

# **EXHIBIT A**

October 30, 2023

Mr. Nic Reuter, Director  
Picerne Homes  
75 Lambert Lind Highway  
Warwick, RI 02886

Re: **Fieldstone Farms**  
**Supplemental Traffic Impact Analysis**  
**South Kingstown, Rhode Island**  
Pare Project No.: 18145.00

Dear Mr. Reuter:

In response to recent comments received at the September 26, 2023 Town of South Kingstown Planning Board meeting regarding the *Traffic Impact Assessment for the Fieldstone Farms Residential Development, dated July 2022* and also through correspondence with the Town, Pare is providing the following supplemental information for review.

### TRAFFIC ANALYSIS

For the July 2022 Traffic Impact Assessment, traffic volume data was collected through turning movement counts (TMCs) at the study intersections. TMC's were performed during the weekday morning (7:00 a.m. to 9:00 a.m.) and weekday afternoon (4:00 p.m. to 6:00 p.m.) peak periods. These time periods were selected as they represent the peak traffic time periods for the proposed residential development. The traffic counts for that study were performed on Tuesday, April 26, 2022 and Thursday, April 28, 2022. Those counts were performed while the URI Spring 2022 Semester was still in regular session as the last day of classes was May 2, 2022. It was stated by a resident (a professor) at the hearing that these counts were not peak conditions as student attendance drops off that last week of classes. To address that comment, additional counts were recently performed on October 4 and October 5, 2023. These counts were used to reanalyze the Existing, Future No-Build (2028) and Future Build Conditions (2028). The revised peak hour traffic data are attached on Figures 3, 4, and 6, dated October 2023 and as attached.

For the Future No-Build conditions, the traffic volumes in the study area were projected to the year 2028 to cover a five-year horizon from the existing 2023 condition. Under the future (2028) no-build scenario, the traffic volumes include existing traffic volumes and additional traffic volumes associated with expected background growth. For this study, the background growth in traffic volumes consists of a general background traffic growth rate consistent with recent traffic volume growth in the area surrounding the study area. This method allows for the inclusion of a general growth rate to account for any unforeseen increases in traffic volumes on the transportation system adjacent to the project. As we did in the previous study, a conservative annual growth rate of 1.5% was applied as a general background growth rate.

For the future build condition, the future no-build condition plus the anticipated trips due to the construction of the proposed residential development was analyzed.

As previously stated, Pare used conservative trips being generated using the “peak hour of generator”, which provides the peak for the site itself, rather than the volumes based on the peak volumes of the surrounding streets. The peak hour generated trips added to the roadway peak hour are as follows:

**Trip Generation Summary**

		AM Peak	PM Peak
<b>LUC 210 – Single Family Detached Housing – 39 Units</b>	Entering	9	27
	Exiting	26	16
	Total	35	43

The distribution of trips entering and exiting the site was determined using Journey-to-Work data from the US Census for the Town of South Kingstown. Trips to and from the site were split between the sites along Old North Road and Stony Fort Road based on the number of dwelling units along each location.

In summary, the analysis scenarios considered are presented below.

**Analysis Scenario Summary**

Existing (2023) Conditions	Analysis Scenario	
	Future (2028) No-Build Conditions	Future (2028) Build Conditions
Existing traffic volumes these volumes are the unchanged peak hour traffic volumes collected in the intersection turning movement counts.	Future traffic volumes <b>without</b> the proposed development – these volumes are the existing traffic volumes inflated with a 1.5% annual growth rate over 5 years. This represents the anticipated future conditions if the proposed development <b>is not</b> constructed.	Future traffic volumes <b>with</b> the proposed development – these volumes are the existing traffic volumes inflated with a 1.5% annual growth rate over 5 years plus the trip generated by the proposed development. They represent the anticipated future conditions if the proposed development <b>is</b> constructed.

The capacity analysis characterizes 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 are defined for each type of facility, from A to F, with A representing the best operating conditions and F representing the worst operating conditions. The LOS criteria, as defined by the 6<sup>th</sup> edition of the Highway Capacity Manual (HCM) for signalized and unsignalized intersections are provided below. Tables for the weekday morning and afternoon peak hours indicating the results of the capacity analysis are below. The complete capacity analysis is attached.

**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

**Morning Peak Hour LOS Summary**

Intersection	Movement		Existing (2023)		Future (2028) No-Build		Future (2028) Build	
			LOS (Delay <sup>1</sup> )	Queue Length <sup>2</sup>	LOS (Delay <sup>1</sup> )	Queue Length <sup>2</sup>	LOS (Delay <sup>1</sup> )	Queue Length <sup>2</sup>
<b>Kingstown Road at Upper College Road (Signalized)</b>	SB	L, R	C (23.2)	67	C (23.4)	72	C (23.5)	78
	EB	L, T	A (7.2)	140	A (8.2)	165	A (8.3)	167
	WB	T	A (8.1)	139	A (9.3)	161	A (9.4)	163
		R	A (3.0)	31	A (3.3)	35	A (3.3)	35
		App	A (7.2)	-	A (7.8)	-	A (7.9)	-
	Intersection		A (9.2)	-	B (10.1)	-	B (10.2)	-
<b>Kingstown Road at Mooresfield Road (Signalized)</b>	NB	L, R	C (32.9)	#362	D (36.7)	#385	D (37.2)	#389
	EB	T	B (19.1)	168	C (20.9)	183	C (20.9)	183
		R	A (3.8)	30	A (3.9)	30	A (3.9)	31
		App	B (12.1)	-	B (13.1)	-	B (13.1)	-
	WB	L, T	E (75.4)	#311	F (158.0)	#363	F (160.0)	#363
	Intersection		D (38.2)	-	E (64.9)	-	E (65.4)	-
<b>Mooresfield Road at Stony Fort Road (Unsignalized)</b>	SB	L,R	F (117.8)	173	F (218.8)	241	F (242.4)	257
	EB	L, T	B (10.6)	23	B (11.1)	23	B (11.1)	23
	WB	T, R	A (0.0)	-	A (0.0)	-	A (0.0)	-
<b>B</b>								
<b>Old North Road at Flagg Road and Bean Farm Drive (Unsignalized)218.8</b>	NB	L,T,R	B (10.8)	34	B (11.4)	42	B (11.6)	44
	SB	L,T,R	A (7.4)	0	A (7.4)	0	A (7.4)	0
	EB	L,T,R	E (35.4)	23	E (45.2)	23	E (49.1)	25
	WB	L,T,R	D (26.5)	23	D (31.6)	23	D (32.9)	23
<b>Broad Rock Road at Mooresfield Road (Unsignalized)</b>	NB	L, R	F (53.8)	131	F (108.4)	207	F (108.4)	207
	EB	T, R	A (0.0)	-	A (0.0)	-	A (0.0)	-
	WB	L, T	B (10.5)	23	B (10.9)	23	B (10.9)	23
<b>Old North Road at Bills Road (Unsignalized)</b>	NB	L, T	A (7.8)	23	A (7.9)	23	A (7.9)	23
	SB	T, R	A (0.0)	-	A (0.0)	-	A (0.0)	-
	EB	L, R	B (13.4)	23	B (13.8)	23	B (13.9)	23
<b>Stony Fort Road at Slocum Road (Unsignalized)</b>	SB	L, R	F (112.9)	598	F (160.6)	775	F (170.4)	805
	EB	L, T	C (19.5)	85	C (22.1)	99	C (24.2)	112

Intersection	Movement		Existing (2023)		Future (2028) No-Build		Future (2028) Build	
			LOS (Delay <sup>1</sup> )	Queue Length <sup>2</sup>	LOS (Delay <sup>1</sup> )	Queue Length <sup>2</sup>	LOS (Delay <sup>1</sup> )	Queue Length <sup>2</sup>
	WB	T, R	C (15.3)	53	C (16.7)	60	C (17.0)	60
Old North Road at Stony Fort Road <sup>3</sup> (Unsignalized)	NB	L,R	A (4.9)	80	A (5.2)	95	A (4.7)	95
	EB	T,R	B (11.6)	60	B (11.7)	53	B (12.0)	56
	WB	L,T	A (2.3)	56	A (2.4)	75	A (1.2)	75
Stony Fort Road at Site Driveway (Unsignalized)	NB	L, R	-	-	-	-	B (14.9)	23
	EB	T, R	-	-	-	-	A (0.0)	-
	WB	L, T	-	-	-	-	A (7.5)	-
Old North Road at Site Driveway (Unsignalized)	NB	T, R	-	-	-	-	A (0.0)	-
	SB	L, T	-	-	-	-	A (7.5)	0
	WB	L, R	-	-	-	-	B (12.9)	23

- # The 95<sup>th</sup> percentile volume exceeds capacity; queue may be longer.
- 1. Delay is measured in seconds/vehicle.
- 2. Queue Length shown represents the 95<sup>th</sup> percentile queue length in feet.
- 3. Intersection analyzed using SimTraffic due to unorthodox signage configuration

**Afternoon Peak Hour LOS Summary**

Intersection	Movement		Existing (2023)		Future (2028) No-Build		Future (2028) Build	
			LOS (Delay <sup>1</sup> )	Queue Length <sup>2</sup>	LOS (Delay <sup>1</sup> )	Queue Length <sup>2</sup>	LOS (Delay <sup>1</sup> )	Queue Length <sup>2</sup>
<b>Kingstown Road at Upper College Road (Signalized)</b>	SB	L, R	C (26.8)	286	C (26.8)	320	C (26.7)	324
	EB	L, T	F (153.9)	#427	F (225.5)	#481	F (88.4)	#605
	WB	T	B (14.5)	288	B (19.5)	#319	C (23.3)	#343
		R	A (6.0)	36	A (6.7)	40	A (7.4)	44
		App	B (14.5)	-	B (17.1)	-	C (20.9)	-
	Intersection		F (85.1)	-	F (120.7)	-	D (46.3)	-
<b>Kingstown Road at Mooresfield Road (Signalized)</b>	NB	L, R	C (23.1)	243	C (25.1)	#294	C (29.4)	#270
	EB	T	B (19.8)	#221	C (23.4)	#272	C (24.0)	#265
		R	A (4.9)	59	A (5.4)	61	A (5.4)	60
		App	B (11.2)	-	B (13.0)	-	B (13.2)	-
	WB	L, T	D (35.7)	#318	F (102.0)	#375	F (154.2)	#386
	Intersection		B (19.7)	-	D (35.8)	-	D (47.9)	-
<b>Mooresfield Road at Stony Fort Road (Unsignalized)</b>	SB	L,R	F (714.2)	706	F (1074)	851	F (1095)	862
	EB	L, T	A (9.5)	23	A (9.8)	23	A (9.8)	23
	WB	T, R	A (0.0)	-	A (0.0)	-	A (0.0)	-
<b>Old North Road at Flagg Road and Bean Farm Drive (Unsignalized)</b>	NB	L,T,R	A (7.9)	23	A (7.9)	23	A (7.8)	23
	SB	L,T,R	A (7.6)	0	A (7.7)	-	A (0.0)	-
	EB	L,T,R	F (51.1)	255	F (85.7)	361	F (104.7)	407
	WB	L,T,R	C (15.9)	23	C (16.9)	25	C (17.2)	23
<b>Broad Rock Road at Mooresfield Road (Unsignalized)</b>	NB	L, R	D (25.6)	55	D (32.6)	85	D (32.6)	85
	EB	T, R	A (0.0)	-	A (0.0)	-	A (0.0)	-
	WB	L, T	B (10.0)	23	B (10.4)	23	B (10.4)	23
<b>Old North Road at Bills Road (Unsignalized)</b>	NB	L, T	A (7.8)	23	A (7.9)	23	A (7.9)	23
	SB	T, R	A (0.0)	-	A (0.0)	-	A (0.0)	-
	EB	L, R	B (13.1)	23	B (13.8)	23	B (14.0)	23

Intersection	Movement		Existing (2023)		Future (2028) No-Build		Future (2028) Build	
			LOS (Delay <sup>1</sup> )	Queue Length <sup>2</sup>	LOS (Delay <sup>1</sup> )	Queue Length <sup>2</sup>	LOS (Delay <sup>1</sup> )	Queue Length <sup>2</sup>
Stony Fort Road at Slocum Road (Unsignalized)	SB	L, R	C (15.2)	76	C (17.4)	94	C (18.1)	99
	EB	L, T	D (28.9)	202	E (41.0)	271	E (44.9)	290
	WB	T, R	B (10.4)	25	B (11.1)	30	B (11.3)	32
Old North Road at Stony Fort Road <sup>3</sup> (Unsignalized)	NB	L, R	A (4.3)	76	A (5.7)	90	A (5.7)	99
	EB	T, R	A (6.9)	51	A (7.1)	55	A (7.4)	53
	WB	L, T	A (1.0)	56	A (1.0)	56	A (1.0)	56
Stony Fort Road at Site Driveway (Unsignalized)	NB	L, R	-	-	-	-	B (14.2)	23
	EB	T, R	-	-	-	-	A (0.0)	-
	WB	L, T	-	-	-	-	A (8.6)	-
Old North Road at Site Driveway (Unsignalized)	NB	T, R	-	-	-	-	A (0.0)	-
	SB	L, T	-	-	-	-	A (8.4)	-
	WB	L, R	-	-	-	-	B (12.5)	23

- # The 95<sup>th</sup> percentile volume exceeds capacity; queue may be longer.
- 1 Delay is measured in seconds/vehicle.
- 2 Queue Length shown represents the 95<sup>th</sup> percentile queue length in feet.
- 3 Intersection analyzed using SimTraffic due to unorthodox signage configuration

The following is a summary of the capacity analysis results as shown in the tables above. The comparisons described below compare the Future No-Build Conditions to the Future Build Conditions as this best represents the conditions which indicate the impacts to the proposed development on traffic flow.

**Morning Peak Hour**

*Kingstown Road @Upper College Road-* In the morning peak hour, there are only 8 additional trips projected to be added in the peak hour to the southbound left turn from Upper College Road to Kingstown Road. The level of service (LOS) for each approach and the overall intersection remains the same between the Future No-Build condition and the Future Build condition. The greatest increase in delay is 0.1 seconds.

*Kingstown Road @ Mooresfield Road-* In the morning peak hour, there are only 8 additional trips being projected during the peak hour added to the eastbound right turn movement from Kingstown Road to Mooresfield Road and only 3 trips projected to be added for the left turn movement from Kingstown Road northbound. The level of service (LOS) for each approach and the overall intersection remains the same. The greatest increase in delay is 2.0 seconds for the westbound movements.

*Mooresfield Road at Stony Fort Road -* In the morning peak hour, there are 3 additional trips projected during the peak hour for the southbound left turn movement from Stony Fort Road onto Mooresfield Road. It is also projected that 1 trip for the right turn movement from Mooresfield Road onto Stony Fort Road

may occur during the peak hour. The level of service (LOS) for each approach and the overall intersection remains the same. The greatest increase in delay is 25 seconds for the southbound movement. The 3 additional trips for the southbound movement at this intersection are anticipated to occur for vehicles accessing Route 1 Southbound. Alternate routes (Saugatucket Road) could be used to avoid this intersection by locals.

*Old North Road at Flagg Road and Bean Farm Drive* - In the morning peak hour, on Old North Road, there are 8 additional trips for through movements and 7 additional trips for the southbound right turn movement during the peak hour. There are also 2 additional vehicles projected for the eastbound left turn movement from Flagg Road to Old North Road northbound and 3 trips projected northbound on Old North Road. The level of service (LOS) for each approach remains the same. The greatest increase in delay is 3.9 seconds for the eastbound movements from Flagg Road.

*Broad Rock Road at Mooresfield Road* - There are no additional trips projected at this intersection therefore no impacts to level of service or delay are anticipated.

*Old North Road at Bills Road* - In the morning peak hour, on Old North Road, there are 8 additional trips for right turn movements from Old North Road southbound onto Bills Road and 3 additional trips projected for the northbound through movement on Old North Road. The level of service (LOS) for each approach remains the same. The greatest increase in delay is 0.1 seconds for the eastbound movements from Bills Road.

*Stony Fort Road at Slocum Road* - In the morning peak hour, on Stony Fort Road, there are 8 additional trips for left turn movements from Stony Fort Road onto Slocum Road, 3 trips projected for through movements on Stony Fort Road eastbound and 1 trip projected for through movements on Stony Fort Road westbound. There are also 3 trips projected for right turn movements for Slocum Road onto Stony Fort Road. The level of service (LOS) for each approach at this intersection remains the same. The greatest increase in delay is 10 seconds for the southbound movements from Slocum Road onto Stony Fort Road.

*Proposed Site Access onto Stony Fort Road and Old North Road* - The access to and from the development on Stony Fort Road and Old North Road will operate at a very acceptable level of service with a worst-case LOS B occurring for vehicles leaving the site. It should be noted that the analyses for the site driveways were performed using one access point on each road.

#### **Afternoon Peak Hour**

*Kingstown Road @ Upper College Road* - In the afternoon peak hour, there are only 5 additional trips projected to be added in the peak hour to the southbound left turn from Upper College Road to Kingstown Road. The level of service (LOS) for each approach and the overall intersection remains the same between the Future No-Build condition and the Future Build condition except for the westbound through approach from on Kingstown Road westbound which goes from a very acceptable LOS B to LOS C with an increase in delay of less than 4 seconds.

*Kingstown Road @ Mooresfield Road* - In the afternoon peak hour, there are only 5 additional trips being projected during the peak hour added to the eastbound right turn movement from Kingstown Road to Mooresfield Road and only 8 trips projected to be added for the left turn movement from Kingstown Road northbound. The level of service (LOS) for each approach and the overall intersection remains the same. The level of service (LOS) for the intersection is LOS D.

*Mooresfield Road at Stony Fort Road* - In the afternoon peak hour, there are only 2 additional trips projected during the peak hour for the southbound left turn movement from Stony Fort Road onto Mooresfield Road. It is also projected that 3 trips may occur for the right turn movement from Mooresfield Road onto Stony Fort Road during the peak hour. The only increase in delay is for the Stony Fort Road approach which indicates an increase in delay of approximately 20 seconds. As previously noted in the morning peak hour, alternative roads can be used by the small number of locals can be used to avoid this intersection.

*Old North Road at Flagg Road and Bean Farm Drive* - In the afternoon peak hour, on Old North Road, there are 5 additional trips for southbound through movements and 4 additional trips for the southbound right turn movement during the peak hour. There are also 7 additional vehicles projected for the eastbound left turn movement from Flagg Road to Old North Road northbound and 8 additional vehicles projected for the Old North Road northbound through movements. The level of service (LOS) for each approach remains the same. The greatest increase in delay is approximately 19 seconds for the movement from Flagg Road.

*Broad Rock Road at Mooresfield Road* - There are no additional trips projected at this intersection therefore no impacts to level of service or delay are anticipated.

*Old North Road at Bills Road* - On Old North Road, there are 5 additional trips projected for right turn movements from Old North Road southbound onto Bills Road and 8 additional trips projected for the northbound through movement on Old North Road. The level of service (LOS) for each approach remains the same. The greatest increase in delay is 0.2 seconds for the eastbound movements from Bills Road.

*Stony Fort Road at Slocum Road* - On Stony Fort Road, there are 5 additional trips for left turn movements from Stony Fort Road onto Slocum Road, 2 trips projected for through movements on Stony Fort Road eastbound and 3 trip projected for through movements on Stony Fort Road westbound. There are also 9 trips projected for right turn movements for Slocum Road onto Stony Fort Road. The level of service (LOS) for each approach at this intersection remains the same. The greatest increase in delay is less than 4 seconds for the southbound movements from Slocum Road onto Stony Fort Road.

*Proposed Site Access onto Stony Fort Road and Old North Road*- The access to and from the development on Stony Fort Road and Old North Road will operate at a very acceptable level of service with a worst-case LOS B occurring for vehicles leaving the site.

In summary, the traffic in the surrounding area of this proposed development is obviously impacted by other uses, namely the University, and it is out of the control of Picerne. This proposed 39-unit residential development will not be a significant trip generator and it can be anticipated that with its construction, it will not have any significant impact to the level of service or the operations of the traffic flow on the surrounding roadway network.

## **SIGHT DISTANCES**

As previously stated, on May 17, 2022, spot speed studies were conducted in 2 locations on Old North Road, one 500 feet south of the intersection with Old North Road and the other 2,000 feet south of the intersection with Old North Road. There was also a speed study on Stony Fort Road. The studies were performed in the vicinity of the development, and near the site driveways to assess driving speeds. A summary of the speed data results is shown in the Table below. The complete data log can be found in Appendix D in the July 2022 report. The most notable metric presented in the table is the 85<sup>th</sup> percentile speed, which is typically considered the design speed and was utilized for the sight distance analysis.

**Speed Study Summary**

	Posted Speed	Average Speed	True Median (50 <sup>th</sup> Percentile)	85 <sup>th</sup> Percentile	10 MPH Pace	% over Posted Speed Limit
Old North Road, 500 feet south of intersection with Stony Fort Road						
Northbound	25	28	28	31	23-32	79%
Southbound	25	27	28	31	23-32	67%
Old North Road, 2,000 feet south of the intersection with Stony Fort Road						
Northbound	25	28	28	32	22-31	75%
Southbound	25	27	27	31	24-33	67%
Stony Fort Road						
Eastbound	25	30	30	35	26-35	87%
Westbound	25	31	31	36	25-34	84%

The available sight distance for the proposed site driveways was assessed. Given the results of the speed study, a design speed of 35 miles per hour was selected for Old North Road and a design speed of 40 miles per hour was selected for Stony Fort 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 required intersection sight distances (ISD) for 35 miles per hour and 40 miles per hour are 390 feet and 445 feet, respectively. A summary of the sight distance requirements for the site driveways can be seen in the Table below.

**Sight Distance Requirements**

		Required ISD (ft)
Old North Road at Site Driveways	To the South (Left)	390
	To the North (Right)	390
Stony Fort Road at Site Driveways	To the West (Left)	445
	To the East (Right)	445

Based on our analyses, and as shown in Appendix E: Sight Triangle Figures, in our July 2022, the required sight lines can be met. There is one diagram, E1.9, which shows an ISD of only 250 feet. This was measured out to the stop control intersection. Figure E1.9A attached indicates if the stop sign was not present, there is a clear sight line of 445 feet looking west onto Stony Fort Road. It should also be noted that for the sight lines on Old North Road and Stony Fort Road close to the intersection are conservative as the speeds in this area will be lower than the design speeds as drivers will still be accelerating having just traversed the intersection.

Based on our data collection and analyses, drivers will be able to make the movement out of all of the proposed site driveways in a safe manner.



Mr. Nic Reuter, Director

(11)

October 30, 2023

**STONY FORT ROAD/OLD NORTH ROAD WARRANT ANALYSIS**

As part of our 2022 Traffic Study Report, Pare reviewed the intersection of Old North Road at Stony Fort Road to determine if an all-way stop traffic control condition is warranted. As indicated in that report, the crash frequency for the intersection of Old North Road at Stony Fort Road falls far below the guideline of five crashes per year.

From the traffic data collected in October 2023, Pare compared the volumes for the volumetric guideline of the Multi-Way Stop warrant. Pare performed a preliminary analysis using the four hours obtained from the MTMC's with the assumption that if the time periods analyzed that are denoted as "peak traffic hours" are unable to meet the warrant, then it is unlikely that any additional hours would reach the related volumes thresholds. The Table below displays the results of the analysis. If a cell in the table is highlighted yellow, it meets the 100% requirements and if a cell is left white, then it does not meet the requirement. To satisfy the requirements, both cells for the four individual hours need to be yellow. From the Table below, it is clear that the multi-way stop warrant is not met in terms of vehicular volumes as none of the four hours analyzed meet the traffic volume threshold.

TIME		Major Street Volume (Both Approaches)	Minor Street Volume (One Direction Only)
		Stony Fort Road	Old North Road
7:00 AM	8:00 AM	394	39
8:00 AM	9:00 AM	692	103
4:00 PM	5:00 PM	259	420
5:00 PM	6:00 PM	237	257

100% Threshold Met

Threshold Major 300 VPH

Threshold Minor 200 VPH

Even though the all-way stop does not meet the warrants, it is believed that if the Town desired to make it an all-way stop they could do so at their discretion.

Thank you for the opportunity to provide this additional information. If you have any questions, please feel free to contact us.

Sincerely,

John P. Shevlin, P.E.  
Chief Executive Officer

JPS/klS

Enclosures  
Appendices

Picerne Homes  
Fieldstone Farms Traffic Impact Analysis

**APPENDIX A**  
**Traffic Counts**



# Transportation Data Corporation

Mario Perone, mperone1@verizon.net

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

S: Old North Road  
 E/W: Stony Fort Road  
 City, State: Saunderstown, RI  
 Client: Pare/J. Shevlin

File Name : 05767A  
 Site Code : 18145.00  
 Start Date : 10/4/2023  
 Page No : 1

### Groups Printed- Cars & Peds

Start Time	Stony Fort Road From East			Old North Road From South			Stony Fort Road From West			Int. Total
	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	
07:00 AM	7	30	0	7	0	0	0	5	0	49
07:15 AM	7	60	0	9	1	0	1	8	0	86
07:30 AM	5	112	0	14	1	0	0	11	0	143
07:45 AM	5	127	0	6	0	0	1	8	0	147
<b>Total</b>	<b>24</b>	<b>329</b>	<b>0</b>	<b>36</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>32</b>	<b>0</b>	<b>425</b>
08:00 AM	9	106	0	13	1	0	0	8	0	137
08:15 AM	13	193	0	26	2	0	2	14	0	250
08:30 AM	31	166	0	30	1	0	3	9	0	240
08:45 AM	34	130	0	16	5	0	1	7	0	193
<b>Total</b>	<b>87</b>	<b>595</b>	<b>0</b>	<b>85</b>	<b>9</b>	<b>0</b>	<b>6</b>	<b>38</b>	<b>0</b>	<b>820</b>
<b>Grand Total</b>	<b>111</b>	<b>924</b>	<b>0</b>	<b>121</b>	<b>11</b>	<b>0</b>	<b>8</b>	<b>70</b>	<b>0</b>	<b>1245</b>
Apprch %	10.7	89.3	0	91.7	8.3	0	10.3	89.7	0	
Total %	8.9	74.2	0	9.7	0.9	0	0.6	5.6	0	

Start Time	Stony Fort Road From East				Old North Road From South				Stony Fort Road From West				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	9	106	0	115	13	1	0	14	0	8	0	8	137
08:15 AM	13	<b>193</b>	0	<b>206</b>	26	2	0	28	2	<b>14</b>	0	<b>16</b>	<b>250</b>
08:30 AM	31	166	0	197	<b>30</b>	1	0	<b>31</b>	<b>3</b>	9	0	12	240
08:45 AM	<b>34</b>	130	0	164	16	<b>5</b>	0	21	1	7	0	8	193
<b>Total Volume</b>	<b>87</b>	<b>595</b>	<b>0</b>	<b>682</b>	<b>85</b>	<b>9</b>	<b>0</b>	<b>94</b>	<b>6</b>	<b>38</b>	<b>0</b>	<b>44</b>	<b>820</b>
<b>% App. Total</b>	<b>12.8</b>	<b>87.2</b>	<b>0</b>		<b>90.4</b>	<b>9.6</b>	<b>0</b>		<b>13.6</b>	<b>86.4</b>	<b>0</b>		
PHF	.640	.771	.000	.828	.708	.450	.000	.758	.500	.679	.000	.688	.820

# Transportation Data Corporation

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S: Old North Road  
 E/W: Stony Fort Road  
 City, State: Saunderstown, RI  
 Client: Pare/J. Shevlin

File Name : 05767A  
 Site Code : 18145.00  
 Start Date : 10/4/2023  
 Page No : 1

### Groups Printed- Trucks & Buses

Start Time	Stony Fort Road From East			Old North Road From South			Stony Fort Road From West			Int. Total
	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	
07:00 AM	0	0	0	1	0	0	1	1	0	3
07:15 AM	0	2	0	0	0	0	0	0	0	2
07:30 AM	1	0	0	0	0	0	0	0	0	1
07:45 AM	0	1	0	0	0	0	0	1	0	2
<b>Total</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>8</b>
08:00 AM	0	0	0	2	0	0	0	0	0	2
08:15 AM	0	3	0	4	0	0	0	0	0	7
08:30 AM	2	2	0	3	0	0	0	0	0	7
08:45 AM	1	1	0	0	0	0	0	0	0	2
<b>Total</b>	<b>3</b>	<b>6</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>18</b>
<b>Grand Total</b>	<b>4</b>	<b>9</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>26</b>
Apprch %	30.8	69.2	0	100	0	0	33.3	66.7	0	
Total %	15.4	34.6	0	38.5	0	0	3.8	7.7	0	

Start Time	Stony Fort Road From East				Old North Road From South				Stony Fort Road From West				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 07:45 AM													
07:45 AM	0	1	0	1	0	0	0	0	0	1	0	1	2
08:00 AM	0	0	0	0	2	0	0	2	0	0	0	0	2
08:15 AM	0	3	0	3	4	0	0	4	0	0	0	0	7
08:30 AM	2	2	0	4	3	0	0	3	0	0	0	0	7
<b>Total Volume</b>	<b>2</b>	<b>6</b>	<b>0</b>	<b>8</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>18</b>
<b>% App. Total</b>	<b>25</b>	<b>75</b>	<b>0</b>	<b>100</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>100</b>	
PHF	.250	.500	.000	.500	.563	.000	.000	.563	.000	.250	.000	.250	.643



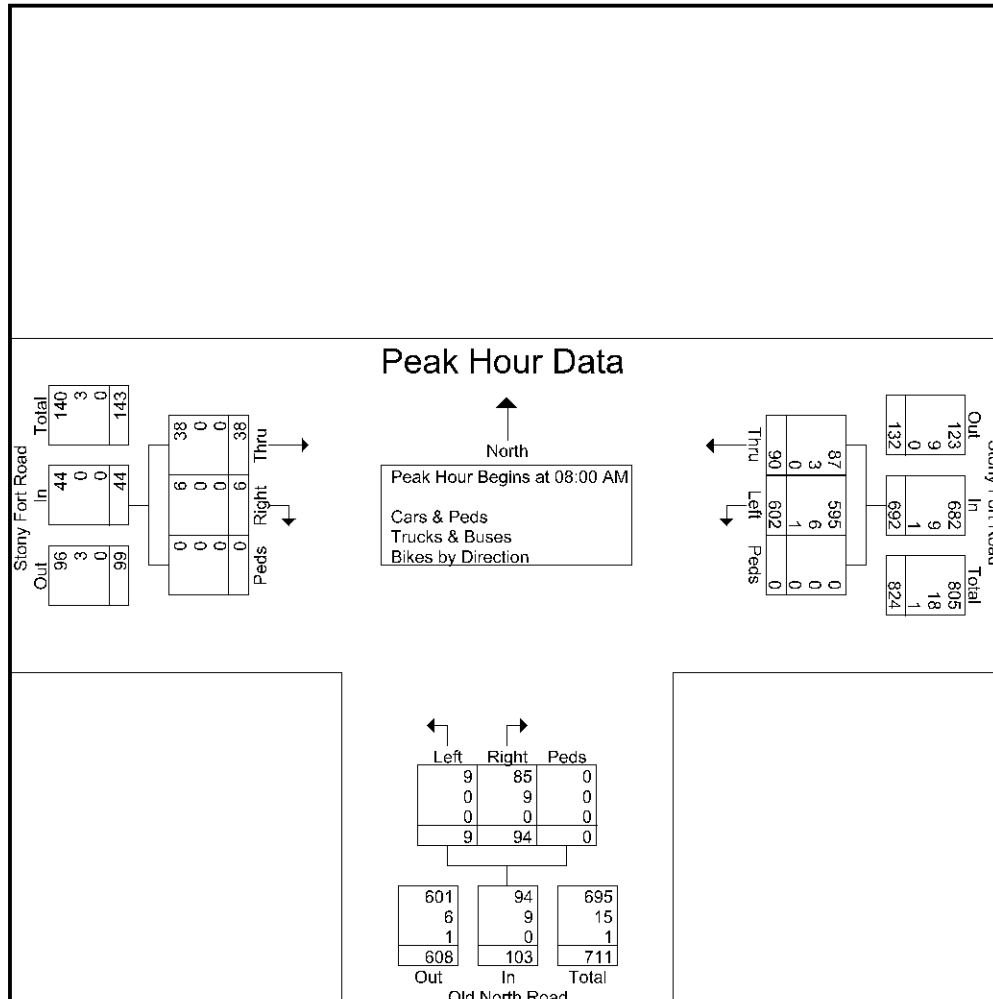
# Transportation Data Corporation

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S: Old North Road  
E/W: Stony Fort Road  
City, State: Saunderstown, RI  
Client: Pare/J. Shevlin

File Name : 05767A  
Site Code : 18145.00  
Start Date : 10/4/2023  
Page No : 1

Start Time	Stony Fort Road From East				Old North Road From South				Stony Fort Road From West				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	9	106	0	115	15	1	0	16	0	8	0	8	139
08:15 AM	13	196	0	209	30	2	0	32	2	14	0	16	257
08:30 AM	33	169	0	202	33	1	0	34	3	9	0	12	248
08:45 AM	35	131	0	166	16	5	0	21	1	7	0	8	195
Total Volume	90	602	0	692	94	9	0	103	6	38	0	44	839
% App. Total	13	87	0		91.3	8.7	0		13.6	86.4	0		
PIIF	.643	.768	.000	.828	.712	.450	.000	.757	.500	.679	.000	.688	.816
Cars & Peds	87	595	0	682	85	9	0	94	6	38	0	44	820
% Cars & Peds	96.7	98.8	0	98.6	90.4	100	0	91.3	100	100	0	100	97.7
Trucks & Buses	3	6	0	9	9	0	0	9	0	0	0	0	18
% Trucks & Buses	3.3	1.0	0	1.3	9.6	0	0	8.7	0	0	0	0	2.1
Bikes by Direction	0	1	0	1	0	0	0	0	0	0	0	0	1
% Bikes by Direction	0	0.2	0	0.1	0	0	0	0	0	0	0	0	0.1



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S: Old North Road  
 E/W: Stony Fort Road  
 City, State: Saunderstown, RI  
 Client: Pare/J. Shevlin

File Name : 05767AA  
 Site Code : 18145.00  
 Start Date : 10/4/2023  
 Page No : 1

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

Start Time	Stony Fort Road From East			Old North Road From South			Stony Fort Road From West			Int. Total
	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	
04:00 PM	8	20	0	94	1	1	4	13	0	141
04:15 PM	10	32	0	112	10	0	5	23	0	192
04:30 PM	6	43	0	106	4	0	0	18	0	177
04:45 PM	22	40	0	91	2	0	4	11	0	170
<b>Total</b>	<b>46</b>	<b>135</b>	<b>0</b>	<b>403</b>	<b>17</b>	<b>1</b>	<b>13</b>	<b>65</b>	<b>0</b>	<b>680</b>
05:00 PM	18	30	0	90	1	0	0	18	2	159
05:15 PM	13	29	0	76	2	0	0	17	0	137
05:30 PM	9	34	0	56	2	1	4	8	0	114
05:45 PM	11	40	0	27	3	0	0	10	1	92
<b>Total</b>	<b>51</b>	<b>133</b>	<b>0</b>	<b>249</b>	<b>8</b>	<b>1</b>	<b>4</b>	<b>53</b>	<b>3</b>	<b>502</b>
<b>Grand Total</b>	<b>97</b>	<b>268</b>	<b>0</b>	<b>652</b>	<b>25</b>	<b>2</b>	<b>17</b>	<b>118</b>	<b>3</b>	<b>1182</b>
Apprch %	26.6	73.4	0	96	3.7	0.3	12.3	85.5	2.2	
Total %	8.2	22.7	0	55.2	2.1	0.2	1.4	10	0.3	
Cars & Peds	94	267	0	652	24	2	16	117	3	1175
% Cars & Peds	96.9	99.6	0	100	96	100	94.1	99.2	100	99.4
Trucks & Buses	2	1	0	0	0	0	1	0	0	4
% Trucks & Buses	2.1	0.4	0	0	0	0	5.9	0	0	0.3
Bikes by Direction	1	0	0	0	1	0	0	1	0	3
% Bikes by Direction	1	0	0	0	4	0	0	0.8	0	0.3

Start Time	Stony Fort Road From East				Old North Road From South				Stony Fort Road From West				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	10	32	0	42	<b>112</b>	<b>10</b>	0	<b>122</b>	<b>5</b>	<b>23</b>	0	<b>28</b>	<b>192</b>
04:30 PM	6	43	0	49	106	4	0	110	0	18	0	18	177
04:45 PM	22	40	0	62	91	2	0	93	4	11	0	15	170
05:00 PM	18	30	0	48	90	1	0	91	0	18	2	20	159
Total Volume	56	145	0	201	399	17	0	416	9	70	2	81	698
% App. Total	27.9	72.1	0		95.9	4.1	0		11.1	86.4	2.5		
PHF	.636	.843	.000	.810	.891	.425	.000	.852	.450	.761	.250	.723	.909
Cars & Peds	54	144	0	198	399	16	0	415	9	69	2	80	693
% Cars & Peds	96.4	99.3	0	98.5	100	94.1	0	99.8	100	98.6	100	98.8	99.3
Trucks & Buses	1	1	0	2	0	0	0	0	0	0	0	0	2
% Trucks & Buses	1.8	0.7	0	1.0	0	0	0	0	0	0	0	0	0.3
Bikes by Direction	1	0	0	1	0	1	0	1	0	1	0	1	3
% Bikes by Direction	1.8	0	0	0.5	0	5.9	0	0.2	0	1.4	0	1.2	0.4

# Transportation Data Corporation

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S: Old North Road  
 E/W: Stony Fort Road  
 City, State: Saunderstown, RI  
 Client: Pare/J. Shevlin

File Name : 05767AA  
 Site Code : 18145.00  
 Start Date : 10/4/2023  
 Page No : 1

### Groups Printed- Cars & Peds

Start Time	Stony Fort Road From East			Old North Road From South			Stony Fort Road From West			Int. Total
	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	
04:00 PM	8	20	0	94	1	1	3	13	0	140
04:15 PM	9	31	0	112	10	0	5	23	0	190
04:30 PM	6	43	0	106	4	0	0	18	0	177
04:45 PM	21	40	0	91	1	0	4	11	0	168
<b>Total</b>	<b>44</b>	<b>134</b>	<b>0</b>	<b>403</b>	<b>16</b>	<b>1</b>	<b>12</b>	<b>65</b>	<b>0</b>	<b>675</b>
05:00 PM	18	30	0	90	1	0	0	17	2	158
05:15 PM	13	29	0	76	2	0	0	17	0	137
05:30 PM	9	34	0	56	2	1	4	8	0	114
05:45 PM	10	40	0	27	3	0	0	10	1	91
<b>Total</b>	<b>50</b>	<b>133</b>	<b>0</b>	<b>249</b>	<b>8</b>	<b>1</b>	<b>4</b>	<b>52</b>	<b>3</b>	<b>500</b>
<b>Grand Total</b>	<b>94</b>	<b>267</b>	<b>0</b>	<b>652</b>	<b>24</b>	<b>2</b>	<b>16</b>	<b>117</b>	<b>3</b>	<b>1175</b>
Apprch %	26	74	0	96.2	3.5	0.3	11.8	86	2.2	
Total %	8	22.7	0	55.5	2	0.2	1.4	10	0.3	

Start Time	Stony Fort Road From East				Old North Road From South				Stony Fort Road From West				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	9	31	0	40	112	10	0	122	5	23	0	28	190
04:30 PM	6	43	0	49	106	4	0	110	0	18	0	18	177
04:45 PM	21	40	0	61	91	1	0	92	4	11	0	15	168
05:00 PM	18	30	0	48	90	1	0	91	0	17	2	19	158
Total Volume	54	144	0	198	399	16	0	415	9	69	2	80	693
% App. Total	27.3	72.7	0		96.1	3.9	0		11.2	86.2	2.5		
PHF	.643	.837	.000	.811	.891	.400	.000	.850	.450	.750	.250	.714	.912

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S: Old North Road  
E/W: Stony Fort Road  
City, State: Saunderstown, RI  
Client: Pare/J. Shevlin

File Name : 05767AA  
Site Code : 18145.00  
Start Date : 10/4/2023  
Page No : 1

### Groups Printed- Trucks & Buses

Start Time	Stony Fort Road From East			Old North Road From South			Stony Fort Road From West			Int. Total
	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	
04:00 PM	0	0	0	0	0	0	1	0	0	1
04:15 PM	1	1	0	0	0	0	0	0	0	2
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
<b>Total</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>3</b>
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	1	0	0	0	0	0	0	0	0	1
<b>Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
<b>Grand Total</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>4</b>
Apprch %	66.7	33.3	0	0	0	0	100	0	0	
Total %	50	25	0	0	0	0	25	0	0	

Start Time	Stony Fort Road From East				Old North Road From South				Stony Fort Road From West				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	0	0	0	0	0	0	0	0	1	0	0	1	1
04:15 PM	1	1	0	2	0	0	0	0	0	0	0	0	2
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
<b>Total Volume</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>3</b>
<b>% App. Total</b>	<b>50</b>	<b>50</b>	<b>0</b>	<b></b>	<b>0</b>	<b>0</b>	<b>0</b>	<b></b>	<b>100</b>	<b>0</b>	<b>0</b>	<b></b>	<b></b>
PHF	.250	.250	.000	.250	.000	.000	.000	.000	.250	.000	.000	.250	.375



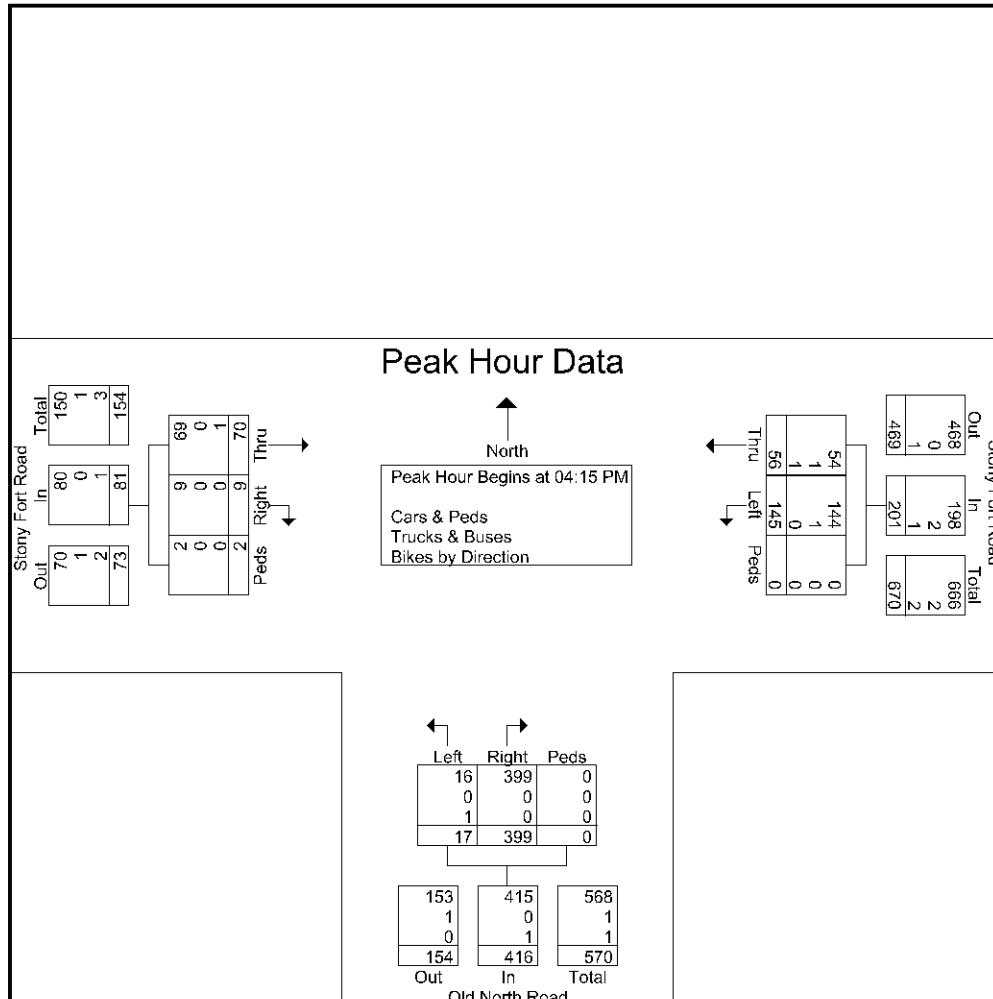
# Transportation Data Corporation

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S: Old North Road  
E/W: Stony Fort Road  
City, State: Saunderstown, RI  
Client: Pare/J. Shevlin

File Name : 05767AA  
Site Code : 18145.00  
Start Date : 10/4/2023  
Page No : 1

Start Time	Stony Fort Road From East				Old North Road From South				Stony Fort Road From West				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	10	32	0	42	112	10	0	122	5	23	0	28	192
04:30 PM	6	43	0	49	106	4	0	110	0	18	0	18	177
04:45 PM	22	40	0	62	91	2	0	93	4	11	0	15	170
05:00 PM	18	30	0	48	90	1	0	91	0	18	2	20	159
Total Volume	56	145	0	201	399	17	0	416	9	70	2	81	698
% App. Total	27.9	72.1	0		95.9	4.1	0		11.1	86.4	2.5		
PIIF	.636	.843	.000	.810	.891	.425	.000	.852	.450	.761	.250	.723	.909
Cars & Peds	54	144	0	198	399	16	0	415	9	69	2	80	693
% Cars & Peds	96.4	99.3	0	98.5	100	94.1	0	99.8	100	98.6	100	98.8	99.3
Trucks & Buses	1	1	0	2	0	0	0	0	0	0	0	0	2
% Trucks & Buses	1.8	0.7	0	1.0	0	0	0	0	0	0	0	0	0.3
Bikes by Direction	1	0	0	1	0	1	0	1	0	1	0	1	3
% Bikes by Direction	1.8	0	0	0.5	0	5.9	0	0.2	0	1.4	0	1.2	0.4





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N: Slocum Road  
 E/W: Stony Fort Road  
 City, State: Saunderstown, RI  
 Client: Pare/J. Shevlin

File Name : 05767B  
 Site Code : 18145.00  
 Start Date : 10/4/2023  
 Page No : 1

Groups Printed- Cars & Peds

Start Time	Slocum Road From North			Stony Fort Road From East			Stony Fort Road From West			Int. Total
	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	
07:00 AM	33	11	0	4	4	0	2	11	0	65
07:15 AM	70	16	0	12	11	0	5	11	0	125
07:30 AM	103	18	0	15	22	0	7	15	0	180
07:45 AM	104	21	0	6	19	0	2	12	0	164
Total	310	66	0	37	56	0	16	49	0	534
08:00 AM	91	26	0	10	32	0	5	12	0	176
08:15 AM	171	14	0	14	45	0	7	23	0	274
08:30 AM	158	17	0	12	48	0	31	46	0	312
08:45 AM	116	18	0	13	38	0	5	23	0	213
Total	536	75	0	49	163	0	48	104	0	975
Grand Total	846	141	0	86	219	0	64	153	0	1509
Apprch %	85.7	14.3	0	28.2	71.8	0	29.5	70.5	0	
Total %	56.1	9.3	0	5.7	14.5	0	4.2	10.1	0	

Start Time	Slocum Road From North				Stony Fort Road From East				Stony Fort Road From West				Int. Total
	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	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	91	26	0	117	10	32	0	42	5	12	0	17	176
08:15 AM	171	14	0	185	14	45	0	59	7	23	0	30	274
08:30 AM	158	17	0	175	12	48	0	60	31	46	0	77	312
08:45 AM	116	18	0	134	13	38	0	51	5	23	0	28	213
Total Volume	536	75	0	611	49	163	0	212	48	104	0	152	975
% App. Total	87.7	12.3	0		23.1	76.9	0		31.6	68.4	0		
PHF	.784	.721	.000	.826	.875	.849	.000	.883	.387	.565	.000	.494	.781

# Transportation Data Corporation

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 E/W: Stony Fort Road  
 City, State: Saunderstown, RI  
 Client: Pare/J. Shevlin

File Name : 05767B  
 Site Code : 18145.00  
 Start Date : 10/4/2023  
 Page No : 1

### Groups Printed- Trucks & Buses

Start Time	Slocum Road From North			Stony Fort Road From East			Stony Fort Road From West			Int. Total
	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	
07:00 AM	0	0	0	0	0	0	1	1	0	2
07:15 AM	2	0	0	0	0	0	0	1	0	3
07:30 AM	1	1	0	0	0	0	0	0	0	2
07:45 AM	1	0	0	0	0	0	0	1	0	2
<b>Total</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>9</b>
08:00 AM	0	0	0	0	0	0	1	1	0	2
08:15 AM	3	2	0	1	1	0	0	0	0	7
08:30 AM	0	0	0	0	0	0	1	3	0	4
08:45 AM	0	1	0	0	1	0	0	0	0	2
<b>Total</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>15</b>
<b>Grand Total</b>	<b>7</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>3</b>	<b>7</b>	<b>0</b>	<b>24</b>
Apprch %	63.6	36.4	0	33.3	66.7	0	30	70	0	
Total %	29.2	16.7	0	4.2	8.3	0	12.5	29.2	0	

Start Time	Slocum Road From North				Stony Fort Road From East				Stony Fort Road From West				Int. Total
	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	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	1	0	0	1	0	0	0	0	0	1	0	1	2
08:00 AM	0	0	0	0	0	0	0	0	1	1	0	2	2
08:15 AM	3	2	0	5	1	1	0	2	0	0	0	0	7
08:30 AM	0	0	0	0	0	0	0	0	1	3	0	4	4
<b>Total Volume</b>	<b>4</b>	<b>2</b>	<b>0</b>	<b>6</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>5</b>	<b>0</b>	<b>7</b>	<b>15</b>
<b>% App. Total</b>	<b>66.7</b>	<b>33.3</b>	<b>0</b>		<b>50</b>	<b>50</b>	<b>0</b>		<b>28.6</b>	<b>71.4</b>	<b>0</b>		
PHF	.333	.250	.000	.300	.250	.250	.000	.250	.500	.417	.000	.438	.536



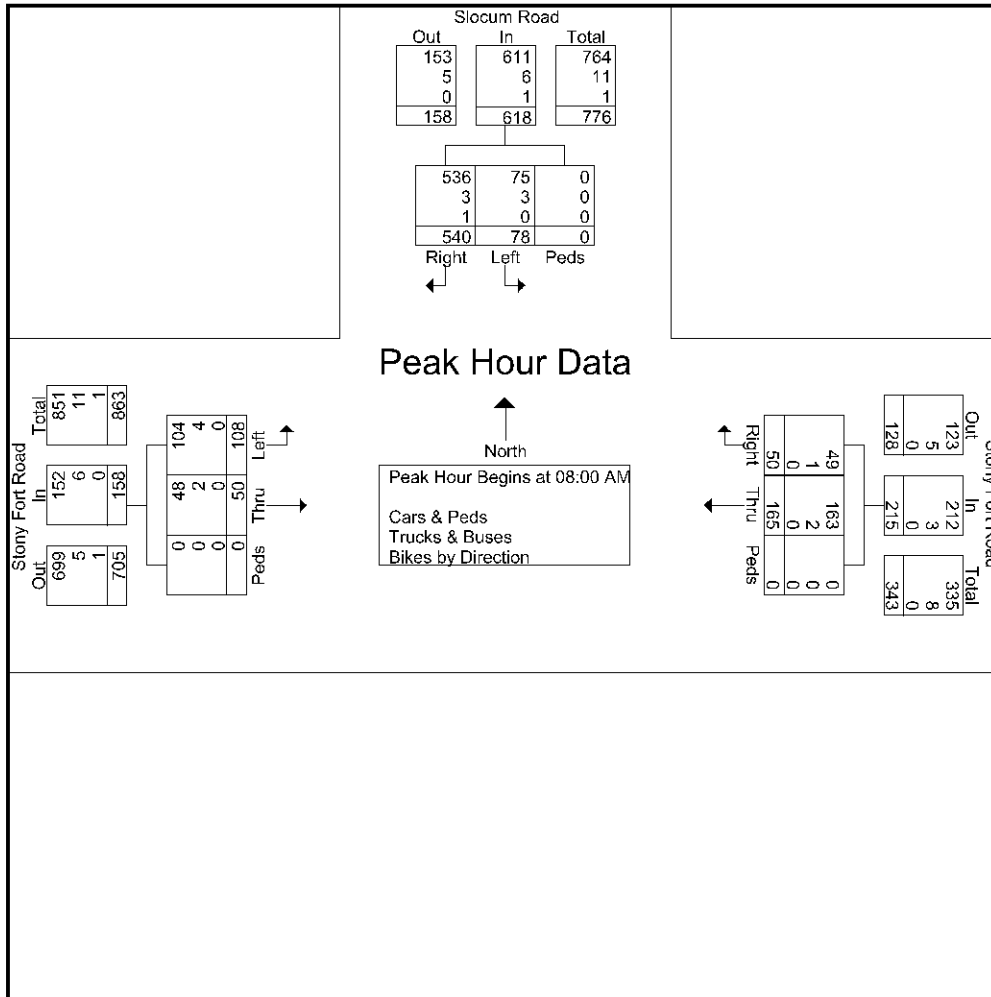
# Transportation Data Corporation

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N: Slocum Road  
E/W: Stony Fort Road  
City, State: Saunderstown, RI  
Client: Pare/J. Shevlin

File Name : 05767B  
Site Code : 18145.00  
Start Date : 10/4/2023  
Page No : 1

Start Time	Slocum Road From North				Stony Fort Road From East				Stony Fort Road From West				Int. Total
	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	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	91	26	0	117	10	32	0	42	6	13	0	19	178
08:15 AM	174	16	0	190	15	46	0	61	7	23	0	30	281
08:30 AM	159	17	0	176	12	48	0	60	32	49	0	81	317
08:45 AM	116	19	0	135	13	39	0	52	5	23	0	28	215
Total Volume	540	78	0	618	50	165	0	215	50	108	0	158	991
% App. Total	87.4	12.6	0		23.3	76.7	0		31.6	68.4	0		
PIIF	.776	.750	.000	.813	.833	.859	.000	.881	.391	.551	.000	.488	.782
Cars & Peds	536	75	0	611	49	163	0	212	48	104	0	152	975
% Cars & Peds	99.3	96.2	0	98.9	98.0	98.8	0	98.6	96.0	96.3	0	96.2	98.4
Trucks & Buses	3	3	0	6	1	2	0	3	2	4	0	6	15
% Trucks & Buses	0.6	3.8	0	1.0	2.0	1.2	0	1.4	4.0	3.7	0	3.8	1.5
Bikes by Direction	1	0	0	1	0	0	0	0	0	0	0	0	1
% Bikes by Direction	0.2	0	0	0.2	0	0	0	0	0	0	0	0	0.1





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 City, State: Saunderstown, RI  
 Client: Pare/J. Shevlin

File Name : 05767BB  
 Site Code : 18145.00  
 Start Date : 10/4/2023  
 Page No : 1

Groups Printed- Cars & Peds

Start Time	Slocum Road From North			Stony Fort Road From East			Stony Fort Road From West			Int. Total
	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	
04:00 PM	20	16	0	25	7	0	39	75	0	182
04:15 PM	40	22	0	28	10	0	38	95	0	233
04:30 PM	38	28	0	32	4	0	29	100	0	231
04:45 PM	45	43	0	35	8	0	28	71	0	230
<b>Total</b>	<b>143</b>	<b>109</b>	<b>0</b>	<b>120</b>	<b>29</b>	<b>0</b>	<b>134</b>	<b>341</b>	<b>0</b>	<b>876</b>
05:00 PM	41	27	0	27	10	0	30	76	0	211
05:15 PM	32	21	0	33	3	0	30	61	0	180
05:30 PM	36	22	0	22	3	0	17	53	0	153
05:45 PM	40	21	0	21	6	0	14	22	0	124
<b>Total</b>	<b>149</b>	<b>91</b>	<b>0</b>	<b>103</b>	<b>22</b>	<b>0</b>	<b>91</b>	<b>212</b>	<b>0</b>	<b>668</b>
<b>Grand Total</b>	<b>292</b>	<b>200</b>	<b>0</b>	<b>223</b>	<b>51</b>	<b>0</b>	<b>225</b>	<b>553</b>	<b>0</b>	<b>1544</b>
Apprch %	59.3	40.7	0	81.4	18.6	0	28.9	71.1	0	
Total %	18.9	13	0	14.4	3.3	0	14.6	35.8	0	

Start Time	Slocum Road From North				Stony Fort Road From East				Stony Fort Road From West				Int. Total
	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	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 04:15 PM													
04:15 PM	40	22	0	62	28	<b>10</b>	0	38	<b>38</b>	95	0	<b>133</b>	<b>233</b>
04:30 PM	38	28	0	66	32	4	0	36	29	<b>100</b>	0	129	231
04:45 PM	<b>45</b>	<b>43</b>	0	<b>88</b>	<b>35</b>	8	0	<b>43</b>	28	71	0	99	230
05:00 PM	41	27	0	68	27	10	0	37	30	76	0	106	211
Total Volume	164	120	0	284	122	32	0	154	125	342	0	467	905
% App. Total	57.7	42.3	0		79.2	20.8	0		26.8	73.2	0		
PHF	.911	.698	.000	.807	.871	.800	.000	.895	.822	.855	.000	.878	.971

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N: Slocum Road  
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 City, State: Saunderstown, RI  
 Client: Pare/J. Shevlin

File Name : 05767BB  
 Site Code : 18145.00  
 Start Date : 10/4/2023  
 Page No : 1

### Groups Printed- Trucks & Buses

Start Time	Slocum Road From North			Stony Fort Road From East			Stony Fort Road From West			Int. Total
	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	
04:00 PM	2	0	0	1	0	0	0	1	0	4
04:15 PM	1	0	0	0	0	0	0	0	0	1
04:30 PM	1	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	2	0	0	0	1	0	3
<b>Total</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>9</b>
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	1	0	1	0	0	0	0	0	2
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	1	0	0	0	0	0	0	0	0	1
<b>Total</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>
<b>Grand Total</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>12</b>
Apprch %	83.3	16.7	0	100	0	0	0	100	0	
Total %	41.7	8.3	0	33.3	0	0	0	16.7	0	

Start Time	Slocum Road From North				Stony Fort Road From East				Stony Fort Road From West				Int. Total
	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	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	2	0	0	2	1	0	0	1	0	1	0	1	4
04:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
04:30 PM	1	0	0	1	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	2	0	0	2	0	1	0	1	3
<b>Total Volume</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>9</b>
<b>% App. Total</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>375</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>500</b>	<b>563</b>
PHF	.500	.000	.000	.500	.375	.000	.000	.375	.000	.500	.000	.500	.563



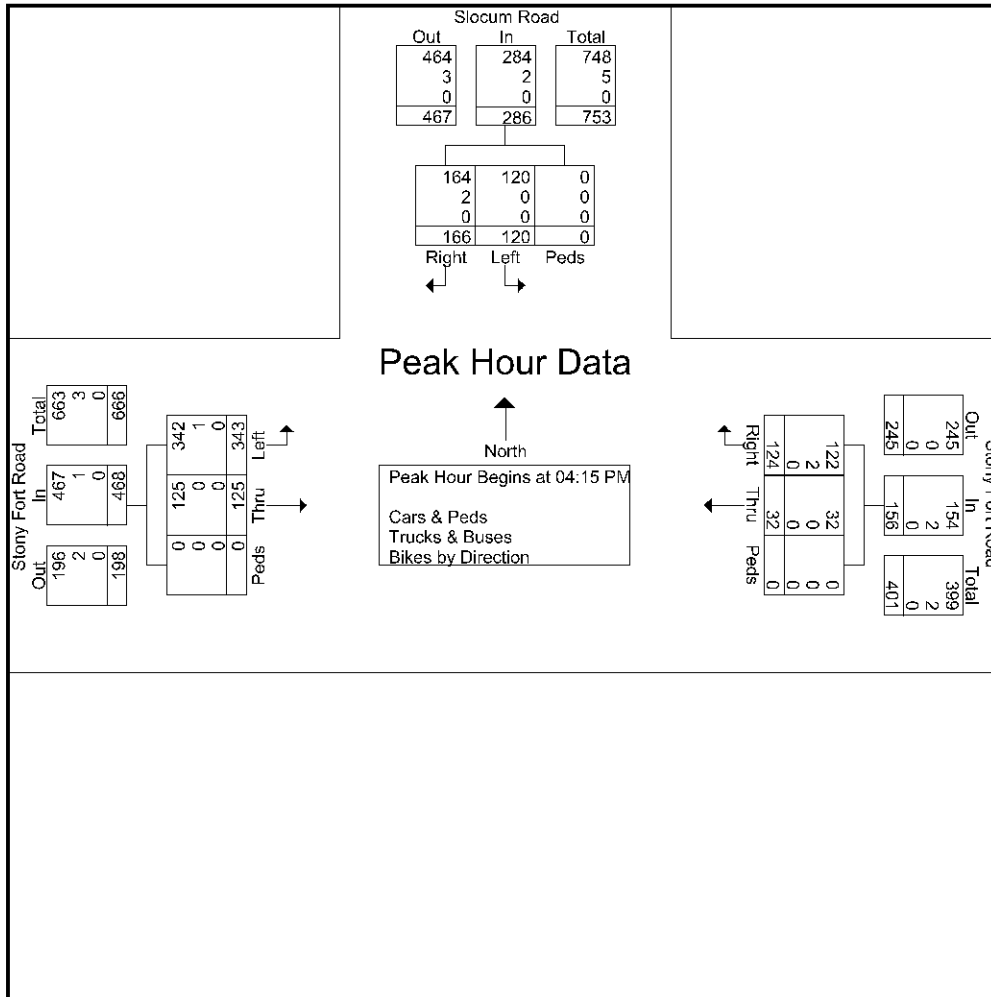
# Transportation Data Corporation

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N: Slocum Road  
E/W: Stony Fort Road  
City, State: Saunderstown, RI  
Client: Pare/J. Shevlin

File Name : 05767BB  
Site Code : 18145.00  
Start Date : 10/4/2023  
Page No : 1

Start Time	Slocum Road From North				Stony Fort Road From East				Stony Fort Road From West				Int. Total
	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	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 04:15 PM													
04:15 PM	41	22	0	63	28	10	0	38	38	95	0	133	234
04:30 PM	39	28	0	67	32	4	0	36	29	100	0	129	232
04:45 PM	45	43	0	88	37	8	0	45	28	72	0	100	233
05:00 PM	41	27	0	68	27	10	0	37	30	76	0	106	211
Total Volume	166	120	0	286	124	32	0	156	125	343	0	468	910
% App. Total	58	42	0		79.5	20.5	0		26.7	73.3	0		
PIIF	.922	.698	.000	.813	.838	.800	.000	.867	.822	.858	.000	.880	.972
Cars & Peds	164	120	0	284	122	32	0	154	125	342	0	467	905
% Cars & Peds	98.8	100	0	99.3	98.4	100	0	98.7	100	99.7	0	99.8	99.5
Trucks & Buses	2	0	0	2	2	0	0	2	0	1	0	1	5
% Trucks & Buses	1.2	0	0	0.7	1.6	0	0	1.3	0	0.3	0	0.2	0.5
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: Stony Fort/Broad Rock  
 E/W: Mooresfield Road (Route 138)  
 City, State: Saunderstown, RI  
 Client: Pare/J. Shevlin

File Name : 05767C  
 Site Code : 18145.00  
 Start Date : 10/4/2023  
 Page No : 1

Groups Printed- Cars & Peds

Start Time	Stony Fort Road From North				Mooresfield Road (Route 138) From East				Broad Rock Road From South				Mooresfield Road (Route 138) From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
07:00 AM	3	2	11	0	4	68	2	0	26	0	0	0	4	136	0	0	256
07:15 AM	1	8	10	0	12	105	3	0	18	8	1	0	1	119	2	0	288
07:30 AM	2	8	12	0	25	137	3	0	39	10	3	0	3	145	1	0	388
07:45 AM	2	18	9	0	21	145	1	0	12	2	3	0	1	150	2	0	366
Total	8	36	42	0	62	455	9	0	95	20	7	0	9	550	5	0	1298
08:00 AM	4	16	16	0	34	130	7	0	19	6	1	0	3	137	5	0	378
08:15 AM	6	6	5	0	41	183	2	0	19	9	3	0	0	112	6	0	392
08:30 AM	7	20	14	0	42	147	5	0	19	6	3	0	0	105	6	0	374
08:45 AM	1	14	19	0	36	99	8	0	8	8	0	0	3	103	5	0	304
Total	18	56	54	0	153	559	22	0	65	29	7	0	6	457	22	0	1448
Grand Total	26	92	96	0	215	1014	31	0	160	49	14	0	15	1007	27	0	2746
Appreh %	12.1	43	44.9	0	17.1	80.5	2.5	0	71.7	22	6.3	0	1.4	96	2.6	0	
Total %	0.9	3.4	3.5	0	7.8	36.9	1.1	0	5.8	1.8	0.5	0	0.5	36.7	1	0	

Start Time	Stony Fort Road From North					Mooresfield Road (Route 138) From East					Broad Rock Road From South					Mooresfield Road (Route 138) 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 07:30 AM																					
07:30 AM	2	8	12	0	22	25	137	3	0	165	<b>39</b>	<b>10</b>	<b>3</b>	0	<b>52</b>	3	145	1	0	149	388
07:45 AM	2	<b>18</b>	9	0	29	21	145	1	0	167	12	2	3	0	17	1	<b>150</b>	2	0	<b>153</b>	366
08:00 AM	4	16	<b>16</b>	0	<b>36</b>	34	130	7	0	171	19	6	1	0	26	3	137	5	0	145	378
08:15 AM	<b>6</b>	6	5	0	17	<b>41</b>	<b>183</b>	2	0	<b>226</b>	19	9	3	0	31	0	112	<b>6</b>	0	118	<b>392</b>
Total Volume	14	48	42	0	104	121	595	13	0	729	89	27	10	0	126	7	544	14	0	565	1524
% App. Total	13.5	46.2	40.4	0		16.6	81.6	1.8	0		70.6	21.4	7.9	0		1.2	96.3	2.5	0		
PHF	.583	.667	.656	.000	.722	.738	.813	.464	.000	.806	.571	.675	.833	.000	.606	.583	.907	.583	.000	.923	.972

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 E/W: Mooresfield Road (Route 138)  
 City, State: Saunderstown, RI  
 Client: Pare/J. Shevlin

File Name : 05767C  
 Site Code : 18145.00  
 Start Date : 10/4/2023  
 Page No : 1

Groups Printed- Trucks & Buses

Start Time	Stony Fort Road From North				Mooresfield Road (Route 138) From East				Broad Rock Road From South				Mooresfield Road (Route 138) From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
07:00 AM	0	1	0	0	0	0	0	0	1	0	0	0	0	6	0	0	8
07:15 AM	0	0	0	0	0	2	0	0	0	0	0	0	1	9	0	0	12
07:30 AM	0	0	1	0	0	3	0	0	0	0	0	0	0	6	0	0	10
07:45 AM	0	0	1	0	0	2	0	0	1	0	0	0	1	2	0	0	7
<b>Total</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>23</b>	<b>0</b>	<b>0</b>	<b>37</b>
08:00 AM	1	0	0	0	0	3	1	0	0	0	1	0	1	6	0	0	13
08:15 AM	0	0	1	0	1	3	0	0	0	0	1	0	0	1	1	0	8
08:30 AM	0	0	2	0	2	4	0	0	0	0	0	0	0	5	0	0	13
08:45 AM	0	0	0	0	0	8	1	0	0	0	0	0	0	3	0	0	12
<b>Total</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>18</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>15</b>	<b>1</b>	<b>0</b>	<b>46</b>
<b>Grand Total</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>3</b>	<b>25</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>3</b>	<b>38</b>	<b>1</b>	<b>0</b>	<b>83</b>
Apprch %	14.3	14.3	71.4	0	10	83.3	6.7	0	50	0	50	0	7.1	90.5	2.4	0	
Total %	1.2	1.2	6	0	3.6	30.1	2.4	0	2.4	0	2.4	0	3.6	45.8	1.2	0	

Start Time	Stony Fort Road From North					Mooresfield Road (Route 138) From East					Broad Rock Road From South					Mooresfield Road (Route 138) 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	1	0	0	0	1	0	3	1	0	4	0	0	1	0	1	1	6	0	0	7	13
08:15 AM	0	0	1	0	1	1	3	0	0	4	0	0	1	0	1	0	1	1	0	2	8
08:30 AM	0	0	2	0	2	2	4	0	0	6	0	0	0	0	0	0	5	0	0	5	13
08:45 AM	0	0	0	0	0	0	8	1	0	9	0	0	0	0	0	0	3	0	0	3	12
Total Volume	1	0	3	0	4	3	18	2	0	23	0	0	2	0	2	1	15	1	0	17	46
% App. Total	25	0	75	0		13	78.3	8.7	0		0	0	100	0		5.9	88.2	5.9	0		
PHF	.250	.000	.375	.000	.500	.375	.563	.500	.000	.639	.000	.000	.500	.000	.500	.250	.625	.250	.000	.607	.885

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N/S: Stony Fort/Broad Rock  
 E/W: Mooresfield Road (Route 138)  
 City, State: Saunderstown, RI  
 Client: Pare/J. Shevlin

File Name : 05767C  
 Site Code : 18145.00  
 Start Date : 10/4/2023  
 Page No : 1

Groups Printed- Bikes by Direction

Start Time	Stony Fort Road From North				Mooresfield Road (Route 138) From East				Broad Rock Road From South				Mooresfield Road (Route 138) 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	0	0	0	0
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	0	0	0	0
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	0	0	0	0
Apprch %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total %																	

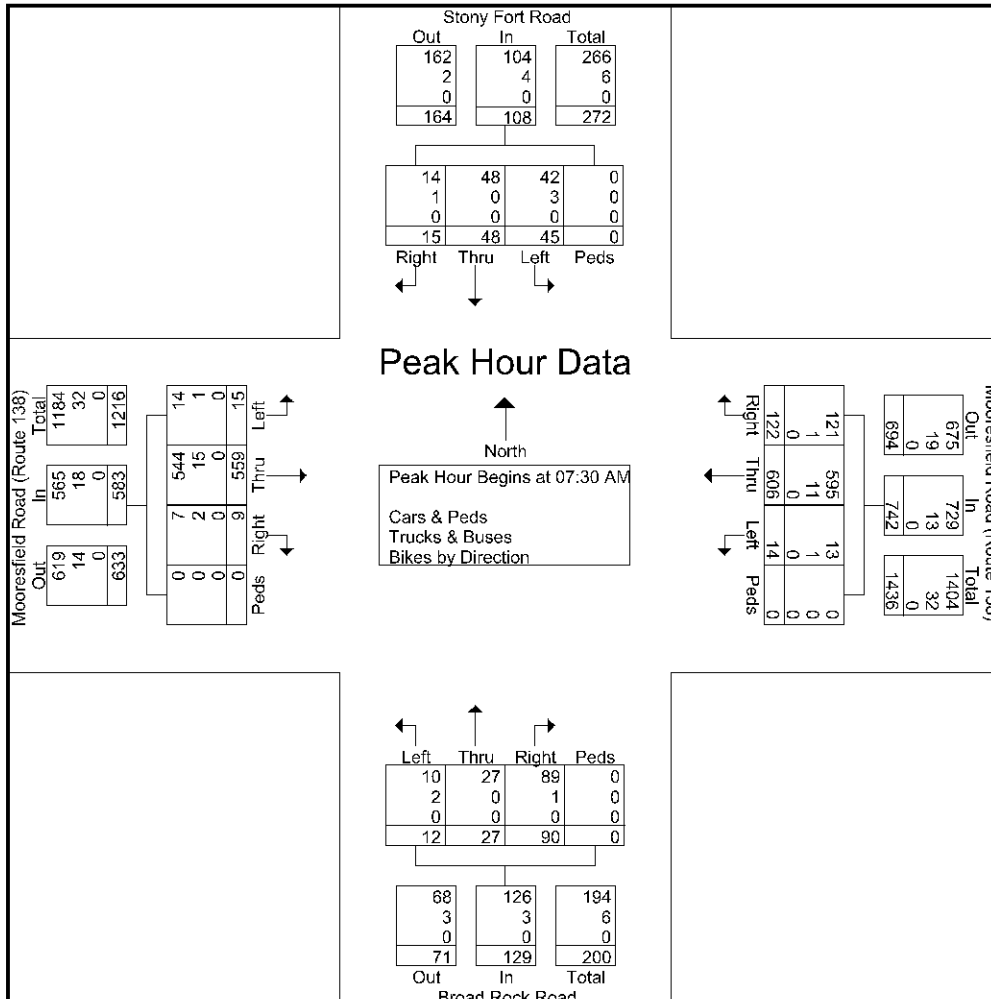
Start Time	Stony Fort Road From North					Mooresfield Road (Route 138) From East					Broad Rock Road From South					Mooresfield Road (Route 138) From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak 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	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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N/S: Stony Fort/Broad Rock  
 E/W: Mooresfield Road (Route 138)  
 City, State: Saunderstown, RI  
 Client: Pare/J. Shevlin

File Name : 05767C  
 Site Code : 18145.00  
 Start Date : 10/4/2023  
 Page No : 1

Start Time	Stony Fort Road From North					Mooresfield Road (Route 138) From East					Broad Rock Road From South					Mooresfield Road (Route 138) 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 1 Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	2	8	13	0	23	25	140	3	0	168	39	10	3	0	52	3	151	1	0	155	398
07:45 AM	2	18	10	0	30	21	147	1	0	169	13	2	3	0	18	2	152	2	0	156	373
08:00 AM	5	16	16	0	37	34	133	8	0	175	19	6	2	0	27	4	143	5	0	152	391
08:15 AM	6	6	6	0	18	42	186	2	0	230	19	9	4	0	32	0	113	7	0	120	400
Total Volume	15	48	45	0	108	122	606	14	0	742	90	27	12	0	129	9	559	15	0	583	1562
% App. Total	13.9	44.4	41.7	0		16.4	81.7	1.9	0		69.8	20.9	9.3	0		1.5	95.9	2.6	0		
PIIF	.625	.667	.703	.000	.730	.726	.815	.438	.000	.807	.577	.675	.750	.000	.620	.563	.919	.536	.000	.934	.976
Cars & Peds	14	48	42	0	104	121	595	13	0	729	89	27	10	0	126	7	544	14	0	565	1524
% Cars & Peds	93.3	100	93.3	0	96.3	99.2	98.2	92.9	0	98.2	98.9	100	83.3	0	97.7	77.8	97.3	93.3	0	96.9	97.6
Trucks & Buses	1	0	3	0	4	1	11	1	0	13	1	0	2	0	3	2	15	1	0	18	38
% Trucks & Buses	6.7	0	6.7	0	3.7	0.8	1.8	7.1	0	1.8	1.1	0	16.7	0	2.3	22.2	2.7	6.7	0	3.1	2.4
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



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N/S: Stony Fort/Broad Rock  
 E/W: Mooresfield Road (Route 138)  
 City, State: Saunderstown, RI  
 Client: Pare/J. Shevlin

File Name : 05767CC  
 Site Code : 18145.00  
 Start Date : 10/4/2023  
 Page No : 1

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

Start Time	Stony Fort Road From North				Mooresfield Road (Route 138) From East				Broad Rock Road From South				Mooresfield Road (Route 138) From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
04:00 PM	3	16	37	0	13	132	13	0	21	10	1	0	4	124	8	0	382
04:15 PM	6	14	38	0	16	103	10	0	19	12	0	0	3	141	8	0	370
04:30 PM	7	13	23	0	12	125	14	0	13	20	2	0	5	159	5	0	398
04:45 PM	16	21	27	0	23	119	16	0	18	18	1	0	5	138	8	0	410
<b>Total</b>	<b>32</b>	<b>64</b>	<b>125</b>	<b>0</b>	<b>64</b>	<b>479</b>	<b>53</b>	<b>0</b>	<b>71</b>	<b>60</b>	<b>4</b>	<b>0</b>	<b>17</b>	<b>562</b>	<b>29</b>	<b>0</b>	<b>1560</b>
05:00 PM	18	15	41	0	17	120	19	0	21	10	3	0	7	141	9	0	421
05:15 PM	8	17	25	0	11	110	12	0	13	15	2	0	4	117	7	0	341
05:30 PM	9	8	29	0	13	137	17	0	17	10	1	0	1	119	6	0	367
05:45 PM	6	14	21	0	12	114	12	0	9	7	3	0	3	103	4	0	308
<b>Total</b>	<b>41</b>	<b>54</b>	<b>116</b>	<b>0</b>	<b>53</b>	<b>481</b>	<b>60</b>	<b>0</b>	<b>60</b>	<b>42</b>	<b>9</b>	<b>0</b>	<b>15</b>	<b>480</b>	<b>26</b>	<b>0</b>	<b>1437</b>
<b>Grand Total</b>	<b>73</b>	<b>118</b>	<b>241</b>	<b>0</b>	<b>117</b>	<b>960</b>	<b>113</b>	<b>0</b>	<b>131</b>	<b>102</b>	<b>13</b>	<b>0</b>	<b>32</b>	<b>1042</b>	<b>55</b>	<b>0</b>	<b>2997</b>
Apprch %	16.9	27.3	55.8	0	9.8	80.7	9.5	0	53.3	41.5	5.3	0	2.8	92.3	4.9	0	
Total %	2.4	3.9	8	0	3.9	32	3.8	0	4.4	3.4	0.4	0	1.1	34.8	1.8	0	
Cars & Peds	72	118	241	0	115	949	112	0	129	100	13	0	32	1034	54	0	2969
% Cars & Peds	98.6	100	100	0	98.3	98.9	99.1	0	98.5	98	100	0	100	99.2	98.2	0	99.1
Trucks & Buses	1	0	0	0	2	11	1	0	2	1	0	0	0	7	1	0	26
% Trucks & Buses	1.4	0	0	0	1.7	1.1	0.9	0	1.5	1	0	0	0	0.7	1.8	0	0.9
Bikes by Direction	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
% Bikes by Direction	0	0	0	0	0	0	0	0	0	1	0	0	0	0.1	0	0	0.1

Start Time	Stony Fort Road From North					Mooresfield Road (Route 138) From East					Broad Rock Road From South					Mooresfield Road (Route 138) 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 04:15 PM																					
04:15 PM	6	14	38	0	58	16	103	10	0	129	19	12	0	0	31	3	141	8	0	152	370
04:30 PM	7	13	23	0	43	12	125	14	0	151	13	20	2	0	35	5	159	5	0	169	398
04:45 PM	16	21	27	0	64	23	119	16	0	158	18	18	1	0	37	5	138	8	0	151	410
05:00 PM	18	15	41	0	74	17	120	19	0	156	21	10	3	0	34	7	141	9	0	157	421
Total Volume	47	63	129	0	239	68	467	59	0	594	71	60	6	0	137	20	579	30	0	629	1599
% App. Total	19.7	26.4	54	0		11.4	78.6	9.9	0		51.8	43.8	4.4	0		3.2	92.1	4.8	0		
PHF	.653	.750	.787	.000	.807	.739	.934	.776	.000	.940	.845	.750	.500	.000	.926	.714	.910	.833	.000	.930	.950
Cars & Peds	47	63	129	0	239	67	461	58	0	586	71	60	6	0	137	20	572	29	0	621	1583
% Cars & Peds	100	100	100	0	100	98.5	98.7	98.3	0	98.7	100	100	100	0	100	100	98.8	96.7	0	98.7	99.0
Trucks & Buses	0	0	0	0	0	1	6	1	0	8	0	0	0	0	0	0	6	1	0	7	15
% Trucks & Buses	0	0	0	0	0	1.5	1.3	1.7	0	1.3	0	0	0	0	0	0	1.0	3.3	0	1.1	0.9
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0.2	0.1

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 E/W: Mooresfield Road (Route 138)  
 City, State: Saunterstown, RI  
 Client: Pare/J. Shevlin

File Name : 05767CC  
 Site Code : 18145.00  
 Start Date : 10/4/2023  
 Page No : 1

Groups Printed- Cars & Peds

Start Time	Stony Fort Road From North				Mooresfield Road (Route 138) From East				Broad Rock Road From South				Mooresfield Road (Route 138) From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
04:00 PM	3	16	37	0	12	131	13	0	19	9	1	0	4	124	8	0	377
04:15 PM	6	14	38	0	16	102	10	0	19	12	0	0	3	140	8	0	368
04:30 PM	7	13	23	0	12	124	14	0	13	20	2	0	5	156	5	0	394
04:45 PM	16	21	27	0	22	116	16	0	18	18	1	0	5	136	7	0	403
Total	32	64	125	0	62	473	53	0	69	59	4	0	17	556	28	0	1542
05:00 PM	18	15	41	0	17	119	18	0	21	10	3	0	7	140	9	0	418
05:15 PM	7	17	25	0	11	108	12	0	13	14	2	0	4	117	7	0	337
05:30 PM	9	8	29	0	13	136	17	0	17	10	1	0	1	118	6	0	365
05:45 PM	6	14	21	0	12	113	12	0	9	7	3	0	3	103	4	0	307
Total	40	54	116	0	53	476	59	0	60	41	9	0	15	478	26	0	1427
Grand Total	72	118	241	0	115	949	112	0	129	100	13	0	32	1034	54	0	2969
Appreh %	16.7	27.4	55.9	0	9.8	80.7	9.5	0	53.3	41.3	5.4	0	2.9	92.3	4.8	0	
Total %	2.4	4	8.1	0	3.9	32	3.8	0	4.3	3.4	0.4	0	1.1	34.8	1.8	0	

Start Time	Stony Fort Road From North					Mooresfield Road (Route 138) From East					Broad Rock Road From South					Mooresfield Road (Route 138) 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 04:15 PM																					
04:15 PM	6	14	38	0	58	16	102	10	0	128	19	12	0	0	31	3	140	8	0	151	368
04:30 PM	7	13	23	0	43	12	124	14	0	150	13	20	2	0	35	5	156	5	0	166	394
04:45 PM	16	21	27	0	64	22	116	16	0	154	18	18	1	0	37	5	136	7	0	148	403
05:00 PM	18	15	41	0	74	17	119	18	0	154	21	10	3	0	34	7	140	9	0	156	418
Total Volume	47	63	129	0	239	67	461	58	0	586	71	60	6	0	137	20	572	29	0	621	1583
% App. Total	19.7	26.4	54	0		11.4	78.7	9.9	0		51.8	43.8	4.4	0		3.2	92.1	4.7	0		
PHF	.653	.750	.787	.000	.807	.761	.929	.806	.000	.951	.845	.750	.500	.000	.926	.714	.917	.806	.000	.935	.947

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N/S: Stony Fort/Broad Rock  
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 City, State: Saunderstown, RI  
 Client: Pare/J. Shevlin

File Name : 05767CC  
 Site Code : 18145.00  
 Start Date : 10/4/2023  
 Page No : 1

Groups Printed- Trucks & Buses

Start Time	Stony Fort Road From North				Mooresfield Road (Route 138) From East				Broad Rock Road From South				Mooresfield Road (Route 138) 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	1	1	0	0	2	0	0	0	0	0	0	0	4
04:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0	0	4
04:45 PM	0	0	0	0	1	3	0	0	0	0	0	0	0	2	1	0	7
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>16</b>
05:00 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	3
05:15 PM	1	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	4
05:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
05:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
<b>Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>10</b>
<b>Grand Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>11</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>1</b>	<b>0</b>	<b>26</b>
Appreh %	100	0	0	0	14.3	78.6	7.1	0	66.7	33.3	0	0	0	87.5	12.5	0	
Total %	3.8	0	0	0	7.7	42.3	3.8	0	7.7	3.8	0	0	0	26.9	3.8	0	

Start Time	Stony Fort Road From North					Mooresfield Road (Route 138) From East					Broad Rock Road From South					Mooresfield Road (Route 138) 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	3	0	0	3	4
04:45 PM	0	0	0	0	0	1	3	0	0	4	0	0	0	0	0	0	2	1	0	3	7
05:00 PM	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	1	0	0	1	3
05:15 PM	1	0	0	0	1	0	2	0	0	2	0	1	0	0	1	0	0	0	0	0	4
Total Volume	1	0	0	0	1	1	7	1	0	9	0	1	0	0	1	0	6	1	0	7	18
% App. Total	100	0	0	0		11.1	77.8	11.1	0		0	100	0	0		0	85.7	14.3	0		
PHF	.250	.000	.000	.000	.250	.250	.583	.250	.000	.563	.000	.250	.000	.000	.250	.000	.500	.250	.000	.583	.643

**Transportation Data Corporation**  
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N/S: Stony Fort/Broad Rock  
 E/W: Mooresfield Road (Route 138)  
 City, State: Saunderstown, RI  
 Client: Pare/J. Shevlin

File Name : 05767CC  
 Site Code : 18145.00  
 Start Date : 10/4/2023  
 Page No : 1

Groups Printed- Bikes by Direction

Start Time	Stony Fort Road From North				Mooresfield Road (Route 138) From East				Broad Rock Road From South				Mooresfield Road (Route 138) 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	1	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	1	0	0	0	1	0	0	2
Approch %	0	0	0	0	0	0	0	0	0	100	0	0	0	100	0	0	
Total %	0	0	0	0	0	0	0	0	0	50	0	0	0	50	0	0	

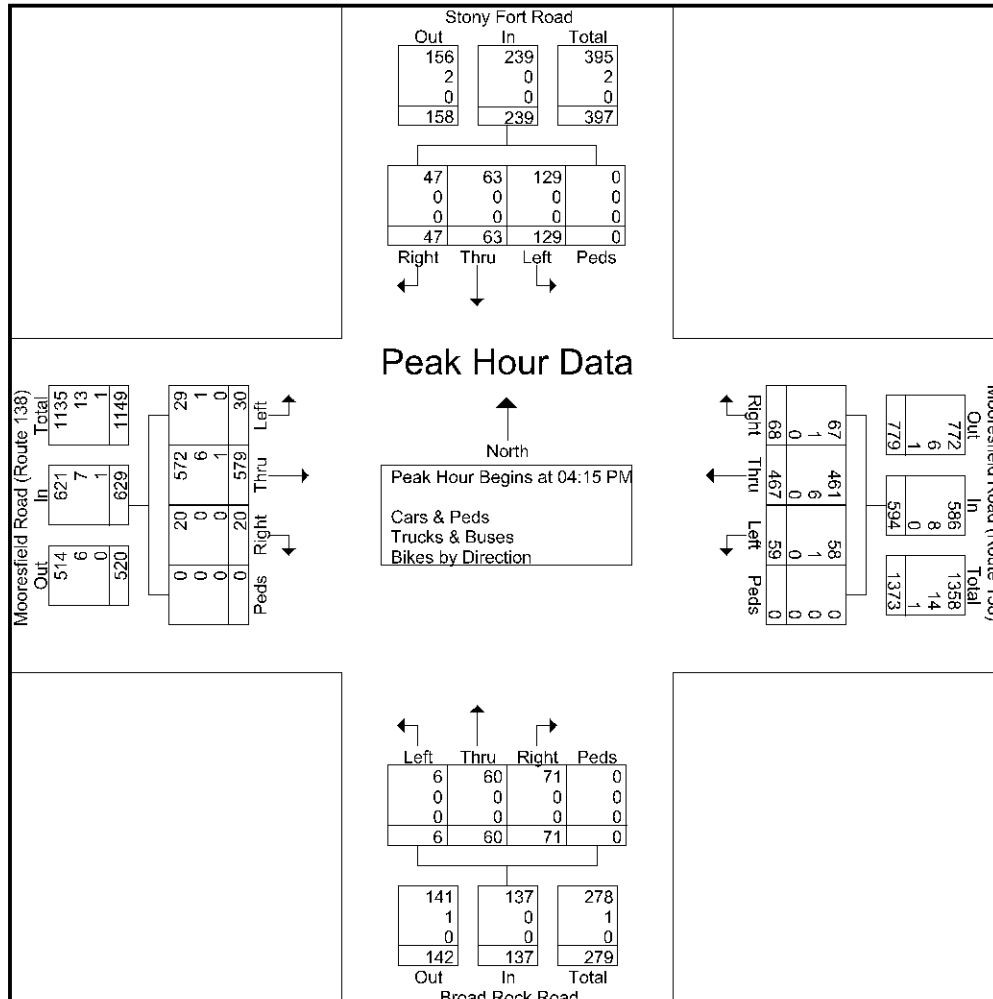
Start Time	Stony Fort Road From North					Mooresfield Road (Route 138) From East					Broad Rock Road From South					Mooresfield Road (Route 138) From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak 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	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	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	1	0	0	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	2
% App. Total	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	0	100	0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.000	.250	.000	.250	.000	.000	.250	.500

**Transportation Data Corporation**  
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N/S: Stony Fort/Broad Rock  
 E/W: Mooresfield Road (Route 138)  
 City, State: Saunderstown, RI  
 Client: Pare/J. Shevlin

File Name : 05767CC  
 Site Code : 18145.00  
 Start Date : 10/4/2023  
 Page No : 1

Start Time	Stony Fort Road From North					Mooresfield Road (Route 138) From East					Broad Rock Road From South					Mooresfield Road (Route 138) 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 1 Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	6	14	38	0	58	16	103	10	0	129	19	12	0	0	31	3	141	8	0	152	370
04:30 PM	7	13	23	0	43	12	125	14	0	151	13	20	2	0	35	5	159	5	0	169	398
04:45 PM	16	21	27	0	64	23	119	16	0	158	18	18	1	0	37	5	138	8	0	151	410
05:00 PM	18	15	41	0	74	17	120	19	0	156	21	10	3	0	34	7	141	9	0	157	421
Total Volume	47	63	129	0	239	68	467	59	0	594	71	60	6	0	137	20	579	30	0	629	1599
% App. Total	19.7	26.4	54	0		11.4	78.6	9.9	0		51.8	43.8	4.4	0		3.2	92.1	4.8	0		
PIIF	.653	.750	.787	.000	.807	.739	.934	.776	.000	.940	.845	.750	.500	.000	.926	.714	.910	.833	.000	.930	.950
Cars & Peds	47	63	129	0	239	67	461	58	0	586	71	60	6	0	137	20	572	29	0	621	1583
% Cars & Peds	100	100	100	0	100	98.5	98.7	98.3	0	98.7	100	100	100	0	100	100	98.8	96.7	0	98.7	99.0
Trucks & Buses	0	0	0	0	0	1	6	1	0	8	0	0	0	0	0	0	6	1	0	7	15
% Trucks & Buses	0	0	0	0	0	1.5	1.3	1.7	0	1.3	0	0	0	0	0	0	1.0	3.3	0	1.1	0.9
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0.2	0.1



**Transportation Data Corporation**  
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S: Kingstown Road (Route 108)  
 E/W: Mooresfield/Kingstown (Route 138)  
 City, State: Kingston, RI  
 Client: Pare/J. Shevlin

File Name : 05767D  
 Site Code : 18145.00  
 Start Date : 10/5/2023  
 Page No : 1

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

Start Time	Mooresfield Road (Route 138) From East			Kingstown Road (Route 108) From South			Kingstown Road (Route 138) From West			Int. Total
	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	
07:00 AM	71	6	1	14	55	0	62	82	0	291
07:15 AM	104	6	1	18	122	0	77	102	0	430
07:30 AM	138	16	0	12	157	0	55	78	4	460
07:45 AM	91	12	0	15	137	0	87	84	0	426
Total	404	40	2	59	471	0	281	346	4	1607
08:00 AM	94	12	1	12	118	0	61	76	0	374
08:15 AM	119	9	0	20	137	0	61	79	1	426
08:30 AM	101	8	0	12	142	0	67	61	5	396
08:45 AM	145	7	0	6	158	0	70	64	0	450
Total	459	36	1	50	555	0	259	280	6	1646
Grand Total	863	76	3	109	1026	0	540	626	10	3253
Apprch %	91.6	8.1	0.3	9.6	90.4	0	45.9	53.2	0.9	
Total %	26.5	2.3	0.1	3.4	31.5	0	16.6	19.2	0.3	
Cars & Peds	841	70	3	102	1000	0	518	595	10	3139
% Cars & Peds	97.5	92.1	100	93.6	97.5	0	95.9	95	100	96.5
Trucks & Buses	22	6	0	7	25	0	22	31	0	113
% Trucks & Buses	2.5	7.9	0	6.4	2.4	0	4.1	5	0	3.5
Bikes by Direction	0	0	0	0	1	0	0	0	0	1
% Bikes by Direction	0	0	0	0	0.1	0	0	0	0	0

Start Time	Mooresfield Road (Route 138) From East				Kingstown Road (Route 108) From South				Kingstown Road (Route 138) From West				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 07:15 AM													
07:15 AM	104	6	1	111	18	122	0	140	77	102	0	179	430
07:30 AM	138	16	0	154	12	157	0	169	55	78	4	137	460
07:45 AM	91	12	0	103	15	137	0	152	87	84	0	171	426
08:00 AM	94	12	1	107	12	118	0	130	61	76	0	137	374
Total Volume	427	46	2	475	57	534	0	591	280	340	4	624	1690
% App. Total	89.9	9.7	0.4		9.6	90.4	0		44.9	54.5	0.6		
PHF	.774	.719	.500	.771	.792	.850	.000	.874	.805	.833	.250	.872	.918
Cars & Peds	419	41	2	462	52	517	0	569	270	320	4	594	1625
% Cars & Peds	98.1	89.1	100	97.3	91.2	96.8	0	96.3	96.4	94.1	100	95.2	96.2
Trucks & Buses	8	5	0	13	5	16	0	21	10	20	0	30	64
% Trucks & Buses	1.9	10.9	0	2.7	8.8	3.0	0	3.6	3.6	5.9	0	4.8	3.8
Bikes by Direction	0	0	0	0	0	1	0	1	0	0	0	0	1
% Bikes by Direction	0	0	0	0	0	0.2	0	0.2	0	0	0	0	0.1

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S: Kingstown Road (Route 108)  
 E/W: Mooresfield/Kingstown (Route 138)  
 City, State: Kingston, RI  
 Client: Pare/J. Shevlin

File Name : 05767D  
 Site Code : 18145.00  
 Start Date : 10/5/2023  
 Page No : 1

Groups Printed- Cars & Peds

Start Time	Mooresfield Road (Route 138) From East			Kingstown Road (Route 108) From South			Kingstown Road (Route 138) From West			Int. Total
	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	
07:00 AM	68	6	1	13	52	0	56	77	0	273
07:15 AM	103	5	1	16	115	0	73	92	0	405
07:30 AM	133	14	0	12	156	0	53	76	4	448
07:45 AM	89	11	0	12	134	0	85	83	0	414
<b>Total</b>	<b>393</b>	<b>36</b>	<b>2</b>	<b>53</b>	<b>457</b>	<b>0</b>	<b>267</b>	<b>328</b>	<b>4</b>	<b>1540</b>
08:00 AM	94	11	1	12	112	0	59	69	0	358
08:15 AM	115	9	0	20	136	0	59	78	1	418
08:30 AM	99	8	0	12	139	0	65	59	5	387
08:45 AM	140	6	0	5	156	0	68	61	0	436
<b>Total</b>	<b>448</b>	<b>34</b>	<b>1</b>	<b>49</b>	<b>543</b>	<b>0</b>	<b>251</b>	<b>267</b>	<b>6</b>	<b>1599</b>
<b>Grand Total</b>	<b>841</b>	<b>70</b>	<b>3</b>	<b>102</b>	<b>1000</b>	<b>0</b>	<b>518</b>	<b>595</b>	<b>10</b>	<b>3139</b>
Apprch %	92	7.7	0.3	9.3	90.7	0	46.1	53	0.9	
Total %	26.8	2.2	0.1	3.2	31.9	0	16.5	19	0.3	

Start Time	Mooresfield Road (Route 138) From East				Kingstown Road (Route 108) From South				Kingstown Road (Route 138) From West				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 07:30 AM													
07:30 AM	133	14	0	147	12	156	0	168	53	76	4	133	448
07:45 AM	89	11	0	100	12	134	0	146	85	83	0	168	414
08:00 AM	94	11	1	106	12	112	0	124	59	69	0	128	358
08:15 AM	115	9	0	124	20	136	0	156	59	78	1	138	418
<b>Total Volume</b>	<b>431</b>	<b>45</b>	<b>1</b>	<b>477</b>	<b>56</b>	<b>538</b>	<b>0</b>	<b>594</b>	<b>256</b>	<b>306</b>	<b>5</b>	<b>567</b>	<b>1638</b>
<b>% App. Total</b>	<b>90.4</b>	<b>9.4</b>	<b>0.2</b>		<b>9.4</b>	<b>90.6</b>	<b>0</b>		<b>45.1</b>	<b>54</b>	<b>0.9</b>		
PHF	.810	.804	.250	.811	.700	.862	.000	.884	.753	.922	.313	.844	.914

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S: Kingstown Road (Route 108)  
 E/W: Mooresfield/Kingstown (Route 138)  
 City, State: Kingston, RI  
 Client: Pare/J. Shevlin

File Name : 05767D  
 Site Code : 18145.00  
 Start Date : 10/5/2023  
 Page No : 1

### Groups Printed- Trucks & Buses

Start Time	Mooresfield Road (Route 138) From East			Kingstown Road (Route 108) From South			Kingstown Road (Route 138) From West			Int. Total
	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	
07:00 AM	3	0	0	1	3	0	6	5	0	18
07:15 AM	1	1	0	2	7	0	4	10	0	25
07:30 AM	5	2	0	0	1	0	2	2	0	12
07:45 AM	2	1	0	3	3	0	2	1	0	12
<b>Total</b>	<b>11</b>	<b>4</b>	<b>0</b>	<b>6</b>	<b>14</b>	<b>0</b>	<b>14</b>	<b>18</b>	<b>0</b>	<b>67</b>
08:00 AM	0	1	0	0	5	0	2	7	0	15
08:15 AM	4	0	0	0	1	0	2	1	0	8
08:30 AM	2	0	0	0	3	0	2	2	0	9
08:45 AM	5	1	0	1	2	0	2	3	0	14
<b>Total</b>	<b>11</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>11</b>	<b>0</b>	<b>8</b>	<b>13</b>	<b>0</b>	<b>46</b>
<b>Grand Total</b>	<b>22</b>	<b>6</b>	<b>0</b>	<b>7</b>	<b>25</b>	<b>0</b>	<b>22</b>	<b>31</b>	<b>0</b>	<b>113</b>
Apprch %	78.6	21.4	0	21.9	78.1	0	41.5	58.5	0	
Total %	19.5	5.3	0	6.2	22.1	0	19.5	27.4	0	

Start Time	Mooresfield Road (Route 138) From East				Kingstown Road (Route 108) From South				Kingstown Road (Route 138) From West				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 07:00 AM													
07:00 AM	3	0	0	3	1	3	0	4	6	5	0	11	18
07:15 AM	1	1	0	2	2	7	0	9	4	10	0	14	25
07:30 AM	5	2	0	7	0	1	0	1	2	2	0	4	12
07:45 AM	2	1	0	3	3	3	0	6	2	1	0	3	12
<b>Total Volume</b>	<b>11</b>	<b>4</b>	<b>0</b>	<b>15</b>	<b>6</b>	<b>14</b>	<b>0</b>	<b>20</b>	<b>14</b>	<b>18</b>	<b>0</b>	<b>32</b>	<b>67</b>
<b>% App. Total</b>	<b>73.3</b>	<b>26.7</b>	<b>0</b>	<b>0.536</b>	<b>30</b>	<b>70</b>	<b>0</b>	<b>0.556</b>	<b>43.8</b>	<b>56.2</b>	<b>0</b>	<b>0.571</b>	<b>0.670</b>
PHF	.550	.500	.000	.536	.500	.500	.000	.556	.583	.450	.000	.571	.670

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S: Kingstown Road (Route 108)  
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 City, State: Kingston, RI  
 Client: Pare/J. Shevlin

File Name : 05767D  
 Site Code : 18145.00  
 Start Date : 10/5/2023  
 Page No : 1

Groups Printed- Bikes by Direction

Start Time	Mooresfield Road (Route 138) From East			Kingstown Road (Route 108) From South			Kingstown Road (Route 138) From West			Int. Total
	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	1	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	0	0	0	1
Grand Total	0	0	0	0	1	0	0	0	0	1
Apprch %	0	0	0	0	100	0	0	0	0	
Total %	0	0	0	0	100	0	0	0	0	

Start Time	Mooresfield Road (Route 138) From East				Kingstown Road (Route 108) From South				Kingstown Road (Route 138) From West				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 07:15 AM													
07:15 AM	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
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	1
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	1
% App. Total	0	0	0	0	0	100	0	.250	0	0	0	0	.250
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.250

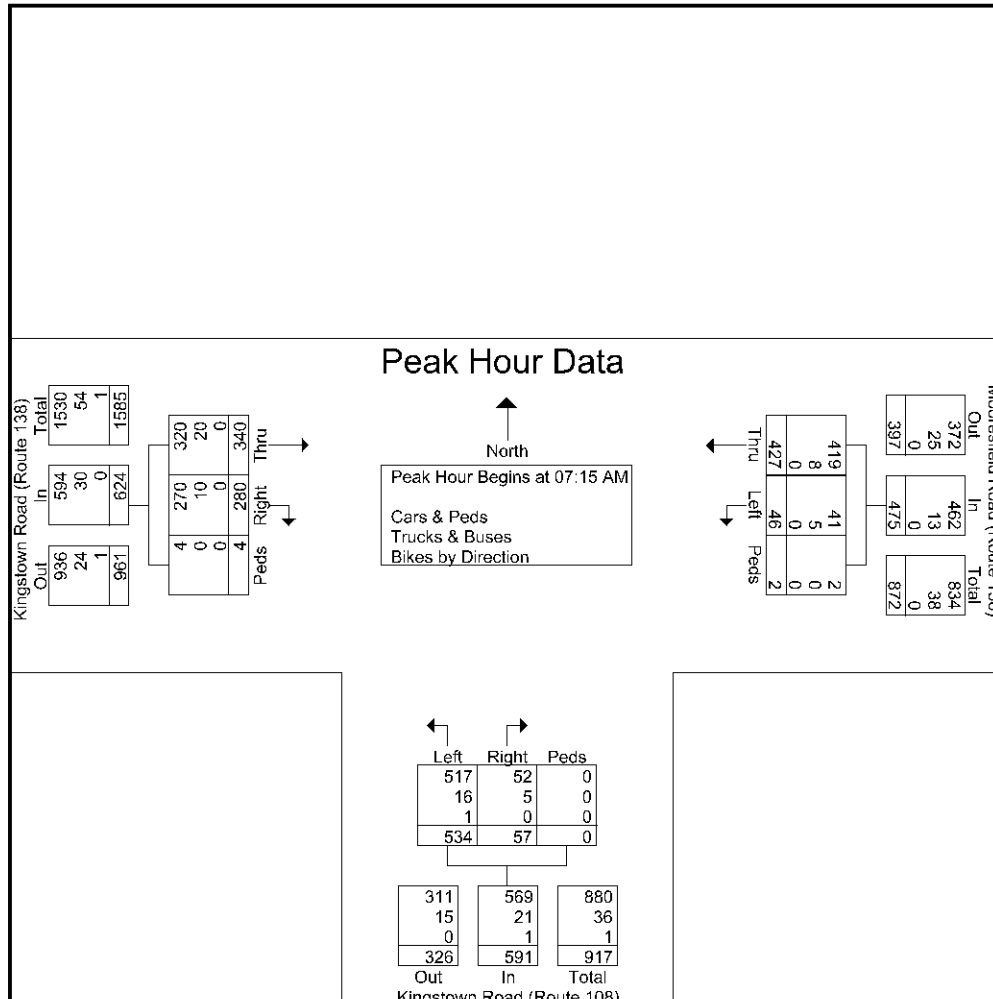
# Transportation Data Corporation

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S: Kingstown Road (Route 108)  
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City, State: Kingston, RI  
Client: Pare/J. Shevlin

File Name : 05767D  
Site Code : 18145.00  
Start Date : 10/5/2023  
Page No : 1

Start Time	Mooresfield Road (Route 138) From East				Kingstown Road (Route 108) From South				Kingstown Road (Route 138) From West				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 07:15 AM													
07:15 AM	104	6	1	111	18	122	0	140	77	102	0	179	430
07:30 AM	138	16	0	154	12	157	0	169	55	78	4	137	460
07:45 AM	91	12	0	103	15	137	0	152	87	84	0	171	426
08:00 AM	94	12	1	107	12	118	0	130	61	76	0	137	374
Total Volume	427	46	2	475	57	534	0	591	280	340	4	624	1690
% App. Total	89.9	9.7	0.4		9.6	90.4	0		44.9	54.5	0.6		
PIIF	.774	.719	.500	.771	.792	.850	.000	.874	.805	.833	.250	.872	.918
Cars & Peds	419	41	2	462	52	517	0	569	270	320	4	594	1625
% Cars & Peds	98.1	89.1	100	97.3	91.2	96.8	0	96.3	96.4	94.1	100	95.2	96.2
Trucks & Buses	8	5	0	13	5	16	0	21	10	20	0	30	64
% Trucks & Buses	1.9	10.9	0	2.7	8.8	3.0	0	3.6	3.6	5.9	0	4.8	3.8
Bikes by Direction	0	0	0	0	0	1	0	1	0	0	0	0	1
% Bikes by Direction	0	0	0	0	0	0.2	0	0.2	0	0	0	0	0.1



**Transportation Data Corporation**  
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S: Kingstown Road (Route 108)  
 E/W: Mooresfield/Kingstown (Route 138)  
 City, State: Kingston, RI  
 Client: Pare/J. Shevlin

File Name : 05767DD  
 Site Code : 18145.00  
 Start Date : 10/5/2023  
 Page No : 1

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

Start Time	Mooresfield Road (Route 138) From East			Kingstown Road (Route 108) From South			Kingstown Road (Route 138) From West			Int. Total
	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	
04:00 PM	91	18	0	15	122	0	144	101	0	491
04:15 PM	87	19	0	13	95	0	146	101	2	463
04:30 PM	106	13	0	21	127	0	151	94	0	512
04:45 PM	97	13	0	13	126	0	153	125	1	528
<b>Total</b>	<b>381</b>	<b>63</b>	<b>0</b>	<b>62</b>	<b>470</b>	<b>0</b>	<b>594</b>	<b>421</b>	<b>3</b>	<b>1994</b>
05:00 PM	88	19	0	17	88	0	170	99	0	481
05:15 PM	81	13	0	17	120	0	170	104	0	505
05:30 PM	85	19	0	13	126	0	129	89	0	461
05:45 PM	97	17	0	9	104	0	104	88	0	419
<b>Total</b>	<b>351</b>	<b>68</b>	<b>0</b>	<b>56</b>	<b>438</b>	<b>0</b>	<b>573</b>	<b>380</b>	<b>0</b>	<b>1866</b>
<b>Grand Total</b>	<b>732</b>	<b>131</b>	<b>0</b>	<b>118</b>	<b>908</b>	<b>0</b>	<b>1167</b>	<b>801</b>	<b>3</b>	<b>3860</b>
Apprch %	84.8	15.2	0	11.5	88.5	0	59.2	40.6	0.2	
Total %	19	3.4	0	3.1	23.5	0	30.2	20.8	0.1	
Cars & Peds	720	130	0	117	900	0	1160	795	3	3825
% Cars & Peds	98.4	99.2	0	99.2	99.1	0	99.4	99.3	100	99.1
Trucks & Buses	11	1	0	1	8	0	5	6	0	32
% Trucks & Buses	1.5	0.8	0	0.8	0.9	0	0.4	0.7	0	0.8
Bikes by Direction	1	0	0	0	0	0	2	0	0	3
% Bikes by Direction	0.1	0	0	0	0	0	0.2	0	0	0.1

Start Time	Mooresfield Road (Route 138) From East				Kingstown Road (Route 108) From South				Kingstown Road (Route 138) From West				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 04:30 PM													
04:30 PM	106	13	0	119	21	127	0	148	151	94	0	245	512
04:45 PM	97	13	0	110	13	126	0	139	153	125	1	279	528
05:00 PM	88	19	0	107	17	88	0	105	170	99	0	269	481
05:15 PM	81	13	0	94	17	120	0	137	170	104	0	274	505
Total Volume	372	58	0	430	68	461	0	529	644	422	1	1067	2026
% App. Total	86.5	13.5	0		12.9	87.1	0		60.4	39.6	0.1		
PHF	.877	.763	.000	.903	.810	.907	.000	.894	.947	.844	.250	.956	.959
Cars & Peds	367	57	0	424	67	456	0	523	640	418	1	1059	2006
% Cars & Peds	98.7	98.3	0	98.6	98.5	98.9	0	98.9	99.4	99.1	100	99.3	99.0
Trucks & Buses	4	1	0	5	1	5	0	6	3	4	0	7	18
% Trucks & Buses	1.1	1.7	0	1.2	1.5	1.1	0	1.1	0.5	0.9	0	0.7	0.9
Bikes by Direction	1	0	0	1	0	0	0	0	1	0	0	1	2
% Bikes by Direction	0.3	0	0	0.2	0	0	0	0	0.2	0	0	0.1	0.1

**Transportation Data Corporation**  
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S: Kingstown Road (Route 108)  
 E/W: Mooresfield/Kingstown (Route 138)  
 City, State: Kingston, RI  
 Client: Pare/J. Shevlin

File Name : 05767DD  
 Site Code : 18145.00  
 Start Date : 10/5/2023  
 Page No : 1

Groups Printed- Cars & Peds

Start Time	Mooresfield Road (Route 138) From East			Kingstown Road (Route 108) From South			Kingstown Road (Route 138) From West			Int. Total
	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	
04:00 PM	90	18	0	15	121	0	143	100	0	487
04:15 PM	84	19	0	13	95	0	145	101	2	459
04:30 PM	106	13	0	21	126	0	150	94	0	510
04:45 PM	96	13	0	13	123	0	153	122	1	521
<b>Total</b>	<b>376</b>	<b>63</b>	<b>0</b>	<b>62</b>	<b>465</b>	<b>0</b>	<b>591</b>	<b>417</b>	<b>3</b>	<b>1977</b>
05:00 PM	85	18	0	16	88	0	170	98	0	475
05:15 PM	80	13	0	17	119	0	167	104	0	500
05:30 PM	84	19	0	13	126	0	129	88	0	459
05:45 PM	95	17	0	9	102	0	103	88	0	414
<b>Total</b>	<b>344</b>	<b>67</b>	<b>0</b>	<b>55</b>	<b>435</b>	<b>0</b>	<b>569</b>	<b>378</b>	<b>0</b>	<b>1848</b>
<b>Grand Total</b>	<b>720</b>	<b>130</b>	<b>0</b>	<b>117</b>	<b>900</b>	<b>0</b>	<b>1160</b>	<b>795</b>	<b>3</b>	<b>3825</b>
Apprch %	84.7	15.3	0	11.5	88.5	0	59.2	40.6	0.2	
Total %	18.8	3.4	0	3.1	23.5	0	30.3	20.8	0.1	

Start Time	Mooresfield Road (Route 138) From East				Kingstown Road (Route 108) From South				Kingstown Road (Route 138) From West				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 04:30 PM													
04:30 PM	<b>106</b>	13	0	<b>119</b>	<b>21</b>	<b>126</b>	0	<b>147</b>	150	94	0	244	510
04:45 PM	96	13	0	109	13	123	0	136	153	<b>122</b>	<b>1</b>	<b>276</b>	<b>521</b>
05:00 PM	85	<b>18</b>	0	103	16	88	0	104	<b>170</b>	98	0	268	475
05:15 PM	80	13	0	93	17	119	0	136	167	104	0	271	500
Total Volume	367	57	0	424	67	456	0	523	640	418	1	1059	2006
% App. Total	86.6	13.4	0		12.8	87.2	0		60.4	39.5	0.1		
PHF	.866	.792	.000	.891	.798	.905	.000	.889	.941	.857	.250	.959	.963

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S: Kingstown Road (Route 108)  
 E/W: Mooresfield/Kingstown (Route 138)  
 City, State: Kingston, RI  
 Client: Pare/J. Shevlin

File Name : 05767DD  
 Site Code : 18145.00  
 Start Date : 10/5/2023  
 Page No : 1

Groups Printed- Trucks & Buses

Start Time	Mooresfield Road (Route 138) From East			Kingstown Road (Route 108) From South			Kingstown Road (Route 138) From West			Int. Total
	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	
04:00 PM	1	0	0	0	1	0	0	1	0	3
04:15 PM	3	0	0	0	0	0	1	0	0	4
04:30 PM	0	0	0	0	1	0	0	0	0	1
04:45 PM	1	0	0	0	3	0	0	3	0	7
<b>Total</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>15</b>
05:00 PM	3	1	0	1	0	0	0	1	0	6
05:15 PM	0	0	0	0	1	0	3	0	0	4
05:30 PM	1	0	0	0	0	0	0	1	0	2
05:45 PM	2	0	0	0	2	0	1	0	0	5
<b>Total</b>	<b>6</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>4</b>	<b>2</b>	<b>0</b>	<b>17</b>
<b>Grand Total</b>	<b>11</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>8</b>	<b>0</b>	<b>5</b>	<b>6</b>	<b>0</b>	<b>32</b>
Apprch %	91.7	8.3	0	11.1	88.9	0	45.5	54.5	0	
Total %	34.4	3.1	0	3.1	25	0	15.6	18.8	0	

Start Time	Mooresfield Road (Route 138) From East				Kingstown Road (Route 108) From South				Kingstown Road (Route 138) From West				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 04:45 PM													
04:45 PM	1	0	0	1	0	3	0	3	0	3	0	3	7
05:00 PM	3	1	0	4	1	0	0	1	0	1	0	1	6
05:15 PM	0	0	0	0	0	1	0	1	3	0	0	3	4
05:30 PM	1	0	0	1	0	0	0	0	0	1	0	1	2
<b>Total Volume</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>6</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>5</b>	<b>3</b>	<b>5</b>	<b>0</b>	<b>8</b>	<b>19</b>
<b>% App. Total</b>	<b>83.3</b>	<b>16.7</b>	<b>0</b>		<b>20</b>	<b>80</b>	<b>0</b>		<b>37.5</b>	<b>62.5</b>	<b>0</b>		
PHF	.417	.250	.000	.375	.250	.333	.000	.417	.250	.417	.000	.667	.679

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S: Kingstown Road (Route 108)  
 E/W: Mooresfield/Kingstown (Route 138)  
 City, State: Kingston, RI  
 Client: Pare/J. Shevlin

File Name : 05767DD  
 Site Code : 18145.00  
 Start Date : 10/5/2023  
 Page No : 1

Groups Printed- Bikes by Direction

Start Time	Mooresfield Road (Route 138) From East			Kingstown Road (Route 108) From South			Kingstown Road (Route 138) From West			Int. Total
	Thru	Left	Peds	Right	Left	Peds	Right	Thru	Peds	
04:00 PM	0	0	0	0	0	0	1	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	1	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	2	0	0	2
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	1	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	0	0	0	0	0	1
Grand Total	1	0	0	0	0	0	2	0	0	3
Apprch %	100	0	0	0	0	0	100	0	0	
Total %	33.3	0	0	0	0	0	66.7	0	0	

Start Time	Mooresfield Road (Route 138) From East				Kingstown Road (Route 108) From South				Kingstown Road (Route 138) From West				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	0	0	0	0	0	0	0	0	1	0	0	1	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	1	0	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	2	0	0	2	2
% App. Total	0	0	0	0	0	0	0	0	100	0	0	50	50
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000	.000	.500	.500

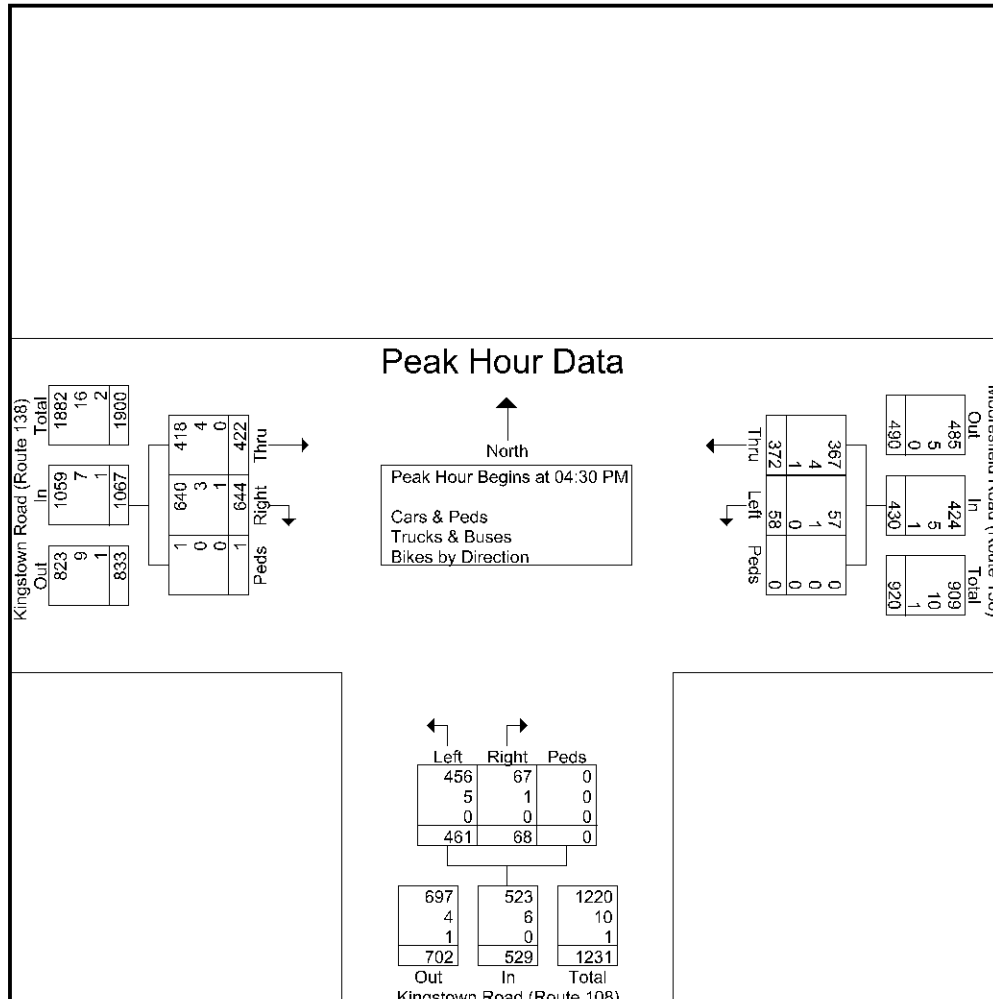
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S: Kingstown Road (Route 108)  
E/W: Mooresfield/Kingstown (Route 138)  
City, State: Kingston, RI  
Client: Pare/J. Shevlin

File Name : 05767DD  
Site Code : 18145.00  
Start Date : 10/5/2023  
Page No : 1

Start Time	Mooresfield Road (Route 138) From East				Kingstown Road (Route 108) From South				Kingstown Road (Route 138) From West				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 04:30 PM													
04:30 PM	106	13	0	119	21	127	0	148	151	94	0	245	512
04:45 PM	97	13	0	110	13	126	0	139	153	125	1	279	528
05:00 PM	88	19	0	107	17	88	0	105	170	99	0	269	481
05:15 PM	81	13	0	94	17	120	0	137	170	104	0	274	505
Total Volume	372	58	0	430	68	461	0	529	644	422	1	1067	2026
% App. Total	86.5	13.5	0		12.9	87.1	0		60.4	39.6	0.1		
PIIF	.877	.763	.000	.903	.810	.907	.000	.894	.947	.844	.250	.956	.959
Cars & Peds	367	57	0	424	67	456	0	523	640	418	1	1059	2006
% Cars & Peds	98.7	98.3	0	98.6	98.5	98.9	0	98.9	99.4	99.1	100	99.3	99.0
Trucks & Buses	4	1	0	5	1	5	0	6	3	4	0	7	18
% Trucks & Buses	1.1	1.7	0	1.2	1.5	1.1	0	1.1	0.5	0.9	0	0.7	0.9
Bikes by Direction	1	0	0	1	0	0	0	0	1	0	0	1	2
% Bikes by Direction	0.3	0	0	0.2	0	0	0	0	0.2	0	0	0.1	0.1



**Transportation Data Corporation**  
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N: Upper College Road  
 E/W: Kingstown Road (Route 138)  
 City, State: Kingston, RI  
 Client: Pare/J. Shevlin

File Name : 05767E  
 Site Code : 18145.00  
 Start Date : 10/5/2023  
 Page No : 1

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

Start Time	Upper College Road From North			Kingstown Road (Route 138) From East			Kingstown Road (Route 138) From West			Int. Total
	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	
07:00 AM	1	22	0	23	69	0	108	5	0	228
07:15 AM	2	29	1	40	80	1	145	5	2	305
07:30 AM	4	24	2	55	76	0	89	11	4	265
07:45 AM	3	26	2	46	92	0	128	9	1	307
Total	10	101	5	164	317	1	470	30	7	1105
08:00 AM	7	19	0	43	94	0	94	10	0	267
08:15 AM	6	22	0	39	109	0	104	16	3	299
08:30 AM	15	40	0	40	114	0	102	9	2	322
08:45 AM	10	26	0	55	164	0	103	14	1	373
Total	38	107	0	177	481	0	403	49	6	1261
Grand Total	48	208	5	341	798	1	873	79	13	2366
Apprch %	18.4	79.7	1.9	29.9	70	0.1	90.5	8.2	1.3	
Total %	2	8.8	0.2	14.4	33.7	0	36.9	3.3	0.5	
Cars & Peds	47	203	5	330	759	1	824	76	13	2258
% Cars & Peds	97.9	97.6	100	96.8	95.1	100	94.4	96.2	100	95.4
Trucks & Buses	1	5	0	6	39	0	49	2	0	102
% Trucks & Buses	2.1	2.4	0	1.8	4.9	0	5.6	2.5	0	4.3
Bikes by Direction	0	0	0	5	0	0	0	1	0	6
% Bikes by Direction	0	0	0	1.5	0	0	0	1.3	0	0.3

Start Time	Upper College Road From North				Kingstown Road (Route 138) From East				Kingstown Road (Route 138) From West				Int. Total
	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	
08:00 AM	7	19	0	26	43	94	0	137	94	10	0	104	267
08:15 AM	6	22	0	28	39	109	0	148	<b>104</b>	<b>16</b>	<b>3</b>	<b>123</b>	299
08:30 AM	<b>15</b>	<b>40</b>	0	<b>55</b>	40	114	0	154	102	9	2	113	322
08:45 AM	10	26	0	36	<b>55</b>	<b>164</b>	0	<b>219</b>	103	14	1	118	<b>373</b>
Total Volume	38	107	0	145	177	481	0	658	403	49	6	458	1261
% App. Total	26.2	73.8	0		26.9	73.1	0		88	10.7	1.3		
PHF	.633	.669	.000	.659	.805	.733	.000	.751	.969	.766	.500	.931	.845
Cars & Peds	37	105	0	142	172	462	0	634	386	46	6	438	1214
% Cars & Peds	97.4	98.1	0	97.9	97.2	96.0	0	96.4	95.8	93.9	100	95.6	96.3
Trucks & Buses	1	2	0	3	2	19	0	21	17	2	0	19	43
% Trucks & Buses	2.6	1.9	0	2.1	1.1	4.0	0	3.2	4.2	4.1	0	4.1	3.4
Bikes by Direction	0	0	0	0	3	0	0	3	0	1	0	1	4
% Bikes by Direction	0	0	0	0	1.7	0	0	0.5	0	2.0	0	0.2	0.3

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

# Transportation Data Corporation

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N: Upper College Road  
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 City, State: Kingston, RI  
 Client: Pare/J. Shevlin

File Name : 05767E  
 Site Code : 18145.00  
 Start Date : 10/5/2023  
 Page No : 1

### Groups Printed- Cars & Peds

Start Time	Upper College Road From North			Kingstown Road (Route 138) From East			Kingstown Road (Route 138) From West			Int. Total
	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	
07:00 AM	1	21	0	22	65	0	97	5	0	211
07:15 AM	2	27	1	40	73	1	133	5	2	284
07:30 AM	4	24	2	54	70	0	85	11	4	254
07:45 AM	3	26	2	42	89	0	123	9	1	295
<b>Total</b>	<b>10</b>	<b>98</b>	<b>5</b>	<b>158</b>	<b>297</b>	<b>1</b>	<b>438</b>	<b>30</b>	<b>7</b>	<b>1044</b>
08:00 AM	7	19	0	41	91	0	88	10	0	256
08:15 AM	6	21	0	38	103	0	101	16	3	288
08:30 AM	15	39	0	40	109	0	98	6	2	309
08:45 AM	9	26	0	53	159	0	99	14	1	361
<b>Total</b>	<b>37</b>	<b>105</b>	<b>0</b>	<b>172</b>	<b>462</b>	<b>0</b>	<b>386</b>	<b>46</b>	<b>6</b>	<b>1214</b>
<b>Grand Total</b>	<b>47</b>	<b>203</b>	<b>5</b>	<b>330</b>	<b>759</b>	<b>1</b>	<b>824</b>	<b>76</b>	<b>13</b>	<b>2258</b>
Apprch %	18.4	79.6	2	30.3	69.6	0.1	90.3	8.3	1.4	
Total %	2.1	9	0.2	14.6	33.6	0	36.5	3.4	0.6	

Start Time	Upper College Road From North				Kingstown Road (Route 138) From East				Kingstown Road (Route 138) From West				Int. Total
	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	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	19	0	26	41	91	0	132	88	10	0	98	256
08:15 AM	6	21	0	27	38	103	0	141	<b>101</b>	<b>16</b>	<b>3</b>	<b>120</b>	288
08:30 AM	<b>15</b>	<b>39</b>	0	<b>54</b>	40	109	0	149	98	6	2	106	309
08:45 AM	9	26	0	35	<b>53</b>	<b>159</b>	0	<b>212</b>	99	14	1	114	<b>361</b>
<b>Total Volume</b>	<b>37</b>	<b>105</b>	<b>0</b>	<b>142</b>	<b>172</b>	<b>462</b>	<b>0</b>	<b>634</b>	<b>386</b>	<b>46</b>	<b>6</b>	<b>438</b>	<b>1214</b>
<b>% App. Total</b>	<b>26.1</b>	<b>73.9</b>	<b>0</b>	<b>0.657</b>	<b>27.1</b>	<b>72.9</b>	<b>0</b>	<b>0.748</b>	<b>88.1</b>	<b>10.5</b>	<b>1.4</b>	<b>0.913</b>	<b>0.841</b>
PHF	.617	.673	.000	.657	.811	.726	.000	.748	.955	.719	.500	.913	.841

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

N: Upper College Road  
 E/W: Kingstown Road (Route 138)  
 City, State: Kingston, RI  
 Client: Pare/J. Shevlin

File Name : 05767E  
 Site Code : 18145.00  
 Start Date : 10/5/2023  
 Page No : 1

Groups Printed- Trucks & Buses

Start Time	Upper College Road From North			Kingstown Road (Route 138) From East			Kingstown Road (Route 138) From West			Int. Total
	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	
07:00 AM	0	1	0	1	4	0	11	0	0	17
07:15 AM	0	2	0	0	7	0	12	0	0	21
07:30 AM	0	0	0	1	6	0	4	0	0	11
07:45 AM	0	0	0	2	3	0	5	0	0	10
<b>Total</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>4</b>	<b>20</b>	<b>0</b>	<b>32</b>	<b>0</b>	<b>0</b>	<b>59</b>
08:00 AM	0	0	0	0	3	0	6	0	0	9
08:15 AM	0	1	0	0	6	0	3	0	0	10
08:30 AM	0	1	0	0	5	0	4	2	0	12
08:45 AM	1	0	0	2	5	0	4	0	0	12
<b>Total</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>19</b>	<b>0</b>	<b>17</b>	<b>2</b>	<b>0</b>	<b>43</b>
<b>Grand Total</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>6</b>	<b>39</b>	<b>0</b>	<b>49</b>	<b>2</b>	<b>0</b>	<b>102</b>
Apprch %	16.7	83.3	0	13.3	86.7	0	96.1	3.9	0	
Total %	1	4.9	0	5.9	38.2	0	48	2	0	

Start Time	Upper College Road From North				Kingstown Road (Route 138) From East				Kingstown Road (Route 138) From West				Int. Total
	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	
07:00 AM	0	1	0	1	1	4	0	5	11	0	0	11	17
07:15 AM	0	2	0	2	0	7	0	7	12	0	0	12	21
07:30 AM	0	0	0	0	1	6	0	7	4	0	0	4	11
07:45 AM	0	0	0	0	2	3	0	5	5	0	0	5	10
<b>Total Volume</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>4</b>	<b>20</b>	<b>0</b>	<b>24</b>	<b>32</b>	<b>0</b>	<b>0</b>	<b>32</b>	<b>59</b>
<b>% App. Total</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>16.7</b>	<b>83.3</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
PHF	.000	.375	.000	.375	.500	.714	.000	.857	.667	.000	.000	.667	.702

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

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N: Upper College Road  
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 City, State: Kingston, RI  
 Client: Pare/J. Shevlin

File Name : 05767E  
 Site Code : 18145.00  
 Start Date : 10/5/2023  
 Page No : 1

Groups Printed- Bikes by Direction

Start Time	Upper College Road From North			Kingstown Road (Route 138) From East			Kingstown Road (Route 138) From West			Int. Total
	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	2	0	0	0	0	0	2
Total	0	0	0	2	0	0	0	0	0	2
08:00 AM	0	0	0	2	0	0	0	0	0	2
08:15 AM	0	0	0	1	0	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	1	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	3	0	0	0	1	0	4
Grand Total	0	0	0	5	0	0	0	1	0	6
Apprch %	0	0	0	100	0	0	0	100	0	
Total %	0	0	0	83.3	0	0	0	16.7	0	

Start Time	Upper College Road From North				Kingstown Road (Route 138) From East				Kingstown Road (Route 138) From West				Int. Total
	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	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	0	0	0	2	0	0	2	0	0	0	0	2
08:00 AM	0	0	0	0	2	0	0	2	0	0	0	0	2
08:15 AM	0	0	0	0	1	0	0	1	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	5	0	0	5	0	1	0	1	6
% App. Total	0	0	0	0	100	0	0		0	100	0		
PHF	.000	.000	.000	.000	.625	.000	.000	.625	.000	.250	.000	.250	.750

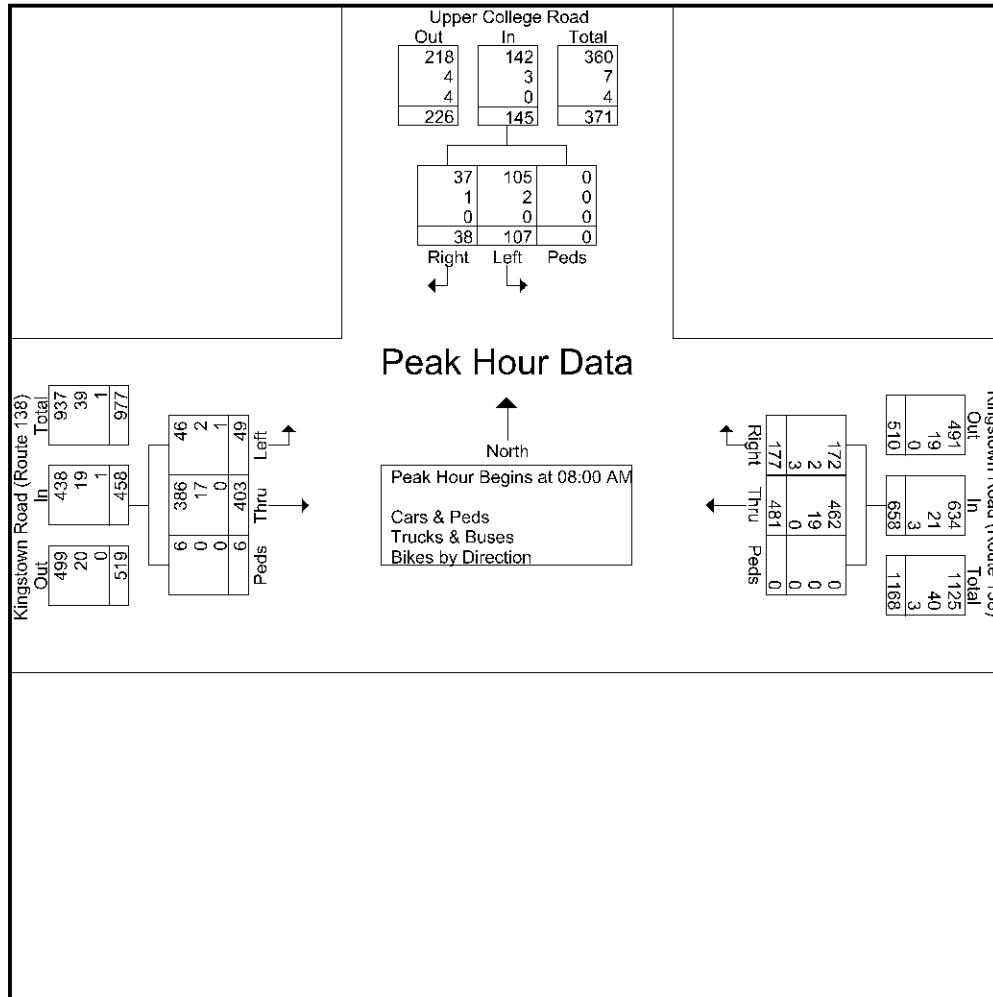
# Transportation Data Corporation

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N: Upper College Road  
E/W: Kingstown Road (Route 138)  
City, State: Kingston, RI  
Client: Pare/J. Shevlin

File Name : 05767E  
Site Code : 18145.00  
Start Date : 10/5/2023  
Page No : 1

Start Time	Upper College Road From North				Kingstown Road (Route 138) From East				Kingstown Road (Route 138) From West				Int. Total
	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	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	19	0	26	43	94	0	137	94	10	0	104	267
08:15 AM	6	22	0	28	39	109	0	148	<b>104</b>	<b>16</b>	<b>3</b>	<b>123</b>	299
08:30 AM	<b>15</b>	<b>40</b>	0	<b>55</b>	<b>40</b>	<b>114</b>	0	<b>154</b>	102	9	2	113	322
08:45 AM	10	26	0	36	<b>55</b>	<b>164</b>	0	<b>219</b>	103	14	1	118	<b>373</b>
Total Volume	38	107	0	145	177	481	0	658	403	49	6	458	1261
% App. Total	26.2	73.8	0		26.9	73.1	0		88	10.7	1.3		
PIIF	.633	.669	.000	.659	.805	.733	.000	.751	.969	.766	.500	.931	.845
Cars & Peds	37	105	0	142	172	462	0	634	386	46	6	438	1214
% Cars & Peds	97.4	98.1	0	97.9	97.2	96.0	0	96.4	95.8	93.9	100	95.6	96.3
Trucks & Buses	1	2	0	3	2	19	0	21	17	2	0	19	43
% Trucks & Buses	2.6	1.9	0	2.1	1.1	4.0	0	3.2	4.2	4.1	0	4.1	3.4
Bikes by Direction	0	0	0	0	3	0	0	3	0	1	0	1	4
% Bikes by Direction	0	0	0	0	1.7	0	0	0.5	0	2.0	0	0.2	0.3



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 City, State: Kingston, RI  
 Client: Pare/J. Shevlin

File Name : 05767EE  
 Site Code : 18145.00  
 Start Date : 10/5/2023  
 Page No : 1

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

Start Time	Upper College Road From North			Kingstown Road (Route 138) From East			Kingstown Road (Route 138) From West			Int. Total
	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	
04:00 PM	11	127	0	20	133	0	150	3	2	446
04:15 PM	10	121	1	23	128	0	164	4	8	459
04:30 PM	13	113	1	31	127	0	160	10	4	459
04:45 PM	6	125	1	30	118	0	145	5	5	435
<b>Total</b>	<b>40</b>	<b>486</b>	<b>3</b>	<b>104</b>	<b>506</b>	<b>0</b>	<b>619</b>	<b>22</b>	<b>19</b>	<b>1799</b>
05:00 PM	14	129	1	17	101	0	135	6	3	406
05:15 PM	10	131	1	21	123	0	151	5	4	446
05:30 PM	15	88	1	23	122	0	155	8	0	412
05:45 PM	13	93	0	30	116	0	117	16	1	386
<b>Total</b>	<b>52</b>	<b>441</b>	<b>3</b>	<b>91</b>	<b>462</b>	<b>0</b>	<b>558</b>	<b>35</b>	<b>8</b>	<b>1650</b>
<b>Grand Total</b>	<b>92</b>	<b>927</b>	<b>6</b>	<b>195</b>	<b>968</b>	<b>0</b>	<b>1177</b>	<b>57</b>	<b>27</b>	<b>3449</b>
Apprch %	9	90.4	0.6	16.8	83.2	0	93.3	4.5	2.1	
Total %	2.7	26.9	0.2	5.7	28.1	0	34.1	1.7	0.8	
Cars & Peds	92	919	6	192	953	0	1170	57	27	3416
% Cars & Peds	100	99.1	100	98.5	98.5	0	99.4	100	100	99
Trucks & Buses	0	4	0	3	15	0	7	0	0	29
% Trucks & Buses	0	0.4	0	1.5	1.5	0	0.6	0	0	0.8
Bikes by Direction	0	4	0	0	0	0	0	0	0	4
% Bikes by Direction	0	0.4	0	0	0	0	0	0	0	0.1

Start Time	Upper College Road From North				Kingstown Road (Route 138) From East				Kingstown Road (Route 138) From West				Int. Total
	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	
04:00 PM	11	127	0	138	20	133	0	153	150	3	2	155	446
04:15 PM	10	121	1	132	23	128	0	151	164	4	8	176	459
04:30 PM	13	113	1	127	31	127	0	158	160	10	4	174	459
04:45 PM	6	125	1	132	30	118	0	148	145	5	5	155	435
<b>Total Volume</b>	<b>40</b>	<b>486</b>	<b>3</b>	<b>529</b>	<b>104</b>	<b>506</b>	<b>0</b>	<b>610</b>	<b>619</b>	<b>22</b>	<b>19</b>	<b>660</b>	<b>1799</b>
% App. Total	7.6	91.9	0.6		17	83	0		93.8	3.3	2.9		
PHF	.769	.957	.750	.958	.839	.951	.000	.965	.944	.550	.594	.938	.980
Cars & Peds	40	481	3	524	103	498	0	601	616	22	19	657	1782
% Cars & Peds	100	99.0	100	99.1	99.0	98.4	0	98.5	99.5	100	100	99.5	99.1
Trucks & Buses	0	2	0	2	1	8	0	9	3	0	0	3	14
% Trucks & Buses	0	0.4	0	0.4	1.0	1.6	0	1.5	0.5	0	0	0.5	0.8
Bikes by Direction	0	3	0	3	0	0	0	0	0	0	0	0	3
% Bikes by Direction	0	0.6	0	0.6	0	0	0	0	0	0	0	0	0.2

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**  
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N: Upper College Road  
 E/W: Kingstown Road (Route 138)  
 City, State: Kingston, RI  
 Client: Pare/J. Shevlin

File Name : 05767EE  
 Site Code : 18145.00  
 Start Date : 10/5/2023  
 Page No : 1

Groups Printed- Cars & Peds

Start Time	Upper College Road From North			Kingstown Road (Route 138) From East			Kingstown Road (Route 138) From West			Int. Total
	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	
04:00 PM	11	127	0	20	131	0	150	3	2	444
04:15 PM	10	118	1	23	126	0	164	4	8	454
04:30 PM	13	113	1	31	125	0	160	10	4	457
04:45 PM	6	123	1	29	116	0	142	5	5	427
<b>Total</b>	<b>40</b>	<b>481</b>	<b>3</b>	<b>103</b>	<b>498</b>	<b>0</b>	<b>616</b>	<b>22</b>	<b>19</b>	<b>1782</b>
05:00 PM	14	129	1	16	99	0	133	6	3	401
05:15 PM	10	129	1	21	121	0	150	5	4	441
05:30 PM	15	87	1	23	121	0	155	8	0	410
05:45 PM	13	93	0	29	114	0	116	16	1	382
<b>Total</b>	<b>52</b>	<b>438</b>	<b>3</b>	<b>89</b>	<b>455</b>	<b>0</b>	<b>554</b>	<b>35</b>	<b>8</b>	<b>1634</b>
<b>Grand Total</b>	<b>92</b>	<b>919</b>	<b>6</b>	<b>192</b>	<b>953</b>	<b>0</b>	<b>1170</b>	<b>57</b>	<b>27</b>	<b>3416</b>
Apprch %	9	90.4	0.6	16.8	83.2	0	93.3	4.5	2.2	
Total %	2.7	26.9	0.2	5.6	27.9	0	34.3	1.7	0.8	

Start Time	Upper College Road From North				Kingstown Road (Route 138) From East				Kingstown Road (Route 138) From West				Int. Total
	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	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	11	127	0	<b>138</b>	20	<b>131</b>	0	151	150	3	2	155	444
04:15 PM	10	118	1	129	23	126	0	149	<b>164</b>	4	<b>8</b>	<b>176</b>	454
04:30 PM	<b>13</b>	113	1	127	<b>31</b>	125	0	<b>156</b>	160	<b>10</b>	4	174	<b>457</b>
04:45 PM	6	123	1	130	29	116	0	145	142	5	5	152	427
<b>Total Volume</b>	<b>40</b>	<b>481</b>	<b>3</b>	<b>524</b>	<b>103</b>	<b>498</b>	<b>0</b>	<b>601</b>	<b>616</b>	<b>22</b>	<b>19</b>	<b>657</b>	<b>1782</b>
<b>% App. Total</b>	<b>7.6</b>	<b>91.8</b>	<b>0.6</b>		<b>17.1</b>	<b>82.9</b>	<b>0</b>		<b>93.8</b>	<b>3.3</b>	<b>2.9</b>		
PHF	.769	.947	.750	.949	.831	.950	.000	.963	.939	.550	.594	.933	.975

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File Name : 05767EE  
 Site Code : 18145.00  
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 Page No : 1

Groups Printed- Trucks & Buses

Start Time	Upper College Road From North			Kingstown Road (Route 138) From East			Kingstown Road (Route 138) From West			Int. Total
	Right	Left	Peds	Right	Thru	Peds	Thru	Left	Peds	
04:00 PM	0	0	0	0	2	0	0	0	0	2
04:15 PM	0	2	0	0	2	0	0	0	0	4
04:30 PM	0	0	0	0	2	0	0	0	0	2
04:45 PM	0	0	0	1	2	0	3	0	0	6
Total	0	2	0	1	8	0	3	0	0	14
05:00 PM	0	0	0	1	2	0	2	0	0	5
05:15 PM	0	1	0	0	2	0	1	0	0	4
05:30 PM	0	1	0	0	1	0	0	0	0	2
05:45 PM	0	0	0	1	2	0	1	0	0	4
Total	0	2	0	2	7	0	4	0	0	15
Grand Total	0	4	0	3	15	0	7	0	0	29
Apprch %	0	100	0	16.7	83.3	0	100	0	0	
Total %	0	13.8	0	10.3	51.7	0	24.1	0	0	

Start Time	Upper College Road From North				Kingstown Road (Route 138) From East				Kingstown Road (Route 138) From West				Int. Total
	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	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 04:15 PM													
04:15 PM	0	2	0	2	0	2	0	2	0	0	0	0	4
04:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	2
04:45 PM	0	0	0	0	1	2	0	3	3	0	0	3	6
05:00 PM	0	0	0	0	1	2	0	3	2	0	0	2	5
Total Volume	0	2	0	2	2	8	0	10	5	0	0	5	17
% App. Total	0	100	0		20	80	0		100	0	0		
PHF	.000	.250	.000	.250	.500	1.00	.000	.833	.417	.000	.000	.417	.708



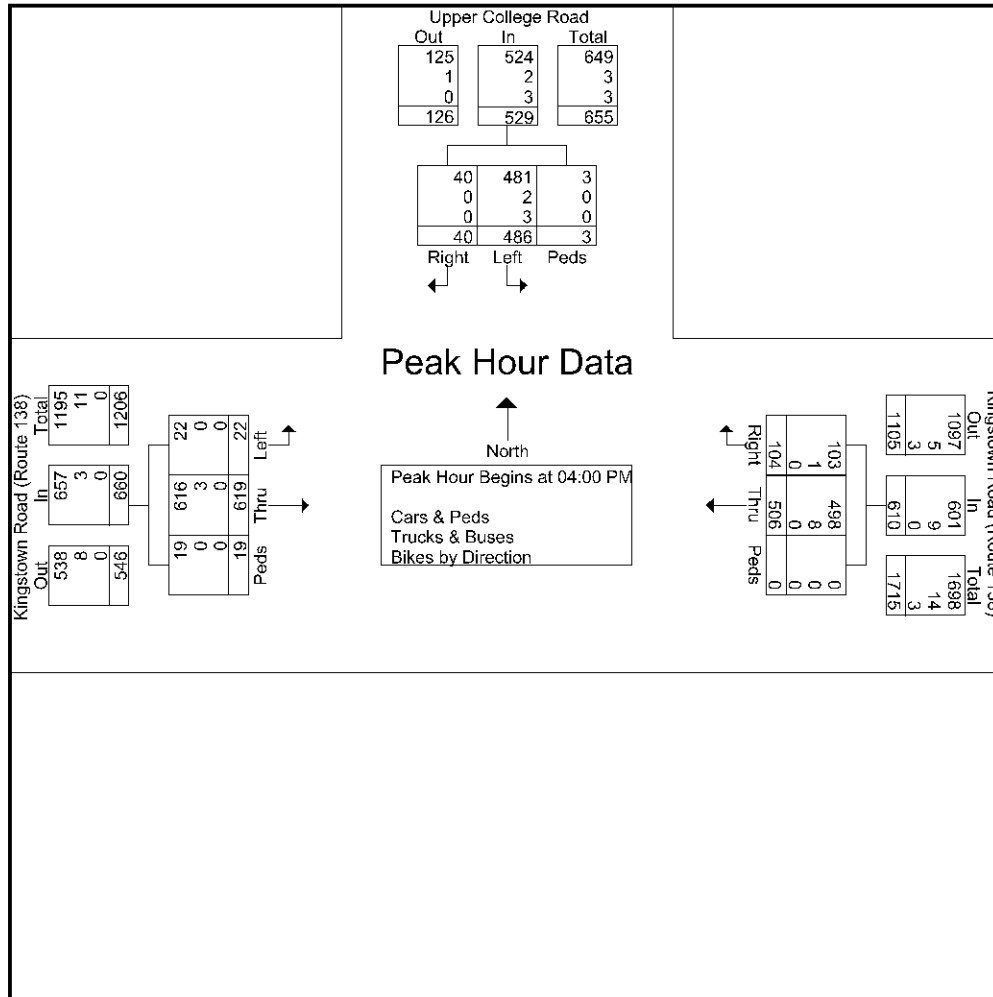
# Transportation Data Corporation

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Start Time	Upper College Road From North				Kingstown Road (Route 138) From East				Kingstown Road (Route 138) From West				Int. Total
	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	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	11	127	0	138	20	133	0	153	150	3	2	155	446
04:15 PM	10	121	1	132	23	128	0	151	164	4	8	176	459
04:30 PM	13	113	1	127	31	127	0	158	160	10	4	174	459
04:45 PM	6	125	1	132	30	118	0	148	145	5	5	155	435
Total Volume	40	486	3	529	104	506	0	610	619	22	19	660	1799
% App. Total	7.6	91.9	0.6		17	83	0		93.8	3.3	2.9		
PIIF	.769	.957	.750	.958	.839	.951	.000	.965	.944	.550	.594	.938	.980
Cars & Peds	40	481	3	524	103	498	0	601	616	22	19	657	1782
% Cars & Peds	100	99.0	100	99.1	99.0	98.4	0	98.5	99.5	100	100	99.5	99.1
Trucks & Buses	0	2	0	2	1	8	0	9	3	0	0	3	14
% Trucks & Buses	0	0.4	0	0.4	1.0	1.6	0	1.5	0.5	0	0	0.5	0.8
Bikes by Direction	0	3	0	3	0	0	0	0	0	0	0	0	3
% Bikes by Direction	0	0.6	0	0.6	0	0	0	0	0	0	0	0	0.2





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N/S: Old North Road  
 E/W: Bean Farm Drive/Flagg Road  
 City, State: Kingston, RI  
 Client: Pare/J. Shevlin

File Name : 05767F  
 Site Code : 18145.00  
 Start Date : 10/5/2023  
 Page No : 1

Groups Printed- Cars & Peds

Start Time	Old North Road From North				Bean Farm Drive From East				Old North Road From South				Flagg Road From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
07:00 AM	26	9	0	0	0	0	0	0	0	1	28	0	0	0	1	0	65
07:15 AM	48	16	0	0	0	0	0	0	0	10	72	0	0	0	0	0	146
07:30 AM	80	21	0	0	2	0	0	0	0	11	117	0	1	0	1	0	233
07:45 AM	102	32	0	0	0	1	1	0	0	15	69	1	0	0	5	0	226
Total	256	78	0	0	2	1	1	0	0	37	286	1	1	0	7	0	670
08:00 AM	59	25	1	1	1	0	0	0	1	19	50	0	2	0	4	0	163
08:15 AM	74	59	0	0	2	0	0	0	0	19	77	2	2	0	4	0	239
08:30 AM	95	58	0	0	2	0	1	0	0	21	82	0	1	0	5	0	265
08:45 AM	64	50	0	0	1	0	0	0	2	9	91	0	3	0	2	0	222
Total	292	192	1	1	6	0	1	0	3	68	300	2	8	0	15	0	889
Grand Total	548	270	1	1	8	1	2	0	3	105	586	3	9	0	22	0	1559
Apprch %	66.8	32.9	0.1	0.1	72.7	9.1	18.2	0	0.4	15.1	84.1	0.4	29	0	71	0	
Total %	35.2	17.3	0.1	0.1	0.5	0.1	0.1	0	0.2	6.7	37.6	0.2	0.6	0	1.4	0	

Start Time	Old North Road From North					Bean Farm Drive From East					Old North Road From South					Flagg 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	
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	102	32	0	0	134	0	1	1	0	2	0	15	69	1	85	0	0	5	0	5	226
08:00 AM	59	25	1	1	86	1	0	0	0	1	1	19	50	0	70	2	0	4	0	6	163
08:15 AM	74	59	0	0	133	2	0	0	0	2	0	19	77	2	98	2	0	4	0	6	239
08:30 AM	95	58	0	0	153	2	0	1	0	3	0	21	82	0	103	1	0	5	0	6	265
Total Volume	330	174	1	1	506	5	1	2	0	8	1	74	278	3	356	5	0	18	0	23	893
% App. Total	65.2	34.4	0.2	0.2		62.5	12.5	25	0		0.3	20.8	78.1	0.8		21.7	0	78.3	0		
PHF	.809	.737	.250	.250	.827	.625	.250	.500	.000	.667	.250	.881	.848	.375	.864	.625	.000	.900	.000	.958	.842



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N/S: Old North Road  
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 City, State: Kingston, RI  
 Client: Pare/J. Shevlin

File Name : 05767F  
 Site Code : 18145.00  
 Start Date : 10/5/2023  
 Page No : 1

Groups Printed- Bikes by Direction

Start Time	Old North Road From North				Bean Farm Drive From East				Old North Road From South				Flagg Road 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	0	0	0	0
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	0	0	0	0
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	0	0	0	0
Apprch %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total %																	

Start Time	Old North Road From North					Bean Farm Drive From East					Old North Road From South					Flagg 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					
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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

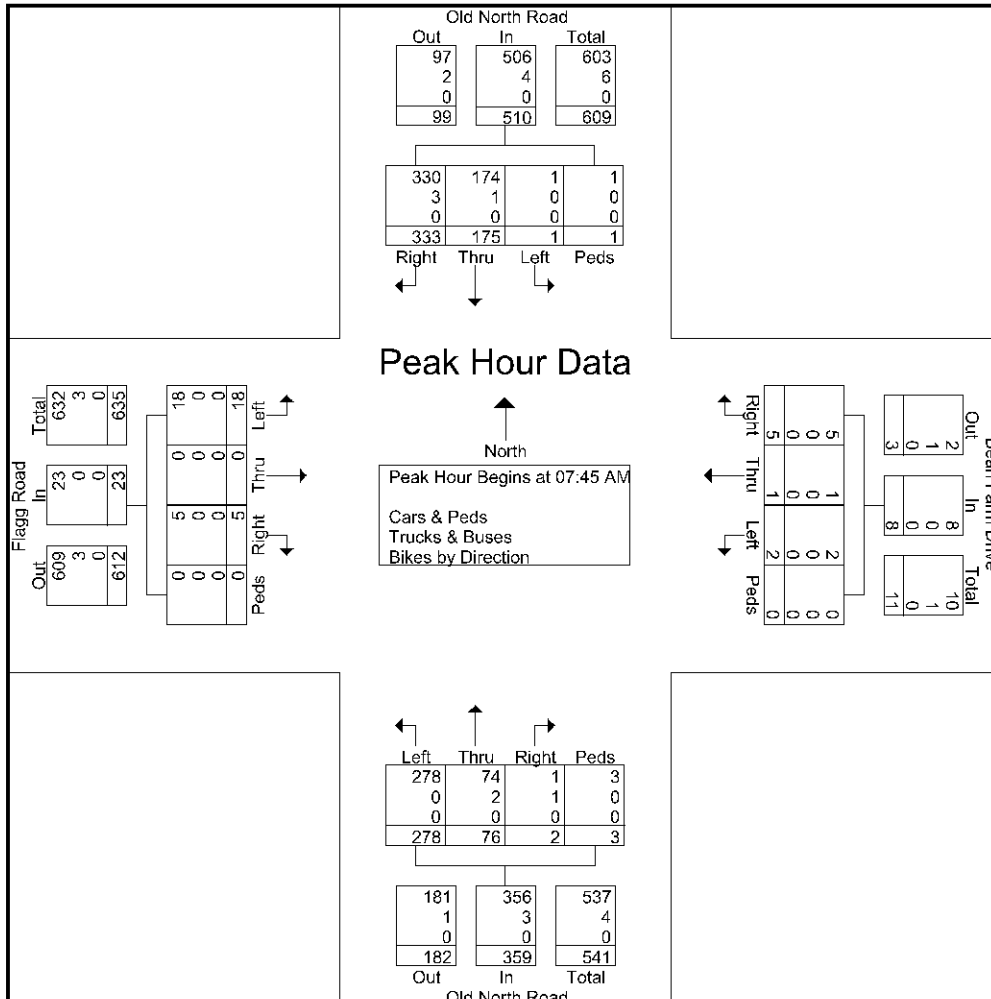
Peak Hour for Entire Intersection Begins at 07:00 AM

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N/S: Old North Road  
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 City, State: Kingston, RI  
 Client: Pare/J. Shevlin

File Name : 05767F  
 Site Code : 18145.00  
 Start Date : 10/5/2023  
 Page No : 1

Start Time	Old North Road From North					Bean Farm Drive From East					Old North Road From South					Flagg 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	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak 1 Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	102	32	0	0	134	0	1	1	0	2	0	15	69	1	85	0	0	5	0	5	226
08:00 AM	59	25	1	1	86	1	0	0	0	1	1	19	50	0	70	2	0	4	0	6	163
08:15 AM	74	60	0	0	134	2	0	0	0	2	1	20	77	2	100	2	0	4	0	6	242
08:30 AM	98	58	0	0	156	2	0	1	0	3	0	22	82	0	104	1	0	5	0	6	269
Total Volume	333	175	1	1	510	5	1	2	0	8	2	76	278	3	359	5	0	18	0	23	900
% App. Total	65.3	34.3	0.2	0.2		62.5	12.5	25	0		0.6	21.2	77.4	0.8		21.7	0	78.3	0		
PIIF	.816	.729	.250	.250	.817	.625	.250	.500	.000	.667	.500	.864	.848	.375	.863	.625	.000	.900	.000	.958	.836
Cars & Peds	330	174	1	1	506	5	1	2	0	8	1	74	278	3	356	5	0	18	0	23	893
% Cars & Peds	99.1	99.4	100	100	99.2	100	100	100	0	100	50.0	97.4	100	100	99.2	100	0	100	0	100	99.2
Trucks & Buses	3	1	0	0	4	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	7
% Trucks & Buses	0.9	0.6	0	0	0.8	0	0	0	0	0	50.0	2.6	0	0	0.8	0	0	0	0	0	0.8
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



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N/S: Old North Road  
 E/W: Bean Farm Drive/Flagg Road  
 City, State: Kingston, RI  
 Client: Pare/J. Shevlin

File Name : 05767FF  
 Site Code : 18145.00  
 Start Date : 10/5/2023  
 Page No : 1

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

Start Time	Old North Road From North				Bean Farm Drive From East				Old North Road From South				Flagg Road From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
04:00 PM	17	17	0	0	0	0	1	0	0	40	11	0	23	0	40	0	149
04:15 PM	25	21	1	0	0	0	0	0	0	27	16	0	20	0	53	0	163
04:30 PM	15	21	1	0	0	2	0	0	1	45	20	0	16	0	51	0	172
04:45 PM	21	16	0	0	0	0	2	0	0	59	12	0	40	0	79	0	229
Total	78	75	2	0	0	2	3	0	1	171	59	0	99	0	223	0	713
05:00 PM	17	13	0	0	0	0	1	0	1	41	12	0	22	0	52	0	159
05:15 PM	20	18	0	0	0	1	1	0	0	39	24	0	13	0	42	0	158
05:30 PM	16	16	0	0	0	0	0	0	3	21	22	0	6	0	28	0	112
05:45 PM	17	11	0	0	0	0	0	0	1	20	17	0	10	0	26	1	103
Total	70	58	0	0	0	1	2	0	5	121	75	0	51	0	148	1	532
Grand Total	148	133	2	0	0	3	5	0	6	292	134	0	150	0	371	1	1245
Apprch %	52.3	47	0.7	0	0	37.5	62.5	0	1.4	67.6	31	0	28.7	0	71.1	0.2	
Total %	11.9	10.7	0.2	0	0	0.2	0.4	0	0.5	23.5	10.8	0	12	0	29.8	0.1	
Cars & Peds	146	132	2	0	0	3	5	0	6	289	134	0	150	0	371	1	1239
% Cars & Peds	98.6	99.2	100	0	0	100	100	0	100	99	100	0	100	0	100	100	99.5
Trucks & Buses	1	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	4
% Trucks & Buses	0.7	0.8	0	0	0	0	0	0	0	0.7	0	0	0	0	0	0	0.3
Bikes by Direction	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
% Bikes by Direction	0.7	0	0	0	0	0	0	0	0	0.3	0	0	0	0	0	0	0.2

Start Time	Old North Road From North					Bean Farm Drive From East					Old North Road From South					Flagg 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	
04:15 PM	25	21	1	0	47	0	0	0	0	0	0	27	16	0	43	20	0	53	0	73	163
04:30 PM	15	21	1	0	37	0	2	0	0	2	1	45	20	0	66	16	0	51	0	67	172
04:45 PM	21	16	0	0	37	0	0	2	0	2	0	59	12	0	71	40	0	79	0	119	229
05:00 PM	17	13	0	0	30	0	0	1	0	1	1	41	12	0	54	22	0	52	0	74	159
Total Volume	78	71	2	0	151	0	2	3	0	5	2	172	60	0	234	98	0	235	0	333	723
% App. Total	51.7	47	1.3	0		0	40	60	0		0.9	73.5	25.6	0		29.4	0	70.6	0		
PHF	.780	.845	.500	.000	.803	.000	.250	.375	.000	.625	.500	.729	.750	.000	.824	.613	.000	.744	.000	.700	.789
Cars & Peds	76	70	2	0	148	0	2	3	0	5	2	171	60	0	233	98	0	235	0	333	719
% Cars & Peds	97.4	98.6	100	0	98.0	0	100	100	0	100	100	99.4	100	0	99.6	100	0	100	0	100	99.4
Trucks & Buses	1	1	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
% Trucks & Buses	1.3	1.4	0	0	1.3	0	0	0	0	0	0	0.6	0	0	0.4	0	0	0	0	0	0.4
Bikes by Direction	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Bikes by Direction	1.3	0	0	0	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1

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

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N/S: Old North Road  
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 City, State: Kingston, RI  
 Client: Pare/J. Shevlin

File Name : 05767FF  
 Site Code : 18145.00  
 Start Date : 10/5/2023  
 Page No : 1

Groups Printed- Cars & Peds

Start Time	Old North Road From North				Bean Farm Drive From East				Old North Road From South				Flagg Road From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
04:00 PM	17	17	0	0	0	0	1	0	0	40	11	0	23	0	40	0	149
04:15 PM	25	21	1	0	0	0	0	0	0	27	16	0	20	0	53	0	163
04:30 PM	14	20	1	0	0	2	0	0	1	45	20	0	16	0	51	0	170
04:45 PM	20	16	0	0	0	0	2	0	0	59	12	0	40	0	79	0	228
Total	76	74	2	0	0	2	3	0	1	171	59	0	99	0	223	0	710
05:00 PM	17	13	0	0	0	0	1	0	1	40	12	0	22	0	52	0	158
05:15 PM	20	18	0	0	0	1	1	0	0	39	24	0	13	0	42	0	158
05:30 PM	16	16	0	0	0	0	0	0	3	19	22	0	6	0	28	0	110
05:45 PM	17	11	0	0	0	0	0	0	1	20	17	0	10	0	26	1	103
Total	70	58	0	0	0	1	2	0	5	118	75	0	51	0	148	1	529
Grand Total	146	132	2	0	0	3	5	0	6	289	134	0	150	0	371	1	1239
Apprch %	52.1	47.1	0.7	0	0	37.5	62.5	0	1.4	67.4	31.2	0	28.7	0	71.1	0.2	
Total %	11.8	10.7	0.2	0	0	0.2	0.4	0	0.5	23.3	10.8	0	12.1	0	29.9	0.1	

Start Time	Old North Road From North					Bean Farm Drive From East					Old North Road From South					Flagg 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	
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	25	21	1	0	47	0	0	0	0	0	0	27	16	0	43	20	0	53	0	73	163
04:30 PM	14	20	1	0	35	0	2	0	0	2	1	45	20	0	66	16	0	51	0	67	170
04:45 PM	20	16	0	0	36	0	0	2	0	2	0	59	12	0	71	40	0	79	0	119	228
05:00 PM	17	13	0	0	30	0	0	1	0	1	1	40	12	0	53	22	0	52	0	74	158
Total Volume	76	70	2	0	148	0	2	3	0	5	2	171	60	0	233	98	0	235	0	333	719
% App. Total	51.4	47.3	1.4	0		0	40	60	0		0.9	73.4	25.8	0		29.4	0	70.6	0		
PHF	.760	.833	.500	.000	.787	.000	.250	.375	.000	.625	.500	.725	.750	.000	.820	.613	.000	.744	.000	.700	.788

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 Client: Pare/J. Shevlin

File Name : 05767FF  
 Site Code : 18145.00  
 Start Date : 10/5/2023  
 Page No : 1

Groups Printed- Trucks & Buses

Start Time	Old North Road From North				Bean Farm Drive From East				Old North Road From South				Flagg Road 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	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	1	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	0	2	0	0	0	0	0	0	2
Grand Total	1	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	4
Apprch %	50	50	0	0	0	0	0	0	0	100	0	0	0	0	0	0	
Total %	25	25	0	0	0	0	0	0	0	50	0	0	0	0	0	0	

Start Time	Old North Road From North					Bean Farm Drive From East					Old North Road From South					Flagg 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	
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	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
04:45 PM	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	1	0	0	1	0	0	0	0	0	1
Total Volume	1	1	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
% App. Total	50	50	0	0		0	0	0	0		0	100	0	0		0	0	0	0		
PHF	.250	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.250	.000	.000	.250	.000	.000	.000	.000	.000	.375

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N/S: Old North Road  
 E/W: Bean Farm Drive/Flagg Road  
 City, State: Kingston, RI  
 Client: Pare/J. Shevlin

File Name : 05767FF  
 Site Code : 18145.00  
 Start Date : 10/5/2023  
 Page No : 1

Groups Printed- Bikes by Direction

Start Time	Old North Road From North				Bean Farm Drive From East				Old North Road From South				Flagg Road 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	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Grand Total	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
Apprch %	100	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	
Total %	50	0	0	0	0	0	0	0	0	50	0	0	0	0	0	0	

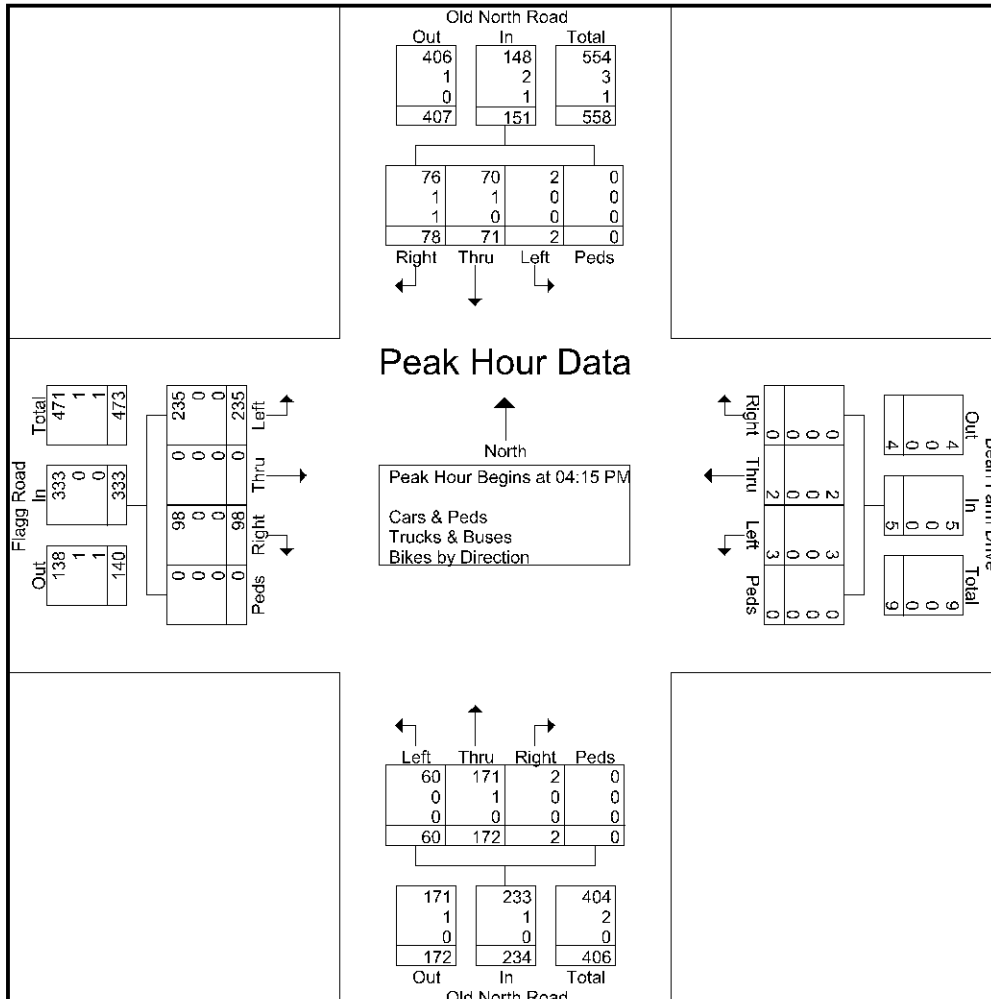
Start Time	Old North Road From North					Bean Farm Drive From East					Old North Road From South					Flagg Road From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Total Volume	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
% App. Total	100	0	0	0		0	0	0	0		0	100	0	0		0	0	0	0		
PHF	.250	.000	.000	.000	.250	.000	.000	.000	.000	.000	.000	.250	.000	.000	.250	.000	.000	.000	.000	.000	.500

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N/S: Old North Road  
 E/W: Bean Farm Drive/Flagg Road  
 City, State: Kingston, RI  
 Client: Pare/J. Shevlin

File Name : 05767FF  
 Site Code : 18145.00  
 Start Date : 10/5/2023  
 Page No : 1

Start Time	Old North Road From North					Bean Farm Drive From East					Old North Road From South					Flagg 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	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak 1 Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	25	21	1	0	47	0	0	0	0	0	0	27	16	0	43	20	0	53	0	73	163
04:30 PM	15	21	1	0	37	0	2	0	0	2	1	45	20	0	66	16	0	51	0	67	172
04:45 PM	21	16	0	0	37	0	0	2	0	2	0	59	12	0	71	40	0	79	0	119	229
05:00 PM	17	13	0	0	30	0	0	1	0	1	1	41	12	0	54	22	0	52	0	74	159
Total Volume	78	71	2	0	151	0	2	3	0	5	2	172	60	0	234	98	0	235	0	333	723
% App. Total	51.7	47	1.3	0		0	40	60	0		0.9	73.5	25.6	0		29.4	0	70.6	0		
PIIF	.780	.845	.500	.000	.803	.000	.250	.375	.000	.625	.500	.729	.750	.000	.824	.613	.000	.744	.000	.700	.789
Cars & Peds	76	70	2	0	148	0	2	3	0	5	2	171	60	0	233	98	0	235	0	333	719
% Cars & Peds	97.4	98.6	100	0	98.0	0	100	100	0	100	100	99.4	100	0	99.6	100	0	100	0	100	99.4
Trucks & Buses	1	1	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
% Trucks & Buses	1.3	1.4	0	0	1.3	0	0	0	0	0	0	0.6	0	0	0.4	0	0	0	0	0	0.4
Bikes by Direction	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Bikes by Direction	1.3	0	0	0	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1



**Transportation Data Corporation**  
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N/S: Old North Road  
 W: Bills Road  
 City, State: Kingston, RI  
 Client: Pare/J. Shevlin

File Name : 05767G  
 Site Code : 18145.00  
 Start Date : 10/5/2023  
 Page No : 1

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

Start Time	Old North Road From North			Old North Road From South			Bills Road From West			Int. Total
	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	
07:00 AM	3	7	0	30	0	0	0	0	0	40
07:15 AM	1	16	0	83	3	0	0	1	0	104
07:30 AM	3	19	0	129	6	0	0	1	0	158
07:45 AM	7	26	0	82	5	0	0	0	0	120
Total	14	68	0	324	14	0	0	2	0	422
08:00 AM	9	20	0	72	4	0	1	1	0	107
08:15 AM	9	53	0	97	3	0	0	0	0	162
08:30 AM	12	49	0	101	8	0	0	1	0	171
08:45 AM	13	40	0	98	9	0	0	3	0	163
Total	43	162	0	368	24	0	1	5	0	603
Grand Total	57	230	0	692	38	0	1	7	0	1025
Apprch %	19.9	80.1	0	94.8	5.2	0	12.5	87.5	0	
Total %	5.6	22.4	0	67.5	3.7	0	0.1	0.7	0	
Cars & Peds	56	228	0	686	37	0	1	7	0	1015
% Cars & Peds	98.2	99.1	0	99.1	97.4	0	100	100	0	99
Trucks & Buses	0	2	0	5	0	0	0	0	0	7
% Trucks & Buses	0	0.9	0	0.7	0	0	0	0	0	0.7
Bikes by Direction	1	0	0	1	1	0	0	0	0	3
% Bikes by Direction	1.8	0	0	0.1	2.6	0	0	0	0	0.3

Start Time	Old North Road From North				Old North Road From South				Bills Road From West				Int. Total
	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	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	9	20	0	29	72	4	0	76	1	1	0	2	107
08:15 AM	9	53	0	62	97	3	0	100	0	0	0	0	162
08:30 AM	12	49	0	61	101	8	0	109	0	1	0	1	171
08:45 AM	13	40	0	53	98	9	0	107	0	3	0	3	163
Total Volume	43	162	0	205	368	24	0	392	1	5	0	6	603
% App. Total	21	79	0		93.9	6.1	0		16.7	83.3	0		
PHF	.827	.764	.000	.827	.911	.667	.000	.899	.250	.417	.000	.500	.882
Cars & Peds	42	161	0	203	365	23	0	388	1	5	0	6	597
% Cars & Peds	97.7	99.4	0	99.0	99.2	95.8	0	99.0	100	100	0	100	99.0
Trucks & Buses	0	1	0	1	3	0	0	3	0	0	0	0	4
% Trucks & Buses	0	0.6	0	0.5	0.8	0	0	0.8	0	0	0	0	0.7
Bikes by Direction	1	0	0	1	0	1	0	1	0	0	0	0	2
% Bikes by Direction	2.3	0	0	0.5	0	4.2	0	0.3	0	0	0	0	0.3

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N/S: Old North Road  
 W: Bills Road  
 City, State: Kingston, RI  
 Client: Pare/J. Shevlin

File Name : 05767G  
 Site Code : 18145.00  
 Start Date : 10/5/2023  
 Page No : 1

Groups Printed- Cars & Peds

Start Time	Old North Road From North			Old North Road From South			Bills Road From West			Int. Total
	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	
07:00 AM	3	6	0	28	0	0	0	0	0	37
07:15 AM	1	16	0	83	3	0	0	1	0	104
07:30 AM	3	19	0	129	6	0	0	1	0	158
07:45 AM	7	26	0	81	5	0	0	0	0	119
Total	14	67	0	321	14	0	0	2	0	418
08:00 AM	8	20	0	72	4	0	1	1	0	106
08:15 AM	9	52	0	95	3	0	0	0	0	159
08:30 AM	12	49	0	100	7	0	0	1	0	169
08:45 AM	13	40	0	98	9	0	0	3	0	163
Total	42	161	0	365	23	0	1	5	0	597
Grand Total	56	228	0	686	37	0	1	7	0	1015
Apprch %	19.7	80.3	0	94.9	5.1	0	12.5	87.5	0	
Total %	5.5	22.5	0	67.6	3.6	0	0.1	0.7	0	

Start Time	Old North Road From North				Old North Road From South				Bills Road From West				Int. Total
	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	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	8	20	0	28	72	4	0	76	1	1	0	2	106
08:15 AM	9	52	0	61	95	3	0	98	0	0	0	0	159
08:30 AM	12	49	0	61	100	7	0	107	0	1	0	1	169
08:45 AM	13	40	0	53	98	9	0	107	0	3	0	3	163
Total Volume	42	161	0	203	365	23	0	388	1	5	0	6	597
% App. Total	20.7	79.3	0		94.1	5.9	0		16.7	83.3	0		
PHF	.808	.774	.000	.832	.913	.639	.000	.907	.250	.417	.000	.500	.883

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 City, State: Kingston, RI  
 Client: Pare/J. Shevlin

File Name : 05767G  
 Site Code : 18145.00  
 Start Date : 10/5/2023  
 Page No : 1

### Groups Printed- Trucks & Buses

Start Time	Old North Road From North			Old North Road From South			Bills Road From West			Int. Total
	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	
07:00 AM	0	1	0	2	0	0	0	0	0	3
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	1	0	2	0	0	0	0	0	3
08:30 AM	0	0	0	1	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>
<b>Grand Total</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>
Apprch %	0	100	0	100	0	0	0	0	0	
Total %	0	28.6	0	71.4	0	0	0	0	0	

Start Time	Old North Road From North				Old North Road From South				Bills Road From West				Int. Total
	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	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	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	1	0	1	2	0	0	2	0	0	0	0	3
08:30 AM	0	0	0	0	1	0	0	1	0	0	0	0	1
<b>Total Volume</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>
<b>% App. Total</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>100</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>375</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>333</b>
PHF	.000	.250	.000	.250	.375	.000	.000	.375	.000	.000	.000	.000	.333

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Client: Pare/J. Shevlin

File Name : 05767G  
Site Code : 18145.00  
Start Date : 10/5/2023  
Page No : 1

### Groups Printed- Bikes by Direction

Start Time	Old North Road From North			Old North Road From South			Bills Road From West			Int. Total
	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	1	0	0	0	0	0	1
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
08:00 AM	1	0	0	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	1	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>
<b>Grand Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>
Apprch %	100	0	0	50	50	0	0	0	0	
Total %	33.3	0	0	33.3	33.3	0	0	0	0	

Start Time	Old North Road From North				Old North Road From South				Bills Road From West				Int. Total
	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	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	0	0	0	1	0	0	1	0	0	0	0	1
08:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	1
<b>Total Volume</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>
<b>% App. Total</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>50</b>	<b>50</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>
PHF	.250	.000	.000	.250	.250	.250	.000	.500	.000	.000	.000	.000	.750

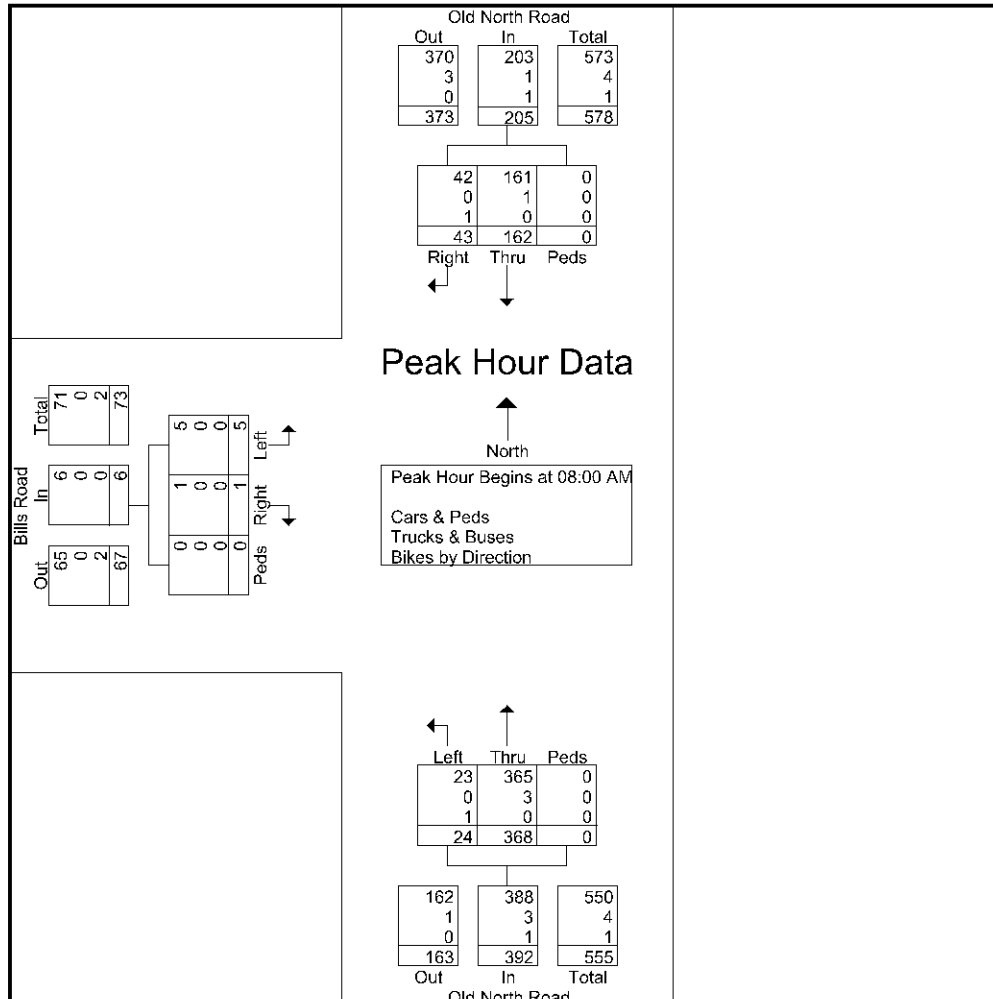
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N/S: Old North Road  
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Start Time	Old North Road From North				Old North Road From South				Bills Road From West				Int. Total
	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	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	9	20	0	29	72	4	0	76	1	1	0	2	107
08:15 AM	9	53	0	62	97	3	0	100	0	0	0	0	162
08:30 AM	12	49	0	61	101	8	0	109	0	1	0	1	171
08:45 AM	13	40	0	53	98	9	0	107	0	3	0	3	163
Total Volume	43	162	0	205	368	24	0	392	1	5	0	6	603
% App. Total	21	79	0		93.9	6.1	0		16.7	83.3	0		
PIIF	.827	.764	.000	.827	.911	.667	.000	.899	.250	.417	.000	.500	.882
Cars & Peds	42	161	0	203	365	23	0	388	1	5	0	6	597
% Cars & Peds	97.7	99.4	0	99.0	99.2	95.8	0	99.0	100	100	0	100	99.0
Trucks & Buses	0	1	0	1	3	0	0	3	0	0	0	0	4
% Trucks & Buses	0	0.6	0	0.5	0.8	0	0	0.8	0	0	0	0	0.7
Bikes by Direction	1	0	0	1	0	1	0	1	0	0	0	0	2
% Bikes by Direction	2.3	0	0	0.5	0	4.2	0	0.3	0	0	0	0	0.3





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Client: Pare/J. Shevlin

File Name : 05767GG  
Site Code : 18145.00  
Start Date : 10/5/2023  
Page No : 1

### Groups Printed- Cars & Peds

Start Time	Old North Road From North			Old North Road From South			Bills Road From West			Int. Total
	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	
04:00 PM	1	39	0	50	4	0	1	10	1	106
04:15 PM	2	39	0	39	1	0	0	3	0	84
04:30 PM	5	32	0	57	5	0	2	15	0	116
04:45 PM	2	56	0	67	7	0	2	9	0	143
<b>Total</b>	<b>10</b>	<b>166</b>	<b>0</b>	<b>213</b>	<b>17</b>	<b>0</b>	<b>5</b>	<b>37</b>	<b>1</b>	<b>449</b>
05:00 PM	1	36	0	51	4	0	1	7	1	101
05:15 PM	2	26	0	53	4	0	3	9	0	97
05:30 PM	1	20	0	41	4	0	0	8	0	74
05:45 PM	3	20	1	35	0	0	0	5	1	65
<b>Total</b>	<b>7</b>	<b>102</b>	<b>1</b>	<b>180</b>	<b>12</b>	<b>0</b>	<b>4</b>	<b>29</b>	<b>2</b>	<b>337</b>
<b>Grand Total</b>	<b>17</b>	<b>268</b>	<b>1</b>	<b>393</b>	<b>29</b>	<b>0</b>	<b>9</b>	<b>66</b>	<b>3</b>	<b>786</b>
Apprch %	5.9	93.7	0.3	93.1	6.9	0	11.5	84.6	3.8	
Total %	2.2	34.1	0.1	50	3.7	0	1.1	8.4	0.4	

Start Time	Old North Road From North				Old North Road From South				Bills Road From West				Int. Total
	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	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	5	32	0	37	57	5	0	62	2	15	0	17	116
04:45 PM	2	56	0	58	67	7	0	74	2	9	0	11	143
05:00 PM	1	36	0	37	51	4	0	55	1	7	1	9	101
05:15 PM	2	26	0	28	53	4	0	57	3	9	0	12	97
<b>Total Volume</b>	<b>10</b>	<b>150</b>	<b>0</b>	<b>160</b>	<b>228</b>	<b>20</b>	<b>0</b>	<b>248</b>	<b>8</b>	<b>40</b>	<b>1</b>	<b>49</b>	<b>457</b>
<b>% App. Total</b>	<b>6.2</b>	<b>93.8</b>	<b>0</b>	<b>100</b>	<b>91.9</b>	<b>8.1</b>	<b>0</b>	<b>100</b>	<b>16.3</b>	<b>81.6</b>	<b>2</b>	<b>100</b>	
PHF	.500	.670	.000	.690	.851	.714	.000	.838	.667	.667	.250	.721	.799

**Transportation Data Corporation**  
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N/S: Old North Road  
 W: Bills Road  
 City, State: Kingston, RI  
 Client: Pare/J. Shevlin

File Name : 05767GG  
 Site Code : 18145.00  
 Start Date : 10/5/2023  
 Page No : 1

Groups Printed- Trucks & Buses

Start Time	Old North Road From North			Old North Road From South			Bills Road From West			Int. Total
	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	
04:00 PM	0	0	0	0	1	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	1	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	1	0	0	0	0	1
<b>Total</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>
05:00 PM	0	0	0	1	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	1	0	0	1
05:30 PM	0	0	0	1	1	0	0	0	0	2
05:45 PM	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>4</b>
<b>Grand Total</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>7</b>
Apprch %	0	100	0	40	60	0	100	0	0	
Total %	0	14.3	0	28.6	42.9	0	14.3	0	0	

Start Time	Old North Road From North				Old North Road From South				Bills Road From West				Int. Total
	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	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	0	0	0	0	0	1	0	1	0	0	0	0	1
05:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	1	0	0	1	1
05:30 PM	0	0	0	0	1	1	0	2	0	0	0	0	2
<b>Total Volume</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>5</b>
<b>% App. Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50</b>	<b>50</b>	<b>0</b>	<b>50</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>25</b>	<b>62.5</b>
PHF	.000	.000	.000	.000	.500	.500	.000	.500	.250	.000	.000	.250	.625

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 Client: Pare/J. Shevlin

File Name : 05767GG  
 Site Code : 18145.00  
 Start Date : 10/5/2023  
 Page No : 1

### Groups Printed- Bikes by Direction

Start Time	Old North Road From North			Old North Road From South			Bills Road From West			Int. Total
	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	1	0	0	1	0	0	0	0	0	2
05:45 PM	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>
<b>Grand Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>
Apprch %	100	0	0	100	0	0	0	0	0	
Total %	50	0	0	50	0	0	0	0	0	

Start Time	Old North Road From North				Old North Road From South				Bills Road From West				Int. Total
	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	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	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	<b>1</b>	0	0	<b>1</b>	<b>1</b>	0	0	<b>1</b>	0	0	0	0	<b>2</b>
<b>Total Volume</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>
<b>% App. Total</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
PHF	.250	.000	.000	.250	.250	.000	.000	.250	.000	.000	.000	.000	.250

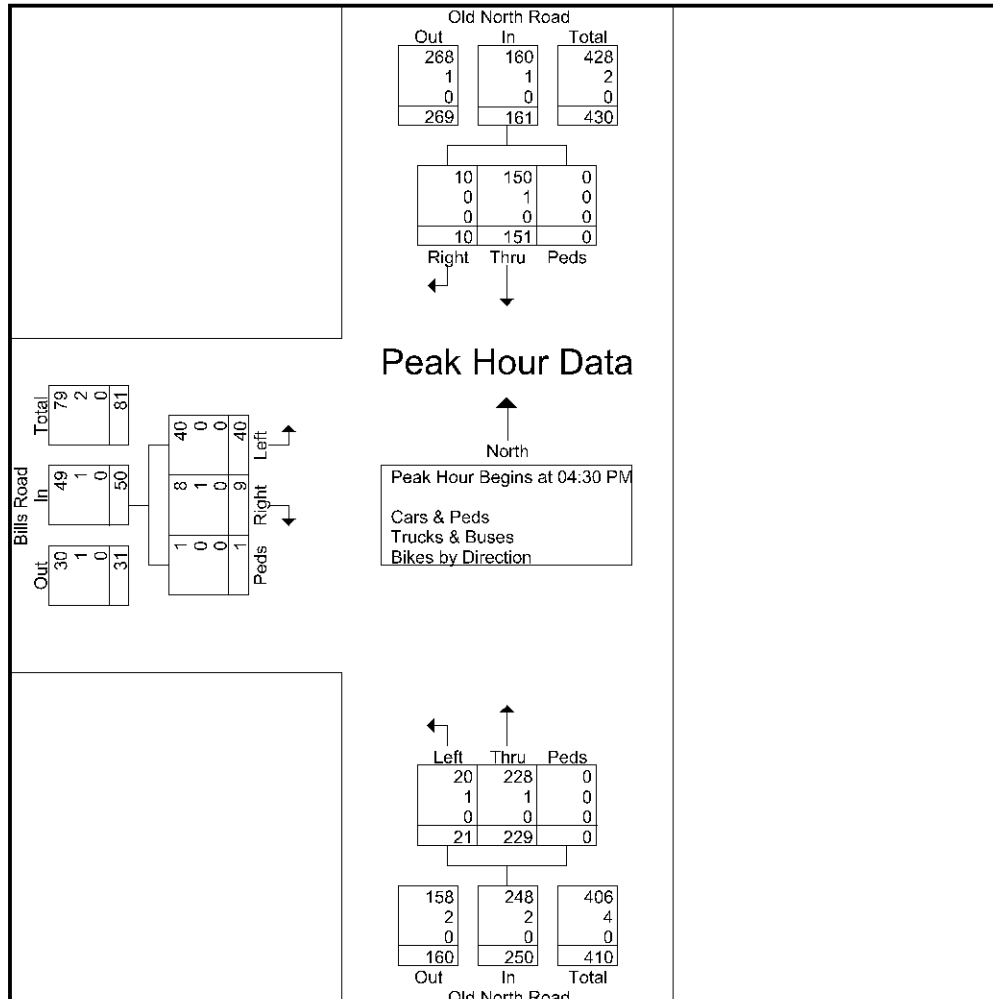
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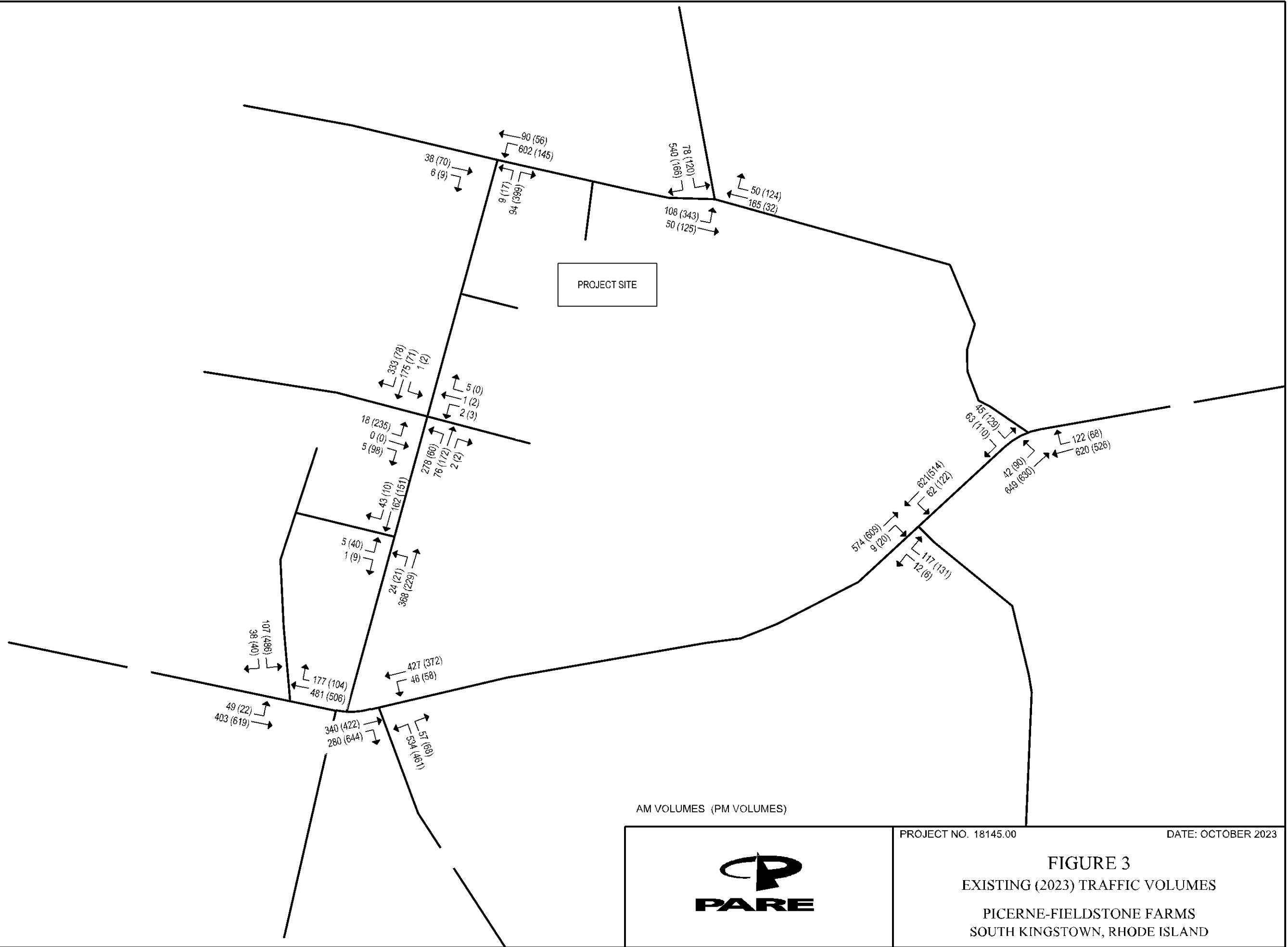
File Name : 05767GG  
Site Code : 18145.00  
Start Date : 10/5/2023  
Page No : 1

Start Time	Old North Road From North				Old North Road From South				Bills Road From West				Int. Total
	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	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	5	33	0	38	57	5	0	62	2	15	0	17	117
04:45 PM	2	56	0	58	67	8	0	75	2	9	0	11	144
05:00 PM	1	36	0	37	52	4	0	56	1	7	1	9	102
05:15 PM	2	26	0	28	53	4	0	57	4	9	0	13	98
Total Volume	10	151	0	161	229	21	0	250	9	40	1	50	461
% App. Total	6.2	93.8	0		91.6	8.4	0		18	80	2		
PIIF	.500	.674	.000	.694	.854	.656	.000	.833	.563	.667	.250	.735	.800
Cars & Peds	10	150	0	160	228	20	0	248	8	40	1	49	457
% Cars & Peds	100	99.3	0	99.4	99.6	95.2	0	99.2	88.9	100	100	98.0	99.1
Trucks & Buses	0	1	0	1	1	1	0	2	1	0	0	1	4
% Trucks & Buses	0	0.7	0	0.6	0.4	4.8	0	0.8	11.1	0	0	2.0	0.9
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0



**Picerne Homes  
Fieldstone Farms Traffic Impact Analysis**

**APPENDIX B  
REVISED FIGURES**

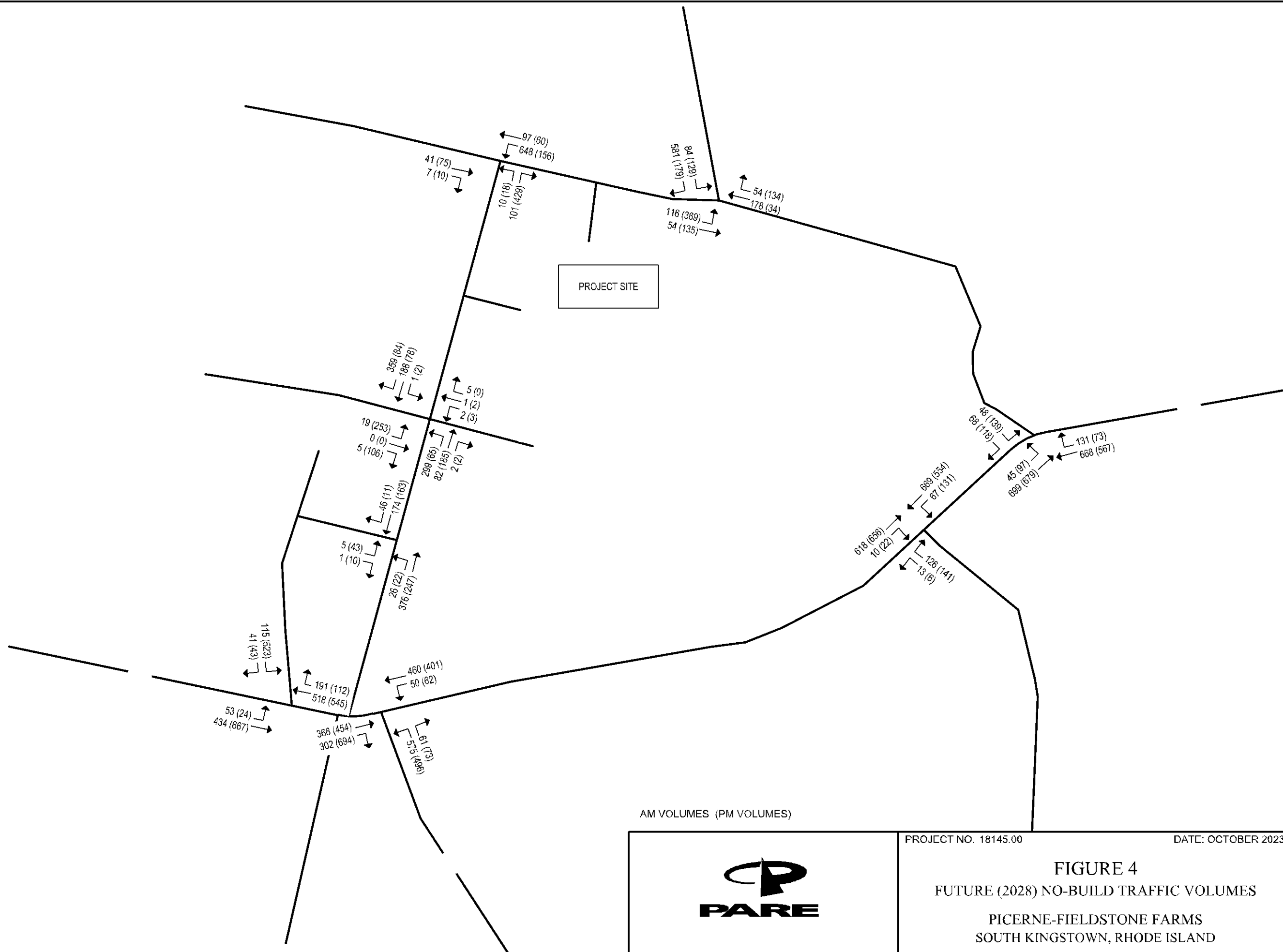


AM VOLUMES (PM VOLUMES)



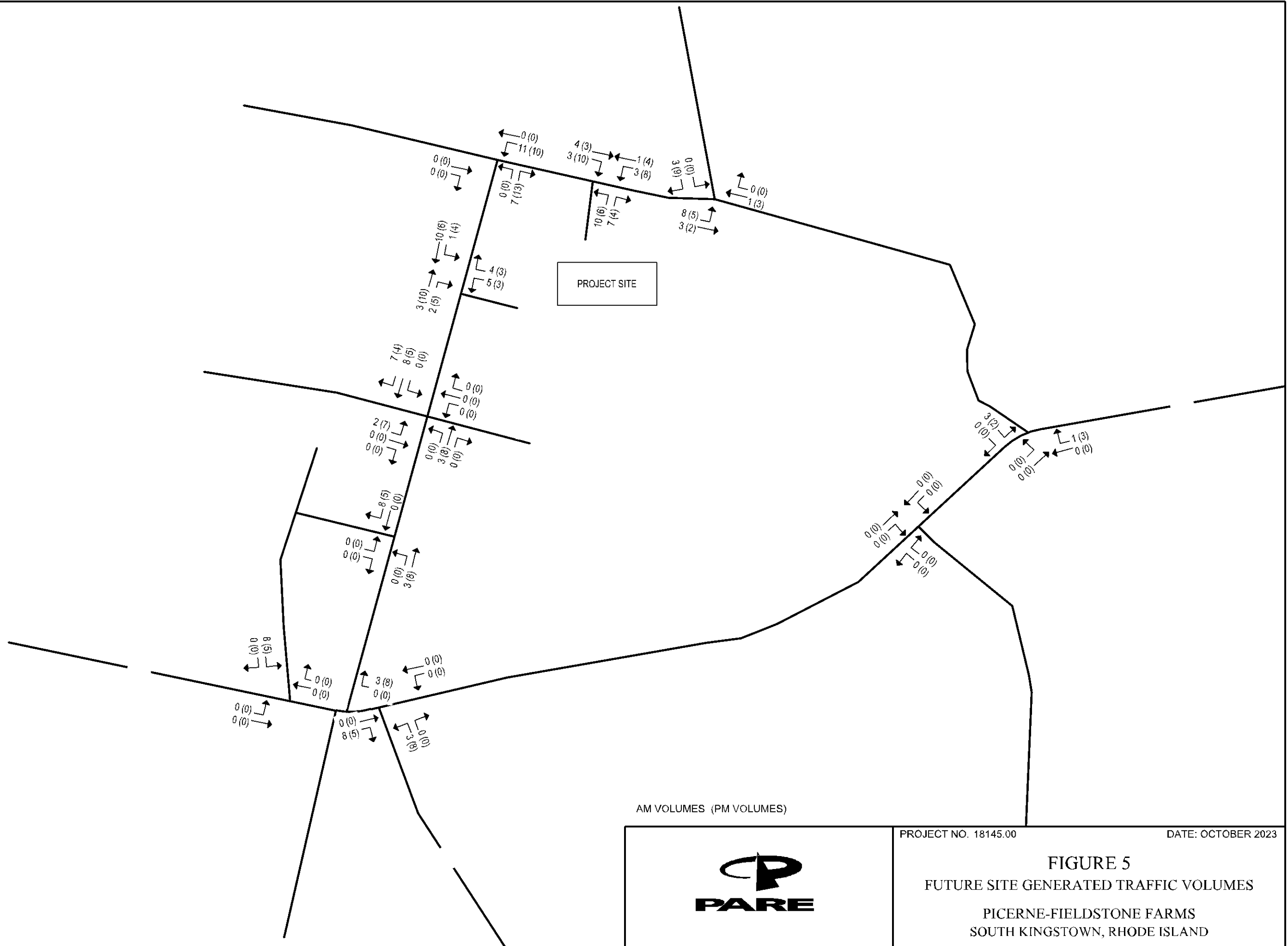
PROJECT NO. 18145.00 DATE: OCTOBER 2023

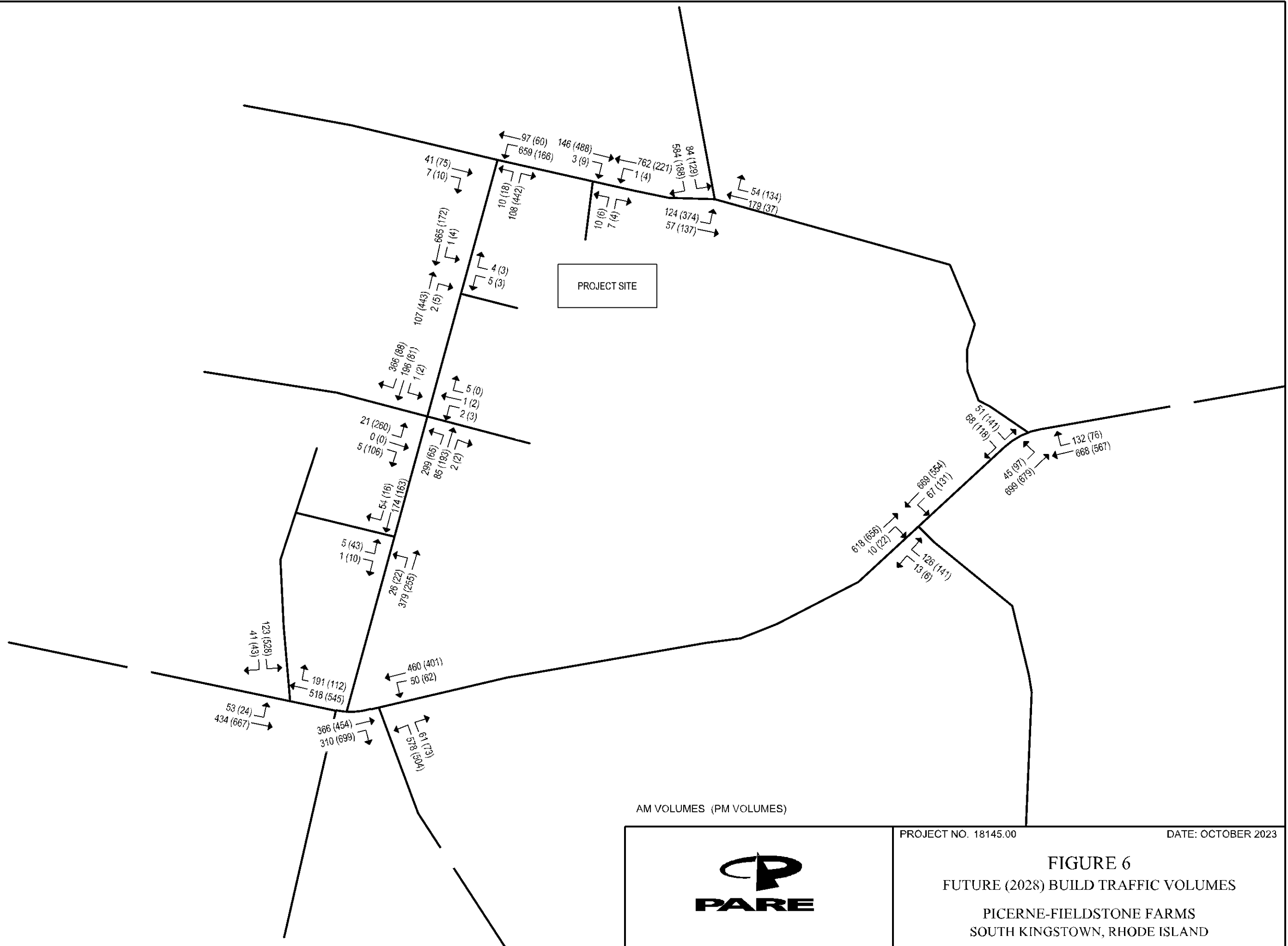
**FIGURE 3**  
 EXISTING (2023) TRAFFIC VOLUMES  
 PICERNE-FIELDSTONE FARMS  
 SOUTH KINGSTOWN, RHODE ISLAND



PROJECT NO. 18145.00 DATE: OCTOBER 2023

**FIGURE 4**  
 FUTURE (2028) NO-BUILD TRAFFIC VOLUMES  
 PICERNE-FIELDSTONE FARMS  
 SOUTH KINGSTOWN, RHODE ISLAND





**Picerne Homes  
Fieldstone Farms Traffic Impact Analysis**

**APPENDIX C  
CAPACITY ANALYSIS**

---

3: Old North Road & Stony Fort Road Performance by approach

---

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	11.6	2.3	4.9	3.1

Queuing and Blocking Report  
AM Peak

10/23/2023

---

Intersection: 3: Old North Road & Stony Fort Road

---

Movement	EB	NB	B2
Directions Served	TR	LR	T
Maximum Queue (ft)	60	80	56
Average Queue (ft)	27	40	28
95th Queue (ft)	53	67	74
Link Distance (ft)	1392	900	-2
Upstream Blk Time (%)			0
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

HCM 6th AWSC  
7: Stony Fort Road & Slocum Road

Existing  
AM Peak

Intersection

Intersection Delay, s/veh 72.9  
Intersection LOS F

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Traffic Vol, veh/h	108	50	165	50	78	540
Future Vol, veh/h	108	50	165	50	78	540
Peak Hour Factor	0.55	0.39	0.86	0.83	0.75	0.78
Heavy Vehicles, %	4	4	1	2	4	1
Mvmt Flow	196	128	192	60	104	692
Number of Lanes	0	1	1	0	1	0
Approach	EB		WB		SB	
Opposing Approach	WB		EB			
Opposing Lanes	1		1		0	
Conflicting Approach Left	SB				WB	
Conflicting Lanes Left	1		0		1	
Conflicting Approach Right			SB		EB	
Conflicting Lanes Right	0		1		1	
HCM Control Delay	19.5		15.3		112.9	
HCM LOS	C		C		F	

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	68%	0%	13%
Vol Thru, %	32%	77%	0%
Vol Right, %	0%	23%	87%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	158	215	618
LT Vol	108	0	78
Through Vol	50	165	0
RT Vol	0	50	540
Lane Flow Rate	325	252	796
Geometry Grp	1	1	1
Degree of Util (X)	0.588	0.445	1.173
Departure Headway (Hd)	7.018	6.871	5.301
Convergence, Y/N	Yes	Yes	Yes
Cap	519	527	693
Service Time	5.018	4.871	3.301
HCM Lane V/C Ratio	0.626	0.478	1.149
HCM Control Delay	19.5	15.3	112.9
HCM Lane LOS	C	C	F
HCM 95th-tile Q	3.7	2.3	26.1

HCM 6th TWSC  
15: Mooresfield Road & Stony Fort Road

Existing  
AM Peak

Intersection

Int Delay, s/veh 10.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	42	649	620	122	45	63
Future Vol, veh/h	42	649	620	122	45	63
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	81	73	70	65
Heavy Vehicles, %	15	3	2	1	7	4
Mvmt Flow	47	721	765	167	64	97

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	932	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.25	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.335	-	-
Pot Cap-1 Maneuver	684	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	684	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	117.8
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	684	-	-	-	166
HCM Lane V/C Ratio	0.068	-	-	-	0.971
HCM Control Delay (s)	10.6	0	-	-	117.8
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0.2	-	-	-	7.5

HCM 6th TWSC  
21: Broad Rock Road & Mooresfield Road

Existing  
AM Peak

Intersection

Int Delay, s/veh 6.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Vol, veh/h	574	9	62	621	12	117
Future Vol, veh/h	574	9	62	621	12	117
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	73	56	44	82	75	63
Heavy Vehicles, %	5	22	7	2	17	1
Mvmt Flow	786	16	141	757	16	186

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	802	0	1833 794
Stage 1	-	-	-	-	794 -
Stage 2	-	-	-	-	1039 -
Critical Hdwy	-	-	4.17	-	6.57 6.21
Critical Hdwy Stg 1	-	-	-	-	5.57 -
Critical Hdwy Stg 2	-	-	-	-	5.57 -
Follow-up Hdwy	-	-	2.263	-	3.653 3.309
Pot Cap-1 Maneuver	-	-	800	-	77 390
Stage 1	-	-	-	-	420 -
Stage 2	-	-	-	-	320 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	800	-	54 390
Mov Cap-2 Maneuver	-	-	-	-	54 -
Stage 1	-	-	-	-	420 -
Stage 2	-	-	-	-	223 -

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	53.8
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	261	-	-	800	-
HCM Lane V/C Ratio	0.773	-	-	0.176	-
HCM Control Delay (s)	53.8	-	-	10.5	0
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	5.7	-	-	0.6	-

Lanes, Volumes, Timings  
12: Kingstown Road & Mooresfield Road

Existing  
AM Peak

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗		↖	↘	
Traffic Volume (vph)	340	280	46	427	554	57
Future Volume (vph)	340	280	46	427	554	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		200	0		0	0
Storage Lanes		1	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.987	
Flt Protected				0.995	0.957	
Satd. Flow (prot)	1792	1553	0	1837	1732	0
Flt Permitted				0.867	0.957	
Satd. Flow (perm)	1792	1553	0	1601	1732	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		346			14	
Link Speed (mph)	30			30	30	
Link Distance (ft)	1310			366	726	
Travel Time (s)	29.8			8.3	16.5	
Peak Hour Factor	0.83	0.81	0.72	0.75	0.85	0.79
Heavy Vehicles (%)	6%	4%	11%	2%	3%	9%
Adj. Flow (vph)	410	346	64	569	652	72
Shared Lane Traffic (%)						
Lane Group Flow (vph)	410	346	0	633	724	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2	1	1	2	1	
Detector Template	Thru	Right	Left	Thru	Left	
Leading Detector (ft)	100	20	20	100	20	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	6	20	20	6	20	
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	CI+Ex			CI+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA	Perm	Perm	NA	Prot	
Protected Phases	1			1	2	

Lanes, Volumes, Timings  
12: Kingstown Road & Mooresfield Road

Existing  
AM Peak

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Permitted Phases		1	1			
Detector Phase	1	1	1	1	2	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	9.5	9.5	9.5	9.8	
Total Split (s)	24.5	24.5	24.5	24.5	30.8	
Total Split (%)	44.3%	44.3%	44.3%	44.3%	55.7%	
Maximum Green (s)	20.0	20.0	20.0	20.0	26.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.8	
Lead/Lag	Lead	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.6	2.6	2.6	2.6	2.6	
Recall Mode	Min	Min	Min	Min	None	
Act Effct Green (s)	20.1	20.1		20.1	24.3	
Actuated g/C Ratio	0.37	0.37		0.37	0.45	
v/c Ratio	0.61	0.43		1.06	0.92	
Control Delay	19.1	3.8		75.4	32.9	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay	19.1	3.8		75.4	32.9	
LOS	B	A		E	C	
Approach Delay	12.1			75.4	32.9	
Approach LOS	B			E	C	
Queue Length 50th (ft)	108	0		~245	197	
Queue Length 95th (ft)	168	30		#311	#362	
Internal Link Dist (ft)	1230			286	646	
Turn Bay Length (ft)		200				
Base Capacity (vph)	670	797		598	848	
Starvation Cap Reductn	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.61	0.43		1.06	0.85	

Intersection Summary

Area Type: Other  
 Cycle Length: 55.3  
 Actuated Cycle Length: 53.7  
 Natural Cycle: 70  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 1.06  
 Intersection Signal Delay: 38.2  
 Intersection Capacity Utilization 88.6%  
 Analysis Period (min) 15  
 Intersection LOS: D  
 ICU Level of Service E

~ 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.

Lanes, Volumes, Timings  
12: Kingstown Road & Mooresfield Road












Existing  
AM Peak

Splits and Phases: 12: Kingstown Road & Mooresfield Road









Lanes, Volumes, Timings  
11: Kingstown Road & Upper College Road

Existing  
AM Peak

						
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	49	403	481	177	107	38
Future Volume (vph)	49	403	481	177	107	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			100	0	0
Storage Lanes	0			1	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850	0.963	
Flt Protected		0.993			0.965	
Satd. Flow (prot)	0	1814	1827	1599	1726	0
Flt Permitted		0.875			0.965	
Satd. Flow (perm)	0	1599	1827	1599	1726	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				109	26	
Link Speed (mph)		30	30		30	
Link Distance (ft)		940	1310		427	
Travel Time (s)		21.4	29.8		9.7	
Peak Hour Factor	0.77	0.97	0.73	0.81	0.67	0.63
Heavy Vehicles (%)	4%	4%	4%	1%	2%	3%
Adj. Flow (vph)	64	415	659	219	160	60
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	479	659	219	220	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	1	1	
Detector Template	Left	Thru	Thru	Right	Left	
Leading Detector (ft)	20	100	100	20	20	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	20	6	6	20	20	
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		CI+Ex	CI+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Prot	
Protected Phases	5	2	6		3	

Lanes, Volumes, Timings  
11: Kingstown Road & Upper College Road

Existing  
AM Peak

						
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	2			6		
Detector Phase	5	2	6	6	3	
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.0	8.0	8.0	8.0	8.0	
Total Split (s)	14.0	34.0	34.0	34.0	37.0	
Total Split (%)	16.5%	40.0%	40.0%	40.0%	43.5%	
Maximum Green (s)	10.0	30.0	30.0	30.0	33.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	
Total Lost Time (s)		4.0	4.0	4.0	4.0	
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	2.4	2.4	2.4	2.4	2.4	
Recall Mode	None	Min	Min	Min	None	
Walk Time (s)			4.0	4.0		
Flash Dont Walk (s)			10.0	10.0		
Pedestrian Calls (#/hr)			5	5		
Act Effct Green (s)		34.7	34.7	34.7	10.7	
Actuated g/C Ratio		0.65	0.65	0.65	0.20	
v/c Ratio		0.46	0.56	0.20	0.60	
Control Delay		7.2	8.1	3.0	23.2	
Queue Delay		0.0	0.0	0.0	0.0	
Total Delay		7.2	8.1	3.0	23.2	
LOS		A	A	A	C	
Approach Delay		7.2	6.8		23.2	
Approach LOS		A	A		C	
Queue Length 50th (ft)		59	89	10	53	
Queue Length 95th (ft)		140	139	31	67	
Internal Link Dist (ft)		860	1230		347	
Turn Bay Length (ft)				100		
Base Capacity (vph)		1327	1186	1076	1080	
Starvation Cap Reductn		0	0	0	0	
Spillback Cap Reductn		0	0	0	0	
Storage Cap Reductn		0	0	0	0	
Reduced v/c Ratio		0.36	0.56	0.20	0.20	

Intersection Summary

Area Type: Other  
 Cycle Length: 85  
 Actuated Cycle Length: 53.4  
 Natural Cycle: 60  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.60  
 Intersection Signal Delay: 9.2  
 Intersection Capacity Utilization 67.5%  
 Analysis Period (min) 15

Intersection LOS: A  
 ICU Level of Service C

Lanes, Volumes, Timings  
11: Kingstown Road & Upper College Road

Existing  
AM Peak

Splits and Phases: 11: Kingstown Road & Upper College Road



HCM 6th TWSC  
24: Old North Road & Bills Road

Existing  
AM Peak

Intersection

Int Delay, s/veh 0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			4	4	
Traffic Vol, veh/h	5	1	24	368	162	43
Future Vol, veh/h	5	1	24	368	162	43
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	42	25	67	91	76	83
Heavy Vehicles, %	0	0	0	1	1	0
Mvmt Flow	12	4	36	404	213	52

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	715	239	265	0	-	0
Stage 1	239	-	-	-	-	-
Stage 2	476	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	400	805	1311	-	-	-
Stage 1	805	-	-	-	-	-
Stage 2	629	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	386	805	1311	-	-	-
Mov Cap-2 Maneuver	386	-	-	-	-	-
Stage 1	777	-	-	-	-	-
Stage 2	629	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.4	0.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1311	-	444	-	-
HCM Lane V/C Ratio	0.027	-	0.036	-	-
HCM Control Delay (s)	7.8	0	13.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

HCM 6th TWSC  
 18: Old North Road & Flagg Road/Bean Farm Drive

Existing  
 AM Peak

Intersection

Int Delay, s/veh	4.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	18	0	5	2	1	5	278	76	2	1	175	333
Future Vol, veh/h	18	0	5	2	1	5	278	76	2	1	175	333
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	25	63	50	25	63	85	86	50	25	73	82
Heavy Vehicles, %	0	0	0	0	0	0	0	3	50	0	1	1
Mvmt Flow	20	0	8	4	4	8	327	88	4	4	240	406

Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	1201	1197	443	1199	1398	90	646	0	0	92	0	0
Stage 1	451	451	-	744	744	-	-	-	-	-	-	-
Stage 2	750	746	-	455	654	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	163	187	619	164	142	973	949	-	-	1515	-	-
Stage 1	592	574	-	410	424	-	-	-	-	-	-	-
Stage 2	407	424	-	589	466	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	112	119	619	116	90	973	949	-	-	1515	-	-
Mov Cap-2 Maneuver	112	119	-	116	90	-	-	-	-	-	-	-
Stage 1	377	572	-	261	270	-	-	-	-	-	-	-
Stage 2	253	270	-	579	464	-	-	-	-	-	-	-

Approach	EB		WB			NB			SB		
HCM Control Delay, s	35.4		26.5			8.4			0		
HCM LOS	E		D								

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	949	-	-	146	183	1515	-	-
HCM Lane V/C Ratio	0.345	-	-	0.191	0.087	0.003	-	-
HCM Control Delay (s)	10.8	0	-	35.4	26.5	7.4	0	-
HCM Lane LOS	B	A	-	E	D	A	A	-
HCM 95th %tile Q(veh)	1.5	-	-	0.7	0.3	0	-	-

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3: Old North Road & Stony Fort Road Performance by approach

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Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	6.9	1.0	4.3	3.6

Queuing and Blocking Report  
PM Peak

10/23/2023

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Intersection: 3: Old North Road & Stony Fort Road

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Movement	EB	NB	B2
Directions Served	TR	LR	T
Maximum Queue (ft)	57	96	56
Average Queue (ft)	31	51	56
95th Queue (ft)	51	76	56
Link Distance (ft)	1392	900	-2
Upstream Blk Time (%)			0
Queuing Penalty (veh)			1
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

HCM 6th AWSC  
7: Stony Fort Road & Slocum Road

Existing  
PM Peak

Intersection

Intersection Delay, s/veh	21.3
Intersection LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Traffic Vol, veh/h	343	125	32	124	120	166
Future Vol, veh/h	343	125	32	124	120	166
Peak Hour Factor	0.86	0.82	0.80	0.84	0.70	0.92
Heavy Vehicles, %	1	0	0	2	0	1
Mvmt Flow	399	152	40	148	171	180
Number of Lanes	0	1	1	0	1	0
Approach	EB		WB		SB	
Opposing Approach	WB		EB			
Opposing Lanes	1		1		0	
Conflicting Approach Left	SB				WB	
Conflicting Lanes Left	1		0		1	
Conflicting Approach Right			SB		EB	
Conflicting Lanes Right	0		1		1	
HCM Control Delay	28.9		10.4		15.2	
HCM LOS	D		B		C	

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	73%	0%	42%
Vol Thru, %	27%	21%	0%
Vol Right, %	0%	79%	58%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	468	156	286
LT Vol	343	0	120
Through Vol	125	32	0
RT Vol	0	124	166
Lane Flow Rate	551	188	352
Geometry Grp	1	1	1
Degree of Util (X)	0.826	0.277	0.545
Departure Headway (Hd)	5.394	5.309	5.574
Convergence, Y/N	Yes	Yes	Yes
Cap	673	674	644
Service Time	3.436	3.368	3.629
HCM Lane V/C Ratio	0.819	0.279	0.547
HCM Control Delay	28.9	10.4	15.2
HCM Lane LOS	D	B	C
HCM 95th-tile Q	8.8	1.1	3.3

HCM 6th TWSC  
15: Mooresfield Road & Stony Fort Road

Existing  
PM Peak

Intersection

Int Delay, s/veh 137.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	90	630	526	68	129	110
Future Vol, veh/h	90	630	526	68	129	110
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	86	74	59	79
Heavy Vehicles, %	0	1	2	2	0	0
Mvmt Flow	100	700	612	92	219	139

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	704	0	0
Stage 1	-	-	658
Stage 2	-	-	900
Critical Hdwy	4.1	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.2	-	3.5
Pot Cap-1 Maneuver	903	-	~ 125
Stage 1	-	-	519
Stage 2	-	-	400
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	903	-	~ 102
Mov Cap-2 Maneuver	-	-	~ 102
Stage 1	-	-	425
Stage 2	-	-	400

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	\$ 714.2
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	903	-	-	-	147
HCM Lane V/C Ratio	0.111	-	-	-	2.435
HCM Control Delay (s)	9.5	0	-	-	\$ 714.2
HCM Lane LOS	A	A	-	-	F
HCM 95th %tile Q(veh)	0.4	-	-	-	30.7

Notes

~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
21: Broad Rock Road & Mooresfield Road

Existing  
PM Peak

Intersection

Int Delay, s/veh 3.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Vol, veh/h	609	20	122	514	6	131
Future Vol, veh/h	609	20	122	514	6	131
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	72	78	94	50	80
Heavy Vehicles, %	2	0	2	1	0	0
Mvmt Flow	700	28	156	547	12	164







Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	728	0	1573
Stage 1	-	-	-	-	714
Stage 2	-	-	-	-	859
Critical Hdwy	-	-	4.12	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.218	-	3.5
Pot Cap-1 Maneuver	-	-	876	-	123
Stage 1	-	-	-	-	489
Stage 2	-	-	-	-	418
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	876	-	92
Mov Cap-2 Maneuver	-	-	-	-	92
Stage 1	-	-	-	-	489
Stage 2	-	-	-	-	311

Approach	EB	WB	NB
HCM Control Delay, s	0	2.2	25.6
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	347	-	-	876	-
HCM Lane V/C Ratio	0.506	-	-	0.179	-
HCM Control Delay (s)	25.6	-	-	10	0
HCM Lane LOS	D	-	-	B	A
HCM 95th %tile Q(veh)	2.7	-	-	0.6	-

Lanes, Volumes, Timings  
12: Kingstown Road & Mooresfield Road

Existing  
PM Peak

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗		↖	↘	
Traffic Volume (vph)	422	644	58	372	461	68
Future Volume (vph)	422	644	58	372	461	68
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		200	0		0	0
Storage Lanes		1	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Flt		0.850			0.981	
Flt Protected				0.992	0.959	
Satd. Flow (prot)	1827	1568	0	1863	1767	0
Flt Permitted				0.749	0.959	
Satd. Flow (perm)	1827	1568	0	1407	1767	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		678			20	
Link Speed (mph)	30			30	30	
Link Distance (ft)	1310			366	726	
Travel Time (s)	29.8			8.3	16.5	
Peak Hour Factor	0.84	0.95	0.76	0.88	0.91	0.81
Heavy Vehicles (%)	4%	3%	2%	1%	1%	2%
Adj. Flow (vph)	502	678	76	423	507	84
Shared Lane Traffic (%)						
Lane Group Flow (vph)	502	678	0	499	591	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2	1	1	2	1	
Detector Template	Thru	Right	Left	Thru	Left	
Leading Detector (ft)	100	20	20	100	20	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	6	20	20	6	20	
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	CI+Ex			CI+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA	Perm	Perm	NA	Prot	
Protected Phases	1			1	2	

Lanes, Volumes, Timings  
12: Kingstown Road & Mooresfield Road

Existing  
PM Peak

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Permitted Phases		1	1			
Detector Phase	1	1	1	1	2	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	9.5	9.5	9.5	9.8	
Total Split (s)	24.5	24.5	24.5	24.5	30.8	
Total Split (%)	44.3%	44.3%	44.3%	44.3%	55.7%	
Maximum Green (s)	20.0	20.0	20.0	20.0	26.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.8	
Lead/Lag	Lead	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.6	2.6	2.6	2.6	2.6	
Recall Mode	Min	Min	Min	Min	None	
Act Effct Green (s)	20.2	20.2		20.2	19.8	
Actuated g/C Ratio	0.41	0.41		0.41	0.40	
v/c Ratio	0.67	0.65		0.87	0.82	
Control Delay	19.8	4.9		35.7	23.1	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay	19.8	4.9		35.7	23.1	
LOS	B	A		D	C	
Approach Delay	11.2			35.7	23.1	
Approach LOS	B			D	C	
Queue Length 50th (ft)	115	0		128	138	
Queue Length 95th (ft)	#221	59		#318	243	
Internal Link Dist (ft)	1230			286	646	
Turn Bay Length (ft)		200				
Base Capacity (vph)	748	1042		576	950	
Starvation Cap Reductn	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.67	0.65		0.87	0.62	

Intersection Summary

Area Type: Other  
 Cycle Length: 55.3  
 Actuated Cycle Length: 49.4  
 Natural Cycle: 60  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.87  
 Intersection Signal Delay: 19.7  
 Intersection Capacity Utilization 86.2%  
 Analysis Period (min) 15  
 Intersection LOS: B  
 ICU Level of Service E

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

Lanes, Volumes, Timings  
12: Kingstown Road & Mooresfield Road












Existing  
PM Peak

Splits and Phases: 12: Kingstown Road & Mooresfield Road









Lanes, Volumes, Timings  
 11: Kingstown Road /Kingstown Road & Upper College Road

Existing  
 PM Peak

						
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	22	619	506	104	486	40
Future Volume (vph)	22	619	506	104	486	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			100	0	0
Storage Lanes	0			1	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850	0.987	
Flt Protected		0.999			0.957	
Satd. Flow (prot)	0	1880	1863	1599	1779	0
Flt Permitted		0.986			0.957	
Satd. Flow (perm)	0	1855	1863	1599	1779	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				76	7	
Link Speed (mph)		30	30		30	
Link Distance (ft)		940	1310		427	
Travel Time (s)		21.4	29.8		9.7	
Peak Hour Factor	0.94	0.55	0.95	0.84	0.96	0.77
Heavy Vehicles (%)	0%	1%	2%	1%	1%	0%
Adj. Flow (vph)	23	1125	533	124	506	52
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1148	533	124	558	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	1	1	
Detector Template	Left	Thru	Thru	Right	Left	
Leading Detector (ft)	20	100	100	20	20	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	20	6	6	20	20	
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		CI+Ex	CI+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Prot	
Protected Phases	5	2	6		3	

Lanes, Volumes, Timings  
 11: Kingstown Road /Kingstown Road & Upper College Road

Existing  
 PM Peak

						
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	2			6		
Detector Phase	5	2	6	6	3	
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.0	8.0	8.0	8.0	8.0	
Total Split (s)	14.0	34.0	34.0	34.0	37.0	
Total Split (%)	16.5%	40.0%	40.0%	40.0%	43.5%	
Maximum Green (s)	10.0	30.0	30.0	30.0	33.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	
Total Lost Time (s)		4.0	4.0	4.0	4.0	
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	2.4	2.4	2.4	2.4	2.4	
Recall Mode	None	Min	Min	Min	None	
Walk Time (s)			4.0	4.0		
Flash Dont Walk (s)			10.0	10.0		
Pedestrian Calls (#/hr)			5	5		
Act Effct Green (s)		30.3	30.3	30.3	24.0	
Actuated g/C Ratio		0.49	0.49	0.49	0.38	
v/c Ratio		1.28	0.59	0.15	0.81	
Control Delay		153.9	16.5	6.0	26.8	
Queue Delay		0.0	0.0	0.0	0.0	
Total Delay		153.9	16.5	6.0	26.8	
LOS		F	B	A	C	
Approach Delay		153.9	14.5		26.8	
Approach LOS		F	B		C	
Queue Length 50th (ft)		~567	136	9	178	
Queue Length 95th (ft)		#427	288	36	286	
Internal Link Dist (ft)		860	1230		347	
Turn Bay Length (ft)				100		
Base Capacity (vph)		1320	903	815	952	
Starvation Cap Reductn		0	0	0	0	
Spillback Cap Reductn		0	0	0	0	
Storage Cap Reductn		0	0	0	0	
Reduced v/c Ratio		0.87	0.59	0.15	0.59	

Intersection Summary

Area Type: Other  
 Cycle Length: 85  
 Actuated Cycle Length: 62.4  
 Natural Cycle: 90  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 1.28  
 Intersection Signal Delay: 85.1  
 Intersection Capacity Utilization 86.4%  
 Analysis Period (min) 15  
 ~ Volume exceeds capacity, queue is theoretically infinite.

Intersection LOS: F  
 ICU Level of Service E

Lanes, Volumes, Timings

11: Kingstown Road /Kingstown Road & Upper College Road

Existing

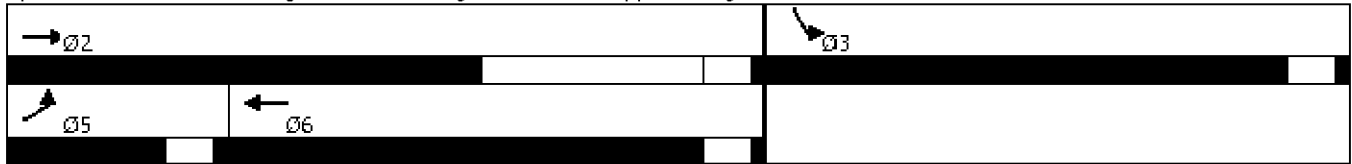
PM Peak

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: 11: Kingstown Road /Kingstown Road & Upper College Road



HCM 6th TWSC  
24: Old North Road & Bills Road

Existing  
PM Peak

Intersection

Int Delay, s/veh 2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			4	4	
Traffic Vol, veh/h	40	9	21	229	151	10
Future Vol, veh/h	40	9	21	229	151	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	68	56	66	85	67	50
Heavy Vehicles, %	0	11	5	1	1	0
Mvmt Flow	59	16	32	269	225	20

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	568	235	245	0	-	0
Stage 1	235	-	-	-	-	-
Stage 2	333	-	-	-	-	-
Critical Hdwy	6.4	6.31	4.15	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.399	2.245	-	-	-
Pot Cap-1 Maneuver	488	782	1304	-	-	-
Stage 1	809	-	-	-	-	-
Stage 2	731	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	474	782	1304	-	-	-
Mov Cap-2 Maneuver	474	-	-	-	-	-
Stage 1	786	-	-	-	-	-
Stage 2	731	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.1	0.8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1304	-	518	-	-
HCM Lane V/C Ratio	0.024	-	0.145	-	-
HCM Control Delay (s)	7.8	0	13.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-

HCM 6th TWSC  
 18: Old North Road & Flagg Road/Bean Farm Drive

Existing  
 PM Peak

Intersection

Int Delay, s/veh	24.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	235	0	98	3	2	0	60	172	2	2	71	78
Future Vol, veh/h	235	0	98	3	2	0	60	172	2	2	71	78
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	74	25	61	38	25	25	83	83	83	75	73	50
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	1	0
Mvmt Flow	318	0	161	8	8	0	72	207	2	3	97	156

Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	537	534	175	614	611	208	253	0	0	209	0	0
Stage 1	181	181	-	352	352	-	-	-	-	-	-	-
Stage 2	356	353	-	262	259	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	458	455	874	407	411	837	1324	-	-	1374	-	-
Stage 1	825	754	-	669	635	-	-	-	-	-	-	-
Stage 2	666	634	-	747	697	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	429	425	874	316	384	837	1324	-	-	1374	-	-
Mov Cap-2 Maneuver	429	425	-	316	384	-	-	-	-	-	-	-
Stage 1	774	752	-	628	596	-	-	-	-	-	-	-
Stage 2	616	595	-	608	695	-	-	-	-	-	-	-

Approach	EB		WB			NB			SB		
HCM Control Delay, s	51.1		15.9			2			0.1		
HCM LOS	F		C								

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1324	-	-	518	347	1374	-	-
HCM Lane V/C Ratio	0.055	-	-	0.923	0.046	0.002	-	-
HCM Control Delay (s)	7.9	0	-	51.1	15.9	7.6	0	-
HCM Lane LOS	A	A	-	F	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	11.1	0.1	0	-	-

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3: Old North Road & Stony Fort Road Performance by approach

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Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	11.7	2.4	5.2	3.2

Queuing and Blocking Report  
AM Peak

10/23/2023

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Intersection: 3: Old North Road & Stony Fort Road

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Movement	EB	NB	B2
Directions Served	TR	LR	T
Maximum Queue (ft)	62	95	56
Average Queue (ft)	27	43	30
95th Queue (ft)	53	75	75
Link Distance (ft)	1392	900	-2
Upstream Blk Time (%)			0
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

HCM 6th AWSC  
7: Stony Fort Road & Slocum Road

No Build  
AM Peak

Intersection

Intersection Delay, s/veh 101.4  
Intersection LOS F

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Traffic Vol, veh/h	116	54	178	54	84	581
Future Vol, veh/h	116	54	178	54	84	581
Peak Hour Factor	0.55	0.39	0.86	0.83	0.75	0.78
Heavy Vehicles, %	4	4	1	2	4	1
Mvmt Flow	211	138	207	65	112	745
Number of Lanes	0	1	1	0	1	0
Approach	EB		WB		SB	
Opposing Approach	WB		EB			
Opposing Lanes	1		1		0	
Conflicting Approach Left	SB				WB	
Conflicting Lanes Left	1		0		1	
Conflicting Approach Right			SB		EB	
Conflicting Lanes Right	0		1		1	
HCM Control Delay	22.1		16.7		160.6	
HCM LOS	C		C		F	

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	68%	0%	13%
Vol Thru, %	32%	77%	0%
Vol Right, %	0%	23%	87%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	170	232	665
LT Vol	116	0	84
Through Vol	54	178	0
RT Vol	0	54	581
Lane Flow Rate	349	272	857
Geometry Grp	1	1	1
Degree of Util (X)	0.632	0.481	1.292
Departure Headway (Hd)	7.325	7.196	5.428
Convergence, Y/N	Yes	Yes	Yes
Cap	496	503	677
Service Time	5.325	5.196	3.428
HCM Lane V/C Ratio	0.704	0.541	1.266
HCM Control Delay	22.1	16.7	160.6
HCM Lane LOS	C	C	F
HCM 95th-tile Q	4.3	2.6	33.7

HCM 6th TWSC  
15: Mooresfield Road & Stony Fort Road

No Build  
AM Peak

Intersection

Int Delay, s/veh 19.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	45	699	668	131	48	68
Future Vol, veh/h	45	699	668	131	48	68
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	81	73	70	65
Heavy Vehicles, %	15	3	2	1	7	4
Mvmt Flow	50	777	825	179	69	105

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	1004	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.25	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.335	-	-
Pot Cap-1 Maneuver	641	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	641	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	218.8
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	641	-	-	-	139
HCM Lane V/C Ratio	0.078	-	-	-	1.246
HCM Control Delay (s)	11.1	0	-	-	218.8
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0.3	-	-	-	10.5

HCM 6th TWSC  
21: Broad Rock Road & Mooresfield Road

No Build  
AM Peak

Intersection

Int Delay, s/veh 12.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Vol, veh/h	618	10	67	669	13	126
Future Vol, veh/h	618	10	67	669	13	126
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	73	56	44	82	75	63
Heavy Vehicles, %	5	22	7	2	17	1
Mvmt Flow	847	18	152	816	17	200

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	865
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.17
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.263
Pot Cap-1 Maneuver	-	-	757
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	757
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.7	108.4
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	217	-	-	757	-
HCM Lane V/C Ratio	1.002	-	-	0.201	-
HCM Control Delay (s)	108.4	-	-	10.9	0
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	9	-	-	0.7	-

Lanes, Volumes, Timings  
12: Kingstown Road & Mooresfield Road

No Build  
AM Peak

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗		↖	↘	
Traffic Volume (vph)	366	302	50	460	575	61
Future Volume (vph)	366	302	50	460	575	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		200	0		0	0
Storage Lanes		1	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.986	
Flt Protected				0.995	0.957	
Satd. Flow (prot)	1792	1553	0	1837	1730	0
Flt Permitted				0.789	0.957	
Satd. Flow (perm)	1792	1553	0	1457	1730	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		373			14	
Link Speed (mph)	30			30	30	
Link Distance (ft)	1310			366	726	
Travel Time (s)	29.8			8.3	16.5	
Peak Hour Factor	0.83	0.81	0.72	0.75	0.85	0.79
Heavy Vehicles (%)	6%	4%	11%	2%	3%	9%
Adj. Flow (vph)	441	373	69	613	676	77
Shared Lane Traffic (%)						
Lane Group Flow (vph)	441	373	0	682	753	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2	1	1	2	1	
Detector Template	Thru	Right	Left	Thru	Left	
Leading Detector (ft)	100	20	20	100	20	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	6	20	20	6	20	
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	CI+Ex			CI+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA	Perm	Perm	NA	Prot	
Protected Phases	1			1	2	

Lanes, Volumes, Timings  
12: Kingstown Road & Mooresfield Road

No Build  
AM Peak

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Permitted Phases		1	1			
Detector Phase	1	1	1	1	2	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	9.5	9.5	9.5	9.8	
Total Split (s)	24.5	24.5	24.5	24.5	30.8	
Total Split (%)	44.3%	44.3%	44.3%	44.3%	55.7%	
Maximum Green (s)	20.0	20.0	20.0	20.0	26.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.8	
Lead/Lag	Lead	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.6	2.6	2.6	2.6	2.6	
Recall Mode	Min	Min	Min	Min	None	
Act Effct Green (s)	20.0	20.0		20.0	24.9	
Actuated g/C Ratio	0.37	0.37		0.37	0.46	
v/c Ratio	0.67	0.46		1.27	0.94	
Control Delay	20.9	3.9		158.0	36.7	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay	20.9	3.9		158.0	36.7	
LOS	C	A		F	D	
Approach Delay	13.1			158.0	36.7	
Approach LOS	B			F	D	
Queue Length 50th (ft)	119	0		~299	211	
Queue Length 95th (ft)	183	30		#363	#385	
Internal Link Dist (ft)	1230			286	646	
Turn Bay Length (ft)		200				
Base Capacity (vph)	661	808		537	836	
Starvation Cap Reductn	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.67	0.46		1.27	0.90	

Intersection Summary

Area Type: Other  
 Cycle Length: 55.3  
 Actuated Cycle Length: 54.3  
 Natural Cycle: 80  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 1.27  
 Intersection Signal Delay: 64.9  
 Intersection Capacity Utilization 93.3%  
 Analysis Period (min) 15  
 Intersection LOS: E  
 ICU Level of Service F

~ 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.

Lanes, Volumes, Timings  
12: Kingstown Road & Mooresfield Road












No Build  
AM Peak

Splits and Phases: 12: Kingstown Road & Mooresfield Road









Lanes, Volumes, Timings  
 11: Kingstown Road /Kingstown Road & Upper College Road

No Build  
 AM Peak

						
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	53	434	518	191	115	41
Future Volume (vph)	53	434	518	191	115	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			100	0	0
Storage Lanes	0			1	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850	0.963	
Flt Protected		0.993			0.965	
Satd. Flow (prot)	0	1814	1827	1599	1726	0
Flt Permitted		0.863			0.965	
Satd. Flow (perm)	0	1577	1827	1599	1726	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				109	26	
Link Speed (mph)		30	30		30	
Link Distance (ft)		940	1310		427	
Travel Time (s)		21.4	29.8		9.7	
Peak Hour Factor	0.77	0.97	0.73	0.81	0.67	0.63
Heavy Vehicles (%)	4%	4%	4%	1%	2%	3%
Adj. Flow (vph)	69	447	710	236	172	65
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	516	710	236	237	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	1	1	
Detector Template	Left	Thru	Thru	Right	Left	
Leading Detector (ft)	20	100	100	20	20	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	20	6	6	20	20	
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		CI+Ex	CI+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Prot	
Protected Phases	5	2	6		3	

Lanes, Volumes, Timings  
 11: Kingstown Road /Kingstown Road & Upper College Road

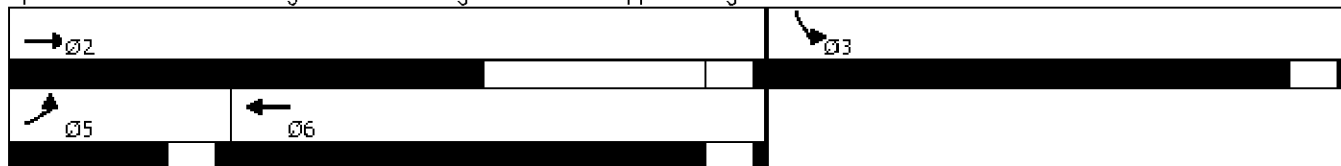
No Build  
 AM Peak

						
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	2			6		
Detector Phase	5	2	6	6	3	
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.0	8.0	8.0	8.0	8.0	
Total Split (s)	14.0	34.0	34.0	34.0	37.0	
Total Split (%)	16.5%	40.0%	40.0%	40.0%	43.5%	
Maximum Green (s)	10.0	30.0	30.0	30.0	33.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	
Total Lost Time (s)		4.0	4.0	4.0	4.0	
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	2.4	2.4	2.4	2.4	2.4	
Recall Mode	None	Min	Min	Min	None	
Walk Time (s)			4.0	4.0		
Flash Dont Walk (s)			10.0	10.0		
Pedestrian Calls (#/hr)			5	5		
Act Effct Green (s)		34.1	34.1	34.1	11.2	
Actuated g/C Ratio		0.64	0.64	0.64	0.21	
v/c Ratio		0.51	0.61	0.22	0.62	
Control Delay		8.2	9.3	3.3	23.4	
Queue Delay		0.0	0.0	0.0	0.0	
Total Delay		8.2	9.3	3.3	23.4	
LOS		A	A	A	C	
Approach Delay		8.2	7.8		23.4	
Approach LOS		A	A		C	
Queue Length 50th (ft)		69	104	12	57	
Queue Length 95th (ft)		165	161	35	72	
Internal Link Dist (ft)		860	1230		347	
Turn Bay Length (ft)				100		
Base Capacity (vph)		1308	1168	1061	1083	
Starvation Cap Reductn		0	0	0	0	
Spillback Cap Reductn		0	0	0	0	
Storage Cap Reductn		0	0	0	0	
Reduced v/c Ratio		0.39	0.61	0.22	0.22	

Intersection Summary

Area Type: Other  
 Cycle Length: 85  
 Actuated Cycle Length: 53.3  
 Natural Cycle: 55  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.62  
 Intersection Signal Delay: 10.1  
 Intersection Capacity Utilization 71.9%  
 Analysis Period (min) 15  
 Intersection LOS: B  
 ICU Level of Service C

Splits and Phases: 11: Kingstown Road /Kingstown Road & Upper College Road



HCM 6th TWSC  
24: Old North Road & Bills Road

No Build  
AM Peak

Intersection

Int Delay, s/veh 0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			4	4	
Traffic Vol, veh/h	5	1	26	376	174	46
Future Vol, veh/h	5	1	26	376	174	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	42	25	67	91	76	83
Heavy Vehicles, %	0	0	0	1	1	0
Mvmt Flow	12	4	39	413	229	55

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	748	257	284	0	-	0
Stage 1	257	-	-	-	-	-
Stage 2	491	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	383	787	1290	-	-	-
Stage 1	791	-	-	-	-	-
Stage 2	619	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	368	787	1290	-	-	-
Mov Cap-2 Maneuver	368	-	-	-	-	-
Stage 1	760	-	-	-	-	-
Stage 2	619	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.8	0.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1290	-	425	-	-
HCM Lane V/C Ratio	0.03	-	0.037	-	-
HCM Control Delay (s)	7.9	0	13.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

HCM 6th TWSC  
18: Old North Road & Flagg Road/Bean Farm Drive

No Build  
AM Peak

Intersection

Int Delay, s/veh	4.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	19	0	5	2	1	5	299	82	2	1	188	359
Future Vol, veh/h	19	0	5	2	1	5	299	82	2	1	188	359
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	25	63	50	25	63	85	86	50	25	73	82
Heavy Vehicles, %	0	0	0	0	0	0	0	3	50	0	1	1
Mvmt Flow	21	0	8	4	4	8	352	95	4	4	258	438

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1292	1288	477	1290	1505	97	696	0	0	99	0	0
Stage 1	485	485	-	801	801	-	-	-	-	-	-	-
Stage 2	807	803	-	489	704	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	141	165	592	142	122	965	909	-	-	1507	-	-
Stage 1	567	555	-	381	400	-	-	-	-	-	-	-
Stage 2	378	399	-	564	443	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	91	97	592	95	72	965	909	-	-	1507	-	-
Mov Cap-2 Maneuver	91	97	-	95	72	-	-	-	-	-	-	-
Stage 1	335	552	-	225	236	-	-	-	-	-	-	-
Stage 2	217	235	-	554	441	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	45.2		31.6		8.9		0	
HCM LOS	E		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	909	-	-	118	151	1507	-	-
HCM Lane V/C Ratio	0.387	-	-	0.246	0.106	0.003	-	-
HCM Control Delay (s)	11.4	0	-	45.2	31.6	7.4	0	-
HCM Lane LOS	B	A	-	E	D	A	A	-
HCM 95th %tile Q(veh)	1.8	-	-	0.9	0.3	0	-	-

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3: Old North Road & Stony Fort Road Performance by approach

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Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	7.1	1.0	5.7	4.5

Queuing and Blocking Report  
PM Peak

10/23/2023

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Intersection: 3: Old North Road & Stony Fort Road

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Movement	EB	NB	B2
Directions Served	TR	LR	T
Maximum Queue (ft)	62	118	56
Average Queue (ft)	33	59	56
95th Queue (ft)	55	90	56
Link Distance (ft)	1392	900	-2
Upstream Blk Time (%)			0
Queuing Penalty (veh)			1
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

HCM 6th AWSC  
7: Stony Fort Road & Slocum Road

No-Build  
PM Peak

Intersection

Intersection Delay, s/veh	28.2
Intersection LOS	D

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Traffic Vol, veh/h	369	135	34	134	129	179
Future Vol, veh/h	369	135	34	134	129	179
Peak Hour Factor	0.86	0.82	0.80	0.84	0.70	0.92
Heavy Vehicles, %	1	0	0	2	0	1
Mvmt Flow	429	165	43	160	184	195
Number of Lanes	0	1	1	0	1	0
Approach	EB		WB		SB	
Opposing Approach	WB		EB			
Opposing Lanes	1		1		0	
Conflicting Approach Left	SB				WB	
Conflicting Lanes Left	1		0		1	
Conflicting Approach Right			SB		EB	
Conflicting Lanes Right	0		1		1	
HCM Control Delay	41		11.1		17.4	
HCM LOS	E		B		C	

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	73%	0%	42%
Vol Thru, %	27%	20%	0%
Vol Right, %	0%	80%	58%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	504	168	308
LT Vol	369	0	129
Through Vol	135	34	0
RT Vol	0	134	179
Lane Flow Rate	594	202	379
Geometry Grp	1	1	1
Degree of Util (X)	0.914	0.31	0.606
Departure Headway (Hd)	5.543	5.525	5.759
Convergence, Y/N	Yes	Yes	Yes
Cap	653	646	625
Service Time	3.599	3.603	3.827
HCM Lane V/C Ratio	0.91	0.313	0.606
HCM Control Delay	41	11.1	17.4
HCM Lane LOS	E	B	C
HCM 95th-tile Q	11.8	1.3	4.1

HCM 6th TWSC  
15: Mooresfield Road & Stony Fort Road

No-Build  
PM Peak

Intersection

Int Delay, s/veh 206

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	97	679	567	73	139	118
Future Vol, veh/h	97	679	567	73	139	118
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	86	74	59	79
Heavy Vehicles, %	0	1	2	2	0	0
Mvmt Flow	108	754	659	99	236	149

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	758	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.1	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.2	-	-
Pot Cap-1 Maneuver	862	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	862	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	\$ 1070.4
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	862	-	-	-	120
HCM Lane V/C Ratio	0.125	-	-	-	3.208
HCM Control Delay (s)	9.8	0	-	-	\$ 1070.4
HCM Lane LOS	A	A	-	-	F
HCM 95th %tile Q(veh)	0.4	-	-	-	37

Notes

-: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
21: Broad Rock Road & Mooresfield Road

No-Build  
PM Peak

Intersection

Int Delay, s/veh 4.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Vol, veh/h	656	22	131	554	6	141
Future Vol, veh/h	656	22	131	554	6	141
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	72	78	94	50	80
Heavy Vehicles, %	2	0	2	1	0	0
Mvmt Flow	754	31	168	589	12	176

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	785	0	1695
Stage 1	-	-	-	-	770
Stage 2	-	-	-	-	925
Critical Hdwy	-	-	4.12	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.218	-	3.5
Pot Cap-1 Maneuver	-	-	834	-	103
Stage 1	-	-	-	-	460
Stage 2	-	-	-	-	389
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	834	-	72
Mov Cap-2 Maneuver	-	-	-	-	72
Stage 1	-	-	-	-	460
Stage 2	-	-	-	-	272

Approach	EB	WB	NB
HCM Control Delay, s	0	2.3	32.6
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	312	-	-	834	-
HCM Lane V/C Ratio	0.603	-	-	0.201	-
HCM Control Delay (s)	32.6	-	-	10.4	0
HCM Lane LOS	D	-	-	B	A
HCM 95th %tile Q(veh)	3.7	-	-	0.8	-

Lanes, Volumes, Timings  
12: Kingstown Road & Mooresfield Road

No-Build  
PM Peak

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗		↖	↘	
Traffic Volume (vph)	454	694	62	401	496	73
Future Volume (vph)	454	694	62	401	496	73
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		200	0		0	0
Storage Lanes		1	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.981	
Flt Protected				0.992	0.959	
Satd. Flow (prot)	1827	1568	0	1863	1767	0
Flt Permitted				0.642	0.959	
Satd. Flow (perm)	1827	1568	0	1206	1767	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		731			20	
Link Speed (mph)	30			30	30	
Link Distance (ft)	1310			366	726	
Travel Time (s)	29.8			8.3	16.5	
Peak Hour Factor	0.84	0.95	0.76	0.88	0.91	0.81
Heavy Vehicles (%)	4%	3%	2%	1%	1%	2%
Adj. Flow (vph)	540	731	82	456	545	90
Shared Lane Traffic (%)						
Lane Group Flow (vph)	540	731	0	538	635	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2	1	1	2	1	
Detector Template	Thru	Right	Left	Thru	Left	
Leading Detector (ft)	100	20	20	100	20	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	6	20	20	6	20	
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	CI+Ex			CI+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA	Perm	Perm	NA	Prot	
Protected Phases	1			1	2	

Lanes, Volumes, Timings  
12: Kingstown Road & Mooresfield Road

No-Build  
PM Peak

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Permitted Phases		1	1			
Detector Phase	1	1	1	1	2	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	9.5	9.5	9.5	9.8	
Total Split (s)	24.5	24.5	24.5	24.5	30.8	
Total Split (%)	44.3%	44.3%	44.3%	44.3%	55.7%	
Maximum Green (s)	20.0	20.0	20.0	20.0	26.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.8	
Lead/Lag	Lead	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.6	2.6	2.6	2.6	2.6	
Recall Mode	Min	Min	Min	Min	None	
Act Effct Green (s)	20.2	20.2		20.2	21.2	
Actuated g/C Ratio	0.40	0.40		0.40	0.42	
v/c Ratio	0.74	0.69		1.12	0.85	
Control Delay	23.4	5.4		102.0	25.1	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay	23.4	5.4		102.0	25.1	
LOS	C	A		F	C	
Approach Delay	13.0			102.0	25.1	
Approach LOS	B			F	C	
Queue Length 50th (ft)	140	0		~206	154	
Queue Length 95th (ft)	#272	61		#375	#294	
Internal Link Dist (ft)	1230			286	646	
Turn Bay Length (ft)		200				
Base Capacity (vph)	726	1063		479	922	
Starvation Cap Reductn	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.74	0.69		1.12	0.69	

Intersection Summary

Area Type: Other  
 Cycle Length: 55.3  
 Actuated Cycle Length: 50.8  
 Natural Cycle: 65  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 1.12  
 Intersection Signal Delay: 35.8  
 Intersection Capacity Utilization 91.9%  
 Analysis Period (min) 15  
 Intersection LOS: D  
 ICU Level of Service F

~ 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.

Lanes, Volumes, Timings  
12: Kingstown Road & Mooresfield Road












No-Build  
PM Peak

Splits and Phases: 12: Kingstown Road & Mooresfield Road









Lanes, Volumes, Timings  
 11: Kingstown Road /Kingstown Road & Upper College Road

No-Build  
 PM Peak

						
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	24	667	545	112	523	43
Future Volume (vph)	24	667	545	112	523	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			100	0	0
Storage Lanes	0			1	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850	0.987	
Flt Protected		0.999			0.957	
Satd. Flow (prot)	0	1880	1863	1599	1779	0
Flt Permitted		0.984			0.957	
Satd. Flow (perm)	0	1851	1863	1599	1779	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				76	7	
Link Speed (mph)		30	30		30	
Link Distance (ft)		940	1310		427	
Travel Time (s)		21.4	29.8		9.7	
Peak Hour Factor	0.94	0.55	0.95	0.84	0.96	0.77
Heavy Vehicles (%)	0%	1%	2%	1%	1%	0%
Adj. Flow (vph)	26	1213	574	133	545	56
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1239	574	133	601	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	1	1	
Detector Template	Left	Thru	Thru	Right	Left	
Leading Detector (ft)	20	100	100	20	20	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	20	6	6	20	20	
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		CI+Ex	CI+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Prot	
Protected Phases	5	2	6		3	

Lanes, Volumes, Timings  
 11: Kingstown Road /Kingstown Road & Upper College Road

No-Build  
 PM Peak

						
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	2			6		
Detector Phase	5	2	6	6	3	
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.0	8.0	8.0	8.0	8.0	
Total Split (s)	14.0	34.0	34.0	34.0	37.0	
Total Split (%)	16.5%	40.0%	40.0%	40.0%	43.5%	
Maximum Green (s)	10.0	30.0	30.0	30.0	33.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	
Total Lost Time (s)		4.0	4.0	4.0	4.0	
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	2.4	2.4	2.4	2.4	2.4	
Recall Mode	None	Min	Min	Min	None	
Walk Time (s)			4.0	4.0		
Flash Dont Walk (s)			10.0	10.0		
Pedestrian Calls (#/hr)			5	5		
Act Effct Green (s)		30.2	30.2	30.2	26.6	
Actuated g/C Ratio		0.47	0.47	0.47	0.41	
v/c Ratio		1.44	0.66	0.17	0.82	
Control Delay		225.5	19.5	6.7	26.8	
Queue Delay		0.0	0.0	0.0	0.0	
Total Delay		225.5	19.5	6.7	26.8	
LOS		F	B	A	C	
Approach Delay		225.5	17.1		26.8	
Approach LOS		F	B		C	
Queue Length 50th (ft)		~700	171	12	199	
Queue Length 95th (ft)		#481	319	40	320	
Internal Link Dist (ft)		860	1230		347	
Turn Bay Length (ft)				100		
Base Capacity (vph)		1263	866	784	914	
Starvation Cap Reductn		0	0	0	0	
Spillback Cap Reductn		0	0	0	0	
Storage Cap Reductn		0	0	0	0	
Reduced v/c Ratio		0.98	0.66	0.17	0.66	

Intersection Summary

Area Type: Other  
 Cycle Length: 85  
 Actuated Cycle Length: 64.9  
 Natural Cycle: 110  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 1.44  
 Intersection Signal Delay: 120.7  
 Intersection Capacity Utilization 92.8%  
 Analysis Period (min) 15  
 ~ Volume exceeds capacity, queue is theoretically infinite.

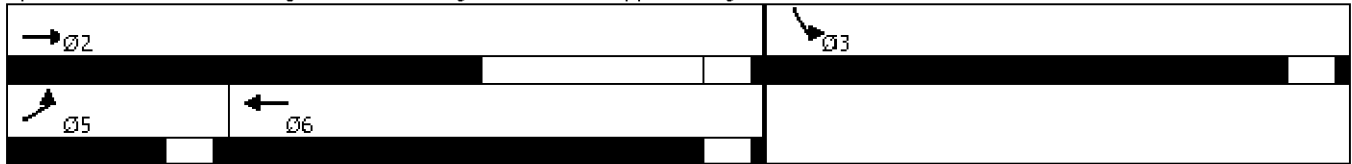
Intersection LOS: F  
 ICU Level of Service F

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: 11: Kingstown Road /Kingstown Road & Upper College Road



Intersection

Int Delay, s/veh 2.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			4	4	
Traffic Vol, veh/h	43	10	22	247	163	11
Future Vol, veh/h	43	10	22	247	163	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	68	56	66	85	67	50
Heavy Vehicles, %	0	11	5	1	1	0
Mvmt Flow	63	18	33	291	243	22

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	611	254	265	0	-	0
Stage 1	254	-	-	-	-	-
Stage 2	357	-	-	-	-	-
Critical Hdwy	6.4	6.31	4.15	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.399	2.245	-	-	-
Pot Cap-1 Maneuver	460	763	1282	-	-	-
Stage 1	793	-	-	-	-	-
Stage 2	713	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	446	763	1282	-	-	-
Mov Cap-2 Maneuver	446	-	-	-	-	-
Stage 1	768	-	-	-	-	-
Stage 2	713	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.8	0.8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1282	-	491	-	-
HCM Lane V/C Ratio	0.026	-	0.165	-	-
HCM Control Delay (s)	7.9	0	13.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.6	-	-

HCM 6th TWSC  
18: Old North Road & Flagg Road/Bean Farm Drive

No-Build  
PM Peak

Intersection

Int Delay, s/veh	40.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	253	0	106	3	2	0	65	185	2	2	76	84
Future Vol, veh/h	253	0	106	3	2	0	65	185	2	2	76	84
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	74	25	61	38	25	25	83	83	83	75	73	50
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	1	0
Mvmt Flow	342	0	174	8	8	0	78	223	2	3	104	168

Major/Minor	Minor2		Minor1			Major1		Major2				
Conflicting Flow All	578	575	188	661	658	224	272	0	0	225	0	0
Stage 1	194	194	-	380	380	-	-	-	-	-	-	-
Stage 2	384	381	-	281	278	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	430	431	859	379	387	820	1303	-	-	1356	-	-
Stage 1	812	744	-	646	617	-	-	-	-	-	-	-
Stage 2	643	617	-	730	684	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	400	400	859	286	360	820	1303	-	-	1356	-	-
Mov Cap-2 Maneuver	400	400	-	286	360	-	-	-	-	-	-	-
Stage 1	757	742	-	602	575	-	-	-	-	-	-	-
Stage 2	591	575	-	581	682	-	-	-	-	-	-	-

Approach	EB		WB			NB		SB		
HCM Control Delay, s	85.7		16.9			2		0.1		
HCM LOS	F		C							

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1303	-	-	488	319	1356	-
HCM Lane V/C Ratio	0.06	-	-	1.057	0.05	0.002	-
HCM Control Delay (s)	7.9	0	-	85.7	16.9	7.7	0
HCM Lane LOS	A	A	-	F	C	A	A
HCM 95th %tile Q(veh)	0.2	-	-	15.7	0.2	0	-

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3: Old North Road & Stony Fort Road Performance by approach

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Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	12.0	1.2	4.7	2.2

Queuing and Blocking Report  
AM Peak

10/23/2023

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Intersection: 3: Old North Road & Stony Fort Road

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Movement	EB	NB
Directions Served	TR	LR
Maximum Queue (ft)	64	93
Average Queue (ft)	30	44
95th Queue (ft)	56	74
Link Distance (ft)	1392	390
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

HCM 6th AWSC  
7: Stony Fort Road & Slocum Road

Build  
AM Peak

Intersection

Intersection Delay, s/veh 106.5  
Intersection LOS F

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Traffic Vol, veh/h	124	57	179	54	84	584
Future Vol, veh/h	124	57	179	54	84	584
Peak Hour Factor	0.55	0.39	0.86	0.83	0.75	0.78
Heavy Vehicles, %	4	4	1	2	4	1
Mvmt Flow	225	146	208	65	112	749
Number of Lanes	0	1	1	0	1	0
Approach	EB		WB		SB	
Opposing Approach	WB		EB			
Opposing Lanes	1		1		0	
Conflicting Approach Left	SB				WB	
Conflicting Lanes Left	1		0		1	
Conflicting Approach Right			SB		EB	
Conflicting Lanes Right	0		1		1	
HCM Control Delay	24.2		17		170.4	
HCM LOS	C		C		F	

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	69%	0%	13%
Vol Thru, %	31%	77%	0%
Vol Right, %	0%	23%	87%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	181	233	668
LT Vol	124	0	84
Through Vol	57	179	0
RT Vol	0	54	584
Lane Flow Rate	372	273	861
Geometry Grp	1	1	1
Degree of Util (X)	0.672	0.486	1.315
Departure Headway (Hd)	7.383	7.304	5.499
Convergence, Y/N	Yes	Yes	Yes
Cap	494	497	671
Service Time	5.383	5.304	3.499
HCM Lane V/C Ratio	0.753	0.549	1.283
HCM Control Delay	24.2	17	170.4
HCM Lane LOS	C	C	F
HCM 95th-tile Q	4.9	2.6	35

HCM 6th TWSC  
 15: Mooresfield Road & Stony Fort Road

Build  
 AM Peak

Intersection

Int Delay, s/veh 21.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	45	699	668	132	51	68
Future Vol, veh/h	45	699	668	132	51	68
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	81	73	70	65
Heavy Vehicles, %	15	3	2	1	7	4
Mvmt Flow	50	777	825	181	73	105

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	1006	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.25	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.335	-	-
Pot Cap-1 Maneuver	640	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	640	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	242.4
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	640	-	-	-	136
HCM Lane V/C Ratio	0.078	-	-	-	1.305
HCM Control Delay (s)	11.1	0	-	-	242.4
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0.3	-	-	-	11.2

HCM 6th TWSC  
21: Broad Rock Road & Mooresfield Road

Build  
AM Peak

Intersection

Int Delay, s/veh 12.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Vol, veh/h	618	10	67	669	13	126
Future Vol, veh/h	618	10	67	669	13	126
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	73	56	44	82	75	63
Heavy Vehicles, %	5	22	7	2	17	1
Mvmt Flow	847	18	152	816	17	200

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	865	0	1976
Stage 1	-	-	-	-	856
Stage 2	-	-	-	-	1120
Critical Hdwy	-	-	4.17	-	6.57
Critical Hdwy Stg 1	-	-	-	-	5.57
Critical Hdwy Stg 2	-	-	-	-	5.57
Follow-up Hdwy	-	-	2.263	-	3.653
Pot Cap-1 Maneuver	-	-	757	-	62
Stage 1	-	-	-	-	392
Stage 2	-	-	-	-	292
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	757	-	39
Mov Cap-2 Maneuver	-	-	-	-	39
Stage 1	-	-	-	-	392
Stage 2	-	-	-	-	185

Approach	EB	WB	NB
HCM Control Delay, s	0	1.7	108.4
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	217	-	-	757	-
HCM Lane V/C Ratio	1.002	-	-	0.201	-
HCM Control Delay (s)	108.4	-	-	10.9	0
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	9	-	-	0.7	-

Lanes, Volumes, Timings  
12: Kingstown Road & Mooresfield Road

Build  
AM Peak

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗		↖	↘	
Traffic Volume (vph)	366	310	50	460	578	61
Future Volume (vph)	366	310	50	460	578	61
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		200	0		0	0
Storage Lanes		1	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.986	
Flt Protected				0.995	0.957	
Satd. Flow (prot)	1792	1553	0	1837	1730	0
Flt Permitted				0.787	0.957	
Satd. Flow (perm)	1792	1553	0	1453	1730	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		383			14	
Link Speed (mph)	30			30	30	
Link Distance (ft)	1310			366	726	
Travel Time (s)	29.8			8.3	16.5	
Peak Hour Factor	0.83	0.81	0.72	0.75	0.85	0.79
Heavy Vehicles (%)	6%	4%	11%	2%	3%	9%
Adj. Flow (vph)	441	383	69	613	680	77
Shared Lane Traffic (%)						
Lane Group Flow (vph)	441	383	0	682	757	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2	1	1	2	1	
Detector Template	Thru	Right	Left	Thru	Left	
Leading Detector (ft)	100	20	20	100	20	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	6	20	20	6	20	
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	CI+Ex			CI+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA	Perm	Perm	NA	Prot	
Protected Phases	1			1	2	

Lanes, Volumes, Timings  
12: Kingstown Road & Mooresfield Road

Build  
AM Peak

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Permitted Phases		1	1			
Detector Phase	1	1	1	1	2	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	9.5	9.5	9.5	9.8	
Total Split (s)	24.5	24.5	24.5	24.5	30.8	
Total Split (%)	44.3%	44.3%	44.3%	44.3%	55.7%	
Maximum Green (s)	20.0	20.0	20.0	20.0	26.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.8	
Lead/Lag	Lead	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.6	2.6	2.6	2.6	2.6	
Recall Mode	Min	Min	Min	Min	None	
Act Effct Green (s)	20.0	20.0		20.0	25.0	
Actuated g/C Ratio	0.37	0.37		0.37	0.46	
v/c Ratio	0.67	0.47		1.27	0.94	
Control Delay	20.9	3.9		160.0	37.2	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay	20.9	3.9		160.0	37.2	
LOS	C	A		F	D	
Approach Delay	13.0			160.0	37.2	
Approach LOS	B			F	D	
Queue Length 50th (ft)	119	0		~299	213	
Queue Length 95th (ft)	183	31		#363	#389	
Internal Link Dist (ft)	1230			286	646	
Turn Bay Length (ft)		200				
Base Capacity (vph)	660	814		535	835	
Starvation Cap Reductn	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.67	0.47		1.27	0.91	

Intersection Summary

Area Type: Other  
 Cycle Length: 55.3  
 Actuated Cycle Length: 54.4  
 Natural Cycle: 80  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 1.27  
 Intersection Signal Delay: 65.4  
 Intersection Capacity Utilization 93.5%  
 Analysis Period (min) 15  
 Intersection LOS: E  
 ICU Level of Service F

~ 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.

Lanes, Volumes, Timings  
12: Kingstown Road & Mooresfield Road












Build  
AM Peak

Splits and Phases: 12: Kingstown Road & Mooresfield Road









Lanes, Volumes, Timings  
 11: Kingstown Road /Kingstown Road & Upper College Road

Build  
 AM Peak

						
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	53	434	518	191	123	41
Future Volume (vph)	53	434	518	191	123	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			100	0	0
Storage Lanes	0			1	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850	0.964	
Flt Protected		0.993			0.965	
Satd. Flow (prot)	0	1814	1827	1599	1728	0
Flt Permitted		0.863			0.965	
Satd. Flow (perm)	0	1577	1827	1599	1728	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				109	26	
Link Speed (mph)		30	30		30	
Link Distance (ft)		940	1310		427	
Travel Time (s)		21.4	29.8		9.7	
Peak Hour Factor	0.77	0.97	0.73	0.81	0.70	0.63
Heavy Vehicles (%)	4%	4%	4%	1%	2%	3%
Adj. Flow (vph)	69	447	710	236	176	65
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	516	710	236	241	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	1	1	
Detector Template	Left	Thru	Thru	Right	Left	
Leading Detector (ft)	20	100	100	20	20	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	20	6	6	20	20	
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		CI+Ex	CI+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Prot	
Protected Phases	5	2	6		3	

Lanes, Volumes, Timings  
 11: Kingstown Road /Kingstown Road & Upper College Road

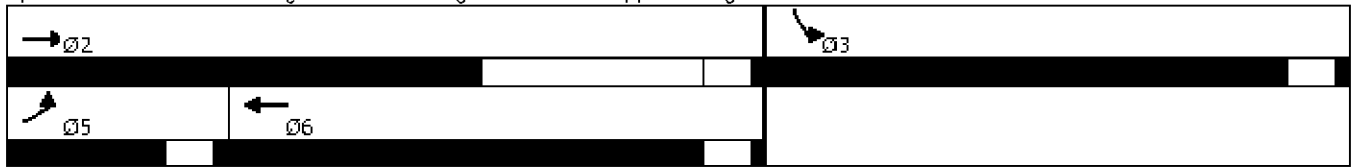
Build  
 AM Peak

						
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	2			6		
Detector Phase	5	2	6	6	3	
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.0	8.0	8.0	8.0	8.0	
Total Split (s)	14.0	34.0	34.0	34.0	37.0	
Total Split (%)	16.5%	40.0%	40.0%	40.0%	43.5%	
Maximum Green (s)	10.0	30.0	30.0	30.0	33.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	
Total Lost Time (s)		4.0	4.0	4.0	4.0	
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	2.4	2.4	2.4	2.4	2.4	
Recall Mode	None	Min	Min	Min	None	
Walk Time (s)			4.0	4.0		
Flash Dont Walk (s)			10.0	10.0		
Pedestrian Calls (#/hr)			5	5		
Act Effct Green (s)		33.9	33.9	33.9	11.3	
Actuated g/C Ratio		0.64	0.64	0.64	0.21	
v/c Ratio		0.51	0.61	0.22	0.62	
Control Delay		8.3	9.4	3.3	23.5	
Queue Delay		0.0	0.0	0.0	0.0	
Total Delay		8.3	9.4	3.3	23.5	
LOS		A	A	A	C	
Approach Delay		8.3	7.9		23.5	
Approach LOS		A	A		C	
Queue Length 50th (ft)		69	105	13	58	
Queue Length 95th (ft)		167	163	35	78	
Internal Link Dist (ft)		860	1230		347	
Turn Bay Length (ft)				100		
Base Capacity (vph)		1308	1164	1058	1084	
Starvation Cap Reductn		0	0	0	0	
Spillback Cap Reductn		0	0	0	0	
Storage Cap Reductn		0	0	0	0	
Reduced v/c Ratio		0.39	0.61	0.22	0.22	

Intersection Summary

Area Type: Other  
 Cycle Length: 85  
 Actuated Cycle Length: 53.2  
 Natural Cycle: 55  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.62  
 Intersection Signal Delay: 10.2  
 Intersection Capacity Utilization 72.4%  
 Analysis Period (min) 15  
 Intersection LOS: B  
 ICU Level of Service C

Splits and Phases: 11: Kingstown Road /Kingstown Road & Upper College Road



Intersection

Int Delay, s/veh 0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			4	4	
Traffic Vol, veh/h	5	1	26	379	174	54
Future Vol, veh/h	5	1	26	379	174	54
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	41	25	67	91	76	83
Heavy Vehicles, %	0	0	0	1	1	0
Mvmt Flow	12	4	39	416	229	65

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	756	262	294	0	-	0
Stage 1	262	-	-	-	-	-
Stage 2	494	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	379	782	1279	-	-	-
Stage 1	786	-	-	-	-	-
Stage 2	617	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	364	782	1279	-	-	-
Mov Cap-2 Maneuver	364	-	-	-	-	-
Stage 1	755	-	-	-	-	-
Stage 2	617	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.9	0.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1279	-	419	-	-
HCM Lane V/C Ratio	0.03	-	0.039	-	-
HCM Control Delay (s)	7.9	0	13.9	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

HCM 6th TWSC  
18: Old North Road & Flagg Road/Bean Farm Drive

Build  
AM Peak

Intersection

Int Delay, s/veh	5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	21	0	5	2	1	5	299	85	2	1	196	366
Future Vol, veh/h	21	0	5	2	1	5	299	85	2	1	196	366
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	25	63	50	25	63	85	86	50	25	73	82
Heavy Vehicles, %	0	0	0	0	0	0	0	3	50	0	1	1
Mvmt Flow	23	0	8	4	4	8	352	99	4	4	268	446

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1310	1306	491	1308	1527	101	714	0	0	103	0	0
Stage 1	499	499	-	805	805	-	-	-	-	-	-	-
Stage 2	811	807	-	503	722	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	137	161	582	138	119	960	895	-	-	1502	-	-
Stage 1	557	547	-	379	398	-	-	-	-	-	-	-
Stage 2	376	397	-	555	434	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	88	93	582	91	69	960	895	-	-	1502	-	-
Mov Cap-2 Maneuver	88	93	-	91	69	-	-	-	-	-	-	-
Stage 1	325	544	-	221	232	-	-	-	-	-	-	-
Stage 2	214	231	-	545	432	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	49.1		32.9		9		0	
HCM LOS	E		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	895	-	-	112	145	1502	-	-
HCM Lane V/C Ratio	0.393	-	-	0.279	0.11	0.003	-	-
HCM Control Delay (s)	11.6	0	-	49.1	32.9	7.4	0	-
HCM Lane LOS	B	A	-	E	D	A	A	-
HCM 95th %tile Q(veh)	1.9	-	-	1.1	0.4	0	-	-

HCM 6th TWSC  
27: Old North Road & Site Driveway

Build  
AM Peak

Intersection

Int Delay, s/veh 0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	5	4	107	2	1	665
Future Vol, veh/h	5	4	107	2	1	665
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	4	116	2	1	723

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	842	117	0
Stage 1	117	-	-
Stage 2	725	-	-
Critical Hdwy	6.42	6.22	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	-
Pot Cap-1 Maneuver	334	935	-
Stage 1	908	-	-
Stage 2	479	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	334	935	-
Mov Cap-2 Maneuver	334	-	-
Stage 1	908	-	-
Stage 2	479	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	468	1470
HCM Lane V/C Ratio	-	-	0.021	0.001
HCM Control Delay (s)	-	-	12.9	7.5
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

HCM 6th TWSC  
25: Site Driveway & Stony Fort Road

Build  
AM Peak

Intersection

Int Delay, s/veh 0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Vol, veh/h	146	3	1	762	10	7
Future Vol, veh/h	146	3	1	762	10	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	159	3	1	828	11	8

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	162
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.12
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.218
Pot Cap-1 Maneuver	-	-	1417
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1417
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	14.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	382	-	-	1417	-
HCM Lane V/C Ratio	0.048	-	-	0.001	-
HCM Control Delay (s)	14.9	-	-	7.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

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3: Old North Road & Stony Fort Road Performance by approach

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Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	7.4	0.4	5.7	4.3

Queuing and Blocking Report  
PM Peak

10/23/2023

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Intersection: 3: Old North Road & Stony Fort Road

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Movement	EB	NB
Directions Served	TR	LR
Maximum Queue (ft)	59	125
Average Queue (ft)	31	64
95th Queue (ft)	53	99
Link Distance (ft)	1392	401
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

HCM 6th AWSC  
7: Stony Fort Road & Slocum Road

Build  
PM Peak

Intersection

Intersection Delay, s/veh	30.4
Intersection LOS	D

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Traffic Vol, veh/h	374	137	37	134	129	188
Future Vol, veh/h	374	137	37	134	129	188
Peak Hour Factor	0.86	0.82	0.80	0.84	0.70	0.92
Heavy Vehicles, %	1	0	0	2	0	1
Mvmt Flow	435	167	46	160	184	204
Number of Lanes	0	1	1	0	1	0
Approach	EB		WB		SB	
Opposing Approach	WB		EB			
Opposing Lanes	1		1		0	
Conflicting Approach Left	SB				WB	
Conflicting Lanes Left	1		0		1	
Conflicting Approach Right			SB		EB	
Conflicting Lanes Right	0		1		1	
HCM Control Delay	44.9		11.3		18.1	
HCM LOS	E		B		C	

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	73%	0%	41%
Vol Thru, %	27%	22%	0%
Vol Right, %	0%	78%	59%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	511	171	317
LT Vol	374	0	129
Through Vol	137	37	0
RT Vol	0	134	188
Lane Flow Rate	602	206	389
Geometry Grp	1	1	1
Degree of Util (X)	0.935	0.32	0.625
Departure Headway (Hd)	5.591	5.595	5.793
Convergence, Y/N	Yes	Yes	Yes
Cap	644	638	618
Service Time	3.65	3.679	3.867
HCM Lane V/C Ratio	0.935	0.323	0.629
HCM Control Delay	44.9	11.3	18.1
HCM Lane LOS	E	B	C
HCM 95th-tile Q	12.6	1.4	4.3

HCM 6th TWSC  
15: Mooresfield Road & Stony Fort Road

Build  
PM Peak

Intersection

Int Delay, s/veh 211.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	97	679	567	76	141	118
Future Vol, veh/h	97	679	567	76	141	118
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	86	74	59	79
Heavy Vehicles, %	0	1	2	2	0	0
Mvmt Flow	108	754	659	103	239	149

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	762	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.1	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.2	-	-
Pot Cap-1 Maneuver	859	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	859	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	\$ 1095.7
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	859	-	-	-	119
HCM Lane V/C Ratio	0.125	-	-	-	3.263
HCM Control Delay (s)	9.8	0	-	-	\$ 1095.7
HCM Lane LOS	A	A	-	-	F
HCM 95th %tile Q(veh)	0.4	-	-	-	37.5

Notes

-: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

HCM 6th TWSC  
21: Broad Rock Road & Mooresfield Road

Build  
PM Peak

Intersection

Int Delay, s/veh 4.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Vol, veh/h	656	22	131	554	6	141
Future Vol, veh/h	656	22	131	554	6	141
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	72	78	94	50	80
Heavy Vehicles, %	2	0	2	1	0	0
Mvmt Flow	754	31	168	589	12	176

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	785	0	1695
Stage 1	-	-	-	-	770
Stage 2	-	-	-	-	925
Critical Hdwy	-	-	4.12	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	-	-	2.218	-	3.5
Pot Cap-1 Maneuver	-	-	834	-	103
Stage 1	-	-	-	-	460
Stage 2	-	-	-	-	389
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	834	-	72
Mov Cap-2 Maneuver	-	-	-	-	72
Stage 1	-	-	-	-	460
Stage 2	-	-	-	-	272

Approach	EB	WB	NB
HCM Control Delay, s	0	2.3	32.6
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	312	-	-	834	-
HCM Lane V/C Ratio	0.603	-	-	0.201	-
HCM Control Delay (s)	32.6	-	-	10.4	0
HCM Lane LOS	D	-	-	B	A
HCM 95th %tile Q(veh)	3.7	-	-	0.8	-

Lanes, Volumes, Timings  
12: Kingstown Road & Mooresfield Road

Build  
PM Peak

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗		↖	↘	
Traffic Volume (vph)	454	699	62	401	504	73
Future Volume (vph)	454	699	62	401	504	73
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		200	0		0	0
Storage Lanes		1	0		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.985	
Flt Protected				0.992	0.958	
Satd. Flow (prot)	1881	1599	0	1863	1773	0
Flt Permitted				0.598	0.958	
Satd. Flow (perm)	1881	1599	0	1123	1773	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		736			16	
Link Speed (mph)	30			30	30	
Link Distance (ft)	1310			366	726	
Travel Time (s)	29.8			8.3	16.5	
Peak Hour Factor	0.84	0.95	0.76	0.88	0.81	0.91
Heavy Vehicles (%)	1%	1%	2%	1%	1%	2%
Adj. Flow (vph)	540	736	82	456	622	80
Shared Lane Traffic (%)						
Lane Group Flow (vph)	540	736	0	538	702	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2	1	1	2	1	
Detector Template	Thru	Right	Left	Thru	Left	
Leading Detector (ft)	100	20	20	100	20	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	6	20	20	6	20	
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	CI+Ex			CI+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA	Perm	Perm	NA	Prot	
Protected Phases	1			1	2	

Lanes, Volumes, Timings  
12: Kingstown Road & Mooresfield Road

Build  
PM Peak

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Permitted Phases		1	1			
Detector Phase	1	1	1	1	2	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	9.5	9.5	9.5	9.8	
Total Split (s)	24.5	24.5	24.5	24.5	30.8	
Total Split (%)	44.3%	44.3%	44.3%	44.3%	55.7%	
Maximum Green (s)	20.0	20.0	20.0	20.0	26.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.8	
Lead/Lag	Lead	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	2.6	2.6	2.6	2.6	2.6	
Recall Mode	Min	Min	Min	Min	None	
Act Effct Green (s)	20.1	20.1		20.1	23.1	
Actuated g/C Ratio	0.38	0.38		0.38	0.44	
v/c Ratio	0.75	0.69		1.25	0.89	
Control Delay	24.0	5.4		154.2	29.4	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay	24.0	5.4		154.2	29.4	
LOS	C	A		F	C	
Approach Delay	13.2			154.2	29.4	
Approach LOS	B			F	C	
Queue Length 50th (ft)	154	0		~239	183	
Queue Length 95th (ft)	#265	60		#386	#270	
Internal Link Dist (ft)	1230			286	646	
Turn Bay Length (ft)		200				
Base Capacity (vph)	719	1066		429	890	
Starvation Cap Reductn	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	
Storage Cap Reductn	0	0		0	0	
Reduced v/c Ratio	0.75	0.69		1.25	0.79	

Intersection Summary

Area Type: Other  
 Cycle Length: 55.3  
 Actuated Cycle Length: 52.6  
 Natural Cycle: 75  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 1.25  
 Intersection Signal Delay: 47.9  
 Intersection Capacity Utilization 92.3%  
 Analysis Period (min) 15  
 Intersection LOS: D  
 ICU Level of Service F

~ 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.

Lanes, Volumes, Timings  
12: Kingstown Road & Mooresfield Road












Build  
PM Peak

Splits and Phases: 12: Kingstown Road & Mooresfield Road









Lanes, Volumes, Timings  
 11: Kingstown Road /Kingstown Road & Upper College Road

Build  
 PM Peak

						
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	24	667	545	112	528	43
Future Volume (vph)	24	667	545	112	528	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			100	0	0
Storage Lanes	0			1	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850	0.988	
Flt Protected		0.997			0.957	
Satd. Flow (prot)	0	1877	1863	1599	1780	0
Flt Permitted		0.778			0.957	
Satd. Flow (perm)	0	1464	1863	1599	1780	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				60	7	
Link Speed (mph)		30	30		30	
Link Distance (ft)		940	1310		427	
Travel Time (s)		21.4	29.8		9.7	
Peak Hour Factor	0.55	0.95	0.84	0.95	0.96	0.77
Heavy Vehicles (%)	0%	1%	2%	1%	1%	0%
Adj. Flow (vph)	44	702	649	118	550	56
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	746	649	118	606	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	1	2	2	1	1	
Detector Template	Left	Thru	Thru	Right	Left	
Leading Detector (ft)	20	100	100	20	20	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	20	6	6	20	20	
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94	94			
Detector 2 Size(ft)		6	6			
Detector 2 Type		CI+Ex	CI+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Prot	
Protected Phases	5	2	6		3	

Lanes, Volumes, Timings  
 11: Kingstown Road /Kingstown Road & Upper College Road

Build  
 PM Peak

						
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	2			6		
Detector Phase	5	2	6	6	3	
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	8.0	8.0	8.0	8.0	8.0	
Total Split (s)	14.0	34.0	34.0	34.0	37.0	
Total Split (%)	16.5%	40.0%	40.0%	40.0%	43.5%	
Maximum Green (s)	10.0	30.0	30.0	30.0	33.0	
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	
Total Lost Time (s)		4.0	4.0	4.0	4.0	
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	2.4	2.4	2.4	2.4	2.4	
Recall Mode	None	Min	Min	Min	None	
Walk Time (s)			4.0	4.0		
Flash Dont Walk (s)			10.0	10.0		
Pedestrian Calls (#/hr)			5	5		
Act Effct Green (s)		30.2	30.2	30.2	27.0	
Actuated g/C Ratio		0.46	0.46	0.46	0.41	
v/c Ratio		1.10	0.75	0.15	0.82	
Control Delay		88.4	23.3	7.4	26.7	
Queue Delay		0.0	0.0	0.0	0.0	
Total Delay		88.4	23.3	7.4	26.7	
LOS		F	C	A	C	
Approach Delay		88.4	20.9		26.7	
Approach LOS		F	C		C	
Queue Length 50th (ft)		~358	209	13	201	
Queue Length 95th (ft)		#605	#343	44	324	
Internal Link Dist (ft)		860	1230		347	
Turn Bay Length (ft)				100		
Base Capacity (vph)		994	862	772	909	
Starvation Cap Reductn		0	0	0	0	
Spillback Cap Reductn		0	0	0	0	
Storage Cap Reductn		0	0	0	0	
Reduced v/c Ratio		0.75	0.75	0.15	0.67	

Intersection Summary

Area Type: Other  
 Cycle Length: 85  
 Actuated Cycle Length: 65.3  
 Natural Cycle: 65  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 1.10  
 Intersection Signal Delay: 46.3  
 Intersection Capacity Utilization 93.1%  
 Analysis Period (min) 15  
 ~ Volume exceeds capacity, queue is theoretically infinite.

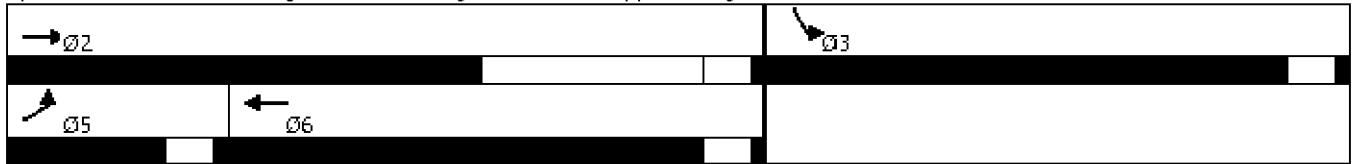
Intersection LOS: D  
 ICU Level of Service F

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: 11: Kingstown Road /Kingstown Road & Upper College Road



Intersection

Int Delay, s/veh 2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			4	4	
Traffic Vol, veh/h	43	10	22	255	163	16
Future Vol, veh/h	43	10	22	255	163	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	67	56	66	85	67	50
Heavy Vehicles, %	0	11	5	1	1	0
Mvmt Flow	64	18	33	300	243	32

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	625	259	275	0	-	0
Stage 1	259	-	-	-	-	-
Stage 2	366	-	-	-	-	-
Critical Hdwy	6.4	6.31	4.15	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.399	2.245	-	-	-
Pot Cap-1 Maneuver	452	758	1271	-	-	-
Stage 1	789	-	-	-	-	-
Stage 2	706	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	438	758	1271	-	-	-
Mov Cap-2 Maneuver	438	-	-	-	-	-
Stage 1	765	-	-	-	-	-
Stage 2	706	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14	0.8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1271	-	482	-	-
HCM Lane V/C Ratio	0.026	-	0.17	-	-
HCM Control Delay (s)	7.9	0	14	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.6	-	-

HCM 6th TWSC  
18: Old North Road & Flagg Road/Bean Farm Drive

Build  
PM Peak

Intersection

Int Delay, s/veh	50.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	260	0	106	3	2	0	65	193	2	2	81	88
Future Vol, veh/h	260	0	106	3	2	0	65	193	2	2	81	88
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	74	25	61	38	25	25	75	73	50	50	84	78
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	2	1
Mvmt Flow	351	0	174	8	8	0	87	264	4	4	96	113

Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	605	603	153	688	657	266	209	0	0	268	0	0
Stage 1	161	161	-	440	440	-	-	-	-	-	-	-
Stage 2	444	442	-	248	217	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	413	416	898	363	387	778	1374	-	-	1307	-	-
Stage 1	846	769	-	600	581	-	-	-	-	-	-	-
Stage 2	597	580	-	760	727	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	382	384	898	276	357	778	1374	-	-	1307	-	-
Mov Cap-2 Maneuver	382	384	-	276	357	-	-	-	-	-	-	-
Stage 1	783	766	-	556	538	-	-	-	-	-	-	-
Stage 2	545	537	-	610	724	-	-	-	-	-	-	-

Approach	EB		WB			NB			SB		
HCM Control Delay, s	104.7		17.2			1.9			0.1		
HCM LOS	F		C								

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1374	-	-	472	312	1307	-	-
HCM Lane V/C Ratio	0.063	-	-	1.113	0.051	0.003	-	-
HCM Control Delay (s)	7.8	0	-	104.7	17.2	7.8	0	-
HCM Lane LOS	A	A	-	F	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	17.7	0.2	0	-	-

HCM 6th TWSC  
27: Old North Road & Site Driveway

Build  
PM Peak

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		P			A
Traffic Vol, veh/h	3	3	443	5	4	172
Future Vol, veh/h	3	3	443	5	4	172
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	3	482	5	4	187

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	680	485	0	0	487
Stage 1	485	-	-	-	-
Stage 2	195	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	417	582	-	-	1076
Stage 1	619	-	-	-	-
Stage 2	838	-	-	-	-
Platoon blocked, %					
Mov Cap-1 Maneuver	415	582	-	-	1076
Mov Cap-2 Maneuver	415	-	-	-	-
Stage 1	619	-	-	-	-
Stage 2	835	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.5	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	485	1076
HCM Lane V/C Ratio	-	-	0.013	0.004
HCM Control Delay (s)	-	-	12.5	8.4
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

HCM 6th TWSC  
25: Site Driveway & Stony Fort Road

Build  
PM Peak

Intersection

Int Delay, s/veh 0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Vol, veh/h	511	9	4	225	6	4
Future Vol, veh/h	511	9	4	225	6	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	555	10	4	245	7	4

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	565	0	813
Stage 1	-	-	-	-	560
Stage 2	-	-	-	-	253
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1007	-	348
Stage 1	-	-	-	-	572
Stage 2	-	-	-	-	789
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1007	-	346
Mov Cap-2 Maneuver	-	-	-	-	346
Stage 1	-	-	-	-	572
Stage 2	-	-	-	-	785

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	14.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	401	-	-	1007	-
HCM Lane V/C Ratio	0.027	-	-	0.004	-
HCM Control Delay (s)	14.2	-	-	8.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

**Picerne Homes  
Fieldstone Farms Traffic Impact Analysis**

**APPENDIX D  
SIGHT LINES**

