

TRAFFIC IMPACT ANALYSIS

Pare Project No. 23149.00

Wampanoag Meadows-Commercial Development East Providence, Rhode Island

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Appendix B	Safety Data
Appendix C	Trip Generation & Distribution
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Introduction

The following represents the traffic study completed for the commercial development proposed on the Wampanoag Meadows property located at 1275 Wampanoag Trail, Map 711, Block3, Parcel 15 on the west side of Wampanoag Trail (Route 114) in East Providence, Rhode Island.

In 2020, Pare performed the traffic study for the 416-unit residential development, Wampanoag Meadows, which is currently under construction. That portion of the project when completed will be comprised of 224 1-bedroom units and 192 2-bedroom units in a total of eight (8) buildings. The proposed development has access via a new driveway on Wampanoag Trail (Route 114), approximately 700 feet south of Forbes Street and approximately 1,400 feet north of the East Providence/Barrington Town line. The access allows for right-in/right-out movements only, due to the presence of the center median on Wampanoag Trail. Based on prior coordination with RIDOT regarding the proposed site, the exit movement is currently designed as a 90-degree stop-controlled intersection. Additionally, a driveway for emergency access only has been constructed onto Hospital Road.

This portion of the project will include 3 new buildings. They are tentatively identified as the following:

- 2-story self-storage facility (total area: 59,092 +/- square feet)
- A 2,400 square foot restaurant
- A 3,600 square foot restaurant
- An 11,053 square foot retail building

In addition, the project will also include 6 residential homes which will have access from their lots to Hospital Road. These six homes will generate a small amount of additional traffic resulting in no safety or capacity issues on Hospital Road. An emergency gated access road will also be provided from the Wampanoag Meadows development through the residential units.

Presented within this study are existing conditions in the vicinity of the project site, a safety analysis of the study area, an analysis of the traffic based on existing, future 2028 no-build and future 2028 build conditions. Where required, mitigation measures have been proposed and discussed. A locus map of the study area is provided in Figure 1 and a conceptual plan for the site is provided in Figure 2.

Data Collection

Manual turning movement counts were completed on Wednesday, September 12, 2023 from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 6:00 p.m. Weekend counts were performed on Saturday, September 23, 2023 from 11:00 a.m. to 1:00 p.m. The counts were performed at the following intersections:

- Wampanoag Trail (Route 114)/Socony Road/Northern Turnaround on Wampanoag Trail
- Wampanoag Trail (Route 114) at Forbes Street
- Wampanoag Trail (Route 114)/Southern Turnaround on Wampanoag Trail (in Barrington, RI)



Automatic Traffic Recorder counts, including volumes and classification and speed data were also collected on Wednesday September 13, 2023 through Friday September 15, 2023 on Wampanoag Trail north of 1200 Wampanoag Trail and south of 1275 Wampanoag Trail. A copy of all count data is provided in Appendix A.

The City of East Providence Planning Department was contacted to determine if there is any other development proposed or approved in the area that should be included in the no-build condition. There are no other known developments at this time.

Crash data for the roadway network in the vicinity of the project site was requested and received from the City of East Providence Police Department and the Town of Barrington Police Department for the period from January 2020 to December 2023. A summary of the crash data is provided in Appendix B. Detailed reports can be provided upon request.

A field review of the area was conducted, with geometric measurements and other field observations recorded at the significant intersections in the vicinity of the project site. The information obtained was used in the analysis of the study area intersections.





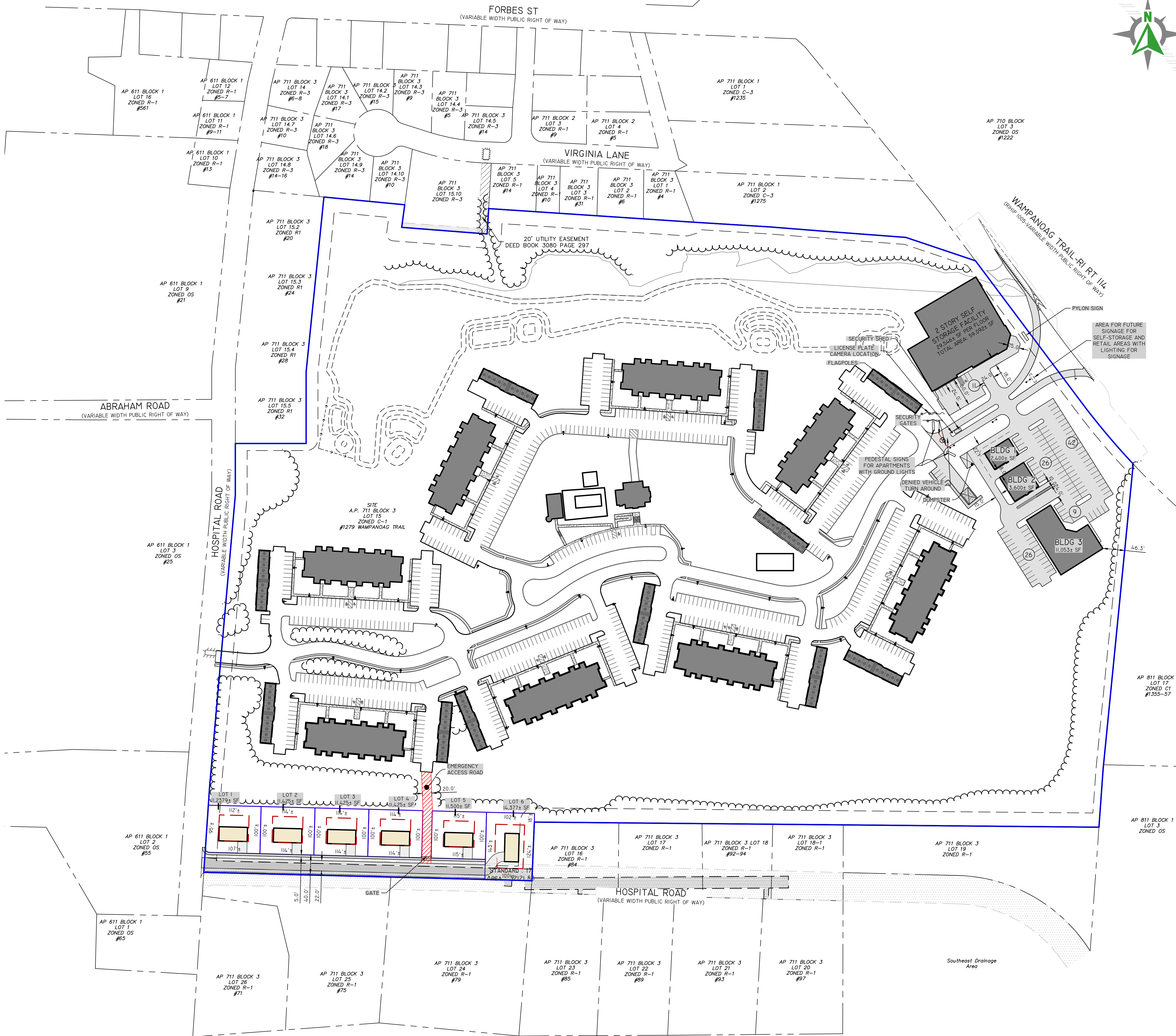
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PROJECT NO. 23149.00

DATE: SEPTEMBER 2023

FIGURE 1
LOCUS MAP
WAMPANOAG MEADOWS
COMMERCIAL DEVELOPMENT
EAST PROVIDENCE, RHODE ISLAND



DEVELOPMENT DATA:

TOTAL SITE AREA:	53.20 ACRES
TOTAL NUMBER OF 1 BEDROOM APARTMENT UNITS:	224 UNITS
TOTAL NUMBER OF 2 BEDROOM APARTMENT UNITS:	192 UNITS
GRAND TOTAL APARTMENT UNITS:	416 UNITS
DENSITY OF APARTMENT UNITS:	7.82 UNITS PER ACRE

DIMENSIONAL REGULATIONS:

	REQUIRED	PROVIDED
ZONING EXISTING:	COMMERCIAL 1	COMMERCIAL 1
MINIMUM LOT AREA:	10,000 SF	2,316,979 SF (53.2 AC)
MINIMUM FRONTAGE/LOT WIDTH:	100'	544'
MINIMUM FRONT YARD:	20'	25.3'
MINIMUM SIDE YARD:	15'	37.7'
MINIMUM REAR YARD:	25'	124.2'
MAXIMUM BUILDING COVERAGE:	35% (18.62 AC.)	12.0% (6.4 AC.)
MAXIMUM IMPERMEABLE COVERAGE:	55% (29.26 AC.)	33.7% (17.9 AC.)
MAXIMUM HEIGHT:	57.5'	30'
MAXIMUM STORIES:	4	2
USEABLE LOT AREA***:	18.9 AC	53.2 AC

*FRONT, SIDE, AND REAR YARD SETBACKS INCREASED 5 FEET PER ZONING SECTION 19-217-A
**INCREASED HEIGHT AND STORIES APPROVED BY EAST PROVIDENCE ZONING BOARD ON SEPTEMBER 21, 2020
***SCHEDULE FOR MULTIFAMILY DWELLING USABLE LOT AREA BASED ON ZONING SECTION 19-218.

DIMENSIONAL REGULATIONS:

	REQUIRED	PROVIDED
ZONING:	RESIDENTIAL 2	RESIDENTIAL 2
MINIMUM LOT AREA:	10,000 SF	>10,000 SF
MINIMUM FRONTAGE/LOT WIDTH:	100'	>100'
MINIMUM FRONT YARD:	25'	25'
MINIMUM SIDE YARD:	20'	20'
MINIMUM REAR YARD:	25'	25'
MAXIMUM BUILDING COVERAGE:	25%	18%
MAXIMUM HEIGHT:	35'	30'
MAXIMUM STORIES:	2	2

PARKING DATA

PARKING USE:	RETAIL / EATING OR DRINKING ESTABLISHMENTS
EATING PARKING REQUIREMENT:	1 SPACE FOR EACH 3 SEATS PROVIDED FOR PATRON USE, 1 SPACE FOR EACH 2 EMPLOYEES
RETAIL PARKING REQUIREMENT:	1 SPACE PER 200 SF (GFA) PLUS 1 SPACE FOR EACH TWO EMPLOYEES

BUILDING 1	
RESTAURANT SQUARE FOOTAGE:	2,400 SF
NUMBER OF EMPLOYEES:	8
NUMBER OF SEATS:	40
REQUIRED PARKING CALCULATION:	1 SPACE / 3 SEATS + 1 / 2 EMPLOYEES 40 / 3 = 13.3 + 8 / 2 = 17.5 = 18 SPACES

BUILDING 2	
RESTAURANT SQUARE FOOTAGE:	3,600 SF
NUMBER OF EMPLOYEES:	8
NUMBER OF SEATS:	40
REQUIRED PARKING CALCULATION:	1 SPACE / 3 SEATS + 1 / 2 EMPLOYEES 40 / 3 = 13.3 + 8 / 2 = 17.5 = 18 SPACES

BUILDING 3	
RETAIL SQUARE FOOTAGE:	11,053 SF
REQUIRED PARKING CALCULATIONS:	11,053 X 1/200 = 55.2 = 56 SPACES

TOTAL	
TOTAL PARKING SPACES REQUIRED:	92
ADA PARKING PROVIDED:	5 SPACES
TOTAL PARKING SPACES PROVIDED:	103 SPACES

PARKING USE:	WAREHOUSE (SELF STORAGE)
PARKING REQUIREMENT:	1 SPACE FOR EACH 2 EMPLOYEES OR AT MIN. 1 SPACE FOR EACH 5,000 SF OF GFA
ADA PARKING REQUIRED:	1 SPACES
BUILDING 1 SQUARE FOOTAGE (GFA):	59,092 SF
REQUIRED PARKING CALCULATIONS:	59,092 X 1/5000 = 11.8 = 12 SPACES
ADA PARKING PROVIDED:	1 SPACES
TOTAL PARKING SPACES PROVIDED:	8 SPACES

GENERAL NOTES:

- THE SITE IS PROPOSED TO BE BUILT IN (1) PHASE.
- THE SITE IS TO BE SERVED BY PUBLIC WATER AND PUBLIC SEWER.
- THE DRAINAGE SYSTEM DESIGNED WILL MEET THE CITY OF EAST PROVIDENCE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS WITH THE USE OF CATCH BASINS, CULVERTS, AND UNDERGROUND DRAINAGE BASINS. THE STORMWATER MANAGEMENT SYSTEM WILL MEET THE RIDEM BEST MANAGEMENT PRACTICES.
- DETAILED SOIL EROSION AND SEDIMENT CONTROL MEASURES TO BE INCORPORATED AT THE PRELIMINARY DESIGN STAGE AND WILL CONFORM TO THE RIDEM BEST MANAGEMENT PRACTICES.

PROPOSED LEGEND

NOT ALL ITEMS SHOWN WILL APPEAR ON PLANS

---	PROPERTY LINE
---	BUILDING SETBACKS
---	RETAINING WALL
---	BUILDING FOOTPRINT
---	RESIDENTIAL BUILDING FOOTPRINT
---	BUILDING OVERHANG
---	ASPHALT PAVEMENT
---	CONCRETE

SCALE: 1"=100'
0 50' 100' 200'

SITE LAYOUT PLAN

WAMPANOAG MEADOWS
ASSESSOR'S PLAT 711 BLOCK 3, LOT 15
1279 WAMPANOAG TRAIL, EAST PROVIDENCE, RHODE ISLAND 02903
PREPARED BY:
DRISCOLL DEVELOPMENT, LLC
940 QUAKER LANE, WARWICK, RHODE ISLAND 02886

Existing Roadway Conditions

The study area is defined as the significant roadways and intersections in the vicinity of the proposed site that may be impacted by the traffic due to the construction of the proposed Wampanoag Meadows development. Included in the study area for the proposed development is Wampanoag Trail (Route 114) from the northern turnaround, approximately 0.5 miles north of Forbes Road, to the southern turnaround, approximately 1 mile south of Forbes Road.

Wampanoag Trail (Route 114)

Wampanoag Trail (Route 114) is a north/south roadway that provides access from I-95 in Providence and East Providence to Barrington. The roadway is a state-owned and maintained roadway and is classified as an Urban Freeway/Expressway from I-95 to just north of Massasoit Avenue in Barrington.

Wampanoag Trail (Route 114) typically has two travel lanes in each direction with a raised grass median separating northbound and southbound traffic. Because there is a raised median, motorists along the roadway are prohibited from making left turns. To facilitate travel in the opposite direction, three turnarounds are located along the roadway within the study area. The first, referred to in this report as the northern turnaround, is located approximately 0.5 miles north of Forbes Road. The second, referred to as the center turnaround, is located approximately 0.29 miles south of Forbes Road. The third, referred to as the southern turnaround, is located approximately 1.10 miles south of Forbes Road. Acceleration and/or deceleration lanes are provided at all turnarounds.



Photo 1: Wampanoag Trail (Route 114) looking northbound from proposed site access.

The travel lanes along the corridor vary from 12 - 13 feet wide in both directions. The outside shoulders are approximately 10 feet, and the inside shoulders vary from approximately 1- 3 feet. The wide outside shoulders are often used by motorists accessing the roadway from adjacent driveways as acceleration and deceleration lanes. The posted speed limit along the corridor is 45 miles per hour, and land use is primarily commercial with some residential.



Photo 2: Wampanoag Trail (Route 114) at Forbes Street

Wampanoag Trail (Route 114) at Forbes Street

Forbes Street intersects Wampanoag Trail (Route 114) from the west to form an unsignalized, three-intersection. Forbes Street is stop controlled at the intersection, while Wampanoag Trail (Route 114) operates freely. Due to the raised median along Wampanoag Trail (Route 114), access to or egress from Forbes Street is through right turns only and is signed accordingly. Forbes Street motorists must use the available turnarounds on Wampanoag Trail (Route 114) to change direction. At the intersection, Wampanoag Trail (Route 114) has two 13-foot-wide southbound travel lanes, with an approximate 20-foot-wide outside lane north of the intersection to allow deceleration for a right turn onto Forbes Street. This off-ramp onto Forbes Street has an advisory speed of 25 miles per hour. Forbes Street is comprised of two 13-



foot-wide travel lanes separated by a solid double yellow line. At the intersection, the eastbound and westbound lanes on Forbes Street are separated by a large grass median. Shoulders along Forbes Street are approximately 5-feet wide which narrow to a varying width from approximately 1 – 3 in the vicinity of the intersection. Prior to its intersection with Forbes Street, the west shoulder on Wampanoag Trail (Route 114) reduces from a 10-foot shoulder to a 3-foot shoulder before widening back to a 10-foot-wide shoulder south of the intersection. All approaches to the intersection have existing concrete curbing and no sidewalk.

Wampanoag Trail (Route 114)/Socony Trail/Northern Turnaround on Wampanoag Trail

In the vicinity of the northern turnaround, Wampanoag Trail is comprised of two 12.5-wide travel lanes with a deceleration lane located on the northbound side and acceleration lane on the southbound side. The acceleration and deceleration lanes will be expressed in more detail below. A 10-foot shoulder exists on both sides of the roadway on the outside and a varying shoulder of widths from 1 – 3 exists on the inside. Socony Road is located just south of the turnaround.

Heading south on Wampanoag Trail, within the merge lane from the turnaround on Wampanoag Trail is a slip ramp to provide access to Socony Road. Approximately 225 feet further south of the entrance ramp to Socony Road is a enter ramp that allows merge traffic onto Wampanoag trail.



Photo 3: Wampanoag Trail (Route 114) at Northern Turnaround

The northern turnaround on Wampanoag Trail (Route 114) within the study area is located approximately 0.5 mile north of Forbes Street. This turnaround provides the opportunity for northbound traffic on Wampanoag Trail (Route 114) to switch direction and travel southbound along the roadway. The deceleration lane provided for northbound traffic is approximately 12-feet wide and 240 feet long, while the acceleration lane provided for southbound traffic is approximately 12-feet wide and 200 feet long. The northern turnaround itself is comprised of one 20-foot lane with a 3-foot shoulder on the inside closest to the median. Curbing exists along all approaches with the exception of the east side of Wampanoag Trail (Route 114).



Photo 5: Wampanoag Trail (Route 114) at Southern Turnaround

Wampanoag Trail (Route 114) at the Southern Turnaround

In the vicinity of the southern turnaround, Wampanoag Trail is comprised of two 12.5-wide travel lanes with a deceleration lane located on the northbound side and acceleration lane on the southbound side. The acceleration and deceleration lanes will be expressed in more detail below. A 10-foot shoulder exists on both sides of the roadway on the outside and a varying shoulder of widths from 1-3 feet exists on the inside. The southern turnaround on Wampanoag Trail (Route 114) within the study area is located approximately 1.10 miles south of Forbes Street. This turnaround provides the opportunity for both northbound and southbound motorists to change directions. As it would not be used by residents of Wampanoag Meadows, the northbound to southbound portion of this turnaround was not included in this study. For the southbound to northbound turnaround, an approximate 12-foot wide and 225-foot-long deceleration lane is provided on the southbound



side, and an approximate 12-foot wide and 200-foot acceleration lane is provided on the northbound side. The southern turnaround itself is comprised of one 19-foot lane with an 8-foot shoulder on the inside closest to the median. Curbing exists along all approaches of the intersection.

Existing Traffic Volumes

Based on the traffic counts completed, the following peak hours were recorded:

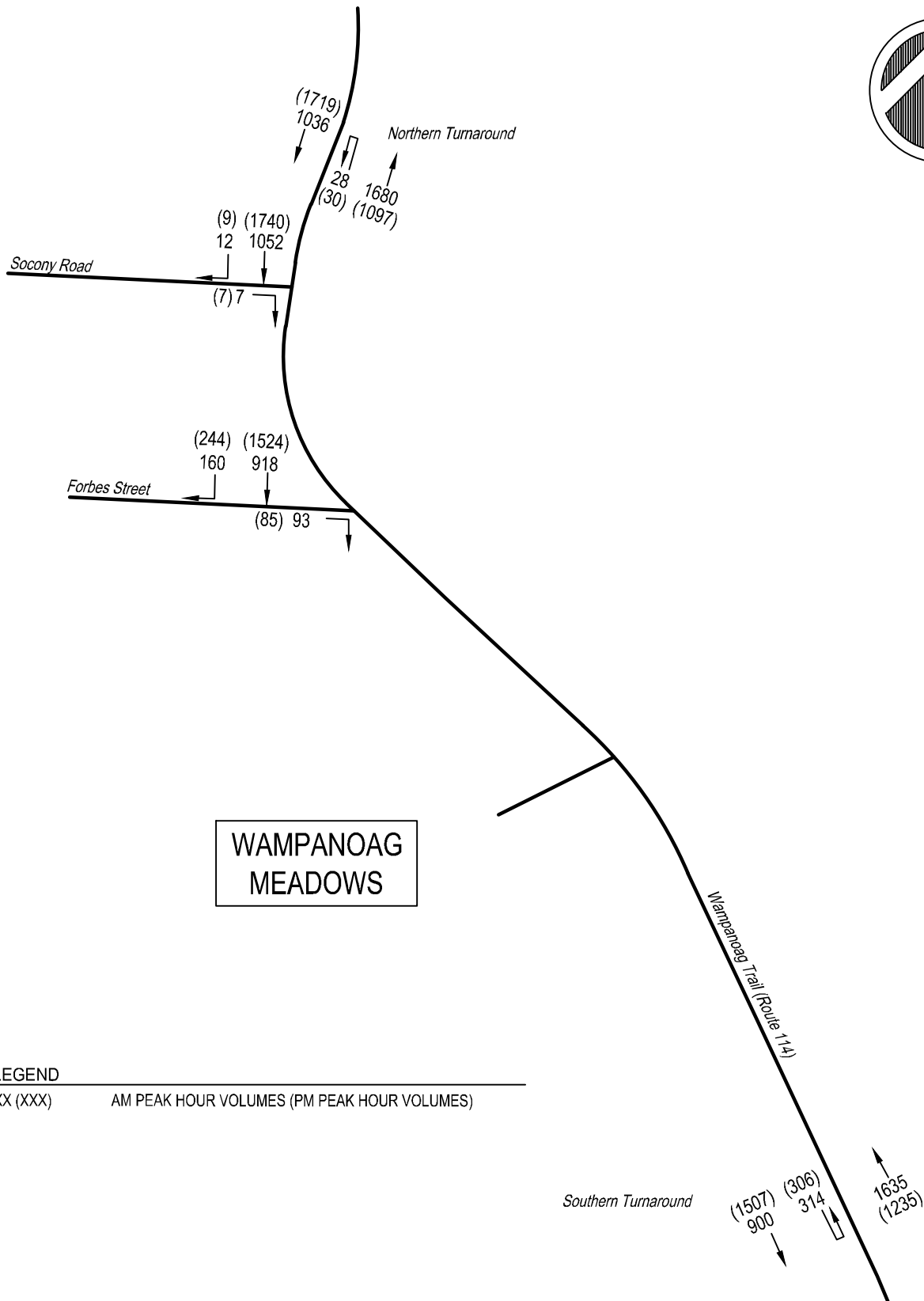
Table 1: Intersection Peak Hours

	Weekday AM Peak Hour	Weekday PM Peak Hour	Saturday Peak Hour
Wampanoag Trail/Socony Road/Northern Turnaround	7:15 a.m. to 8:15 a.m.	4:45 p.m. to 5:45 p.m.	12:00 p.m. to 1:00 p.m.
Wampanoag Trail/Forbes Street	7:15 a.m. to 8:15 a.m.	4:30 p.m. to 5:30 p.m.	12:00 p.m. to 1:00 p.m.
Wampanoag Trail/Southern Turnaround	7:45 a.m. to 8:45 a.m.	4:15 p.m. to 5:15 p.m.	12:00 p.m. to 1:00 p.m.

The need for seasonal adjustments was considered. The study area is not considered a tourist location. Additionally, school was in regular session at the time of the traffic counts. Therefore, no adjustments were applied to the existing volumes.

To be conservative, the existing peak hours of traffic were used for the capacity analysis at intersections. The existing a.m. and p.m. peak hour traffic volumes are shown in Figure 3 and the existing Saturday midday peak hour volumes are shown in Figure 4.





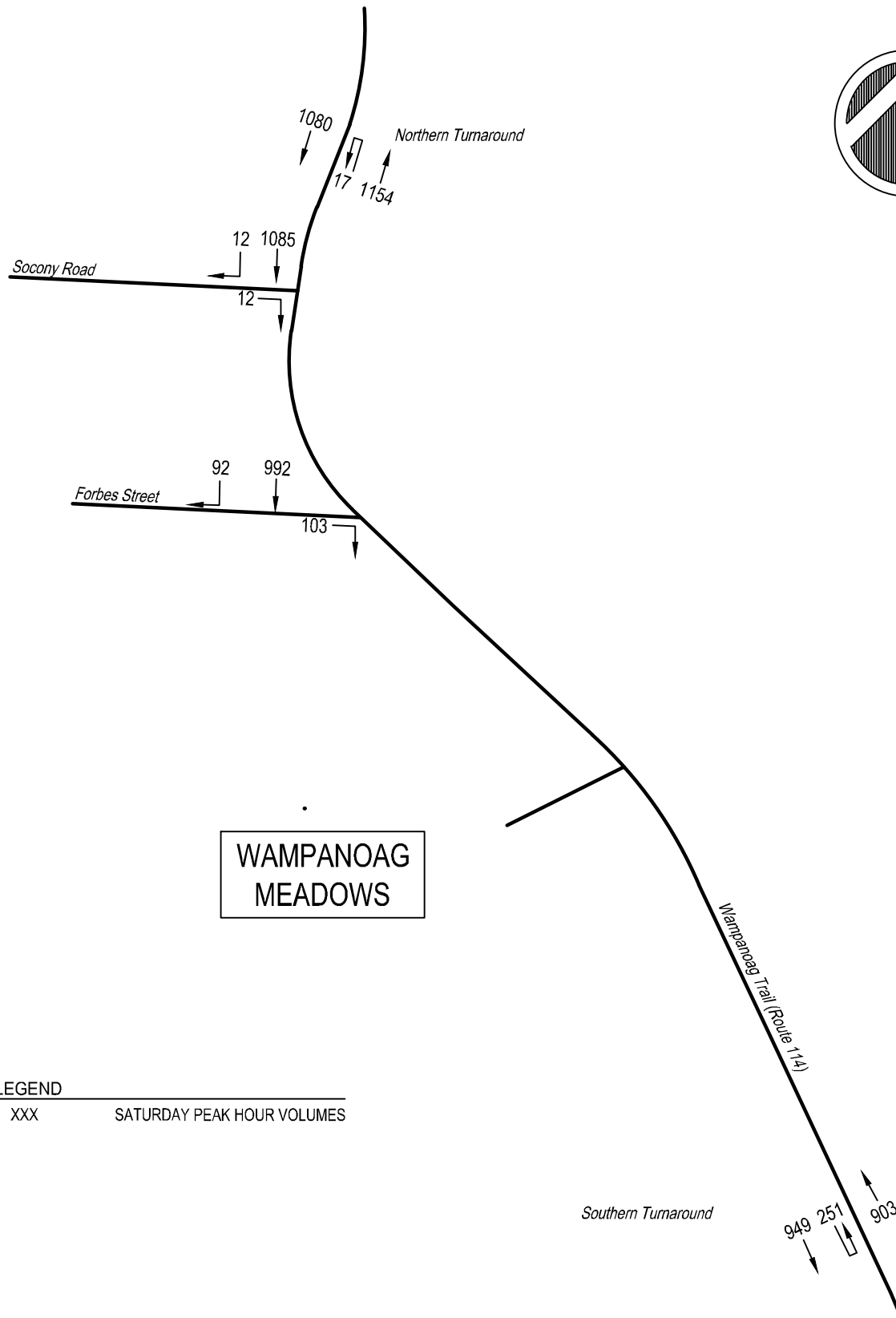
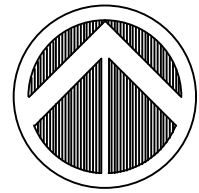
LEGEND
XXX (XXX) AM PEAK HOUR VOLUMES (PM PEAK HOUR VOLUMES)



PROJECT NO. 23149.00

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FIGURE 3
2023 EXISTING VOLUMES - WEEKDAY
WAMPANOAG MEADOWS
COMMERCIAL DEVELOPMENT
EAST PROVIDENCE, RHODE ISLAND



LEGEND

XXX

SATURDAY PEAK HOUR VOLUMES



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FIGURE 4
2023 EXISTING VOLUMES - SATURDAY
WAMPANOAG MEADOWS
COMMERCIAL DEVELOPMENT
EAST PROVIDENCE, RHODE ISLAND

Safety Analysis

Crash Data

Crash data obtained from the East Providence Police Department and the Barrington Police Department for the period from January 2020 through August 2023 (44 months) was reviewed for the roadway network surrounding the project site.

Table 2: Crash Summary

Roadway/Intersection	Total Crashes	Crash Severity			Crash Type			
		PDO	Non-Fatal Injury	Fatal Injury	Angle	Rear End	Sideswipe, Same Direction	Loss of Control/Object
Wampanoag Trail	15	14	1	0	2	3	0	10
Forbes Street/ Wampanoag Trail	3	3	0	0	0	2	0	1
Wampanoag Trail/ Mink Street	25	23	2	0	2	19	2	2
Wampanoag Trail/ Reardon Avenue	6	4	2	0	1	3	2	0
Wampanoag Trail/ Mohawk Drive	2	2	0	0	0	1	0	1
Wampanoag Trail/ President Avenue	1	0	1	0	1	0	0	0
Wampanoag Trail/ Argyle Avenue	4	4	0	0	0	2	1	1

PDO = Property Damage Only

Between the areas in the vicinity of Mink Street and the southern turnaround, an approximate 2.1 miles length of roadway, 56 crashes were reported, 6 of which involved an injury. Only 6 of the 56 crashes resulted in an injury, and 6 occurred on a wet or snowy roadway and 1 was during foggy conditions.

Of the reported crashes, 8 were single-vehicle loss of control, 4 were single-vehicle collisions with an animal (three deer, one coyote), 30 were rear-end crashes, 5 were sideswipes in the same direction, 6 were angle crashes, and 1 was a motorist collision with an object. Many of the crashes, 19 of 56, involved a rear end collision at the Wampanoag Trail/Mink Street intersection. The rear end collisions are typically the result of drivers not paying attention.

Fifteen of the 56 reported crashes occurred at various addresses along Wampanoag Trail (Route 114). Overall, the severity of the crashes is low and based on the traffic volumes, the frequency of crashes is not excessive.

A summary table of all crash data reviewed is provided in Appendix B.



Sight Distance

A spot speed study was performed for the southbound direction of Wampanoag Trail (Route 114) north of the Wampanoag Meadows development entrance, in the vicinity of 1275 Wampanoag Trail. The data collected is summarized in the table below. The full speed study is included in Appendix A.

Table 3: Speed Data Results for Wampanoag Trail (Route 114)

	Posted Speed	Average Speed	True Median (50th Percentile)	85th Percentile	10 MPH Pace	% over 45 MPH
Southbound	45	47	47	53	46-55	66

Based on the spot speed study performed, a design speed of 55 miles per hour was selected for Wampanoag Trail (Route 114), which is greater than the posted 45 mile per hour speed limit. 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 minimum safe stopping sight distance for a 55 mile per hour speed is 495 feet and for a 45 mile per hour speed is 360 feet. The minimum required intersection sight distance for a right turn from stop for a 55 mile per hour speed is 530 feet and for a 45 mile per hour speed is 430 feet.

From the proposed Wampanoag Meadows site egress, the available stopping sight distance and intersection sight distance is greater than 600 feet, assuming minor clearing at the front of the site that will be necessary to construct the proposed layout. The stopping sight distance and intersection sight distance for both the posted speed and the selected design speed meet the requirements set forth by AASHTO. There are minor obstacles such as utility poles, overhanging tree branches and signage that slightly hinder the motorist vision; however, vehicles are still visible through these obstacles.

Future Conditions

To account for background growth within the vicinity of the project, the existing traffic volumes were projected over a five-year horizon from 2023 to 2028. Recent Census data for the City of East Providence and the Town of Barrington was reviewed to determine the appropriate growth rate. Historic data showed an annual decrease in population in East Providence but an increase in Barrington.

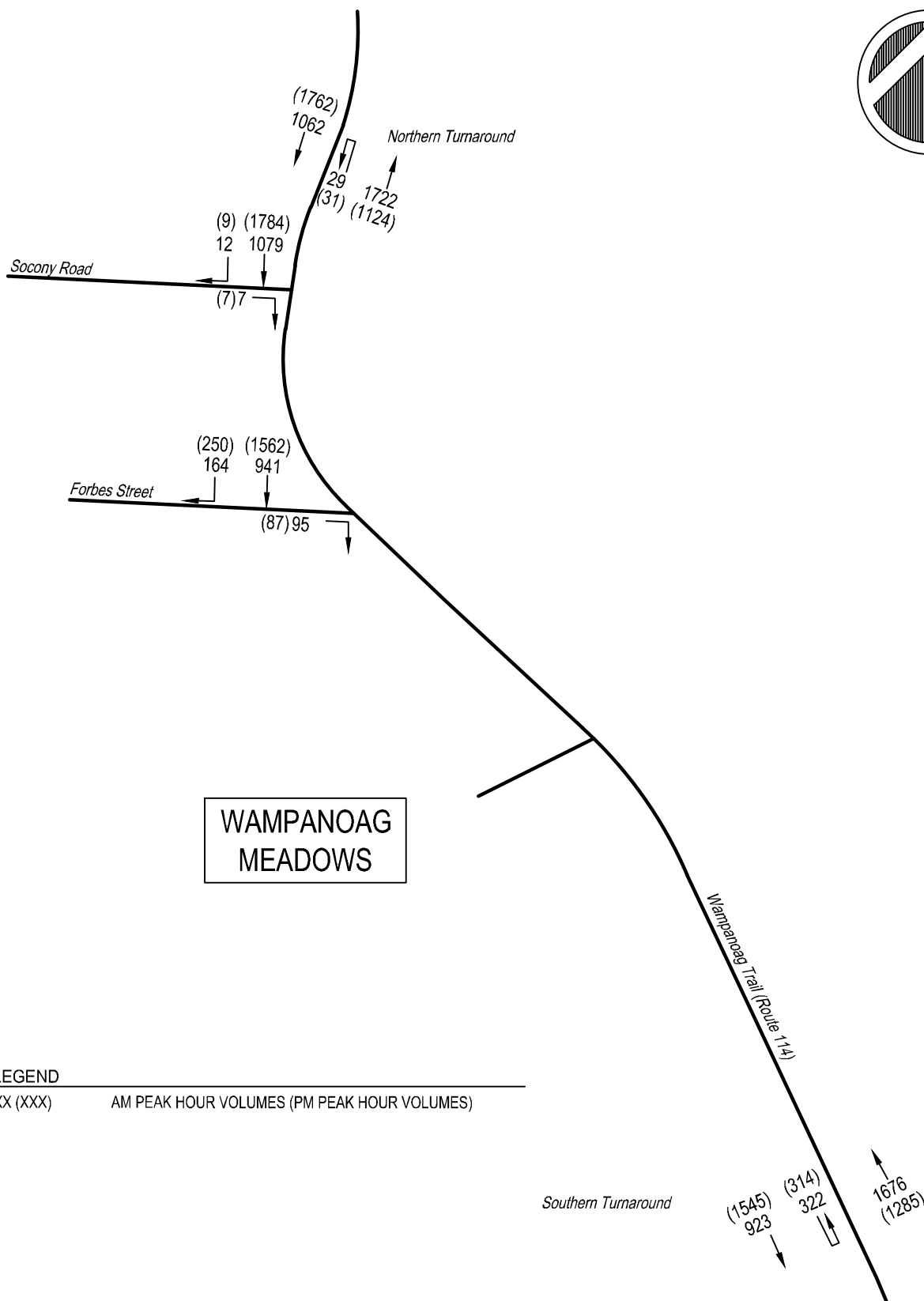
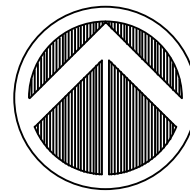
Table 4: Background Growth Factors

	East Providence	Barrington
2010	47037	16310
2020		17153
2022	46691	
Difference	-346	843
Percentage	-.074%	0.517%

To remain conservative, for the purpose of this study, we used the more conservative growth rate of 0.517%.

Future No-Build condition traffic volumes for the morning and afternoon peak hours are provided in Figure 5 and the Saturday peak hour volumes are in Figure 6.

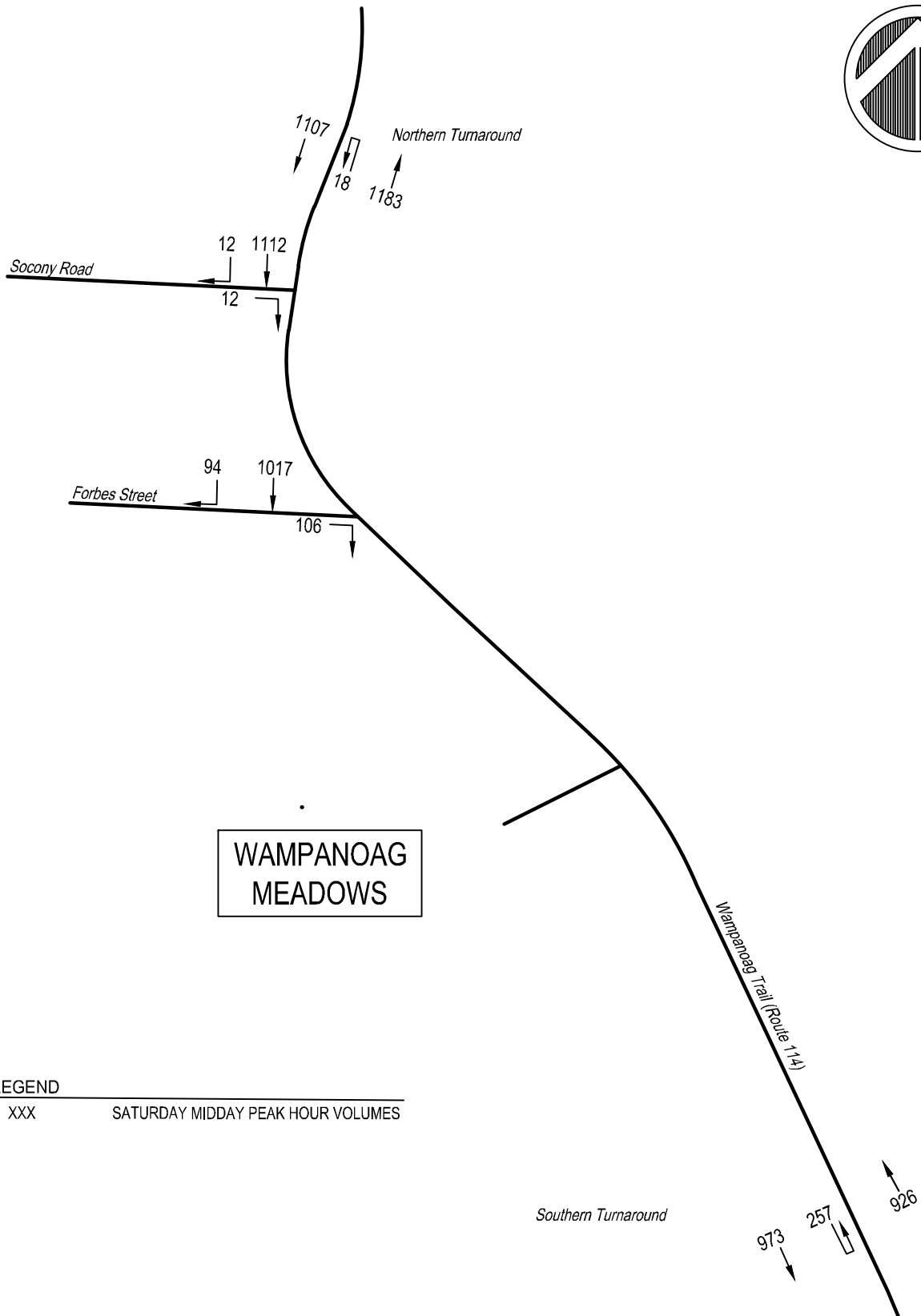
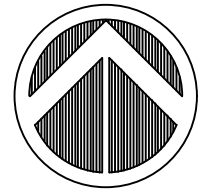




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FIGURE 5
2028 FUTURE NO-BUILD VOLUMES - WEEKDAY
WAMPANOAG MEADOWS
COMMERCIAL DEVELOPMENT
EAST PROVIDENCE, RHODE ISLAND



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FIGURE 6
2028 FUTURE NO-BUILD VOLUMES-SATURDAY
WAMPANOAG MEADOWS
COMMERCIAL DEVELOPMENT
EAST PROVIDENCE, RHODE ISLAND

Build Conditions

The future 2028 build condition represents the future 2028 no-build condition plus the traffic expected to be generated by the construction of the proposed development.

Trip Generation

The number of new trips expected by the proposed 416-unit Wampanoag Meadows development was estimated using the latest edition of the industry standard Institute of Transportation Engineers (ITE) *Trip Generation Manual*. Trip generation calculations for the proposed development were completed utilizing the appropriate Land Use Codes identified in Table 5 below, for the weekday morning and afternoon peak hours and the Saturday midday peak hour. Values calculated for the peak hour of adjacent street traffic and as well as the peak of the generator were compared, and the more conservative value was chosen.

A summary of the trip generations is provided in Table 5 below, and complete trip generation calculations are provided in Appendix C.

Table 5: Trip Generation Summary

		Weekday	AM Peak Hour	PM Peak Hour	Saturday Peak Hour
LUC 220 – Multifamily Housing (Mid Rise) (416 units)	Entering	944	40	126	85
	Exiting	944	126	73	86
	Total	1889	166	199	171
LUC 932-High Turnover (Sit-Down) Restaurant (2,400 s.f.)	Entering	129	13	13	14
	Exiting	128	10	9	13
	Total	257	23	22	27
LUC 931 – Fine Dining Restaurant (3,600 s.f.)	Entering	151	3	19	23
	Exiting	151	-	9	15
	Total	302	3	28	38
LUC 822 – Strip Retail Plaza (11,053 s.f.)	Entering	348	18	42	37
	Exiting	348	13	42	36
	Total	696	31	84	73
LUC 151 – Mini Warehouse (Self Storage) (59,092 s.f.)	Entering	43	3	4	6
	Exiting	43	2	5	4
	Total	86	5	9	10

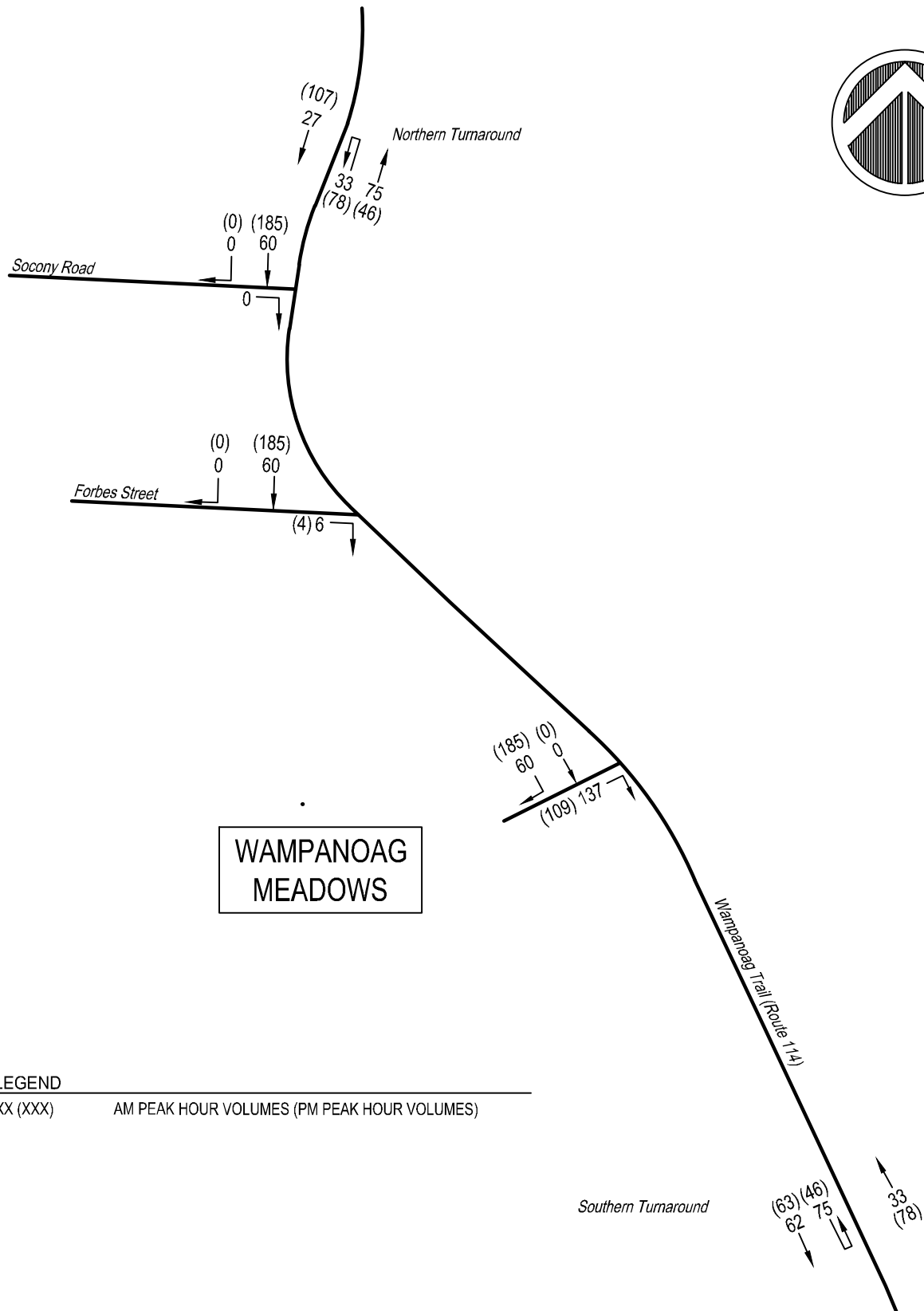
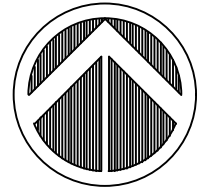


Trip Distribution

Trip distribution was completed for the Wampanoag Meadows development by adding the proposed traffic into the existing traffic stream based on the existing travel patterns in the study area. Because of the raised median on Wampanoag Trail (Route 114), the proposed site entrance will allow only right-in and right-out movements. To change directions, residents of Wampanoag Meadows will be required to use one of the existing turnarounds north and south of the site along Wampanoag Trail.

The site-generated trips and distribution are shown in Figure 7 and Figure 8 which are added to the Future Non-Build conditions to obtain the Future Build Conditions. The Future Build Conditions are shown in Figure 9 and Figure 10.





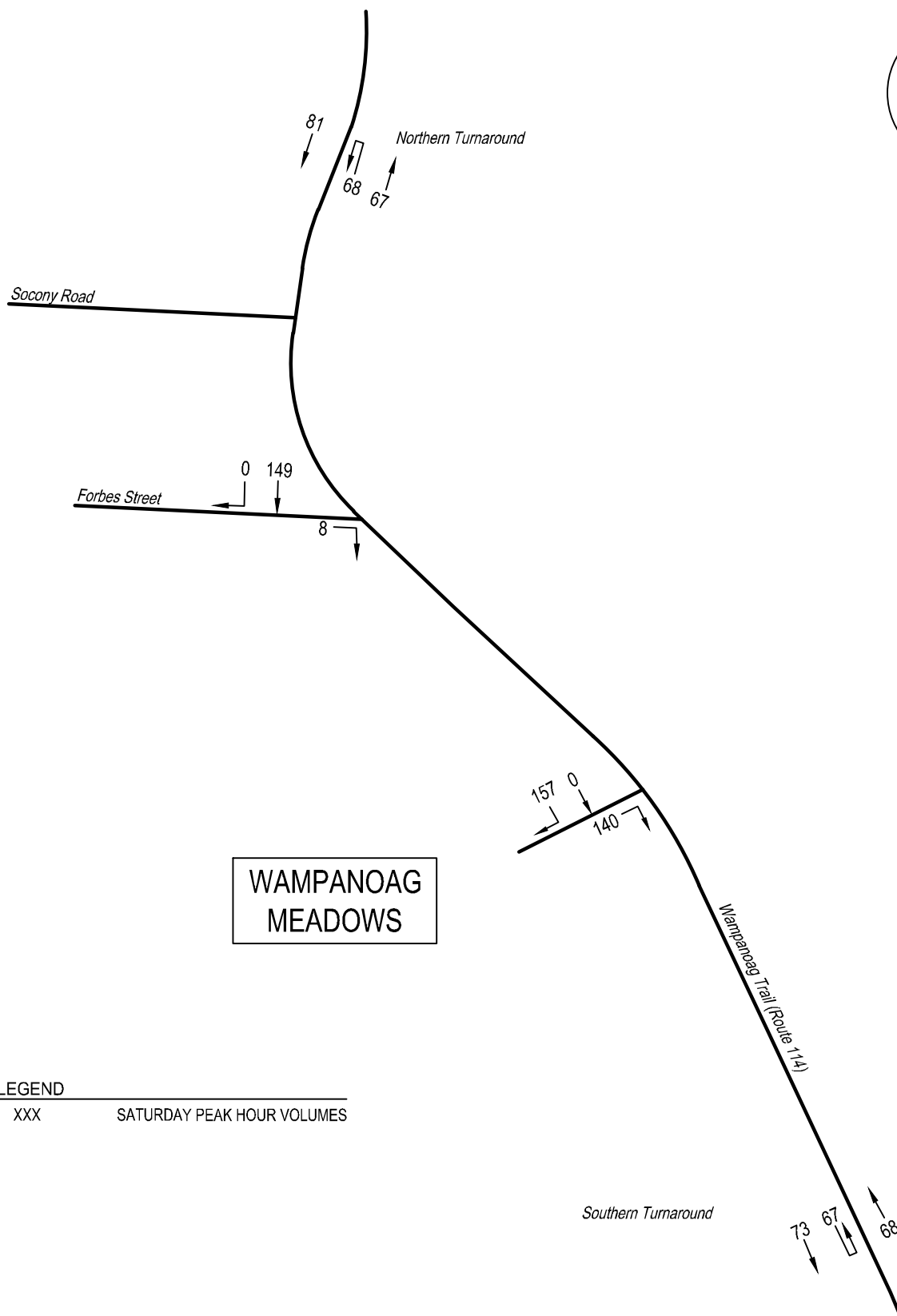
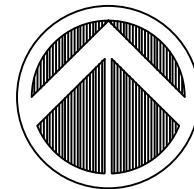
LEGEND
XXX (XXX) AM PEAK HOUR VOLUMES (PM PEAK HOUR VOLUMES)



PROJECT NO. 23149.00

DATE: SEPTEMBER 2023

FIGURE 7
SITE GENERATED TRIPS - WEEKDAY
WAMPANOAG MEADOWS
COMMERCIAL DEVELOPMENT
EAST PROVIDENCE, RHODE ISLAND



LEGEND

XXX

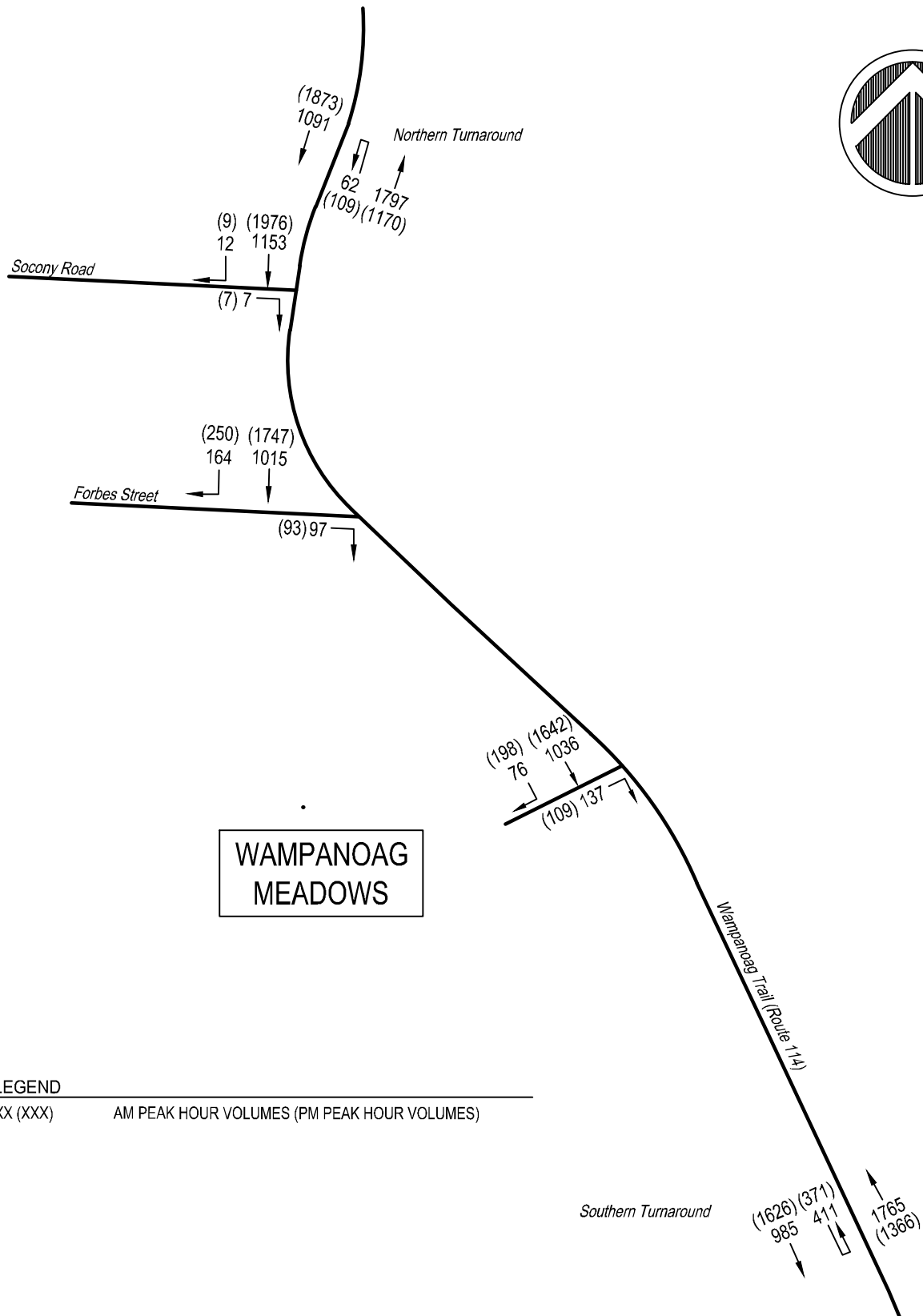
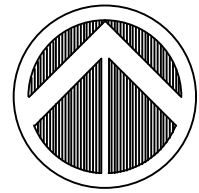
SATURDAY PEAK HOUR VOLUMES



PROJECT NO. 23149.00

DATE: SEPTEMBER 2023

FIGURE 8
SITE GENERATED TRIPS - SATURDAY
WAMPANOAG MEADOWS
COMMERCIAL DEVELOPMENT
EAST PROVIDENCE, RHODE ISLAND



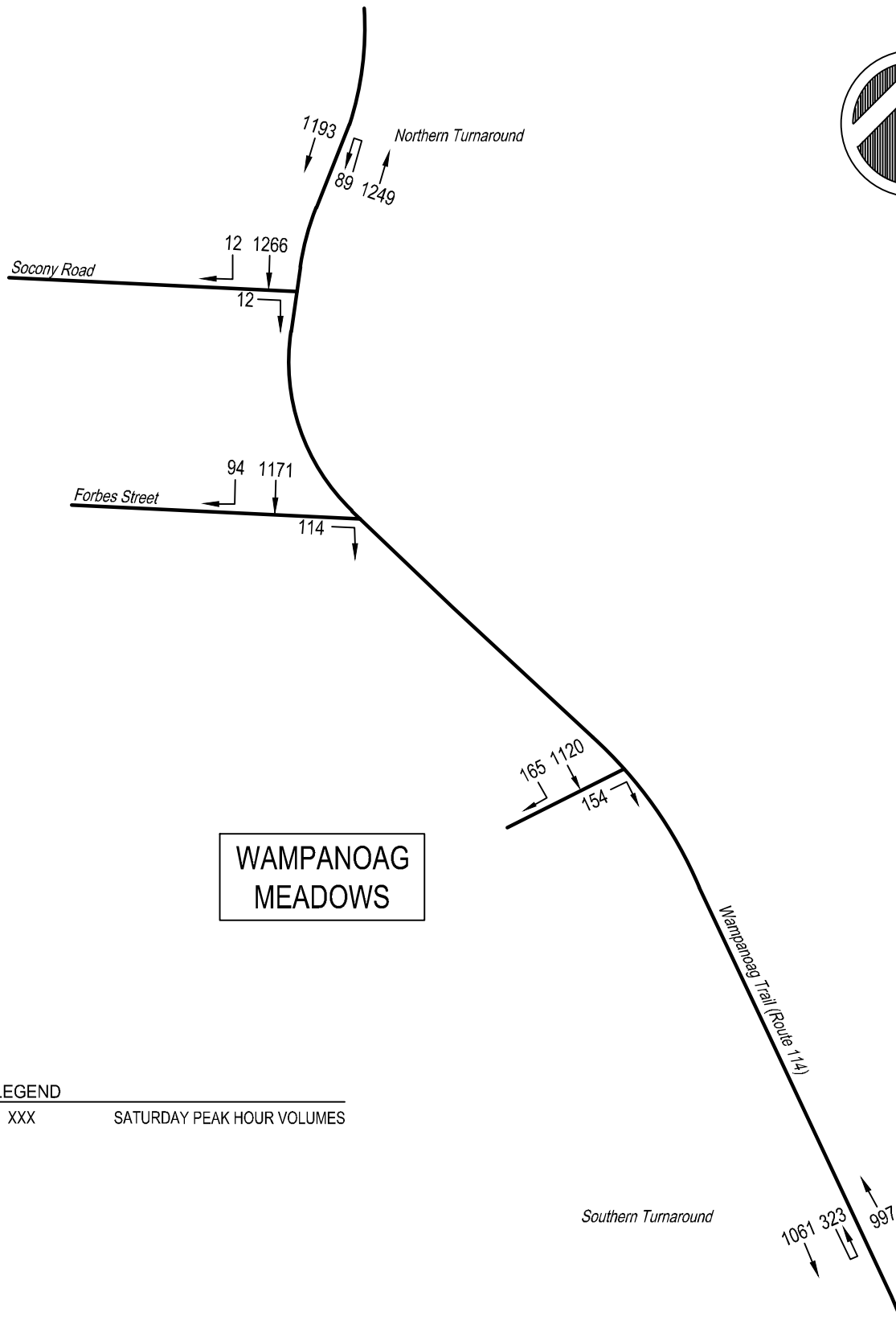
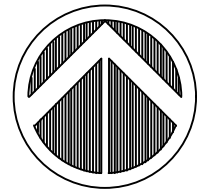
LEGEND
XXX (XXX) AM PEAK HOUR VOLUMES (PM PEAK HOUR VOLUMES)



PROJECT NO. 23149.00

DATE: SEPTEMBER 2023

FIGURE 9
2028 FUTURE BUILD VOLUMES - WEEKDAY
WAMPANOAG MEADOWS
COMMERCIAL DEVELOPMENT
EAST PROVIDENCE, RHODE ISLAND



LEGEND
XXX SATURDAY PEAK HOUR VOLUMES



PROJECT NO. 23149.00

DATE: SEPTEMBER 2023

FIGURE 10
2028 FUTURE BUILD VOLUMES - SATURDAY
WAMPANOAG MEADOWS
COMMERCIAL DEVELOPMENT
EAST PROVIDENCE, RHODE ISLAND

Capacity Analysis – Existing, Future No-Build, and Future Build Conditions

Capacity analysis was completed for the study intersections and turnarounds for existing, future 2028 no-build, and future 2028 build conditions. 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.

Wampanoag Trail Intersection Analysis

The LOS criteria for unsignalized intersections are provided in Table 6 below, and a full LOS table with results from all intersections is provided in Table 7.

Table 6: LOS Criteria for Unsignalized Intersections

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

Table 7: LOS Table – Unsignalized Intersections

	Weekday AM Peak			Weekday PM Peak			Saturday PM Peak		
	Existing 2023	Future (2028) No-Build	Future Build 2023	Existing 2023	Future (2028) No-Build	Future (2028) Build	Existing 2023	Future (2028) No-Build	Future (2028) Build
Wampanoag Trail (Route 114) at Forbes Street									
Southbound	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C
Eastbound	B (14.7)	C (15.1)	C (16.1)	C (20.5)	C (21.4)	D (26.2)	C (15.3)	C (15.7)	C (18.4)
Wampanoag Trail (Route 114) at Proposed Wampanoag Meadows Site Driveway									
Southbound	N/A	N/A	N/A	N/A	N/C	N/C	N/A	N/A	N/C
Eastbound	N/A	N/A	C (17.3)	N/A	N/C	D (31.4)	N/A	N/A	C (22.4)

Legend: LOS (Delay per vehicle in seconds)

N/C = No conflict; N/A = Not applicable

Wampanoag Trail (Route 114) and Forbes Street

Comparing the Future No-Build to the Future Build conditions, the only reduction in level of service (LOS) is during the weekday p.m. peak hour which reduces from a LOS C to a LOS D with an increase of delay by 4.8 seconds. LOS D is still considered an acceptable LOS>

Wampanoag Trail (Route 114) and the Proposed Wampanoag Meadows Entrance

The Wampanoag Meadows entrance was analyzed as a three- with a stop control on the exit drive. During the a.m., p.m. peak and Saturday midday peak hours, the intersection of Wampanoag Trail (Route 114) with the Wampanoag Meadows exit is expected to operate at an acceptable level of service, with delays less than 32 seconds per vehicle.



Wampanoag Trail Turnaround Analysis

According to the Highway Capacity Manual (HCM), ramp junctions are characterized by their merge and diverge maneuvers. They often create turbulence in the merging or diverging traffic stream, and LOS for these facilities is based on traffic density, measured in passenger cars per mile per lane. The LOS criteria for freeway merge and diverge segments is provided in Table 8 below, and a full LOS table with results for the merge and diverge movements required to enter and exit the proposed site via the roadway U-turns is provided in Table 9.

Table 8: LOS Criteria for Freeway Merge and Diverge Segments

LOS	Density (pc/mi/ln)	Comments
A	≤ 10	Unrestricted operations
B	> 10-20	Merging and diverging maneuvers noticeable to drivers
C	> 20-28	Influence area speeds begin to decline
D	> 28-35	Influence area turbulence becomes intrusive
E	> 35	Turbulence felt by virtually all drivers
F	Demand Exceeds Capacity	Ramp and freeway queues form

Table 9: LOS Table - Freeway Merge and Diverge Segments

	Weekday AM Peak			Weekday PM Peak			Saturday Mid-Day Peak		
	Existing 2023	Future (2028) No-Build	Future (2028) Build	Existing 2023	Future (2028) No-Build	Future (2028) Build	Existing 2023	Future (2028) No-Build	Future (2028) Build
Northern Turnaround (Merge)									
Mainline Demand	1036	1062	1719	1762	1873	1091	1080	1107	1193
Ramp Demand	28	29	30	31	109	62	17	323	323
Speed	55	55	55	55	55	55	55	55	55
Density	11.6	11.9	19.2	19.7	21.9	12.6	12.3	17.7	18.7
LOS	B	B	B	B	C	B	B	B	B
Southern Turnaround (Diverge)									
Mainline Demand	900	923	1507	1545	1626	985	949	973	1061
Ramp Demand	314	322	306	314	371	411	251	257	323
Speed	55	55	55	55	55	55	55	55	55
Density	10.6	11.0	16.9	17.3	18.3	11.8	11.3	11.6	12.7
LOS	B	B	B	B	B	B	B	B	B

The turnarounds along Wampanoag Trail (Route 114) were analyzed using the procedures provided in the HCM for freeway merge and diverge segments. It should be noted that the minimum travel speed allowed for HCM merge and diverge analysis is 55 miles per hour. This speed corresponds to the design speed selected for Wampanoag Trail (Route 114), which is based on the measured 85th percentile speed for the southbound direction. The LOS results for the two turnarounds are provided in Table 9.



Wampanoag Trail (Route 114) and the Northern Turnaround

The northern turnaround on Wampanoag Trail (Route 114), located north of the proposed site, currently operates at LOS B during the AM peak hour, PM peak hour and the Saturday Mid-Day Peak Hour. Under future no-build, the LOS remains unchanged during the peak hours. Comparing the Future No-Build to Build Conditions, the only reduction in LOS is during the weekday afternoon peak hour with a reduction from LOS B to LOS C. The increases in delay is less than two seconds per vehicle.

Wampanoag Trail (Route 114) and the Southern Turnaround

The southern turnaround is located at the southern limit of the study area for the proposed Wampanoag Meadows. As part of this study, only the movement from southbound to northbound was analyzed, as the northbound to southbound movement is not likely to be impacted by the proposed development. Under existing conditions, the southern turnaround operates at LOS B during the a.m., p.m. and Saturday midday peak hour. The increase delay for each of the scenarios is approximately 1 second.

Conclusions & Recommendations

Based on the crash data reviewed, the overall frequency and severity of crashes along the 2.1-mile length of Wampanoag Trail (Route 114) studied for this project is relatively low. Forty-five percent of crashes occurred north of the northern turn around at the Wampanoag Trail/Mink Street intersection. The majority of those crashes were rear enders where drivers were distracted and were not paying attention to the vehicle in front of the,

Many of the crashes involved single vehicles losing control, rear-end collisions or vehicles hitting a deer in the roadway. Also, none of the crashes resulted in a fatality while only 10% resulted in injuries that included a bloody nose, neck/back pain or a headache. It is not expected that the addition of trips from the proposed Wampanoag Meadows development will create additional safety concerns along Wampanoag Trail (Route 114).

Stopping and intersection sight distance for the Wampanoag Meadows site egress is sufficient allowing vehicles to exit the site safely and efficiently. The stopping sight and intersection sight distance for the Wampanoag Meadows site egress is sufficient for both the posted speed and 85th percentile speeds as previously stated. Some tree trimming may be required when vegetation begins to grow to maintain visibility of oncoming vehicles.

It is proposed to continue coordination with RIDOT, to further investigate options for the driveway entrance on Wampanoag Trail. Although there is no history of crashes in this area, as the project proceeds further, Pare will look at options with RIDOT including signalization at the intersection, the incorporation of a deceleration lane and acceleration lane at the entrance and the installation of signage to alert motorists of the development.

The developer will also continue coordination with the City and the bus company to investigate moving the pick-up and drop-off for school children off of Wampanoag Trail and locate a stop within the development.

Level of service and delay impacts are expected to be minimal at the intersections and turnarounds in the vicinity of the proposed Wampanoag Meadows. The addition of site traffic to the roadway network has minimal impact on the LOS, and delay increases are less than ten seconds per vehicle during all peak hours.



Based on our safety and capacity analyses, we are of the opinion that this project as proposed can be built with little or no impact on the roadways.



John Flatley Company
Wampanoag Meadows-Commercial Development

APPENDIX A
Traffic Counts & Speed Study

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

N/S: Wampanoag Trail (Route 114)
W: Socony Road (Incl. NB to SB Uturn)
City, State: E. Providence, RI
Client: Pare/Derek Hug

File Name : 05758A
Site Code : 23149
Start Date : 9/13/2023
Page No : 1

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

[illegible][illegible]

Transportation Data Corporation

Mario Perone, mperone1@verizon.net

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

N/S: Wampanoag Trail (Route 114)
W: Socony Road (Incl. NB to SB Uturn)
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File Name : 05758A
Site Code : 23149
Start Date : 9/13/2023
Page No : 1

Groups Printed- Cars & Peds

Start Time	Wampanoag Trail (Route 114) From North			Wampanoag Trail (Route 114) From South			Socony Road From West			Int. Total
	Right	Thru	Peds	Thru	Left	Uturn	Right	Left	Peds	
07:00 AM	0	185	0	0	0	1	0	0	0	186
07:15 AM	0	240	0	0	0	9	0	0	0	249
07:30 AM	1	249	0	0	0	5	0	0	1	256
07:45 AM	0	272	0	0	0	9	0	0	0	281
Total	1	946	0	0	0	24	0	0	1	972
08:00 AM	0	262	0	0	0	5	4	0	0	271
08:15 AM	0	221	0	0	0	1	1	0	0	223
08:30 AM	1	228	0	0	0	4	4	0	0	237
08:45 AM	0	249	0	0	0	6	4	0	0	259
Total	1	960	0	0	0	16	13	0	0	990
Grand Total	2	1906	0	0	0	40	13	0	1	1962
Apprch %	0.1	99.9	0	0	0	100	92.9	0	7.1	
Total %	0.1	97.1	0	0	0	2	0.7	0	0.1	

Start Time	Wampanoag Trail (Route 114) From North				Wampanoag Trail (Route 114) From South				Socony Road From West				Int. Total
	Right	Thru	Peds	App. Total	Thru	Left	Uturn	App. Total	Right	Left	Peds	App. Total	
07:15 AM	0	240	0	240	0	0	9	9	0	0	0	0	249
07:30 AM	1	249	0	250	0	0	5	5	0	0	1	1	256
07:45 AM	0	272	0	272	0	0	9	9	0	0	0	0	281
08:00 AM	0	262	0	262	0	0	5	5	4	0	0	4	271
Total Volume	1	1023	0	1024	0	0	28	28	4	0	1	5	1057
% App. Total	0.1	99.9	0		0	0	100		80	0	20		
PHF	.250	.940	.000	.941	.000	.000	.778	.778	.250	.000	.250	.313	.940

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

Transportation Data Corporation

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N/S: Wampanoag Trail (Route 114)
W: Socony Road (Incl. NB to SB Uturn)
City, State: E. Providence, RI
Client: Pare/Derek Hug

File Name : 05758A
Site Code : 23149
Start Date : 9/13/2023
Page No : 1

Groups Printed- Trucks & Buses

	Wampanoag Trail (Route 114) From North			Wampanoag Trail (Route 114) From South			Socony Road From West			
Start Time	Right	Thru	Peds	Thru	Left	Uturn	Right	Left	Peds	Int. Total
07:00 AM	8	4	0	0	0	0	8	0	0	20
07:15 AM	2	6	0	0	0	0	2	0	0	10
07:30 AM	4	7	0	0	0	0	0	0	0	11
07:45 AM	2	6	0	0	0	0	0	0	0	8
Total	16	23	0	0	0	0	10	0	0	49
08:00 AM	3	10	0	0	0	0	1	0	0	14
08:15 AM	3	6	0	0	0	0	1	0	0	10
08:30 AM	1	2	0	0	0	0	0	0	0	3
08:45 AM	3	4	0	0	0	0	0	0	0	7
Total	10	22	0	0	0	0	2	0	0	34
Grand Total	26	45	0	0	0	0	12	0	0	83
Apprch %	36.6	63.4	0	0	0	0	100	0	0	
Total %	31.3	54.2	0	0	0	0	14.5	0	0	

	Wampanoag Trail (Route 114) From North				Wampanoag Trail (Route 114) From South				Socony Road From West				
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Uturn	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:00 AM													
07:00 AM	8	4	0	12	0	0	0	0	8	0	0	8	20
07:15 AM	2	6	0	8	0	0	0	0	2	0	0	2	10
07:30 AM	4	7	0	11	0	0	0	0	0	0	0	0	11
07:45 AM	2	6	0	8	0	0	0	0	0	0	0	0	8
Total Volume	16	23	0	39	0	0	0	0	10	0	0	10	49
% App. Total	41	59	0		0	0	0		100	0	0		
PHF	.500	.821	.000	.813	.000	.000	.000	.000	.313	.000	.000	.313	.613

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W: Socony Road (Incl. NB to SB Uturn)
City, State: E. Providence, RI
Client: Pare/Derek Hug

File Name : 05758A
Site Code : 23149
Start Date : 9/13/2023
Page No : 1

Groups Printed- Bikes by Direction

[illegible][illegible]

Transportation Data Corporation

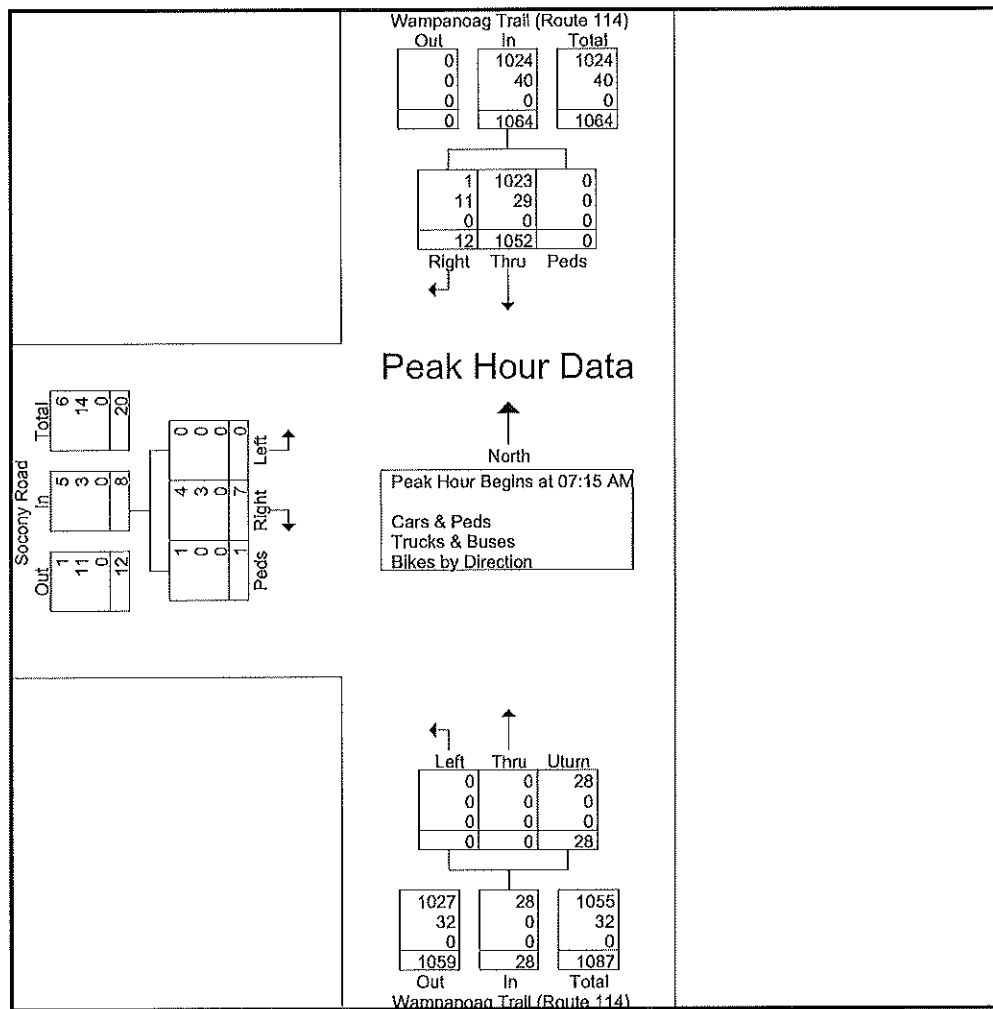
Mario Perone, mperone1@verizon.net

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

N/S: Wampanoag Trail (Route 114)
W: Socony Road (Incl. NB to SB Uturn)
City, State: E. Providence, RI
Client: Pare/Derek Hug

File Name : 05758A
Site Code : 23149
Start Date : 9/13/2023
Page No : 1

	Wampanoag Trail (Route 114) From North				Wampanoag Trail (Route 114) From South				Socony Road From West				
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Uturn	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:15 AM													
07:15 AM	2	246	0	248	0	0	9	9	2	0	0	2	259
07:30 AM	5	256	0	261	0	0	5	5	0	0	1	1	267
07:45 AM	2	278	0	280	0	0	9	9	0	0	0	0	289
08:00 AM	3	272	0	275	0	0	5	5	5	0	0	5	285
Total Volume	12	1052	0	1064	0	0	28	28	7	0	1	8	1100
% App. Total	1.1	98.9	0		0	0	100		87.5	0	12.5		
PHF	.600	.946	.000	.950	.000	.000	.778	.778	.350	.000	.250	.400	.952
Cars & Peds	1	1023	0	1024	0	0	28	28	4	0	1	5	1057
% Cars & Peds	8.3	97.2	0	96.2	0	0	100	100	57.1	0	100	62.5	96.1
Trucks & Buses	11	29	0	40	0	0	0	0	3	0	0	3	43
% Trucks & Buses	91.7	2.8	0	3.8	0	0	0	0	42.9	0	0	37.5	3.9
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



Mario Perone, mperone1@verizon.net
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N/S: Wampanoag Trail (Route 114)
W: Forbes Street
City, State: E. Providence, RI
Client: Pare/Derek Hug

File Name : 05758B
Site Code : 23149
Start Date : 9/13/2023
Page No : 1

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

[illegible][illegible]

Transportation Data Corporation

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N/S: Wampanoag Trail (Route 114)

W: Forbes Street

City, State: E. Providence, RI

Client: Pare/Derek Hug

File Name : 05758B

Site Code : 23149

Start Date : 9/13/2023

Page No : 1

Groups Printed- Cars & Peds

Start Time	Wampanoag Trail (Route 114) From North			Wampanoag Trail (Route 114) From South			Forbes Street From West			Int. Total
	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	
07:00 AM	23	166	0	359	0	0	14	0	0	562
07:15 AM	42	211	0	412	0	0	14	0	0	679
07:30 AM	51	198	0	442	0	0	26	0	0	717
07:45 AM	34	238	0	433	0	0	35	0	0	740
Total	150	813	0	1646	0	0	89	0	0	2698
08:00 AM	28	245	0	401	0	0	16	0	0	690
08:15 AM	29	194	0	365	0	0	17	0	0	605
08:30 AM	21	214	0	369	0	0	15	0	0	619
08:45 AM	33	220	0	327	0	0	11	0	0	591
Total	111	873	0	1462	0	0	59	0	0	2505
Grand Total	261	1686	0	3108	0	0	148	0	0	5203
Apprch %	13.4	86.6	0	100	0	0	100	0	0	
Total %	5	32.4	0	59.7	0	0	2.8	0	0	

	Wampanoag Trail (Route 114) From North				Wampanoag Trail (Route 114) From South				Forbes Street From West				
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:15 AM													
07:15 AM	42	211	0	253	412	0	0	412	14	0	0	14	679
07:30 AM	51	198	0	249	442	0	0	442	26	0	0	26	717
07:45 AM	34	238	0	272	433	0	0	433	35	0	0	35	740
08:00 AM	28	245	0	273	401	0	0	401	16	0	0	16	690
Total Volume	155	892	0	1047	1688	0	0	1688	91	0	0	91	2826
% App. Total	14.8	85.2	0		100	0	0		100	0	0		
PHF	.760	.910	.000	.959	.955	.000	.000	.955	.650	.000	.000	.650	.955

Transportation Data Corporation

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

N/S: Wampanoag Trail (Route 114)

W: Forbes Street

City, State: E. Providence, RI

Client: Pare/Derek Hug

File Name : 05758B

Site Code : 23149

Start Date : 9/13/2023

Page No : 1

Groups Printed- Trucks & Buses

Start Time	Wampanoag Trail (Route 114) From North			Wampanoag Trail (Route 114) From South			Forbes Street From West			Int. Total
	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	
07:00 AM	0	11	0	3	0	0	0	0	0	14
07:15 AM	1	6	0	4	0	0	0	0	0	11
07:30 AM	3	6	0	5	0	0	1	0	0	15
07:45 AM	1	6	0	5	0	0	0	0	0	12
Total	5	29	0	17	0	0	1	0	0	52
08:00 AM	0	8	0	6	0	0	1	0	0	15
08:15 AM	2	6	0	9	0	0	1	0	0	18
08:30 AM	1	1	0	12	0	0	1	0	0	15
08:45 AM	0	5	0	5	0	0	1	0	0	11
Total	3	20	0	32	0	0	4	0	0	59
Grand Total	8	49	0	49	0	0	5	0	0	111
Apprch %	14	86	0	100	0	0	100	0	0	
Total %	7.2	44.1	0	44.1	0	0	4.5	0	0	

Start Time	Wampanoag Trail (Route 114) From North				Wampanoag Trail (Route 114) From South				Forbes Street From West				Int. Total
	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	
07:30 AM	3	6	0	9	5	0	0	5	1	0	0	1	15
07:45 AM	1	6	0	7	5	0	0	5	0	0	0	0	12
08:00 AM	0	8	0	8	6	0	0	6	1	0	0	1	15
08:15 AM	2	6	0	8	9	0	0	9	1	0	0	1	18
Total Volume	6	26	0	32	25	0	0	25	3	0	0	3	60
% App. Total	18.8	81.2	0		100	0	0		100	0	0		
PHF	.500	.813	.000	.889	.694	.000	.000	.694	.750	.000	.000	.750	.833

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

Transportation Data Corporation

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N/S: Wampanoag Trail (Route 114)

W: Forbes Street

City, State: E. Providence, RI

Client: Pare/Derek Hug

File Name : 05758B

Site Code : 23149

Start Date : 9/13/2023

Page No : 1

Groups Printed- Bikes by Direction

Start Time	Wampanoag Trail (Route 114) From North			Wampanoag Trail (Route 114) From South			Forbes Street 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	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0	0	0	0	0	0	0
Total %										

Start Time	Wampanoag Trail (Route 114) From North				Wampanoag Trail (Route 114) From South				Forbes Street From West				Int. Total
	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	
07:00 AM	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
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
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		
PHF	.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: Wampanoag Trail (Route 114)

W: Forbes Street

City, State: E. Providence, RI

Client: Pare/Derek Hug

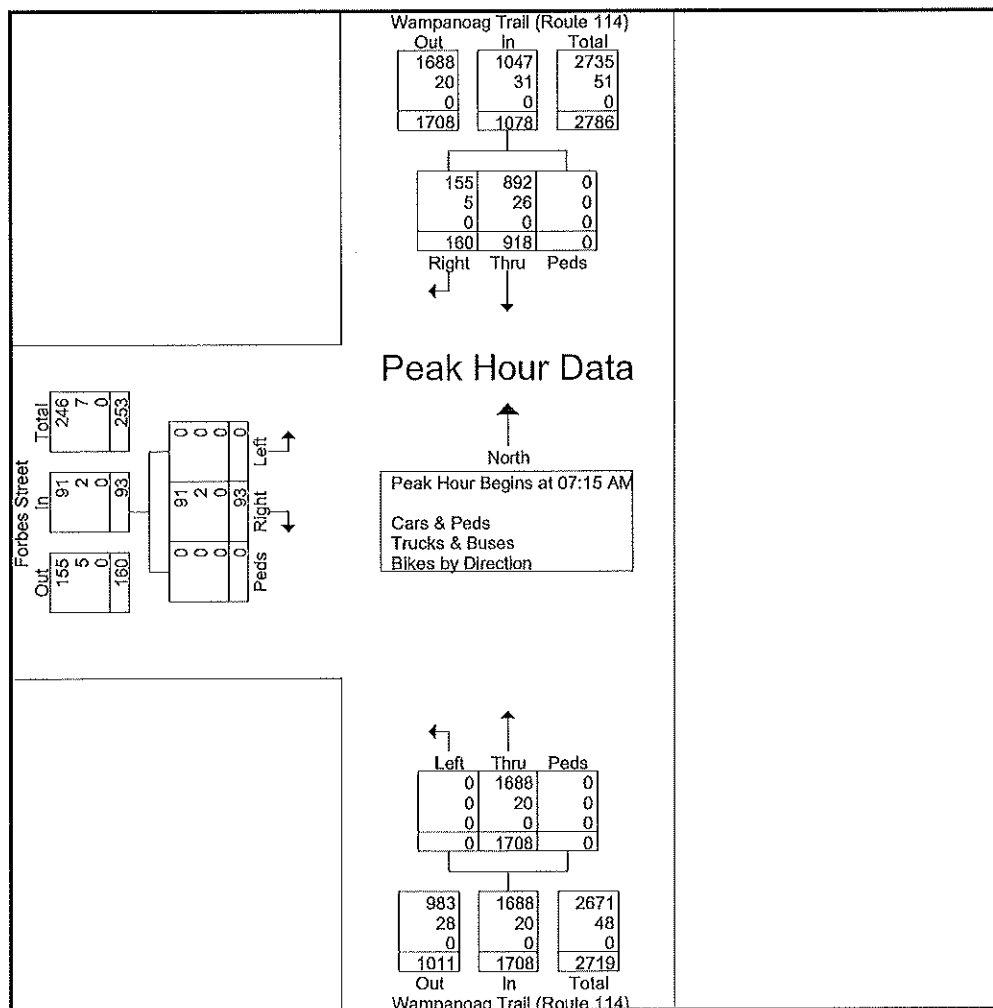
File Name : 05758B

Site Code : 23149

Start Date : 9/13/2023

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	Wampanoag Trail (Route 114) From North				Wampanoag Trail (Route 114) From South				Forbes Street From West				
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:15 AM													
07:15 AM	43	217	0	260	416	0	0	416	14	0	0	14	690
07:30 AM	54	204	0	258	447	0	0	447	27	0	0	27	732
07:45 AM	35	244	0	279	438	0	0	438	35	0	0	35	752
08:00 AM	28	253	0	281	407	0	0	407	17	0	0	17	705
Total Volume	160	918	0	1078	1708	0	0	1708	93	0	0	93	2879
% App. Total	14.8	85.2	0		100	0	0		100	0	0		
PHF	.741	.907	.000	.959	.955	.000	.000	.955	.664	.000	.000	.664	.957
Cars & Peds	155	892	0	1047	1688	0	0	1688	91	0	0	91	2826
% Cars & Peds	96.9	97.2	0	97.1	98.8	0	0	98.8	97.8	0	0	97.8	98.2
Trucks & Buses	5	26	0	31	20	0	0	20	2	0	0	2	53
% Trucks & Buses	3.1	2.8	0	2.9	1.2	0	0	1.2	2.2	0	0	2.2	1.8
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: Wampanoag Trail (Route 114)
W: #1691 BCG (Incl. SB to NB Uturn)
City, State: E. Providence, RI
Client: Pare/Derek Hug

File Name : 05758C
Site Code : 23149
Start Date : 9/13/2023
Page No : 1

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

[illegible][illegible]

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N/S: Wampanoag Trail (Route 114)
W: #1691 BCG (Incl. SB to NB Uturn)
City, State: E. Providence, RI
Client: Pare/Derek Hug

File Name : 05758C
Site Code : 23149
Start Date : 9/13/2023
Page No : 1

Groups Printed- Cars & Peds

	Wampanoag Trail (Route 114) From North			Wampanoag Trail (Route 114) From South			Barrington Community Garden (Vicinity) From West			
Start Time	Right	Thru	Uturn	Thru	Left	Peds	Right	Left	Peds	Int. Total
07:00 AM	0	0	73	0	0	0	0	0	0	73
07:15 AM	0	0	71	0	0	0	0	0	0	71
07:30 AM	0	0	71	0	0	0	0	0	0	71
07:45 AM	0	0	78	0	0	0	0	0	0	78
Total	0	0	293	0	0	0	0	0	0	293
08:00 AM	0	0	71	0	0	0	0	0	0	71
08:15 AM	0	0	70	0	0	0	0	0	0	70
08:30 AM	0	0	90	0	0	0	0	0	0	90
08:45 AM	0	0	63	0	0	0	0	0	0	63
Total	0	0	294	0	0	0	0	0	0	294
Grand Total	0	0	587	0	0	0	0	0	0	587
Apprch %	0	0	100	0	0	0	0	0	0	
Total %	0	0	100	0	0	0	0	0	0	

[illegible]

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N/S: Wampanoag Trail (Route 114)
W: #1691 BCG (Incl. SB to NB Uturn)
City, State: E. Providence, RI
Client: Pare/Derek Hug

File Name : 05758C
Site Code : 23149
Start Date : 9/13/2023
Page No : 1

Groups Printed- Trucks & Buses

Groups Trained - Trucks & Buses										
	Wampanoag Trail (Route 114) From North			Wampanoag Trail (Route 114) From South			Barrington Community Garden (Vicinity) From West			
Start Time	Right	Thru	Uturn	Thru	Left	Peds	Right	Left	Peds	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	2	0	0	0	0	0	0	2
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	1	0	0	0	0	0	0	1
Total	0	0	3	0	0	0	0	0	0	3
08:00 AM	0	0	3	0	0	0	0	0	0	3
08:15 AM	0	0	1	0	0	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	1	0	0	0	0	0	0	1
Total	0	0	5	0	0	0	0	0	0	5
Grand Total	0	0	8	0	0	0	0	0	0	8
Apprch %	0	0	100	0	0	0	0	0	0	
Total %	0	0	100	0	0	0	0	0	0	

[illegible]

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N/S: Wampanoag Trail (Route 114)
W: #1691 BCG (Incl. SB to NB Uturn)
City, State: E. Providence, RI
Client: Pare/Derek Hug

File Name : 05758C
Site Code : 23149
Start Date : 9/13/2023
Page No : 1

Groups Printed- Bikes by Direction

[illegible][illegible]

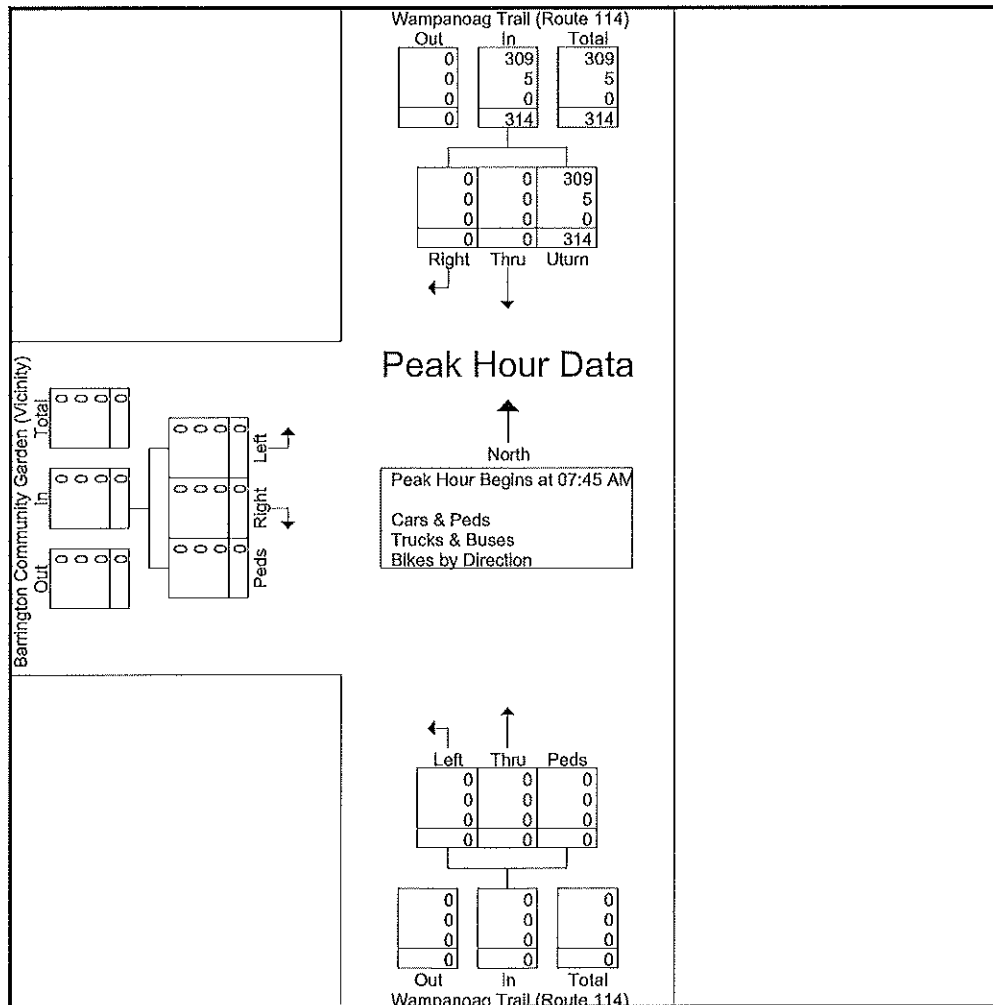
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N/S: Wampanoag Trail (Route 114)
W: #1691 BCG (Incl. SB to NB Uturn)
City, State: E. Providence, RI
Client: Pare/Derek Hug

File Name : 05758C
Site Code : 23149
Start Date : 9/13/2023
Page No : 1

	Wampanoag Trail (Route 114) From North				Wampanoag Trail (Route 114) From South				Barrington Community Garden (Vicinity) From West				
Start Time	Right	Thru	Uturn	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:45 AM													
07:45 AM	0	0	79	79	0	0	0	0	0	0	0	0	79
08:00 AM	0	0	74	74	0	0	0	0	0	0	0	0	74
08:15 AM	0	0	71	71	0	0	0	0	0	0	0	0	71
08:30 AM	0	0	90	90	0	0	0	0	0	0	0	0	90
Total Volume	0	0	314	314	0	0	0	0	0	0	0	0	314
% App. Total	0	0	100		0	0	0		0	0	0		
PHF	.000	.000	.872	.872	.000	.000	.000	.000	.000	.000	.000	.000	.872
Cars & Peds	0	0	309	309	0	0	0	0	0	0	0	0	309
% Cars & Peds	0	0	98.4	98.4	0	0	0	0	0	0	0	0	98.4
Trucks & Buses	0	0	5	5	0	0	0	0	0	0	0	0	5
% Trucks & Buses	0	0	1.6	1.6	0	0	0	0	0	0	0	0	1.6
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: Wampanoag Trail (Route 114)
W: Socony Road (Incl. NB to SB Uturn)
City, State: E. Providence, RI
Client: Pare/Derek Hug

File Name : 05758AA
Site Code : 23149
Start Date : 9/13/2023
Page No : 1

Groups Printed- Bikes by Direction

Start Time	Wampanoag Trail (Route 114) From North			Wampanoag Trail (Route 114) From South			Socony Road From West			Int. Total
	Right	Thru	Peds	Thru	Left	Uturn	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
Total	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0	0	0	0	0	0	
Total %										

Start Time	Wampanoag Trail (Route 114) From North				Wampanoag Trail (Route 114) From South				Socony Road From West				Int. Total
	Right	Thru	Peds	App. Total	Thru	Left	Uturn	App. Total	Right	Left	Peds	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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

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N/S: Wampanoag Trail (Route 114)
W: Socony Road (Incl. NB to SB Uturn)
City, State: E. Providence, RI
Client: Pare/Derek Hug

File Name : 05758AA
Site Code : 23149
Start Date : 9/13/2023
Page No : 1

Groups Printed- Trucks & Buses

Start Time	Wampanoag Trail (Route 114) From North			Wampanoag Trail (Route 114) From South			Socony Road From West			Int, Total
	Right	Thru	Peds	Thru	Left	Uturn	Right	Left	Peds	
04:00 PM	0	4	0	0	0	0	1	0	0	5
04:15 PM	2	2	0	0	0	0	0	0	0	4
04:30 PM	0	2	0	0	0	0	0	0	0	2
04:45 PM	1	2	0	0	0	0	0	0	0	3
Total	3	10	0	0	0	0	1	0	0	14
05:00 PM	3	1	0	0	0	0	0	0	0	4
05:15 PM	1	2	0	0	0	0	0	0	0	3
05:30 PM	3	2	0	0	0	0	0	0	0	5
05:45 PM	2	2	0	0	0	0	0	0	0	4
Total	9	7	0	0	0	0	0	0	0	16
Grand Total	12	17	0	0	0	0	1	0	0	30
Apprch %	41.4	58.6	0	0	0	0	100	0	0	
Total %	40	56.7	0	0	0	0	3.3	0	0	

Start Time	Wampanoag Trail (Route 114) From North				Wampanoag Trail (Route 114) From South				Socony Road From West				Int, Total
	Right	Thru	Peds	App. Total	Thru	Left	Uturn	App. Total	Right	Left	Peds	App. Total	
05:00 PM	3	1	0	4	0	0	0	0	0	0	0	0	4
05:15 PM	1	2	0	3	0	0	0	0	0	0	0	0	3
05:30 PM	3	2	0	5	0	0	0	0	0	0	0	0	5
05:45 PM	2	2	0	4	0	0	0	0	0	0	0	0	4
Total Volume	9	7	0	16	0	0	0	0	0	0	0	0	16
% App. Total	56.2	43.8	0		0	0	0		0	0	0		
PHF	.750	.875	.000	.800	.000	.000	.000	.000	.000	.000	.000	.000	.800

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

Peak Hour for Entire Intersection Begins at 05:00 PM

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N/S: Wampanoag Trail (Route 114)
W: Socony Road (Incl. NB to SB Uturn)
City, State: E. Providence, RI
Client: Pare/Derek Hug

File Name : 05758AA
Site Code : 23149
Start Date : 9/13/2023
Page No : 1

Groups Printed- Cars & Peds

Start Time	Wampanoag Trail (Route 114) From North			Wampanoag Trail (Route 114) From South			Socony Road From West			Int. Total
	Right	Thru	Peds	Thru	Left	Uturn	Right	Left	Peds	
04:00 PM	1	352	0	0	0	1	8	0	1	363
04:15 PM	0	372	0	0	0	4	3	0	0	379
04:30 PM	0	436	0	0	0	7	2	0	0	445
04:45 PM	0	428	0	0	0	11	3	0	0	442
Total	1	1588	0	0	0	23	16	0	1	1629
05:00 PM	1	466	0	0	0	11	3	0	0	481
05:15 PM	0	397	0	0	0	5	1	0	0	403
05:30 PM	0	442	0	0	0	3	0	0	0	445
05:45 PM	0	422	0	0	0	8	1	0	0	431
Total	1	1727	0	0	0	27	5	0	0	1760
Grand Total	2	3315	0	0	0	50	21	0	1	3389
Apprch %	0.1	99.9	0	0	0	100	95.5	0	4.5	
Total %	0.1	97.8	0	0	0	1.5	0.6	0	0	

	Wampanoag Trail (Route 114) From North				Wampanoag Trail (Route 114) From South				Socony Road From West				
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Uturn	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:30 PM													
04:30 PM	0	436	0	436	0	0	7	7	2	0	0	2	445
04:45 PM	0	428	0	428	0	0	11	11	3	0	0	3	442
05:00 PM	1	466	0	467	0	0	11	11	3	0	0	3	481
05:15 PM	0	397	0	397	0	0	5	5	1	0	0	1	403
Total Volume	1	1727	0	1728	0	0	34	34	9	0	0	9	1771
% App. Total	0.1	99.9	0		0	0	100		100	0	0		
PHF	.250	.927	.000	.925	.000	.000	.773	.773	.750	.000	.000	.750	.920

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N/S: Wampanoag Trail (Route 114)
W: Socony Road (Incl. NB to SB Uturn)
City, State: E. Providence, RI
Client: Pare/Derek Hug

File Name : 05758AA
Site Code : 23149
Start Date : 9/13/2023
Page No : 1

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

[illegible][illegible]

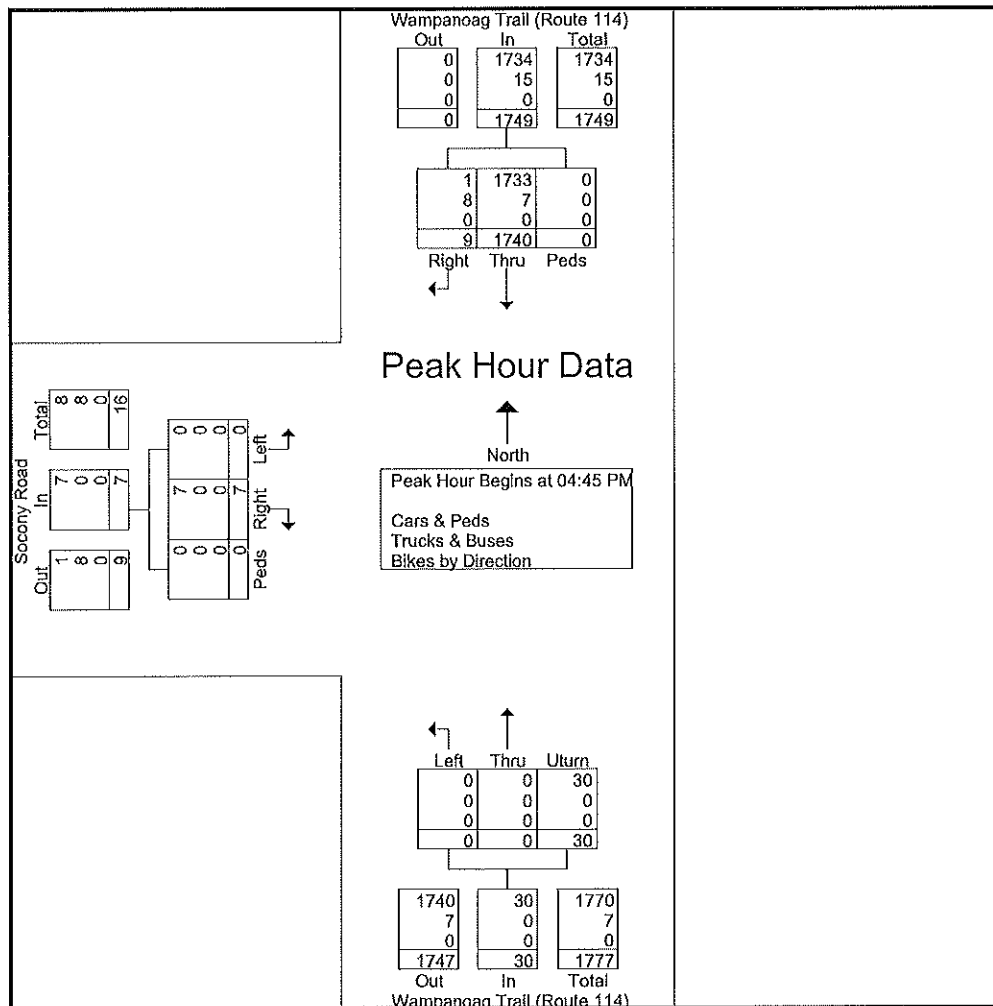
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N/S: Wampanoag Trail (Route 114)
W: Socony Road (Incl. NB to SB Uturn)
City, State: E. Providence, RI
Client: Pare/Derek Hug

File Name : 05758AA
Site Code : 23149
Start Date : 9/13/2023
Page No : 1

	Wampanoag Trail (Route 114) From North				Wampanoag Trail (Route 114) From South				Socony Road From West				
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Uturn	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:45 PM													
04:45 PM	1	430	0	431	0	0	11	11	3	0	0	3	445
05:00 PM	4	467	0	471	0	0	11	11	3	0	0	3	485
05:15 PM	1	399	0	400	0	0	5	5	1	0	0	1	406
05:30 PM	3	444	0	447	0	0	3	3	0	0	0	0	450
Total Volume	9	1740	0	1749	0	0	30	30	7	0	0	7	1786
% App. Total	0.5	99.5	0		0	0	100		100	0	0		
PHF	.563	.931	.000	.928	.000	.000	.682	.682	.583	.000	.000	.583	.921
Cars & Peds	1	1733	0	1734	0	0	30	30	7	0	0	7	1771
% Cars & Peds	11.1	99.6	0	99.1	0	0	100	100	100	0	0	100	99.2
Trucks & Buses	8	7	0	15	0	0	0	0	0	0	0	0	15
% Trucks & Buses	88.9	0.4	0	0.9	0	0	0	0	0	0	0	0	0.8
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: Wampanoag Trail (Route 114)

W: Forbes Street

City, State: E. Providence, RI

Client: Pare/Derek Hug

File Name : 05758BB

Site Code : 23149

Start Date : 9/13/2023

Page No : 1

Groups Printed- Cars & Peds

Start Time	Wampanoag Trail (Route 114) From North			Wampanoag Trail (Route 114) From South			Forbes Street From West			Int. Total
	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	
04:00 PM	42	324	0	246	0	0	14	0	0	626
04:15 PM	47	336	0	291	0	0	11	0	0	685
04:30 PM	51	389	0	299	0	0	17	0	0	756
04:45 PM	58	385	0	254	0	0	25	0	0	722
Total	198	1434	0	1090	0	0	67	0	0	2789
05:00 PM	70	397	0	290	0	0	24	0	0	781
05:15 PM	65	344	0	277	0	0	19	0	0	705
05:30 PM	43	405	0	252	0	0	16	0	0	716
05:45 PM	40	390	0	196	0	0	14	0	0	640
Total	218	1536	0	1015	0	0	73	0	0	2842
Grand Total	416	2970	0	2105	0	0	140	0	0	5631
Apprch %	12.3	87.7	0	100	0	0	100	0	0	
Total %	7.4	52.7	0	37.4	0	0	2.5	0	0	

	Wampanoag Trail (Route 114) From North				Wampanoag Trail (Route 114) From South				Forbes Street From West				
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:30 PM													
04:30 PM	51	389	0	440	299	0	0	299	17	0	0	17	756
04:45 PM	58	385	0	443	254	0	0	254	25	0	0	25	722
05:00 PM	70	397	0	467	290	0	0	290	24	0	0	24	781
05:15 PM	65	344	0	409	277	0	0	277	19	0	0	19	705
Total Volume	244	1515	0	1759	1120	0	0	1120	85	0	0	85	2964
% App. Total	13.9	86.1	0		100	0	0		100	0	0		
PHF	.871	.954	.000	.942	.936	.000	.000	.936	.850	.000	.000	.850	.949

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N/S: Wampanoag Trail (Route 114)

W: Forbes Street

City, State: E. Providence, RI

Client: Pare/Derek Hug

File Name : 05758BB

Site Code : 23149

Start Date : 9/13/2023

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Groups Printed- Trucks & Buses

Start Time	Wampanoag Trail (Route 114) From North			Wampanoag Trail (Route 114) From South			Forbes Street From West			Int. Total
	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	
04:00 PM	0	4	0	3	0	0	0	0	0	7
04:15 PM	0	2	0	3	0	0	0	0	0	5
04:30 PM	0	2	0	0	0	0	0	0	0	2
04:45 PM	0	3	0	2	0	0	0	0	0	5
Total	0	11	0	8	0	0	0	0	0	19
05:00 PM	0	3	0	4	0	0	0	0	0	7
05:15 PM	0	1	0	1	0	0	0	0	0	2
05:30 PM	0	2	0	3	0	0	0	0	0	5
05:45 PM	0	2	0	0	0	0	0	0	0	2
Total	0	8	0	8	0	0	0	0	0	16
Grand Total	0	19	0	16	0	0	0	0	0	35
Approch %	0	100	0	100	0	0	0	0	0	
Total %	0	54.3	0	45.7	0	0	0	0	0	

	Wampanoag Trail (Route 114) From North				Wampanoag Trail (Route 114) From South				Forbes Street From West				
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:00 PM													
04:00 PM	0	4	0	4	3	0	0	3	0	0	0	0	7
04:15 PM	0	2	0	2	3	0	0	3	0	0	0	0	5
04:30 PM	0	2	0	2	0	0	0	0	0	0	0	0	2
04:45 PM	0	3	0	3	2	0	0	2	0	0	0	0	5
Total Volume	0	11	0	11	8	0	0	8	0	0	0	0	19
% App. Total	0	100	0		100	0	0		0	0	0		
PHF	.000	.688	.000	.688	.667	.000	.000	.667	.000	.000	.000	.000	.679

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N/S: Wampanoag Trail (Route 114)
W: Forbes Street
City, State: E. Providence, RI
Client: Pare/Derek Hug

File Name : 05758BB
Site Code : 23149
Start Date : 9/13/2023
Page No : 1

Groups Printed- Bikes by Direction

[illegible][illegible]

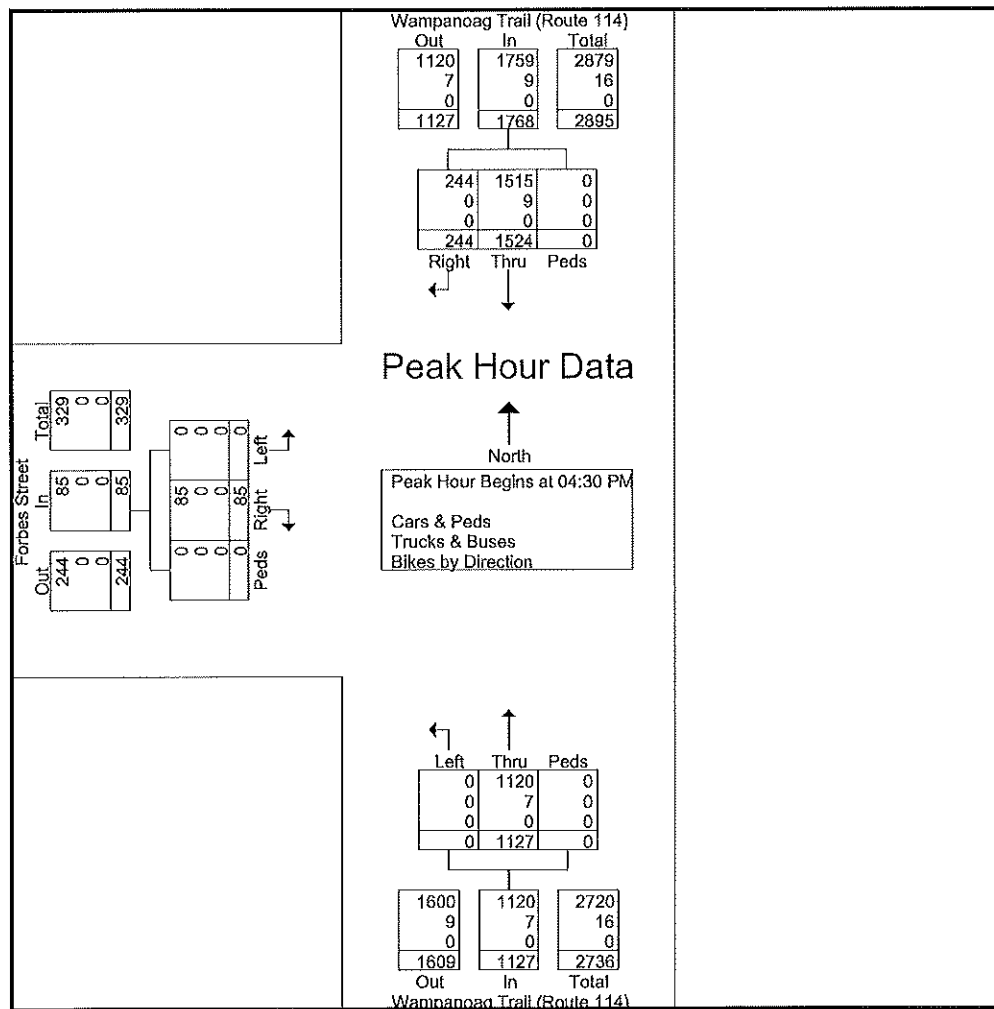
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N/S: Wampanoag Trail (Route 114)
W: Forbes Street
City, State: E. Providence, RI
Client: Pare/Derek Hug

File Name : 05758BB
Site Code : 23149
Start Date : 9/13/2023
Page No : 1

	Wampanoag Trail (Route 114) From North				Wampanoag Trail (Route 114) From South				Forbes Street From West				
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:30 PM													
04:30 PM	51	391	0	442	299	0	0	299	17	0	0	17	758
04:45 PM	58	388	0	446	256	0	0	256	25	0	0	25	727
05:00 PM	70	400	0	470	294	0	0	294	24	0	0	24	788
05:15 PM	65	345	0	410	278	0	0	278	19	0	0	19	707
Total Volume	244	1524	0	1768	1127	0	0	1127	85	0	0	85	2980
% App. Total	13.8	86.2	0		100	0	0		100	0	0		
PHF	.871	.953	.000	.940	.942	.000	.000	.942	.850	.000	.000	.850	.945
Cars & Peds	244	1515	0	1759	1120	0	0	1120	85	0	0	85	2964
% Cars & Peds	100	99.4	0	99.5	99.4	0	0	99.4	100	0	0	100	99.5
Trucks & Buses	0	9	0	9	7	0	0	7	0	0	0	0	16
% Trucks & Buses	0	0.6	0	0.5	0.6	0	0	0.6	0	0	0	0	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: Wampanoag Trail (Route 114)
W: #1691 BCG (Incl. SB to NB Uturn)
City, State: E. Providence, RI
Client: Pare/Derek Hug

File Name : 05758CC
Site Code : 23149
Start Date : 9/13/2023
Page No : 1

Groups Printed- Trucks & Buses

	Wampanoag Trail (Route 114) From North			Wampanoag Trail (Route 114) From South			Barrington Community Garden (Vicinity) From West			
Start Time	Right	Thru	Uturn	Thru	Left	Peds	Right	Left	Peds	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	1	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	0	0	0	0	0	1
05:00 PM	0	0	1	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	0	0	0	0	0	1
Grand Total	0	0	2	0	0	0	0	0	0	2
Apprch %	0	0	100	0	0	0	0	0	0	
Total %	0	0	100	0	0	0	0	0	0	

[illegible]

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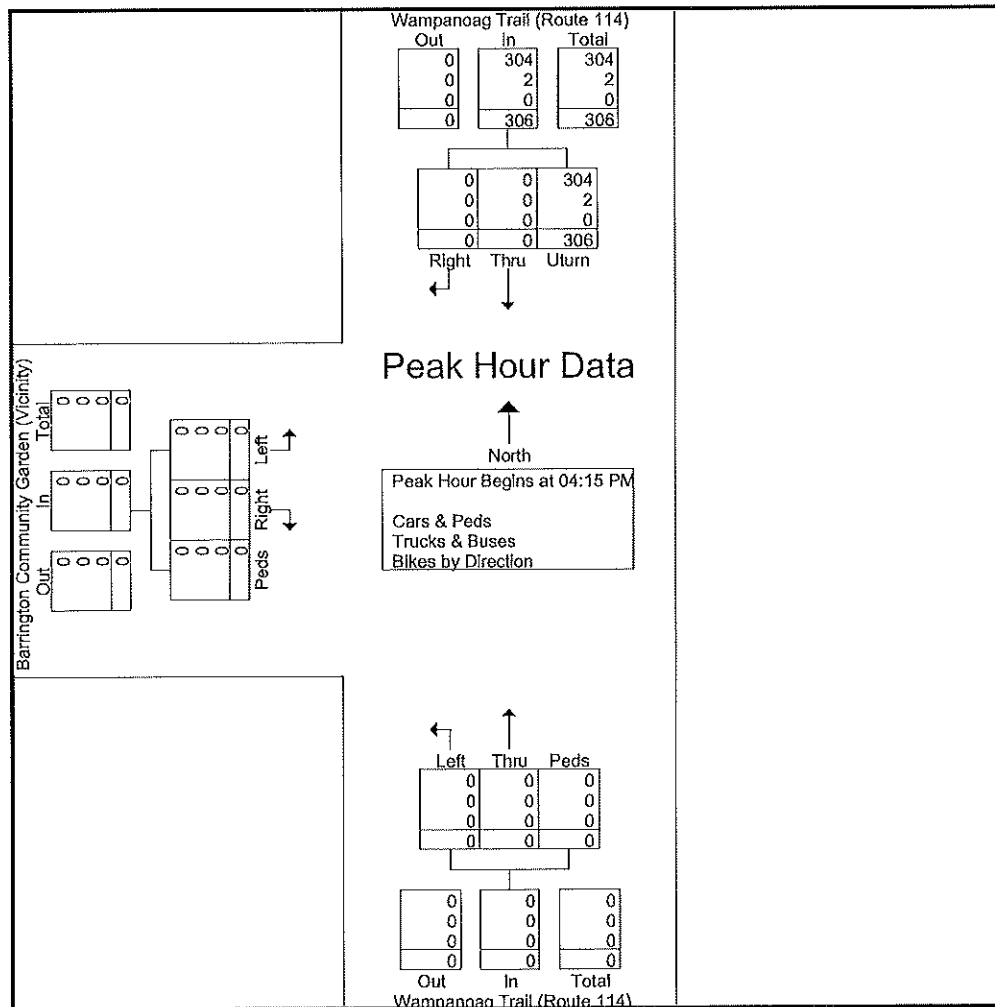
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N/S: Wampanoag Trail (Route 114)
W: #1691 BCG (Incl. SB to NB Uturn)
City, State: E. Providence, RI
Client: Pare/Derek Hug

File Name : 05758CC
Site Code : 23149
Start Date : 9/13/2023
Page No : 1

	Wampanoag Trail (Route 114) From North				Wampanoag Trail (Route 114) From South				Barrington Community Garden (Vicinity) From West				
Start Time	Right	Thru	Uturn	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:15 PM													
04:15 PM	0	0	65	65	0	0	0	0	0	0	0	0	65
04:30 PM	0	0	85	85	0	0	0	0	0	0	0	0	85
04:45 PM	0	0	69	69	0	0	0	0	0	0	0	0	69
05:00 PM	0	0	87	87	0	0	0	0	0	0	0	0	87
Total Volume	0	0	306	306	0	0	0	0	0	0	0	0	306
% App. Total	0	0	100		0	0	0		0	0	0		
PHF	.000	.000	.879	.879	.000	.000	.000	.000	.000	.000	.000	.000	.879
Cars & Peds	0	0	304	304	0	0	0	0	0	0	0	0	304
% Cars & Peds	0	0	99.3	99.3	0	0	0	0	0	0	0	0	99.3
Trucks & Buses	0	0	2	2	0	0	0	0	0	0	0	0	2
% Trucks & Buses	0	0	0.7	0.7	0	0	0	0	0	0	0	0	0.7
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0



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Page No : 1

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

[illegible][illegible]

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N/S: Wampanoag Trail (Route 114)
W: Socony Road (Incl. NB to SB Uturn)
City, State: E. Providence, RI
Client: Parc/Derek Hug

File Name : 05758AAA

Site Code : 23149

Start Date : 9/23/2023

Page No : 1

Groups Printed: Cars & Peds

Start Time	Wampanoag Trail (Route 114) From North			Wampanoag Trail (Route 114) From South			Socony Road From West			Int. Total
	Right	Thru	Peds	Thru	Left	Uturn	Right	Left	Peds	
11:00 AM	0	225	0	0	0	1	0	0	0	226
11:15 AM	0	239	0	0	0	2	0	0	0	241
11:30 AM	0	244	0	0	0	5	0	0	1	250
11:45 AM	0	278	0	0	0	6	1	0	0	285
Total	0	986	0	0	0	14	1	0	1	1002
12:00 PM	0	263	0	0	0	2	3	0	0	268
12:15 PM	0	258	0	0	0	7	1	0	0	266
12:30 PM	0	261	0	0	0	7	4	0	0	272
12:45 PM	0	297	0	0	0	1	4	0	0	302
Total	0	1079	0	0	0	17	12	0	0	1108
Grand Total	0	2065	0	0	0	31	13	0	1	2110
Apprch %	0	100	0	0	0	100	92.9	0	7.1	
Total %	0	97.9	0	0	0	1.5	0.6	0	0	

	Wampanoag Trail (Route 114) From North				Wampanoag Trail (Route 114) From South				Socony Road From West				
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Uturn	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 12:00 PM													
12:00 PM	0	263	0	263	0	0	2	2	3	0	0	3	268
12:15 PM	0	258	0	258	0	0	7	7	1	0	0	1	266
12:30 PM	0	261	0	261	0	0	7	7	4	0	0	4	272
12:45 PM	0	297	0	297	0	0	1	1	4	0	0	4	302
Total Volume	0	1079	0	1079	0	0	17	17	12	0	0	12	1108
% App. Total	0	100	0		0	0	100		100	0	0		
PHF	.000	.908	.000	.908	.000	.000	.607	.607	.750	.000	.000	.750	.917

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Page No : 1

[illegible]

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N/S: Wampanoag Trail (Route 114)
W: Socony Road (Incl. NB to SB Uturn)
City, State: E. Providence, RI
Client: Pare/Derek Hug

File Name : 05758AAA
Site Code : 23149
Start Date : 9/23/2023
Page No : 1

Groups Printed: Bikes by Direction

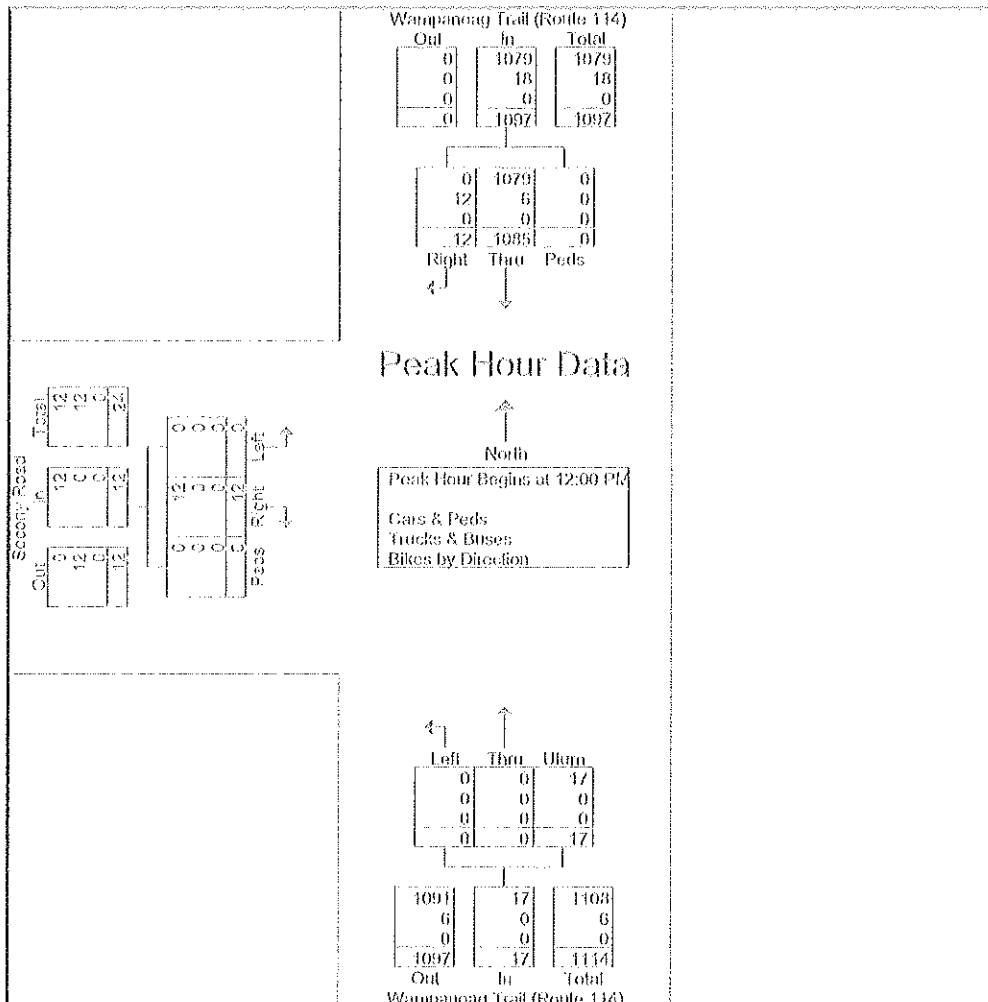
[illegible][illegible]

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N/S: Wampanoag Trail (Route 114)
W: Socony Road (Incl. NB to SB Uturn)
City, State: E. Providence, RI
Client: Pare/Derek Hug

File Name : 05758AAA
Site Code : 23149
Start Date : 9/23/2023
Page No : 1

	Wampanoag Trail (Route 114)				Wampanoag Trail (Route 114)				Socony Road				
	From North				From South				From West				
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Uturn	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 12:00 PM													
12:00 PM	4	267	0	271	0	0	2	2	3	0	0	3	276
12:15 PM	2	258	0	260	0	0	7	7	1	0	0	1	268
12:30 PM	5	263	0	268	0	0	7	7	4	0	0	4	279
12:45 PM	1	297	0	298	0	0	1	1	4	0	0	4	303
Total Volume	12	1085	0	1097	0	0	17	17	12	0	0	12	1126
% App. Total	1.1	98.9	0		0	0	100		100	0	0		
PDF	.600	.913	.000	.920	.000	.000	.607	.607	.750	.000	.000	.750	.929
Cars & Peds	0	1079	0	1079	0	0	17	17	12	0	0	12	1108
% Cars & Peds	0	99.4	0	98.4	0	0	100	100	100	0	0	100	98.4
Trucks & Buses	12	6	0	18	0	0	0	0	0	0	0	0	18
% Trucks & Buses	100	0.6	0	1.6	0	0	0	0	0	0	0	0	1.6
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: Wampanoag Trail (Route 114)
W: Forbes Street
City, State: E. Providence, RI
Client: Pare/Derek Hug

File Name : 05758BBB
Site Code : 23149
Start Date : 9/23/2023
Page No : 1

Groups Printed- Cars & Peds

Start Time	Wampanoag Trail (Route 114) From North			Wampanoag Trail (Route 114) From South			Forbes Street From West			Int. Total
	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	
11:00 AM	28	198	0	248	0	0	20	0	0	494
11:15 AM	39	204	0	252	0	0	20	0	0	515
11:30 AM	36	211	0	254	0	0	21	0	0	522
11:45 AM	40	233	0	270	0	0	16	0	0	559
Total	143	846	0	1024	0	0	77	0	0	2090
12:00 PM	28	227	0	281	0	0	25	0	0	561
12:15 PM	21	241	0	295	0	0	32	0	0	589
12:30 PM	19	240	0	293	0	0	24	0	0	576
12:45 PM	24	278	0	277	0	0	21	0	0	600
Total	92	986	0	1146	0	0	102	0	0	2326
Grand Total	235	1832	0	2170	0	0	179	0	0	4416
Approch %	11.4	88.6	0	100	0	0	100	0	0	
Total %	5.3	41.5	0	49.1	0	0	4.1	0	0	

Start Time	Wampanoag Trail (Route 114) From North				Wampanoag Trail (Route 114) From South				Forbes Street From West				Int. Total	
	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total		
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1														
Peak Hour for Entire Intersection Begins at 12:00 PM														
12:00 PM	28	227	0	255	281	0	0	281	25	0	0	25	561	
12:15 PM	21	241	0	262	295	0	0	295	32	0	0	32	589	
12:30 PM	19	240	0	259	293	0	0	293	24	0	0	24	576	
12:45 PM	24	278	0	302	277	0	0	277	21	0	0	21	600	
Total Volume	92	986	0	1078	1146	0	0	1146	102	0	0	102	2326	
% App. Total	8.5	91.5	0		100	0	0		100	0	0			
PHF	.821	.887	.000	.892	.971	.000	.000	.971	.797	.000	.000	.797	.969	

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N/S: Wampanoag Trail (Route 114)

W: Forbes Street

City, State: E. Providence, RI

Client: Pare/Derek Hug

File Name : 05758BBB

Site Code : 23149

Start Date : 9/23/2023

Page No : 1

Groups Printed- Trucks & Buses

Start Time	Wampanoag Trail (Route 114) From North			Wampanoag Trail (Route 114) From South			Forbes Street From West			Int. Total
	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	
11:00 AM	0	2	0	5	0	0	1	0	0	8
11:15 AM	0	2	0	1	0	0	0	0	0	3
11:30 AM	0	1	0	2	0	0	0	0	0	3
11:45 AM	0	0	0	1	0	0	0	0	0	1
Total	0	5	0	9	0	0	1	0	0	15
12:00 PM	0	4	0	3	0	0	0	0	0	7
12:15 PM	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	2	0	5	0	0	0	0	0	7
12:45 PM	0	0	0	0	0	0	1	0	0	1
Total	0	6	0	8	0	0	1	0	0	15
Grand Total	0	11	0	17	0	0	2	0	0	30
Approch %	0	100	0	100	0	0	100	0	0	
Total %	0	36.7	0	56.7	0	0	6.7	0	0	

Start Time	Wampanoag Trail (Route 114) From North				Wampanoag Trail (Route 114) From South				Forbes Street From West				Int. Total	
	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total		
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1														
Peak Hour for Entire Intersection Begins at 11:00 AM														
11:00 AM	0	2	0	2	5	0	0	5	1	0	0	1	8	
11:15 AM	0	2	0	2	1	0	0	1	0	0	0	0	3	
11:30 AM	0	1	0	1	2	0	0	2	0	0	0	0	3	
11:45 AM	0	0	0	0	1	0	0	1	0	0	0	0	1	
Total Volume	0	5	0	5	9	0	0	9	1	0	0	1	15	
% App. Total	0	100	0		100	0	0		100	0	0			
PHF	.000	.625	.000	.625	.450	.000	.000	.450	.250	.000	.000	.250	.469	

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N/S: Wampanoag Trail (Route 114)

W: Forbes Street

City, State: E. Providence, RI

Client: Pare/Derek Hug

File Name : 057581313

Site Code : 23149

Start Date : 9/23/2023

Page No : 3

Groups Printed- Bikes by Direction

[illegible][illegible]

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N/S: Wampanoag Trail (Route 114)

W: Forbes Street

City, State: E. Providence, RI

Client: Pare/Derek Hug

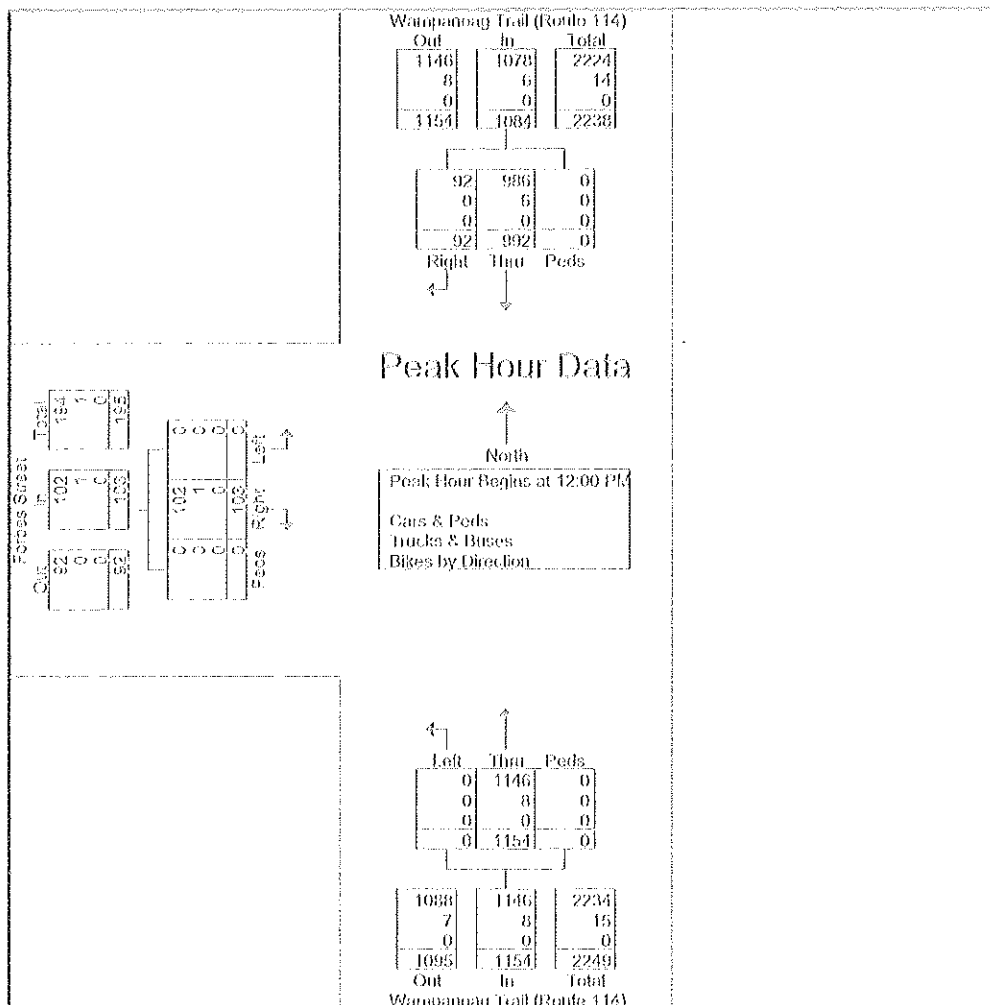
File Name : 05758B3B

Site Code : 23149

Start Date : 9/23/2023

Page No : 1

	Wampanoag Trail (Route 114) From North				Wampanoag Trail (Route 114) From South				Forbes Street From West				
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 12:00 PM													
12:00 PM	28	231	0	259	284	0	0	284	25	0	0	25	568
12:15 PM	21	241	0	262	295	0	0	295	32	0	0	32	589
12:30 PM	19	242	0	261	298	0	0	298	24	0	0	24	583
12:45 PM	24	278	0	302	277	0	0	277	22	0	0	22	604
Total Volume	92	992	0	1084	1154	0	0	1154	103	0	0	103	2341
% App. Total	8.5	91.5	0		100	0	0		100	0	0		
PHF	.821	.892	.000	.897	.968	.000	.000	.968	.805	.000	.000	.805	.974
Cars & Peds	92	986	0	1078	1146	0	0	1146	102	0	0	102	2326
% Cars & Peds	100	99.4	0	99.4	99.3	0	0	99.3	99.0	0	0	99.0	99.4
Trucks & Buses	0	6	0	6	8	0	0	8	1	0	0	1	15
% Trucks & Buses	0	0.6	0	0.6	0.7	0	0	0.7	1.0	0	0	1.0	0.6
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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Page No : 1

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

[illegible][illegible]

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Page No : 1

[illegible]

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N/S: Wampanoag Trail (Route 114)
W: #1691 BCG (Incl. SB to NB Uturn)
City, State: E. Providence, RI
Client: Pare/Derek Hug

File Name : 05758CCC
Site Code : 23149
Start Date : 9/23/2023
Page No : 1

Groups Printed- Trucks & Buses

Groups Trained- Trucks & Buses										
	Wampanoag Trail (Route 114) From North			Wampanoag Trail (Route 114) From South			Barrington Community Garden (Vicinity) From West			
Start Time	Right	Thru	Uturn	Thru	Left	Peds	Right	Left	Peds	Int. Total
11:00 AM	0	0	2	0	0	0	0	0	0	2
11:15 AM	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	1	0	0	0	0	0	0	1
Total	0	0	3	0	0	0	0	0	0	3
12:00 PM	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	1	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	1	0	0	0	0	0	0	1
Total	0	0	2	0	0	0	0	0	0	2
Grand Total	0	0	5	0	0	0	0	0	0	5
Apprch %	0	0	100	0	0	0	0	0	0	
Total %	0	0	100	0	0	0	0	0	0	

[illegible]

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

Page No : 1

[illegible]

Transportation Data Corporation

Mario Perone, mperone1@verizon.net

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N/S: Wampanoag Trail (Route 114)
W: #1691 BCG (Incl. SB to NB Uturn)
City, State: E. Providence, RI
Client: Pare/Derek Hug

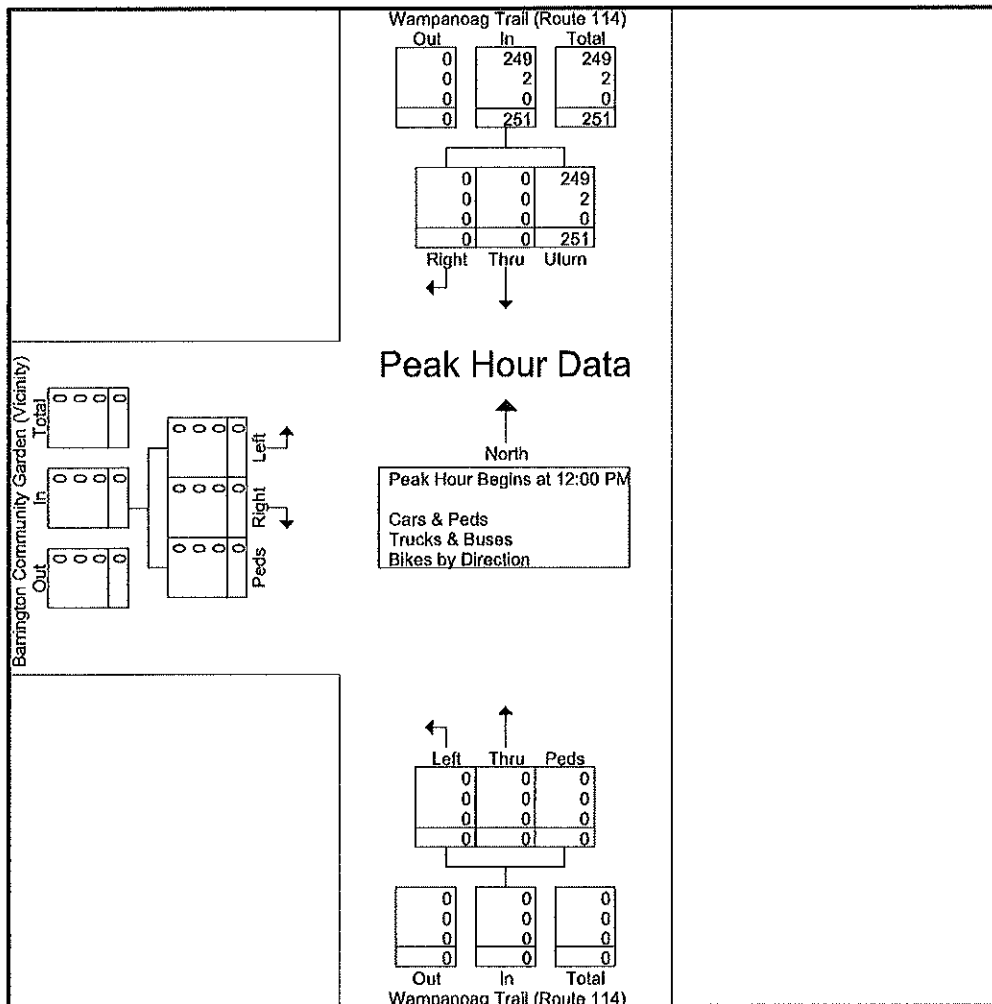
File Name : 05758CCC

Site Code : 23149

Start Date : 9/23/2023

Page No : 1

	Wampanoag Trail (Route 114) From North				Wampanoag Trail (Route 114) From South				Barrington Community Garden (Vicinity) From West				
Start Time	Right	Thru	Uturn	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 12:00 PM													
12:00 PM	0	0	66	66	0	0	0	0	0	0	0	0	66
12:15 PM	0	0	68	68	0	0	0	0	0	0	0	0	68
12:30 PM	0	0	61	61	0	0	0	0	0	0	0	0	61
12:45 PM	0	0	56	56	0	0	0	0	0	0	0	0	56
Total Volume	0	0	251	251	0	0	0	0	0	0	0	0	251
% App. Total	0	0	100		0	0	0		0	0	0		
PHF	.000	.000	.923	.923	.000	.000	.000	.000	.000	.000	.000	.000	.923
Cars & Peds	0	0	249	249	0	0	0	0	0	0	0	0	249
% Cars & Peds	0	0	99.2	99.2	0	0	0	0	0	0	0	0	99.2
Trucks & Buses	0	0	2	2	0	0	0	0	0	0	0	0	2
% Trucks & Buses	0	0	0.8	0.8	0	0	0	0	0	0	0	0	0.8
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



Transportation Data Corporation

Page 1

Wampanoag Trail (Route 114)
just north of #1200 North Pointe Drive
City, State: E. Providence, RI
Client: Pare/Derek Hug

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

05758AVOLUME
Site Code: 23149

Start	Wed	13-Sep-23	Thu	14-Sep-23	Fri	15-Sep-23	Daily Average		
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
12:00	14	270	1	232	*	*	8	251	
12:15	9	240	2	222	*	*	6	231	
12:30	9	288	1	221	*	*	5	254	
12:45	12	215	2	241	*	*	7	228	
01:00	5	219	0	224	*	*	2	222	
01:15	3	225	1	220	*	*	2	222	
01:30	3	193	0	214	*	*	2	204	
01:45	7	191	2	229	*	*	4	210	
02:00	3	216	1	236	*	*	2	226	
02:15	3	218	0	243	*	*	2	230	
02:30	2	249	0	282	*	*	1	266	
02:45	7	231	0	267	*	*	4	249	
03:00	7	276	0	346	*	*	4	311	
03:15	8	310	0	325	*	*	4	318	
03:30	9	341	1	353	*	*	5	347	
03:45	12	308	1	294	*	*	6	301	
04:00	16	254	7	291	*	*	12	272	
04:15	15	291	1	274	*	*	8	282	
04:30	35	305	8	283	*	*	22	294	
04:45	33	257	15	311	*	*	24	284	
05:00	47	286	27	314	*	*	37	300	
05:15	65	280	14	293	*	*	40	286	
05:30	81	249	44	254	*	*	62	252	
05:45	117	193	86	257	*	*	102	225	
06:00	138	203	120	219	*	*	129	211	
06:15	175	208	135	225	*	*	155	216	
06:30	235	182	192	214	*	*	214	198	
06:45	305	145	285	149	*	*	295	147	
07:00	357	160	282	164	*	*	320	162	
07:15	410	150	392	161	*	*	401	156	
07:30	439	114	405	186	*	*	422	150	
07:45	429	105	434	128	*	*	432	116	
08:00	407	94	352	114	*	*	380	104	
08:15	374	86	321	94	*	*	348	90	
08:30	388	69	360	95	*	*	374	82	
08:45	331	75	316	78	*	*	324	76	
09:00	327	72	285	88	*	*	306	80	
09:15	303	43	248	63	*	*	276	53	
09:30	299	44	284	50	*	*	292	47	
09:45	255	42	223	40	*	*	239	41	
10:00	249	39	266	53	*	*	258	46	
10:15	264	23	240	33	*	*	252	28	
10:30	264	28	295	31	*	*	280	30	
10:45	250	13	230	26	*	*	240	20	
11:00	243	20	204	33	*	*	224	26	
11:15	253	2	196	31	*	*	224	16	
11:30	246	4	207	17	*	*	226	10	
11:45	253	1	250	9	*	*	252	5	
Total	7716	8027	6736	8727	0	0	7234	8375	
Combined Total	15743		15463		0		15609		
Peak	07:15	03:00	-	07:15	03:00	-	-	07:15	03:00
Vol.	1685	1235	-	1583	1318	-	-	1635	1277
P.H.F.	0.960	0.905		0.912	0.933			0.946	0.920
ADT	ADT 14,284		AADT 14,284						

Transportation Data Corporation

Page 1

Wampanoag Trail (Route 114)
just north of #1200 North Pointe Drive
City, State: E. Providence, RI
Client: Pare/Derek Hug

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

05758AVOLUME
Site Code: 23149

Start Time	13-Sep-23 Wed	NB		Hour Totals	
		Morning	Afternoon	Morning	Afternoon
12:00		14	270		
12:15		9	240		
12:30		9	288		
12:45		12	215	44	1013
01:00		5	219		
01:15		3	225		
01:30		3	193		
01:45		7	191	18	828
02:00		3	216		
02:15		3	218		
02:30		2	249		
02:45		7	231	15	914
03:00		7	276		
03:15		8	310		
03:30		9	341		
03:45		12	308	36	1235
04:00		16	254		
04:15		15	291		
04:30		35	305		
04:45		33	257	99	1107
05:00		47	286		
05:15		65	280		
05:30		81	249		
05:45		117	193	310	1008
06:00		138	203		
06:15		175	208		
06:30		235	182		
06:45		305	145	853	738
07:00		357	160		
07:15		410	150		
07:30		439	114		
07:45		429	105	1635	529
08:00		407	94		
08:15		374	86		
08:30		388	69		
08:45		331	75	1500	324
09:00		327	72		
09:15		303	43		
09:30		299	44		
09:45		255	42	1184	201
10:00		249	39		
10:15		264	23		
10:30		264	28		
10:45		250	13	1027	103
11:00		243	20		
11:15		253	2		
11:30		246	4		
11:45		253	1	995	27
Total		7716	8027		
Combined Total		15743			
Percentage		0.0%			

Transportation Data Corporation

Page 2

Mario Perone, mperone1@verizon.net
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Wampanoag Trail (Route 114)
just north of #1200 North Pointe Drive
City, State: E. Providence, RI
Client: Pare/Derek Hug

05758AVOLUME
Site Code: 23149

Start Time	14-Sep-23 Thu	NB		Hour Totals	
		Morning	Afternoon	Morning	Afternoon
12:00		1	232		
12:15		2	222		
12:30		1	221		
12:45		2	241	6	916
01:00		0	224		
01:15		1	220		
01:30		0	214		
01:45		2	229	3	887
02:00		1	236		
02:15		0	243		
02:30		0	282		
02:45		0	267	1	1028
03:00		0	346		
03:15		0	325		
03:30		1	353		
03:45		1	294	2	1318
04:00		7	291		
04:15		1	274		
04:30		8	283		
04:45		15	311	31	1159
05:00		27	314		
05:15		14	293		
05:30		44	254		
05:45		86	257	171	1118
06:00		120	219		
06:15		135	225		
06:30		192	214		
06:45		285	149	732	807
07:00		282	164		
07:15		392	161		
07:30		405	186		
07:45		434	128	1513	639
08:00		352	114		
08:15		321	94		
08:30		360	95		
08:45		316	78	1349	381
09:00		285	88		
09:15		248	63		
09:30		284	50		
09:45		223	40	1040	241
10:00		266	53		
10:15		240	33		
10:30		295	31		
10:45		230	26	1031	143
11:00		204	33		
11:15		196	31		
11:30		207	17		
11:45		250	9	857	90
Total		6736	8727		
Combined Total		15463			
Percentage	0.0%				
Total		14452	16754		
Percent		46.3%	53.7%		
ADT		ADT 14,284		ADT 14,284	

Transportation Data Corporation

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Wampanoag Trail (Route 114)
just north of #1200 North Pointe Drive

City, State: E. Providence, RI

Client: Pare/Derek Hug

05758Aspeed
Site Code: 23149

Northbound		1	15	16	20	21	25	26	31	36	41	46	51	56	61	66	71	Total	85th Percent	95th Percent
Start Time		15	20	21	25	26	30	31	35	40	45	50	55	60	65	70	75			
09/13/23		0	0	0	0	0	0	0	0	4	7	6	15	9	3	0	0	44	57	61
01:00		0	0	0	0	1	0	0	0	1	2	8	1	2	2	1	0	18	60	65
02:00		0	0	0	0	0	0	1	1	1	2	7	0	4	0	0	0	15	57	59
03:00		0	0	0	0	0	0	1	1	0	4	15	8	6	2	0	0	36	57	60
04:00		0	0	0	0	0	0	0	0	2	10	31	26	18	8	3	1	99	58	63
05:00		2	0	0	0	0	0	0	2	9	26	83	95	53	30	10	0	310	59	64
06:00		12	0	0	0	0	0	0	0	6	34	169	264	242	101	23	2	853	59	64
07:00		26	0	0	0	0	0	2	2	9	74	306	573	472	152	20	1	1635	59	62
08:00		40	0	0	0	0	0	4	4	23	125	331	456	368	125	20	8	1500	58	62
09:00		24	0	0	0	0	0	0	0	12	87	290	356	298	97	17	3	1184	58	62
10:00		24	0	0	0	0	0	2	3	21	148	305	262	189	68	7	1	1027	57	61
11:00		15	0	0	0	0	0	0	0	23	138	290	271	189	52	12	2	995	57	61
12 PM		12	0	0	0	1	1	12	12	29	115	301	278	195	56	12	2	1013	57	61
13:00		14	0	0	0	0	0	11	11	52	202	260	191	76	21	1	0	828	54	58
14:00		8	0	0	0	0	0	2	2	20	103	250	253	181	79	13	5	914	58	62
15:00		25	0	0	0	1	1	1	1	21	130	316	347	253	115	21	5	1235	59	63
16:00		9	0	0	0	0	0	0	0	9	111	315	304	237	91	27	4	1107	58	63
17:00		8	0	0	0	0	0	1	1	18	71	256	326	244	65	18	1	1008	58	62
18:00		4	0	0	0	0	0	1	1	12	95	213	224	136	38	11	4	738	57	61
19:00		5	0	0	0	0	0	0	0	21	90	177	146	67	19	4	0	529	55	59
20:00		3	0	0	0	0	0	3	3	25	91	114	68	17	2	1	0	324	52	56
21:00		1	0	0	0	0	0	1	1	15	48	60	50	20	4	2	0	201	54	58
22:00		1	0	0	0	0	0	0	0	14	16	25	27	15	5	0	0	103	56	59
23:00		4	0	0	0	0	0	0	0	5	5	4	9	0	0	0	0	27	52	54
Total		237	0	0	0	3	47	352	1734	4132	4550	3291	1135	223	1135	223	39	15743		
Percent		1.5%	0.0%	0.0%	0.0%	0.0%	0.3%	2.2%	11.0%	26.2%	28.9%	20.9%	7.2%	1.4%	7.2%	1.4%	0.2%			
AM Peak		08:00				01:00		08:00	08:00	08:00	10:00	08:00	07:00	07:00	07:00	06:00	08:00	07:00		
Vol.		40				1		4	23	148	331	472	152	23	152	23	8	1635		
PM Peak		15:00				12:00		12:00	13:00	13:00	13:00	15:00	15:00	15:00	15:00	16:00	14:00	15:00		
Vol.		25				1		12	52	202	316	347	253	27	115	27	5	1235		

Transportation Data Corporation

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Wampanoag Trail (Route 114)
just north of #1200 North Pointe Drive

City, State: E. Providence, RI

Client: Pare/Derek Hug

05758Aspeed

Site Code: 23149

Start Time	1	16	21	26	31	36	41	46	51	56	61	66	71	75	Total	85th Percent	95th Percent
09/14/23	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95
01:00	1	0	0	0	1	1	1	0	1	1	0	0	0	0	6	55	58
02:00	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	32	34
03:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	44	44
04:00	1	0	0	0	1	0	1	0	0	0	0	0	0	0	2	43	44
05:00	12	0	0	0	1	8	7	9	4	0	0	1	0	0	31	50	54
06:00	56	0	1	1	5	12	37	57	26	10	7	3	1	1	171	53	61
07:00	125	0	1	0	5	12	79	207	208	119	35	6	4	4	732	57	60
08:00	225	115	30	36	33	49	133	254	277	304	68	10	0	0	1513	57	60
09:00	71	0	1	1	7	29	177	260	285	164	36	6	1	1	1349	54	59
10:00	61	0	0	1	13	43	160	283	280	136	38	5	2	2	1040	56	59
11:00	91	0	1	0	6	27	147	228	198	110	36	8	3	3	1031	56	59
12 PM	58	0	0	0	13	32	156	242	232	128	40	13	2	2	916	56	60
13:00	13	0	0	0	10	23	118	223	246	183	55	10	6	6	887	58	61
14:00	14	0	0	0	0	19	117	302	280	215	58	18	5	5	1028	58	62
15:00	21	0	0	0	7	45	134	309	373	293	111	22	3	3	1318	58	63
16:00	21	0	0	0	2	17	97	261	357	243	121	35	5	5	1159	59	64
17:00	16	0	0	0	1	7	71	240	343	290	122	26	2	2	1118	59	63
18:00	3	0	0	0	0	13	68	223	246	183	55	10	6	6	807	58	62
19:00	7	0	0	0	0	14	103	195	166	108	37	6	3	3	639	57	61
20:00	3	0	0	0	1	11	68	128	105	35	23	7	0	0	381	56	62
21:00	0	0	0	0	0	4	30	81	64	41	16	4	1	1	241	58	62
22:00	0	0	0	0	1	7	20	43	38	24	8	1	1	1	143	57	61
23:00	0	0	0	0	2	4	14	34	21	7	4	3	1	1	90	55	63
Total	801	115	34	41	119	410	1878	3942	4209	2748	913	202	51	51	15463		
Percent	5.2%	0.7%	0.2%	0.3%	0.8%	2.7%	12.1%	25.5%	27.2%	17.8%	5.9%	1.3%	0.3%	0.3%			
AM Peak	08:00	08:00	08:00	08:00	08:00	08:00	09:00	07:00	07:00	07:00	07:00	07:00	11:00	11:00	07:00		
Vol.	225	115	30	36	33	49	177	363	459	304	68	10	5	5	1513		
PM Peak	12:00	12:00	12:00	12:00	12:00	12:00	12:00	15:00	15:00	15:00	17:00	16:00	13:00	13:00	15:00		
Vol.	58	13	45	45	13	45	156	309	373	293	122	35	6	6	1318		
Grand Total	1038	115	34	44	166	762	3612	8074	8759	6039	2048	425	90	90	31206		
Percent	3.3%	0.4%	0.1%	0.1%	0.5%	2.4%	11.6%	25.9%	28.1%	19.4%	6.6%	1.4%	0.3%	0.3%			

Stats 10 MPH Pace Speed : 46-55 MPH

Number of Vehicles > 45 MPH : 25435
Percent of Vehicles > 45 MPH : 81.5%
Mean Speed(Average) : 50 MPH

15th Percentile : 43 MPH
50th Percentile : 50 MPH
85th Percentile : 58 MPH
95th Percentile : 62 MPH

Transportation Data Corporation

Mario Perone, mperone1@verizon.net

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

Wampanoag Trail (Route 114)

just north of #1200 North Pointe Drive

City, State: E. Providence, RI

Client: Pare/Derek Hug

Northbound

05758Aclass
Site Code: 23149

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
09/13/23	0	34	6	2	2	0	0	0	0	0	0	0	0	44
01:00	0	13	3	1	1	0	0	0	0	0	0	0	0	18
02:00	0	14	0	0	0	0	0	1	0	0	0	0	0	15
03:00	0	27	4	1	4	0	0	0	0	0	0	0	0	36
04:00	0	63	20	1	15	0	0	0	0	0	0	0	0	99
05:00	1	208	65	7	28	1	0	0	0	0	0	0	0	310
06:00	2	635	135	7	72	0	0	2	0	0	0	0	0	853
07:00	4	1278	249	10	80	4	0	9	1	0	0	0	0	1635
08:00	8	1110	262	21	81	5	0	6	5	0	2	0	0	1500
09:00	2	869	227	6	70	1	0	8	1	0	0	0	0	1184
10:00	1	765	160	15	72	2	0	9	2	0	1	0	0	1027
11:00	1	750	161	7	63	4	0	7	1	0	1	0	0	995
12 PM	1	724	184	7	85	3	0	8	1	0	0	0	0	1013
13:00	3	566	139	16	86	6	0	11	0	0	1	0	0	828
14:00	1	642	168	8	83	4	0	4	3	0	1	0	0	914
15:00	1	899	232	23	76	1	1	2	0	0	0	0	0	1235
16:00	0	830	195	3	75	1	0	2	1	0	0	0	0	1107
17:00	0	770	162	5	66	0	0	4	1	0	0	0	0	1008
18:00	0	566	120	6	43	0	0	2	1	0	0	0	0	738
19:00	0	415	76	3	35	0	0	0	0	0	0	0	0	529
20:00	0	266	36	0	20	0	0	2	0	0	0	0	0	324
21:00	0	168	26	1	6	0	0	0	0	0	0	0	0	201
22:00	0	80	17	1	5	0	0	0	0	0	0	0	0	103
23:00	0	25	0	0	2	0	0	0	0	0	0	0	0	27
Day Total	25	11717	2647	151	1070	32	1	77	17	0	6	0	0	15743
Percent	0.2%	74.4%	16.8%	1.0%	6.8%	0.2%	0.0%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	07:00	08:00	08:00	08:00	08:00		07:00	08:00	08:00	08:00			07:00
Vol.	8	1278	262	21	81	5		9	5	2				1635
PM Peak	13:00	15:00	15:00	15:00	13:00	13:00	15:00	13:00	14:00	13:00	13:00			15:00
Vol.	3	899	232	23	86	6	1	11	3	1				1235

Transportation Data Corporation

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Wampanoag Trail (Route 114)
just north of #1200 North Pointe Drive
City, State: E. Providence, RI
Client: Pare/Derek Hug
Northbound

05758Aclass
Site Code: 23149

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
09/14/23	0	6	0	0	0	0	0	0	0	0	0	0	0	6
01:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:00	1	24	5	0	1	0	0	0	0	0	0	0	0	31
05:00	0	128	27	4	11	0	0	1	0	0	0	0	0	171
06:00	10	578	110	8	24	1	0	1	0	0	0	0	0	732
07:00	9	1256	175	7	58	4	0	4	0	0	0	0	0	1513
08:00	20	1075	174	18	53	5	0	4	0	0	0	0	0	1349
09:00	9	828	147	5	44	4	0	3	0	0	0	0	0	1040
10:00	1	780	171	9	63	2	0	5	0	0	0	0	0	1031
11:00	6	664	134	6	41	2	0	2	2	0	0	0	0	857
12 PM	5	712	148	2	44	1	0	4	0	0	0	0	0	916
13:00	5	679	140	7	54	0	0	1	0	0	1	0	0	887
14:00	2	755	177	10	73	2	1	6	2	0	0	0	0	1028
15:00	3	914	261	24	105	2	0	7	2	0	0	0	0	1318
16:00	7	878	189	6	69	3	0	5	1	0	1	0	0	1159
17:00	5	845	196	5	62	2	0	3	0	0	0	0	0	1118
18:00	5	609	135	5	51	0	0	1	0	0	1	0	0	807
19:00	0	522	75	2	39	0	0	1	0	0	0	0	0	639
20:00	0	309	50	2	20	0	0	0	0	0	0	0	0	381
21:00	1	202	29	1	8	0	0	0	0	0	0	0	0	241
22:00	0	115	18	2	8	0	0	0	0	0	0	0	0	143
23:00	0	73	12	1	4	0	0	0	0	0	0	0	0	90
Day Total	89	11958	2373	124	832	28	1	48	7	0	3	0	0	15463
Percent	0.6%	77.3%	15.3%	0.8%	5.4%	0.2%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	07:00	07:00	08:00	10:00	08:00		10:00	11:00					07:00
Vol.	20	1256	175	18	63	5		5	2					1513
PM Peak	16:00	15:00	15:00	15:00	15:00	16:00	14:00	15:00	14:00		13:00			15:00
Vol.	7	914	261	24	105	3	1	7	2		1			1318
Grand Total	114	23675	5020	275	1902	60	2	125	24	0	9	0	0	31206
Percent	0.4%	75.9%	16.1%	0.9%	6.1%	0.2%	0.0%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	

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Page 1

Wampanoag Trail (Route 114)
just south of #1275 Driveway
City, State: E. Providence, RI
Client: Pare/Derek Hug

05758Bvolume

Site Code: 23149

Start	Wed	13-Sep-23	Thu	14-Sep-23	Fri	15-Sep-23	Daily Average		
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
12:00	17	256	25	246	*	*	21	251	
12:15	24	274	19	264	*	*	22	269	
12:30	18	249	21	259	*	*	20	254	
12:45	6	237	15	247	*	*	10	242	
01:00	14	213	12	224	*	*	13	218	
01:15	13	210	11	239	*	*	12	224	
01:30	5	217	4	236	*	*	4	226	
01:45	8	244	4	277	*	*	6	260	
02:00	2	219	5	289	*	*	4	254	
02:15	3	295	4	333	*	*	4	314	
02:30	6	278	7	333	*	*	6	306	
02:45	5	284	4	307	*	*	4	296	
03:00	5	275	3	308	*	*	4	292	
03:15	5	268	8	316	*	*	6	292	
03:30	4	304	7	332	*	*	6	318	
03:45	7	344	6	361	*	*	6	352	
04:00	5	318	9	385	*	*	7	352	
04:15	5	340	12	340	*	*	8	340	
04:30	12	389	13	359	*	*	12	374	
04:45	14	385	12	377	*	*	13	381	
05:00	23	388	20	369	*	*	22	378	
05:15	28	349	19	401	*	*	24	375	
05:30	39	412	44	381	*	*	42	396	
05:45	53	358	56	350	*	*	54	354	
06:00	58	288	58	315	*	*	58	302	
06:15	78	263	82	301	*	*	80	282	
06:30	117	221	138	237	*	*	128	229	
06:45	163	236	155	241	*	*	159	238	
07:00	178	197	171	242	*	*	174	220	
07:15	218	187	250	202	*	*	234	194	
07:30	216	166	247	236	*	*	232	201	
07:45	282	165	325	187	*	*	304	176	
08:00	253	157	255	180	*	*	254	168	
08:15	194	154	224	168	*	*	209	161	
08:30	217	138	222	153	*	*	220	146	
08:45	236	112	222	151	*	*	229	132	
09:00	245	102	241	146	*	*	243	124	
09:15	212	115	208	113	*	*	210	114	
09:30	202	93	197	103	*	*	200	98	
09:45	239	78	218	77	*	*	228	78	
10:00	197	64	215	83	*	*	206	74	
10:15	203	68	230	56	*	*	216	62	
10:30	224	70	231	52	*	*	228	61	
10:45	259	39	245	48	*	*	252	44	
11:00	220	41	214	43	*	*	217	42	
11:15	215	43	234	29	*	*	224	36	
11:30	216	35	231	40	*	*	224	38	
11:45	233	40	223	28	*	*	228	34	
Total	5196	10178	5376	10964	0	0	5287	10572	
Combined Total	15374		16340		0		15859		
Peak	07:15	04:45	-	07:15	04:45	-	-	07:15	04:45
Vol.	969	1534	-	1077	1528	-	-	1024	1530
P.H.F.	0.859	0.931		0.828	0.953			0.842	0.966
ADT	ADT 15,857		AADT 15,857						

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Page 2

Wampanoag Trail (Route 114)
just south of #1275 Driveway
City, State: E. Providence, RI
Client: Pare/Derek Hug

05758Bvolume
Site Code: 23149

Start Time	14-Sep-23 Thu	SB		Hour Totals	
		Morning	Afternoon	Morning	Afternoon
12:00		25	246		
12:15		19	264		
12:30		21	259		
12:45		15	247	80	1016
01:00		12	224		
01:15		11	239		
01:30		4	236		
01:45		4	277	31	976
02:00		5	289		
02:15		4	333		
02:30		7	333		
02:45		4	307	20	1262
03:00		3	308		
03:15		8	316		
03:30		7	332		
03:45		6	361	24	1317
04:00		9	385		
04:15		12	340		
04:30		13	359		
04:45		12	377	46	1461
05:00		20	369		
05:15		19	401		
05:30		44	381		
05:45		56	350	139	1501
06:00		58	315		
06:15		82	301		
06:30		138	237		
06:45		155	241	433	1094
07:00		171	242		
07:15		250	202		
07:30		247	236		
07:45		325	187	993	867
08:00		255	180		
08:15		224	168		
08:30		222	153		
08:45		222	151	923	652
09:00		241	146		
09:15		208	113		
09:30		197	103		
09:45		218	77	864	439
10:00		215	83		
10:15		230	56		
10:30		231	52		
10:45		245	48	921	239
11:00		214	43		
11:15		234	29		
11:30		231	40		
11:45		223	28	902	140
Total		5376	10964		
Combined Total		16340			
Percentage	0.0%				
Total		10572	21142		
Percent		33.3%	66.7%		
ADT		ADT 15,857		ADT 15,857	

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Page 1

Wampanoag Trail (Route 114)
just south of #1275 Driveway
City, State: E. Providence, RI
Client: Pare/Derek Hug

05758Bvolume
Site Code: 23149

Start Time	13-Sep-23 Wed	SB		Hour Totals	
		Morning	Afternoon	Morning	Afternoon
12:00		17	256		
12:15		24	274		
12:30		18	249		
12:45		6	237	65	1016
01:00		14	213		
01:15		13	210		
01:30		5	217		
01:45		8	244	40	884
02:00		2	219		
02:15		3	295		
02:30		6	278		
02:45		5	284	16	1076
03:00		5	275		
03:15		5	268		
03:30		4	304		
03:45		7	344	21	1191
04:00		5	318		
04:15		5	340		
04:30		12	389		
04:45		14	385	36	1432
05:00		23	388		
05:15		28	349		
05:30		39	412		
05:45		53	358	143	1507
06:00		58	288		
06:15		78	263		
06:30		117	221		
06:45		163	236	416	1008
07:00		178	197		
07:15		218	187		
07:30		216	166		
07:45		282	165	894	715
08:00		253	157		
08:15		194	154		
08:30		217	138		
08:45		236	112	900	561
09:00		245	102		
09:15		212	115		
09:30		202	93		
09:45		239	78	898	388
10:00		197	64		
10:15		203	68		
10:30		224	70		
10:45		259	39	883	241
11:00		220	41		
11:15		215	43		
11:30		216	35		
11:45		233	40	884	159
Total		5196	10178		
Combined Total		15374			
Percentage	0.0%				

Transportation Data Corporation

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05758Bspeed
Site Code: 23149

Wampanoag Trail (Route 114)
just south of #1275 Driveway
City, State: E. Providence, RI
Client: Pare/Derek Hug
Southbound

Start Time	1	16	21	26	31	36	41	46	51	56	61	66	71	Total	85th Percent	95th Percent
09/14/23	15	20	25	30	35	40	45	50	55	60	65	70	75			
01:00	0	0	0	0	1	2	16	25	26	7	2	0	0	80	54	58
02:00	0	0	0	0	0	1	7	14	7	1	1	0	0	31	53	57
03:00	0	0	0	0	0	3	5	11	1	0	0	0	0	20	49	50
04:00	0	0	0	0	0	2	5	8	6	2	1	0	0	24	54	59
05:00	0	0	0	0	4	5	15	13	7	2	0	0	0	46	51	54
06:00	4	1	1	3	13	13	38	34	26	6	1	0	0	139	52	55
07:00	21	5	5	8	20	39	94	133	104	37	3	2	1	433	53	57
08:00	9	0	1	7	20	73	197	304	273	69	14	3	1	993	53	57
09:00	11	2	3	9	22	82	203	274	266	94	8	0	0	923	54	57
10:00	14	2	5	4	14	52	193	313	222	63	13	1	0	864	53	57
11:00	14	0	11	4	12	42	213	312	217	85	17	0	0	921	54	58
12 PM	14	0	12	10	14	81	248	348	220	58	10	2	0	902	53	57
13:00	18	0	8	7	14	67	231	327	223	61	16	2	0	1016	53	56
14:00	21	1	8	13	19	77	272	378	346	98	26	3	0	976	53	57
15:00	27	6	26	17	19	80	257	397	368	105	12	3	0	1262	54	58
16:00	20	1	8	14	12	54	308	455	435	138	16	0	0	1317	53	57
17:00	25	2	12	2	11	69	265	505	482	122	6	0	0	1461	54	57
18:00	8	0	9	2	8	61	199	380	482	98	9	2	0	1501	53	57
19:00	4	1	5	7	12	61	197	286	318	98	4	0	0	1094	54	57
20:00	6	1	0	1	7	39	166	210	237	53	12	2	0	867	53	56
21:00	2	0	2	2	11	34	103	150	160	48	12	2	0	652	53	58
22:00	1	0	0	0	6	12	62	86	96	35	2	2	0	439	53	57
23:00	0	0	1	1	4	8	36	47	59	10	2	1	0	239	53	55
Total	219	22	117	120	254	1012	3519	5256	4336	1270	186	27	2	16340	53	58
Percent	1.3%	0.1%	0.7%	0.7%	1.6%	6.2%	21.5%	32.2%	26.5%	7.8%	1.1%	0.2%	0.0%			
AM Peak	07:00	07:00	11:00	09:00	09:00	09:00	11:00	10:00	07:00	08:00	10:00	07:00	06:00	07:00		
Vol.	21	5	11	9	22	82	213	313	273	94	17	3	1	993		
PM Peak	15:00	15:00	15:00	15:00	14:00	12:00	16:00	17:00	17:00	16:00	14:00	13:00		17:00		
Vol.	27	6	26	17	19	81	308	505	482	138	26	4		1501		
Grand Total	418	41	234	241	547	2158	7149	10183	7988	2364	341	47	3	31714		
Percent	1.3%	0.1%	0.7%	0.8%	1.7%	6.8%	22.5%	32.1%	25.2%	7.5%	1.1%	0.1%	0.0%			

Stats
10 MPH Pace Speed : 46-55 MPH
Number of Vehicles > 45 MPH : 20926
Percent of Vehicles > 45 MPH : 66.0%
Mean Speed(Average) : 47 MPH

Transportation Data Corporation

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05758Bspeed
Site Code: 23149

Wampanoag Trail (Route 114)
just south of #1275 Driveway
City, State: E. Providence, RI
Client: Pare/Derek Hug
Southbound

Start Time	1	15	16	20	21	25	26	30	31	35	36	40	41	45	46	50	51	55	56	60	61	65	66	70	71	75	Total	85th Percent	95th Percent	
09/13/23	0	0	0	0	0	0	0	0	1	1	4	4	14	14	23	23	16	16	7	7	0	0	0	0	0	0	0	65	54	57
01:00	0	0	0	0	0	0	0	0	0	0	2	2	8	8	18	18	10	10	2	2	0	0	0	0	0	0	0	40	53	55
02:00	0	0	0	0	0	0	0	0	0	0	0	0	3	3	6	6	5	5	1	1	1	1	0	0	0	0	0	16	54	60
03:00	0	0	0	0	0	0	0	0	0	0	4	4	10	10	2	2	3	3	2	2	0	0	0	0	0	0	0	21	53	57
04:00	0	0	0	0	0	0	2	2	0	0	5	5	4	4	14	14	7	7	3	3	1	1	0	0	0	0	0	36	53	58
05:00	0	0	0	0	0	0	8	8	12	12	18	18	22	22	48	48	26	26	8	8	1	1	0	0	0	0	0	143	52	56
06:00	3	3	0	0	1	1	6	6	25	25	52	52	89	89	114	114	90	90	27	27	7	7	2	2	0	0	0	416	53	57
07:00	20	20	4	4	5	5	7	7	17	17	61	61	181	181	245	245	243	243	95	95	15	15	1	1	0	0	0	894	54	58
08:00	6	6	0	0	1	1	4	4	16	16	46	46	189	189	298	298	224	224	92	92	23	23	1	1	0	0	0	900	54	58
09:00	18	18	5	5	6	6	5	5	18	18	65	65	217	217	264	264	212	212	75	75	13	13	0	0	0	0	0	898	53	57
10:00	14	14	0	0	8	8	12	12	8	8	49	49	230	230	304	304	190	190	56	56	11	11	1	1	0	0	0	883	53	57
11:00	8	8	1	1	10	10	4	4	7	7	46	46	196	196	298	298	218	218	84	84	11	11	1	1	0	0	0	884	54	58
12 PM	16	16	1	1	13	13	9	9	16	16	86	86	245	245	344	344	218	218	60	60	7	7	1	1	0	0	0	1016	53	56
13:00	9	9	0	0	8	8	12	12	12	12	116	116	287	287	278	278	131	131	28	28	3	3	0	0	0	0	0	884	51	54
14:00	16	16	2	2	6	6	8	8	30	30	75	75	225	225	330	330	270	270	98	98	13	13	3	3	0	0	0	1076	54	58
15:00	24	24	4	4	16	16	12	12	22	22	78	78	268	268	372	372	304	304	77	77	12	12	2	2	0	0	0	1191	53	57
16:00	20	20	1	1	11	11	5	5	21	21	79	79	293	293	457	457	417	417	117	117	9	9	2	2	0	0	0	1432	53	57
17:00	21	21	0	0	11	11	7	7	15	15	97	97	307	307	530	530	415	415	91	91	10	10	3	3	0	0	0	1507	53	56
18:00	14	14	1	1	10	10	8	8	17	17	45	45	192	192	353	353	280	280	81	81	5	5	1	1	1	1	0	1008	53	57
19:00	5	5	0	0	7	7	6	6	18	18	73	73	204	204	225	225	149	149	24	24	3	3	1	1	0	0	0	715	52	54
20:00	1	1	0	0	3	3	1	1	24	24	82	82	220	220	157	157	65	65	8	8	0	0	0	0	0	0	0	561	49	53
21:00	2	2	0	0	0	0	1	1	10	10	29	29	134	134	109	109	74	74	25	25	4	4	0	0	0	0	0	388	53	56
22:00	2	2	0	0	1	1	1	1	0	0	17	17	65	65	79	79	55	55	19	19	1	1	1	1	0	0	0	241	53	57
23:00	0	0	0	0	0	0	3	3	4	4	17	17	27	27	59	59	30	30	14	14	5	5	0	0	0	0	0	159	54	58
Total	199	199	19	19	117	117	121	121	293	293	1146	1146	3630	3630	4927	4927	3652	3652	1094	1094	155	155	20	20	1	1	0	15374		
Percent	1.3%	1.3%	0.1%	0.1%	0.8%	0.8%	0.8%	0.8%	1.9%	1.9%	7.5%	7.5%	23.6%	23.6%	32.0%	32.0%	23.8%	23.8%	7.1%	7.1%	1.0%	1.0%	0.1%	0.1%	0.0%	0.0%	0.0%			
AM Peak	07:00	07:00	09:00	09:00	11:00	11:00	10:00	10:00	06:00	06:00	09:00	09:00	10:00	10:00	10:00	10:00	07:00	07:00	07:00	07:00	08:00	08:00	06:00	06:00				08:00		
Vol.	20	20	5	5	10	10	12	12	25	25	65	65	230	230	304	304	243	243	95	95	23	23	2	2				900		
PM Peak	15:00	15:00	15:00	15:00	15:00	15:00	13:00	13:00	14:00	14:00	13:00	13:00	17:00	17:00	17:00	17:00	16:00	16:00	16:00	16:00	14:00	14:00	14:00	14:00	18:00	18:00	18:00	17:00		
Vol.	24	24	4	4	16	16	12	12	30	30	116	116	307	307	530	530	417	417	117	117	13	13	3	3	1	1	0	1507		

Transportation Data Corporation

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Wampanoag Trail (Route 114)

just south of #1275 Driveway

City, State: E. Providence, RI

Client: Pare/Derek Hug

Southbound

05758Bclass
Site Code: 23149

Start Time	Cars & Trailers	Bikes	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
09/13/23	54	0	9	1	1	0	0	0	0	0	0	0	0	65
01:00	36	0	4	0	0	0	0	0	0	0	0	0	0	40
02:00	14	0	1	1	0	0	0	0	0	0	0	0	0	16
03:00	18	0	0	0	2	0	0	0	1	0	0	0	0	21
04:00	22	0	6	2	3	2	0	0	1	0	0	0	0	36
05:00	94	0	36	8	5	0	0	0	0	0	0	0	0	143
06:00	248	1	102	18	39	4	0	3	1	0	0	0	0	416
07:00	680	1	146	12	42	1	0	11	1	0	0	0	0	894
08:00	688	2	143	11	45	3	0	5	3	0	0	0	0	900
09:00	671	6	149	9	46	1	1	10	5	0	0	0	0	898
10:00	694	6	126	6	37	6	0	7	1	0	0	0	0	883
11:00	701	2	139	5	28	5	0	4	0	0	0	0	0	884
12 PM	803	8	146	8	43	4	0	3	0	0	1	0	0	1016
13:00	704	2	131	8	33	2	2	0	2	0	0	0	0	884
14:00	853	1	163	17	35	3	0	2	1	0	1	0	0	1076
15:00	970	6	171	5	32	0	0	6	1	0	0	0	0	1191
16:00	1203	4	178	5	36	1	0	2	3	0	0	0	0	1432
17:00	1324	0	148	4	27	0	0	4	0	0	0	0	0	1507
18:00	890	3	97	2	15	0	0	1	0	0	0	0	0	1008
19:00	621	2	79	1	11	1	0	0	0	0	0	0	0	715
20:00	483	1	64	1	8	0	0	2	2	0	0	0	0	561
21:00	337	0	46	1	4	0	0	0	0	0	0	0	0	388
22:00	207	0	28	1	5	0	0	0	0	0	0	0	0	241
23:00	141	1	15	1	1	0	0	0	0	0	0	0	0	159
Day Total	46	12456	2127	127	498	33	3	60	22	0	2	0	0	15374
Percent	0.3%	81.0%	13.8%	0.8%	3.2%	0.2%	0.0%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak Vol.	09:00	6	701	18	46	6	1	11	5	09:00	07:00	09:00	08:00	900
PM Peak Vol.	12:00	8	1324	17	43	4	2	6	3	16:00	15:00	12:00	17:00	1507

Transportation Data Corporation

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05758Bclass
Site Code: 23149

Wampanoag Trail (Route 114)
just south of #1275 Driveway
City, State: E. Providence, RI
Client: Pare/Derek Hug
Southbound

Start Time	Cars & Trailers	Bikes	Buses	2 Axle Long	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
09/14/23	68	0	1	7	3	0	0	0	0	1	0	0	0	80
01:00	28	0	0	3	0	0	0	0	0	0	0	0	0	31
02:00	17	0	1	2	0	0	0	0	0	0	0	0	0	20
03:00	18	0	0	2	3	0	0	1	0	0	0	0	0	24
04:00	30	0	2	8	1	0	0	1	4	0	0	0	0	46
05:00	92	0	8	30	6	1	0	2	0	0	0	0	0	139
06:00	261	4	15	98	44	5	2	3	1	0	0	0	0	433
07:00	737	4	17	157	59	4	5	8	2	0	0	0	0	993
08:00	654	2	15	171	56	3	4	14	2	0	2	0	0	923
09:00	614	2	8	167	56	5	3	7	2	0	0	0	0	864
10:00	708	6	4	144	45	3	2	7	2	0	0	0	0	921
11:00	715	6	4	138	26	4	3	4	1	0	1	0	0	902
12 PM	813	6	8	142	38	3	1	3	1	0	1	0	0	1016
13:00	793	5	6	135	31	2	2	2	0	0	0	0	0	976
14:00	1026	8	16	165	40	4	0	2	1	0	0	0	0	1262
15:00	1078	3	7	186	38	1	0	4	0	0	0	0	0	1317
16:00	1253	5	3	176	21	1	0	2	0	0	0	0	0	1461
17:00	1309	4	4	163	19	1	0	1	0	0	0	0	0	1501
18:00	970	2	4	106	10	1	0	0	1	0	0	0	0	1094
19:00	750	4	3	99	11	0	0	0	0	0	0	0	0	867
20:00	574	0	2	68	8	0	0	0	0	0	0	0	0	652
21:00	382	0	1	51	5	0	0	0	0	0	0	0	0	439
22:00	213	2	1	22	1	0	0	0	0	0	0	0	0	239
23:00	126	0	1	11	2	0	0	0	0	0	0	0	0	140
Day Total	13229	63	131	2251	523	38	22	61	18	0	4	0	0	16340
Percent	81.0%	0.4%	0.8%	13.8%	3.2%	0.2%	0.1%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	10:00	07:00	08:00	07:00	06:00	07:00	08:00	04:00	0.0%	08:00	0.0%	0.0%	07:00
Vol.	737	6	17	171	59	5	5	14	4		2			993
PM Peak	17:00	14:00	14:00	15:00	14:00	14:00	13:00	15:00	12:00		12:00			17:00
Vol.	1309	8	16	186	40	4	2	4	1		1			1501
Grand Total	25685	109	258	4378	1021	71	25	121	40	0	6	0	0	31714
Percent	81.0%	0.3%	0.8%	13.8%	3.2%	0.2%	0.1%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	

Transportation Data Corporation

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Page 1

Wampanoag Trail (Route 114)
just south of #1275 Driveway
City, State: E. Providence, RI
Client: Pare/Derek Hug

05758Bvolume
Site Code: 23149

Start	Wed	13-Sep-	Thu	14-Sep-	Fri	15-Sep-	Daily Average	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	17	256	25	246	*	*	21	251
12:15	24	274	19	264	*	*	22	269
12:30	18	249	21	259	*	*	20	254
12:45	6	237	15	247	*	*	10	242
01:00	14	213	12	224	*	*	13	218
01:15	13	210	11	239	*	*	12	224
01:30	5	217	4	236	*	*	4	226
01:45	8	244	4	277	*	*	6	260
02:00	2	219	5	289	*	*	4	254
02:15	3	295	4	333	*	*	4	314
02:30	6	278	7	333	*	*	6	306
02:45	5	284	4	307	*	*	4	296
03:00	5	275	3	308	*	*	4	292
03:15	5	268	8	316	*	*	6	292
03:30	4	304	7	332	*	*	6	318
03:45	7	344	6	361	*	*	6	352
04:00	5	318	9	385	*	*	7	352
04:15	5	340	12	340	*	*	8	340
04:30	12	389	13	359	*	*	12	374
04:45	14	385	12	377	*	*	13	381
05:00	23	388	20	369	*	*	22	378
05:15	28	349	19	401	*	*	24	375
05:30	39	412	44	381	*	*	42	396
05:45	53	358	56	350	*	*	54	354
06:00	58	288	58	315	*	*	58	302
06:15	78	263	82	301	*	*	80	282
06:30	117	221	138	237	*	*	128	229
06:45	163	236	155	241	*	*	159	238
07:00	178	197	171	242	*	*	174	220
07:15	218	187	250	202	*	*	234	194
07:30	216	166	247	236	*	*	232	201
07:45	282	165	325	187	*	*	304	176
08:00	253	157	255	180	*	*	254	168
08:15	194	154	224	168	*	*	209	161
08:30	217	138	222	153	*	*	220	146
08:45	236	112	222	151	*	*	229	132
09:00	245	102	241	146	*	*	243	124
09:15	212	115	208	113	*	*	210	114
09:30	202	93	197	103	*	*	200	98
09:45	239	78	218	77	*	*	228	78
10:00	197	64	215	83	*	*	206	74
10:15	203	68	230	56	*	*	216	62
10:30	224	70	231	52	*	*	228	61
10:45	259	39	245	48	*	*	252	44
11:00	220	41	214	43	*	*	217	42
11:15	215	43	234	29	*	*	224	36
11:30	216	35	231	40	*	*	224	38
11:45	233	40	223	28	*	*	228	34
Total	5196	10178	5376	10964	0	0	5287	10572
Combined Total	15374		16340		0		15859	
Peak	07:15	04:45	-	07:15	04:45	-	07:15	04:45
Vol.	969	1534	-	1077	1528	-	1024	1530
P.H.F.	0.859	0.931	-	0.828	0.953	-	0.842	0.966
ADT	ADT 15,857		ADT 15,857					

Transportation Data Corporation

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Page 2

Wampanoag Trail (Route 114)
just south of #1275 Driveway
City, State: E. Providence, RI
Client: Pare/Derek Hug

05758Bvolume
Site Code: 23149

Start Time	14-Sep-23 Thu	SB		Hour Totals	
		Morning	Afternoon	Morning	Afternoon
12:00		25	246		
12:15		19	264		
12:30		21	259		
12:45		15	247	80	1016
01:00		12	224		
01:15		11	239		
01:30		4	236		
01:45		4	277	31	976
02:00		5	289		
02:15		4	333		
02:30		7	333		
02:45		4	307	20	1262
03:00		3	308		
03:15		8	316		
03:30		7	332		
03:45		6	361	24	1317
04:00		9	385		
04:15		12	340		
04:30		13	359		
04:45		12	377	46	1461
05:00		20	369		
05:15		19	401		
05:30		44	381		
05:45		56	350	139	1501
06:00		58	315		
06:15		82	301		
06:30		138	237		
06:45		155	241	433	1094
07:00		171	242		
07:15		250	202		
07:30		247	236		
07:45		325	187	993	867
08:00		255	180		
08:15		224	168		
08:30		222	153		
08:45		222	151	923	652
09:00		241	146		
09:15		208	113		
09:30		197	103		
09:45		218	77	864	439
10:00		215	83		
10:15		230	56		
10:30		231	52		
10:45		245	48	921	239
11:00		214	43		
11:15		234	29		
11:30		231	40		
11:45		223	28	902	140
Total		5376	10964		
Combined Total		16340			
Percentage	0.0%				
Total		10572	21142		
Percent		33.3%	66.7%		
ADT		ADT 15,857		AADT 15,857	

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Page 1

Wampanoag Trail (Route 114)
just south of #1275 Driveway
City, State: E. Providence, RI
Client: Pare/Derek Hug

05758Bvolume
Site Code: 23149

Start Time	13-Sep-23 Wed	SB		Hour Totals	
		Morning	Afternoon	Morning	Afternoon
12:00		17	256		
12:15		24	274		
12:30		18	249		
12:45		6	237	65	1016
01:00		14	213		
01:15		13	210		
01:30		5	217		
01:45		8	244	40	884
02:00		2	219		
02:15		3	295		
02:30		6	278		
02:45		5	284	16	1076
03:00		5	275		
03:15		5	268		
03:30		4	304		
03:45		7	344	21	1191
04:00		5	318		
04:15		5	340		
04:30		12	389		
04:45		14	385	36	1432
05:00		23	388		
05:15		28	349		
05:30		39	412		
05:45		53	358	143	1507
06:00		58	288		
06:15		78	263		
06:30		117	221		
06:45		163	236	416	1008
07:00		178	197		
07:15		218	187		
07:30		216	166		
07:45		282	165	894	715
08:00		253	157		
08:15		194	154		
08:30		217	138		
08:45		236	112	900	561
09:00		245	102		
09:15		212	115		
09:30		202	93		
09:45		239	78	898	388
10:00		197	64		
10:15		203	68		
10:30		224	70		
10:45		259	39	883	241
11:00		220	41		
11:15		215	43		
11:30		216	35		
11:45		233	40	884	159
Total		5196	10178		
Combined Total		15374			
Percentage	0.0%				

Transportation Data Corporation

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Wampanoag Trail (Route 114)

just south of #1275 Driveway

City, State: E. Providence, RI

Client: Pare/Derek Hug

05758Bspeed

Site Code: 23149

Start Time	1	16	21	26	31	36	41	46	51	56	61	66	71	Total	85th Percent	95th Percent
	15	20	25	30	35	40	45	50	55	60	65	70	75			
09/14/23	0	0	0	1	1	2	16	25	26	7	2	0	0	80	54	58
01:00	0	0	0	0	0	1	7	14	7	1	1	0	0	31	53	57
02:00	0	0	0	0	0	3	5	11	1	0	0	0	0	20	49	50
03:00	0	0	0	0	0	2	5	8	6	2	1	0	0	24	54	59
04:00	0	0	0	0	4	5	15	13	7	2	0	0	0	46	51	54
05:00	0	0	0	8	13	13	38	34	26	6	1	0	0	139	52	55
06:00	4	1	1	3	11	39	94	133	104	37	3	2	1	433	53	57
07:00	21	5	5	8	20	73	197	304	273	69	14	3	1	993	53	57
08:00	9	0	1	7	20	55	189	274	266	94	8	0	0	923	54	57
09:00	11	2	3	9	22	82	203	246	209	63	13	1	0	884	53	57
10:00	14	2	5	4	14	52	193	313	222	85	17	0	0	921	54	58
11:00	14	0	11	4	12	42	213	312	217	65	10	2	0	902	53	57
12 PM	14	0	12	10	14	81	248	348	220	58	9	2	0	1016	53	56
13:00	18	0	8	7	14	67	231	327	223	61	16	4	0	976	53	57
14:00	21	1	8	13	19	77	272	378	346	98	26	3	0	1262	54	58
15:00	27	6	26	17	19	80	257	397	368	105	12	3	0	1317	53	57
16:00	20	1	8	14	12	54	308	455	435	138	16	0	0	1461	54	57
17:00	25	2	12	2	11	69	265	505	482	122	6	0	0	1501	53	57
18:00	8	0	9	2	8	61	199	380	318	98	9	2	0	1094	54	57
19:00	4	1	5	7	12	61	197	286	237	53	4	0	0	867	53	56
20:00	6	1	0	1	7	39	166	210	160	48	12	2	0	852	53	58
21:00	2	0	2	2	11	34	103	150	96	35	2	2	0	439	53	57
22:00	1	0	0	0	6	12	62	86	59	10	2	1	0	239	53	55
23:00	0	0	1	1	4	8	36	47	28	13	2	0	0	140	53	58
Total	219	22	117	120	254	1012	3519	5258	4338	1270	186	27	2	16340		
Percent	1.3%	0.1%	0.7%	0.7%	1.6%	6.2%	21.5%	32.2%	26.5%	7.8%	1.1%	0.2%	0.0%			
AM Peak	07:00	07:00	11:00	09:00	09:00	09:00	11:00	10:00	07:00	08:00	10:00	07:00	06:00	07:00		
Vol.	21	5	11	9	22	82	213	313	273	94	17	3	1	993		
PM Peak	15:00	15:00	15:00	15:00	14:00	12:00	16:00	17:00	17:00	16:00	14:00	13:00		17:00		
Vol.	27	6	26	17	19	81	308	505	482	138	26	4		1501		
Grand Total	418	41	234	241	547	2158	7149	10183	7988	2364	341	47	3	31714		
Percent	1.3%	0.1%	0.7%	0.8%	1.7%	6.8%	22.5%	32.1%	25.2%	7.5%	1.1%	0.1%	0.0%			

515

10 MPH Pace Speed: 48-55 MPH

Number of Vehicles > 45 MPH : 20928

Percent of Vehicles > 45 MPH: 66.0%

Mean Speed(Average): 47 MPH

Transportation Data Corporation

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05758Bspeed
Site Code: 23149

Wampanoag Trail (Route 114)
just south of #1275 Driveway
City, State: E. Providence, RI
Client: Pare/Derek Hug
Southbound

Start Time	15	16	20	21	25	26	30	31	35	36	40	41	45	46	50	51	55	56	60	61	65	66	70	71	75	Total	85th Percent	95th Percent		
09/13/23	0	0	0	0	0	0	0	1	1	4	4	14	14	23	23	16	16	7	7	0	0	0	0	0	0	0	65	54	57	
01:00	0	0	0	0	0	0	0	0	0	2	2	8	8	18	18	10	10	2	2	0	0	0	0	0	0	0	40	53	55	
02:00	0	0	0	0	0	0	0	0	0	0	0	3	3	6	6	5	5	1	1	1	1	0	0	0	0	0	16	54	60	
03:00	0	0	0	0	0	0	0	0	0	4	4	10	10	2	2	3	3	2	2	0	0	0	0	0	0	0	21	53	57	
04:00	0	0	0	0	0	2	2	0	0	5	5	4	4	14	14	7	7	3	3	1	1	0	0	0	0	0	36	53	59	
05:00	0	0	0	0	0	8	8	12	12	18	18	22	22	48	48	26	26	8	8	1	1	0	0	0	0	0	143	52	56	
06:00	3	0	0	1	1	6	6	25	25	52	52	89	89	114	114	90	90	27	27	7	7	2	2	0	0	0	416	53	57	
07:00	20	4	4	5	5	7	7	17	17	61	61	181	181	245	245	243	243	95	95	15	15	1	1	0	0	0	894	54	58	
08:00	6	0	0	1	1	4	4	16	16	46	46	189	189	298	298	224	224	92	92	23	23	1	1	0	0	0	900	54	58	
09:00	18	5	5	6	6	5	5	18	18	65	65	217	217	264	264	212	212	75	75	13	13	0	0	0	0	0	898	53	57	
10:00	14	0	0	8	8	12	12	8	8	49	49	230	230	304	304	190	190	56	56	11	11	1	1	0	0	0	883	53	57	
11:00	8	1	1	10	10	4	4	7	7	46	46	196	196	298	298	218	218	84	84	11	11	1	1	0	0	0	884	54	58	
12 PM	16	1	1	13	13	9	9	16	16	86	86	245	245	344	344	218	218	60	60	7	7	1	1	0	0	0	1016	53	56	
13:00	9	0	0	8	8	12	12	12	12	116	116	287	287	278	278	131	131	28	28	3	3	0	0	0	0	0	894	51	54	
14:00	16	2	2	6	6	8	8	30	30	75	75	225	225	330	330	270	270	98	98	13	13	3	3	0	0	0	1076	54	58	
15:00	24	4	4	16	16	12	12	22	22	78	78	268	268	372	372	304	304	77	77	12	12	2	2	0	0	0	1191	53	57	
16:00	20	1	1	11	11	5	5	21	21	79	79	293	293	457	457	417	417	117	117	9	9	2	2	0	0	0	1432	53	57	
17:00	21	0	0	11	11	7	7	15	15	97	97	307	307	530	530	415	415	91	91	10	10	3	3	0	0	0	1507	53	56	
18:00	14	1	1	10	10	8	8	17	17	45	45	192	192	353	353	280	280	81	81	5	5	1	1	1	1	0	1008	53	57	
19:00	5	0	0	7	7	6	6	18	18	73	73	204	204	225	225	149	149	24	24	3	3	1	1	0	0	0	715	52	54	
20:00	1	0	0	3	3	1	1	24	24	82	82	220	220	157	157	65	65	8	8	0	0	0	0	0	0	0	561	49	53	
21:00	2	0	0	0	0	1	1	10	10	29	29	134	134	109	109	74	74	25	25	4	4	0	0	0	0	0	388	53	56	
22:00	2	0	0	1	1	1	1	0	0	17	17	65	65	79	79	55	55	19	19	1	1	1	1	0	0	0	241	53	57	
23:00	0	0	0	0	0	3	3	4	4	17	17	27	27	59	59	30	30	14	14	5	5	0	0	0	0	0	159	54	58	
Total	199	19	19	117	117	121	121	293	293	1146	1146	3630	3630	4927	4927	3652	3652	1094	1094	155	155	20	20	1	1	0	15374			
Percent	1.3%	0.1%	0.1%	0.8%	0.8%	0.8%	0.8%	1.9%	1.9%	7.5%	7.5%	23.6%	23.6%	32.0%	32.0%	23.8%	23.8%	7.1%	7.1%	1.0%	1.0%	0.1%	0.1%	0.0%	0.0%	0.0%				
AM Peak	07:00	09:00	11:00	11:00	11:00	10:00	10:00	06:00	06:00	09:00	09:00	10:00	10:00	10:00	10:00	07:00	07:00	07:00	07:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00			
Vol.	20	5	5	10	10	12	12	25	25	65	65	230	230	304	304	243	243	95	95	23	23	2	2	1	1	0	900			
PM Peak	15:00	15:00	15:00	15:00	15:00	13:00	13:00	14:00	14:00	13:00	13:00	17:00	17:00	17:00	17:00	16:00	16:00	16:00	16:00	14:00	14:00	14:00	18:00	18:00	17:00	17:00	17:00			
Vol.	24	4	4	16	16	12	12	30	30	116	116	307	307	530	530	417	417	117	117	13	13	3	3	1	1	0	1507			

Transportation Data Corporation

Page 1

Wampanoag Trail (Route 114)
just north of #1200 North Pointe Drive

City, State: E. Providence, RI

Client: Pare/Derek Hug

Northbound

Mario Perone, mperone1@verizon.net

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

05758Aspeed

Site Code: 23149

Start Time	15	16	20	21	25	26	31	36	41	46	51	56	61	66	71	Total	85th Percent	95th Percent
09/13/23	0	0	0	0	0	0	0	4	7	6	15	9	3	0	0	44	57	61
01:00	0	0	0	0	0	1	0	1	2	8	1	2	2	1	0	18	60	65
02:00	0	0	0	0	0	0	1	1	2	7	0	4	0	0	0	15	57	59
03:00	0	0	0	0	0	0	1	0	4	15	8	6	2	0	0	38	57	60
04:00	0	0	0	0	0	0	0	2	10	31	26	18	8	3	1	99	58	63
05:00	2	0	0	0	0	0	2	9	26	83	95	53	30	10	0	310	59	64
06:00	12	0	0	0	0	0	0	6	34	169	264	242	101	23	2	853	59	64
07:00	26	0	0	0	0	0	2	9	74	306	573	472	152	20	1	1635	59	62
08:00	40	0	0	0	0	0	4	23	125	331	456	368	125	20	8	1500	58	62
09:00	24	0	0	0	0	0	0	12	87	290	356	298	97	17	3	1184	58	62
10:00	24	0	0	0	0	0	2	21	148	305	262	189	68	7	1	1027	57	61
11:00	15	0	0	0	0	0	3	23	138	290	271	189	52	12	2	995	57	61
12 PM	12	0	0	0	0	1	12	29	115	301	278	195	56	12	2	1013	57	61
13:00	14	0	0	0	0	0	11	52	202	280	191	76	21	1	0	828	54	58
14:00	8	0	0	0	0	0	2	20	103	250	253	181	79	13	5	914	58	62
15:00	25	0	0	0	0	1	1	21	130	316	347	253	115	21	5	1235	59	63
16:00	9	0	0	0	0	0	0	9	111	315	304	237	91	27	4	1107	58	62
17:00	8	0	0	0	0	0	1	18	71	256	326	244	65	18	1	1008	58	62
18:00	4	0	0	0	0	0	1	12	95	213	224	136	38	11	4	738	57	61
19:00	5	0	0	0	0	0	0	21	90	177	146	67	19	4	0	529	55	59
20:00	3	0	0	0	0	0	3	25	91	114	68	17	2	1	0	324	52	56
21:00	1	0	0	0	0	0	1	15	48	60	50	20	4	2	0	201	54	58
22:00	1	0	0	0	0	0	0	14	16	25	27	15	5	0	0	103	56	59
23:00	4	0	0	0	0	0	0	5	5	4	9	0	0	0	0	27	52	54
Total	237	0	0	0	0	3	47	352	1734	4132	4550	3291	1135	223	39	15743		
Percent	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	2.2%	11.0%	26.2%	28.9%	20.9%	7.2%	1.4%	0.2%			
AM Peak	08:00					01:00	08:00	08:00	10:00	08:00	07:00	07:00	07:00	06:00	08:00	07:00		
Vol.	40					1	4	23	148	331	573	472	152	23	8	1635		
PM Peak	15:00					12:00	12:00	13:00	13:00	15:00	15:00	15:00	15:00	16:00	14:00	15:00		
Vol.	25					1	12	52	202	316	347	253	115	27	5	1235		

Transportation Data Corporation

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Wampanoag Trail (Route 114)

just north of #1200 North Pointe Drive

City, State: E. Providence, RI

Client: Pare/Derek Hug

Northbound

Start Time	15	16	20	21	25	30	31	35	36	40	41	45	46	50	51	55	56	60	61	65	66	70	71	75	Total	85th Percent	95th Percent
09/14/23	1	0	0	0	0	0	1	1	1	1	1	1	0	0	1	1	1	1	0	0	0	0	0	0	6	55	58
01:00	2	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	32	34	
02:00	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	44	44	
03:00	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2	43	44	
04:00	1	0	0	0	0	0	1	1	8	7	7	7	9	9	4	4	0	0	0	0	1	1	0	31	50	54	
05:00	12	0	0	0	0	1	5	5	12	37	37	57	57	26	26	26	10	10	7	7	3	3	1	171	53	61	
06:00	56	0	0	1	0	0	5	5	33	79	79	207	207	208	208	208	119	119	35	35	6	4	4	732	57	60	
07:00	125	0	0	1	0	2	9	9	33	139	139	363	363	459	459	459	304	304	68	68	10	0	0	1513	57	60	
08:00	225	115	0	30	36	36	33	33	49	133	133	254	254	277	277	277	154	154	36	36	6	1	1	1349	54	59	
08:00	71	0	0	1	1	1	7	7	29	177	177	280	280	285	285	285	184	184	38	38	5	2	2	1040	56	59	
10:00	61	0	0	0	0	1	13	13	43	160	160	283	283	280	280	280	136	136	43	43	8	3	3	1031	56	59	
11:00	91	0	0	0	0	0	6	6	27	147	147	228	228	198	198	198	110	110	36	36	8	5	5	857	56	60	
12 PM	58	0	0	0	0	0	13	13	32	156	156	242	242	232	232	232	128	128	40	40	13	2	2	916	56	60	
13:00	13	0	0	0	0	0	10	10	23	118	118	223	223	246	246	246	183	183	55	55	10	6	6	887	58	61	
14:00	14	0	0	0	0	0	0	0	19	117	117	302	302	280	280	280	215	215	58	58	18	5	5	1028	58	62	
15:00	21	0	0	0	0	0	7	7	45	134	134	309	309	373	373	373	293	293	111	111	22	3	3	1318	58	63	
16:00	21	0	0	0	0	0	2	2	17	97	97	261	261	357	357	357	243	243	121	121	35	5	5	1159	59	64	
17:00	16	0	0	0	0	0	1	1	7	71	71	240	240	343	343	343	290	290	122	122	26	2	2	1118	59	63	
18:00	3	0	0	0	0	0	0	0	13	68	68	223	223	246	246	246	183	183	55	55	10	6	6	807	58	62	
19:00	7	0	0	0	0	0	0	0	14	103	103	195	195	166	166	166	108	108	37	37	6	3	3	639	57	61	
20:00	3	0	0	0	0	0	1	1	11	68	68	128	128	105	105	105	35	35	23	23	7	0	0	381	56	62	
21:00	0	0	0	0	0	0	0	0	4	30	30	81	81	64	64	64	41	41	16	16	4	1	1	241	58	62	
22:00	0	0	0	0	0	0	1	1	7	20	20	43	43	38	38	38	24	24	8	8	1	1	1	143	57	61	
23:00	0	0	0	0	0	0	2	2	4	14	14	34	34	21	21	21	7	7	4	4	3	1	1	90	55	63	
Total	801	115	0	34	41	41	119	119	410	1878	1878	3942	3942	4209	4209	4209	2748	2748	913	913	202	51	51	15463			
Percent	5.2%	0.7%	0.2%	0.3%	0.3%	0.3%	0.8%	0.8%	2.7%	12.1%	12.1%	25.5%	25.5%	27.2%	27.2%	27.2%	17.8%	17.8%	5.9%	5.9%	1.3%	0.3%	0.3%				
AM Peak	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	07:00	07:00	07:00	07:00	07:00	07:00	07:00	07:00	07:00	11:00	11:00		07:00		
Vol.	225	115	0	30	36	36	33	33	49	177	177	363	363	459	459	459	304	304	68	68	10	5	5		1513		
PM Peak	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	15:00	15:00	15:00	15:00	15:00	15:00	17:00	17:00	16:00	13:00	13:00		15:00		
Vol.	58	115	0	34	44	44	168	168	762	3612	3612	8074	8074	8759	8759	8759	6039	6039	2048	2048	425	90	90		31206		
Grand Total	1038	115	0	34	44	44	168	168	762	3612	3612	8074	8074	8759	8759	8759	6039	6039	2048	2048	425	90	90		31206		
Percent	3.3%	0.4%	0.1%	0.1%	0.1%	0.1%	0.5%	0.5%	2.4%	11.6%	11.6%	25.9%	25.9%	28.1%	28.1%	28.1%	19.4%	19.4%	6.8%	6.8%	1.4%	0.3%	0.3%				

Transportation Data Corporation

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

Wampanoag Trail (Route 114)
just north of #1200 North Pointe Drive

City, State: E. Providence, RI

Client: Pare/Derek Hug

Northbound

05758Aclass
Site Code: 23149

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
09/13/23	0	34	6	2	2	0	0	0	0	0	0	0	0	44
01:00	0	13	3	1	1	0	0	0	0	0	0	0	0	18
02:00	0	14	0	0	0	0	0	1	0	0	0	0	0	15
03:00	0	27	4	1	4	0	0	0	0	0	0	0	0	36
04:00	0	63	20	1	15	0	0	0	0	0	0	0	0	99
05:00	1	208	65	7	28	1	0	0	0	0	0	0	0	310
06:00	2	635	135	7	72	0	0	2	0	0	0	0	0	853
07:00	4	1278	249	10	80	4	0	9	1	0	0	0	0	1635
08:00	8	1110	262	21	81	5	0	6	5	0	2	0	0	1500
09:00	2	869	227	6	70	1	0	8	1	0	0	0	0	1184
10:00	1	765	160	15	72	2	0	9	2	0	1	0	0	1027
11:00	1	750	161	7	63	4	0	7	1	0	1	0	0	995
12 PM	1	724	184	7	85	3	0	8	1	0	0	0	0	1013
13:00	3	566	139	16	86	6	0	11	0	0	1	0	0	828
14:00	1	642	168	8	83	4	0	4	3	0	1	0	0	914
15:00	1	899	232	23	76	1	1	2	0	0	0	0	0	1235
16:00	0	830	195	3	75	1	0	2	1	0	0	0	0	1107
17:00	0	770	162	5	66	0	0	4	1	0	0	0	0	1008
18:00	0	568	120	6	43	0	0	2	1	0	0	0	0	738
19:00	0	415	76	3	35	0	0	0	0	0	0	0	0	529
20:00	0	266	36	0	20	0	0	2	0	0	0	0	0	324
21:00	0	168	26	1	6	0	0	0	0	0	0	0	0	201
22:00	0	80	17	1	5	0	0	0	0	0	0	0	0	103
23:00	0	25	0	0	2	0	0	0	0	0	0	0	0	27
Day Total	25	11717	2647	151	1070	32	1	77	17	0	6	0	0	15743
Percent	0.2%	74.4%	16.8%	1.0%	6.8%	0.2%	0.0%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	07:00	08:00	08:00	08:00	08:00		07:00	08:00	0.0%	08:00	0.0%		07:00
Vol.	8	1278	262	21	81	5		9	5		2			1635
PM Peak	13:00	15:00	15:00	15:00	13:00	13:00	15:00	13:00	14:00		13:00			15:00
Vol.	3	899	232	23	86	6	1	11	3		1			1235

Transportation Data Corporation

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Wampanoag Trail (Route 114)
just north of #1200 North Pointe Drive
City, State: E. Providence, RI
Client: Pare/Derek Hug
Northbound

05758Aclass
Site Code: 23149

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
09/14/23	0	6	0	0	0	0	0	0	0	0	0	0	0	6
01:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:00	1	24	5	0	1	0	0	0	0	0	0	0	0	31
05:00	0	128	27	4	11	0	0	1	0	0	0	0	0	171
06:00	10	578	110	8	24	1	0	1	0	0	0	0	0	732
07:00	9	1256	175	7	58	4	0	4	0	0	0	0	0	1513
08:00	20	1075	174	18	53	5	4	4	0	0	0	0	0	1349
09:00	9	828	147	5	44	4	0	3	0	0	0	0	0	1040
10:00	1	780	171	9	63	2	0	5	0	0	0	0	0	1031
11:00	6	664	134	6	41	2	0	2	2	0	0	0	0	857
12 PM	5	712	148	2	44	1	0	4	0	0	0	0	0	916
13:00	5	679	140	7	54	0	0	1	0	0	1	0	0	887
14:00	2	755	177	10	73	2	1	6	2	0	0	0	0	1028
15:00	3	914	261	24	105	2	0	7	2	0	0	0	0	1318
16:00	7	878	189	6	69	3	0	5	1	0	1	0	0	1159
17:00	5	845	196	5	62	2	0	3	0	0	0	0	0	1118
18:00	5	609	135	5	51	0	0	1	0	0	1	0	0	807
19:00	0	522	75	2	39	0	0	1	0	0	0	0	0	639
20:00	0	309	50	2	20	0	0	0	0	0	0	0	0	381
21:00	1	202	29	1	8	0	0	0	0	0	0	0	0	241
22:00	0	115	18	2	8	0	0	0	0	0	0	0	0	143
23:00	0	73	12	1	4	0	0	0	0	0	0	0	0	90
Day Total	89	11958	2373	124	832	28	1	48	7	0	3	0	0	15463
Percent	0.6%	77.3%	15.3%	0.8%	5.4%	0.2%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak Vol.	08:00	07:00	07:00	08:00	10:00	08:00		10:00	11:00					07:00
	20	1256	175	18	63	5		5	2					1513
PM Peak Vol.	16:00	15:00	15:00	15:00	15:00	16:00	14:00	15:00	14:00		13:00			15:00
	7	914	261	24	105	3	1	7	2		1			1318
Grand Total	114	23675	5020	275	1902	60	2	125	24	0	9	0	0	31206
Percent	0.4%	75.9%	16.1%	0.9%	6.1%	0.2%	0.0%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	

Transportation Data Corporation

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Wampanoag Trail (Route 114)

just south of #1275 Driveway

City, State: E. Providence, RI

Client: Pare/Derek Hug

Southbound

 05758Bclass
Site Code: 23149

Start Time	Cars & Trailers	Bikes	Buses	2 Axle Long	2 Axle Single	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
09/13/23	54	0	1	9	0	0	0	0	0	0	0	0	0	65
01:00	36	0	0	4	0	0	0	0	0	0	0	0	0	40
02:00	14	0	1	1	0	0	0	0	0	0	0	0	0	16
03:00	18	0	0	0	0	0	0	0	1	0	0	0	0	21
04:00	22	0	2	6	3	2	0	0	1	0	0	0	0	36
05:00	94	0	8	36	5	0	0	0	0	0	0	0	0	143
06:00	248	1	18	102	39	4	0	3	1	0	0	0	0	416
07:00	680	1	12	146	42	1	0	11	1	0	0	0	0	894
08:00	688	2	11	143	45	3	0	5	3	0	0	0	0	900
09:00	671	6	9	149	46	1	1	10	5	0	0	0	0	898
10:00	694	6	6	126	37	6	0	7	1	0	0	0	0	883
11:00	701	2	5	139	28	5	0	4	0	0	0	0	0	884
12 PM	803	8	8	146	43	4	0	3	0	0	1	0	0	1016
13:00	704	2	8	131	33	2	2	0	2	0	0	0	0	884
14:00	853	1	17	163	35	3	0	2	1	0	1	0	0	1076
15:00	970	6	5	171	32	0	0	6	1	0	0	0	0	1191
16:00	1203	4	5	178	36	1	0	2	3	0	0	0	0	1432
17:00	1324	0	4	148	27	0	0	4	0	0	0	0	0	1507
18:00	890	3	2	97	15	0	0	1	0	0	0	0	0	1008
19:00	621	2	1	79	11	1	0	0	0	0	0	0	0	715
20:00	483	1	1	64	8	0	0	2	2	0	0	0	0	561
21:00	337	0	1	46	4	0	0	0	0	0	0	0	0	388
22:00	207	0	1	28	5	0	0	0	0	0	0	0	0	241
23:00	141	1	1	15	1	0	0	0	0	0	0	0	0	159
Day Total	46	12456	127	2127	498	33	3	60	22	0	2	0	0	15374
Percent	0.3%	81.0%	0.8%	13.8%	3.2%	0.2%	0.0%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	09:00	11:00	06:00	09:00	09:00	10:00	09:00	07:00	09:00	0.0%	0.0%	0.0%	0.0%	08:00
Vol.	6	701	18	149	46	6	1	11	5					900
PM Peak	12:00	17:00	14:00	16:00	12:00	12:00	13:00	15:00	16:00		12:00			17:00
Vol.	8	1324	17	178	43	4	2	6	3		1			1507

Transportation Data Corporation

Mario Perone, mperone1@verizon.net

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

Wampanoag Trail (Route 114)

just south of #1275 Driveway

City, State: E. Providence, RI

Client: Pare/Derek Hug

Southbound

05758Bclass
Site Code: 23149

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Total
09/14/23	0	68	7	1	3	0	0	0	1	0	0	0	0	80
01:00	0	28	3	0	0	0	0	0	0	0	0	0	0	31
02:00	0	17	2	1	0	0	0	0	0	0	0	0	0	20
03:00	0	18	2	0	3	0	0	1	0	0	0	0	0	24
04:00	0	30	8	2	1	0	0	1	4	0	0	0	0	46
05:00	0	92	30	8	6	1	0	2	0	0	0	0	0	139
06:00	4	261	98	15	44	5	2	3	1	0	0	0	0	433
07:00	4	737	157	17	59	4	5	8	2	0	0	0	0	993
08:00	2	654	171	15	56	3	4	14	2	0	2	0	0	923
09:00	2	614	167	8	56	5	3	7	2	0	0	0	0	864
10:00	6	708	144	4	45	3	2	7	2	0	0	0	0	921
11:00	6	715	138	4	26	4	3	4	1	0	1	0	0	902
12 PM	6	813	142	8	38	3	1	3	1	0	1	0	0	1016
13:00	5	793	135	6	31	2	2	2	0	0	0	0	0	976
14:00	8	1026	165	16	40	4	0	2	1	0	0	0	0	1262
15:00	3	1078	186	7	38	1	0	4	0	0	0	0	0	1317
16:00	5	1253	176	3	21	1	0	2	0	0	0	0	0	1461
17:00	4	1309	163	4	19	1	0	1	0	0	0	0	0	1501
18:00	2	970	106	4	10	1	0	0	1	0	0	0	0	1094
19:00	4	750	99	3	11	0	0	0	0	0	0	0	0	867
20:00	0	574	68	2	8	0	0	0	0	0	0	0	0	652
21:00	0	382	51	1	5	0	0	0	0	0	0	0	0	439
22:00	2	213	22	1	1	0	0	0	0	0	0	0	0	239
23:00	0	126	11	1	2	0	0	0	0	0	0	0	0	140
Day Total	63	13229	2251	131	523	38	22	61	18	0	4	0	0	16340
Percent	0.4%	81.0%	13.8%	0.8%	3.2%	0.2%	0.1%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak Vol.	10:00	6	737	17	59	5	5	14	4	0	2	0	0	993
PM Peak Vol.	14:00	8	1309	16	40	4	2	4	1	0	1	0	0	1501
Grand Total	109	25685	4378	258	1021	71	25	121	40	0	6	0	0	31714
Percent	0.3%	81.0%	13.8%	0.8%	3.2%	0.2%	0.1%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	

John Flatley Company
Wampanoag Meadows-Commercial Development

APPENDIX B
SAFETY DATA

WAMPANOAG MEADOWS CRASH DATA SUMMARY-EAST PROVIDENCE											
Date	Time	Location	Type of Roadway	Road Surface Condition	Light Condition	Weather	No. of vehicles	Type of Impact	Contributing Circumstance	Damage/Injuries	Other
10.30.20	11:57 AM	Wampanoag Tr/Mohawk Dr	One-way traffic way	Snow	Daylight	Snow	2	Rear end	Veh 1 was bumped. Veh 2 ran	Minor/None	
10.13.20	8:50am	Wampanoag Tr/Mohawk Dr	2-way divided median barrier	Wet	Daylight	Rain	2	Barrel flew from veh 1 hit veh 2	loss barrel	Minor/None	
8.2.20	6:12am	Wampanoag Tr/Forbes St 500 ft north	2-way divided pmedian barrier	Drt	Daylight	Clear	1	Struck grass median	Driverfell asleep	Extensive /towed/None	
7.30.20	8:32 PM	Wampanoag Tr/Forbes St 500' south	2-way divided positive median barr	Dry	Dark lighted	Clear	1	Loss control	Hit objects	Damage/None	
7.6.20	3:00 PM	Wampanoag Tr/Reardon Ave	2-way not divided cont left turn lane	Dry	Daylight	Clear	2	Sideswipe Same Direction	Changing lanes southbound	Minor/BackPain	
6.11.20	9:40am	Forbes St/Wampanoag Tr	2-way divided unprotectd median	Dry	Daylight	Cloudy	2	Rear end	At stop sign	Minor/None	hit and run
5.20.20	10:45 AM	Wampanoag Tr/Reardon Ave	One-way traffic way	Dry	Daylight	Clear	2	Rear end	Roll over after rear ended	Extensive damage	On phone
4.6.20	4:41 PM	Wampanoag Tr/1000' north of Forbes	One way traffic way	Dry	Daylight	Clear	1	Slid on road/guardrail	Loss control	Minor/Transported to hospital	
4.4.20	2:20 AM	Wampanoag Tr/Forbes St	One-way traffic way	Wet	Dark Lighted	Rain	1	Hit signs and lights	Loss contol/On speaker phone	Objects/None	
3.7.20	7:18 AM	Wampanoag Tr 500' north of Reardon	One-way traffic way	Ice/Frost	Daylight	Cloudy	3	Angle/Right angle	Car lost contol-2 cars hit	Towed/None	
1.20.20	11:29 AM	Forbes St/Wamanoag Tr	One way traffic way	Dry	Daylight	Clear	2	Rear end	At stop sign	None/none	
12.12.21	8:23 PM	Wampanoag Trail 1000' north Reardon Ave	2-way divided median barrier	dry	dark unknown lighting	clear	1	object	deer	Significant/none	
12.7.21	5:40 PM	25 Argyle St/Wampanoag Tr	2-way not divided	dry	dusk	clear	2	rear end	stop at intersection	minor/none	
11.7.21	11:48 PM	Wampanoag Tr 500 feet south of Argyle Ave	One-way trafficway	dry	Dark-lighted	clear	1	Object	Deer	Disabling/head pain	
11.6.21	10:33 PM	Wampanoag Tr 800 ' Forbes St	2-way divided barrier	dry	dark-lighted	clear	2	angle	Travelling southbound sideswipe	Minor/none	hit and run
11.5.21	5:32 PM	Wampanoag Tr 350' s of Forbes St	2-way divided barrier	dry	dusk	clear	2	rear end	Veh merging from turnaround	Minor/none	
9.12.21	3:28 AM	Wampanoag Tr 1 mile Forbes St	One-way trafficway	dry	dark lighted	clear	1	object	coyote	minor/none	
7.31.21	11:38 AM	Wampanoag Tr/Argyle Ave	2-way not divided	dry	daylight	clear	2	rear end	hit and run	Functional/none	
5.25.21	8:30 PM	Wampanoag Tr/Reardon Ave	2-way, divided barrier	dry	dusk	clear	2	rear end	car turning	minor/none	hit and run
5.14.21	5:02 PM	Wampaoag Trail 300 ft sout Reardon Ave	2-way divided barrier	dry	daylight	clear	2	angle same direction	Turned into lane	Heavy/minor	
5.10.21	2:22 PM	Wampanoag Tr 40 feet south Reardon Ave	2-way divided barrier	dry	daylight	cloudy	2	Rear to side	Car reversed in breakdown lane	Significant/injuries	
4.19.21	11:22 AM	Wampanoag Tr 300 south of President Ave	2-way divided barrier	Dry	Daylight	Clear	2	Angle front to side	crossing lanes enter Express Gas	Significant/neck and back	southbound turn around
2.16.21	5:07 PM	Forbes St/n500 ft spouth Wampanoag Trl	2	dry	dusk	clear	2	Rear end	Turning vehicle	Minor/none	
2.9.21	10:15 PM	Wampanag Tr 1000' south Mink Rd	2-way divided barrier	Ice/Frost	Dark-Lighted	Clear	1	Rollover	Hit ice	Major/none	
12.27.22	10:30 AM	Wampanoag Tr/500' s of Mink Rd	2-way divided barrier	Dry	Daylight	Clear	2	Sideswipe Same Direction	drifted into other lane	Minor/none	
12.19.22	4:38 PM	Wampanoag Tr/Reardon Ave	2-way divided barrier	dry	Daylight	Clear	2	Sideswipe, Same Direction	Switch lanes with blind spo	Significant/none	
11.14.22	2:12 PM	Wampanoag Trl/Mink Rd	2-way divided barrier	Dry	Daylight	Clear	2	angle same direction	Car merging/car turning into Mobile	None/none	
11.11.22	4:54 PM	Mink Rd/Wampanoag Tr	2-way not divided	Wet	Daylight	Rain	2	Rear end	Merging then stopped	Minor/none	
9.14.22	12:01 PM	Wampanoag Tr/Mink Rd	2-way not divided	Dry	Daylight	Clear	2	Rear end	stop car at intersection	Minor/none	
7.10.22	11:35 PM	Wampanoag Tr/Mink Rd	2-way not divided	Dry	Day light	Clear	2	Rear end	Did not syop at light and rearended car in front	None/none	
7.10.22	4:49 PM	Wampanoag Tr/ 1 mile south of Reardon Ave	2-way divided barrier	dry	daylight	clear	2	angle	crossed 2 lanes w/o looking/V2 accessing turnaround	Heavy/none	
6.14.22	5:03 PM	Wampanoag Tr/Mink Rd	2-way divided barrier	Dry	Daylight	Clear	2	Rear end	At redlight Veh 1 rear ended	Minor/None	
6.8.22	3:22 PM	Wampanoag Tr/Mink Rd	2-way divided barrier	Dry	Daylight	Clear	2	Rear end	Rearended at light	Minor/minor	
5.30.22	1:58 PM	Mink Rd/Wampanoag Tr	one-way traffic way	Dry	Daylight	Clear	2	Rear end	Hit car at yield looking over shldr	Minor/none	
3.25.22	8:43 AM	Wampanoag Tr/Mink Rd	one-way traffic way	Dry	Daylight	Cloudy	2	Rear end	Waiting to merge/rearended	Minor/none	
3.9.22	11:33am	Wampanoag Tr/Mink Rd	one-way traffic way	Wet	Daylight	Rain	2	Rear end	Slowing down and hit from behind	Minor/None	
2.26.22	3:47 PM	Wampanoag Tr/Mink Rd	one-way traffic way	Ice/Frost	Daylight	Clear	2	angle	Stop at light and hit side of vehicle	Heavy/none	
2.14.22	11:25 AM	Mink Rd/Wampanoag Tr	2-way not divided	wet	Daylight	Snow	2	rear end	Stop at light and was rear ended	Minor/none	
2.2.22	11:03 PM	MinkRd/Wampanoag Tr	2-way divided barrier	Snow	Dark lighted	Fog	1	Hit curb and snowbank	Significant/none		
8.26.23	7:00 AM	Wampanoag Tr/Mink Rd 30' east of inter	one-way traffic way	dry	Daylight	Clear	2	angle same direction	car merging from Mink. Veh on Wampanoag hit	Minor/headache	
8.19.23	2:09 PM	Wampanoag Tr/Mink Rd	2-way divided barrier	dry	Daylight	Clear	2	Rear end Front to Rear	foot slipped off break at stop	Minor/None	
6.11.23	10:27 AM	Wampanoag TR/30' south of Mink Road	2-way not divided	dry	Daylight	Clear	2	Rear end	Stopped on Mink Rd. Bumped from behind	Minor/None	
5.4.23	4:26 PM	Wampanoag Trail/Mink Road	2-way not divided	Dry	Daylight	Clear	2	Rear end	cut off by tractor trailer moved to other and was rear ended	Minor/None	
4.19.23	1:52 PM	Wampanoag Trail/Mink Rd	one-way traffic way	dry	daylight	cloudy	2	rear end	Waiting to turn. Foot slipped off brake	Moderate/None	
4.11.23	11:37 AM	Wampanoag Trail/Mink Road	2-way divided barrier	dry	daylight	clear	2	Rear end	Approaching intersection. Not paying attention. Hit car	significant/hospital	
3.1.23	9:32 AM	Mink Road/Wampanoag TR	2-way not divided	dry	daylight	clear	2	rear end	merging. Didn't notice car in front	None/None	
2.3.23	4:28 PM	Wampanoag Trail/Mink Rd	2-way not divided	dry	daylight	clear	2	rear end	hit from behind at stop light	minor/none	
2.2.23	7:57 PM	Wampanoag Tr/Mink Rd	2-way divided barrier	Dry	Dark lighted	Clear	2	Sideswipe	swerved to avoid collison with another vehicle	Minor/None	
1.30.23	7:05 PM	Wampanoag Tr/Mink Rd	one-way traffic way	Dry	Dark lighted	Clear	1	fish tailed and went offroad	speed may have been factor	none/none	
1.9.23	1:29 PM	Mink Road/Wampanoag TR	one-way traffic way	Dry	Daylight	Clear	2	rear end	hit car in merge lane	Minor/none	
1.2.23	12:10 PM	Mink Road/Wampanoag TR	one-way traffic way	Dry	Daylight	Clear	2	rear end	hit car at red light	minor/none	

WAMPANOAG MEADOWS CRASH DATA SUMMARY-BARRINGTON											
Date	Time	Location	Type of Roadway	Road Surface Condition	Light Condition	Weather	No. of vehicles	Type of Impact	Contributing Circumstance	Damage/Injuries	Other
9.14.21	9:46 PM	1691 Wampanoag Tr	2-way divided barrier	Dry	Daylight	Clear	1	went off road	cut off by other vehicle	completely disabled/none	
6.19.21	11:06 AM	1581 Wampanoag Tr	2-Way not divided	dry	Daylight	Clear	1	deer	Swerved to not hit animal	minor/none	
8.12.23	9:20 PM	1825 Wampanoag Tr	2-way not divided	dry	Dark lighted	Clear	2	rear end	Car pulled over. Backed into police cruiser	Minor/None	
5.13.23	12:27 PM	Wampanoag Tr/Argyle Rd	2-way not divided	dry	Daylight	clear	2	sideswipe	pulled out from Argyle. Did not see on-coming car	Minor/none	
1.2.23	6:02 PM	Wampanoag Tr/by turnaround	2-way divided barrier	dry	Dark lighted	Clear	1	entangled in guardrail	operator seizing. Under the influence	Minor/Injury	

John Flatley Company
Wampanoag Meadows-Commercial Development

APPENDIX C
TRIP GENERATION & DISTRIBUTION

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

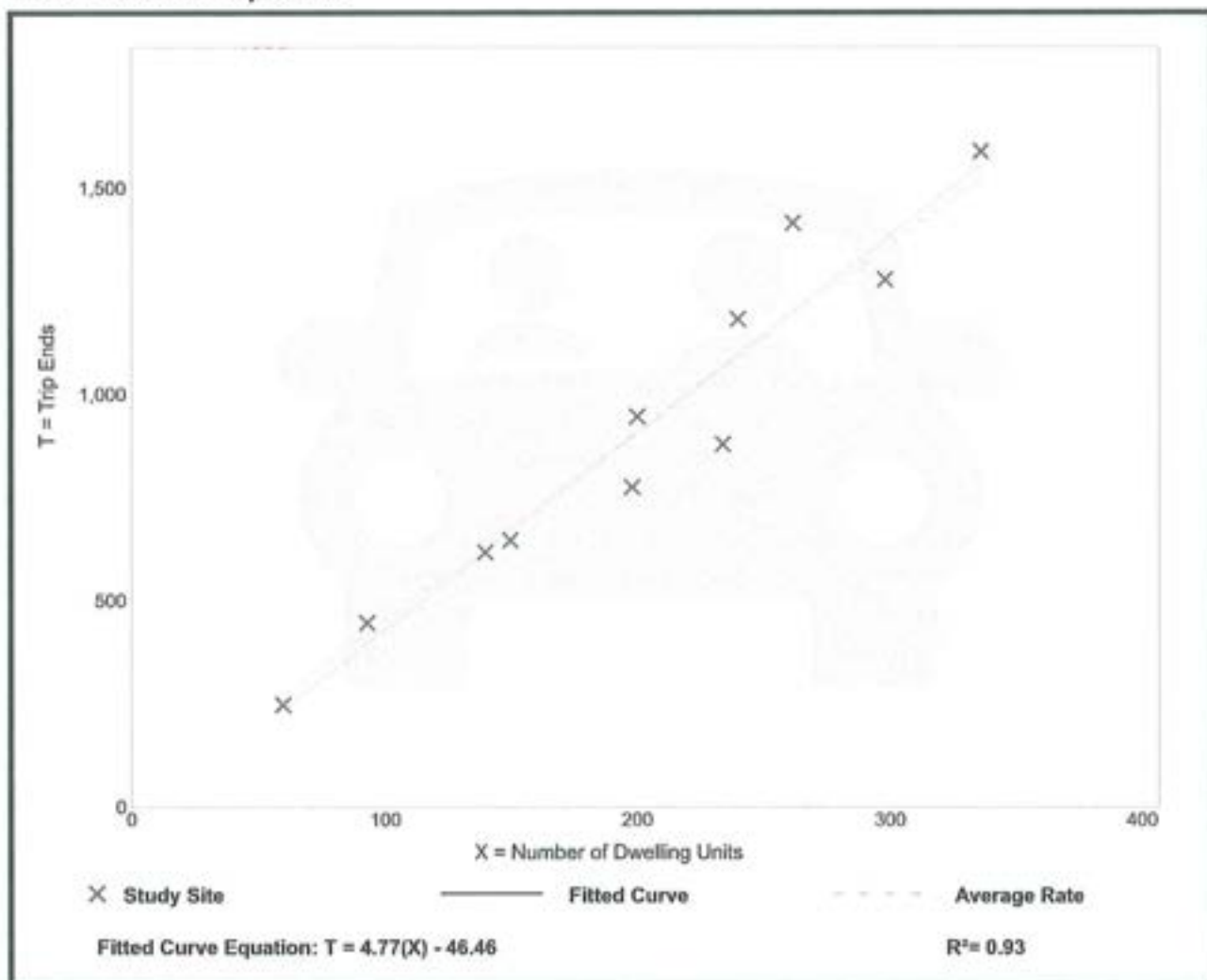
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

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

Vehicle Trip Generation per Dwelling Unit

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

Data Plot and Equation



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

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 49

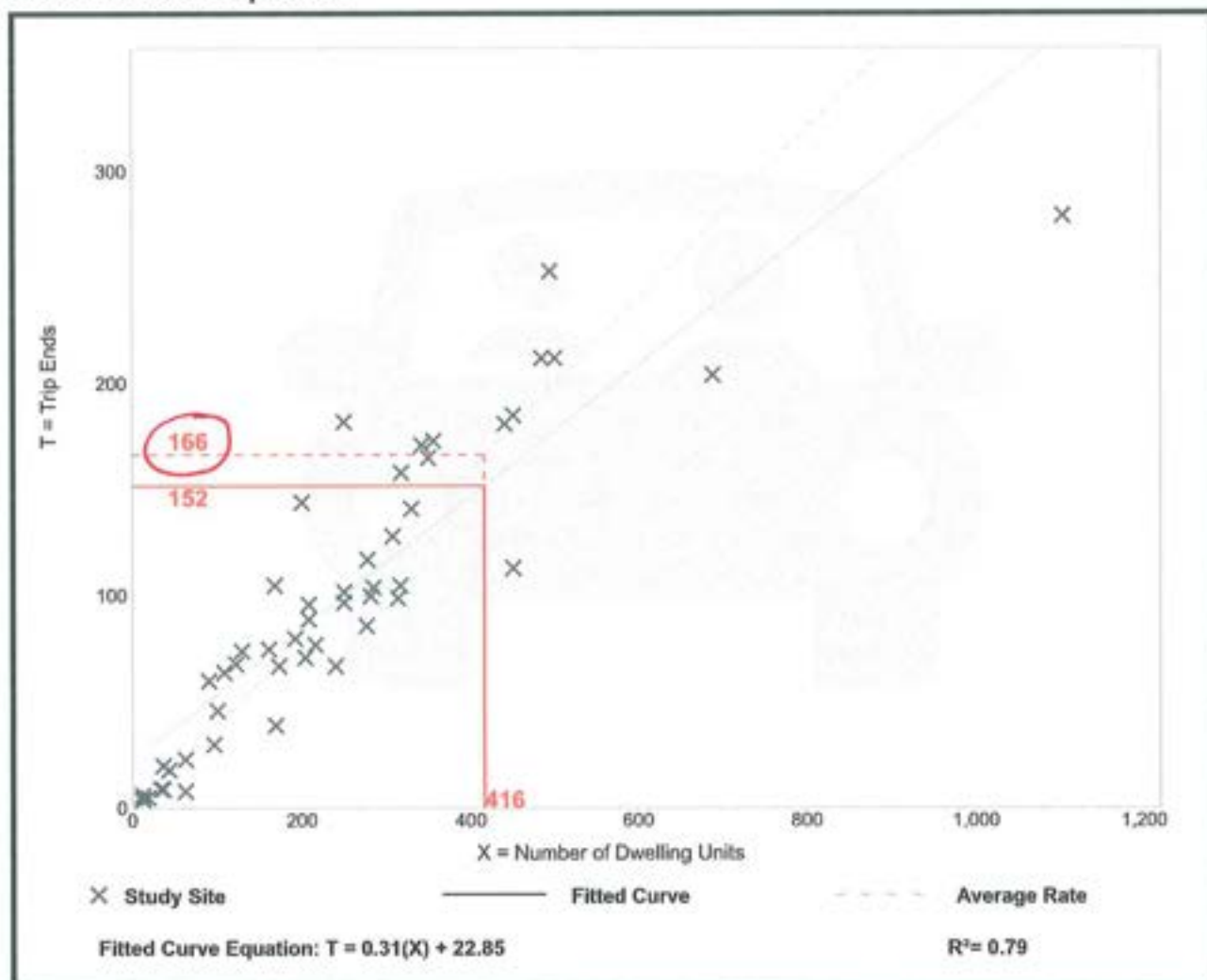
Avg. Num. of Dwelling Units: 249

Directional Distribution: 24% entering, 76% exiting

Vehicle Trip Generation per Dwelling Unit

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

Data Plot and Equation



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

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 59

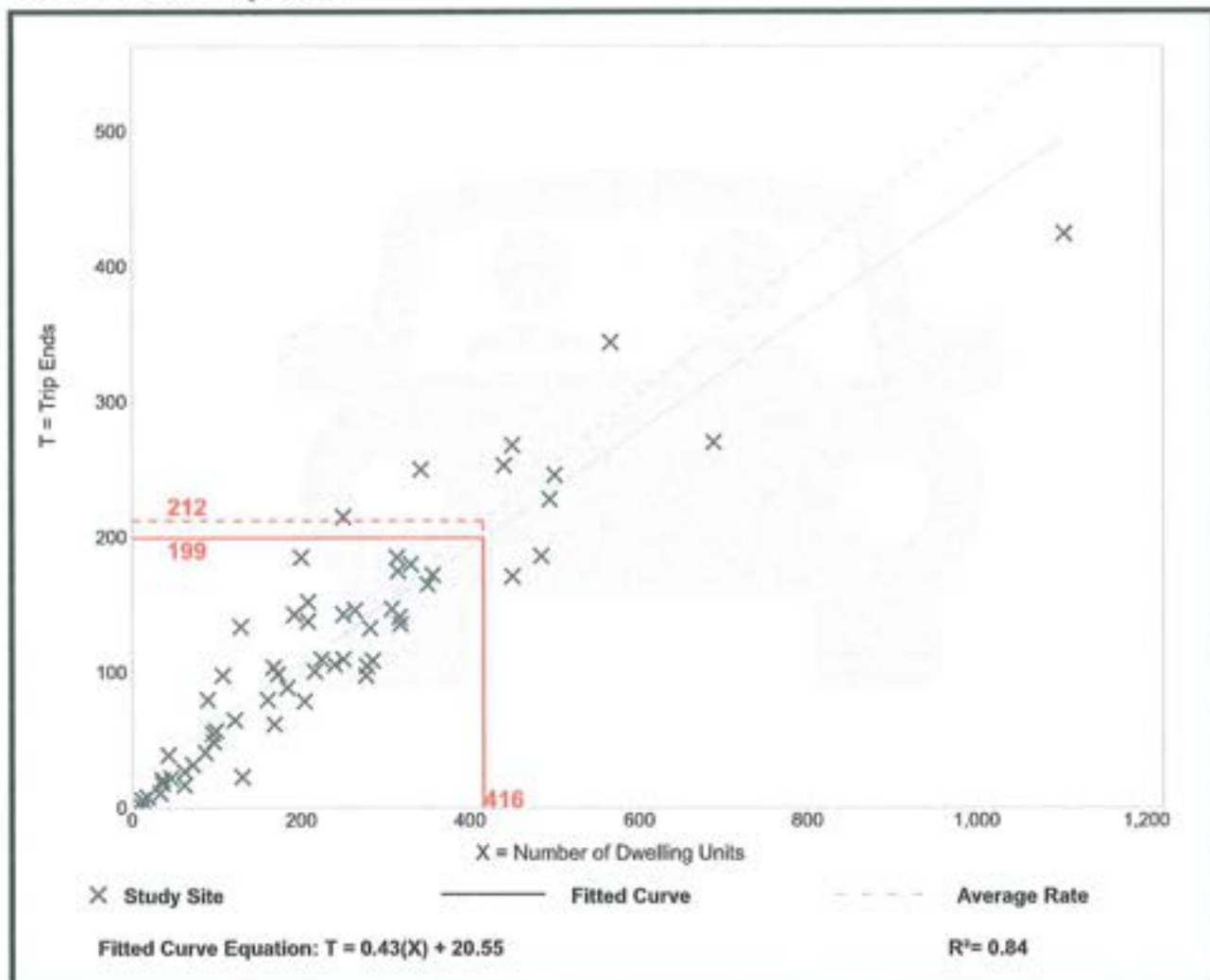
Avg. Num. of Dwelling Units: 241

Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

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

Data Plot and Equation



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

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

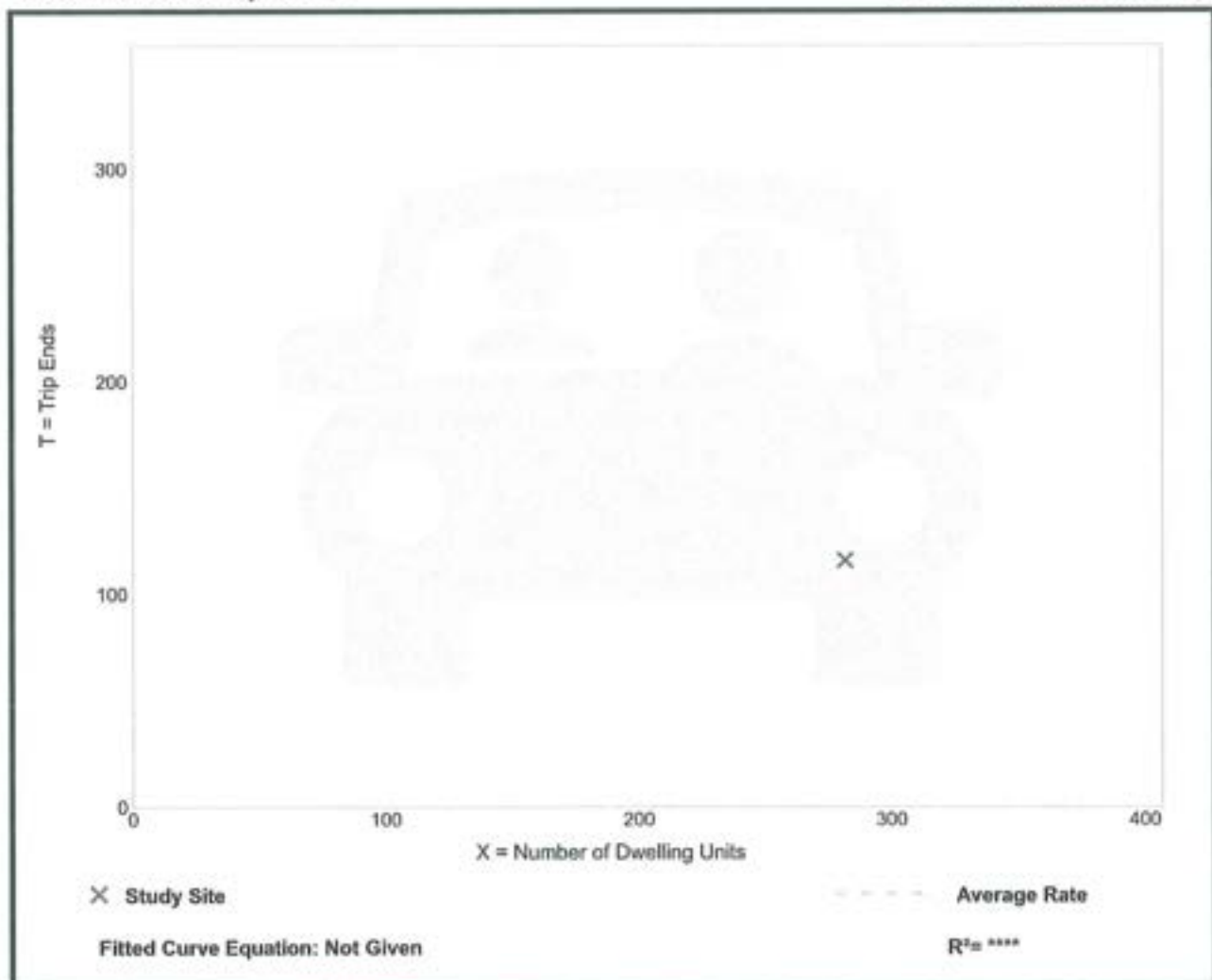
Setting/Location: General Urban/Suburban
Number of Studies: 1
Avg. Num. of Dwelling Units: 282
Directional Distribution: Not Available

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.41	0.41 - 0.41	*

Data Plot and Equation

Caution – Small Sample Size



High-Turnover (Sit-Down) Restaurant (932)

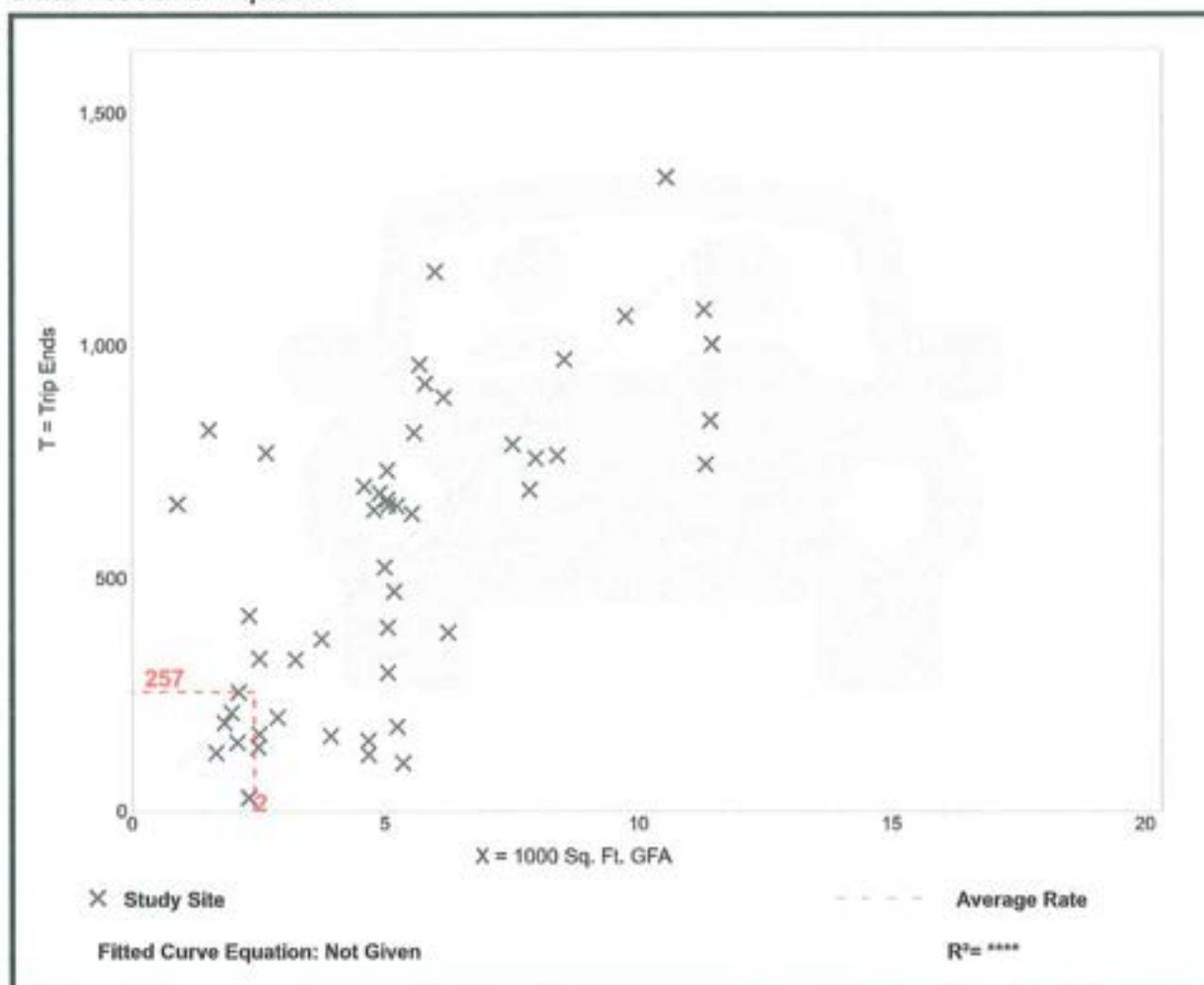
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 50
Avg. 1000 Sq. Ft. GFA: 5
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
107.20	13.04 - 742.41	66.72

Data Plot and Equation



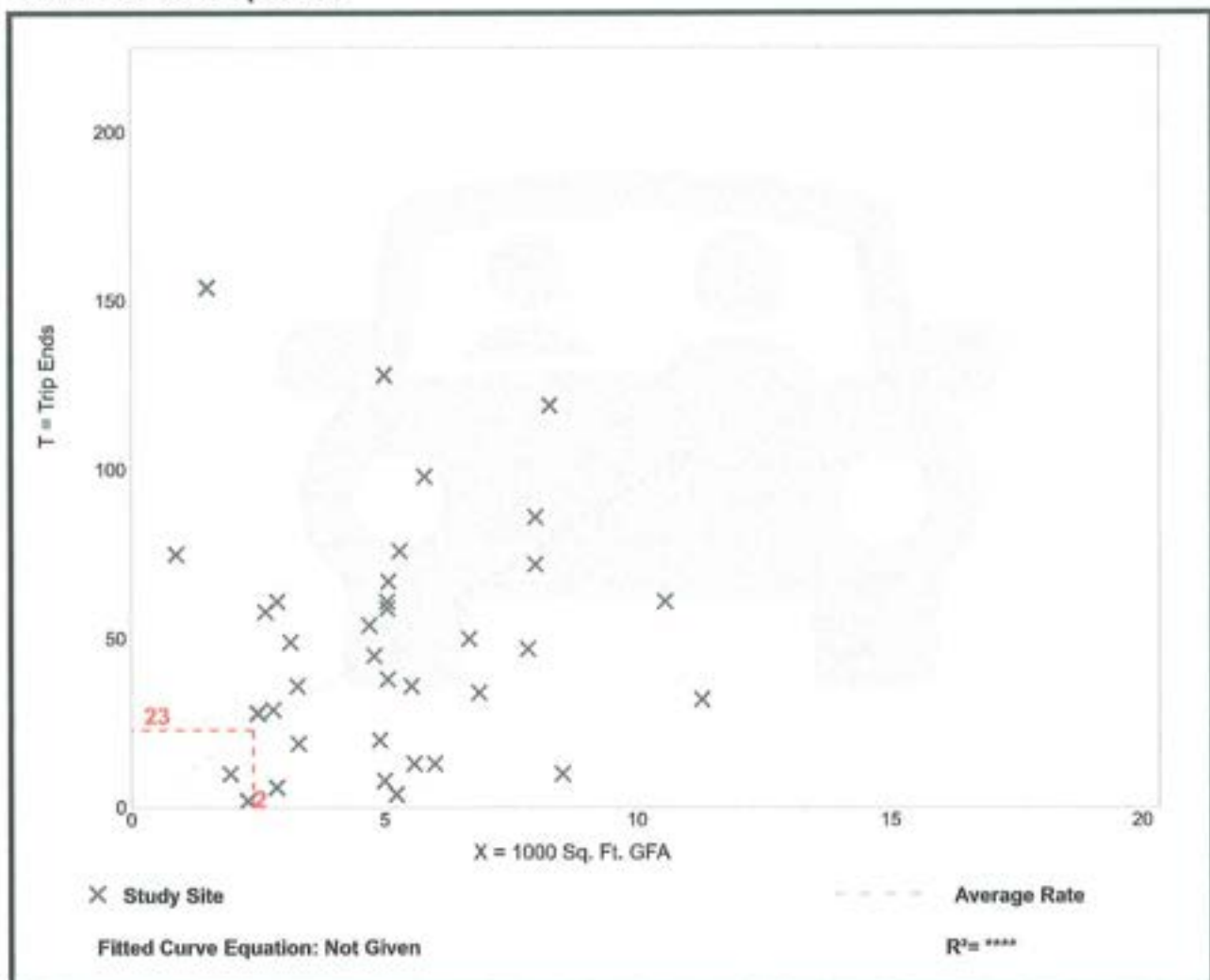
High-Turnover (Sit-Down) Restaurant (932)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
 On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 7 and 9 a.m.
 Setting/Location: General Urban/Suburban
 Number of Studies: 37
 Avg. 1000 Sq. Ft. GFA: 5
 Directional Distribution: 55% entering, 45% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.57	0.76 - 102.39	11.61

Data Plot and Equation



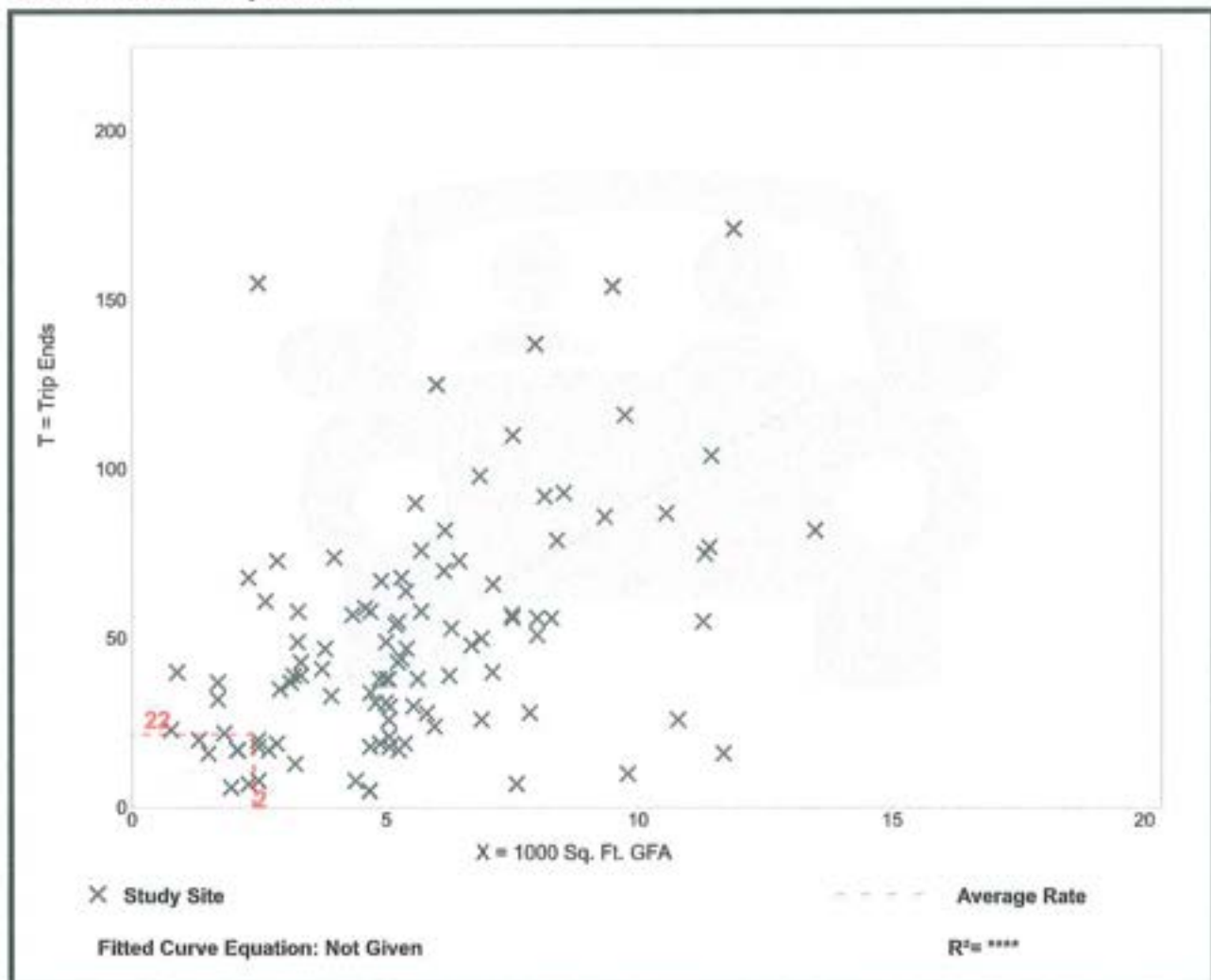
High-Turnover (Sit-Down) Restaurant (932)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
 On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 4 and 6 p.m.
 Setting/Location: General Urban/Suburban
 Number of Studies: 104
 Avg. 1000 Sq. Ft. GFA: 6
 Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.05	0.92 - 62.00	6.18

Data Plot and Equation



High-Turnover (Sit-Down) Restaurant (932)

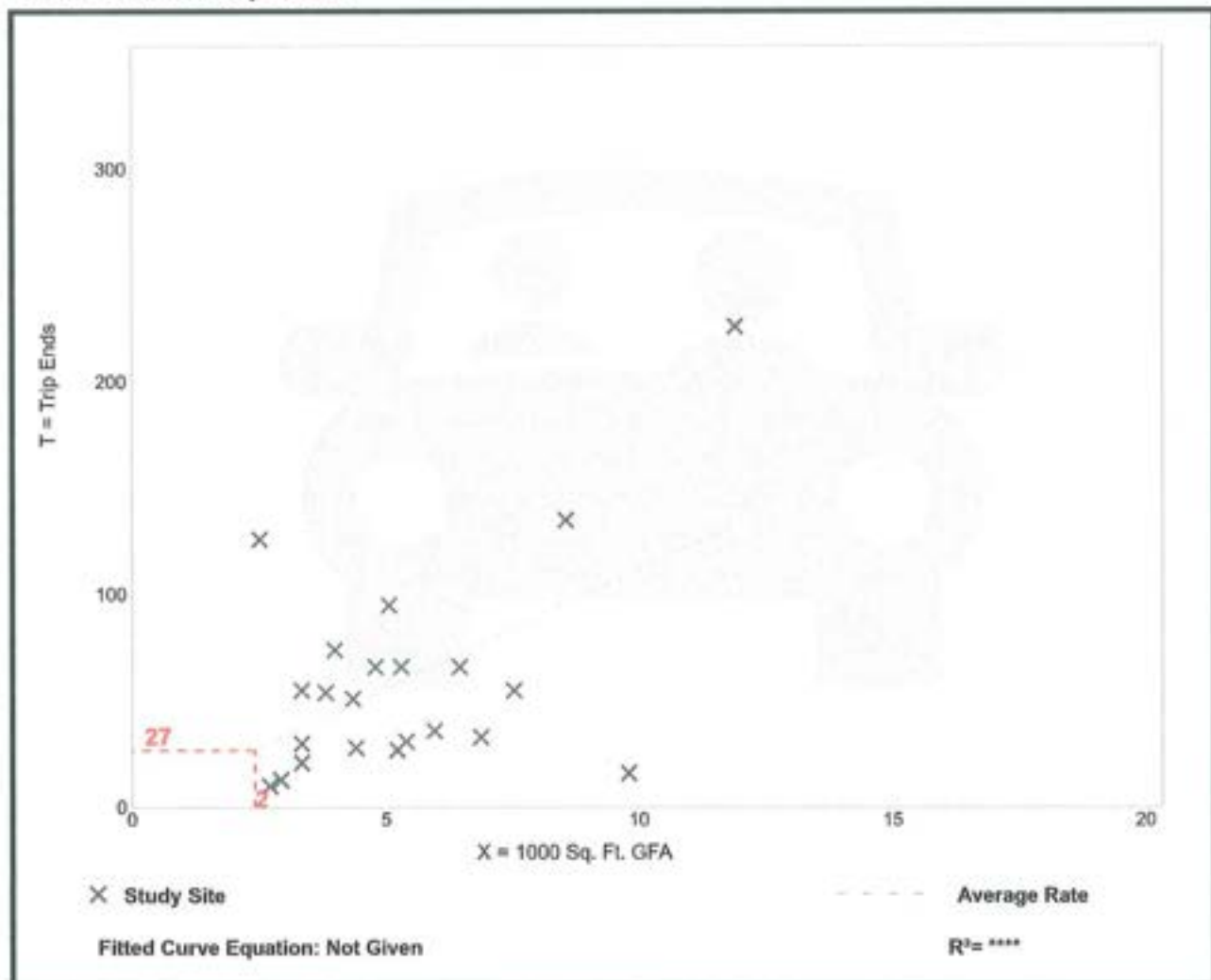
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Saturday, Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 22
Avg. 1000 Sq. Ft. GFA: 5
Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
11.19	1.63 - 50.40	8.30

Data Plot and Equation



Fine Dining Restaurant (931)

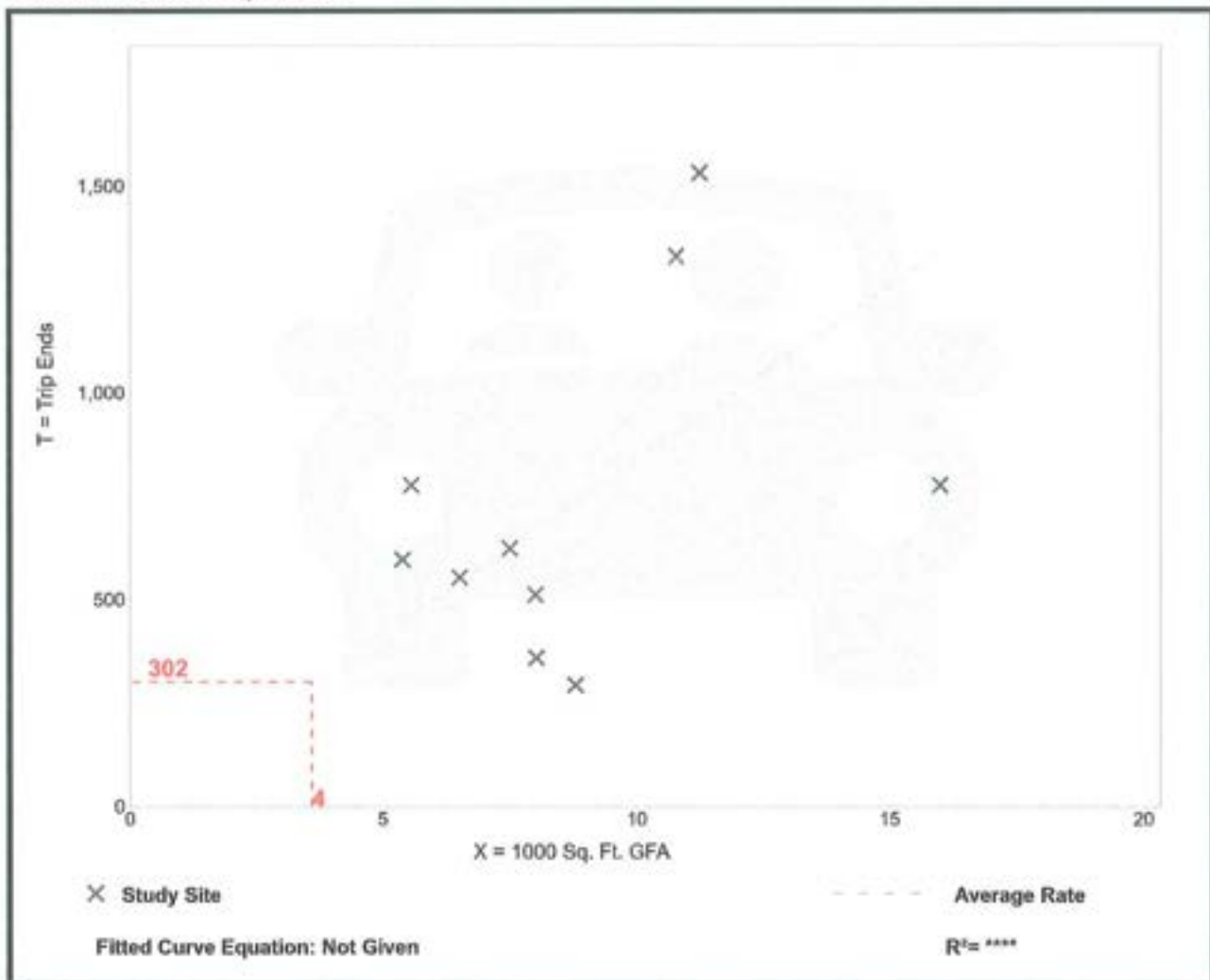
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 10
Avg. 1000 Sq. Ft. GFA: 9
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
83.84	33.45 - 139.93	40.01

Data Plot and Equation



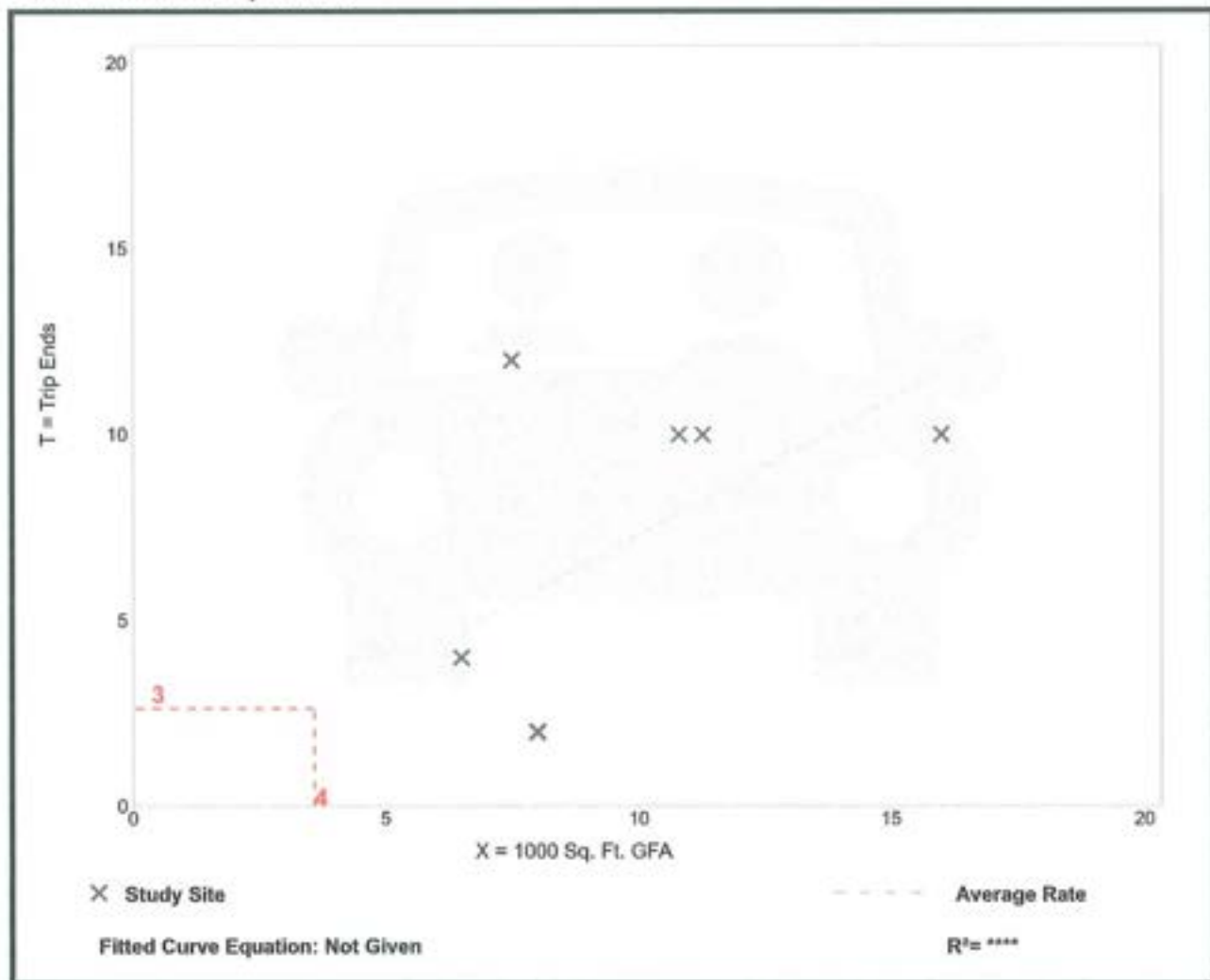
Fine Dining Restaurant (931)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
 On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 7 and 9 a.m.
 Setting/Location: General Urban/Suburban
 Number of Studies: 7
 Avg. 1000 Sq. Ft. GFA: 10
 Directional Distribution: Not Available

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.73	0.25 - 1.60	0.42

Data Plot and Equation



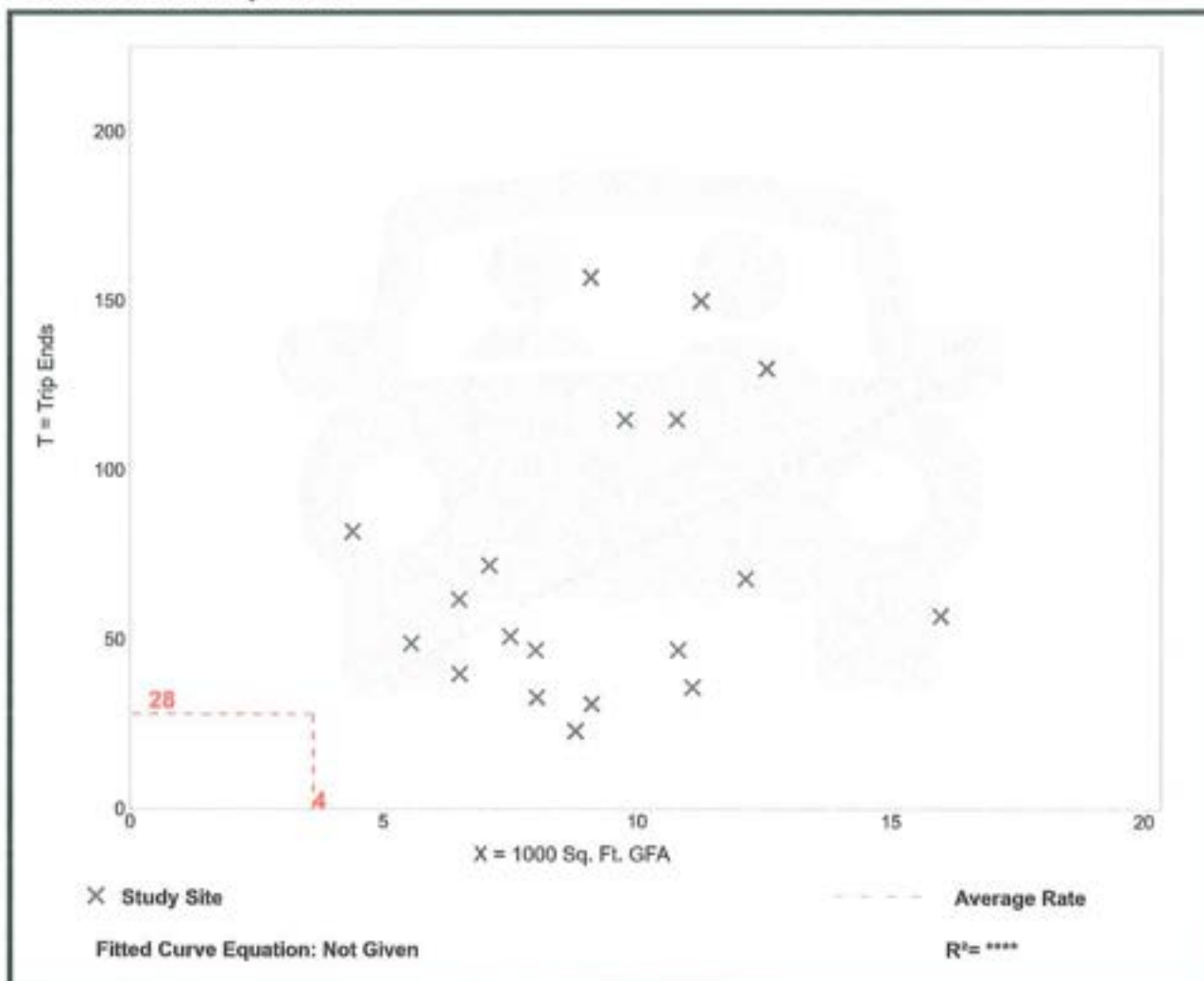
Fine Dining Restaurant (931)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 19
 Avg. 1000 Sq. Ft. GFA: 9
 Directional Distribution: 67% entering, 33% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
7.80	2.62 - 18.68	4.49

Data Plot and Equation



Fine Dining Restaurant (931)

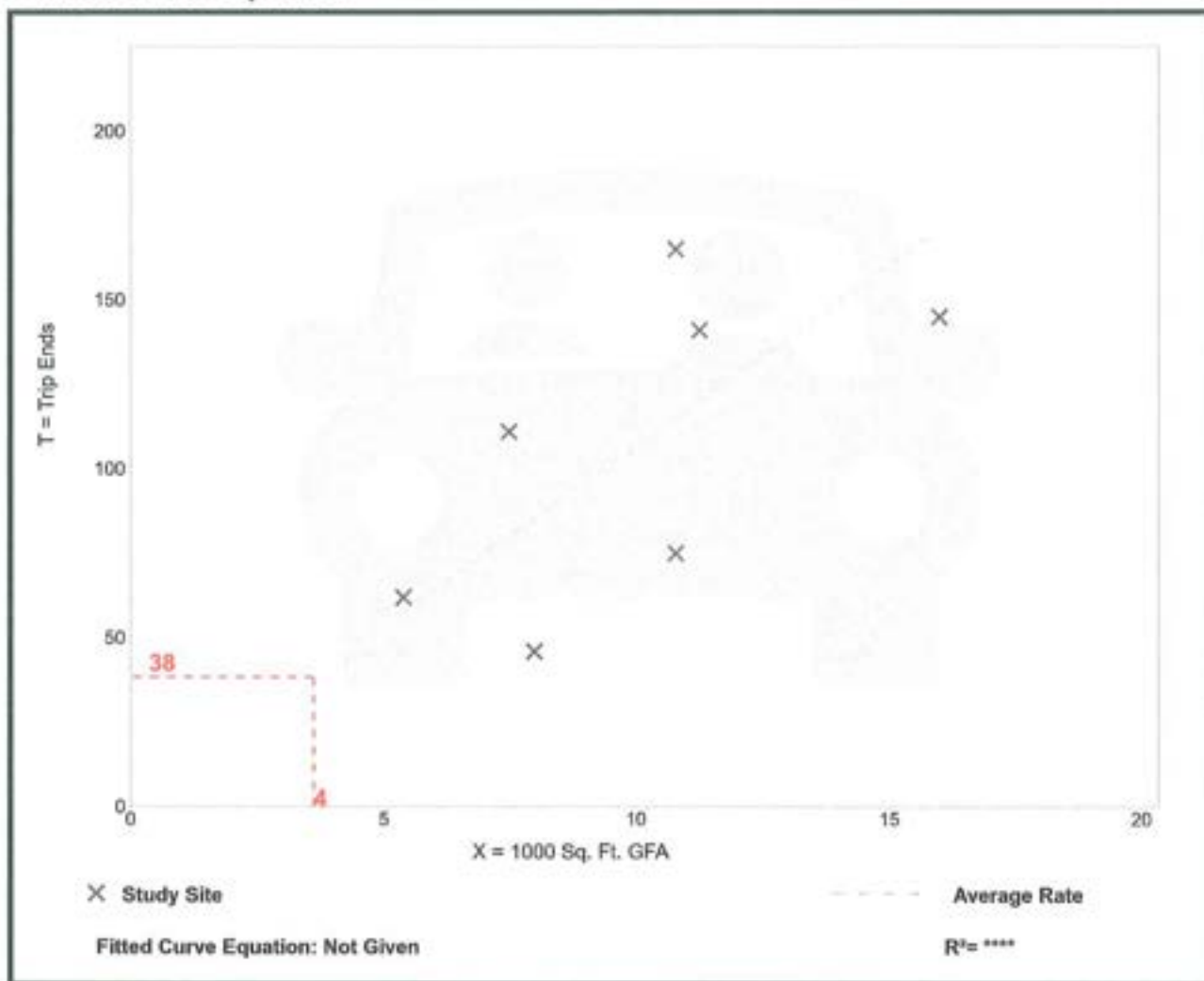
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Saturday, Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 7
Avg. 1000 Sq. Ft. GFA: 10
Directional Distribution: 59% entering, 41% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
10.68	5.75 - 15.29	3.62

Data Plot and Equation



Strip Retail Plaza (<40k) (822)

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

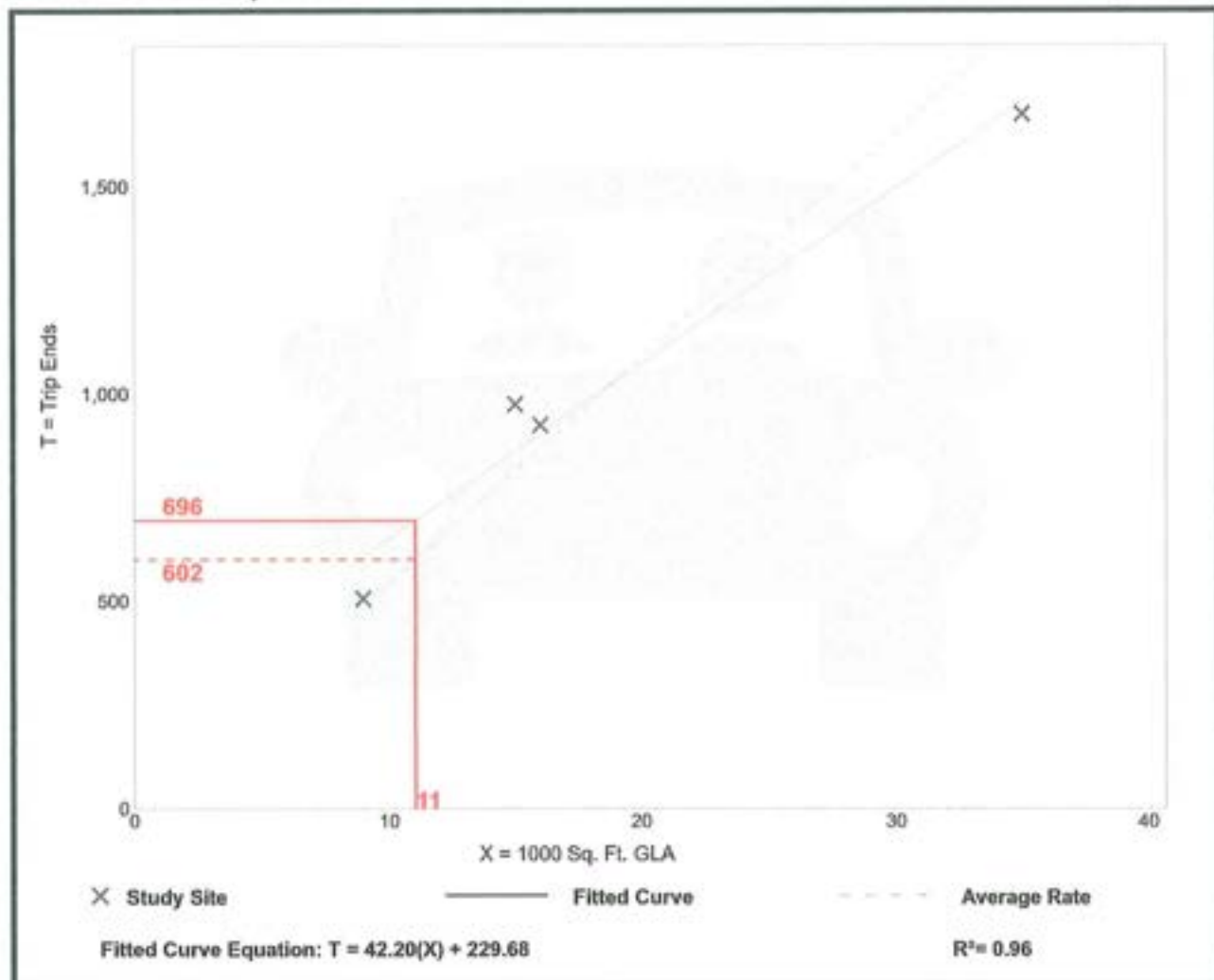
Setting/Location: General Urban/Suburban
Number of Studies: 4
Avg. 1000 Sq. Ft. GLA: 19
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
54.45	47.86 - 65.07	7.81

Data Plot and Equation

Caution – Small Sample Size



Strip Retail Plaza (<40k) (822)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA
 On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

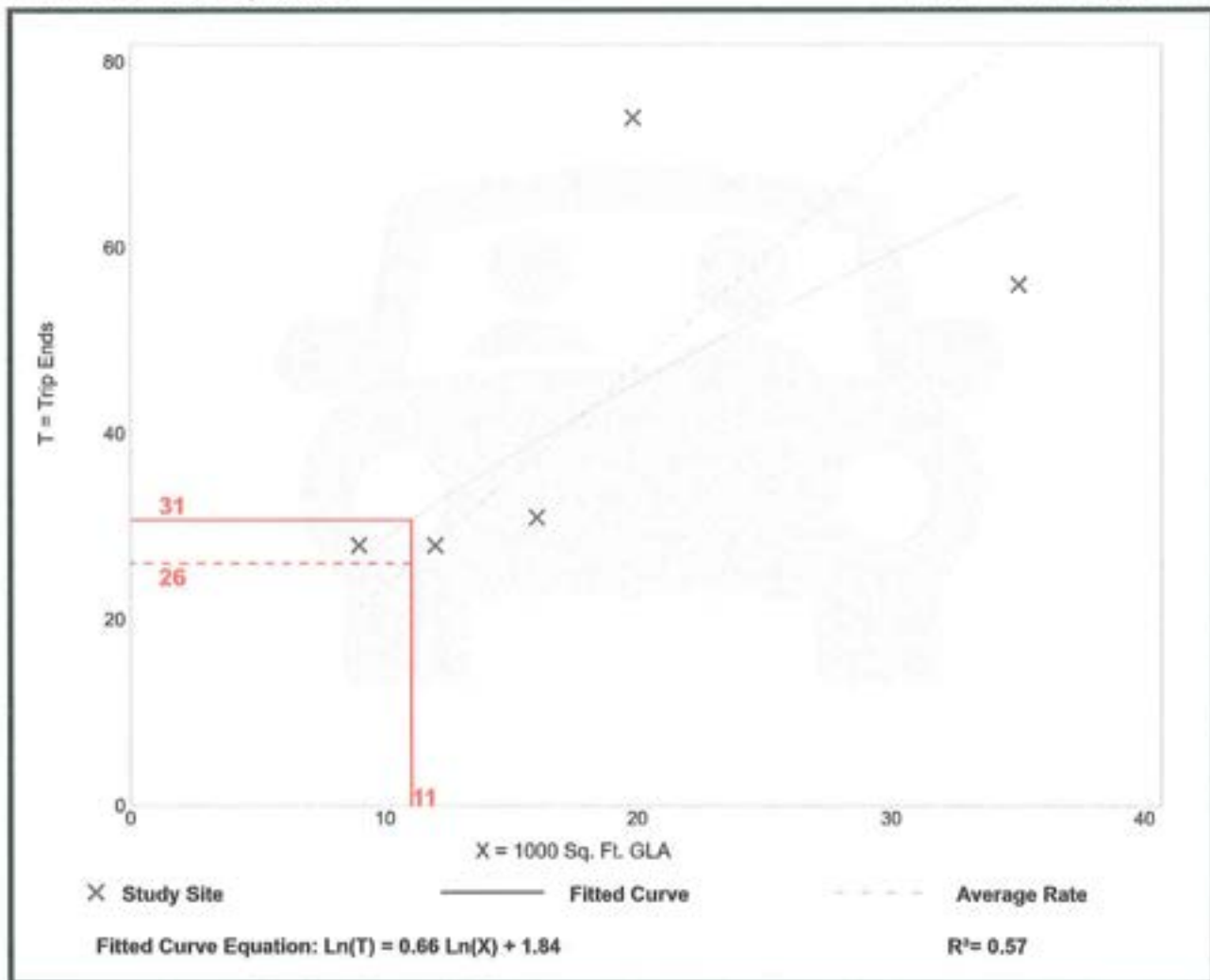
Number of Studies: 5
 Avg. 1000 Sq. Ft. GLA: 18
 Directional Distribution: 60% entering, 40% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
2.36	1.60 - 3.73	0.94

Data Plot and Equation

Caution – Small Sample Size



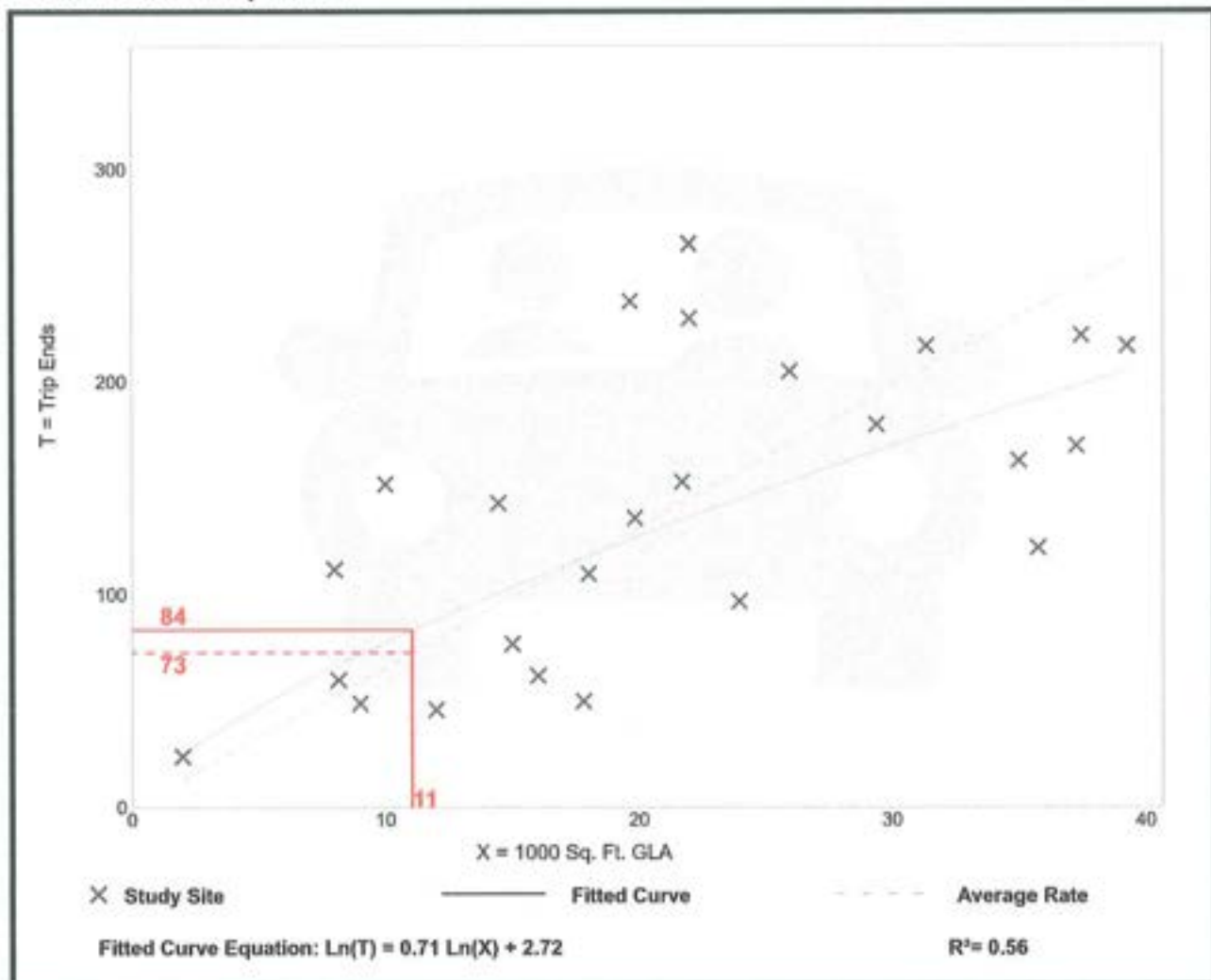
Strip Retail Plaza (<40k) (822)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA
 On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 4 and 6 p.m.
 Setting/Location: General Urban/Suburban
 Number of Studies: 25
 Avg. 1000 Sq. Ft. GLA: 21
 Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
6.59	2.81 - 15.20	2.94

Data Plot and Equation



Strip Retail Plaza (<40k) (822)

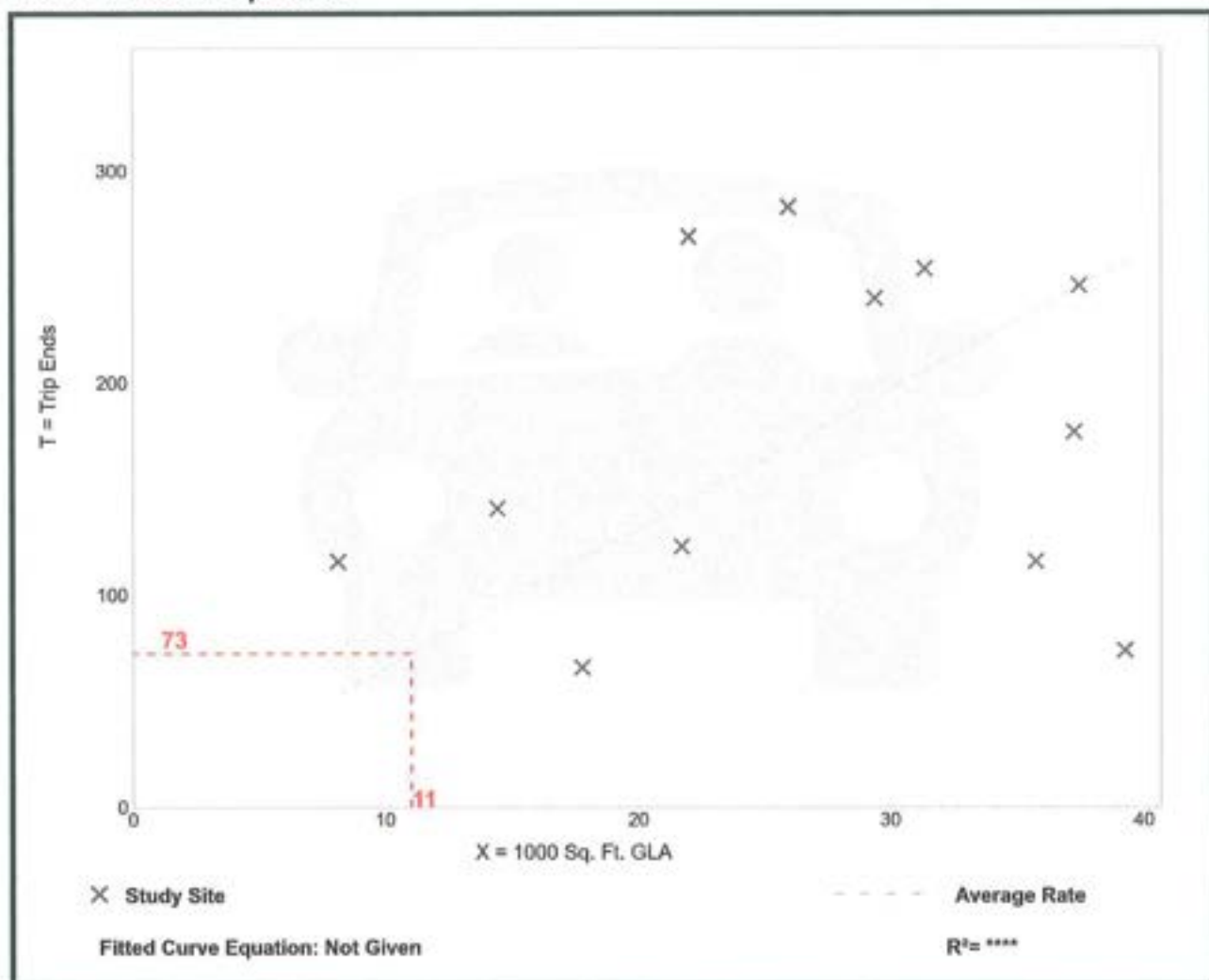
Vehicle Trip Ends vs: 1000 Sq. Ft. GLA
On a: Saturday, Peak Hour of Generator

Setting/Location: General Urban/Suburban
 Number of Studies: 12
 Avg. 1000 Sq. Ft. GLA: 27
 Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
6.57	1.88 - 14.23	3.45

Data Plot and Equation



Mini-Warehouse (151)

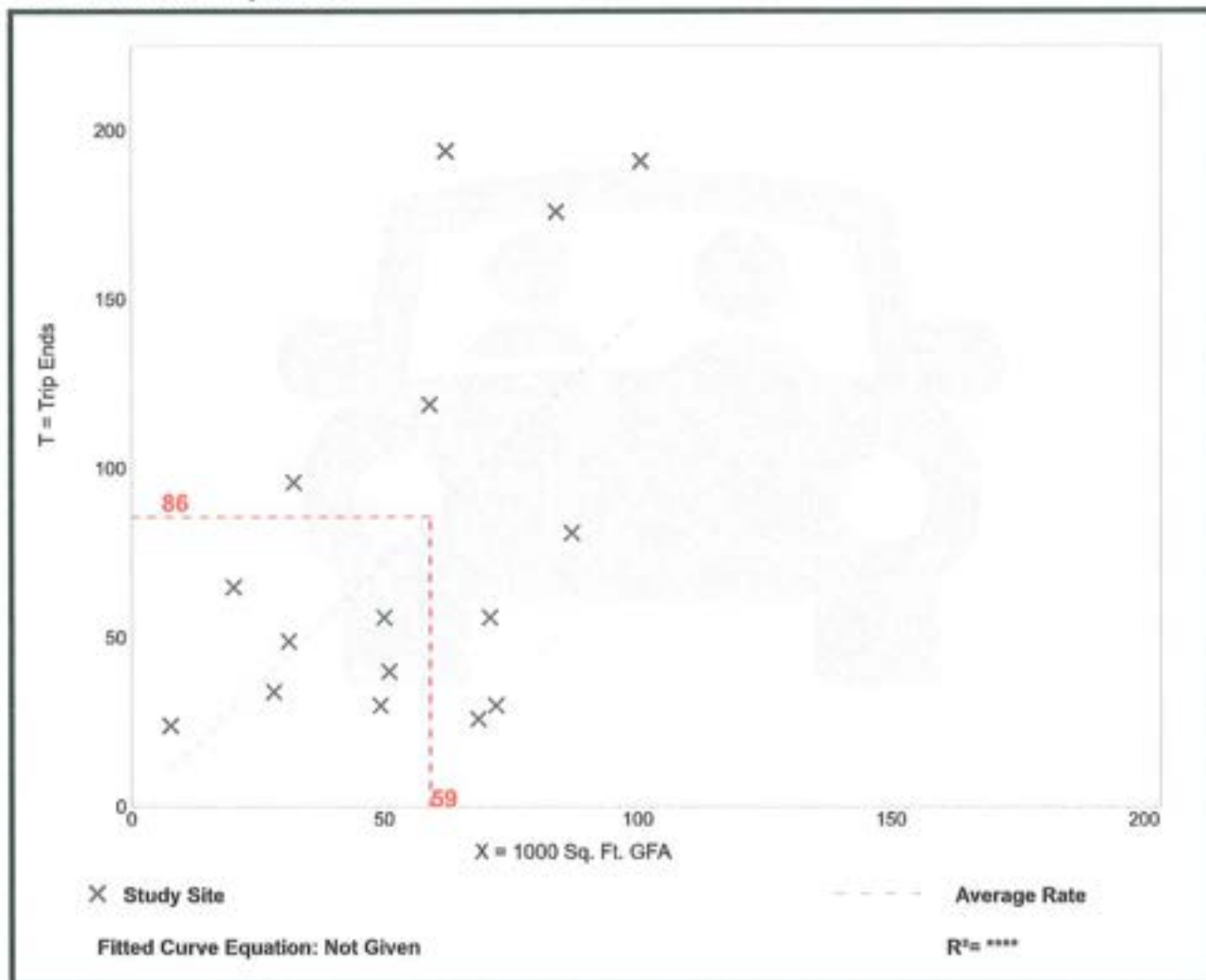
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 16
Avg. 1000 Sq. Ft. GFA: 55
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.45	0.38 - 3.25	0.92

Data Plot and Equation



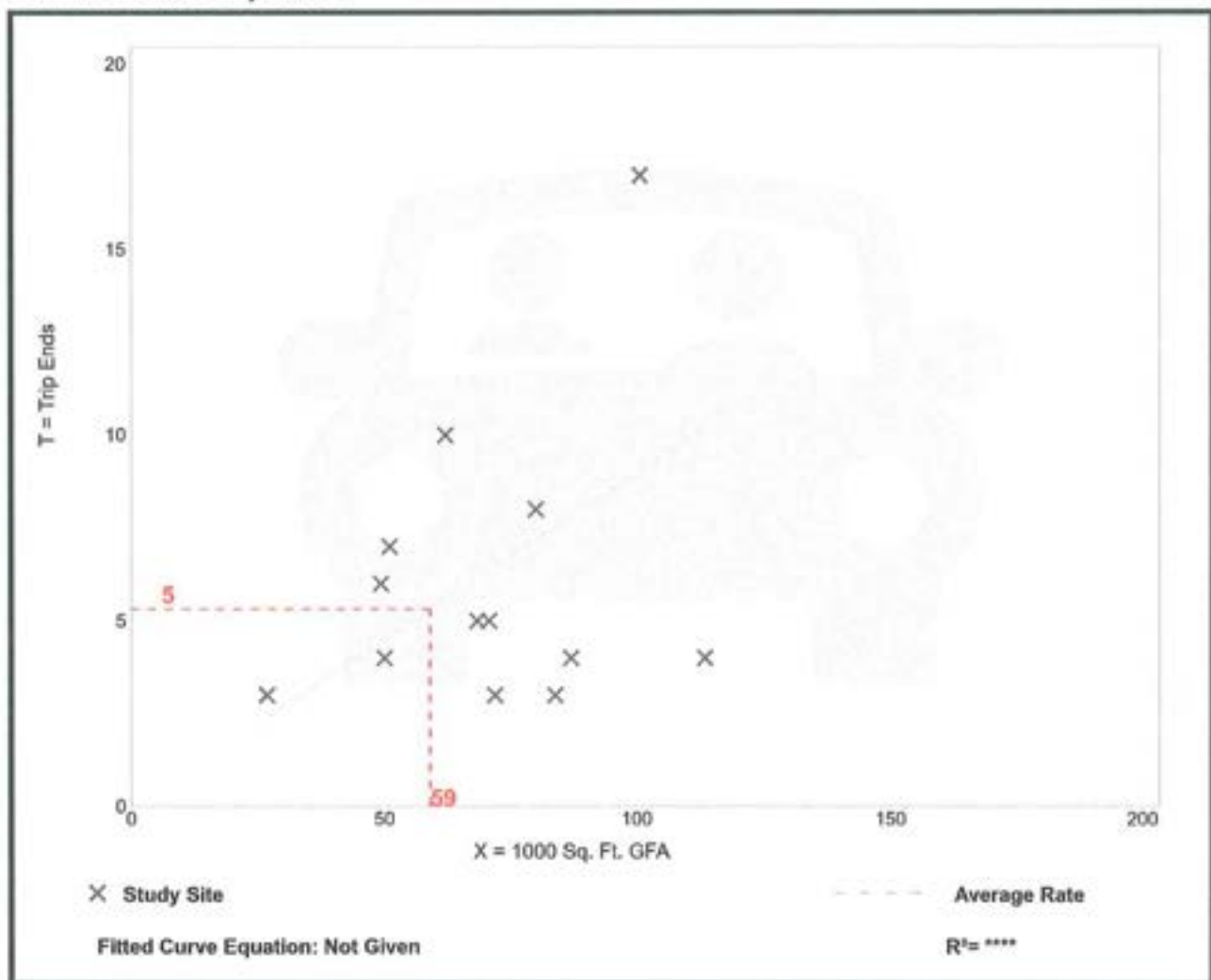
Mini-Warehouse (151)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
 On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 7 and 9 a.m.
 Setting/Location: General Urban/Suburban
 Number of Studies: 13
 Avg. 1000 Sq. Ft. GFA: 70
 Directional Distribution: 59% entering, 41% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.09	0.04 - 0.17	0.05

Data Plot and Equation



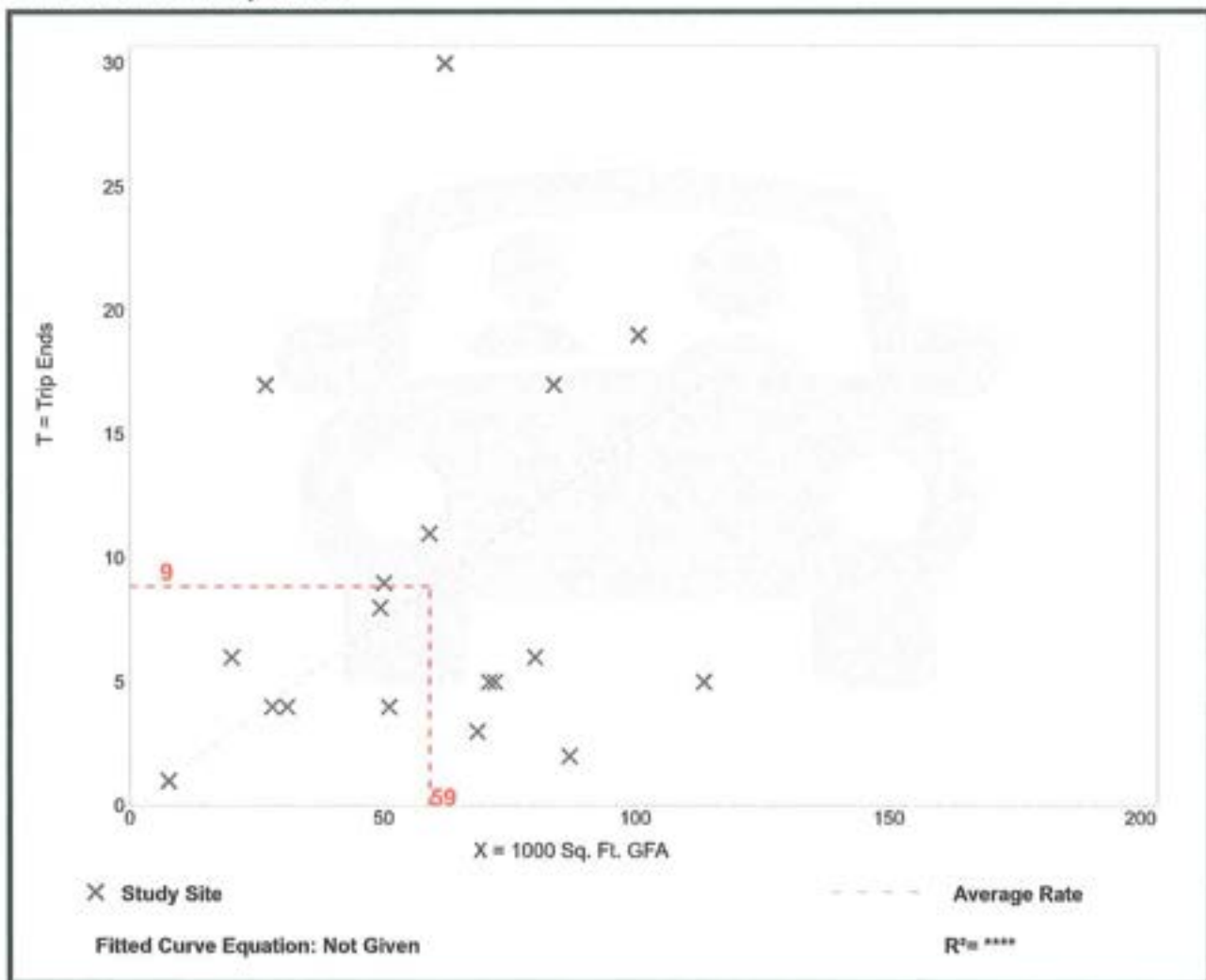
Mini-Warehouse (151)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
 On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 4 and 6 p.m.
 Setting/Location: General Urban/Suburban
 Number of Studies: 18
 Avg. 1000 Sq. Ft. GFA: 59
 Directional Distribution: 47% entering, 53% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.15	0.02 - 0.64	0.14

Data Plot and Equation



Mini-Warehouse (151)

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

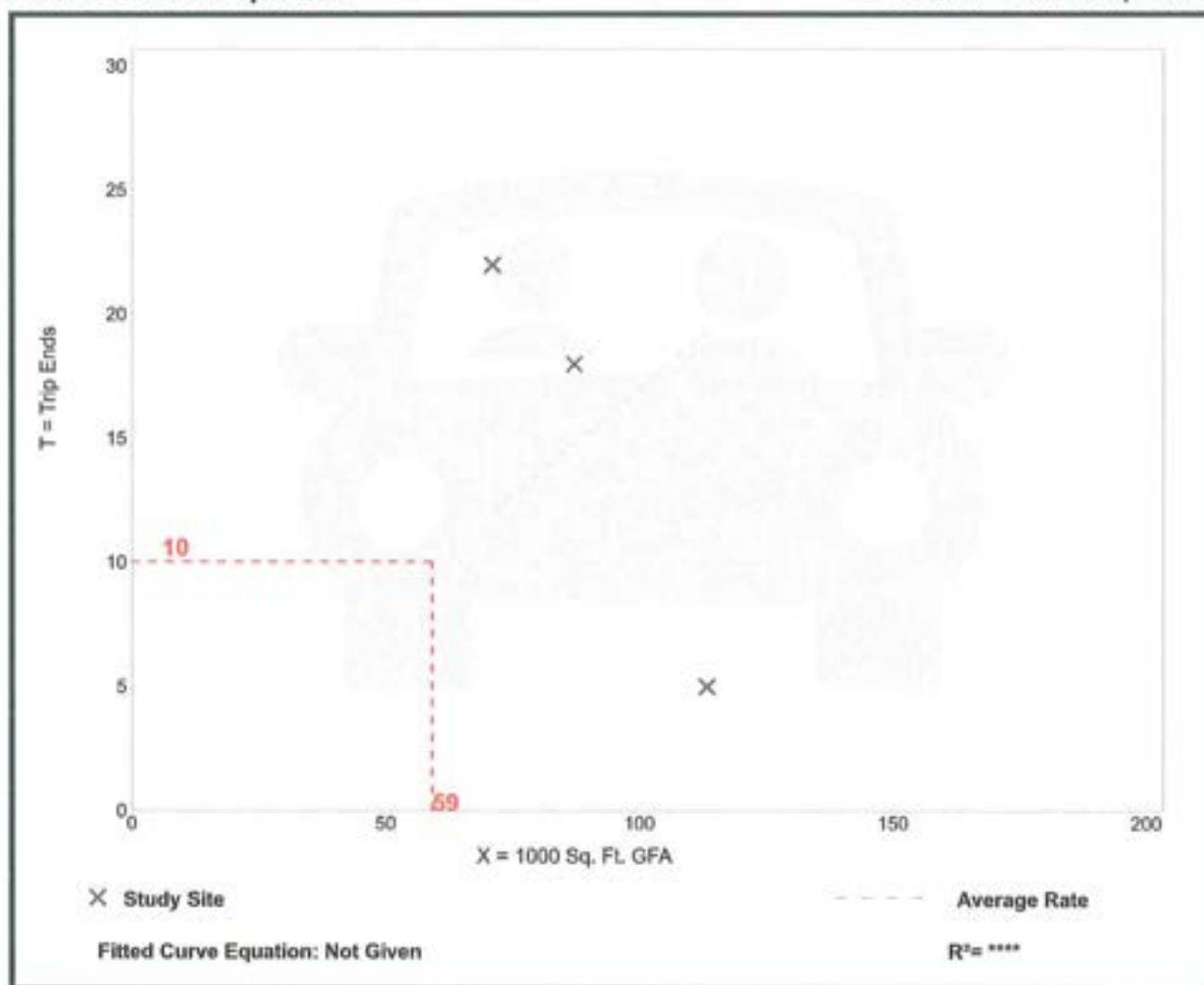
Setting/Location: General Urban/Suburban
Number of Studies: 3
Avg. 1000 Sq. Ft. GFA: 90
Directional Distribution: 62% entering, 38% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.17	0.04 - 0.31	0.14

Data Plot and Equation

Caution – Small Sample Size



John Flatley Company
Wampanoag Meadows-Commercial Development

APPENDIX D
TRAFFIC CAPACITY ANALYSIS

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↑			↑↑	↑
Traffic Vol, veh/h	0	93	0	0	918	160
Future Vol, veh/h	0	93	0	0	918	160
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	-	-	-	265
Veh in Median Storage, #	0	-	-	-	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	66	92	94	91	88
Heavy Vehicles, %	2	3	2	1	3	3
Mvmt Flow	0	141	0	0	1009	182
Major/Minor	Minor2		Major2			
Conflicting Flow All	-	505	-	-	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.96	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.33	-	-	-	-
Pot Cap-1 Maneuver	0	510	-	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	510	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		SB			
HCM Control Delay, s	14.7		0			
HCM LOS	B					
Minor Lane/Major Mvmt	EBLn1	SBT	SBR			
Capacity (veh/h)	510	-	-			
HCM Lane V/C Ratio	0.276	-	-			
HCM Control Delay (s)	14.7	-	-			
HCM Lane LOS	B	-	-			
HCM 95th %tile Q(veh)	1.1	-	-			

Intersection

Int Delay, s/veh 1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗			↗↗	↗
Traffic Vol, veh/h	0	85	0	0	1524	244
Future Vol, veh/h	0	85	0	0	1524	244
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	-	-	-	265
Veh in Median Storage, #	0	-	-	-	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	67	85	92	94	95	87
Heavy Vehicles, %	0	0	2	1	1	0
Mvmt Flow	0	100	0	0	1604	280

Major/Minor Minor2 Major2

Conflicting Flow All	-	802	-	0
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	6.9	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	3.3	-	-
Pot Cap-1 Maneuver	0	331	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	331	-	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach EB SB

HCM Control Delay, s	20.5	0
HCM LOS	C	

Minor Lane/Major Mvmt EBLn1 SBT SBR

Capacity (veh/h)	331	-	-
HCM Lane V/C Ratio	0.302	-	-
HCM Control Delay (s)	20.5	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	1.2	-	-

HCM 2010 TWSC
5: Wampanoag Trail & Forbes Street

Wampanoag Meadows: Existing Volumes
Saturday Peak Hour

Intersection

Int Delay, s/veh 1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗			↗↗	↗
Traffic Vol, veh/h	0	103	0	0	992	92
Future Vol, veh/h	0	103	0	0	992	92
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	-	-	-	265
Veh in Median Storage, #	0	-	-	-	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	67	81	92	94	89	82
Heavy Vehicles, %	0	1	2	1	1	0
Mvmt Flow	0	127	0	0	1115	112

Major/Minor	Minor2	Major2
Conflicting Flow All	- 558	- 0
Stage 1	- -	- -
Stage 2	- -	- -
Critical Hdwy	- 6.92	- -
Critical Hdwy Stg 1	- -	- -
Critical Hdwy Stg 2	- -	- -
Follow-up Hdwy	- 3.31	- -
Pot Cap-1 Maneuver	0 476	- -
Stage 1	0 -	- -
Stage 2	0 -	- -
Platoon blocked, %		- -
Mov Cap-1 Maneuver	- 476	- -
Mov Cap-2 Maneuver	- -	- -
Stage 1	- -	- -
Stage 2	- -	- -

Approach	EB	SB
HCM Control Delay, s	15.3	0
HCM LOS	C	

Minor Lane/Major Mvmt	EBLn1	SBT	SBR
Capacity (veh/h)	476	-	-
HCM Lane V/C Ratio	0.267	-	-
HCM Control Delay (s)	15.3	-	-
HCM Lane LOS	C	-	-
HCM 95th %ile Q(veh)	1.1	-	-

Intersection

Int Delay, s/veh 1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗			↗↗	↗
Traffic Vol, veh/h	0	95	0	0	941	164
Future Vol, veh/h	0	95	0	0	941	164
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	-	-	-	265
Veh in Median Storage, #	0	-	-	-	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	66	92	94	91	74
Heavy Vehicles, %	2	3	2	1	3	3
Mvmt Flow	0	144	0	0	1034	222

Major/Minor Minor2 Major2

Conflicting Flow All	-	517	-	0
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	6.96	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	3.33	-	-
Pot Cap-1 Maneuver	0	501	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-
Platoon blocked, %			-	-
Mov Cap-1 Maneuver	-	501	-	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach EB SB

HCM Control Delay, s	15.1	0
HCM LOS	C	

Minor Lane/Major Mvmt EBLn1 SBT SBR

Capacity (veh/h)	501	-	-
HCM Lane V/C Ratio	0.287	-	-
HCM Control Delay (s)	15.1	-	-
HCM Lane LOS	C	-	-
HCM 95th %ile Q(veh)	1.2	-	-

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗			↗↗	↗
Traffic Vol, veh/h	0	87	0	0	1562	250
Future Vol, veh/h	0	87	0	0	1562	250
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	-	-	-	265
Veh in Median Storage, #	0	-	-	-	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	67	85	92	94	95	87
Heavy Vehicles, %	0	0	2	1	1	0
Mvmt Flow	0	102	0	0	1644	287

Major/Minor	Minor2		Major2	
Conflicting Flow All	-	822	-	0
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	6.9	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	3.3	-	-
Pot Cap-1 Maneuver	0	321	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-
Platoon blocked, %			-	-
Mov Cap-1 Maneuver	-	321	-	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	SB
HCM Control Delay, s	21.4	0
HCM LOS	C	

Minor Lane/Major Mvmt	EBLn1	SBT	SBR
Capacity (veh/h)	321	-	-
HCM Lane V/C Ratio	0.319	-	-
HCM Control Delay (s)	21.4	-	-
HCM Lane LOS	C	-	-
HCM 95th %ile Q(veh)	1.3	-	-

Intersection

Int Delay, s/veh 1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗			↗↗	↗
Traffic Vol, veh/h	0	106	0	0	1017	94
Future Vol, veh/h	0	106	0	0	1017	94
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	-	-	-	265
Veh in Median Storage, #	0	-	-	-	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	67	81	92	94	89	82
Heavy Vehicles, %	0	1	2	1	1	0
Mvmt Flow	0	131	0	0	1143	115

Major/Minor Minor2 Major2

Conflicting Flow All	-	572	-	0
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	6.92	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	3.31	-	-
Pot Cap-1 Maneuver	0	466	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-
Platoon blocked, %			-	-
Mov Cap-1 Maneuver	-	466	-	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach EB SB

HCM Control Delay, s	15.7	0
HCM LOS	C	

Minor Lane/Major Mvmt EBLn1 SBT SBR

Capacity (veh/h)	466	-	-
HCM Lane V/C Ratio	0.281	-	-
HCM Control Delay (s)	15.7	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	1.1	-	-

Intersection

Int Delay, s/veh 1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗			↗↗	↗
Traffic Vol, veh/h	0	97	0	0	1015	164
Future Vol, veh/h	0	97	0	0	1015	164
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	-	-	-	265
Veh in Median Storage, #	0	-	-	-	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	66	92	94	91	74
Heavy Vehicles, %	2	3	2	1	3	3
Mvmt Flow	0	147	0	0	1115	222

Major/Minor Minor2 Major2

Conflicting Flow All	-	558	-	0
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	6.96	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	3.33	-	-
Pot Cap-1 Maneuver	0	471	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-
Platoon blocked, %			-	-
Mov Cap-1 Maneuver	-	471	-	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach EB SB

HCM Control Delay, s	16.1	0
HCM LOS	C	

Minor Lane/Major Mvmt EBLn1 SBT SBR

Capacity (veh/h)	471	-	-
HCM Lane V/C Ratio	0.312	-	-
HCM Control Delay (s)	16.1	-	-
HCM Lane LOS	C	-	-
HCM 95th %ile Q(veh)	1.3	-	-

Intersection

Int Delay, s/veh 1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↑			↑↑	↑
Traffic Vol, veh/h	0	93	0	0	1747	250
Future Vol, veh/h	0	93	0	0	1747	250
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	-	-	-	265
Veh in Median Storage, #	0	-	-	-	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	85	92	94	95	87
Heavy Vehicles, %	2	0	2	1	1	0
Mvmt Flow	0	109	0	0	1839	287

Major/Minor Minor2 Major2

Conflicting Flow All	-	920	-	0
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	6.9	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	3.3	-	-
Pot Cap-1 Maneuver	0	277	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-
Platoon blocked, %			-	-
Mov Cap-1 Maneuver	-	277	-	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach EB SB

HCM Control Delay, s	26.2	0
HCM LOS	D	

Minor Lane/Major Mvmt EBLn1 SBT SBR

Capacity (veh/h)	277	-	-
HCM Lane V/C Ratio	0.395	-	-
HCM Control Delay (s)	26.2	-	-
HCM Lane LOS	D	-	-
HCM 95th %ile Q(veh)	1.8	-	-

Intersection

Int Delay, s/veh 1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗			↗↗	↗
Traffic Vol, veh/h	0	114	0	0	1171	94
Future Vol, veh/h	0	114	0	0	1171	94
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	-	-	-	265
Veh in Median Storage, #	0	-	-	-	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	81	92	94	89	82
Heavy Vehicles, %	2	1	2	1	1	0
Mvmt Flow	0	141	0	0	1316	115

Major/Minor Minor2 Major2

Conflicting Flow All	-	658	-	0
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	6.92	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	3.31	-	-
Pot Cap-1 Maneuver	0	409	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-
Platoon blocked, %			-	-
Mov Cap-1 Maneuver	-	409	-	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach EB SB

HCM Control Delay, s	18.4	0
HCM LOS	C	

Minor Lane/Major Mvmt EBLn1 SBT SBR

Capacity (veh/h)	409	-	-
HCM Lane V/C Ratio	0.344	-	-
HCM Control Delay (s)	18.4	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	1.5	-	-

Intersection

Int Delay, s/veh 1.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
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Lane Configurations		↗			↖	↖
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Traffic Vol, veh/h	0	137	0	0	1036	76
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Future Vol, veh/h	0	137	0	0	1036	76
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Conflicting Peds, #/hr	0	0	0	0	0	0
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Sign Control	Stop	Stop	Free	Free	Free	Free
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RT Channelized	-	None	-	None	-	None
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Storage Length	-	0	-	-	-	-
----------------	---	---	---	---	---	---

Veh in Median Storage, #	0	-	-	-	0	-
--------------------------	---	---	---	---	---	---

Grade, %	0	-	-	0	0	-
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Peak Hour Factor	92	92	92	92	92	92
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Heavy Vehicles, %	2	2	2	2	3	2
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Mvmt Flow	0	149	0	0	1126	83
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Major/Minor	Minor2	Major2
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Conflicting Flow All	- 605	- 0
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Stage 1	- -	- -
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Stage 2	- -	- -
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Critical Hdwy	- 6.94	- -
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Critical Hdwy Stg 1	- -	- -
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Critical Hdwy Stg 2	- -	- -
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Follow-up Hdwy	- 3.32	- -
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Pot Cap-1 Maneuver	0 441	- -
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Stage 1	0 -	- -
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Stage 2	0 -	- -
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Platoon blocked, %		- -
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Mov Cap-1 Maneuver	- 441	- -
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Mov Cap-2 Maneuver	- -	- -
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Stage 1	- -	- -
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Stage 2	- -	- -
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Approach	EB	SB
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HCM Control Delay, s	17.3	0
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HCM LOS	C	
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Minor Lane/Major Mvmt	EBLn1	SBT	SBR
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Capacity (veh/h)	441	-	-
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HCM Lane V/C Ratio	0.338	-	-
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HCM Control Delay (s)	17.3	-	-
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HCM Lane LOS	C	-	-
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HCM 95th %tile Q(veh)	1.5	-	-
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Intersection

Int Delay, s/veh 1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
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Lane Configurations		↑			↑↑	
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Traffic Vol, veh/h	0	109	0	0	1642	198
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Future Vol, veh/h	0	109	0	0	1642	198
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Conflicting Peds, #/hr	0	0	0	0	0	0
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Sign Control	Stop	Stop	Free	Free	Free	Free
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RT Channelized	-	None	-	None	-	None
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Storage Length	-	0	-	-	-	-
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Veh in Median Storage, #	0	-	-	-	0	-
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Grade, %	0	-	-	0	0	-
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Peak Hour Factor	92	92	92	92	95	92
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Heavy Vehicles, %	2	2	2	2	1	2
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Mvmt Flow	0	118	0	0	1728	215
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Major/Minor	Minor2	Major2
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Conflicting Flow All	- 972	- 0
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Stage 1	- -	- -
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Stage 2	- -	- -
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Critical Hdwy	- 6.94	- -
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Critical Hdwy Stg 1	- -	- -
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Critical Hdwy Stg 2	- -	- -
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Follow-up Hdwy	- 3.32	- -
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Pot Cap-1 Maneuver	0 252	- -
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Stage 1	0 -	- -
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Stage 2	0 -	- -
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Platoon blocked, %		- -
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Mov Cap-1 Maneuver	- 252	- -
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Mov Cap-2 Maneuver	- -	- -
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Stage 1	- -	- -
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Stage 2	- -	- -
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Approach	EB	SB
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HCM Control Delay, s	31.4	0
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HCM LOS	D	
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Minor Lane/Major Mvmt	EBLn1	SBT	SBR
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Capacity (veh/h)	252	-	-
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HCM Lane V/C Ratio	0.47	-	-
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HCM Control Delay (s)	31.4	-	-
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HCM Lane LOS	D	-	-
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HCM 95th %ile Q(veh)	2.3	-	-
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Intersection

Int Delay, s/veh 2.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
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Lane Configurations		↑			↑↑	
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Traffic Vol, veh/h	0	154	0	0	1120	165
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Future Vol, veh/h	0	154	0	0	1120	165
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Conflicting Peds, #/hr	0	0	0	0	0	0
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Sign Control	Stop	Stop	Free	Free	Free	Free
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RT Channelized	-	None	-	None	-	None
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Storage Length	-	0	-	-	-	-
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Veh in Median Storage, #	0	-	-	-	0	-
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Grade, %	0	-	-	0	0	-
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Peak Hour Factor	92	92	92	92	89	92
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Heavy Vehicles, %	2	2	2	2	1	2
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Mvmt Flow	0	167	0	0	1258	179
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Major/Minor	Minor2	Major2
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Conflicting Flow All	- 719	- 0
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Stage 1	- -	- -
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Stage 2	- -	- -
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Critical Hdwy	- 6.94	- -
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Critical Hdwy Stg 1	- -	- -
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Critical Hdwy Stg 2	- -	- -
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Follow-up Hdwy	- 3.32	- -
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Pot Cap-1 Maneuver	0 371	- -
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Stage 1	0 -	- -
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Stage 2	0 -	- -
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Platoon blocked, %		- -
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Mov Cap-1 Maneuver	- 371	- -
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Mov Cap-2 Maneuver	- -	- -
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Stage 1	- -	- -
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Stage 2	- -	- -
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Approach	EB	SB
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HCM Control Delay, s	22.4	0
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HCM LOS	C	
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Minor Lane/Major Mvmt	EBLn1	SBT	SBR
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Capacity (veh/h)	371	-	-
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HCM Lane V/C Ratio	0.451	-	-
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HCM Control Delay (s)	22.4	-	-
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HCM Lane LOS	C	-	-
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HCM 95th %ile Q(veh)	2.3	-	-
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HCS7 Freeway Merge Report

Project Information

Analyst	KJS	Date	10/3/2023
Agency	Pare Corporation	Analysis Year	2023
Jurisdiction	East Providence	Time Analyzed	7:15- 8:15 AM EXT
Project Description	Northern Turnaround Merge Analysis	Units	U.S. Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	55.0	30.0
Segment Length (L) / Acceleration Length (LA),ft	1500	200
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Left-Sided One-Lane

Adjustment Factors

Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Final Capacity Adjustment Factor (CAF)	0.968	0.968
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (V)	1036	28
Peak Hour Factor (PHF)	0.95	0.78
Total Trucks, %	3.00	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.971	1.000
Flow Rate (v),pc/h	1123	36
Capacity (c), pc/h	4356	1839
Volume-to-Capacity Ratio (v/c)	0.27	0.02

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.322
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (VOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	49.9
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FM})	1.000	Outer Lanes Freeway Speed (S _O), mi/h	53.6
Flow in Lanes 1 and 2 (v ₁₂), pc/h	1123	Ramp Junction Speed (S), mi/h	49.9
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	1159	Average Density (D), pc/mi/ln	11.6
Level of Service (LOS)	B	Density in Ramp Influence Area (D _R), pc/mi/ln	13.3

Design Analysis Table								
Freeway Lanes, ln	2	2	3	3	4	4	5	5
Ramp Lanes, ln	1	2	1	2	1	2	1	2
Density, pc/mi/ln	11.6	11.6	7.6	7.5	5.6	5.6	4.5	4.4
LOS	B	B	B	A	A	A	A	A

HCS7 Freeway Merge Report

Project Information

Analyst	KJS	Date	10/3/2023
Agency	Pare Corporation	Analysis Year	2023
Jurisdiction	East Providence	Time Analyzed	4:45- 5:45 PM EXT
Project Description	Northern Turnaround Merge Analysis	Units	U.S. Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	55.0	30.0
Segment Length (L) / Acceleration Length (LA),ft	1500	200
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Left-Sided One-Lane

Adjustment Factors

Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Final Capacity Adjustment Factor (CAF)	0.968	0.968
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	1719	30
Peak Hour Factor (PHF)	0.93	0.68
Total Trucks, %	1.00	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.990	1.000
Flow Rate (vi),pc/h	1867	44
Capacity (c), pc/h	4356	1839
Volume-to-Capacity Ratio (v/c)	0.44	0.02

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (No)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.336
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (VOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	49.7
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	53.6
Flow in Lanes 1 and 2 (v12), pc/h	1867	Ramp Junction Speed (S), mi/h	49.7
Flow Entering Ramp-Infl. Area (vR12), pc/h	1911	Average Density (D), pc/mi/ln	19.2
Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	19.2

Design Analysis Table								
Freeway Lanes, ln	2	2	3	3	4	4	5	5
Ramp Lanes, ln	1	2	1	2	1	2	1	2
Density, pc/mi/ln	19.2	19.2	12.5	12.5	9.2	9.2	7.4	7.3
LOS	B	B	B	B	B	A	A	A

HCS7 Freeway Merge Report

Project Information

Analyst	KJS	Date	10/3/2023
Agency	Pare Corporation	Analysis Year	2023
Jurisdiction	East Providence	Time Analyzed	12:00-1:00 PM SATURDAY EXT
Project Description	Northern Turnaround Merge Analysis	Units	U.S. Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	55.0	30.0
Segment Length (L) / Acceleration Length (LA),ft	1500	200
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Left-Sided One-Lane

Adjustment Factors

Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Final Capacity Adjustment Factor (CAF)	0.968	0.968
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	1080	17
Peak Hour Factor (PHF)	0.91	0.61
Total Trucks, %	1.00	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.990	1.000
Flow Rate (vi),pc/h	1199	28
Capacity (c), pc/h	4356	1839
Volume-to-Capacity Ratio (v/c)	0.28	0.02

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.323
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (VOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	49.9
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	53.6
Flow in Lanes 1 and 2 (v12), pc/h	1199	Ramp Junction Speed (S), mi/h	49.9
Flow Entering Ramp-Infl. Area (VR12), pc/h	1227	Average Density (D), pc/mi/ln	12.3
Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	13.9

Design Analysis Table								
Freeway Lanes, ln	2	2	3	3	4	4	5	5
Ramp Lanes, ln	1	2	1	2	1	2	1	2
Density, pc/mi/ln	12.3	12.3	8.0	8.0	5.9	5.9	4.7	4.7
LOS	B	B	B	A	A	A	A	A

HCS7 Freeway Merge Report

Project Information

Analyst	KJS	Date	10/3/2023
Agency	Pare Corporation	Analysis Year	2028
Jurisdiction	East Providence	Time Analyzed	7:15- 8:15 AM FNB
Project Description	Northern Turnaround Merge Analysis	Units	U.S. Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	55.0	30.0
Segment Length (L) / Acceleration Length (LA),ft	1500	200
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Left-Sided One-Lane

Adjustment Factors

Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Final Capacity Adjustment Factor (CAF)	0.968	0.968
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	1062	29
Peak Hour Factor (PHF)	0.95	0.78
Total Trucks, %	3.00	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.971	1.000
Flow Rate (vi),pc/h	1151	37
Capacity (c), pc/h	4356	1839
Volume-to-Capacity Ratio (v/c)	0.27	0.02

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.322
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (VOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	49.9
Prop. Freeway Vehicles in Lane 1 and 2 (P _{FM})	1.000	Outer Lanes Freeway Speed (SO), mi/h	53.6
Flow in Lanes 1 and 2 (v ₁₂), pc/h	1151	Ramp Junction Speed (S), mi/h	49.9
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	1188	Average Density (D), pc/mi/ln	11.9
Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	13.5

Design Analysis Table								
Freeway Lanes, ln	2	2	3	3	4	4	5	5
Ramp Lanes, ln	1	2	1	2	1	2	1	2
Density, pc/mi/ln	11.9	11.9	7.7	7.7	5.7	5.7	4.6	4.6
LOS	B	B	B	A	A	A	A	A

HCS7 Freeway Merge Report

Project Information

Analyst	KJS	Date	10/3/2023
Agency	Pare Corporation	Analysis Year	2028
Jurisdiction	East Providence	Time Analyzed	4:45- 5:45 PM FNB
Project Description	Northern Turnaround Merge Analysis	Units	U.S. Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	55.0	30.0
Segment Length (L) / Acceleration Length (LA),ft	1500	200
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Left-Sided One-Lane

Adjustment Factors

Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Final Capacity Adjustment Factor (CAF)	0.968	0.968
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	1762	31
Peak Hour Factor (PHF)	0.93	0.68
Total Trucks, %	1.00	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.990	1.000
Flow Rate (vi),pc/h	1914	46
Capacity (c), pc/h	4356	1839
Volume-to-Capacity Ratio (v/c)	0.45	0.03

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (No)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.337
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	49.7
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	53.6
Flow in Lanes 1 and 2 (v12), pc/h	1914	Ramp Junction Speed (S), mi/h	49.7
Flow Entering Ramp-Infl. Area (vR12), pc/h	1960	Average Density (D), pc/mi/ln	19.7
Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	19.6

Design Analysis Table								
Freeway Lanes, ln	2	2	3	3	4	4	5	5
Ramp Lanes, ln	1	2	1	2	1	2	1	2
Density, pc/mi/ln	19.7	19.7	12.9	12.8	9.5	9.4	7.5	7.5
LOS	B	B	B	B	B	A	A	A

HCS7 Freeway Merge Report

Project Information

Analyst	KJS	Date	10/3/2023
Agency	Pare Corporation	Analysis Year	2028
Jurisdiction	East Providence	Time Analyzed	12:00-1:00 PM SATURDAY FN8
Project Description	Northern Turnaround Merge Analysis	Units	U.S. Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	55.0	30.0
Segment Length (L) / Acceleration Length (LA),ft	1500	200
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Left-Sided One-Lane

Adjustment Factors

Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Final Capacity Adjustment Factor (CAF)	0.968	0.968
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	1107	323
Peak Hour Factor (PHF)	0.91	0.61
Total Trucks, %	1.00	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fhv)	0.990	1.000
Flow Rate (vi),pc/h	1229	530
Capacity (c), pc/h	4356	1839
Volume-to-Capacity Ratio (v/c)	0.40	0.29

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.332
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	49.7
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	53.6
Flow in Lanes 1 and 2 (v12), pc/h	1229	Ramp Junction Speed (S), mi/h	49.7
Flow Entering Ramp-Infl. Area (VR12), pc/h	1759	Average Density (D), pc/mi/ln	17.7
Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	17.8

Design Analysis Table								
Freeway Lanes, ln	2	2	3	3	4	4	5	5
Ramp Lanes, ln	1	2	1	2	1	2	1	2
Density, pc/mi/ln	17.7	17.6	11.6	11.5	8.6	8.6	6.9	6.9
LOS	B	B	B	B	B	B	B	A

HCS7 Freeway Merge Report

Project Information

Analyst	KJS	Date	10/3/2023
Agency	Pare Corporation	Analysis Year	2028
Jurisdiction	East Providence	Time Analyzed	7:15- 8:15 AM FB
Project Description	Northern Turnaround Merge Analysis	Units	U.S. Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	55.0	30.0
Segment Length (L) / Acceleration Length (LA),ft	1500	200
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Left-Sided One-Lane

Adjustment Factors

Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Final Capacity Adjustment Factor (CAF)	0.968	0.968
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	1091	62
Peak Hour Factor (PHF)	0.95	0.78
Total Trucks, %	3.00	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.971	1.000
Flow Rate (vi),pc/h	1183	79
Capacity (c), pc/h	4356	1839
Volume-to-Capacity Ratio (v/c)	0.29	0.04

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.323
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (VOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	49.9
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	53.6
Flow in Lanes 1 and 2 (v12), pc/h	1183	Ramp Junction Speed (S), mi/h	49.9
Flow Entering Ramp-Infl. Area (VR12), pc/h	1262	Average Density (D), pc/mi/ln	12.6
Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	14.1

Design Analysis Table								
Freeway Lanes, ln	2	2	3	3	4	4	5	5
Ramp Lanes, ln	1	2	1	2	1	2	1	2
Density, pc/mi/ln	12.6	12.6	8.2	8.2	6.1	6.1	4.9	4.9
LOS	B	B	B	A	A	A	A	A

HCS7 Freeway Merge Report

Project Information

Analyst	KJS	Date	10/3/2023
Agency	Pare Corporation	Analysis Year	2028
Jurisdiction	East Providence	Time Analyzed	4:45- 5:45 PM FB
Project Description	Northern Turnaround Merge Analysis	Units	U.S. Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	55.0	30.0
Segment Length (L) / Acceleration Length (LA),ft	1500	200
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Left-Sided One-Lane

Adjustment Factors

Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Final Capacity Adjustment Factor (CAF)	0.968	0.968
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	1873	109
Peak Hour Factor (PHF)	0.94	0.68
Total Trucks, %	1.00	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fhv)	0.990	1.000
Flow Rate (vi),pc/h	2013	160
Capacity (c), pc/h	4356	1839
Volume-to-Capacity Ratio (v/c)	0.50	0.09

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.344
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	49.6
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	53.6
Flow in Lanes 1 and 2 (v12), pc/h	2013	Ramp Junction Speed (S), mi/h	49.6
Flow Entering Ramp-Infl. Area (vR12), pc/h	2173	Average Density (D), pc/mi/ln	21.9
Level of Service (LOS)	C	Density in Ramp Influence Area (DR), pc/mi/ln	21.2

Design Analysis Table								
Freeway Lanes, In	2	2	3	3	4	4	5	5
Ramp Lanes, In	1	2	1	2	1	2	1	2
Density, pc/mi/ln	21.9	21.9	14.3	14.2	10.5	10.5	8.4	8.4
LOS	C	B	B	B	B	B	B	A

HCS7 Freeway Merge Report

Project Information

Analyst	KJS	Date	10/3/2023
Agency	Pare Corporation	Analysis Year	2028
Jurisdiction	East Providence	Time Analyzed	12:00-1:00 PM SATURDAY FB
Project Description	Northern Turnaround Merge Analysis	Units	U.S. Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	55.0	30.0
Segment Length (L) / Acceleration Length (LA),ft	1500	200
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Left-Sided One-Lane

Adjustment Factors

Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Final Capacity Adjustment Factor (CAF)	0.968	0.968
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	1193	323
Peak Hour Factor (PHF)	0.91	0.61
Total Trucks, %	1.00	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fi/v)	0.990	1.000
Flow Rate (vi),pc/h	1324	530
Capacity (c), pc/h	4356	1839
Volume-to-Capacity Ratio (v/c)	0.43	0.29

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.334
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (VOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	49.7
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	53.6
Flow in Lanes 1 and 2 (v12), pc/h	1324	Ramp Junction Speed (S), mi/h	49.7
Flow Entering Ramp-Infl. Area (VR12), pc/h	1854	Average Density (D), pc/mi/ln	18.7
Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	18.5

Design Analysis Table								
Freeway Lanes, ln	2	2	3	3	4	4	5	5
Ramp Lanes, ln	1	2	1	2	1	2	1	2
Density, pc/mi/ln	18.7	18.6	12.2	12.1	9.0	9.0	7.2	7.2
LOS	B	B	B	B	B	B	B	B

HCS7 Freeway Diverge Report

Project Information

Analyst	KJS	Date	10/3/2023
Agency	Pare Corporation	Analysis Year	2023
Jurisdiction	East Providence, RI	Time Analyzed	7:15- 8:15 AM EXT
Project Description	Southern Turnaround Diverge Analysis	Units	U.S. Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	55.0	30.0
Segment Length (L) / Deceleration Length (LA),ft	1500	225
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Left-Sided One-Lane

Adjustment Factors

Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Final Capacity Adjustment Factor (CAF)	0.968	0.968
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	900	314
Peak Hour Factor (PHF)	0.91	0.87
Total Trucks, %	2.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.980	0.980
Flow Rate (vi),pc/h	1009	368
Capacity (c), pc/h	4356	1839
Volume-to-Capacity Ratio (v/c)	0.23	0.20

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.537
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	47.4
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	58.8
Flow in Lanes 1 and 2 (v12), pc/h	1009	Ramp Junction Speed (S), mi/h	47.4
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	10.6
Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	10.9

Design Analysis Table								
Freeway Lanes, ln	2	2	3	3	4	4	5	5
Ramp Lanes, ln	1	2	1	2	1	2	1	2
Density, pc/mi/ln	10.6	10.6	6.9	6.7	5.0	4.9	4.0	3.9
LOS	B	A	A	A	A	A	A	A

HCS7 Freeway Diverge Report

Project Information

Analyst	KJS	Date	10/3/2023
Agency	Pare Corporation	Analysis Year	2023
Jurisdiction	East Providence, RI	Time Analyzed	4:15- 5:15 PM EXT
Project Description	Southern Turnaround Diverge Analysis	Units	U.S. Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	55.0	30.0
Segment Length (L) / Deceleration Length (LA),ft	1500	225
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Left-Sided One-Lane

Adjustment Factors

Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Final Capacity Adjustment Factor (CAF)	0.968	0.968
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	1507	306
Peak Hour Factor (PHF)	0.95	0.88
Total Trucks, %	1.00	1.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.990	0.990
Flow Rate (vi),pc/h	1602	351
Capacity (c), pc/h	4356	1839
Volume-to-Capacity Ratio (v/c)	0.37	0.19

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (Ds)	0.535
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	47.4
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	58.8
Flow in Lanes 1 and 2 (v12), pc/h	1602	Ramp Junction Speed (S), mi/h	47.4
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	16.9
Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	16.0

Design Analysis Table								
Freeway Lanes, ln	2	2	3	3	4	4	5	5
Ramp Lanes, ln	1	2	1	2	1	2	1	2
Density, pc/mi/ln	16.9	16.9	10.9	10.4	7.8	7.6	6.3	6.1
LOS	B	B	B	A	B	A	B	A

HCS7 Freeway Diverge Report

Project Information

Analyst	KJS	Date	10/3/2023
Agency	Pare Corporation	Analysis Year	2023
Jurisdiction	East Providence, RI	Time Analyzed	12:00-1:00 PM SATURDAY EXT
Project Description	Southern Turnaround Diverge Analysis	Units	U.S. Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	55.0	30.0
Segment Length (L) / Deceleration Length (LA),ft	1500	225
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Left-Sided One-Lane

Adjustment Factors

Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Final Capacity Adjustment Factor (CAF)	0.968	0.968
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	949	251
Peak Hour Factor (PHF)	0.89	0.92
Total Trucks, %	1.00	1.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.990	0.990
Flow Rate (vi),pc/h	1077	276
Capacity (c), pc/h	4356	1839
Volume-to-Capacity Ratio (v/c)	0.25	0.15

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (Ds)	0.528
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (VOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	47.5
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	58.8
Flow in Lanes 1 and 2 (v12), pc/h	1077	Ramp Junction Speed (S), mi/h	47.5
Flow Entering Ramp-Infl. Area (VR12), pc/h	-	Average Density (D), pc/mi/ln	11.3
Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	11.5

Design Analysis Table								
Freeway Lanes, ln	2	2	3	3	4	4	5	5
Ramp Lanes, ln	1	2	1	2	1	2	1	2
Density, pc/mi/ln	11.3	11.3	7.3	7.0	5.3	5.1	4.2	4.1
LOS	B	A	A	A	A	A	A	A

HCS7 Freeway Diverge Report

Project Information

Analyst	KJS	Date	10/3/2023
Agency	Pare Corporation	Analysis Year	2028
Jurisdiction	East Providence, RI	Time Analyzed	7:15- 8:15 AM FNB
Project Description	Southern Diverge Analysis	Units	U.S. Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	55.0	30.0
Segment Length (L) / Deceleration Length (LA),ft	1500	225
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Left-Sided One-Lane

Adjustment Factors

Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Final Capacity Adjustment Factor (CAF)	0.968	0.968
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	923	322
Peak Hour Factor (PHF)	0.91	0.83
Total Trucks, %	3.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.971	0.980
Flow Rate (vi),pc/h	1045	396
Capacity (c), pc/h	4356	1839
Volume-to-Capacity Ratio (v/c)	0.24	0.22

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (No)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (Ds)	0.539
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	47.3
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	58.8
Flow in Lanes 1 and 2 (v12), pc/h	1045	Ramp Junction Speed (S), mi/h	47.3
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	11.0
Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	11.2

Design Analysis Table

Freeway Lanes, ln	2	2	3	3	4	4	5	5
Ramp Lanes, ln	1	2	1	2	1	2	1	2
Density, pc/mi/ln	11.0	11.0	7.2	6.9	5.2	5.1	4.2	4.1
LOS	B	A	A	A	A	A	A	A

HCS7 Freeway Diverge Report

Project Information

Analyst	KJS	Date	10/3/2023
Agency	Pare Corporation	Analysis Year	2028
Jurisdiction	East Providence, RI	Time Analyzed	4:15- 5:15 PM FNB
Project Description	Southern Turnaround Diverge Analysis	Units	U.S. Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	55.0	30.0
Segment Length (L) / Deceleration Length (LA),ft	1500	225
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Left-Sided One-Lane

Adjustment Factors

Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Final Capacity Adjustment Factor (CAF)	0.968	0.968
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	1545	314
Peak Hour Factor (PHF)	0.95	0.88
Total Trucks, %	1.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.990	0.980
Flow Rate (vi),pc/h	1643	364
Capacity (c), pc/h	4356	1839
Volume-to-Capacity Ratio (v/c)	0.38	0.20

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.536
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (VOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	47.4
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	58.8
Flow in Lanes 1 and 2 (v12), pc/h	1643	Ramp Junction Speed (S), mi/h	47.4
Flow Entering Ramp-Infl. Area (VR12), pc/h	-	Average Density (D), pc/mi/ln	17.3
Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	16.4

Design Analysis Table								
Freeway Lanes, ln	2	2	3	3	4	4	5	5
Ramp Lanes, ln	1	2	1	2	1	2	1	2
Density, pc/mi/ln	17.3	17.3	11.1	10.7	8.0	7.8	6.4	6.2
LOS	B	B	B	A	B	A	B	A

HCS7 Freeway Diverge Report

Project Information

Analyst	KJS	Date	10/3/2023
Agency	Pare Corporation	Analysis Year	2028
Jurisdiction	East Providence, RI	Time Analyzed	12:00-1:00 PM SATURDAY FNB
Project Description	Southern Turnaround Diverge Analysis	Units	U.S. Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	55.0	30.0
Segment Length (L) / Deceleration Length (LA),ft	1500	225
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Left-Sided One-Lane

Adjustment Factors

Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Final Capacity Adjustment Factor (CAF)	0.968	0.968
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	973	257
Peak Hour Factor (PHF)	0.89	0.92
Total Trucks, %	1.00	1.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f _{HV})	0.990	0.990
Flow Rate (v _i),pc/h	1104	282
Capacity (c), pc/h	4356	1839
Volume-to-Capacity Ratio (v/c)	0.25	0.15

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (N _O)	0
Distance to Upstream Ramp (L _{UP}), ft	-	Speed Index (DS)	0.529
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (VOA), pc/h/ln	-
Distance to Downstream Ramp (L _{DOWN}), ft	-	Off-Ramp Influence Area Speed (S _R), mi/h	47.5
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (S _O), mi/h	58.8
Flow in Lanes 1 and 2 (v ₁₂), pc/h	1104	Ramp Junction Speed (S), mi/h	47.5
Flow Entering Ramp-Infl. Area (v _{R12}), pc/h	-	Average Density (D), pc/mi/ln	11.6
Level of Service (LOS)	B	Density in Ramp Influence Area (D _R), pc/mi/ln	11.7

Design Analysis Table								
Freeway Lanes, ln	2	2	3	3	4	4	5	5
Ramp Lanes, ln	1	2	1	2	1	2	1	2
Density, pc/mi/ln	11.6	11.6	7.5	7.2	5.4	5.2	4.3	4.2
LOS	B	A	B	A	A	A	A	A

HCS7 Freeway Diverge Report

Project Information

Analyst	KJS	Date	10/3/2023
Agency	Pare Corporation	Analysis Year	2028
Jurisdiction	East Providence, RI	Time Analyzed	7:15- 8:15 AM FB
Project Description	Southern Turnaround Diverge Analysis	Units	U.S. Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	55.0	30.0
Segment Length (L) / Deceleration Length (LA),ft	1500	225
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Left-Sided One-Lane

Adjustment Factors

Driver Population	Mostly Familiar -	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Final Capacity Adjustment Factor (CAF)	0.968	0.968
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	985	411
Peak Hour Factor (PHF)	0.91	0.83
Total Trucks, %	3.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	0.971	0.980
Flow Rate (vi),pc/h	1115	505
Capacity (c), pc/h	4356	1839
Volume-to-Capacity Ratio (v/c)	0.26	0.27

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.549
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	47.2
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	58.8
Flow in Lanes 1 and 2 (v12), pc/h	1115	Ramp Junction Speed (S), mi/h	47.2
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	11.8
Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	11.8

Design Analysis Table								
Freeway Lanes, ln	2	2	3	3	4	4	5	5
Ramp Lanes, ln	1	2	1	2	1	2	1	2
Density, pc/mi/ln	11.8	11.8	7.7	7.5	5.6	5.5	4.5	4.4
LOS	B	A	B	A	A	A	A	A

HCS7 Freeway Diverge Report

Project Information

Analyst	KJS	Date	10/3/2023
Agency	Pare Corporation	Analysis Year	2028
Jurisdiction	East Providence, RI	Time Analyzed	4:15- 5:15 PM FB
Project Description	Southern Turnaround Diverge Analysis	Units	U.S. Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	55.0	30.0
Segment Length (L) / Deceleration Length (LA),ft	1500	225
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Left-Sided One-Lane

Adjustment Factors

Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Final Capacity Adjustment Factor (CAF)	0.968	0.968
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	1626	371
Peak Hour Factor (PHF)	0.95	0.88
Total Trucks, %	1.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fhv)	0.990	0.980
Flow Rate (vi),pc/h	1729	430
Capacity (c), pc/h	4356	1839
Volume-to-Capacity Ratio (v/c)	0.40	0.23

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (Ds)	0.542
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	47.3
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	58.8
Flow in Lanes 1 and 2 (v12), pc/h	1729	Ramp Junction Speed (S), mi/h	47.3
Flow Entering Ramp-Infl. Area (VR12), pc/h	-	Average Density (D), pc/mi/ln	18.3
Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	17.1

Design Analysis Table								
Freeway Lanes, ln	2	2	3	3	4	4	5	5
Ramp Lanes, ln	1	2	1	2	1	2	1	2
Density, pc/mi/ln	18.3	18.3	11.7	11.3	8.5	8.2	6.8	6.6
LOS	B	B	B	A	B	A	B	A

HCS7 Freeway Diverge Report

Project Information

Analyst	KJS	Date	10/3/2023
Agency	Pare Corporation	Analysis Year	2028
Jurisdiction	East Providence, RI	Time Analyzed	12:00-1:00 PM SATURDAY FB
Project Description	Southern Turnaround Diverge Analysis	Units	U.S. Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	55.0	30.0
Segment Length (L) / Deceleration Length (LA),ft	1500	225
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Left-Sided One-Lane

Adjustment Factors

Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Final Capacity Adjustment Factor (CAF)	0.968	0.968
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	1061	323
Peak Hour Factor (PHF)	0.89	0.92
Total Trucks, %	1.00	1.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fhv)	0.990	0.990
Flow Rate (vi),pc/h	1204	355
Capacity (c), pc/h	4356	1839
Volume-to-Capacity Ratio (v/c)	0.28	0.19

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.535
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (VOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	47.4
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	58.8
Flow in Lanes 1 and 2 (v12), pc/h	1204	Ramp Junction Speed (S), mi/h	47.4
Flow Entering Ramp-Infl. Area (VR12), pc/h	-	Average Density (D), pc/mi/ln	12.7
Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	12.6

Design Analysis Table								
Freeway Lanes, ln	2	2	3	3	4	4	5	5
Ramp Lanes, ln	1	2	1	2	1	2	1	2
Density, pc/mi/ln	12.7	12.7	8.2	7.9	5.9	5.8	4.7	4.6
LOS	B	B	B	A	A	A	A	A