

TRAFFIC IMPACT ANALYSIS

Pare Project No. 25152.00

Greenhouse Dispensary
711 Kingstown Road
South Kingstown, Rhode Island

Prepared for:
Mr. Kenneth Tetzner
225 Main Street
Wakefield, RI 02879



Prepared by:

Pare Corporation
8 Blackstone Valley Place
Lincoln, RI 02865

September 2025

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INTRODUCTION

The following report represents a traffic study completed for a proposed redevelopment of property located at 711 Kingstown Road in South Kingstown, Rhode Island. The site contains an existing small structure formerly utilized as the Clarks Farm Garden Center, which is proposed to be razed to allow construction of a new 1,815 square foot building for a cannabis dispensary. Access and egress to the property will be provided at a one-way enter only driveway on Kingstown Road (Route 108), and a one-way exit only driveway on a local street, which will be referenced as Indian Run Village access road in accordance with record RIDOT plans.

Presented within are the existing conditions in the vicinity of the project site, a safety analysis of the study area, and an analysis of the traffic based on existing, future (2030) no-build and future (2030) build conditions. A locus map of the study area is provided in **Figure 1**, and the proposed site layout is shown in **Figure 2**.

DATA COLLECTION

Three study intersections have been identified for examination with regards to traffic capacity and safety as part of this study. The study intersections include:

- Kingstown Road (Route 108) at Indian Run Village Access Road
- Kingstown Road at Main Street /Old Tower Hill Road (Route 1 A)
- The Proposed Site Driveways

Pare previously performed manual turning movement counts (MTMC's) on a typical weekday and weekend day in summer 2023 for a project adjacent to the subject site. The weekday and weekend summer 2023 counts were performed at the following locations and times:

- *Wednesday August 16, 2023*
 - 7:00 a.m. to 9:00 a.m. Kingstown Road/Old Tower Hill Road/Main Street
 - 4:00 p.m. to 6:00 p.m. Kingstown Road/Old Tower Hill Road/Main Street
 - 7:00 a.m. to 9:00 a.m. Kingstown Road/Indian Run Village Access Road
 - 4:00 p.m. to 6:00 p.m. Kingstown Road/ Indian Run Village Access Road
- *Saturday August 12, 2023*
 - 11:00 a.m. to 1:00 p.m. Kingstown Road/Old Tower Hill Road/Main Street
 - 11:00 a.m. to 1:00 p.m. Kingstown Road/ Indian Run Village Access Road

Pare also previously performed, for comparison, MTMC's turning movement counts on a typical weekday and weekend in fall 2023 to take into consideration traffic during the school year. The school year counts were performed at the following location and times:



- *Wednesday October 25, 2023*
 - 7:00 a.m. to 9:00 a.m. Kingstown Road/Old Tower Hill Road/Main Street
 - 4:00 p.m. to 6:00 p.m. Kingstown Road/Old Tower Hill Road/Main Street
 - 7:00 a.m. to 9:00 a.m. Kingstown Road/ Indian Run Village Access Road
 - 4:00 p.m. to 6:00 p.m. Kingstown Road/ Indian Run Village Access Road

- *Saturday October 28, 2023*
 - 11:00 a.m. to 1:00 p.m. Kingstown Road/Old Tower Hill Road/Main Street

Crash data obtained as part of the project adjacent to the site will be used for this project. The crash data for the roadway network in the vicinity of the project site on Kingstown Road between School Street and the Old Tower Hill Road were requested from the South Kingstown Police Department for a 3-year period between January 2020 and October 1, 2023. The crash data request included copies of the crash reports and supplemental narratives for each record. The number of crashes, the location, the date, time of day, the crash type, the number of injuries and/or fatalities, and the roadway surface condition were all adequately analyzed. A crash review is included in this report to identify if there are any potential trends that may require mitigation.

Previous field reviews of the study area were conducted on Wednesday August 16, 2023, and Wednesday October 25, 2023. Geometric measurements and other field observations were recorded at the study intersections in the vicinity of the project site. The information obtained was used in the analysis of the study area intersections.





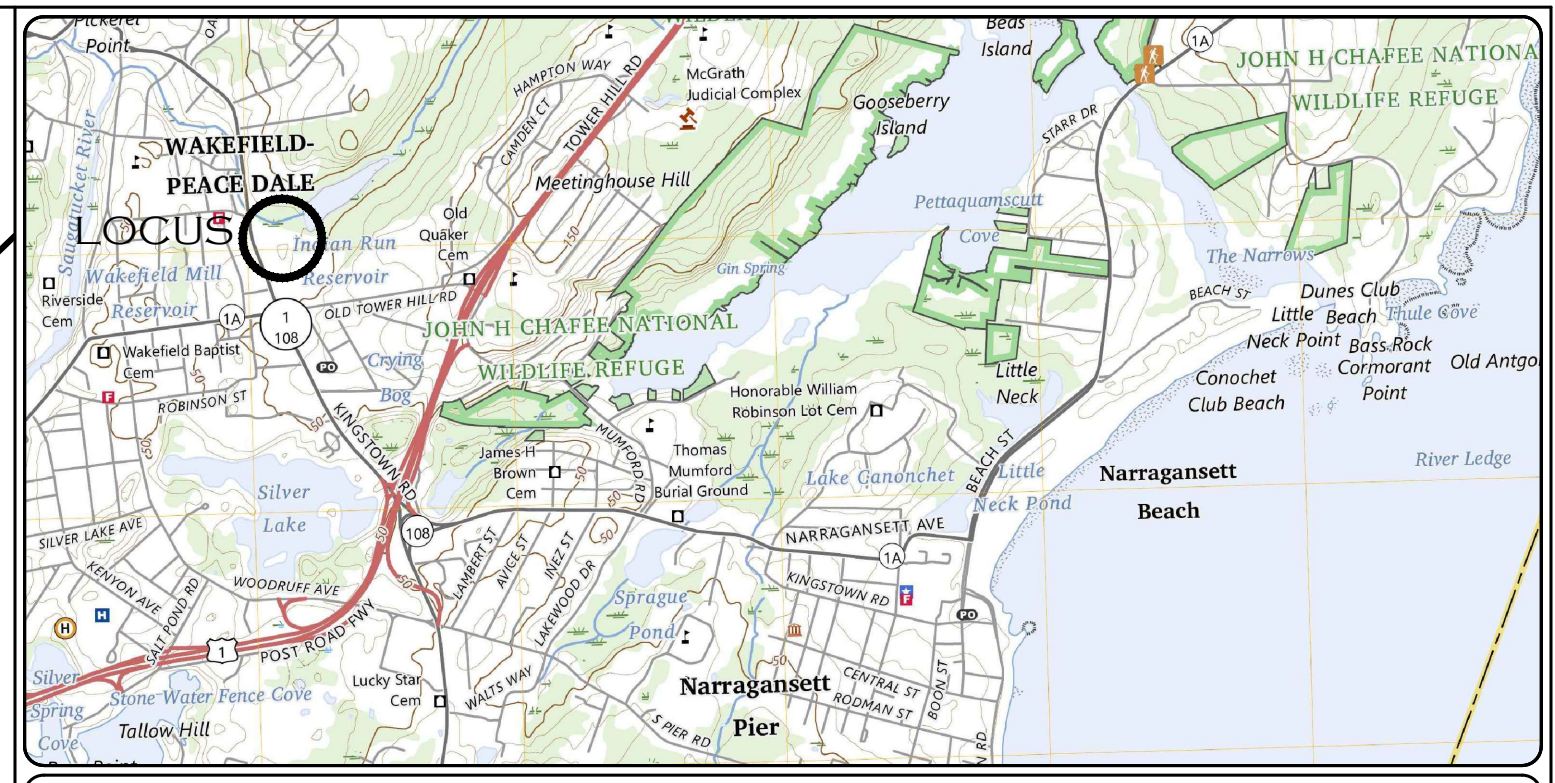
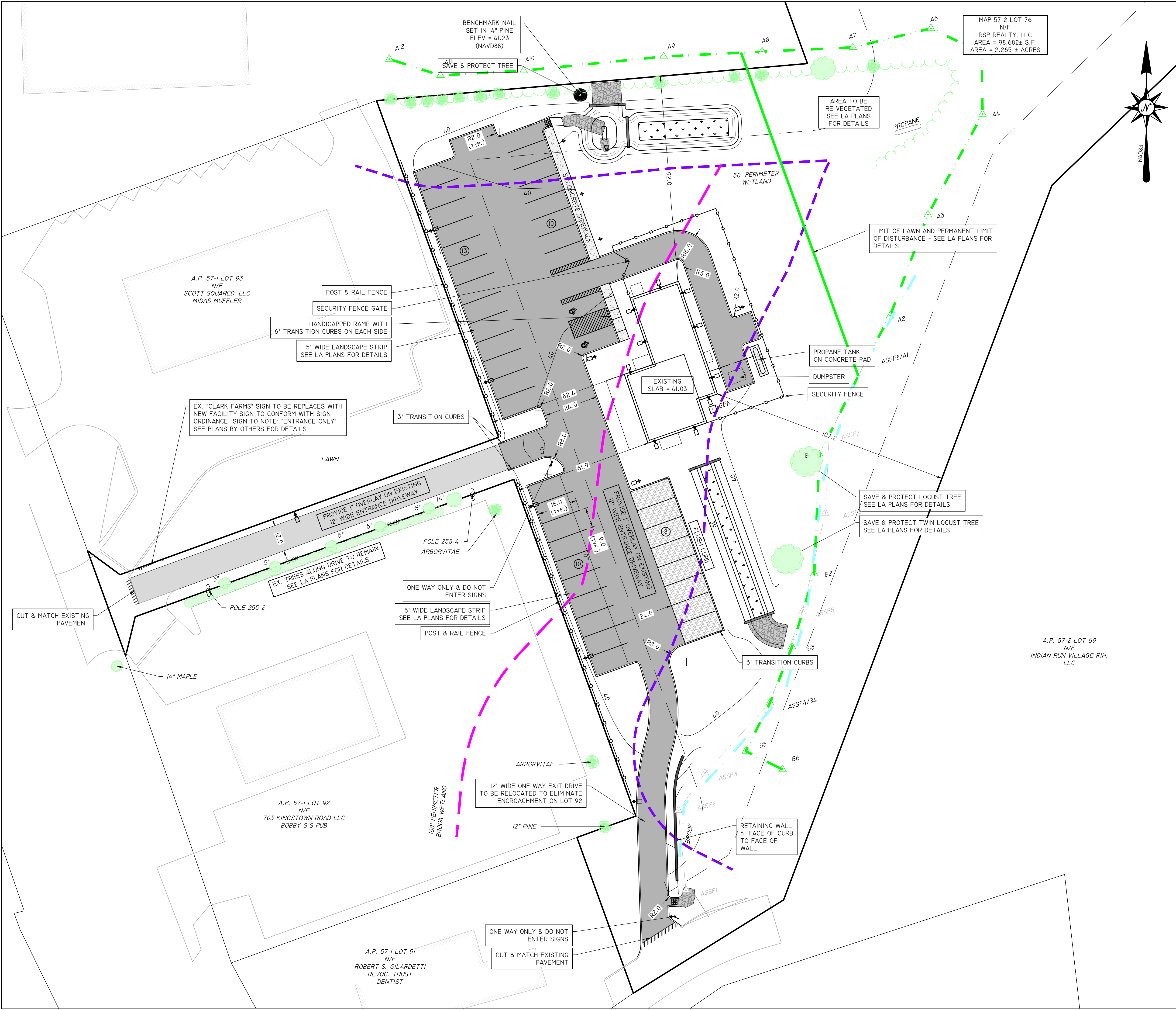
PROJECT NO. 25152.00

DATE: SEPTEMBER 2025



FIGURE 1
LOCUS MAP

GREENHOUSE DISPENSARY
SOUTH KINGSTOWN, RHODE ISLAND



LOCATION (NOT TO SCALE) MAP

- PROPERTY NOTES:**
- LOT SHOWN IS DESIGNATED AS LOT 76 ON SOUTH KINGSTOWN ASSESSORS MAP 57-2
 - OWNER OF RECORD: - OFFSHORE DEVELOPMENT
EDGEWOOD FARM ENTERPRISES
17 ARNOLD STREET
WAKEFIELD, RI 02879
BOOK 1902 PAGE 536
 - ZONING DISTRICT: CH - COMMERCIAL HIGHWAY

DIMENSIONAL ZONING REQUIREMENTS:

COMMERCIAL HIGHWAY - CH - ZONING DISTRICT	
MINIMUM AREA	= 20,000 S.F.
FRONTAGE & WIDTH	= 100'
FRONT YARD SETBACK	= 40'
SIDE YARD SETBACK	= 30'
REAR YARD SETBACK	= 40'
MAXIMUM BUILDING HEIGHT	= 35'
MAX. % OF BUILDING COVERAGE	= 30%

EXISTING LOT COVERAGE:

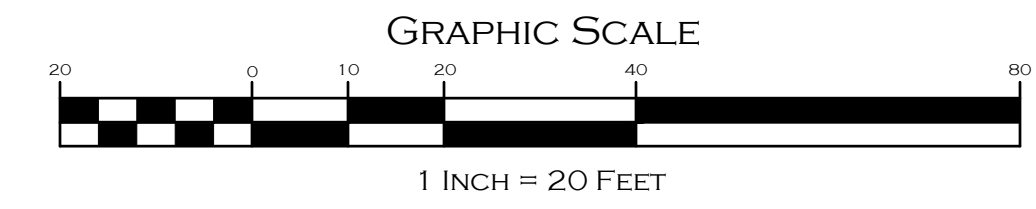
BUILDINGS:	5,100 S.F.	5.2%
BIT PAVEMENT:	3,700 S.F.	3.7%
GRAVEL PAVEMENT:	35,245 S.F.	35.7%
CONCRETE WALKS / PADS:	1,245 S.F.	1.3%
LANDSCAPED / WOODS:	53,392 S.F.	54.1%

PROPOSED LOT COVERAGE:

BUILDINGS:	1,815 S.F.	1.8%
OVERHANGS:	410 S.F.	0.4%
BIT PAVEMENT:	15,810 S.F.	16.0%
GRASS PAVERS:	1,320 S.F.	1.3%
CONCRETE WALKS / PADS:	705 S.F.	0.7%
LANDSCAPED / WOODS:	78,622 S.F.	79.8%

- SITE NOTES:**
- ALL AREAS WITHIN THE LIMITS OF SITE DISTURBANCE NOT OTHERWISE DESIGNATED SHALL BE LANDSCAPED OR LOAMED & SEEDING, SEE LANDSCAPE ARCHITECT PLANS.
 - TO THE EXTENT POSSIBLE, HEALTHY MATURE TREES AND UNDERSTORY VEGETATION ON THE SITE PERIMETER BANK SHALL BE PROTECTED AND PRESERVED. SELECTIVE PRUNING TO FACILITATE SITE WORK IS ALLOWED.
 - A CONTINUOUS LINE OF EROSION CONTROL SHALL BE INSTALLED ALONG THE LIMITS OF SITE DISTURBANCE AND SHALL BE MAINTAINED UNTIL THE SITE IS FULLY STABILIZED.
 - PARKING LOT AND BUILDING SECURITY LIGHTING SHALL HAVE CUT OFF TYPE FIXTURES THAT SHALL PREVENT LIGHT INTRUSION ONTO ADJACENT PROPERTIES OR TOWARDS WETLANDS.

NOT FOR CONSTRUCTION



SITE LAYOUT PLAN

"GREENHOUSE DISPENSARY"
711 KINGSTOWN ROAD, SOUTH KINGSTOWN, RI 02789
ASSESSORS PLAT 57-2 LOT 76

APPLICANT: GREENHOUSE DISPENSARY INC.
225 MAIN STREET, WAKEFIELD, RI 02879

NO. 7142
REGISTERED PROFESSIONAL ENGINEER CIVIL
PAUL D. CARLSON

JOB # 25-045
SCALE: 1" = 20'
DRAWN BY: LJJ
DATE: SEPTEMBER 25, 2025

REVISED:

INSITE Engineering Services, LLC
PROFESSIONAL ENGINEERS | LAND SURVEYORS
Precision. Clarity. Certainty.

InSite Professional Complex, Suite 1
1539 Fall River Avenue, Seekonk, MA 02771
Phone: (508) 336-4500 Fax: (508) 336-4558
Web Address: InsiteEngineers.com

SHEET 4 OF 10

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EXISTING CONDITIONS

The study area is defined as the significant roadways and intersections in the vicinity of the site that may be impacted by the construction of the proposed dispensary. Listed below are the roadways and intersections that were reviewed as part of this study.

Study Area Roadways:

- Kingstown Road (Route 108)
- Old Tower Hill (Route 1A)
- Main Street (Route 1A)
- Indian Run Village Access Road

Study Area Intersections:

- Kingstown Road (Route 108) at the Wakefield Liquors/Indian Run Village Access Road
- Kingstown Road at Main Street /Old Tower Hill Road (Route 1 A)
- Kingstown Road at the Proposed Site Driveway

Study Area Roadways

Roadways

Kingstown Road (Route 108): Kingstown Road is a principal arterial and is owned and maintained by the Rhode Island Department of Transportation (RIDOT). In the vicinity of project site, Kingstown Road runs in a north/south direction and its typical section has an approximate 44-foot paved width consisting of two 10.5-foot travel lanes in each direction and a 1-foot-wide curb offset in each direction, granite curb and 5-foot concrete sidewalks on both sides of the roadway. Within the study area, Old Tower Hill Road's posted speed limit is 25 miles per hour. Pavement conditions are generally good.

Old Tower Hill Road (Route 1A): Old Tower Hill Road (Route 1A) is a principal arterial and is owned and maintained by the RIDOT. Old Tower Hill Road runs in the east/west direction and the cross-section has an approximate 51-foot paved width consisting of 11-foot travel lanes in each direction, a 13-foot center two-way left turn lane, 5-foot bike lanes with 3-foot bike path buffers in each direction and granite curb and 5-foot concrete sidewalks on both sides of the roadway. Within the study area, Old Tower Hill Road's posted speed limit is 25 miles per hour. Old Tower Hill Road has recently been reconstructed by RIDOT therefore the pavement is in excellent condition.

Main Street (Route 1A): Main Street is an urban collector road. The roadway runs in an east/west direction and typically has an approximate striped curb-to-curb 36-foot pavement width with concrete curb and 5-foot concrete sidewalks on both sides. Parking is provided on both sides of the road. There are 1-hour parking restrictions between 9 a.m. and 6 p.m. in the designated parking spaces. There is a posted speed limit of 25 mph along Main Street. In general, pavement conditions on Main Street are good.

Indian Run Village Access Road: The Indian Run Village access road is a short local street that extends from Route 108 to the east to Old Tower Hill Road to the south. The roadway runs easterly from Route 108 for approximately 400 feet then turns 90-degrees southerly for approximately 500 feet to Old Tower Hill Road. The roadway provides local access to multiple businesses in an



adjacent plaza and the Indian Run Village apartment complex. In the project area, the Indian Run Village access road is approximately 26 feet wide consisting of a 13-foot travel in each direction with no pavement markings. Cement concrete curbing is provided on both sides of the road with no sidewalks. There was no observed posted speed limit in the vicinity, and it was assumed to be 25 mph due to the commercial and residential nature of the area.

Intersections

Old Tower Hill Road/Main Street/Kingstown Road (Route 108): The intersection of Old Tower Hill Road/Main Street/Kingstown Road forms a four-legged signalized intersection. Kingstown Road forms the north and south legs, Main Street forms the west leg and Old Tower Hill Road forms the east leg.

The north leg of Kingstown Road consists of two 12-foot travel lanes in the northbound direction and three 11-foot travel lanes, one dedicated for thru movements, one for shared through/right turn movements, and a dedicated left turn lane in the southbound direction. Concrete curb and sidewalks are on both sides of the roadway.

The south leg of Kingstown Road consists of two 12-foot travel lanes in the southbound direction and a 12-foot dedicated left turn lane, a dedicated 12-foot thru lane and a 12-foot shared right turn/thru lane. Concrete curb and sidewalks are on both sides of the roadway.

The east leg of Old Tower Hill Road consists of two 11-foot lanes heading eastbound and three 11-foot lanes westbound consisting of an 11-foot left turn lane, an 11-foot thru lane and a shared right turn /bike lane. Curbing and concrete sidewalks are on both sides of the roadway.

The west leg, Main Street, consists of a one 11-foot lane heading towards downtown Wakefield, and an 11-foot dedicated left turn lane, an 11-foot dedicated thru lane and an 11-foot shared through/right turn lane heading eastbound. Curbing and concrete sidewalks are on both sides of the roadway.

Crosswalks exist at each leg of the intersection. The signal operates under five phases. Phase one serves the protected eastbound and westbound left-turn movements. Phase two serves the eastbound and westbound approaches. The third phase serves the northbound and southbound left turn movements. The fourth phase serves the northbound and southbound movements concurrently and the fifth phase serves the pedestrian movements.

Kingstown Road (Route 108) at the Indian Run Village Access Road: The intersection of Kingstown Road with the Indian Run Village Access Road properties forms a three-legged signalized intersection. Kingstown Road runs in the north/south direction and the access road, the east leg, runs in an east/west direction. The east leg is approximately 26 feet wide and provides one travel lane in each direction. The lanes are not striped to delineate the travel ways.

Kingstown Road south leg has two (2) approximate 11-foot travel lanes, providing a thru lane and a shared thru/right turn lane, and a 1-foot curb offset heading northbound and two (2) 12-foot lanes with a 1-foot curb offset southbound. The travel ways are separated by an approximate 7-foot-wide striped median. Concrete curbing and concrete sidewalks exist on both sides of the road on this leg.



Kingstown Road north leg has two (2) approximate 10.5-foot travel lanes, providing a thru lane and a shared left turn/thru lane along with a 1-foot curb offset heading southbound and two (2) 11-foot lanes with a 1-foot curb offset northbound. The travel ways are separated by a double yellow centerline. Concrete curbing and concrete sidewalks exist on both sides of the road on this leg.

Crosswalks exist at the east and north legs of the intersection. The signal operates under three phases. Phase one serves the northbound and southbound movements, the second phase is for the westbound movements, and the third phase is for pedestrian movements.

EXISTING TRAFFIC VOLUMES

Pare performed manual turning movement counts (MTMC's) on a typical weekday and weekend day in summer 2023. The weekday and weekend summer 2023 counts were performed at the following locations and times:

- Wednesday August 16, 2023
 - 7:00 a.m. to 9:00 a.m. Kingstown Road/Old Tower Hill Road/Main Street
 - 4:00 p.m. to 6:00 p.m. Kingstown Road/Old Tower Hill Road/Main Street
 - 7:00 a.m. to 9:00 a.m. Kingstown Road/ Indian Run Village Access Road
 - 4:00 p.m. to 6:00 p.m. Kingstown Road/ Indian Run Village Access Road

- Saturday August 12, 2023
 - 11:00 a.m. to 1:00 p.m. Kingstown Road/Old Tower Hill Road/Main Street
 - 11:00 a.m. to 1:00 p.m. Kingstown Road/ Indian Run Village Access Road

Pare also performed, for comparison, MTMC's turning movement counts on a typical weekday and weekend in fall 2023 to take into consideration traffic during the school year. The fall 2023 counts were performed at the following location and times:

- Wednesday October 25, 2023
 - 7:00 a.m. to 9:00 a.m. Kingstown Road/Old Tower Hill Road/Main Street
 - 4:00 p.m. to 6:00 p.m. Kingstown Road/Old Tower Hill Road/Main Street
 - 7:00 a.m. to 9:00 a.m. Kingstown Road/ Indian Run Village Access Road
 - 4:00 p.m. to 6:00 p.m. Kingstown Road/ Indian Run Village Access Road

- Saturday October 28, 2023
 - 11:00 a.m. to 1:00 p.m. Kingstown Road/Old Tower Hill Road/Main Street

The summer 2023 counts were compared with the counts performed during the school year to determine the worst-case volumes and to use those numbers for analyses.



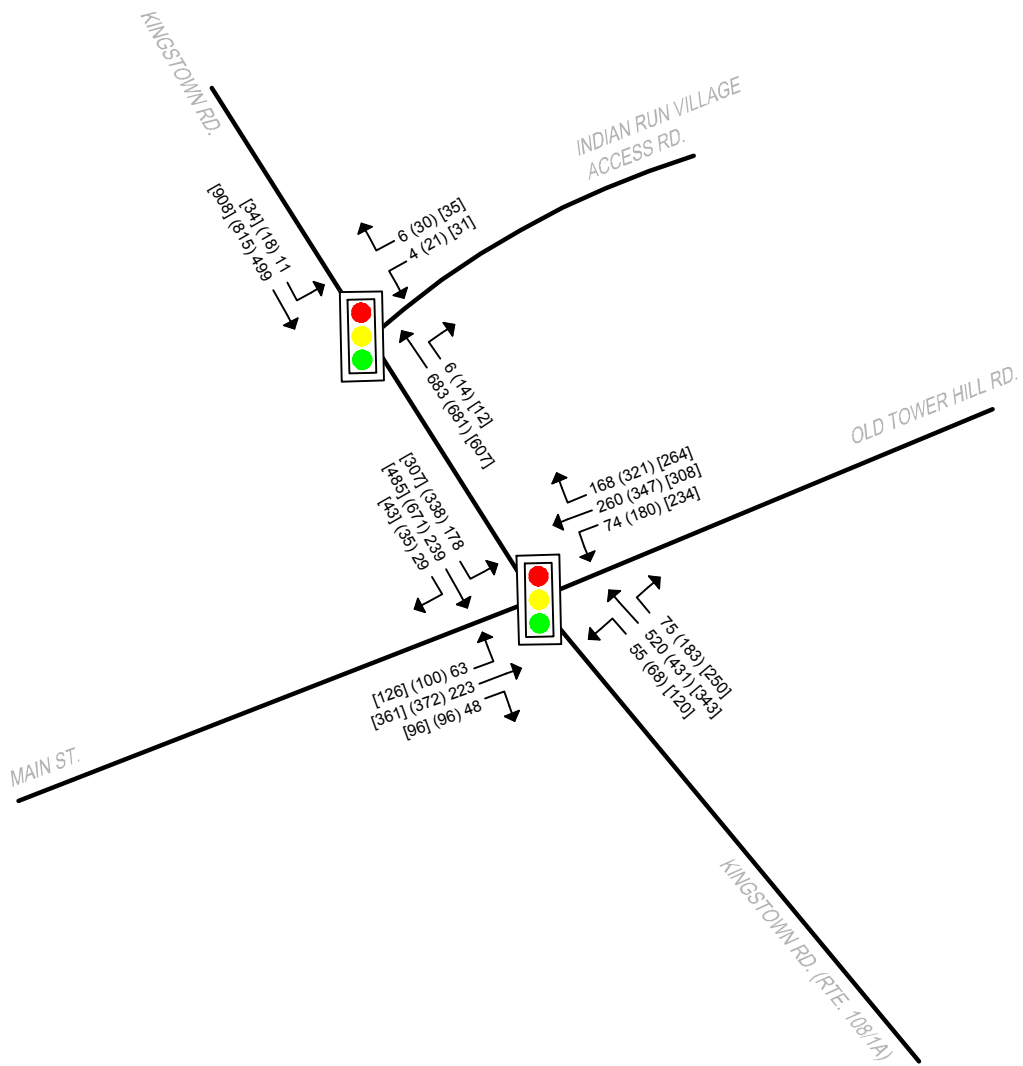
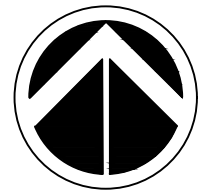
Table 1: Summer vs. School Year Traffic Volume Comparison

	Summer 2023 Counts-Weekday Morning Peak Hour (August 2023)	Fall 2023 Counts-Weekday Morning Peak Hour (October 2023)	Summer 2023 Counts-Weekday Afternoon (August 2023)	Fall 2023 Counts-Weekday Afternoon Peak Hour (October 2023)	Summer 2023 Counts-Saturday (August 2023-midday)	Fall 2023 Counts-Saturday (October 2023 midday)	% Difference
Kingstown Road (Route 108)/Old Tower Hill Road (Route 1A)/Main Street (Route 1A)	1,585 veh.	1,907 veh.	2,142 veh.	3,106 veh.	2,404 veh.	2,901 veh	+21%
Kingstown Road (Route 108)/Dental/Liquor Store/Apartment access (Route 1A)	851 veh.	1193 veh.	1,191 veh.	1559 veh.	1,327 veh.	1,605 veh	Est +21%

Based on the data previously obtained, the fall 2023 volumes were the higher volumes during peak hours and were used for the traffic capacity analyses. The actual fall 2023 counts during the weekday morning and afternoon peak hours and the Saturday mid-day peak hour were used for the Kingstown Road/Old Tower Hill Road/Main Street intersection. The actual fall 2023 counts were also used for the weekday morning and afternoon peak hours for the Kingstown Road/Old Tower Hill Road/Main Street intersection. To obtain the fall 2023 volume at the Kingstown Road/Indian Run Village Access Road, a 21% increase of the summer 2023 counts at this location was used similar to those experienced at the Kingstown Road (Route 108)/Main Street/Old Tower Hill Road intersection.

Additionally, the base volume data was further expanded to estimate the current 2025 traffic condition assuming a background growth rate. The fall 2023 data was increased using a conservative annual growth rate of 0.50%, though the Town of South Kingstown has seen an annual population growth rate of less than 0.45%. Copies of all count data are provided in **Appendix A**. Existing base traffic volumes, which were adjusted to the current year as previously described, for the weekday morning and afternoon, and Saturday midday peak hours are shown in **Figure 3**.





AM PEAK VOLUMES (PM PEAK VOLUMES) [SATURDAY PEAK VOLUMES]



PROJECT NO. 25152.00

DATE: SEPTEMBER 2025

FIGURE 3 EXISTING (2025) TRAFFIC VOLUMES GREENHOUSE DISPENSARY

SOUTH KINGSTOWN, RHODE ISLAND

SAFETY ANALYSIS

Crash Data

Crash data was collected from the South Kingstown Police Department from January 1, 2020, to September 2023 for the study area. **Table 2** below provides a breakdown of the crashes based on type and severity. The crash data request letter and a complete crash data summary is provided in Appendix B.

Table 2: Crash Data Summary

Roadway/ Intersection	Total Crashes	Non-Fatal Injuries	Angle	Head On	Single Vehicle	Rear End	Sideswipe	Loss of Control
Kingstown Rd/Dale Carlia Street	19	4	9	0	1	2	6	1
Kingstown Road/Old Tower Hill Road/Main Street	18	2	2	0	0	13	2	1
Site/Job Lot Entrance	5	2	3	0	0	2	0	0
School Street/Kingstown Road	6	2	3	0	0	3	0	0
TOTAL	48	10	17	0	1	20	8	2

From January 1, 2020, through September 2023, a total of 48 crashes occurred within the study area on Kingstown Road, Old Tower Hill Road, Main Street, School Street and Dale Carlia Street. Of the 48 crashes, ten resulted in non-fatal minor injuries. The most notable intersection with crashes is the Kingstown Road/Dale Carlia Street intersection with 19 total crashes over the 45-month period that data was collected. The reasons for the crashes include:

Kingstown Road/Dale Carlia Street

- Car makes left turn from Kingstown Road northbound into Dale Carlia Street. Car in inner lane southbound stopped to let car make left turn. Car in outer lane southbound did not stop. (3 crashes)
- A vehicle heading southbound was changing lanes and got hit by second car. (3 crashes)
- Accident at intersection, left turning vehicle cut in front of southbound travelling vehicle. (2 crashes)
- Vehicle heading northbound was changing lanes and got hit by second car. (2 crashes)
- Car cut in front of another car heading northbound that went from left lane to right lane at signalized intersection to go into Indian Run
- Single car taking left turn into Dale Carlia Street lost control making turn
- Car pulled out of roadway from Wakefield Liquors and car heading southbound sideswiped the car pulling out of roadway.
- Rear ender at traffic light.
- Vehicle taking right out of Dale Carlia Street pulled out in front of vehicle heading southbound.
- Car turning into CVS sideswiped a vehicle turning into Wakefield Liquors.
- Vehicle ran a green light and had an angle crash with second vehicle.



- Vehicle 1 rear ended Vehicle 2 coming out of Dale Carlia Street.
- Vehicle exiting CVS onto Dale Carlia Street was hit by vehicle heading eastbound on Dale Carlia Street.

Kingstown/Old Tower Hill Road/Main Street

- Rear end at intersection on Old Tower Hill Road. (6 crashes)
- On Kingstown Road approaching intersection. Vehicle 1 was rear ended at signal. (3 crashes)
- Rear end on Main Street approach. (2 crashes)
- Vehicle 1 exiting Twisted Pizza. Vehicle 2 travelling westbound had the right blinker on. Vehicle 1 thought Vehicle 2 was turning and pulled out to create a crash.
- Road rage incident on Old Tower Hill and vehicle forced into curb.
- Snowy conditions. Vehicle 1 stopped on Old tower Hill Road. Vehicle did not stop on time.
- Vehicle ran red light at intersection.
- Vehicle approached intersection on Main Street. Vehicle 1 was rearended by Vehicle 2.
- Vehicle pulling out of Belmont onto Main Street. Vehicle was waved into traffic and was struck by vehicle heading in other direction.
- Vehicle heading westbound on Old Tower Hill Road merged into adjacent lane and hit another vehicle.
- Travelling southbound on Kingstown Road. Took left turn from middle lane and was hit by Vehicle 2.

Site/Job Lot Entrance

- Vehicle turning into Ocean State Job Lot. Crossed in front of southbound travelling vehicle. (2 crashes)
- Vehicle taking left turn into Ocean State Job Lot. Vehicle in inner lane heading southbound stopped to let car turn. Left turning vehicle did not see car approaching on outside lane.
- Vehicle pulled out of Bobby G's hit northbound travelling vehicle.
- Vehicle heading northbound turning into Ocean State Job Lot was rear ended.

School Street/Kingstown Road

- Vehicle 1 exited School Street and did not see Vehicle 2. (2 crashes)
- Vehicle pulled out of Old Mountain Lanes. Driver stated he did not see vehicle heading southbound.
- Vehicle taking left turn into northern Ocean State Job Lot had collision with vehicle heading southbound.
- Vehicle 1 was turning. Vehicle 2 reached down to grab water bottle and did not see turning making turn.
- Vehicle turning into School Street was rear ended.

Based on the number of crashes over the 45-month period data was collected, the distribution of crashes in the roadway network and the type of crashes there was no identified pattern of accidents. Most of the crashes that occurred were related to driver inattention.

Sight Distance

The posted speed limit on Kingstown Road (Route 108) is 25 miles per hour. Actual speeds were measured on Kingstown Road, and the average speed was 30 miles per hour. The 85th percentile



speed was 33 miles per hour. A summary of the speed data results is shown in **Table 3** below. The most notable metric presented in the table is the 85th percentile speed, which was utilized for the sight distance analysis. Based on the speeds observed, the sight distance analysis was conducted using an operating speed of 35 miles per hour.

Table 3: Kingstown Road Speed Study Summary

	Posted Speed	Average Speed	True Median (50 th Percentile)	85 th Percentile	10 MPH Pace	% over Posted
Northbound	25	29	29	33	23-32	80
Southbound	25	30	31	35	26-35	82

The vertical and horizontal alignment of Kingstown Road in the project area can be described as generally level and relatively straight with a gradual horizontal curve north of the site. Based upon the existing roadway geometry, the available sight distance at the proposed entrance-only driveway location on Kingstown Road for vehicles entering the site is greater than 500 feet to the south through the signalized intersection with the Indian Run Village access road. According to the latest edition of the American Association of State Highway and Transportation Officials (AASHTO) publication *A Policy on the Geometric Design of Highways and Streets*, the sight distance is in excess of the minimum safe stopping sight distance (SSD) of 250 feet for operating speeds of 35 miles per hour.

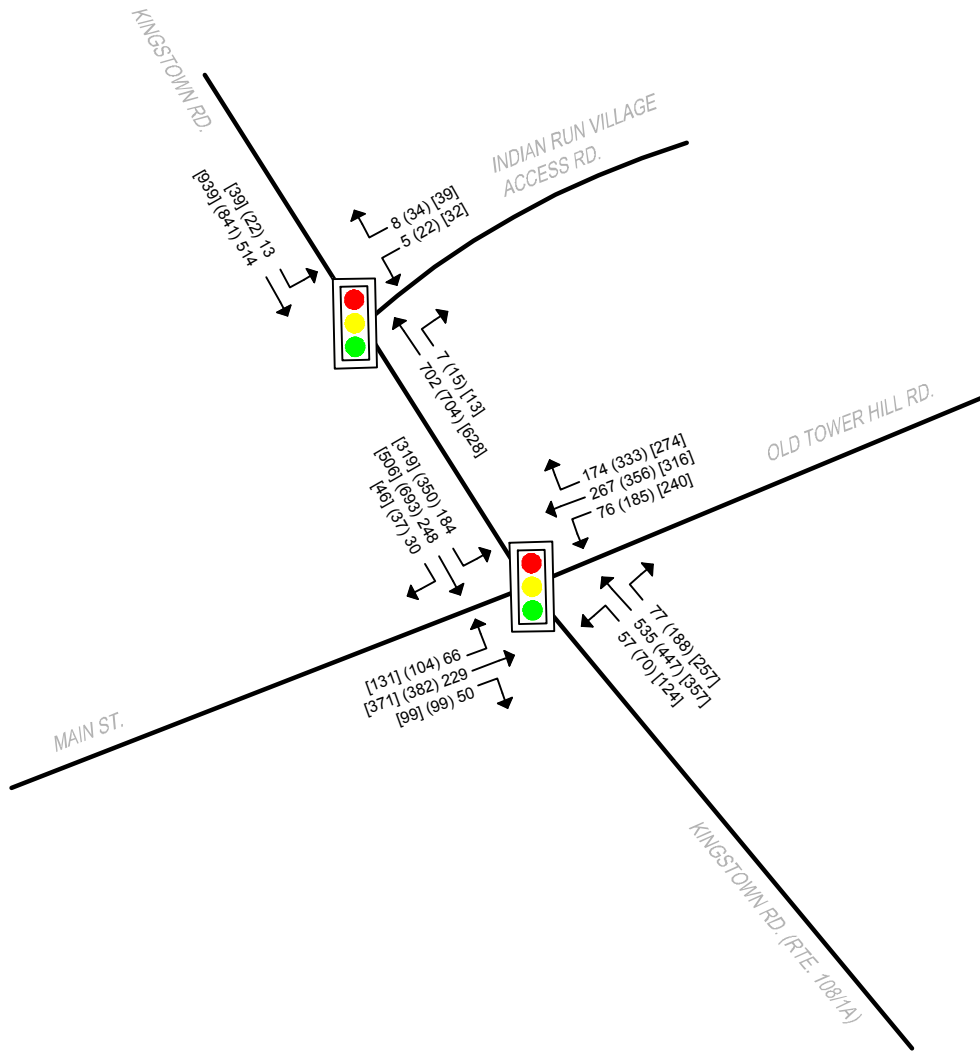
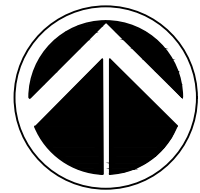
The vertical and horizontal alignment of the Indian Run Village access road in the site vicinity can be described as level and generally straight to the apartment complex where there is an intersecting street approximately 170 feet to the east of the site driveway. These physical features provide sight distances at the proposed exit-only driveway, in excess of 200 feet to the west through the signalized junction with Kingstown Road and in excess of 170 feet to the east. These values are greater than the 155-foot minimum stopping sight distance required according to AASHTO design standards for the assumed speed limit of 25 mph and observed travel conditions.

NO-BUILD CONDITIONS

Future no-build traffic volumes are determined by projecting the existing traffic volumes based on a determined annual growth rate and including known potential developments within the study area. Pare is aware of one such development that includes a proposed bank adjacent to the subject site. Additionally, based on previous coordination with the South Kingstown Planning Department, it was determined that two existing properties on Old Tower Hill Road is proposed to be redeveloped for commercial and restaurant use. The three (3) known potential developments in the vicinity of the subject site were added to the adjusted base volumes that were expanded by 0.50% to establish a future 2030 No-Build traffic condition.

To account for background growth along the roadways within the vicinity of the project site, the existing traffic volumes were projected forward over a two-year horizon from 2025 to 2020. Recent census data was reviewed to determine the appropriate growth rate. The census data showed a population increase of approximately 0.41% per year from 2010 to 2020 for the Town of South Kingstown. To be conservative a 0.50% growth rate was used for the five-year projection.





AM PEAK VOLUMES (PM PEAK VOLUMES) [SATURDAY PEAK VOLUMES]



PROJECT NO. 25152.00

DATE: SEPTEMBER 2025

FIGURE 4 FUTURE (2030) NO-BUILD TRAFFIC VOLUMES GREENHOUSE DISPENSARY

SOUTH KINGSTOWN, RHODE ISLAND

Figure 4 on the previous page shows the 2030 no-build volumes for the morning and afternoon, and Saturday peak hours.

BUILD CONDITIONS

The future 2030 build condition represents the future 2030 no-build condition plus the anticipated trips due to the proposed Greenhouse Dispensary.

Trip Generation

The estimated trips for the proposed dispensary were determined through the use of the 12th edition of *Trip Generation*, published by the Institute of Transportation Engineers (ITE). Land Use Code (LUC) 882 Cannabis Dispensary was used for an 1,815 square foot dispensary. **Table 4** below summarizes the expected trips for this facility during the weekday morning and afternoon, and Saturday midday peak hours.

Table 4: Trip Generation Summary

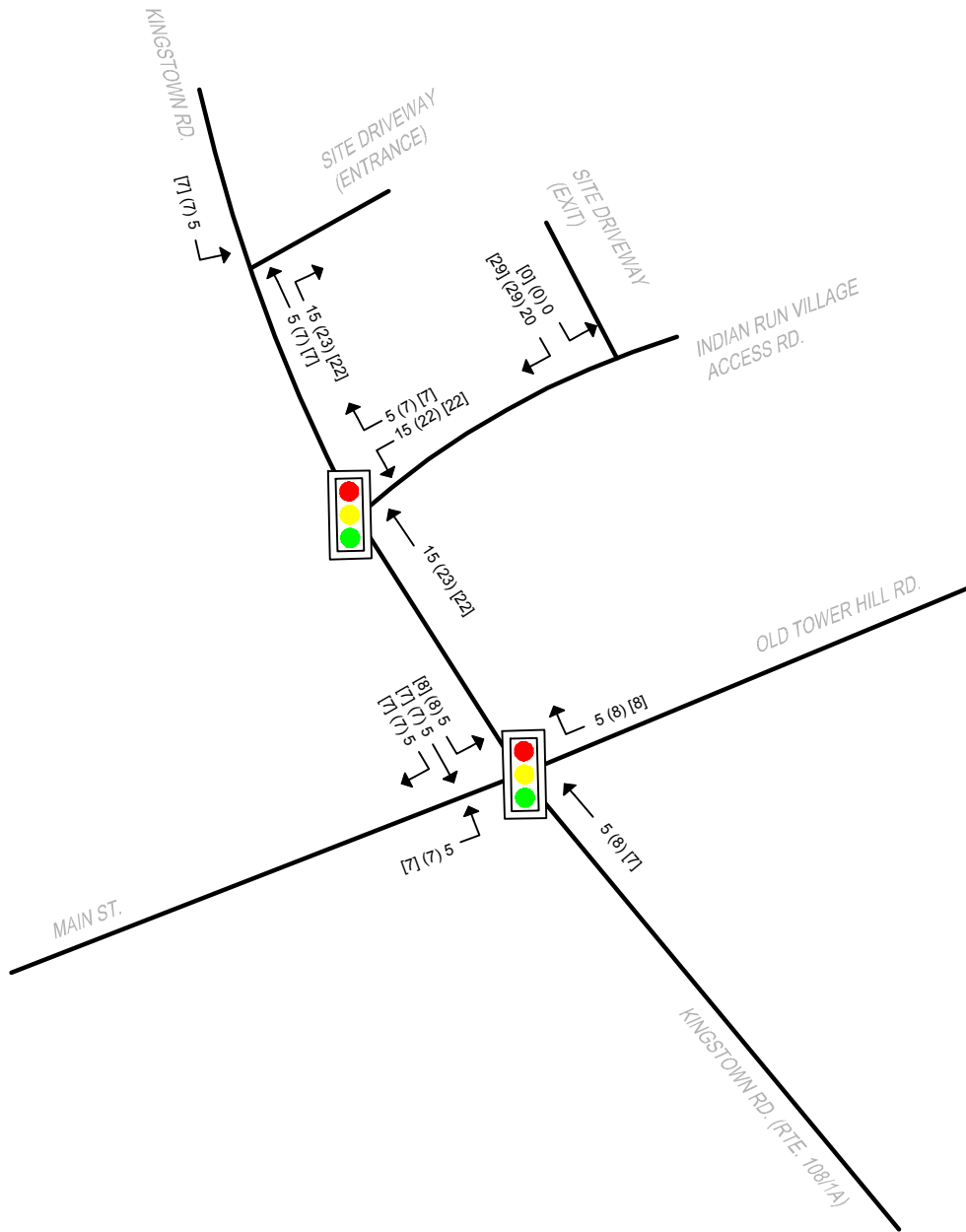
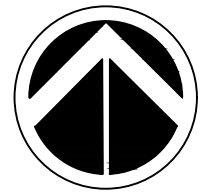
		AM Peak	PM Peak	Saturday MD Peak
LUC 882 – Cannabis Dispensary (1,815 square feet)	Entering	20	30	29
	Exiting	20	29	29
	Total	40	59	58

Trip Distribution

With the proposed land use in combination with the site location in relation to US Route 1, it is anticipated that 75% of the site traffic will arrive from and depart to the south and 25% will arrive from and depart to the north during all three peak periods analyzed.

Site-generated traffic volumes are shown in **Figure 5** and **Figure 6** shows the future (2030) build condition volumes.





AM PEAK HOUR (PM PEAK HOUR) [SATURDAY PEAK HOUR]

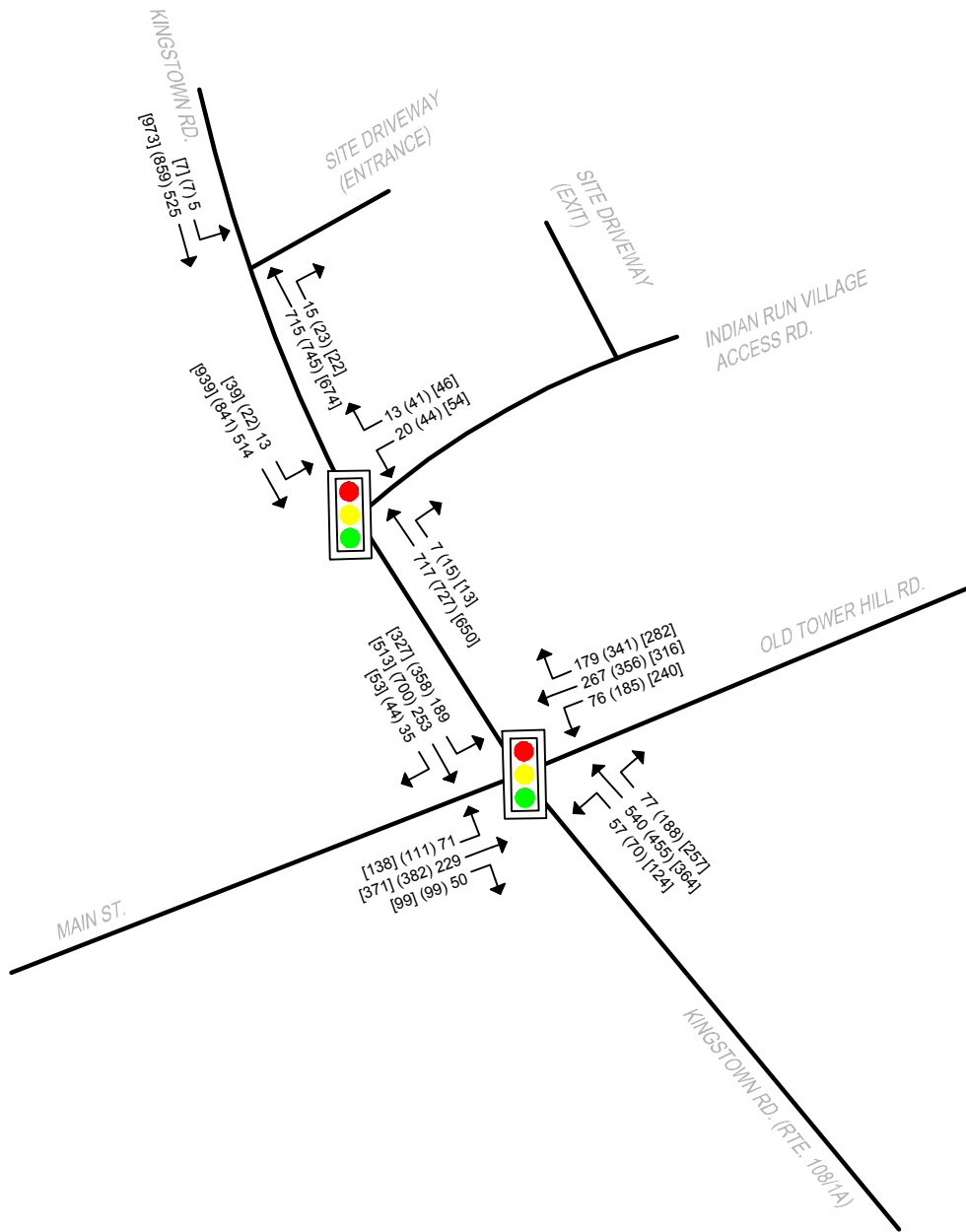
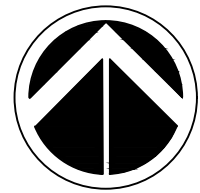


PROJECT NO. 25152.00

DATE: SEPTEMBER 2025

FIGURE 5 TRIP DISTRIBUTION GREENHOUSE DISPENSARY

SOUTH KINGSTOWN, RHODE ISLAND



AM PEAK VOLUMES (PM PEAK VOLUMES) [SATURDAY PEAK VOLUMES]



PROJECT NO. 25152.00

DATE: SEPTEMBER 2025

FIGURE 6
FUTURE (2030) BUILD TRAFFIC VOLUMES
GREENHOUSE DISPENSARY

SOUTH KINGSTOWN, RHODE ISLAND

CAPACITY ANALYSES

Capacity analyses were completed for all study intersections for existing, future no-build, and future build conditions. Capacity analyses characterize intersections based on their level of service (LOS). LOS is a quality measure describing operational conditions within a traffic stream, generally in terms of service measures such as speed, travel times, traffic interruptions, etc. Six LOS values, from A to F, are defined for each type of facility, with A representing the best operating conditions and F representing the worst operating conditions. The LOS criteria for signalized and unsignalized intersections is provided in **Table 5** below. **Tables 6, 7 and 8** summarize the capacity analysis results for the morning and afternoon peak hours and the Saturday Mid-day peak hour, respectively.

Table 5: LOS Criteria for Signalized and Unsignalized Intersections

LOS	Signalized Intersection	Unsignalized Intersection
	Delay Time (sec/veh)	Delay Time (sec/veh)
A	≤ 10	0-10
B	> 10-20	> 10-15
C	> 20-35	> 15-25
D	> 35-55	> 25-35
E	> 55-80	> 35-50
F	> 80	> 50

As shown in the tables on the following pages, there is no anticipated change in overall LOS at the signalized intersections of Kingstown Road (Route 108) with Old Tower Hill Road/Main Street and with the Indian Run Village access road between no-build and build conditions during the morning or afternoon, and Saturday peak hours. Furthermore, the overall impact of the proposed development is anticipated to be less than three seconds of additional delay at both study intersections during all three peak hours analyzed. The analysis indicated some critical movements/approached experiences extended delay at the signalized intersection of Kingstown Road (Route 108) with Old Tower Hill Road/Main Street, including the westbound left turn, the northbound through/right turn, and southbound left turn movements during the weekday afternoon and Saturday midday peak hours. These are existing conditions, and the proposed development is not anticipated to significantly exacerbate the delays experienced by these approaches.

Specifically relating to vehicles entering and exiting the redeveloped property, the left turn entering movement at the unsignalized intersection of the proposed site driveway with Route 108 will operate efficiently with minimal delays during the weekday morning and afternoon, and Saturday midday peak conditions due to the estimated low volumes for this movement, coupled with the restriction to an enter only movement, which does not require analysis. In addition, the site one-way exit only driveway on the Indian Run Village access road will operate efficiently with minimal delays during all three peak conditions due to the low volumes experienced on the Indian Run Village access road.



Table 6: Weekday Morning Peak Hour LOS Summary

Intersection	Movement		Existing (2025)		Future (2030) No-Build		Future (2030) Build	
			LOS (Delay ¹)	Queue Length ²	LOS (Delay ¹)	Queue Length ²	LOS (Delay ¹)	Queue Length ²
Kingstown Road (Route 108)/Main Street/Old Tower Hill Road	EB	L	D (53.7)	103	D (54.0)	110	E (55.4)	116
		TR	C (34.8)	163	C (34.9)	167	C (34.1)	167
	WB	L	D (53.8)	125	D (54.0)	130	D (54.7)	130
		T	D (45.0)	413	D (45.2)	426	D (47.0)	426
		R	A (4.0)	46	A (4.0)	46	A (4.0)	47
	NB	L	C (34.4)	86	C (34.7)	89	C (34.9)	90
		TR	D (37.9)	398	D (39.2)	417	D (41.8)	421
	SB	L	D (53.2)	329	D (54.9)	342	E (59.1)	355
		TR	C (35.0)	166	D (35.2)	172	D (35.5)	175
	Intersection		D (37.6)		D (38.2)		D (39.7)	
Kingstown Road (Route 108)/Indian Run Village Access Road	WB	LR	B (12.3)	10	B (11.9)	11	B (12.2)	18
	NB	TR	A (1.1)	44	A (1.1)	47	A (2.3)	55
	SB	TL	A (1.0)	33	A (1.0)	34	A (2.1)	40
	Intersection		A (1.1)		A (1.2)		A (2.5)	

1. Delay shown in seconds per vehicle.

2. Queue Length shown in feet.

- 95th percentile volume exceeds capacity, value shown is queue after two consecutive 95th percentile cycles.



Table 7: Weekday Afternoon Peak Hour LOS Summary

Intersection	Movement		Existing (2025)		Future (2030) No-Build		Future (2030) Build	
			LOS (Delay ¹)	Queue Length ²	LOS (Delay ¹)	Queue Length ²	LOS (Delay ¹)	Queue Length ²
Kingstown Road (Route 108)/Main Street/Old Tower Hill Road	EB	L	E (63.8)	184	E (66.3)	197	E (70.8)	211
		TR	D (48.7)	324	D (50.7)	338	D (50.7)	338
	WB	L	E (60.2)	340	E (61.8)	348	E (61.8)	348
		T	D (50.5)	570	D (52.5)	592	E (52.5)	592
		R	A (3.0)	48	A (3.1)	48	A (3.1)	49
	NB	L	E (55.9)	113	E (56.2)	115	E (56.2)	115
		TR	F (119.4)	510	F (133.6)	532	F (140.2)	541
	SB	L	F (85.9)	604	F (94.3)	630	F (100.7)	648
		TR	D (34.9)	500	D (35.5)	524	D (35.8)	540
	Intersection		D (61.1)		E (65.7)		E (67.9)	
Kingstown Road (Route 108)/Indian Run Village Access Road	WB	LR	A (9.1)	19	A (8.8)	19	A (9.2)	27
	NB	TR	A (4.9)	124	A (5.1)	130	A (6.2)	135
	SB	TL	A (5.4)	157	A (5.6)	166	A (6.9)	167
	Intersection		A (5.4)		A (5.5)		A (6.7)	



Table 8: Saturday Midday Peak Hour LOS Summary

Intersection	Movement		Existing (2025)		Future (2030) No-Build		Future (2030) Build	
			LOS (Delay ¹)	Queue Length ²	LOS (Delay ¹)	Queue Length ²	LOS (Delay ¹)	Queue Length ²
Kingstown Road (Route 108)/Main Street/Old Tower Hill Road	EB	L	E (63.7)	255	E (66.5)	267	E (70.5)	283
		TR	D (41.3)	315	D (41.1)	230	D (41.1)	330
	WB	L	F (82.4)	450	F (89.9)	464	F (89.9)	464
		T	D (44.6)	476	D (44.4)	492	D (44.4)	492
		R	A (3.0)	49	A (3.0)	49	A (3.0)	50
	NB	L	E (63.4)	246	E (66.1)	256	E (66.1)	256
		TR	E (55.7)	436	E (64.4)	461	E (67.4)	470
	SB	L	E (70.5)	562	E (79.3)	586	F (85.1)	604
		TR	D (34.5)	320	D (35.2)	355	D (35.5)	371
	Intersection		D (48.2)		D (51.8)		D (53.2)	
Kingstown Road (Route 108)/Indian Run Village Access Road	WB	LR	B (10.0)	28	B (10.0)	29	B (10.2)	37
	NB	TR	A (4.8)	112	A (4.8)	116	A (5.8)	122
	SB	TL	A (5.8)	191	A (6.0)	202	A (7.2)	204
	Intersection		A (5.6)		A (5.7)		A (6.9)	
Kingstown Road (Route 108)/Proposed Site Entrance Only Driveway	SB	L	-	-	-	-	A (9.3)	25

CONCLUSIONS

In summary, the study has shown that the proposed site access and circulation plan has been designed to maintain a desirable level of safety and efficiency on the servicing roadway system. The safety of the intersections of the proposed access driveway on Route 108 and on the Indian Run Village access road were reviewed for geometry and sight distances. The study intersections were determined to provide sufficient sight distances in accordance with AASHTO criteria for visibility and decision making of drivers attempting to enter/exit main street traffic from the proposed site driveways.

Additionally, crash data from a previous project, which was obtained from the South Kingstown Police Department, was utilized for this project as previously mentioned. The results indicated that there were 48 crashes within the study area over the 45-month period that data was provided. Of the 48 crashes, 42% of the crashes were rear end crashes which are typical in areas with traffic signals. Most of these are due to driver’s inattentiveness. Seventeen of the crashes (36%) of the crashes were due to vehicles switching lanes within the study area. In the area of the proposed site



driveway there were only 5 crashes reported in the vicinity of the driveway. Based on our review, it appears that of the crashes that resulted in injuries, none of the injuries appeared to be serious. Based on the volume of traffic that passes through this corridor, the number of crashes that occurred do not appear to be significant.

The results of the operational analysis determined that the estimated minor increase in traffic during the daily peak period resulting from the proposed project will have a negligible effect on overall traffic operations along the servicing roadways, particularly during the morning and afternoon, and Saturday midday peak hours.

Therefore, based upon the data collected on the servicing roadways and the analysis completed as part of this study, it can be concluded that the future traffic conditions resulting from the proposed dispensary will provide for adequate and safe access to a public street, and will not have a detrimental effect on public safety and welfare in the study area.



**Mr. Kenneth Tetzner
Greenhouse Dispensary**

**APPENDIX A
Traffic Count Data**

Summer Counts
August 2023

Transportation Data Corporation

Mario Perone, mperone1@verizon.net

tel (781) 587-0086 cell (781) 439-4999

N/S: Kingstown Road (Route 108)
 E/W: Old Tower Hill/Main Street
 City, State: Wakefield, RI
 Client: Pare/J. Shevlin

File Name : 05744AAA
 Site Code : 23048.00
 Start Date : 8/12/2023
 Page No : 1

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

Start Time	Kingstown Road (Route 108) From North				Old Tower Hill Road From East				Kingstown Road (Routes 1A/108) From South				Main Street (Route 1A) From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
11:00 AM	15	115	62	1	49	58	53	3	45	62	21	0	26	79	20	1	610
11:15 AM	18	110	75	0	61	54	48	0	42	53	22	7	24	70	22	0	606
11:30 AM	14	121	67	0	44	59	50	0	43	53	22	1	31	80	14	0	599
11:45 AM	16	114	56	0	55	59	42	0	55	66	30	1	24	62	23	3	606
Total	63	460	260	1	209	230	193	3	185	234	95	9	105	291	79	4	2421
12:00 PM	12	107	53	0	44	58	61	0	46	66	16	3	24	63	27	0	580
12:15 PM	8	82	68	1	58	57	44	1	37	61	15	0	20	61	11	0	524
12:30 PM	14	84	56	0	53	56	50	1	32	70	18	0	23	64	19	0	540
12:45 PM	15	94	44	0	43	60	42	2	44	53	15	3	21	77	19	0	532
Total	49	367	221	1	198	231	197	4	159	250	64	6	88	265	76	0	2176
Grand Total	112	827	481	2	407	461	390	7	344	484	159	15	193	556	155	4	4597
Apprch %	7.9	58.2	33.8	0.1	32.2	36.4	30.8	0.6	34.3	48.3	15.9	1.5	21.3	61.2	17.1	0.4	
Total %	2.4	18	10.5	0	8.9	10	8.5	0.2	7.5	10.5	3.5	0.3	4.2	12.1	3.4	0.1	
Cars & Peds	111	820	480	2	406	455	388	7	343	478	159	15	193	551	154	4	4566
% Cars & Peds	99.1	99.2	99.8	100	99.8	98.7	99.5	100	99.7	98.8	100	100	100	99.1	99.4	100	99.3
Trucks & Buses	1	1	0	0	0	2	1	0	1	3	0	0	0	0	1	0	10
% Trucks & Buses	0.9	0.1	0	0	0	0.4	0.3	0	0.3	0.6	0	0	0	0	0.6	0	0.2
Bikes by Direction	0	6	1	0	1	4	1	0	0	3	0	0	0	5	0	0	21
% Bikes by Direction	0	0.7	0.2	0	0.2	0.9	0.3	0	0	0.6	0	0	0	0.9	0	0	0.5

Start Time	Kingstown Road (Route 108) From North					Old Tower Hill Road From East					Kingstown Road (Routes 1A/108) From South					Main Street (Route 1A) From West					Int. Total
	Right	Thru	Left	Peds	App.Total	Right	Thru	Left	Peds	App.Total	Right	Thru	Left	Peds	App.Total	Right	Thru	Left	Peds	App.Total	
11:00 AM	15	115	62	1	193	49	58	53	3	163	45	62	21	0	128	26	79	20	1	126	610
11:15 AM	18	110	75	0	203	61	54	48	0	163	42	53	22	7	124	24	70	22	0	116	606
11:30 AM	14	121	67	0	202	44	59	50	0	153	43	53	22	1	119	31	80	14	0	125	599
11:45 AM	16	114	56	0	186	55	59	42	0	156	55	66	30	1	152	24	62	23	3	112	606
Total Volume	63	460	260	1	784	209	230	193	3	635	185	234	95	9	523	105	291	79	4	479	2421
% App. Total	8	58.7	33.2	0.1		32.9	36.2	30.4	0.5		35.4	44.7	18.2	1.7		21.9	60.8	16.5	0.8		
PHF	.875	.950	.867	.250	.966	.857	.975	.910	.250	.974	.841	.886	.792	.321	.860	.847	.909	.859	.333	.950	.992
Cars & Peds	63	455	260	1	779	208	227	193	3	631	185	232	95	9	521	105	287	79	4	475	2406
% Cars & Peds	100	98.9	100	100	99.4	99.5	98.7	100	100	99.4	100	99.1	100	100	99.6	100	98.6	100	100	99.2	99.4
Trucks & Buses	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
% Trucks & Buses	0	0.2	0	0	0.1	0	0	0	0	0	0	0.4	0	0	0.2	0	0	0	0	0	0.1
Bikes by Direction	0	4	0	0	4	1	3	0	0	4	0	1	0	0	1	0	4	0	0	4	13
% Bikes by Direction	0	0.9	0	0	0.5	0.5	1.3	0	0	0.6	0	0.4	0	0	0.2	0	1.4	0	0	0.8	0.5

Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 11:00 AM

Transportation Data Corporation

Mario Perone, mperone1@verizon.net

tel (781) 587-0086 cell (781) 439-4999

N/S: Kingstown Road (Route 108)

E/W: Old Tower Hill/Main Street

City, State: Wakefield, RI

Client: Pare/J. Shevlin

File Name : 05744AAA

Site Code : 23048.00

Start Date : 8/12/2023

Page No : 1

Groups Printed- Cars & Peds

Start Time	Kingstown Road (Route 108) From North				Old Tower Hill Road From East				Kingstown Road (Routes 1A/108) From South				Main Street (Route 1A) From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
11:00 AM	15	113	62	1	49	58	53	3	45	62	21	0	26	79	20	1	608
11:15 AM	18	109	75	0	61	54	48	0	42	53	22	7	24	68	22	0	603
11:30 AM	14	121	67	0	43	57	50	0	43	52	22	1	31	78	14	0	593
11:45 AM	16	112	56	0	55	58	42	0	55	65	30	1	24	62	23	3	602
Total	63	455	260	1	208	227	193	3	185	232	95	9	105	287	79	4	2406
12:00 PM	12	106	52	0	44	58	61	0	45	64	16	3	24	63	27	0	575
12:15 PM	8	82	68	1	58	56	43	1	37	60	15	0	20	60	11	0	520
12:30 PM	14	84	56	0	53	54	50	1	32	69	18	0	23	64	19	0	537
12:45 PM	14	93	44	0	43	60	41	2	44	53	15	3	21	77	18	0	528
Total	48	365	220	1	198	228	195	4	158	246	64	6	88	264	75	0	2160
Grand Total	111	820	480	2	406	455	388	7	343	478	159	15	193	551	154	4	4566
Apprch %	7.9	58	34	0.1	32.3	36.2	30.9	0.6	34.5	48	16	1.5	21.4	61.1	17.1	0.4	
Total %	2.4	18	10.5	0	8.9	10	8.5	0.2	7.5	10.5	3.5	0.3	4.2	12.1	3.4	0.1	

Start Time	Kingstown Road (Route 108) From North					Old Tower Hill Road From East					Kingstown Road (Routes 1A/108) From South					Main Street (Route 1A) From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:00 AM																					
11:00 AM	15	113	62	1	191	49	58	53	3	163	45	62	21	0	128	26	79	20	1	126	608
11:15 AM	18	109	75	0	202	61	54	48	0	163	42	53	22	7	124	24	68	22	0	114	603
11:30 AM	14	121	67	0	202	43	57	50	0	150	43	52	22	1	118	31	78	14	0	123	593
11:45 AM	16	112	56	0	184	55	58	42	0	155	55	65	30	1	151	24	62	23	3	112	602
Total Volume	63	455	260	1	779	208	227	193	3	631	185	232	95	9	521	105	287	79	4	475	2406
% App. Total	8.1	58.4	33.4	0.1		33	36	30.6	0.5		35.5	44.5	18.2	1.7		22.1	60.4	16.6	0.8		
PHF	.875	.940	.867	.250	.964	.852	.978	.910	.250	.968	.841	.892	.792	.321	.863	.847	.908	.859	.333	.942	.989

Transportation Data Corporation

Mario Perone, mperone1@verizon.net

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N/S: Kingstown Road (Route 108)

E/W: Old Tower Hill/Main Street

City, State: Wakefield, RI

Client: Pare/J. Shevlin

File Name : 05744AAA

Site Code : 23048.00

Start Date : 8/12/2023

Page No : 1

Groups Printed- Trucks & Buses

Start Time	Kingstown Road (Route 108) From North				Old Tower Hill Road From East				Kingstown Road (Routes 1A/108) From South				Main Street (Route 1A) From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
12:00 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2
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	2	0	0	0	1	0	0	0	0	0	0	3
12:45 PM	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	3
Total	1	0	0	0	0	2	1	0	1	2	0	0	0	0	1	0	8
Grand Total	1	1	0	0	0	2	1	0	1	3	0	0	0	0	1	0	10
Apprch %	50	50	0	0	0	66.7	33.3	0	25	75	0	0	0	0	100	0	
Total %	10	10	0	0	0	20	10	0	10	30	0	0	0	0	10	0	

Start Time	Kingstown Road (Route 108) From North					Old Tower Hill Road From East					Kingstown Road (Routes 1A/108) From South					Main Street (Route 1A) From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 11:00 AM to 12:45 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	1	1	0	0	2	0	0	0	0	0	2
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	2	0	0	2	0	1	0	0	1	0	0	0	0	0	3
12:45 PM	1	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1	3
Total Volume	1	0	0	0	1	0	2	1	0	3	1	2	0	0	3	0	0	1	0	1	8
% App. Total	100	0	0	0		0	66.7	33.3	0		33.3	66.7	0	0		0	0	100	0		
PHF	.250	.000	.000	.000	.250	.000	.250	.250	.000	.375	.250	.500	.000	.000	.375	.000	.000	.250	.000	.250	.667

Transportation Data Corporation

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N/S: Kingstown Road (Route 108)

E/W: Old Tower Hill/Main Street

City, State: Wakefield, RI

Client: Pare/J. Shevlin

File Name : 05744AAA

Site Code : 23048.00

Start Date : 8/12/2023

Page No : 1

Groups Printed- Bikes by Direction

Start Time	Kingstown Road (Route 108) From North				Old Tower Hill Road From East				Kingstown Road (Routes 1A/108) From South				Main Street (Route 1A) From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
11:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
11:30 AM	0	0	0	0	1	2	0	0	0	0	0	0	0	2	0	0	5
11:45 AM	0	2	0	0	0	1	0	0	0	1	0	0	0	0	0	0	4
Total	0	4	0	0	1	3	0	0	0	1	0	0	0	4	0	0	13
12:00 PM	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	3
12:15 PM	0	0	0	0	0	1	1	0	0	1	0	0	0	1	0	0	4
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	2	1	0	0	1	1	0	0	2	0	0	0	1	0	0	8
Grand Total	0	6	1	0	1	4	1	0	0	3	0	0	0	5	0	0	21
Apprch %	0	85.7	14.3	0	16.7	66.7	16.7	0	0	100	0	0	0	100	0	0	
Total %	0	28.6	4.8	0	4.8	19	4.8	0	0	14.3	0	0	0	23.8	0	0	

Start Time	Kingstown Road (Route 108) From North					Old Tower Hill Road From East					Kingstown Road (Routes 1A/108) From South					Main Street (Route 1A) From West					Int. Total
	Right	Thru	Left	Peds	App.Total	Right	Thru	Left	Peds	App.Total	Right	Thru	Left	Peds	App.Total	Right	Thru	Left	Peds	App.Total	
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:30 AM																					
11:30 AM	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	2	0	0	2	5
11:45 AM	0	2	0	0	2	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	4
12:00 PM	0	1	1	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
12:15 PM	0	0	0	0	0	0	1	1	0	2	0	1	0	0	1	0	1	0	0	1	4
Total Volume	0	3	1	0	4	1	4	1	0	6	0	3	0	0	3	0	3	0	0	3	16
% App. Total	0	75	25	0		16.7	66.7	16.7	0		0	100	0	0		0	100	0	0		
PHF	.000	.375	.250	.000	.500	.250	.500	.250	.000	.500	.000	.750	.000	.000	.750	.000	.375	.000	.000	.375	.800

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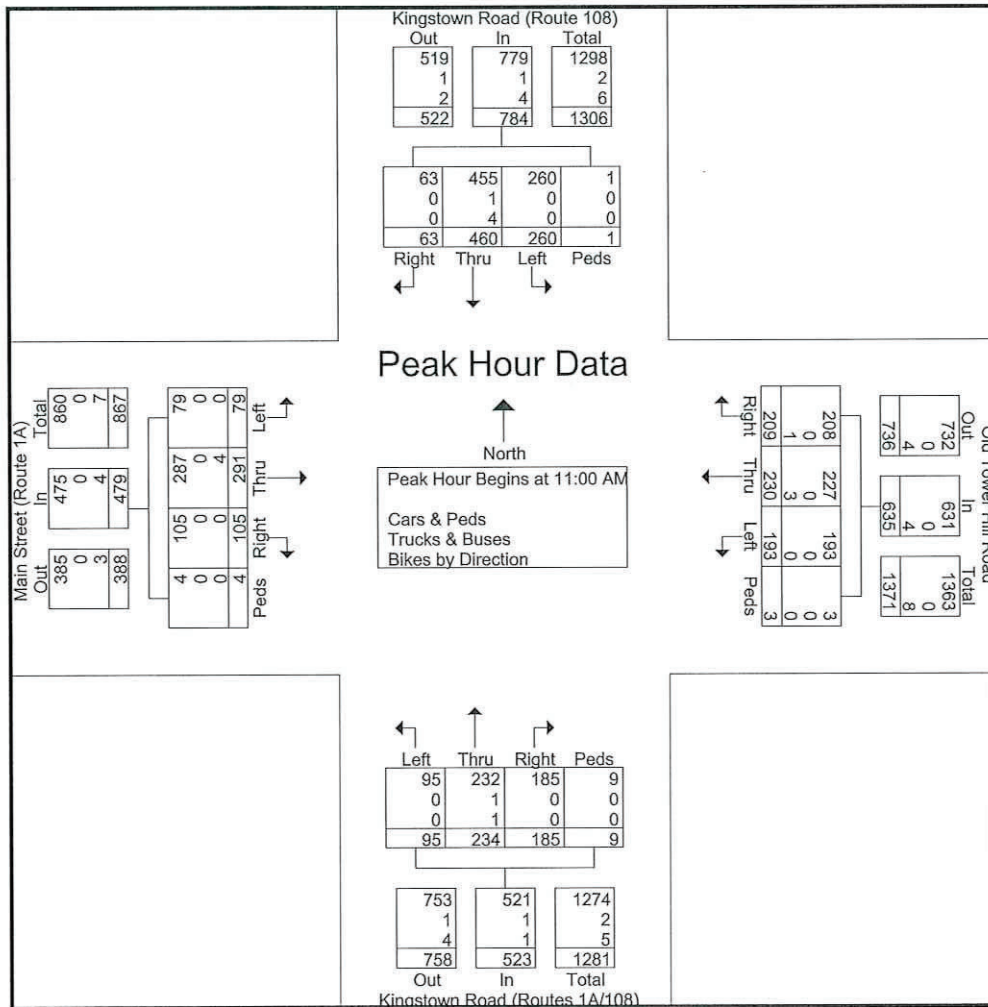
Mario Perone, mperone1@verizon.net

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N/S: Kingstown Road (Route 108)
 E/W: Old Tower Hill/Main Street
 City, State: Wakefield, RI
 Client: Pare/J. Shevlin

File Name : 05744AAA
 Site Code : 23048.00
 Start Date : 8/12/2023
 Page No : 1

Start Time	Kingstown Road (Route 108) From North					Old Tower Hill Road From East					Kingstown Road (Routes 1A/108) From South					Main Street (Route 1A) From West					Int. Total	
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total		
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																						
Peak Hour for Entire Intersection Begins at 11:00 AM																						
11:00 AM	15	115	62	1	193	49	58	53	3	163	45	62	21	0	128	26	79	20	1	126	610	
11:15 AM	18	110	75	0	203	61	54	48	0	163	42	53	22	7	124	24	70	22	0	116	606	
11:30 AM	14	121	67	0	202	44	59	50	0	153	43	53	22	1	119	31	80	14	0	125	599	
11:45 AM	16	114	56	0	186	55	59	42	0	156	55	66	30	1	152	24	62	23	3	112	606	
Total Volume	63	460	260	1	784	209	230	193	3	635	185	234	95	9	523	105	291	79	4	479	2421	
% App. Total	8	58.7	33.2	0.1		32.9	36.2	30.4	0.5		35.4	44.7	18.2	1.7		21.9	60.8	16.5	0.8			
PHF	.875	.950	.867	.250	.966	.857	.975	.910	.250	.974	.841	.886	.792	.321	.860	.847	.909	.859	.333	.950	.992	
Cars & Peds	63	455	260	1	779	208	227	193	3	631	185	232	95	9	521	105	287	79	4	475	2406	
% Cars & Peds	100	98.9	100	100	99.4	99.5	98.7	100	100	99.4	100	99.1	100	100	99.6	100	98.6	100	100	99.2	99.4	
Trucks & Buses	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
% Trucks & Buses	0	0.2	0	0	0.1	0	0	0	0	0	0	0.4	0	0	0.2	0	0	0	0	0	0	0.1
Bikes by Direction	0	4	0	0	4	1	3	0	0	4	0	1	0	0	1	0	4	0	0	4	13	
% Bikes by Direction	0	0.9	0	0	0.5	0.5	1.3	0	0	0.6	0	0.4	0	0	0.2	0	1.4	0	0	0.8	0.5	



Transportation Data Corporation

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N/S: Kingstown Road (Route 108)
E: #673-691 Signalized Access Road
City, State: Wakefield, RI
Client: Pare/J. Shevlin

File Name : 05744BBB
Site Code : 23048.00
Start Date : 8/12/2023
Page No : 1

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

Start Time	Kingstown Road (Route 108) From North			Signal @ Dental/Liquor/Bank/Apt Drive From East			Kingstown Road (Route 108) From South			Int. Total
	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	
11:00 AM	179	4	0	12	3	0	2	120	0	320
11:15 AM	186	6	0	5	9	0	2	129	0	337
11:30 AM	198	6	0	5	6	0	2	112	0	329
11:45 AM	179	11	0	6	7	0	3	135	0	341
Total	742	27	0	28	25	0	9	496	0	1327
12:00 PM	156	10	1	9	3	1	2	129	0	311
12:15 PM	146	15	1	3	7	0	3	126	0	301
12:30 PM	144	6	1	8	6	0	2	136	0	303
12:45 PM	144	5	0	2	5	1	4	108	0	269
Total	590	36	3	22	21	2	11	499	0	1184
Grand Total	1332	63	3	50	46	2	20	995	0	2511
Apprch %	95.3	4.5	0.2	51	46.9	2	2	98	0	
Total %	53	2.5	0.1	2	1.8	0.1	0.8	39.6	0	
Cars & Peds	1322	63	3	50	46	2	20	988	0	2494
% Cars & Peds	99.2	100	100	100	100	100	100	99.3	0	99.3
Trucks & Buses	3	0	0	0	0	0	0	4	0	7
% Trucks & Buses	0.2	0	0	0	0	0	0	0.4	0	0.3
Bikes by Direction	7	0	0	0	0	0	0	3	0	10
% Bikes by Direction	0.5	0	0	0	0	0	0	0.3	0	0.4

Start Time	Kingstown Road (Route 108) From North				Signal @ Dental/Liquor/Bank/Apt Drive From East				Kingstown Road (Route 108) From South				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	

Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 11:00 AM

11:00 AM	179	4	0	183	12	3	0	15	2	120	0	122	320
11:15 AM	186	6	0	192	5	9	0	14	2	129	0	131	337
11:30 AM	198	6	0	204	5	6	0	11	2	112	0	114	329
11:45 AM	179	11	0	190	6	7	0	13	3	135	0	138	341
Total Volume	742	27	0	769	28	25	0	53	9	496	0	505	1327
% App. Total	96.5	3.5	0		52.8	47.2	0		1.8	98.2	0		
PHF	.937	.614	.000	.942	.583	.694	.000	.883	.750	.919	.000	.915	.973
Cars & Peds	736	27	0	763	28	25	0	53	9	494	0	503	1319
% Cars & Peds	99.2	100	0	99.2	100	100	0	100	100	99.6	0	99.6	99.4
Trucks & Buses	2	0	0	2	0	0	0	0	0	1	0	1	3
% Trucks & Buses	0.3	0	0	0.3	0	0	0	0	0	0.2	0	0.2	0.2
Bikes by Direction	4	0	0	4	0	0	0	0	0	1	0	1	5
% Bikes by Direction	0.5	0	0	0.5	0	0	0	0	0	0.2	0	0.2	0.4

Transportation Data Corporation

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N/S: Kingstown Road (Route 108)
 E: #673-691 Signalized Access Road
 City, State: Wakefield, RI
 Client: Pare/J. Shevlin

File Name : 05744BBB
 Site Code : 23048.00
 Start Date : 8/12/2023
 Page No : 1

Groups Printed- Cars & Peds

Start Time	Kingstown Road (Route 108) From North			Signal @ Dental/Liquor/Bank/Apt Drive From East			Kingstown Road (Route 108) From South			Int. Total
	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	
11:00 AM	177	4	0	12	3	0	2	120	0	318
11:15 AM	185	6	0	5	9	0	2	129	0	336
11:30 AM	198	6	0	5	6	0	2	111	0	328
11:45 AM	176	11	0	6	7	0	3	134	0	337
Total	736	27	0	28	25	0	9	494	0	1319
12:00 PM	155	10	1	9	3	1	2	127	0	308
12:15 PM	146	15	1	3	7	0	3	125	0	300
12:30 PM	143	6	1	8	6	0	2	135	0	301
12:45 PM	142	5	0	2	5	1	4	107	0	266
Total	586	36	3	22	21	2	11	494	0	1175
Grand Total	1322	63	3	50	46	2	20	988	0	2494
Apprch %	95.2	4.5	0.2	51	46.9	2	2	98	0	
Total %	53	2.5	0.1	2	1.8	0.1	0.8	39.6	0	

Start Time	Kingstown Road (Route 108) From North				Signal @ Dental/Liquor/Bank/Apt Drive From East				Kingstown Road (Route 108) From South				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 11:00 AM													
11:00 AM	177	4	0	181	12	3	0	15	2	120	0	122	318
11:15 AM	185	6	0	191	5	9	0	14	2	129	0	131	336
11:30 AM	198	6	0	204	5	6	0	11	2	111	0	113	328
11:45 AM	176	11	0	187	6	7	0	13	3	134	0	137	337
Total Volume	736	27	0	763	28	25	0	53	9	494	0	503	1319
% App. Total	96.5	3.5	0		52.8	47.2	0		1.8	98.2	0		
PHF	.929	.614	.000	.935	.583	.694	.000	.883	.750	.922	.000	.918	.978

Transportation Data Corporation

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N/S: Kingstown Road (Route 108)
 E: #673-691 Signalized Access Road
 City, State: Wakefield, RI
 Client: Pare/J. Shevlin

File Name : 05744BBB
 Site Code : 23048.00
 Start Date : 8/12/2023
 Page No : 1

Groups Printed- Trucks & Buses

Start Time	Kingstown Road (Route 108) From North			Signal @ Dental/Liquor/Bank/Apt Drive From East			Kingstown Road (Route 108) From South			Int. Total
	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	
11:00 AM	0	0	0	0	0	0	0	0	0	0
11:15 AM	1	0	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	0	1	0	1
11:45 AM	1	0	0	0	0	0	0	0	0	1
Total	2	0	0	0	0	0	0	1	0	3
12:00 PM	0	0	0	0	0	0	0	1	0	1
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	1	0	0	0	0	0	0	1	0	2
Total	1	0	0	0	0	0	0	3	0	4
Grand Total	3	0	0	0	0	0	0	4	0	7
Apprch %	100	0	0	0	0	0	0	100	0	
Total %	42.9	0	0	0	0	0	0	57.1	0	

Start Time	Kingstown Road (Route 108) From North				Signal @ Dental/Liquor/Bank/Apt Drive From East				Kingstown Road (Route 108) From South				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 11:15 AM													
11:15 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
11:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	2	0	0	2	0	0	0	0	0	2	0	2	4
% App. Total	100	0	0	1.000	0	0	0	0	0	100	0	1.000	1.000
PHF	.500	.000	.000	.500	.000	.000	.000	.000	.000	.500	.000	.500	1.00

Transportation Data Corporation

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N/S: Kingstown Road (Route 108)
 E: #673-691 Signalized Access Road
 City, State: Wakefield, RI
 Client: Pare/J. Shevlin

File Name : 05744BBB
 Site Code : 23048.00
 Start Date : 8/12/2023
 Page No : 1

Groups Printed- Bikes by Direction

Start Time	Kingstown Road (Route 108) From North			Signal @ Dental/Liquor/Bank/Apt Drive From East			Kingstown Road (Route 108) From South			Int. Total
	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	
11:00 AM	2	0	0	0	0	0	0	0	0	2
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	2	0	0	0	0	0	0	1	0	3
Total	4	0	0	0	0	0	0	1	0	5
12:00 PM	1	0	0	0	0	0	0	1	0	2
12:15 PM	0	0	0	0	0	0	0	1	0	1
12:30 PM	1	0	0	0	0	0	0	0	0	1
12:45 PM	1	0	0	0	0	0	0	0	0	1
Total	3	0	0	0	0	0	0	2	0	5
Grand Total	7	0	0	0	0	0	0	3	0	10
Apprch %	100	0	0	0	0	0	0	100	0	
Total %	70	0	0	0	0	0	0	30	0	

Start Time	Kingstown Road (Route 108) From North				Signal @ Dental/Liquor/Bank/Apt Drive From East				Kingstown Road (Route 108) From South				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 11:45 AM													
11:45 AM	2	0	0	2	0	0	0	0	0	1	0	1	3
12:00 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
12:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
12:30 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
Total Volume	4	0	0	4	0	0	0	0	0	3	0	3	7
% App. Total	100	0	0		0	0	0		0	100	0		
PHF	.500	.000	.000	.500	.000	.000	.000	.000	.000	.750	.000	.750	.583

Transportation Data Corporation

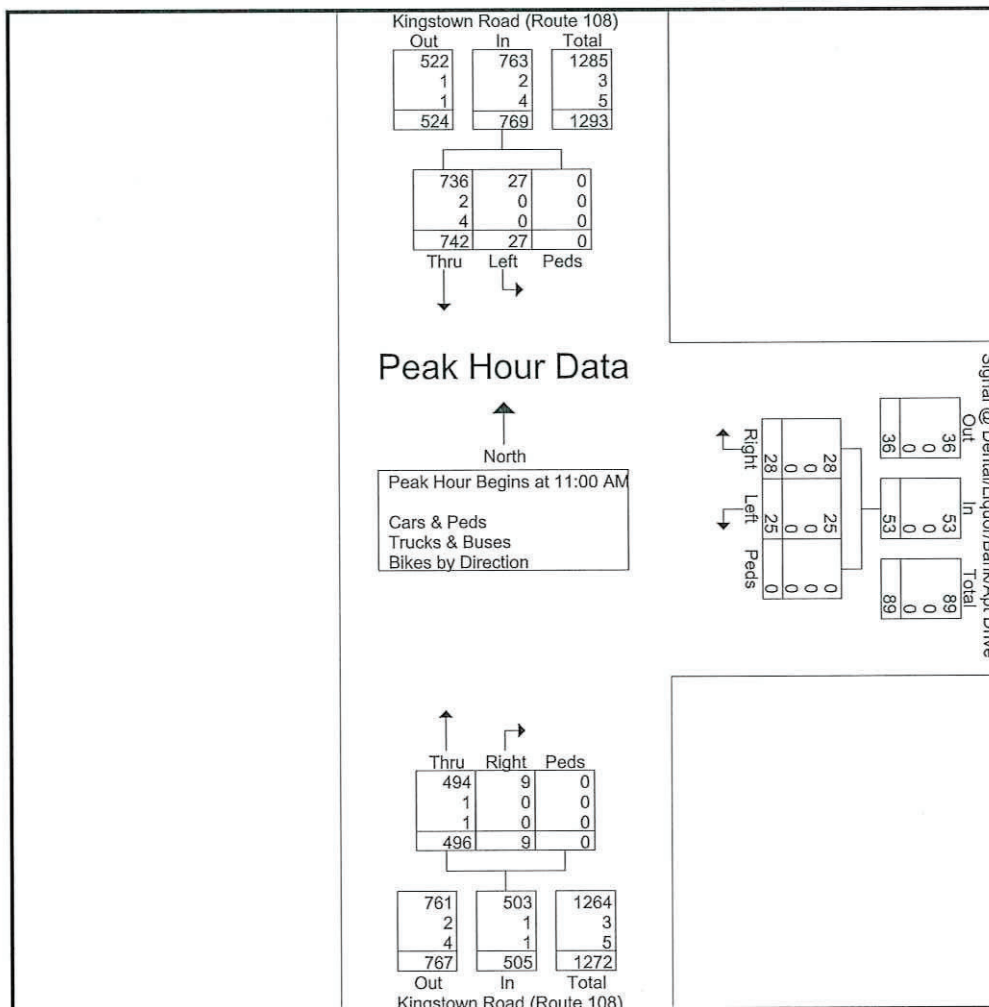
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N/S: Kingstown Road (Route 108)
 E: #673-691 Signalized Access Road
 City, State: Wakefield, RI
 Client: Pare/J. Shevlin

File Name : 05744BBB
 Site Code : 23048.00
 Start Date : 8/12/2023
 Page No : 1

Start Time	Kingstown Road (Route 108) From North				Signal @ Dental/Liquor/Bank/Apt Drive From East				Kingstown Road (Route 108) From South				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 11:00 AM													
11:00 AM	179	4	0	183	12	3	0	15	2	120	0	122	320
11:15 AM	186	6	0	192	5	9	0	14	2	129	0	131	337
11:30 AM	198	6	0	204	5	6	0	11	2	112	0	114	329
11:45 AM	179	11	0	190	6	7	0	13	3	135	0	138	341
Total Volume	742	27	0	769	28	25	0	53	9	496	0	505	1327
% App. Total	96.5	3.5	0		52.8	47.2	0		1.8	98.2	0		
PHF	.937	.614	.000	.942	.583	.694	.000	.883	.750	.919	.000	.915	.973
Cars & Peds	736	27	0	763	28	25	0	53	9	494	0	503	1319
% Cars & Peds	99.2	100	0	99.2	100	100	0	100	100	99.6	0	99.6	99.4
Trucks & Buses	2	0	0	2	0	0	0	0	0	1	0	1	3
% Trucks & Buses	0.3	0	0	0.3	0	0	0	0	0	0.2	0	0.2	0.2
Bikes by Direction	4	0	0	4	0	0	0	0	0	1	0	1	5
% Bikes by Direction	0.5	0	0	0.5	0	0	0	0	0	0.2	0	0.2	0.4



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N/S: Kingstown Road (Route 108)
E/W: Old Tower Hill/Main Street
City, State: Wakefield, RI
Client: Pare/J. Shevlin

File Name : 05744A
Site Code : 23048.00
Start Date : 8/16/2023
Page No : 1

Groups Printed- Cars & Peds

Start Time	Kingstown Road (Route 108) From North				Old Tower Hill Road From East				Kingstown Road (Routes 1A/108) From South				Main Street (Route 1A) From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
07:00 AM	2	27	24	0	20	16	6	0	7	22	1	0	7	28	7	0	167
07:15 AM	5	38	19	1	23	32	8	0	13	37	3	0	10	40	6	1	236
07:30 AM	8	43	38	1	25	42	8	0	12	33	7	0	10	32	4	0	263
07:45 AM	8	50	36	0	30	54	19	0	11	46	14	0	10	54	4	0	336
Total	23	158	117	2	98	144	41	0	43	138	25	0	37	154	21	1	1002
08:00 AM	6	52	39	0	33	50	24	0	18	44	10	0	12	48	9	0	345
08:15 AM	1	64	48	0	43	39	19	0	25	43	14	0	13	51	9	1	370
08:30 AM	8	69	35	0	42	59	25	0	26	50	14	0	15	52	10	0	405
08:45 AM	10	81	42	0	41	48	27	0	24	49	23	0	20	65	18	0	448
Total	25	266	164	0	159	196	95	0	93	186	61	0	60	216	46	1	1568
Grand Total	48	424	281	2	257	340	136	0	136	324	86	0	97	370	67	2	2570
Apprch %	6.4	56.2	37.2	0.3	35.1	46.4	18.6	0	24.9	59.3	15.8	0	18.1	69	12.5	0.4	
Total %	1.9	16.5	10.9	0.1	10	13.2	5.3	0	5.3	12.6	3.3	0	3.8	14.4	2.6	0.1	

Start Time	Kingstown Road (Route 108) From North					Old Tower Hill Road From East					Kingstown Road (Routes 1A/108) From South					Main Street (Route 1A) From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	6	52	39	0	97	33	50	24	0	107	18	44	10	0	72	12	48	9	0	69	345
08:15 AM	1	64	48	0	113	43	39	19	0	101	25	43	14	0	82	13	51	9	1	74	370
08:30 AM	8	69	35	0	112	42	59	25	0	126	26	50	14	0	90	15	52	10	0	77	405
08:45 AM	10	81	42	0	133	41	48	27	0	116	24	49	23	0	96	20	65	18	0	103	448
Total Volume	25	266	164	0	455	159	196	95	0	450	93	186	61	0	340	60	216	46	1	323	1568
% App. Total	5.5	58.5	36	0		35.3	43.6	21.1	0		27.4	54.7	17.9	0		18.6	66.9	14.2	0.3		
PHF	.625	.821	.854	.000	.855	.924	.831	.880	.000	.893	.894	.930	.663	.000	.885	.750	.831	.639	.250	.784	.875

Transportation Data Corporation

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N/S: Kingstown Road (Route 108)
E/W: Old Tower Hill/Main Street
City, State: Wakefield, RI
Client: Pare/J. Shevlin

File Name : 05744A
Site Code : 23048.00
Start Date : 8/16/2023
Page No : 1

Groups Printed- Trucks & Buses

Start Time	Kingstown Road (Route 108) From North				Old Tower Hill Road From East				Kingstown Road (Routes 1A/108) From South				Main Street (Route 1A) From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
07:00 AM	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2
07:15 AM	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	2
07:30 AM	0	1	1	0	1	2	0	0	0	0	0	0	0	2	0	0	7
07:45 AM	0	1	0	0	0	2	0	0	0	1	0	0	0	1	0	0	5
Total	0	2	2	0	2	4	0	0	2	1	0	0	0	3	0	0	16
08:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:15 AM	0	0	1	0	0	3	0	0	0	0	0	0	0	0	0	0	4
08:30 AM	0	1	0	0	0	2	2	0	1	2	0	0	0	1	0	0	9
08:45 AM	0	1	0	0	0	2	0	0	0	0	0	0	0	1	0	0	4
Total	0	3	1	0	0	7	2	0	1	2	0	0	0	2	0	0	18
Grand Total	0	5	3	0	2	11	2	0	3	3	0	0	0	5	0	0	34
Apprch %	0	62.5	37.5	0	13.3	73.3	13.3	0	50	50	0	0	0	100	0	0	
Total %	0	14.7	8.8	0	5.9	32.4	5.9	0	8.8	8.8	0	0	0	14.7	0	0	

Start Time	Kingstown Road (Route 108) From North					Old Tower Hill Road From East					Kingstown Road (Routes 1A/108) From South					Main Street (Route 1A) From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	1	0	0	1	0	2	0	0	2	0	1	0	0	1	0	1	0	0	1	5
08:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:15 AM	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	4
08:30 AM	0	1	0	0	1	0	2	2	0	4	1	2	0	0	3	0	1	0	0	1	9
Total Volume	0	3	1	0	4	0	7	2	0	9	1	3	0	0	4	0	2	0	0	2	19
% App. Total	0	75	25	0		0	77.8	22.2	0		25	75	0	0		0	100	0	0		
PHF	.000	.750	.250	.000	1.00	.000	.583	.250	.000	.563	.250	.375	.000	.000	.333	.000	.500	.000	.000	.500	.528

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N/S: Kingstown Road (Route 108)

E/W: Old Tower Hill/Main Street

City, State: Wakefield, RI

Client: Pare/J. Shevlin

File Name : 05744A

Site Code : 23048.00

Start Date : 8/16/2023

Page No : 1

Groups Printed- Bikes by Direction

Start Time	Kingstown Road (Route 108) From North				Old Tower Hill Road From East				Kingstown Road (Routes 1A/108) From South				Main Street (Route 1A) From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
07:45 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	1	0	0	1
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	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
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Apprch %	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	

Start Time	Kingstown Road (Route 108) From North					Old Tower Hill Road From East					Kingstown Road (Routes 1A/108) From South					Main Street (Route 1A) From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	100	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.000	.250	.250

Transportation Data Corporation

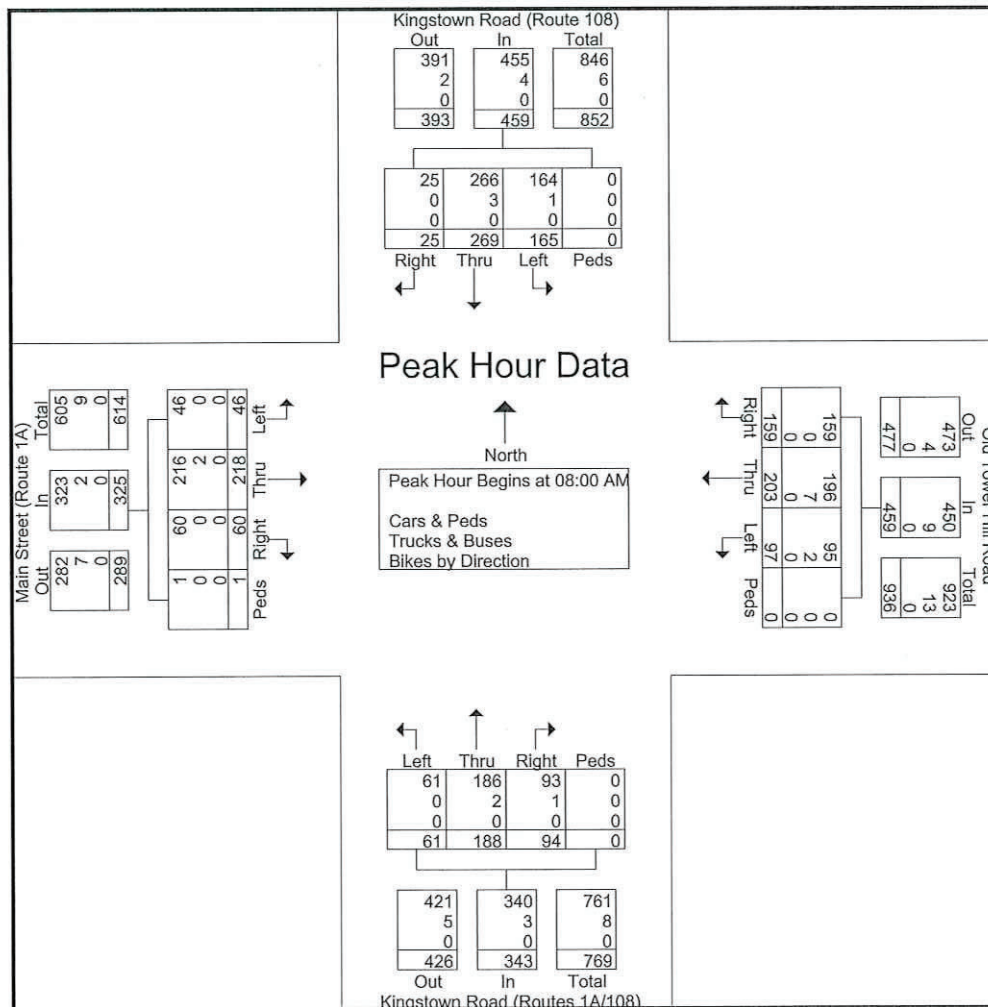
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N/S: Kingstown Road (Route 108)
 E/W: Old Tower Hill/Main Street
 City, State: Wakefield, RI
 Client: Pare/J. Shevlin

File Name : 05744A
 Site Code : 23048.00
 Start Date : 8/16/2023
 Page No : 1

Start Time	Kingstown Road (Route 108) From North					Old Tower Hill Road From East					Kingstown Road (Routes 1A/108) From South					Main Street (Route 1A) From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	6	53	39	0	98	33	50	24	0	107	18	44	10	0	72	12	48	9	0	69	346
08:15 AM	1	64	49	0	114	43	42	19	0	104	25	43	14	0	82	13	51	9	1	74	374
08:30 AM	8	70	35	0	113	42	61	27	0	130	27	52	14	0	93	15	53	10	0	78	414
08:45 AM	10	82	42	0	134	41	50	27	0	118	24	49	23	0	96	20	66	18	0	104	452
Total Volume	25	269	165	0	459	159	203	97	0	459	94	188	61	0	343	60	218	46	1	325	1586
% App. Total	5.4	58.6	35.9	0		34.6	44.2	21.1	0		27.4	54.8	17.8	0		18.5	67.1	14.2	0.3		
PHF	.625	.820	.842	.000	.856	.924	.832	.898	.000	.883	.870	.904	.663	.000	.893	.750	.826	.639	.250	.781	.877
Cars & Peds	25	266	164	0	455	159	196	95	0	450	93	186	61	0	340	60	216	46	1	323	1568
% Cars & Peds	100	98.9	99.4	0	99.1	100	96.6	97.9	0	98.0	98.9	98.9	100	0	99.1	100	99.1	100	100	99.4	98.9
Trucks & Buses	0	3	1	0	4	0	7	2	0	9	1	2	0	0	3	0	2	0	0	2	18
% Trucks & Buses	0	1.1	0.6	0	0.9	0	3.4	2.1	0	2.0	1.1	1.1	0	0	0.9	0	0.9	0	0	0.6	1.1
Bikes by Direction	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



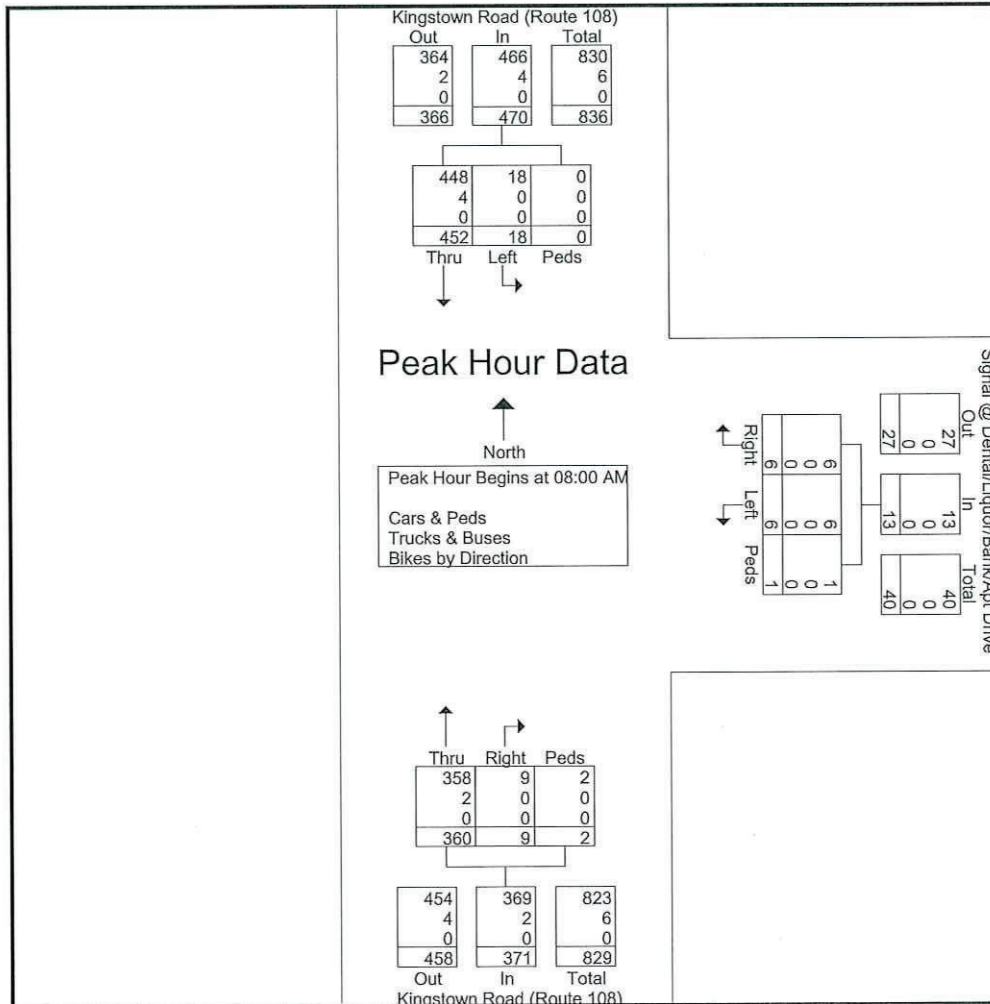
Transportation Data Corporation

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N/S: Kingstown Road (Route 108)
E: #673-691 Signalized Access Road
City, State: Wakefield, RI
Client: Pare/J. Shevlin

File Name : 05744B
Site Code : 23048.00
Start Date : 8/16/2023
Page No : 1

Start Time	Kingstown Road (Route 108) From North				Signal @ Dental/Liquor/Bank/Apt Drive From East				Kingstown Road (Route 108) From South				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 08:00 AM													
08:00 AM	92	2	0	94	0	3	0	3	5	76	0	81	178
08:15 AM	118	5	0	123	1	0	1	2	1	85	0	86	211
08:30 AM	112	5	0	117	5	1	0	6	2	100	0	102	225
08:45 AM	130	6	0	136	0	2	0	2	1	99	2	102	240
Total Volume	452	18	0	470	6	6	1	13	9	360	2	371	854
% App. Total	96.2	3.8	0		46.2	46.2	7.7		2.4	97	0.5		
PHF	.869	.750	.000	.864	.300	.500	.250	.542	.450	.900	.250	.909	.890
Cars & Peds	448	18	0	466	6	6	1	13	9	358	2	369	848
% Cars & Peds	99.1	100	0	99.1	100	100	100	100	100	99.4	100	99.5	99.3
Trucks & Buses	4	0	0	4	0	0	0	0	0	2	0	2	6
% Trucks & Buses	0.9	0	0	0.9	0	0	0	0	0	0.6	0	0.5	0.7
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/S: Kingstown Road (Route 108)
E/W: Old Tower Hill/Main Street
City, State: Wakefield, RI
Client: Pare/J. Shevlin

File Name : 05744AA
Site Code : 23048.00
Start Date : 8/16/2023
Page No : 1

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

Start Time	Kingstown Road (Route 108) From North				Old Tower Hill Road From East				Kingstown Road (Routes 1A/108) From South				Main Street (Route 1A) From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
04:00 PM	17	80	68	1	62	59	38	1	27	70	17	0	11	76	20	0	547
04:15 PM	12	70	55	0	62	73	29	1	39	65	27	1	18	68	17	0	537
04:30 PM	9	84	57	0	51	76	40	0	30	59	13	0	22	73	29	0	543
04:45 PM	14	77	56	0	61	57	33	0	28	78	10	0	12	71	22	0	519
Total	52	311	236	1	236	265	140	2	124	272	67	1	63	288	88	0	2146
05:00 PM	8	79	47	2	57	62	32	1	35	65	15	1	7	69	24	0	504
05:15 PM	8	64	37	1	58	46	33	0	34	58	13	0	7	71	25	0	455
05:30 PM	10	64	61	2	43	60	22	1	23	47	16	0	19	45	25	0	438
05:45 PM	9	66	52	1	55	66	32	0	16	51	20	0	16	46	18	0	448
Total	35	273	197	6	213	234	119	2	108	221	64	1	49	231	92	0	1845
Grand Total	87	584	433	7	449	499	259	4	232	493	131	2	112	519	180	0	3991
Apprch %	7.8	52.6	39	0.6	37.1	41.2	21.4	0.3	27	57.5	15.3	0.2	13.8	64	22.2	0	
Total %	2.2	14.6	10.8	0.2	11.3	12.5	6.5	0.1	5.8	12.4	3.3	0.1	2.8	13	4.5	0	
Cars & Peds	87	584	433	7	449	495	256	4	231	489	130	2	112	515	178	0	3972
% Cars & Peds	100	100	100	100	100	99.2	98.8	100	99.6	99.2	99.2	100	100	99.2	98.9	0	99.5
Trucks & Buses	0	0	0	0	0	3	3	0	0	3	1	0	0	2	0	0	12
% Trucks & Buses	0	0	0	0	0	0.6	1.2	0	0	0.6	0.8	0	0	0.4	0	0	0.3
Bikes by Direction	0	0	0	0	0	1	0	0	1	1	0	0	0	2	2	0	7
% Bikes by Direction	0	0	0	0	0	0.2	0	0	0.4	0.2	0	0	0	0.4	1.1	0	0.2

Start Time	Kingstown Road (Route 108) From North					Old Tower Hill Road From East					Kingstown Road (Routes 1A/108) From South					Main Street (Route 1A) From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	

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

Peak Hour for Entire Intersection Begins at 04:00 PM

04:00 PM	17	80	68	1	166	62	59	38	1	160	27	70	17	0	114	11	76	20	0	107	547
04:15 PM	12	70	55	0	137	62	73	29	1	165	39	65	27	1	132	18	68	17	0	103	537
04:30 PM	9	84	57	0	150	51	76	40	0	167	30	59	13	0	102	22	73	29	0	124	543
04:45 PM	14	77	56	0	147	61	57	33	0	151	28	78	10	0	116	12	71	22	0	105	519
Total Volume	52	311	236	1	600	236	262	140	2	640	124	270	67	1	462	63	287	88	0	438	2140
% App. Total	8.7	51.8	39.3	0.2		36.7	41.2	21.8	0.3		26.7	58.6	14.4	0.2		14.4	65.6	20	0		
PHF	.765	.926	.868	.250	.904	.952	.872	.875	.500	.963	.795	.872	.620	.250	.879	.716	.947	.759	.000	.885	.981
Cars & Peds	52	311	236	1	600	236	262	140	2	640	124	270	67	1	462	63	287	88	0	438	2140
% Cars & Peds	100	100	100	100	100	100	98.9	100	100	99.5	100	99.3	100	100	99.6	100	99.7	100	0	99.8	99.7
Trucks & Buses	0	0	0	0	0	0	2	0	0	2	0	1	0	0	1	0	1	0	0	1	4
% Trucks & Buses	0	0	0	0	0	0	0.8	0	0	0.3	0	0.4	0	0	0.2	0	0.3	0	0	0.2	0.2
Bikes by Direction	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	2
% Bikes by Direction	0	0	0	0	0	0	0.4	0	0	0.2	0	0.4	0	0	0.2	0	0	0	0	0	0.1

Transportation Data Corporation

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N/S: Kingstown Road (Route 108)
 E/W: Old Tower Hill/Main Street
 City, State: Wakefield, RI
 Client: Pare/J. Shevlin

File Name : 05744AA
 Site Code : 23048.00
 Start Date : 8/16/2023
 Page No : 1

Groups Printed- Cars & Peds

Start Time	Kingstown Road (Route 108) From North				Old Tower Hill Road From East				Kingstown Road (Routes 1A/108) From South				Main Street (Route 1A) From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
04:00 PM	17	80	68	1	62	58	38	1	27	69	17	0	11	76	20	0	545
04:15 PM	12	70	55	0	62	73	29	1	39	64	27	1	18	68	17	0	536
04:30 PM	9	84	57	0	51	74	40	0	30	59	13	0	22	72	29	0	540
04:45 PM	14	77	56	0	61	57	33	0	28	78	10	0	12	71	22	0	519
Total	52	311	236	1	236	262	140	2	124	270	67	1	63	287	88	0	2140
05:00 PM	8	79	47	2	57	62	29	1	35	64	15	1	7	68	22	0	497
05:15 PM	8	64	37	1	58	46	33	0	34	58	13	0	7	69	25	0	453
05:30 PM	10	64	61	2	43	60	22	1	22	46	16	0	19	45	25	0	436
05:45 PM	9	66	52	1	55	65	32	0	16	51	19	0	16	46	18	0	446
Total	35	273	197	6	213	233	116	2	107	219	63	1	49	228	90	0	1832
Grand Total	87	584	433	7	449	495	256	4	231	489	130	2	112	515	178	0	3972
Apprch %	7.8	52.6	39	0.6	37.3	41.1	21.3	0.3	27.1	57.4	15.3	0.2	13.9	64	22.1	0	
Total %	2.2	14.7	10.9	0.2	11.3	12.5	6.4	0.1	5.8	12.3	3.3	0.1	2.8	13	4.5	0	

Start Time	Kingstown Road (Route 108) From North					Old Tower Hill Road From East					Kingstown Road (Routes 1A/108) From South					Main Street (Route 1A) From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	17	80	68	1	166	62	58	38	1	159	27	69	17	0	113	11	76	20	0	107	545
04:15 PM	12	70	55	0	137	62	73	29	1	165	39	64	27	1	131	18	68	17	0	103	536
04:30 PM	9	84	57	0	150	51	74	40	0	165	30	59	13	0	102	22	72	29	0	123	540
04:45 PM	14	77	56	0	147	61	57	33	0	151	28	78	10	0	116	12	71	22	0	105	519
Total Volume	52	311	236	1	600	236	262	140	2	640	124	270	67	1	462	63	287	88	0	438	2140
% App. Total	8.7	51.8	39.3	0.2		36.9	40.9	21.9	0.3		26.8	58.4	14.5	0.2		14.4	65.5	20.1	0		
PHF	.765	.926	.868	.250	.904	.952	.885	.875	.500	.970	.795	.865	.620	.250	.882	.716	.944	.759	.000	.890	.982

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N/S: Kingstown Road (Route 108)
E/W: Old Tower Hill/Main Street
City, State: Wakefield, RI
Client: Pare/J. Shevlin

File Name : 05744AA
Site Code : 23048.00
Start Date : 8/16/2023
Page No : 1

Groups Printed- Trucks & Buses

Start Time	Kingstown Road (Route 108) From North				Old Tower Hill Road From East				Kingstown Road (Routes 1A/108) From South				Main Street (Route 1A) From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
04:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
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	2	0	0	0	1	0	0	0	1	0	0	4
05:00 PM	0	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0	4
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	0	0	0	0	1	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Total	0	0	0	0	0	1	3	0	0	2	1	0	0	1	0	0	8
Grand Total	0	0	0	0	0	3	3	0	0	3	1	0	0	2	0	0	12
Apprch %	0	0	0	0	0	50	50	0	0	75	25	0	0	100	0	0	
Total %	0	0	0	0	0	25	25	0	0	25	8.3	0	0	16.7	0	0	

Start Time	Kingstown Road (Route 108) From North					Old Tower Hill Road From East					Kingstown Road (Routes 1A/108) From South					Main Street (Route 1A) From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	0	0	0	0	0	0	3	0	3	0	1	0	0	1	0	0	0	0	0	4
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	2
Total Volume	0	0	0	0	0	0	1	3	0	4	0	2	1	0	3	0	1	0	0	1	8
% App. Total	0	0	0	0	0	0	25	75	0		0	66.7	33.3	0		0	100	0	0		
PHF	.000	.000	.000	.000	.000	.000	.250	.250	.000	.333	.000	.500	.250	.000	.750	.000	.250	.000	.000	.250	.500

Transportation Data Corporation

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N/S: Kingstown Road (Route 108)
E/W: Old Tower Hill/Main Street
City, State: Wakefield, RI
Client: Pare/J. Shevlin

File Name : 05744AA
Site Code : 23048.00
Start Date : 8/16/2023
Page No : 1

Groups Printed- Bikes by Direction

Start Time	Kingstown Road (Route 108) From North				Old Tower Hill Road From East				Kingstown Road (Routes 1A/108) From South				Main Street (Route 1A) From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
04:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
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	1	0	0	0	1	0	0	0	0	0	0	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3
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	0	0	0	1	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	0	0	0	1	0	0	0	0	2	2	0	5
Grand Total	0	0	0	0	0	1	0	0	1	1	0	0	0	2	2	0	7
Apprch %	0	0	0	0	0	100	0	0	50	50	0	0	0	50	50	0	
Total %	0	0	0	0	0	14.3	0	0	14.3	14.3	0	0	0	28.6	28.6	0	

Start Time	Kingstown Road (Route 108) From North					Old Tower Hill Road From East					Kingstown Road (Routes 1A/108) From South					Main Street (Route 1A) From West					Int. Total	
	Right	Thru	Left	Peds	App.Total	Right	Thru	Left	Peds	App.Total	Right	Thru	Left	Peds	App.Total	Right	Thru	Left	Peds	App.Total		
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																						
Peak Hour for Entire Intersection Begins at 04:30 PM																						
04:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	3
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Total Volume	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	2	0	4	5	
% App. Total	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	50	50	0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.500	.250	.000	.333	.417	

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N/S: Kingstown Road (Route 108)

E/W: Old Tower Hill/Main Street

City, State: Wakefield, RI

Client: Pare/J. Shevlin

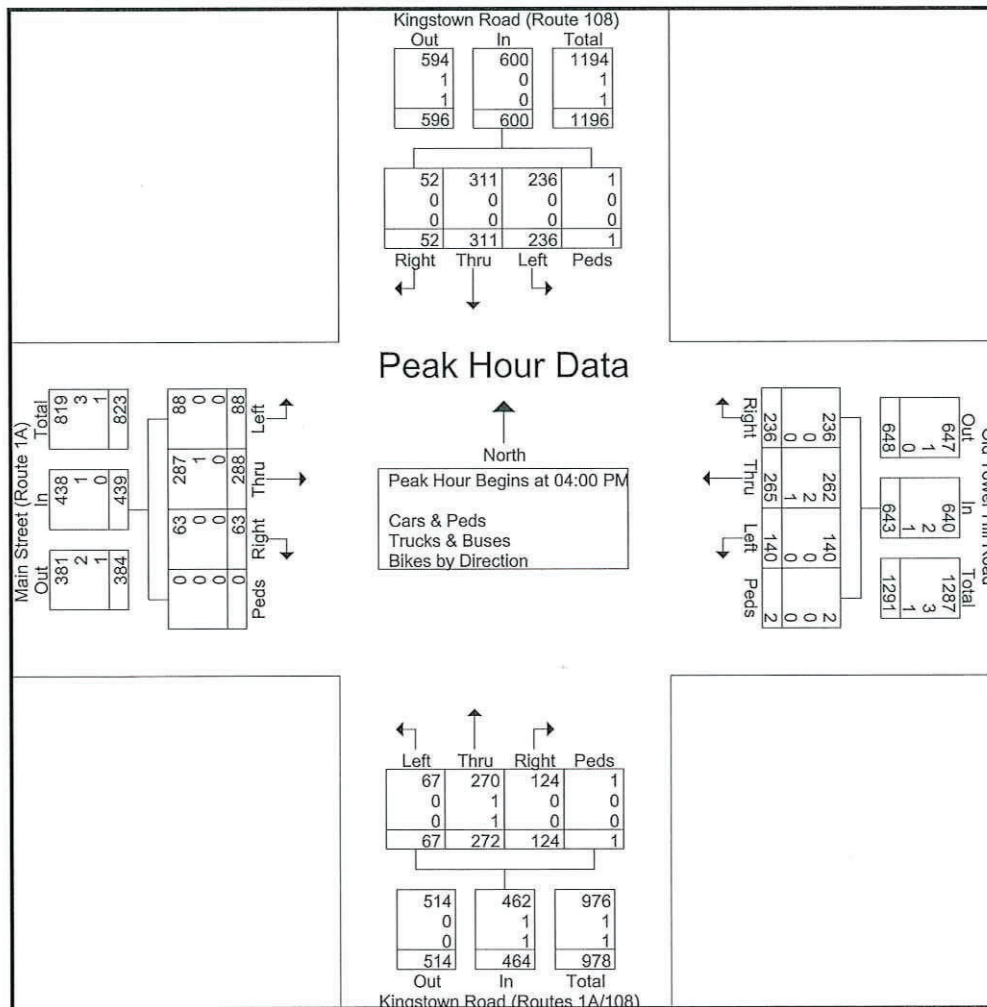
File Name : 05744AA

Site Code : 23048.00

Start Date : 8/16/2023

Page No : 1

Start Time	Kingstown Road (Route 108) From North					Old Tower Hill Road From East					Kingstown Road (Routes 1A/108) From South					Main Street (Route 1A) From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	17	80	68	1	166	62	59	38	1	160	27	70	17	0	114	11	76	20	0	107	547
04:15 PM	12	70	55	0	137	62	73	29	1	165	39	65	27	1	132	18	68	17	0	103	537
04:30 PM	9	84	57	0	150	51	76	40	0	167	30	59	13	0	102	22	73	29	0	124	543
04:45 PM	14	77	56	0	147	61	57	33	0	151	28	78	10	0	116	12	71	22	0	105	519
Total Volume	52	311	236	1	600	236	265	140	2	643	124	272	67	1	464	63	288	88	0	439	2146
% App. Total	8.7	51.8	39.3	0.2		36.7	41.2	21.8	0.3		26.7	58.6	14.4	0.2		14.4	65.6	20	0		
PHF	.765	.926	.868	.250	.904	.952	.872	.875	.500	.963	.795	.872	.620	.250	.879	.716	.947	.759	.000	.885	.981
Cars & Peds	52	311	236	1	600	236	262	140	2	640	124	270	67	1	462	63	287	88	0	438	2140
% Cars & Peds	100	100	100	100	100	100	98.9	100	100	99.5	100	99.3	100	100	99.6	100	99.7	100	0	99.8	99.7
Trucks & Buses	0	0	0	0	0	0	2	0	0	2	0	1	0	0	1	0	1	0	0	1	4
% Trucks & Buses	0	0	0	0	0	0	0.8	0	0	0.3	0	0.4	0	0	0.2	0	0.3	0	0	0.2	0.2
Bikes by Direction	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	2
% Bikes by Direction	0	0	0	0	0	0	0.4	0	0	0.2	0	0.4	0	0	0.2	0	0	0	0	0	0.1



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N/S: Kingstown Road (Route 108)
 E: #673-691 Signalized Access Road
 City, State: Wakefield, RI
 Client: Pare/J. Shevlin

File Name : 05744B
 Site Code : 23048.00
 Start Date : 8/16/2023
 Page No : 1

Groups Printed- Cars & Peds

Start Time	Kingstown Road (Route 108) From North			Signal @ Dental/Liquor/Bank/Apt Drive From East			Kingstown Road (Route 108) From South			Int. Total
	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	
07:00 AM	55	0	0	0	0	0	0	47	0	102
07:15 AM	62	1	1	1	1	0	1	62	0	129
07:30 AM	93	2	0	2	1	0	3	55	0	156
07:45 AM	97	3	0	1	1	1	1	71	0	175
Total	307	6	1	4	3	1	5	235	0	562
08:00 AM	91	2	0	0	3	0	5	76	0	177
08:15 AM	117	5	0	1	0	1	1	85	0	210
08:30 AM	111	5	0	5	1	0	2	98	0	222
08:45 AM	129	6	0	0	2	0	1	99	2	239
Total	448	18	0	6	6	1	9	358	2	848
Grand Total	755	24	1	10	9	2	14	593	2	1410
Apprch %	96.8	3.1	0.1	47.6	42.9	9.5	2.3	97.4	0.3	
Total %	53.5	1.7	0.1	0.7	0.6	0.1	1	42.1	0.1	

Start Time	Kingstown Road (Route 108) From North				Signal @ Dental/Liquor/Bank/Apt Drive From East				Kingstown Road (Route 108) From South				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 08:00 AM													
08:00 AM	91	2	0	93	0	3	0	3	5	76	0	81	177
08:15 AM	117	5	0	122	1	0	1	2	1	85	0	86	210
08:30 AM	111	5	0	116	5	1	0	6	2	98	0	100	222
08:45 AM	129	6	0	135	0	2	0	2	1	99	2	102	239
Total Volume	448	18	0	466	6	6	1	13	9	358	2	369	848
% App. Total	96.1	3.9	0		46.2	46.2	7.7		2.4	97	0.5		
PHF	.868	.750	.000	.863	.300	.500	.250	.542	.450	.904	.250	.904	.887

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N/S: Kingstown Road (Route 108)
 E: #673-691 Signalized Access Road
 City, State: Wakefield, RI
 Client: Pare/J. Shevlin

File Name : 05744B
 Site Code : 23048.00
 Start Date : 8/16/2023
 Page No : 1

Groups Printed- Trucks & Buses

Start Time	Kingstown Road (Route 108) From North			Signal @ Dental/Liquor/Bank/Apt Drive From East			Kingstown Road (Route 108) From South			Int. Total
	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	
07:00 AM	0	0	0	1	0	0	0	1	0	2
07:15 AM	1	0	0	0	0	0	0	0	0	1
07:30 AM	2	0	0	0	0	0	0	1	0	3
07:45 AM	1	0	0	0	0	0	0	1	0	2
Total	4	0	0	1	0	0	0	3	0	8
08:00 AM	1	0	0	0	0	0	0	0	0	1
08:15 AM	1	0	0	0	0	0	0	0	0	1
08:30 AM	1	0	0	0	0	0	0	2	0	3
08:45 AM	1	0	0	0	0	0	0	0	0	1
Total	4	0	0	0	0	0	0	2	0	6
Grand Total	8	0	0	1	0	0	0	5	0	14
Apprch %	100	0	0	100	0	0	0	100	0	
Total %	57.1	0	0	7.1	0	0	0	35.7	0	

Start Time	Kingstown Road (Route 108) From North				Signal @ Dental/Liquor/Bank/Apt Drive From East				Kingstown Road (Route 108) From South				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	
07:00 AM	0	0	0	0	1	0	0	1	0	1	0	1	2
07:15 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
07:30 AM	2	0	0	2	0	0	0	0	0	1	0	1	3
07:45 AM	1	0	0	1	0	0	0	0	0	1	0	1	2
Total Volume	4	0	0	4	1	0	0	1	0	3	0	3	8
% App. Total	100	0	0	100	100	0	0	100	0	100	0	100	100
PHF	.500	.000	.000	.500	.250	.000	.000	.250	.000	.750	.000	.750	.667

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

Transportation Data Corporation

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N/S: Kingstown Road (Route 108)
 E: #673-691 Signalized Access Road
 City, State: Wakefield, RI
 Client: Pare/J. Shevlin

File Name : 05744B
 Site Code : 23048.00
 Start Date : 8/16/2023
 Page No : 1

Groups Printed- Trucks & Buses

Start Time	Kingstown Road (Route 108) From North			Signal @ Dental/Liquor/Bank/Apt Drive From East			Kingstown Road (Route 108) From South			Int. Total
	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	
07:00 AM	0	0	0	1	0	0	0	1	0	2
07:15 AM	1	0	0	0	0	0	0	0	0	1
07:30 AM	2	0	0	0	0	0	0	1	0	3
07:45 AM	1	0	0	0	0	0	0	1	0	2
Total	4	0	0	1	0	0	0	3	0	8
08:00 AM	1	0	0	0	0	0	0	0	0	1
08:15 AM	1	0	0	0	0	0	0	0	0	1
08:30 AM	1	0	0	0	0	0	0	2	0	3
08:45 AM	1	0	0	0	0	0	0	0	0	1
Total	4	0	0	0	0	0	0	2	0	6
Grand Total	8	0	0	1	0	0	0	5	0	14
Apprch %	100	0	0	100	0	0	0	100	0	
Total %	57.1	0	0	7.1	0	0	0	35.7	0	

Start Time	Kingstown Road (Route 108) From North				Signal @ Dental/Liquor/Bank/Apt Drive From East				Kingstown Road (Route 108) From South				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	
07:00 AM	0	0	0	0	1	0	0	1	0	1	0	1	2
07:15 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
07:30 AM	2	0	0	2	0	0	0	0	0	1	0	1	3
07:45 AM	1	0	0	1	0	0	0	0	0	1	0	1	2
Total Volume	4	0	0	4	1	0	0	1	0	3	0	3	8
% App. Total	100	0	0	100	100	0	0	100	0	100	0	100	
PHF	.500	.000	.000	.500	.250	.000	.000	.250	.000	.750	.000	.750	.667

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

Transportation Data Corporation

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N/S: Kingstown Road (Route 108)
 E: #673-691 Signalized Access Road
 City, State: Wakefield, RI
 Client: Pare/J. Shevlin

File Name : 05744BB
 Site Code : 23048.00
 Start Date : 8/16/2023
 Page No : 1

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

Start Time	Kingstown Road (Route 108) From North			Signal @ Dental/Liquor/Bank/Apt Drive From East			Kingstown Road (Route 108) From South			Int. Total
	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	
04:00 PM	150	4	0	5	6	0	1	150	0	316
04:15 PM	128	6	0	3	2	1	2	127	0	269
04:30 PM	148	4	0	8	2	0	3	131	0	296
04:45 PM	139	6	0	10	5	0	3	148	0	311
Total	565	20	0	26	15	1	9	556	0	1192
05:00 PM	127	5	0	5	4	0	1	136	0	278
05:15 PM	104	4	1	3	5	0	1	138	0	256
05:30 PM	138	2	1	9	2	1	1	115	0	269
05:45 PM	123	4	1	4	2	1	4	122	0	261
Total	492	15	3	21	13	2	7	511	0	1064
Grand Total	1057	35	3	47	28	3	16	1067	0	2256
Apprch %	96.5	3.2	0.3	60.3	35.9	3.8	1.5	98.5	0	
Total %	46.9	1.6	0.1	2.1	1.2	0.1	0.7	47.3	0	
Cars & Peds	1055	34	3	47	28	3	16	1063	0	2249
% Cars & Peds	99.8	97.1	100	100	100	100	100	99.6	0	99.7
Trucks & Buses	0	0	0	0	0	0	0	3	0	3
% Trucks & Buses	0	0	0	0	0	0	0	0.3	0	0.1
Bikes by Direction	2	1	0	0	0	0	0	1	0	4
% Bikes by Direction	0.2	2.9	0	0	0	0	0	0.1	0	0.2

Start Time	Kingstown Road (Route 108) From North				Signal @ Dental/Liquor/Bank/Apt Drive From East				Kingstown Road (Route 108) From South				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:00 PM													
04:00 PM	150	4	0	154	5	6	0	11	1	150	0	151	316
04:15 PM	128	6	0	134	3	2	1	6	2	127	0	129	269
04:30 PM	148	4	0	152	8	2	0	10	3	131	0	134	296
04:45 PM	139	6	0	145	10	5	0	15	3	148	0	151	311
Total Volume	565	20	0	585	26	15	1	42	9	556	0	565	1192
% App. Total	96.6	3.4	0		61.9	35.7	2.4		1.6	98.4	0		
PHF	.942	.833	.000	.950	.650	.625	.250	.700	.750	.927	.000	.935	.943
Cars & Peds	565	19	0	584	26	15	1	42	9	554	0	563	1189
% Cars & Peds	100	95.0	0	99.8	100	100	100	100	100	99.6	0	99.6	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	0.2	0	0.2	0.1
Bikes by Direction	0	1	0	1	0	0	0	0	0	1	0	1	2
% Bikes by Direction	0	5.0	0	0.2	0	0	0	0	0	0.2	0	0.2	0.2

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N/S: Kingstown Road (Route 108)
 E: #673-691 Signalized Access Road
 City, State: Wakefield, RI
 Client: Pare/J. Shevlin

File Name : 05744BB
 Site Code : 23048.00
 Start Date : 8/16/2023
 Page No : 1

Groups Printed- Cars & Peds

Start Time	Kingstown Road (Route 108) From North			Signal @ Dental/Liquor/Bank/Apt Drive From East			Kingstown Road (Route 108) From South			Int. Total
	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	
04:00 PM	150	4	0	5	6	0	1	149	0	315
04:15 PM	128	6	0	3	2	1	2	126	0	268
04:30 PM	148	4	0	8	2	0	3	131	0	296
04:45 PM	139	5	0	10	5	0	3	148	0	310
Total	565	19	0	26	15	1	9	554	0	1189
05:00 PM	126	5	0	5	4	0	1	135	0	276
05:15 PM	104	4	1	3	5	0	1	138	0	256
05:30 PM	137	2	1	9	2	1	1	114	0	267
05:45 PM	123	4	1	4	2	1	4	122	0	261
Total	490	15	3	21	13	2	7	509	0	1060
Grand Total	1055	34	3	47	28	3	16	1063	0	2249
Apprch %	96.6	3.1	0.3	60.3	35.9	3.8	1.5	98.5	0	
Total %	46.9	1.5	0.1	2.1	1.2	0.1	0.7	47.3	0	

Start Time	Kingstown Road (Route 108) From North				Signal @ Dental/Liquor/Bank/Apt Drive From East				Kingstown Road (Route 108) From South				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	
04:00 PM	150	4	0	154	5	6	0	11	1	149	0	150	315
04:15 PM	128	6	0	134	3	2	1	6	2	126	0	128	268
04:30 PM	148	4	0	152	8	2	0	10	3	131	0	134	296
04:45 PM	139	5	0	144	10	5	0	15	3	148	0	151	310
Total Volume	565	19	0	584	26	15	1	42	9	554	0	563	1189
% App. Total	96.7	3.3	0		61.9	35.7	2.4		1.6	98.4	0		
PHF	.942	.792	.000	.948	.650	.625	.250	.700	.750	.930	.000	.932	.944

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

Transportation Data Corporation

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

N/S: Kingstown Road (Route 108)
E: #673-691 Signalized Access Road
City, State: Wakefield, RI
Client: Pare/J. Shevlin

File Name : 05744BB
Site Code : 23048.00
Start Date : 8/16/2023
Page No : 1

Groups Printed- Trucks & Buses

Start Time	Kingstown Road (Route 108) From North			Signal @ Dental/Liquor/Bank/Apt Drive From East			Kingstown Road (Route 108) From South			Int. Total
	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	1	0	1
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	1	0	1
05:00 PM	0	0	0	0	0	0	0	1	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	1	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	2	0	2
Grand Total	0	0	0	0	0	0	0	3	0	3
Apprch %	0	0	0	0	0	0	0	100	0	
Total %	0	0	0	0	0	0	0	100	0	

Start Time	Kingstown Road (Route 108) From North				Signal @ Dental/Liquor/Bank/Apt Drive From East				Kingstown Road (Route 108) From South				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:15 PM													
04:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
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
05:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	0	0	0	0	0	2	0	2	2
% App. Total	0	0	0	0	0	0	0	0	0	100	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000	.500	.500

Transportation Data Corporation

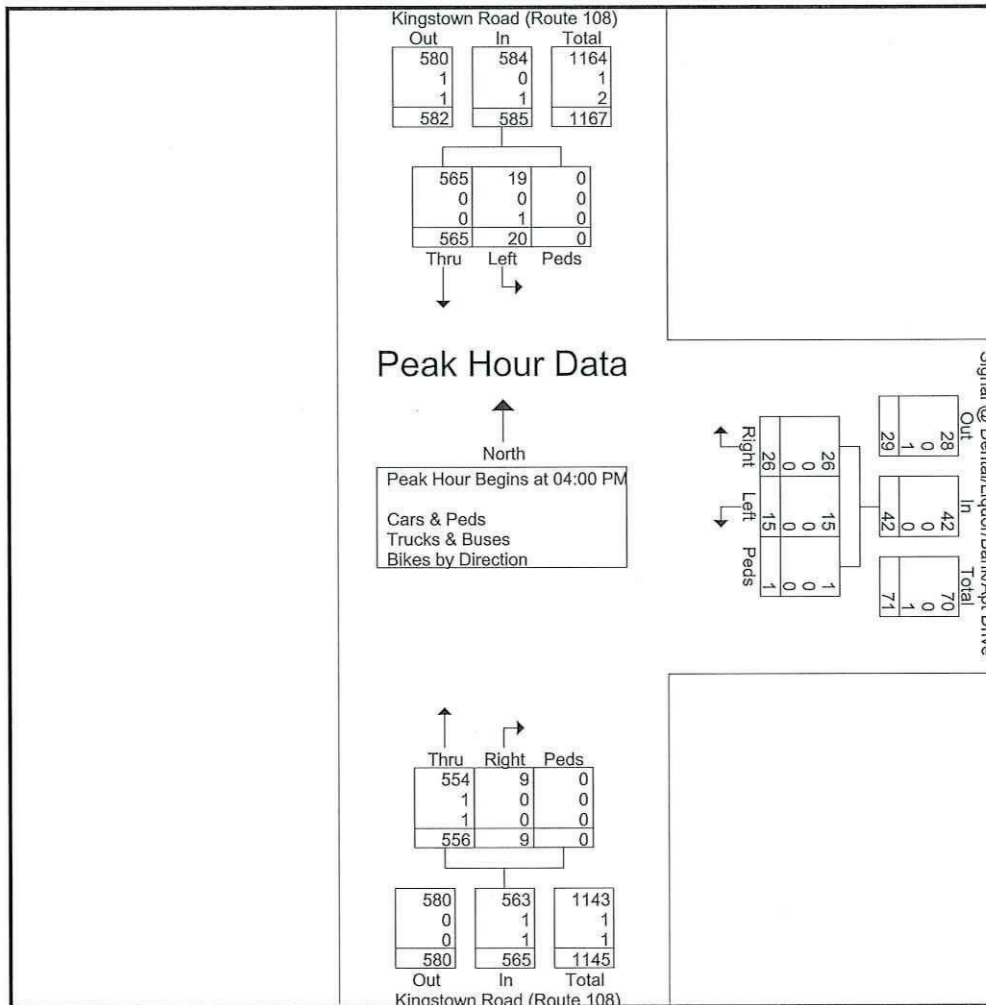
Mario Perone, mperone1@verizon.net

tel (781) 587-0086 cell (781) 439-4999

N/S: Kingstown Road (Route 108)
 E: #673-691 Signalized Access Road
 City, State: Wakefield, RI
 Client: Pare/J. Shevlin

File Name : 05744BB
 Site Code : 23048.00
 Start Date : 8/16/2023
 Page No : 1

Start Time	Kingstown Road (Route 108) From North				Signal @ Dental/Liquor/Bank/Apt Drive From East				Kingstown Road (Route 108) From South				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:00 PM													
04:00 PM	150	4	0	154	5	6	0	11	1	150	0	151	316
04:15 PM	128	6	0	134	3	2	1	6	2	127	0	129	269
04:30 PM	148	4	0	152	8	2	0	10	3	131	0	134	296
04:45 PM	139	6	0	145	10	5	0	15	3	148	0	151	311
Total Volume	565	20	0	585	26	15	1	42	9	556	0	565	1192
% App. Total	96.6	3.4	0		61.9	35.7	2.4		1.6	98.4	0		
PHF	.942	.833	.000	.950	.650	.625	.250	.700	.750	.927	.000	.935	.943
Cars & Peds	565	19	0	584	26	15	1	42	9	554	0	563	1189
% Cars & Peds	100	95.0	0	99.8	100	100	100	100	100	99.6	0	99.6	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	0.2	0	0.2	0.1
Bikes by Direction	0	1	0	1	0	0	0	0	0	1	0	1	2
% Bikes by Direction	0	5.0	0	0.2	0	0	0	0	0	0.2	0	0.2	0.2



School Year Counts

October 2023

Pare Corporation

8 Blackstone Valley Place
 Lincoln, RI, 02865
 401-334-4100
 www.parecorp.com

NB/SB: Kingstown Road
 EB/WB: Main Street/Old Tower Hill Road
 City/State: South Kingstown, RI
 Taken By: BSO

File Name : AM Peak - Kingstown_Old Tower
 Site Code : 23142.00
 Start Date : 10/25/2023
 Page No : 1

Groups Printed- Cars/Peds - Trucks - Bikes

Start Time	Kingstown Road From North					Old Tower Hill Road From East					Kingstown Road From South					Main Street From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
07:00 AM	5	25	29	0	59	36	22	4	0	62	2	54	2	0	58	7	38	18	0	63	242
07:15 AM	14	54	59	0	127	80	33	11	2	126	15	86	9	0	110	10	46	28	1	85	448
07:30 AM	11	66	56	0	133	45	51	15	2	113	14	90	13	0	117	5	53	8	0	66	429
07:45 AM	10	56	60	0	126	45	39	16	0	100	24	91	7	0	122	5	54	12	0	71	419
Total	40	201	204	0	445	206	145	46	4	401	55	321	31	0	407	27	191	66	1	285	1538
08:00 AM	7	56	47	0	110	36	67	18	0	121	16	169	12	0	197	11	53	15	0	79	507
08:15 AM	9	58	50	0	117	38	69	16	0	123	18	176	14	0	208	15	59	10	0	84	532
08:30 AM	6	53	33	0	92	42	55	23	0	120	22	84	13	1	120	16	64	25	1	106	438
08:45 AM	6	69	46	0	121	50	66	16	0	132	18	85	15	0	118	5	44	12	0	61	432
Total	28	236	176	0	440	166	257	73	0	496	74	514	54	1	643	47	220	62	1	330	1909
Grand Total	68	437	380	0	885	372	402	119	4	897	129	835	85	1	1050	74	411	128	2	615	3447
Apprch %	7.7	49.4	42.9	0		41.5	44.8	13.3	0.4		12.3	79.5	8.1	0.1		12	66.8	20.8	0.3		
Total %	2	12.7	11	0	25.7	10.8	11.7	3.5	0.1	26	3.7	24.2	2.5	0	30.5	2.1	11.9	3.7	0.1	17.8	
Cars/Peds	62	427	363	0	852	372	396	119	4	891	129	821	85	1	1036	64	403	128	2	597	3376
% Cars/Peds	91.2	97.7	95.5	0	96.3	100	98.5	100	100	99.3	100	98.3	100	100	98.7	86.5	98.1	100	100	97.1	97.9
Trucks	5	8	16	0	29	0	6	0	0	6	0	12	0	0	12	10	8	0	0	18	65
% Trucks	7.4	1.8	4.2	0	3.3	0	1.5	0	0	0.7	0	1.4	0	0	1.1	13.5	1.9	0	0	2.9	1.9
Bikes	1	2	1	0	4	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	6
% Bikes	1.5	0.5	0.3	0	0.5	0	0	0	0	0	0	0.2	0	0	0.2	0	0	0	0	0	0.2

Pare Corporation

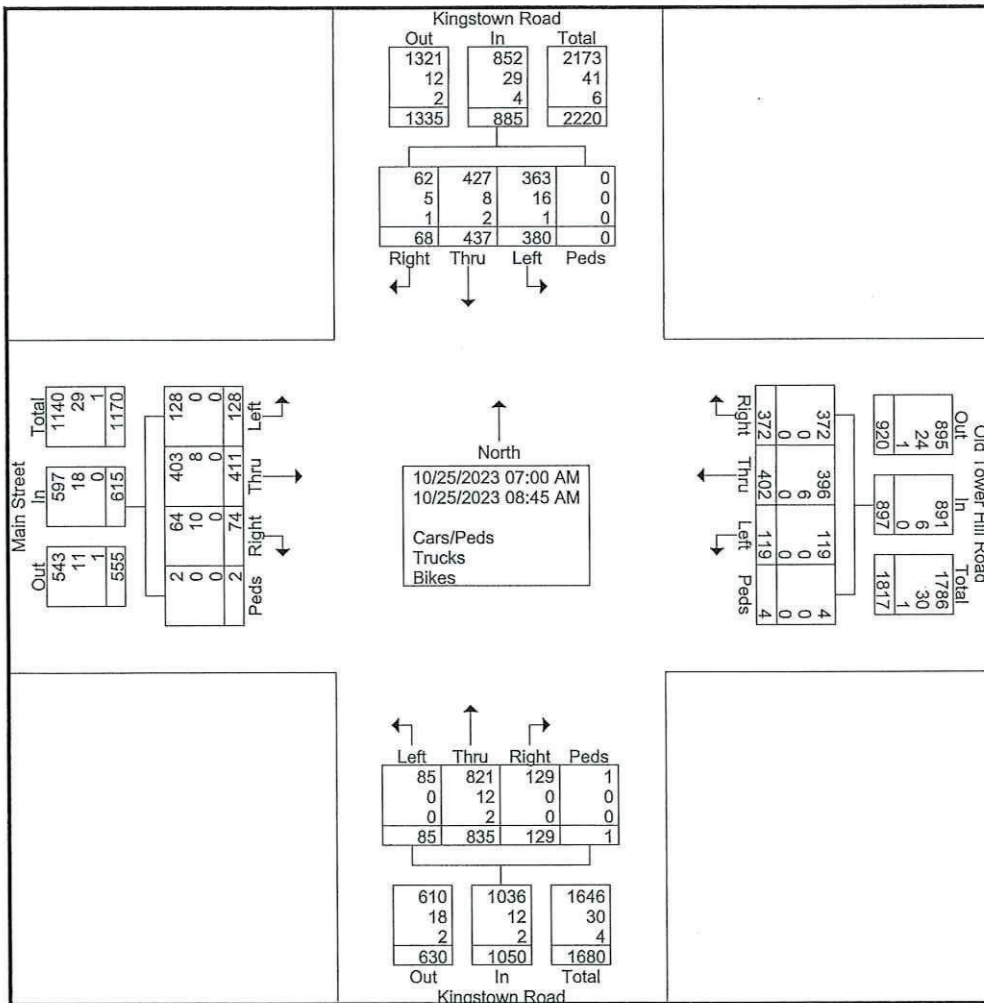
8 Blackstone Valley Place
 Lincoln, RI, 02865
 401-334-4100
 www.parecorp.com

File Name : AM Peak - Kingstown_Old Tower

Site Code : 23142.00

Start Date : 10/25/2023

Page No : 2

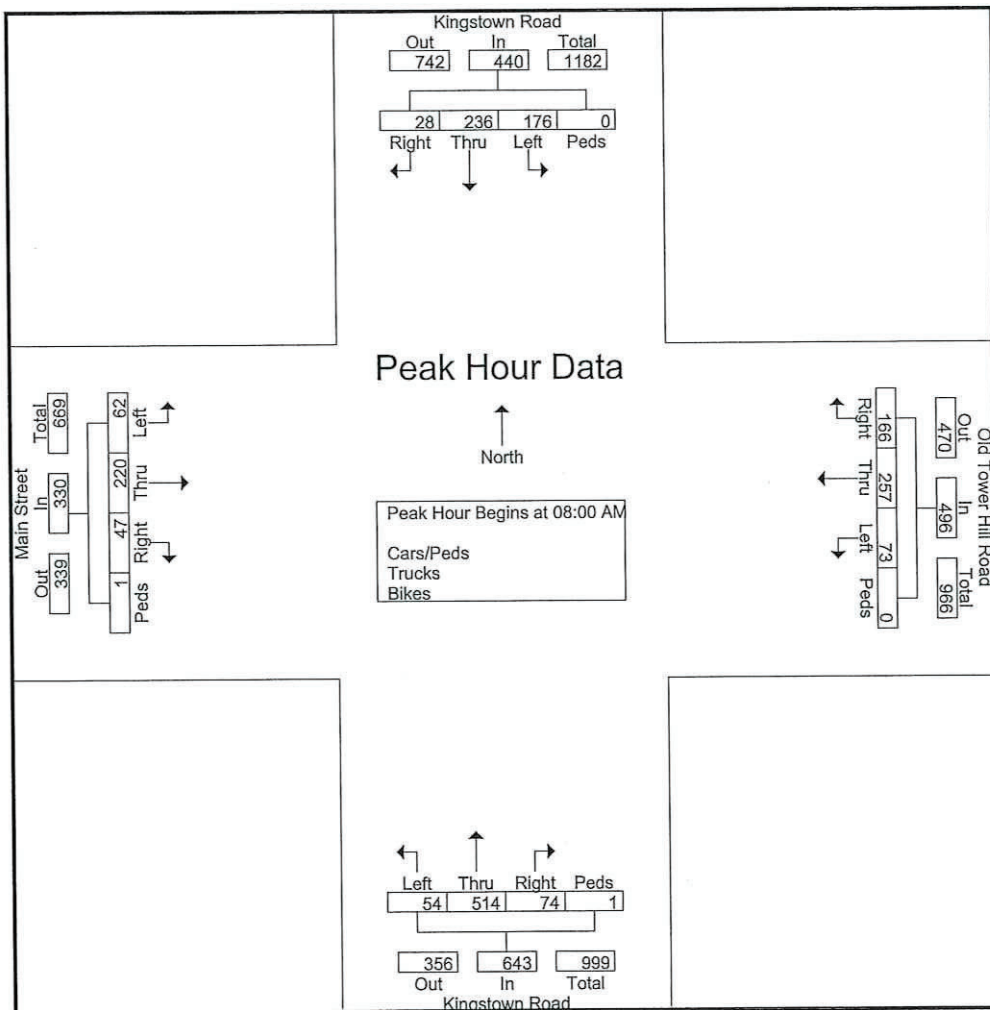


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File Name : AM Peak - Kingstown_Old Tower
 Site Code : 23142.00
 Start Date : 10/25/2023
 Page No : 3

Start Time	Kingstown Road From North					Old Tower Hill Road From East					Kingstown Road From South					Main Street From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	7	56	47	0	110	36	67	18	0	121	16	169	12	0	197	11	53	15	0	79	507
08:15 AM	9	58	50	0	117	38	69	16	0	123	18	176	14	0	208	15	59	10	0	84	532
08:30 AM	6	53	33	0	92	42	55	23	0	120	22	84	13	1	120	16	64	25	1	106	438
08:45 AM	6	69	46	0	121	50	66	16	0	132	18	85	15	0	118	5	44	12	0	61	432
Total Volume	28	236	176	0	440	166	257	73	0	496	74	514	54	1	643	47	220	62	1	330	1909
% App. Total	6.4	53.6	40	0		33.5	51.8	14.7	0		11.5	79.9	8.4	0.2		14.2	66.7	18.8	0.3		
PHF	.778	.855	.880	.000	.909	.830	.931	.793	.000	.939	.841	.730	.900	.250	.773	.734	.859	.620	.250	.778	.897

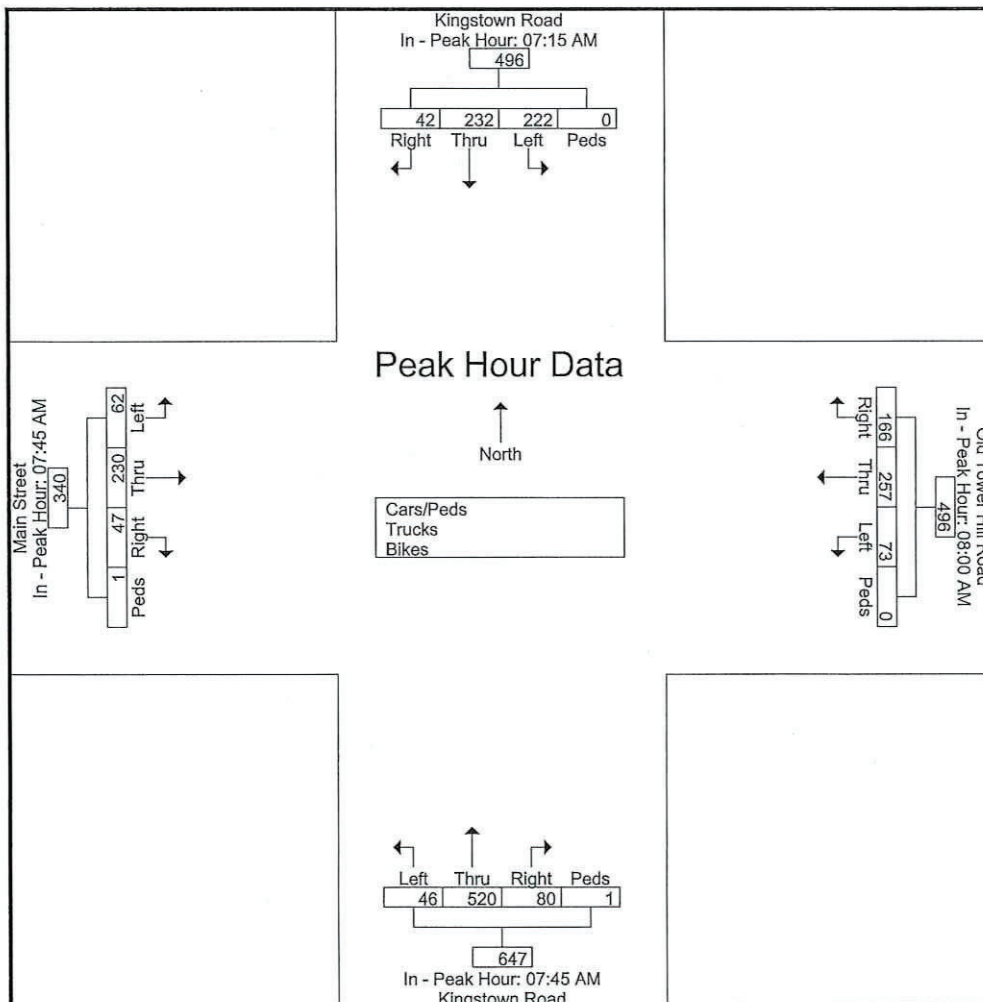


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File Name : AM Peak - Kingstown_Old Tower
 Site Code : 23142.00
 Start Date : 10/25/2023
 Page No : 4

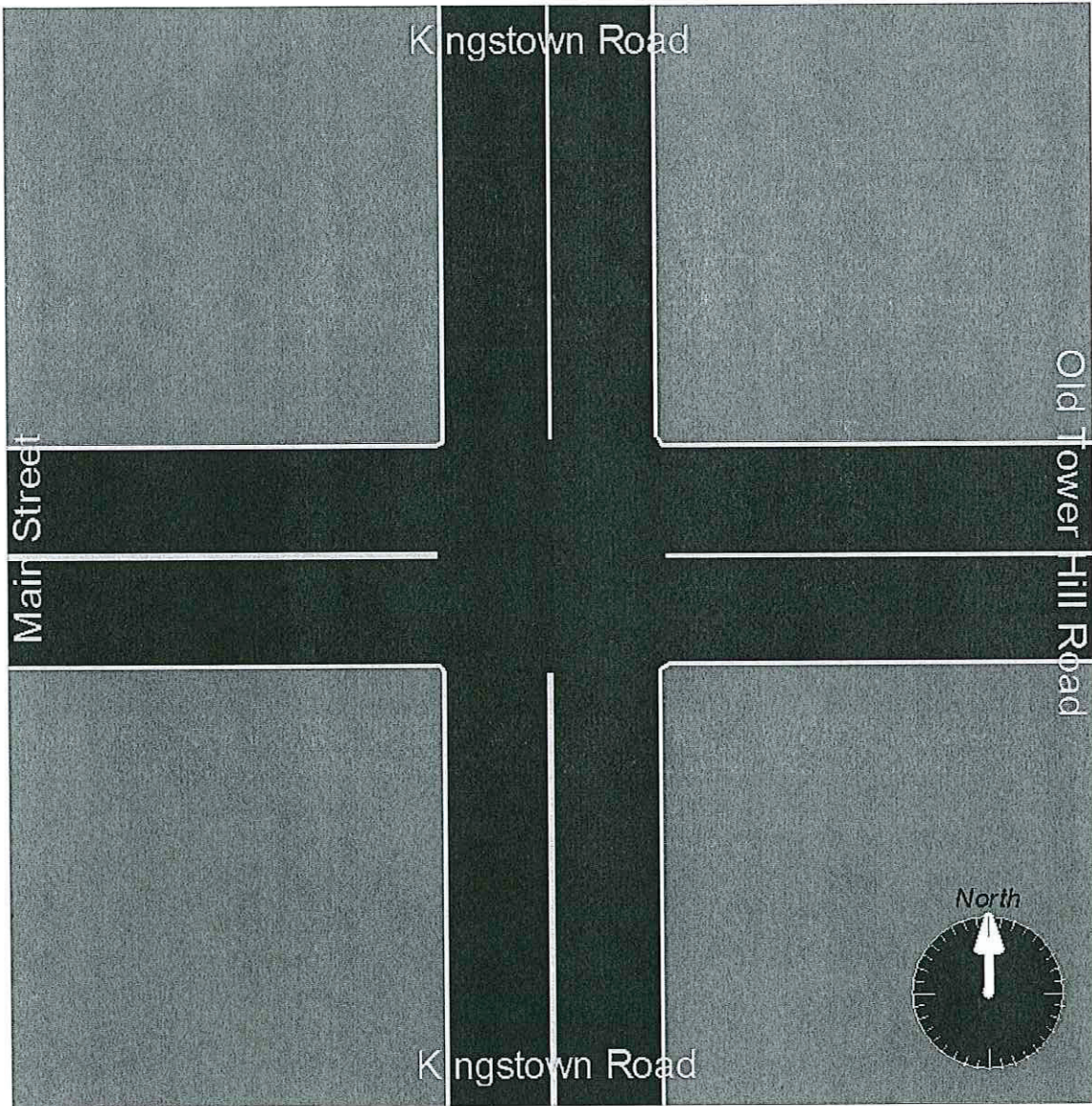
Start Time	Kingstown Road From North					Old Tower Hill Road From East					Kingstown Road From South					Main Street From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	07:15 AM					08:00 AM					07:45 AM					07:45 AM					
+0 mins.	14	54	59	0	127	36	67	18	0	121	24	91	7	0	122	5	54	12	0	71	
+15 mins.	11	66	56	0	133	38	69	16	0	123	16	169	12	0	197	11	53	15	0	79	
+30 mins.	10	56	60	0	126	42	55	23	0	120	18	176	14	0	208	15	59	10	0	84	
+45 mins.	7	56	47	0	110	50	66	16	0	132	22	84	13	1	120	16	64	25	1	106	
Total Volume	42	232	222	0	496	166	257	73	0	496	80	520	46	1	647	47	230	62	1	340	
% App. Total	8.5	46.8	44.8	0		33.5	51.8	14.7	0		12.4	80.4	7.1	0.2		13.8	67.6	18.2	0.3		
PHF	.750	.879	.925	.000	.932	.830	.931	.793	.000	.939	.833	.739	.821	.250	.778	.734	.898	.620	.250	.802	



Pare Corporation

8 Blackstone Valley Place
Lincoln, RI, 02865
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File Name : AM Peak - Kingstown_Old Tower
Site Code : 23142.00
Start Date : 10/25/2023
Page No : 5



Pare Corporation

8 Blackstone Valley Place
 Lincoln, RI, 02865
 401-334-4100
 www.parecorp.com

NB/SB: Kingstown Road
 EB/WB: Main Street/ Old Tower Hill Road
 City/State: South Kingstown, RI
 Taken By: BSO

File Name : PM Peak - Kingstown_Old Tower
 Site Code : 23142.00
 Start Date : 10/25/2023
 Page No : 1

Groups Printed- Cars/Peds - Trucks/Buses - Bikes

Start Time	Kingstown Road From North					Old Tower Hill Road From East					Kingstown Road From South					Main Street From West					Int. Total	
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total		
04:00 PM	11	160	79	2	252	67	84	24	0	175	49	119	27	1	196	27	88	27	0	142	765	
04:15 PM	10	148	76	0	234	76	98	43	0	217	39	140	28	1	208	33	74	19	1	127	786	
04:30 PM	33	134	73	6	246	73	89	37	1	200	28	120	18	1	167	20	91	31	3	145	758	
04:45 PM	15	137	81	2	235	84	79	29	1	193	38	98	14	0	150	10	73	15	1	99	677	
Total	69	579	309	10	967	300	350	133	2	785	154	477	87	3	721	90	326	92	5	513	2986	
05:00 PM	5	188	71	0	264	90	93	54	1	238	40	116	17	0	173	20	138	32	0	190	865	
05:15 PM	4	163	89	2	258	71	85	50	0	206	45	83	15	0	143	27	68	36	1	132	739	
05:30 PM	10	176	93	0	279	72	86	45	0	203	58	129	21	0	208	38	89	16	1	144	834	
05:45 PM	9	124	61	1	195	77	89	34	2	202	30	80	18	0	128	7	79	21	0	107	632	
Total	28	651	314	3	996	310	353	183	3	849	173	408	71	0	652	92	374	105	2	573	3070	
Grand Total	97	1230	623	13	1963	610	703	316	5	1634	327	885	158	3	1373	182	700	197	7	1086	6056	
Apprch %	4.9	62.7	31.7	0.7		37.3	43	19.3	0.3		23.8	64.5	11.5	0.2		16.8	64.5	18.1	0.6			
Total %	1.6	20.3	10.3	0.2	32.4	10.1	11.6	5.2	0.1	27	5.4	14.6	2.6	0	22.7	3	11.6	3.3	0.1	17.9		
Cars/Peds	93	1223	617	13	1946	607	703	314	5	1629	326	879	158	3	1366	177	700	197	7	1081	6022	
% Cars/Peds	95.9	99.4	99	100	99.1	99.5	100	99.4	100	99.7	99.7	99.3	100	100	99.5	97.3	100	100	100	99.5	99.4	
Trucks/Buses	2	6	5	0	13	0	0	2	0	2	0	6	0	0	6	5	0	0	0	0	5	26
% Trucks/Buses	2.1	0.5	0.8	0	0.7	0	0	0.6	0	0.1	0	0.7	0	0	0.4	2.7	0	0	0	0	0.5	0.4
Bikes	2	1	1	0	4	3	0	0	0	3	1	0	0	0	1	0	0	0	0	0	0	8
% Bikes	2.1	0.1	0.2	0	0.2	0.5	0	0	0	0.2	0.3	0	0	0	0.1	0	0	0	0	0	0	0.1

Pare Corporation

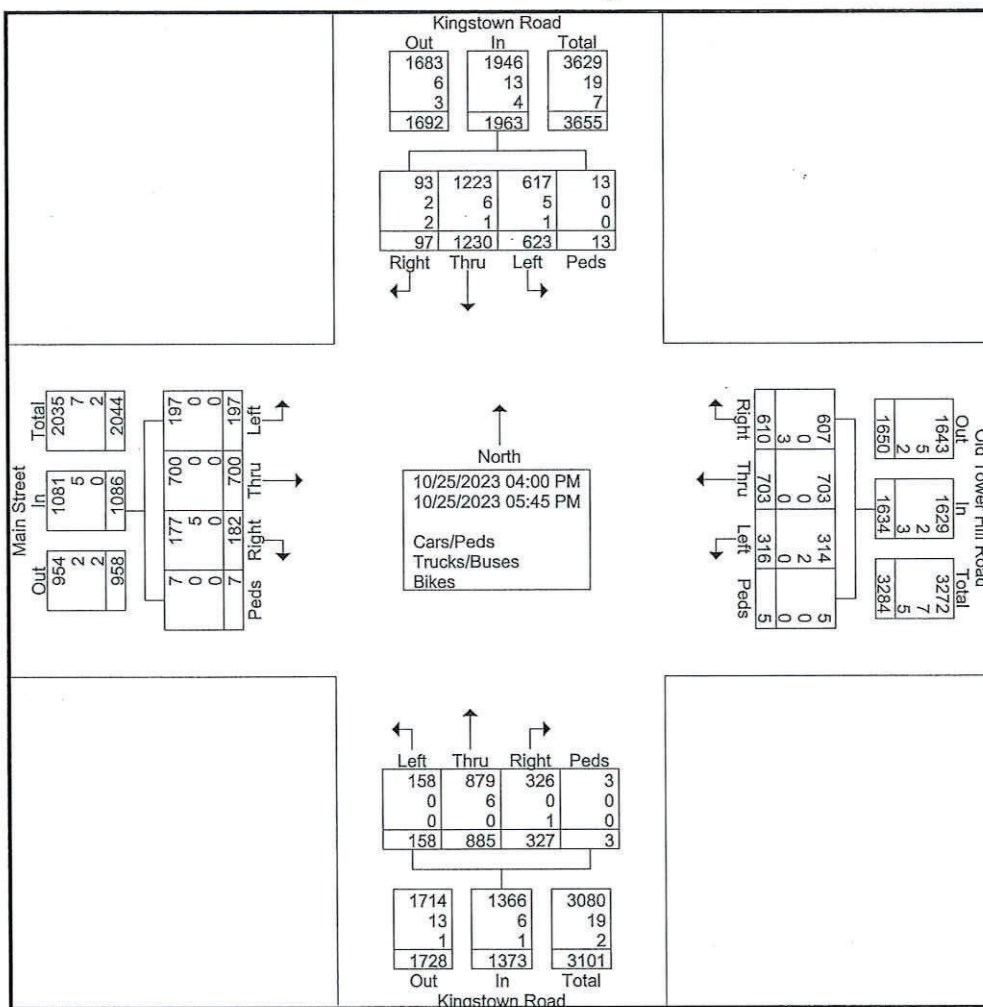
8 Blackstone Valley Place
 Lincoln, RI, 02865
 401-334-4100
 www.parecorp.com

File Name : PM Peak - Kingstown_Old Tower

Site Code : 23142.00

Start Date : 10/25/2023

Page No : 2

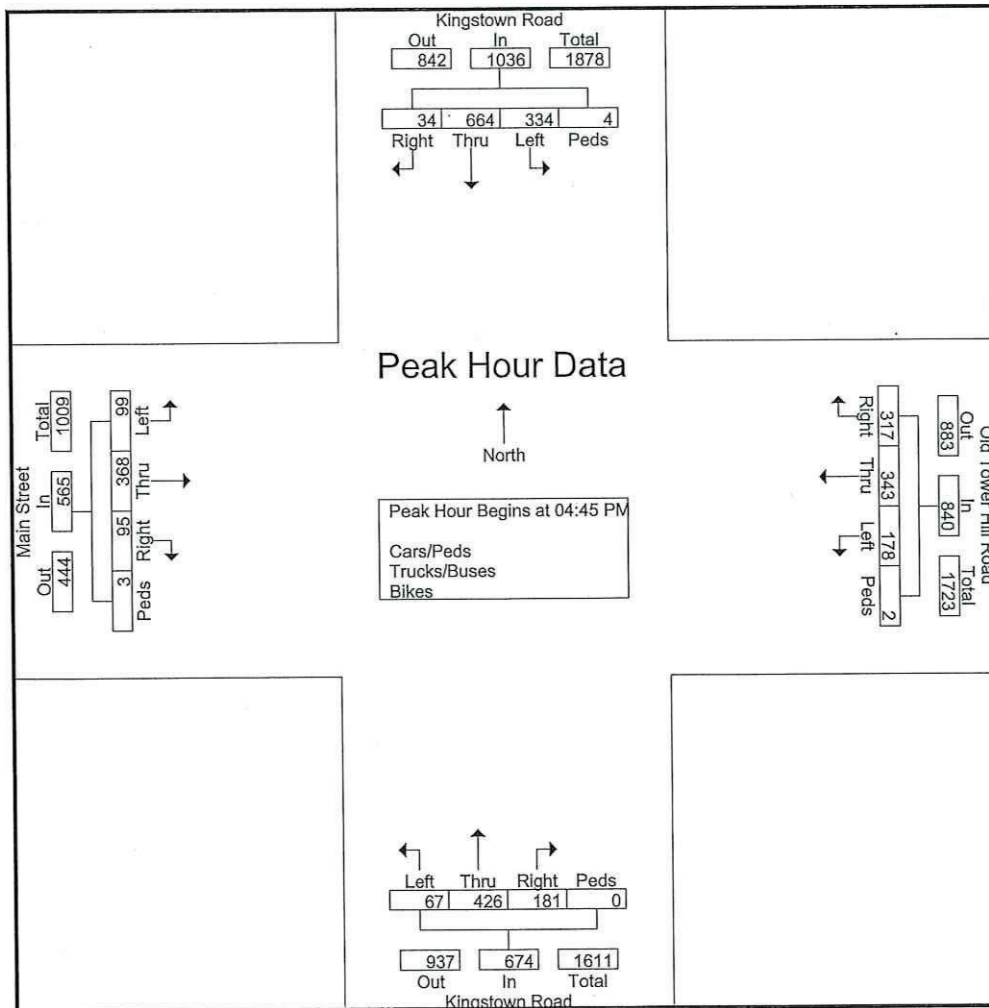


Pare Corporation

8 Blackstone Valley Place
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File Name : PM Peak - Kingstown_Old Tower
 Site Code : 23142.00
 Start Date : 10/25/2023
 Page No : 3

Start Time	Kingstown Road From North					Old Tower Hill Road From East					Kingstown Road From South					Main Street From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	15	137	81	2	235	84	79	29	1	193	38	98	14	0	150	10	73	15	1	99	677
05:00 PM	5	188	71	0	264	90	93	54	1	238	40	116	17	0	173	20	138	32	0	190	865
05:15 PM	4	163	89	2	258	71	85	50	0	206	45	83	15	0	143	27	68	36	1	132	739
05:30 PM	10	176	93	0	279	72	86	45	0	203	58	129	21	0	208	38	89	16	1	144	834
Total Volume	34	664	334	4	1036	317	343	178	2	840	181	426	67	0	674	95	368	99	3	565	3115
% App. Total	3.3	64.1	32.2	0.4		37.7	40.8	21.2	0.2		26.9	63.2	9.9	0		16.8	65.1	17.5	0.5		
PHF	.567	.883	.898	.500	.928	.881	.922	.824	.500	.882	.780	.826	.798	.000	.810	.625	.667	.688	.750	.743	.900



Pare Corporation

8 Blackstone Valley Place
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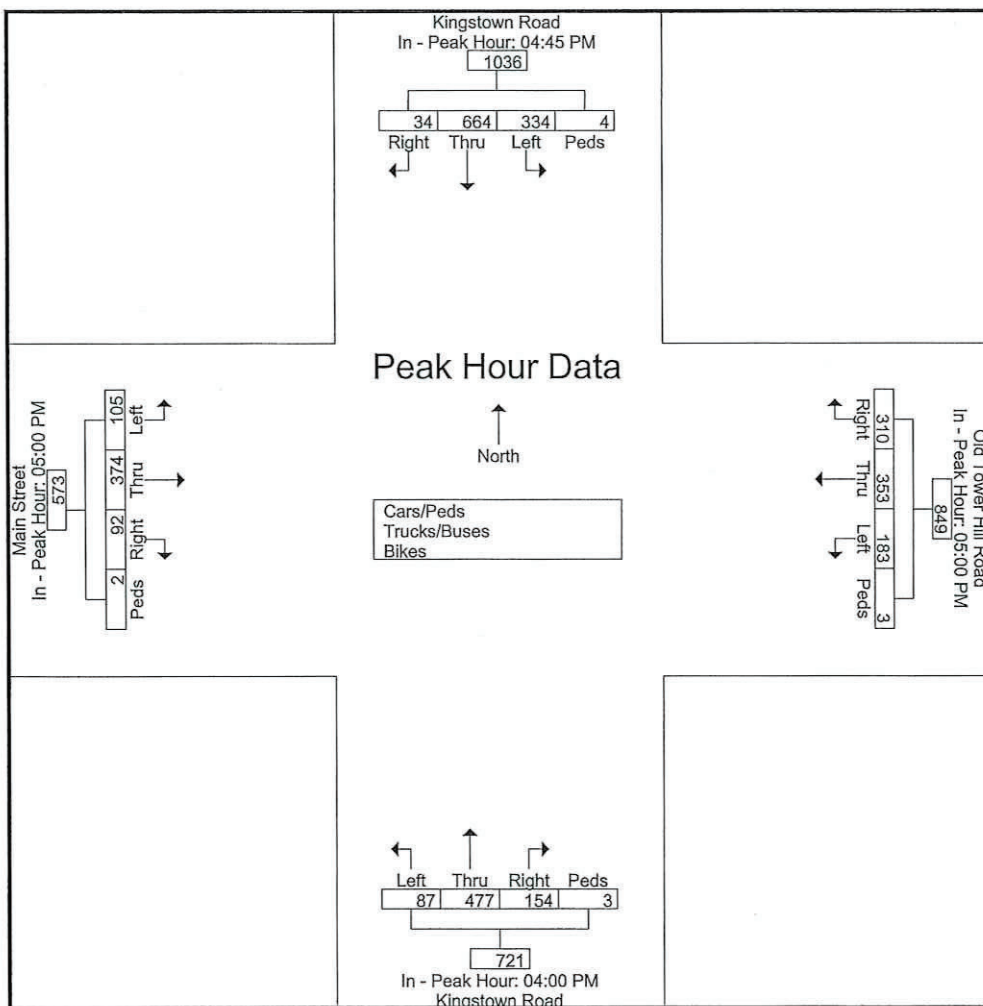
File Name : PM Peak - Kingstown_Old Tower
 Site Code : 23142.00
 Start Date : 10/25/2023
 Page No : 4

Start Time	Kingstown Road From North					Old Tower Hill Road From East					Kingstown Road From South					Main Street From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	

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

Peak Hour for Each Approach Begins at:

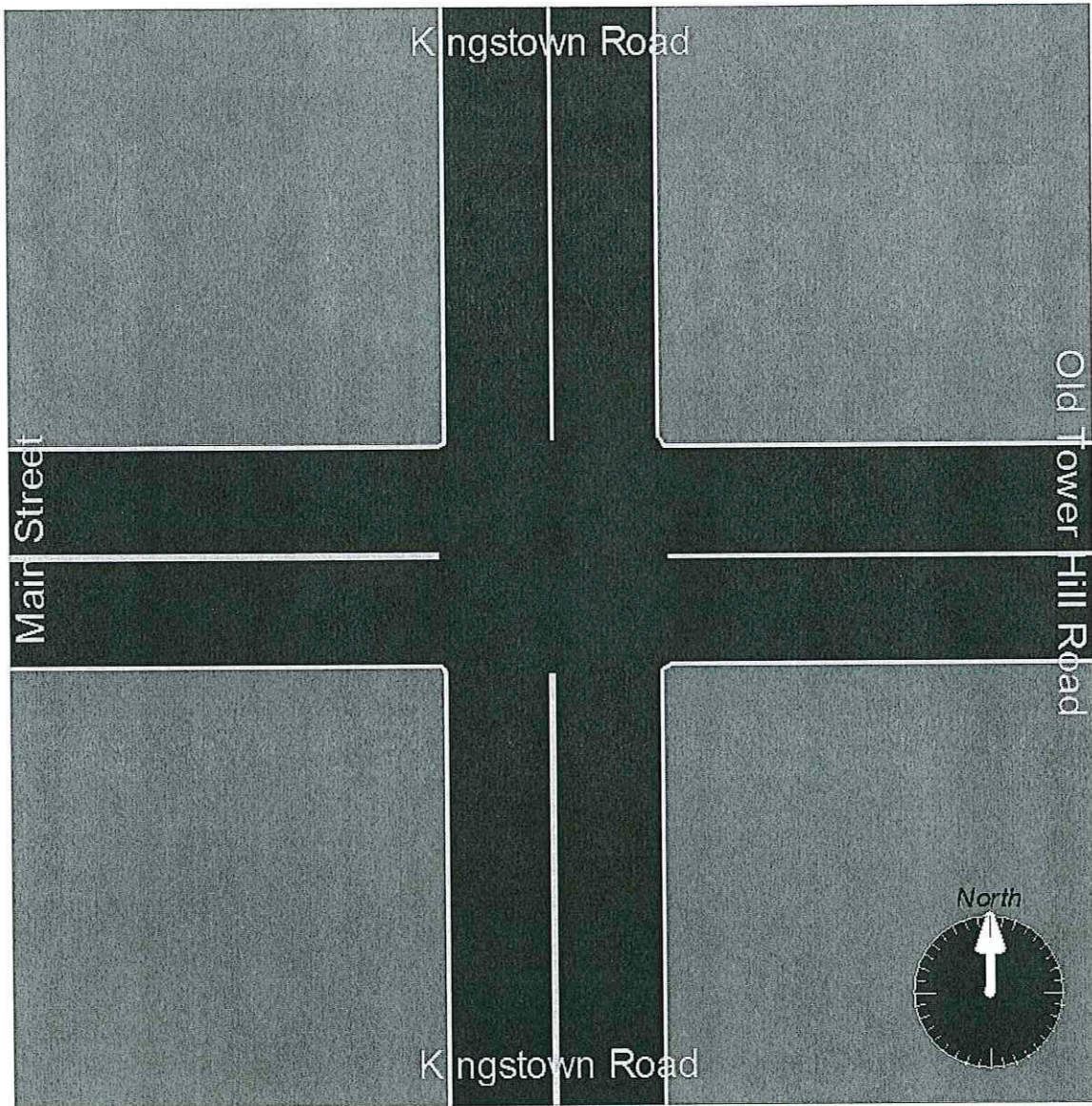
	04:45 PM					05:00 PM					04:00 PM					05:00 PM				
+0 mins.	15	137	81	2	235	90	93	54	1	238	49	119	27	1	196	20	138	32	0	190
+15 mins.	5	188	71	0	264	71	85	50	0	206	39	140	28	1	208	27	68	36	1	132
+30 mins.	4	163	89	2	258	72	86	45	0	203	28	120	18	1	167	38	89	16	1	144
+45 mins.	10	176	93	0	279	77	89	34	2	202	38	98	14	0	150	7	79	21	0	107
Total Volume	34	664	334	4	1036	310	353	183	3	849	154	477	87	3	721	92	374	105	2	573
% App. Total	3.3	64.1	32.2	0.4		36.5	41.6	21.6	0.4		21.4	66.2	12.1	0.4		16.1	65.3	18.3	0.3	
PHF	.567	.883	.898	.500	.928	.861	.949	.847	.375	.892	.786	.852	.777	.750	.867	.605	.678	.729	.500	.754



Pare Corporation

8 Blackstone Valley Place
Lincoln, RI, 02865
401-334-4100
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File Name : PM Peak - Kingstown_Old Tower
Site Code : 23142.00
Start Date : 10/25/2023
Page No : 5



Pare Corporation

8 Blackstone Valley Place
 Lincoln, RI, 02865
 401-334-4100
 www.parecorp.com

NB/SB: Kingstown Road
 EB/WB: Plaza Driveway
 City/State: South Kingstown, RI
 Taken By: EY

File Name : AM Peak - Kingstown_Driveway
 Site Code : 23142.00
 Start Date : 10/25/2023
 Page No : 1

Groups Printed- Cars/Peds - Trucks/Buses - Bikes

Start Time	Kingstown Road From North					Plaza Driveway From East					Kingstown Road From South					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
07:00 AM	0	68	1	0	69	0	0	2	0	2	1	93	0	1	95	166
07:15 AM	0	140	3	0	143	1	0	0	2	3	2	192	0	1	195	341
07:30 AM	0	126	1	0	127	0	0	0	0	0	0	136	0	0	136	263
07:45 AM	0	111	4	0	115	2	0	1	1	4	1	145	0	0	146	265
Total	0	445	9	0	454	3	0	3	3	9	4	566	0	2	572	1035
08:00 AM	0	117	2	0	119	2	0	2	0	4	2	203	0	1	206	329
08:15 AM	0	96	4	0	100	1	0	2	2	5	3	216	0	1	220	325
08:30 AM	0	95	5	0	100	1	0	5	0	6	1	131	0	1	133	239
08:45 AM	0	109	5	0	114	5	0	2	0	7	0	136	0	0	136	257
Total	0	417	16	0	433	9	0	11	2	22	6	686	0	3	695	1150
Grand Total	0	862	25	0	887	12	0	14	5	31	10	1252	0	5	1267	2185
Apprch %	0	97.2	2.8	0		38.7	0	45.2	16.1		0.8	98.8	0	0.4		
Total %	0	39.5	1.1	0	40.6	0.5	0	0.6	0.2	1.4	0.5	57.3	0	0.2	58	
Cars/Peds	0	829	23	0	852	12	0	12	5	29	7	1233	0	5	1245	2126
% Cars/Peds	0	96.2	92	0	96.1	100	0	85.7	100	93.5	70	98.5	0	100	98.3	97.3
Trucks/Buses	0	29	1	0	30	0	0	1	0	1	2	18	0	0	20	51
% Trucks/Buses	0	3.4	4	0	3.4	0	0	7.1	0	3.2	20	1.4	0	0	1.6	2.3
Bikes	0	4	1	0	5	0	0	1	0	1	1	1	0	0	2	8
% Bikes	0	0.5	4	0	0.6	0	0	7.1	0	3.2	10	0.1	0	0	0.2	0.4

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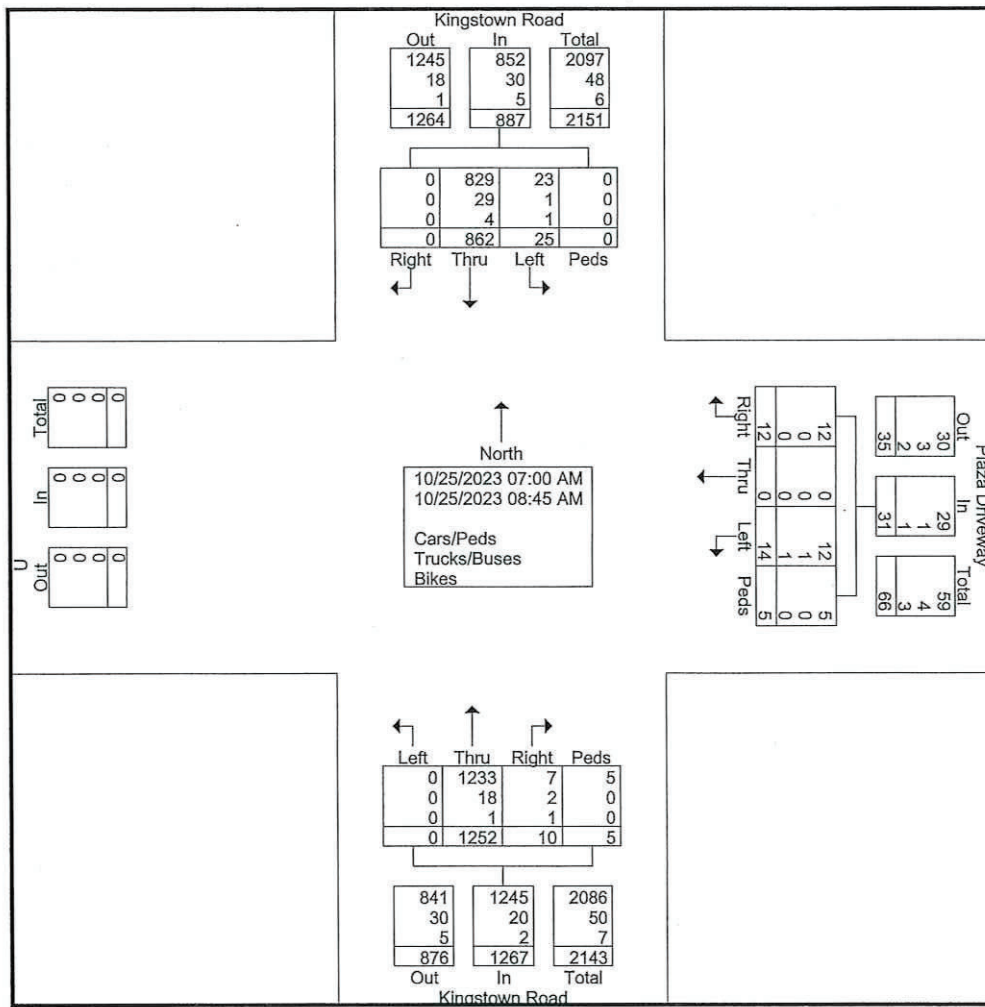
8 Blackstone Valley Place
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File Name : AM Peak - Kingstown_Driveway

Site Code : 23142.00

Start Date : 10/25/2023

Page No : 2

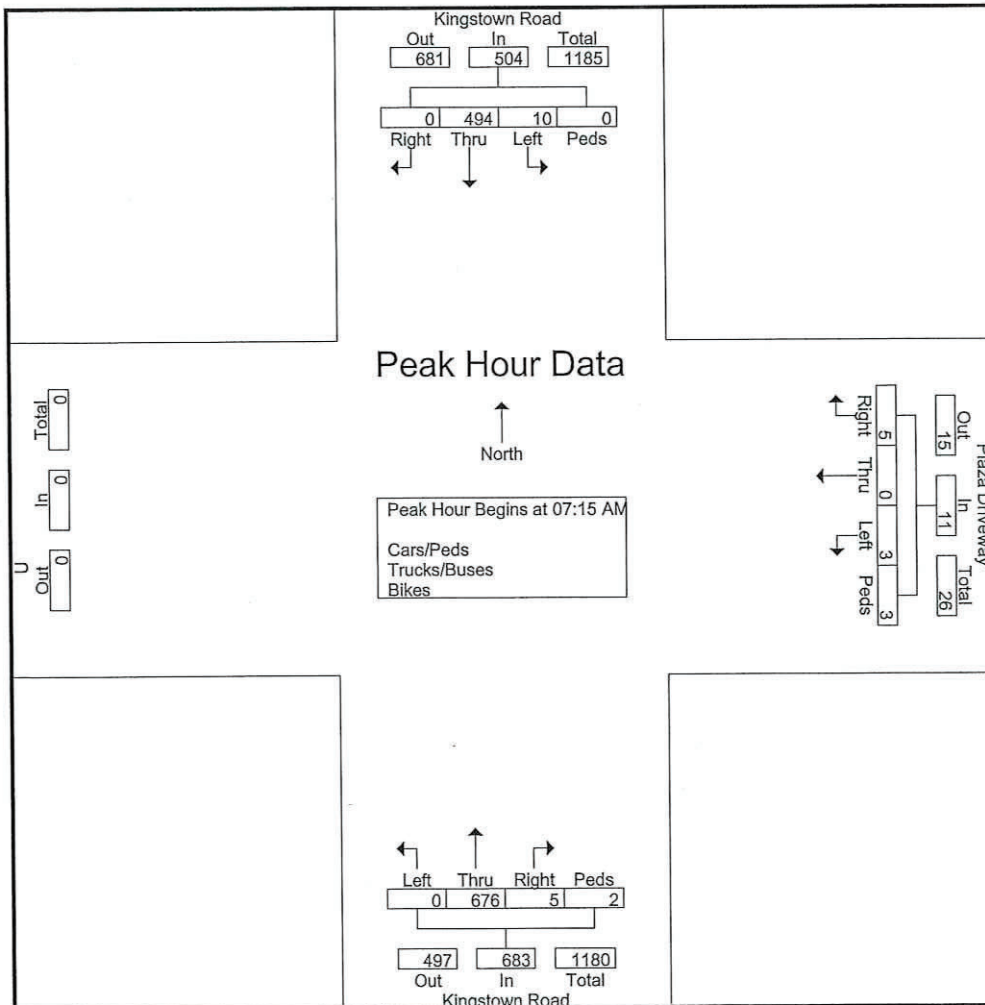


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File Name : AM Peak - Kingstown_Driveway
 Site Code : 23142.00
 Start Date : 10/25/2023
 Page No : 3

Start Time	Kingstown Road From North					Plaza Driveway From East					Kingstown Road From South					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																
Peak Hour for Entire Intersection Begins at 07:15 AM																
07:15 AM	0	140	3	0	143	1	0	0	2	3	2	192	0	1	195	341
07:30 AM	0	126	1	0	127	0	0	0	0	0	0	136	0	0	136	263
07:45 AM	0	111	4	0	115	2	0	1	1	4	1	145	0	0	146	265
08:00 AM	0	117	2	0	119	2	0	2	0	4	2	203	0	1	206	329
Total Volume	0	494	10	0	504	5	0	3	3	11	5	676	0	2	683	1198
% App. Total	0	98	2	0		45.5	0	27.3	27.3		0.7	99	0	0.3		
PHF	.000	.882	.625	.000	.881	.625	.000	.375	.375	.688	.625	.833	.000	.500	.829	.878

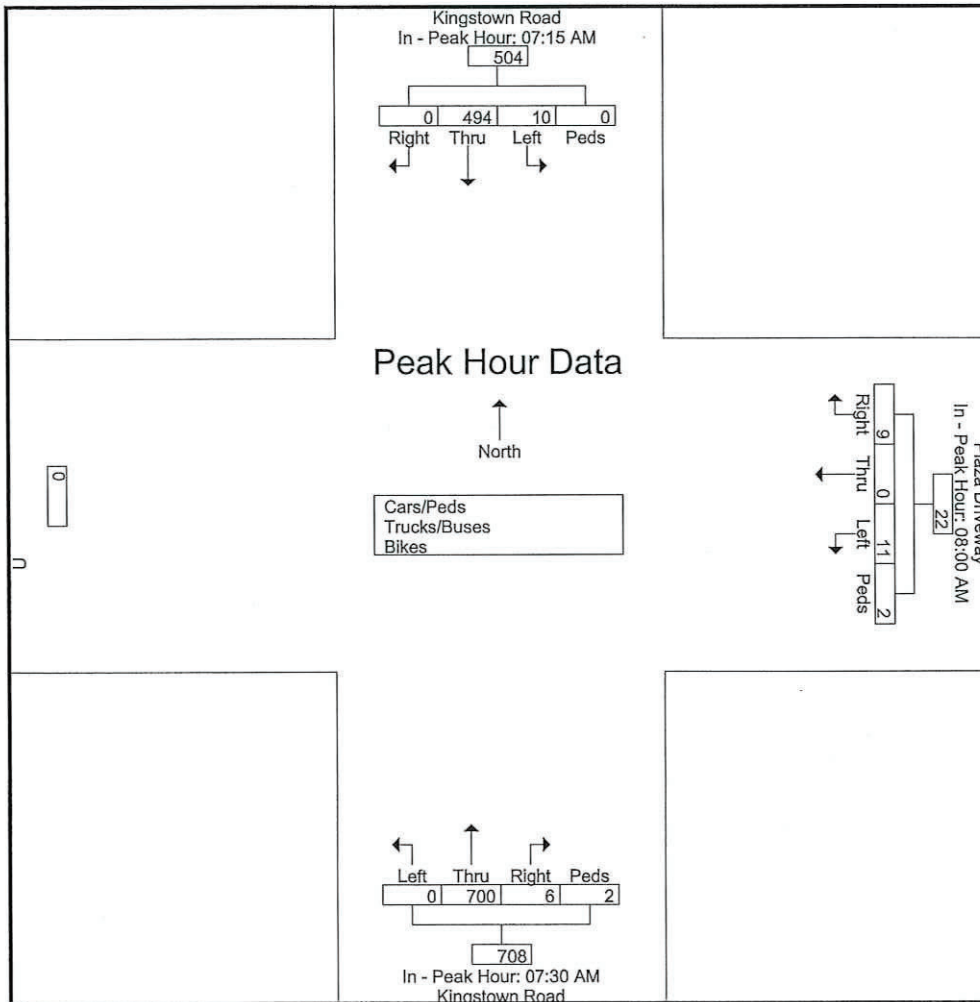


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File Name : AM Peak - Kingstown_Driveway
 Site Code : 23142.00
 Start Date : 10/25/2023
 Page No : 4

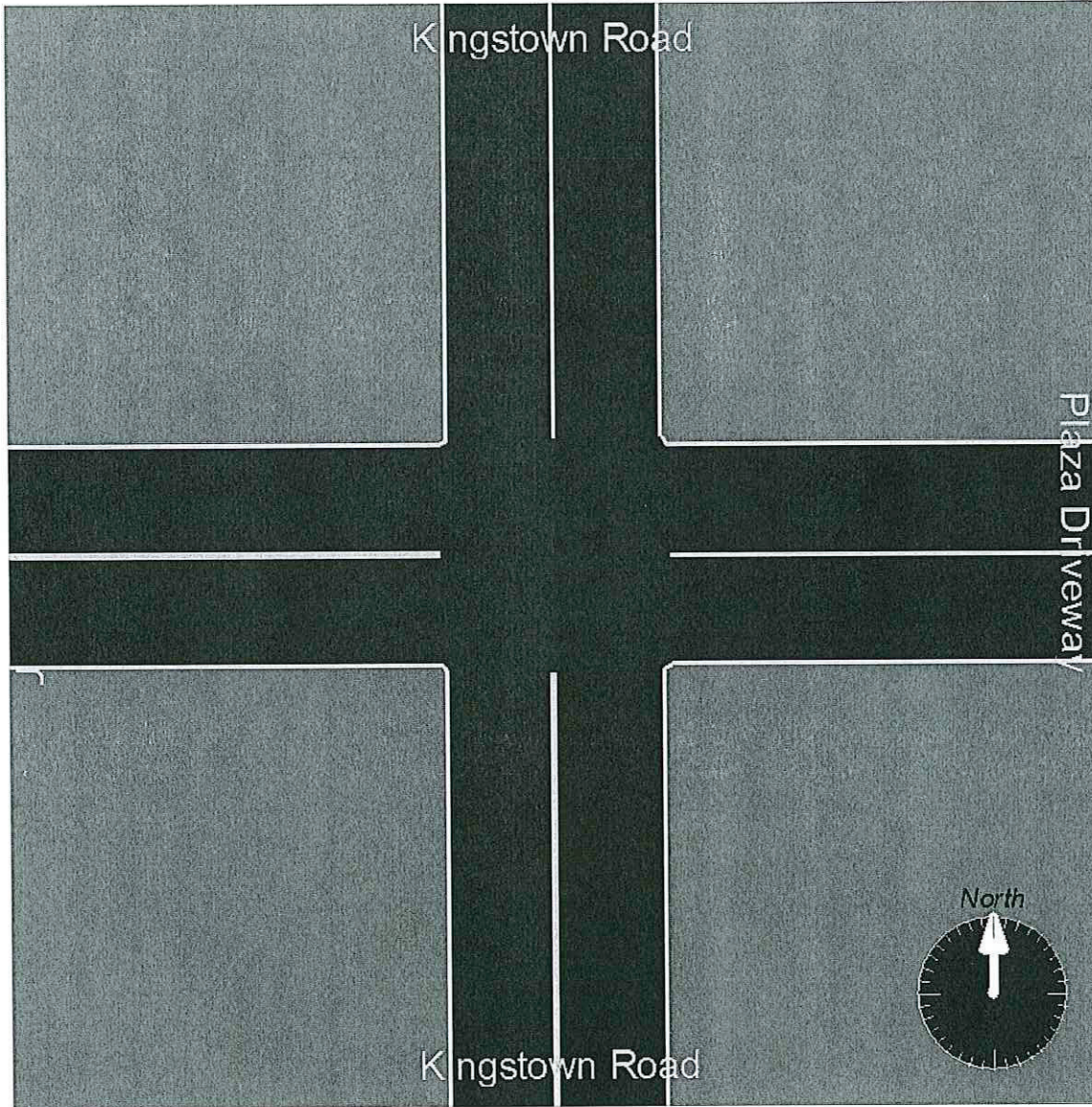
Start Time	Kingstown Road From North					Plaza Driveway From East					Kingstown Road From South					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																
Peak Hour for Each Approach Begins at:																
	07:15 AM					08:00 AM					07:30 AM					
+0 mins.	0	140	3	0	143	2	0	2	0	4	0	136	0	0	136	
+15 mins.	0	126	1	0	127	1	0	2	2	5	1	145	0	0	146	
+30 mins.	0	111	4	0	115	1	0	5	0	6	2	203	0	1	206	
+45 mins.	0	117	2	0	119	5	0	2	0	7	3	216	0	1	220	
Total Volume	0	494	10	0	504	9	0	11	2	22	6	700	0	2	708	
% App. Total	0	98	2	0		40.9	0	50	9.1		0.8	98.9	0	0.3		
PHF	.000	.882	.625	.000	.881	.450	.000	.550	.250	.786	.500	.810	.000	.500	.805	



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File Name : AM Peak - Kingstown_Driveway
Site Code : 23142.00
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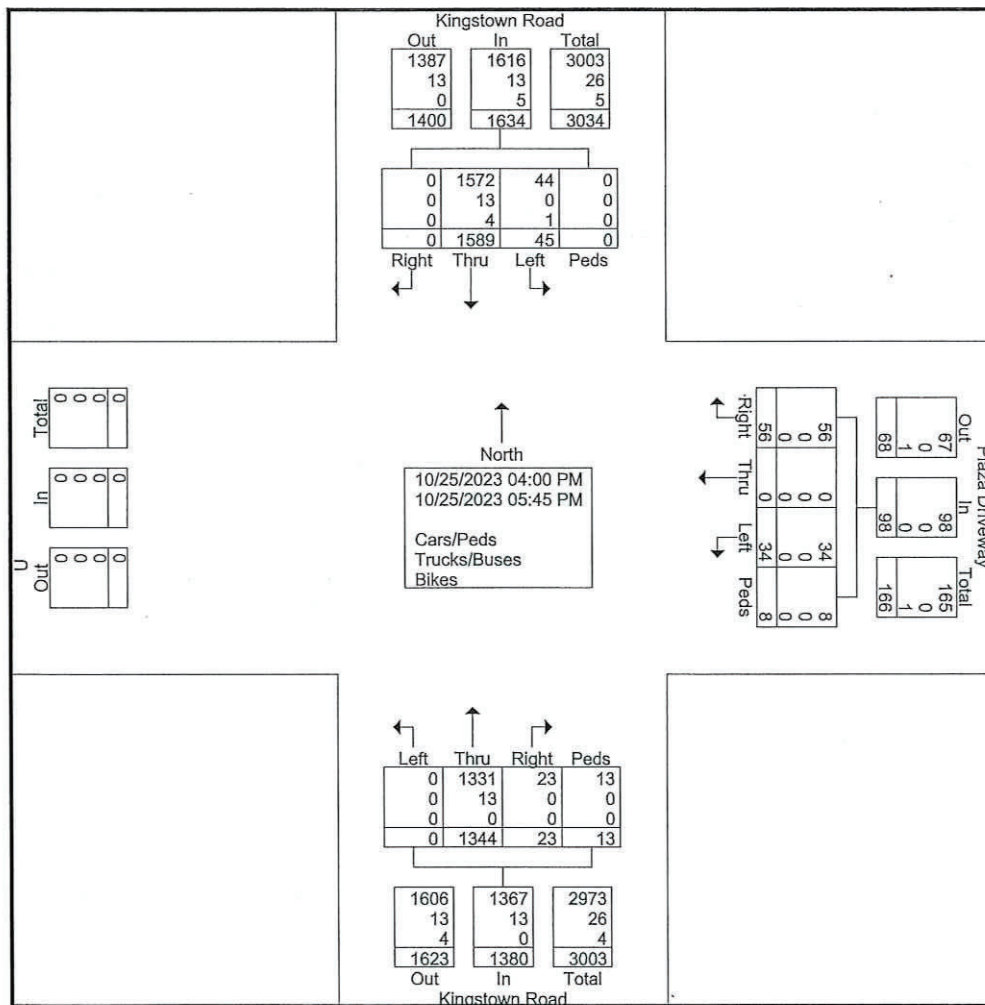
8 Blackstone Valley Place
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File Name : PM Peak - Kingstown_Driveway

Site Code : 23142.00

Start Date : 10/25/2023

Page No : 2



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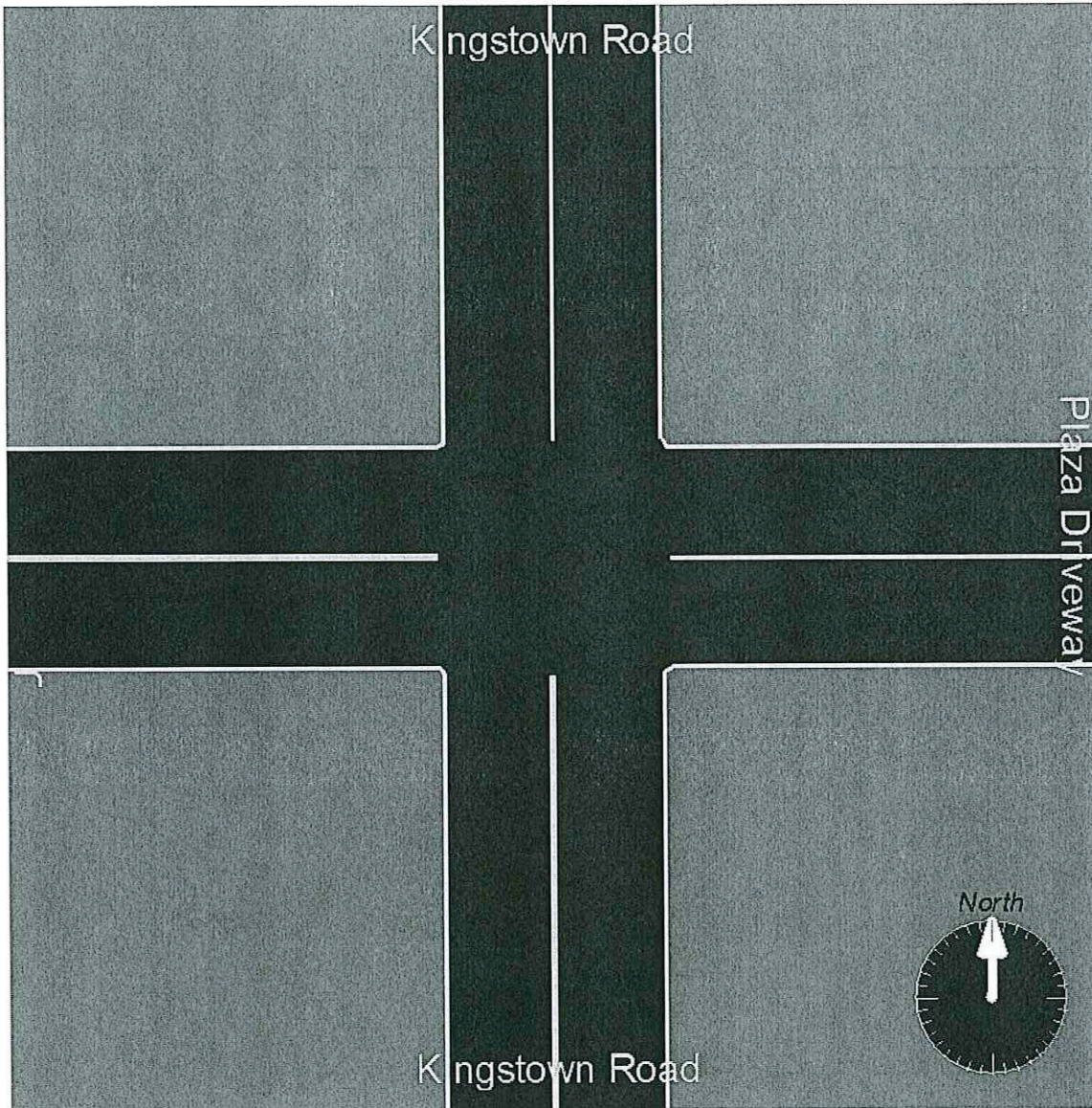
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Site Code : 23142.00

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Start Date: 10/28/2023

N/S: Kingstown Road
 E/W: Old Tower Hill Road
 City, State: North Kingstown, RI
 Taken By: HA

Groups Printed- Cars/Peds - Heavy Vehicles/Buses - Bikes

Start Time	Kingstown Road From North					Old Tower Hill Road From East					Kingstown Road From South					Old Tower Hill Road From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
11:00 AM	15	111	77	0	203	79	76	53	0	208	66	95	32	0	193	23	111	26	0	160	764
11:15 AM	7	125	69	0	201	69	76	56	0	201	65	71	26	0	162	30	96	28	0	154	718
11:30 AM	11	128	81	0	220	42	70	59	2	173	65	79	32	0	176	21	64	29	0	114	683
11:45 AM	9	116	76	0	201	71	82	63	0	216	51	94	28	1	174	21	86	41	0	148	739
Total	42	480	303	0	825	261	304	231	2	798	247	339	118	1	705	95	357	124	0	576	2904
12:00 PM	5	100	83	0	188	66	64	62	0	192	61	61	25	0	147	19	66	25	0	110	637
12:15 PM	10	113	67	0	190	61	64	69	2	196	63	93	22	0	178	29	85	17	1	132	696
12:30 PM	10	87	57	0	154	62	53	51	1	167	61	73	22	0	156	26	85	26	3	140	617
12:45 PM	20	119	90	1	230	68	69	62	3	202	52	99	43	0	194	20	90	31	7	148	774
Total	45	419	297	1	762	257	250	244	6	757	237	326	112	0	675	94	326	99	11	530	2724

**Mr. Kenneth Tetzner
Greenhouse Dispensary**

**APPENDIX B
Crash Data**

Making your world **MORE**

parecorp.com

 **Engineers**  **Scientists**  **Planners**



September 18, 2023

Records Department
South Kingstown Police Department
1790 Kingstown Road
South Kingstown, RI 02879

Re: **Traffic Engineering Services**
Kingstown Road TIS
703 Kingstown Road
South Kingstown, Rhode Island
(Pare Project No.: 23142.00)

Records Department:

Pare Corporation (Pare) has been retained to perform a traffic analysis for the proposed development at 703 Kingstown Road. As part of this study, we are required to obtain crash information for roadways relative to this site.

We are requesting crash records for the most recent *three* years for:

- Kingstown Road – from Main Street/Old Tower Hill Road to School Street

If possible, the accident data should include copies of the accident reports and supplemental narratives for each record. The number of accidents, the location, time of day, the accident type, the number of injuries and/or fatalities, the date, and the roadway surface condition are all necessary to adequately analyze the accident data. Accidents that occurred within parking lots will not be required. It would be preferable if these reports could be emailed to the sender of this request, however, if that is not feasible, mailing them or picking up of the reports are options.

Should you have any questions, or if we can be of assistance in any way, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads 'Aidan Bennett'.

Aidan Michael Bennett
Transportation Department Engineer I
401.297.5853
abennett@parecorp.com


8 Blackstone Valley Place
Lincoln, RI 02865
401-334-4100

10 Lincoln Road, Suite 210
Foxborough, MA 02035
508-543-1755

14 Bobala Road, Suite 2B
Holyoke, MA 01040
413-507-3448

PEOPLES CREDIT UNION CRASH DATA

Date	Time	Location	Type of Roadway	Road Surface Condition	Light Condition	Weather	No. of vehicles	Type of Impact	Contributing Circumstance	Damage/Injuries	Other
1/31/2020	2:27 PM	Kingstown rd/School St	2-way divided unprotected	dry	daylight	clear	2	rear end	V1 slowed down/V2 did not notice	Substantial/none	
2/11/2020	3:54 PM	Dale Carlia St/Kingstown Rd	2-way not divided	wet	daylight	sleet	2	angle front to side	turning/sb inside lane stopped outside did not	Minor/none	
2/28/2020	2:29 PM	688 Kingstown Rd	2-way not divided	dry	Daylight	clear	2	angle opposite direction	turning into Ocean State Job Lot opp traffic 1-lane stopped other didn't	Minor/none	
7/22/2020	12:02pm	Kingstown Rd/Dale Carlia St	2-way not divided	dry	Daylight	clear	2	angle	Car pulled out of Dale Carlia St and was struck	Heavy/none	
8/1/2020	5:20 PM	703 Kingstown Rd	2-way divided, unprotected median	dry	daylight	clear	2	rear end	Veh 1 turning into lot/veh 2 hit from behind	Minor/stiff back/shaken up	
8/11/2020	4:18 PM	Kingstown Rd/Dale Carlia St	2-way not divided	dry	Daylight	clear	2	Sideswipe Same Direction	Pull out of Wakefield Liquors hit by sn car	Minor/none	
9/2/2020	11:26 AM	Main St/Kingstown Rd	2-way not divided	wet	daylight	rain	2	Sideswipe Same Direction	crossed in front of outside lane to enter property	Moderate/none	
10/1/2020	1:08 PM	Kingstown Rd/Dale Carlia St	2-way not divided	dry	Daylight	cloudy	2	rear end	Stopped at light/2nd car did not	Minor/None	
10/12/2020	12:05 PM	Main St/Kingstown Rd	2-way not divided	Dry	Daylight	clear	2	Rear end	Vehicle 2 hit stopped car	None/little in neck and back	
11/17/2020	12:35 PM	621 Kingstown Rd at intersection	2-way not divided	dry	Daylight	clear	2	rear end	hit car twice at light. Veh 2 operator under the influence	Significant/None	
12/11/2020	1:07 PM	Main St/Kingstown Rd	2-way not divided	dry	dark-lighted	clear	2	angle	pulled out of Belmont Lot	Minor/none	
12/18/2020	2:56 PM	Old Tower Hill Rd/Kingstown Rd	2-way not divided	wet	Daylight	cloudy	2	sideswipesame direction	Merged into other lane on OTHR	Minor/none	
12/23/2020	4:04 PM	Kingstown /Dale Carlia St	2-way not divided	dry	dry	dusk	2	angle front to side			
12/29/2020	12:28 PM	Kingstown Rd/Old Tower Hill Rd	2-way not divided	Dry	Daylight	Clear	1	road rage incident, struck curb		Disabling damage/none	
12/30/2020	4:04 PM	Dale Carlia St/Kingstown Rd	2-way not divided		Daylight		2	angle	left turn into DC 1 sb car stooped inside lane didn't	Minor/None	
1/23/2021	12:37 PM	Kingstown Rd/Dale Carlia St	2-way, divided, unprotected median	dry	daylight	clear	2	angle front to side	left turn, veh in opp direction stopped, right lane did not	Extensive damage/neck pain	
2/4/2021	2:24 PM	Kingstown Rd/Dale Carlia St	2-way, not divided	wet	daylight	clear	2	angle front to side	turning vehicle cutting in front of opp traffic	Disabling damage/knee injury & head pain	
2/18/2021	1:27 PM	Old Tower Hill Rd/Kingstown Rd	2-way not divided	snow	daylight	snow	2	rear end	Could not stop in snow. Sid	Minor/none	
3/26/2021	10:11 PM	Main Street/Kingstown Rd	2-way not divided	dry	Dark-Lighted	clear	2	angle front to side	Car ran light and broad sided 2nd vehicle	1 vehicle towed/none	
4/8/2021	5:55 PM	Kingstown Rd/Dale Carlia St	2-way not divided	dry	daylight	clear	2	angle same direction	??????		
5/30/2021	5:50 AM	Dale Carlia St/S50' N of intersection	2-way,Divided,Unprotected painted median	Wet	Dark-Light	Rain	2	Angle Same Direction	Crossed over lane to make turn	Minor/None	
6/5/2021	7:06 AM	Dale Carlia St/Kingstown Rd Intersection	2-way not divided	dry	Daylight	clear	1	left turn from kingstown to dale.	Failed to make turn properly	Heavy/head and abdomen pain	
7/7/2021	10:22 PM	Kingstown Rd/Old Tower Hill Rd	2-way not divided	dry	dark-lighted	clear	2	Sideswipe Same Direction	blinker on to turn but did not turn	Minor/None	
7/21/2021	10:22 PM	Kingstown Rd/Old Tower Hill Rd	2-way not divided	dry	dark-lighted	clear	2	Sideswipe Same Direction	pulling out of Twisted Pizza Car had blinker on into Twisted. Didn't turn	Minor/None	
8/13/2021	10:12 AM	Kingstown Rd/Old Tower Hill Rd	2-way not divided	dry	daylight	clear	2	rear end	Stopped at Dale Carlia Int hit from behind	Minor/none	
9/7/2021	10:30am	Kingstown Rd/Dale Carlia St	2-way not divided	dry	daylight	Clear	2	Sideswipe same direction	Switch lanes did not see on-coming car	Minor/none	
9/22/2021	9:13 AM	Main Street/Kingstown Rd	2-way not divided	Dry	daylight	cloudy	3	rear end	double rear end	Minor/none	
10/12/2021	9:53 PM	Kingstown Rd/School St	2-way not divided	Dry	Daylight	Clear	2	Rear end	V1 stopped. V2 was grabbing water bottle	Significant/none	
11/9/2021	5:24pm	Kingstown Rd/Dale Carlia St	2-way not divided	Dry	dark-lighted	Clear	2	SideswipeOpposite Direction	Misjudged room to turn. 2 cars opp dir turning left	Minor/none	
11/14/2021	6:45 PM	668 Kingstown Rd	2-way not divided	Dry	dark-unknown lighting	clear	2	angle front to side	pulling out/Bobby G's and hit car	minor/none	
12/15/2021	12:14 PM	Kingstown Road/Dale Carlia St	2-way not divided	Dry	Daylight	Clear	2	angle front to side	entered lighted intersection at same time. Question as to who had green	Minor/Leg and back	
12/20/2021	3:15 PM	Kingstown Rd/Dale Carlia St	2-way not divided	Dry	Daylight	clear	2	rear end			
1/4/2022	1:05 PM	Main St/Kingstown Rd	2-way not divided	dry	daylight	clear	2	rear end	stopped at light	minor/none	
2/9/2022	2:24 PM	Kingstown Rd/Dale Carlia St	2-way not divided	dry	Daylight	clear	2	sideswipe same direction	swaved into adjacent lane	Minor/none	
4/1/2022	7:37 PM	667 Kingstown Rd	2-way not divided	dry	Dark-lighted	clear	2	rear end	hit at stop light	Minor/none	
4/7/2022	12:39 PM	Kingstown Rd/School St	2-way not divided	dry	daylight	clear	2	angle front to side	Turning into Ocean State Job Lot hit by opposite trveling vehicle	Minor/none	
5/17/2022	2:30 PM	756 Kingstown Rd	2-way not divided	dry	daylight	clear	2	angle frontto side	Pulled out into road and clipped passing vehicle	Minor/none	
5/19/2022	2:19 PM	Kingtown Rd/Dale Carlia St	2-way not divided	Wet	Daylight	Rain	2	angle front to side	turn left and sb vehicle clipped turning vehicle	Minor/none	
6/17/2022	10:11 AM	Dale Carlia St/Kingstown Rd	2-way not divided	Dry	Daylight	cloudy	2	angle front to side	On Dale Carlia Rd Car exiting lot was trying to merge	Minor/none	
7/22/2022	10:53 AM	Dale Carlia St/Kingstown Rd	2-way not divided	Dry	daylighted	Clear	2	sideswipe	switch lanes to avoid turning traffic. Did not see car in adj lane	Minor/none	
8/20/2022	3:18 PM	Kingstown Rd/Old Tower Hill Rd	2-way not divided	Dry	Daylight	Clear	2	Sideswipe Same Direction	Veh 2 dropped cigarette to lose control	Minor/none	
9/28/2022	8:19 AM	Kingstown Rd/Old Tower Hill Rd	2-way not divided	Dry	Daylight	Clear	2	rear end	Stopped atBess Eaton due to light. Let car exit and Veh 1 was hit from behind	minor/none	
11/26/2022	8:20 PM	School St/Kingstown Rd	2-way not divided	Dry	Dark lighted	Clear	2	angle front to side	Left out of School did not see car on Kingstown approaching	Minor/None	
1/10/2023	1:23 PM	Kingstown Rd/Dale Carlia St	2-way not divided	Dry	Daylight	Clear	2	sideswipesame direction	Changing lane	minor/none	
4/29/2023	9:03 PM	Old Tower Hill Rd/Kingstown Rd	2-way not divided	wet	dark lighted	rain	2	rear end	Hit stopped at light	Minor/none	
5/5/2023	4:26 PM	Kingstown Rd/Dale Carlia St	2-way not divided	dry	Daylight	Clear	2	angle front toside	turn into Ocean Statemand was hit	Damage/both operators complained of pain	
6/12/2023	5:20 PM	Kingstown Rd/Old Tower Hill Rd	2-way not divided	Dry	Daylight	Cloudy	2	Angle front to side	Turning into Indian Village. On-coming car hit turning vehicle	Disabling damage/minor pain	
6/23/2023	9:30 AM	Kingstown Rd/Old Tower Hill Rd	2-way not divided	Dry	daylight	Clear	2	rear end	Veh 2 jumped green light	Minor/None	
9/25/2023	7:07 PM	621 Kingstown Rd	2-way not divided	wet	Dark lighted	rain	2	rear end	Hit from behind heading in same direction	Minor/None	

**Mr. Kenneth Tetzner
Greenhouse Dispensary**

APPENDIX C
Trip Generation Worksheet

Greenhouse Dispensary
 South Kingstown, RI
 Trip Generation
 PARE Project No. 25152.00
 September 25, 2025



Greenhouse Dispensary
Land Use Code 882: Cannabis Dispensary

1.82 GFA

On a: Weekday, AM

On a: Weekday AM Peak Hour of Generator

Average Rate:	=22.21(1.82)	40
Fitted Curve Equation:	Not Given	
Trips Entering:	51% * 40	20
Trips Exiting:	49% * 40	20
		<u>40</u>

On a: Weekday, PM

On a: Weekday PM Peak Hour of Generator

Average Rate:	=32.36(1.82)	59
Fitted Curve Equation:	Not Given	
Trips Entering:	50% * 59	30
Trips Exiting:	50% * 59	29
		<u>59</u>

On a: Weekend

On a: Saturday Peak Hour of Generator

Average Rate:	=32.08(1.82)	58
Fitted Curve Equation:	Not Given	
Trips Entering:	49% * 58	29
Trips Exiting:	51% * 58	29
		<u>58</u>

**Mr. Kenneth Tetzner
Greenhouse Dispensary**
























APPENDIX D
Traffic Capacity Analysis

Lanes, Volumes, Timings

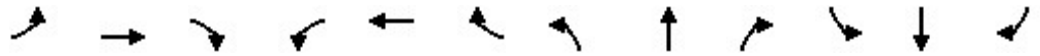
Existing AM Peak

1: Kingstown Rd (Rte 1A/108) & Main St (Rte 1A)/Old Tower Hill Road

Weekday

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	63	223	48	74	260	168	55	520	75	178	239	29
Future Volume (vph)	63	223	48	74	260	168	55	520	75	178	239	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	110		280	135		0	100		0	155		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	55			50			65			90		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.973				0.850		0.981			0.984	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3484	0	1770	1845	1615	1805	3506	0	1787	3521	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1805	3484	0	1770	1845	1615	1805	3506	0	1787	3521	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17				179		11			9	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		2373			1140			1111			419	
Travel Time (s)		64.7			31.1			30.3			11.4	
Peak Hour Factor	0.78	0.78	0.78	0.94	0.94	0.94	0.77	0.77	0.77	0.91	0.91	0.91
Heavy Vehicles (%)	0%	1%	0%	2%	3%	0%	0%	1%	1%	1%	1%	0%
Adj. Flow (vph)	81	286	62	79	277	179	71	675	97	196	263	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	81	348	0	79	277	179	71	772	0	196	295	0
Turn Type	Prot	NA		Prot	NA	pt+ov	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	8 1	5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8	8 1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	15.0		7.0	15.0		7.0	15.0		7.0	15.0	
Minimum Split (s)	11.0	20.0		11.0	19.5		11.0	20.0		11.0	20.0	
Total Split (s)	14.0	24.5		14.0	24.5		15.0	30.0		18.0	33.0	
Total Split (%)	10.8%	18.9%		10.8%	18.9%		11.6%	23.2%		13.9%	25.5%	
Maximum Green (s)	10.0	19.5		10.0	20.0		11.0	25.0		14.0	28.0	
Yellow Time (s)	3.0	3.5		3.0	3.5		3.0	3.5		3.0	3.5	
All-Red Time (s)	1.0	1.5		1.0	1.0		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	5.0		4.0	4.5		4.0	5.0		4.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.4	2.7		2.4	2.7		2.4	2.7		2.4	2.7	
Recall Mode	None	Min		None	Min		None	Min		None	Min	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	8.7	19.8		8.7	20.3	35.5	19.9	26.0		14.6	23.5	
Actuated g/C Ratio	0.10	0.22		0.10	0.22	0.39	0.22	0.29		0.16	0.26	
v/c Ratio	0.47	0.45		0.47	0.67	0.24	0.18	0.77		0.69	0.32	
Control Delay	53.7	34.8		53.8	45.0	4.0	34.4	37.9		53.2	35.0	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	43.0
Total Split (s)	43.0
Total Split (%)	33%
Maximum Green (s)	40.0
Yellow Time (s)	2.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	7.0
Flash Dont Walk (s)	33.0
Pedestrian Calls (#/hr)	2
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	53.7	34.8		53.8	45.0	4.0	34.4	37.9		53.2	35.0	
LOS	D	C		D	D	A	C	D		D	D	
Approach Delay		38.4			32.6			37.6			42.3	
Approach LOS		D			C			D			D	
Queue Length 50th (ft)	42	79		40	134	0	28	192		100	73	
Queue Length 95th (ft)	105	163		#125	#413	46	86	#398		#329	166	
Internal Link Dist (ft)		2293			1060			1031			339	
Turn Bay Length (ft)	110			135			100			155		
Base Capacity (vph)	206	789		202	421	747	415	1009		285	1282	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.39	0.44		0.39	0.66	0.24	0.17	0.77		0.69	0.23	

Intersection Summary

Area Type:	Other
Cycle Length:	129.5
Actuated Cycle Length:	91.1
Natural Cycle:	125
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.77
Intersection Signal Delay:	37.6
Intersection LOS:	D
Intersection Capacity Utilization:	60.7%
ICU Level of Service:	B
Analysis Period (min):	15
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.	











Splits and Phases: 1: Kingstown Rd (Rte 1A/108) & Main St (Rte 1A)/Old Tower Hill Road

Ø2	Ø1	Ø3	Ø4	Ø9
30 s	18 s	14 s	24.5 s	43 s
Ø6	Ø5	Ø7	Ø8	
33 s	15 s	14 s	24.5 s	

Lane Group	Ø9
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lanes, Volumes, Timings
5: Indian Run Village Access Rd.

Existing AM Peak
Weekday

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	4	6	683	6	11	499
Future Volume (vph)	4	6	683	6	11	499
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Ped Bike Factor						1.00
Frt	0.919		0.999			
Flt Protected	0.980					0.999
Satd. Flow (prot)	1711	0	3571	0	0	3571
Flt Permitted	0.980					0.938
Satd. Flow (perm)	1711	0	3571	0	0	3353
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	9		2			
Link Speed (mph)	20		25			25
Link Distance (ft)	416		419			440
Travel Time (s)	14.2		11.4			12.0
Confl. Peds. (#/hr)					1	
Peak Hour Factor	0.69	0.69	0.83	0.83	0.88	0.88
Heavy Vehicles (%)	0%	0%	1%	0%	0%	1%
Adj. Flow (vph)	6	9	823	7	13	567
Shared Lane Traffic (%)						
Lane Group Flow (vph)	15	0	830	0	0	580
Turn Type	Prot		NA		Perm	NA
Protected Phases	8		2			6
Permitted Phases					6	
Detector Phase	8		2		6	6
Switch Phase						
Minimum Initial (s)	5.0		8.0		8.0	8.0
Minimum Split (s)	27.0		22.5		22.5	22.5
Total Split (s)	27.0		23.0		23.0	23.0
Total Split (%)	54.0%		46.0%		46.0%	46.0%
Maximum Green (s)	23.0		18.5		18.5	18.5
Yellow Time (s)	3.0		3.5		3.5	3.5
All-Red Time (s)	1.0		1.0		1.0	1.0
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	4.0		4.5			4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	2.2		2.8		2.8	2.8
Recall Mode	None		Min		Min	Min
Walk Time (s)	7.0					
Flash Dont Walk (s)	16.0					
Pedestrian Calls (#/hr)	0					
Act Effct Green (s)	5.3		31.2			31.2
Actuated g/C Ratio	0.16		0.94			0.94
v/c Ratio	0.05		0.25			0.18
Control Delay	12.3		1.1			1.0
Queue Delay	0.0		0.0			0.0
Total Delay	12.3		1.1			1.0

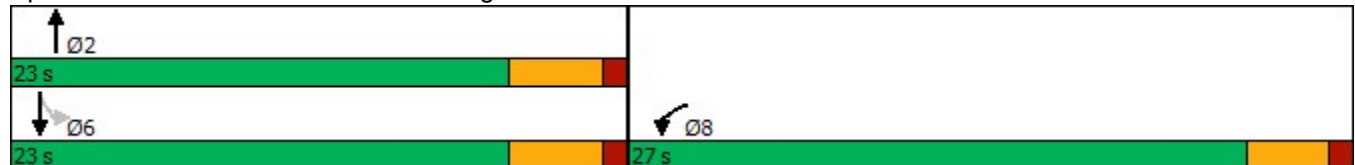


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
LOS	B		A			A
Approach Delay	12.3		1.1			1.0
Approach LOS	B		A			A
Queue Length 50th (ft)	1		0			0
Queue Length 95th (ft)	10		44			33
Internal Link Dist (ft)	336		339			360
Turn Bay Length (ft)						
Base Capacity (vph)	1236		3356			3151
Starvation Cap Reductn	0		0			0
Spillback Cap Reductn	0		0			0
Storage Cap Reductn	0		0			0
Reduced v/c Ratio	0.01		0.25			0.18

Intersection Summary

Area Type:	Other
Cycle Length:	50
Actuated Cycle Length:	33.2
Natural Cycle:	50
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.25
Intersection Signal Delay:	1.1
Intersection LOS:	A
Intersection Capacity Utilization:	32.9%
ICU Level of Service:	A
Analysis Period (min):	15

Splits and Phases: 5: Indian Run Village Access Rd.


























Lanes, Volumes, Timings

Existing PM Peak

1: Kingstown Rd (Rte 1A/108) & Main St (Rte 1A)/Old Tower Hill Road

Weekday

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	372	96	180	347	321	68	431	183	338	671	35
Future Volume (vph)	100	372	96	180	347	321	68	431	183	338	671	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	110		280	135		0	100		0	155		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	55			50			65			90		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.969				0.850		0.955			0.992	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3498	0	1805	1881	1615	1805	3448	0	1805	3581	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1805	3498	0	1805	1881	1615	1805	3448	0	1805	3581	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21				365		41			4	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		2373			1140			1111			419	
Travel Time (s)		64.7			31.1			30.3			11.4	
Peak Hour Factor	0.74	0.74	0.74	0.88	0.88	0.88	0.81	0.81	0.81	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	135	503	130	205	394	365	84	532	226	363	722	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	135	633	0	205	394	365	84	758	0	363	760	0
Turn Type	Prot	NA		Prot	NA	pt+ov	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	8 1	5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8	8 1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	15.0		7.0	15.0		7.0	15.0		7.0	15.0	
Minimum Split (s)	11.0	20.0		11.0	19.5		11.0	20.0		11.0	20.0	
Total Split (s)	14.0	24.5		18.0	28.5		14.0	22.0		23.0	31.0	
Total Split (%)	10.7%	18.8%		13.8%	21.8%		10.7%	16.9%		17.6%	23.8%	
Maximum Green (s)	10.0	19.5		14.0	24.0		10.0	17.0		19.0	26.0	
Yellow Time (s)	3.0	3.5		3.0	3.5		3.0	3.5		3.0	3.5	
All-Red Time (s)	1.0	1.5		1.0	1.0		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	5.0		4.0	4.5		4.0	5.0		4.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.4	2.7		2.4	2.7		2.4	2.7		2.4	2.7	
Recall Mode	None	Min		None	Min		None	Min		None	Min	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	10.3	20.0		14.4	24.6	43.6	8.9	17.4		19.5	30.5	
Actuated g/C Ratio	0.11	0.21		0.15	0.26	0.45	0.09	0.18		0.20	0.32	
v/c Ratio	0.70	0.85		0.76	0.82	0.39	0.51	1.15		0.99	0.67	
Control Delay	63.8	48.7		60.2	50.5	3.0	55.9	119.4		85.9	34.8	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.1	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	7.0
Minimum Split (s)	43.0
Total Split (s)	43.0
Total Split (%)	33%
Maximum Green (s)	40.0
Yellow Time (s)	2.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	7.0
Flash Dont Walk (s)	33.0
Pedestrian Calls (#/hr)	1
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	

Lanes, Volumes, Timings

Existing PM Peak

1: Kingstown Rd (Rte 1A/108) & Main St (Rte 1A)/Old Tower Hill Road

Weekday

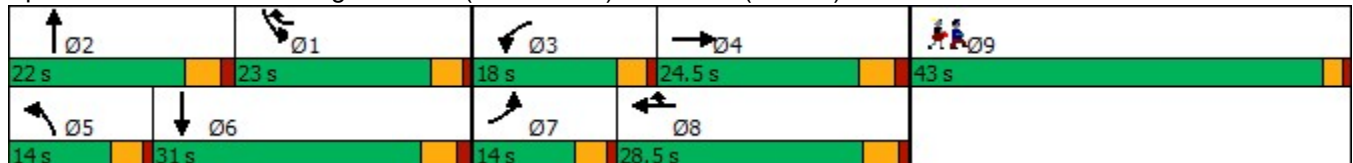


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	63.8	48.7		60.2	50.5	3.0	55.9	119.4		85.9	34.9	
LOS	E	D		E	D	A	E	F		F	C	
Approach Delay		51.4			34.6			113.1			51.4	
Approach LOS		D			C			F			D	
Queue Length 50th (ft)	72	168		108	199	0	44	~238		197	190	
Queue Length 95th (ft)	#184	#324		#340	#570	48	113	#510		#604	#500	
Internal Link Dist (ft)		2293			1060			1031			339	
Turn Bay Length (ft)	110			135			100			155		
Base Capacity (vph)	192	744		269	481	932	192	658		365	1138	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	21	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.70	0.85		0.76	0.82	0.39	0.44	1.15		0.99	0.68	

Intersection Summary

Area Type:	Other
Cycle Length:	130.5
Actuated Cycle Length:	96.1
Natural Cycle:	145
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	1.15
Intersection Signal Delay:	61.1
Intersection LOS:	E
Intersection Capacity Utilization:	75.2%
ICU Level of Service:	D
Analysis Period (min):	15
~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.	











Splits and Phases: 1: Kingstown Rd (Rte 1A/108) & Main St (Rte 1A)/Old Tower Hill Road



Lane Group	Ø9
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lanes, Volumes, Timings
5: Indian Run Village Access Rd.

Existing PM Peak
Weekday

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	21	30	681	14	18	815
Future Volume (vph)	21	30	681	14	18	815
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Ped Bike Factor						1.00
Frt	0.920		0.997			
Flt Protected	0.980					0.999
Satd. Flow (prot)	1713	0	3599	0	0	3606
Flt Permitted	0.980					0.937
Satd. Flow (perm)	1713	0	3599	0	0	3383
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	43		5			
Link Speed (mph)	20		25			25
Link Distance (ft)	416		419			440
Travel Time (s)	14.2		11.4			12.0
Confl. Peds. (#/hr)					1	
Peak Hour Factor	0.70	0.70	0.94	0.94	0.95	0.95
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	30	43	724	15	19	858
Shared Lane Traffic (%)						
Lane Group Flow (vph)	73	0	739	0	0	877
Turn Type	Prot		NA		Perm	NA
Protected Phases	8		2			6
Permitted Phases					6	
Detector Phase	8		2		6	6
Switch Phase						
Minimum Initial (s)	5.0		8.0		8.0	8.0
Minimum Split (s)	27.0		12.5		12.5	12.5
Total Split (s)	27.0		30.0		30.0	30.0
Total Split (%)	47.4%		52.6%		52.6%	52.6%
Maximum Green (s)	23.0		25.5		25.5	25.5
Yellow Time (s)	3.0		3.5		3.5	3.5
All-Red Time (s)	1.0		1.0		1.0	1.0
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	4.0		4.5			4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	None		Min		Min	Min
Walk Time (s)	7.0					
Flash Dont Walk (s)	16.0					
Pedestrian Calls (#/hr)	9					
Act Effct Green (s)	8.9		31.3			31.3
Actuated g/C Ratio	0.21		0.76			0.76
v/c Ratio	0.18		0.27			0.34
Control Delay	9.1		4.9			5.4
Queue Delay	0.0		0.0			0.0
Total Delay	9.1		4.9			5.4



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
LOS	A		A			A
Approach Delay	9.1		4.9			5.4
Approach LOS	A		A			A
Queue Length 50th (ft)	7		29			38
Queue Length 95th (ft)	19		124			157
Internal Link Dist (ft)	336		339			360
Turn Bay Length (ft)						
Base Capacity (vph)	1048		2671			2509
Starvation Cap Reductn	0		0			0
Spillback Cap Reductn	0		0			0
Storage Cap Reductn	0		0			0
Reduced v/c Ratio	0.07		0.28			0.35

Intersection Summary

Area Type:	Other
Cycle Length:	57
Actuated Cycle Length:	41.4
Natural Cycle:	50
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.34
Intersection Signal Delay:	5.4
Intersection LOS:	A
Intersection Capacity Utilization:	46.6%
ICU Level of Service:	A
Analysis Period (min):	15

Splits and Phases: 5: Indian Run Village Access Rd.


























Lanes, Volumes, Timings

Existing Sat Peak

1: Kingstown Rd (Rte 1A/108) & Main St (Rte 1A)/Old Tower Hill Road

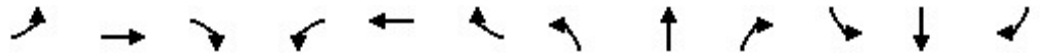
Weekend

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	126	361	96	234	308	264	120	343	250	307	485	43
Future Volume (vph)	126	361	96	234	308	264	120	343	250	307	485	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	110		280	135		0	100		0	155		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	55			50			65			90		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.969				0.850		0.937			0.988	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3498	0	1805	1881	1615	1805	3383	0	1805	3567	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1805	3498	0	1805	1881	1615	1805	3383	0	1805	3567	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21				287		115			6	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		2373			1140			1111			419	
Travel Time (s)		64.7			31.1			30.3			11.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.88	0.88	0.88	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	137	392	104	254	335	287	136	390	284	341	539	48
Shared Lane Traffic (%)												
Lane Group Flow (vph)	137	496	0	254	335	287	136	674	0	341	587	0
Turn Type	Prot	NA		Prot	NA	pt+ov	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	8 1	5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8	8 1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	15.0		7.0	15.0		7.0	15.0		7.0	15.0	
Minimum Split (s)	11.0	20.0		11.0	19.5		11.0	20.0		11.0	20.0	
Total Split (s)	14.0	24.5		18.0	28.5		14.0	22.0		23.0	31.0	
Total Split (%)	10.7%	18.8%		13.8%	21.8%		10.7%	16.9%		17.6%	23.8%	
Maximum Green (s)	10.0	19.5		14.0	24.0		10.0	17.0		19.0	26.0	
Yellow Time (s)	3.0	3.5		3.0	3.5		3.0	3.5		3.0	3.5	
All-Red Time (s)	1.0	1.5		1.0	1.0		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	5.0		4.0	4.5		4.0	5.0		4.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.4	2.7		2.4	2.7		2.4	2.7		2.4	2.7	
Recall Mode	None	Min		None	Min		None	Min		None	Min	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	10.3	19.1		14.4	23.7	42.7	10.3	17.5		19.5	26.7	
Actuated g/C Ratio	0.11	0.20		0.15	0.25	0.45	0.11	0.18		0.20	0.28	
v/c Ratio	0.71	0.69		0.93	0.72	0.33	0.70	0.94		0.92	0.58	
Control Delay	63.7	41.3		82.4	44.6	3.0	63.4	55.7		70.5	34.5	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	7.0
Minimum Split (s)	43.0
Total Split (s)	43.0
Total Split (%)	33%
Maximum Green (s)	40.0
Yellow Time (s)	2.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	7.0
Flash Dont Walk (s)	33.0
Pedestrian Calls (#/hr)	1
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	

Lanes, Volumes, Timings
 1: Kingstown Rd (Rte 1A/108) & Main St (Rte 1A)/Old Tower Hill Road

Existing Sat Peak
 Weekend



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	63.7	41.3		82.4	44.6	3.0	63.4	55.7		70.5	34.5	
LOS	E	D		F	D	A	E	E		E	C	
Approach Delay		46.1			41.9			57.0			47.7	
Approach LOS		D			D			E			D	
Queue Length 50th (ft)	74	124		139	163	0	73	161		182	141	
Queue Length 95th (ft)	#255	#315		#450	#476	49	#246	#436		#562	#320	
Internal Link Dist (ft)		2293			1060			1031			339	
Turn Bay Length (ft)	110			135			100			155		
Base Capacity (vph)	194	752		272	486	896	194	714		369	1005	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.71	0.66		0.93	0.69	0.32	0.70	0.94		0.92	0.58	

Intersection Summary

Area Type:	Other
Cycle Length:	130.5
Actuated Cycle Length:	95.3
Natural Cycle:	145
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.94
Intersection Signal Delay:	48.2
Intersection LOS:	D
Intersection Capacity Utilization:	75.5%
ICU Level of Service:	D
Analysis Period (min):	15
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.	










Splits and Phases: 1: Kingstown Rd (Rte 1A/108) & Main St (Rte 1A)/Old Tower Hill Road

Ø2	Ø1	Ø3	Ø4	Ø9
22 s	23 s	18 s	24.5 s	43 s
Ø5	Ø6	Ø7	Ø8	
14 s	31 s	14 s	28.5 s	

Lane Group	Ø9
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lanes, Volumes, Timings
5: Indian Run Village Access Rd.

Existing Sat Peak
Weekend

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	31	35	607	12	34	908
Future Volume (vph)	31	35	607	12	34	908
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Ped Bike Factor						1.00
Frt	0.928		0.997			
Flt Protected	0.977					0.998
Satd. Flow (prot)	1723	0	3599	0	0	3603
Flt Permitted	0.977					0.920
Satd. Flow (perm)	1723	0	3599	0	0	3321
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	40		4			
Link Speed (mph)	20		25			25
Link Distance (ft)	416		419			440
Travel Time (s)	14.2		11.4			12.0
Confl. Peds. (#/hr)					1	
Peak Hour Factor	0.88	0.88	0.92	0.92	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	35	40	660	13	36	966
Shared Lane Traffic (%)						
Lane Group Flow (vph)	75	0	673	0	0	1002
Turn Type	Prot		NA		Perm	NA
Protected Phases	8		2			6
Permitted Phases					6	
Detector Phase	8		2		6	6
Switch Phase						
Minimum Initial (s)	5.0		8.0		8.0	8.0
Minimum Split (s)	27.0		12.5		12.5	12.5
Total Split (s)	27.0		30.0		30.0	30.0
Total Split (%)	47.4%		52.6%		52.6%	52.6%
Maximum Green (s)	23.0		25.5		25.5	25.5
Yellow Time (s)	3.0		3.5		3.5	3.5
All-Red Time (s)	1.0		1.0		1.0	1.0
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	4.0		4.5			4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	None		Min		Min	Min
Walk Time (s)	7.0					
Flash Dont Walk (s)	16.0					
Pedestrian Calls (#/hr)	9					
Act Effct Green (s)	9.0		33.0			33.0
Actuated g/C Ratio	0.21		0.76			0.76
v/c Ratio	0.19		0.24			0.39
Control Delay	10.0		4.8			5.8
Queue Delay	0.0		0.0			0.0
Total Delay	10.0		4.8			5.8

Lanes, Volumes, Timings
5: Indian Run Village Access Rd.

Existing Sat Peak
Weekend



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
LOS	B		A			A
Approach Delay	10.0		4.8			5.8
Approach LOS	B		A			A
Queue Length 50th (ft)	9		26			47
Queue Length 95th (ft)	28		112			191
Internal Link Dist (ft)	336		339			360
Turn Bay Length (ft)						
Base Capacity (vph)	1004		2664			2458
Starvation Cap Reductn	0		0			0
Spillback Cap Reductn	0		0			0
Storage Cap Reductn	0		0			0
Reduced v/c Ratio	0.07		0.25			0.41

Intersection Summary

Area Type: Other
 Cycle Length: 57
 Actuated Cycle Length: 43.2
 Natural Cycle: 55
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.39
 Intersection Signal Delay: 5.6
 Intersection Capacity Utilization 58.2%
 Analysis Period (min) 15

Intersection LOS: A
 ICU Level of Service B

Splits and Phases: 5: Indian Run Village Access Rd.


























Lanes, Volumes, Timings

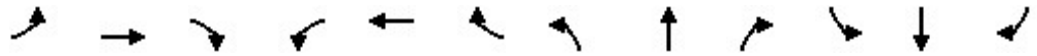
Future (2030) No-Build AM Peak

1: Kingstown Rd (Rte 1A/108) & Main St (Rte 1A)/Old Tower Hill Road

Weekday

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	229	50	76	267	174	57	535	77	184	248	30
Future Volume (vph)	66	229	50	76	267	174	57	535	77	184	248	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	110		280	135		0	100		0	155		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	55			50			65			90		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.973				0.850		0.981			0.984	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3484	0	1770	1845	1615	1805	3506	0	1787	3521	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1805	3484	0	1770	1845	1615	1805	3506	0	1787	3521	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17				185		11			9	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		2373			1140			1111			419	
Travel Time (s)		64.7			31.1			30.3			11.4	
Peak Hour Factor	0.78	0.78	0.78	0.94	0.94	0.94	0.77	0.77	0.77	0.91	0.91	0.91
Heavy Vehicles (%)	0%	1%	0%	2%	3%	0%	0%	1%	1%	1%	1%	0%
Adj. Flow (vph)	85	294	64	81	284	185	74	695	100	202	273	33
Shared Lane Traffic (%)												
Lane Group Flow (vph)	85	358	0	81	284	185	74	795	0	202	306	0
Turn Type	Prot	NA		Prot	NA	pt+ov	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	8 1	5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8	8 1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	15.0		7.0	15.0		7.0	15.0		7.0	15.0	
Minimum Split (s)	11.0	20.0		11.0	19.5		11.0	20.0		11.0	20.0	
Total Split (s)	14.0	24.5		14.0	24.5		15.0	30.0		18.0	33.0	
Total Split (%)	10.8%	18.9%		10.8%	18.9%		11.6%	23.2%		13.9%	25.5%	
Maximum Green (s)	10.0	19.5		10.0	20.0		11.0	25.0		14.0	28.0	
Yellow Time (s)	3.0	3.5		3.0	3.5		3.0	3.5		3.0	3.5	
All-Red Time (s)	1.0	1.5		1.0	1.0		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	5.0		4.0	4.5		4.0	5.0		4.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.4	2.7		2.4	2.7		2.4	2.7		2.4	2.7	
Recall Mode	None	Min		None	Min		None	Min		None	Min	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	8.9	20.3		8.8	20.8	35.9	19.9	26.0		14.5	23.4	
Actuated g/C Ratio	0.10	0.22		0.10	0.23	0.39	0.22	0.28		0.16	0.26	
v/c Ratio	0.49	0.46		0.48	0.68	0.25	0.19	0.79		0.71	0.34	
Control Delay	54.0	34.9		54.0	45.2	4.0	34.7	39.2		54.9	35.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	43.0
Total Split (s)	43.0
Total Split (%)	33%
Maximum Green (s)	40.0
Yellow Time (s)	2.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	7.0
Flash Dont Walk (s)	33.0
Pedestrian Calls (#/hr)	2
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	

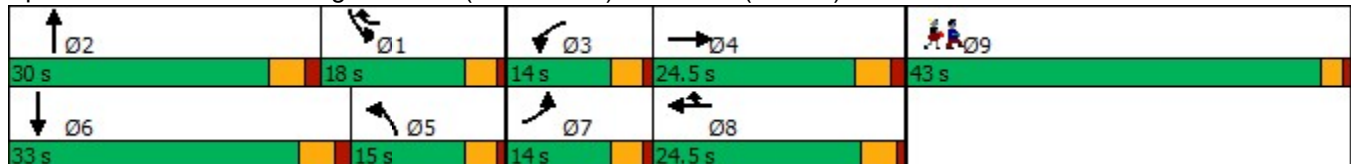


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	54.0	34.9		54.0	45.2	4.0	34.7	39.2		54.9	35.2	
LOS	D	C		D	D	A	C	D		D	D	
Approach Delay		38.6			32.6			38.8			43.0	
Approach LOS		D			C			D			D	
Queue Length 50th (ft)	44	82		42	138	0	30	201		103	76	
Queue Length 95th (ft)	110	167		#130	#426	46	89	#417		#342	172	
Internal Link Dist (ft)		2293			1060			1031			339	
Turn Bay Length (ft)	110			135			100			155		
Base Capacity (vph)	204	784		200	418	745	411	1001		283	1268	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.42	0.46		0.41	0.68	0.25	0.18	0.79		0.71	0.24	

Intersection Summary

Area Type:	Other
Cycle Length:	129.5
Actuated Cycle Length:	91.6
Natural Cycle:	135
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.79
Intersection Signal Delay:	38.2
Intersection LOS:	D
Intersection Capacity Utilization:	61.9%
ICU Level of Service:	B
Analysis Period (min):	15
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.	










Splits and Phases: 1: Kingstown Rd (Rte 1A/108) & Main St (Rte 1A)/Old Tower Hill Road



Lane Group	Ø9
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lanes, Volumes, Timings
5: Indian Run Village Access Rd.

Future (2030) No-Build AM Peak
Weekday

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	5	8	702	7	13	514
Future Volume (vph)	5	8	702	7	13	514
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Ped Bike Factor						1.00
Frt	0.915		0.999			
Flt Protected	0.982					0.999
Satd. Flow (prot)	1707	0	3571	0	0	3572
Flt Permitted	0.982					0.934
Satd. Flow (perm)	1707	0	3571	0	0	3339
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	12		2			
Link Speed (mph)	20		25			25
Link Distance (ft)	416		419			440
Travel Time (s)	14.2		11.4			12.0
Confl. Peds. (#/hr)					1	
Peak Hour Factor	0.69	0.69	0.83	0.83	0.88	0.88
Heavy Vehicles (%)	0%	0%	1%	0%	0%	1%
Adj. Flow (vph)	7	12	846	8	15	584
Shared Lane Traffic (%)						
Lane Group Flow (vph)	19	0	854	0	0	599
Turn Type	Prot		NA		Perm	NA
Protected Phases	8		2			6
Permitted Phases					6	
Detector Phase	8		2		6	6
Switch Phase						
Minimum Initial (s)	5.0		8.0		8.0	8.0
Minimum Split (s)	27.0		22.5		22.5	22.5
Total Split (s)	27.0		23.0		23.0	23.0
Total Split (%)	54.0%		46.0%		46.0%	46.0%
Maximum Green (s)	23.0		18.5		18.5	18.5
Yellow Time (s)	3.0		3.5		3.5	3.5
All-Red Time (s)	1.0		1.0		1.0	1.0
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	4.0		4.5			4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	2.2		2.8		2.8	2.8
Recall Mode	None		Min		Min	Min
Walk Time (s)	7.0					
Flash Dont Walk (s)	16.0					
Pedestrian Calls (#/hr)	0					
Act Effct Green (s)	5.4		31.5			31.5
Actuated g/C Ratio	0.16		0.94			0.94
v/c Ratio	0.07		0.25			0.19
Control Delay	11.9		1.1			1.0
Queue Delay	0.0		0.0			0.0
Total Delay	11.9		1.1			1.0

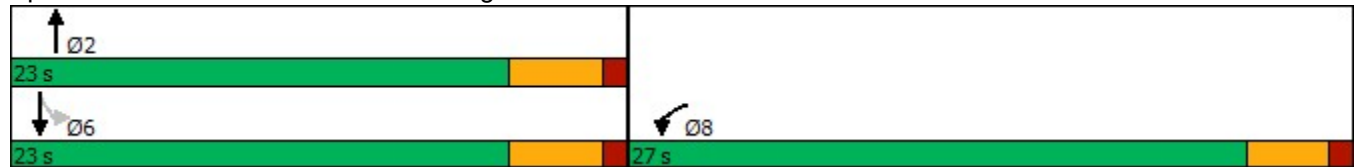


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
LOS	B		A			A
Approach Delay	11.9		1.1			1.0
Approach LOS	B		A			A
Queue Length 50th (ft)	1		0			0
Queue Length 95th (ft)	11		47			34
Internal Link Dist (ft)	336		339			360
Turn Bay Length (ft)						
Base Capacity (vph)	1223		3354			3136
Starvation Cap Reductn	0		0			0
Spillback Cap Reductn	0		0			0
Storage Cap Reductn	0		0			0
Reduced v/c Ratio	0.02		0.25			0.19

Intersection Summary

Area Type:	Other
Cycle Length:	50
Actuated Cycle Length:	33.5
Natural Cycle:	50
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.25
Intersection Signal Delay:	1.2
Intersection LOS:	A
Intersection Capacity Utilization:	34.8%
ICU Level of Service:	A
Analysis Period (min):	15

Splits and Phases: 5: Indian Run Village Access Rd.


























Lanes, Volumes, Timings

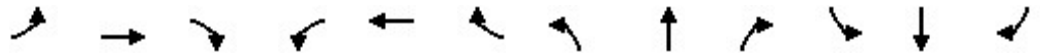
Future (2030) No-Build PM Peak

1: Kingstown Rd (Rte 1A/108) & Main St (Rte 1A)/Old Tower Hill Road

Weekday

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	104	382	99	185	356	333	70	447	188	350	693	37
Future Volume (vph)	104	382	99	185	356	333	70	447	188	350	693	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	110		280	135		0	100		0	155		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	55			50			65			90		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.969				0.850		0.956			0.992	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3498	0	1805	1881	1615	1805	3451	0	1805	3581	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1805	3498	0	1805	1881	1615	1805	3451	0	1805	3581	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21				378		41			4	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		2373			1140			1111			419	
Travel Time (s)		64.7			31.1			30.3			11.4	
Peak Hour Factor	0.74	0.74	0.74	0.88	0.88	0.88	0.81	0.81	0.81	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	141	516	134	210	405	378	86	552	232	376	745	40
Shared Lane Traffic (%)												
Lane Group Flow (vph)	141	650	0	210	405	378	86	784	0	376	785	0
Turn Type	Prot	NA		Prot	NA	pt+ov	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	8 1	5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8	8 1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	15.0		7.0	15.0		7.0	15.0		7.0	15.0	
Minimum Split (s)	11.0	20.0		11.0	19.5		11.0	20.0		11.0	20.0	
Total Split (s)	14.0	24.5		18.0	28.5		14.0	22.0		23.0	31.0	
Total Split (%)	10.7%	18.8%		13.8%	21.8%		10.7%	16.9%		17.6%	23.8%	
Maximum Green (s)	10.0	19.5		14.0	24.0		10.0	17.0		19.0	26.0	
Yellow Time (s)	3.0	3.5		3.0	3.5		3.0	3.5		3.0	3.5	
All-Red Time (s)	1.0	1.5		1.0	1.0		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	5.0		4.0	4.5		4.0	5.0		4.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.4	2.7		2.4	2.7		2.4	2.7		2.4	2.7	
Recall Mode	None	Min		None	Min		None	Min		None	Min	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	10.3	20.0		14.4	24.6	43.6	8.9	17.4		19.5	30.5	
Actuated g/C Ratio	0.11	0.21		0.15	0.26	0.45	0.09	0.18		0.20	0.32	
v/c Ratio	0.73	0.87		0.78	0.84	0.40	0.51	1.19		1.03	0.69	
Control Delay	66.3	50.7		61.8	52.5	3.1	56.2	133.6		94.3	35.4	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.1	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	7.0
Minimum Split (s)	43.0
Total Split (s)	43.0
Total Split (%)	33%
Maximum Green (s)	40.0
Yellow Time (s)	2.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	7.0
Flash Dont Walk (s)	33.0
Pedestrian Calls (#/hr)	1
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	

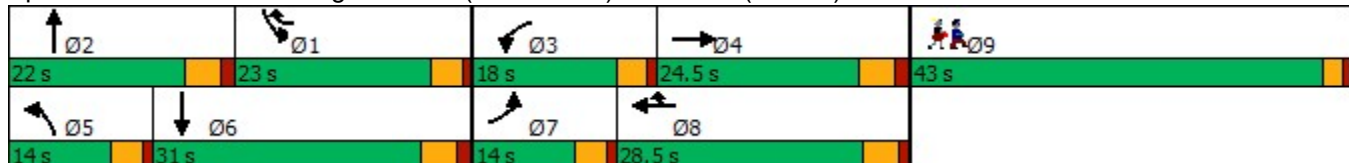


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	66.3	50.7		61.8	52.5	3.1	56.2	133.6		94.3	35.5	
LOS	E	D		E	D	A	E	F		F	D	
Approach Delay		53.5			35.6			125.9			54.5	
Approach LOS		D			D			F			D	
Queue Length 50th (ft)	76	174		111	206	0	46	~254		206	198	
Queue Length 95th (ft)	#197	#338		#348	#592	48	115	#532		#630	#524	
Internal Link Dist (ft)		2293			1060			1031			339	
Turn Bay Length (ft)	110			135			100			155		
Base Capacity (vph)	192	744		269	481	938	192	659		365	1137	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	19	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.73	0.87		0.78	0.84	0.40	0.45	1.19		1.03	0.70	

Intersection Summary

Area Type:	Other
Cycle Length:	130.5
Actuated Cycle Length:	96.1
Natural Cycle:	145
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	1.19
Intersection Signal Delay:	65.7
Intersection LOS:	E
Intersection Capacity Utilization:	76.9%
ICU Level of Service:	D
Analysis Period (min):	15
~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.	
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.	










Splits and Phases: 1: Kingstown Rd (Rte 1A/108) & Main St (Rte 1A)/Old Tower Hill Road



Lane Group	Ø9
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lanes, Volumes, Timings
5: Indian Run Village Access Rd.

Future (2030) No-Build PM Peak
Weekday

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	22	34	704	15	22	841
Future Volume (vph)	22	34	704	15	22	841
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Ped Bike Factor						1.00
Frt	0.917		0.997			
Flt Protected	0.981					0.999
Satd. Flow (prot)	1709	0	3599	0	0	3606
Flt Permitted	0.981					0.931
Satd. Flow (perm)	1709	0	3599	0	0	3361
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	49		5			
Link Speed (mph)	20		25			25
Link Distance (ft)	416		419			440
Travel Time (s)	14.2		11.4			12.0
Confl. Peds. (#/hr)					1	
Peak Hour Factor	0.70	0.70	0.94	0.94	0.95	0.95
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	31	49	749	16	23	885
Shared Lane Traffic (%)						
Lane Group Flow (vph)	80	0	765	0	0	908
Turn Type	Prot		NA		Perm	NA
Protected Phases	8		2			6
Permitted Phases					6	
Detector Phase	8		2		6	6
Switch Phase						
Minimum Initial (s)	5.0		8.0		8.0	8.0
Minimum Split (s)	27.0		12.5		12.5	12.5
Total Split (s)	27.0		30.0		30.0	30.0
Total Split (%)	47.4%		52.6%		52.6%	52.6%
Maximum Green (s)	23.0		25.5		25.5	25.5
Yellow Time (s)	3.0		3.5		3.5	3.5
All-Red Time (s)	1.0		1.0		1.0	1.0
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	4.0		4.5			4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	None		Min		Min	Min
Walk Time (s)	7.0					
Flash Dont Walk (s)	16.0					
Pedestrian Calls (#/hr)	9					
Act Effct Green (s)	8.9		31.3			31.3
Actuated g/C Ratio	0.21		0.75			0.75
v/c Ratio	0.20		0.28			0.36
Control Delay	8.8		5.1			5.6
Queue Delay	0.0		0.0			0.0
Total Delay	8.8		5.1			5.6



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
LOS	A		A			A
Approach Delay	8.8		5.1			5.6
Approach LOS	A		A			A
Queue Length 50th (ft)	7		31			40
Queue Length 95th (ft)	19		130			166
Internal Link Dist (ft)	336		339			360
Turn Bay Length (ft)						
Base Capacity (vph)	1037		2639			2463
Starvation Cap Reductn	0		0			0
Spillback Cap Reductn	0		0			0
Storage Cap Reductn	0		0			0
Reduced v/c Ratio	0.08		0.29			0.37

Intersection Summary

Area Type:	Other
Cycle Length:	57
Actuated Cycle Length:	41.5
Natural Cycle:	50
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.36
Intersection Signal Delay:	5.5
Intersection LOS:	A
Intersection Capacity Utilization:	50.3%
ICU Level of Service:	A
Analysis Period (min):	15

Splits and Phases: 5: Indian Run Village Access Rd.


























Lanes, Volumes, Timings

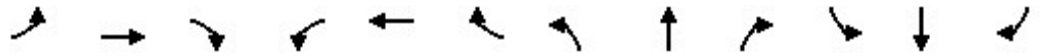
Future (2030) No-Build Sat Peak

1: Kingstown Rd (Rte 1A/108) & Main St (Rte 1A)/Old Tower Hill Road

Weekend

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	131	371	99	240	316	274	124	357	257	319	506	46
Future Volume (vph)	131	371	99	240	316	274	124	357	257	319	506	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	110		280	135		0	100		0	155		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	55			50			65			90		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.968				0.850		0.937			0.988	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3494	0	1805	1881	1615	1805	3383	0	1805	3567	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1805	3494	0	1805	1881	1615	1805	3383	0	1805	3567	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22				298		114			6	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		2373			1140			1111			419	
Travel Time (s)		64.7			31.1			30.3			11.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.88	0.88	0.88	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	142	403	108	261	343	298	141	406	292	354	562	51
Shared Lane Traffic (%)												
Lane Group Flow (vph)	142	511	0	261	343	298	141	698	0	354	613	0
Turn Type	Prot	NA		Prot	NA	pt+ov	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	8 1	5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8	8 1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	15.0		7.0	15.0		7.0	15.0		7.0	15.0	
Minimum Split (s)	11.0	20.0		11.0	19.5		11.0	20.0		11.0	20.0	
Total Split (s)	14.0	24.5		18.0	28.5		14.0	22.0		23.0	31.0	
Total Split (%)	10.7%	18.8%		13.8%	21.8%		10.7%	16.9%		17.6%	23.8%	
Maximum Green (s)	10.0	19.5		14.0	24.0		10.0	17.0		19.0	26.0	
Yellow Time (s)	3.0	3.5		3.0	3.5		3.0	3.5		3.0	3.5	
All-Red Time (s)	1.0	1.5		1.0	1.0		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	5.0		4.0	4.5		4.0	5.0		4.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.4	2.7		2.4	2.7		2.4	2.7		2.4	2.7	
Recall Mode	None	Min		None	Min		None	Min		None	Min	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	10.3	19.8		14.4	24.4	43.4	10.3	17.4		19.5	26.7	
Actuated g/C Ratio	0.11	0.21		0.15	0.25	0.45	0.11	0.18		0.20	0.28	
v/c Ratio	0.74	0.69		0.97	0.72	0.33	0.73	0.99		0.97	0.61	
Control Delay	66.5	41.1		89.9	44.4	3.0	66.1	64.4		79.3	35.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	7.0
Minimum Split (s)	43.0
Total Split (s)	43.0
Total Split (%)	33%
Maximum Green (s)	40.0
Yellow Time (s)	2.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	7.0
Flash Dont Walk (s)	33.0
Pedestrian Calls (#/hr)	1
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	

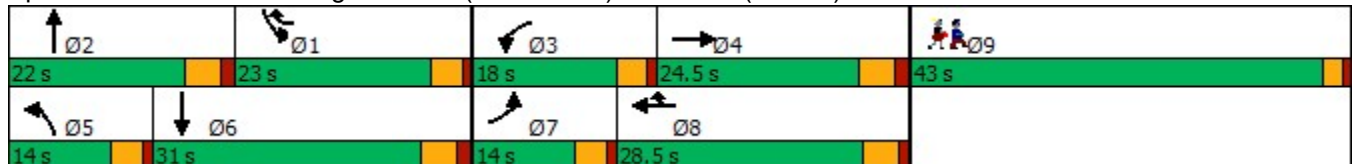


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	66.5	41.1		89.9	44.4	3.0	66.1	64.4		79.3	35.2	
LOS	E	D		F	D	A	E	E		E	D	
Approach Delay		46.6			43.9			64.7			51.4	
Approach LOS		D			D			E			D	
Queue Length 50th (ft)	77	129		143	168	0	76	170		191	148	
Queue Length 95th (ft)	#267	#330		#464	#492	49	#256	#461		#586	#355	
Internal Link Dist (ft)		2293			1060			1031			339	
Turn Bay Length (ft)	110			135			100			155		
Base Capacity (vph)	193	746		270	482	896	193	708		366	997	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.74	0.68		0.97	0.71	0.33	0.73	0.99		0.97	0.61	

Intersection Summary

Area Type:	Other
Cycle Length:	130.5
Actuated Cycle Length:	95.9
Natural Cycle:	145
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.99
Intersection Signal Delay:	51.8
Intersection LOS:	D
Intersection Capacity Utilization:	77.5%
ICU Level of Service:	D
Analysis Period (min):	15
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.	










Splits and Phases: 1: Kingstown Rd (Rte 1A/108) & Main St (Rte 1A)/Old Tower Hill Road



Lane Group	Ø9
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lanes, Volumes, Timings
5: Indian Run Village Access Rd.

Future (2030) No-Build Sat Peak
Weekend

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	32	39	628	13	39	939
Future Volume (vph)	32	39	628	13	39	939
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Ped Bike Factor						1.00
Frt	0.926		0.997			
Flt Protected	0.978					0.998
Satd. Flow (prot)	1721	0	3599	0	0	3603
Flt Permitted	0.978					0.913
Satd. Flow (perm)	1721	0	3599	0	0	3296
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	44		5			
Link Speed (mph)	20		25			25
Link Distance (ft)	416		419			440
Travel Time (s)	14.2		11.4			12.0
Confl. Peds. (#/hr)					1	
Peak Hour Factor	0.88	0.88	0.92	0.92	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	36	44	683	14	41	999
Shared Lane Traffic (%)						
Lane Group Flow (vph)	80	0	697	0	0	1040
Turn Type	Prot		NA		Perm	NA
Protected Phases	8		2			6
Permitted Phases					6	
Detector Phase	8		2		6	6
Switch Phase						
Minimum Initial (s)	5.0		8.0		8.0	8.0
Minimum Split (s)	27.0		12.5		12.5	12.5
Total Split (s)	27.0		30.0		30.0	30.0
Total Split (%)	47.4%		52.6%		52.6%	52.6%
Maximum Green (s)	23.0		25.5		25.5	25.5
Yellow Time (s)	3.0		3.5		3.5	3.5
All-Red Time (s)	1.0		1.0		1.0	1.0
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	4.0		4.5			4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	None		Min		Min	Min
Walk Time (s)	7.0					
Flash Dont Walk (s)	16.0					
Pedestrian Calls (#/hr)	9					
Act Effct Green (s)	9.1		33.3			33.3
Actuated g/C Ratio	0.21		0.77			0.77
v/c Ratio	0.20		0.25			0.41
Control Delay	9.9		4.8			6.0
Queue Delay	0.0		0.0			0.0
Total Delay	9.9		4.8			6.0



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
LOS	A		A		A	
Approach Delay	9.9		4.8		6.0	
Approach LOS	A		A		A	
Queue Length 50th (ft)	10		28		50	
Queue Length 95th (ft)	29		116		202	
Internal Link Dist (ft)	336		339		360	
Turn Bay Length (ft)						
Base Capacity (vph)	996		2664		2439	
Starvation Cap Reductn	0		0		0	
Spillback Cap Reductn	0		0		0	
Storage Cap Reductn	0		0		0	
Reduced v/c Ratio	0.08		0.26		0.43	

Intersection Summary

Area Type:	Other
Cycle Length:	57
Actuated Cycle Length:	43.5
Natural Cycle:	55
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.41
Intersection Signal Delay:	5.7
Intersection LOS:	A
Intersection Capacity Utilization	59.9%
ICU Level of Service	B
Analysis Period (min)	15

Splits and Phases: 5: Indian Run Village Access Rd.


























Lanes, Volumes, Timings

Future (2030) Build AM Peak

1: Kingstown Rd (Rte 1A/108) & Main St (Rte 1A)/Old Tower Hill Road

09/25/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	71	229	50	76	267	179	57	540	77	189	253	35
Future Volume (vph)	71	229	50	76	267	179	57	540	77	189	253	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	110		280	135		0	100		0	155		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	55			50			65			90		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.973				0.850		0.981			0.982	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3484	0	1770	1845	1615	1805	3506	0	1787	3514	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1805	3484	0	1770	1845	1615	1805	3506	0	1787	3514	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17				190		11			11	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		2373			1140			1111			419	
Travel Time (s)		64.7			31.1			30.3			11.4	
Peak Hour Factor	0.78	0.78	0.78	0.94	0.94	0.94	0.77	0.77	0.77	0.91	0.91	0.91
Heavy Vehicles (%)	0%	1%	0%	2%	3%	0%	0%	1%	1%	1%	1%	0%
Adj. Flow (vph)	91	294	64	81	284	190	74	701	100	208	278	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	91	358	0	81	284	190	74	801	0	208	316	0
Turn Type	Prot	NA		Prot	NA	pt+ov	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	8 1	5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8	8 1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	15.0		7.0	15.0		7.0	15.0		7.0	15.0	
Minimum Split (s)	11.0	20.0		11.0	19.5		11.0	20.0		11.0	20.0	
Total Split (s)	14.0	24.5		14.0	24.5		15.0	30.0		18.0	33.0	
Total Split (%)	10.8%	18.9%		10.8%	18.9%		11.6%	23.2%		13.9%	25.5%	
Maximum Green (s)	10.0	19.5		10.0	20.0		11.0	25.0		14.0	28.0	
Yellow Time (s)	3.0	3.5		3.0	3.5		3.0	3.5		3.0	3.5	
All-Red Time (s)	1.0	1.5		1.0	1.0		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	5.0		4.0	4.5		4.0	5.0		4.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.4	2.7		2.4	2.7		2.4	2.7		2.4	2.7	
Recall Mode	None	Min		None	Min		None	Min		None	Min	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	9.0	22.8		8.8	20.6	34.5	20.0	25.7		14.4	22.6	
Actuated g/C Ratio	0.10	0.24		0.09	0.22	0.37	0.21	0.27		0.15	0.24	
v/c Ratio	0.53	0.42		0.49	0.70	0.27	0.19	0.83		0.76	0.37	
Control Delay	55.4	34.1		54.7	47.0	4.0	34.9	41.8		59.1	35.5	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	43.0
Total Split (s)	43.0
Total Split (%)	33%
Maximum Green (s)	40.0
Yellow Time (s)	2.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	7.0
Flash Dont Walk (s)	33.0
Pedestrian Calls (#/hr)	2
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	55.4	34.1		54.7	47.0	4.0	34.9	41.8		59.1	35.5	
LOS	E	C		D	D	A	C	D		E	D	
Approach Delay		38.4			33.4			41.2			44.8	
Approach LOS		D			C			D			D	
Queue Length 50th (ft)	47	82		42	139	0	30	204		108	78	
Queue Length 95th (ft)	116	167		#130	#426	47	90	#421		#355	175	
Internal Link Dist (ft)		2293			1060			1031			339	
Turn Bay Length (ft)	110			135			100			155		
Base Capacity (vph)	197	856		193	403	712	402	967		273	1210	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.46	0.42		0.42	0.70	0.27	0.18	0.83		0.76	0.26	

Intersection Summary

Area Type:	Other
Cycle Length:	129.5
Actuated Cycle Length:	94
Natural Cycle:	135
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.83
Intersection Signal Delay:	39.7
Intersection LOS:	D
Intersection Capacity Utilization:	62.3%
ICU Level of Service:	B
Analysis Period (min):	15
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.	











Splits and Phases: 1: Kingstown Rd (Rte 1A/108) & Main St (Rte 1A)/Old Tower Hill Road

Ø2	Ø1	Ø3	Ø4	Ø9
30 s	18 s	14 s	24.5 s	43 s
Ø6	Ø5	Ø7	Ø8	
33 s	15 s	14 s	24.5 s	

Lane Group	Ø9
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lanes, Volumes, Timings
5: Indian Run Village Access Rd.

Future (2030) Build AM Peak
09/25/2025

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	20	13	717	7	13	514
Future Volume (vph)	20	13	717	7	13	514
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Ped Bike Factor						1.00
Frt	0.947		0.999			
Flt Protected	0.971					0.999
Satd. Flow (prot)	1747	0	3571	0	0	3572
Flt Permitted	0.971					0.933
Satd. Flow (perm)	1747	0	3571	0	0	3336
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	19		2			
Link Speed (mph)	20		25			25
Link Distance (ft)	240		419			297
Travel Time (s)	8.2		11.4			8.1
Confl. Peds. (#/hr)					1	
Peak Hour Factor	0.69	0.69	0.83	0.83	0.88	0.88
Heavy Vehicles (%)	0%	0%	1%	0%	0%	1%
Adj. Flow (vph)	29	19	864	8	15	584
Shared Lane Traffic (%)						
Lane Group Flow (vph)	48	0	872	0	0	599
Turn Type	Prot		NA		Perm	NA
Protected Phases	8		2			6
Permitted Phases					6	
Detector Phase	8		2		6	6
Switch Phase						
Minimum Initial (s)	5.0		8.0		8.0	8.0
Minimum Split (s)	27.0		22.5		22.5	22.5
Total Split (s)	27.0		23.0		23.0	23.0
Total Split (%)	54.0%		46.0%		46.0%	46.0%
Maximum Green (s)	23.0		18.5		18.5	18.5
Yellow Time (s)	3.0		3.5		3.5	3.5
All-Red Time (s)	1.0		1.0		1.0	1.0
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	4.0		4.5			4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	2.2		2.8		2.8	2.8
Recall Mode	None		Min		Min	Min
Walk Time (s)	7.0					
Flash Dont Walk (s)	16.0					
Pedestrian Calls (#/hr)	0					
Act Effct Green (s)	5.7		29.5			29.5
Actuated g/C Ratio	0.17		0.86			0.86
v/c Ratio	0.16		0.28			0.21
Control Delay	12.2		2.3			2.1
Queue Delay	0.0		0.0			0.0
Total Delay	12.2		2.3			2.1

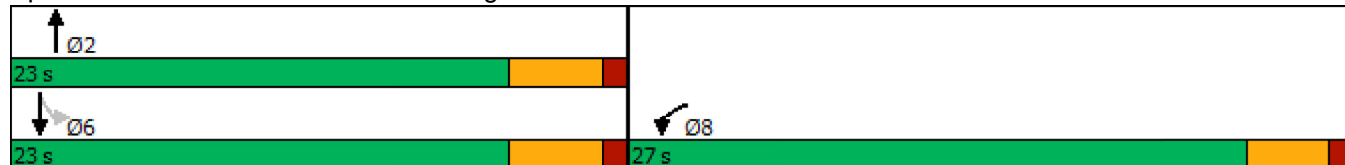


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
LOS	B		A			A
Approach Delay	12.2		2.3			2.1
Approach LOS	B		A			A
Queue Length 50th (ft)	4		0			0
Queue Length 95th (ft)	18		55			40
Internal Link Dist (ft)	160		339			217
Turn Bay Length (ft)						
Base Capacity (vph)	1215		3063			2862
Starvation Cap Reductn	0		0			0
Spillback Cap Reductn	0		0			0
Storage Cap Reductn	0		0			0
Reduced v/c Ratio	0.04		0.28			0.21

Intersection Summary

Area Type:	Other
Cycle Length:	50
Actuated Cycle Length:	34.4
Natural Cycle:	50
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.28
Intersection Signal Delay:	2.5
Intersection LOS:	A
Intersection Capacity Utilization:	34.8%
ICU Level of Service:	A
Analysis Period (min):	15

Splits and Phases: 5: Indian Run Village Access Rd.


























Lanes, Volumes, Timings

Future (2030) Build PM Peak

1: Kingstown Rd (Rte 1A/108) & Main St (Rte 1A)/Old Tower Hill Road

09/25/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	111	382	99	185	356	341	70	455	188	358	700	44
Future Volume (vph)	111	382	99	185	356	341	70	455	188	358	700	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	110		280	135		0	100		0	155		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	55			50			65			90		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.969				0.850		0.956			0.991	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3498	0	1805	1881	1615	1805	3451	0	1805	3578	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1805	3498	0	1805	1881	1615	1805	3451	0	1805	3578	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21				388		40			4	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		2373			1140			1111			419	
Travel Time (s)		64.7			31.1			30.3			11.4	
Peak Hour Factor	0.74	0.74	0.74	0.88	0.88	0.88	0.81	0.81	0.81	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	150	516	134	210	405	388	86	562	232	385	753	47
Shared Lane Traffic (%)												
Lane Group Flow (vph)	150	650	0	210	405	388	86	794	0	385	800	0
Turn Type	Prot	NA		Prot	NA	pt+ov	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	8 1	5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8	8 1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	15.0		7.0	15.0		7.0	15.0		7.0	15.0	
Minimum Split (s)	11.0	20.0		11.0	19.5		11.0	20.0		11.0	20.0	
Total Split (s)	14.0	24.5		18.0	28.5		14.0	22.0		23.0	31.0	
Total Split (%)	10.7%	18.8%		13.8%	21.8%		10.7%	16.9%		17.6%	23.8%	
Maximum Green (s)	10.0	19.5		14.0	24.0		10.0	17.0		19.0	26.0	
Yellow Time (s)	3.0	3.5		3.0	3.5		3.0	3.5		3.0	3.5	
All-Red Time (s)	1.0	1.5		1.0	1.0		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	5.0		4.0	4.5		4.0	5.0		4.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.4	2.7		2.4	2.7		2.4	2.7		2.4	2.7	
Recall Mode	None	Min		None	Min		None	Min		None	Min	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	10.3	20.0		14.4	24.6	43.6	8.9	17.4		19.5	30.5	
Actuated g/C Ratio	0.11	0.21		0.15	0.26	0.45	0.09	0.18		0.20	0.32	
v/c Ratio	0.78	0.87		0.78	0.84	0.41	0.51	1.21		1.05	0.70	
Control Delay	70.8	50.7		61.8	52.5	3.1	56.2	140.2		100.7	35.7	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.1	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	7.0
Minimum Split (s)	43.0
Total Split (s)	43.0
Total Split (%)	33%
Maximum Green (s)	40.0
Yellow Time (s)	2.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	7.0
Flash Dont Walk (s)	33.0
Pedestrian Calls (#/hr)	1
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	

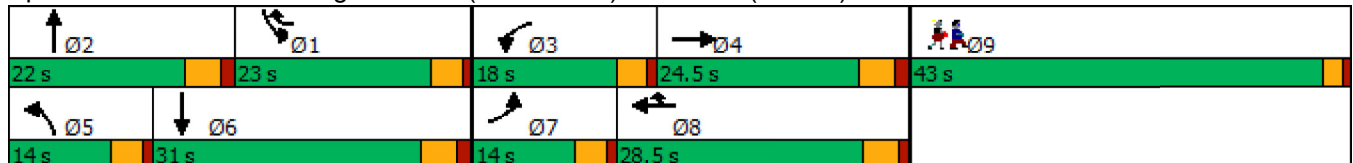


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	70.8	50.7		61.8	52.5	3.1	56.2	140.2		100.7	35.8	
LOS	E	D		E	D	A	E	F		F	D	
Approach Delay		54.4			35.3			132.0			56.9	
Approach LOS		D			D			F			E	
Queue Length 50th (ft)	81	174		111	206	0	46	~261		212	204	
Queue Length 95th (ft)	#211	#338		#348	#592	49	115	#541		#648	#540	
Internal Link Dist (ft)		2293			1060			1031			339	
Turn Bay Length (ft)	110			135			100			155		
Base Capacity (vph)	192	744		269	481	944	192	658		365	1136	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	16	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.78	0.87		0.78	0.84	0.41	0.45	1.21		1.05	0.71	

Intersection Summary

Area Type:	Other
Cycle Length:	130.5
Actuated Cycle Length:	96.1
Natural Cycle:	145
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	1.21
Intersection Signal Delay:	67.9
Intersection LOS:	E
Intersection Capacity Utilization:	77.9%
ICU Level of Service:	D
Analysis Period (min):	15
~	Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.
#	95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.










Splits and Phases: 1: Kingstown Rd (Rte 1A/108) & Main St (Rte 1A)/Old Tower Hill Road



Lane Group	Ø9
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lanes, Volumes, Timings
5: Indian Run Village Access Rd.

Future (2030) Build PM Peak
09/25/2025

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	44	41	727	15	22	841
Future Volume (vph)	44	41	727	15	22	841
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Ped Bike Factor						1.00
Frt	0.935		0.997			
Flt Protected	0.975					0.999
Satd. Flow (prot)	1732	0	3599	0	0	3606
Flt Permitted	0.975					0.930
Satd. Flow (perm)	1732	0	3599	0	0	3357
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	59		5			
Link Speed (mph)	20		25			25
Link Distance (ft)	240		419			297
Travel Time (s)	8.2		11.4			8.1
Confl. Peds. (#/hr)					1	
Peak Hour Factor	0.70	0.70	0.94	0.94	0.95	0.95
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	63	59	773	16	23	885
Shared Lane Traffic (%)						
Lane Group Flow (vph)	122	0	789	0	0	908
Turn Type	Prot		NA		Perm	NA
Protected Phases	8		2			6
Permitted Phases					6	
Detector Phase	8		2		6	6
Switch Phase						
Minimum Initial (s)	5.0		8.0		8.0	8.0
Minimum Split (s)	27.0		12.5		12.5	12.5
Total Split (s)	27.0		30.0		30.0	30.0
Total Split (%)	47.4%		52.6%		52.6%	52.6%
Maximum Green (s)	23.0		25.5		25.5	25.5
Yellow Time (s)	3.0		3.5		3.5	3.5
All-Red Time (s)	1.0		1.0		1.0	1.0
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	4.0		4.5			4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	None		Min		Min	Min
Walk Time (s)	7.0					
Flash Dont Walk (s)	16.0					
Pedestrian Calls (#/hr)	9					
Act Effct Green (s)	9.3		27.2			27.2
Actuated g/C Ratio	0.23		0.66			0.66
v/c Ratio	0.28		0.33			0.41
Control Delay	9.2		6.2			6.9
Queue Delay	0.0		0.0			0.0
Total Delay	9.2		6.2			6.9



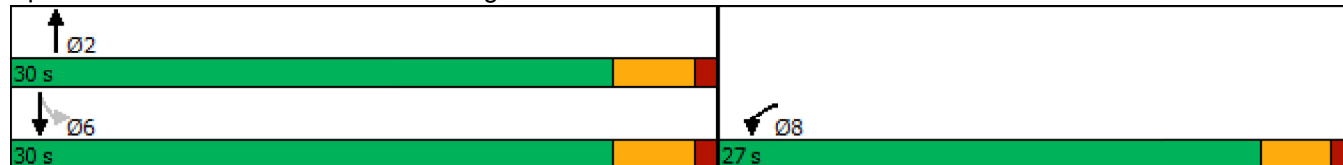
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
LOS	A		A			A
Approach Delay	9.2		6.2			6.9
Approach LOS	A		A			A
Queue Length 50th (ft)	12		34			43
Queue Length 95th (ft)	27		135			167
Internal Link Dist (ft)	160		339			217
Turn Bay Length (ft)						
Base Capacity (vph)	1036		2385			2223
Starvation Cap Reductn	0		0			0
Spillback Cap Reductn	0		0			0
Storage Cap Reductn	0		0			0
Reduced v/c Ratio	0.12		0.33			0.41

Intersection Summary

Area Type: Other
 Cycle Length: 57
 Actuated Cycle Length: 41.3
 Natural Cycle: 50
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.41
 Intersection Signal Delay: 6.7
 Intersection Capacity Utilization 51.1%
 Analysis Period (min) 15

Intersection LOS: A
 ICU Level of Service A

Splits and Phases: 5: Indian Run Village Access Rd.



Lanes, Volumes, Timings

Future (2030) Build Sat Peak

1: Kingstown Rd (Rte 1A/108) & Main St (Rte 1A)/Old Tower Hill Road

09/25/2025



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	138	371	99	240	316	282	124	364	257	327	513	53
Future Volume (vph)	138	371	99	240	316	282	124	364	257	327	513	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	110		280	135		0	100		0	155		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	55			50			65			90		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.968				0.850		0.938			0.986	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3494	0	1805	1881	1615	1805	3386	0	1805	3559	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1805	3494	0	1805	1881	1615	1805	3386	0	1805	3559	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22				307		113			7	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		2373			1140			1111			419	
Travel Time (s)		64.7			31.1			30.3			11.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.88	0.88	0.88	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	150	403	108	261	343	307	141	414	292	363	570	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	150	511	0	261	343	307	141	706	0	363	629	0
Turn Type	Prot	NA		Prot	NA	pt+ov	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	8 1	5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8	8 1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	15.0		7.0	15.0		7.0	15.0		7.0	15.0	
Minimum Split (s)	11.0	20.0		11.0	19.5		11.0	20.0		11.0	20.0	
Total Split (s)	14.0	24.5		18.0	28.5		14.0	22.0		23.0	31.0	
Total Split (%)	10.7%	18.8%		13.8%	21.8%		10.7%	16.9%		17.6%	23.8%	
Maximum Green (s)	10.0	19.5		14.0	24.0		10.0	17.0		19.0	26.0	
Yellow Time (s)	3.0	3.5		3.0	3.5		3.0	3.5		3.0	3.5	
All-Red Time (s)	1.0	1.5		1.0	1.0		1.0	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	5.0		4.0	4.5		4.0	5.0		4.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.4	2.7		2.4	2.7		2.4	2.7		2.4	2.7	
Recall Mode	None	Min		None	Min		None	Min		None	Min	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
Act Effct Green (s)	10.3	19.8		14.4	24.4	43.4	10.3	17.4		19.5	26.7	
Actuated g/C Ratio	0.11	0.21		0.15	0.25	0.45	0.11	0.18		0.20	0.28	
v/c Ratio	0.78	0.69		0.97	0.72	0.34	0.73	1.00		0.99	0.63	
Control Delay	70.5	41.1		89.9	44.4	3.0	66.1	67.4		85.1	35.5	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	7.0
Minimum Split (s)	43.0
Total Split (s)	43.0
Total Split (%)	33%
Maximum Green (s)	40.0
Yellow Time (s)	2.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	7.0
Flash Dont Walk (s)	33.0
Pedestrian Calls (#/hr)	1
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	70.5	41.1		89.9	44.4	3.0	66.1	67.4		85.1	35.5	
LOS	E	D		F	D	A	E	E		F	D	
Approach Delay		47.8			43.5			67.2			53.7	
Approach LOS		D			D			E			D	
Queue Length 50th (ft)	81	129		143	168	0	76	173		197	153	
Queue Length 95th (ft)	#283	#330		#464	#492	50	#256	#470		#604	#371	
Internal Link Dist (ft)		2293			1060			1031			339	
Turn Bay Length (ft)	110			135			100			155		
Base Capacity (vph)	193	746		270	482	901	193	708		366	995	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.78	0.68		0.97	0.71	0.34	0.73	1.00		0.99	0.63	

Intersection Summary

Area Type:	Other
Cycle Length:	130.5
Actuated Cycle Length:	95.9
Natural Cycle:	145
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	1.00
Intersection Signal Delay:	53.2
Intersection LOS:	D
Intersection Capacity Utilization:	78.1%
ICU Level of Service:	D
Analysis Period (min):	15
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	










Splits and Phases: 1: Kingstown Rd (Rte 1A/108) & Main St (Rte 1A)/Old Tower Hill Road

Ø2	Ø1	Ø3	Ø4	Ø9
22 s	23 s	18 s	24.5 s	43 s
Ø5	Ø6	Ø7	Ø8	
14 s	31 s	14 s	28.5 s	

Lane Group	Ø9
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lanes, Volumes, Timings
5: Indian Run Village Access Rd.

Future (2030) Build Sat Peak
09/25/2025

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	54	46	650	13	39	939
Future Volume (vph)	54	46	650	13	39	939
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Ped Bike Factor						1.00
Frt	0.938		0.997			
Flt Protected	0.974					0.998
Satd. Flow (prot)	1736	0	3599	0	0	3603
Flt Permitted	0.974					0.911
Satd. Flow (perm)	1736	0	3599	0	0	3289
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	52		4			
Link Speed (mph)	20		25			25
Link Distance (ft)	240		419			297
Travel Time (s)	8.2		11.4			8.1
Confl. Peds. (#/hr)					1	
Peak Hour Factor	0.88	0.88	0.92	0.92	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	61	52	707	14	41	999
Shared Lane Traffic (%)						
Lane Group Flow (vph)	113	0	721	0	0	1040
Turn Type	Prot		NA		Perm	NA
Protected Phases	8		2			6
Permitted Phases					6	
Detector Phase	8		2		6	6
Switch Phase						
Minimum Initial (s)	5.0		8.0		8.0	8.0
Minimum Split (s)	27.0		12.5		12.5	12.5
Total Split (s)	27.0		30.0		30.0	30.0
Total Split (%)	47.4%		52.6%		52.6%	52.6%
Maximum Green (s)	23.0		25.5		25.5	25.5
Yellow Time (s)	3.0		3.5		3.5	3.5
All-Red Time (s)	1.0		1.0		1.0	1.0
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	4.0		4.5			4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	None		Min		Min	Min
Walk Time (s)	7.0					
Flash Dont Walk (s)	16.0					
Pedestrian Calls (#/hr)	9					
Act Effct Green (s)	9.3		29.2			29.2
Actuated g/C Ratio	0.21		0.67			0.67
v/c Ratio	0.27		0.30			0.47
Control Delay	10.2		5.8			7.2
Queue Delay	0.0		0.0			0.0
Total Delay	10.2		5.8			7.2



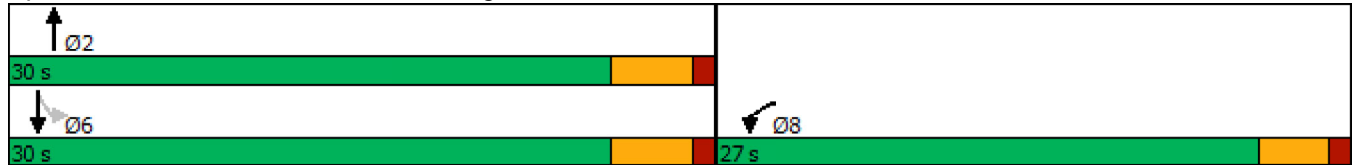
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
LOS	B		A			A
Approach Delay	10.2		5.8			7.2
Approach LOS	B		A			A
Queue Length 50th (ft)	14		32			54
Queue Length 95th (ft)	37		122			204
Internal Link Dist (ft)	160		339			217
Turn Bay Length (ft)						
Base Capacity (vph)	988		2339			2136
Starvation Cap Reductn	0		0			0
Spillback Cap Reductn	0		0			0
Storage Cap Reductn	0		0			0
Reduced v/c Ratio	0.11		0.31			0.49

Intersection Summary

Area Type: Other
 Cycle Length: 57
 Actuated Cycle Length: 43.3
 Natural Cycle: 55
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.47
 Intersection Signal Delay: 6.9
 Intersection Capacity Utilization 62.1%
 Analysis Period (min) 15

Intersection LOS: A
 ICU Level of Service B

Splits and Phases: 5: Indian Run Village Access Rd.



**Mr. Kenneth Tetzner
Greenhouse Dispensary**

**APPENDIX E
Traffic Signal Plan**

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	R.I.	STPG-HSIP(003)	2013	41	69

TRAFFIC SIGNAL LEGEND

- 10) PRECAST TYPE A HANDHOLE, STD. 18.2.0
- 14) BREAK INTO EXISTING HANDHOLE
- 20) 2 INCH RIGID STEEL CONDUIT - UNDERGROUND
- 26) 3 INCH RIGID STEEL CONDUIT - UNDERGROUND
- 28) 2 INCH RIGID STEEL CONDUIT - OVERHEAD
- 21) 2 INCH SCHEDULE 40 PVC CONDUIT - UNDERGROUND
- 29) 3 INCH SCHEDULE 40 PVC CONDUIT - UNDERGROUND
- 24) 2 INCH POLYVINYL CHLORIDE PLASTIC CONDUIT - OVERHEAD
- 25) 3 INCH SCHEDULE 80 PVC CONDUIT - UNDER EXISTING PAVEMENT
- 36) ACTUATED CONTROLLER TS-2, TYPE 1 W/8 PHASE ASSEMBLY GROUND MOUNTED INCLUDING FOUNDATION AND CABINET STD. 19.1.0
- 31) METER SOCKET w/ MANUAL BY-PASS
- 31) TRAFFIC SIGNAL DIAL-UP MODEM
- 41) TRAFFIC SIGNAL STANDARD, 8 FT. STD 19.4.0 ALUMINUM PEDESTAL POLE AND FOUNDATION
- 43) TRAFFIC SIGNAL STANDARD GALVANIZED STEEL AND FOUNDATION STD. 19.3.0
- 50) TETHER WIRE 5/16" WITH BREAKAWAY DISCONNECTS
- 56) SPAN AND MESSENGER WIRE 6/16"
- 66) 1-WAY 3-SECTION SPAN MOUNTED SIGNAL HEAD, 12 INCH
- 64) 2-WAY BRACKET MOUNTED COUNTDOWN L.E.D. PEDESTRIAN SIGNAL HEAD, 12 INCH
- 67) 2-WAY PEDESTAL MOUNTED COUNTDOWN L.E.D. PEDESTRIAN SIGNAL HEAD, 12 INCH
- 61) 1-WAY PEDESTAL MOUNTED COUNTDOWN L.E.D. PEDESTRIAN SIGNAL HEAD, 12 INCH
- 62) 2-WAY 3-SECTION SPAN MOUNTED SIGNAL HEAD, 12 INCH
- 70) 6 AWG SINGLE CONDUCTOR CABLE 600V INSULATION
- 71) 14 AWG 2 CONDUCTOR TWISTED SHIELDED CABLE
- 73) 14 AWG 3 CONDUCTOR CABLE
- 71) 14 AWG 5 CONDUCTOR CABLE
- 7K) 14 AWG 7 CONDUCTOR CABLE
- 7M) 14 AWG 9 CONDUCTOR CABLE
- 8C) TRAFFIC DETECTOR RELAY - LOOP 4 CHANNEL
- 9V) ACCESSIBLE PEDESTRIAN DETECTION SYSTEM
- 9A) TRAFFIC DETECTOR - QUADRUPOLE INDUCTIVE LOOP

SEQUENCE AND TIMING DIAGRAM

APPROACH	DIRECTION	HOUSING	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8	PED	FLASHING OPERATION
MINIMUM INTERVAL			7	15	7	15	7	15	7	15		
VEHICLE EXTENSION			2.4	2.7	2.4	2.7	2.4	2.7	2.4	2.7		
MAXIMUM 1			19	16	14	17	10	26	10	24		
MAXIMUM 2			14	25	10	17	11	28	10	20		
YELLOW CLEARANCE												
RED CLEARANCE			3	3.5	3	3.5	3	3.5	3	3.5		
PED. WALK/CLEARANCE			1	1.5	1	1.5	1	1.5	1	1.5	7	33
<p>SEQUENCE AND TIMING NOTES</p> <ul style="list-style-type: none"> ONLY WITH PEDESTRIAN ACTUATION. OTHERWISE, GREEN AND DON'T WALK INDICATORS WILL BE MAINTAINED. FLASHING OPERATION PER M.U.T.C.D. SECTION 4D.28. MAXIMUM 1: ALL OTHER TIMES MAXIMUM 2: M-F 0600-1000 												

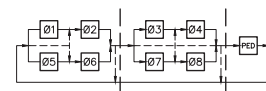
GENERAL NOTES

- ALL EXISTING WIRING TO BE REMOVED.
- SIGNAL TO BE INITIALLY PROGRAMMED TO OPERATE FREE AT ALL TIMES.
- SEE SHEETS ENTITLED "STANDARD NOTES" AND "JOB SPECIFIC NOTES AND LEGEND" FOR ADDITIONAL NOTES.
- PROPOSED SIGN DESIGNATIONS AND FACES SHOWN ON SIGNING & STRIPING PLAN NO. 5.
- PROPOSED PAVEMENT MARKING TYPES AND COLORS SHOWN ON SIGNING & STRIPING PLAN NO. 5.

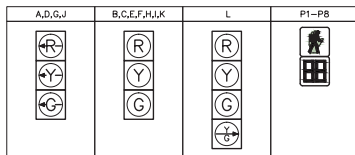
INDUCTIVE LOOP DETECTOR TABLE

LOOP	SIZE	SLOT	CHANNEL	CALL PHASE	EXT. PHASE	DELAY	MODE	REMARKS
1	6'x40'	2	1	5	5	3	PRESENCE	
2	6'x40'	2	2	2	2	3	PRESENCE	
3	6'x40'	2	3	2	2	3	PRESENCE	
4	6'x40'	4	1	1	1	3	PRESENCE	
5	6'x40'	4	2	6	6	3	PRESENCE	
6	6'x40'	4	3	6	6	3	PRESENCE	
7	6'x40'	6	1	3	3	3	PRESENCE	
8	6'x40'	6	2	8	8	3	PRESENCE	
9	6'x40'	6	3	8	8	5	PRESENCE	
10	6'x40'	8	1	7	7	3	PRESENCE	
11	6'x40'	8	2	4	4	3	PRESENCE	
12	6'x40'	8	3	4	4	3	PRESENCE	

PHASE SEQUENCE DIAGRAM



SIGNAL HEAD DATA



- SIGNAL HEAD NOTES**
- ALL SIGNAL HEADS ARE TO BE REPLACED.
 - ARROW DISPLAYS SHALL BE MADE UP OF TWO ROWS OF LED MODULES.

REMOVE AND DISPOSE SIGNAL EQUIPMENT

QUANTITY	ITEM DESCRIPTION
17	LOOP DETECTORS
2500 LF	TRAFFIC SIGNAL WIRE
6	HANDHOLES

REMOVE AND SALVAGE SIGNAL EQUIPMENT

QUANTITY	ITEM DESCRIPTION
8	TRAFFIC SIGNAL HEADS
8	PEDESTRIAN SIGNAL HEADS
8	PEDESTRIAN PUSHBUTTONS WITH SIGNS
4	PEDESTRIAN PEDESTAL POLES

SIGNAL NO. 022

REVISIONS

NO.	DATE	BY

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

HIGHWAY SAFETY IMPROVEMENT PROGRAM

SOUTH KINGSTOWN RHODE ISLAND

TRAFFIC SIGNAL PLAN NO. 4

ROUTE 108 (KINGSTOWN ROAD) AT OLD TOWER HILL ROAD/MAIN STREET

CHECKED BY: _____ DATE: JANUARY 2014 SCALE: H:1"=20'

