/24/23	0	0	1	3	1	0	0	0	0	0	0	0	0	5	31	33
01:00	0	0	1	4	0	1	0	0	0	0	0	0	0	6	35	38
02:00	0	1	1	2	1	0	0	0	0	0	0	0	0	5	31	33
03:00	0	0	1	0	0	2	0	0	0	0	0	0	0	3	38	39
04:00	0	0	1	2	4	2	0	0	0	0	0	0	0	9	36	38
05:00	0	0	2	8	12	2	1	1	0	0	0	0	0	26	35	43
06:00	1	2	14	29	16	4	0	0	0	**1**	0	0	0	67	33	37
07:00	8	5	87	162	**81**	11	1	0	0	0	0	0	0	355	32	34
08:00	**11**	**13**	**127**	**246**	71	**13**	**2**	0	0	0	0	0	0	**483**	30	34
09:00	5	3	66	102	27	2	0	0	0	0	0	0	0	205	29	33
10:00	0	4	53	50	28	4	0	**2**	0	0	0	0	0	141	32	34
11:00	8	3	41	85	16	4	1	0	0	0	0	0	0	158	29	34
12 PM	7	7	58	82	19	5	0	0	0	0	0	0	0	178	29	33
13:00	4	8	63	78	20	3	0	0	0	0	0	0	0	176	29	33
14:00	5	9	72	119	28	7	1	0	0	0	0	0	0	241	29	34
15:00	**13**	9	108	146	48	**13**	1	0	0	0	0	0	0	338	31	34
16:00	7	**12**	**135**	**164**	**74**	5	1	0	0	0	0	0	0	**398**	31	34
17:00	3	12	118	164	39	8	0	0	0	0	0	0	0	344	29	33
18:00	1	4	63	88	32	1	0	0	0	0	0	0	0	189	30	33
19:00	2	3	31	40	26	6	1	0	0	0	0	0	0	109	33	36
20:00	0	0	16	29	18	6	1	0	0	0	0	0	0	70	34	37
21:00	0	2	12	20	7	3	0	0	0	0	0	0	0	44	32	36
22:00	0	0	8	15	3	0	**2**	0	0	0	0	0	0	28	31	41
23:00	0	0	2	6	2	1	0	0	0	0	0	0	0	11	33	37
Total	75	97	1081	1644	573	103	12	3	0	1	0	0	0	3589		
Percent	2.1%	2.7%	30.1%	45.8%	16.0%	2.9%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	08:00	08:00	08:00	07:00	08:00	08:00	10:00		06:00				08:00		
Vol.	11	13	127	246	81	13	2	2		1				483		
PM Peak	15:00	16:00	16:00	16:00	16:00	15:00	22:00							16:00		
Vol.	13	12	135	164	74	13	2							398		

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S. Broadway
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05774Bspeed
Site Code: 2814

Northbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/25/23	0	1	2	1	3	1	1	0	0	0	0	0	0	9	38	42
01:00	0	0	1	3	0	0	1	0	0	0	0	0	0	5	41	43
02:00	0	0	0	2	0	0	0	0	0	0	0	0	0	2	29	29
03:00	0	1	0	4	0	0	0	0	0	0	0	0	0	5	29	29
04:00	0	0	1	1	2	1	0	**1**	0	0	0	0	0	6	45	48
05:00	1	1	7	14	6	2	0	1	0	0	0	0	0	32	33	38
06:00	0	3	17	37	13	0	0	0	0	0	0	0	0	70	30	33
07:00	1	9	99	172	51	**9**	**2**	0	0	0	0	0	0	343	31	34
08:00	**6**	8	**131**	**186**	**57**	7	0	0	0	0	0	0	0	**395**	30	33
09:00	2	**13**	66	71	37	2	1	0	0	0	0	0	0	192	31	34
10:00	3	1	60	84	20	3	0	0	0	0	0	0	0	171	29	33
11:00	4	5	78	85	17	3	0	0	0	0	0	0	0	192	29	33
12 PM	6	2	62	73	27	3	**1**	0	0	0	0	0	0	174	30	34
13:00	5	5	51	65	21	4	0	**1**	0	0	0	0	0	152	30	34
14:00	7	7	**106**	92	37	**7**	1	0	0	0	0	0	0	257	30	34
15:00	**10**	**10**	103	152	39	7	0	0	0	0	0	0	0	321	29	33
16:00	9	7	92	**153**	**56**	7	0	0	0	0	0	0	0	**324**	31	34
17:00	4	7	100	146	39	5	0	0	0	0	0	0	0	301	29	33
18:00	5	5	66	92	22	2	0	0	0	0	0	0	0	192	29	33
19:00	2	5	30	46	22	4	0	0	0	0	0	0	0	109	32	34
20:00	0	1	19	35	7	7	0	0	0	0	0	0	0	69	32	37
21:00	0	3	18	15	8	2	0	0	0	0	0	0	0	46	31	34
22:00	0	0	8	8	3	0	1	0	0	0	0	0	0	20	31	40
23:00	0	0	1	14	4	0	0	0	0	0	0	0	0	19	31	33
Total	65	94	1118	1551	491	76	8	3	0	0	0	0	0	3406		
Percent	1.9%	2.8%	32.8%	45.5%	14.4%	2.2%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	09:00	08:00	08:00	08:00	07:00	07:00	04:00						08:00		
Vol.	6	13	131	186	57	9	2	1						395		
PM Peak	15:00	15:00	14:00	16:00	16:00	14:00	12:00	13:00						16:00		
Vol.	10	10	106	153	56	7	1	1						324		

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S. Broadway
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05774Bspeed
Site Code: 2814

Northbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/26/23	0	0	2	4	2	0	0	0	0	0	0	0	0	8	32	34
01:00	0	0	0	4	2	1	0	0	0	0	0	0	0	7	34	38
02:00	1	1	1	1	1	1	0	0	0	0	0	0	0	6	35	38
03:00	0	0	1	0	1	0	0	0	0	0	0	0	0	2	33	34
04:00	0	1	0	6	3	2	0	0	0	0	0	0	0	12	35	38
05:00	0	1	6	7	12	3	0	0	0	0	0	0	0	29	34	37
06:00	1	2	12	34	20	0	0	0	0	0	0	0	0	69	32	34
07:00	6	10	104	**155**	61	**15**	**1**	0	0	0	0	0	0	352	31	34
08:00	**17**	**18**	**121**	154	**62**	14	0	0	0	0	0	0	0	**386**	31	34
09:00	4	5	55	81	23	6	0	0	0	0	0	0	0	174	30	34
10:00	2	13	64	65	22	3	0	0	0	0	0	0	0	169	29	33
11:00	6	5	65	65	23	3	0	0	0	0	0	0	0	167	30	33
12 PM	8	2	54	104	29	**8**	0	0	0	0	0	0	0	205	31	34
13:00	4	6	44	77	19	8	0	0	0	0	0	0	0	158	30	35
14:00	10	5	78	120	28	3	**1**	0	0	0	0	0	0	245	29	33
15:00	5	12	142	182	53	6	1	0	**1**	0	0	0	0	402	30	33
16:00	**14**	**13**	108	165	54	3	0	0	0	0	0	0	0	357	30	33
17:00	10	5	**154**	**195**	**58**	4	0	0	0	0	0	0	0	**426**	29	33
18:00	1	8	72	76	30	5	0	0	0	0	0	0	0	192	31	34
19:00	8	3	37	58	15	3	0	0	0	0	0	0	0	124	29	33
20:00	1	3	21	38	15	2	0	0	0	0	0	0	0	80	31	34
21:00	0	2	11	23	14	3	1	0	0	0	0	0	0	54	33	37
22:00	0	0	8	13	6	2	0	0	0	0	0	0	0	29	33	36
23:00	0	2	7	16	6	2	0	**1**	0	0	0	0	0	34	33	38
Total	98	117	1167	1643	559	97	4	1	1	0	0	0	0	3687		
Percent	2.7%	3.2%	31.7%	44.6%	15.2%	2.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	08:00	08:00	07:00	08:00	07:00	07:00							08:00		
Vol.	17	18	121	155	62	15	1							386		
PM Peak	16:00	16:00	17:00	17:00	17:00	12:00	14:00	23:00	15:00					17:00		
Vol.	14	13	154	195	58	8	1	1	1					426		

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05774Bspeed
Site Code: 2814

Northbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/27/23	0	0	2	5	3	1	0	0	0	0	0	0	0	11	33	37
01:00	0	0	3	7	1	0	0	0	0	0	0	0	0	11	29	32
02:00	1	0	0	3	0	1	0	0	0	0	0	0	0	5	36	38
03:00	0	0	2	0	0	0	0	0	0	0	0	0	0	2	24	24
04:00	0	1	0	4	4	0	0	0	0	0	0	0	0	9	33	34
05:00	0	2	5	6	7	5	0	0	0	0	0	0	0	25	36	38
06:00	0	1	17	35	17	6	1	0	0	0	0	0	0	77	33	37
07:00	**8**	**6**	52	110	**68**	**11**	**4**	0	0	0	0	0	0	259	33	35
08:00	4	4	**86**	**154**	43	4	1	0	0	0	0	0	0	**296**	30	33
09:00	7	2	61	58	16	8	0	0	0	0	0	0	0	152	30	35
10:00	3	6	60	77	20	4	1	0	0	0	0	0	0	171	29	34
11:00	6	5	70	79	16	2	0	0	0	0	0	0	0	178	29	32
12 PM	5	**18**	93	63	11	4	0	0	0	0	0	0	0	194	28	32
13:00	3	12	67	80	8	1	0	0	0	0	0	0	0	171	28	30
14:00	**12**	7	114	122	30	1	0	0	0	0	0	0	0	286	29	32
15:00	7	16	**142**	129	43	5	0	0	0	0	0	0	0	**342**	29	33
16:00	7	12	91	139	47	**6**	2	0	0	0	0	0	0	304	31	34
17:00	6	3	78	**148**	**49**	2	1	0	0	0	0	0	0	287	30	33
18:00	4	9	75	76	25	6	0	0	0	0	0	0	0	195	30	34
19:00	1	5	31	48	10	1	1	0	0	0	0	0	0	97	29	33
20:00	3	3	25	43	17	1	0	0	0	0	0	0	0	92	31	33
21:00	0	3	24	22	5	0	0	0	0	0	0	0	0	54	29	32
22:00	0	1	13	25	5	6	**3**	0	0	0	0	0	0	53	35	40
23:00	0	3	10	18	5	1	0	0	0	0	0	0	0	37	30	34
Total	77	119	1121	1451	450	76	14	0	0	0	0	0	0	3308		
Percent	2.3%	3.6%	33.9%	43.9%	13.6%	2.3%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	07:00	08:00	08:00	07:00	07:00	07:00							08:00		
Vol.	8	6	86	154	68	11	4							296		
PM Peak	14:00	12:00	15:00	17:00	17:00	16:00	22:00							15:00		
Vol.	12	18	142	148	49	6	3							342		

Transportation Data Corporation
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S. Broadway
south of Martin Street
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774Bspeed
Site Code: 2814

Northbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/28/23	0	0	3	10	4	2	0	0	0	0	0	0	0	19	33	37
01:00	0	0	2	5	1	1	0	0	0	0	0	0	0	9	33	37
02:00	0	1	0	5	0	2	1	0	0	0	0	0	0	9	39	42
03:00	0	0	2	1	3	1	0	0	0	0	0	0	0	7	34	38
04:00	0	0	0	1	1	0	0	0	0	0	0	0	0	2	33	34
05:00	0	0	4	7	1	2	0	0	0	0	0	0	0	14	34	38
06:00	0	0	9	12	12	2	0	**1**	0	0	0	0	0	36	34	38
07:00	2	0	13	37	24	7	0	0	0	0	0	0	0	83	33	37
08:00	1	2	19	55	31	7	**2**	0	**1**	0	0	0	0	118	33	37
09:00	1	3	24	54	**35**	4	2	0	1	0	0	0	0	124	33	36
10:00	**4**	4	36	**82**	34	**9**	0	0	0	0	0	0	0	**169**	32	35
11:00	3	**9**	**44**	76	30	3	0	0	0	0	0	0	0	165	31	34
12 PM	**5**	**6**	38	59	33	2	1	0	0	0	0	0	0	144	32	34
13:00	3	3	24	49	34	10	1	0	0	0	0	0	0	124	33	37
14:00	2	1	27	71	**51**	8	0	0	0	0	0	0	0	160	33	35
15:00	3	1	32	80	42	**11**	0	0	0	0	0	0	0	**169**	33	36
16:00	1	2	35	59	35	8	0	0	0	0	0	0	0	140	33	35
17:00	1	5	**44**	**85**	27	5	0	0	0	0	0	0	0	167	31	34
18:00	0	2	38	71	23	4	0	0	0	0	0	0	0	138	31	34
19:00	1	4	35	40	17	4	1	0	0	0	0	0	0	102	31	34
20:00	0	1	20	30	10	3	0	0	0	0	0	0	0	64	31	34
21:00	1	4	17	34	10	4	1	0	0	0	0	0	0	71	32	36
22:00	1	1	13	40	8	3	**2**	0	0	0	0	0	0	68	31	37
23:00	2	1	10	18	7	3	0	0	0	0	0	0	0	41	32	36
Total	31	50	489	981	473	105	11	1	2	0	0	0	0	2143		
Percent	1.4%	2.3%	22.8%	45.8%	22.1%	4.9%	0.5%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	11:00	11:00	10:00	09:00	10:00	08:00	06:00	08:00					10:00		
Vol.	4	9	44	82	35	9	2	1	1					169		
PM Peak	12:00	12:00	17:00	17:00	14:00	15:00	22:00							15:00		
Vol.	5	6	44	85	51	11	2							169		

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S. Broadway
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05774Bspeed
Site Code: 2814

Northbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/29/23	0	0	4	9	5	1	0	**1**	0	0	0	0	0	20	34	45
01:00	0	0	5	4	6	2	0	0	0	0	0	0	0	17	34	37
02:00	0	0	4	9	4	1	0	0	0	0	0	0	0	18	32	35
03:00	0	0	0	5	0	0	0	0	0	0	0	0	0	5	29	29
04:00	0	0	2	3	1	1	0	0	0	0	0	0	0	7	34	38
05:00	0	1	2	3	1	2	0	0	0	0	0	0	0	9	36	38
06:00	0	1	3	10	8	1	0	0	0	0	0	0	0	23	33	34
07:00	0	1	6	23	14	6	0	0	0	0	0	0	0	50	34	37
08:00	0	0	13	19	**23**	2	0	0	0	0	0	0	0	57	33	34
09:00	0	0	15	52	19	2	0	0	0	0	0	0	0	88	32	34
10:00	0	**4**	24	48	15	6	0	0	0	0	0	0	0	97	32	35
11:00	**2**	2	**32**	**70**	16	**7**	0	0	0	0	0	0	0	**129**	31	35
12 PM	2	**6**	**44**	43	14	4	**1**	0	0	0	0	0	0	**114**	30	34
13:00	2	3	19	41	23	**8**	1	0	0	0	0	0	0	97	33	37
14:00	1	5	30	37	17	2	0	0	0	0	0	0	0	92	31	34
15:00	0	2	16	43	23	5	1	0	0	0	0	0	0	90	33	36
16:00	**3**	4	19	**64**	18	2	0	0	0	0	0	0	0	110	30	34
17:00	1	3	25	45	14	4	1	**1**	0	**1**	0	0	0	95	32	37
18:00	2	3	23	34	19	2	1	0	0	0	0	0	0	84	32	34
19:00	1	0	12	41	**24**	5	0	0	0	0	0	0	0	83	33	35
20:00	0	0	9	27	7	1	0	0	0	0	0	0	0	44	31	34
21:00	0	1	8	13	16	3	1	0	0	0	0	0	0	42	34	38
22:00	1	1	6	18	5	1	0	1	0	0	0	0	0	33	32	36
23:00	0	0	2	6	4	1	0	0	0	0	0	0	0	13	33	36
Total	15	37	323	667	296	69	6	3	0	1	0	0	0	1417		
Percent	1.1%	2.6%	22.8%	47.1%	20.9%	4.9%	0.4%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%			
AM Peak	11:00	10:00	11:00	11:00	08:00	11:00		00:00						11:00		
Vol.	2	4	32	70	23	7		1						129		
PM Peak	16:00	12:00	12:00	16:00	19:00	13:00	12:00	17:00		17:00				12:00		
Vol.	3	6	44	64	24	8	1	1		1				114		

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05774Bspeed
Site Code: 2814

Northbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/30/23	0	0	0	1	2	1	0	0	0	0	0	0	0	4	37	39
01:00	0	2	0	1	1	1	0	0	0	0	0	0	0	5	36	38
02:00	0	0	1	2	2	0	0	0	0	0	0	0	0	5	33	34
03:00	0	0	0	1	2	1	0	0	0	0	0	0	0	4	37	39
04:00	0	1	3	4	2	1	0	0	**1**	0	0	0	0	12	35	51
05:00	0	1	4	11	6	0	0	0	0	0	0	0	0	22	32	34
06:00	0	2	12	40	15	4	0	0	0	0	0	0	0	73	32	35
07:00	**10**	**14**	82	156	**62**	**17**	**2**	0	1	0	0	0	0	344	32	35
08:00	7	6	**135**	**177**	60	6	0	0	0	0	0	**1**	0	**392**	30	33
09:00	5	4	56	85	23	1	0	0	0	0	0	0	0	174	29	33
10:00	7	9	49	57	14	2	1	0	0	0	0	0	0	139	29	33
11:00	4	4	42	78	30	3	0	0	0	0	0	0	0	161	31	34
12 PM	2	2	42	54	19	4	**4**	0	0	0	0	0	0	127	32	37
13:00	4	4	48	69	15	1	0	0	0	0	0	0	0	141	29	32
14:00	**10**	**15**	72	103	29	6	1	0	0	0	0	0	0	236	30	34
15:00	7	3	**132**	137	28	5	0	0	0	0	0	0	0	312	29	33
16:00	6	6	126	**154**	**52**	5	0	0	0	0	0	0	0	**349**	30	33
17:00	7	2	76	153	49	**9**	0	**1**	0	0	0	0	0	297	31	34
18:00	0	1	17	67	33	4	3	0	0	0	0	0	0	125	33	35
19:00	2	2	25	36	21	7	1	1	0	0	0	0	0	95	33	38
20:00	0	1	9	18	10	1	1	1	0	0	0	0	0	41	33	39
21:00	0	0	13	14	9	0	0	0	0	0	0	0	0	36	31	34
22:00	0	0	3	12	4	1	0	0	0	0	0	0	0	20	32	35
23:00	0	1	3	7	5	2	0	0	0	0	0	0	0	18	34	37
Total	71	80	950	1437	493	82	13	3	2	0	0	1	0	3132		
Percent	2.3%	2.6%	30.3%	45.9%	15.7%	2.6%	0.4%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	07:00	08:00	08:00	07:00	07:00	07:00		04:00			08:00		08:00		
Vol.	10	14	135	177	62	17	2		1			1		392		
PM Peak	14:00	14:00	15:00	16:00	16:00	17:00	12:00	17:00						16:00		
Vol.	10	15	132	154	52	9	4	1						349		
Grand Total	432	594	6249	9374	3335	608	68	14	5	2	0	1	0	20682		
Percent	2.1%	2.9%	30.2%	45.3%	16.1%	2.9%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			

	15th Percentile :	21 MPH
	50th Percentile :	26 MPH
	85th Percentile :	31 MPH
	95th Percentile :	34 MPH
Stats	10 MPH Pace Speed :	21-30 MPH
	Number of Vehicles > 30 MPH :	4033
	Percent of Vehicles > 30 MPH :	19.5%
	Mean Speed(Average) :	27 MPH

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S. Broadway
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05774Bspeed
Site Code: 2814

Southbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/24/23	0	0	1	4	2	0	0	0	0	0	0	0	0	7	32	34
01:00	0	0	0	5	0	0	1	0	0	0	0	0	0	6	40	43
02:00	0	0	1	1	3	2	1	0	0	0	**1**	0	0	9	43	62
03:00	0	0	0	0	2	0	0	0	0	0	0	0	0	2	34	34
04:00	0	0	0	4	2	0	0	0	0	0	0	0	0	6	32	34
05:00	0	0	0	6	8	1	1	0	0	0	0	0	0	16	34	41
06:00	2	1	11	33	27	7	0	**1**	0	0	0	0	0	82	34	37
07:00	**10**	3	7	48	50	12	0	0	0	0	0	0	0	130	34	37
08:00	3	2	**20**	**70**	54	**15**	3	1	0	0	0	0	0	**168**	34	38
09:00	3	**6**	16	69	52	13	1	0	0	0	0	0	0	160	34	37
10:00	2	0	8	41	**65**	10	**5**	0	0	0	0	0	0	131	34	39
11:00	2	1	7	45	43	11	2	1	0	0	0	0	0	112	34	38
12 PM	3	3	13	65	64	**16**	**2**	0	0	0	0	0	0	166	34	38
13:00	3	1	20	60	69	15	1	0	0	0	0	0	0	169	34	37
14:00	4	**7**	15	65	71	9	2	0	0	0	0	0	0	173	33	36
15:00	5	2	**22**	**85**	56	7	0	0	0	0	0	0	0	177	33	34
16:00	**6**	3	14	85	58	14	0	0	0	0	0	0	0	180	33	36
17:00	3	1	19	82	**73**	11	1	0	0	0	0	0	0	**190**	33	36
18:00	2	4	14	72	39	3	0	0	0	0	0	0	0	134	32	34
19:00	3	2	19	49	32	4	1	0	0	0	0	0	0	110	33	34
20:00	0	1	10	38	23	1	1	0	0	0	0	0	0	74	33	34
21:00	0	0	3	14	14	3	0	0	0	0	0	0	0	34	34	37
22:00	1	2	6	6	10	3	0	0	0	0	0	0	0	28	34	37
23:00	0	1	3	6	7	3	0	0	0	0	0	0	0	20	35	38
Total	52	40	229	953	824	160	22	3	0	0	1	0	0	2284		
Percent	2.3%	1.8%	10.0%	41.7%	36.1%	7.0%	1.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	09:00	08:00	08:00	10:00	08:00	10:00	06:00			02:00			08:00		
Vol.	10	6	20	70	65	15	5	1			1			168		
PM Peak	16:00	14:00	15:00	15:00	17:00	12:00	12:00							17:00		
Vol.	6	7	22	85	73	16	2							190		

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Southbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/25/23	0	0	2	2	2	0	1	0	0	0	0	0	0	7	34	43
01:00	0	0	0	2	3	0	1	0	0	0	0	0	0	6	40	43
02:00	0	0	0	1	1	0	0	0	0	0	0	0	0	2	33	34
03:00	0	0	0	2	1	0	0	0	0	0	0	0	0	3	32	34
04:00	1	0	0	3	3	1	0	0	0	0	0	0	0	8	34	37
05:00	1	0	0	10	2	1	1	0	0	0	0	0	0	15	34	41
06:00	1	0	8	26	34	4	1	0	0	0	0	0	0	74	34	36
07:00	5	2	11	68	**53**	14	0	0	0	0	0	0	0	153	34	37
08:00	**6**	1	13	**70**	53	**19**	**4**	0	0	0	0	0	0	**166**	34	38
09:00	5	3	13	61	50	10	2	0	0	0	0	0	0	144	34	37
10:00	4	1	13	63	47	8	0	0	0	0	0	0	0	136	33	35
11:00	1	**4**	**15**	64	44	17	1	0	0	0	0	0	0	146	34	38
12 PM	5	**6**	16	59	57	9	1	0	0	0	0	0	0	153	33	36
13:00	7	1	12	81	52	**17**	0	0	0	0	0	0	0	170	34	37
14:00	**8**	0	25	79	68	6	**3**	0	0	0	0	0	0	**189**	33	34
15:00	6	4	**28**	75	53	12	0	0	0	0	0	0	0	178	33	36
16:00	5	3	9	83	**73**	12	1	0	0	0	0	0	0	186	33	36
17:00	4	1	17	**84**	67	8	0	0	**1**	0	0	0	0	182	33	34
18:00	4	3	11	79	38	5	0	0	0	0	0	0	0	140	32	34
19:00	0	2	12	49	40	5	0	0	1	0	0	0	0	109	33	35
20:00	0	0	8	49	31	2	1	0	0	0	0	0	0	91	33	34
21:00	0	0	6	36	17	6	0	**1**	0	0	0	0	0	66	34	38
22:00	1	0	2	17	6	6	1	0	0	0	0	0	0	33	36	39
23:00	1	1	3	11	2	1	0	0	0	0	0	0	0	19	30	35
Total	65	32	224	1074	797	163	18	1	2	0	0	0	0	2376		
Percent	2.7%	1.3%	9.4%	45.2%	33.5%	6.9%	0.8%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	11:00	11:00	08:00	07:00	08:00	08:00							08:00		
Vol.	6	4	15	70	53	19	4							166		
PM Peak	14:00	12:00	15:00	17:00	16:00	13:00	14:00	21:00	17:00					14:00		
Vol.	8	6	28	84	73	17	3	1	1					189		

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Southbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/26/23	0	0	0	2	6	2	0	**1**	0	0	0	0	0	11	38	47
01:00	0	0	1	1	1	0	1	0	0	0	0	0	0	4	42	44
02:00	0	0	0	1	2	1	0	0	0	0	0	0	0	4	37	39
03:00	0	0	0	1	1	1	0	0	0	0	0	0	0	3	37	39
04:00	0	1	2	3	3	2	0	0	0	0	0	0	0	11	35	38
05:00	0	1	4	5	5	2	**2**	0	0	0	0	0	0	19	37	42
06:00	3	**2**	13	40	25	6	0	0	0	0	0	0	0	89	33	36
07:00	**14**	2	14	43	55	11	0	0	0	0	0	0	0	139	34	36
08:00	9	2	19	**76**	**64**	9	0	0	0	0	0	0	0	**179**	33	35
09:00	4	1	9	52	52	16	1	0	0	0	0	0	0	135	34	38
10:00	4	2	11	57	56	10	1	1	0	0	0	0	0	142	34	37
11:00	4	2	**20**	50	42	**19**	1	0	0	0	0	0	0	138	34	38
12 PM	**10**	2	17	65	59	13	0	0	0	0	0	0	0	166	33	36
13:00	1	2	11	63	70	**24**	1	0	0	0	0	0	0	172	34	38
14:00	7	2	14	83	**72**	12	2	0	0	0	0	0	0	**192**	33	36
15:00	6	**6**	28	73	68	8	1	0	0	0	0	0	0	190	33	34
16:00	10	3	13	83	64	10	**3**	0	0	0	0	0	0	186	33	36
17:00	3	3	22	**86**	43	5	0	0	0	0	0	0	0	162	32	34
18:00	3	1	**34**	85	33	3	0	0	0	0	0	0	0	159	31	34
19:00	1	2	17	48	25	13	2	0	0	0	0	0	0	108	34	38
20:00	1	3	10	42	31	7	1	0	0	0	0	0	0	95	33	37
21:00	1	0	6	23	18	5	1	0	0	0	0	0	0	54	34	38
22:00	0	1	5	11	11	3	1	0	0	0	0	0	0	32	34	39
23:00	0	1	7	7	7	0	0	0	0	0	0	0	0	22	32	34
Total	81	39	277	1000	813	182	18	2	0	0	0	0	0	2412		
Percent	3.4%	1.6%	11.5%	41.5%	33.7%	7.5%	0.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	06:00	11:00	08:00	08:00	11:00	05:00	00:00						08:00		
Vol.	14	2	20	76	64	19	2	1						179		
PM Peak	12:00	15:00	18:00	17:00	14:00	13:00	16:00							14:00		
Vol.	10	6	34	86	72	24	3							192		

Transportation Data Corporation
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S. Broadway
south of Martin Street
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774Bspeed
Site Code: 2814

Southbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/27/23	0	1	1	5	3	1	**2**	0	0	0	0	0	0	13	40	43
01:00	0	0	1	2	1	4	0	0	0	0	0	0	0	8	38	39
02:00	0	0	2	1	2	1	0	0	0	0	0	0	0	6	35	38
03:00	0	0	1	1	1	1	0	0	0	0	0	0	0	4	37	39
04:00	0	0	1	1	5	0	0	0	0	0	0	0	0	7	33	34
05:00	0	0	2	10	1	1	0	0	0	0	0	0	0	14	29	36
06:00	1	2	9	35	34	6	0	0	0	0	0	0	0	87	33	36
07:00	**8**	1	14	50	52	**14**	0	0	0	0	0	0	0	139	34	37
08:00	6	**3**	14	**81**	**69**	9	0	0	0	0	0	0	0	**182**	33	34
09:00	0	2	**17**	60	49	7	0	0	0	0	0	0	0	135	33	35
10:00	3	0	13	50	44	14	1	0	0	0	0	0	0	125	34	38
11:00	2	1	17	59	57	10	0	0	0	0	0	0	0	146	33	36
12 PM	7	**9**	**40**	68	46	9	0	0	0	0	0	0	0	179	33	35
13:00	2	9	26	65	**62**	6	1	**1**	0	0	0	0	0	172	33	34
14:00	**8**	4	32	**99**	59	6	0	1	0	**1**	0	0	0	**210**	33	34
15:00	5	8	34	71	47	11	0	1	0	0	0	0	0	177	33	36
16:00	4	3	12	68	60	12	0	0	0	0	0	0	0	159	34	36
17:00	6	2	20	84	42	**14**	0	1	0	0	0	0	0	169	33	37
18:00	4	9	25	59	24	5	0	0	0	0	0	0	0	126	32	34
19:00	4	5	32	61	37	6	0	0	0	0	0	0	0	145	32	34
20:00	1	1	17	43	18	2	**2**	0	0	0	0	0	0	84	32	34
21:00	0	1	15	35	12	5	0	0	0	0	0	0	0	68	32	36
22:00	0	1	8	25	12	4	0	0	0	0	0	0	0	50	33	36
23:00	1	4	4	10	15	2	0	0	**1**	0	**1**	0	0	38	34	50
Total	62	66	357	1043	752	150	6	4	1	1	1	0	0	2443		
Percent	2.5%	2.7%	14.6%	42.7%	30.8%	6.1%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	08:00	09:00	08:00	08:00	07:00	00:00							08:00		
Vol.	8	3	17	81	69	14	2							182		
PM Peak	14:00	12:00	12:00	14:00	13:00	17:00	20:00	13:00	23:00	14:00	23:00			14:00		
Vol.	8	9	40	99	62	14	2	1	1	1	1			210		

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S. Broadway
south of Martin Street
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774Bspeed
Site Code: 2814

Southbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/28/23	0	0	6	14	7	1	1	0	0	0	0	0	0	29	33	37
01:00	0	0	0	5	3	2	0	0	0	0	0	0	0	10	36	38
02:00	0	0	2	5	2	0	0	0	0	0	0	0	0	9	31	33
03:00	0	0	1	0	4	0	1	0	0	0	0	0	0	6	40	43
04:00	0	0	0	4	1	0	0	0	0	0	0	0	0	5	31	33
05:00	0	1	3	6	2	3	0	0	0	0	0	0	0	15	36	38
06:00	0	1	5	8	7	6	2	0	0	0	0	0	0	29	38	41
07:00	3	0	3	17	16	6	0	0	0	0	0	0	0	45	34	38
08:00	4	1	7	13	44	8	1	0	0	0	0	0	0	78	34	38
09:00	2	0	4	39	48	9	**4**	0	0	0	0	0	0	106	34	39
10:00	**6**	1	**8**	39	50	12	3	0	0	0	0	0	0	119	34	38
11:00	2	**2**	8	**59**	**68**	**17**	1	0	0	0	0	0	0	**157**	34	37
12 PM	**8**	0	4	61	57	15	**3**	0	0	0	0	0	0	148	34	38
13:00	2	**3**	7	46	68	19	1	0	0	0	0	0	0	146	34	38
14:00	3	0	2	47	**78**	**20**	1	0	0	0	0	0	0	**151**	34	38
15:00	4	0	10	46	68	20	1	0	0	0	0	0	0	149	34	38
16:00	2	1	3	55	68	12	2	0	0	0	0	0	0	143	34	37
17:00	1	2	10	**62**	46	10	2	0	**1**	**1**	0	0	0	135	34	38
18:00	4	3	16	60	36	5	0	0	0	0	0	0	0	124	33	34
19:00	1	3	**23**	52	32	4	1	0	0	1	0	0	0	117	33	35
20:00	1	0	8	40	33	5	3	0	0	0	0	0	0	90	34	38
21:00	1	1	10	35	19	5	0	0	0	0	0	0	0	71	33	36
22:00	0	0	7	22	22	4	0	0	0	0	0	0	0	55	34	36
23:00	0	0	5	13	15	0	0	0	0	0	0	0	0	33	33	34
Total	44	19	152	748	794	183	27	0	1	2	0	0	0	1970		
Percent	2.2%	1.0%	7.7%	38.0%	40.3%	9.3%	1.4%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%			
AM Peak	10:00	11:00	10:00	11:00	11:00	11:00	09:00							11:00		
Vol.	6	2	8	59	68	17	4							157		
PM Peak	12:00	13:00	19:00	17:00	14:00	14:00	12:00		17:00	17:00				14:00		
Vol.	8	3	23	62	78	20	3		1	1				151		

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S. Broadway
south of Martin Street
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774Bspeed
Site Code: 2814

Southbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/29/23	0	0	3	9	9	2	0	0	0	0	0	0	0	23	34	37
01:00	**2**	0	1	3	4	3	0	0	0	0	0	0	0	13	36	38
02:00	0	0	0	4	3	2	**1**	1	0	0	0	0	0	11	41	47
03:00	0	0	1	3	4	2	0	0	**1**	0	0	0	0	11	38	52
04:00	0	0	0	3	3	0	0	0	0	0	0	0	0	6	33	34
05:00	0	0	1	3	2	0	0	0	0	0	0	0	0	6	32	34
06:00	0	0	1	7	10	3	0	0	0	0	0	0	0	21	34	38
07:00	1	0	1	9	14	5	0	0	0	0	0	0	0	30	35	38
08:00	1	0	4	19	22	**14**	0	**2**	0	0	0	0	0	62	37	39
09:00	0	**3**	4	17	40	13	0	0	0	0	0	0	0	77	35	38
10:00	1	2	**15**	33	23	7	1	0	0	0	0	0	0	82	34	37
11:00	1	2	9	**49**	**42**	13	0	0	0	0	0	0	0	**116**	34	37
12 PM	1	1	**14**	**60**	**51**	3	0	**1**	0	0	0	0	0	**131**	33	34
13:00	1	0	7	39	49	**17**	0	0	0	0	0	0	0	113	35	38
14:00	2	**2**	6	37	39	10	1	0	0	0	0	0	0	97	34	38
15:00	**4**	2	5	30	48	7	**2**	0	0	0	0	0	0	98	34	37
16:00	1	2	5	42	32	11	1	1	0	0	0	0	0	95	34	38
17:00	0	1	8	30	38	11	2	0	0	0	0	0	0	90	34	38
18:00	1	0	10	26	22	7	1	0	0	0	0	0	0	67	34	38
19:00	3	0	7	26	27	7	1	0	0	0	0	0	0	71	34	38
20:00	2	2	4	21	13	8	0	0	0	0	0	0	0	50	35	38
21:00	3	0	3	13	20	5	2	0	0	0	0	0	0	46	35	39
22:00	1	0	3	13	13	2	2	0	0	0	0	0	0	34	34	40
23:00	0	1	1	4	8	2	1	0	0	0	0	0	0	17	36	40
Total	25	18	113	500	536	154	15	5	1	0	0	0	0	1367		
Percent	1.8%	1.3%	8.3%	36.6%	39.2%	11.3%	1.1%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak	01:00	09:00	10:00	11:00	11:00	08:00	02:00	08:00	03:00					11:00		
Vol.	2	3	15	49	42	14	1	2	1					116		
PM Peak	15:00	14:00	12:00	12:00	12:00	13:00	15:00	12:00						12:00		
Vol.	4	2	14	60	51	17	2	1						131		

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S. Broadway
south of Martin Street
City, State: E. Providence, RI
Client: Crossman/P. Bannon

05774Bspeed
Site Code: 2814

Southbound

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	Total	85th Percent	95th Percent
10/30/23	0	0	1	3	4	2	1	0	**1**	0	0	0	0	12	40	51
01:00	1	0	0	0	3	1	0	0	0	0	0	0	0	5	36	38
02:00	0	0	1	0	0	2	0	0	0	0	0	0	0	3	38	39
03:00	0	0	0	2	1	0	0	0	0	0	0	0	0	3	32	34
04:00	1	0	1	2	1	2	0	0	0	0	0	0	0	7	37	39
05:00	0	2	2	8	4	2	0	0	0	0	0	0	0	18	34	37
06:00	1	**3**	10	36	21	3	0	0	0	0	0	0	0	74	33	34
07:00	8	1	**16**	54	46	8	0	0	0	0	0	0	0	133	33	35
08:00	6	0	8	**72**	49	**21**	2	0	0	0	0	0	0	**158**	34	38
09:00	3	1	5	58	41	10	**4**	0	0	0	0	0	0	122	34	38
10:00	**9**	0	11	55	29	10	3	0	0	0	0	0	0	117	34	38
11:00	1	2	14	51	**67**	11	3	0	0	0	0	0	0	149	34	37
12 PM	1	2	13	55	**70**	14	**2**	0	0	0	0	0	0	157	34	37
13:00	5	1	10	47	60	**19**	0	0	0	0	0	0	0	142	34	38
14:00	**9**	**4**	19	60	52	12	2	0	0	0	0	0	0	158	34	37
15:00	4	2	**23**	**75**	56	15	0	0	0	0	0	0	0	**175**	33	37
16:00	2	0	6	70	53	15	2	0	0	0	0	0	0	148	34	38
17:00	4	0	7	74	56	7	0	0	0	0	0	0	0	148	33	34
18:00	2	1	14	64	38	8	1	0	0	0	0	0	0	128	33	36
19:00	1	1	10	38	33	5	0	0	0	0	0	0	0	88	33	35
20:00	1	3	4	28	21	3	1	0	**1**	0	0	0	0	62	33	38
21:00	1	0	2	17	18	5	1	0	0	0	0	0	0	44	34	38
22:00	1	0	4	3	8	1	1	0	0	0	0	0	0	18	34	40
23:00	0	0	1	13	3	2	0	0	0	0	0	0	0	19	33	37
Total	61	23	182	885	734	178	23	0	2	0	0	0	0	2088		
Percent	2.9%	1.1%	8.7%	42.4%	35.2%	8.5%	1.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	06:00	07:00	08:00	11:00	08:00	09:00		00:00					08:00		
Vol.	9	3	16	72	67	21	4		1					158		
PM Peak	14:00	14:00	15:00	15:00	12:00	13:00	12:00		20:00					15:00		
Vol.	9	4	23	75	70	19	2		1					175		
Grand Total	390	237	1534	6203	5250	1170	129	15	7	3	2	0	0	14940		
Percent	2.6%	1.6%	10.3%	41.5%	35.1%	7.8%	0.9%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile :	25 MPH
50th Percentile :	29 MPH
85th Percentile :	34 MPH
95th Percentile :	37 MPH

Stats

10 MPH Pace Speed :	26-35 MPH
Number of Vehicles > 30 MPH :	6576
Percent of Vehicles > 30 MPH :	44.0%
Mean Speed(Average) :	30 MPH

A

Intersection Turning Movement Counts

Veterans Memorial Parkway at Lyon Avenue

Veterans Memorial Parkway at South Broadway

South Broadway at Fort Street

Lyon Avenue at Fort Street

Veterans Memorial Parkway at Lyon Avenue

Transportation Data Corporation

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N/S: Lyon Avenue/Bike Path
E/W: Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

File Name : 05774A
Site Code : 2814
Start Date : 10/25/2023
Page No : 1

Groups Printed- Cars & Peds - Trucks & Buses - Bikes by Direction

	Lyon Avenue From North				Veterans Memorial Parkway From East				Ped & Bike Path From South				Veterans Memorial Parkway From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:00 AM	1	0	3	0	6	182	0	0	0	0	0	1	0	123	0	1	317
07:15 AM	0	0	2	0	3	190	0	0	0	0	0	2	0	147	2	0	346
07:30 AM	2	0	3	0	9	166	0	0	0	0	0	6	0	212	0	0	398
07:45 AM	1	0	5	0	9	135	0	0	0	0	0	2	0	233	2	0	387
Total	4	0	13	0	27	673	0	0	0	0	0	11	0	715	4	1	1448
08:00 AM	0	0	1	0	16	198	0	0	0	0	0	2	0	203	1	0	421
08:15 AM	1	0	6	0	8	156	0	0	0	0	0	2	0	142	2	0	317
08:30 AM	2	0	5	0	18	140	0	0	0	0	0	2	0	144	4	0	315
08:45 AM	2	0	7	0	18	146	0	0	0	0	0	2	0	131	10	0	316
Total	5	0	19	0	60	640	0	0	0	0	0	8	0	620	17	0	1369
Grand Total	9	0	32	0	87	1313	0	0	0	0	0	19	0	1335	21	1	2817
Apprch %	22	0	78	0	6.2	93.8	0	0	0	0	0	100	0	98.4	1.5	0.1	
Total %	0.3	0	1.1	0	3.1	46.6	0	0	0	0	0	0.7	0	47.4	0.7	0	
Cars & Peds	6	0	31	0	86	1280	0	0	0	0	0	19	0	1308	21	1	2752
% Cars & Peds	66.7	0	96.9	0	98.9	97.5	0	0	0	0	0	100	0	98	100	100	97.7
Trucks & Buses	2	0	1	0	0	4	0	0	0	0	0	0	0	8	0	0	15
% Trucks & Buses	22.2	0	3.1	0	0	0.3	0	0	0	0	0	0	0	0.6	0	0	0.5
Bikes by Direction	1	0	0	0	1	29	0	0	0	0	0	0	0	19	0	0	50
% Bikes by Direction	11.1	0	0	0	1.1	2.2	0	0	0	0	0	0	0	1.4	0	0	1.8

	Lyon Avenue From North					Veterans Memorial Parkway From East					Ped & Bike Path From South					Veterans Memorial Parkway From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	0	2	0	2	3	190	0	0	193	0	0	0	2	2	0	147	**2**	0	149	346
07:30 AM	**2**	0	3	0	5	9	166	0	0	175	0	0	0	**6**	**6**	0	212	0	0	212	398
07:45 AM	1	0	**5**	0	**6**	9	135	0	0	144	0	0	0	2	2	0	**233**	2	0	**235**	387
08:00 AM	0	0	1	0	1	**16**	**198**	0	0	**214**	0	0	0	2	2	0	203	1	0	204	**421**
Total Volume	3	0	11	0	14	37	689	0	0	726	0	0	0	12	12	0	795	5	0	800	1552
% App. Total	21.4	0	78.6	0		5.1	94.9	0	0		0	0	0	100		0	99.4	0.6	0		
PHF	.375	.000	.550	.000	.583	.578	.870	.000	.000	.848	.000	.000	.000	.500	.500	.000	.853	.625	.000	.851	.922
Cars & Peds	2	0	10	0	12	36	674	0	0	710	0	0	0	12	12	0	781	5	0	786	1520
% Cars & Peds	66.7	0	90.9	0	85.7	97.3	97.8	0	0	97.8	0	0	0	100	100	0	98.2	100	0	98.3	97.9
Trucks & Buses	1	0	1	0	2	0	3	0	0	3	0	0	0	0	0	0	6	0	0	6	11
% Trucks & Buses	33.3	0	9.1	0	14.3	0	0.4	0	0	0.4	0	0	0	0	0	0	0.8	0	0	0.8	0.7
Bikes by Direction	0	0	0	0	0	1	12	0	0	13	0	0	0	0	0	0	8	0	0	8	21
% Bikes by Direction	0	0	0	0	0	2.7	1.7	0	0	1.8	0	0	0	0	0	0	1.0	0	0	1.0	1.4

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N/S: Lyon Avenue/Bike Path
E/W: Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

File Name : 05774A
Site Code : 2814
Start Date : 10/25/2023
Page No : 1

Groups Printed- Cars & Peds

	Lyon Avenue From North				Veterans Memorial Parkway From East				Ped & Bike Path From South				Veterans Memorial Parkway From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:00 AM	0	0	3	0	6	180	0	0	0	0	0	1	0	120	0	1	311
07:15 AM	0	0	2	0	2	190	0	0	0	0	0	2	0	139	2	0	337
07:30 AM	2	0	3	0	9	161	0	0	0	0	0	6	0	209	0	0	390
07:45 AM	0	0	4	0	9	128	0	0	0	0	0	2	0	231	2	0	376
Total	2	0	12	0	26	659	0	0	0	0	0	11	0	699	4	1	1414
08:00 AM	0	0	1	0	16	195	0	0	0	0	0	2	0	202	1	0	417
08:15 AM	1	0	6	0	8	149	0	0	0	0	0	2	0	139	2	0	307
08:30 AM	2	0	5	0	18	134	0	0	0	0	0	2	0	142	4	0	307
08:45 AM	1	0	7	0	18	143	0	0	0	0	0	2	0	126	10	0	307
Total	4	0	19	0	60	621	0	0	0	0	0	8	0	609	17	0	1338
Grand Total	6	0	31	0	86	1280	0	0	0	0	0	19	0	1308	21	1	2752
Apprch %	16.2	0	83.8	0	6.3	93.7	0	0	0	0	0	100	0	98.3	1.6	0.1	
Total %	0.2	0	1.1	0	3.1	46.5	0	0	0	0	0	0.7	0	47.5	0.8	0	

	Lyon Avenue From North					Veterans Memorial Parkway From East					Ped & Bike Path From South					Veterans Memorial Parkway From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	0	2	0	2	2	190	0	0	192	0	0	0	2	2	0	139	**2**	0	141	337
07:30 AM	**2**	0	3	0	**5**	9	161	0	0	170	0	0	0	**6**	**6**	0	209	0	0	209	390
07:45 AM	0	0	**4**	0	4	9	128	0	0	137	0	0	0	2	2	0	**231**	2	0	**233**	376
08:00 AM	0	0	1	0	1	**16**	**195**	0	0	**211**	0	0	0	2	2	0	202	1	0	203	**417**
Total Volume	2	0	10	0	12	36	674	0	0	710	0	0	0	12	12	0	781	5	0	786	1520
% App. Total	16.7	0	83.3	0		5.1	94.9	0	0		0	0	0	100		0	99.4	0.6	0		
PHF	.250	.000	.625	.000	.600	.563	.864	.000	.000	.841	.000	.000	.000	.500	.500	.000	.845	.625	.000	.843	.911

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N/S: Lyon Avenue/Bike Path
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City, State: E. Providence, RI
Client: Crossman/P. Bannon

File Name : 05774A
Site Code : 2814
Start Date : 10/25/2023
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Groups Printed- Trucks & Buses

	Lyon Avenue From North				Veterans Memorial Parkway From East				Ped & Bike Path From South				Veterans Memorial Parkway From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
07:45 AM	1	0	1	0	0	2	0	0	0	0	0	0	0	1	0	0	5
Total	1	0	1	0	0	2	0	0	0	0	0	0	0	7	0	0	11
08:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
08:45 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	4
Grand Total	2	0	1	0	0	4	0	0	0	0	0	0	0	8	0	0	15
Apprch %	66.7	0	33.3	0	0	100	0	0	0	0	0	0	0	100	0	0	
Total %	13.3	0	6.7	0	0	26.7	0	0	0	0	0	0	0	53.3	0	0	

	Lyon Avenue From North					Veterans Memorial Parkway From East					Ped & Bike Path From South					Veterans Memorial Parkway From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**	0	0	**3**	3
07:45 AM	**1**	0	**1**	0	**2**	0	**2**	0	0	**2**	0	0	0	0	0	0	1	0	0	1	**5**
Total Volume	1	0	1	0	2	0	2	0	0	2	0	0	0	0	0	0	7	0	0	7	11
% App. Total	50	0	50	0		0	100	0	0		0	0	0	0		0	100	0	0		
PHF	.250	.000	.250	.000	.250	.000	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.583	.000	.000	.583	.550

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Client: Crossman/P. Bannon

File Name : 05774A
Site Code : 2814
Start Date : 10/25/2023
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Groups Printed- Bikes by Direction

	Lyon Avenue From North				Veterans Memorial Parkway From East				Ped & Bike Path From South				Veterans Memorial Parkway From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:00 AM	1	0	0	0	0	2	0	0	0	0	0	0	0	2	0	0	5
07:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	6	0	0	7
07:30 AM	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	5
07:45 AM	0	0	0	0	0	5	0	0	0	0	0	0	0	1	0	0	6
Total	1	0	0	0	1	12	0	0	0	0	0	0	0	9	0	0	23
08:00 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	3
08:15 AM	0	0	0	0	0	6	0	0	0	0	0	0	0	3	0	0	9
08:30 AM	0	0	0	0	0	6	0	0	0	0	0	0	0	1	0	0	7
08:45 AM	0	0	0	0	0	3	0	0	0	0	0	0	0	5	0	0	8
Total	0	0	0	0	0	17	0	0	0	0	0	0	0	10	0	0	27
Grand Total	1	0	0	0	1	29	0	0	0	0	0	0	0	19	0	0	50
Apprch %	100	0	0	0	3.3	96.7	0	0	0	0	0	0	0	100	0	0	
Total %	2	0	0	0	2	58	0	0	0	0	0	0	0	38	0	0	

	Lyon Avenue From North					Veterans Memorial Parkway From East					Ped & Bike Path From South					Veterans Memorial Parkway From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
08:15 AM	0	0	0	0	0	0	**6**	0	0	**6**	0	0	0	0	0	0	3	0	0	3	**9**
08:30 AM	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	1	0	0	1	7
08:45 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	**5**	0	0	**5**	8
Total Volume	0	0	0	0	0	0	17	0	0	17	0	0	0	0	0	0	10	0	0	10	27
% App. Total	0	0	0	0		0	100	0	0		0	0	0	0		0	100	0	0		
PHF	.000	.000	.000	.000	.000	.000	.708	.000	.000	.708	.000	.000	.000	.000	.000	.000	.500	.000	.000	.500	.750

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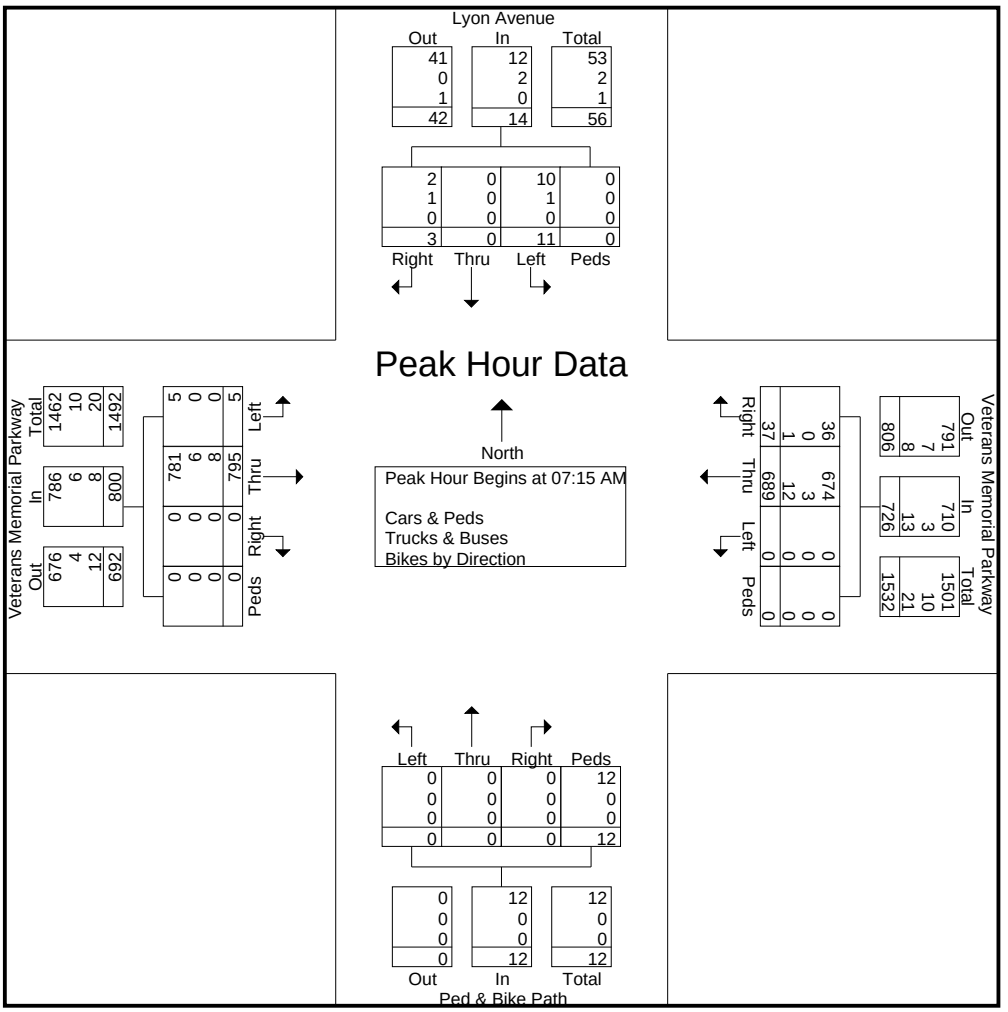
Client: Crossman/P. Bannon

File Name : 05774A
Site Code : 2814
Start Date : 10/25/2023
Page No : 1

	Lyon Avenue From North					Veterans Memorial Parkway From East					Ped & Bike Path From South					Veterans Memorial Parkway From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	0	2	0	2	3	190	0	0	193	0	0	0	2	2	0	147	**2**	0	149	346
07:30 AM	**2**	0	3	0	5	9	166	0	0	175	0	0	0	**6**	**6**	0	212	0	0	212	398
07:45 AM	1	0	**5**	0	**6**	9	135	0	0	144	0	0	0	2	2	0	**233**	2	0	**235**	387
08:00 AM	0	0	1	0	1	**16**	**198**	0	0	**214**	0	0	0	2	2	0	203	1	0	204	**421**
Total Volume	3	0	11	0	14	37	689	0	0	726	0	0	0	12	12	0	795	5	0	800	1552
% App. Total	21.4	0	78.6	0		5.1	94.9	0	0		0	0	0	100		0	99.4	0.6	0		
PHF	.375	.000	.550	.000	.583	.578	.870	.000	.000	.848	.000	.000	.000	.500	.500	.000	.853	.625	.000	.851	.922
Cars & Peds	2	0	10	0	12	36	674	0	0	710	0	0	0	12	12	0	781	5	0	786	1520
% Cars & Peds	66.7	0	90.9	0	85.7	97.3	97.8	0	0	97.8	0	0	0	100	100	0	98.2	100	0	98.3	97.9
Trucks & Buses	1	0	1	0	2	0	3	0	0	3	0	0	0	0	0	0	6	0	0	6	11
% Trucks & Buses	33.3	0	9.1	0	14.3	0	0.4	0	0	0.4	0	0	0	0	0	0	0.8	0	0	0.8	0.7
Bikes by Direction	0	0	0	0	0	1	12	0	0	13	0	0	0	0	0	0	8	0	0	8	21
% Bikes by Direction	0	0	0	0	0	2.7	1.7	0	0	1.8	0	0	0	0	0	0	1.0	0	0	1.0	1.4



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File Name : 05774AA
Site Code : 2814
Start Date : 10/25/2023
Page No : 1

Groups Printed- Cars & Peds - Trucks & Buses - Bikes by Direction

	Lyon Avenue From North				Veterans Memorial Parkway From East				Ped & Bike Path From South				Veterans Memorial Parkway From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
03:00 PM	7	0	6	0	9	175	0	0	0	0	0	5	0	182	4	0	388
03:15 PM	7	0	7	0	5	170	0	0	0	0	0	1	0	160	4	0	354
03:30 PM	7	0	8	0	8	133	0	0	0	0	0	0	0	186	5	0	347
03:45 PM	4	0	4	0	4	147	0	0	0	0	0	3	0	189	5	0	356
Total	25	0	25	0	26	625	0	0	0	0	0	9	0	717	18	0	1445
04:00 PM	2	0	8	0	7	141	0	0	0	0	0	7	0	182	4	0	351
04:15 PM	2	0	7	0	7	111	0	0	0	0	0	7	0	173	7	0	314
04:30 PM	6	0	10	0	4	130	0	0	0	0	0	3	0	167	1	0	321
04:45 PM	2	0	3	0	6	163	0	0	0	0	0	3	0	197	0	0	374
Total	12	0	28	0	24	545	0	0	0	0	0	20	0	719	12	0	1360
05:00 PM	6	0	9	0	7	122	0	0	0	0	0	6	0	198	1	0	349
05:15 PM	3	0	12	0	9	116	0	0	0	0	0	3	0	219	3	0	365
05:30 PM	5	0	11	0	6	128	0	0	0	0	0	3	0	205	3	0	361
05:45 PM	1	0	4	0	14	88	0	0	0	0	0	8	0	182	4	0	301
Total	15	0	36	0	36	454	0	0	0	0	0	20	0	804	11	0	1376
Grand Total	52	0	89	0	86	1624	0	0	0	0	0	49	0	2240	41	0	4181
Apprch %	36.9	0	63.1	0	5	95	0	0	0	0	0	100	0	98.2	1.8	0	
Total %	1.2	0	2.1	0	2.1	38.8	0	0	0	0	0	1.2	0	53.6	1	0	
Cars & Peds	51	0	85	0	84	1549	0	0	0	0	0	49	0	2164	38	0	4020
% Cars & Peds	98.1	0	95.5	0	97.7	95.4	0	0	0	0	0	100	0	96.6	92.7	0	96.1
Trucks & Buses	0	0	1	0	0	5	0	0	0	0	0	0	0	6	1	0	13
% Trucks & Buses	0	0	1.1	0	0	0.3	0	0	0	0	0	0	0	0.3	2.4	0	0.3
Bikes by Direction	1	0	3	0	2	70	0	0	0	0	0	0	0	70	2	0	148
% Bikes by Direction	1.9	0	3.4	0	2.3	4.3	0	0	0	0	0	0	0	3.1	4.9	0	3.5

	Lyon Avenue From North					Veterans Memorial Parkway From East					Ped & Bike Path From South					Veterans Memorial Parkway From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	2	0	3	0	5	6	**163**	0	0	**169**	0	0	0	3	3	0	197	0	0	197	**374**
05:00 PM	**6**	0	9	0	15	7	122	0	0	129	0	0	0	**6**	**6**	0	198	1	0	199	349
05:15 PM	3	0	**12**	0	15	**9**	116	0	0	125	0	0	0	3	3	0	**219**	**3**	0	**222**	365
05:30 PM	5	0	11	0	**16**	6	128	0	0	134	0	0	0	3	3	0	205	3	0	208	361
Total Volume	16	0	35	0	51	28	529	0	0	557	0	0	0	15	15	0	819	7	0	826	1449
% App. Total	31.4	0	68.6	0		5	95	0	0		0	0	0	100		0	99.2	0.8	0		
PHF	.667	.000	.729	.000	.797	.778	.811	.000	.000	.824	.000	.000	.000	.625	.625	.000	.935	.583	.000	.930	.969
Cars & Peds	15	0	33	0	48	26	500	0	0	526	0	0	0	15	15	0	791	6	0	797	1386
% Cars & Peds	93.8	0	94.3	0	94.1	92.9	94.5	0	0	94.4	0	0	0	100	100	0	96.6	85.7	0	96.5	95.7
Trucks & Buses	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3
% Trucks & Buses	0	0	0	0	0	0	0.2	0	0	0.2	0	0	0	0	0	0	0.2	0	0	0.2	0.2
Bikes by Direction	1	0	2	0	3	2	28	0	0	30	0	0	0	0	0	0	26	1	0	27	60
% Bikes by Direction	6.3	0	5.7	0	5.9	7.1	5.3	0	0	5.4	0	0	0	0	0	0	3.2	14.3	0	3.3	4.1

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File Name : 05774AA
Site Code : 2814
Start Date : 10/25/2023
Page No : 1

Groups Printed- Cars & Peds

	Lyon Avenue From North				Veterans Memorial Parkway From East				Ped & Bike Path From South				Veterans Memorial Parkway From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
03:00 PM	7	0	6	0	9	167	0	0	0	0	0	5	0	174	4	0	372
03:15 PM	7	0	6	0	5	154	0	0	0	0	0	1	0	155	4	0	332
03:30 PM	7	0	7	0	8	126	0	0	0	0	0	0	0	179	5	0	332
03:45 PM	4	0	4	0	4	144	0	0	0	0	0	3	0	182	4	0	345
Total	25	0	23	0	26	591	0	0	0	0	0	9	0	690	17	0	1381
04:00 PM	2	0	8	0	7	138	0	0	0	0	0	7	0	177	4	0	343
04:15 PM	2	0	7	0	7	109	0	0	0	0	0	7	0	169	7	0	308
04:30 PM	6	0	10	0	4	125	0	0	0	0	0	3	0	164	1	0	313
04:45 PM	2	0	3	0	5	155	0	0	0	0	0	3	0	191	0	0	359
Total	12	0	28	0	23	527	0	0	0	0	0	20	0	701	12	0	1323
05:00 PM	5	0	9	0	6	117	0	0	0	0	0	6	0	193	1	0	337
05:15 PM	3	0	12	0	9	107	0	0	0	0	0	3	0	209	3	0	346
05:30 PM	5	0	9	0	6	121	0	0	0	0	0	3	0	198	2	0	344
05:45 PM	1	0	4	0	14	86	0	0	0	0	0	8	0	173	3	0	289
Total	14	0	34	0	35	431	0	0	0	0	0	20	0	773	9	0	1316
Grand Total	51	0	85	0	84	1549	0	0	0	0	0	49	0	2164	38	0	4020
Apprch %	37.5	0	62.5	0	5.1	94.9	0	0	0	0	0	100	0	98.3	1.7	0	
Total %	1.3	0	2.1	0	2.1	38.5	0	0	0	0	0	1.2	0	53.8	0.9	0	

	Lyon Avenue From North					Veterans Memorial Parkway From East					Ped & Bike Path From South					Veterans Memorial Parkway From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	2	0	3	0	5	5	**155**	0	0	**160**	0	0	0	3	3	0	191	0	0	191	**359**
05:00 PM	**5**	0	9	0	14	6	117	0	0	123	0	0	0	**6**	**6**	0	193	1	0	194	337
05:15 PM	3	0	**12**	0	**15**	**9**	107	0	0	116	0	0	0	3	3	0	**209**	**3**	0	**212**	346
05:30 PM	5	0	9	0	14	6	121	0	0	127	0	0	0	3	3	0	198	2	0	200	344
Total Volume	15	0	33	0	48	26	500	0	0	526	0	0	0	15	15	0	791	6	0	797	1386
% App. Total	31.2	0	68.8	0		4.9	95.1	0	0		0	0	0	100		0	99.2	0.8	0		
PHF	.750	.000	.688	.000	.800	.722	.806	.000	.000	.822	.000	.000	.000	.625	.625	.000	.946	.500	.000	.940	.965

Transportation Data Corporation

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N/S: Lyon Avenue/Bike Path
E/W: Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

File Name : 05774AA
Site Code : 2814
Start Date : 10/25/2023
Page No : 1

Groups Printed- Trucks & Buses

	Lyon Avenue From North				Veterans Memorial Parkway From East				Ped & Bike Path From South				Veterans Memorial Parkway From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
03:15 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
03:30 PM	0	0	1	0	0	2	0	0	0	0	0	0	0	1	0	0	4
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3
Total	0	0	1	0	0	4	0	0	0	0	0	0	0	4	1	0	10
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
05:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	3
Grand Total	0	0	1	0	0	5	0	0	0	0	0	0	0	6	1	0	13
Apprch %	0	0	100	0	0	100	0	0	0	0	0	0	0	85.7	14.3	0	
Total %	0	0	7.7	0	0	38.5	0	0	0	0	0	0	0	46.2	7.7	0	

	Lyon Avenue From North					Veterans Memorial Parkway From East					Ped & Bike Path From South					Veterans Memorial Parkway From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 03:00 PM																					
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
03:15 PM	0	0	0	0	0	0	**2**	0	0	**2**	0	0	0	0	0	0	0	0	0	0	2
03:30 PM	0	0	**1**	0	**1**	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	**4**
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	**1**	0	**3**	3
Total Volume	0	0	1	0	1	0	4	0	0	4	0	0	0	0	0	0	4	1	0	5	10
% App. Total	0	0	100	0		0	100	0	0		0	0	0	0		0	80	20	0		
PHF	.000	.000	.250	.000	.250	.000	.500	.000	.000	.500	.000	.000	.000	.000	.000	.000	.500	.250	.000	.417	.625

Transportation Data Corporation

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N/S: Lyon Avenue/Bike Path
E/W: Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

File Name : 05774AA
Site Code : 2814
Start Date : 10/25/2023
Page No : 1

Groups Printed- Bikes by Direction

	Lyon Avenue From North				Veterans Memorial Parkway From East				Ped & Bike Path From South				Veterans Memorial Parkway From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
03:00 PM	0	0	0	0	0	8	0	0	0	0	0	0	0	7	0	0	15
03:15 PM	0	0	1	0	0	14	0	0	0	0	0	0	0	5	0	0	20
03:30 PM	0	0	0	0	0	5	0	0	0	0	0	0	0	6	0	0	11
03:45 PM	0	0	0	0	0	3	0	0	0	0	0	0	0	5	0	0	8
Total	0	0	1	0	0	30	0	0	0	0	0	0	0	23	0	0	54
04:00 PM	0	0	0	0	0	3	0	0	0	0	0	0	0	5	0	0	8
04:15 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	4	0	0	6
04:30 PM	0	0	0	0	0	5	0	0	0	0	0	0	0	3	0	0	8
04:45 PM	0	0	0	0	1	8	0	0	0	0	0	0	0	6	0	0	15
Total	0	0	0	0	1	18	0	0	0	0	0	0	0	18	0	0	37
05:00 PM	1	0	0	0	1	5	0	0	0	0	0	0	0	4	0	0	11
05:15 PM	0	0	0	0	0	9	0	0	0	0	0	0	0	9	0	0	18
05:30 PM	0	0	2	0	0	6	0	0	0	0	0	0	0	7	1	0	16
05:45 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	9	1	0	12
Total	1	0	2	0	1	22	0	0	0	0	0	0	0	29	2	0	57
Grand Total	1	0	3	0	2	70	0	0	0	0	0	0	0	70	2	0	148
Apprch %	25	0	75	0	2.8	97.2	0	0	0	0	0	0	0	97.2	2.8	0	
Total %	0.7	0	2	0	1.4	47.3	0	0	0	0	0	0	0	47.3	1.4	0	

	Lyon Avenue From North					Veterans Memorial Parkway From East					Ped & Bike Path From South					Veterans Memorial Parkway From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	0	0	0	0	0	**1**	8	0	0	**9**	0	0	0	0	0	0	6	0	0	6	15
05:00 PM	**1**	0	0	0	1	1	5	0	0	6	0	0	0	0	0	0	4	0	0	4	11
05:15 PM	0	0	0	0	0	0	**9**	0	0	9	0	0	0	0	0	0	**9**	0	0	**9**	**18**
05:30 PM	0	0	**2**	0	**2**	0	6	0	0	6	0	0	0	0	0	0	7	**1**	0	8	16
Total Volume	1	0	2	0	3	2	28	0	0	30	0	0	0	0	0	0	26	1	0	27	60
% App. Total	33.3	0	66.7	0		6.7	93.3	0	0		0	0	0	0		0	96.3	3.7	0		
PHF	.250	.000	.250	.000	.375	.500	.778	.000	.000	.833	.000	.000	.000	.000	.000	.000	.722	.250	.000	.750	.833

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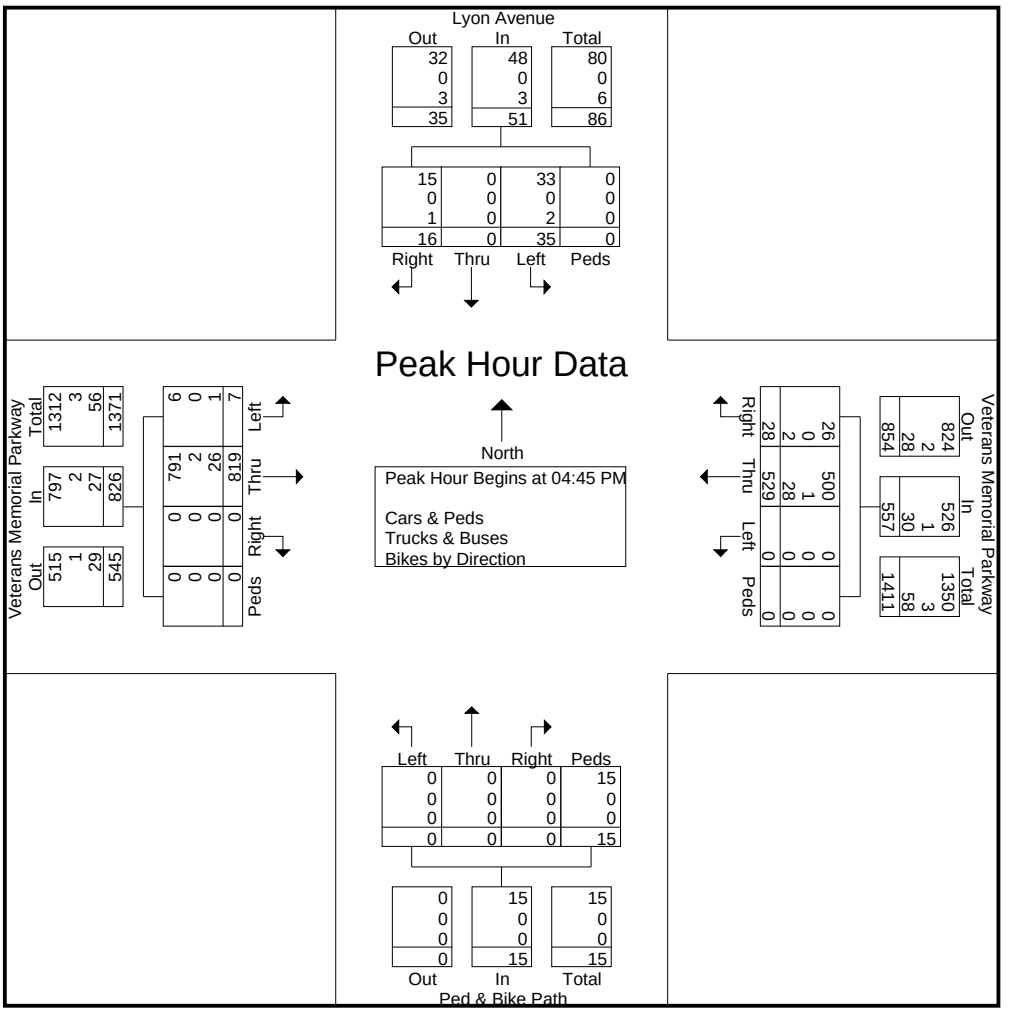
N/S: Lyon Avenue/Bike Path
E/W: Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

File Name : 05774AA
Site Code : 2814
Start Date : 10/25/2023
Page No : 1

	Lyon Avenue From North					Veterans Memorial Parkway From East					Ped & Bike Path From South					Veterans Memorial Parkway From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	2	0	3	0	5	6	**163**	0	0	**169**	0	0	0	3	3	0	197	0	0	197	**374**
05:00 PM	**6**	0	9	0	15	7	122	0	0	129	0	0	0	**6**	**6**	0	198	1	0	199	349
05:15 PM	3	0	**12**	0	15	**9**	116	0	0	125	0	0	0	3	3	0	**219**	**3**	0	**222**	365
05:30 PM	5	0	11	0	**16**	6	128	0	0	134	0	0	0	3	3	0	205	3	0	208	361
Total Volume	16	0	35	0	51	28	529	0	0	557	0	0	0	15	15	0	819	7	0	826	1449
% App. Total	31.4	0	68.6	0		5	95	0	0		0	0	0	100		0	99.2	0.8	0		
PHF	.667	.000	.729	.000	.797	.778	.811	.000	.000	.824	.000	.000	.000	.625	.625	.000	.935	.583	.000	.930	.969
Cars & Peds	15	0	33	0	48	26	500	0	0	526	0	0	0	15	15	0	791	6	0	797	1386
% Cars & Peds	93.8	0	94.3	0	94.1	92.9	94.5	0	0	94.4	0	0	0	100	100	0	96.6	85.7	0	96.5	95.7
Trucks & Buses	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3
% Trucks & Buses	0	0	0	0	0	0	0.2	0	0	0.2	0	0	0	0	0	0	0.2	0	0	0.2	0.2
Bikes by Direction	1	0	2	0	3	2	28	0	0	30	0	0	0	0	0	0	26	1	0	27	60
% Bikes by Direction	6.3	0	5.7	0	5.9	7.1	5.3	0	0	5.4	0	0	0	0	0	0	3.2	14.3	0	3.3	4.1



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N/S: Lyon Avenue/Bike Path
E/W: Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

File Name : 05774AAA
Site Code : 2814
Start Date : 10/28/2023
Page No : 1

Groups Printed- Cars & Peds - Trucks & Buses - Bikes by Direction

	Lyon Avenue From North				Veterans Memorial Parkway From East				Ped & Bike Path From South				Veterans Memorial Parkway From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
11:00 AM	0	0	1	0	4	135	0	0	0	0	0	7	0	116	1	0	264
11:15 AM	1	0	5	0	4	132	0	0	0	0	0	9	0	104	1	0	256
11:30 AM	3	0	3	0	5	120	0	0	0	0	0	5	0	106	1	0	243
11:45 AM	1	0	2	0	6	142	0	0	0	0	0	7	0	138	2	0	298
Total	5	0	11	0	19	529	0	0	0	0	0	28	0	464	5	0	1061
12:00 PM	2	0	4	0	7	136	0	0	3	0	0	4	0	119	1	0	276
12:15 PM	1	0	2	0	1	121	0	0	0	0	0	4	0	131	0	0	260
12:30 PM	3	0	6	0	2	134	0	0	0	0	0	5	0	136	2	0	288
12:45 PM	1	0	8	0	4	140	0	0	0	0	0	5	0	119	2	0	279
Total	7	0	20	0	14	531	0	0	3	0	0	18	0	505	5	0	1103
01:00 PM	0	0	1	0	3	123	0	0	0	0	0	5	0	122	3	0	257
01:15 PM	0	0	6	0	2	116	0	0	0	0	0	5	0	121	1	0	251
01:30 PM	2	0	2	0	4	145	0	0	0	0	0	3	0	120	2	0	278
01:45 PM	2	0	3	1	9	128	0	0	0	0	0	7	0	127	2	0	279
Total	4	0	12	1	18	512	0	0	0	0	0	20	0	490	8	0	1065
Grand Total	16	0	43	1	51	1572	0	0	3	0	0	66	0	1459	18	0	3229
Apprch %	26.7	0	71.7	1.7	3.1	96.9	0	0	4.3	0	0	95.7	0	98.8	1.2	0	
Total %	0.5	0	1.3	0	1.6	48.7	0	0	0.1	0	0	2	0	45.2	0.6	0	
Cars & Peds	16	0	38	1	45	1401	0	0	3	0	0	66	0	1213	18	0	2801
% Cars & Peds	100	0	88.4	100	88.2	89.1	0	0	100	0	0	100	0	83.1	100	0	86.7
Trucks & Buses	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
% Trucks & Buses	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0
Bikes by Direction	0	0	5	0	6	170	0	0	0	0	0	0	0	246	0	0	427
% Bikes by Direction	0	0	11.6	0	11.8	10.8	0	0	0	0	0	0	0	16.9	0	0	13.2

	Lyon Avenue From North					Veterans Memorial Parkway From East					Ped & Bike Path From South					Veterans Memorial Parkway From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:45 AM																					
11:45 AM	1	0	2	0	3	6	**142**	0	0	**148**	0	0	0	**7**	**7**	0	**138**	**2**	0	**140**	**298**
12:00 PM	2	0	4	0	6	**7**	136	0	0	143	**3**	0	0	4	7	0	119	1	0	120	276
12:15 PM	1	0	2	0	3	1	121	0	0	122	0	0	0	4	4	0	131	0	0	131	260
12:30 PM	**3**	0	**6**	0	**9**	2	134	0	0	136	0	0	0	5	5	0	136	2	0	138	288
Total Volume	7	0	14	0	21	16	533	0	0	549	3	0	0	20	23	0	524	5	0	529	1122
% App. Total	33.3	0	66.7	0		2.9	97.1	0	0		13	0	0	87		0	99.1	0.9	0		
PHF	.583	.000	.583	.000	.583	.571	.938	.000	.000	.927	.250	.000	.000	.714	.821	.000	.949	.625	.000	.945	.941
Cars & Peds	7	0	14	0	21	15	467	0	0	482	3	0	0	20	23	0	444	5	0	449	975
% Cars & Peds	100	0	100	0	100	93.8	87.6	0	0	87.8	100	0	0	100	100	0	84.7	100	0	84.9	86.9
Trucks & Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks & Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bikes by Direction	0	0	0	0	0	1	66	0	0	67	0	0	0	0	0	0	80	0	0	80	147
% Bikes by Direction	0	0	0	0	0	6.3	12.4	0	0	12.2	0	0	0	0	0	0	15.3	0	0	15.1	13.1

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N/S: Lyon Avenue/Bike Path
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City, State: E. Providence, RI
Client: Crossman/P. Bannon

File Name : 05774AAA
Site Code : 2814
Start Date : 10/28/2023
Page No : 1

Groups Printed- Cars & Peds

	Lyon Avenue From North				Veterans Memorial Parkway From East				Ped & Bike Path From South				Veterans Memorial Parkway From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
11:00 AM	0	0	1	0	4	125	0	0	0	0	0	7	0	100	1	0	238
11:15 AM	1	0	5	0	4	124	0	0	0	0	0	9	0	88	1	0	232
11:30 AM	3	0	3	0	5	115	0	0	0	0	0	5	0	79	1	0	211
11:45 AM	1	0	2	0	6	125	0	0	0	0	0	7	0	112	2	0	255
Total	5	0	11	0	19	489	0	0	0	0	0	28	0	379	5	0	936
12:00 PM	2	0	4	0	6	124	0	0	3	0	0	4	0	100	1	0	244
12:15 PM	1	0	2	0	1	100	0	0	0	0	0	4	0	116	0	0	224
12:30 PM	3	0	6	0	2	118	0	0	0	0	0	5	0	116	2	0	252
12:45 PM	1	0	5	0	3	121	0	0	0	0	0	5	0	104	2	0	241
Total	7	0	17	0	12	463	0	0	3	0	0	18	0	436	5	0	961
01:00 PM	0	0	0	0	3	104	0	0	0	0	0	5	0	98	3	0	213
01:15 PM	0	0	5	0	2	101	0	0	0	0	0	5	0	100	1	0	214
01:30 PM	2	0	2	0	4	128	0	0	0	0	0	3	0	95	2	0	236
01:45 PM	2	0	3	1	5	116	0	0	0	0	0	7	0	105	2	0	241
Total	4	0	10	1	14	449	0	0	0	0	0	20	0	398	8	0	904
Grand Total	16	0	38	1	45	1401	0	0	3	0	0	66	0	1213	18	0	2801
Apprch %	29.1	0	69.1	1.8	3.1	96.9	0	0	4.3	0	0	95.7	0	98.5	1.5	0	
Total %	0.6	0	1.4	0	1.6	50	0	0	0.1	0	0	2.4	0	43.3	0.6	0	

	Lyon Avenue From North					Veterans Memorial Parkway From East					Ped & Bike Path From South					Veterans Memorial Parkway From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:45 AM																					
11:45 AM	1	0	2	0	3	**6**	**125**	0	0	**131**	0	0	0	**7**	**7**	0	112	**2**	0	114	**255**
12:00 PM	2	0	4	0	6	6	124	0	0	130	**3**	0	0	4	7	0	100	1	0	101	244
12:15 PM	1	0	2	0	3	1	100	0	0	101	0	0	0	4	4	0	**116**	0	0	116	224
12:30 PM	**3**	0	**6**	0	**9**	2	118	0	0	120	0	0	0	5	5	0	116	2	0	**118**	252
Total Volume	7	0	14	0	21	15	467	0	0	482	3	0	0	20	23	0	444	5	0	449	975
% App. Total	33.3	0	66.7	0		3.1	96.9	0	0		13	0	0	87		0	98.9	1.1	0		
PHF	.583	.000	.583	.000	.583	.625	.934	.000	.000	.920	.250	.000	.000	.714	.821	.000	.957	.625	.000	.951	.956

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N/S: Lyon Avenue/Bike Path
E/W: Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

File Name : 05774AAA
Site Code : 2814
Start Date : 10/28/2023

Groups Printed- Trucks & Buses

	Lyon Avenue From North				Veterans Memorial Parkway From East				Ped & Bike Path From South				Veterans Memorial Parkway From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
11:00 AM	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
11:30 AM	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
Total	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
12:15 PM	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
12:45 PM	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
01:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
01:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Apprch %	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	
Total %	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	

	Lyon Avenue From North					Veterans Memorial Parkway From East					Ped & Bike Path From South					Veterans Memorial Parkway From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:15 PM																					
12:15 PM	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 PM	0	0	0	0	0	0	**1**	0	0	**1**	0	0	0	0	0	0	0	0	0	0	**1**
Total Volume	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
% App. Total	0	0	0	0		0	100	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250

Transportation Data Corporation

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N/S: Lyon Avenue/Bike Path
E/W: Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

File Name : 05774AAA
Site Code : 2814
Start Date : 10/28/2023
Page No : 1

Groups Printed- Bikes by Direction

	Lyon Avenue From North				Veterans Memorial Parkway From East				Ped & Bike Path From South				Veterans Memorial Parkway From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
11:00 AM	0	0	0	0	0	10	0	0	0	0	0	0	0	16	0	0	26
11:15 AM	0	0	0	0	0	8	0	0	0	0	0	0	0	16	0	0	24
11:30 AM	0	0	0	0	0	5	0	0	0	0	0	0	0	27	0	0	32
11:45 AM	0	0	0	0	0	17	0	0	0	0	0	0	0	26	0	0	43
Total	0	0	0	0	0	40	0	0	0	0	0	0	0	85	0	0	125
12:00 PM	0	0	0	0	1	12	0	0	0	0	0	0	0	19	0	0	32
12:15 PM	0	0	0	0	0	21	0	0	0	0	0	0	0	15	0	0	36
12:30 PM	0	0	0	0	0	16	0	0	0	0	0	0	0	20	0	0	36
12:45 PM	0	0	3	0	1	19	0	0	0	0	0	0	0	15	0	0	38
Total	0	0	3	0	2	68	0	0	0	0	0	0	0	69	0	0	142
01:00 PM	0	0	1	0	0	18	0	0	0	0	0	0	0	24	0	0	43
01:15 PM	0	0	1	0	0	15	0	0	0	0	0	0	0	21	0	0	37
01:30 PM	0	0	0	0	0	17	0	0	0	0	0	0	0	25	0	0	42
01:45 PM	0	0	0	0	4	12	0	0	0	0	0	0	0	22	0	0	38
Total	0	0	2	0	4	62	0	0	0	0	0	0	0	92	0	0	160
Grand Total	0	0	5	0	6	170	0	0	0	0	0	0	0	246	0	0	427
Apprch %	0	0	100	0	3.4	96.6	0	0	0	0	0	0	0	100	0	0	
Total %	0	0	1.2	0	1.4	39.8	0	0	0	0	0	0	0	57.6	0	0	

	Lyon Avenue From North					Veterans Memorial Parkway From East					Ped & Bike Path From South					Veterans Memorial Parkway From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:45 PM																					
12:45 PM	0	0	**3**	0	**3**	**1**	**19**	0	0	**20**	0	0	0	0	0	0	15	0	0	15	38
01:00 PM	0	0	1	0	1	0	18	0	0	18	0	0	0	0	0	0	24	0	0	24	**43**
01:15 PM	0	0	1	0	1	0	15	0	0	15	0	0	0	0	0	0	21	0	0	21	37
01:30 PM	0	0	0	0	0	0	17	0	0	17	0	0	0	0	0	0	**25**	0	0	**25**	42
Total Volume	0	0	5	0	5	1	69	0	0	70	0	0	0	0	0	0	85	0	0	85	160
% App. Total	0	0	100	0		1.4	98.6	0	0		0	0	0	0		0	100	0	0		
PHF	.000	.000	.417	.000	.417	.250	.908	.000	.000	.875	.000	.000	.000	.000	.000	.000	.850	.000	.000	.850	.930

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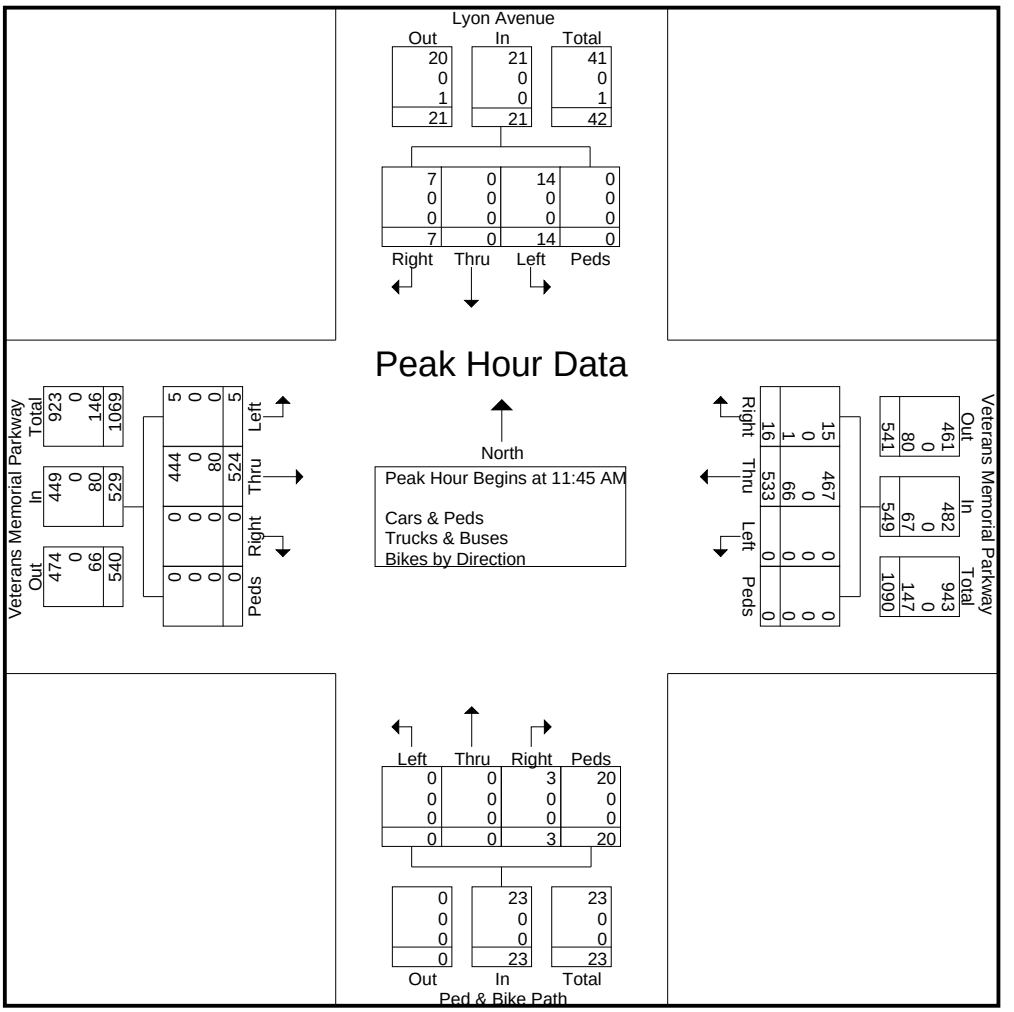
N/S: Lyon Avenue/Bike Path
E/W: Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

File Name : 05774AAA
Site Code : 2814
Start Date : 10/28/2023
Page No : 1

	Lyon Avenue From North					Veterans Memorial Parkway From East					Ped & Bike Path From South					Veterans Memorial Parkway From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:45 AM																					
11:45 AM	1	0	2	0	3	6	**142**	0	0	**148**	0	0	0	**7**	**7**	0	**138**	**2**	0	**140**	**298**
12:00 PM	2	0	4	0	6	**7**	136	0	0	143	**3**	0	0	4	7	0	119	1	0	120	276
12:15 PM	1	0	2	0	3	1	121	0	0	122	0	0	0	4	4	0	131	0	0	131	260
12:30 PM	**3**	0	**6**	0	**9**	2	134	0	0	136	0	0	0	5	5	0	136	2	0	138	288
Total Volume	7	0	14	0	21	16	533	0	0	549	3	0	0	20	23	0	524	5	0	529	1122
% App. Total	33.3	0	66.7	0		2.9	97.1	0	0		13	0	0	87		0	99.1	0.9	0		
PHF	.583	.000	.583	.000	.583	.571	.938	.000	.000	.927	.250	.000	.000	.714	.821	.000	.949	.625	.000	.945	.941
Cars & Peds	7	0	14	0	21	15	467	0	0	482	3	0	0	20	23	0	444	5	0	449	975
% Cars & Peds	100	0	100	0	100	93.8	87.6	0	0	87.8	100	0	0	100	100	0	84.7	100	0	84.9	86.9
Trucks & Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks & Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bikes by Direction	0	0	0	0	0	1	66	0	0	67	0	0	0	0	0	0	80	0	0	80	147
% Bikes by Direction	0	0	0	0	0	6.3	12.4	0	0	12.2	0	0	0	0	0	0	15.3	0	0	15.1	13.1



Veterans Memorial Parkway at South Broadway

Transportation Data Corporation

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N: South Broadway
E/W: Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

File Name : 05774B
Site Code : 2814
Start Date : 10/25/2023
Page No : 1

Groups Printed- Cars & Peds - Trucks & Buses - Bikes by Direction

	South Broadway From North			Veterans Memorial Parkway From East			Veterans Memorial Parkway From West			
Start Time	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	Int. Total
07:00 AM	10	15	0	38	191	0	111	8	0	373
07:15 AM	7	25	0	50	179	0	134	8	0	403
07:30 AM	3	38	0	94	165	0	206	9	0	515
07:45 AM	7	40	0	106	128	0	203	31	0	515
Total	27	118	0	288	663	0	654	56	0	1806
08:00 AM	11	36	0	82	204	0	160	41	0	534
08:15 AM	9	36	0	77	151	0	136	17	0	426
08:30 AM	10	35	0	81	136	0	140	9	0	411
08:45 AM	8	25	0	71	148	0	122	7	0	381
Total	38	132	0	311	639	0	558	74	0	1752
Grand Total	65	250	0	599	1302	0	1212	130	0	3558
Apprch %	20.6	79.4	0	31.5	68.5	0	90.3	9.7	0	
Total %	1.8	7	0	16.8	36.6	0	34.1	3.7	0	
Cars & Peds	64	244	0	591	1298	0	1205	128	0	3530
% Cars & Peds	98.5	97.6	0	98.7	99.7	0	99.4	98.5	0	99.2
Trucks & Buses	1	5	0	8	3	0	7	2	0	26
% Trucks & Buses	1.5	2	0	1.3	0.2	0	0.6	1.5	0	0.7
Bikes by Direction	0	1	0	0	1	0	0	0	0	2
% Bikes by Direction	0	0.4	0	0	0.1	0	0	0	0	0.1

	South Broadway From North				Veterans Memorial Parkway From East				Veterans Memorial Parkway From West				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:30 AM													
07:30 AM	3	38	0	41	94	165	0	259	**206**	9	0	215	515
07:45 AM	7	**40**	0	**47**	**106**	128	0	234	203	31	0	**234**	515
08:00 AM	**11**	36	0	47	82	**204**	0	**286**	160	**41**	0	201	**534**
08:15 AM	9	36	0	45	77	151	0	228	136	17	0	153	426
Total Volume	30	150	0	180	359	648	0	1007	705	98	0	803	1990
% App. Total	16.7	83.3	0		35.7	64.3	0		87.8	12.2	0		
PHF	.682	.938	.000	.957	.847	.794	.000	.880	.856	.598	.000	.858	.932
Cars & Peds	29	147	0	176	354	645	0	999	701	97	0	798	1973
% Cars & Peds	96.7	98.0	0	97.8	98.6	99.5	0	99.2	99.4	99.0	0	99.4	99.1
Trucks & Buses	1	3	0	4	5	3	0	8	4	1	0	5	17
% Trucks & Buses	3.3	2.0	0	2.2	1.4	0.5	0	0.8	0.6	1.0	0	0.6	0.9
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0

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N: South Broadway
E/W: Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

File Name : 05774B
Site Code : 2814
Start Date : 10/25/2023
Page No : 1

Groups Printed- Cars & Peds

	South Broadway From North			Veterans Memorial Parkway From East			Veterans Memorial Parkway From West			
Start Time	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	Int. Total
07:00 AM	10	14	0	38	191	0	111	7	0	371
07:15 AM	7	25	0	48	179	0	132	8	0	399
07:30 AM	3	35	0	92	165	0	203	9	0	507
07:45 AM	7	40	0	104	126	0	202	30	0	509
Total	27	114	0	282	661	0	648	54	0	1786
08:00 AM	11	36	0	81	203	0	160	41	0	532
08:15 AM	8	36	0	77	151	0	136	17	0	425
08:30 AM	10	35	0	80	135	0	139	9	0	408
08:45 AM	8	23	0	71	148	0	122	7	0	379
Total	37	130	0	309	637	0	557	74	0	1744
Grand Total	64	244	0	591	1298	0	1205	128	0	3530
Apprch %	20.8	79.2	0	31.3	68.7	0	90.4	9.6	0	
Total %	1.8	6.9	0	16.7	36.8	0	34.1	3.6	0	

	South Broadway From North				Veterans Memorial Parkway From East				Veterans Memorial Parkway From West				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:30 AM													
07:30 AM	3	35	0	38	92	165	0	257	**203**	9	0	212	507
07:45 AM	7	**40**	0	**47**	**104**	126	0	230	202	30	0	**232**	509
08:00 AM	**11**	36	0	47	81	**203**	0	**284**	160	**41**	0	201	**532**
08:15 AM	8	36	0	44	77	151	0	228	136	17	0	153	425
Total Volume	29	147	0	176	354	645	0	999	701	97	0	798	1973
% App. Total	16.5	83.5	0		35.4	64.6	0		87.8	12.2	0		
PHF	.659	.919	.000	.936	.851	.794	.000	.879	.863	.591	.000	.860	.927

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N: South Broadway
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City, State: E. Providence, RI
Client: Crossman/P. Bannon

File Name : 05774B
Site Code : 2814
Start Date : 10/25/2023
Page No : 1

Groups Printed- Trucks & Buses

	South Broadway From North			Veterans Memorial Parkway From East			Veterans Memorial Parkway From West			
Start Time	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	Int. Total
07:00 AM	0	1	0	0	0	0	0	1	0	2
07:15 AM	0	0	0	2	0	0	2	0	0	4
07:30 AM	0	3	0	2	0	0	3	0	0	8
07:45 AM	0	0	0	2	2	0	1	1	0	6
Total	0	4	0	6	2	0	6	2	0	20
08:00 AM	0	0	0	1	1	0	0	0	0	2
08:15 AM	1	0	0	0	0	0	0	0	0	1
08:30 AM	0	0	0	1	0	0	1	0	0	2
08:45 AM	0	1	0	0	0	0	0	0	0	1
Total	1	1	0	2	1	0	1	0	0	6
Grand Total	1	5	0	8	3	0	7	2	0	26
Apprch %	16.7	83.3	0	72.7	27.3	0	77.8	22.2	0	
Total %	3.8	19.2	0	30.8	11.5	0	26.9	7.7	0	

	South Broadway From North				Veterans Memorial Parkway From East				Veterans Memorial Parkway From West				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:00 AM													
07:00 AM	0	1	0	1	0	0	0	0	0	**1**	0	1	2
07:15 AM	0	0	0	0	**2**	0	0	2	2	0	0	2	4
07:30 AM	0	**3**	0	**3**	2	0	0	2	**3**	0	0	**3**	**8**
07:45 AM	0	0	0	0	2	**2**	0	**4**	1	1	0	2	6
Total Volume	0	4	0	4	6	2	0	8	6	2	0	8	20
% App. Total	0	100	0		75	25	0		75	25	0		
PHF	.000	.333	.000	.333	.750	.250	.000	.500	.500	.500	.000	.667	.625

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N: South Broadway
E/W: Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

File Name : 05774B
Site Code : 2814
Start Date : 10/25/2023
Page No : 1

Groups Printed- Bikes by Direction

	South Broadway From North			Veterans Memorial Parkway From East			Veterans Memorial Parkway From West			
Start Time	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	1	0	0	0	0	1
08:45 AM	0	1	0	0	0	0	0	0	0	1
Total	0	1	0	0	1	0	0	0	0	2
Grand Total	0	1	0	0	1	0	0	0	0	2
Apprch %	0	100	0	0	100	0	0	0	0	
Total %	0	50	0	0	50	0	0	0	0	

	South Broadway From North				Veterans Memorial Parkway From East				Veterans Memorial Parkway From West				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 08:00 AM													
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	**1**	0	**1**	0	0	0	0	**1**
08:45 AM	0	**1**	0	**1**	0	0	0	0	0	0	0	0	1
Total Volume	0	1	0	1	0	1	0	1	0	0	0	0	2
% App. Total	0	100	0		0	100	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.250	.000	.250	.000	.000	.000	.000	.500

Transportation Data Corporation

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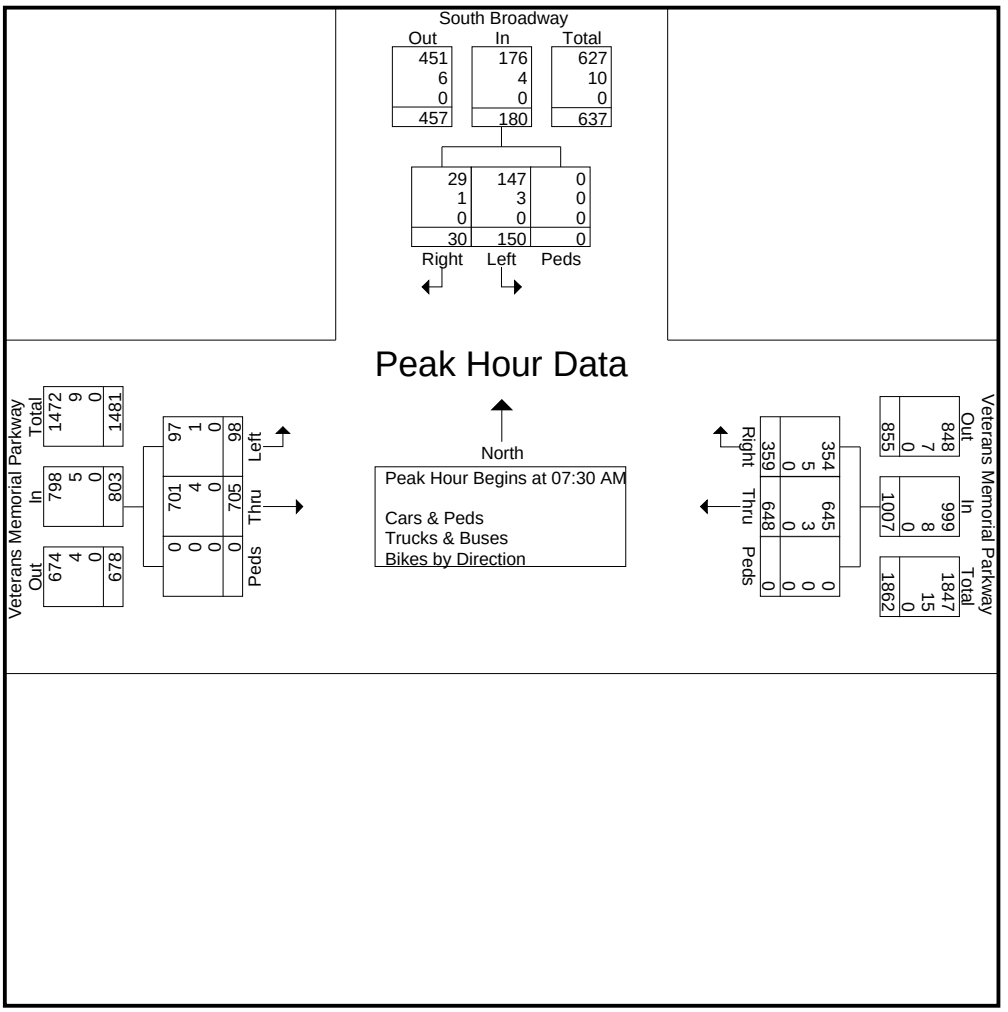
N: South Broadway
E/W: Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

File Name : 05774B
Site Code : 2814
Start Date : 10/25/2023

	South Broadway From North				Veterans Memorial Parkway From East				Veterans Memorial Parkway From West				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:30 AM													
07:30 AM	3	38	0	41	94	165	0	259	**206**	9	0	215	515
07:45 AM	7	**40**	0	**47**	**106**	128	0	234	203	31	0	**234**	515
08:00 AM	**11**	36	0	47	82	**204**	0	**286**	160	**41**	0	201	**534**
08:15 AM	9	36	0	45	77	151	0	228	136	17	0	153	426
Total Volume	30	150	0	180	359	648	0	1007	705	98	0	803	1990
% App. Total	16.7	83.3	0		35.7	64.3	0		87.8	12.2	0		
PHF	.682	.938	.000	.957	.847	.794	.000	.880	.856	.598	.000	.858	.932
Cars & Peds	29	147	0	176	354	645	0	999	701	97	0	798	1973
% Cars & Peds	96.7	98.0	0	97.8	98.6	99.5	0	99.2	99.4	99.0	0	99.4	99.1
Trucks & Buses	1	3	0	4	5	3	0	8	4	1	0	5	17
% Trucks & Buses	3.3	2.0	0	2.2	1.4	0.5	0	0.8	0.6	1.0	0	0.6	0.9
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0



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N: South Broadway
E/W: Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

File Name : 05774BB
Site Code : 2814
Start Date : 10/25/2023
Page No : 1

Groups Printed- Cars & Peds - Trucks & Buses - Bikes by Direction

	South Broadway From North			Veterans Memorial Parkway From East			Veterans Memorial Parkway From West			
Start Time	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	Int. Total
03:00 PM	7	42	0	39	160	0	139	27	0	414
03:15 PM	14	36	0	76	143	0	147	23	0	439
03:30 PM	8	35	0	61	127	0	156	20	0	407
03:45 PM	4	29	0	60	147	0	190	12	0	442
Total	33	142	0	236	577	0	632	82	0	1702
04:00 PM	5	48	0	66	136	0	159	9	0	423
04:15 PM	6	30	0	55	102	0	161	23	0	377
04:30 PM	8	33	0	83	127	0	160	15	0	426
04:45 PM	11	35	0	52	142	0	185	21	0	446
Total	30	146	0	256	507	0	665	68	0	1672
05:00 PM	14	39	0	66	114	0	170	27	0	430
05:15 PM	10	44	0	51	108	0	207	20	0	440
05:30 PM	9	24	0	52	119	0	196	16	0	416
05:45 PM	6	31	0	63	94	0	183	7	0	384
Total	39	138	0	232	435	0	756	70	0	1670
Grand Total	102	426	0	724	1519	0	2053	220	0	5044
Apprch %	19.3	80.7	0	32.3	67.7	0	90.3	9.7	0	
Total %	2	8.4	0	14.4	30.1	0	40.7	4.4	0	
Cars & Peds	101	420	0	720	1513	0	2049	218	0	5021
% Cars & Peds	99	98.6	0	99.4	99.6	0	99.8	99.1	0	99.5
Trucks & Buses	1	6	0	4	3	0	3	2	0	19
% Trucks & Buses	1	1.4	0	0.6	0.2	0	0.1	0.9	0	0.4
Bikes by Direction	0	0	0	0	3	0	1	0	0	4
% Bikes by Direction	0	0	0	0	0.2	0	0	0	0	0.1

	South Broadway From North				Veterans Memorial Parkway From East				Veterans Memorial Parkway From West				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:30 PM													
04:30 PM	8	33	0	41	**83**	127	0	**210**	160	15	0	175	426
04:45 PM	11	35	0	46	52	**142**	0	194	185	21	0	206	**446**
05:00 PM	**14**	39	0	53	66	114	0	180	170	**27**	0	197	430
05:15 PM	10	**44**	0	**54**	51	108	0	159	**207**	20	0	**227**	440
Total Volume	43	151	0	194	252	491	0	743	722	83	0	805	1742
% App. Total	22.2	77.8	0		33.9	66.1	0		89.7	10.3	0		
PHF	.768	.858	.000	.898	.759	.864	.000	.885	.872	.769	.000	.887	.976
Cars & Peds	43	150	0	193	251	490	0	741	721	83	0	804	1738
% Cars & Peds	100	99.3	0	99.5	99.6	99.8	0	99.7	99.9	100	0	99.9	99.8
Trucks & Buses	0	1	0	1	1	0	0	1	0	0	0	0	2
% Trucks & Buses	0	0.7	0	0.5	0.4	0	0	0.1	0	0	0	0	0.1
Bikes by Direction	0	0	0	0	0	1	0	1	1	0	0	1	2
% Bikes by Direction	0	0	0	0	0	0.2	0	0.1	0.1	0	0	0.1	0.1

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City, State: E. Providence, RI
Client: Crossman/P. Bannon

File Name : 05774BB
Site Code : 2814
Start Date : 10/25/2023
Page No : 1

Groups Printed- Cars & Peds

	South Broadway From North			Veterans Memorial Parkway From East			Veterans Memorial Parkway From West			
Start Time	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	Int. Total
03:00 PM	7	41	0	39	159	0	137	27	0	410
03:15 PM	14	34	0	74	140	0	147	23	0	432
03:30 PM	7	35	0	61	126	0	156	18	0	403
03:45 PM	4	27	0	60	147	0	189	12	0	439
Total	32	137	0	234	572	0	629	80	0	1684
04:00 PM	5	48	0	65	136	0	159	9	0	422
04:15 PM	6	30	0	55	102	0	161	23	0	377
04:30 PM	8	32	0	82	127	0	160	15	0	424
04:45 PM	11	35	0	52	142	0	185	21	0	446
Total	30	145	0	254	507	0	665	68	0	1669
05:00 PM	14	39	0	66	114	0	169	27	0	429
05:15 PM	10	44	0	51	107	0	207	20	0	439
05:30 PM	9	24	0	52	119	0	196	16	0	416
05:45 PM	6	31	0	63	94	0	183	7	0	384
Total	39	138	0	232	434	0	755	70	0	1668
Grand Total	101	420	0	720	1513	0	2049	218	0	5021
Apprch %	19.4	80.6	0	32.2	67.8	0	90.4	9.6	0	
Total %	2	8.4	0	14.3	30.1	0	40.8	4.3	0	

	South Broadway From North				Veterans Memorial Parkway From East				Veterans Memorial Parkway From West				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:30 PM													
04:30 PM	8	32	0	40	**82**	127	0	**209**	160	15	0	175	424
04:45 PM	11	35	0	46	52	**142**	0	194	185	21	0	206	**446**
05:00 PM	**14**	39	0	53	66	114	0	180	169	**27**	0	196	429
05:15 PM	10	**44**	0	**54**	51	107	0	158	**207**	20	0	**227**	439
Total Volume	43	150	0	193	251	490	0	741	721	83	0	804	1738
% App. Total	22.3	77.7	0		33.9	66.1	0		89.7	10.3	0		
PHF	.768	.852	.000	.894	.765	.863	.000	.886	.871	.769	.000	.885	.974

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Client: Crossman/P. Bannon

File Name : 05774BB
Site Code : 2814
Start Date : 10/25/2023
Page No : 1

Groups Printed- Trucks & Buses

	South Broadway From North			Veterans Memorial Parkway From East			Veterans Memorial Parkway From West			
Start Time	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	Int. Total
03:00 PM	0	1	0	0	0	0	2	0	0	3
03:15 PM	0	2	0	2	2	0	0	0	0	6
03:30 PM	1	0	0	0	1	0	0	2	0	4
03:45 PM	0	2	0	0	0	0	1	0	0	3
Total	1	5	0	2	3	0	3	2	0	16
04:00 PM	0	0	0	1	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	1	0	1	0	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	2	0	0	0	0	0	3
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	1	6	0	4	3	0	3	2	0	19
Apprch %	14.3	85.7	0	57.1	42.9	0	60	40	0	
Total %	5.3	31.6	0	21.1	15.8	0	15.8	10.5	0	

	South Broadway From North				Veterans Memorial Parkway From East				Veterans Memorial Parkway From West				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 03:00 PM													
03:00 PM	0	1	0	1	0	0	0	0	**2**	0	0	**2**	3
03:15 PM	0	**2**	0	**2**	**2**	**2**	0	**4**	0	0	0	0	**6**
03:30 PM	**1**	0	0	1	0	1	0	1	0	**2**	0	2	4
03:45 PM	0	2	0	2	0	0	0	0	1	0	0	1	3
Total Volume	1	5	0	6	2	3	0	5	3	2	0	5	16
% App. Total	16.7	83.3	0		40	60	0		60	40	0		
PHF	.250	.625	.000	.750	.250	.375	.000	.313	.375	.250	.000	.625	.667

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Client: Crossman/P. Bannon

File Name : 05774BB
Site Code : 2814
Start Date : 10/25/2023
Page No : 1

Groups Printed- Bikes by Direction

	South Broadway From North			Veterans Memorial Parkway From East			Veterans Memorial Parkway From West			
Start Time	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	Int. Total
03:00 PM	0	0	0	0	1	0	0	0	0	1
03:15 PM	0	0	0	0	1	0	0	0	0	1
03:30 PM	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	2	0	0	0	0	2
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	1	0	0	1
05:15 PM	0	0	0	0	1	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	1	0	0	2
Grand Total	0	0	0	0	3	0	1	0	0	4
Apprch %	0	0	0	0	100	0	100	0	0	
Total %	0	0	0	0	75	0	25	0	0	

	South Broadway From North				Veterans Memorial Parkway From East				Veterans Memorial Parkway From West				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 03:00 PM													
03:00 PM	0	0	0	0	0	**1**	0	**1**	0	0	0	0	**1**
03:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	1
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	2	0	2	0	0	0	0	2
% App. Total	0	0	0		0	100	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.500

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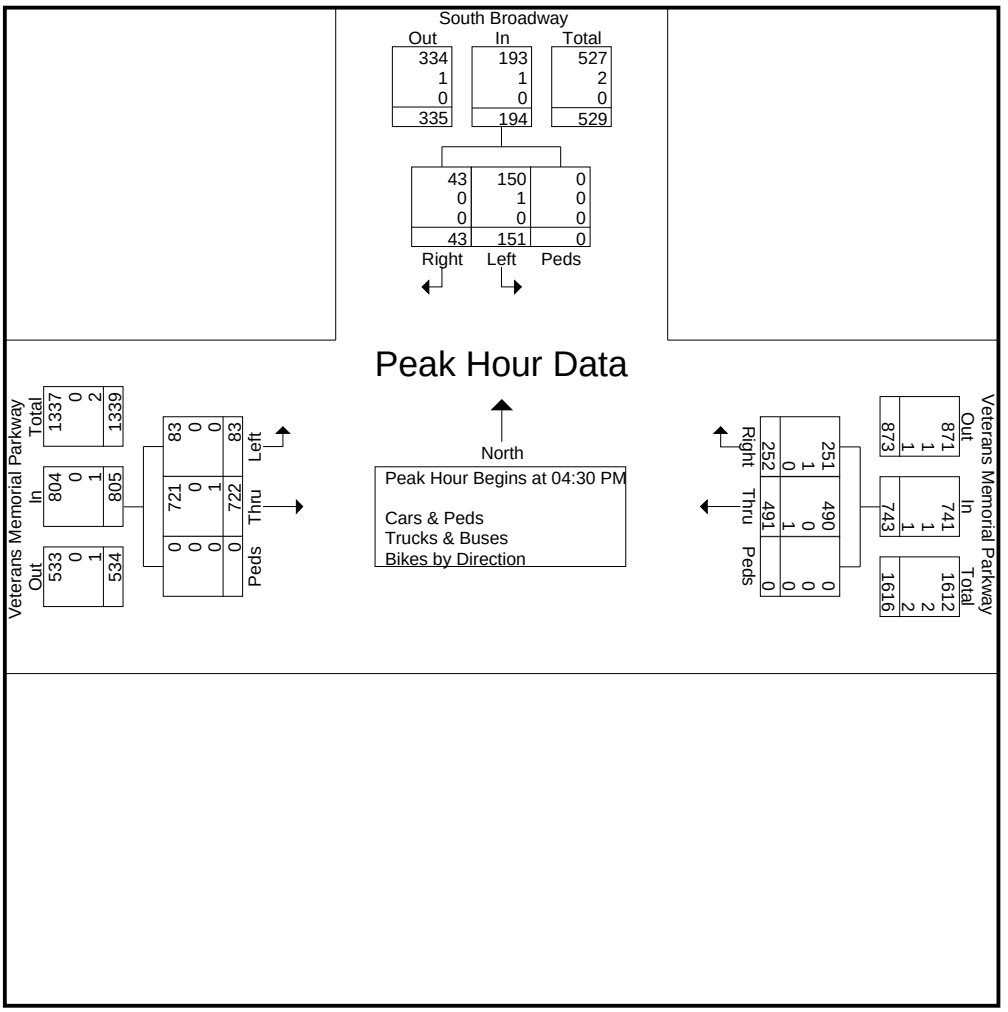
Client: Crossman/P. Bannon

File Name : 05774BB
Site Code : 2814
Start Date : 10/25/2023
Page No : 1

	South Broadway From North				Veterans Memorial Parkway From East				Veterans Memorial Parkway From West				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:30 PM													
04:30 PM	8	33	0	41	**83**	127	0	**210**	160	15	0	175	426
04:45 PM	11	35	0	46	52	**142**	0	194	185	21	0	206	**446**
05:00 PM	**14**	39	0	53	66	114	0	180	170	**27**	0	197	430
05:15 PM	10	**44**	0	**54**	51	108	0	159	**207**	20	0	**227**	440
Total Volume	43	151	0	194	252	491	0	743	722	83	0	805	1742
% App. Total	22.2	77.8	0		33.9	66.1	0		89.7	10.3	0		
PHF	.768	.858	.000	.898	.759	.864	.000	.885	.872	.769	.000	.887	.976
Cars & Peds	43	150	0	193	251	490	0	741	721	83	0	804	1738
% Cars & Peds	100	99.3	0	99.5	99.6	99.8	0	99.7	99.9	100	0	99.9	99.8
Trucks & Buses	0	1	0	1	1	0	0	1	0	0	0	0	2
% Trucks & Buses	0	0.7	0	0.5	0.4	0	0	0.1	0	0	0	0	0.1
Bikes by Direction	0	0	0	0	0	1	0	1	1	0	0	1	2
% Bikes by Direction	0	0	0	0	0	0.2	0	0.1	0.1	0	0	0.1	0.1



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Client: Crossman/P. Bannon

File Name : 05774BBB
Site Code : 2814
Start Date : 10/28/2023
Page No : 1

Groups Printed- Cars & Peds - Trucks & Buses - Bikes by Direction

	South Broadway From North			Veterans Memorial Parkway From East			Veterans Memorial Parkway From West			
Start Time	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	Int. Total
11:00 AM	6	37	0	39	110	0	82	12	0	286
11:15 AM	10	30	0	30	132	0	85	14	0	301
11:30 AM	6	29	0	32	110	0	80	5	0	262
11:45 AM	8	27	0	22	124	0	96	10	0	287
Total	30	123	0	123	476	0	343	41	0	1136
12:00 PM	9	37	0	33	113	0	93	11	0	296
12:15 PM	2	24	0	23	105	0	115	6	0	275
12:30 PM	4	28	0	28	117	0	106	14	0	297
12:45 PM	15	25	0	27	97	0	109	6	0	279
Total	30	114	0	111	432	0	423	37	0	1147
01:00 PM	5	32	0	19	100	0	96	13	0	265
01:15 PM	4	31	0	25	104	0	91	11	0	266
01:30 PM	12	22	0	26	118	0	94	2	0	274
01:45 PM	8	31	0	22	110	0	104	6	0	281
Total	29	116	0	92	432	0	385	32	0	1086
Grand Total	89	353	0	326	1340	0	1151	110	0	3369
Apprch %	20.1	79.9	0	19.6	80.4	0	91.3	8.7	0	
Total %	2.6	10.5	0	9.7	39.8	0	34.2	3.3	0	
Cars & Peds	89	349	0	325	1338	0	1151	109	0	3361
% Cars & Peds	100	98.9	0	99.7	99.9	0	100	99.1	0	99.8
Trucks & Buses	0	1	0	0	1	0	0	1	0	3
% Trucks & Buses	0	0.3	0	0	0.1	0	0	0.9	0	0.1
Bikes by Direction	0	3	0	1	1	0	0	0	0	5
% Bikes by Direction	0	0.8	0	0.3	0.1	0	0	0	0	0.1

	South Broadway From North				Veterans Memorial Parkway From East				Veterans Memorial Parkway From West				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 11:45 AM													
11:45 AM	8	27	0	35	22	**124**	0	**146**	96	10	0	106	287
12:00 PM	**9**	**37**	0	**46**	**33**	113	0	146	93	11	0	104	296
12:15 PM	2	24	0	26	23	105	0	128	**115**	6	0	**121**	275
12:30 PM	4	28	0	32	28	117	0	145	106	**14**	0	120	**297**
Total Volume	23	116	0	139	106	459	0	565	410	41	0	451	1155
% App. Total	16.5	83.5	0		18.8	81.2	0		90.9	9.1	0		
PHF	.639	.784	.000	.755	.803	.925	.000	.967	.891	.732	.000	.932	.972
Cars & Peds	23	115	0	138	106	458	0	564	410	40	0	450	1152
% Cars & Peds	100	99.1	0	99.3	100	99.8	0	99.8	100	97.6	0	99.8	99.7
Trucks & Buses	0	0	0	0	0	0	0	0	0	1	0	1	1
% Trucks & Buses	0	0	0	0	0	0	0	0	0	2.4	0	0.2	0.1
Bikes by Direction	0	1	0	1	0	1	0	1	0	0	0	0	2
% Bikes by Direction	0	0.9	0	0.7	0	0.2	0	0.2	0	0	0	0	0.2

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E/W: Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

File Name : 05774BBB
Site Code : 2814
Start Date : 10/28/2023
Page No : 1

Groups Printed- Cars & Peds

	South Broadway From North			Veterans Memorial Parkway From East			Veterans Memorial Parkway From West			
Start Time	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	Int. Total
11:00 AM	6	37	0	39	110	0	82	12	0	286
11:15 AM	10	30	0	30	132	0	85	14	0	301
11:30 AM	6	29	0	32	110	0	80	5	0	262
11:45 AM	8	26	0	22	124	0	96	10	0	286
Total	30	122	0	123	476	0	343	41	0	1135
12:00 PM	9	37	0	33	113	0	93	11	0	296
12:15 PM	2	24	0	23	105	0	115	6	0	275
12:30 PM	4	28	0	28	116	0	106	13	0	295
12:45 PM	15	24	0	26	97	0	109	6	0	277
Total	30	113	0	110	431	0	423	36	0	1143
01:00 PM	5	32	0	19	99	0	96	13	0	264
01:15 PM	4	30	0	25	104	0	91	11	0	265
01:30 PM	12	22	0	26	118	0	94	2	0	274
01:45 PM	8	30	0	22	110	0	104	6	0	280
Total	29	114	0	92	431	0	385	32	0	1083
Grand Total	89	349	0	325	1338	0	1151	109	0	3361
Apprch %	20.3	79.7	0	19.5	80.5	0	91.3	8.7	0	
Total %	2.6	10.4	0	9.7	39.8	0	34.2	3.2	0	

	South Broadway From North				Veterans Memorial Parkway From East				Veterans Memorial Parkway From West				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 11:45 AM													
11:45 AM	8	26	0	34	22	**124**	0	**146**	96	10	0	106	286
12:00 PM	**9**	**37**	0	**46**	**33**	113	0	146	93	11	0	104	**296**
12:15 PM	2	24	0	26	23	105	0	128	**115**	6	0	**121**	275
12:30 PM	4	28	0	32	28	116	0	144	106	**13**	0	119	295
Total Volume	23	115	0	138	106	458	0	564	410	40	0	450	1152
% App. Total	16.7	83.3	0		18.8	81.2	0		91.1	8.9	0		
PHF	.639	.777	.000	.750	.803	.923	.000	.966	.891	.769	.000	.930	.973

Transportation Data Corporation

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N: South Broadway
E/W: Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

File Name : 05774BBB
Site Code : 2814
Start Date : 10/28/2023
Page No : 1

Groups Printed- Trucks & Buses

	South Broadway From North			Veterans Memorial Parkway From East			Veterans Memorial Parkway From West			
Start Time	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	Int. Total
11:00 AM	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	1	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	0	1
01:00 PM	0	0	0	0	1	0	0	0	0	1
01:15 PM	0	1	0	0	0	0	0	0	0	1
01:30 PM	0	0	0	0	0	0	0	0	0	0
01:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	1	0	0	0	0	2
Grand Total	0	1	0	0	1	0	0	1	0	3
Apprch %	0	100	0	0	100	0	0	100	0	
Total %	0	33.3	0	0	33.3	0	0	33.3	0	

	South Broadway From North				Veterans Memorial Parkway From East				Veterans Memorial Parkway From West				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 12:30 PM													
12:30 PM	0	0	0	0	0	0	0	0	0	**1**	0	**1**	**1**
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 PM	0	0	0	0	0	**1**	0	**1**	0	0	0	0	1
01:15 PM	0	**1**	0	**1**	0	0	0	0	0	0	0	0	1
Total Volume	0	1	0	1	0	1	0	1	0	1	0	1	3
% App. Total	0	100	0		0	100	0		0	100	0		
PHF	.000	.250	.000	.250	.000	.250	.000	.250	.000	.250	.000	.250	.750

Transportation Data Corporation

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N: South Broadway
E/W: Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

File Name : 05774BBB
Site Code : 2814
Start Date : 10/28/2023
Page No : 1

Groups Printed- Bikes by Direction

	South Broadway From North			Veterans Memorial Parkway From East			Veterans Memorial Parkway From West			
Start Time	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	Int. Total
11:00 AM	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	1	0	0	0	0	0	0	0	1
Total	0	1	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	1	0	0	0	0	1
12:45 PM	0	1	0	1	0	0	0	0	0	2
Total	0	1	0	1	1	0	0	0	0	3
01:00 PM	0	0	0	0	0	0	0	0	0	0
01:15 PM	0	0	0	0	0	0	0	0	0	0
01:30 PM	0	0	0	0	0	0	0	0	0	0
01:45 PM	0	1	0	0	0	0	0	0	0	1
Total	0	1	0	0	0	0	0	0	0	1
Grand Total	0	3	0	1	1	0	0	0	0	5
Apprch %	0	100	0	50	50	0	0	0	0	
Total %	0	60	0	20	20	0	0	0	0	

	South Broadway From North				Veterans Memorial Parkway From East				Veterans Memorial Parkway From West				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 12:00 PM													
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	**1**	0	**1**	0	0	0	0	1
12:45 PM	0	**1**	0	**1**	**1**	0	0	1	0	0	0	0	**2**
Total Volume	0	1	0	1	1	1	0	2	0	0	0	0	3
% App. Total	0	100	0		50	50	0		0	0	0		
PHF	.000	.250	.000	.250	.250	.250	.000	.500	.000	.000	.000	.000	.375

Transportation Data Corporation

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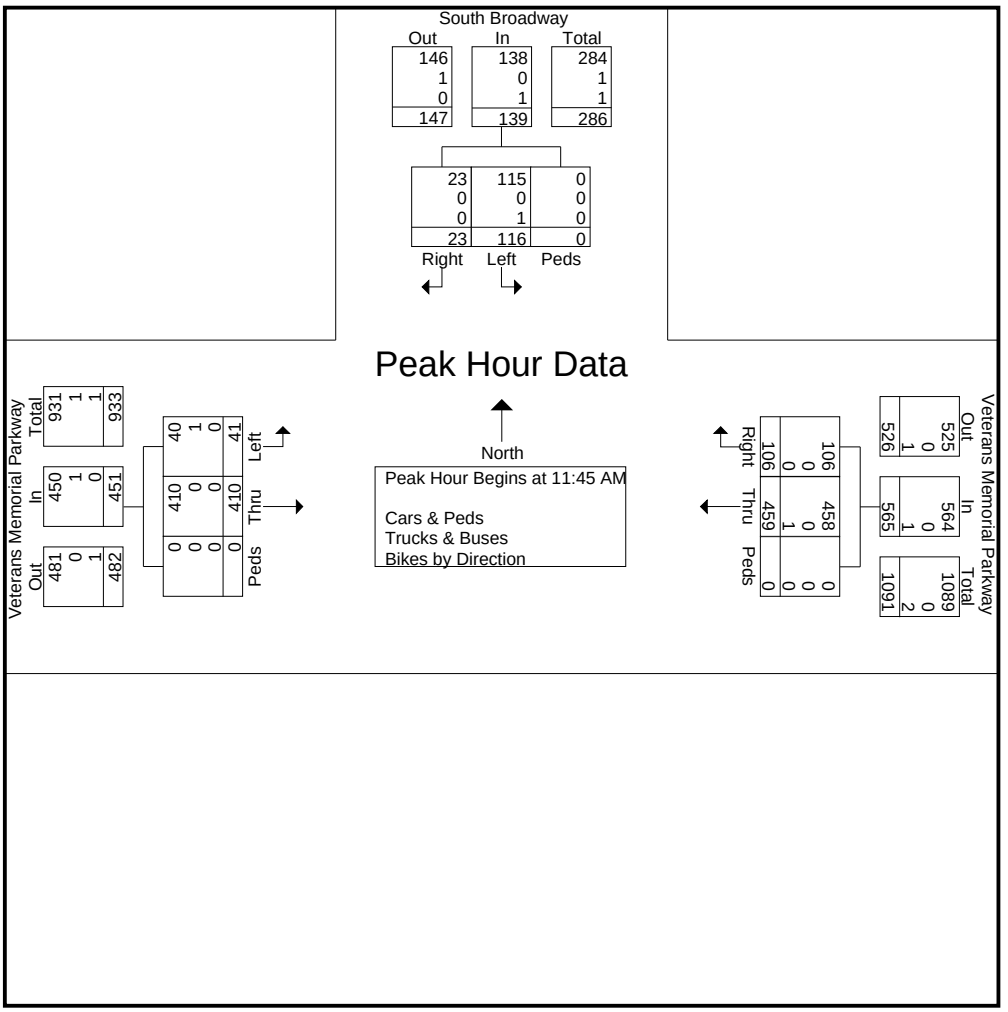
N: South Broadway
E/W: Veterans Memorial Parkway
City, State: E. Providence, RI
Client: Crossman/P. Bannon

File Name : 05774BBB
Site Code : 2814
Start Date : 10/28/2023
Page No : 1

	South Broadway From North				Veterans Memorial Parkway From East				Veterans Memorial Parkway From West				
Start Time	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 11:45 AM													
11:45 AM	8	27	0	35	22	**124**	0	**146**	96	10	0	106	287
12:00 PM	**9**	**37**	0	**46**	**33**	113	0	146	93	11	0	104	296
12:15 PM	2	24	0	26	23	105	0	128	**115**	6	0	**121**	275
12:30 PM	4	28	0	32	28	117	0	145	106	**14**	0	120	**297**
Total Volume	23	116	0	139	106	459	0	565	410	41	0	451	1155
% App. Total	16.5	83.5	0		18.8	81.2	0		90.9	9.1	0		
PHF	.639	.784	.000	.755	.803	.925	.000	.967	.891	.732	.000	.932	.972
Cars & Peds	23	115	0	138	106	458	0	564	410	40	0	450	1152
% Cars & Peds	100	99.1	0	99.3	100	99.8	0	99.8	100	97.6	0	99.8	99.7
Trucks & Buses	0	0	0	0	0	0	0	0	0	1	0	1	1
% Trucks & Buses	0	0	0	0	0	0	0	0	0	2.4	0	0.2	0.1
Bikes by Direction	0	1	0	1	0	1	0	1	0	0	0	0	2
% Bikes by Direction	0	0.9	0	0.7	0	0.2	0	0.2	0	0	0	0	0.2



South Broadway at Fort Street

Accurate Counts

978-664-2565

N/S Street : South Broadway
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100008
Site Code : 86100008
Start Date : 11/5/2020
Page No : 1

Groups Printed- Cars - Trucks

	South Broadway From North		South Broadway From South		Fort St From West		
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
07:00 AM	35	2	1	55	4	2	99
07:15 AM	35	4	0	53	8	2	102
07:30 AM	49	7	1	67	11	5	140
07:45 AM	55	9	4	66	6	2	142
Total	174	22	6	241	29	11	483
08:00 AM	63	2	2	97	7	4	175
08:15 AM	35	8	3	84	5	5	140
08:30 AM	55	5	4	66	5	2	137
08:45 AM	33	6	1	67	3	4	114
Total	186	21	10	314	20	15	566
Grand Total	360	43	16	555	49	26	1049
Apprch %	89.3	10.7	2.8	97.2	65.3	34.7	
Total %	34.3	4.1	1.5	52.9	4.7	2.5	
Cars	352	42	16	543	47	26	1026
% Cars	97.8	97.7	100	97.8	95.9	100	97.8
Trucks	8	1	0	12	2	0	23
% Trucks	2.2	2.3	0	2.2	4.1	0	2.2

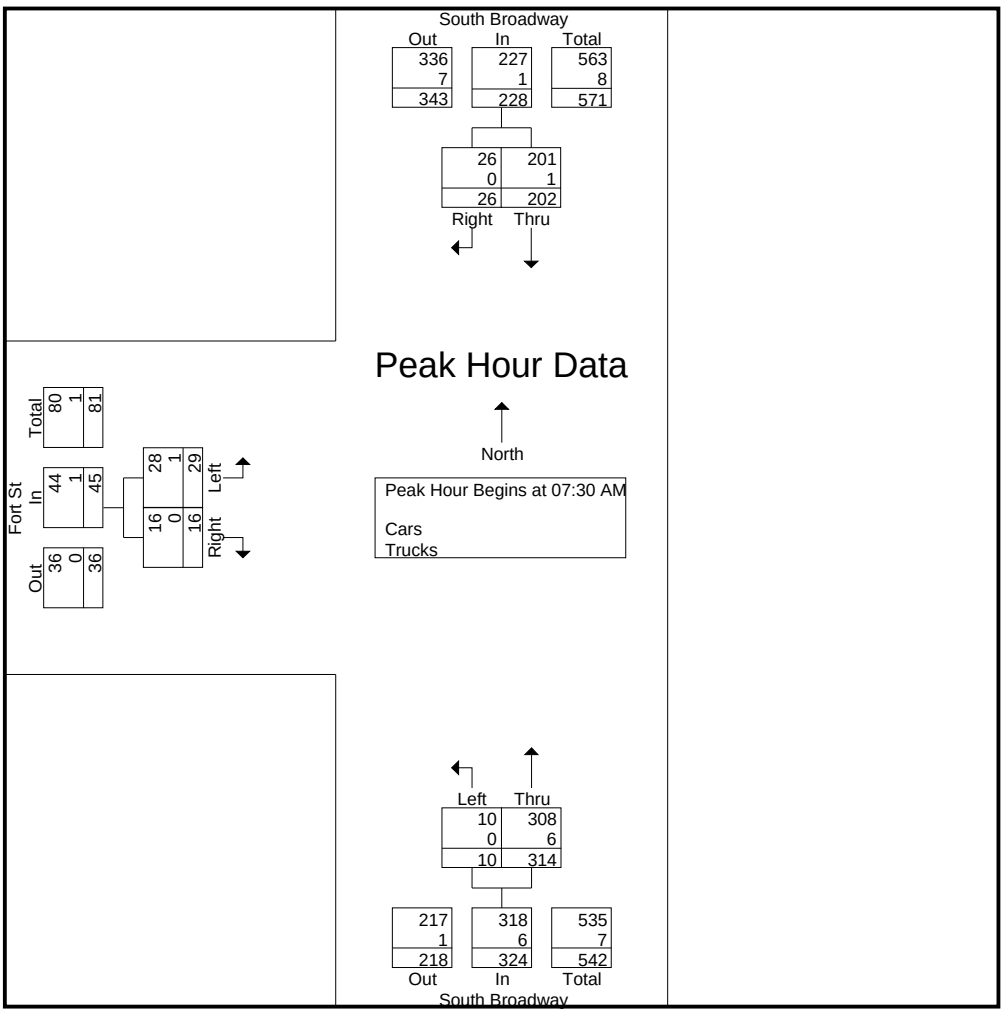
	South Broadway From North			South Broadway From South			Fort St From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	49	7	56	1	67	68	**11**	**5**	**16**	140
07:45 AM	55	**9**	64	**4**	66	70	6	2	8	142
08:00 AM	**63**	2	**65**	2	**97**	**99**	7	4	11	**175**
08:15 AM	35	8	43	3	84	87	5	5	10	140
Total Volume	202	26	228	10	314	324	29	16	45	597
% App. Total	88.6	11.4		3.1	96.9		64.4	35.6		
PHF	.802	.722	.877	.625	.809	.818	.659	.800	.703	.853
Cars	201	26	227	10	308	318	28	16	44	589
% Cars	99.5	100	99.6	100	98.1	98.1	96.6	100	97.8	98.7
Trucks	1	0	1	0	6	6	1	0	1	8
% Trucks	0.5	0	0.4	0	1.9	1.9	3.4	0	2.2	1.3

Accurate Counts

978-664-2565

N/S Street : South Broadway
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100008
Site Code : 86100008
Start Date : 11/5/2020
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45 AM			07:45 AM			07:15 AM		
+0 mins.	55	**9**	64	**4**	66	70	8	2	10
+15 mins.	**63**	2	**65**	2	**97**	**99**	**11**	**5**	**16**
+30 mins.	35	8	43	3	84	87	6	2	8
+45 mins.	55	5	60	4	66	70	7	4	11
Total Volume	208	24	232	13	313	326	32	13	45
% App. Total	89.7	10.3		4	96		71.1	28.9	
PHF	.825	.667	.892	.813	.807	.823	.727	.650	.703
Cars	208	24	232	13	307	320	30	13	43
% Cars	100	100	100	100	98.1	98.2	93.8	100	95.6
Trucks	0	0	0	0	6	6	2	0	2
% Trucks	0	0	0	0	1.9	1.8	6.2	0	4.4

Accurate Counts

978-664-2565

N/S Street : South Broadway
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100008
Site Code : 86100008
Start Date : 11/5/2020
Page No : 4

Groups Printed- Cars

	South Broadway From North		South Broadway From South		Fort St From West		
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
07:00 AM	34	2	1	53	4	2	96
07:15 AM	30	3	0	52	7	2	94
07:30 AM	48	7	1	66	10	5	137
07:45 AM	55	9	4	65	6	2	141
Total	167	21	6	236	27	11	468
08:00 AM	63	2	2	94	7	4	172
08:15 AM	35	8	3	83	5	5	139
08:30 AM	55	5	4	65	5	2	136
08:45 AM	32	6	1	65	3	4	111
Total	185	21	10	307	20	15	558
Grand Total	352	42	16	543	47	26	1026
Apprch %	89.3	10.7	2.9	97.1	64.4	35.6	
Total %	34.3	4.1	1.6	52.9	4.6	2.5	

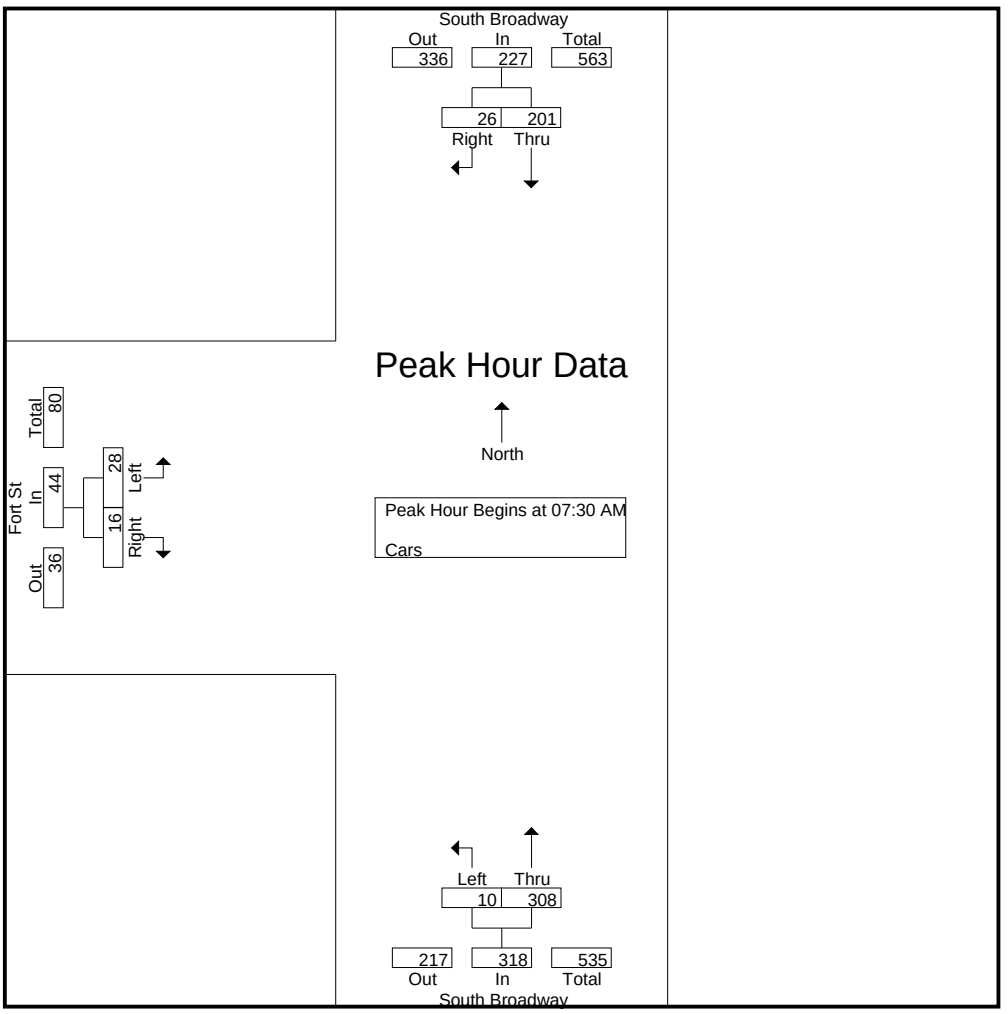
	South Broadway From North			South Broadway From South			Fort St From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	48	7	55	1	66	67	**10**	**5**	**15**	137
07:45 AM	55	**9**	64	**4**	65	69	6	2	8	141
08:00 AM	**63**	2	**65**	2	**94**	**96**	7	4	11	**172**
08:15 AM	35	8	43	3	83	86	5	5	10	139
Total Volume	201	26	227	10	308	318	28	16	44	589
% App. Total	88.5	11.5		3.1	96.9		63.6	36.4		
PHF	.798	.722	.873	.625	.819	.828	.700	.800	.733	.856

Accurate Counts

978-664-2565

N/S Street : South Broadway
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100008
Site Code : 86100008
Start Date : 11/5/2020
Page No : 5



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

	07:45 AM			07:45 AM			07:30 AM		
+0 mins.	55	**9**	64	**4**	65	69	**10**	**5**	**15**
+15 mins.	**63**	2	**65**	2	**94**	**96**	6	2	8
+30 mins.	35	8	43	3	83	86	7	4	11
+45 mins.	55	5	60	4	65	69	5	5	10
Total Volume	208	24	232	13	307	320	28	16	44
% App. Total	89.7	10.3		4.1	95.9		63.6	36.4	
PHF	.825	.667	.892	.813	.816	.833	.700	.800	.733

Accurate Counts

978-664-2565

N/S Street : South Broadway
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100008
Site Code : 86100008
Start Date : 11/5/2020

Groups Printed- Trucks

	South Broadway From North		South Broadway From South		Fort St From West		
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
07:00 AM	1	0	0	2	0	0	3
07:15 AM	5	1	0	1	1	0	8
07:30 AM	1	0	0	1	1	0	3
07:45 AM	0	0	0	1	0	0	1
Total	7	1	0	5	2	0	15
08:00 AM	0	0	0	3	0	0	3
08:15 AM	0	0	0	1	0	0	1
08:30 AM	0	0	0	1	0	0	1
08:45 AM	1	0	0	2	0	0	3
Total	1	0	0	7	0	0	8
Grand Total	8	1	0	12	2	0	23
Apprch %	88.9	11.1	0	100	100	0	
Total %	34.8	4.3	0	52.2	8.7	0	

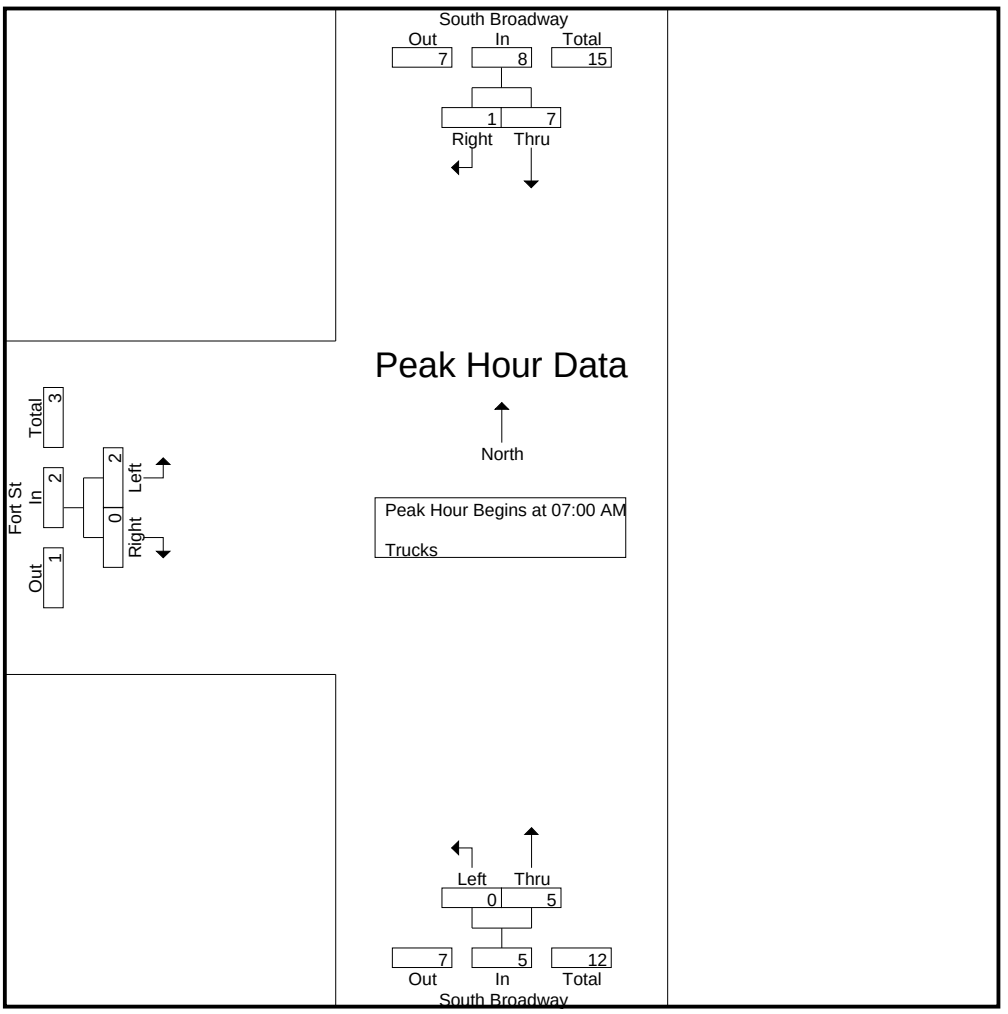
	South Broadway From North			South Broadway From South			Fort St From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	1	0	1	0	**2**	**2**	0	0	0	3
07:15 AM	**5**	**1**	**6**	0	1	1	**1**	0	**1**	**8**
07:30 AM	1	0	1	0	1	1	1	0	1	3
07:45 AM	0	0	0	0	1	1	0	0	0	1
Total Volume	7	1	8	0	5	5	2	0	2	15
% App. Total	87.5	12.5		0	100		100	0		
PHF	.350	.250	.333	.000	.625	.625	.500	.000	.500	.469

Accurate Counts

978-664-2565

N/S Street : South Broadway
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100008
Site Code : 86100008
Start Date : 11/5/2020
Page No : 8



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

	07:00 AM			08:00 AM			07:00 AM		
+0 mins.	1	0	1	0	**3**	**3**	0	0	0
+15 mins.	**5**	**1**	**6**	0	1	1	**1**	0	**1**
+30 mins.	1	0	1	0	1	1	1	0	1
+45 mins.	0	0	0	0	2	2	0	0	0
Total Volume	7	1	8	0	7	7	2	0	2
% App. Total	87.5	12.5		0	100		100	0	
PHF	.350	.250	.333	.000	.583	.583	.500	.000	.500

Accurate Counts

978-664-2565

N/S Street : South Broadway
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100008
Site Code : 86100008
Start Date : 11/5/2020

Groups Printed- Bikes Peds

	South Broadway From North			South Broadway From South			Fort St From West					
Start Time	Thru	Right	Peds	Left	Thru	Peds	Left	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	1	0	0	0	0	0	0	1	0	1
07:15 AM	0	0	0	0	0	0	0	0	1	1	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	0	0	0	0	1	2	0	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	1	1	0	3	4	1	5
Total	0	0	0	0	0	1	1	0	3	4	1	5
Grand Total	0	0	1	0	0	1	1	0	4	6	1	7
Apprch %	0	0		0	0		100	0				
Total %	0	0		0	0		100	0		85.7	14.3	

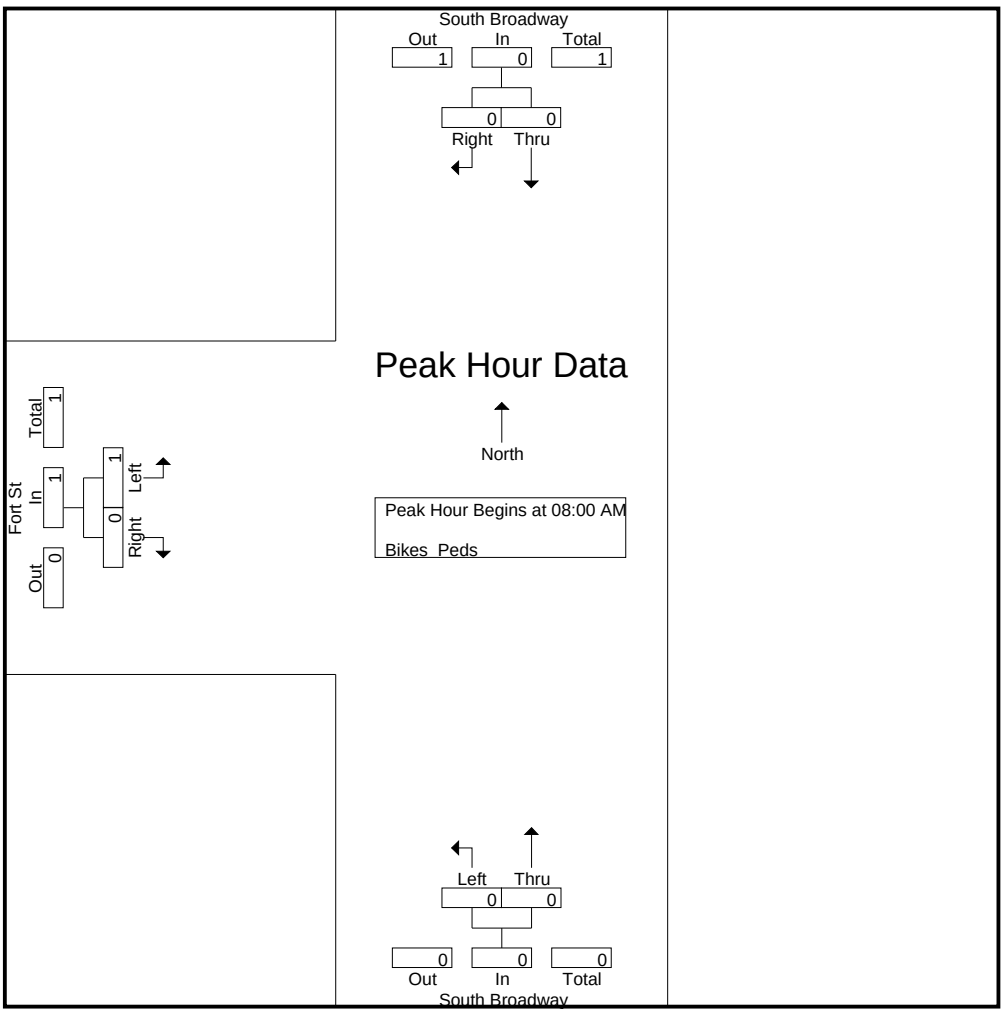
	South Broadway From North			South Broadway From South			Fort St From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00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

Accurate Counts

978-664-2565

N/S Street : South Broadway
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100008
Site Code : 86100008
Start Date : 11/5/2020
Page No : 11



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

	07:00 AM			07:00 AM			08:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	**1**	0	**1**
Total Volume	0	0	0	0	0	0	1	0	1
% App. Total	0	0		0	0		100	0	
PHF	.000	.000	.000	.000	.000	.000	.250	.000	.250

Accurate Counts

978-664-2565

N/S Street : South Broadway
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100008
Site Code : 86100008
Start Date : 11/5/2020
Page No : 1

Groups Printed- Cars - Trucks

	South Broadway From North		South Broadway From South		Fort St From West		
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
04:00 PM	89	6	15	65	12	4	191
04:15 PM	78	5	4	68	5	7	167
04:30 PM	77	9	2	80	5	5	178
04:45 PM	76	8	1	88	10	4	187
Total	320	28	22	301	32	20	723
05:00 PM	70	13	3	75	4	6	171
05:15 PM	82	10	0	58	11	3	164
05:30 PM	67	6	4	51	7	5	140
05:45 PM	67	5	3	56	8	3	142
Total	286	34	10	240	30	17	617
Grand Total	606	62	32	541	62	37	1340
Apprch %	90.7	9.3	5.6	94.4	62.6	37.4	
Total %	45.2	4.6	2.4	40.4	4.6	2.8	
Cars	604	62	32	538	62	37	1335
% Cars	99.7	100	100	99.4	100	100	99.6
Trucks	2	0	0	3	0	0	5
% Trucks	0.3	0	0	0.6	0	0	0.4

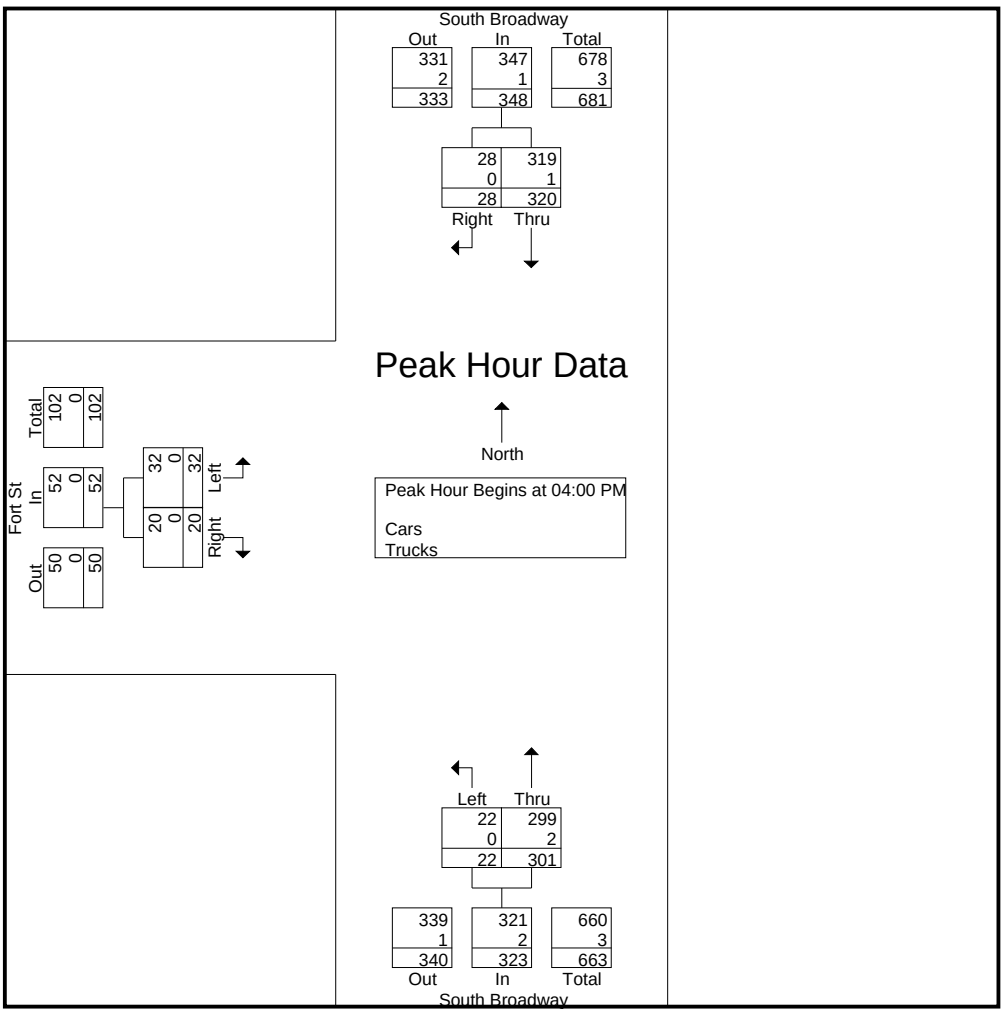
	South Broadway From North			South Broadway From South			Fort St From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	**89**	6	**95**	**15**	65	80	**12**	4	**16**	**191**
04:15 PM	78	5	83	4	68	72	5	**7**	12	167
04:30 PM	77	**9**	86	2	80	82	5	5	10	178
04:45 PM	76	8	84	1	**88**	**89**	10	4	14	187
Total Volume	320	28	348	22	301	323	32	20	52	723
% App. Total	92	8		6.8	93.2		61.5	38.5		
PHF	.899	.778	.916	.367	.855	.907	.667	.714	.813	.946
Cars	319	28	347	22	299	321	32	20	52	720
% Cars	99.7	100	99.7	100	99.3	99.4	100	100	100	99.6
Trucks	1	0	1	0	2	2	0	0	0	3
% Trucks	0.3	0	0.3	0	0.7	0.6	0	0	0	0.4

Accurate Counts

978-664-2565

N/S Street : South Broadway
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100008
Site Code : 86100008
Start Date : 11/5/2020
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	**89**	6	**95**	**15**	65	80	**12**	4	**16**
+15 mins.	78	5	83	4	68	72	5	**7**	12
+30 mins.	77	**9**	86	2	80	82	5	5	10
+45 mins.	76	8	84	1	**88**	**89**	10	4	14
Total Volume	320	28	348	22	301	323	32	20	52
% App. Total	92	8		6.8	93.2		61.5	38.5	
PHF	.899	.778	.916	.367	.855	.907	.667	.714	.813
Cars	319	28	347	22	299	321	32	20	52
% Cars	99.7	100	99.7	100	99.3	99.4	100	100	100
Trucks	1	0	1	0	2	2	0	0	0
% Trucks	0.3	0	0.3	0	0.7	0.6	0	0	0

Accurate Counts

978-664-2565

N/S Street : South Broadway
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100008
Site Code : 86100008
Start Date : 11/5/2020
Page No : 4

Groups Printed- Cars

	South Broadway From North		South Broadway From South		Fort St From West		
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
04:00 PM	89	6	15	64	12	4	190
04:15 PM	78	5	4	68	5	7	167
04:30 PM	76	9	2	80	5	5	177
04:45 PM	76	8	1	87	10	4	186
Total	319	28	22	299	32	20	720
05:00 PM	70	13	3	74	4	6	170
05:15 PM	81	10	0	58	11	3	163
05:30 PM	67	6	4	51	7	5	140
05:45 PM	67	5	3	56	8	3	142
Total	285	34	10	239	30	17	615
Grand Total	604	62	32	538	62	37	1335
Apprch %	90.7	9.3	5.6	94.4	62.6	37.4	
Total %	45.2	4.6	2.4	40.3	4.6	2.8	

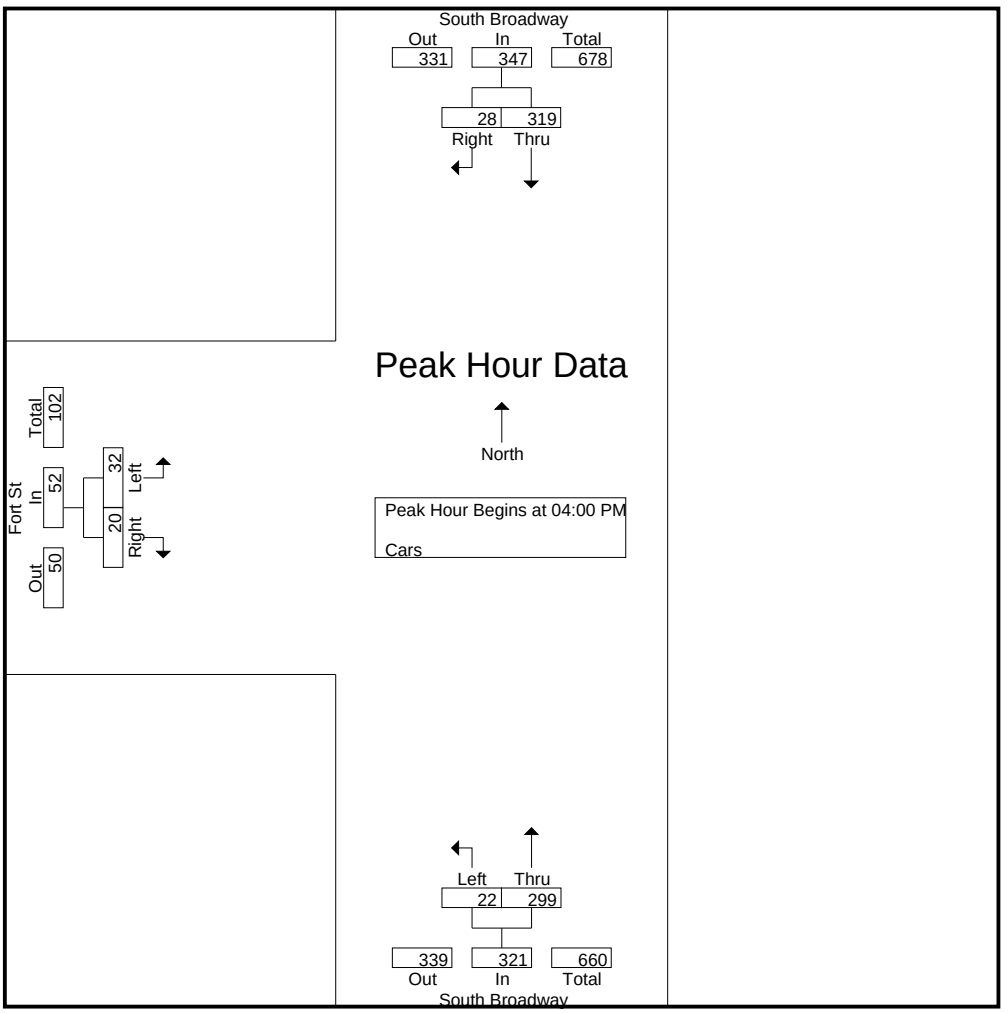
	South Broadway From North			South Broadway From South			Fort St From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	**89**	6	**95**	**15**	64	79	**12**	4	**16**	**190**
04:15 PM	78	5	83	4	68	72	5	**7**	12	167
04:30 PM	76	**9**	85	2	80	82	5	5	10	177
04:45 PM	76	8	84	1	**87**	**88**	10	4	14	186
Total Volume	319	28	347	22	299	321	32	20	52	720
% App. Total	91.9	8.1		6.9	93.1		61.5	38.5		
PHF	.896	.778	.913	.367	.859	.912	.667	.714	.813	.947

Accurate Counts

978-664-2565

N/S Street : South Broadway
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100008
Site Code : 86100008
Start Date : 11/5/2020
Page No : 5



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	**89**	6	**95**	**15**	64	79	**12**	4	**16**
+15 mins.	78	5	83	4	68	72	5	**7**	12
+30 mins.	76	**9**	85	2	80	82	5	5	10
+45 mins.	76	8	84	1	**87**	**88**	10	4	14
Total Volume	319	28	347	22	299	321	32	20	52
% App. Total	91.9	8.1		6.9	93.1		61.5	38.5	
PHF	.896	.778	.913	.367	.859	.912	.667	.714	.813

Accurate Counts

978-664-2565

N/S Street : South Broadway
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100008
Site Code : 86100008
Start Date : 11/5/2020

Groups Printed- Trucks

	South Broadway From North		South Broadway From South		Fort St From West		
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
04:00 PM	0	0	0	1	0	0	1
04:15 PM	0	0	0	0	0	0	0
04:30 PM	1	0	0	0	0	0	1
04:45 PM	0	0	0	1	0	0	1
Total	1	0	0	2	0	0	3
05:00 PM	0	0	0	1	0	0	1
05:15 PM	1	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0
Total	1	0	0	1	0	0	2
Grand Total	2	0	0	3	0	0	5
Apprch %	100	0	0	100	0	0	
Total %	40	0	0	60	0	0	

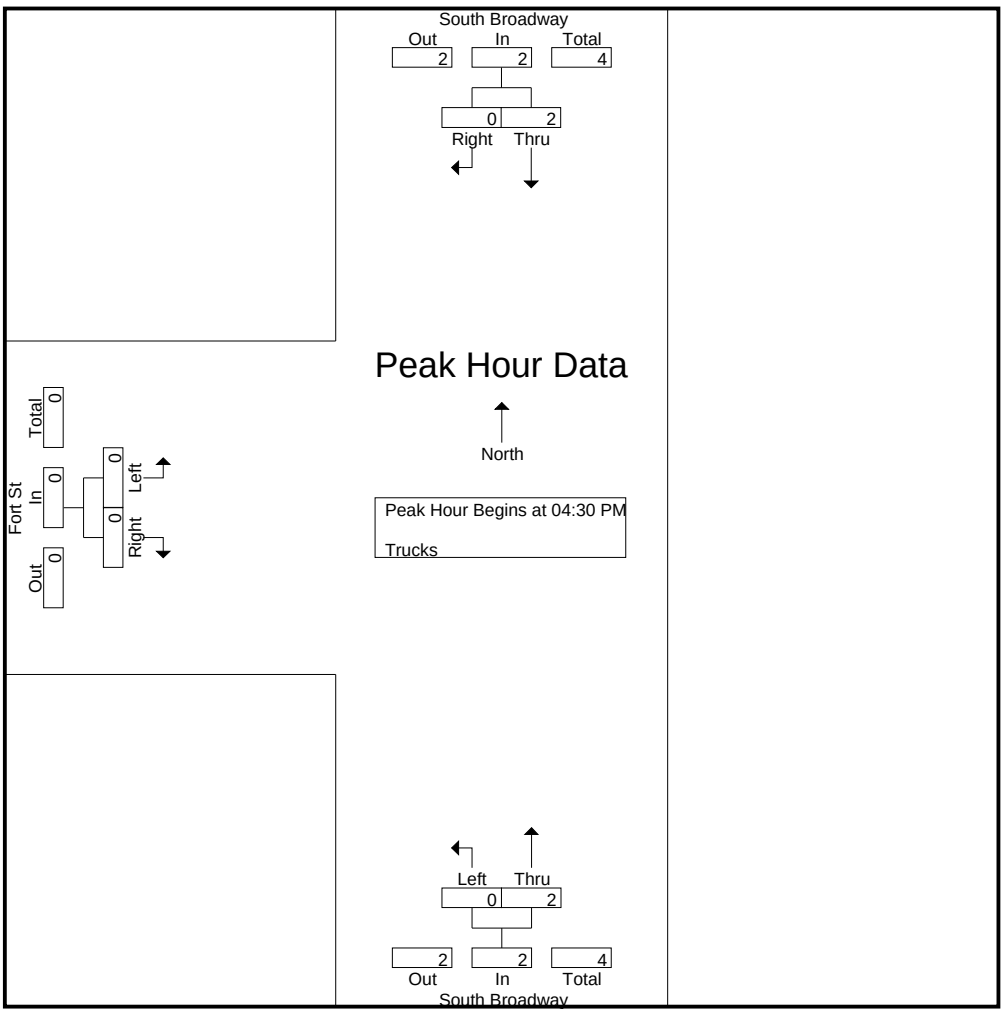
	South Broadway From North			South Broadway From South			Fort St From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	**1**	0	**1**	0	0	0	0	0	0	**1**
04:45 PM	0	0	0	0	**1**	**1**	0	0	0	1
05:00 PM	0	0	0	0	1	1	0	0	0	1
05:15 PM	1	0	1	0	0	0	0	0	0	1
Total Volume	2	0	2	0	2	2	0	0	0	4
% App. Total	100	0		0	100		0	0		
PHF	.500	.000	.500	.000	.500	.500	.000	.000	.000	1.00

Accurate Counts

978-664-2565

N/S Street : South Broadway
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100008
Site Code : 86100008
Start Date : 11/5/2020
Page No : 8



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

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

Accurate Counts

978-664-2565

N/S Street : South Broadway
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100008
Site Code : 86100008
Start Date : 11/5/2020

Groups Printed- Bikes Peds

	South Broadway From North			South Broadway From South			Fort St From West					
Start Time	Thru	Right	Peds	Left	Thru	Peds	Left	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	1	0	0	0	0	1	1	1	2
04:45 PM	0	0	2	0	0	0	0	0	0	2	0	2
Total	0	0	2	1	0	0	0	0	1	3	1	4
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	1	0	0	0	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	0	0	0	1	1
Grand Total	0	0	2	1	0	0	1	0	1	3	2	5
Apprch %	0	0		100	0		100	0				
Total %	0	0		50	0		50	0		60	40	

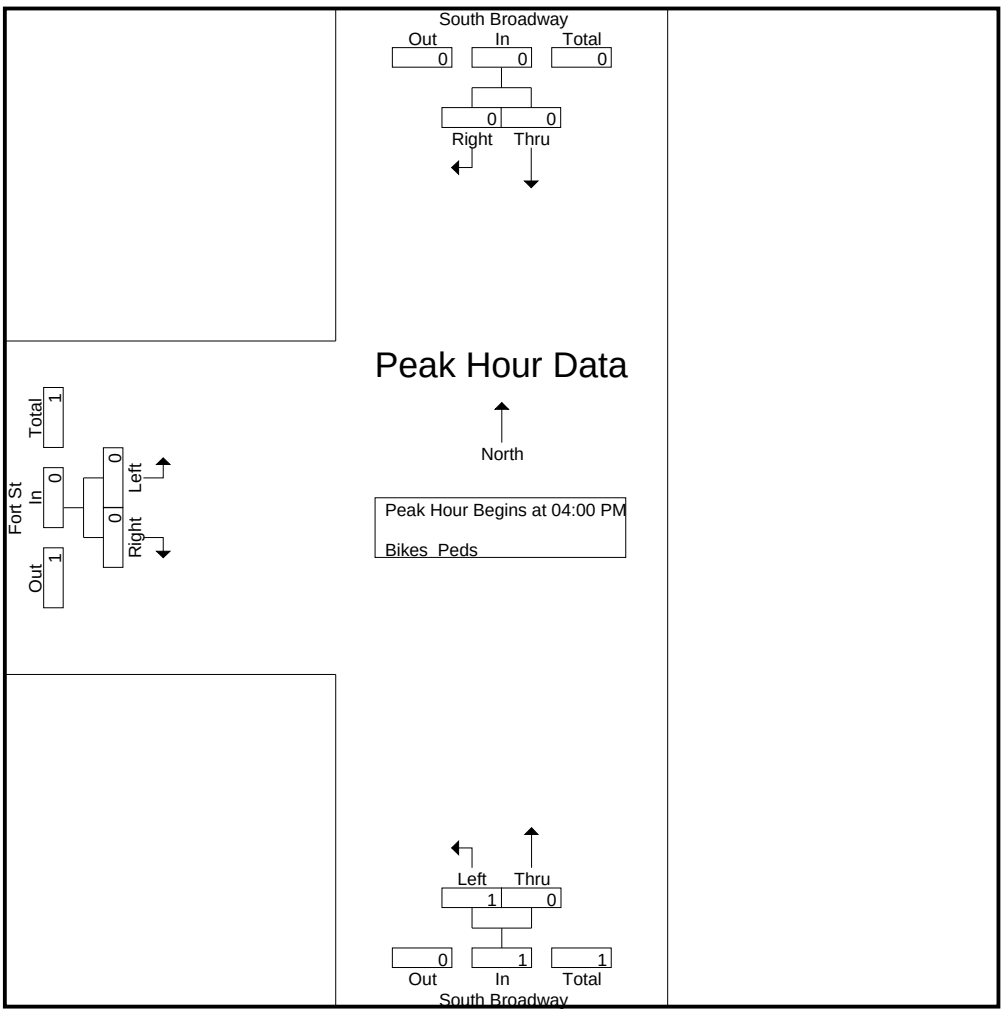
	South Broadway From North			South Broadway From South			Fort St From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	**1**	0	**1**	0	0	0	**1**
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	1	0	1	0	0	0	1
% App. Total	0	0		100	0		0	0		
PHF	.000	.000	.000	.250	.000	.250	.000	.000	.000	.250

Accurate Counts

978-664-2565

N/S Street : South Broadway
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100008
Site Code : 86100008
Start Date : 11/5/2020
Page No : 11



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

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

Lyon Avenue at Fort Street

Accurate Counts

978-664-2565

N/S Street : Lyon Avenue
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100007
Site Code : 86100007
Start Date : 11/5/2020
Page No : 1

Groups Printed- Cars - Trucks

	Lyon Ave From North			Fort St From East			Lyon Ave From South			Fort St From West			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
07:00 AM	2	4	1	3	1	0	0	5	4	3	4	0	27
07:15 AM	1	5	0	2	1	2	0	8	5	1	3	0	28
07:30 AM	2	9	1	5	3	3	0	8	6	1	1	0	39
07:45 AM	0	9	1	6	2	1	0	10	4	2	2	1	38
Total	5	27	3	16	7	6	0	31	19	7	10	1	132
08:00 AM	2	15	2	3	2	1	0	9	3	2	3	0	42
08:15 AM	3	11	0	4	1	5	0	9	3	0	1	3	40
08:30 AM	0	7	1	1	3	5	1	4	0	2	2	1	27
08:45 AM	0	17	0	5	2	2	1	6	4	0	2	0	39
Total	5	50	3	13	8	13	2	28	10	4	8	4	148
Grand Total	10	77	6	29	15	19	2	59	29	11	18	5	280
Apprch %	10.8	82.8	6.5	46	23.8	30.2	2.2	65.6	32.2	32.4	52.9	14.7	
Total %	3.6	27.5	2.1	10.4	5.4	6.8	0.7	21.1	10.4	3.9	6.4	1.8	
Cars	10	74	6	28	15	19	2	56	28	11	17	5	271
% Cars	100	96.1	100	96.6	100	100	100	94.9	96.6	100	94.4	100	96.8
Trucks	0	3	0	1	0	0	0	3	1	0	1	0	9
% Trucks	0	3.9	0	3.4	0	0	0	5.1	3.4	0	5.6	0	3.2

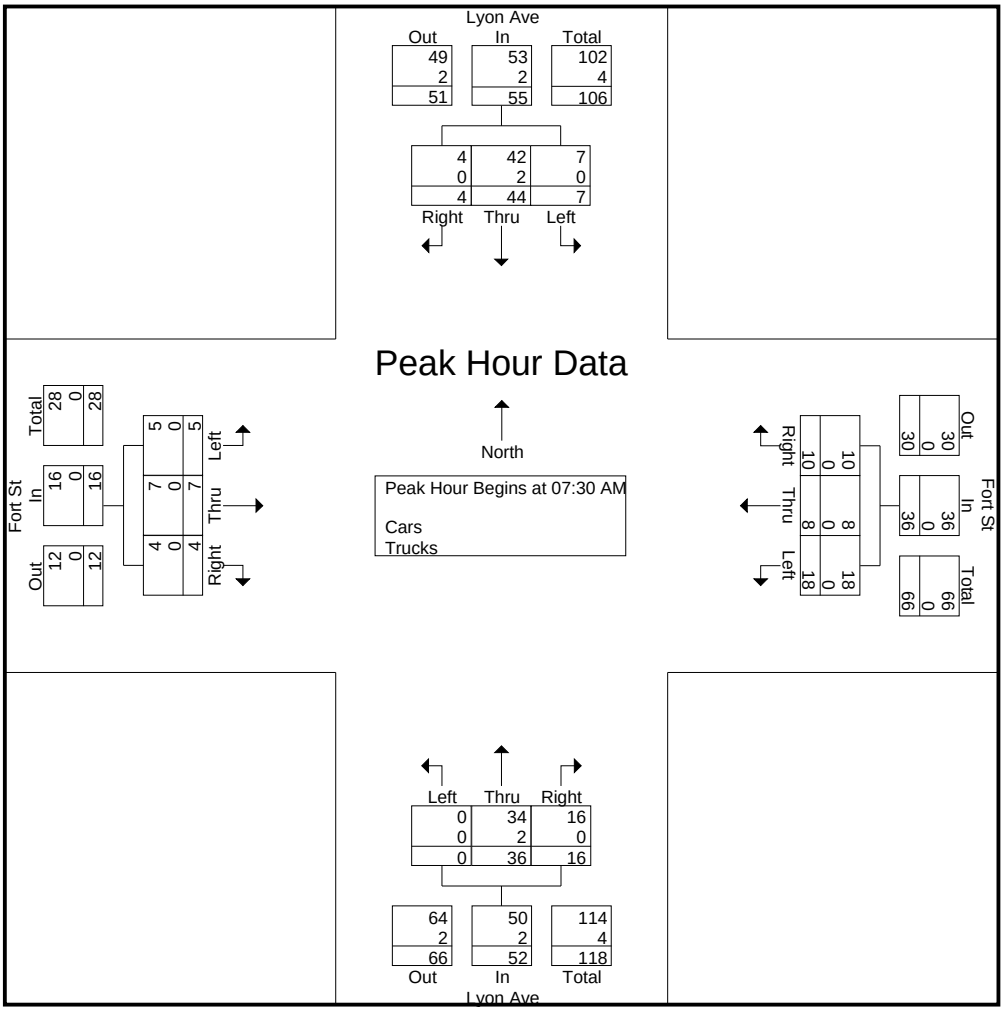
	Lyon Ave From North				Fort St From East				Lyon Ave From South				Fort St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	2	9	1	12	5	**3**	3	**11**	0	8	**6**	**14**	1	1	0	2	39
07:45 AM	0	9	1	10	**6**	2	1	9	0	**10**	4	14	**2**	2	1	**5**	38
08:00 AM	2	**15**	**2**	**19**	3	2	1	6	0	9	3	12	2	**3**	0	5	**42**
08:15 AM	**3**	11	0	14	4	1	**5**	10	0	9	3	12	0	1	**3**	4	40
Total Volume	7	44	4	55	18	8	10	36	0	36	16	52	5	7	4	16	159
% App. Total	12.7	80	7.3		50	22.2	27.8		0	69.2	30.8		31.2	43.8	25		
PHF	.583	.733	.500	.724	.750	.667	.500	.818	.000	.900	.667	.929	.625	.583	.333	.800	.946
Cars	7	42	4	53	18	8	10	36	0	34	16	50	5	7	4	16	155
% Cars	100	95.5	100	96.4	100	100	100	100	0	94.4	100	96.2	100	100	100	100	97.5
Trucks	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
% Trucks	0	4.5	0	3.6	0	0	0	0	0	5.6	0	3.8	0	0	0	0	2.5

Accurate Counts

978-664-2565

N/S Street : Lyon Avenue
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100007
Site Code : 86100007
Start Date : 11/5/2020
Page No : 2



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

	08:00 AM				07:30 AM				07:15 AM				07:45 AM			
+0 mins.	2	15	**2**	**19**	5	**3**	3	**11**	0	8	5	13	**2**	2	1	**5**
+15 mins.	**3**	11	0	14	**6**	2	1	9	0	8	**6**	**14**	2	**3**	0	5
+30 mins.	0	7	1	8	3	2	1	6	0	**10**	4	14	0	1	**3**	4
+45 mins.	0	**17**	0	17	4	1	**5**	10	0	9	3	12	2	2	1	5
Total Volume	5	50	3	58	18	8	10	36	0	35	18	53	6	8	5	19
% App. Total	8.6	86.2	5.2		50	22.2	27.8		0	66	34		31.6	42.1	26.3	
PHF	.417	.735	.375	.763	.750	.667	.500	.818	.000	.875	.750	.946	.750	.667	.417	.950
Cars	5	48	3	56	18	8	10	36	0	34	17	51	6	8	5	19
% Cars	100	96	100	96.6	100	100	100	100	0	97.1	94.4	96.2	100	100	100	100
Trucks	0	2	0	2	0	0	0	0	0	1	1	2	0	0	0	0
% Trucks	0	4	0	3.4	0	0	0	0	0	2.9	5.6	3.8	0	0	0	0

Accurate Counts

978-664-2565

N/S Street : Lyon Avenue
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100007
Site Code : 86100007
Start Date : 11/5/2020
Page No : 4

Groups Printed- Cars

	Lyon Ave From North			Fort St From East			Lyon Ave From South			Fort St From West			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
07:00 AM	2	4	1	3	1	0	0	4	4	3	4	0	26
07:15 AM	1	4	0	1	1	2	0	8	4	1	2	0	24
07:30 AM	2	9	1	5	3	3	0	8	6	1	1	0	39
07:45 AM	0	9	1	6	2	1	0	9	4	2	2	1	37
Total	5	26	3	15	7	6	0	29	18	7	9	1	126
08:00 AM	2	14	2	3	2	1	0	9	3	2	3	0	41
08:15 AM	3	10	0	4	1	5	0	8	3	0	1	3	38
08:30 AM	0	7	1	1	3	5	1	4	0	2	2	1	27
08:45 AM	0	17	0	5	2	2	1	6	4	0	2	0	39
Total	5	48	3	13	8	13	2	27	10	4	8	4	145
Grand Total	10	74	6	28	15	19	2	56	28	11	17	5	271
Apprch %	11.1	82.2	6.7	45.2	24.2	30.6	2.3	65.1	32.6	33.3	51.5	15.2	
Total %	3.7	27.3	2.2	10.3	5.5	7	0.7	20.7	10.3	4.1	6.3	1.8	

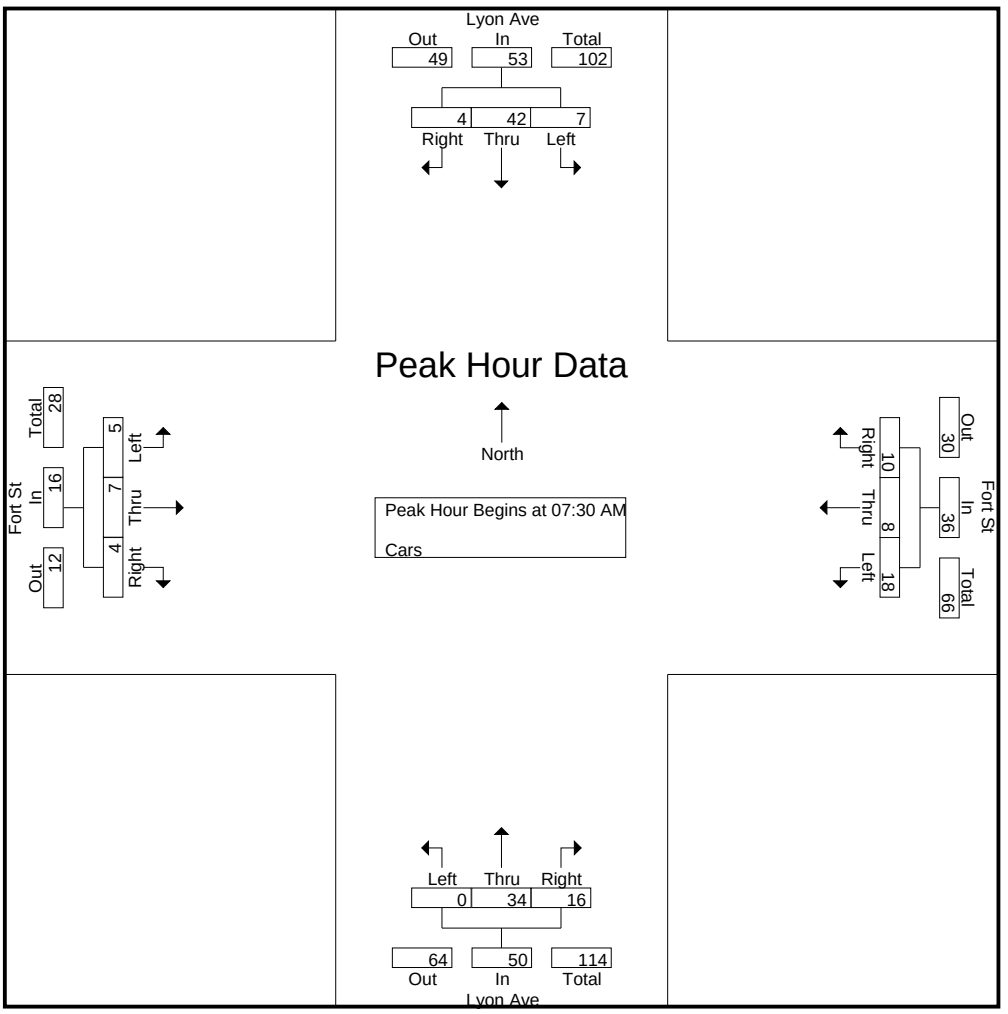
	Lyon Ave From North				Fort St From East				Lyon Ave From South				Fort St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	2	9	1	12	5	**3**	3	**11**	0	8	**6**	**14**	1	1	0	2	39
07:45 AM	0	9	1	10	**6**	2	1	9	0	**9**	4	13	**2**	2	1	**5**	37
08:00 AM	2	**14**	**2**	**18**	3	2	1	6	0	9	3	12	2	**3**	0	5	**41**
08:15 AM	**3**	10	0	13	4	1	**5**	10	0	8	3	11	0	1	**3**	4	38
Total Volume	7	42	4	53	18	8	10	36	0	34	16	50	5	7	4	16	155
% App. Total	13.2	79.2	7.5		50	22.2	27.8		0	68	32		31.2	43.8	25		
PHF	.583	.750	.500	.736	.750	.667	.500	.818	.000	.944	.667	.893	.625	.583	.333	.800	.945

Accurate Counts

978-664-2565

N/S Street : Lyon Avenue
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100007
Site Code : 86100007
Start Date : 11/5/2020
Page No : 5



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

	08:00 AM				07:30 AM				07:15 AM				07:45 AM			
+0 mins.	2	14	**2**	**18**	5	**3**	3	**11**	0	8	4	12	**2**	2	1	**5**
+15 mins.	**3**	10	0	13	**6**	2	1	9	0	8	**6**	**14**	2	**3**	0	5
+30 mins.	0	7	1	8	3	2	1	6	0	**9**	4	13	0	1	**3**	4
+45 mins.	0	**17**	0	17	4	1	**5**	10	0	9	3	12	2	2	1	5
Total Volume	5	48	3	56	18	8	10	36	0	34	17	51	6	8	5	19
% App. Total	8.9	85.7	5.4		50	22.2	27.8		0	66.7	33.3		31.6	42.1	26.3	
PHF	.417	.706	.375	.778	.750	.667	.500	.818	.000	.944	.708	.911	.750	.667	.417	.950

Accurate Counts

978-664-2565

N/S Street : Lyon Avenue
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100007
Site Code : 86100007
Start Date : 11/5/2020

Groups Printed- Trucks

	Lyon Ave From North			Fort St From East			Lyon Ave From South			Fort St From West			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
07:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
07:15 AM	0	1	0	1	0	0	0	0	1	0	1	0	4
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
Total	0	1	0	1	0	0	0	2	1	0	1	0	6
08:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
08:15 AM	0	1	0	0	0	0	0	1	0	0	0	0	2
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	0	0	0	0	1	0	0	0	0	3
Grand Total	0	3	0	1	0	0	0	3	1	0	1	0	9
Apprch %	0	100	0	100	0	0	0	75	25	0	100	0	
Total %	0	33.3	0	11.1	0	0	0	33.3	11.1	0	11.1	0	

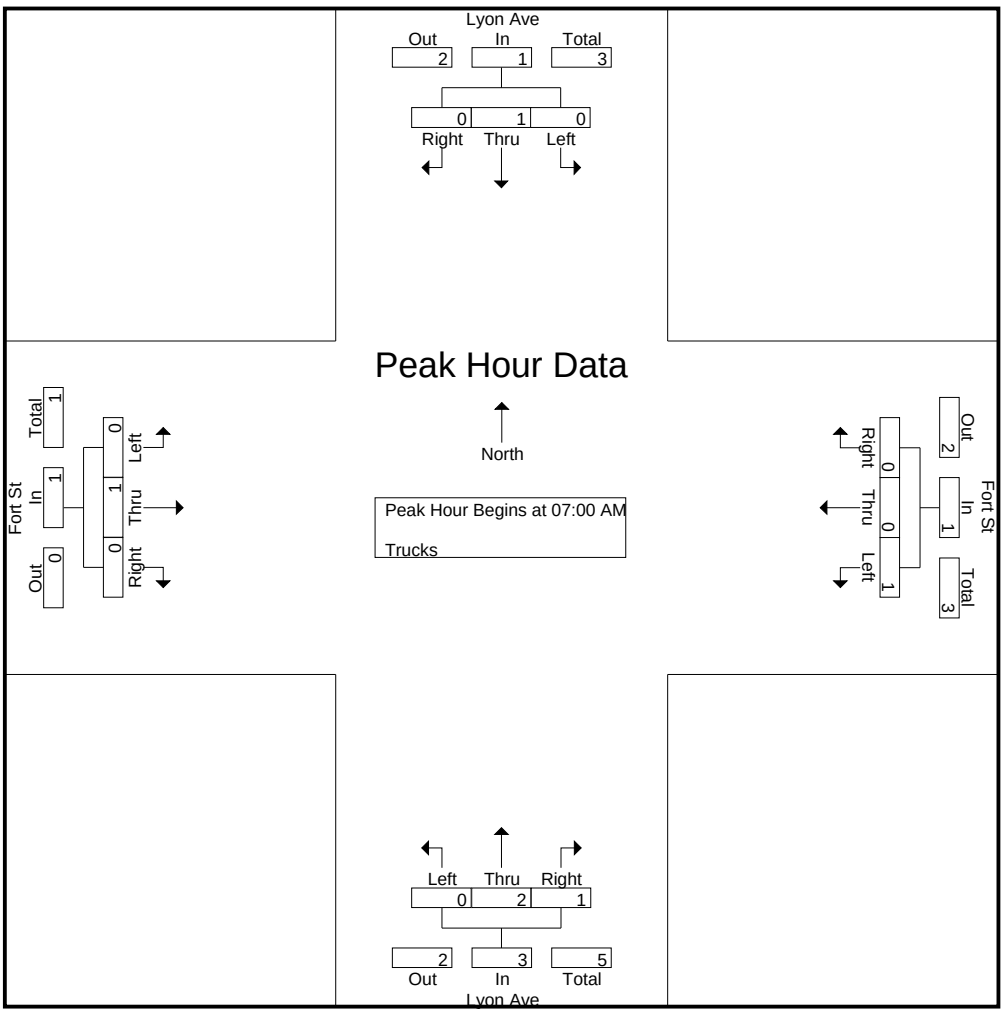
	Lyon Ave From North				Fort St From East				Lyon Ave From South				Fort St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	**1**	0	**1**	0	0	0	0	1
07:15 AM	0	**1**	0	**1**	**1**	0	0	**1**	0	0	**1**	1	0	**1**	0	**1**	**4**
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total Volume	0	1	0	1	1	0	0	1	0	2	1	3	0	1	0	1	6
% App. Total	0	100	0		100	0	0		0	66.7	33.3		0	100	0		
PHF	.000	.250	.000	.250	.250	.000	.000	.250	.000	.500	.250	.750	.000	.250	.000	.250	.375

Accurate Counts

978-664-2565

N/S Street : Lyon Avenue
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100007
Site Code : 86100007
Start Date : 11/5/2020
Page No : 8



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

	07:15 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	**1**	0	**1**	0	0	0	0	0	**1**	0	**1**	0	0	0	0
+15 mins.	0	0	0	0	**1**	0	0	**1**	0	0	**1**	1	0	**1**	0	**1**
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	0	2	0	2	1	0	0	1	0	2	1	3	0	1	0	1
% App. Total	0	100	0		100	0	0		0	66.7	33.3		0	100	0	
PHF	.000	.500	.000	.500	.250	.000	.000	.250	.000	.500	.250	.750	.000	.250	.000	.250

Accurate Counts

978-664-2565

N/S Street : Lyon Avenue
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100007
Site Code : 86100007
Start Date : 11/5/2020

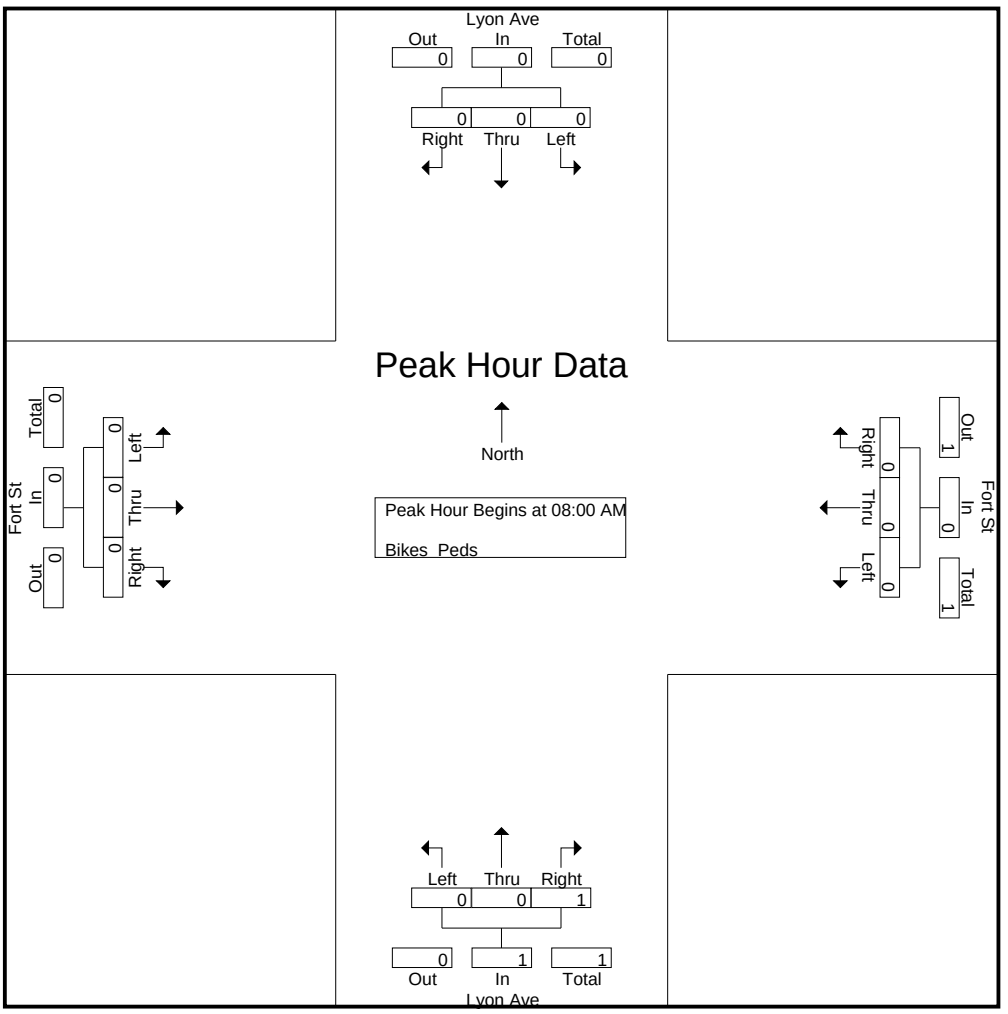
Groups Printed- Bikes Peds

	Lyon Ave From North				Fort St From East				Lyon Ave From South				Fort St From West						
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	3
07:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
07:30 AM	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	3	0	3
07:45 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	0	3
Total	0	0	0	1	0	0	0	4	0	0	0	2	0	0	0	3	10	0	10
08:00 AM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	4	0	4
08:15 AM	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	3	0	3
08:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0	2
08:45 AM	0	0	0	0	0	0	0	2	0	0	1	6	0	0	0	1	9	1	10
Total	0	0	0	1	0	0	0	9	0	0	1	7	0	0	0	1	18	1	19
Grand Total	0	0	0	2	0	0	0	13	0	0	1	9	0	0	0	4	28	1	29
Apprch %	0	0	0		0	0	0		0	0	100		0	0	0				
Total %	0	0	0		0	0	0		0	0	100		0	0	0		96.6	3.4	

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

N/S Street : Lyon Avenue
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100007
Site Code : 86100007
Start Date : 11/5/2020
Page No : 11



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

	07:00 AM				07:00 AM				08:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	**1**	**1**	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	100		0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250	.000	.000	.000	.000

Accurate Counts

978-664-2565

N/S Street : Lyon Avenue
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100007
Site Code : 86100007
Start Date : 11/5/2020
Page No : 1

Groups Printed- Cars - Trucks

	Lyon Ave From North			Fort St From East			Lyon Ave From South			Fort St From West			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
04:00 PM	4	13	0	3	6	5	0	22	10	1	4	0	68
04:15 PM	3	13	4	1	6	2	0	20	4	0	2	0	55
04:30 PM	6	7	0	1	2	3	0	23	3	1	2	1	49
04:45 PM	6	8	0	3	2	0	0	9	6	3	2	0	39
Total	19	41	4	8	16	10	0	74	23	5	10	1	211
05:00 PM	2	9	1	5	8	1	0	11	4	0	1	1	43
05:15 PM	4	9	2	2	6	0	2	15	7	0	3	0	50
05:30 PM	4	3	2	4	1	0	1	13	6	0	0	0	34
05:45 PM	1	7	1	1	1	3	1	7	3	0	3	1	29
Total	11	28	6	12	16	4	4	46	20	0	7	2	156
Grand Total	30	69	10	20	32	14	4	120	43	5	17	3	367
Apprch %	27.5	63.3	9.2	30.3	48.5	21.2	2.4	71.9	25.7	20	68	12	
Total %	8.2	18.8	2.7	5.4	8.7	3.8	1.1	32.7	11.7	1.4	4.6	0.8	
Cars	30	69	10	20	32	14	4	120	43	5	17	3	367
% Cars	100	100	100	100	100	100	100	100	100	100	100	100	100
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0

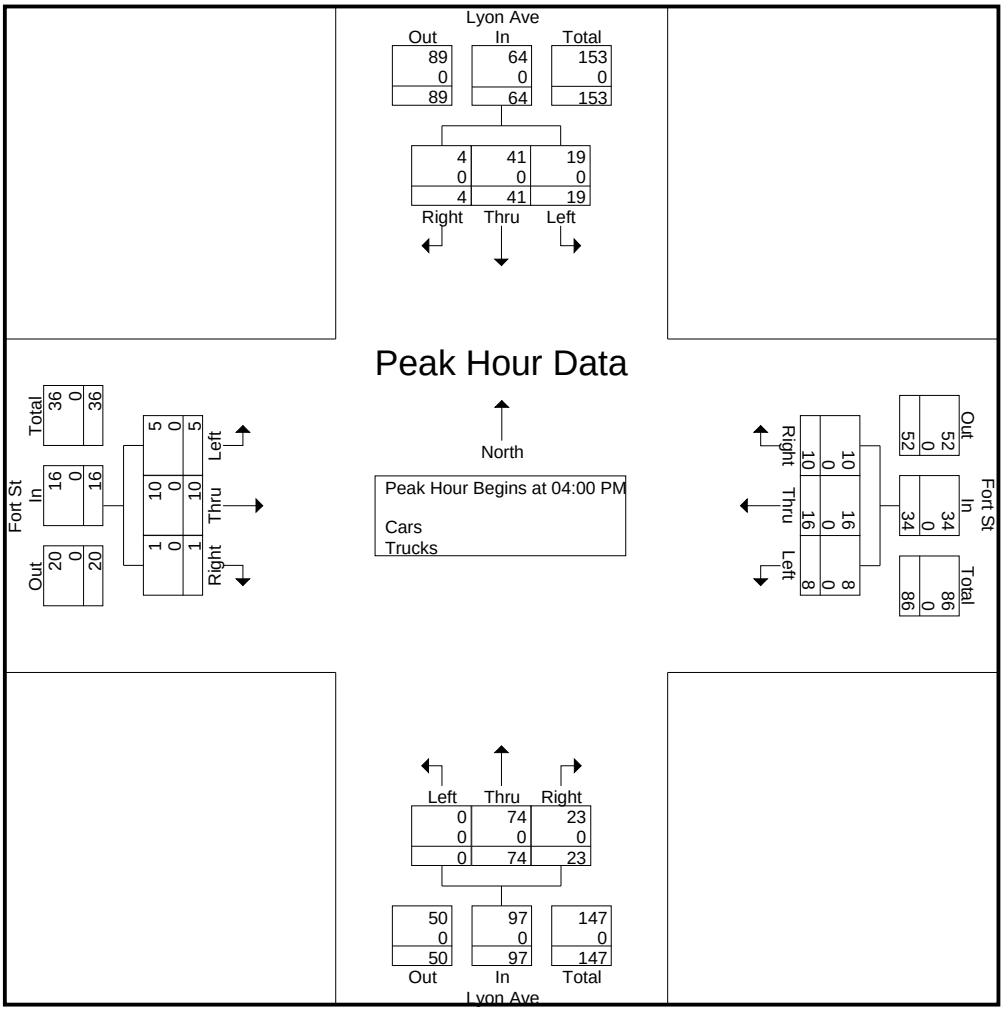
	Lyon Ave From North				Fort St From East				Lyon Ave From South				Fort St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	4	**13**	0	17	**3**	**6**	**5**	**14**	0	22	**10**	**32**	1	**4**	0	**5**	**68**
04:15 PM	3	13	**4**	**20**	1	6	2	9	0	20	4	24	0	2	0	2	55
04:30 PM	**6**	7	0	13	1	2	3	6	0	**23**	3	26	1	2	**1**	4	49
04:45 PM	6	8	0	14	3	2	0	5	0	9	6	15	**3**	2	0	5	39
Total Volume	19	41	4	64	8	16	10	34	0	74	23	97	5	10	1	16	211
% App. Total	29.7	64.1	6.2		23.5	47.1	29.4		0	76.3	23.7		31.2	62.5	6.2		
PHF	.792	.788	.250	.800	.667	.667	.500	.607	.000	.804	.575	.758	.417	.625	.250	.800	.776
Cars	19	41	4	64	8	16	10	34	0	74	23	97	5	10	1	16	211
% Cars	100	100	100	100	100	100	100	100	0	100	100	100	100	100	100	100	100
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Counts

978-664-2565

N/S Street : Lyon Avenue
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100007
Site Code : 86100007
Start Date : 11/5/2020
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	4	**13**	0	17	**3**	**6**	**5**	**14**	0	22	**10**	**32**	1	**4**	0	**5**
+15 mins.	3	13	**4**	**20**	1	6	2	9	0	20	4	24	0	2	0	2
+30 mins.	**6**	7	0	13	1	2	3	6	0	**23**	3	26	1	2	**1**	4
+45 mins.	6	8	0	14	3	2	0	5	0	9	6	15	**3**	2	0	5
Total Volume	19	41	4	64	8	16	10	34	0	74	23	97	5	10	1	16
% App. Total	29.7	64.1	6.2		23.5	47.1	29.4		0	76.3	23.7		31.2	62.5	6.2	
PHF	.792	.788	.250	.800	.667	.667	.500	.607	.000	.804	.575	.758	.417	.625	.250	.800
Cars	19	41	4	64	8	16	10	34	0	74	23	97	5	10	1	16
% Cars	100	100	100	100	100	100	100	100	0	100	100	100	100	100	100	100
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Counts

978-664-2565

N/S Street : Lyon Avenue
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100007
Site Code : 86100007
Start Date : 11/5/2020

Groups Printed- Cars

	Lyon Ave From North			Fort St From East			Lyon Ave From South			Fort St From West			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
04:00 PM	4	13	0	3	6	5	0	22	10	1	4	0	68
04:15 PM	3	13	4	1	6	2	0	20	4	0	2	0	55
04:30 PM	6	7	0	1	2	3	0	23	3	1	2	1	49
04:45 PM	6	8	0	3	2	0	0	9	6	3	2	0	39
Total	19	41	4	8	16	10	0	74	23	5	10	1	211
05:00 PM	2	9	1	5	8	1	0	11	4	0	1	1	43
05:15 PM	4	9	2	2	6	0	2	15	7	0	3	0	50
05:30 PM	4	3	2	4	1	0	1	13	6	0	0	0	34
05:45 PM	1	7	1	1	1	3	1	7	3	0	3	1	29
Total	11	28	6	12	16	4	4	46	20	0	7	2	156
Grand Total	30	69	10	20	32	14	4	120	43	5	17	3	367
Apprch %	27.5	63.3	9.2	30.3	48.5	21.2	2.4	71.9	25.7	20	68	12	
Total %	8.2	18.8	2.7	5.4	8.7	3.8	1.1	32.7	11.7	1.4	4.6	0.8	

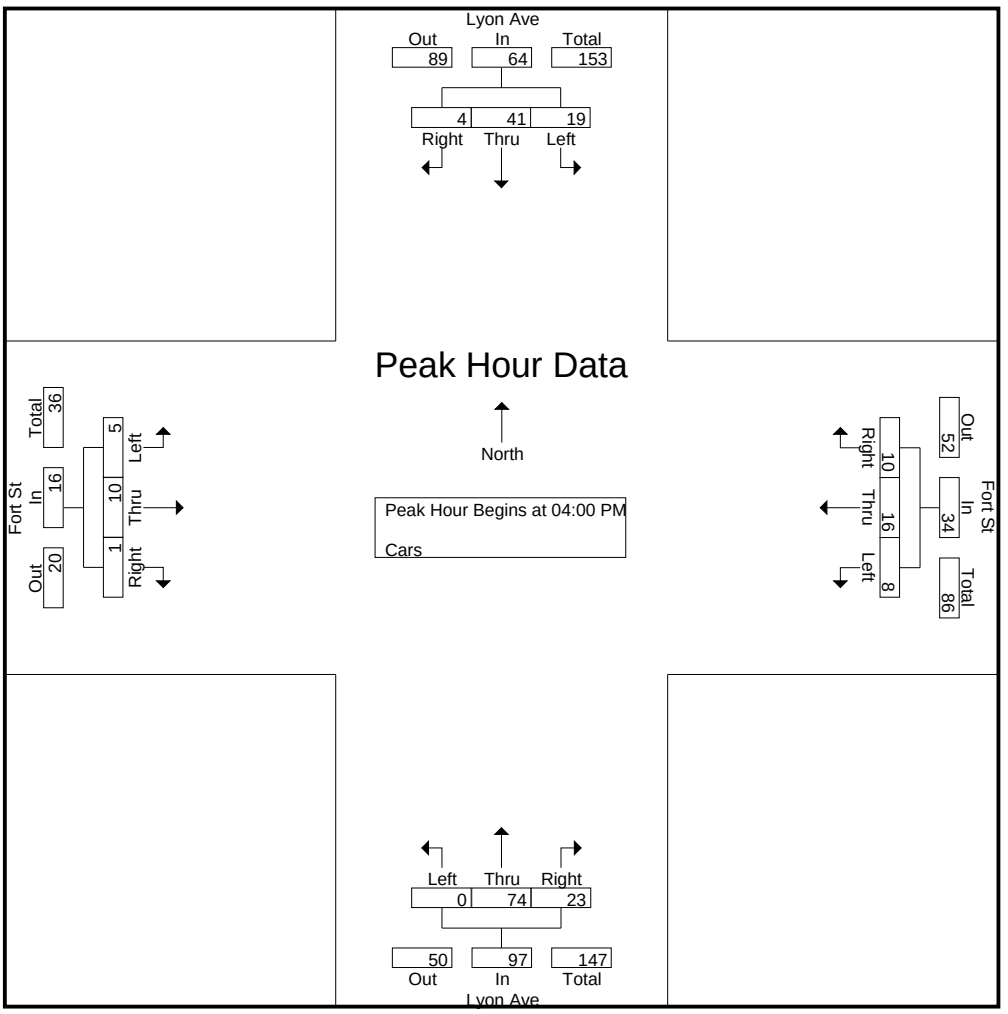
	Lyon Ave From North				Fort St From East				Lyon Ave From South				Fort St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	4	**13**	0	17	**3**	**6**	**5**	**14**	0	22	**10**	**32**	1	**4**	0	**5**	**68**
04:15 PM	3	13	**4**	**20**	1	6	2	9	0	20	4	24	0	2	0	2	55
04:30 PM	**6**	7	0	13	1	2	3	6	0	**23**	3	26	1	2	**1**	4	49
04:45 PM	6	8	0	14	3	2	0	5	0	9	6	15	**3**	2	0	5	39
Total Volume	19	41	4	64	8	16	10	34	0	74	23	97	5	10	1	16	211
% App. Total	29.7	64.1	6.2		23.5	47.1	29.4		0	76.3	23.7		31.2	62.5	6.2		
PHF	.792	.788	.250	.800	.667	.667	.500	.607	.000	.804	.575	.758	.417	.625	.250	.800	.776

Accurate Counts

978-664-2565

N/S Street : Lyon Avenue
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100007
Site Code : 86100007
Start Date : 11/5/2020
Page No : 5



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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	4	**13**	0	17	**3**	**6**	**5**	**14**	0	22	**10**	**32**	1	**4**	0	**5**
+15 mins.	3	13	**4**	**20**	1	6	2	9	0	20	4	24	0	2	0	2
+30 mins.	**6**	7	0	13	1	2	3	6	0	**23**	3	26	1	2	**1**	4
+45 mins.	6	8	0	14	3	2	0	5	0	9	6	15	**3**	2	0	5
Total Volume	19	41	4	64	8	16	10	34	0	74	23	97	5	10	1	16
% App. Total	29.7	64.1	6.2		23.5	47.1	29.4		0	76.3	23.7		31.2	62.5	6.2	
PHF	.792	.788	.250	.800	.667	.667	.500	.607	.000	.804	.575	.758	.417	.625	.250	.800

Accurate Counts

978-664-2565

N/S Street : Lyon Avenue
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100007
Site Code : 86100007
Start Date : 11/5/2020

Groups Printed- Trucks

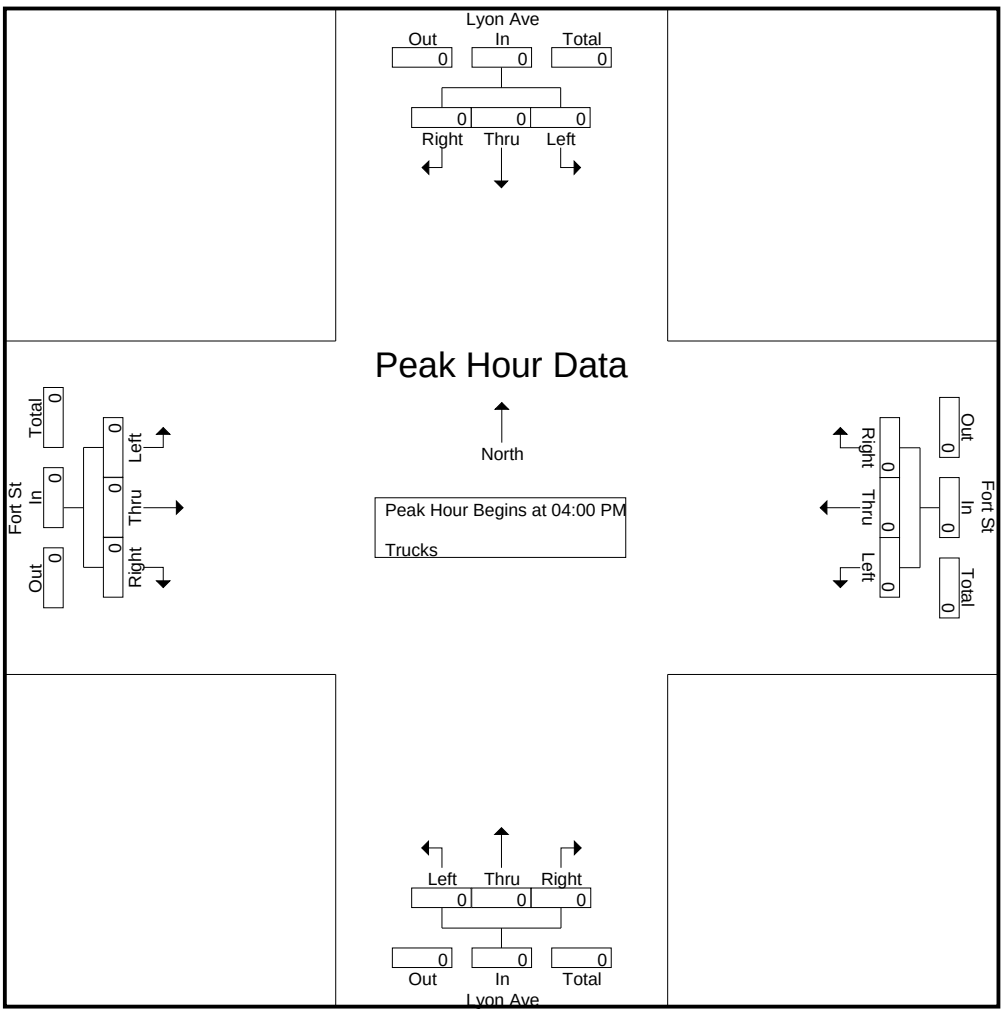
	Lyon Ave From North			Fort St From East			Lyon Ave From South			Fort St From West			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	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
Apprch %	0	0	0	0	0	0	0	0	0	0	0	0	
Total %													

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

Accurate Counts
978-664-2565

N/S Street : Lyon Avenue
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100007
Site Code : 86100007
Start Date : 11/5/2020



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

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

Accurate Counts

978-664-2565

N/S Street : Lyon Avenue
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100007
Site Code : 86100007
Start Date : 11/5/2020

Groups Printed- Bikes Peds

	Lyon Ave From North				Fort St From East				Lyon Ave From South				Fort St From West						
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	0	0	2	0	0	0	1	0	0	0	1	0	0	0	0	4	0	4
04:15 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	3	0	3
04:30 PM	0	0	0	0	2	1	2	0	0	0	0	1	0	0	0	0	1	5	6
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3	3	1	4
Total	0	0	0	2	2	1	2	2	0	1	0	3	0	0	0	4	11	6	17
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	0	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	3
05:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
05:45 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	2	0	2
Total	0	0	0	0	0	1	0	1	0	0	0	2	0	0	0	4	7	1	8
Grand Total	0	0	0	2	2	2	2	3	0	1	0	5	0	0	0	8	18	7	25
Apprch %	0	0	0		33.3	33.3	33.3		0	100	0		0	0	0				
Total %	0	0	0		28.6	28.6	28.6		0	14.3	0		0	0	0		72	28	

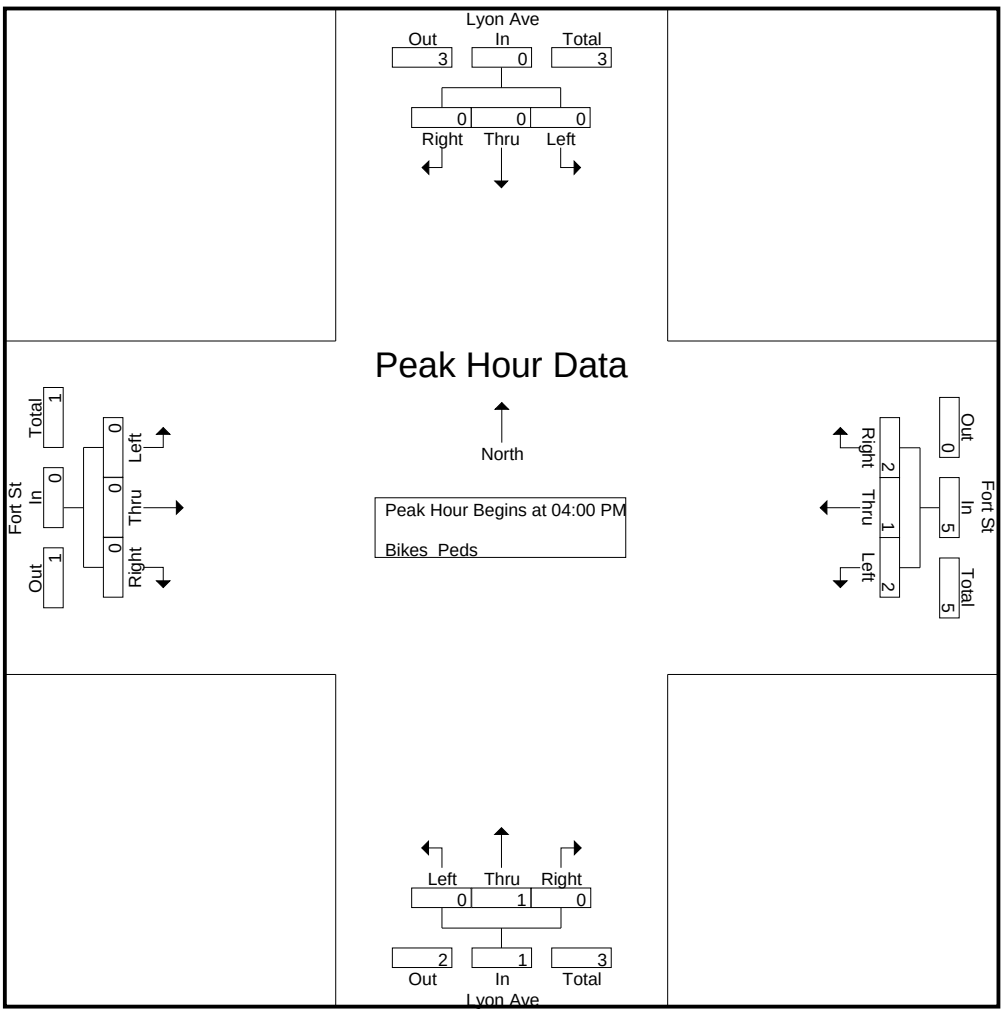
	Lyon Ave From North				Fort St From East				Lyon Ave From South				Fort St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	**2**	**1**	**2**	**5**	0	0	0	0	0	0	0	0	**5**
04:45 PM	0	0	0	0	0	0	0	0	0	**1**	0	**1**	0	0	0	0	1
Total Volume	0	0	0	0	2	1	2	5	0	1	0	1	0	0	0	0	6
% App. Total	0	0	0		40	20	40		0	100	0		0	0	0		
PHF	.000	.000	.000	.000	.250	.250	.250	.250	.000	.250	.000	.250	.000	.000	.000	.000	.300

Accurate Counts

978-664-2565

N/S Street : Lyon Avenue
E/W Street : Fort Street
City/State : E. Providence, RI
Weather : Clear

File Name : 86100007
Site Code : 86100007
Start Date : 11/5/2020
Page No : 11



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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	**2**	**1**	**2**	**5**	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	**1**	0	**1**	0	0	0	0
Total Volume	0	0	0	0	2	1	2	5	0	1	0	1	0	0	0	0
% App. Total	0	0	0		40	20	40		0	100	0		0	0	0	
PHF	.000	.000	.000	.000	.250	.250	.250	.250	.000	.250	.000	.250	.000	.000	.000	.000

ATTACHMENT B – Trip Generation

ITE Trip Generation Summary

ITE Land Use Code

- ITE Land Use Code 215 – Single-Family Attached Housing
- ITE Land Use Code 220 – Multifamily Housing (Low-Rise)
- ITE Land Use Code 221 – Multifamily Housing (Mid-Rise)
- ITE Land Use Code 430 – Golf Course
- ITE Land Use Code 821 – Shopping Plaza with Supermarket

B

ITE Trip Generation Summary

Trip Generation Summary

	Description	Enter	Exit	Total
DAILY				
ITE Land Use Code 215	Single Family Attached	166	166	332
ITE Land Use Code 220	Multifamily (Low-Rise)	809	809	1,618
ITE Land Use Code 221	Multifamily (Mid-Rise)	1,371	1,371	2,742
ITE Land Use Code 430	Golf Course	137	137	274
ITE Land Use Code 821	Shopping Plaza w/Market	7,219	7,219	14,438
	TOTAL	9,702	9,702	19,404
AM PEAK HOUR				
ITE Land Use Code 215	Single Family Attached	7	15	22
ITE Land Use Code 220	Multifamily (Low-Rise)	23	73	96
ITE Land Use Code 221	Multifamily (Mid-Rise)	52	172	224
ITE Land Use Code 430	Golf Course	13	3	16
ITE Land Use Code 821	Shopping Plaza w/Market	335	205	540
	TOTAL	430	468	898
PM PEAK HOUR				
ITE Land Use Code 215	Single Family Attached	15	11	26
ITE Land Use Code 220	Multifamily (Low-Rise)	77	45	122
ITE Land Use Code 221	Multifamily (Mid-Rise)	144	92	236
ITE Land Use Code 430	Golf Course	14	12	26
ITE Land Use Code 821	Shopping Plaza w/Market	662	718	1,380
	TOTAL	912	878	1,790

SATURDAY MD PEAK HOUR

ITE Land Use Code 215	Single Family Attached	12	14	26
ITE Land Use Code 220	Multifamily (Low-Rise)	50	48	98
ITE Land Use Code 221	Multifamily (Mid-Rise)	120	116	236
ITE Land Use Code 430	Golf Course	13	14	27
ITE Land Use Code 821	Shopping Plaza w/Market	722	693	1,415
	TOTAL	917	885	1,802

Calculations;

ITE Land Use Code 215 – Single Family Attached

Independent Variable (X) = Dwelling Units X = 46

Daily *Directional Distribution 50% Entering, 50% Exiting*

T = 7.2 (X)	Enter:	166
T = 7.2 (46)	Exit:	166
T = 332	Total	332

AM Peak *Directional Distribution 31% Entering, 69% Exiting*

T = 0.48 (X)	Enter:	7
T = 0.48 (46)	Exit:	15
T = 22	Total	22

PM Peak *Directional Distribution 57% Entering, 43% Exiting*

T = 0.57 (X)	Enter:	15
T = 0.57 (46)	Exit:	11
T = 26	Total	26

Sat. MD Peak *Directional Distribution 48% Entering, 52% Exiting*

T = 0.57 (X)	Enter:	12
T = 0.57 (46)	Exit:	14
T = 26	Total	26

ITE Land Use Code 220 – Multifamily Housing (Low-Rise)

Independent Variable (X) = Dwelling Units X = 240

Daily *Directional Distribution 50% Entering, 50% Exiting*

T = 6.74 (X)	Enter:	809
T = 6.74 (240)	Exit:	809
T = 1,618	Total	1,618

AM Peak *Directional Distribution 24% Entering, 76% Exiting*

T = 0.40 (X)	Enter:	23
T = 0.40 (240)	Exit:	73
T = 96	Total	96

PM Peak *Directional Distribution 63% Entering, 37% Exiting*

T = 0.51 (X)	Enter:	77
T = 0.51 (240)	Exit:	45
T = 122	Total	122

Sat. MD Peak *Directional Distribution 51% Entering, 49% Exiting*

T = 0.41 (X)	Enter:	50
T = 0.41 (240)	Exit:	48
T = 98		98

ITE Land Use Code 221 – Multifamily Housing (Mid-Rise)

Independent Variable (X) = Dwelling Units X = 604

Daily *Directional Distribution 50% Entering, 50% Exiting*

T = 4.54 (X)	Enter: 1,371
T = 4.54 (604)	Exit: 1,371
T = 2,742	Total 2742

AM Peak *Directional Distribution 23% Entering, 77% Exiting*

T = 0.37 (X)	Enter: 52
T = 0.37 (604)	Exit: 172
T = 224	Total 224

PM Peak *Directional Distribution 61% Entering, 39% Exiting*

T = 0.39 (X)	Enter: 144
T = 0.39 (604)	Exit: 92
T = 236	Total 236

Sat. MD Peak *Directional Distribution 51% Entering, 49% Exiting*

T = 0.39 (X)	Enter: 120
T = 0.39 (604)	Exit: 116
T = 236	Total 236

ITE Land Use Code 430 – Golf Course

Independent Variable (X) = Holes X = 9 holes

Daily *Directional Distribution 50% Entering, 50% Exiting*

T = 30.38 (X)	Enter:	137
T = 30.38 (9)	Exit:	137
T = 274	Total	274

AM Peak *Directional Distribution 79% Entering, 21% Exiting*

T = 1.76 (X)	Enter:	13
T = 1.76 (9)	Exit:	3
T = 16	Total	16

PM Peak *Directional Distribution 53% Entering, 47% Exiting*

T = 2.91 (X)	Enter:	14
T = 2.91 (9)	Exit:	12
T = 26	Total	26

Sat. MD Peak *Directional Distribution 49% Entering, 51% Exiting*

T = 3.03 (X)	Enter:	13
T = 3.03 (9)	Exit:	14
T = 27	Total	27

ITE Land Use Code 821 – Shopping Plaza with Supermarket

Independent Variable (X) = Thousand Gross Floor Area X = 152.8

Daily *Directional Distribution 50% Entering, 50% Exiting*

T = 94.49 (X)	Enter:	7,219
T = 94.49 (152.8)	Exit:	7,219
T = 14,438	Total	14,438

AM Peak *Directional Distribution 62% Entering, 38% Exiting*

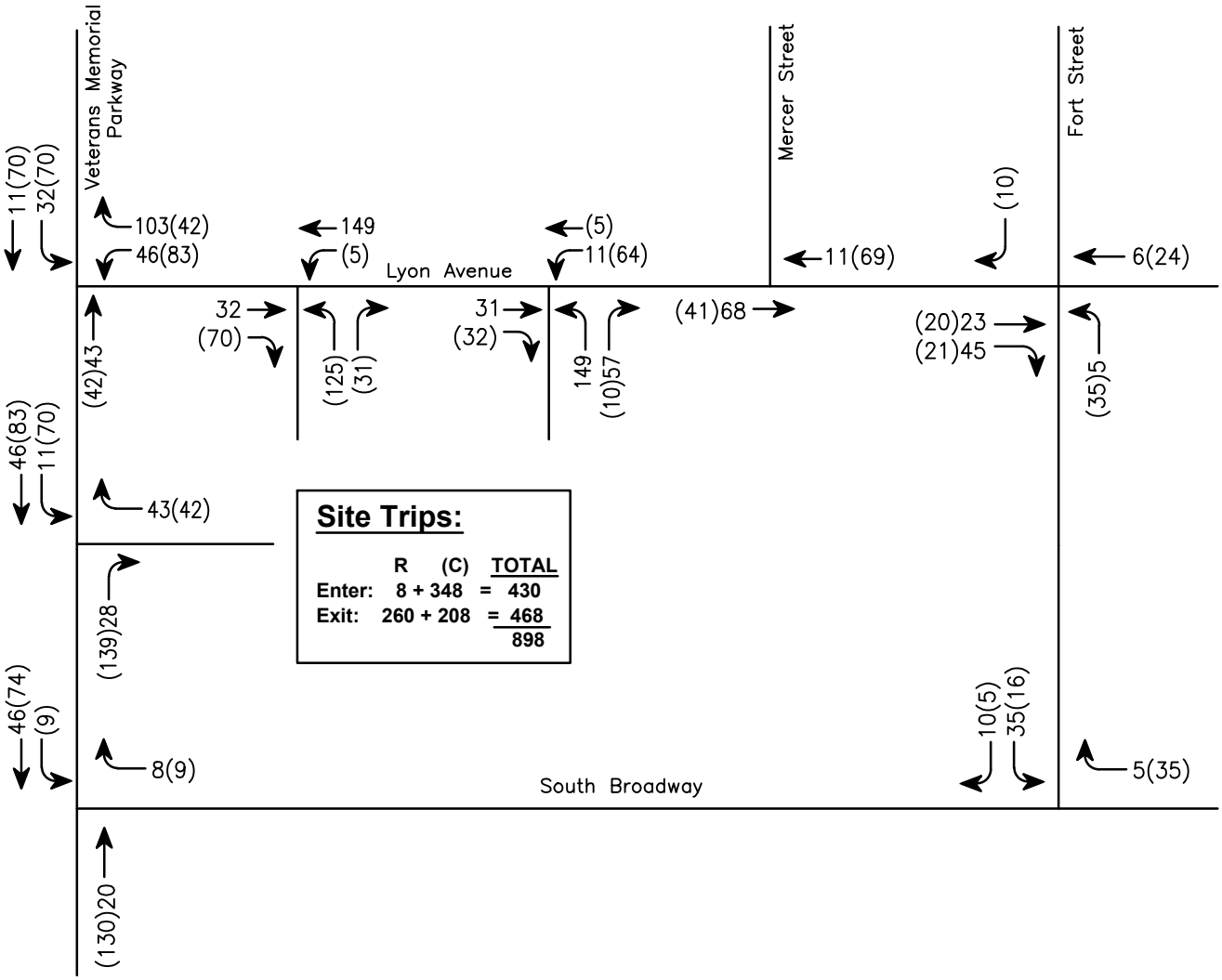
T = 3.53 (X)	Enter:	335
T = 3.53 (152.8)	Exit:	205
T = 540	Total	540

PM Peak *Directional Distribution 48% Entering, 52% Exiting*

T = 9.03 (X)	Enter:	662
T = 9.03 (152.8)	Exit:	718
T = 1,380	Total	1,380

Sat. MD Peak *Directional Distribution 51% Entering, 49% Exiting*

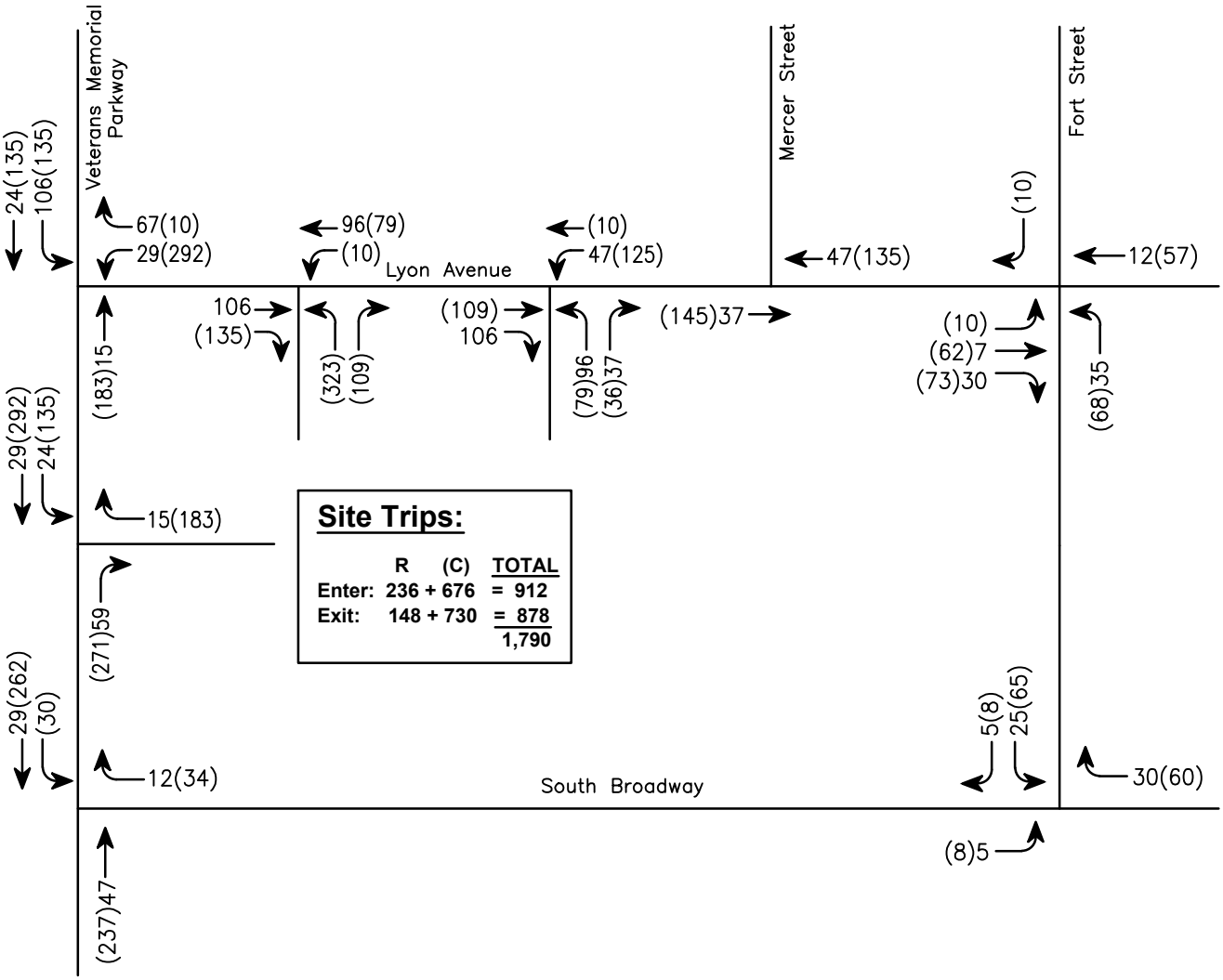
T = 9.26(X)	Enter:	722
T = 9.26 (152.8)	Exit:	693
T = 1,415	Total	1,415



CROSSMAN ENGINEERING
151 Centerville Road | Warwick, Rhode Island 02886

SITE TRIP DISTRIBUTION
WEEKDAY AM PEAK HOUR

THE MET
EAST PROVIDENCE, RHODE ISLAND



Site Trips:

	R	(C)	TOTAL
Enter:	236 +	676	= 912
Exit:	148 +	730	= 878
			1,790

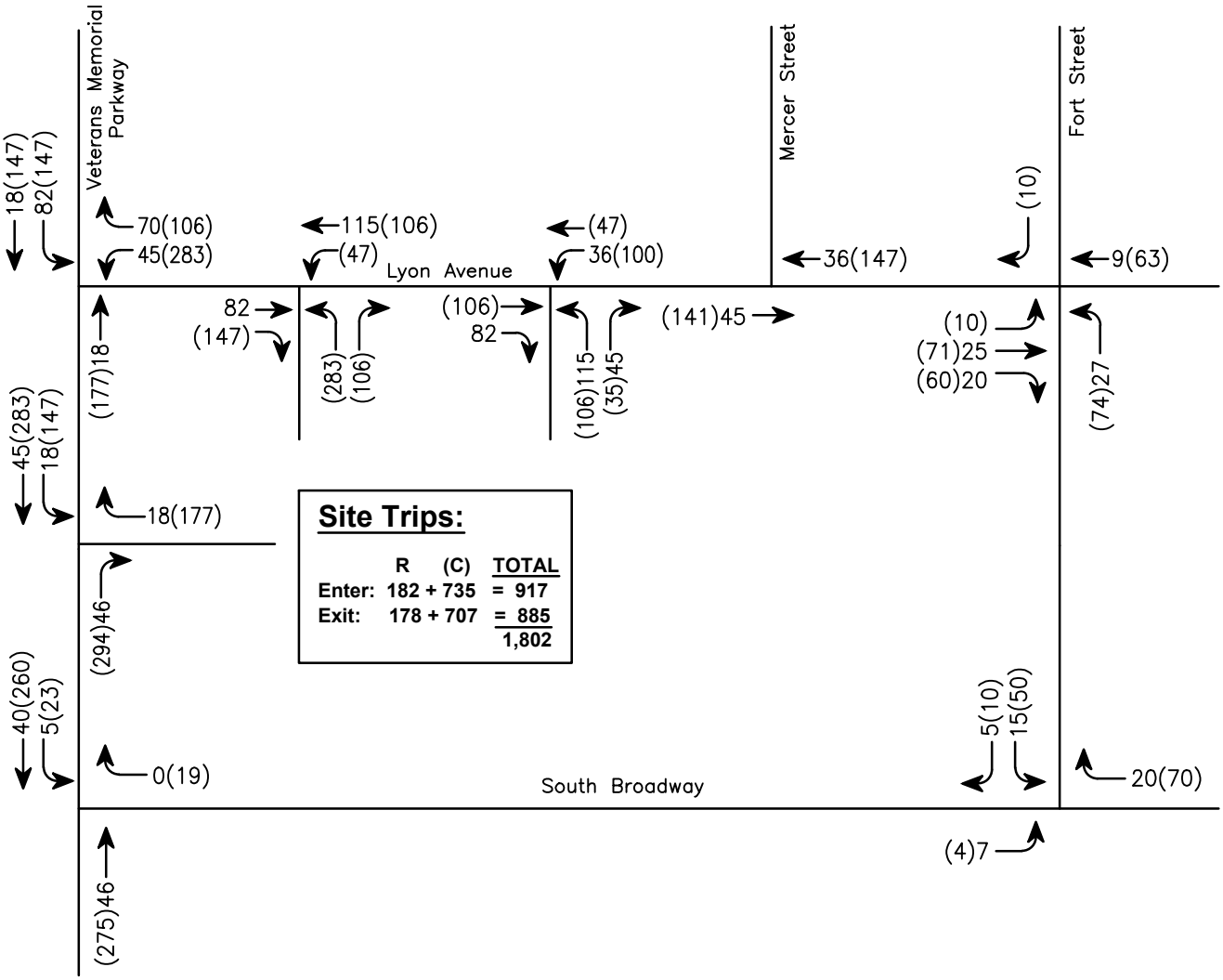
LEGEND

R = RESIDENTIAL
(C) = COMMERCIAL

CROSSMAN ENGINEERING
151 Centerville Road | Warwick, Rhode Island 02886

SITE TRIP DISTRIBUTION
WEEKDAY PM PEAK HOUR

THE MET
EAST PROVIDENCE, RHODE ISLAND



CROSSMAN ENGINEERING
151 Centerville Road | Warwick, Rhode Island 02886

SITE TRIP DISTRIBUTION
SATURDAY PEAK HOUR

THE MET
EAST PROVIDENCE, RHODE ISLAND

B

ITE Land Use Code

ITE Land Use Code 215 – Single-Family Attached Housing

ITE Land Use Code 220 – Multifamily Housing (Low-Rise)

ITE Land Use Code 221 – Multifamily Housing (Mid-Rise)

ITE Land Use Code 430 – Golf Course

ITE Land Use Code 821 – Shopping Plaza with Supermarket

ITE Land Use Code 215 – Single-Family Attached Housing

Land Use: 215
Single-Family Attached Housing

Description

Single-family attached housing includes any single-family housing unit that shares a wall with an adjoining dwelling unit, whether the walls are for living space, a vehicle garage, or storage space.

Additional Data

The database for this land use includes duplexes (defined as a single structure with two distinct dwelling units, typically joined side-by-side and each with at least one outside entrance) and townhouses/rowhouses (defined as a single structure with three or more distinct dwelling units, joined side-by-side in a row and each with an outside entrance).

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in British Columbia (CAN), California, Georgia, Illinois, Maryland, Massachusetts, Minnesota, New Jersey, Ontario (CAN), Oregon, Pennsylvania, South Dakota, Utah, Virginia, and Wisconsin.

Source Numbers

168, 204, 211, 237, 305, 306, 319, 321, 357, 390, 418, 525, 571, 583, 638, 735, 868, 869, 870, 896, 912, 959, 1009, 1046, 1056, 1058, 1077

Single-Family Attached Housing
(215)

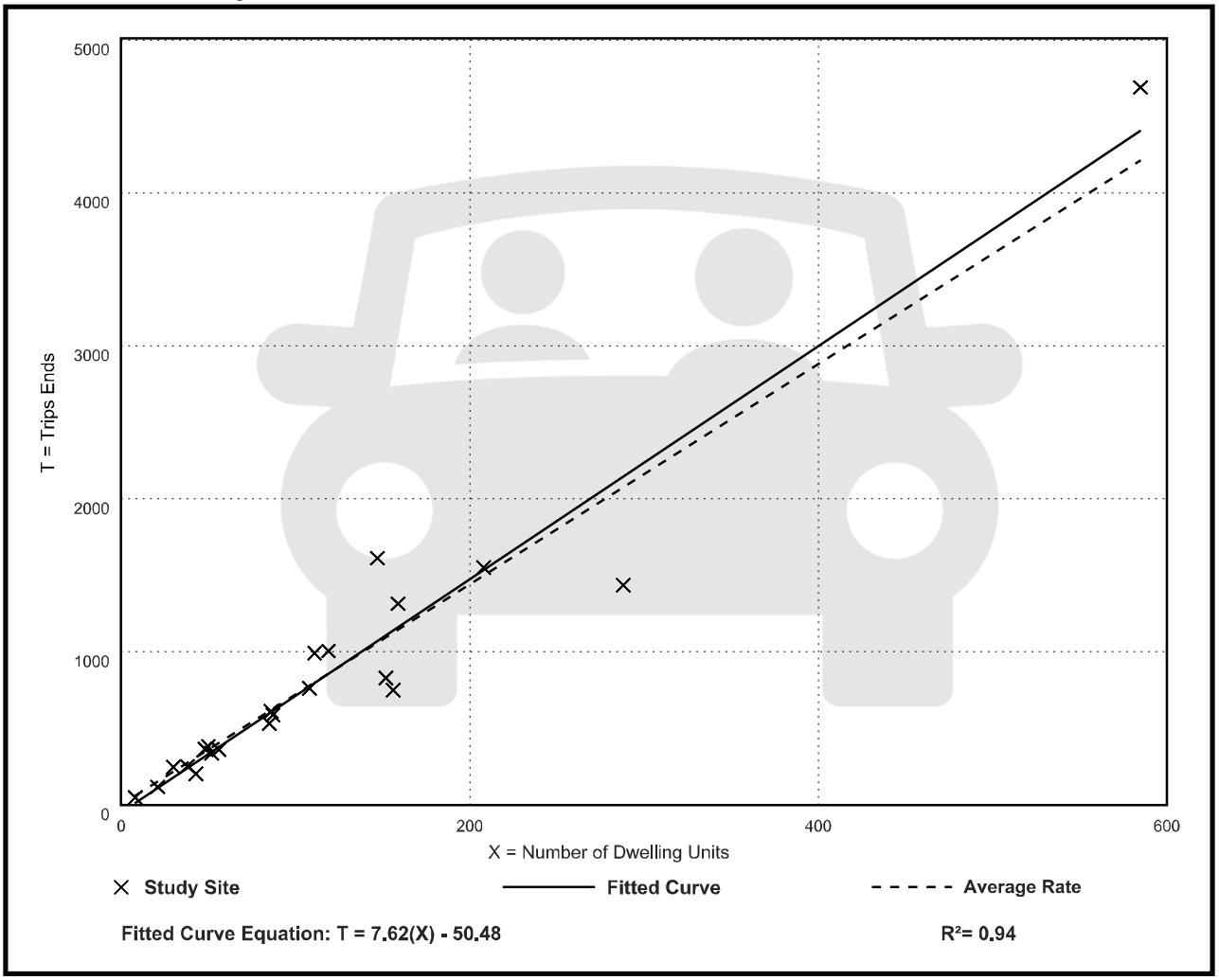
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 22
Avg. Num. of Dwelling Units: 120
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
7.20	4.70 - 10.97	1.61

Data Plot and Equation



Fitted Curve Equation: T = 7.62(X) - 50.48

R^2= 0.94

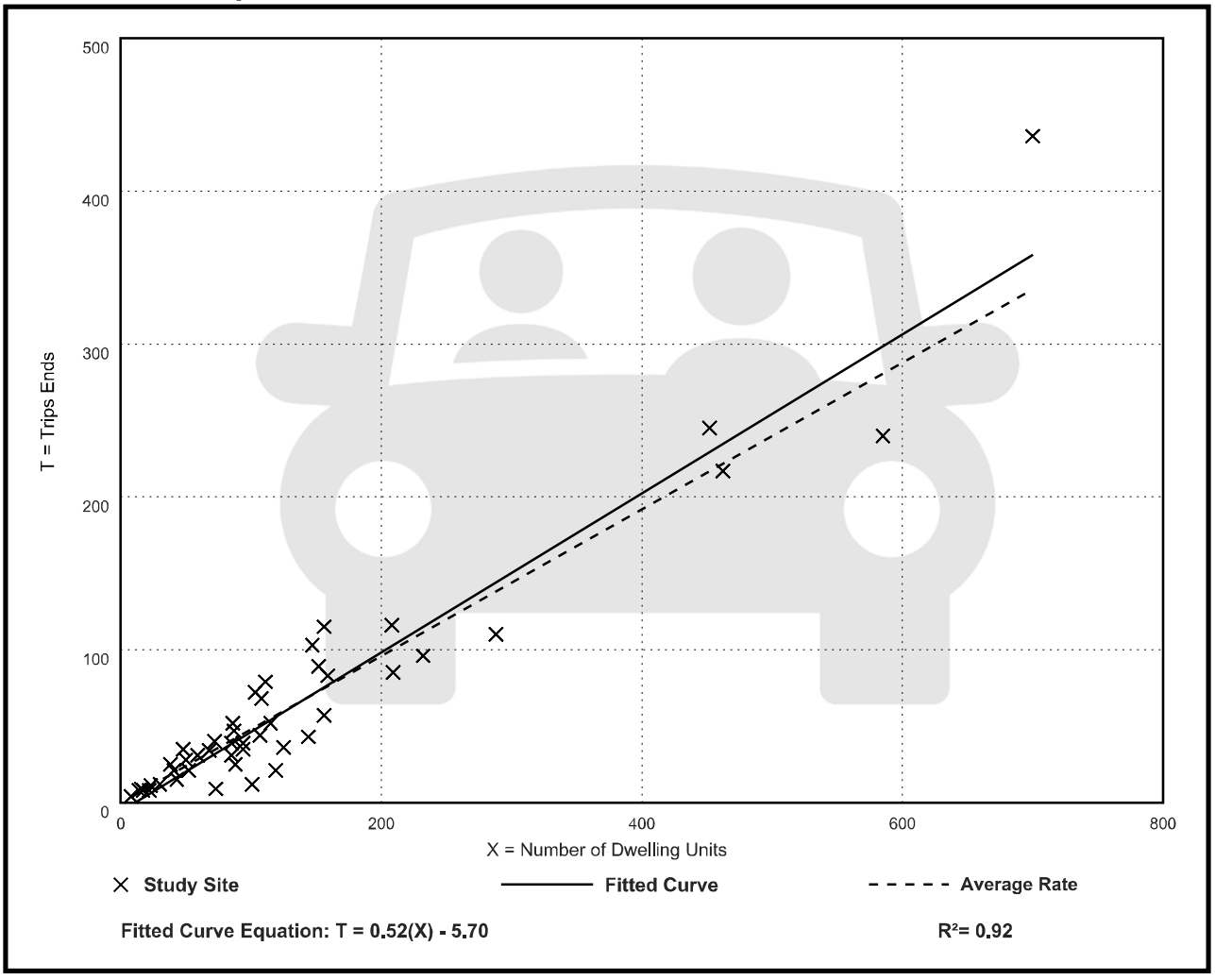
Single-Family Attached Housing
(215)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 46
Avg. Num. of Dwelling Units: 135
Directional Distribution: 31% entering, 69% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.48	0.12 - 0.74	0.14

Data Plot and Equation



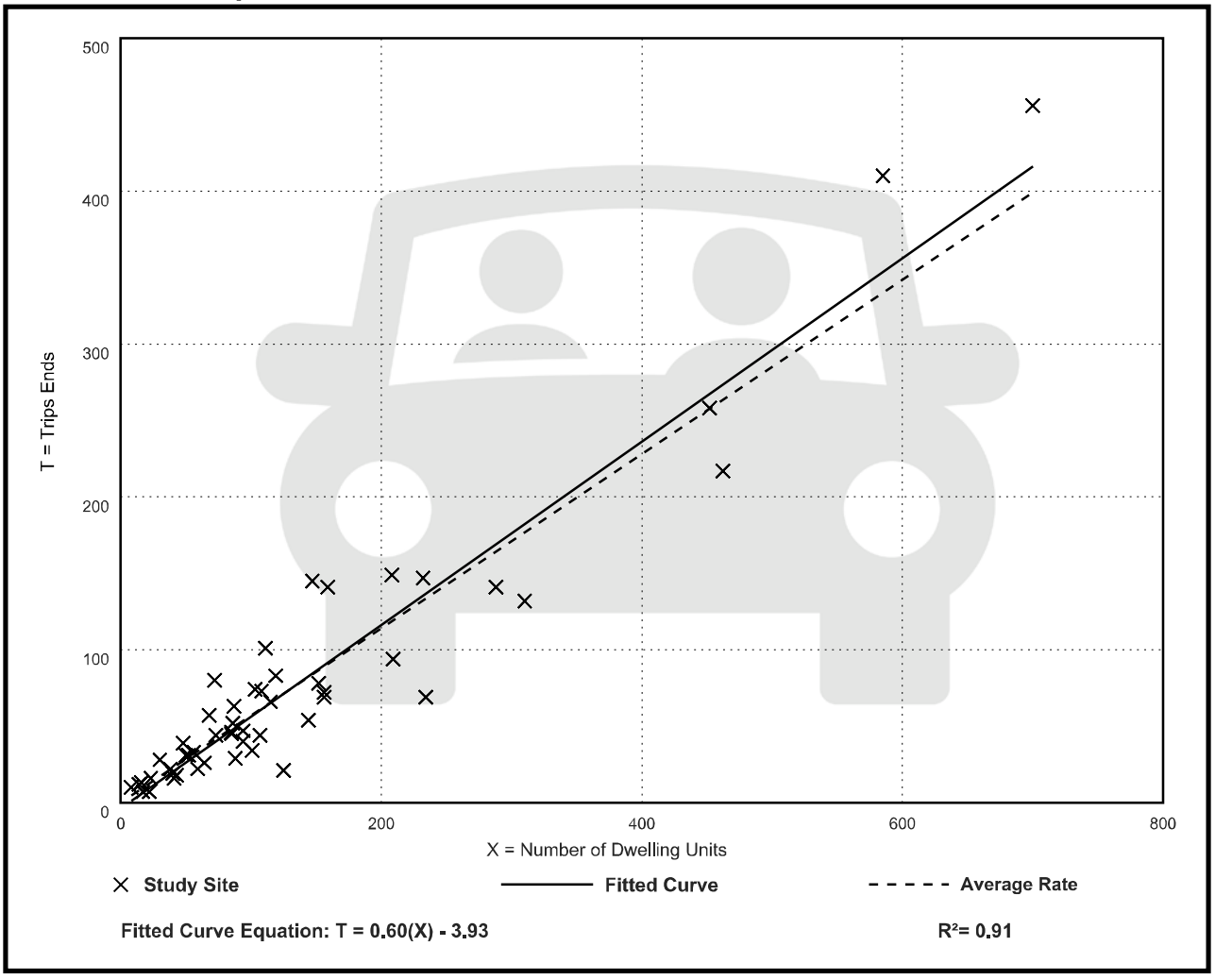
Single-Family Attached Housing
(215)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 51
Avg. Num. of Dwelling Units: 136
Directional Distribution: 57% entering, 43% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.57	0.17 - 1.25	0.18

Data Plot and Equation



Single-Family Attached Housing
(215)

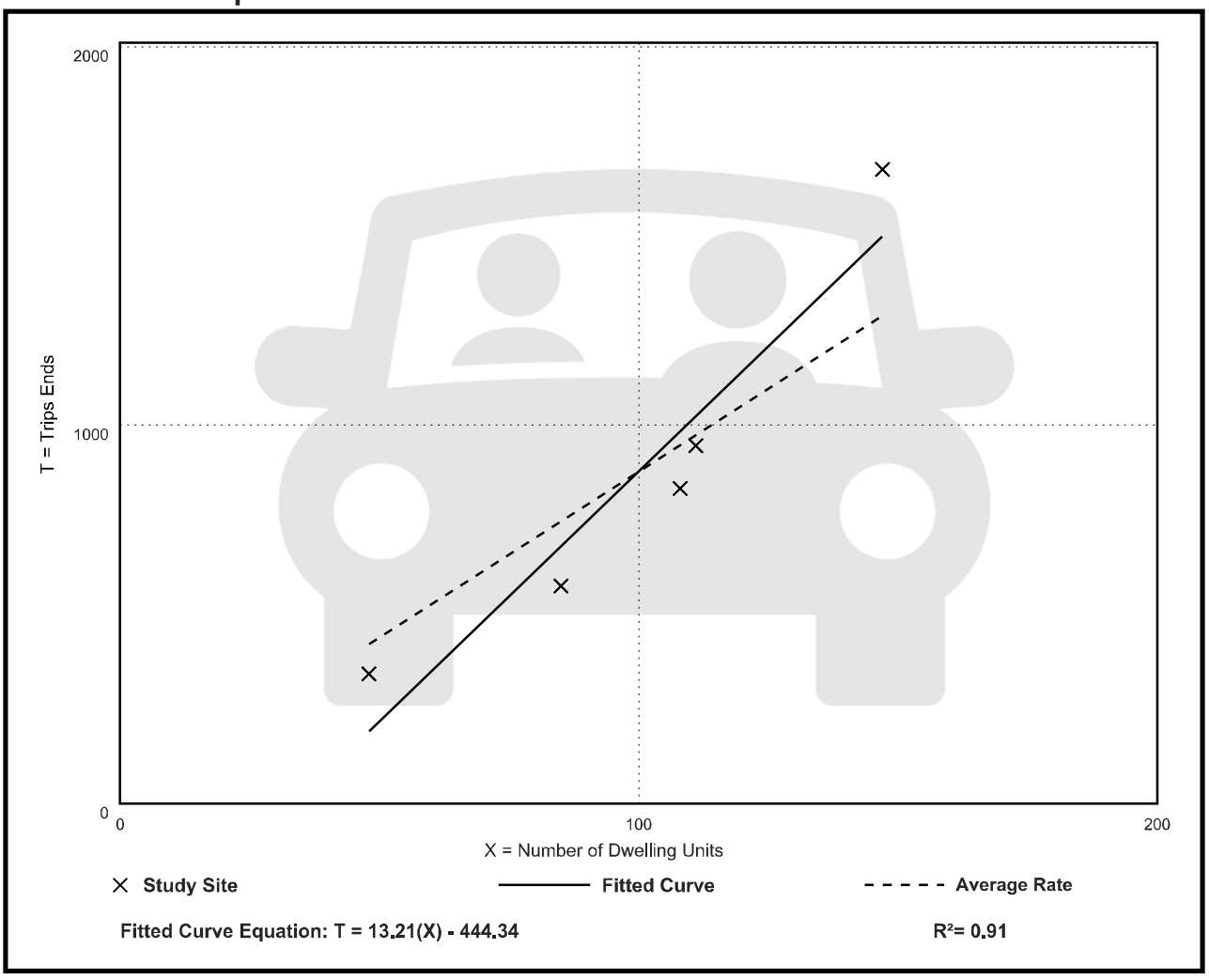
Vehicle Trip Ends vs: Dwelling Units
On a: Saturday

Setting/Location: General Urban/Suburban
Number of Studies: 5
Avg. Num. of Dwelling Units: 100
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
8.76	6.75 - 11.40	2.02

Data Plot and Equation



Fitted Curve Equation: T = 13.21(X) - 444.34

R^2= 0.91

Single-Family Attached Housing
(215)

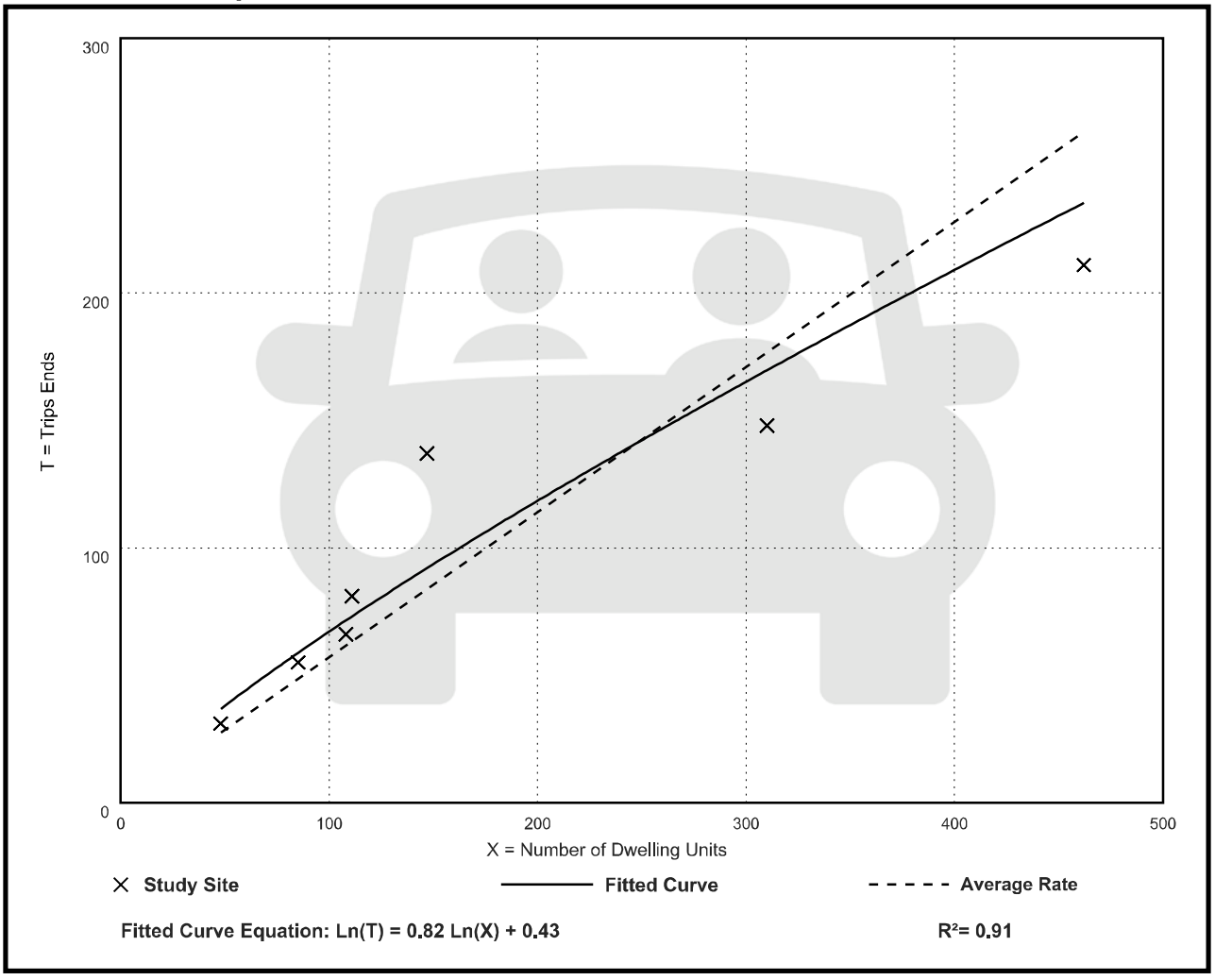
Vehicle Trip Ends vs: Dwelling Units
On a: Saturday, Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 7
Avg. Num. of Dwelling Units: 182
Directional Distribution: 48% entering, 52% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.57	0.46 - 0.93	0.17

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.82 Ln(X) + 0.43

R^2= 0.91

ITE Land Use Code 220 – Multifamily Housing (Low-Rise)

Land Use: 220
Multifamily Housing (Low-Rise)

Description

Low-rise multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have two or three floors (levels). Various configurations fit this description, including walkup apartment, mansion apartment, and stacked townhouse.

- A walkup apartment typically is two or three floors in height with dwelling units that are accessed by a single or multiple entrances with stairways and hallways.
- A mansion apartment is a single structure that contains several apartments within what appears to be a single-family dwelling unit.
- A fourplex is a single two-story structure with two matching dwelling units on the ground and second floors. Access to the individual units is typically internal to the structure and provided through a central entry and stairway.
- A stacked townhouse is designed to match the external appearance of a townhouse. But, unlike a townhouse dwelling unit that only shares walls with an adjoining unit, the stacked townhouse units share both floors and walls. Access to the individual units is typically internal to the structure and provided through a central entry and stairway.

Multifamily housing (mid-rise) (Land Use 221), multifamily housing (high-rise) (Land Use 222), affordable housing (Land Use 223), and off-campus student apartment (low-rise) (Land Use 225) are related land uses.

Land Use Subcategory

Data are presented for two subcategories for this land use: (1) not close to rail transit and (2) close to rail transit. A site is considered close to rail transit if the walking distance between the residential site entrance and the closest rail transit station entrance is ½ mile or less.

Additional Data

For the three sites for which both the number of residents and the number of occupied dwelling units were available, there were an average of 2.72 residents per occupied dwelling unit.

For the two sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 96.2 percent of the total dwelling units were occupied.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip

generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

For the three sites for which data were provided for both occupied dwelling units and residents, there was an average of 2.72 residents per occupied dwelling unit.

It is expected that the number of bedrooms and number of residents are likely correlated to the trips generated by a residential site. To assist in future analysis, trip generation studies of all multifamily housing should attempt to obtain information on occupancy rate and on the mix of residential unit sizes (i.e., number of units by number of bedrooms at the site complex).

The sites were surveyed in the 1980s, the 1990s, the 2000s, the 2010s, and the 2020s in British Columbia (CAN), California, Delaware, Florida, Georgia, Illinois, Indiana, Maine, Maryland, Massachusetts, Minnesota, New Jersey, Ontario (CAN), Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, and Washington.

Source Numbers

188, 204, 237, 300, 305, 306, 320, 321, 357, 390, 412, 525, 530, 579, 583, 638, 864, 866, 896, 901, 903, 904, 936, 939, 944, 946, 947, 948, 963, 964, 966, 967, 1012, 1013, 1014, 1036, 1047, 1056, 1071, 1076

Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

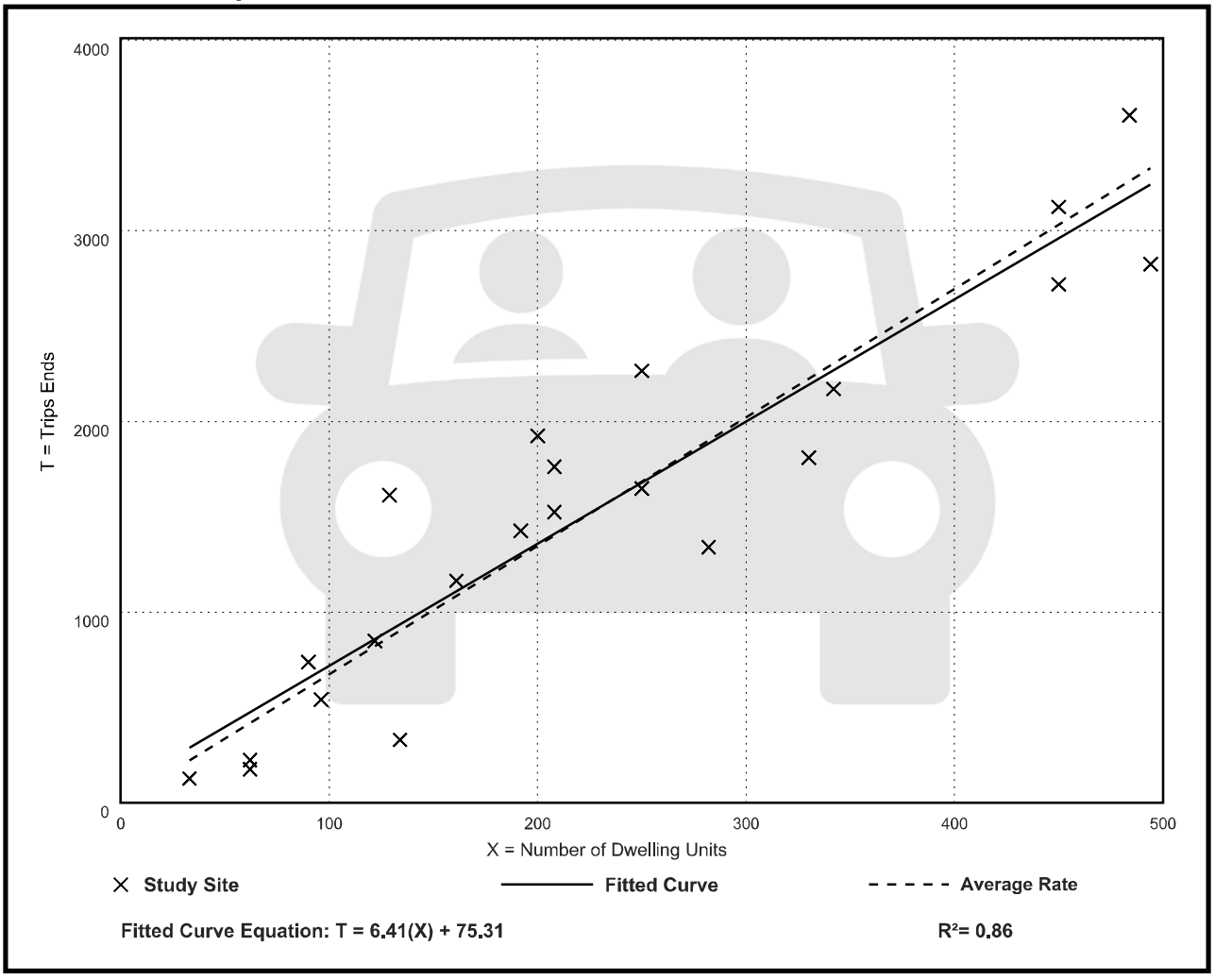
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 22
Avg. Num. of Dwelling Units: 229
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
6.74	2.46 - 12.50	1.79

Data Plot and Equation



Fitted Curve Equation: T = 6.41(X) + 75.31

R^2= 0.86

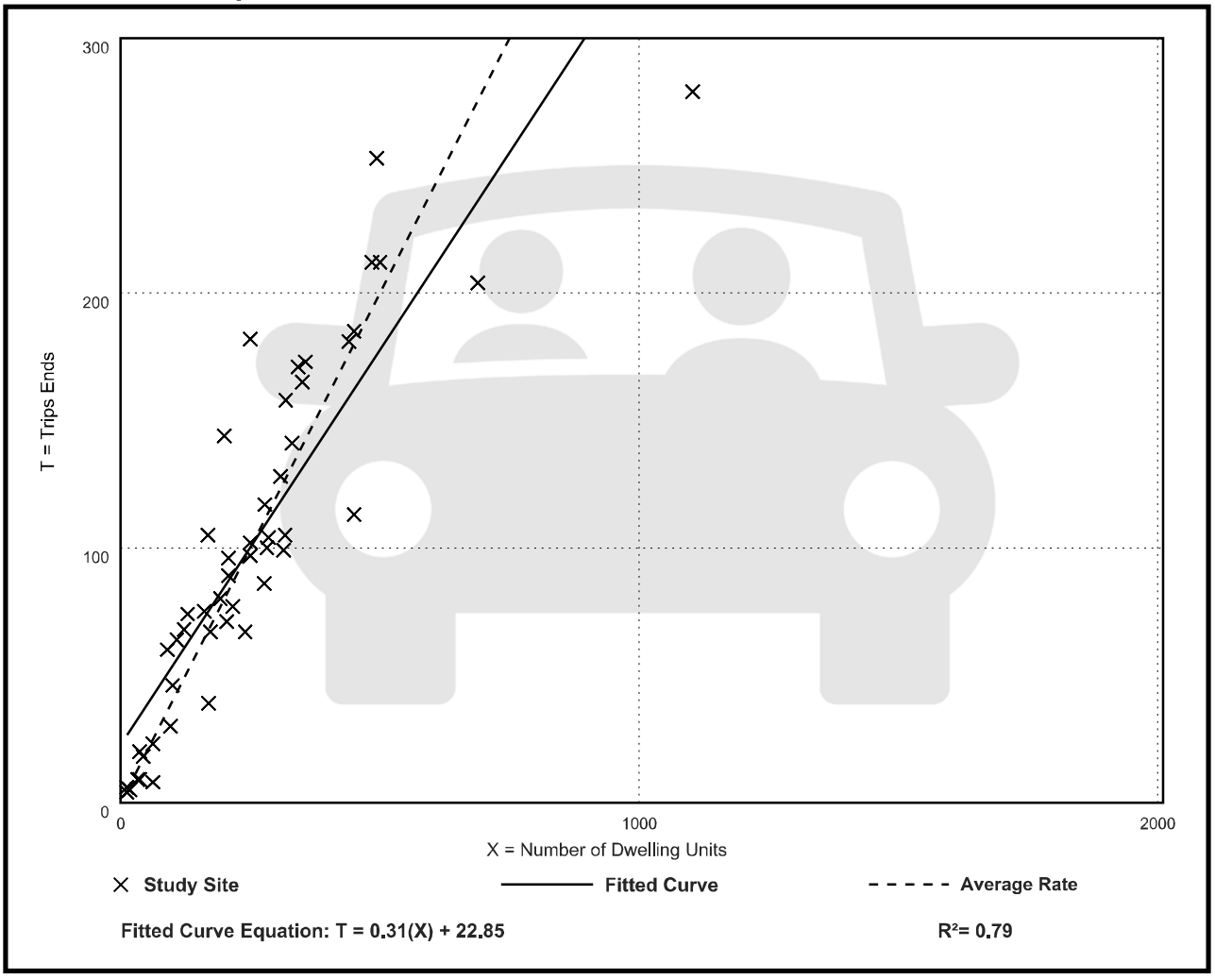
Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 49
Avg. Num. of Dwelling Units: 249
Directional Distribution: 24% entering, 76% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.40	0.13 - 0.73	0.12

Data Plot and Equation



Fitted Curve Equation: T = 0.31(X) + 22.85

R^2= 0.79

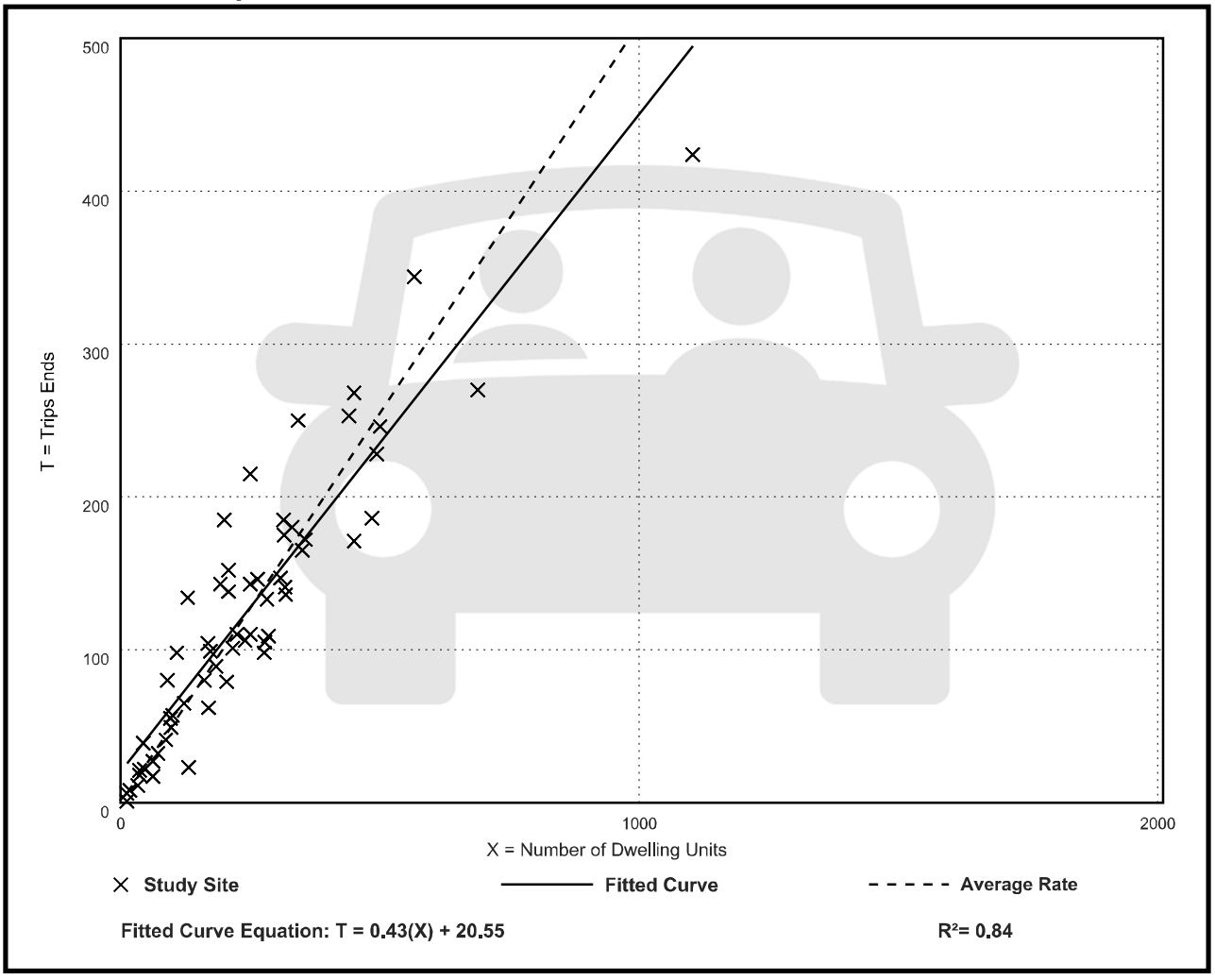
Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 59
Avg. Num. of Dwelling Units: 241
Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.51	0.08 - 1.04	0.15

Data Plot and Equation



Fitted Curve Equation: T = 0.43(X) + 20.55

R^2= 0.84

Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units
On a: Saturday

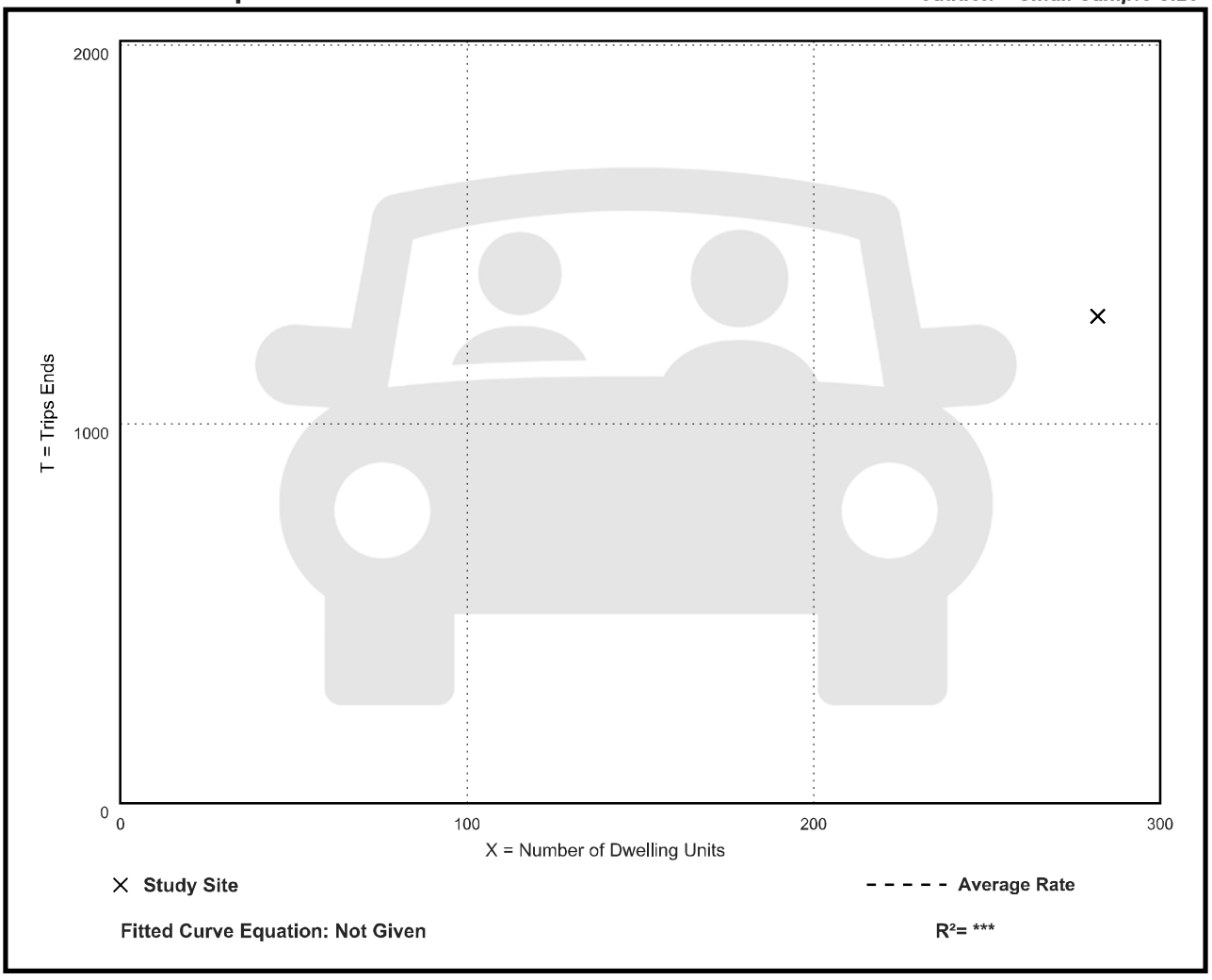
Setting/Location: General Urban/Suburban
Number of Studies: 1
Avg. Num. of Dwelling Units: 282
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
4.55	4.55 - 4.55	***

Data Plot and Equation

Caution – Small Sample Size



ITE Land Use Code 221 – Multifamily Housing (Mid-Rise)

Land Use: 221
Multifamily Housing (Mid-Rise)

Description

Mid-rise multifamily housing includes apartments and condominiums located in a building that has between four and 10 floors of living space. Access to individual dwelling units is through an outside building entrance, a lobby, elevator, and a set of hallways.

Multifamily housing (low-rise) (Land Use 220), multifamily housing (high-rise) (Land Use 222), off-campus student apartment (mid-rise) (Land Use 226), and mid-rise residential with ground-floor commercial (Land Use 231) are related land uses.

Land Use Subcategory

Data are presented for two subcategories for this land use: (1) not close to rail transit and (2) close to rail transit. A site is considered close to rail transit if the walking distance between the residential site entrance and the closest rail transit station entrance is ½ mile or less.

Additional Data

For the six sites for which both the number of residents and the number of occupied dwelling units were available, there were an average of 2.5 residents per occupied dwelling unit.

For the five sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 96 percent of the total dwelling units were occupied.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

It is expected that the number of bedrooms and number of residents are likely correlated to the trips generated by a residential site. To assist in future analysis, trip generation studies of all multifamily housing should attempt to obtain information on occupancy rate and on the mix of residential unit sizes (i.e., number of units by number of bedrooms at the site complex).

The sites were surveyed in the 1990s, the 2000s, the 2010s, and the 2020s in Alberta (CAN), California, District of Columbia, Florida, Georgia, Illinois, Maryland, Massachusetts, Minnesota, Montana, New Jersey, New York, Ontario (CAN), Oregon, Utah, and Virginia.

Source Numbers

168, 188, 204, 305, 306, 321, 818, 857, 862, 866, 901, 904, 910, 949, 951, 959, 963, 964, 966, 967, 969, 970, 1004, 1014, 1022, 1023, 1025, 1031, 1032, 1035, 1047, 1056, 1057, 1058, 1071, 1076

Multifamily Housing (Mid-Rise)
Not Close to Rail Transit (221)

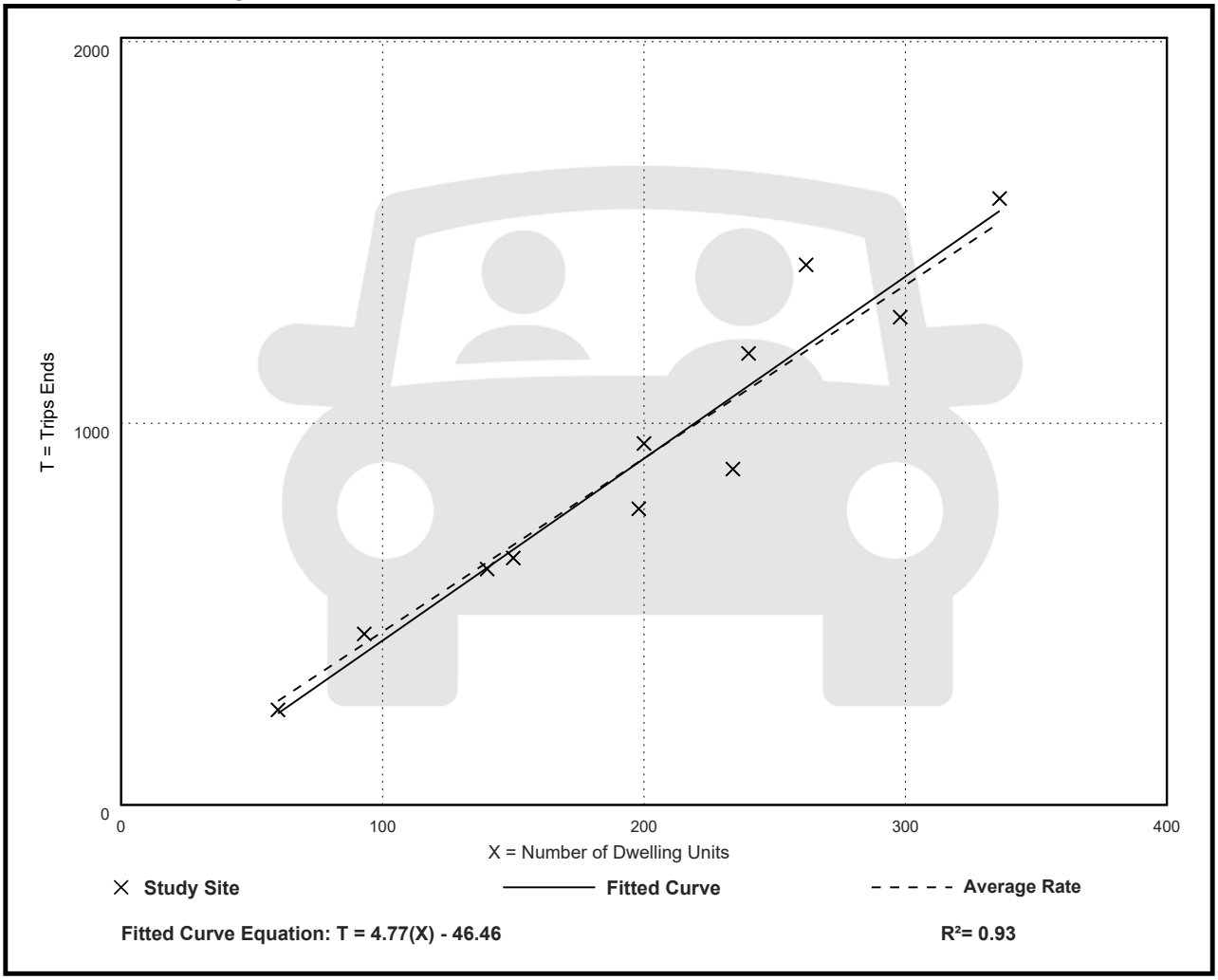
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 11
Avg. Num. of Dwelling Units: 201
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
4.54	3.76 - 5.40	0.51

Data Plot and Equation



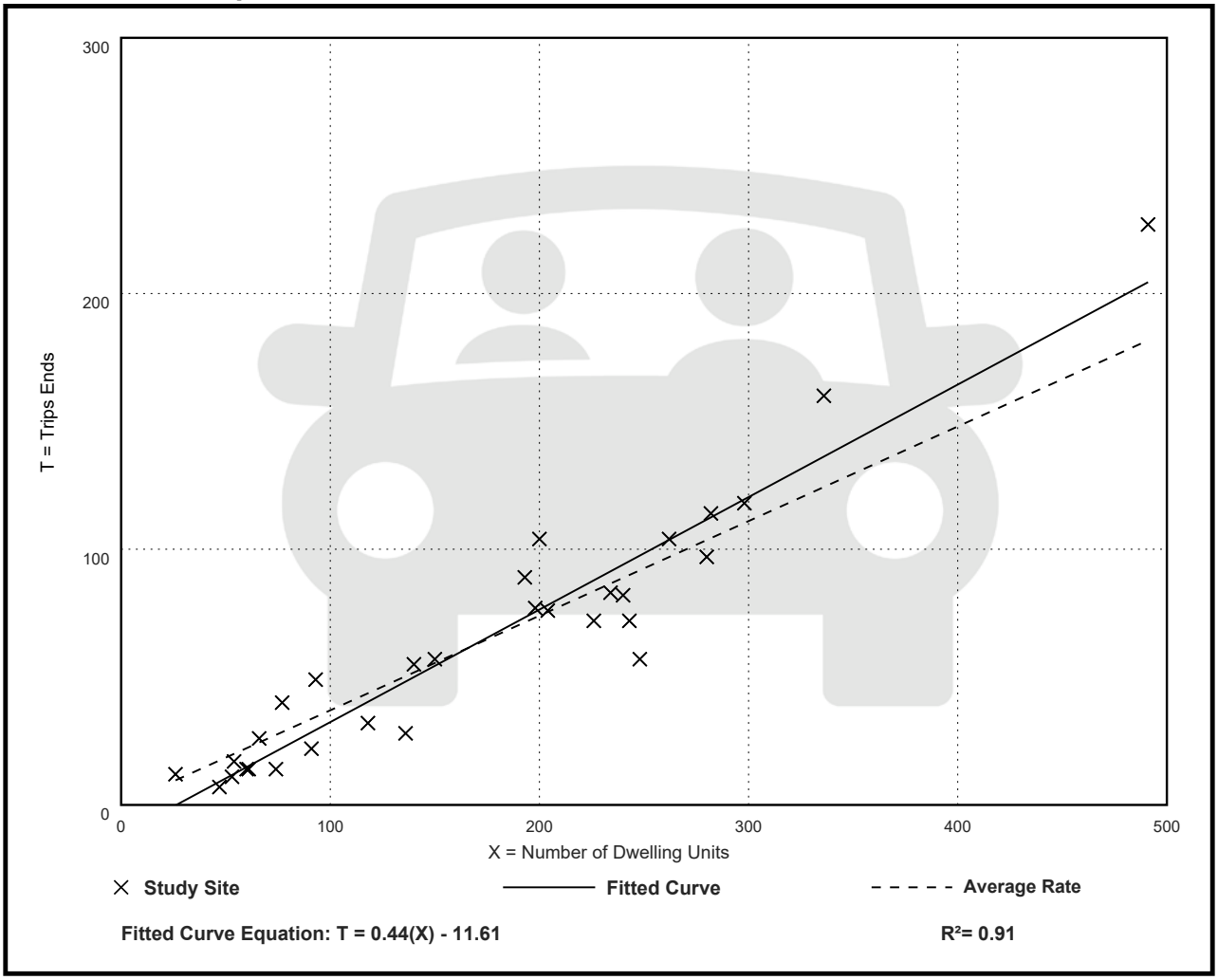
Multifamily Housing (Mid-Rise)
Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 30
Avg. Num. of Dwelling Units: 173
Directional Distribution: 23% entering, 77% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.37	0.15 - 0.53	0.09

Data Plot and Equation



Fitted Curve Equation: T = 0.44(X) - 11.61

R^2= 0.91

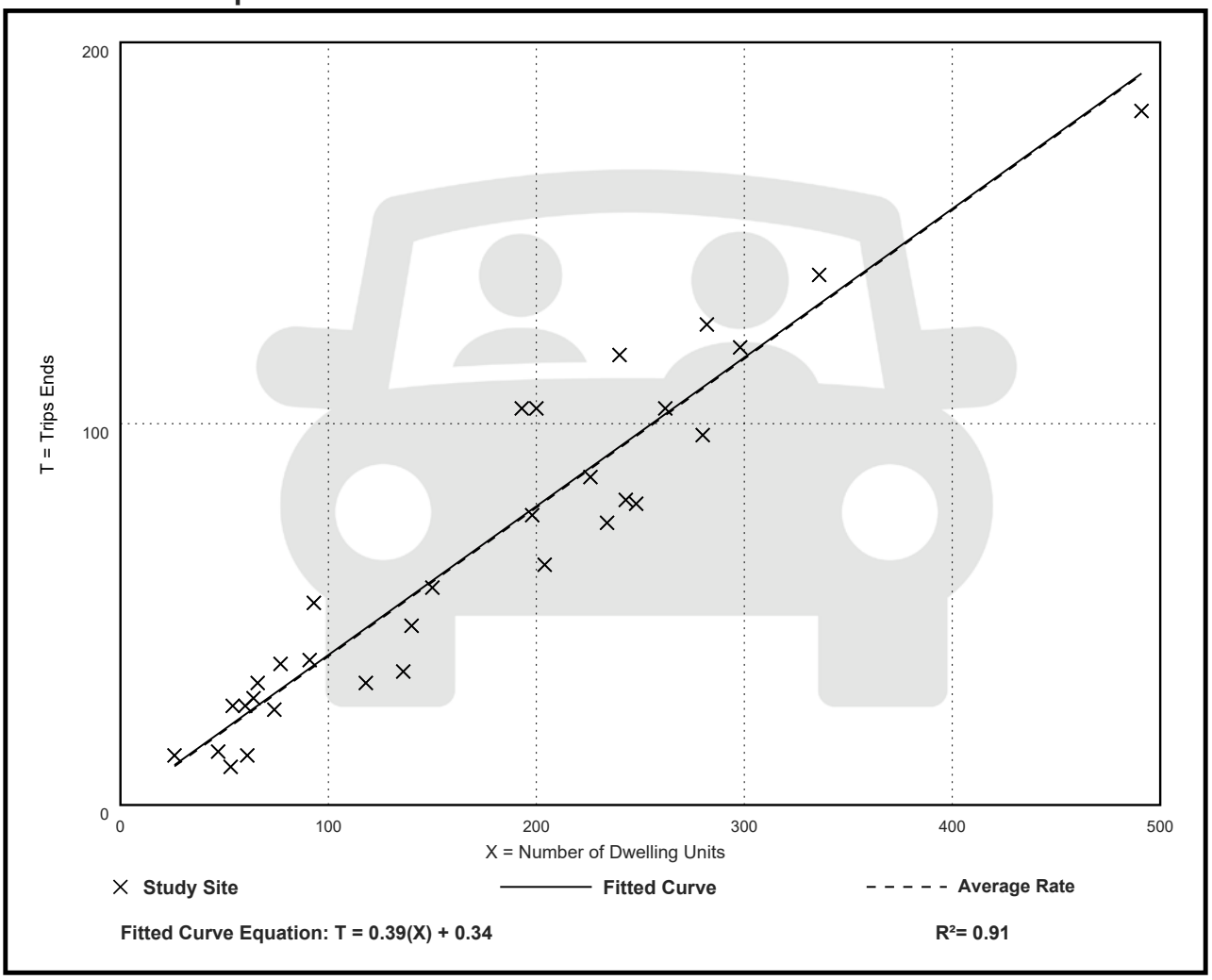
Multifamily Housing (Mid-Rise)
Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 31
Avg. Num. of Dwelling Units: 169
Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.39	0.19 - 0.57	0.08

Data Plot and Equation



Multifamily Housing (Mid-Rise)
Not Close to Rail Transit (221)

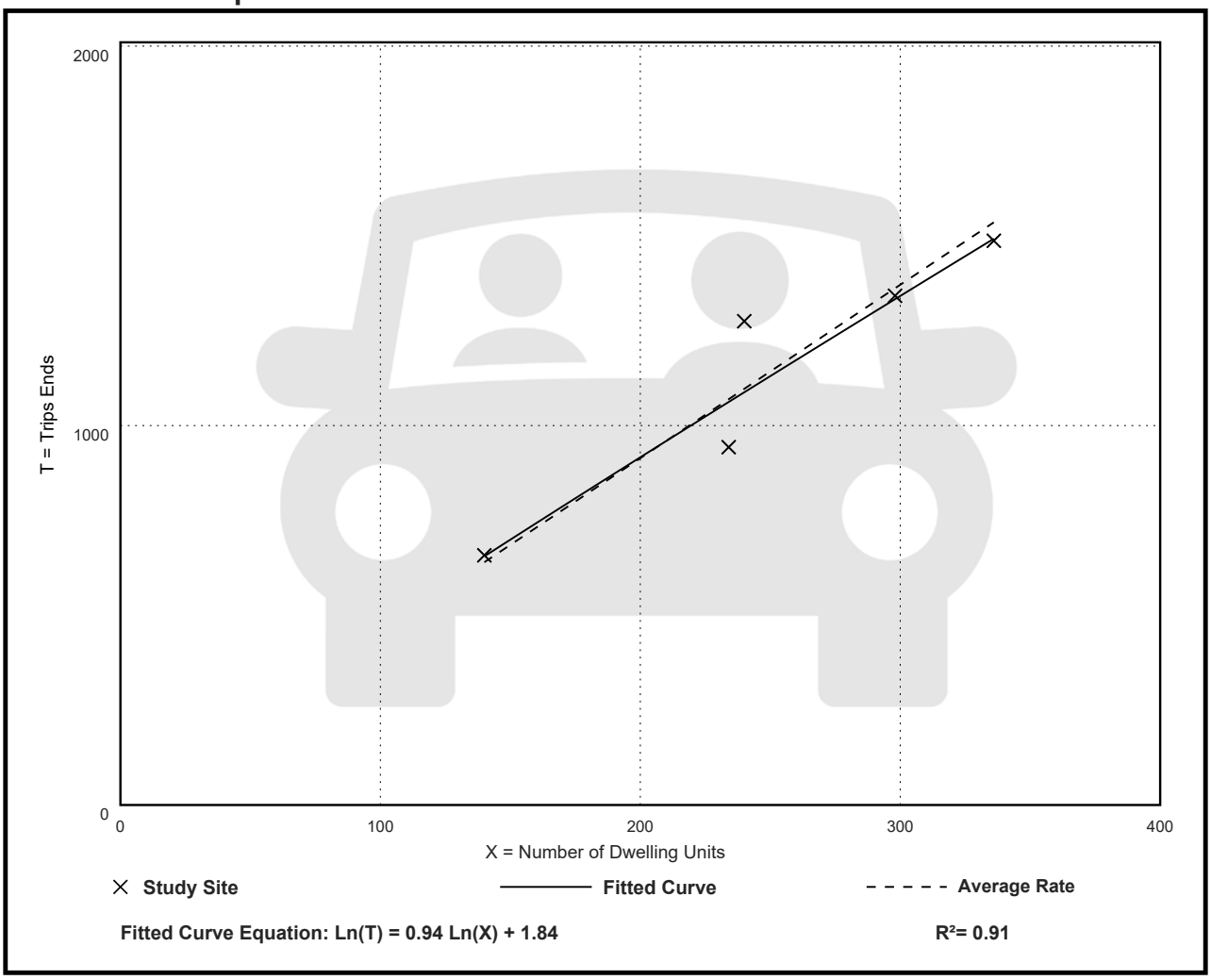
Vehicle Trip Ends vs: Dwelling Units
On a: Saturday

Setting/Location: General Urban/Suburban
Number of Studies: 5
Avg. Num. of Dwelling Units: 250
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
4.57	4.03 - 5.31	0.46

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.94 Ln(X) + 1.84

R^2= 0.91

ITE Land Use Code 430 – Golf Course

Land Use: 430
Golf Course

Description

A golf course is an expansive landscaped area that includes a series of golf holes, each consisting of a tee, fairway, and putting green. The site may have a driving range, clubhouse with a pro shop, restaurant, lounge, or banquet facility. Miniature golf course (Land Use 431), golf driving range (Land Use 432), and multipurpose recreational facility (Land Use 435) are related uses.

Additional Data

The golf courses in this land use are 9-, 18-, and 36-hole municipal courses.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), California, New Jersey, New York, Oregon, Pennsylvania, and Vermont.

Source Numbers

378, 407, 440, 629, 728, 925, 940, 970

Golf Course
(430)

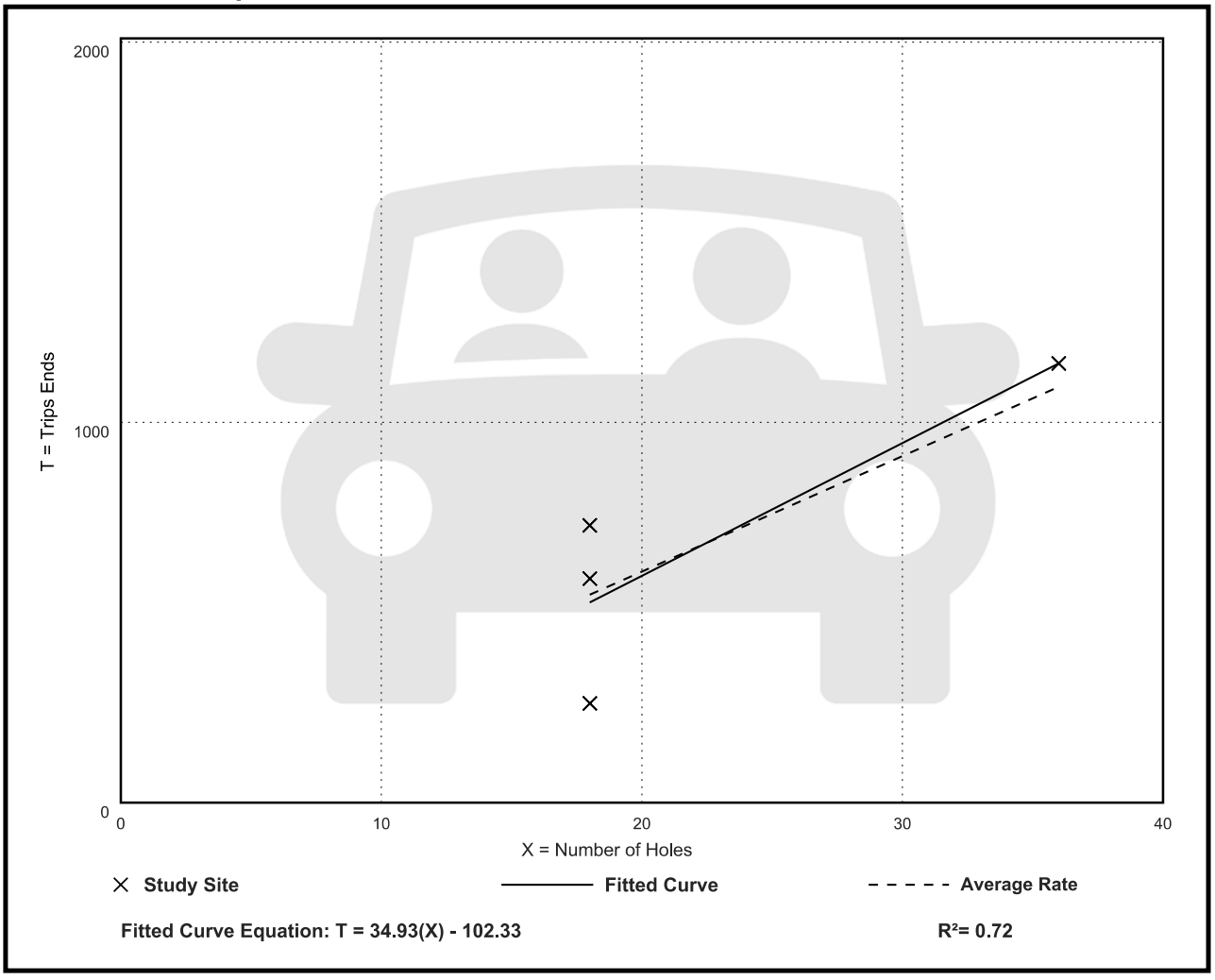
Vehicle Trip Ends vs: Holes
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 4
Avg. Num. of Holes: 23
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Hole

Average Rate	Range of Rates	Standard Deviation
30.38	14.50 - 40.50	9.88

Data Plot and Equation



Fitted Curve Equation: T = 34.93(X) - 102.33

R^2= 0.72

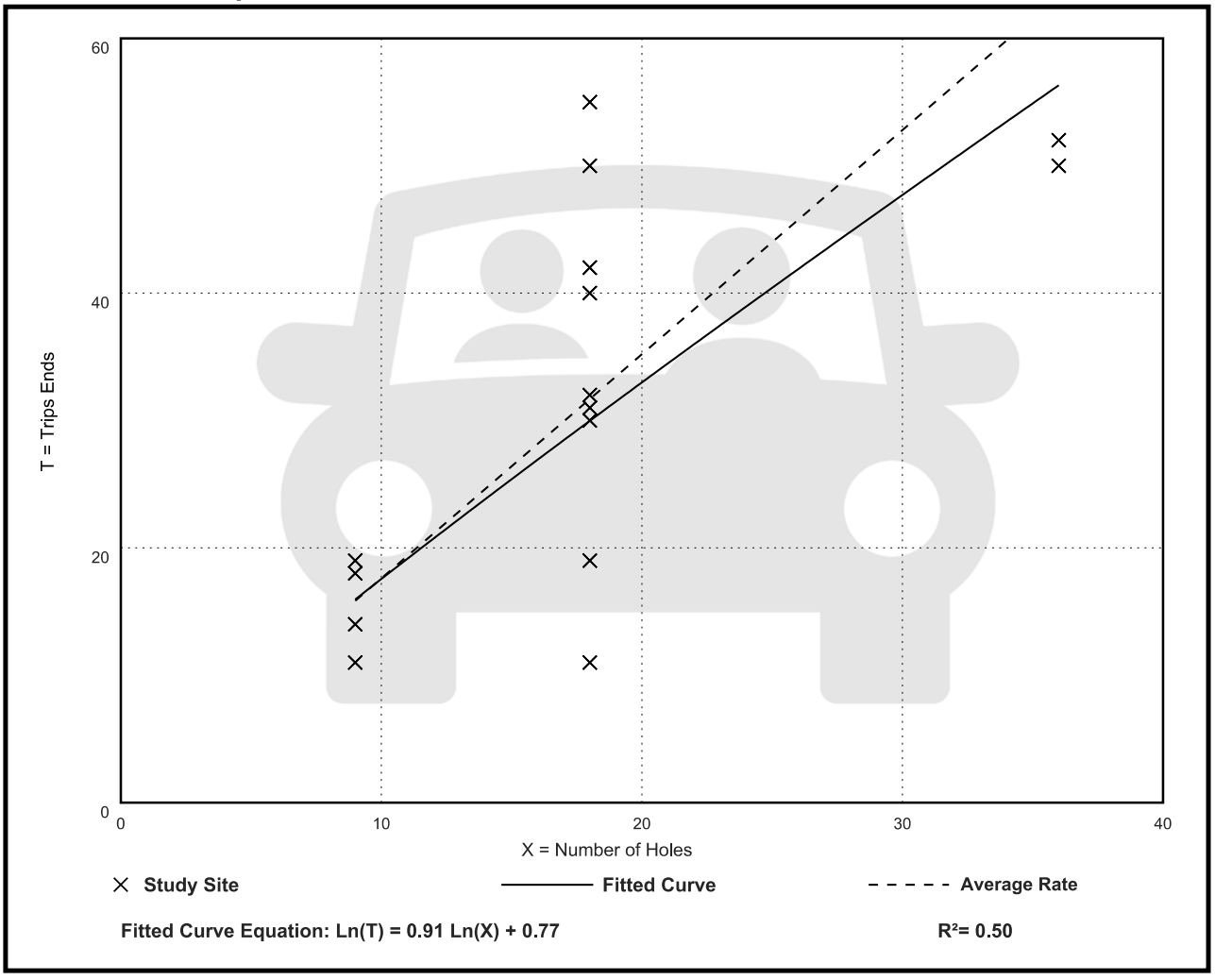
Golf Course
(430)

Vehicle Trip Ends vs: Holes
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 15
Avg. Num. of Holes: 18
Directional Distribution: 79% entering, 21% exiting

Vehicle Trip Generation per Hole

Average Rate	Range of Rates	Standard Deviation
1.76	0.61 - 3.06	0.64

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.91 Ln(X) + 0.77

R^2= 0.50

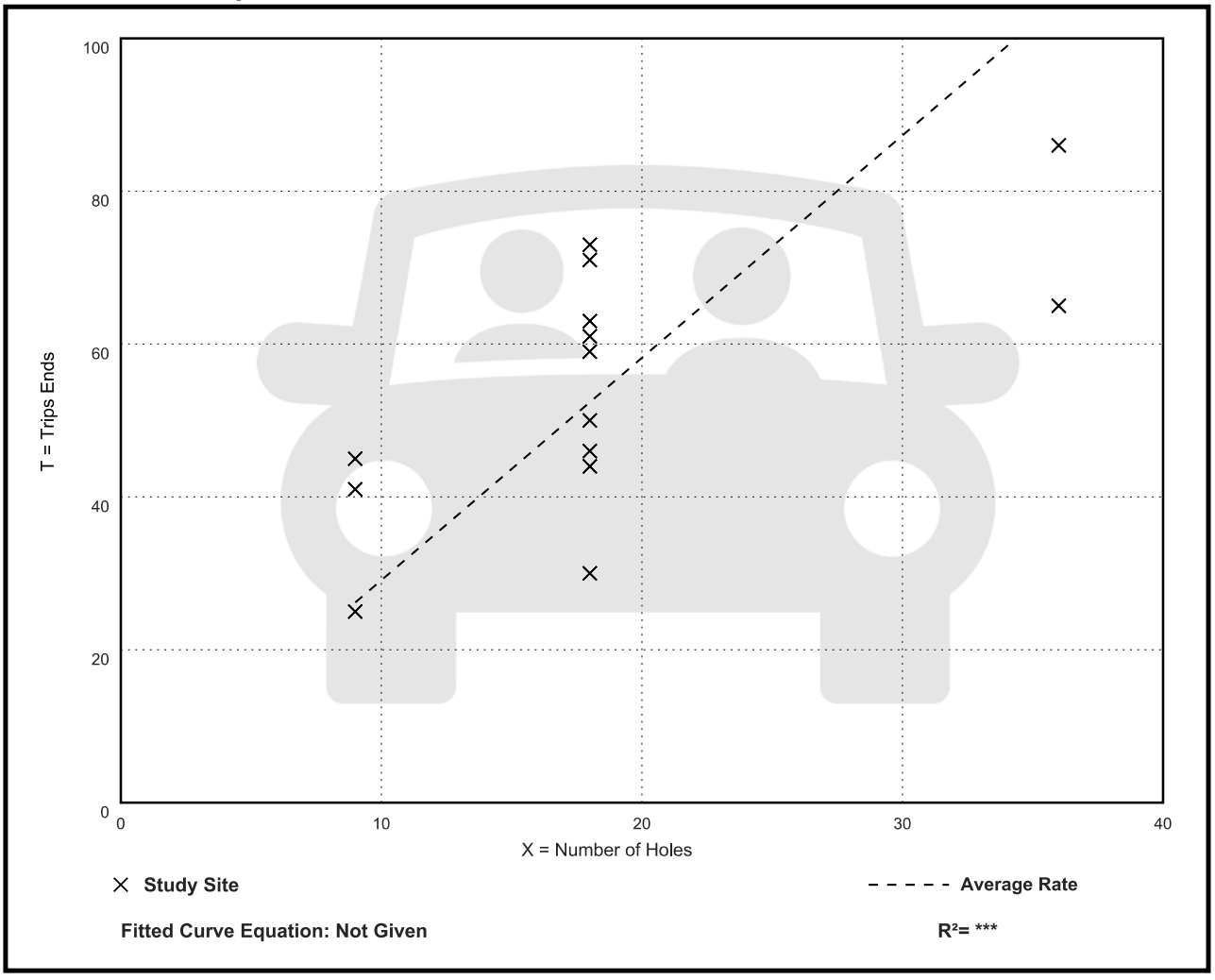
Golf Course
(430)

Vehicle Trip Ends vs: Holes
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 14
Avg. Num. of Holes: 19
Directional Distribution: 53% entering, 47% exiting

Vehicle Trip Generation per Hole

Average Rate	Range of Rates	Standard Deviation
2.91	1.67 - 5.00	0.93

Data Plot and Equation



Golf Course
(430)

Vehicle Trip Ends vs: Holes
On a: Saturday, Peak Hour of Generator

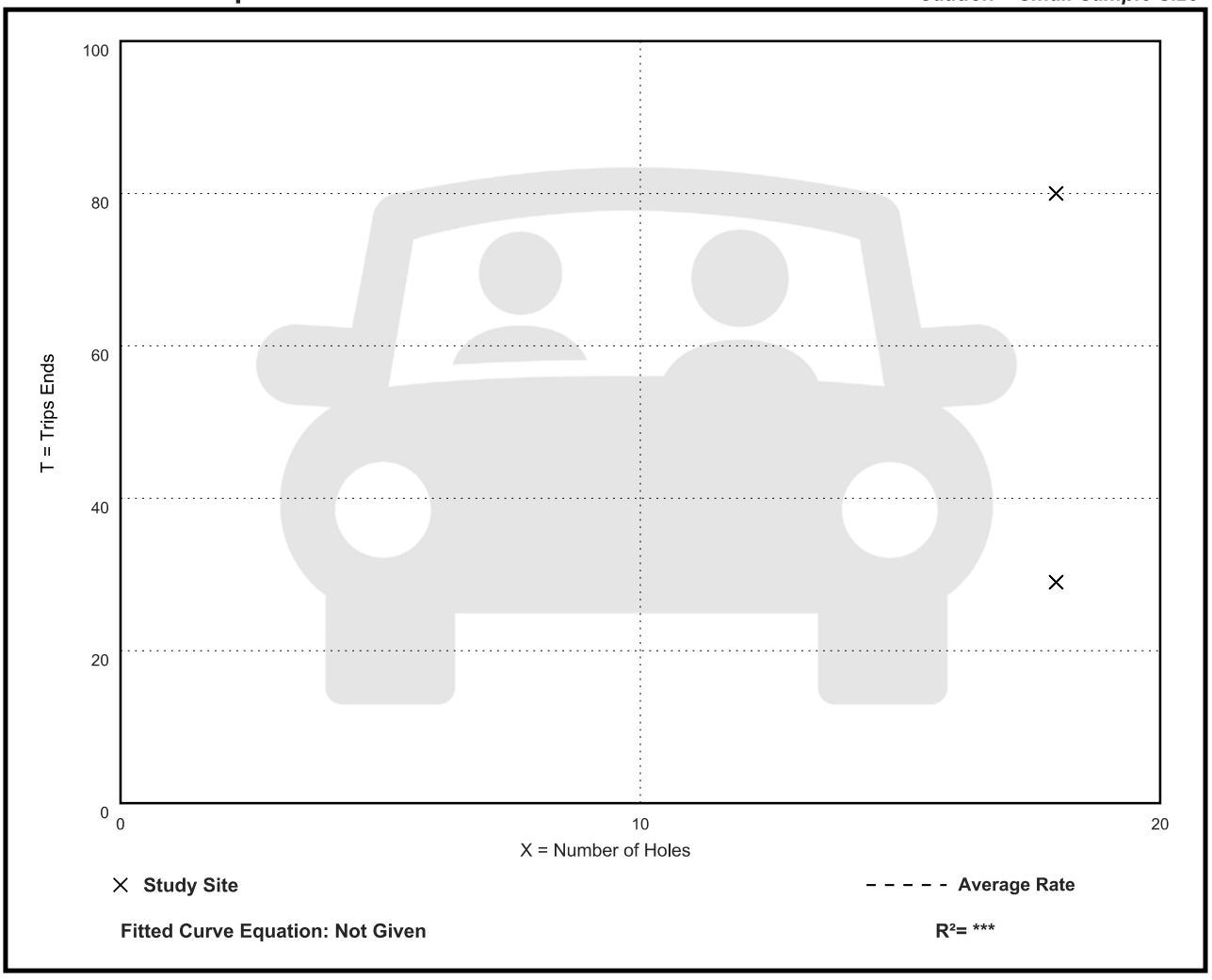
Setting/Location: General Urban/Suburban
Number of Studies: 2
Avg. Num. of Holes: 18
Directional Distribution: 49% entering, 51% exiting

Vehicle Trip Generation per Hole

Average Rate	Range of Rates	Standard Deviation
3.03	1.61 - 4.44	***

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= ***

ITE Land Use Code 821 – Shopping Plaza with Supermarket

Land Use: 821
Shopping Plaza (40-150k)

Description

A shopping plaza is an integrated group of commercial establishments that is planned, developed, owned, and managed as a unit. Each study site in this land use has between 40,000 and 150,000 square feet of gross leasable area (GLA). The term "plaza" in the land use name rather than "center" is simply a means of distinction between the different shopping center size ranges. Various other names are commonly used to categorize a shopping plaza within this size range, depending on its specific size and tenants, such as neighborhood center, community center, and fashion center.

Its major tenant is often a supermarket but many sites are anchored by home improvement, discount, or other stores. A shopping plaza typically contains more than retail merchandising facilities. Office space, a movie theater, restaurants, a post office, banks, a health club, and recreational facilities are common tenants. A shopping plaza is almost always open-air and the GLA is the same as the gross floor area of the building.

The 150,000 square feet GLA threshold value between shopping plaza and shopping center (Land Use 820) is based on an examination of trip generation data. For a shopping plaza that is smaller than the threshold value, the presence or absence of a supermarket within the plaza has a measurable effect on site trip generation. For a shopping center that is larger than the threshold value, the trips generated by its other major tenants mask any effects of the presence or absence of an on-site supermarket.

The 40,000 square feet GFA threshold between shopping plaza and strip retail plaza (Land Use 822) was selected based on an examination of the overall shopping center/plaza database. No shopping plaza with a supermarket as its anchor is smaller than 40,000 square feet GLA.

Shopping center (>150k) (Land Use 820), strip retail plaza (<40k) (Land Use 822), and factory outlet center (Land Use 823) are related uses.

Land Use Subcategory

The presence or absence of a supermarket in a shopping plaza has been determined to have a measurable effect on site trip generation. Therefore, data are presented for two subcategories for this land use: sites with a supermarket anchor and sites without a supermarket.

Additional Data

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), British Columbia (CAN), California, Connecticut, District of Columbia, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Minnesota, Nevada, New Jersey, New York, Ontario (CAN), Oregon, Pennsylvania, South Dakota, Texas, Vermont, Virginia, Washington, and Wisconsin.

Source Numbers

105, 110, 156, 159, 186, 198, 204, 211, 213, 239, 259, 260, 295, 301, 304, 305, 307, 317, 319, 358, 376, 390, 400, 404, 437, 444, 446, 507, 580, 598, 658, 728, 908, 926, 944, 946, 960, 973, 974, 1004, 1009, 1025, 1069

Shopping Plaza (40-150k) - Supermarket - Yes (821)

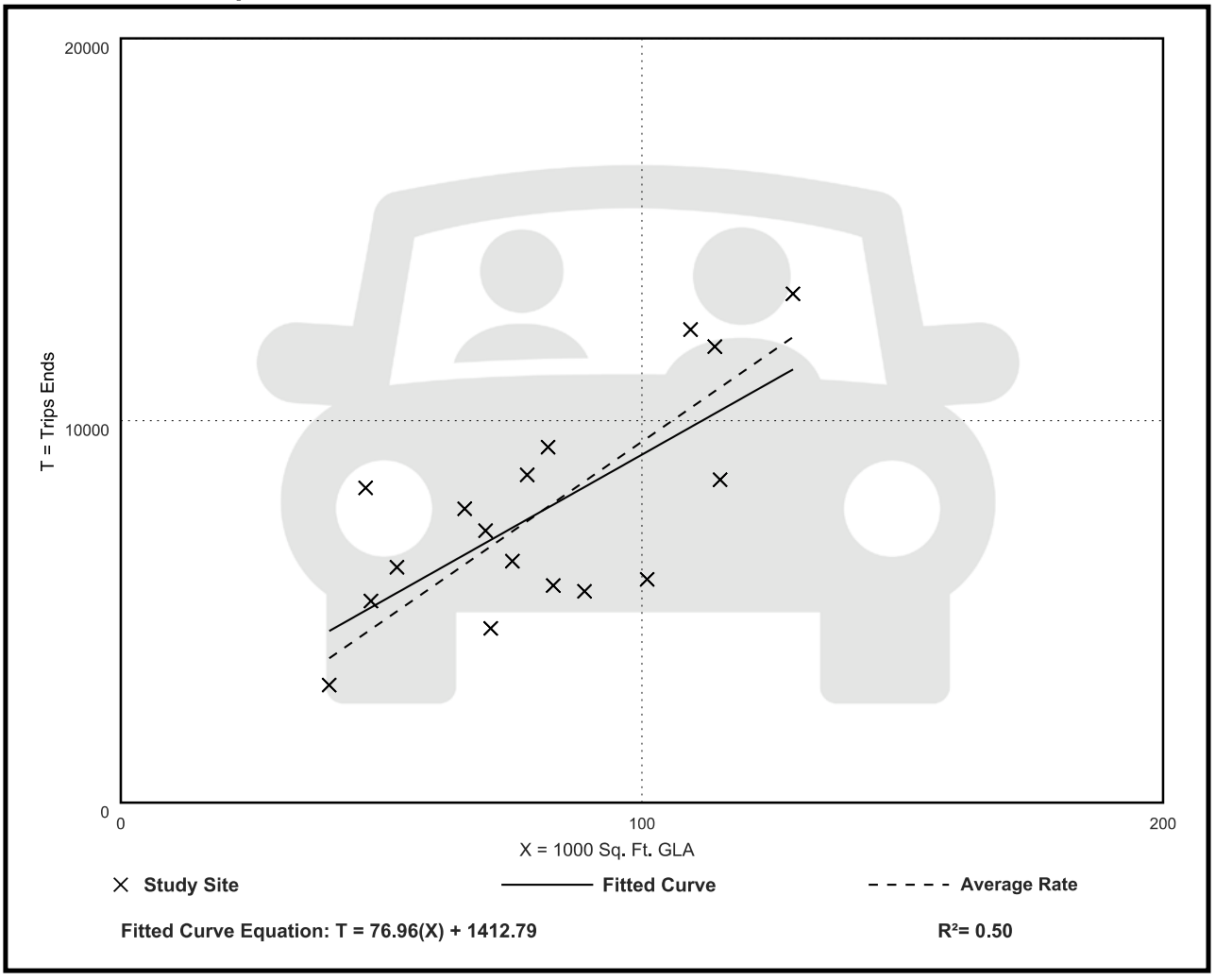
Vehicle Trip Ends vs: 1000 Sq. Ft. GLA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 17
Avg. 1000 Sq. Ft. GLA: 81
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
94.49	57.86 - 175.32	26.55

Data Plot and Equation



Fitted Curve Equation: T = 76.96(X) + 1412.79

R^2= 0.50

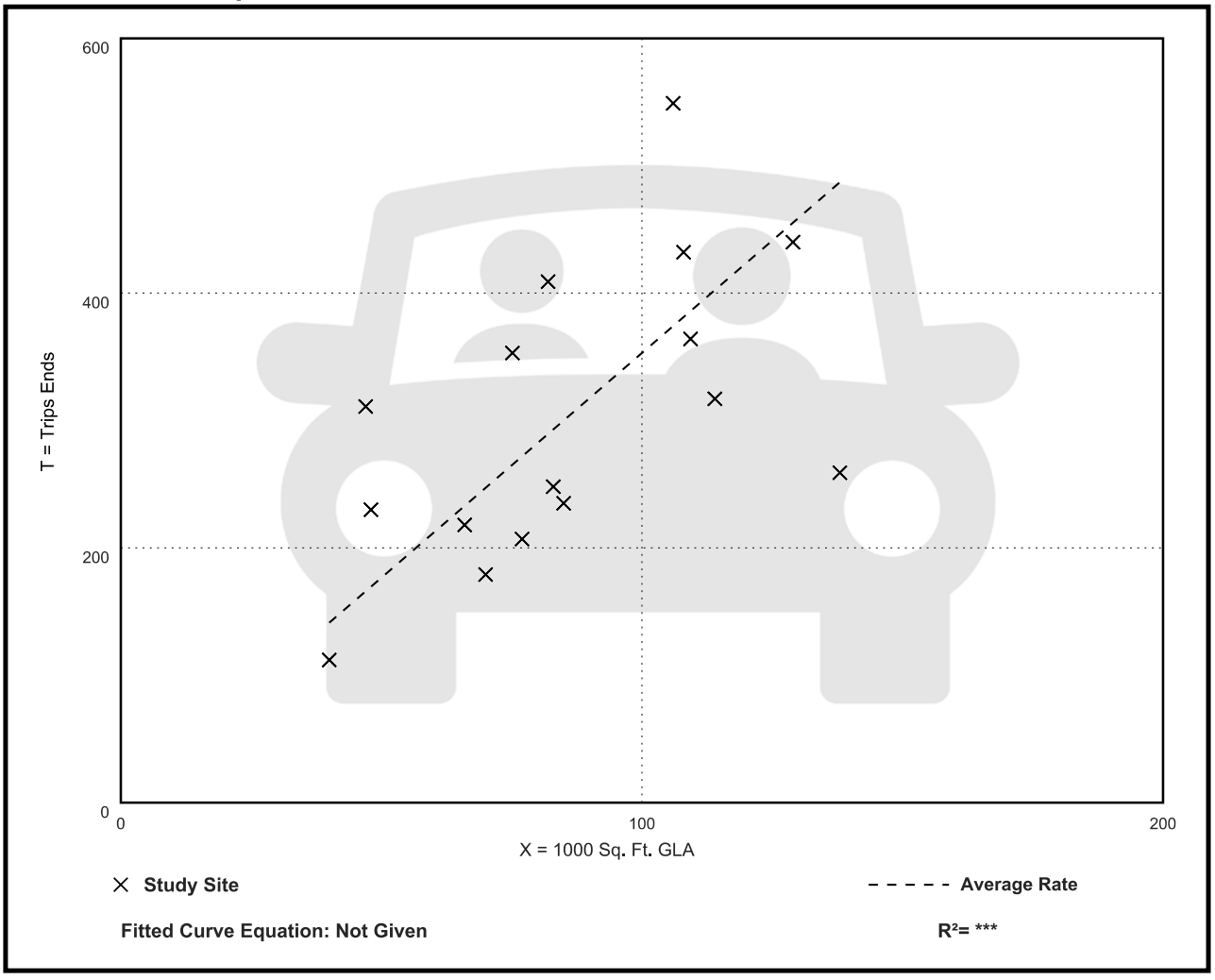
Shopping Plaza (40-150k) - Supermarket - Yes (821)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 16
Avg. 1000 Sq. Ft. GLA: 86
Directional Distribution: 62% entering, 38% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
3.53	1.88 - 6.62	1.17

Data Plot and Equation



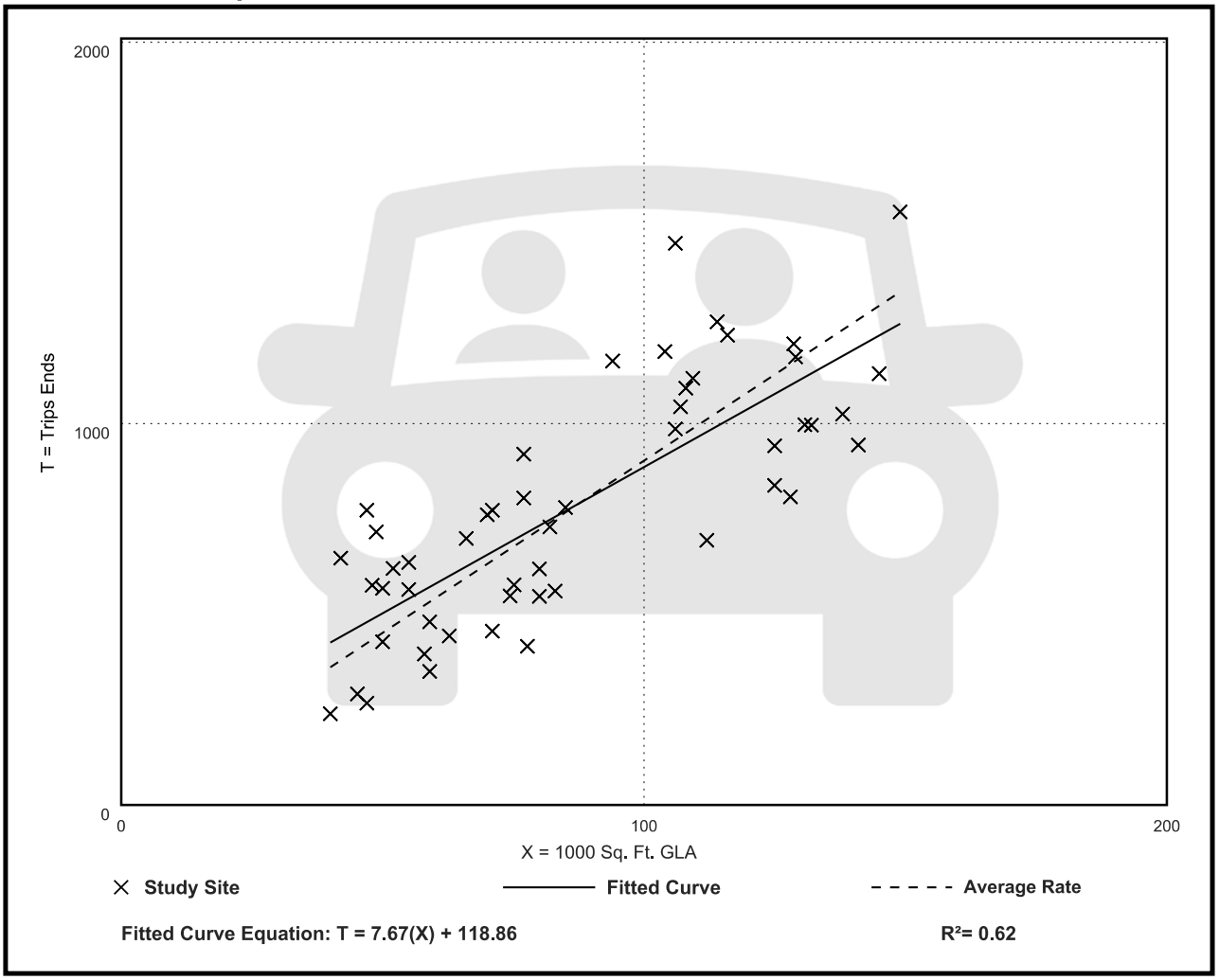
Shopping Plaza (40-150k) - Supermarket - Yes (821)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 51
Avg. 1000 Sq. Ft. GLA: 87
Directional Distribution: 48% entering, 52% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
9.03	5.35 - 16.45	2.37

Data Plot and Equation



Fitted Curve Equation: T = 7.67(X) + 118.86

R^2= 0.62

Shopping Plaza (40-150k) - Supermarket - Yes (821)

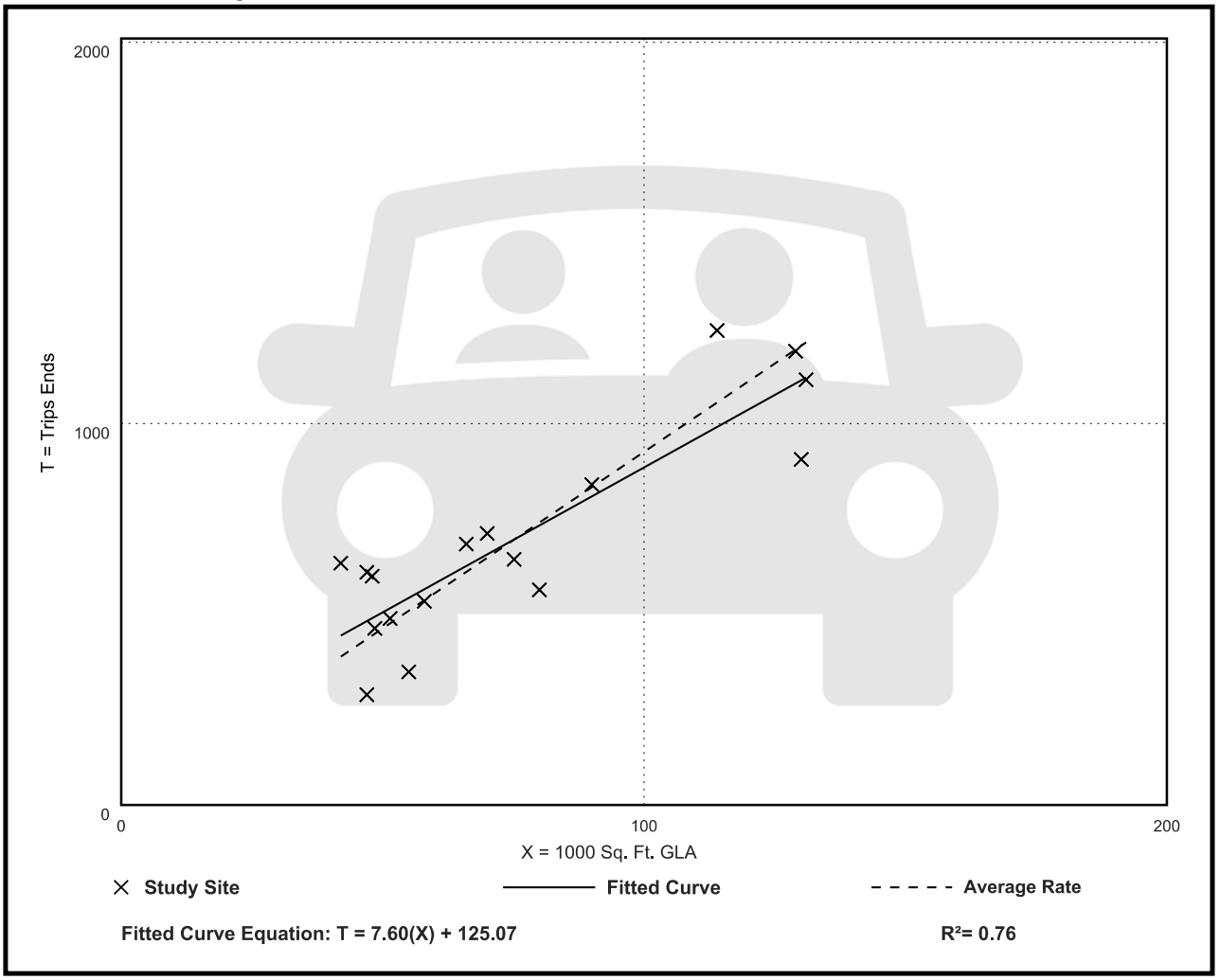
Vehicle Trip Ends vs: 1000 Sq. Ft. GLA
On a: Saturday, Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 17
Avg. 1000 Sq. Ft. GLA: 75
Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
9.26	6.15 - 15.10	2.07

Data Plot and Equation



Fitted Curve Equation: T = 7.60(X) + 125.07

R^2= 0.76

ATTACHMENT C – Operational Analysis

Existing Conditions

- Veterans Memorial Parkway at Lyon Avenue
- Veterans Memorial Parkway at South Broadway
- South Broadway at Fort Street
- Lyon Avenue at Fort Street

Future Build Conditions

- Veterans Memorial Parkway at Lyon Avenue
- Veterans Memorial Parkway at Site Access Road
- Veterans Memorial Parkway at South Broadway
- South Broadway at Fort Street
- Lyon Avenue at Fort Street
- Lyon Avenue at West Site Driveway
- Lyon Avenue at East Site Driveway

C

Existing Weekday AM/PM and Saturday Mid-Day Peak Hours

Veterans Memorial Parkway at Lyon Avenue

Veterans Memorial Parkway at South Broadway

South Broadway at Fort Street

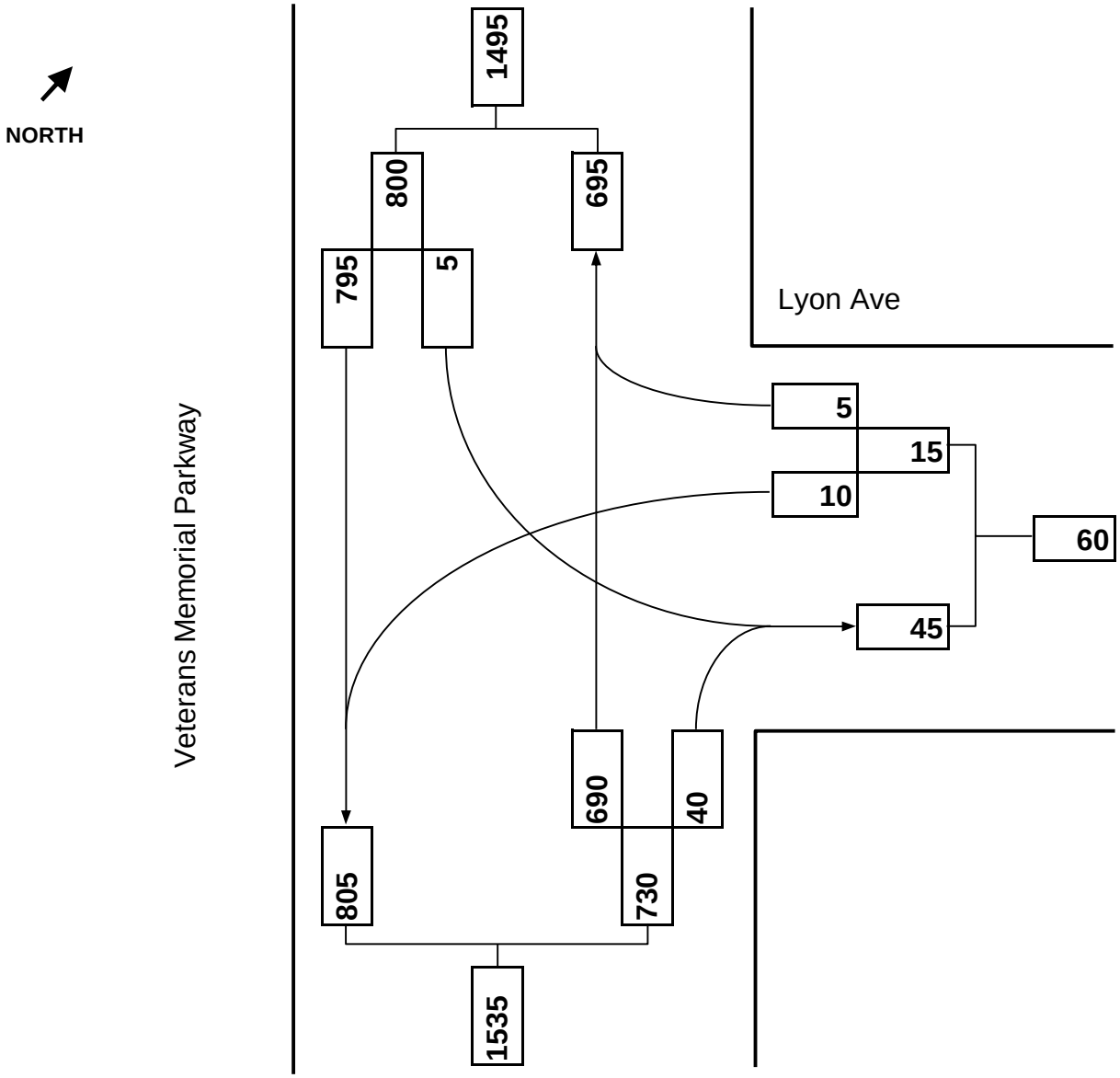
Lyon Avenue at Fort Street

Veterans Memorial Parkway at Lyon Avenue

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Veterans Parkway	**Minor Street**:	Lyon Ave
City/Town:	East Providence	**Day of Week**:	Weekday
Reference No.:	2814	**Peak Period**:	7:30-8:30 AM
Existing:	AM Peak	**Future**:	n/a



HCS7 Two-Way Stop-Control Report

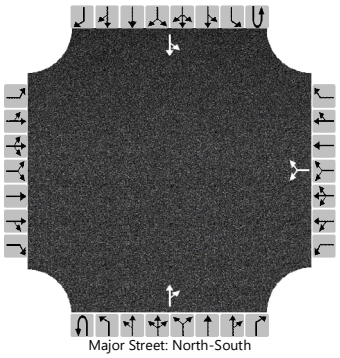
General Information

Analyst	Traffic Section
Agency/Co.	Crossman
Date Performed	12/08/2023
Analysis Year	2023
Time Analyzed	AM Peak
Intersection Orientation	North-South
Project Description	The MET

Site Information

Intersection	Vets Parkway at Lyon
Jurisdiction	East Providence
East/West Street	Lyon Ave
North/South Street	Vets Parkway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						10		15			690	40		5	795	
Percent Heavy Vehicles (%)						0		0						0		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.40		6.20						4.10		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.50		3.30						2.20		

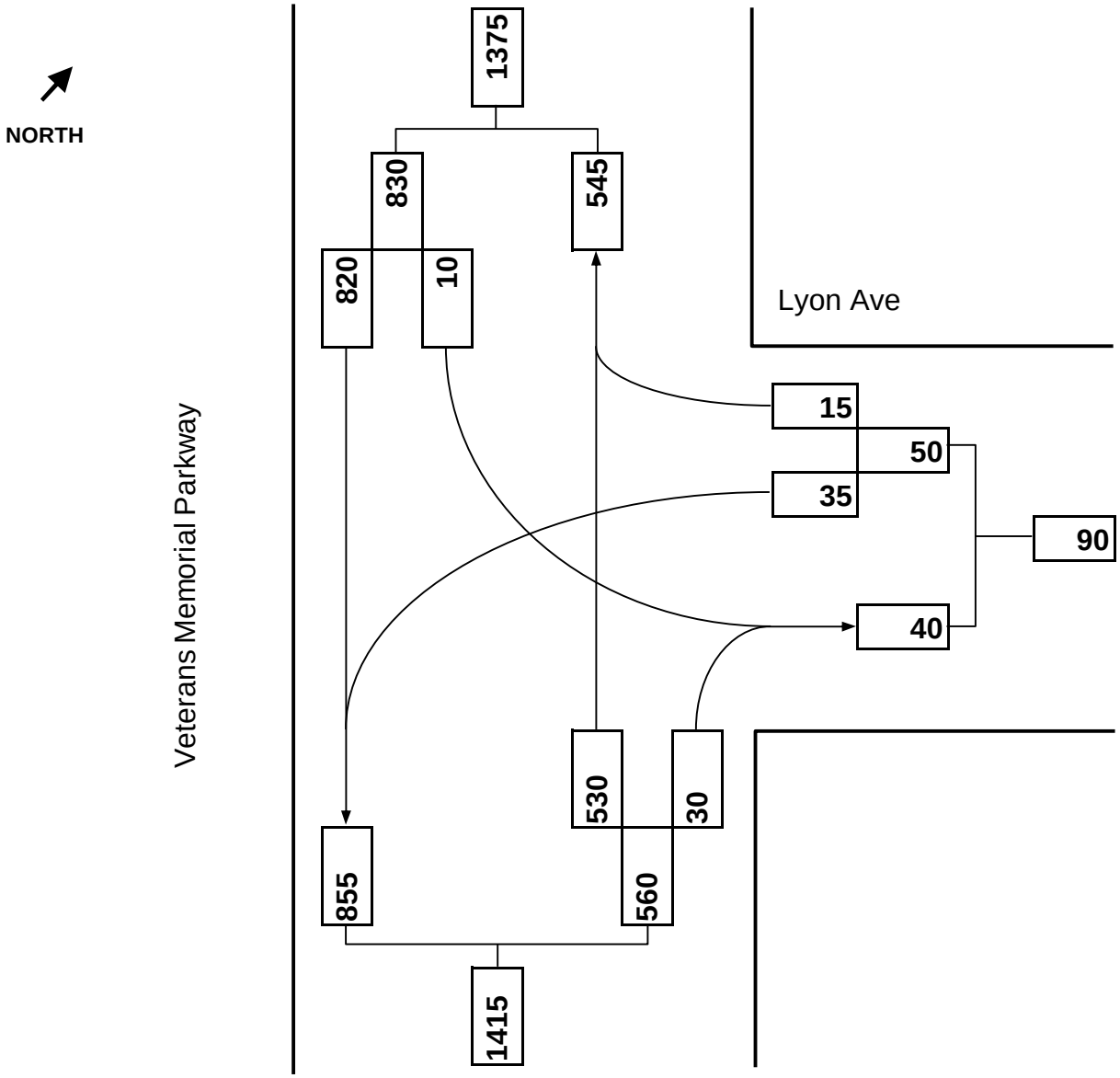
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							27							5		
Capacity, c (veh/h)							194							836		
v/c Ratio							0.14							0.01		
95% Queue Length, Q_{95} (veh)							0.5							0.0		
Control Delay (s/veh)							26.6							9.3		
Level of Service (LOS)							D							A		
Approach Delay (s/veh)						26.6								0.2		
Approach LOS						D										

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Veterans Parkway	**Minor Street**:	Lyon Ave
City/Town:	East Providence	**Day of Week**:	Weekday
Reference No.:	2814	**Peak Period**:	4:30-5:30 PM
Existing:	PM Peak	**Future**:	n/a



HCS7 Two-Way Stop-Control Report

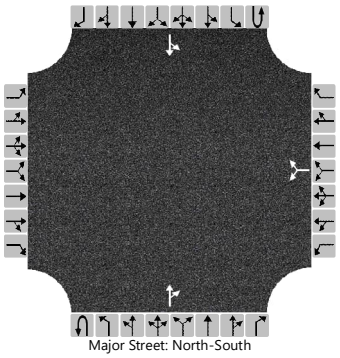
General Information

Analyst	Traffic Section
Agency/Co.	Crossman
Date Performed	12/08/2023
Analysis Year	2023
Time Analyzed	PM Peak
Intersection Orientation	North-South
Project Description	The MET

Site Information

Intersection	Vets Parkway at Lyon
Jurisdiction	East Providence
East/West Street	Lyon Ave
North/South Street	Vets Parkway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						35		15			530	30		10	820	
Percent Heavy Vehicles (%)						0		0						0		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.40		6.20						4.10		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.50		3.30						2.20		

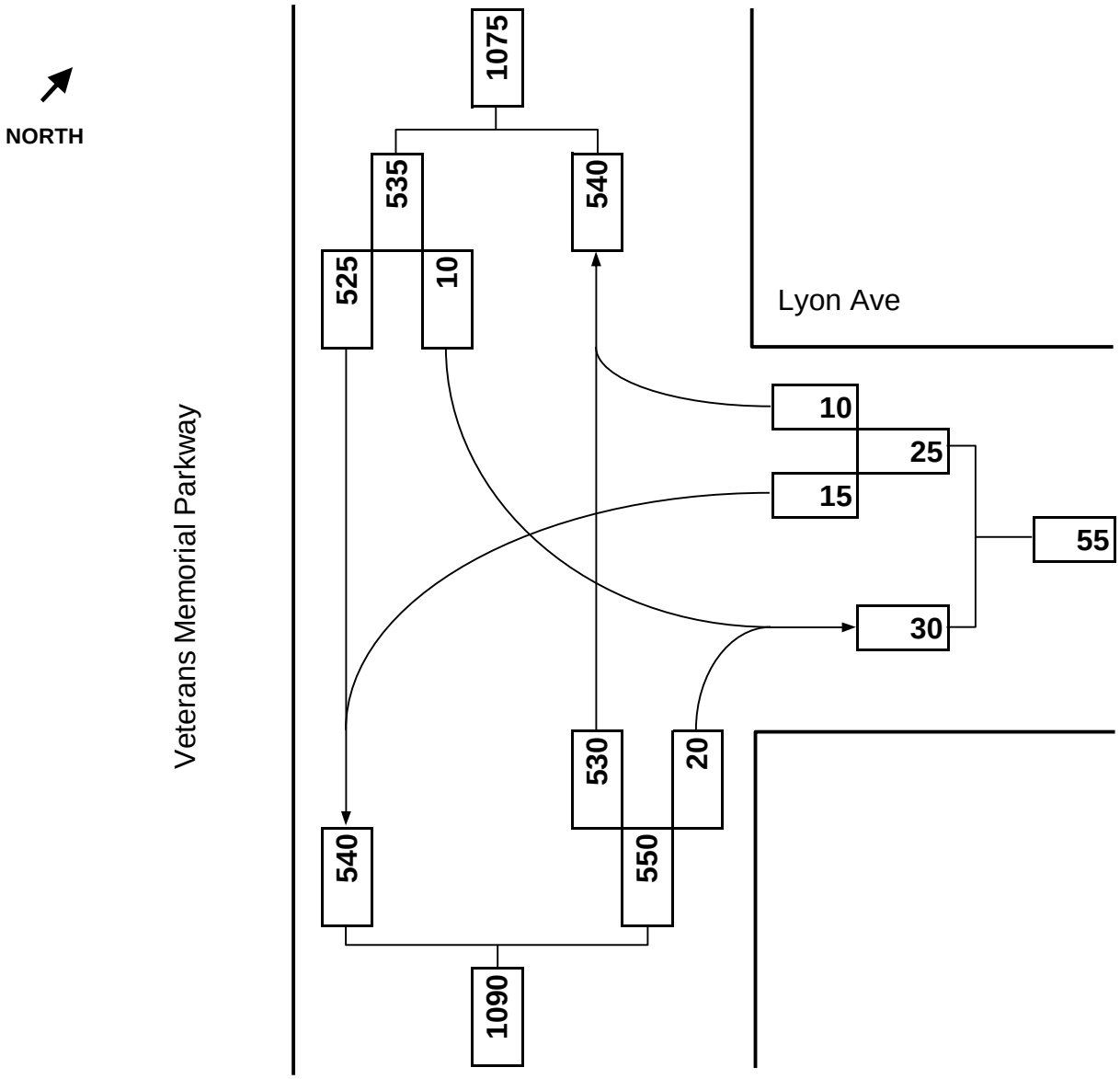
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							54							11		
Capacity, c (veh/h)							170							980		
v/c Ratio							0.32							0.01		
95% Queue Length, Q_{95} (veh)							1.3							0.0		
Control Delay (s/veh)							35.9							8.7		
Level of Service (LOS)							E							A		
Approach Delay (s/veh)						35.9								0.3		
Approach LOS						E										

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Veterans Parkway	**Minor Street**:	Lyon Ave
City/Town:	East Providence	**Day of Week**:	Saturday
Reference No.:	2814	**Peak Period**:	11:30-12:30 PM
Existing:	Mid-Day	**Future**:	n/a



HCS7 Two-Way Stop-Control Report

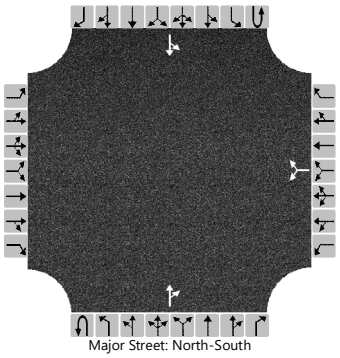
General Information

Analyst	Traffic Section
Agency/Co.	Crossman
Date Performed	12/08/2023
Analysis Year	2023
Time Analyzed	Sat MD Peak
Intersection Orientation	North-South
Project Description	The MET

Site Information

Intersection	Vets Parkway at Lyon
Jurisdiction	East Providence
East/West Street	Lyon Ave
North/South Street	Vets Parkway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						15		10			530	20		10	525	
Percent Heavy Vehicles (%)						0		0						0		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.40		6.20						4.10		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.50		3.30						2.20		

Delay, Queue Length, and Level of Service

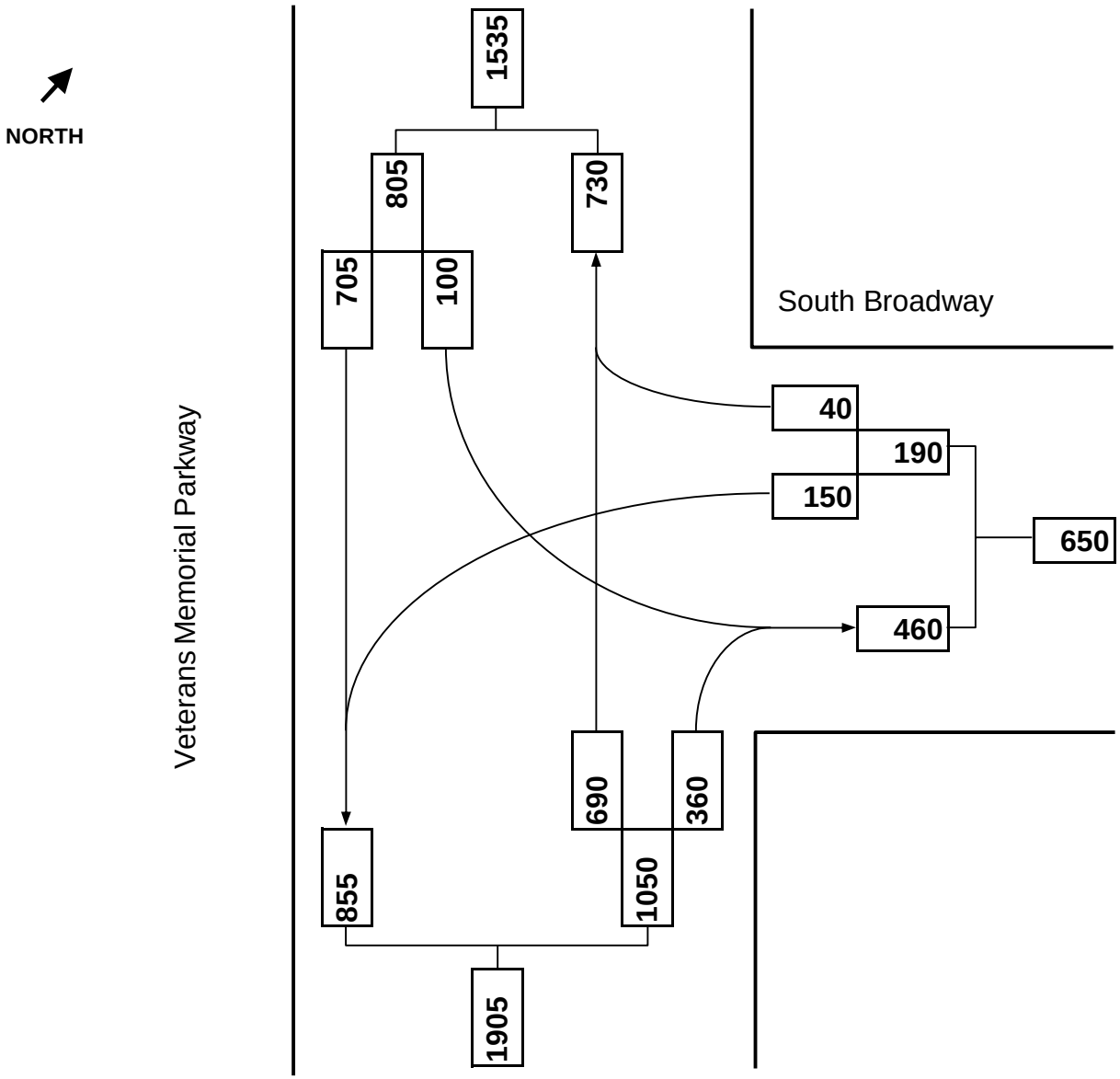
Flow Rate, v (veh/h)							27							11		
Capacity, c (veh/h)							274							989		
v/c Ratio							0.10							0.01		
95% Queue Length, Q_{95} (veh)							0.3							0.0		
Control Delay (s/veh)							19.6							8.7		
Level of Service (LOS)							C							A		
Approach Delay (s/veh)						19.6								0.3		
Approach LOS						C										

Veterans Memorial Parkway at South Broadway

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Veterans Parkway	**Minor Street**:	South Broadway
City/Town:	East Providence	**Day of Week**:	Weekday
Reference No.:	2814	**Peak Period**:	7:30-8:30 AM
Existing:	AM Peak	**Future**:	n/a



HCS7 Two-Way Stop-Control Report

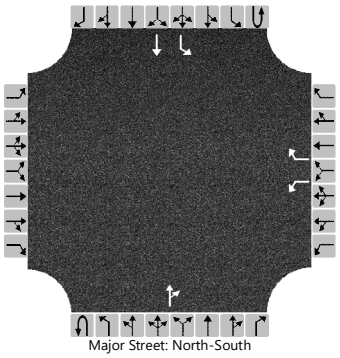
General Information

Analyst	Traffic Section
Agency/Co.	Crossman
Date Performed	12/08/2023
Analysis Year	2023
Time Analyzed	AM Peak
Intersection Orientation	North-South
Project Description	The MET

Site Information

Intersection	Vets Parkway at SBroadway
Jurisdiction	East Providence
East/West Street	South Broadway
North/South Street	Vets Parkway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		1	0	1	0	0	1	0	0	1	1	0
Configuration						L		R				TR		L	T	
Volume (veh/h)						150		40			690	360		100	705	
Percent Heavy Vehicles (%)						0		0						0		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized						No										
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						4.50		4.50						4.10		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.50		3.30						2.20		

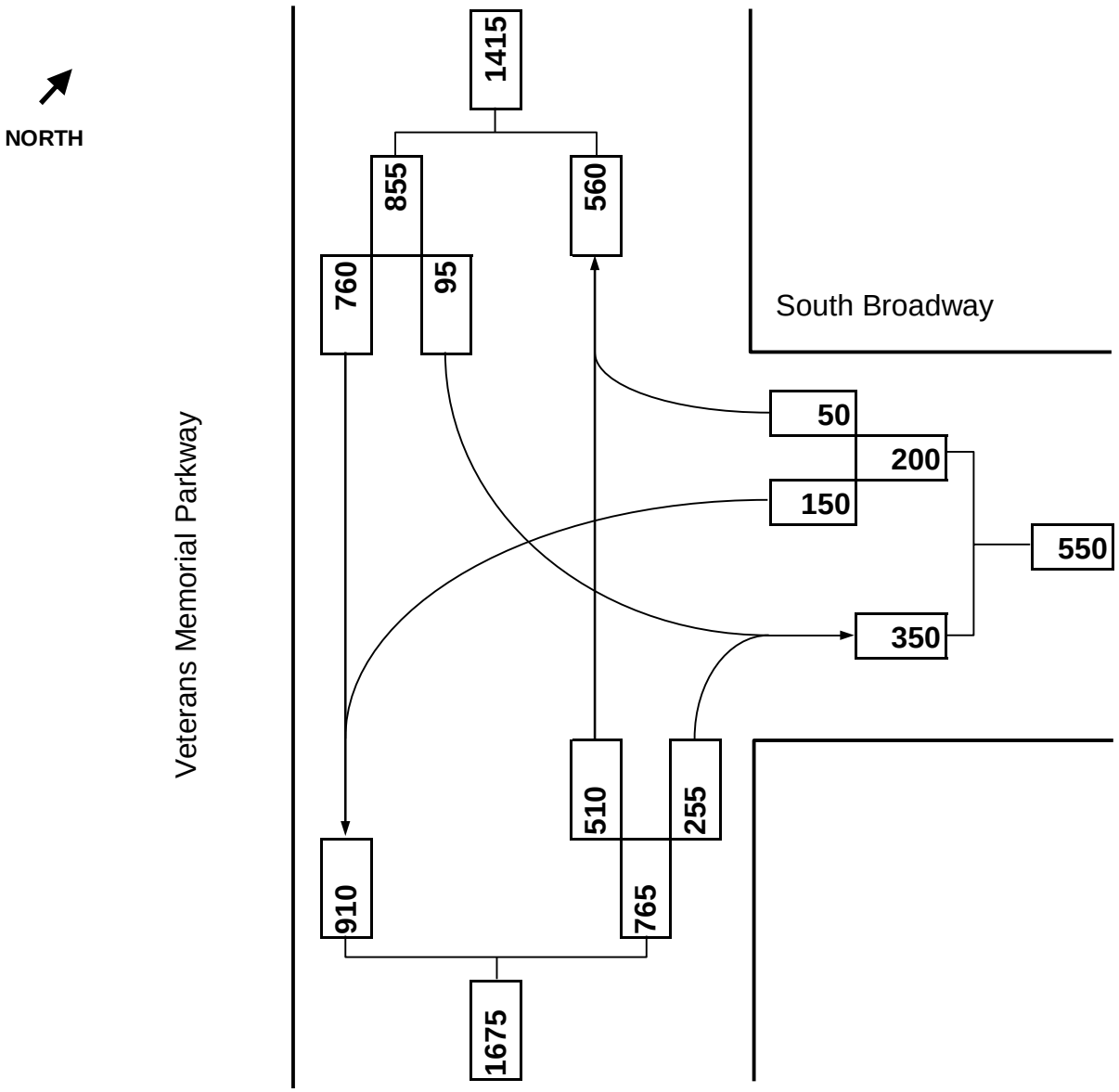
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						163		43						109		
Capacity, c (veh/h)						168		500						620		
v/c Ratio						0.97		0.09						0.18		
95% Queue Length, Q_{95} (veh)						7.5		0.3						0.6		
Control Delay (s/veh)						115.9		12.9						12.0		
Level of Service (LOS)						F		B						B		
Approach Delay (s/veh)						94.2								1.5		
Approach LOS						F										

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Veterans Parkway	**Minor Street**:	South Broadway
City/Town:	East Providence	**Day of Week**:	Weekday
Reference No.:	2814	**Peak Period**:	4:30-5:30 PM
Existing:	PM Peak	**Future**:	n/a



HCS7 Two-Way Stop-Control Report

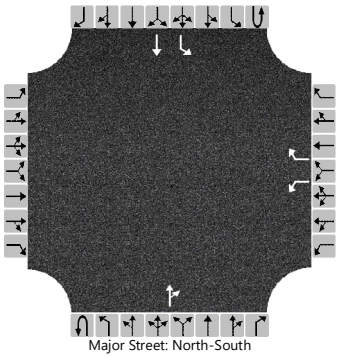
General Information

Analyst	Traffic Section
Agency/Co.	Crossman
Date Performed	12/08/2023
Analysis Year	2023
Time Analyzed	PM Peak
Intersection Orientation	North-South
Project Description	The MET

Site Information

Intersection	Vets Parkway at SBroadway
Jurisdiction	East Providence
East/West Street	South Broadway
North/South Street	Vets Parkway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		1	0	1	0	0	1	0	0	1	1	0
Configuration						L		R				TR		L	T	
Volume (veh/h)						150		50			510	255		95	760	
Percent Heavy Vehicles (%)						0		0						0		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized						No										
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						4.50		4.50						4.10		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.50		3.30						2.20		

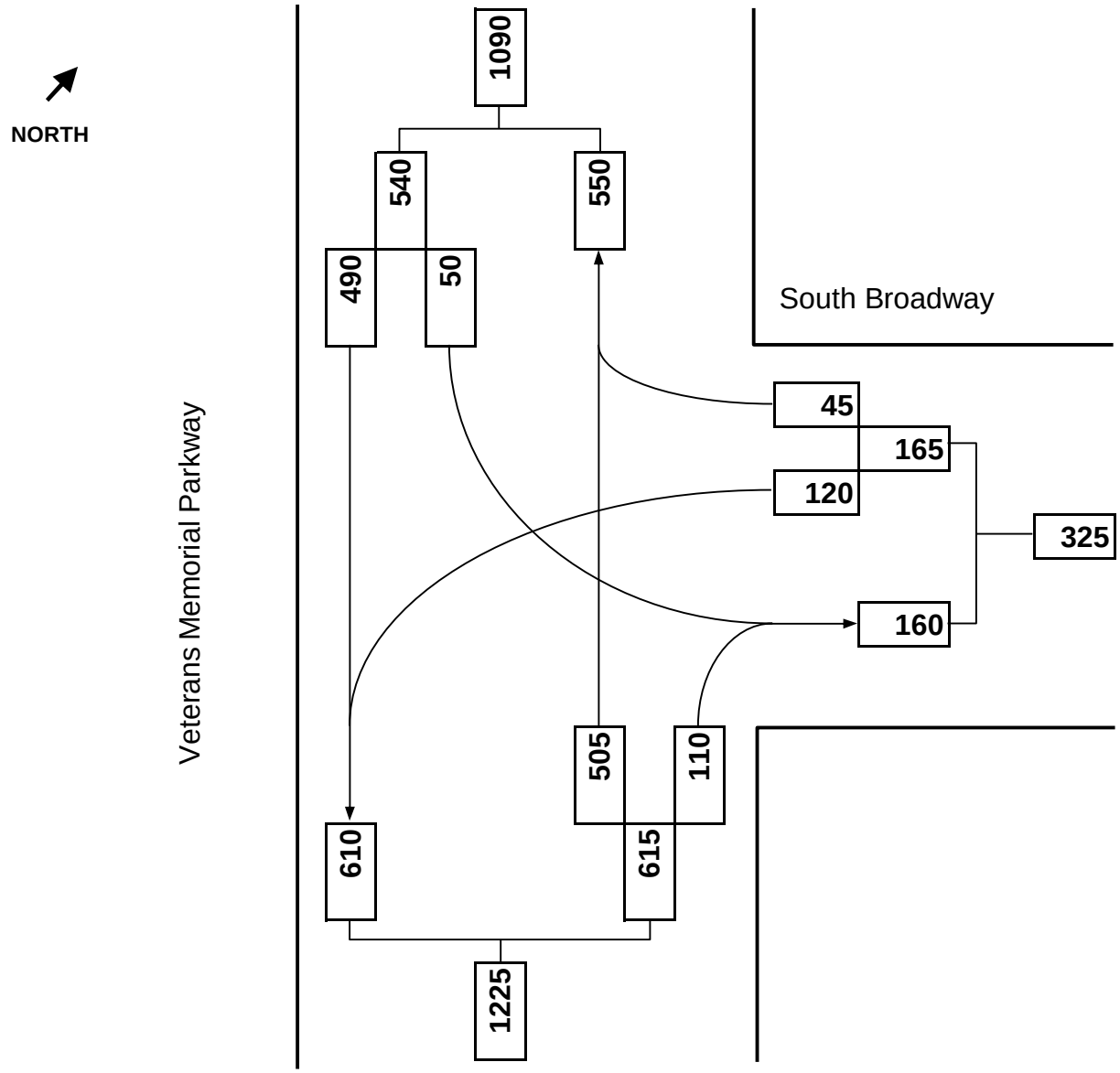
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						163		54						103		
Capacity, c (veh/h)						214		620						810		
v/c Ratio						0.76		0.09						0.13		
95% Queue Length, Q_{95} (veh)						5.3		0.3						0.4		
Control Delay (s/veh)						61.1		11.4						10.1		
Level of Service (LOS)						F		B						B		
Approach Delay (s/veh)						48.6								1.1		
Approach LOS						E										

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Veterans Parkway	**Minor Street**:	South Broadway
City/Town:	East Providence	**Day of Week**:	Saturday
Reference No.:	2814	**Peak Period**:	11:30-12:30 PM
Existing:	Mid-Day	**Future**:	n/a



HCS7 Two-Way Stop-Control Report

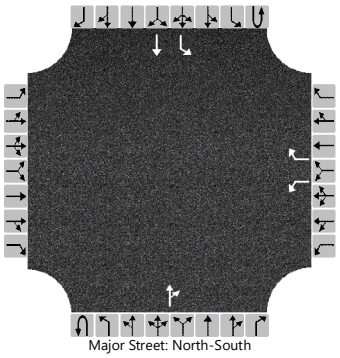
General Information

Analyst	Traffic Section
Agency/Co.	Crossman
Date Performed	12/08/2023
Analysis Year	2023
Time Analyzed	Sat MD Peak
Intersection Orientation	North-South
Project Description	The MET

Site Information

Intersection	Vets Parkway at SBroadway
Jurisdiction	East Providence
East/West Street	South Broadway
North/South Street	Vets Parkway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		1	0	1	0	0	1	0	0	1	1	0
Configuration						L		R				TR		L	T	
Volume (veh/h)						120		45			505	110		50	490	
Percent Heavy Vehicles (%)						0		0						0		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized						No										
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						4.50		4.50						4.10		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.50		3.30						2.20		

Delay, Queue Length, and Level of Service

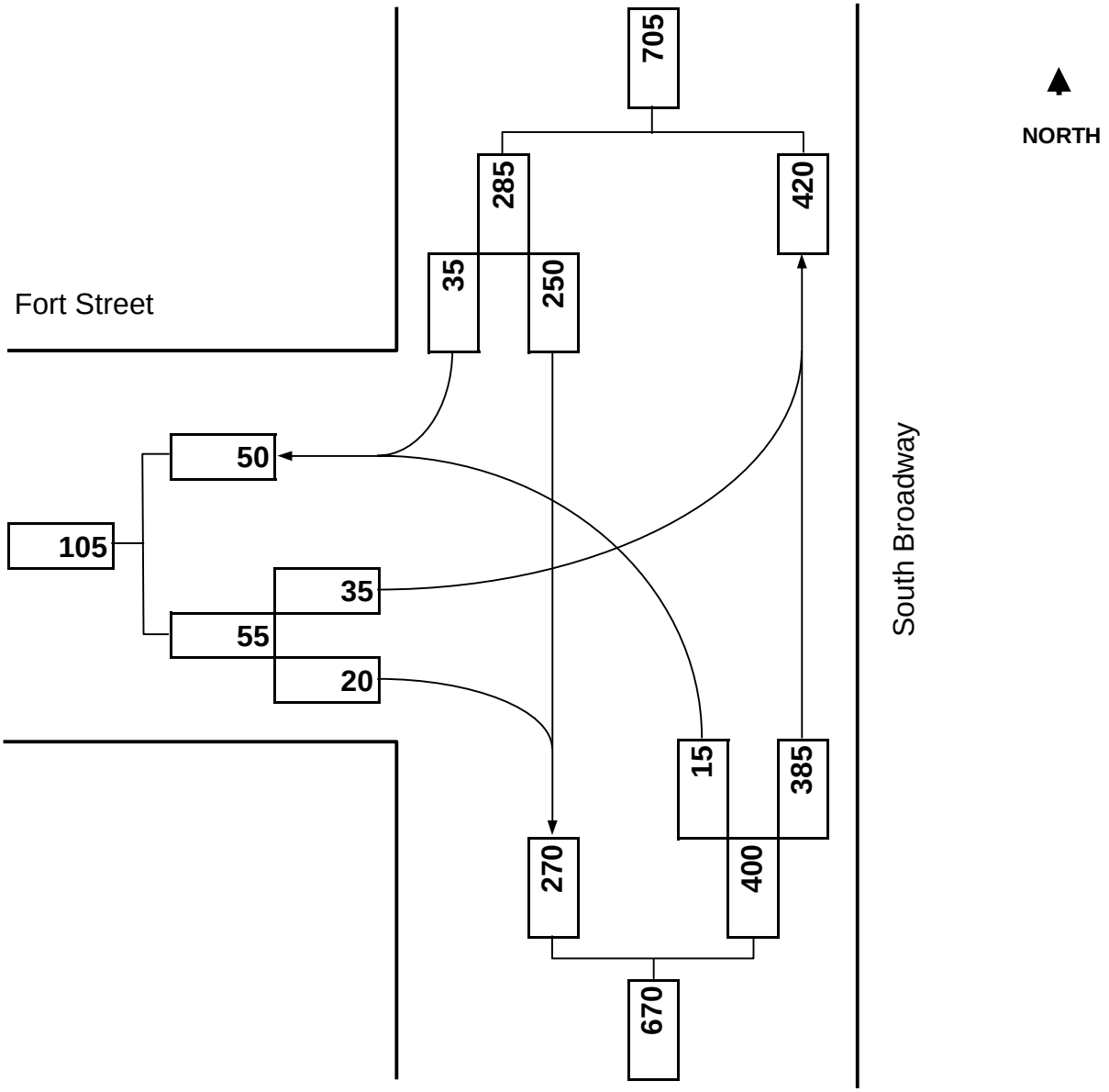
Flow Rate, v (veh/h)						130		49						54		
Capacity, c (veh/h)						351		665						931		
v/c Ratio						0.37		0.07						0.06		
95% Queue Length, Q_{95} (veh)						1.7		0.2						0.2		
Control Delay (s/veh)						21.2		10.8						9.1		
Level of Service (LOS)						C		B						A		
Approach Delay (s/veh)						18.4								0.8		
Approach LOS						C										

South Broadway at Fort Street

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	South Broadway	**Minor Street**:	Fort Street
City/Town:	East Providence	**Day of Week**:	Weekday
Reference No.:	2814	**Peak Period**:	7:30-8:30 AM
Existing:	AM Peak	**Future**:	n/a



HCS7 Two-Way Stop-Control Report

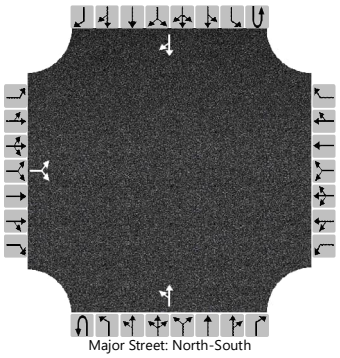
General Information

Analyst	Traffic Section
Agency/Co.	Crossman
Date Performed	12/08/2023
Analysis Year	2023
Time Analyzed	AM Peak
Intersection Orientation	North-South
Project Description	The MET

Site Information

Intersection	SBroadway at Fort
Jurisdiction	East Providence
East/West Street	Fort Street
North/South Street	South Broadway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		35		20						15	385				250	35
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

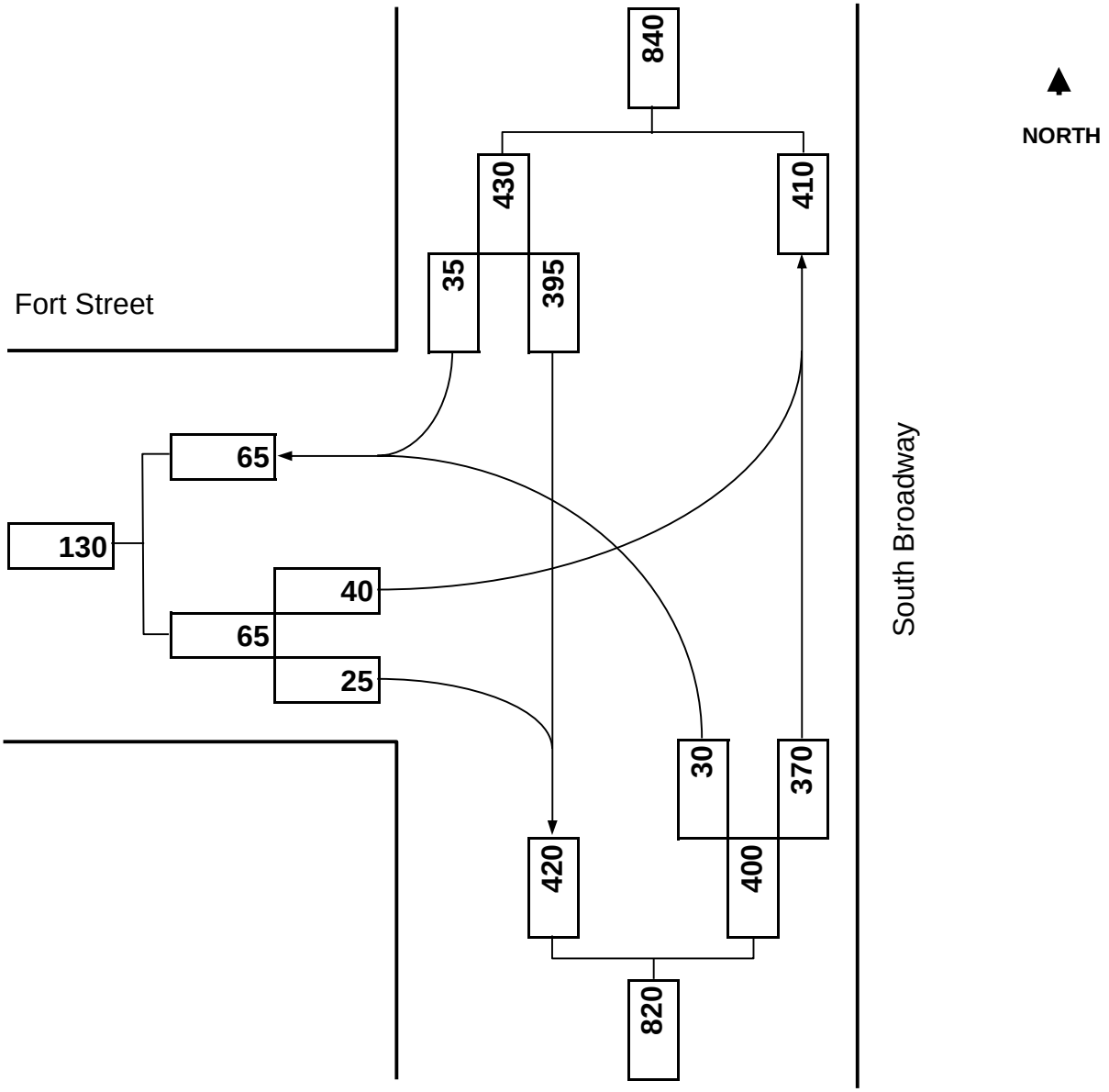
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			60							16						
Capacity, c (veh/h)			463							1262						
v/c Ratio			0.13							0.01						
95% Queue Length, Q_{95} (veh)			0.4							0.0						
Control Delay (s/veh)			13.9							7.9						
Level of Service (LOS)			B							A						
Approach Delay (s/veh)		13.9								0.4						
Approach LOS		B														

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	South Broadway	**Minor Street**:	Fort Street
City/Town:	East Providence	**Day of Week**:	Weekday
Reference No.:	2814	**Peak Period**:	4:30-5:30 PM
Existing:	PM Peak	**Future**:	n/a



HCS7 Two-Way Stop-Control Report

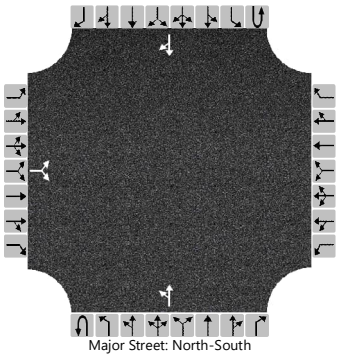
General Information

Analyst	Traffic Section
Agency/Co.	Crossman
Date Performed	12/08/2023
Analysis Year	2023
Time Analyzed	PM Peak
Intersection Orientation	North-South
Project Description	The MET

Site Information

Intersection	SBroadway at Fort
Jurisdiction	East Providence
East/West Street	Fort Street
North/South Street	South Broadway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		40		25						30	370				395	35
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

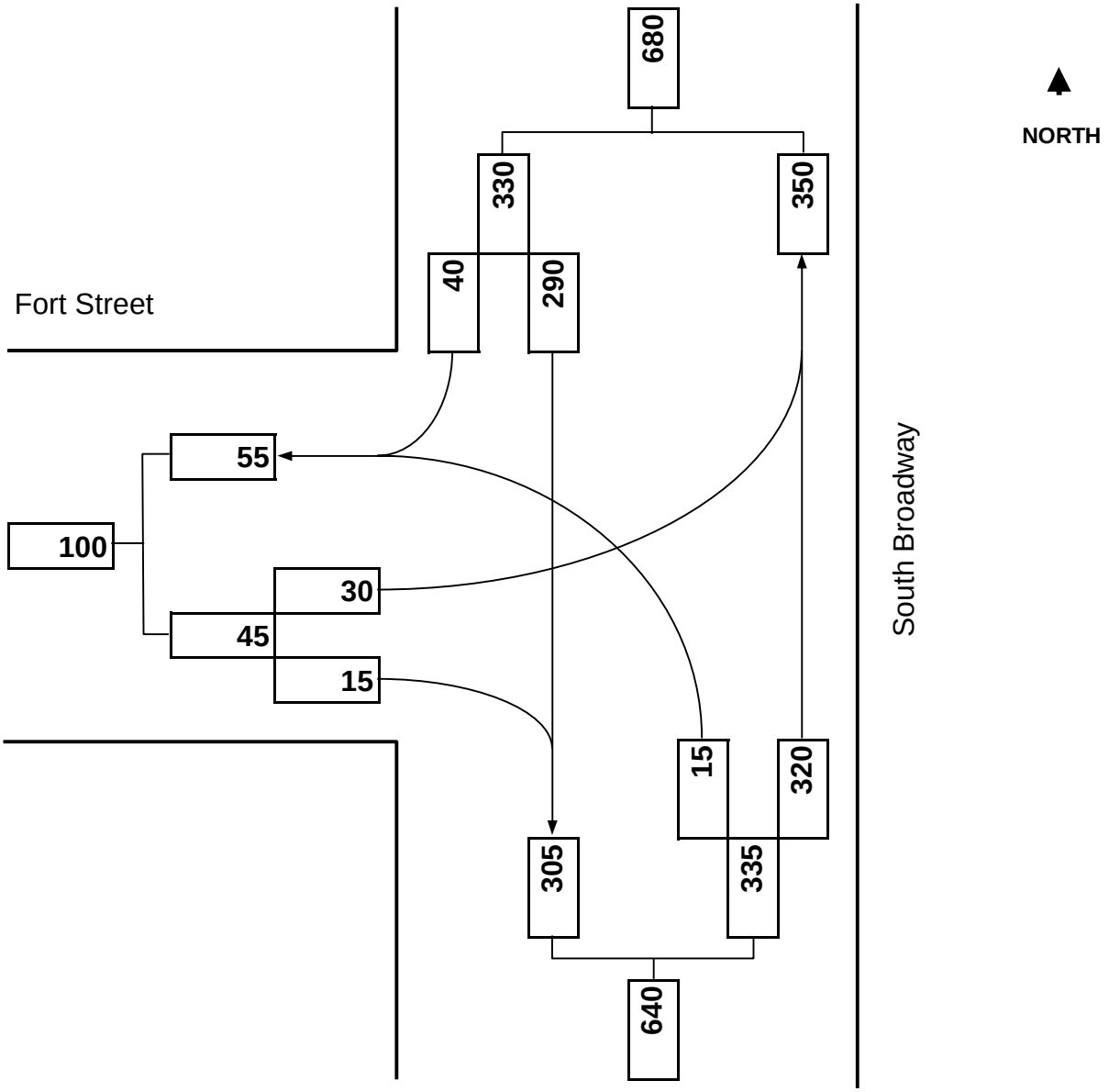
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			71							33						
Capacity, c (veh/h)			367							1105						
v/c Ratio			0.19							0.03						
95% Queue Length, Q_{95} (veh)			0.7							0.1						
Control Delay (s/veh)			17.1							8.4						
Level of Service (LOS)			C							A						
Approach Delay (s/veh)		17.1								0.9						
Approach LOS		C														

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	South Broadway	**Minor Street**:	Fort Street
City/Town:	East Providence	**Day of Week**:	Saturday
Reference No.:	2814	**Peak Period**:	11:30-12:30 PM
Existing:	Saturday Mid-Day	**Future**:	n/a



HCS7 Two-Way Stop-Control Report

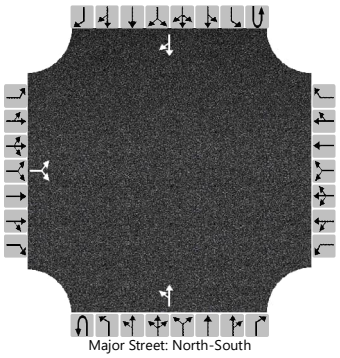
General Information

Analyst	Traffic Section
Agency/Co.	Crossman
Date Performed	12/08/2023
Analysis Year	2023
Time Analyzed	Sat MD Peak
Intersection Orientation	North-South
Project Description	The MET

Site Information

Intersection	SBroadway at Fort
Jurisdiction	East Providence
East/West Street	Fort Street
North/South Street	South Broadway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		30		15						15	320				290	40
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

Delay, Queue Length, and Level of Service

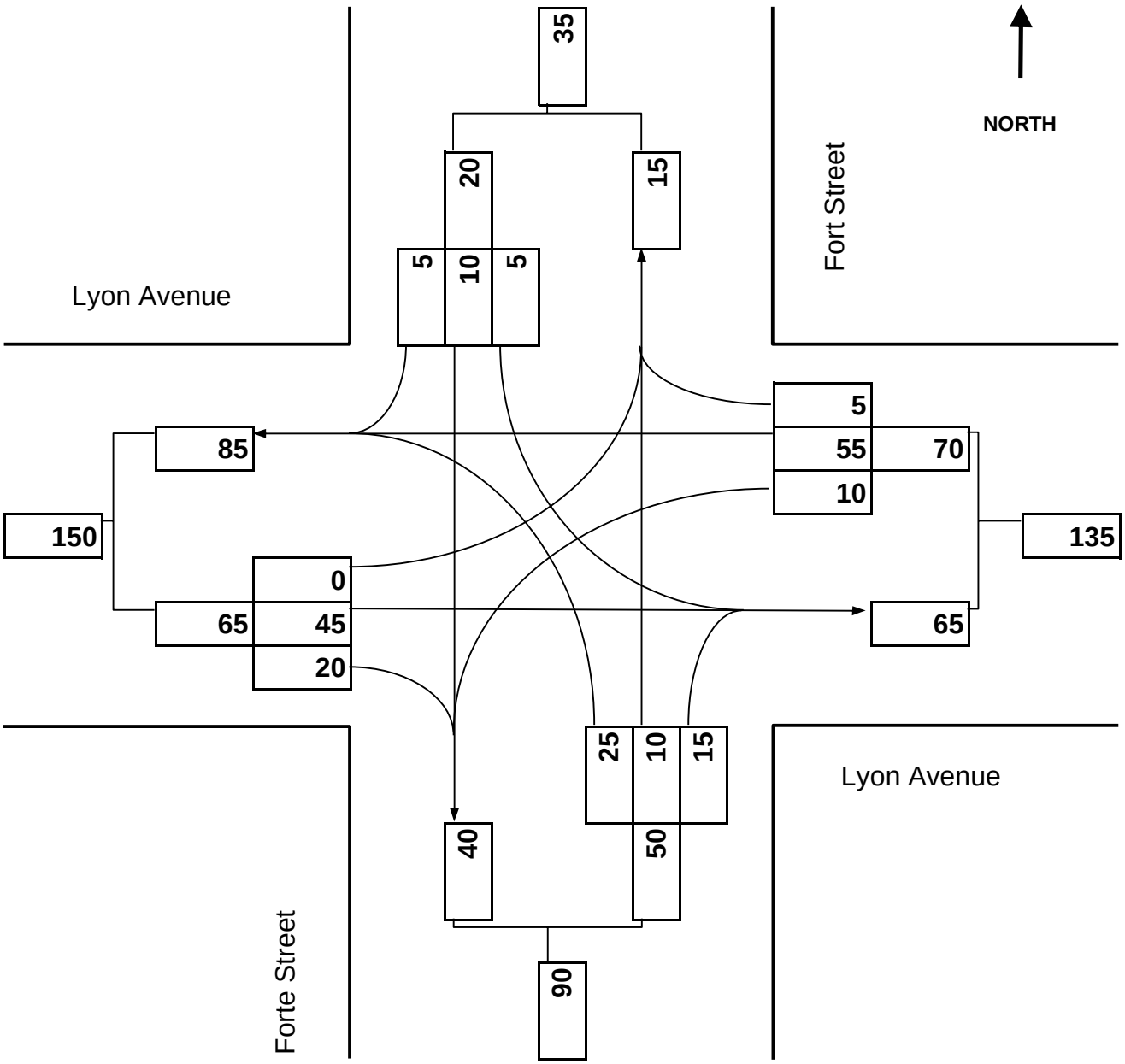
Flow Rate, v (veh/h)			49							16						
Capacity, c (veh/h)			461							1211						
v/c Ratio			0.11							0.01						
95% Queue Length, Q_{95} (veh)			0.4							0.0						
Control Delay (s/veh)			13.7							8.0						
Level of Service (LOS)			B							A						
Approach Delay (s/veh)		13.7								0.5						
Approach LOS		B														

Lyon Avenue at Fort Street

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Lyon Avenue	**Minor Street**:	Fort Street
City/Town:	East Providence	**Day of Week**:	Weekday
Reference No.:	2814	**Peak Period**:	7:30-8:30 AM
Existing:	AM Peak Hour	**Future**:	n/a

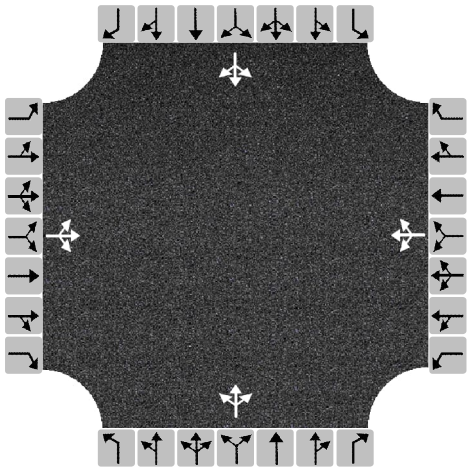


HCS All-Way Stop Control Report

General and Site Information

Analyst	Traffic Section
Agency/Co.	Crossman
Date Performed	8/12/2024
Analysis Year	2023
Analysis Time Period (hrs)	0.25
Time Analyzed	AM Peak
Project Description	The MET
Intersection	Lyon Ave at Fort St
Jurisdiction	East Providence
East/West Street	Lyon Avenue
North/South Street	Fort Street
Peak Hour Factor	0.92

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	0	45	20	10	55	5	25	10	15	5	10	5
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	71			76			54			22		
Percent Heavy Vehicles	0			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.063			0.068			0.048			0.019		
Final Departure Headway, h_d (s)	3.96			4.12			4.15			4.17		
Final Degree of Utilization, x	0.078			0.087			0.063			0.025		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	1.96			2.12			2.15			2.17		

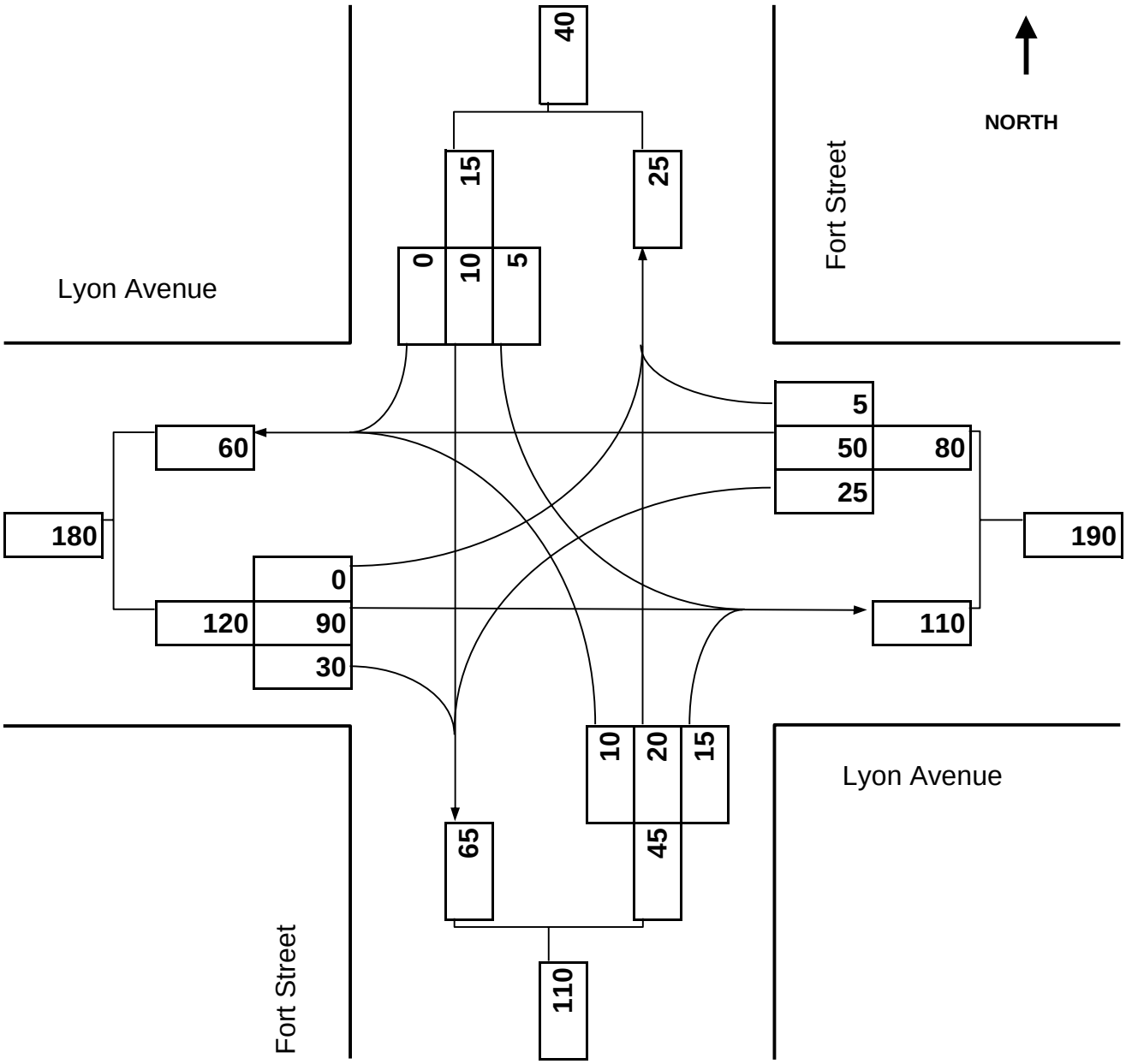
Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	71			76			54			22		
Capacity (veh/h)	910			874			867			864		
95% Queue Length, Q_{95} (veh)	0.3			0.3			0.2			0.1		
95% Queue Length, Q_{95} (ft)	7.5			7.5			5.0			2.5		
Control Delay (s/veh)	7.3			7.5			7.4			7.3		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	7.3	A		7.5	A		7.4	A		7.3	A	
Intersection Delay (s/veh) | LOS	7.4						A					

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Lyon Avenue	**Minor Street**:	Fort Street
City/Town:	East Providence	**Day of Week**:	Weekday
Reference No.:	2814	**Peak Period**:	4:30-5:30 PM
Existing:	PM Peak Hour	**Future**:	n/a

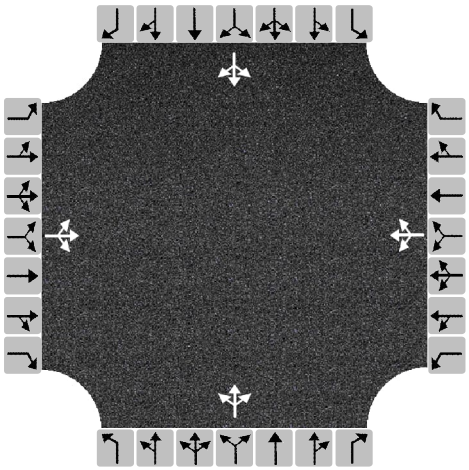


HCS All-Way Stop Control Report

General and Site Information

Analyst	Traffic Section
Agency/Co.	Crossman
Date Performed	8/12/2024
Analysis Year	2023
Analysis Time Period (hrs)	0.25
Time Analyzed	PM Peak
Project Description	The MET
Intersection	Lyon Ave at Fort St
Jurisdiction	East Providence
East/West Street	Lyon Avenue
North/South Street	Fort Street
Peak Hour Factor	0.92

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	0	90	30	25	50	5	10	20	15	5	10	0
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	130			87			49			16		
Percent Heavy Vehicles	0			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.116			0.077			0.043			0.014		
Final Departure Headway, h_d (s)	3.98			4.19			4.22			4.48		
Final Degree of Utilization, x	0.144			0.101			0.057			0.020		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	1.98			2.19			2.22			2.48		

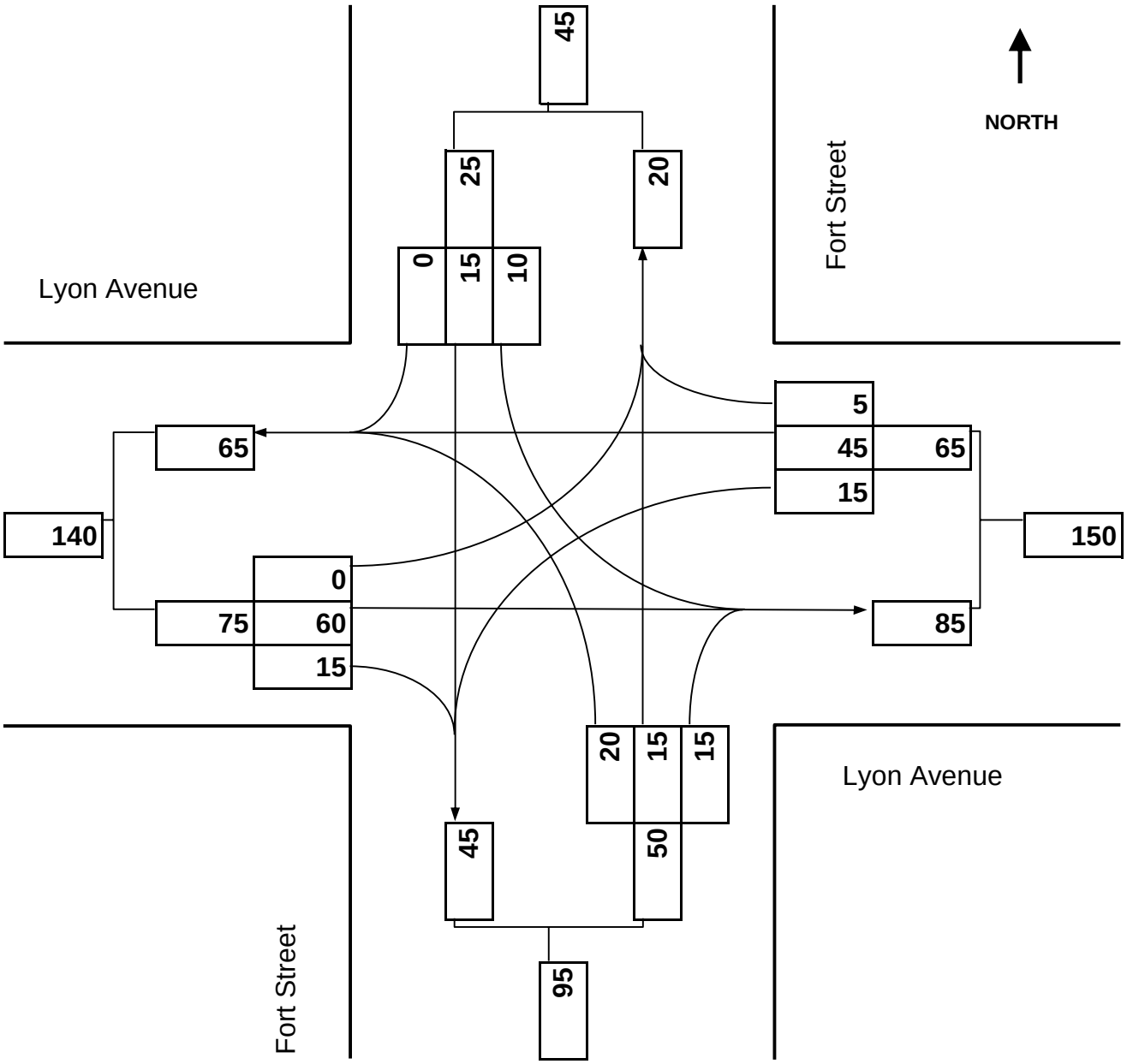
Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	130			87			49			16		
Capacity (veh/h)	904			858			853			804		
95% Queue Length, Q_{95} (veh)	0.5			0.3			0.2			0.1		
95% Queue Length, Q_{95} (ft)	12.5			7.5			5.0			2.5		
Control Delay (s/veh)	7.7			7.7			7.5			7.6		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	7.7	A		7.7	A		7.5	A		7.6	A	
Intersection Delay (s/veh) | LOS	7.6						A					

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Lyon Avenue	**Minor Street**:	Fort Street
City/Town:	East Providence	**Day of Week**:	Saturday
Reference No.:	2814	**Peak Period**:	11:30-12:30 PM
Existing:	Saturday Mid-Day	**Future**:	n/a

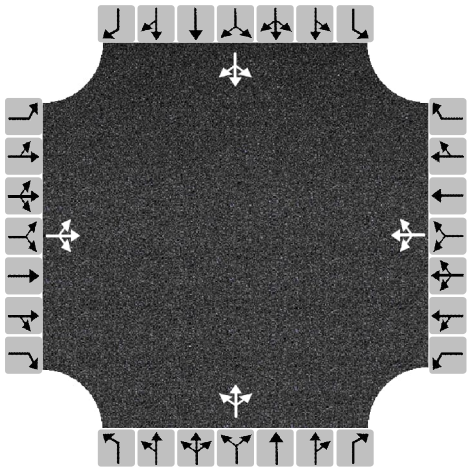


HCS All-Way Stop Control Report

General and Site Information

Analyst	Traffic Section
Agency/Co.	Crossman
Date Performed	8/12/2024
Analysis Year	2023
Analysis Time Period (hrs)	0.25
Time Analyzed	Saturday Mid-Day Peak
Project Description	The MET
Intersection	Lyon Ave at Fort St
Jurisdiction	East Providence
East/West Street	Lyon Avenue
North/South Street	Fort Street
Peak Hour Factor	0.92

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	0	60	15	15	45	5	20	15	15	10	15	0
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	82			71			54			27		
Percent Heavy Vehicles	0			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.072			0.063			0.048			0.024		
Final Departure Headway, h_d (s)	4.03			4.16			4.15			4.36		
Final Degree of Utilization, x	0.091			0.082			0.063			0.033		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.03			2.16			2.15			2.36		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	82			71			54			27		
Capacity (veh/h)	893			866			867			825		
95% Queue Length, Q_{95} (veh)	0.3			0.3			0.2			0.1		
95% Queue Length, Q_{95} (ft)	7.5			7.5			5.0			2.5		
Control Delay (s/veh)	7.4			7.5			7.4			7.5		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	7.4	A		7.5	A		7.4	A		7.5	A	
Intersection Delay (s/veh) | LOS	7.5						A					

C

Future Build Weekday AM/PM and Saturday Mid-Day Peak Hour

Veterans Memorial Parkway at Lyon Avenue

Veterans Memorial Parkway at Site Access Road

Veterans Memorial Parkway at South Broadway

South Broadway at Fort Street

Lyon Avenue at Fort Street

Lyon Avenue at West Site Driveway

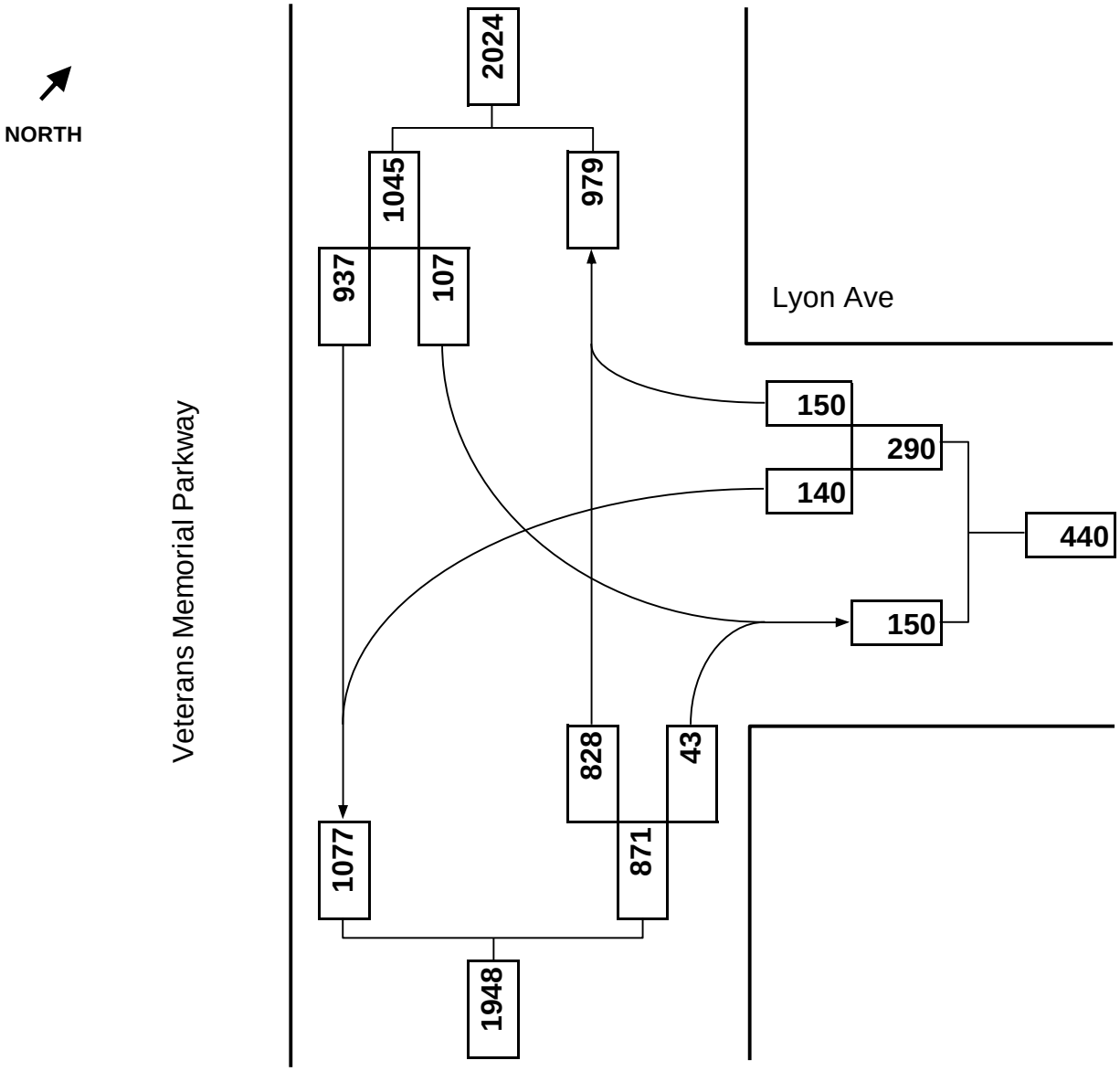
Lyon Avenue at East Site Driveway

Veterans Memorial Parkway at Lyon Avenue

CROSSMAN ENGINEERING

Turning Movement Diagram

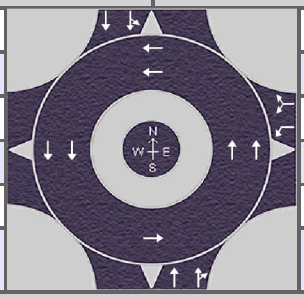
Major Street:	Veterans Parkway	**Minor Street**:	Lyon Ave
City/Town:	East Providence	**Day of Week**:	Weekday
Reference No.:	2814	**Peak Period**:	AM Peak
Existing:	n/a	**Future**:	Build



HCS7 Roundabouts Report

General Information

Analyst	Traffic Section
Agency or Co.	Crossman
Date Performed	12/08/2023
Analysis Year	2028
Time Analyzed	AM Peak
Project Description	The MET



Site Information

Intersection	Vets Parkway at Lyon Ave
E/W Street Name	Lyon Ave
N/S Street Name	Vets Parkway
Analysis Time Period (hrs)	0.25
Peak Hour Factor	0.92
Jurisdiction	East Providence

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	0	0	0	0	1	1	0	0	0	2	0	0	0	2	0
Lane Assignment					L		LR		T		TR		LT		T	
Volume (V), veh/h					0	140		150	0		828	43	0	107	937	
Percent Heavy Vehicles, %					0	0		0	0		0	0	0	0	0	
Flow Rate (v_{PCE}), pc/h					0	152		163	0		900	47	0	116	1018	
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes					2				1				2			
Pedestrians Crossing, p/h					0				0				0			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)				4.6453	4.3276		4.5436	4.5436		4.6453	4.3276	
Follow-Up Headway (s)				2.6667	2.5352		2.5352	2.5352		2.6667	2.5352	

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v_e), pc/h				167	148		445	502		533	601	
Entry Volume, veh/h				167	148		445	502		533	601	
Circulating Flow (v_c), pc/h	1286			900			116			152		
Exiting Flow (v_{ex}), pc/h	163			0			1063			1170		
Capacity (c_{pce}), pc/h				590	661		1278	1278		1174	1248	
Capacity (c), veh/h				590	661		1278	1278		1174	1248	
v/c Ratio (x)				0.28	0.22		0.35	0.39		0.45	0.48	

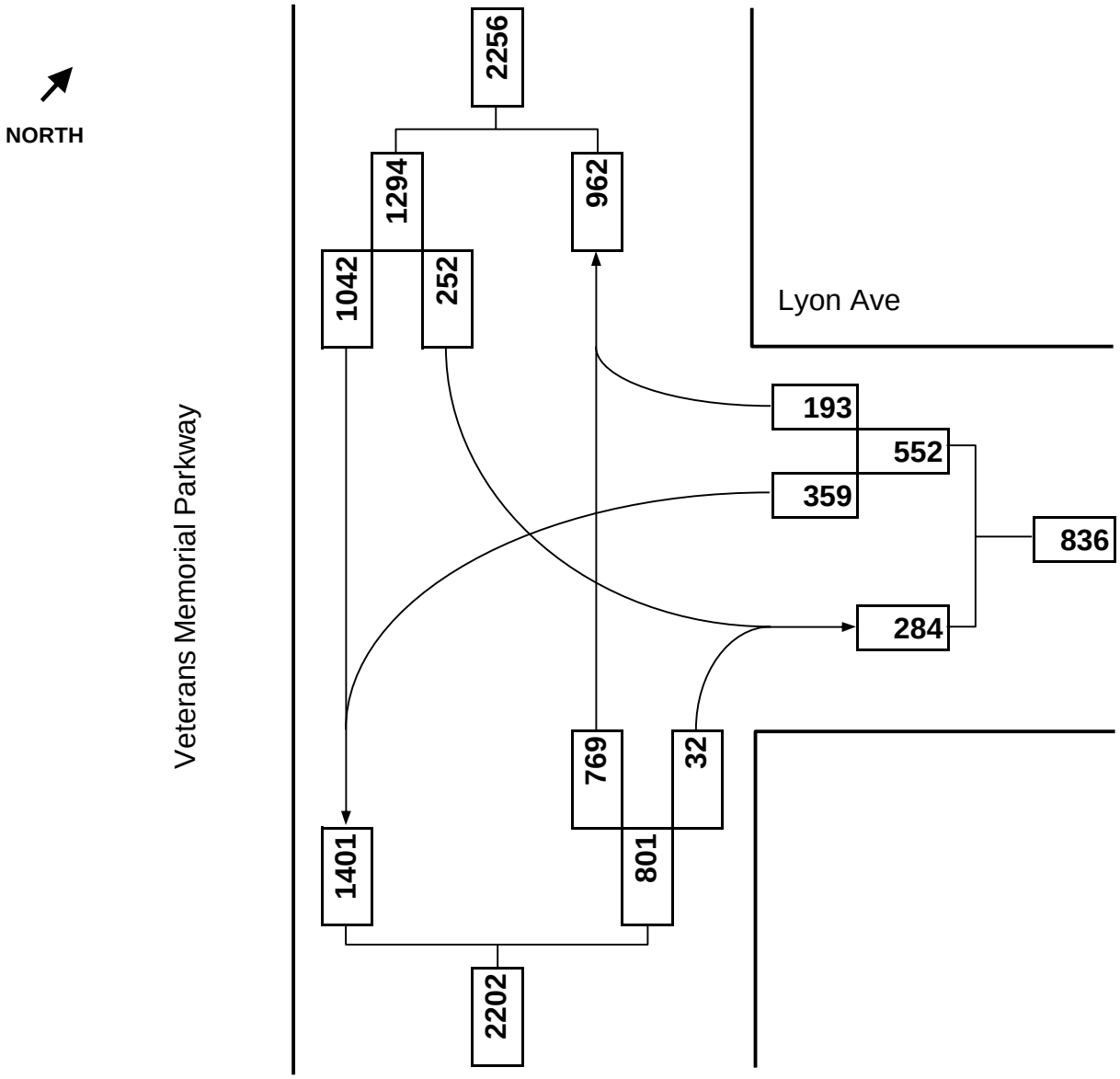
Delay and Level of Service

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh				9.9	8.1		6.1	6.6		7.9	7.9	
Lane LOS				A	A		A	A		A	A	
95% Queue, veh				1.2	0.9		1.6	1.9		2.4	2.7	
Approach Delay, s/veh				9.1			6.3			7.9		
Approach LOS				A			A			A		
Intersection Delay, s/veh | LOS	7.4						A					

CROSSMAN ENGINEERING

Turning Movement Diagram

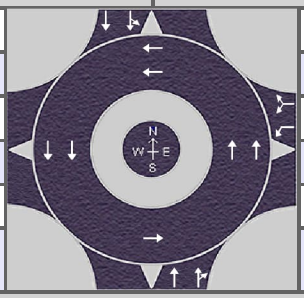
Major Street:	Veterans Parkway	**Minor Street**:	Lyon Ave
City/Town:	East Providence	**Day of Week**:	Weekday
Reference No.:	2814	**Peak Period**:	PM Peak
Existing:	n/a	**Future**:	Build



HCS7 Roundabouts Report

General Information

Analyst	Traffic Section
Agency or Co.	Crossman
Date Performed	12/08/2023
Analysis Year	2028
Time Analyzed	PM Peak
Project Description	The MET



Site Information

Intersection	Vets Parkway at Lyon Ave
E/W Street Name	Lyon Ave
N/S Street Name	Vets Parkway
Analysis Time Period (hrs)	0.25
Peak Hour Factor	0.92
Jurisdiction	East Providence

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	0	0	0	0	1	1	0	0	0	2	0	0	0	2	0
Lane Assignment					L		LR		T		TR		LT		T	
Volume (V), veh/h					0	359		193	0		769	32	0	252	1042	
Percent Heavy Vehicles, %					0	0		0	0		0	0	0	0	0	
Flow Rate (v_{PCE}), pc/h					0	390		210	0		836	35	0	274	1133	
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes					2				1				2			
Pedestrians Crossing, p/h					0				0				0			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)				4.6453	4.3276		4.5436	4.5436		4.6453	4.3276	
Follow-Up Headway (s)				2.6667	2.5352		2.5352	2.5352		2.6667	2.5352	

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v_e), pc/h				318	282		409	462		661	746	
Entry Volume, veh/h				318	282		409	462		661	746	
Circulating Flow (v_c), pc/h	1797			836			274			390		
Exiting Flow (v_{ex}), pc/h	309			0			1046			1523		
Capacity (c_{pce}), pc/h				626	698		1107	1107		943	1019	
Capacity (c), veh/h				626	698		1107	1107		943	1019	
v/c Ratio (x)				0.51	0.40		0.37	0.42		0.70	0.73	

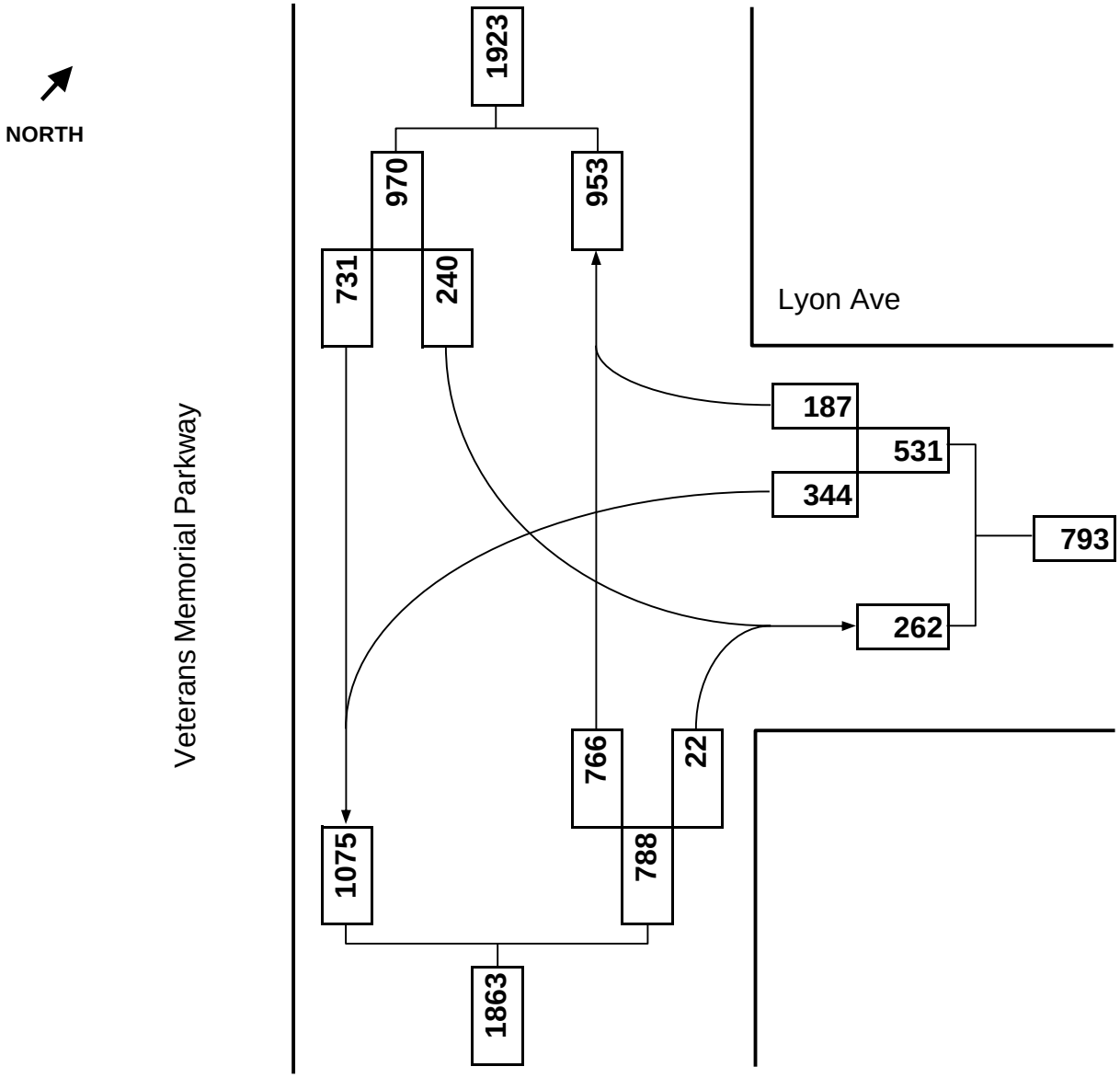
Delay and Level of Service

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh				14.1	10.6		7.0	7.6		15.8	16.1	
Lane LOS				B	B		A	A		C	C	
95% Queue, veh				2.9	2.0		1.7	2.1		6.0	6.8	
Approach Delay, s/veh				12.5			7.3			16.0		
Approach LOS				B			A			C		
Intersection Delay, s/veh | LOS	12.6						B					

CROSSMAN ENGINEERING

Turning Movement Diagram

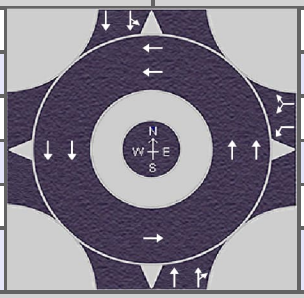
Major Street:	Veterans Parkway	**Minor Street**:	Lyon Ave
City/Town:	East Providence	**Day of Week**:	Saturday
Reference No.:	2814	**Peak Period**:	Mid-Day
Existing:	n/a	**Future**:	Build



HCS7 Roundabouts Report

General Information

Analyst	Traffic Section
Agency or Co.	Crossman
Date Performed	12/08/2023
Analysis Year	2028
Time Analyzed	Saturday MD Peak
Project Description	The MET



Site Information

Intersection	Vets Parkway at Lyon Ave
E/W Street Name	Lyon Ave
N/S Street Name	Vets Parkway
Analysis Time Period (hrs)	0.25
Peak Hour Factor	0.92
Jurisdiction	East Providence

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	0	0	0	0	1	1	0	0	0	2	0	0	0	2	0
Lane Assignment					L		LR		T		TR		LT		T	
Volume (V), veh/h					0	344		187	0		766	22	0	240	731	
Percent Heavy Vehicles, %					0	0		0	0		0	0	0	0	0	
Flow Rate (v_{PCE}), pc/h					0	374		203	0		833	24	0	261	795	
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes					2				1				2			
Pedestrians Crossing, p/h					0				0				0			

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway (s)				4.6453	4.3276		4.5436	4.5436		4.6453	4.3276	
Follow-Up Headway (s)				2.6667	2.5352		2.5352	2.5352		2.6667	2.5352	

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v_e), pc/h				306	271		403	454		496	560	
Entry Volume, veh/h				306	271		403	454		496	560	
Circulating Flow (v_c), pc/h	1430			833			261			374		
Exiting Flow (v_{ex}), pc/h	285			0			1036			1169		
Capacity (c_{pce}), pc/h				627	700		1120	1120		957	1033	
Capacity (c), veh/h				627	700		1120	1120		957	1033	
v/c Ratio (x)				0.49	0.39		0.36	0.41		0.52	0.54	

Delay and Level of Service

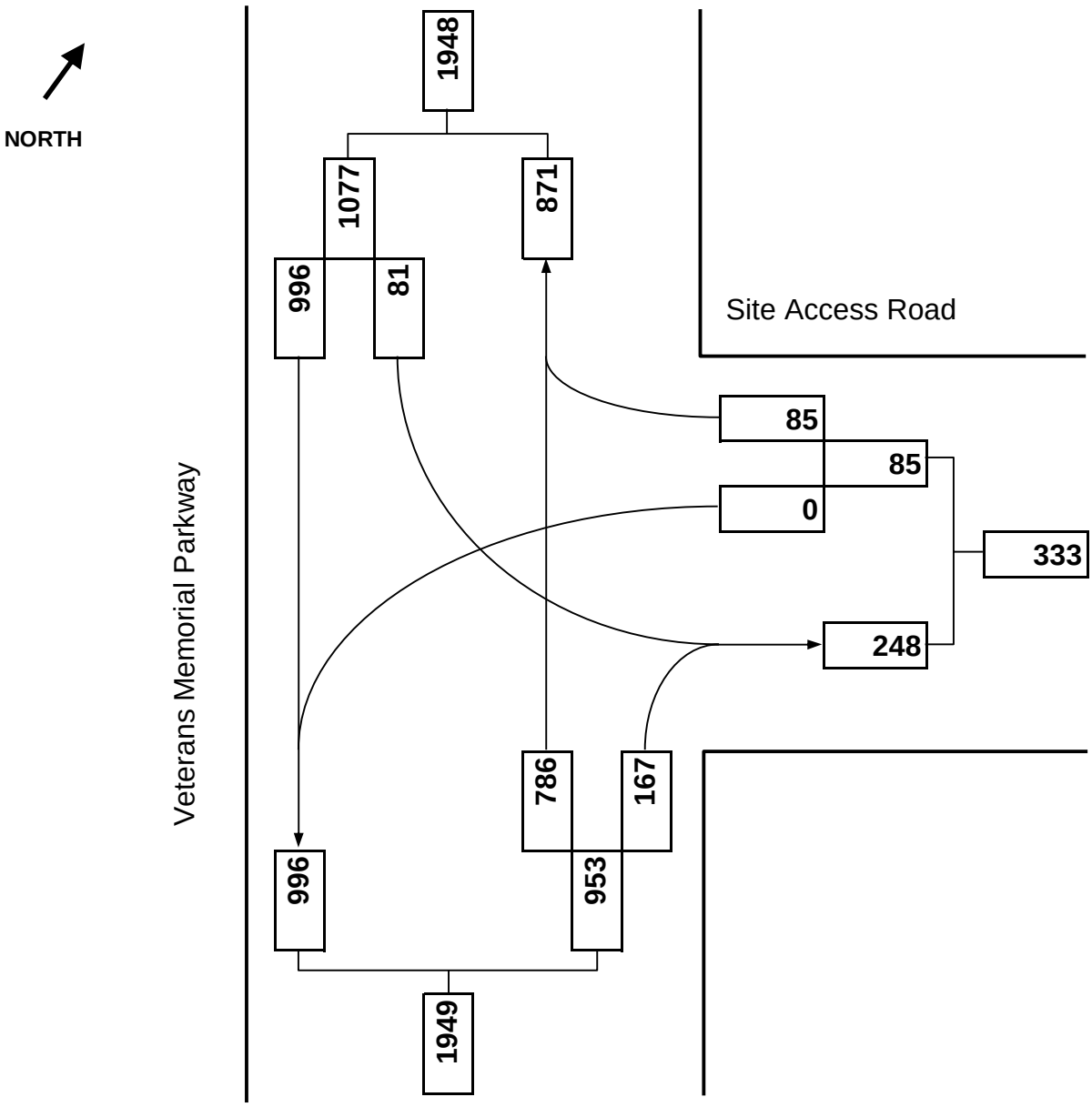
Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh				13.5	10.3		6.8	7.4		10.3	10.2	
Lane LOS				B	B		A	A		B	B	
95% Queue, veh				2.7	1.8		1.7	2.0		3.1	3.4	
Approach Delay, s/veh				12.0			7.1			10.3		
Approach LOS				B			A			B		
Intersection Delay, s/veh | LOS	9.6						A					

Veterans Memorial Parkway at Site Access Road

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Veterans Parkway	**Minor Street**:	Site Access Road
City/Town:	East Providence	**Day of Week**:	Weekday
Reference No.:	2814	**Peak Period**:	AM Peak
Existing:	n/a	**Future**:	Build



HCS7 Two-Way Stop-Control Report

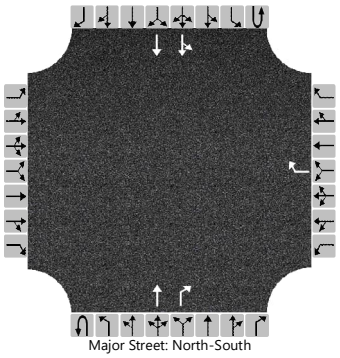
General Information

Analyst	Traffic Section
Agency/Co.	Crossman
Date Performed	12/08/2023
Analysis Year	2028
Time Analyzed	Future Build AM Peak
Intersection Orientation	North-South
Project Description	The MET

Site Information

Intersection	Vets Parkway at Site Rd
Jurisdiction	East Providence
East/West Street	Site Access Road
North/South Street	Vets Parkway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	1	0	0	1	1	0	0	2	0
Configuration								R			T	R		LT	T	
Volume (veh/h)								85			786	167		81	996	
Percent Heavy Vehicles (%)								0						0		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized						No					Yes					
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)								6.2						4.1		
Critical Headway (sec)								6.20						4.10		
Base Follow-Up Headway (sec)								3.3						2.2		
Follow-Up Headway (sec)								3.30						2.20		

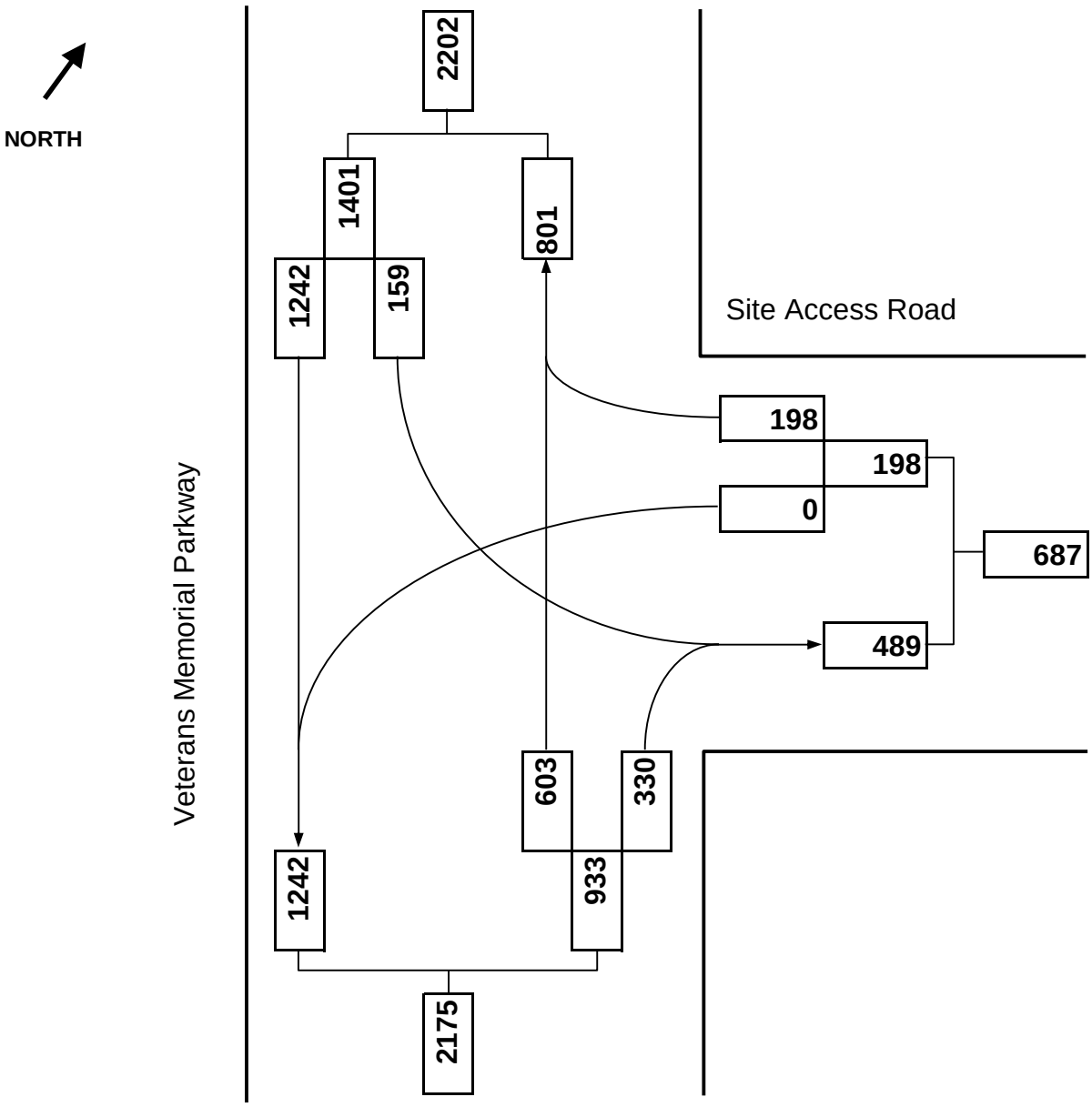
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)								92						88		
Capacity, c (veh/h)								361						794		
v/c Ratio								0.26						0.11		
95% Queue Length, Q_{95} (veh)								1.0						0.4		
Control Delay (s/veh)								18.4						10.1		
Level of Service (LOS)								C						B		
Approach Delay (s/veh)						18.4								1.9		
Approach LOS						C										

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Veterans Parkway	**Minor Street**:	Site Access Road
City/Town:	East Providence	**Day of Week**:	Weekday
Reference No.:	2814	**Peak Period**:	PM Peak
Existing:	n/a	**Future**:	Build



HCS7 Two-Way Stop-Control Report

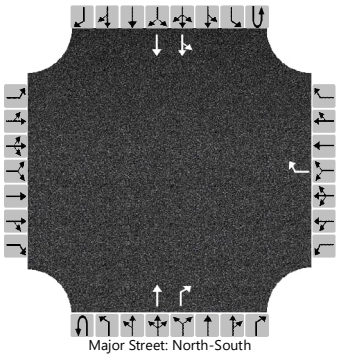
General Information

Analyst	Traffic Section
Agency/Co.	Crossman
Date Performed	12/08/2023
Analysis Year	2028
Time Analyzed	Future Build PM Peak
Intersection Orientation	North-South
Project Description	The MET

Site Information

Intersection	Vets Parkway at Site Dr
Jurisdiction	East Providence
East/West Street	Site Driveway
North/South Street	Vets Parkway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	1	0	0	1	1	0	0	2	0
Configuration								R			T	R		LT	T	
Volume (veh/h)								198			603	330		159	1242	
Percent Heavy Vehicles (%)								0						0		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized						No					Yes					
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)								6.2						4.1		
Critical Headway (sec)								6.20						4.10		
Base Follow-Up Headway (sec)								3.3						2.2		
Follow-Up Headway (sec)								3.30						2.20		

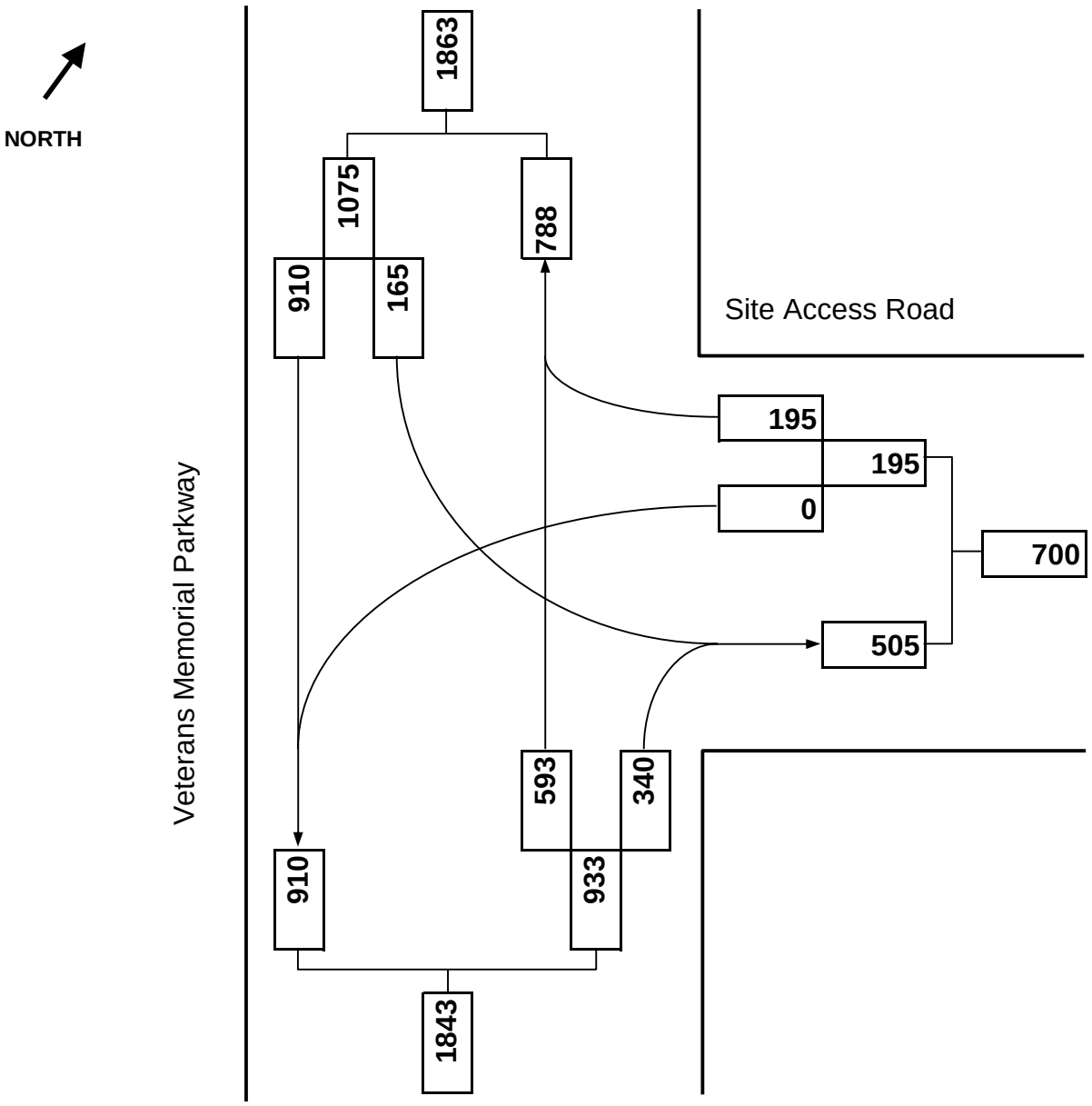
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)								215						173		
Capacity, c (veh/h)								469						941		
v/c Ratio								0.46						0.18		
95% Queue Length, Q_{95} (veh)								2.4						0.7		
Control Delay (s/veh)								19.0						9.7		
Level of Service (LOS)								C						A		
Approach Delay (s/veh)						19.0								3.6		
Approach LOS						C										

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Veterans Parkway	**Minor Street**:	Site Access Road
City/Town:	East Providence	**Day of Week**:	Saturday
Reference No.:	2814	**Peak Period**:	Mid-Day Peak
Existing:	n/a	**Future**:	Build



HCS7 Two-Way Stop-Control Report

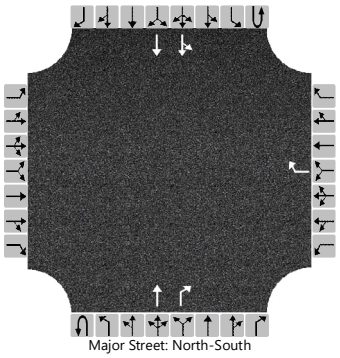
General Information

Analyst	Traffic Section
Agency/Co.	Crossman
Date Performed	12/08/2023
Analysis Year	2028
Time Analyzed	Future Build Sat MD Peak
Intersection Orientation	North-South
Project Description	The MET

Site Information

Intersection	Vets Parkway at Site Dr
Jurisdiction	East Providence
East/West Street	Site Driveway
North/South Street	Vets Parkway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	1	0	0	1	1	0	0	2	0
Configuration								R			T	R		LT	T	
Volume (veh/h)								195			593	340		165	910	
Percent Heavy Vehicles (%)								0						0		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized						No					Yes					
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)								6.2						4.1		
Critical Headway (sec)								6.20						4.10		
Base Follow-Up Headway (sec)								3.3						2.2		
Follow-Up Headway (sec)								3.30						2.20		

Delay, Queue Length, and Level of Service

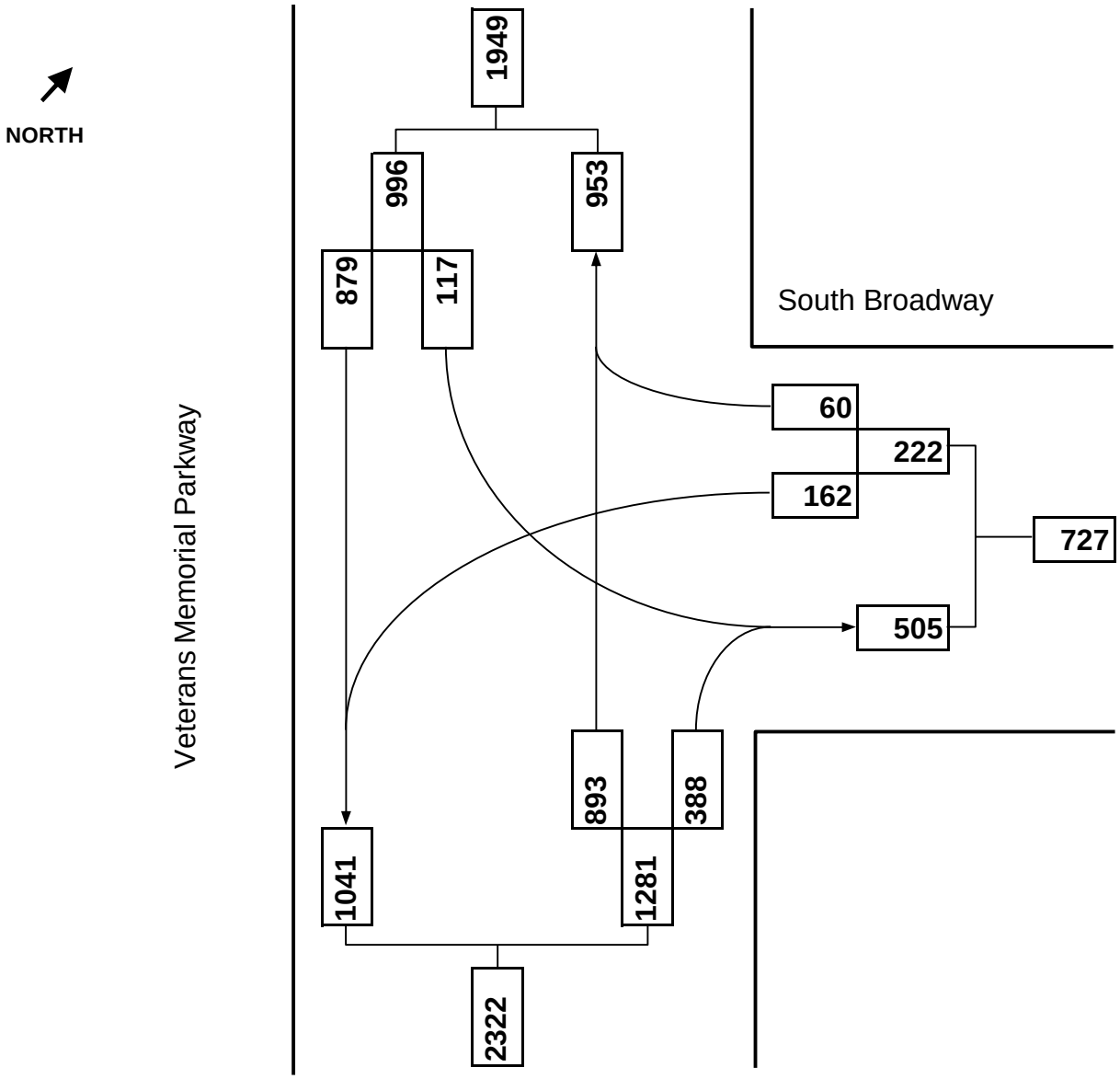
Flow Rate, v (veh/h)								212						179		
Capacity, c (veh/h)								476						950		
v/c Ratio								0.45						0.19		
95% Queue Length, Q_{95} (veh)								2.3						0.7		
Control Delay (s/veh)								18.5						9.7		
Level of Service (LOS)								C						A		
Approach Delay (s/veh)						18.5								2.7		
Approach LOS						C										

Veterans Memorial Parkway at South Broadway

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Veterans Parkway	**Minor Street**:	South Broadway
City/Town:	East Providence	**Day of Week**:	Weekday
Reference No.:	2814	**Peak Period**:	AM Peak
Existing:	n/a	**Future**:	Build



HCS7 Two-Way Stop-Control Report

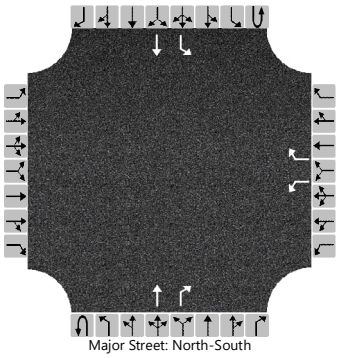
General Information

Analyst	Traffic Section
Agency/Co.	Crossman
Date Performed	12/08/2023
Analysis Year	2028
Time Analyzed	Future Build AM Peak
Intersection Orientation	North-South
Project Description	The MET

Site Information

Intersection	Vets Parkway at SBroadway
Jurisdiction	East Providence
East/West Street	South Broadway
North/South Street	Vets Parkway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		1	0	1	0	0	1	1	0	1	1	0
Configuration						L		R			T	R		L	T	
Volume (veh/h)						162		60			893	388		117	879	
Percent Heavy Vehicles (%)						0		0						0		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized						No					Yes					
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						4.50		4.50						4.10		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.50		3.30						2.20		

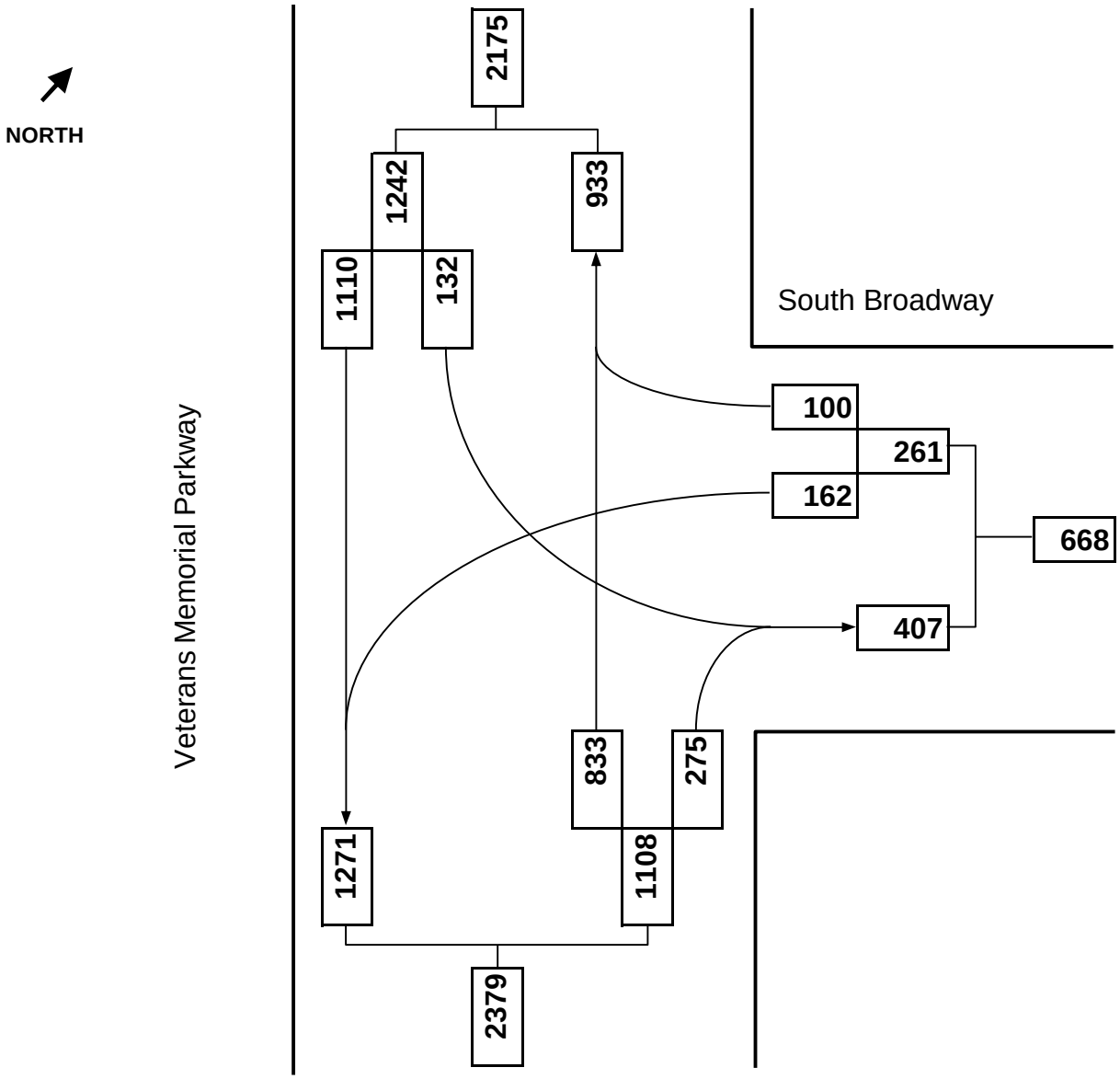
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						176		65						127		
Capacity, c (veh/h)						134		490						718		
v/c Ratio						1.32		0.13						0.18		
95% Queue Length, Q_{95} (veh)						11.2		0.5						0.6		
Control Delay (s/veh)						248.8		13.5						11.1		
Level of Service (LOS)						F		B						B		
Approach Delay (s/veh)						185.2								1.3		
Approach LOS						F										

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Veterans Parkway	**Minor Street**:	South Broadway
City/Town:	East Providence	**Day of Week**:	Weekday
Reference No.:	2814	**Peak Period**:	PM Peak
Existing:	n/a	**Future**:	Build



HCS7 Two-Way Stop-Control Report

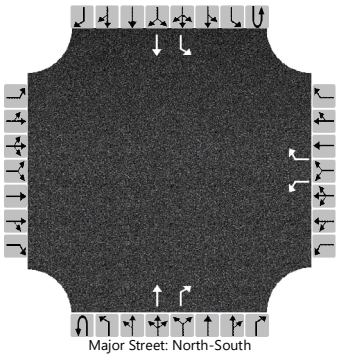
General Information

Analyst	Traffic Section
Agency/Co.	Crossman
Date Performed	12/08/2023
Analysis Year	2028
Time Analyzed	Future Build PM Peak
Intersection Orientation	North-South
Project Description	The MET

Site Information

Intersection	Vets Parkway at SBroadway
Jurisdiction	East Providence
East/West Street	South Broadway
North/South Street	Vets Parkway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		1	0	1	0	0	1	1	0	1	1	0
Configuration						L		R			T	R		L	T	
Volume (veh/h)						162		100			833	275		132	1110	
Percent Heavy Vehicles (%)						0		0						0		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized						No					Yes					
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						4.50		4.50						4.10		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.50		3.30						2.20		

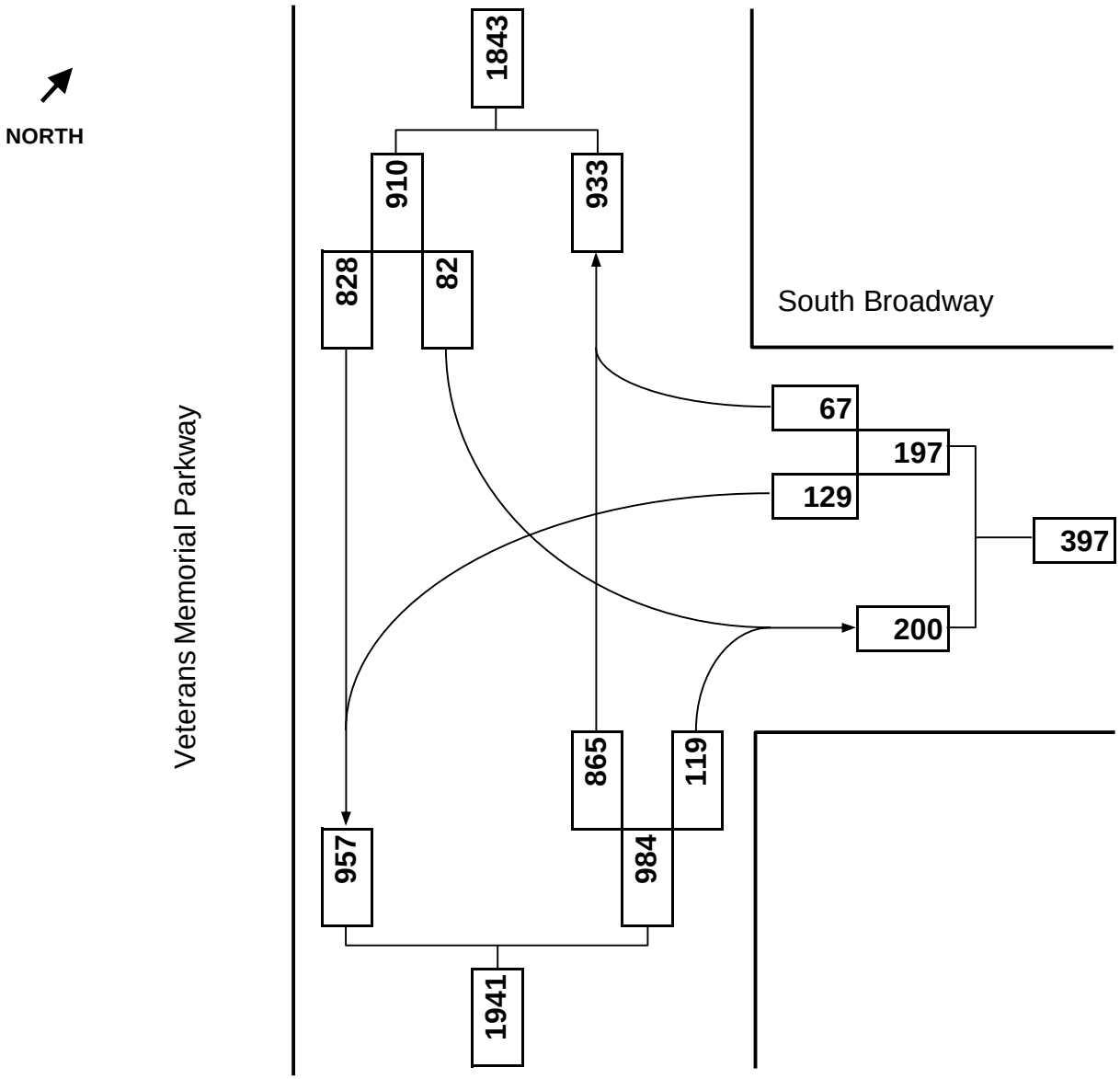
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						176		109						143		
Capacity, c (veh/h)						107		518						760		
v/c Ratio						1.64		0.21						0.19		
95% Queue Length, Q_{95} (veh)						13.5		0.8						0.7		
Control Delay (s/veh)						395.3		13.8						10.8		
Level of Service (LOS)						F		B						B		
Approach Delay (s/veh)						249.7								1.2		
Approach LOS						F										

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Veterans Parkway	**Minor Street**:	South Broadway
City/Town:	East Providence	**Day of Week**:	Saturday
Reference No.:	2814	**Peak Period**:	Mid-Day
Existing:	n/a	**Future**:	Build



HCS7 Two-Way Stop-Control Report

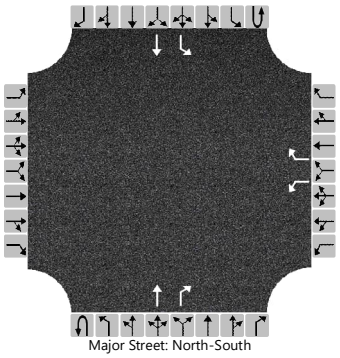
General Information

Analyst	Traffic Section
Agency/Co.	Crossman
Date Performed	12/08/2023
Analysis Year	2028
Time Analyzed	Future Build Sat MD Peak
Intersection Orientation	North-South
Project Description	The MET

Site Information

Intersection	Vets Parkway at SBroadway
Jurisdiction	East Providence
East/West Street	South Broadway
North/South Street	Vets Parkway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		1	0	1	0	0	1	1	0	1	1	0
Configuration						L		R			T	R		L	T	
Volume (veh/h)						129		67			865	119		82	828	
Percent Heavy Vehicles (%)						0		0						0		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized						No					Yes					
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						4.50		4.50						4.10		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.50		3.30						2.20		

Delay, Queue Length, and Level of Service

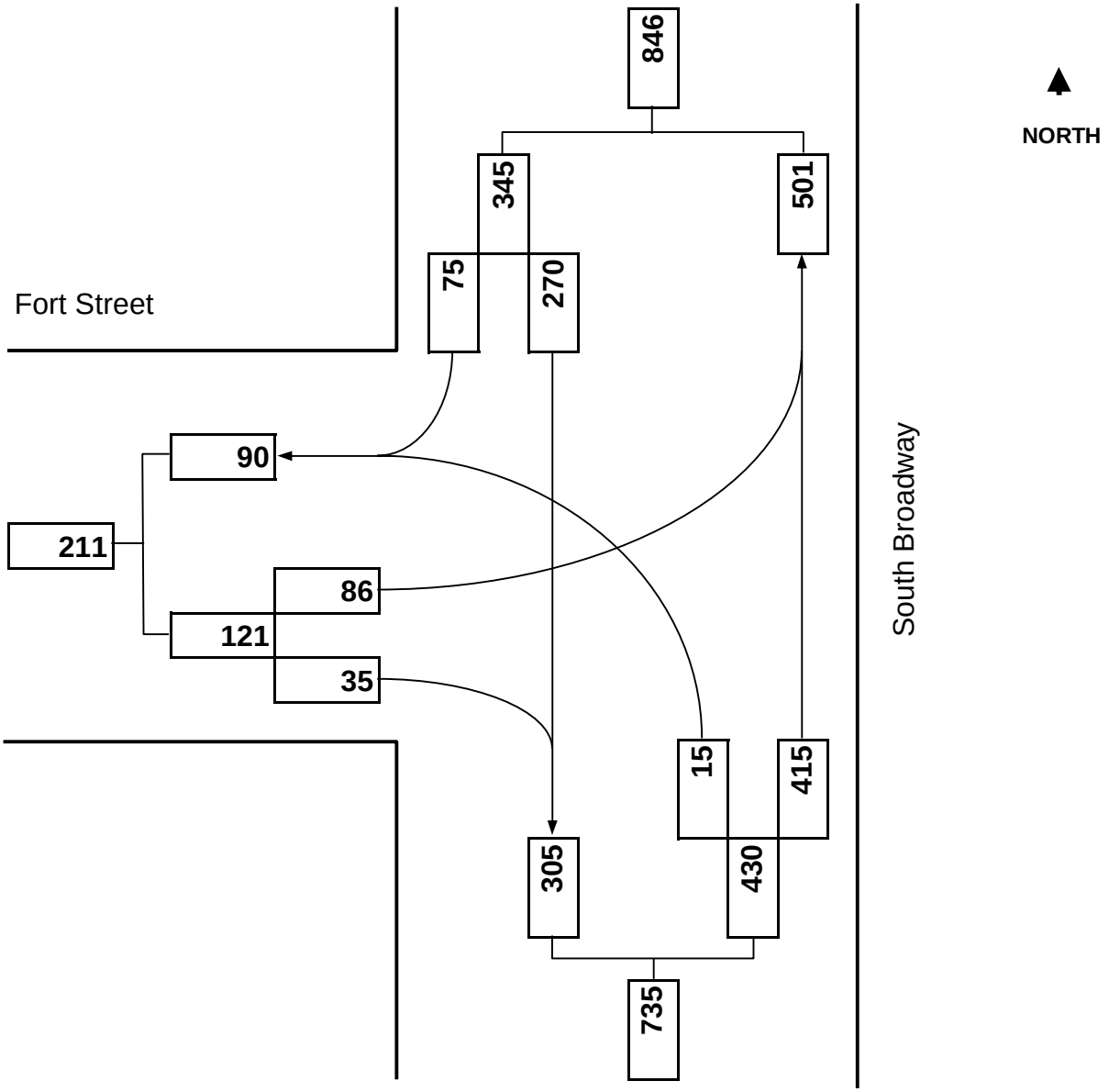
Flow Rate, v (veh/h)						140		73						89		
Capacity, c (veh/h)						166		503						737		
v/c Ratio						0.85		0.14						0.12		
95% Queue Length, Q_{95} (veh)						5.8		0.5						0.4		
Control Delay (s/veh)						89.6		13.4						10.6		
Level of Service (LOS)						F		B						B		
Approach Delay (s/veh)						63.5								1.0		
Approach LOS						F										

South Broadway at Fort Street

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	South Broadway	**Minor Street**:	Fort Street
City/Town:	East Providence	**Day of Week**:	Weekday
Reference No.:	2814	**Peak Period**:	AM Peak
Existing:	n/a	**Future**:	Build



HCS7 Two-Way Stop-Control Report

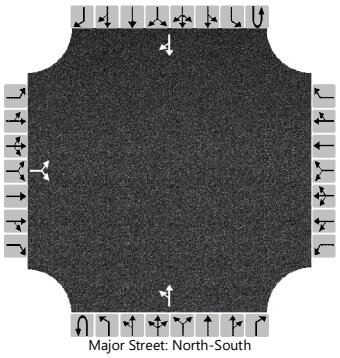
General Information

Analyst	Traffic Section
Agency/Co.	Crossman
Date Performed	12/08/2023
Analysis Year	2028
Time Analyzed	Future Build AM Peak
Intersection Orientation	North-South
Project Description	The MET

Site Information

Intersection	SBroadway at Fort
Jurisdiction	East Providence
East/West Street	Fort Street
North/South Street	South Broadway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		86		35						15	415				270	75
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

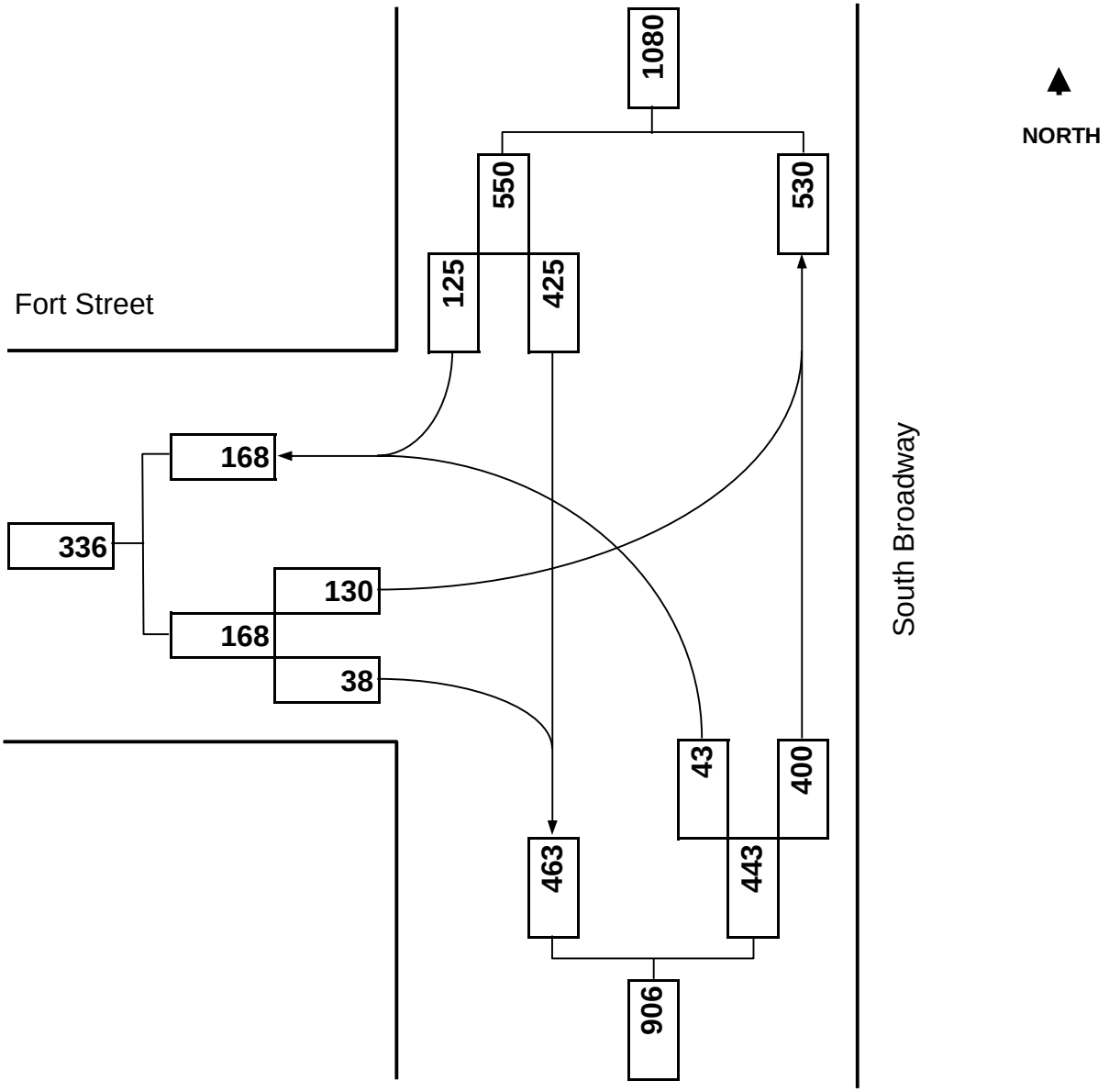
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			132							16						
Capacity, c (veh/h)			403							1195						
v/c Ratio			0.33							0.01						
95% Queue Length, Q_{95} (veh)			1.4							0.0						
Control Delay (s/veh)			18.2							8.1						
Level of Service (LOS)			C							A						
Approach Delay (s/veh)		18.2								0.4						
Approach LOS		C														

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	South Broadway	**Minor Street**:	Fort Street
City/Town:	East Providence	**Day of Week**:	Weekday
Reference No.:	2814	**Peak Period**:	PM Peak
Existing:	n/a	**Future**:	Build



HCS7 Two-Way Stop-Control Report

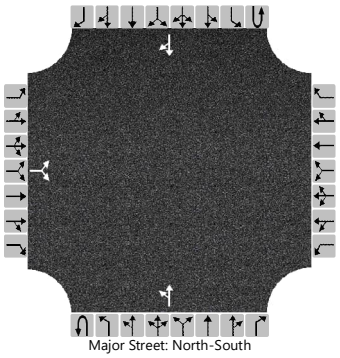
General Information

Analyst	Traffic Section
Agency/Co.	Crossman
Date Performed	12/08/2023
Analysis Year	2028
Time Analyzed	Future Build PM Peak
Intersection Orientation	North-South
Project Description	The MET

Site Information

Intersection	SBroadway at Fort
Jurisdiction	East Providence
East/West Street	Fort Street
North/South Street	South Broadway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		130		38						43	400				425	125
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

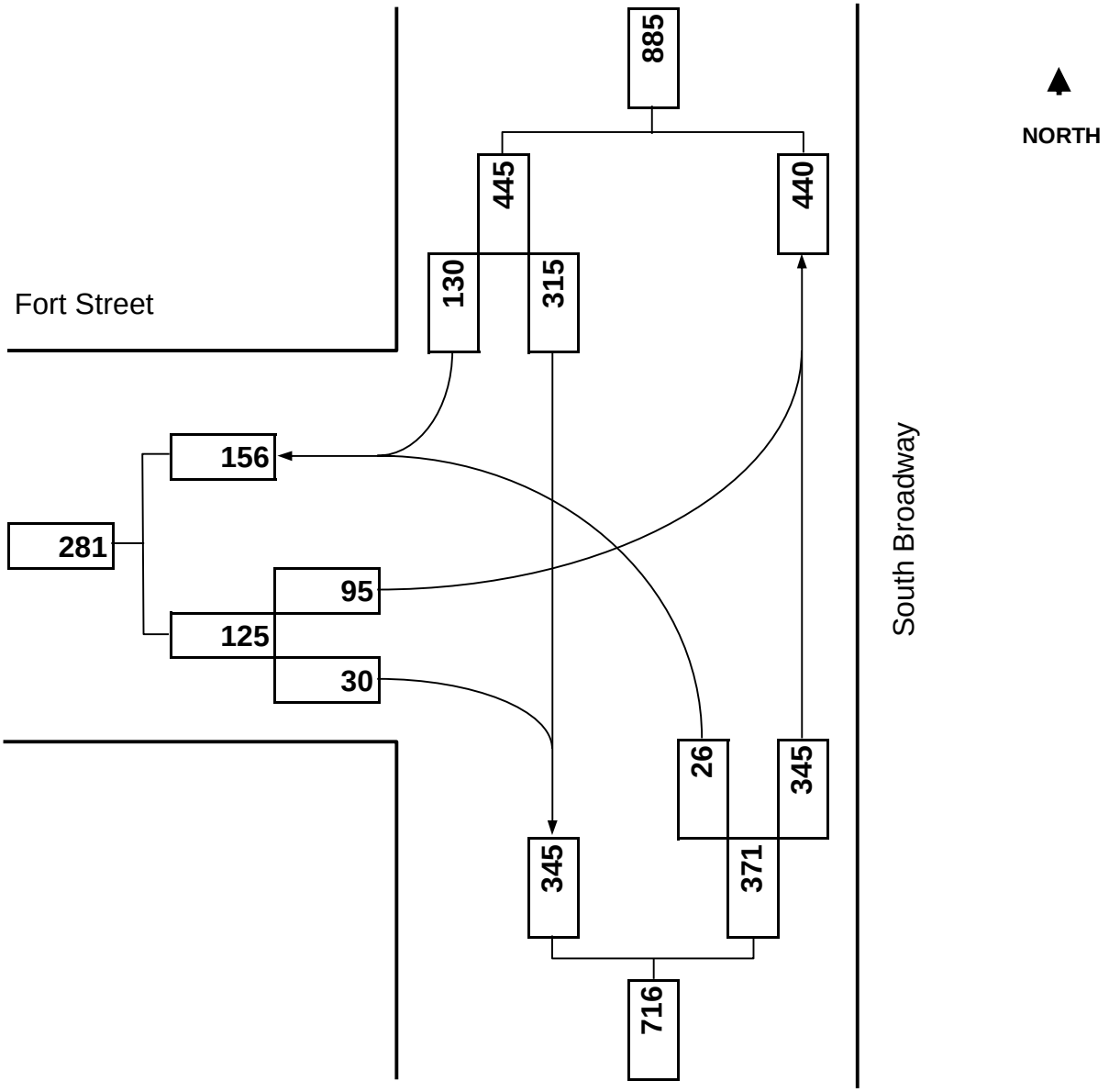
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			183							47						
Capacity, c (veh/h)			270							989						
v/c Ratio			0.68							0.05						
95% Queue Length, Q_{95} (veh)			4.4							0.1						
Control Delay (s/veh)			42.1							8.8						
Level of Service (LOS)			E							A						
Approach Delay (s/veh)		42.1								1.4						
Approach LOS		E														

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	South Broadway	**Minor Street**:	Fort Street
City/Town:	East Providence	**Day of Week**:	Saturday
Reference No.:	2814	**Peak Period**:	Mid-Day
Existing:	n/a	**Future**:	Build



HCS7 Two-Way Stop-Control Report

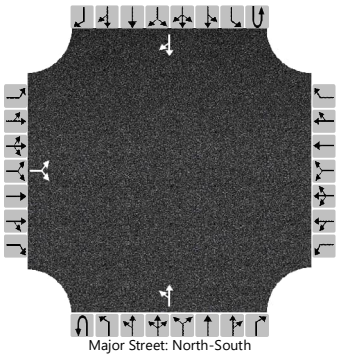
General Information

Analyst	Traffic Section
Agency/Co.	Crossman
Date Performed	12/08/2023
Analysis Year	2028
Time Analyzed	Future Build Sat MD Peak
Intersection Orientation	North-South
Project Description	The MET

Site Information

Intersection	SBroadway at Fort
Jurisdiction	East Providence
East/West Street	Fort Street
North/South Street	South Broadway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		95		30						26	345				315	130
Percent Heavy Vehicles (%)		0		0						0						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.40		6.20						4.10						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.50		3.30						2.20						

Delay, Queue Length, and Level of Service

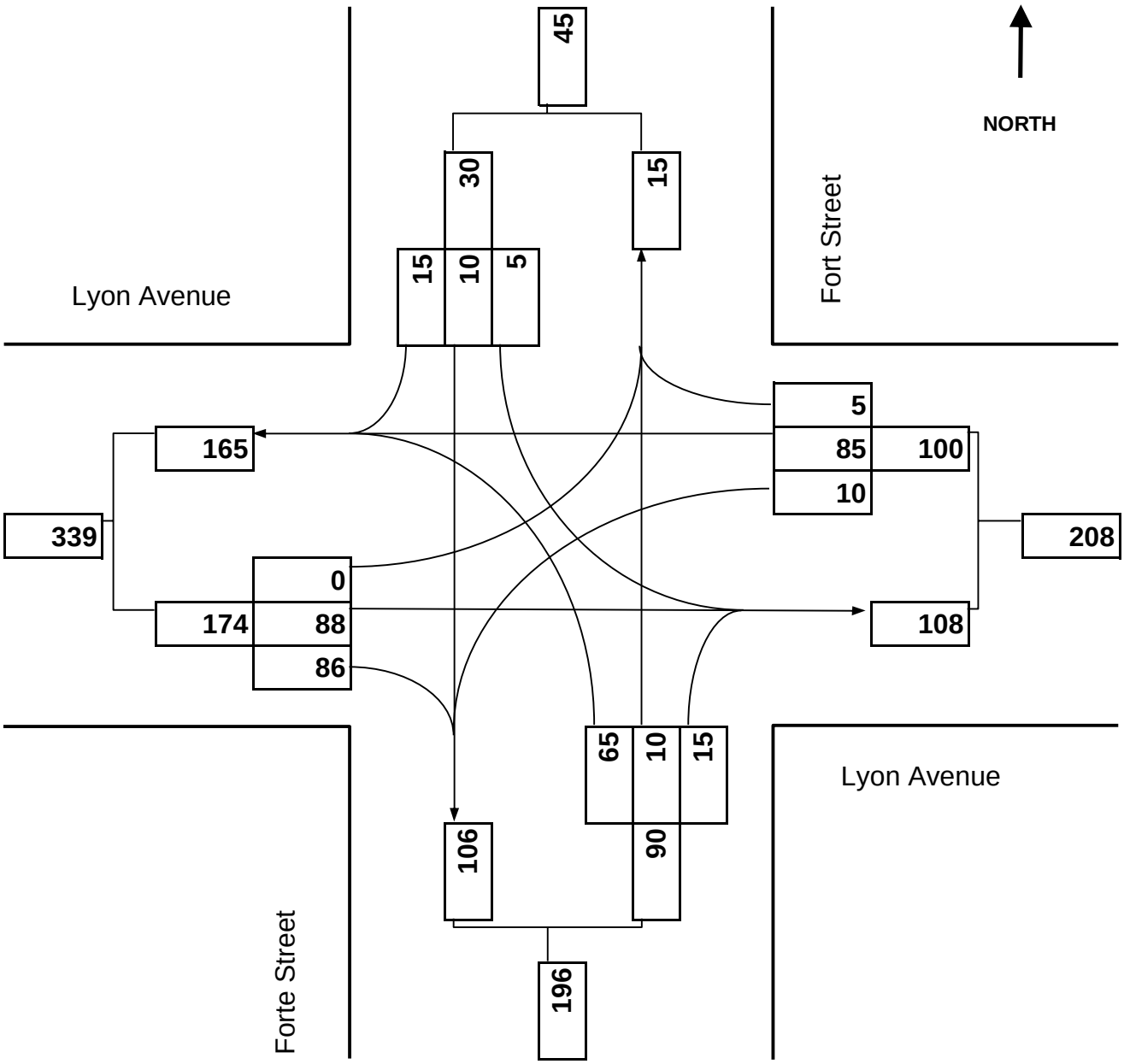
Flow Rate, v (veh/h)			136							28						
Capacity, c (veh/h)			369							1090						
v/c Ratio			0.37							0.03						
95% Queue Length, Q_{95} (veh)			1.7							0.1						
Control Delay (s/veh)			20.3							8.4						
Level of Service (LOS)			C							A						
Approach Delay (s/veh)		20.3								0.8						
Approach LOS		C														

Lyon Avenue at Fort Street

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Lyon Avenue	**Minor Street**:	Fort Street
City/Town:	East Providence	**Day of Week**:	Weekday
Reference No.:	2814	**Peak Period**:	AM Peak
Existing:	n/a	**Future**:	Build

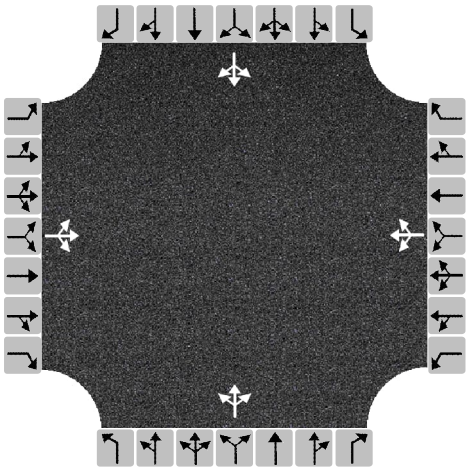


HCS All-Way Stop Control Report

General and Site Information

Analyst	Traffic Section
Agency/Co.	Crossman
Date Performed	8/12/2024
Analysis Year	2028
Analysis Time Period (hrs)	0.25
Time Analyzed	Future Build AM Peak
Project Description	The MET
Intersection	Lyon Ave at Fort St
Jurisdiction	East Providence
East/West Street	Lyon Avenue
North/South Street	Fort Street
Peak Hour Factor	0.92

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	0	88	86	10	85	5	65	10	15	5	10	15
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	189			109			98			33		
Percent Heavy Vehicles	0			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.168			0.097			0.087			0.029		
Final Departure Headway, h_d (s)	4.04			4.40			4.63			4.41		
Final Degree of Utilization, x	0.212			0.133			0.126			0.040		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.04			2.40			2.63			2.41		

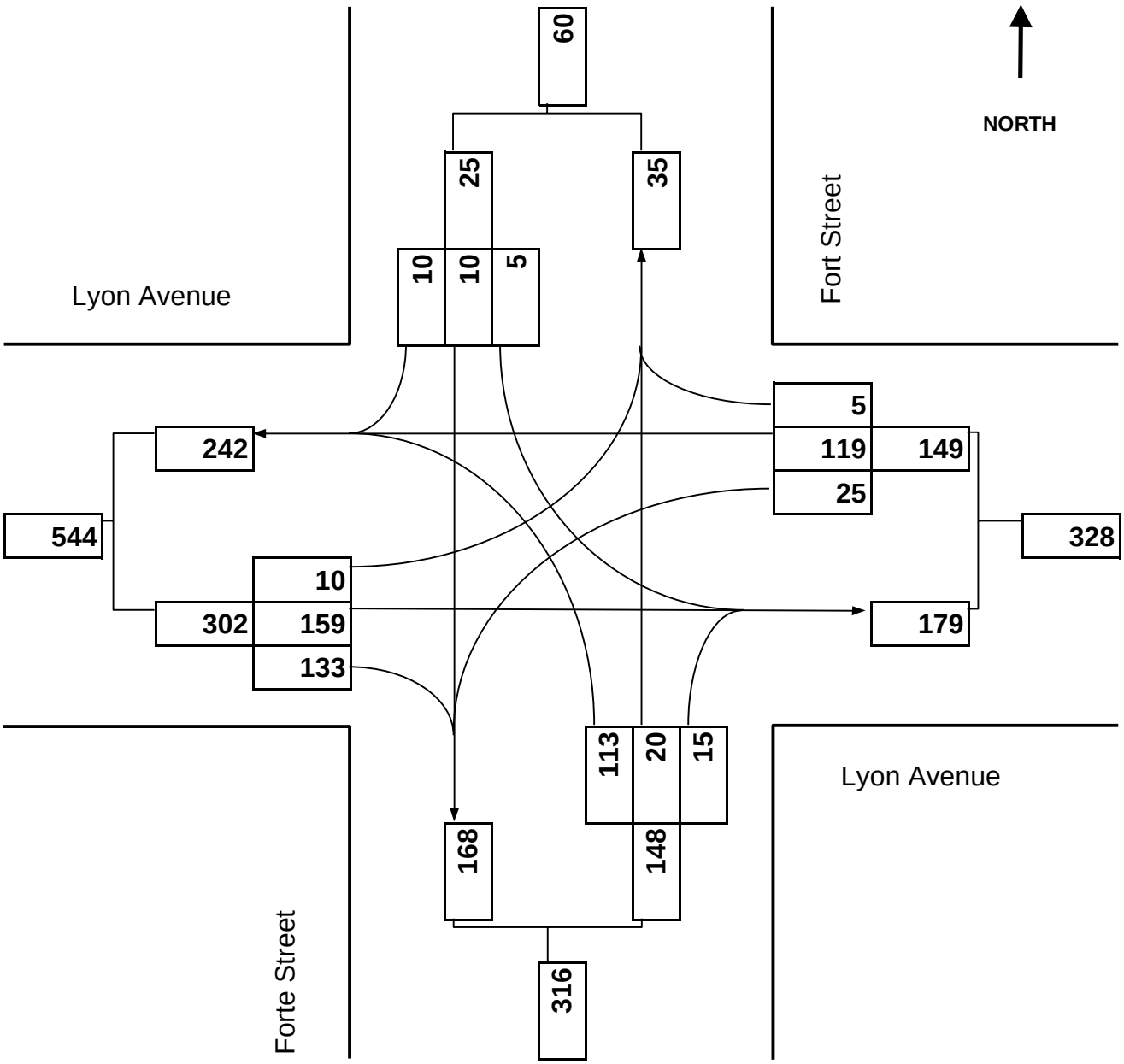
Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	189			109			98			33		
Capacity (veh/h)	891			819			777			817		
95% Queue Length, Q_{95} (veh)	0.8			0.5			0.4			0.1		
95% Queue Length, Q_{95} (ft)	20.0			12.5			10.0			2.5		
Control Delay (s/veh)	8.1			8.1			8.3			7.6		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	8.1	A		8.1	A		8.3	A		7.6	A	
Intersection Delay (s/veh) | LOS	8.1						A					

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Lyon Avenue	**Minor Street**:	Fort Street
City/Town:	East Providence	**Day of Week**:	Weekday
Reference No.:	2814	**Peak Period**:	PM Peak
Existing:	n/a	**Future**:	Build

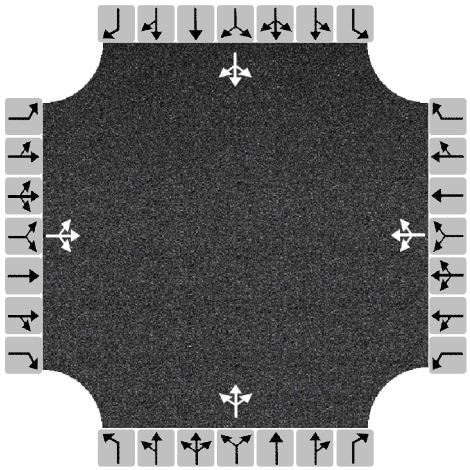


HCS All-Way Stop Control Report

General and Site Information

Analyst	Traffic Section
Agency/Co.	Crossman
Date Performed	8/12/2024
Analysis Year	2028
Analysis Time Period (hrs)	0.25
Time Analyzed	Future Build PM Peak
Project Description	The MET
Intersection	Lyon Ave at Fort St
Jurisdiction	East Providence
East/West Street	Lyon Avenue
North/South Street	Fort Street
Peak Hour Factor	0.92

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	10	159	133	25	119	5	113	20	15	5	10	10
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	328			162			161			27		
Percent Heavy Vehicles	0			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.292			0.144			0.143			0.024		
Final Departure Headway, h_d (s)	4.35			4.80			5.16			5.09		
Final Degree of Utilization, x	0.397			0.216			0.230			0.038		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.35			2.80			3.16			3.09		

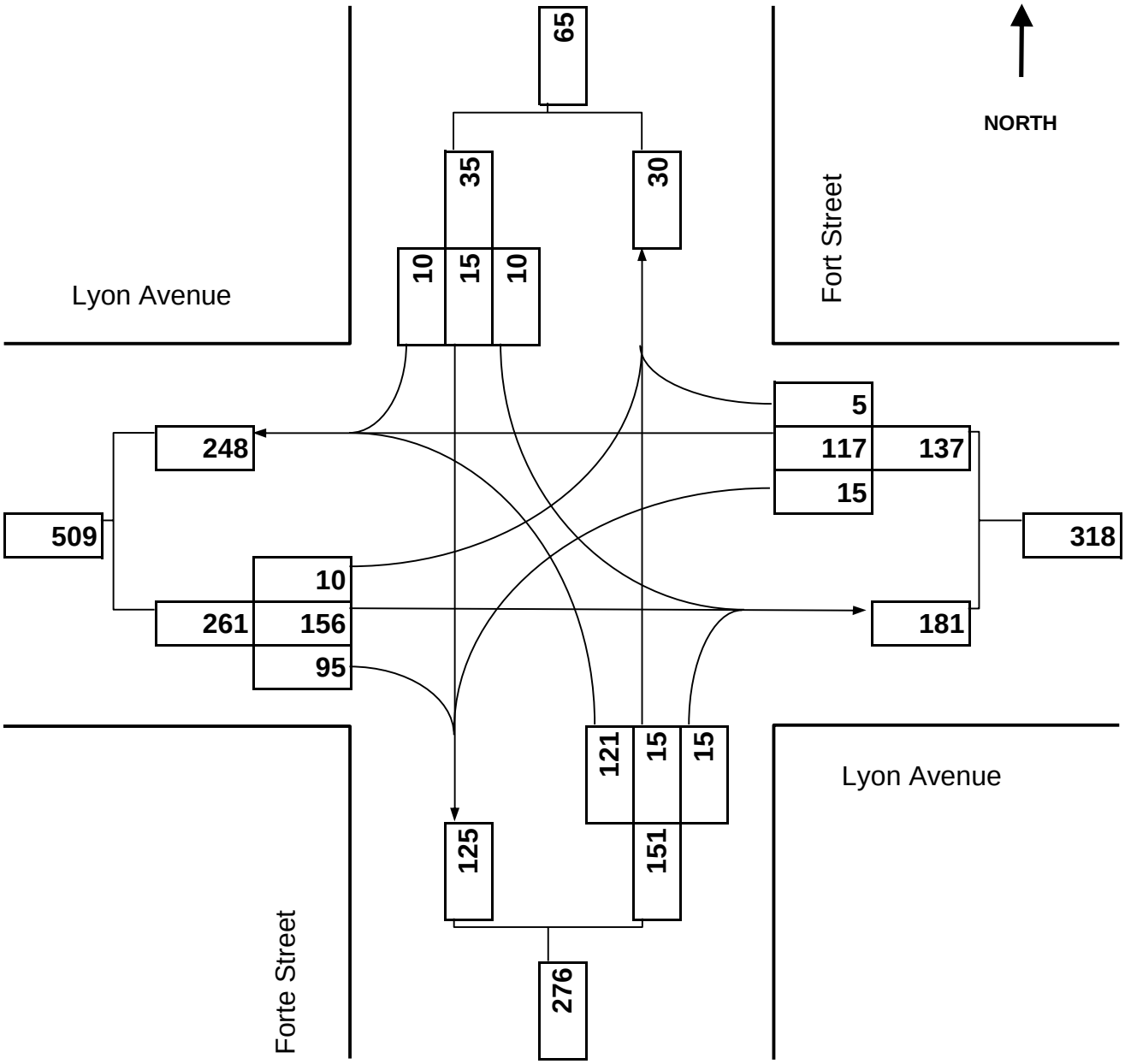
Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	328			162			161			27		
Capacity (veh/h)	827			750			698			708		
95% Queue Length, Q_{95} (veh)	1.9			0.8			0.9			0.1		
95% Queue Length, Q_{95} (ft)	47.5			20.0			22.5			2.5		
Control Delay (s/veh)	10.2			9.1			9.7			8.3		
Level of Service, LOS	B			A			A			A		
Approach Delay (s/veh) | LOS	10.2	B		9.1	A		9.7	A		8.3	A	
Intersection Delay (s/veh) | LOS	9.7						A					

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Lyon Avenue	**Minor Street**:	Fort Street
City/Town:	East Providence	**Day of Week**:	Saturday
Reference No.:	2814	**Peak Period**:	Mid-Day
Existing:	n/a	**Future**:	Build

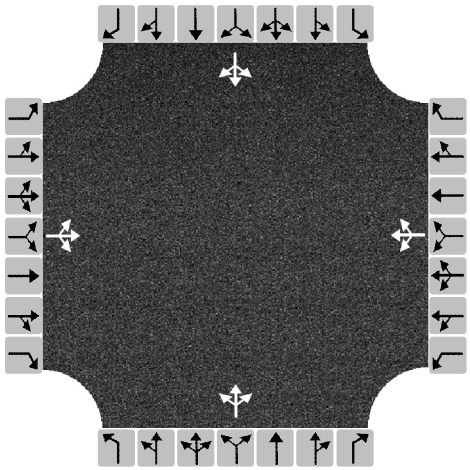


HCS All-Way Stop Control Report

General and Site Information

Analyst	Traffic Section
Agency/Co.	Crossman
Date Performed	8/12/2024
Analysis Year	2028
Analysis Time Period (hrs)	0.25
Time Analyzed	Future Build Sat MD Peak
Project Description	The MET
Intersection	Lyon Ave at Fort St
Jurisdiction	East Providence
East/West Street	Lyon Avenue
North/South Street	Fort Street
Peak Hour Factor	0.92

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	10	156	95	15	117	5	121	15	15	10	15	10
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	284			149			164			38		
Percent Heavy Vehicles	0			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.252			0.132			0.146			0.034		
Final Departure Headway, h_d (s)	4.41			4.77			5.06			5.05		
Final Degree of Utilization, x	0.348			0.197			0.231			0.053		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.41			2.77			3.06			3.05		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	284			149			164			38		
Capacity (veh/h)	816			755			711			714		
95% Queue Length, Q_{95} (veh)	1.6			0.7			0.9			0.2		
95% Queue Length, Q_{95} (ft)	40.0			17.5			22.5			5.0		
Control Delay (s/veh)	9.7			8.9			9.6			8.3		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	9.7	A		8.9	A		9.6	A		8.3	A	
Intersection Delay (s/veh) | LOS	9.4						A					

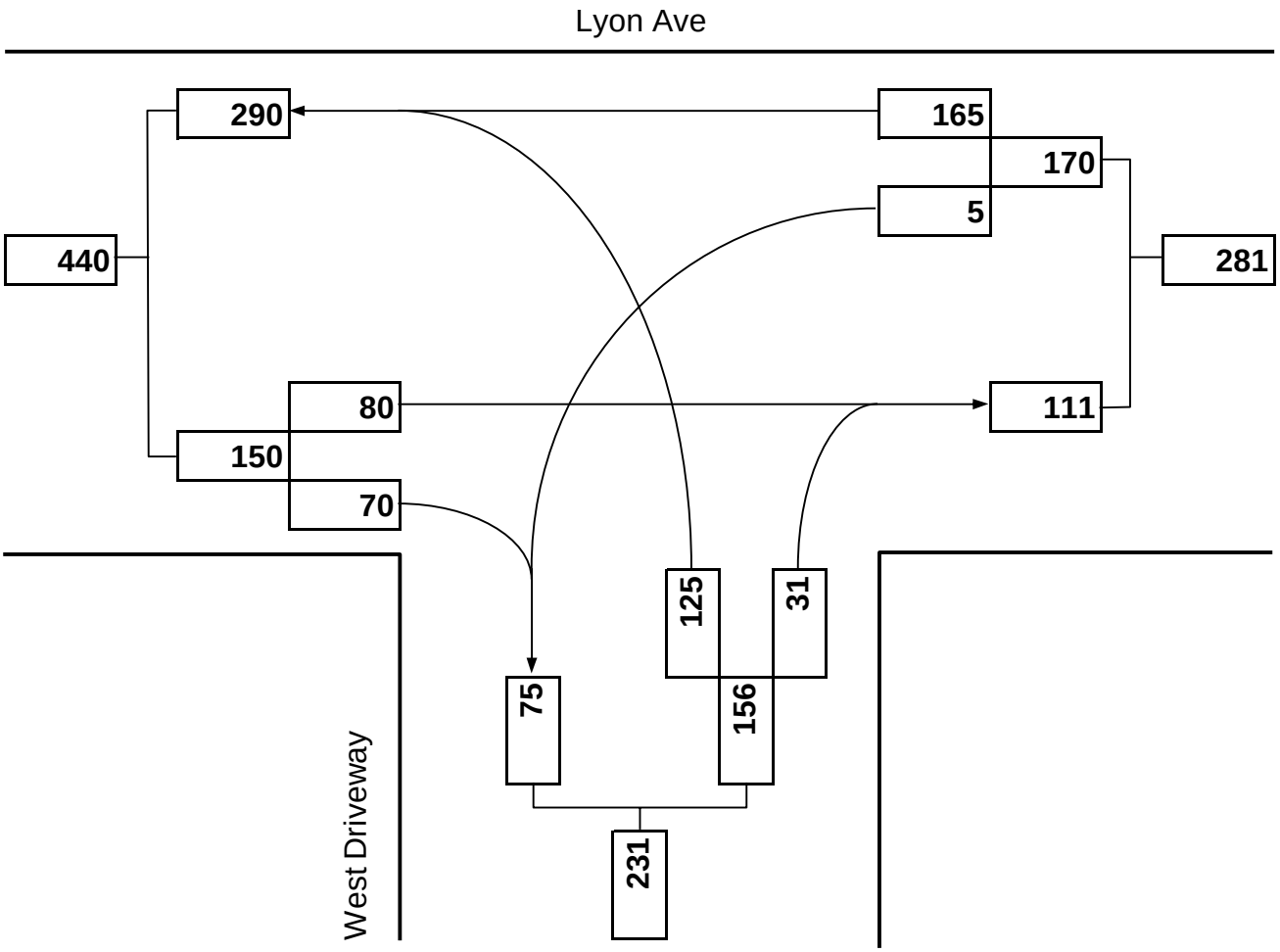
Lyon Avenue at West Site Driveway

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Lyon Ave	**Minor Street**:	West Driveway
City/Town:	East Providence	**Day of Week**:	Weekday
Reference No.:	2814	**Peak Period**:	AM Peak
Existing:	n/a	**Future**:	Build

NORTH



HCS7 Two-Way Stop-Control Report

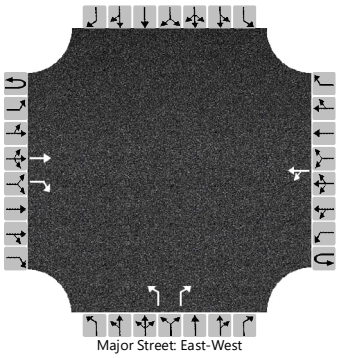
General Information

Analyst	Traffic Section
Agency/Co.	Crossman
Date Performed	12/08/2023
Analysis Year	2028
Time Analyzed	Future Build AM Peak
Intersection Orientation	East-West
Project Description	The MET

Site Information

Intersection	Lyon at West Site Dr
Jurisdiction	East Providence
East/West Street	Lyon Ave
North/South Street	West Site Driveway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	1	0	0	1	0		1	0	1		0	0	0
Configuration			T	R		LT				L		R				
Volume (veh/h)			80	70		5	165			125		31				
Percent Heavy Vehicles (%)						0				0		0				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized			No							No						
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.50				6.40		6.20				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.20				3.50		3.30				

Delay, Queue Length, and Level of Service

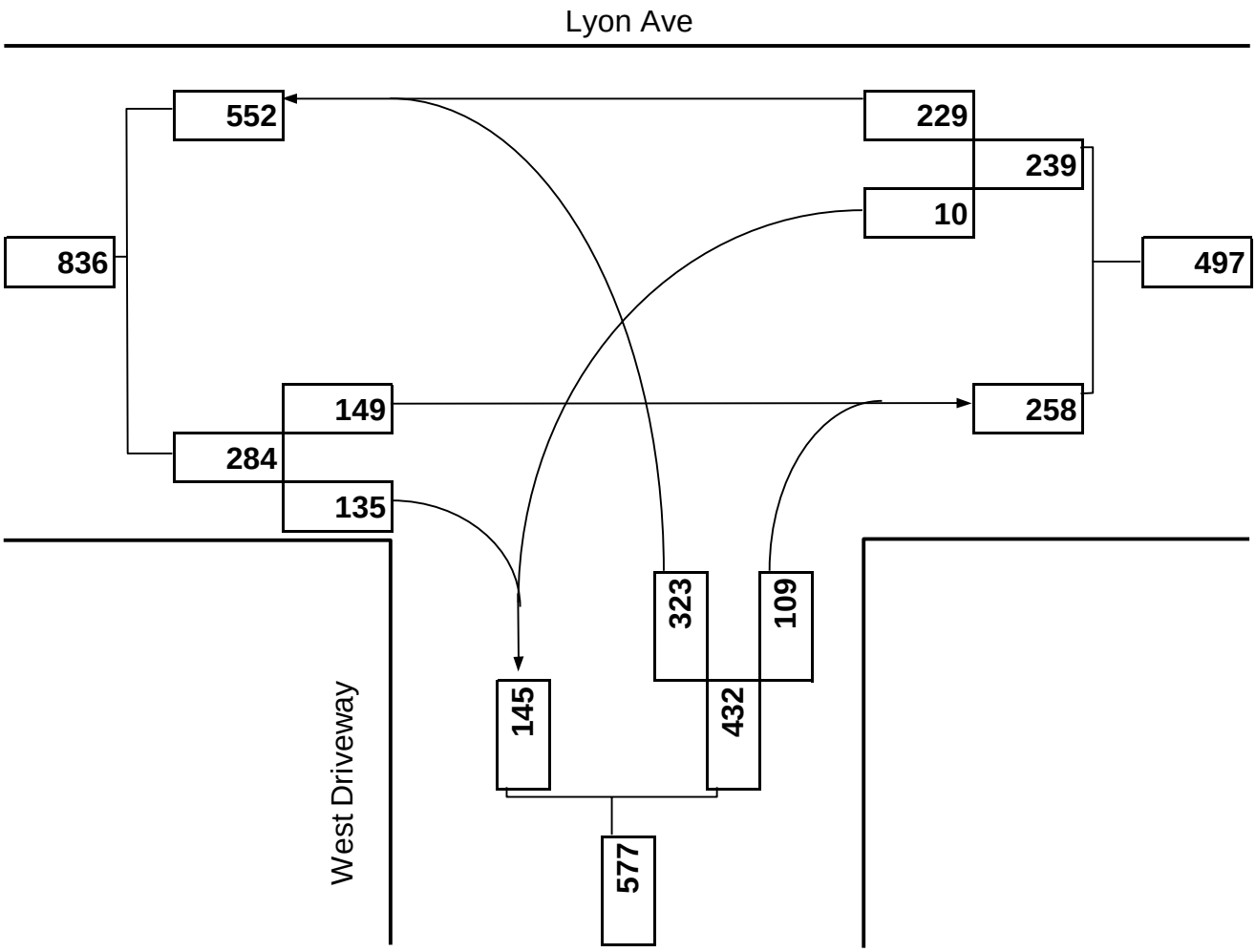
Flow Rate, v (veh/h)						5				136		34				
Capacity, c (veh/h)						1402				714		977				
v/c Ratio						0.00				0.19		0.03				
95% Queue Length, Q_{95} (veh)						0.0				0.7		0.1				
Control Delay (s/veh)						7.6				11.2		8.8				
Level of Service (LOS)						A				B		A				
Approach Delay (s/veh)						0.3				10.7						
Approach LOS										B						

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Lyon Ave	**Minor Street**:	West Driveway
City/Town:	East Providence	**Day of Week**:	Weekday
Reference No.:	2814	**Peak Period**:	PM Peak
Existing:	n/a	**Future**:	Build

NORTH



HCS7 Two-Way Stop-Control Report

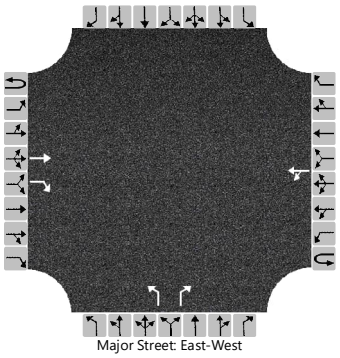
General Information

Analyst	Traffic Section
Agency/Co.	Crossman
Date Performed	12/08/2023
Analysis Year	2028
Time Analyzed	Future Build PM Peak
Intersection Orientation	East-West
Project Description	The MET

Site Information

Intersection	Lyon at West Site Dr
Jurisdiction	East Providence
East/West Street	Lyon Ave
North/South Street	West Site Driveway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	1	0	0	1	0		1	0	1		0	0	0
Configuration			T	R		LT				L		R				
Volume (veh/h)			149	135		10	229			323		109				
Percent Heavy Vehicles (%)						0				0		0				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized			No							No						
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.50				6.40		6.20				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.20				3.50		3.30				

Delay, Queue Length, and Level of Service

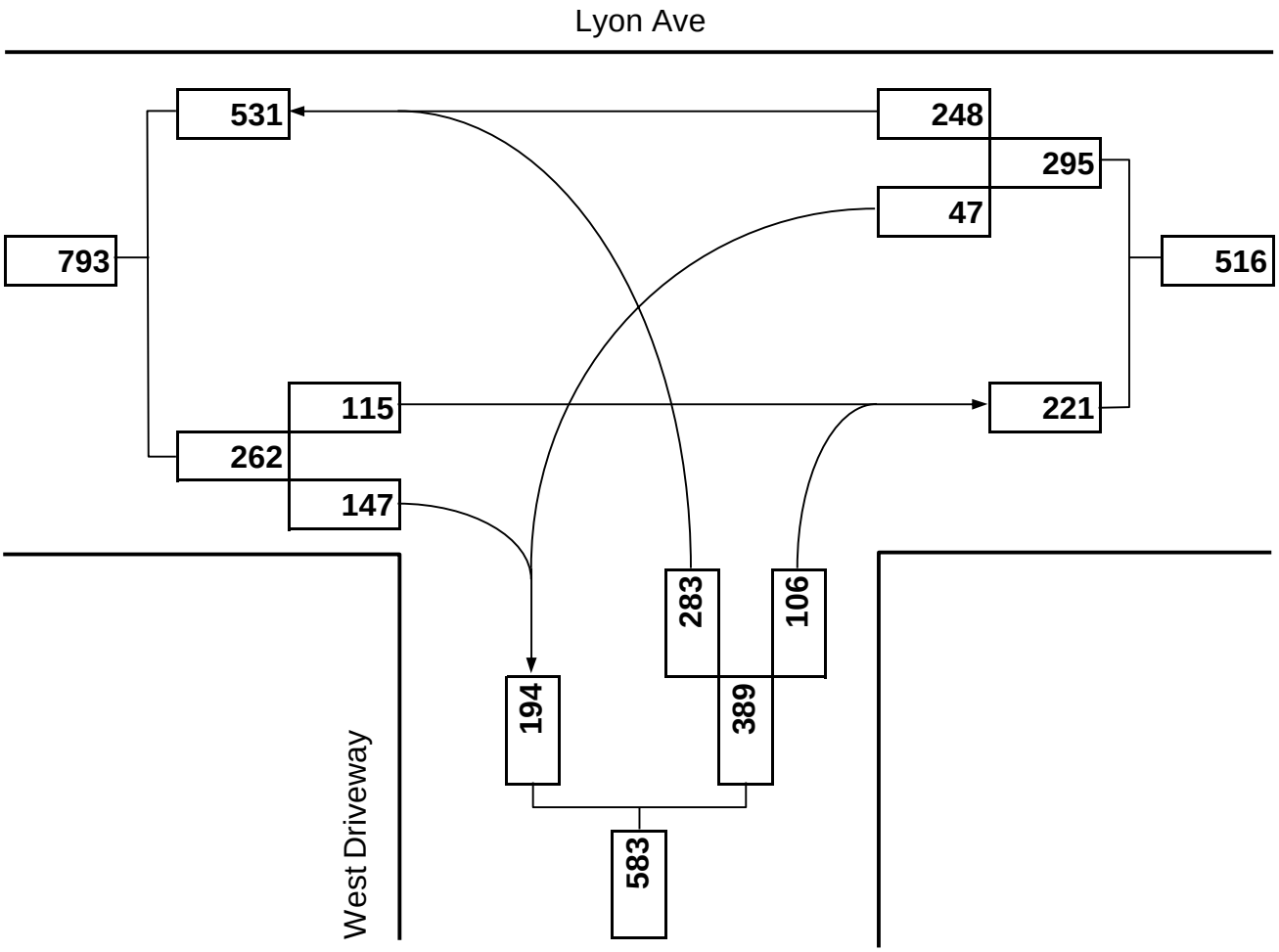
Flow Rate, v (veh/h)						11				351		118				
Capacity, c (veh/h)						1221				578		888				
v/c Ratio						0.01				0.61		0.13				
95% Queue Length, Q_{95} (veh)						0.0				4.1		0.5				
Control Delay (s/veh)						8.0				20.4		9.7				
Level of Service (LOS)						A				C		A				
Approach Delay (s/veh)						0.4				17.7						
Approach LOS										C						

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Lyon Ave	**Minor Street**:	West Driveway
City/Town:	East Providence	**Day of Week**:	Saturday
Reference No.:	2814	**Peak Period**:	Mid-day
Existing:	n/a	**Future**:	Build

NORTH



HCS7 Two-Way Stop-Control Report

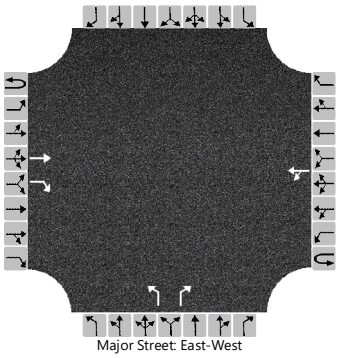
General Information

Analyst	Traffic Section
Agency/Co.	Crossman
Date Performed	12/08/2023
Analysis Year	2028
Time Analyzed	Future Build Sat MD Peak
Intersection Orientation	East-West
Project Description	The MET

Site Information

Intersection	Lyon at West Site Dr
Jurisdiction	East Providence
East/West Street	Lyon Ave
North/South Street	West Site Driveway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	1	0	0	1	0		1	0	1		0	0	0
Configuration			T	R		LT				L		R				
Volume (veh/h)			115	147		47	248			283		106				
Percent Heavy Vehicles (%)						0				0		0				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized			No							No						
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.50				6.40		6.20				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.20				3.50		3.30				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						51				308		115				
Capacity, c (veh/h)						1249				510		931				
v/c Ratio						0.04				0.60		0.12				
95% Queue Length, Q_{95} (veh)						0.1				3.9		0.4				
Control Delay (s/veh)						8.0				22.2		9.4				
Level of Service (LOS)						A				C		A				
Approach Delay (s/veh)						1.6				18.7						
Approach LOS										C						

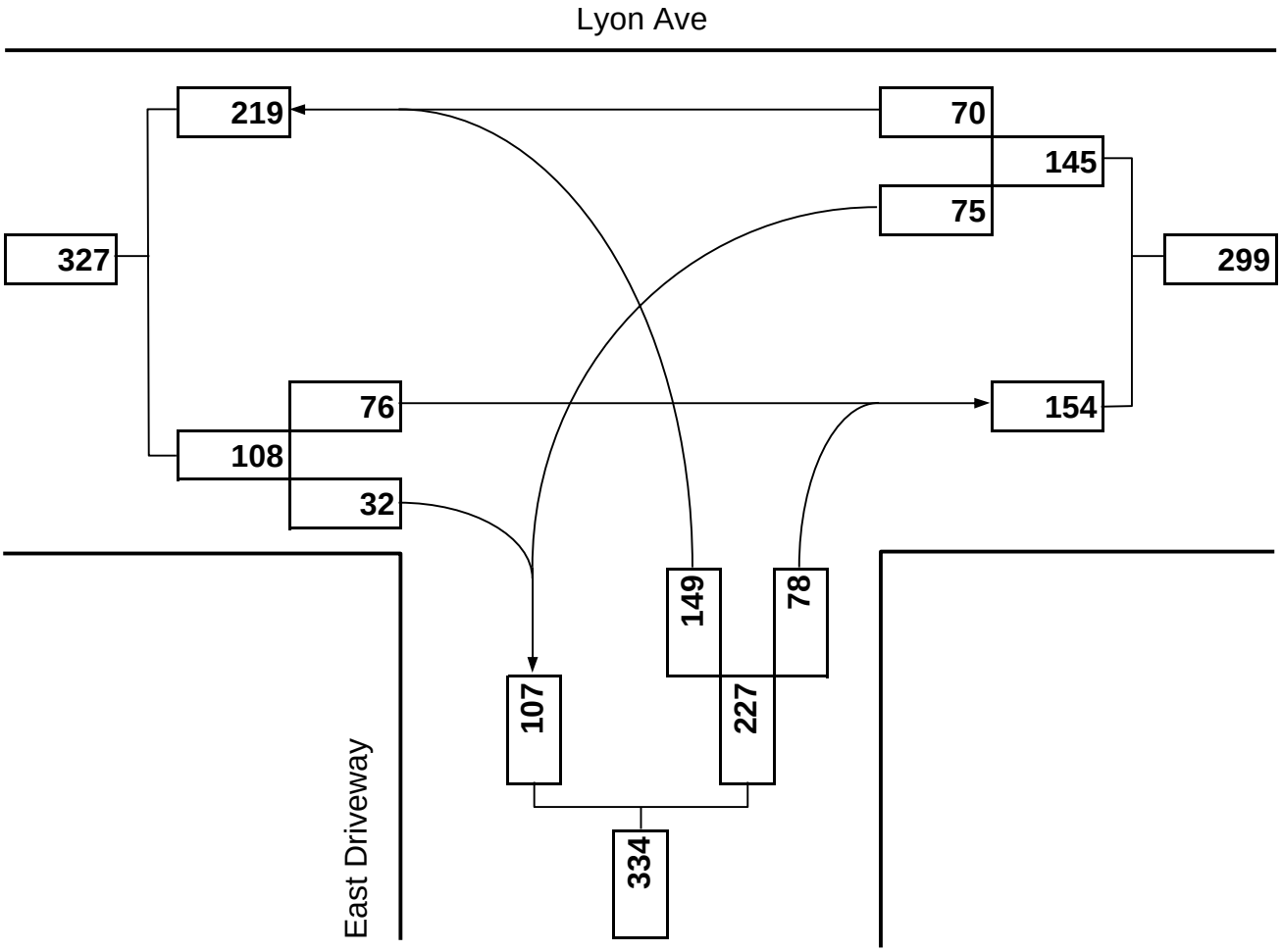
Lyon Avenue at East Site Driveway

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Lyon Ave	**Minor Street**:	East Driveway
City/Town:	East Providence	**Day of Week**:	Weekday
Reference No.:	2814	**Peak Period**:	AM Peak
Existing:	n/a	**Future**:	Build

NORTH



HCS7 Two-Way Stop-Control Report

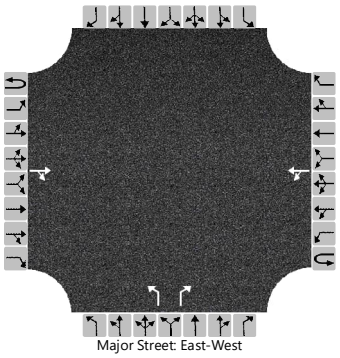
General Information

Analyst	Traffic Section
Agency/Co.	Crossman
Date Performed	12/08/2023
Analysis Year	2028
Time Analyzed	Future Build AM Peak
Intersection Orientation	East-West
Project Description	The MET

Site Information

Intersection	Lyon at East Site Dr
Jurisdiction	East Providence
East/West Street	Lyon Ave
North/South Street	East Site Driveway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		1	0	1		0	0	0
Configuration				TR		LT				L		R				
Volume (veh/h)			76	32		75	70			149		78				
Percent Heavy Vehicles (%)						0				0		0				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized										No						
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.50				6.40		6.20				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.20				3.50		3.30				

Delay, Queue Length, and Level of Service

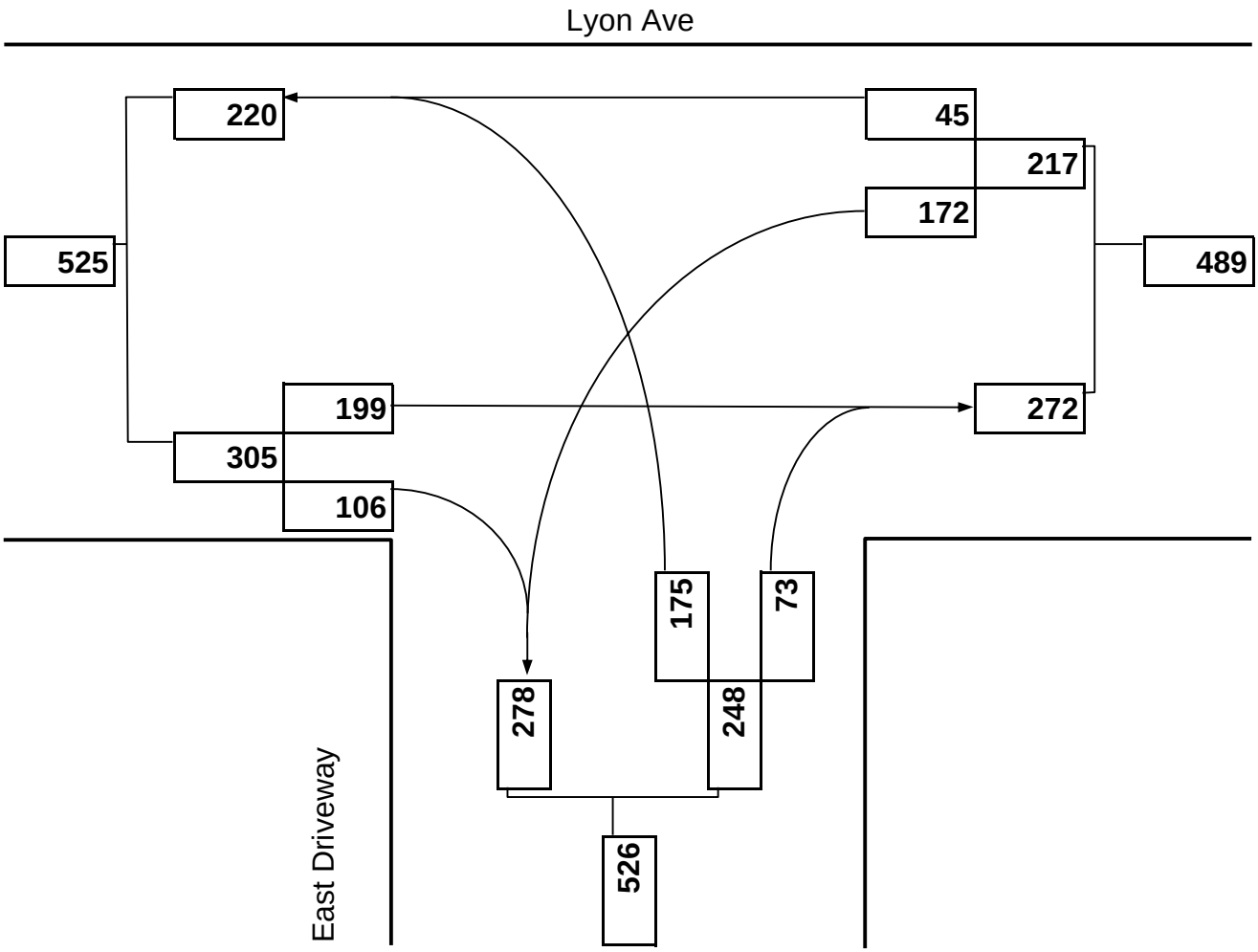
Flow Rate, v (veh/h)						82				162		85				
Capacity, c (veh/h)						1464				622		961				
v/c Ratio						0.06				0.26		0.09				
95% Queue Length, Q_{95} (veh)						0.2				1.0		0.3				
Control Delay (s/veh)						7.6				12.8		9.1				
Level of Service (LOS)						A				B		A				
Approach Delay (s/veh)						4.1				11.5						
Approach LOS										B						

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Lyon Ave	**Minor Street**:	East Driveway
City/Town:	East Providence	**Day of Week**:	Weekday
Reference No.:	2814	**Peak Period**:	PM Peak
Existing:	n/a	**Future**:	Build

NORTH



HCS Two-Way Stop-Control Report

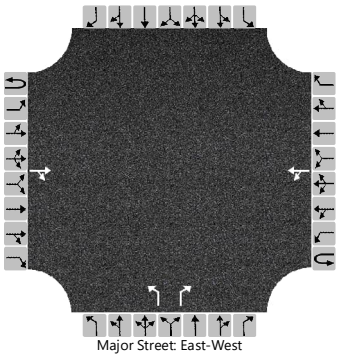
General Information

Analyst	Traffic Section
Agency/Co.	Crossman
Date Performed	12/08/2023
Analysis Year	2028
Time Analyzed	Future Build PM Peak
Intersection Orientation	East-West
Project Description	The MET

Site Information

Intersection	Lyon at East Site Dr
Jurisdiction	East Providence
East/West Street	Lyon Ave
North/South Street	East Site Driveway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		1	0	1		0	0	0
Configuration				TR		LT				L		R				
Volume (veh/h)			199	106		172	45			175		73				
Percent Heavy Vehicles (%)						0				0		0				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized										No						
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.50				6.40		6.20				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.20				3.50		3.30				

Delay, Queue Length, and Level of Service

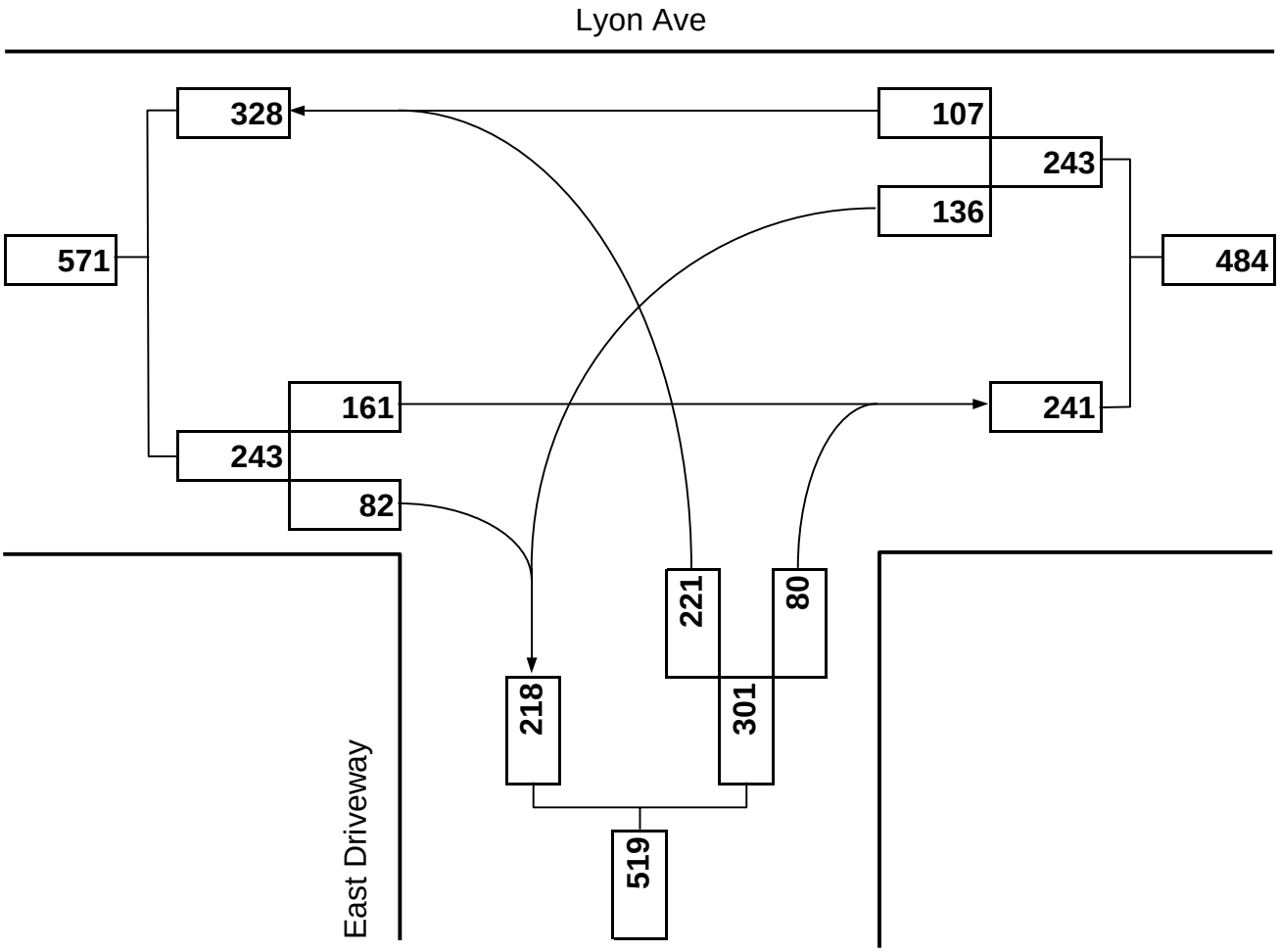
Flow Rate, v (veh/h)						187				190		79				
Capacity, c (veh/h)						1194				344		770				
v/c Ratio						0.16				0.55		0.10				
95% Queue Length, Q_{95} (veh)						0.6				3.2		0.3				
95% Queue Length, Q_{95} (ft)						15.0				80.0		7.5				
Control Delay (s/veh)						8.6	1.4			27.6		10.2				
Level of Service (LOS)						A	A			D		B				
Approach Delay (s/veh)					7.1				22.5							
Approach LOS					A				C							

CROSSMAN ENGINEERING

Turning Movement Diagram

Major Street:	Lyon Ave	**Minor Street**:	East Driveway
City/Town:	East Providence	**Day of Week**:	Saturday
Reference No.:	2814	**Peak Period**:	Mid-day
Existing:	n/a	**Future**:	Build

NORTH



HCS7 Two-Way Stop-Control Report

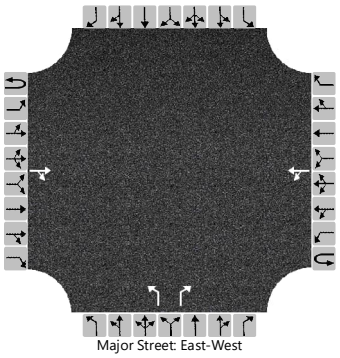
General Information

Analyst	Traffic Section
Agency/Co.	Crossman
Date Performed	12/08/2023
Analysis Year	2028
Time Analyzed	Future Build Sat MD Peak
Intersection Orientation	East-West
Project Description	The MET

Site Information

Intersection	Lyon at East Site Dr
Jurisdiction	East Providence
East/West Street	Lyon Ave
North/South Street	East Site Driveway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		1	0	1		0	0	0
Configuration				TR		LT				L		R				
Volume (veh/h)			161	82		136	107			221		80				
Percent Heavy Vehicles (%)						0				0		0				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized										No						
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.50				6.40		6.20				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.20				3.50		3.30				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						148				240		87				
Capacity, c (veh/h)						1274				392		825				
v/c Ratio						0.12				0.61		0.11				
95% Queue Length, Q_{95} (veh)						0.4				3.9		0.4				
Control Delay (s/veh)						8.2				27.6		9.9				
Level of Service (LOS)						A				D		A				
Approach Delay (s/veh)					5.0				22.9							
Approach LOS										C						

ATTACHMENT D – Coordination

Correspondence

RIDOT Letter – June 21, 2024

Crossman Letter – May 6, 2024

RIDOT Letter – March 18, 2024

Department of Transportation
Two Capitol Hill
Providence, RI 02903

Office 401-222-2450
Fax 401-222-3905

Mr. Paul Bannon
Crossman Engineering
151 Centerville Road
Warwick, RI 02886

June 21, 2024

Subject: Metacomet Redevelopment
500 Veterans Memorial Parkway
East Providence

Dear Mr. Bannon,

RIDOT has reviewed the Preliminary-Physical Alteration Permit for the proposed Metacomet Redevelopment. The submission only pertained to traffic impacts and their associated mitigation and did not address any other items typically included in a full Physical Alteration Permit Application (drainage, roadway profiles, etc). Our review was not coordinated with any other reviewing agency such as RIDEM, Scenic Roadway Board, etc, This letter is an assessment of Project's traffic impact statement.

As such, we provide the following comments:

1) We recognize that the Development Team is getting a roundabout designer to ensure the nuances of roundabouts are properly designed.
2) We also recognize that a detailed microsimulation of the roundabout will be conducted to ensure accurate representations of the traffic impacts.
3) We remain concerned about the location of the Lyon Avenue access being so close to the roundabout. This may need to be adjusted based on the results of the roundabout microsimulation referenced above.
4) We recommended the access to the south of the roundabout be a right in/right out. The Development Team feels the left turn in is necessary and safe. As part of the final Physical Alteration Permit, we will require the Development Team to perform a safety study one year after opening to assess if safety enhancements will be needed at the Developer's expense. With the left turn remaining, we highly recommend a left turn lane be established to remove the lefts from the flow of southbound traffic.
5) Please address any issues that the new traffic pattern may have with the Metacomet Executive Office Park just to the north of the roundabout.
6) The design of the roundabout shall not prohibit the expansion of the roundabout to accommodate the fourth leg which could be added by a developer on the opposite side of the road.

Since this was submitted as a preliminary PAPA, we believe the above comments are design level comments and can be accommodated within the design. As such, we agree with the concept of

the proposed improvements from a traffic assessment point of view, and we will review the officially submitted PAPA to ensure it meets all RIDOT criteria.

If you have any questions, please do not hesitate to contact me.

Sincerely,

Steven Pristawa, P.E.
State Traffic Safety Engineer

Cc: Mayor Roberto DaSilva
Chief Christopher Francesconi (East Providence Police Department)
Gagnon, Hall, Ouellette, Pristawa, Raymond, Town file

CROSSMAN ENGINEERING

Civil • Transportation • Environmental • Site Planning • Surveying • Permitting

May 6, 2024

Mr. Steven W. Pristawa
State Traffic Safety Engineer
RI Department of Transportation
Two Capitol Hill
Providence, RI 02903

RE: Metacomet Redevelopment "The MET"
500 Veterans Memorial Parkway, East Providence
Preliminary PAP Design Concept Review

Dear Mr. Pristawa:

Crossman Engineering is pleased to submit the following responses to the Preliminary PAP review comments received from the Department for the above referenced project in East Providence. Our office had submitted a Design Study Report and Conceptual Roadway Improvement Plan for consideration of off-site mitigation required as part of the redevelopment of the Metacomet Country Club property on Veterans Memorial Parkway. A meeting was held on April 1, 2024 with department staff to review the comments, and we offer the following responses as a result of the meeting discussions to address the comments:

Office of Safety Comments:

The following comments were received in a letter dated March 18, 2024 from the Office of Safety:

1. Please provide simulation analysis of the proposed roundabout showing expected queues based on full build of the development.

   In addition to the HCS7 analysis provided in the study, a Synchro/SimTraffic simulation has been prepared at this preliminary stage of the project and can be provided as part of the conceptual review. Based upon our meeting, a more detailed Vissim analysis that will model the roundabout queuing will be provided as part of the formal PAP Application design and supporting information.

2. Understanding that design of roundabouts, particularly two-lane roundabouts, are an iterative process, we strongly encourage coordinating with an independent roundabout expert designer as part of the final design process.

   The owner is committed to retaining as part of the final design team, an approved roundabout expert designer, conforming to current RIDOT practice. WSP, which is on the approved list provided by the Department, will assist in the evaluation of the proposed concept submitted as part of the preliminary application, and provide review and guidance on the final design elements of the roundabout layout to be completed as part of the formal PAP submission.

3. We recommend that the southern access from Veterans Memorial Parkway be restricted to right-in and right-out only. All southbound traffic entering the development would be restricted to entering from the roundabout only.

   As discussed in the review meeting, the design as proposed was completed considering initial city zoning approvals of the site redevelopment plan, and the future connection to Waterfront Drive that is proposed to be extended further south from its present terminus at Bold Point Park. The zoning approval requires that the main access to the site redevelopment project be provided from Veterans Memorial Parkway, with the goal of limiting commercial traffic use of Lyon Avenue. The design as proposed would promote use of Lyon Avenue for the apartment use proposed on the site. This residential component is situated on the easterly portion of the property off of Lyon Avenue near Fort Street. The design as proposed would limit where practical, commercial traffic on Lyon Avenue which provides access to an existing residential neighborhood.

   In addition, as noted, the waterfront property formerly owned by Chevron, is available for redevelopment. As part of the City's 2015 Comprehensive Plan, it was recommended that a connection to the future extension of Waterfront Drive through the Chevron property be located at Lyon Avenue in order to limit new points of access to Veterans Memorial Parkway. A driveway to the waterfront property currently exists at this location, and provided an historical access to this site. A previous project from 2014 referred to as *Village on the Waterfront*, proposed a roundabout access at Lyon Avenue as is currently proposed with the Metacomet redevelopment project. This waterfront property has been sold and the new owners presently have no current plans for short or long-term redevelopment proposals.

   As part of the final design effort, further detailed Vissim analysis will be completed and provided to the Department. The analysis will demonstrate the anticipated operations of the roundabout, including full access on Veterans Memorial Parkway that would more evenly distribute site related traffic demands, and will provide the most efficient and safest access design for the redevelopment project.

4. Are two egress lanes exiting the roundabout on Veterans Memorial Parkway southbound necessary.

   The peak hour demands for through traffic on Veterans Memorial Parkway require a two-lane approach and exit. This design will be supported with the Vissim analysis to be provided as part of the final PAP design submission.

5. We have concerns that the proposed entrance/exit onto Lyon Avenue closest to the roundabout is too close where queue spillback on Lyon Avenue from the roundabout could extend past this access point. This should be analyzed to determine if the access point should be shifted further east or eliminated.

   As noted in a previous response, the goal of the design was to limit the impact of site related traffic on Lyon Avenue, resulting in a design that included a site access as close as practical to Veterans Memorial Parkway. Based on the analysis provided in the study, queuing of westbound traffic from the roundabout is not expected to extend to the site driveway. The design team will work with the city in potentially shifting the driveway further to the east in order to limit potential queue conflicts. The final design Vissim queue analysis to be submitted as part of the formal PAP will provide the appropriate documentation for the driveway location to ensure safe and efficient operations of the intersection.

6. The curve at the Interlocken Road intersection should be analyzed for any required warning signage relative to the curve.

   A review of this location will be completed in cooperation with the Department as part of the formal PAP application and appropriate mitigation will be included as necessary.

The TIA and Plan that has been submitted to the Department in support the proposed design includes modifications to Veterans Memorial Parkway to provide a relocated site driveway access, and an intersection control upgrade at Lyon Avenue. As noted, the existing driveway to the former Metacomet County Club will be shifted to the south and modified to provide restricted egress movements. The driveway will provide full access, but egress will be limited to right turns only out of the development, with all left turning traffic (southbound) required to exit the site on Lyon Avenue to utilize the proposed roundabout for southbound access to Veterans Memorial Parkway. This design will limit impacts to the Parkway by not requiring any control measures over existing conditions at the site driveway.

The primary off-site improvements defined in the conceptual plans include installation of a two-lane roundabout at the existing Lyon Avenue intersection. Minor widening of Veterans Memorial Parkway is required to provide the two-lane approaches necessary to accommodate both existing and future build traffic demands. In addition, understanding that Veterans Memorial Parkway is a designated Scenic Roadway, we will also coordinate with the Rhode Island Scenic Roadways Board to ensure the appropriate design treatments are included in the design. As part of our final design team we are including, in addition to the roundabout design expert firm (WSP), an expert on the historical elements of Veterans Memorial Parkway that was involved in the original "Stewardship Plan" prepared by Gates Leighton & Associates in 1999. The final design team will focus on providing the appropriate traffic design elements in mitigating potential adverse impact to the roadway.

A substantial effort and due diligence have been completed to advance the design to this phase, and it is vital in the process that the RIDOT agree in concept with a preliminary design as we seek local approvals, and before the design can be advanced to the final engineering phase for formal approval by the RIDOT. As part your initial review of these documents, we will work with your office to make adjustments as determined appropriate, to obtain your approval of the conceptual design. Upon agreement, it is requested that the Department confirm in writing to our attention, that the design concept for access and egress to the property including the modifications to Veterans Memorial Parkway are appropriate, and can be submitted for full engineering review by the state. We understand that a formal permit will be required as part of the Physical Alteration Permit process where final engineering plans and drainage designs will be provided to the Department for review and approval.

If you have any questions or require other supporting documents, please do not hesitate to contact our office.

Very truly yours,
Crossman Engineering, Inc.

Paul J. Bannon
Senior Project Director

Department of Transportation
Two Capitol Hill
Providence, RI 02903

Office 401-222-2450
Fax 401-222-3905

March 18, 2024

Paul J. Bannon
Senior Project Director
Crossman Engineering
151 Centerville Road, Warwick RI 02886

Subject: Metacomet Redevelopment "The MET"
500 Veteran's Memorial Parkway, East Providence
Design Study and Concept Plan

Dear Mr. Bannon,

We have reviewed the submitted materials as part of the Design Study and Concept Plan for the subject proposed development. RIDOT has the following comments:

1. Please provide simulation analysis of the proposed roundabout showing expected queues based on full build of the development.
2. Understanding that design of roundabouts, particularly two-lane roundabouts, are an iterative process, we strongly encourage coordinating with an independent roundabout expert designer as part of the final design process.
3. We recommend that the southern access from Veteran's Memorial Parkway be restricted to right-in and right-out only. All southbound traffic entering the development would be restricted to entering from the roundabout only.
4. Are two egress lanes exiting the roundabout on Veteran's Memorial Parkway southbound necessary?
5. We have concerns that the proposed entrance/exit onto Lyon Avenue closest to the roundabout is too close where queue spillback on Lyon Avenue from the roundabout could extend past this access point. This should be analyzed to determine if the access point should be shifted further east or eliminated.
6. The curve at the Interlocked Road intersection should be analyzed for any required warning signage relative to the curve.

Please review and provide Response to Comments at your earliest convenience.

Sincerely,

Steven W. Pristawa
State Traffic Safety Engineer
Office of Safety
Rhode Island Department of Transportation

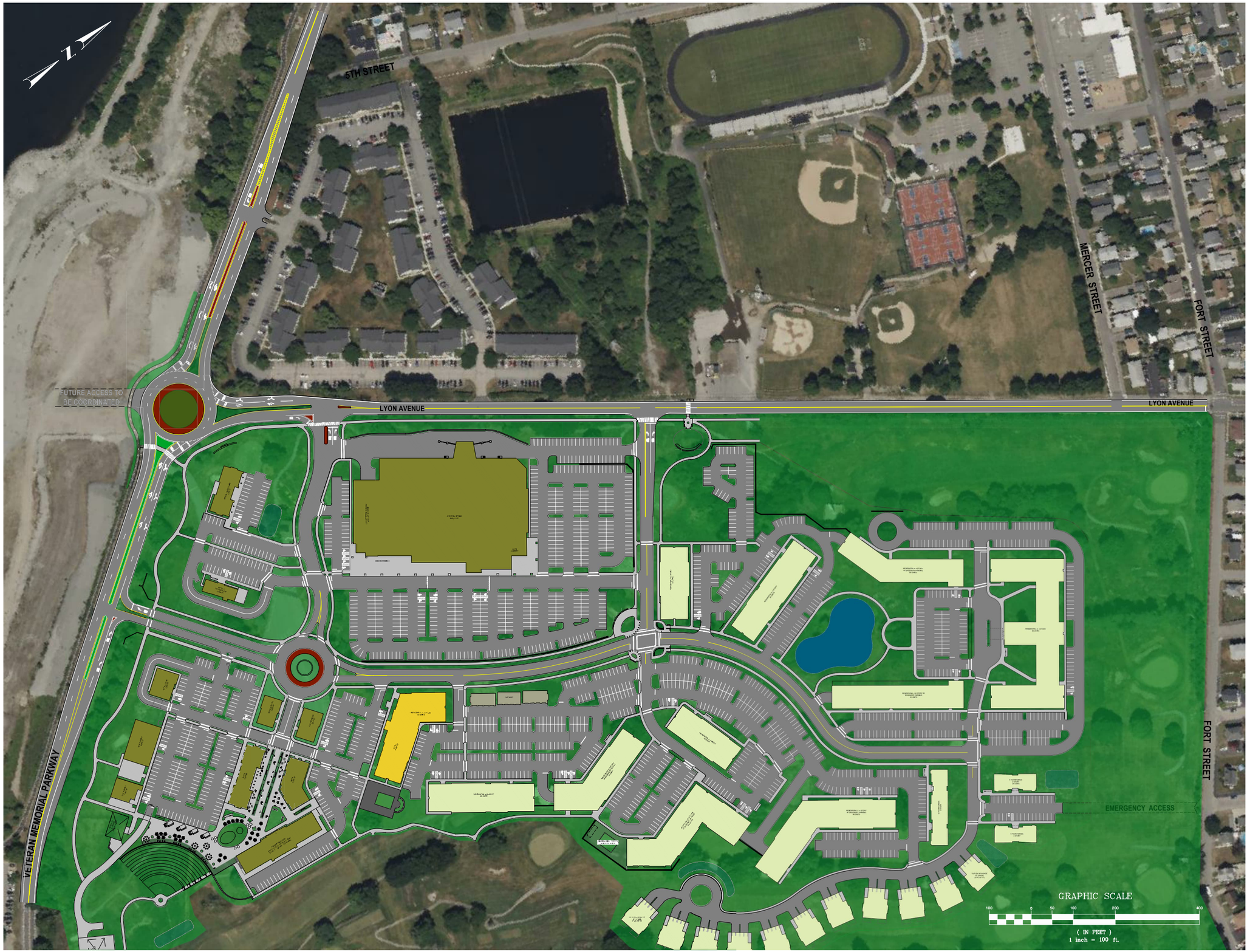
cc: Hall, Lapatin, Pristawa, Raymond; Town file (w/ attachment)

ATTACHMENT E – Off-Site Mitigation Plan

Veterans Memorial Parkway

Preferred Alternative

CROSSMAN ENGINEERING



- Civil
- Transportation
- Environmental
- Site Planning
- Surveying
- Permitting
- Landscape Architecture

Crossman Engineering

Rhode Island
100 Jefferson Blvd., Suite 200
Warwick, RI 02888
Phone: (401) 738-5660

Massachusetts
1 George Leven Drive, Suite 200
North Attleboro, MA 02760
Phone: (508) 695-1700

Email: cei@crossmaneng.com

PROJECT TITLE:

PROPOSED MIXED-USE DEVELOPMENT

PLAT MAP 107
BLOCK 15, LOT 1

500 VETERANS PARKWAY
EAST PROVIDENCE, RI

PREPARED FOR:

MARSHALL PROPERTIES

700 NARRAGANSETT PARK DRIVE
PAWTUCKET, RI

DRAWING TITLE:

ROADWAY IMPROVEMENT PLAN No. 1

DATE: JULY 2024

SCALE: 1"=100'

DWG. NAME: 2814-ROADWAY IMPROVEMENTS-07-24.dwg

REVISIONS

NUMBER	REMARKS	DATE
--	--	--

DRAWING NUMBER

C1

SHEET: 1 *OF:* 2

- Civil
- Transportation
- Environmental
- Site Planning
- Surveying
- Permitting
- Landscape Architecture

Crossman Engineering

Rhode Island
151 Centerville Road
Warwick, RI 02886
Phone (401) 738-5660

Massachusetts
103 Commonwealth Avenue
North Attleboro, MA 02763
Phone (508) 695-1700

Email: cei@crossmaneng.com

PROJECT TITLE:

PROPOSED MIXED-USE DEVELOPMENT

PLAT MAP 107
BLOCK 15, LOT 1

500 VETERANS PARKWAY
EAST PROVIDENCE, RI

PREPARED FOR:

MARSHALL PROPERTIES

700 NARRAGANSETT PARK DRIVE
PAWTUCKET, RI

DRAWING TITLE:

ROADWAY IMPROVEMENT PLAN No. 2

DATE:	*SCALE:*
DECEMBER 2023	1"=40'

DWG. NAME: 2814-P-ROADWAY IMPROVEMENTS-SOUTH BROADWAY.dwg

REVISIONS

NUMBER	*REMARKS*	*DATE*
--	--	--

DRAWING NUMBER

C2

SHEET: 2 *OF:* 2