

# PROJECT TRAFFIC ANALYSIS REPORT

Florida Department of Transportation

District 4

Project Development and Environment (PD&E) Study

SR A1A over Sebastian Inlet - Bridge 880005

Bridge Replacement

Indian River County and Brevard County, Florida

Financial Project ID: 445618-1-22-02

ETDM Number: 14433

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*The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016, and executed by FHWA and FDOT.*

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## 1.0 EXECUTIVE SUMMARY

The Florida Department of Transportation (FDOT) District Four is conducting a Project Development & Environment (PD&E) Study to evaluate the replacement of the State Road (SR) A1A bridge crossing the Sebastian Inlet located at the Indian River County - Brevard County boundary. The primary purpose of this project is to address the structural and functional deficiencies of the existing bridge and address the gap in system linkage for bicyclists and pedestrians.

The objectives of this traffic analysis are to validate that the 2-lane capacity will sufficiently accommodate future traffic demand, evaluate the two intersections along the project corridor that are the north and south access points to/from the Sebastian Inlet State Park, and conduct a safety analysis. A Traffic Analysis Methodology was approved in April 2021. The temporal analysis periods include weekday and weekend AM and PM peak hours. Traffic data was collected as part of the FDOT District 4 PD&E Study Pre-work activity titled: Traffic Counts and Traffic Projections (dated March 2020). The project area serves recreational users, so the SR A1A project area has a higher demand during the weekends.

An existing conditions (2019) analysis was performed, and the results show that the study area intersections and SR A1A arterial are operating at an acceptable LOS with low vehicle delay and sufficient storage capacity at the turn lanes. An existing conditions safety analysis was also conducted by gathering 5-years of historical crash data between the years 2016 and 2020. Six crashes were recorded with off-road crashes as the predominant crash type. There was also one bicycle crash and a crash with a utility pole. The historical crashes revealed one fatal crash which was correlated to drug influences. The existing conditions safety ratio calculations for the overall 5-year period suggest that the crash rates in the study area were not abnormally high; although the year 2016 had a statistically significant crash occurrence with a calculated safety ratio of 3.018 which is greater than one.

Future traffic volumes were developed as part of the PD&E Study Pre-work report titled: Traffic Counts and Traffic Projections (dated March 2020). The future traffic volumes include Opening Year (2025) and Design Year (2045) for both weekday and weekend scenarios during the AM and PM peak hours. The alternatives evaluated include the No-Action and one Build Alternative. Since this is a bridge replacement project and the capacity along SR A1A will be maintained, the future traffic volumes between both alternatives are projected to be the same. The Build Alternative will include intersection turn lane improvements at both north and south access points to the Sebastian Inlet State Park.

A future conditions alternatives analysis was completed between the No-Action and Build Alternatives. In both alternative scenarios, the intersections are projected to continue operating at an acceptable LOS and low vehicle delays. The results show that the existing two-way stop traffic control is acceptable for a traffic operations perspective. The projected 95th percentile vehicle queues for the Build Alternative's Design Year (2045) revealed that the turn lanes will provide sufficient storage capacity. An arterial analysis for the Build Alternative confirmed that the SR A1A facility will continue to provide sufficient capacity to accommodate the projected Design Year (2045) traffic volumes. The results of the future conditions safety analysis shows that the Build Alternative is projected to reduce the expected average crash frequency by over 30%, primarily due to the new shared used path and wider shoulders.

Overall, future conditions analysis shows that the No-Action and Build Alternatives are comparable from a traffic operations perspective; however, the safety is projected to significantly benefit from the Build Alternative due to the reduction of expected crash frequencies.

## 2.0 TRAFFIC ANALYSIS ASSUMPTIONS

<b>Traffic forecast for the project was developed using:</b>	
<input checked="" type="checkbox"/> Travel Demand Model	<input checked="" type="checkbox"/> Growth Rates
<b>Type of Travel Demand Model Used:</b> <input checked="" type="checkbox"/> Metropolitan Planning Model <input type="checkbox"/> Other Model <i>Treasure Coast Regional Planning Model (TCRPM) V4.0</i>	<i>Refer to section 5.0 of Project Traffic Analysis Report that discusses growth rates.</i>  <i>Note: Travel demand modeling effort and growth rates established from the FDOT District 4 PD&amp;E Study Pre-work activity titled: Traffic Counts and Traffic Projections (dated March 2020)</i>
<b>Is the travel demand model based on the latest adopted Long Range Transportation Plan?</b>	
<input checked="" type="checkbox"/> YES – see explanation	<input type="checkbox"/> NO
<u>February 2021</u> Date when MPO adopted the latest Long Range Transportation Plan	Explain why?
<u>2010</u> Base Year of Travel Demand Model	
<u>2040</u> Horizon Year of Travel Demand Model	
Long Range Transportation Plan documentation is available at (provide web address): <a href="https://ircgov.com/mpo/LRTP/">https://ircgov.com/mpo/LRTP/</a>  <i>Note: The travel demand model that was utilized for this project is based on the 2040 LRTP for Indian River MPO. However, a comparison of the Cost Feasible Plan (CFP) between 2040 LRTP and 2045 LRTP showed similarities with the capacity improvements in the project vicinity including SR A1A and County Road 510.</i>	
<b>Traffic Data and Factors</b>	
Standard K = <u>9.0%</u> D Factor = <u>51.1 to 79.6 %</u> T Daily = <u>8%</u>	Data Collection Year = <u>2019</u> Year = <u>2025</u> Opening Year = <u>-</u> Interim Year = <u>2045</u> Design
Discuss any changes in land use, economics, population and employment data since the model was built: <i>No major changes since the development of the model – the immediate area is coastal roadway that provides access to Sebastian Inlet State Park; however, there are communities north and south of the project which utilize the arterial.</i>	
<b>Traffic Analysis Assumptions</b>	
Discuss study area, data calibration/validation parameters, analysis tools, analysis periods and MOEs <i>Study area includes SR A1A over Sebastian Inlet between the southern and north access points to Sebastian Inlet State Park. Traffic data, validation, and future traffic projections have been provided by the Traffic Counts and Traffic Projections Report (dated March 2020). Analysis will focus on the two intersections that form the northern and southern access points to Sebastian Inlet State Park. Synchro Version 11 software will be used to evaluate the intersections and the SR A1A arterial will be evaluated using the FDOT 2020 Quality/Level of Service Handbook using Highway Capacity Manual (HCM) Methodologies. Analysis periods include AM and PM peak hours for both weekday and weekends. MOEs include LOS, delay, volume/capacity, and queuing.</i>	

## 3.0 INTRODUCTION

The Florida Department of Transportation (FDOT or Department) District Four is conducting a Project Development & Environment (PD&E) Study to evaluate the replacement of the Sebastian Inlet Bridge (No. 880005) crossing the Sebastian Inlet located at the Indian River County and Brevard County boundary (**Figure 1**).

The project development process, alternatives developed, and the associated social, economic, and environmental analyses follow the guidance provided in the Department's current version of the PD&E Manual and FDOT Design Manual (FDM). The project also satisfies state and federal processes and incorporates the requirements of the National Environmental Policy Act (NEPA). The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. §327 and a Memorandum of Understanding dated December 14, 2016, and executed by the Federal Highway Administration (FHWA) and FDOT.

### 3.1 PROJECT DESCRIPTION

The Sebastian Inlet Bridge (bridge), also known as the James H. Pruitt Memorial Bridge, was constructed in 1964 to carry State Road (SR) A1A across the Sebastian Inlet. The bridge is approximately 1,500-feet long with 19 spans, the longest of which is approximately 180-feet long. The bridge vertical clearance is 39-feet and horizontal clearance is 150-feet between the bridge fenders. The Inlet provides access for vessels between the Indian River Lagoon and the Atlantic Ocean and is approximately 525-feet wide at the bridge. The bridge is located within FDOT and Sebastian Inlet District (SID) right-of-way (ROW) and is adjacent to the Sebastian Inlet State Park. The Inlet was created from privately owned uplands. In 1919 the SID was formed to maintain the Inlet and owns the submerged lands under the bridge.

The project limits extend approximately one mile along SR A1A from Mile Post (MP) 21.945 north to MP 22.665 of Roadway ID 88070000 in Indian River County continuing north from MP 0.00 north to MP 0.307 of Roadway ID 70060000 in Brevard County.

The existing bridge has two 12-foot travel lanes and 2-foot shoulders. The approach roadway has two 12-foot travel lanes. North and south of the bridge, paved shoulders are 2 to 4-feet wide. South of the bridge, shoulders are marked as designated bicycle lanes. There are currently no pedestrian or bicycle facilities located within the bridge approaches or on the bridge, creating a gap in the multimodal network along SR A1A. An 8-foot shared use path, separated from SR A1A, is located on the west side of the roadway north and south of the bridge.

This project was evaluated through FDOT's Efficient Transportation Decision Making (ETDM) process as project #14433. An ETDM Programming Screen Summary Report containing comments from the Environmental Technical Advisory Team (ETAT) was published on June 3, 2020. The ETAT evaluated the project's effects on natural, physical, cultural, social, and economic resources.

Figure 1 - Project Location Map





The bridge is recommended National Register of Historic Places (NRHP)-eligible under Criterion C in the area of Engineering for its high-integrity embodiment of a prestressed concrete bridge in Florida. The bridge is also situated within the Sebastian Inlet State Park, a Section 4(f) resource.

The project includes the evaluation of Build and Rehabilitation alternatives for the bridge and the No-Action (No-Build) alternative, replacement of the existing under deck observation/fishing piers, and the addition of bicycle and pedestrian facilities across the bridge. The underdeck observation/ fishing piers are located under the north and south portions of the bridge. Build alternatives will include evaluation of the bridge vertical clearance as required by the U.S. Coast Guard (USCG).

### 3.2 TRAFFIC ANALYSIS OBJECTIVE

The objectives of this traffic analysis are as follows:

- Validate that the 2-lane capacity will sufficiently accommodate future traffic demand
- Evaluate the two intersections along the project corridor that are access points to/from the Sebastian Inlet State Park
- Perform safety analysis

### 3.3 TRAFFIC ANALYSIS METHODOLOGY

The Traffic Analysis Methodology was approved in April 2021. A summary of the approach is provided below. The methodology is included in **Appendix A**.

#### 3.3.1 ANALYSIS PERIODS

The analysis periods include both weekday and weekend during AM and PM Peak Hours for the following analysis years:

- Existing (2019)
- Opening Year (2025)
- Design Year (2045)

#### 3.3.2 STUDY AREA

The study area includes the SR A1A corridor between the southern and northern access points to Sebastian Inlet State Park, as presented in **Figure 2**. The study area includes the following intersections:

1. SR A1A and Sebastian Inlet State Park Northern Access Point
2. SR A1A and Sebastian Inlet State Park Southern Access Point

Figure 2 - Study Area



### **3.3.3 ANALYSIS TOOLS**

Intersections will be evaluated using Synchro Version 11 software and the SR A1A arterial will be evaluated using FDOT 2020 Quality/Level of Service Handbook. The results will be based on the Highway Capacity Manual (HCM) 6th Edition.

### **3.3.4 PERFORMANCE MEASURES OF EFFECTIVENESS**

The performance Measures of Effectiveness (MOEs) will include Level of Service (LOS), Volume/Capacity (V/C), Delay, and Queue. Consistent with the FDOT policy on Level of Service Targets for the State Highway System (Topic Number 000-525-006-c), the LOS target is LOS C since this is outside of an urbanized area.

## 4.0 EXISTING CONDITIONS

### 4.1 TRAFFIC DATA

Based on a review of the traffic data from the year 2019, higher traffic demand is realized during the weekends which is consistent with the recreational land uses in the immediate area that typically attract a higher weekend use. Several types of traffic data were collected for the PD&E Study including turning movement counts, 72-hour bi-directional classification and volume counts, and bicycle and pedestrian data. The data was collected as part of the PD&E Study Pre-work report titled: Traffic Counts and Traffic Projections (dated March 2020).

The 2019 existing intersection volumes for the AM and PM peak hours and the AADT is presented in **Figure 3**. The traffic volumes were extracted from the TMTTools spreadsheet within the PD&E Study Pre-work report titled: Traffic Counts and Traffic Projections (dated March 2020). According to this Pre-work report, the Thursday count was used as the basis for the weekday count, and the average of Friday, Saturday, and Sunday counts were used as the basis for the weekend count. The traffic data is included in **Appendix A**, Traffic Analysis Methodology.

### 4.2 EXISTING LANE CONFIGURATION AND TRAFFIC CONTROL

SR A1A is a two-lane, two-way facility. There are no traffic signals within the study area. Both intersections at the northern and southern access to Sebastian Inlet State Park are accommodated with exclusive turn lanes. The park access at both intersections is stop-controlled and SR A1A serves as the major roadway with free flow operations. **Figure 4** depicts the existing lane configuration and traffic control within the study area.

Figure 3 - Existing (2019) Traffic Volumes

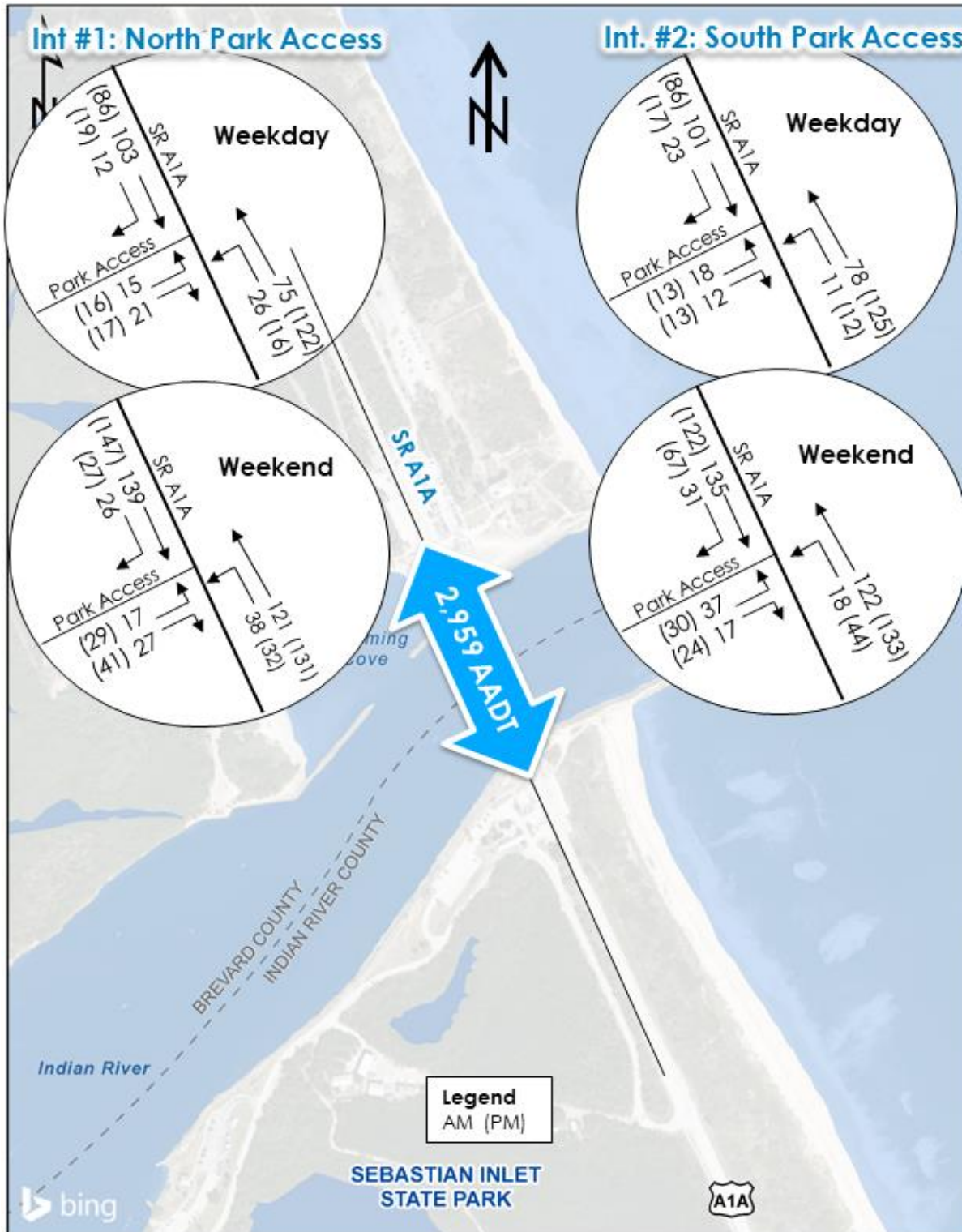


Figure 4 – Existing Lane Configuration and Traffic Control



### 4.3 TRAFFIC FACTORS

Table 1 provides the design traffic factors used for the analysis:

**Table 1 – Design Traffic Factors**

TRAFFIC FACTOR	SELECTION	ASSUMPTIONS
K Factor	9.0%	Standard K factor was selected as part of the PD&E Study Pre-work report titled: Traffic Counts and Traffic Projections (dated March 2020), which is included in <b>Appendix A</b> .
D Factor	51.1 to 79.6%	D Factor is based on existing traffic data which varies by location and time period. This range is consistent with the FDOT Project Traffic Forecasting Handbook for rural facilities. The D factors are included in <b>Appendix A</b> in the TMTTool spreadsheets.
Truck Daily Factor	8%	Selected based on a comparison of the 72-hour classification counts along the SR A1A Bridge over Sebastian Inlet and the FDOT Telemetered Traffic Monitoring Station 880291 which is located along SR A1A south of the Sebastian Inlet Bridge. The 72-hour classification counts had an average truck percentage of 8.3%. The FDOT Telemetered Traffic Monitoring Station shows a T-Factor of 7.4%. The calculations are provided in <b>Appendix B</b> .
Design Hour Truck (DHT)	4%	Calculated by dividing the Truck Daily by two which is consistent with the FDOT Project Traffic Forecasting Handbook.
Peak Hour Factor (PHF)	0.77 to 0.91	PHF factor calculated for weekday and weekend AM and PM peak hours based on the field measured existing turning movement data which is included in <b>Appendix A</b> . PHF calculations are presented in <b>Appendix B</b> .

### 4.4 INTERSECTION OPERATIONAL ANALYSIS

A comprehensive existing conditions analysis was conducted by evaluating each day that turning movement counts were collected (i.e., Thursday, Friday, Saturday, and Sunday). The results of the analysis show that all intersections, approaches, and movements are operating at LOS B or better. The results indicate that the weekends have slightly higher delays due to the higher traffic demand. Similarly, the PM peak hours for each day showed slightly higher delay. The eastbound stop-controlled approach at both north and south access points was operating at LOS A to LOS B with a delay of approximately 9.1 to 11.0 seconds. The results are presented in **Table 2**. The existing intersection operational analysis output is provided in **Appendix C**.

**Table 2 – Existing (2019) Intersection Operational Analysis**

INTERSECTION	DIRECTION	AM PEAK				PM PEAK			
		APPROACH		INTERSECTION (4)		APPROACH		INTERSECTION (4)	
		DELAY (SEC)	LOS	DELAY (SEC)	LOS	DELAY (SEC)	LOS	DELAY (SEC)	LOS
<b>WEEKDAY</b>									
Int. #1: North Access Point and SR A1A	EB	9.7	A	2.1	N/A	9.9	A	1.6	N/A
	NB (2)	7.6	A			7.5	A		
	SB (3)	N/A	N/A			N/A	N/A		
Int. #2: South Access Point and SR A1A	EB	9.7	A	1.5	N/A	9.8	A	1.3	N/A
	NB (2)	7.5	A			7.5	A		
	SB (3)	N/A	N/A			N/A	N/A		
<b>WEEKEND</b>									
Int. #1: North Access Point and SR A1A	EB	10.1	B	2.0	N/A	10.5	B	2.4	N/A
	NB (2)	7.7	A			7.7	A		
	SB (3)	N/A	N/A			N/A	N/A		
Int. #2: South Access Point and SR A1A	EB	10.5	B	2.0	N/A	10.6	B	2.2	N/A
	NB (2)	7.6	A			7.6	A		
	SB (3)	N/A	N/A			N/A	N/A		

Notes:

- 1) Results shown as HCM 6th Edition Methodologies
- 2) Northbound-left movement operations shown
- 3) Southbound approach is a free flow condition
- 4) Overall intersection results are presented as intersection delay only since it is a two-way stop control evaluation

## 4.5 QUEUING ANALYSIS

The 95th percentile queue results were extracted from the synchro output sheets which were provided as number of vehicles. This was then converted to the 95th percentile queue length by multiplying by 25-ft which is an acceptable value according to the FDOT Design Manual (FDM), Chapter 212, Intersections. The analysis was conducted for both eastbound left-turns and northbound left-turns at the study intersections.

The results of the queuing analysis show that there is sufficient storage at the eastbound left-turn and northbound left-turn lanes for both study intersections. **Table 3** shows the queuing results. The existing conditions queuing results are provided in **Appendix C**.



**Table 3 – Existing (2019) Queuing Results**

INTERSECTION	MOVEMENT	AVAILABLE STORAGE (FT)	TIME PERIOD WITH HIGHEST QUEUE	95TH % QUEUE (FT) (2)	SUFFICIENT STORAGE?
Int. #1: North Access Point and SR A1A	EBL	>1,000	Weekend PM Peak Hour	10.0	Yes
	NBL	190	Weekday and Weekend AM Peak Hour	2.5	Yes
Int. #2: South Access Point and SR A1A	EBL	>1,000	Weekend AM and PM Peak Hours	7.5	Yes
	NBL	370	Weekend PM Peak Hour	2.5	Yes

Notes:

- 1) Results extracted from the synchro analysis output from the HCM 6th Edition Methodologies
- 2) 95th % Queuing calculated by multiplying 25-ft to the 95th % queue vehicle results from Synchro

## 4.6 ARTERIAL ANALYSIS

Planning-level arterial analysis was conducted for SR A1A to verify there is sufficient capacity. There are no known concerns with capacity in the project vicinity. The analysis was based on Table 9, Generalized Peak Hour Directional, Rural Undeveloped Areas from the 2020 Quality/Level of Service Handbook (see **Appendix D**). Rural areas are a more conservative analysis compared to transitioning areas.

As presented **Table 4**, the result of the arterial analysis shows that there is sufficient capacity along the SR A1A project limits.

**Table 4 – Existing (2019) Arterial Analysis Results along SR A1A Project Limits**

NUMBER OF LANES	MEDIAN	EXCLUSIVE LEFT LANES	EXCLUSIVE RIGHT LANES	ADJUSTMENT FACTORS (1)	PEAK HOUR DIRECTIONAL CAPACITY (VEH. /HR) (2), (3)	2019 AADT	2019 PEAK HOUR DIRECTIONAL VOLUME (4)	LOS
2	Undivided	Yes	Yes	0%	670	2959	140	C

Notes:

- 1) Adjustment factors used: 1) Multi, undivided exclusive left lane (-5%); and 2) exclusive right lane (+5%)
- 2) Target Level of Service (LOS) C
- 3) Capacity volumes extracted from the FDOT 2020 Quality/Level of Service Handbook for Peak Hour Directional, Rural Undeveloped Area
- 4) 2019 Peak Hour Volumes = 2019 AADT x Standard K factor x D factor (53.4% from FDOT Traffic Count Station, **Appendix B**)

## 4.7 SAFETY ANALYSIS

The safety analysis for existing conditions included an evaluation of historical crash data and calculation of crash rates and safety ratio. A summary of the safety analysis is provided in the next section. The details are included in **Appendix E**.

### 4.7.1 CRASH DATA

Crash data was obtained for the years 2016 to 2020 along SR A1A between the southern and northern access points to Sebastian Inlet State Park. The data was downloaded from the FDOT State Safety Office GIS (SSOGis) Query Tool on the Traffic Safety Web Portal.

## 4.7.2 CRASH SUMMARY

**Figure 5** provides a graphical summary of the crash statistics and **Figure 6** shows the geographical location of crashes. Based on the crash analysis, a total of six crashes occurred on the SR A1A arterial within the study area from 2016 to 2020. Off-road crashes were the predominant crash type with overturn/rollover crashes accounting for 3 (50%) of the total crashes. Others included one bicycle crash, one crash with utility pole, and one fire/explosion crash. Five out of 6 of the crashes occurred under daylight and dry weather conditions.

One (1) fatal crash occurred within the study limits during the five-year period under wet surface conditions. Property Damage Only (PDO) crashes accounted for 2 crashes and the remaining 3 crashes resulted in injury. Among the contributing causes documented in the crash data, 'carelessness or negligent manner' (2 crashes) resulted in the most crashes. Other contributing causes included 'improper turn' (1 crash), 'failed to keep in proper lane' (1 crash), 'ran off roadway' (1 crash), and 'other contributing action' (1 crash).

## 4.7.3 FATAL CRASH

Fatal crashes are a major concern in roadway safety analysis. Based on the crash data, there was one fatal crash within the study area along SR A1A. The police report for this crash was obtained from the FDOT and reviewed to identify specific contributing factors that may have caused or influenced this fatal crash.

On July 3, 2016, a vehicle traveling southbound failed to keep in the proper lane and overturned/rolled over. The driver of this vehicle who died, was alone in the vehicle and found to have been under the influence of drugs at the time of the incident. This crash occurred under dry surface conditions and during the daytime. The fatal crash location is shown in **Figure 6**.

**Figure 5 – Crash Summary along the SR A1A Project Limits**



Figure 6 – Crash Location Map



#### 4.7.4 CRASH RATES AND SAFETY RATIO

Crash Rates, Safety Ratios and Confidence Levels were calculated for the SR A1A study using the crash data for the years 2016 to 2020. Average crash rates for a rural 2-3 lane 2-way undivided roadway segment were utilized in computing the safety ratios and confidence levels. A safety ratio greater than one indicates that the roadway segment presents abnormally high crash occurrences. Safety ratios less than one translate into random occurrences of crashes within normal ranges based on the safety ratio analysis.

The results of the analysis are presented in **Table 5**. All years recorded only one or no crashes except for 2016 which recorded 4 crashes. The year 2016 had a statistically significant crash occurrence with a calculated safety ratio of 3.018 which is greater than one. The calculated overall 5-year safety ratios and confidence levels suggests that the crash rates at this location were not abnormally high.

**Table 5 – Crash Rates and Safety Ratios**

YEAR	NUMBER OF CRASHES	ADT	ACTUAL CRASH RATE (ACR)	DISTRICT 4 AVERAGE CRASH RATE (A)	AVERAGE VEHICLE EXPOSURE (M)	CRITICAL CRASH RATE (CCR)	SAFETY RATIO	STATISTICAL SIGNIFICANCE	CONFIDENCE LEVEL
2016	4	3023	3.251	0.469	1.230	1.077	3.018	5.167	99.99%
2017	-	-	-	-	-	-	-	-	-
2018	1	3149	0.780	0.469	1.282	1.073	0.727	1.161	85.00%
2019	-	-	-	-	-	-	-	-	-
2020	1	3125	0.786	0.469	1.272	1.074	0.732	1.171	85.00%
Overall	6	3099	0.951	0.469	1.261	1.075	0.885	1.442	90.00%

Notes:

- ADT – Average Daily Traffic
- ACR – Actual Crash Rate = No. of crashes in a year / Average Vehicle Exposure (M)
- M – Average Vehicle Exposure (million vehicles or million vehicles miles) = [(ADT \* 365 \* L) / 1,000,000]
- A – Average Crash Rate
- CCR – Critical Crash Rate
- Safety Ratio = ACR/CCR
- Level of statistical significance = (ACR - A + (1/2M))/SQRT(A/M)
- Confidence Level = Percent probability that the crash rate is abnormally high for the location under study, using the district-wide average as a basis.

## 5.0 DESCRIPTION OF PROJECT ALTERNATIVES

The PD&E Study considers a range of alternatives that meet the purpose and need of the project while balancing engineering requirements, environmental impacts, and public input. Project alternatives include the No-Action (No-Build), Transportation Systems Management & Operations (TSM&O), Rehabilitation, and Build Alternatives.

The development of alternatives and the associated environmental effects were evaluated according to FDOT's PD&E manual and FDM and were undertaken in a collaborative process utilizing input from the Department, stakeholders, and the study team. A detailed discussion of each alternative evaluated in the PD&E Study is summarized in the following sections.

### 5.1 PREVIOUS PLANNING STUDIES

FDOT performed an assessment to evaluate the feasibility of replacing the existing bridge as part of a planning level activity. The results of the feasibility study are reported in the Bridge Replacement Feasibility Report (April 2020). This study conducted evaluations to determine ROW requirements, as well as the feasibility of phased construction of a proposed bridge and the approach to maintenance of traffic. Additional feasibility study activities included:

- Traffic Data
- Operational Analysis
- Benthic Survey of Inlet
- Vessel Survey
- Section 4(f) Research Memo
- Preliminary Geotechnical Review

### 5.2 NO-ACTION (NO-BUILD) ALTERNATIVE

The No-Action alternative is an alternative solution that assumes the retention of existing conditions within the projects limits and would not have any direct impacts to the physical, natural, cultural, and social environments. Continuous maintenance is performed to make the bridge safe to use. Although this alternative does not meet the purpose and need for the project, it will remain under consideration and serve as a baseline for comparison against other alternatives throughout the PD&E Study.

### 5.3 TRANSPORTATION SYSTEMS MANAGEMENT AND OPERATIONS ALTERNATIVE (TSM&O)

The TSM&O alternative consists of short-term improvements aimed at extending the service life of the bridge or optimizing the performance of the existing facility. However, they do not address the structural deficiency of the bridge. The TSM&O alternative does not meet the purpose and need for the project.

## 5.4 BUILD ALTERNATIVES(S)

Build Alternatives were developed and evaluated based on the following criteria:

- Ability to satisfy the purpose and need for the project
- Vertical and horizontal navigational clearances
- Bridge, roadway, and park entrance geometry
- Natural, social, cultural, and physical environment impacts
- Section 4(f) impacts
- Section 106 criteria of the National Historic Preservation Act (NHPA)
- Required ROW
- Project costs
- Avoidance of bridge closure during construction

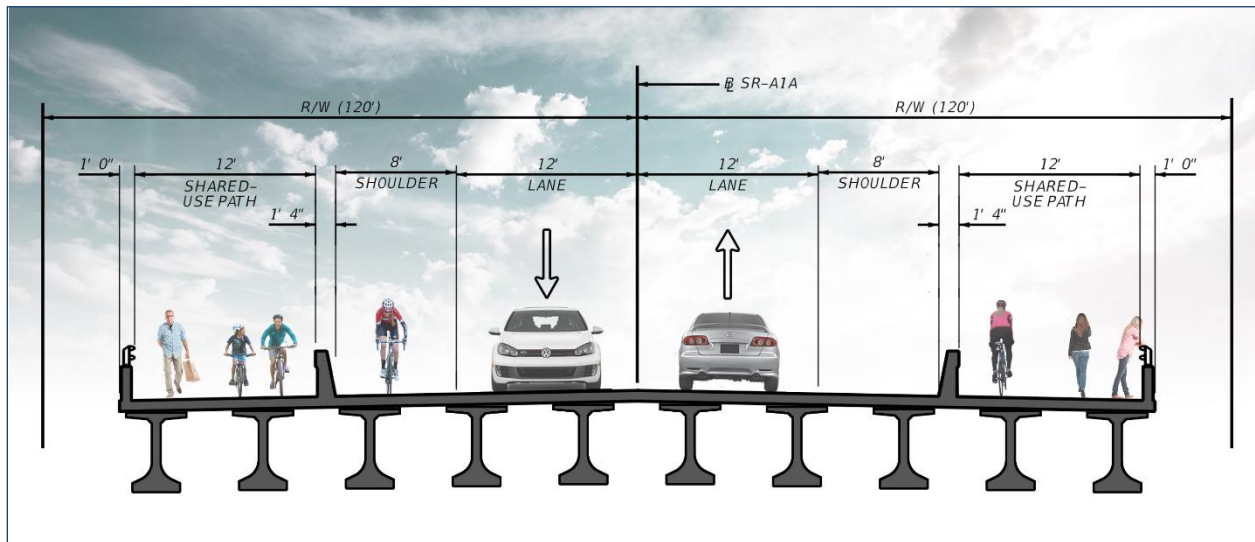
A key criterion for the Alternatives development is the vertical and horizontal clearances of the bridge. A navigation needs analysis memorandum was submitted to the USCG and a preliminary clearance determination was received which stated a desired minimum vertical clearance of 65-feet above mean high water (MHW) for a fixed bridge and 125-feet minimum horizontal clearance.

Based on the USCG response, a vertical clearance evaluation was completed to demonstrate a bridge vertical clearance of less than 65-feet, as preliminarily determined by the USCG, provides for reasonable needs of navigation at the Inlet. Also considered were the purpose and need for the project, impacts to the north and south park entrances, character of the Inlet, bathymetry, surrounding resources, maintenance of the Inlet and adjacent waterways, and connectivity to the Intracoastal Waterway (ICW).

The proposed typical section developed during the feasibility study was modified during the PD&E Study. The proposed typical section is shown in **Figure 7** and includes:

- Two 12-foot travel lanes
- Two 8-foot shoulders
- Two 12-foot shared use paths

Figure 7 – Proposed Bridge Typical Section



#### 5.4.1 REHABILITATION ALTERNATIVE

Because the bridge is considered an eligible historic resource under Section 106 of the National Historic Preservation Act, a rehabilitation alternative was considered. The bridge is eligible under Criterion C – Engineering indicating the bridge “*embodies the distinctive characteristics of type, period, or method of construction*”.

A determination of whether rehabilitation can be completed to an acceptable level in a feasible and prudent manner is a function of its ability to perform adequately in both structural and functional areas.

If the bridge is rehabilitated to meet the purpose and need for the project, at minimum, it must:

- Meet current FDOT Design Standards
- Be widened by adding shoulders and bicycle/pedestrian facilities
- Provide a 75-Year service life
- Maintains existing vertical and horizontal clearances
- Maintain traffic during construction
- Minimize impacts to the natural, cultural, and physical environments

Whether the bridge is rehabilitated to its existing condition or not, this option does not meet the purpose and need for the project and the bridge remains structurally and functionally deficient. Based on the results of the rehabilitation alternative analysis, this alternative was removed from further consideration.



## **5.4.2 BUILD ALTERNATIVE 1**

Build Alternative 1 includes a new bridge on the existing alignment. This alternative requires the installation of a temporary bridge to maintain traffic and avoid bridge closing or lengthy detours.

South of the bridge, proposed Build Alternative 1 improvements include:

- The beginning of the temporary bridge
- Reconfiguration of the south Park entrance including the addition of an exit right turn lane
- A southbound acceleration lane from the south Park entrance
- Lengthened storage of the southbound right turn lane into the Park
- Continuation of the shared use path on the west side of the bridge and roadway
- Addition of a shared use path on the east side of the bridge and roadway that extends to the public parking lot located on the east side of SR A1A
- Addition of a crosswalk crossing SR A1A at the south Park entrance

North of the bridge, proposed Build Alternative 1 improvements include:

- The end of the temporary bridge
- Reconfiguration of the north Park entrance including the addition of an exit right turn lane
- Lengthened storage of the southbound right turn lane into the Park
- Continuation of the shared use path on the west side of the bridge and roadway
- Addition of a shared use path on the east side of the bridge and roadway terminating at the north Park entrance
- Addition of a crosswalk crossing SR A1A at the north Park entrance
- Reconfiguration of the Sebastian Inlet District Access Road

All bridge improvements are located within existing FDOT ROW. Approximately 2.03 Acres of ROW is required to meet current design standards for clear zone and maintenance associated with bridge approaches, roadway, Park entrances, and shared use path improvements.

## **5.4.3 BUILD ALTERNATIVE 2**

Build Alternative 2 includes a new bridge alignment that is shifted to the east of the centerline of the existing bridge. The western limit of the new bridge is generally located near the western limit of the existing bridge.

South and north of the bridge, the proposed Build Alternative 2 improvements are the same as Build Alternative 1 except that a temporary bridge is not required.

All bridge improvements are located within existing FDOT ROW. Approximately 1.0 Acre of ROW is required to meet current design standards for clear zone and maintenance associated with bridge approaches, roadway, Park entrances, and shared use path improvements.

Because the new bridge will be constructed in phases, the existing bridge will remain in place while the east portion of the new bridge is constructed. This new construction will include the shared use path, shoulder, and northbound travel lane.

Once construction of the east portion of the new bridge is completed, traffic will be diverted to the newly constructed portion of the bridge. The existing bridge will then be demolished followed by construction of the west side of the bridge completing the new bridge.

#### **5.4.4 BUILD ALTERNATIVE 3**

Build Alternative 3 includes a new bridge on alignment that is shifted to the west of the centerline of the existing bridge. The eastern limit of the new bridge is generally located near the eastern limit of the existing bridge.

South and north of the bridge, the proposed Build Alternative 3 improvements are the same as Build Alternative 1 except that a temporary bridge is not required.

All bridge improvements are located within existing FDOT ROW. Approximately 1.22 Acres of ROW is required to meet current design standards for clear zone and maintenance associated with bridge approaches, roadway, Park entrances, and shared use path improvements.

Because the new bridge will be constructed in phases, the existing bridge will remain in place while the west portion of the new bridge is constructed. This new construction will include the shared use path, shoulder, and southbound travel lane.

Once construction of the west portion of the new bridge is completed, traffic will be diverted to the newly constructed portion of the bridge. The existing bridge will then be demolished followed by construction of the east side of the bridge completing the new bridge.

## 6.0 DEVELOPMENT OF FUTURE YEAR TRAFFIC FORECAST

Future traffic volumes were developed as part of the PD&E Study Pre-work report titled: Traffic Counts and Traffic Projections (dated March 2020) which is included in **Appendix A**.

The growth rates were calculated based on regression analysis of historical traffic counts, regression analysis of historical traffic counts and the Treasure Coast Regional Planning Model (TCRPM) V4.0 2040 output data, linear growth between TCRPM V4.0 2010 and 2040 output, and linear growth between the TCRPM V4.0 2010 and 2040 population and employment data.

A growth rate of 1.0% was selected for the study area. The selected growth rate was applied to the existing (2019) AADT volumes to project future AADT. Future intersection turning movement volumes were calculated using TMTTool by inputting the existing intersection turning movement volumes, existing and future AADTs, standard K factor, and D factor.

Future traffic volumes were computed for AM and PM peak hour for weekday and weekend analysis periods. The future traffic volumes were the same between the No-Action and Build Alternative since no capacity improvements or access modifications are proposed.

**Figure 8** and **Figure 9** present the future traffic volumes for the Opening Year (2025) and Design Year (2045), respectively.

Figure 8 – Opening Year (2025) Traffic Volumes

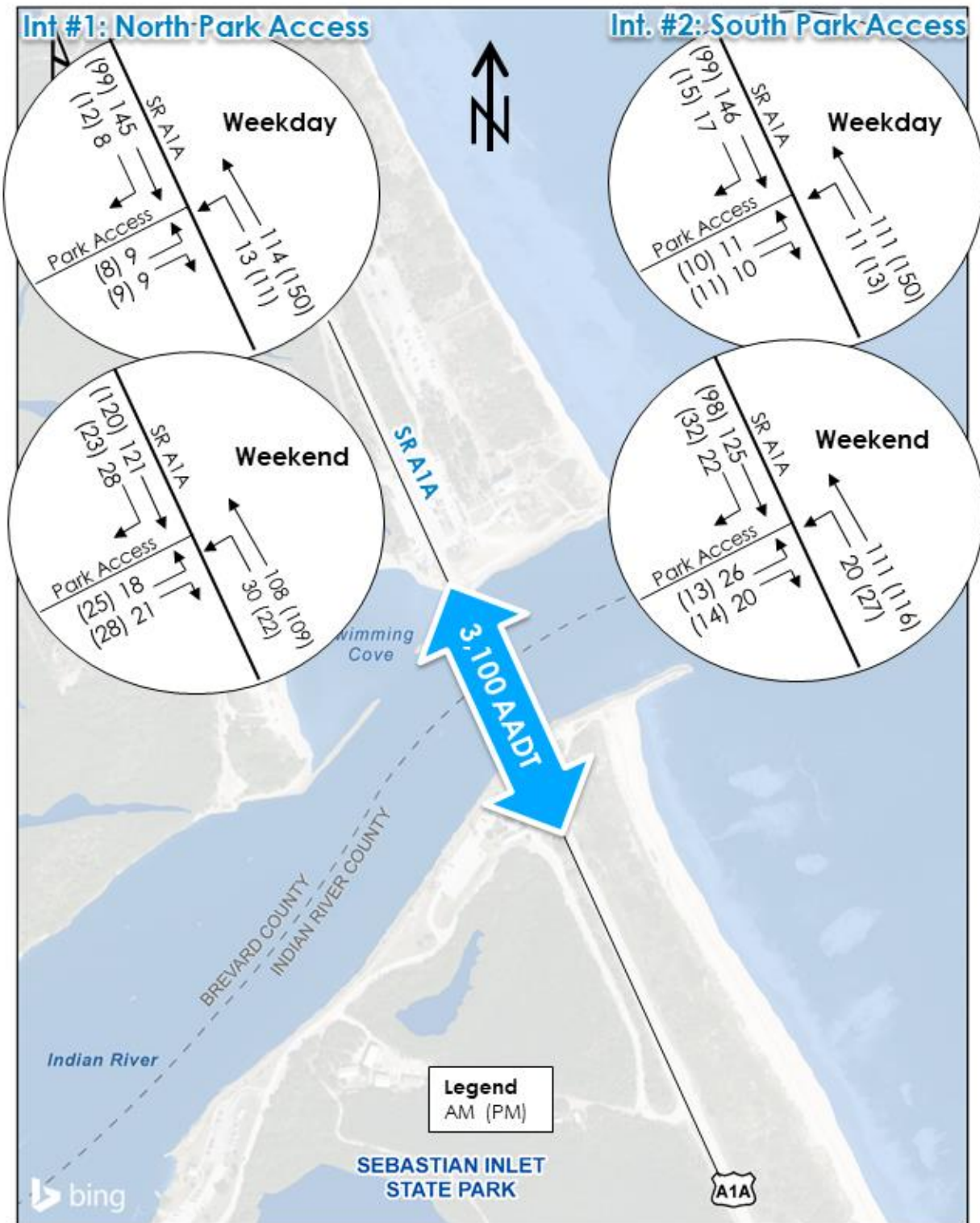
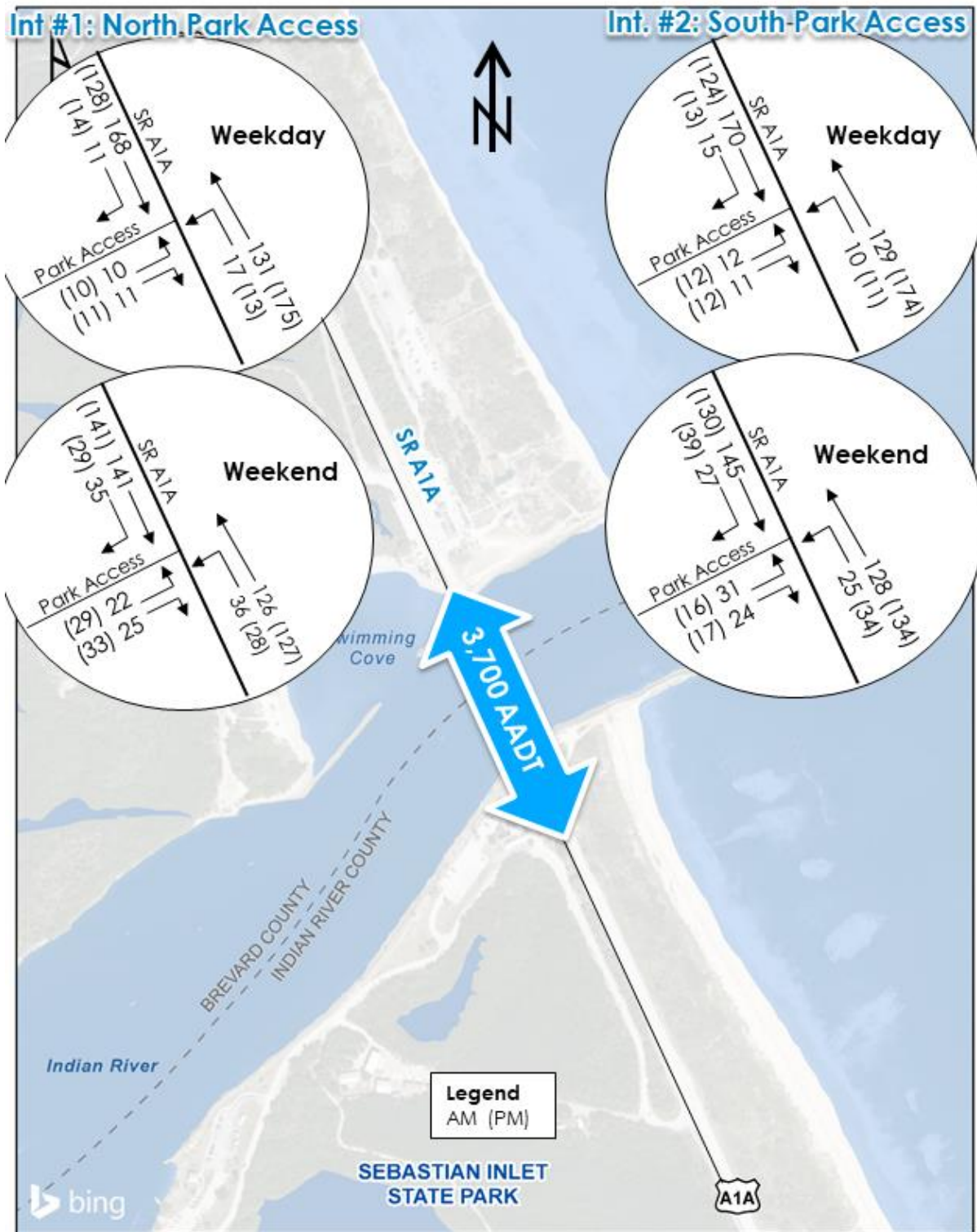


Figure 9 – Design Year (2045) Traffic Volumes



## 7.0 ALTERNATIVES ANALYSIS

### 7.1 PROJECT ALTERNATIVES TO BE EVALUATED

The project alternatives to evaluate traffic operations and safety include the No-Action alternative and the Build Alternative. Multiple build alternatives are being evaluated during the PD&E study; however, the differences between the alternatives are construction and alignment options (i.e., construct bridge to the east, west, and along existing bridge alignment). The three Build Alternatives will have a similar effect on traffic demand, traffic capacity, and safety; therefore, the Build Alternatives will be evaluated as one alternative for the traffic and safety analysis.

From a traffic analysis perspective, the primary difference between No-Action and the Build Alternative are the intersection improvements. The Build Alternative includes the following intersection improvements at both north and south access points to the Sebastian Inlet State Park:

- Intersection #1 (SR A1A and North Access to Sebastian Inlet State Park)
  - New exclusive eastbound right-turn lane with a length of approximately 100-ft
  - Extended turn lanes along SR A1A for southbound right and northbound left
- Intersection #2 (SR A1A and South Access to Sebastian Inlet State Park)
  - New exclusive eastbound right-turn lane with a length of approximately 100-ft
  - Extended turn lane along SR A1A for southbound right

From a safety analysis perspective, the primary difference between the No-Action and the Build Alternative are the improved multi-modal facilities and wider shoulder. The Build Alternative includes the following features:

- Two 8-foot shoulders
- Two 12-foot shared use paths

### 7.2 INTERSECTION OPERATIONAL ANALYSIS

#### 7.2.1 OPENING YEAR (2025)

Intersection operational analysis was conducted for the Opening Year (2025) conditions by comparing the No-Action and Build Alternative using the projected traffic volumes for the weekday and weekend AM and PM peak hours. Based on the analysis, the intersections, approaches, and movements are projected to continue operating at LOS B or better for both the No-Action and Build Alternatives compared to existing conditions. For the Build Alternative there are slight improvements for the eastbound approach of all intersections with a reduction of delay that is less than 1% compared to the No-Action alternative. The results are presented in **Table 6**. The future intersection operational analysis output is provided in **Appendix F**.

**Table 6 – Opening Year (2025) Intersection Operational Analysis**

INTERSECTION	DIRECTION	AM PEAK				PM PEAK			
		APPROACH		INTERSECTION (4)		APPROACH		INTERSECTION (4)	
		DELAY (SEC)	LOS	DELAY (SEC)	LOS	DELAY (SEC)	LOS	DELAY (SEC)	LOS
<b>NO-ACTION - WEEKDAY</b>									
Int. #1: North Access Point and SR A1A	EB	10.0	B	0.9	N/A	9.9	A	0.9	N/A
	NB (2)	7.6	A			7.6	A		
	SB (3)	N/A	N/A			N/A	N/A		
Int. #2: South Access Point and SR A1A	EB	10.1	B	1.0	N/A	10	B	1.0	N/A
	NB (2)	7.6	A			7.5	A		
	SB (3)	N/A	N/A			N/A	N/A		
<b>NO-ACTION - WEEKEND</b>									
Int. #1: North Access Point and SR A1A	EB	9.9	A	1.9	N/A	10.0	B	2.1	N/A
	NB (2)	7.6	A			7.6	A		
	SB (3)	N/A	N/A			N/A	N/A		
Int. #2: South Access Point and SR A1A	EB	10.1	B	1.9	N/A	9.7	A	1.5	N/A
	NB (2)	7.5	A			7.5	A		
	SB (3)	N/A	N/A			N/A	N/A		
<b>BUILD ALTERNATIVE - WEEKDAY</b>									
Int. #1: North Access Point and SR A1A	EB	10.0	B	0.9	N/A	9.8	A	0.9	N/A
	NB (2)	7.6	A			7.6	A		
	SB (3)	N/A	N/A			N/A	N/A		
Int. #2: South Access Point and SR A1A	EB	10.0	B	1.0	N/A	9.9	A	1.0	N/A
	NB (2)	7.7	A			7.6	A		
	SB (3)	N/A	N/A			N/A	N/A		
<b>BUILD ALTERNATIVE - WEEKEND</b>									
Int. #1: North Access Point and SR A1A	EB	9.8	A	1.9	N/A	9.8	A	2.1	N/A
	NB (2)	7.6	A			7.6	A		
	SB (3)	N/A	N/A			N/A	N/A		
Int. #2: South Access Point and SR A1A	EB	9.9	A	1.9	N/A	9.7	A	1.5	N/A
	NB (2)	7.6	A			7.6	A		
	SB (3)	N/A	N/A			N/A	N/A		

Notes:

- 1) Results shown as HCM 6th Edition Methodologies
- 2) Northbound-left movement operations shown
- 3) Southbound approach is a free flow condition
- 4) Overall intersection results are presented as intersection delay only since it is a two-way stop control evaluation

### 7.2.2 DESIGN YEAR (2045)

Intersection operational analysis was conducted for the Design Year (2045) conditions by comparing the No-Action and Build Alternative using the projected traffic volumes for the weekday and weekend AM and PM peak hours. Similar to the Opening Year (2025) analysis, the intersections, approaches, and movements are projected to continue operating at LOS B or better for both the No-Action and Build Alternatives compared to existing conditions. For the Build Alternative there are slight improvements for the eastbound approach of all intersections with a reduction of delay that is less than 1% compared to the No-Action alternative. The results are presented in **Table 7**. The future intersection operational analysis output is provided in **Appendix F**.

**Table 7 – Design Year (2045) Intersection Operational Analysis**

INTERSECTION	DIRECTION	AM PEAK				PM PEAK			
		APPROACH		INTERSECTION (4)		APPROACH		INTERSECTION (4)	
		DELAY (SEC)	LOS	DELAY (SEC)	LOS	DELAY (SEC)	LOS	DELAY (SEC)	LOS
<b>NO-ACTION - WEEKDAY</b>									
Int. #1: North Access Point and SR A1A	EB	10.3	B	1.0	N/A	10.4	B	0.9	N/A
	NB (2)	7.7	A			7.6	A		
	SB (3)	N/A	N/A			N/A	N/A		
Int. #2: South Access Point and SR A1A	EB	10.4	B	0.9	N/A	10.4	B	1.0	N/A
	NB (2)	7.7	A			7.6	A		
	SB (3)	N/A	N/A			N/A	N/A		
<b>NO-ACTION - WEEKEND</b>									
Int. #1: North Access Point and SR A1A	EB	10.3	B	2.0	N/A	10.4	B	2.2	N/A
	NB (2)	7.7	A			7.7	A		
	SB (3)	N/A	N/A			N/A	N/A		
Int. #2: South Access Point and SR A1A	EB	10.5	B	2.0	N/A	10.2	B	1.6	N/A
	NB (2)	7.6	A			7.6	A		
	SB (3)	N/A	N/A			N/A	N/A		
<b>BUILD ALTERNATIVE - WEEKDAY</b>									
Int. #1: North Access Point and SR A1A	EB	10.3	B	1.0	N/A	10.2	B	0.9	N/A
	NB (2)	7.7	A			7.6	A		
	SB (3)	N/A	N/A			N/A	N/A		
Int. #2: South Access Point and SR A1A	EB	10.3	B	0.9	N/A	10.3	B	1.0	N/A
	NB (2)	7.7	A			7.6	A		
	SB (3)	N/A	N/A			N/A	N/A		
<b>BUILD ALTERNATIVE - WEEKEND</b>									
Int. #1: North Access Point and SR A1A	EB	10.1	B	1.9	N/A	10.1	B	2.2	N/A
	NB (2)	7.7	A			7.7	A		
	SB (3)	N/A	N/A			N/A	N/A		
Int. #2: South Access Point and SR A1A	EB	10.3	B	2.0	N/A	10.1	B	1.6	N/A
	NB (2)	7.7	A			7.7	A		
	SB (3)	N/A	N/A			N/A	N/A		

Notes:

- 1) Results shown as HCM 6th Edition Methodologies
- 2) Northbound-left movement operations shown
- 3) Southbound approach is a free flow condition
- 4) Overall intersection results are presented as intersection delay only since it is a two-way stop control evaluation

### 7.3 QUEUING ANALYSIS - BUILD ALTERNATIVE DESIGN YEAR (2045)

Queueing analysis provides design guidance for turn lane lengths at intersections (i.e., left-turn lane). The 95th percentile queue results were extracted from the synchro output for the Build Alternatives Design Year (2045). The results from Synchro are provided as number of vehicles which was then converted to the 95th percentile queue length by multiplying by 25-ft which is a suggested value according to the FDOT Design Manual (FDM), Chapter 212, Intersections. The analysis was conducted for the turn lanes at both intersections, except for the southbound right-turn which is a free flow movement. The Build Alternative proposes intersection turn lane improvements as described in section 5.0.



The results of the analysis show that the projected 95th percentile queue will be accommodated by the available/proposed storage at both intersections during the Design Year (2045). **Table 8** presents the queuing results. The future conditions queuing results are provided in **Appendix F**.

**Table 8 – Design Year (2045) Build Alternative Queuing Analysis Results**

INTERSECTION	MOVEMENT	AVAILABLE/ PROPOSED STORAGE (FT)	95TH PERCENTILE QUEUE (FT)		
			AM PEAK HOUR	PM PEAK HOUR	SUFFICIENT STORAGE?
<b>WEEKDAY</b>					
Int. #1: North Access Point and SR A1A	EBL	>1,000	3	3	Yes
	EBR	100	0	3	Yes
	NBL	330	0	0	Yes
Int. #2: South Access Point and SR A1A	EBL	>1,000	3	3	Yes
	EBR	100	0	3	Yes
	NBL	370	0	0	Yes
<b>WEEKEND</b>					
Int. #1: North Access Point and SR A1A	EBL	>1,000	3	5	Yes
	EBR	100	3	3	Yes
	NBL	330	3	3	Yes
Int. #2: South Access Point and SR A1A	EBL	>1,000	5	3	Yes
	EBR	100	3	3	Yes
	NBL	370	3	3	Yes

Notes:

- 1) Results extracted from the synchro analysis output from the HCM 6th Edition Methodologies
- 2) 95th % Queuing calculated by multiplying 25-ft to the 95th % queue vehicle results from Synchro

## 7.4 ARTERIAL ANALYSIS – DESIGN YEAR (2045)

Planning-level arterial analysis was conducted for the SR A1A project corridor to verify there is sufficient capacity in the Design Year (2045). A planning-level analysis was conducted since the project is a bridge replacement and there are no known concerns with available capacity. The arterial analysis utilized Table 9, Generalized Peak Hour Directional, Rural Undeveloped Areas from the 2020 Quality/Level of Service Handbook (see **Appendix D**). Rural areas are a more conservative analysis compared to transitioning areas.

The result of the arterial analysis shows that the projected traffic volumes in the Design Year (2045) will be accommodated with the current two-lane capacity. The SR A1A facility will continue to operate at an acceptable LOS. **Table 9** provides the arterial analysis results.

**Table 9 – Design Year (2045) Arterial Analysis along SR A1A Project Limits**

NUMBER OF LANES	MEDIAN	EXCLUSIVE LEFT LANES	EXCLUSIVE RIGHT LANES	ADJUSTMENT FACTORS (1)	PEAK HOUR DIRECTIONAL CAPACITY (VEH. /HR) (2), (3)	2045 AADT	2045 PEAK HOUR DIRECTIONAL VOLUME (4)	LOS
2	Undivided	Yes	Yes	0%	670	3700	180	C

Notes:

- 1) Adjustment factors used: 1) Multi, undivided exclusive left lane (-5%); and 2) exclusive right lane (+5%)
- 2) Target Level of Service (LOS) C
- 3) Capacity volumes extracted from the FDOT 2020 Quality/Level of Service Handbook for Peak Hour Directional, Rural Undeveloped Area
- 4) 2045 Peak Hour Volumes = 2045 AADT x Standard K factor x D factor (53.4% from FDOT Traffic Count Station, **Appendix B**)

## 7.5 SAFETY ANALYSIS

A future conditions safety analysis was conducted for the SR A1A project corridor. The Highway Safety Manual (HSM) Predictive Method for Rural Two-Lane, Two-Way Roads Analysis Spreadsheet Tool was used for the predictive safety analysis. The crash prediction analysis follows the methodology outlined in the HSM.

Expected crashes were predicted for the No-Build and Build Alternative for the 2025 opening year and the 2045 design year using the HSM Predictive Spreadsheet Tool. The geometric, cross sectional and traffic operation characteristics as well as the historic crash data for the No-Build and Build Alternative were input into the HSM Predictive Spreadsheet Tool to obtain the expected crashes for the analysis years. The Build Alternative provides wider shoulders as well as a shared use path and auxiliary lanes to enhance safety within the project limits.

The results of the future conditions safety analysis are presented in **Table 10**. Based on the results, the Build Alternative will result in a lower number of expected total crashes with an overall crash reduction of 31.5% for the 2025 opening year and 31.8% for the 2045 design year compared to the No-Build Alternative. The details of the analysis are included in **Appendix E**.

**Table 10 – Future Conditions Safety Analysis**

CRASH SEVERITY	CRASH FREQUENCY				% CHANGE FROM NO-BUILD	
	2025		2045		2025	2045
	NO-ACTION	BUILD ALT.	NO-ACTION	BUILD ALT.		
Fatal & Injury	0.35	0.24	0.41	0.28	-31.4%	-31.7%
Property Damage Only	0.74	0.50	0.88	0.60	-32.4%	-31.8%
<b>Total</b>	<b>1.08</b>	<b>0.74</b>	<b>1.29</b>	<b>0.88</b>	<b>-31.5%</b>	<b>-31.8%</b>

## 8.0 SUMMARY OF ANALYSIS RESULTS

The results of the existing conditions analysis shows that the intersections and roadway segments are operating at an acceptable LOS with low vehicle delay and sufficient storage capacity at the turn lanes. An existing conditions safety analysis was conducted using historical crash data between 2016 and 2020. Six crashes occurred during this time period with Off-road crashes as the predominant crash type. There was also on bicycle crash and a crash with a utility pole. One fatal crash was realized which was correlated to drug influences. The existing conditions safety ratio calculations for the overall 5-year period suggest that the crash rates in the study area were not abnormally high; although the year 2016 had a statistically significant crash occurrence with a calculated safety ratio of 3.018 which is greater than one.

An alternatives analysis was completed for the future conditions between the No-Action and Build Alternatives for the weekday and weekend AM and PM peak hours for the Opening Year (2025) and Design Year (2045). In both No-Action and Build Alternative scenarios, the intersections are projected to operate at an acceptable LOS and low vehicle delays. The two-way stop traffic control should be maintained. The projected 95th percentile vehicle queue lengths for the Design Year (2045) for the Build Alternative revealed that the proposed turn lanes will provide sufficient storage capacity. An arterial analysis for the Build Alternative confirmed that the SR A1A facility will continue to provide sufficient capacity to accommodate the projected Design Year (2045) traffic volumes. The results of the future conditions safety analysis shows that the Build Alternative is projected to reduce the expected average crash frequency by over 30%, primarily due to the new shared used path and wider shoulders.

Overall, the No-Action and Build Alternatives are comparable from a traffic operations perspective; however, the safety is projected to significantly benefit from the Build Alternative due to the reduction of expected crash frequencies.

# APPENDIX A

## TRAFFIC ANALYSIS METHODOLOGY

# TRAFFIC ANALYSIS METHODOLOGY

Project Development and Environment (PD&E) Study  
SR A1A Over Sebastian Inlet - Bridge 880005  
Bridge Replacement  
Indian River County and Brevard County, Florida

Financial Project ID: 445618-1-22-02  
Federal Aid Number: D420 075B  
ETDM Number: 14433

PREPARED FOR



Florida Department of Transportation  
District Four  
3400 West Commercial Boulevard  
Fort Lauderdale, Florida 33309

*The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016, and executed by FHWA and FDOT.*

APRIL 2021

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APPENDIX A Pre-work: Traffic Counts and Traffic Projections

## 1.0 INTRODUCTION

### 1.1 PROJECT DESCRIPTION

The Florida Department of Transportation (FDOT) District Four is conducting a Project Development & Environment (PD&E) Study to evaluate the replacement of the State Road (SR) A1A bridge crossing the Sebastian Inlet located at the Indian River County - Brevard County boundary. The bridge is known as the James H. Pruitt Memorial Bridge. The primary purpose of this project is to address the structural and functional deficiencies of the existing bridge and address the gap in system linkage for bicyclists and pedestrians. A project location map is included in **Figure 1**.

### 1.2 PURPOSE OF THIS DOCUMENT

The Traffic Analysis Methodology is used to document how the analysis will be accomplished to meet the project goals. This document serves as the agreed upon traffic analysis methodology between FDOT and the project team. It includes the analysis objectives, temporal and spatial limits, analysis tools and approach, data requirements, performance Measures of Effectiveness (MOEs), and documentation of the traffic analysis effort.

### 1.3 TRAFFIC ANALYSIS OBJECTIVE

The objectives of this traffic analysis are as follows:

- Validate that the 2-lane capacity will sufficiently accommodate future demand
- Evaluate the two intersections near the limits of the project to determine if improvements are needed – these two intersections are access points to/from the Sebastian Inlet State Park
- Assess Maintenance of Traffic (MOT) scenarios
- Perform safety analysis using historical crash data and Highway Safety Manual (HSM) methods

### 1.4 TECHNICAL GUIDANCE AND STANDARDS

The traffic analysis will be conducted in accordance with the following documents:

- FDOT PD&E Manual, Part 2, Chapter 2, Traffic Analysis
- FDOT Traffic Analysis Handbook (2014)
- FDOT Project Traffic Forecasting Handbook (2019)

### 1.5 CORRIDOR CHARACTERISTICS

The corridor characteristics are presented in **Table 1**.

Figure 1 Project Location Map





**Table 1 SR A1A Corridor Characteristics**

TOPIC	DESCRIPTION
Project limits	SR A1A between southern and northern access points to Sebastian Inlet State Park
Context Classification	C1 – Natural (SR A1A bridge and southern limits of project) C2 – Rural (Northern limits of project)
Travel lanes	2-lanes, undivided to service north and south traffic
Posted speed limit	45 mph
Intersections	2 intersections located along SR A1A at: <ul style="list-style-type: none"> <li>• Southern access point to Sebastian Inlet State Park (unsignalized)</li> <li>• Northern access point to Sebastian Inlet State Park (unsignalized)</li> </ul>
Bicycle and Pedestrian facilities	Located along the west side of SR A1A at the southern and northern intersections. Facility does not connect across bridge.
Existing nearby traffic attractors and generators	<p>Within project limits:</p> <ul style="list-style-type: none"> <li>• Sebastian Inlet State Park which provides several amenities including bicycling, boating, camping, fishing, geo-seeking, hiking, mountain biking, paddling, picnicking, scuba diving, snorkeling, star gazing, surfing, swimming, and wildlife viewing</li> </ul> <p>South of the project limits:</p> <ul style="list-style-type: none"> <li>• Predominantly residential single family homes that are scattered along SR A1A</li> <li>• North Beach and Wabasso Beach communities are approximately 5 miles away with a combined population of over 2,000 persons according to 2010 US Census data</li> </ul> <p>North of the project limits:</p> <ul style="list-style-type: none"> <li>• Predominantly residential single family homes that are scattered along SR A1A</li> <li>• Town of Melbourne Beach with a population of over 3,000 according to 2010 US Census data</li> </ul>

## 2.0 ANALYSIS APPROACH

### 2.1 STUDY AREA

The area of influence is the immediate area of the project. The project location is isolated from other corridors and intersections that are located over 5 miles north and south. The study area includes the SR A1A corridor between the southern and northern access points to Sebastian Inlet State Park, as presented in **Figure 2**. There are two intersections within this study area that will be evaluated during the study:

- SR A1A and southern access point to Sebastian Inlet State Park (unsignalized)
- SR A1A and northern access point to Sebastian Inlet State Park (unsignalized)

### 2.2 ANALYSIS PERIODS AND YEARS

The corridor serves commuter traffic traveling between counties and communities as well as recreational traffic accessing Sebastian Inlet State Park. This type of usage could produce a variable daily and weekly traffic distribution. To capture this variability, the analysis will include both weekday and weekend AM and PM Peak Hours. The opening year for analysis was selected by considering the potential opening year of the project, future updates to the Treasure Coast Regional Planning Model (TCRPM), available data to support the future traffic volumes, and recommendations by the District. Overall, the analysis years will include the following years:

- Existing (2019)
- Opening Year (2025)
- Design Year (2045)

### 2.3 ANALYSIS TOOLS

The traffic operating characteristics in the study area are anticipated to be undersaturated. Therefore, deterministic, Highway Capacity Manual (HCM)-based methods will be utilized. Synchro Version 10 software will be used to evaluate the intersections and the roadway segments will be analyzed using the FDOT 2020 Quality/Level of Service Handbook. The roadway segment is a free flow condition so the typical analysis software such as Synchro will not provide results.

Figure 2 Study Area and Existing AADT



The results will be based on the HCM 6th Edition module. It was determined that the updates with the HCM 6th Edition from HCM 2010 were applicable to this project. A list of the methodological updates from HCM 6th Edition is provided below for each potential traffic control type that are anticipated for evaluation during this traffic study:

- Stop-controlled Intersections
  - The application of the peak hour factor has been clarified in Chapter 20, Two-Way Stop-Controlled Intersections, and in Chapter 21, All-way stop-controlled intersections
- Signalized Intersections
  - Delay for unsignalized movements is now considered in the calculation of approach delay and intersection delay. The analyst will have to provide these delays as input values.
  - A combined saturation flow adjustment factor for heavy vehicles and grade is incorporated in the method. It replaced the previous individual factors for heavy vehicles and grade.
  - New saturation flow adjustment factors are provided for work zone presence at the intersection, midsegment lane blockage, and a downstream segment with sustained spillback.
  - A new planning application is provided, which simplifies the input data requirements and calculations.

## 2.4 EXISTING TRAFFIC DATA, FACTORS, AND ANALYSIS

Data collection was completed in December 2019 as part of the pre-work activities for the project. The pre-work included pedestrian and bicycle counts, weekday and weekend AM and PM peak hour turning movement counts, and 72-hour bi-directional volume and classification counts. It was a larger study area to assist with future traffic projections. The traffic analysis for this PD&E study will focus on a smaller area. Based on a review of the data in this pre-work activity, it is sufficient for this traffic study. The Peak Hour Factors (PHFs) and truck factor will be extracted from this pre-work and utilized for the intersection traffic analysis. Existing conditions analysis will be completed for the study intersections and roadway segment based on the analysis approach described in the previous sections. A field visit will also be performed to confirm lane configurations and assess the traffic operations. The existing AADT (2019) is presented in **Figure 2**. The pre-work on file is included in **Appendix A**.

## 2.5 PROJECT TRAFFIC FORECASTING

Future traffic projections were completed as part of the pre-work activity for the project. The projections were based on a comparison of growth rates from historical traffic counts and the TCRPM V4.0. The forecasted population and employment growth was also considered. A growth rate of 1.00% was selected and applied to the 2019 AADT to calculate the opening year and design year AADTs along SR A1A. A Standard K factor of 9% was utilized along with the directional distribution for each approach by time

period. TMTTools was used to estimate the future intersection turning movements for the study intersections for each time period. The future intersection turning movement volumes are included in the pre-work document in **Appendix A**.

## 2.6 ANALYSIS OUTPUT AND TARGET

Intersections and roadway segments will be evaluated using Synchro software and FDOT 2020 Quality/Level of Service Handbook, respectively. The performance Measures of Effectiveness (MOEs) will include:

- Level of Service (LOS)
- Volume/Capacity (V/C)
- Delay
- Queue

Since the project corridor is outside an urbanized area, the Level of Service (LOS) target will be LOS C consistent with the FDOT policy on Level of Services Targets for the State Highway System (Topic Number 000-525-006-c).

## 2.7 PROJECT ALTERNATIVES

The project alternatives that will be evaluated include the No-Action alternative and one Build Alternative. Existing lane configuration and capacity will match the No-Action alternative since there are no programmed capacity improvements. Three build alternatives are being evaluated during the PD&E study; however, the differences between the alternatives are construction and placement options (i.e., construct bridge to the left of existing bridge or construct bridge to the right of the existing bridge). These alternatives will have the same effect on traffic demand and capacity; therefore, all three PD&E alternatives will be evaluated as one build alternative during the future condition's analysis.

### 2.7.1 FUTURE TRAFFIC ANALYSIS

The future conditions analysis will be conducted of the intersections and roadway segment between the No-Action and the Build Alternative. The analysis will be conducted for the timeframes described in Section 2.2. Truck factors and PHFs will be based on the existing traffic data. The MOEs will be comparatively evaluated. Should any of the intersections reveal traffic operational issues, mitigation measures will be assessed using the intersection analysis software. If a traffic signal is a likely option, then an Intersection Control Evaluation (ICE) may be conducted, however, this will be determined during the analysis stage.

### 2.7.2 MAINTENANCE OF TRAFFIC SCENARIOS

Complete closure of the SR A1A bridge will result in a traffic detour of over 20 miles for some persons as well as affect the Sebastian Inlet State Park operations. Thus, alternative Maintenance of Traffic (MOT)

scenarios will be evaluated to maintain traffic flow across the bridge. The analysis will include two MOT scenarios focusing on the two study intersections as well as any traffic capacity constraints such as temporary traffic control conditions. The potential MOT scenarios will be determined after the three build alternatives are further defined during the study.

## 2.8 SAFETY

Crash data will be obtained from the FDOT Safety Office for the most recent five-year period along SR A1A within the area of influence. The data collected shall include the number, type and location of crashes, the crash severity, and estimates of property damage and economic loss.

Using the information obtained from the crash data, as well as field observations, the evaluation will identify needs associated with the safety of the existing facility. The safety analysis will also document crash rates for segments and intersections within the project limits and compare to the statewide averages for similar corridors. The analysis results will be summarized in tables and figures.

A quantitative safety analysis based on the procedures in the Highway Safety Manual (HSM) will also be performed as part of the safety analysis to diagnose safety conditions and thus inform the development and refinement of the project alternatives. The following measures of effectiveness will be used to evaluate the safety performance of the No-Action and Build alternatives considered.

- Crash rate
- Crash frequency
- Reduction in crashes

In addition, a benefit-cost analysis will be performed to compare the cost-effectiveness of the study alternatives. The safety analysis will be documented in a standalone memorandum, and the results from the memorandum will be summarized in the Project Traffic Analysis Report (PTAR).

## 2.9 TRAFFIC ANALYSIS DOCUMENTATION

The traffic effort for this PD&E study will be documented in a PTAR, in accordance with the PD&E Manual. The document will include the traffic and safety analysis for the project.

# APPENDIX A

## PRE-WORK TRAFFIC COUNTS AND TRAFFIC PROJECTIONS

# FDOT D4 PD&E Support Services

SR A1A

## Sebastian Inlet Bridge Replacement Traffic Counts and Traffic Projections

Roadway ID: 88070-000

Bridge ID: 880005

### **FINAL REPORT**

Indian River County, Florida

FM No: 445618-1

TWO # 20

Prepared for:

Florida Department of Transportation – District 4



Prepared by:

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March 30, 2020



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## Introduction

The Florida Department of Transportation (FDOT) has programed a PD&E Study to replace the Sebastian Inlet Bridge in Indian River County. The Sebastian Inlet Bridge (No. 880005) is 1,542-foot long. It is located along State Road A1A (Section No. 88070: BMP. 22.364 EMP 22.656) over the Sebastian Inlet and at Indian River/Brevard county line. The Sebastian Inlet Bridge facilitates traffic flow along the barrier island between Wabasso Beach on the south and Melbourne Beach to the north. State parks are located at both ends of the bridge. The state park on the south end has campgrounds and a boat ramp, and the state park on the north end has a fishing pier. The Sebastian Bridge replacement study extends from the south entrance of the SR A1A/Wabasso Beach Parking Lot to approximately 1.9 miles to the north of the state park marina entrance.

The existing bridge was constructed in 1965 and found to need replacement by the Intracoastal Waterway Bridge Safety Study of FDOT D4. The PD&E Study will investigate the feasibility of adding sidewalks and/or bicycle paths on bridge. The replacement bridge will be along the same general alignment of the existing bridge; however, the vertical clearance is anticipated to be increased from 37 feet to 65 feet.

This report presents the existing and projected traffic data to support the PD&E Study. The tasks performed to prepare this study include:

- Collecting Pedestrians and Bicyclists counts.
- Collecting Vehicle Turning Movement Counts (TMC).
- Collecting 72-Hours of bi-directional vehicle classification counts.
- Collecting 72-Hours of volume counts.
- Performing traffic projections and traffic forecasting.

## Data Collection

Four types of data were collected to prepare existing and future traffic volumes to facilitate the PD&E Study – the count locations are shown on Figure 1:

### **1. Pedestrian and Bicycle Data**

The pedestrian and bicycle data were collected at both ends of the Sebastian Inlet Bridge in accordance with the MUTS and D4 procedures. The data was collected for 4 consecutive days, starting on December 12 (Thursday) through December 15 (Sunday), for a period of 14 hours (6 AM to 8 PM) per day. The data collection was scheduled to coincide with the *Night Sounds at Sebastian Inlet Concert* on December 14 (Saturday 6 PM – 9 PM) at the state park to represent the maximum potential impact of pedestrians and bicyclists activities. The pedestrian and bicycle data are included in Appendix A.

### **2. Turning Movement Count (TMC) Data**

The turning movement counts (TMC) was collected in accordance with the MUTS and D4 procedures. The TMC were collected at the entrance/exit driveways to the state parks on SR AIA at both ends of the Sebastian Inlet Bridge. Consistent with the pedestrian and

# Sebastian Inlet Bridge Replacement Traffic Counts and Traffic Projections

bicyclists data, the TMCs were collected for 4 consecutive days, starting on December 12 (Thursday) through December 15 (Sunday), for a period of 10 hours (7 AM to 1 PM and 3 PM to 7 PM) per day. The TMCs are included in Appendix B. The peak hour TMCs for the four days (Thursday, Friday, Saturday, and Sunday) are shown on Figure 2.

Figure 1 – Traffic Count Locations

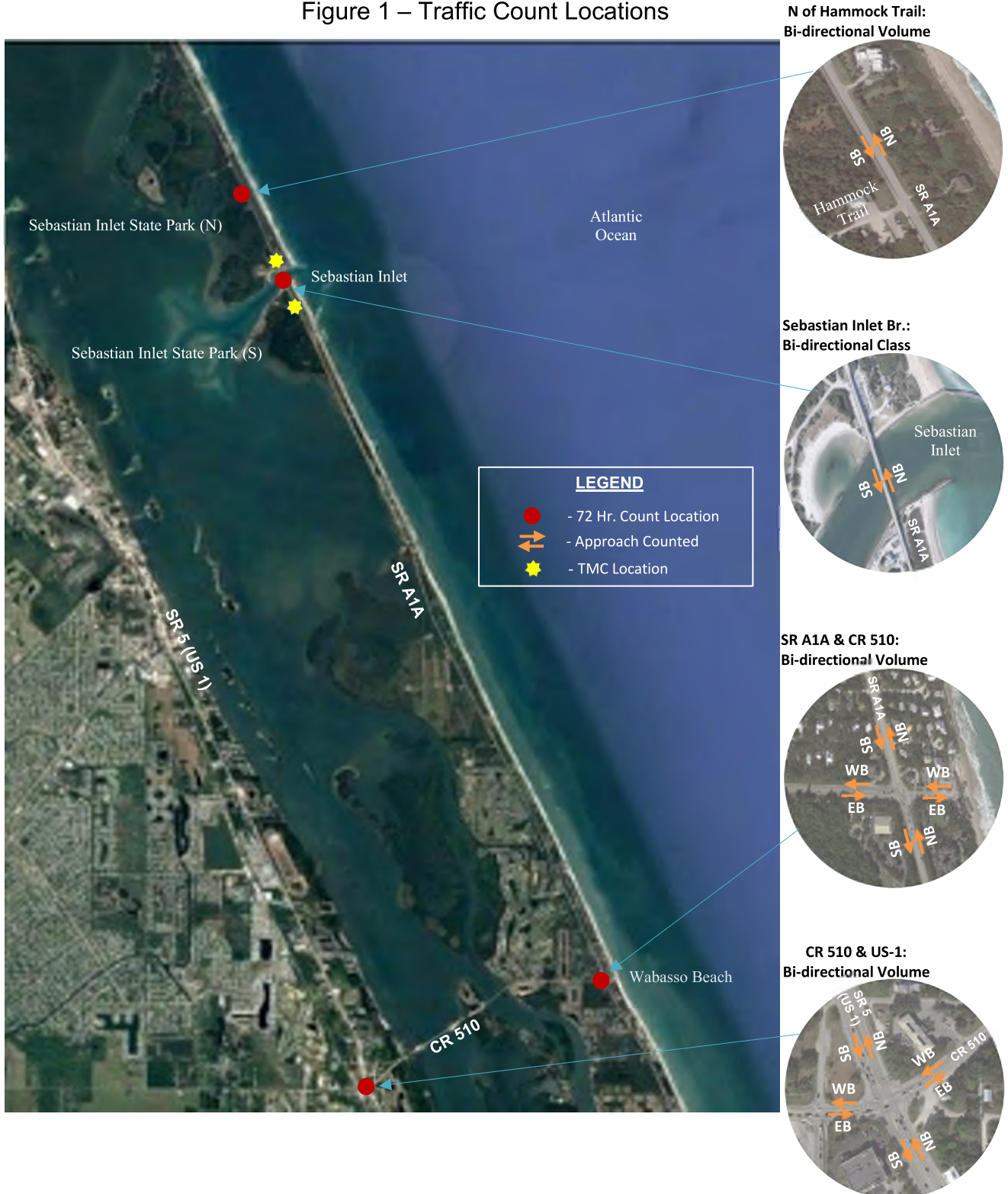
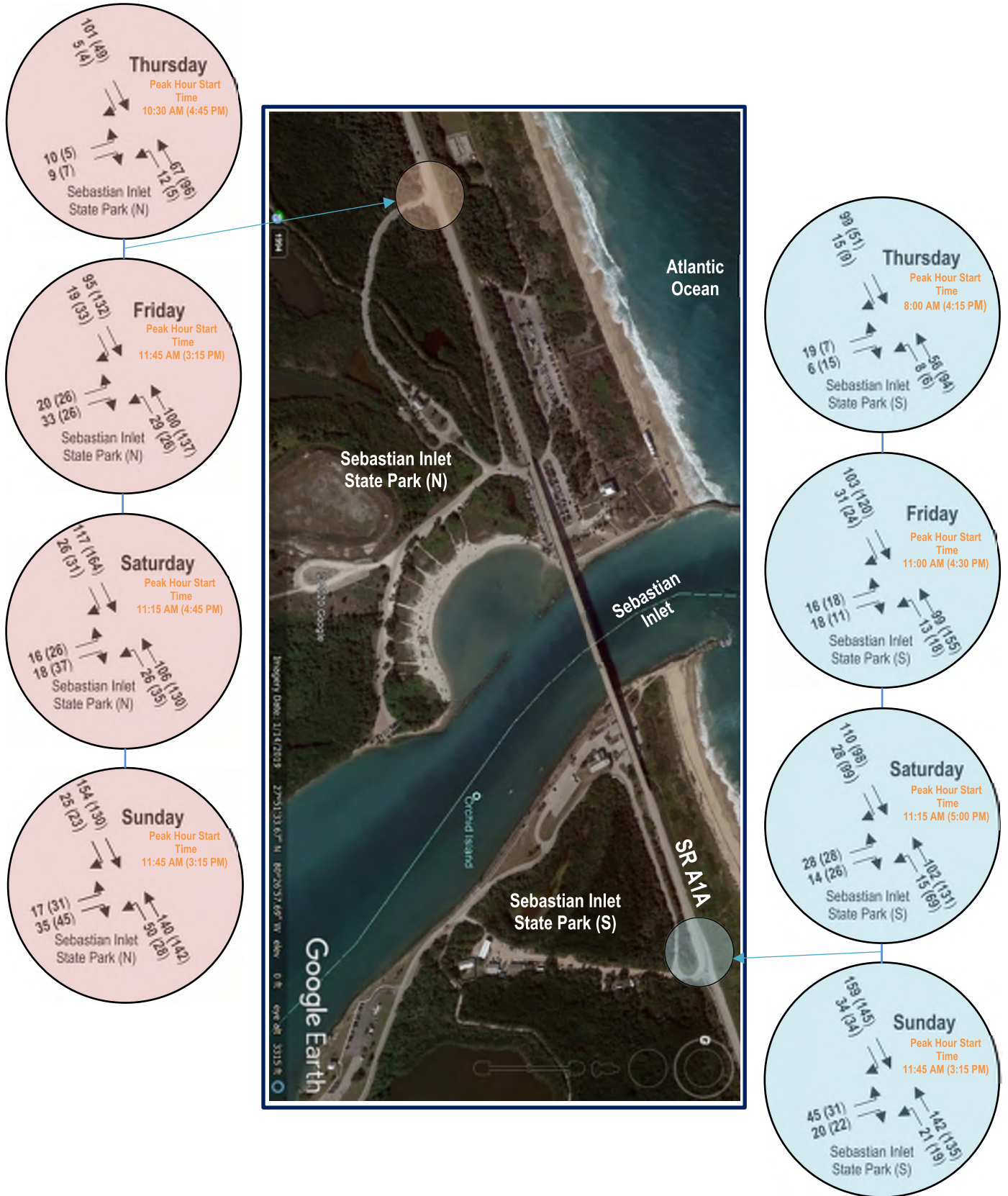


Figure 2 – Existing Peak AM (PM) Hour Turning Movements



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### **3. Bi-directional - 72 Hours of Vehicle Classification Data**

Bi-directional 72 Hours of vehicle classification data was collected starting November 12 (Tuesday) for three days on the Sebastian Inlet Bridge. The northbound data represented consistent vehicle classification percentages among the three days. Whereas the southbound data exhibited inconsistent vehicle classification percentages among the three days as well as compared to northbound data. Therefore, the southbound data was repeated on December 10 (Tuesday) for three days. The bi-directional, 72-hour vehicle classification data is included in Appendix C.

### **4. Bi-directional - Vehicle Volume Data**

Bi-directional 72 Hours of vehicle volume data was collected at the following locations starting November 12 (Tuesday) for three days. The data collection was repeated on December 10 (Tuesday) for three days at some locations due to vandalism and broken hoses:

- a) SR AIA @ CR 510/Wabasso Beach Parking Lot – four approaches.
- b) SR A1A near Hammock Trail Entrance – two approaches.
- c) SR 5 (US 1) @ CR 510 – four approaches.
- d) \*Melbourne Causeway/SR I92 – two approaches.
- e) \*SR 192 @ SR AIA – four approaches.

\*- Data was collected to supplement the OD Survey conducted by the Department and NOT used for the traffic projections

The bi-directional, 72-hour vehicle volume data is included in Appendix D.

## **Existing AADT Volumes**

The Seasonal Factor (SF) and Axle Correction Factor were obtained from the 2018 FDOT Traffic Online and included in Appendix E. The appropriate factors were applied to three-day short-term traffic counts to establish the 2019 AADT volumes. The 2019 AADTs are presented in Table 1.

## **Growth Rates**

Several data sources were used to evaluate the traffic conditions and historical growth pattern in the study area, including historical traffic counts, and the Treasure Coast Regional Planning Model (TCRPM) V4.0 output data. Different forecasting methodologies were utilized to develop the most reasonable growth rates for the study locations, which include the following:

- Regression analysis of up to 10 years of most recent historical AADT volumes from FDOT count stations as reported by the 2018 FDOT Traffic Online
- Regression analysis including the 2040 TCRPM4 model volumes and up to 10 years of most recent historical AADT from 2018 FDOT Traffic Online
- Growth between base year 2010 and future year 2040 TCRPM4 model volumes

Sebastian Inlet Bridge Replacement  
Traffic Counts and Traffic Projections

Table 1 - 2019 AADTs

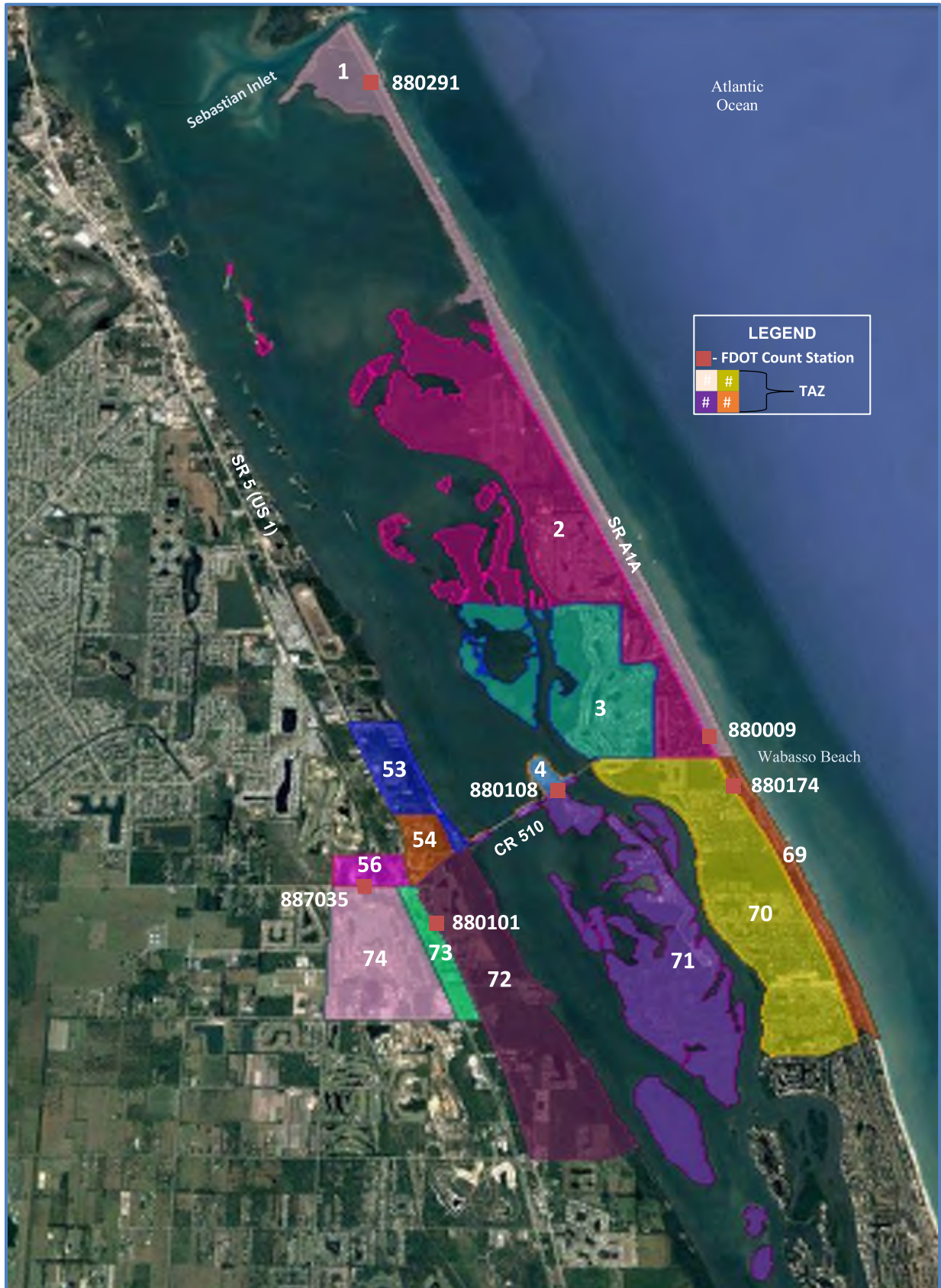
Traffic Count Location	Daily Volumes			3-Day Ave. Vol.	Correction Factors		Directional 2019 AADT	Total 2019 AADT
	Tues.	Wed.	Thurs		Seasonal	Axle		
Sebastian Inlet Bridge - NB	1,575	1,235	1,375	1,395	1.06	N/A	1,479	2,959
Sebastian Inlet Bridge - SB	1,682	1,479	1,150	1,437	1.03	N/A	1,480	
SR A1A & CR 510 East leg - EB	810	672	398	627	1.03	0.98	633	1,260
SR A1A & CR 510 East leg - WB	799	691	372	621	1.03	0.98	627	
SR A1A & CR 510 West leg - EB	4,397	3,923	4,213	4,178	1.06	0.97	4,295	8,395
SR A1A & CR 510 West leg - WB	4,137	3,848	3,975	3,987	1.06	0.97	4,099	
SR A1A & CR 510 North leg - NB	3,597	3,048	3,261	3,302	1.06	0.98	3,430	7,011
SR A1A & CR 510 North leg - SB	3,784	3,194	3,363	3,447	1.06	0.98	3,581	
SR A1A & CR 510 South leg - NB	3,591	4,253	4,475	4,106	1.06	0.98	4,266	9,130
SR A1A & CR 510 South leg - SB	4,954	4,415	4,679	4,683	1.06	0.98	4,864	
CR510 & US-1 East leg - EB	6,344	6,058	6,419	6,274	1.06	0.97	6,451	12,151
CR510 & US-1 East leg - WB	5,451	5,456	5,725	5,544	1.06	0.97	5,700	
CR510 & US-1 North leg - NB	11,131	10,820	11,092	11,014	1.06	0.98	11,442	21,614
CR510 & US-1 North leg - SB	9,940	9,617	9,820	9,792	1.06	0.98	10,172	
CR510 & US-1 South leg - NB	18,398	18,286	14,804	17,163	1.03	0.98	17,324	29,822
CR510 & US-1 South leg - SB	12,876	12,720	11,548	12,381	1.03	0.98	12,498	
CR510 & US-1 West leg - EB	8,698	8,628	7,239	8,188	1.03	0.97	8,181	17,707
CR510 & US-1 West leg - WB	9,426	8,972	9,395	9,264	1.06	0.97	9,526	
Melbourne Causeway - EB	13,983	13,077	13,555	13,538	1.06	0.98	14,064	32,369
Melbourne Causeway - WB	18,258	17,187	17,419	17,621	1.06	0.98	18,305	
North of Hammock Trail Ent. - NB	2,361	2,121	1,166	1,883	1.03	0.98	1,900	3,640
North of Hammock Trail Ent. - SB	2,010	1,930	1,231	1,724	1.03	0.98	1,740	
SR192 & SR A1A North Leg - NB	10,573	10,478	9,684	10,245	1.03	0.98	10,341	21,116
SR192 & SR A1A North Leg - SB	11,140	10,789	10,095	10,675	1.03	0.98	10,775	
SR192 & SR A1A South Leg - NB	9,665	9,063	8,607	9,112	1.03	0.98	9,197	18,554
SR192 & SR A1A South Leg - SB	9,286	9,450	9,074	9,270	1.03	0.98	9,357	

In addition, the projected population growth for Indian River County from the 2019 FDOT Technical Memorandum - Projections of Florida Population by County, 2020-2070 were used to qualitatively assess the recommended growth rates. Indian River County has a population growth rate of 1.43% (linear), 1.19% (exponential), and 2.76% (decaying exponential). The countywide population growth data is presented in Appendix F.

Following six FDOT count stations are the closest to the data collection locations. The TCRPM4 shape files were reviewed and TAZs 1, 2, 3, 4, 53, 54, 56, 69, 70, 71, 72, 73, and 74 were identified to influence the study area. The TAZs influencing the study area and the FDOT count stations are presented in Figure 3.:

- 880009 - SR A1A, north of CR 510/Wabasso Road
- 880101 - SR 5, south of CR 510/Wabasso Road
- 880108 - CR 510/Wabasso Road, east end of ICWW bridge
- 880174 - SR A1A, south of CR 510/Wabasso Road
- 880291 - SR A1A, 0.5 miles south of Sebastian Inlet bridge
- 887035 - CR 510/85<sup>th</sup> Street, east of 58<sup>th</sup> Avenue

Figure 3 – FDOT Count Stations and TAZs



The results of regression analysis of count data using the following methods are presented in Tables 2 through 4:

- Historical AADT volumes including the observed 2019 AADT calculated from the 2019 72-hour traffic counts,
- Historical AADT combined with 2040 TCRPM4 model volumes, and
- Traffic growth between 2010 and 2040 extracted from the TCRPM4 data

The *Traffic Analysis Tool, Version 3.0*, developed by FDOT Central Office was used for the analysis. Linear, exponential, and decaying exponential trend lines were fit to the data. The regression analysis is included in Appendix G.

Table 2 – Growth Rates using Historical Data

Count Location	Count Station	Historical Growth Rates					
		Linear Growth	R-Square	Exponential Growth	R-Square	Decaying Exponential Growth	R-Square
Sebastian Inlet Bridge	880291	1.01%	38.6%	0.96%	37.9%	0.65%	17.0%
A1A & CR 510 North leg	880009	2.11%	28.8%	1.78%	27.5%	1.20%	11.1%
A1A & CR 510 South leg	880174	1.89%	29.9%	1.63%	25.91	1.30%	15.3%
A1A & CR 510 West leg	880108	2.71%	68.1%	2.47%	66.8%	2.96%	85.2%
A1A & CR 510 East leg	880108	2.71%	68.1%	2.47%	66.8%	2.96%	85.2%
CR510 & US-1 East leg	880108	2.71%	68.1%	2.47%	66.8%	2.96%	85.2%
CR510 & US-1 North leg	880101	5.17%	38.6%	4.58%	31.0%	3.68%	22.5%
CR510 & US-1 South leg	880101	5.17%	38.6%	4.58%	31.0%	3.68%	22.5%
CR510 & US-1 West leg	887035	5.30%	49.7%	4.71%	44.7%	5.32%	55.9%

Note: The Growth Rate with the best R-Square is highlighted in GREEN

Table 3 – Growth Rates using Historical Data + TCRPM4 2040 Data

Count Location	Count Station	Historical + Model (2040) Growth Rates					
		Linear Growth	R-Square	Exponential Growth	R-Square	Decaying Exponential Growth	R-Square
Sebastian Inlet Bridge	880291	8.64%	86.0%	3.49%	87.9%	10.01%	36.7%
A1A & CR 510 North leg	880009	5.19%	86.5%	2.78%	82.0%	6.38%	40.0%
A1A & CR 510 South leg	880174	1.09%	46.1%	0.93%	40.8%	2.02%	33.3%
A1A & CR 510 West leg	880108	3.55%	94.1%	2.31%	90.7%	5.92%	68.5%
A1A & CR 510 East leg	880108	3.55%	94.1%	2.31%	90.7%	5.92%	68.5%
CR510 & US-1 East leg	880108	3.55%	94.1%	2.31%	90.7%	5.92%	68.5%
CR510 & US-1 North leg	880101	2.21%	39.9%	1.97%	28.5%	4.29%	35.9%
CR510 & US-1 South leg	880101	2.21%	39.9%	1.97%	28.5%	4.29%	35.9%
CR510 & US-1 West leg	887035	NA	NA	NA	NA	NA	NA



Table 4 – Growth Rates using TCRPM4 2010 and 2040 Data

Count Location	Count Station	TCRPM4 Model Growth Rates			2019 AADTs from Counts
		2010	2040	Linear Growth	
Sebastian Inlet Bridge	880291	6,370	8,280	1.04%	2,959
A1A & CR 510 North leg	880009	10,250	13,670	0.98%	7,011
A1A & CR 510 South leg	880174	6,930	9,870	1.45%	9,130
A1A & CR 510 West leg	880108	16,830	21,540	0.93%	8,395
A1A & CR 510 East leg	880108	NA	NA	NA	1,260
CR510 & US-1 East leg	880108	16,890	21,610	0.92%	12,151
CR510 & US-1 North leg	880101	19,740	26,700	1.18%	21,614
CR510 & US-1 South leg	880101	19,610	29,920	1.76%	29,822
CR510 & US-1 West leg	887035	13,420	NA	NA	17,707

Note: Disproportionate traffic volumes between the 2019 data (actual count) and the 2010 Model data is highlighted in RED

In addition to developing growth rates from the 2010 and 2040 TCRPM data, a comparison of 2019 actual counts and the 2010 model data was performed and presented above. Five of the nine count locations exhibited significant discrepancies (2010 data higher or similar to 2019 data). These locations are highlighted to emphasize that the model-based data, hence the model-based growth rates may not be appropriate at these five locations.

Table 5 – Selected TAZ's Population and Employment Growths

Summary of TCRPM4 Population and Employment Forecasts					
Location		2010		2040	
FID	TAZ	Population	Employment	Population	Employment
484	74	7	256	7	414
504	56	45	49	47	302
507	73	132	131	133	238
508	54	54	87	87	133
547	2	678	323	874	330
548	1	260	104	309	109
549	69	235	422	268	480
550	70	2010	143	2823	148
551	3	338	180	362	217
552	72	379	249	1199	487
554	4	16	0	34	0
555	71	174	18	194	20
<b>Total</b>		<b>4,328</b>	<b>1,962</b>	<b>6,337</b>	<b>2,878</b>
<b>Selected TAZ Growth Rate *</b>	<b>Pop.</b>	<b>1.55%</b>			
	<b>Emp.</b>	<b>1.56%</b>			

$$* \text{ Rate} = \frac{(\text{Final year (2040 Total)} - \text{Beginning year (2010 Total)}) / (\# \text{ years (30)})}{\text{Beginning year (2010 Total)}} \%$$

Further, the socio-economic data for population and employment growth generated from the 2010 and 2040 TCRPM4 data for selected TAZs within the influence area (1-mile radius) was summarized and presented in Table 5. The population and the employment model forecast show a growth rate of 1.55% and 1.56%, respectively. The socio-economic growth rates were used to qualitatively assess the recommended growth rates.

As described above, the growth rates with higher R-square while model volumes reasonably comparable to the 2019 counts, were selected to develop the recommended growth rates. A reasonable check comparing the growth rates to population growth (1.19% to 2.76%), Taz’s socio-economic growth (1.55% and 1.56%) were also used as a factor in determining the appropriate growth rates. The study area is considered a non-high-density urban area. Therefore, approaches (legs) where the growth rates exceed 3.0%, a conservative growth rate was selected while taking into consideration the best R-square value, county wide population growth, and selected TAZ’s socio-economic growth.

The recommended growth rates are presented in Table 6.

Table 6 – Recommended Growth Rates

Count Location	Count Station	Historical Growth Rates			Historical + Model Growth Rates			TCRPM Traffic Data (2010 to 2040) Growth Rate	Recomd. Growth Rate**
		Linear Growth	Expnl. Growth	Decaying Expnl. Growth	Linear Growth	Expnl. Growth	Decaying Expnl. Growth		
Sebastian Inlet Bridge	880291	1.01%	0.96%	0.65%	<del>8.64%</del>	<del>3.49%</del>	<del>10.01%</del>	<del>1.04%</del>	<b>1.00%*</b>
A1A & CR 510 North leg	880009	2.11%	1.78%	1.20%	<del>5.19%</del>	<del>2.78%</del>	<del>6.38%</del>	<del>0.98%</del>	<b>1.70%</b>
A1A & CR 510 South leg	880174	<del>1.89%</del>	<del>1.63%</del>	<del>1.30%</del>	1.09%	0.93%	2.02%	1.45%	<b>1.37%</b>
A1A & CR 510 West leg	880108	2.71%	2.47%	2.96%	<del>3.55%</del>	<del>2.31%</del>	<del>5.92%</del>	<del>0.93%</del>	<b>2.71%</b>
A1A & CR 510 East leg	880108	2.71%	2.47%	2.96%	3.55%	2.31%	<del>5.92%</del>	NA	<b>2.80%</b>
CR510 & US-1 East leg	880108	2.71%	2.47%	2.96%	<del>3.55%</del>	<del>2.31%</del>	<del>5.92%</del>	<del>0.92%</del>	<b>2.71%</b>
CR510 & US-1 North leg	880101	<del>5.17%</del>	<del>4.58%</del>	<del>3.68%</del>	2.21%	1.97%	<del>4.29%</del>	1.18%	<b>1.79%</b>
CR510 & US-1 South leg	880101	<del>5.17%</del>	<del>4.58%</del>	<del>3.68%</del>	2.21%	1.97%	<del>4.29%</del>	1.76%	<b>1.98%</b>
CR510 & US-1 West leg	887035	<del>5.30%</del>	<del>4.71%</del>	<del>5.32%</del>	NA	NA	NA	NA	<b>2.71%***</b>

Note: Growth rates NOT used in estimating the recommended Growth Rates are struck through.

\* - The calculated Growth Rate is less than 1.0%

\*\* - Average of accepted Growth Rates

\*\*\* - For the CR510 & US-1 intersection west leg, none of the growth rates appear to be reasonable (>3.0%). Therefore, the higher of the remaining three legs was selected.

## Projected Traffic Volumes

The future AADT projections and turning movements were estimated using the TmTool V2 that was released on April 8, 2015 by FDOT District 4. The AADT projections were based on existing (2019) AADT volumes and recommended growth rates. The link AADT projections are presented in Table 7.

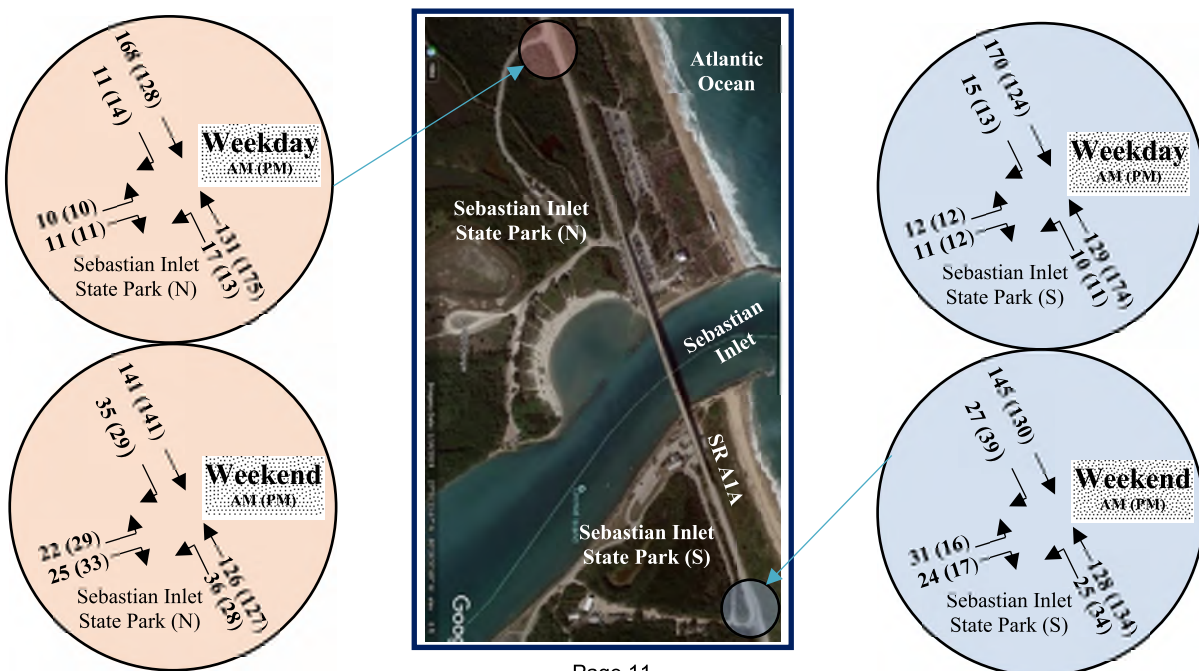
Table 7 – Projected Link AADTs

Location	2019 AADT	2025 AADT	2035 AADT	2045 AADT
Sebastian Inlet Bridge	2,959	3,100	3,400	3,700
A1A & CR 510 North leg	7,011	7,700	8,900	10,100
A1A & CR 510 South leg	9,130	9,900	11,100	12,400
A1A & CR 510 West leg	8,395	9,800	12,000	14,300
A1A & CR 510 East leg	1,259	1,500	1,800	2,200
CR510 & US-1 East leg	12,151	14,100	17,400	20,700
CR510 & US-1 North leg	21,614	23,900	27,800	31,700
CR510 & US-1 South leg	29,822	33,400	39,300	45,200
CR510 & US-1 West leg	17,707	20,600	25,400 </td <td>30,200</td>	30,200

Note: Data rounded to nearest hundredth.

The turning movements at the state park access driveways were estimated based on turning percentages obtained from the field counts. A standard K factor of 9.0 was used as per table 2.1 of the FDOT Project Traffic Forecasting Handbook. The Thursday count was used as the base for weekday count, and the average of Friday, Saturday, and Sunday counts were used as the base for the weekend count. The projected 2045 AM and PM peak hour turning movements are presented in Figure 4. The detailed TmToolv2 spreadsheets are included in Appendix H.

Figure 4 - Projected 2045 Peak AM (PM) Hour Turning Movements



**Appendix A**  
**Bicycle and Pedestrian Counts**



TRIDENT Engineering LLC

CLIENT: FDOT D4  
 JOB No:  
 PROJECT: Ped/Bike Count  
 COUNTY:

10232 NW 47 Street  
 Sunrise, FL 33351  
 TEL: 954-415-3795

File Name: Sebastian Inlet Bridge  
 Site Code: -  
 Count Date: 12/13/2019  
 Page No: 1 of 1

**North End of Sebastian Inlet Bridge**

Start Time	East side of Bridge				West side of Bridge			
	NB		SB		NB		SB	
	Peds.	Bikes	Peds.	Bikes	Peds.	Bikes	Peds.	Bikes
6:00 AM	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	2	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1
9:00 AM	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	1
9:45 AM	0	0	0	0	0	0	0	0
10:00 AM	0	1	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	1
11:45 AM	0	1	0	0	0	0	0	0
NOON	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	1	0	0
1:00 PM	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0
3:00 PM	0	1	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	3
4:00 PM	0	1	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>8</b>

TRIDENT Engineering LLC

CLIENT: FDOT D4  
 JOB No:  
 PROJECT: Ped/Bike Count  
 COUNTY:

10232 NW 47 Street  
 Sunrise, FL 33351  
 TEL: 954-415-3795

File Name: Sebastian Inlet Bridge  
 Site Code: -  
 Count Date: 12/14/2019  
 Page No: 1 of 1

North End of Sebastian Inlet Bridge

Start Time	East side of Bridge				West side of Bridge			
	NB		SB		NB		SB	
	Peds.	Bikes	Peds.	Bikes	Peds.	Bikes	Peds.	Bikes
6:00 AM	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	2
8:15 AM	0	2	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	0	0	0	1
9:00 AM	0	0	0	0	0	0	0	0
9:15 AM	0	1	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	1
11:15 AM	0	2	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0
NOON	0	0	0	0	0	0	0	0
12:15 PM	0	1	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	2
1:00 PM	0	2	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	2
1:30 PM	0	0	0	0	0	2	0	1
1:45 PM	0	0	0	0	0	0	0	0
2:00 PM	0	1	0	0	0	0	0	2
2:15 PM	0	7	0	0	0	0	0	4
2:30 PM	0	1	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0
3:00 PM	0	1	0	0	0	0	0	3
3:15 PM	0	1	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	6
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	1	0	1
5:30 PM	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0
Total	0	20	0	0	0	3	0	28







TRIDENT Engineering LLC

CLIENT: FDOT D4  
 JOB No:  
 PROJECT: Ped/Bike Count  
 COUNTY:

10232 NW 47 Street  
 Sunrise, FL 33351  
 TEL: 954-415-3795

File Name: Sebastian Inlet Bridge  
 Site Code: -  
 Count Date: 12/13/2019  
 Page No: 1 of 1

South End of Sebastian Inlet Bridge

Start Time	East side of Bridge				West side of Bridge			
	NB		SB		NB		SB	
	Peds.	Bikes	Peds.	Bikes	Peds.	Bikes	Peds.	Bikes
6:00 AM	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	2	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1
9:00 AM	0	0	0	0	0	0	0	1
9:15 AM	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0
10:00 AM	0	1	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	1
11:45 AM	0	1	0	0	0	0	0	0
NOON	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	1	0	0
1:00 PM	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0
3:00 PM	0	1	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0
Total	0	6	0	0	0	1	0	7

TRIDENT Engineering LLC

CLIENT: FDOT D4  
 JOB No:  
 PROJECT: Ped/Bike Count  
 COUNTY:

10232 NW 47 Street  
 Sunrise, FL 33351  
 TEL: 954-415-3795

File Name: Sebastian Inlet Bridge  
 Site Code: -  
 Count Date: 12/14/2019  
 Page No: 1 of 1

**South End of Sebastian Inlet Bridge**

Start Time	East side of Bridge				West side of Bridge			
	NB		SB		NB		SB	
	Peds.	Bikes	Peds.	Bikes	Peds.	Bikes	Peds.	Bikes
6:00 AM	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	3
8:15 AM	0	3	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	0	0	0	1
9:00 AM	0	0	0	0	0	0	0	0
9:15 AM	0	1	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	1
11:15 AM	0	2	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0
NOON	0	0	0	0	0	0	0	0
12:15 PM	0	1	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0
1:00 PM	0	2	0	0	0	0	0	2
1:15 PM	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	1
1:45 PM	0	1	0	0	0	0	0	0
2:00 PM	0	2	0	0	0	3	0	5
2:15 PM	0	4	0	0	0	0	0	1
2:30 PM	0	2	0	0	0	0	0	0
2:45 PM	0	1	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	2
3:15 PM	0	1	0	0	0	0	0	1
3:30 PM	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	3
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	1
6:00 PM	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>21</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>23</b>

TRIDENT Engineering LLC

CLIENT: FDOT D4  
 JOB No:  
 PROJECT: Ped/Bike Count  
 COUNTY:

10232 NW 47 Street  
 Sunrise, FL 33351  
 TEL: 954-415-3795

File Name: Sebastian Inlet Bridge  
 Site Code: -  
 Count Date: 12/15/2019  
 Page No: 1 of 1

South End of Sebastian Inlet Bridge

Start Time	East side of Bridge				West side of Bridge			
	NB		SB		NB		SB	
	Peds.	Bikes	Peds.	Bikes	Peds.	Bikes	Peds.	Bikes
6:00 AM	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	2	0	0	0	0	0	7
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	5	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	3
8:45 AM	0	1	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0
9:30 AM	0	1	0	0	0	0	0	1
9:45 AM	0	2	0	0	0	0	0	1
10:00 AM	0	0	0	0	0	0	0	2
10:15 AM	0	0	0	0	0	0	0	0
10:30 AM	0	1	0	0	0	0	0	0
10:45 AM	0	3	0	0	0	0	0	4
11:00 AM	0	0	0	0	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0
11:45 AM	0	1	0	0	0	0	0	2
NOON	0	0	0	0	0	0	0	0
12:15 PM	0	2	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0
1:15 PM	0	2	0	0	0	0	0	2
1:30 PM	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	1
2:15 PM	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0
3:15 PM	0	1	0	0	0	0	0	0
3:30 PM	0	1	0	0	0	0	0	0
3:45 PM	0	1	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	1	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0
Total	0	24	0	0	0	0	0	28

Trident Engineering, LLC  
10232 NW 47th Street  
Sunrise, FL 33351

Sebastian Inlet  
Driveway Entrance

File Name : N-ENT~1  
Site Code : 00000000  
Start Date : 01/28/2020  
Page No : 1

Groups PrintedCars & Peds - Trucks & Bicycles - U-Turns

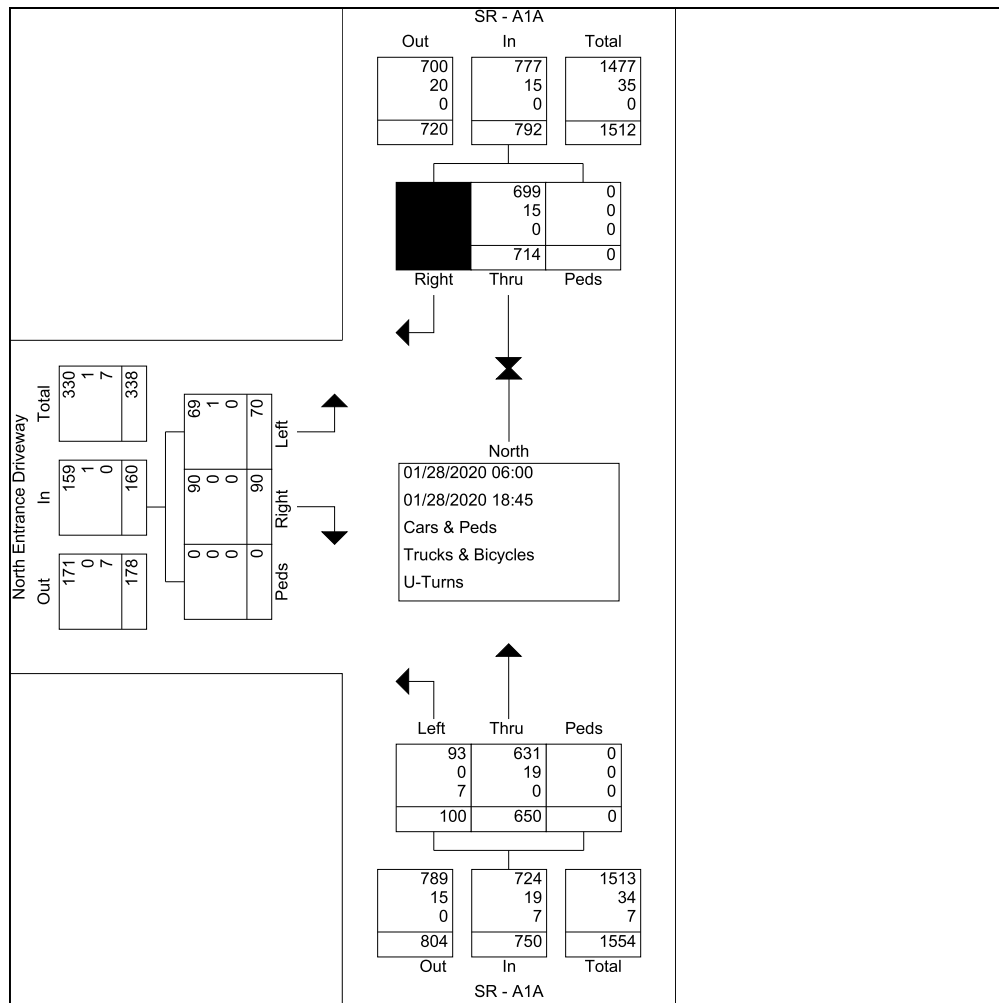
Start Time	SR - A1A Southbound					Westbound					SR - A1A Northbound					North Entrance Driveway Eastbound					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
*** BREAK ***																					
07:00 AM	4	20	0	0	24	0	0	0	0	0	0	5	6	0	11	0	0	0	0	0	35
07:15 AM	3	32	0	0	35	0	0	0	0	0	0	4	0	0	4	3	0	2	0	5	44
07:30 AM	4	23	0	0	27	0	0	0	0	0	0	11	5	0	16	5	0	0	0	5	48
07:45 AM	0	25	0	0	25	0	0	0	0	0	0	10	5	0	15	2	0	1	0	3	43
Total	11	100	0	0	111	0	0	0	0	0	0	30	16	0	46	10	0	3	0	13	170
08:00 AM	3	21	0	0	24	0	0	0	0	0	0	17	2	0	19	4	0	1	0	5	48
08:15 AM	1	35	0	0	36	0	0	0	0	0	0	16	3	0	19	2	0	1	0	3	58
08:30 AM	2	22	0	0	24	0	0	0	0	0	0	10	3	0	13	0	0	2	0	2	39
08:45 AM	2	26	0	0	28	0	0	0	0	0	0	14	9	0	23	4	0	2	0	6	57
Total	8	104	0	0	112	0	0	0	0	0	0	57	17	0	74	10	0	6	0	16	202
09:00 AM	2	16	0	0	18	0	0	0	0	0	0	16	3	0	19	2	0	2	0	4	41
09:15 AM	2	23	0	0	25	0	0	0	0	0	0	12	3	0	15	2	0	3	0	5	45
09:30 AM	3	23	0	0	26	0	0	0	0	0	0	21	1	0	22	1	0	4	0	5	53
09:45 AM	4	18	0	0	22	0	0	0	0	0	0	18	1	0	19	6	0	4	0	10	51
Total	11	80	0	0	91	0	0	0	0	0	0	67	8	0	75	11	0	13	0	24	190
10:00 AM	4	22	0	0	26	0	0	0	0	0	0	11	2	0	13	3	0	0	0	3	42
10:15 AM	1	17	0	0	18	0	0	0	0	0	0	16	2	0	18	3	0	4	0	7	43
10:30 AM	1	27	0	0	28	0	0	0	0	0	0	21	6	0	27	4	0	2	0	6	61
10:45 AM	1	33	1	0	35	0	0	0	0	0	0	14	1	0	15	2	0	0	0	2	52
Total	7	99	1	0	107	0	0	0	0	0	0	62	11	0	73	12	0	6	0	18	198
11:00 AM	2	23	0	0	25	0	0	0	0	0	0	15	1	0	16	1	0	3	0	4	45
11:15 AM	1	18	0	0	19	0	0	0	0	0	0	17	4	0	21	2	0	5	0	7	47
11:30 AM	2	12	0	0	14	0	0	0	0	0	0	26	4	0	30	6	0	3	0	9	53
11:45 AM	2	22	0	0	24	0	0	0	0	0	0	16	3	0	19	3	0	1	0	4	47
Total	7	75	0	0	82	0	0	0	0	0	0	74	12	0	86	12	0	12	0	24	192
12:00 PM	2	13	0	0	15	0	0	0	0	0	0	21	2	0	23	4	0	4	0	8	46
12:15 PM	0	14	0	0	14	0	0	0	0	0	0	24	2	0	26	2	0	1	0	3	43
12:30 PM	0	14	0	0	14	0	0	0	0	0	0	24	2	0	26	2	0	1	0	3	43
12:45 PM	0	20	0	0	20	0	0	0	0	0	0	8	3	0	11	3	0	0	0	3	34
Total	2	61	0	0	63	0	0	0	0	0	0	77	9	0	86	11	0	6	0	17	166
*** BREAK ***																					
03:00 PM	0	11	0	0	11	0	0	0	0	0	0	18	0	0	18	1	0	3	0	4	33
03:15 PM	3	14	0	0	17	0	0	0	0	0	0	11	4	0	15	2	0	2	0	4	36
03:30 PM	0	13	0	0	13	0	0	0	0	0	0	19	3	0	22	2	0	1	0	3	38
03:45 PM	1	21	0	0	22	0	0	0	0	0	0	21	3	0	24	2	0	2	0	4	50
Total	4	59	0	0	63	0	0	0	0	0	0	69	10	0	79	7	0	8	0	15	157
04:00 PM	0	6	0	0	6	0	0	0	0	0	0	18	3	0	21	1	0	3	0	4	31
04:15 PM	1	16	0	0	17	0	0	0	0	0	0	10	3	0	13	2	0	2	0	4	34
04:30 PM	2	17	0	0	19	0	0	0	0	0	0	19	2	0	21	0	0	0	0	0	40
04:45 PM	0	20	0	0	20	0	0	0	0	0	0	26	3	0	29	3	0	2	0	5	54
Total	3	59	0	0	62	0	0	0	0	0	0	73	11	0	84	6	0	7	0	13	159
05:00 PM	0	6	0	0	6	0	0	0	0	0	0	22	2	0	24	0	0	2	0	2	32
05:15 PM	1	10	0	0	11	0	0	0	0	0	0	24	0	0	24	2	0	1	0	3	38
05:30 PM	3	13	0	0	16	0	0	0	0	0	0	24	0	0	24	2	0	0	0	2	42
05:45 PM	0	7	0	0	7	0	0	0	0	0	0	20	0	0	20	2	0	0	0	2	29
Total	4	36	0	0	40	0	0	0	0	0	0	90	2	0	92	6	0	3	0	9	141

Trident Engineering, LLC  
 10232 NW 47th Street  
 Sunrise, FL 33351

File Name : N-ENT~1  
 Site Code : 00000000  
 Start Date : 01/28/2020  
 Page No : 2

Groups PrintedCars & Peds - Trucks & Bicycles - U-Turns

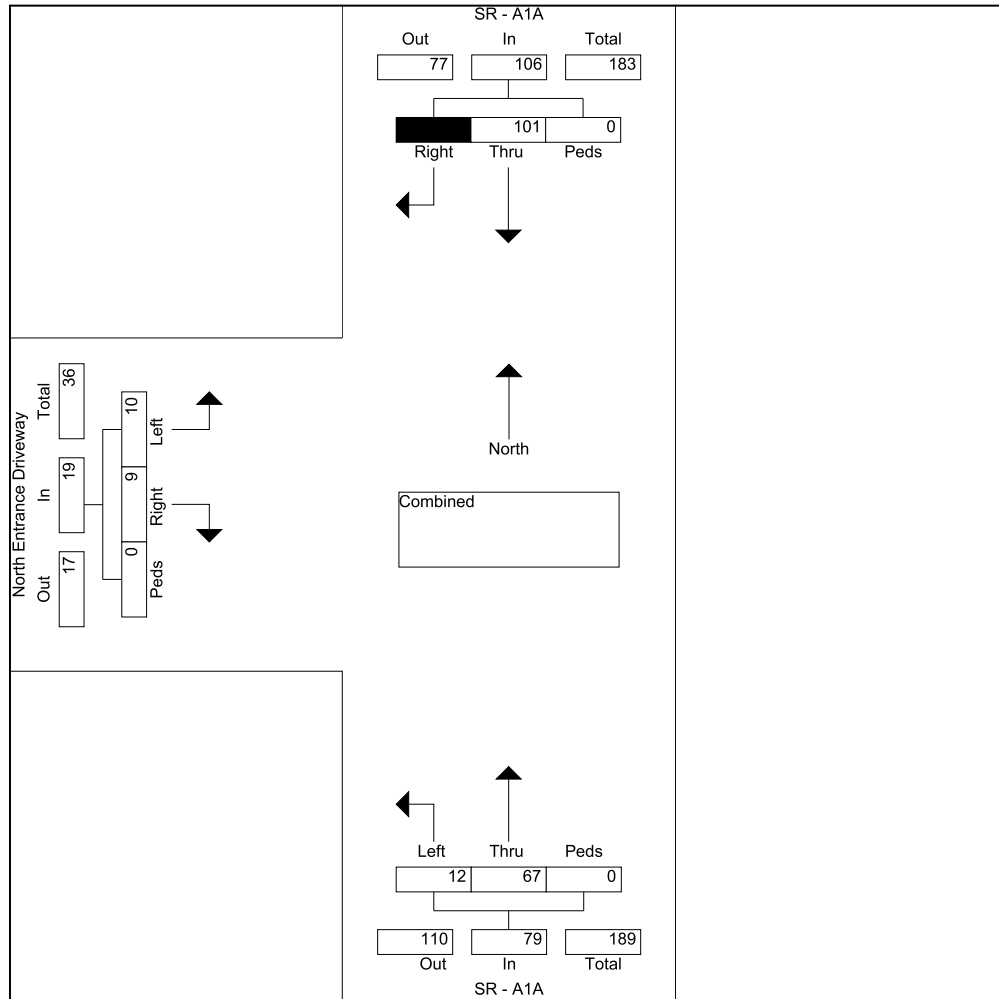
Start Time	SR - A1A Southbound					Westbound					SR - A1A Northbound					North Entrance Driveway Eastbound					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
06:00 PM	4	8	0	0	12	0	0	0	0	0	0	15	1	0	16	0	0	2	0	2	30
06:15 PM	7	10	0	0	17	0	0	0	0	0	0	9	0	0	9	1	0	0	0	1	27
06:30 PM	1	9	0	0	10	0	0	0	0	0	0	14	2	0	16	2	0	4	0	6	32
06:45 PM	9	14	0	0	23	0	0	0	0	0	0	13	1	0	14	2	0	0	0	2	39
Total	21	41	0	0	62	0	0	0	0	0	0	51	4	0	55	5	0	6	0	11	128
Grand Total	78	714	1	0	793	0	0	0	0	0	0	650	100	0	750	90	0	70	0	160	1703
Apprch %	9.8	90.0	0.1	0.0		0.0	0.0	0.0	0.0		0.0	86.7	13.3	0.0		56.3	0.0	43.8	0.0		
Total %	4.6	41.9	0.1	0.0	46.6	0.0	0.0	0.0	0.0	0.0	0.0	38.2	5.9	0.0	44.0	5.3	0.0	4.1	0.0	9.4	



Trident Engineering, LLC  
 10232 NW 47th Street  
 Sunrise, FL 33351

File Name : N-ENT~1  
 Site Code : 00000000  
 Start Date : 01/28/2020  
 Page No : 3

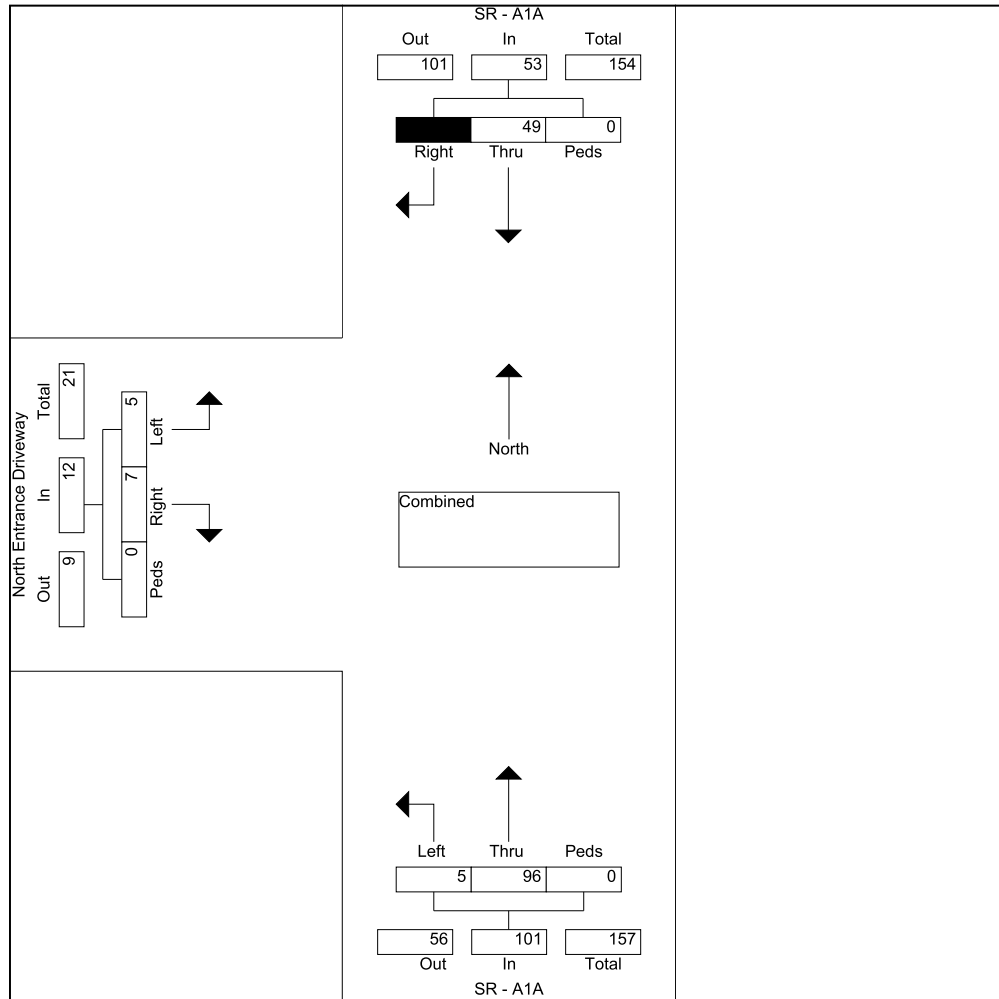
Start Time	SR - A1A Southbound					Westbound					SR - A1A Northbound					North Entrance Driveway Eastbound					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Peak Hour From 06:00 AM to 12:30 PM - Peak 1 of 1																					
Intersecti on	10:30 AM																				
Volume	5	101	1	0	107	0	0	0	0	0	0	67	12	0	79	9	0	10	0	19	205
Percent	4.7	94.4	0.9	0.0		0.0	0.0	0.0	0.0		0.0	84.8	15.2	0.0		47.4	0.0	52.6	0.0		
High Int. Volume	10:45 AM					5:45:00 AM					10:30 AM					11:15 AM					10:30
Peak Factor	1	27	0	0	28	0	0	0	0	0	0	21	6	0	27	4	0	2	0	6	0.84
					0.764										0.731					0.679	0



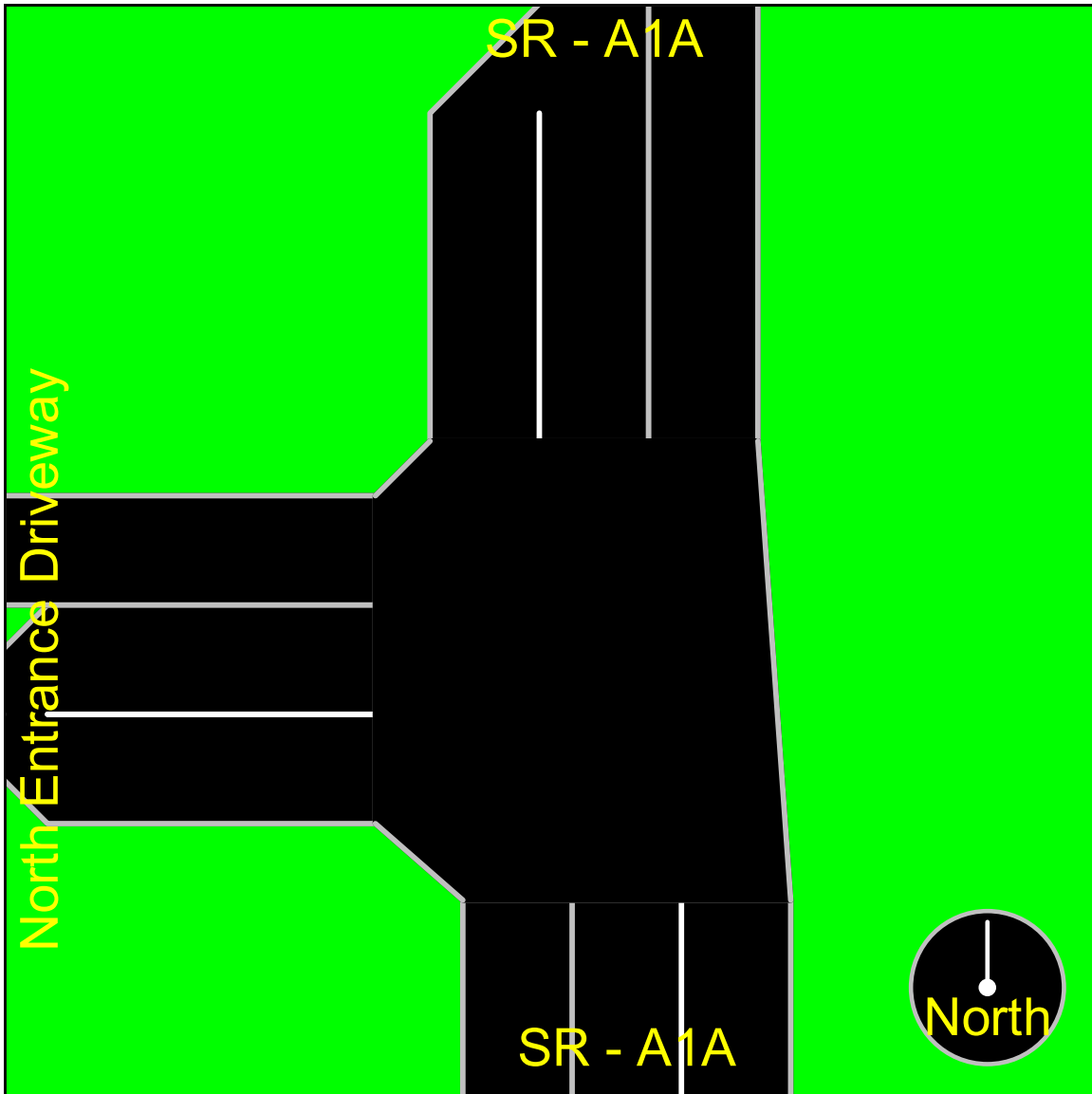
Trident Engineering, LLC  
 10232 NW 47th Street  
 Sunrise, FL 33351

File Name : N-ENT~1  
 Site Code : 00000000  
 Start Date : 01/28/2020  
 Page No : 4

Start Time	SR - A1A Southbound					Westbound					SR - A1A Northbound					North Entrance Driveway Eastbound					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Peak Hour From 12:45 PM to 06:45 PM - Peak 1 of 1																					
Intersecti on	04:45 PM																				
Volume	4	49	0	0	53	0	0	0	0	0	0	96	5	0	101	7	0	5	0	12	166
Percent	7.5	92.5	0.0	0.0		0.0	0.0	0.0	0.0		0.0	95.0	5.0	0.0		58.3	0.0	41.7	0.0		
High Int. Volume	04:45 PM																				
Peak	0	20	0	0	20	0	0	0	0	0	0	26	3	0	29	3	0	2	0	5	54
Factor	0.663										0.871					0.600					0.769







Trident Engineering, LLC  
10232 NW 47th Street  
Sunrise, FL 33351

Sebastian Inlet State Park  
Driveway Entrance/Exit

File Name : NORTHE~2  
Site Code : 00000000  
Start Date : 01/28/2020  
Page No : 1

Groups PrintedCars & Peds - Trucks & Bicycles - U-Turns

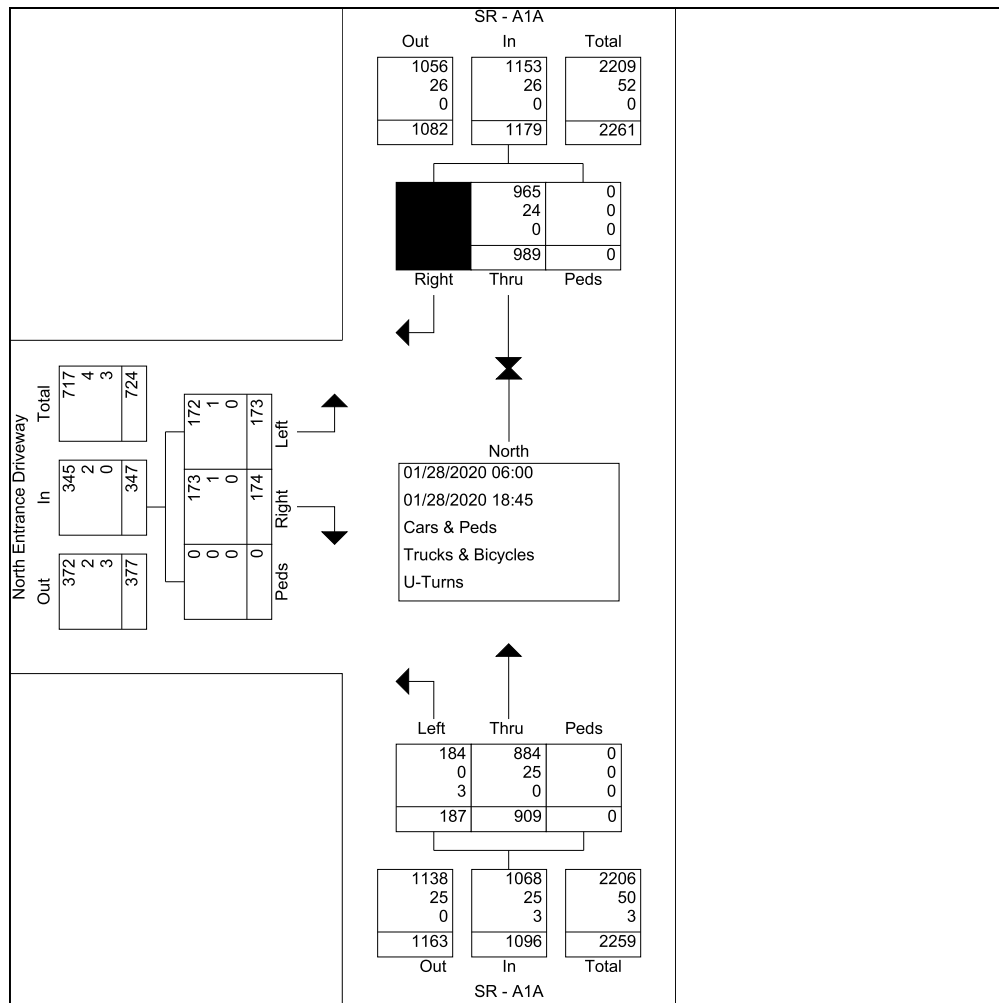
Start Time	SR - A1A Southbound					Westbound					SR - A1A Northbound					North Entrance Driveway Eastbound					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
*** BREAK ***																					
07:00 AM	1	24	0	0	25	0	0	0	0	0	0	7	2	0	9	0	0	4	0	4	38
07:15 AM	2	31	0	0	33	0	0	0	0	0	0	11	2	0	13	1	0	1	0	2	48
07:30 AM	1	21	0	0	22	0	0	0	0	0	0	13	5	0	18	1	0	0	0	1	41
07:45 AM	1	23	0	0	24	0	0	0	0	0	0	14	4	0	18	1	0	0	0	1	43
Total	5	99	0	0	104	0	0	0	0	0	0	45	13	0	58	3	0	5	0	8	170
08:00 AM	3	24	0	0	27	0	0	0	0	0	0	10	3	0	13	1	0	0	0	1	41
08:15 AM	2	23	0	0	25	0	0	0	0	0	0	19	4	0	23	2	0	1	0	3	51
08:30 AM	3	18	0	0	21	0	0	0	0	0	0	16	3	0	19	2	0	1	0	3	43
08:45 AM	4	25	0	0	29	0	0	0	0	0	0	24	5	0	29	3	0	3	0	6	64
Total	12	90	0	0	102	0	0	0	0	0	0	69	15	0	84	8	0	5	0	13	199
09:00 AM	4	28	0	0	32	0	0	0	0	0	0	19	6	0	25	2	0	2	0	4	61
09:15 AM	6	29	0	0	35	0	0	0	0	0	0	19	7	0	26	2	0	4	0	6	67
09:30 AM	5	28	0	0	33	0	0	0	0	0	0	16	2	0	18	4	0	2	0	6	57
09:45 AM	4	20	0	0	24	0	0	0	0	0	0	19	4	0	23	3	0	2	0	5	52
Total	19	105	0	0	124	0	0	0	0	0	0	73	19	0	92	11	0	10	0	21	237
10:00 AM	5	26	0	0	31	0	0	0	0	0	0	10	4	0	14	5	0	2	0	7	52
10:15 AM	8	26	0	0	34	0	0	0	0	0	0	13	6	0	19	4	0	0	0	4	57
10:30 AM	3	17	0	0	20	0	0	0	0	0	0	18	5	0	23	3	0	6	0	9	52
10:45 AM	5	17	0	0	22	0	0	0	0	0	0	17	3	0	20	2	0	2	0	4	46
Total	21	86	0	0	107	0	0	0	0	0	0	58	18	0	76	14	0	10	0	24	207
11:00 AM	4	34	1	0	39	0	0	0	0	0	0	30	11	0	41	3	0	1	0	4	84
11:15 AM	5	26	0	0	31	0	0	0	0	0	0	19	6	0	25	4	0	4	0	8	64
11:30 AM	2	27	0	0	29	0	0	0	0	0	0	21	6	0	27	3	0	1	0	4	60
11:45 AM	5	23	0	0	28	0	0	0	0	0	0	21	7	0	28	11	0	4	0	15	71
Total	16	110	1	0	127	0	0	0	0	0	0	91	30	0	121	21	0	10	0	31	279
12:00 PM	4	23	0	0	27	0	0	0	0	0	0	21	9	0	30	7	0	9	0	16	73
12:15 PM	7	23	0	0	30	0	0	0	0	0	0	29	7	0	36	6	0	3	0	9	75
12:30 PM	3	26	0	0	29	0	0	0	0	0	0	29	6	0	35	9	0	4	0	13	77
12:45 PM	6	27	0	0	33	0	0	0	0	0	0	27	3	0	30	4	0	3	0	7	70
Total	20	99	0	0	119	0	0	0	0	0	0	106	25	0	131	26	0	19	0	45	295
*** BREAK ***																					
03:00 PM	4	21	0	0	25	0	0	0	0	0	0	21	4	0	25	3	0	6	0	9	59
03:15 PM	12	41	0	0	53	0	0	0	0	0	0	23	6	0	29	8	0	3	0	11	93
03:30 PM	9	38	0	0	47	0	0	0	0	0	0	35	7	0	42	5	0	9	0	14	103
03:45 PM	5	25	0	0	30	0	0	0	0	0	0	46	3	0	49	5	0	6	0	11	90
Total	30	125	0	0	155	0	0	0	0	0	0	125	20	0	145	21	0	24	0	45	345
04:00 PM	7	28	0	0	35	0	0	0	0	0	0	33	10	0	43	8	0	8	0	16	94
04:15 PM	7	21	0	0	28	0	0	0	0	0	0	31	4	0	35	1	0	3	0	4	67
04:30 PM	3	32	0	0	35	0	0	0	0	0	0	35	6	0	41	8	0	7	0	15	91
04:45 PM	3	32	0	0	35	0	0	0	0	0	0	34	2	0	36	6	0	5	0	11	82
Total	20	113	0	0	133	0	0	0	0	0	0	133	22	0	155	23	0	23	0	46	334
05:00 PM	2	27	0	0	29	0	0	0	0	0	0	49	3	0	52	6	0	13	0	19	100
05:15 PM	9	27	0	0	36	0	0	0	0	0	0	32	4	0	36	5	0	10	0	15	87
05:30 PM	3	22	0	0	25	0	0	0	0	0	0	30	2	0	32	8	0	22	0	30	87
05:45 PM	7	30	0	0	37	0	0	0	0	0	0	31	3	0	34	15	1	12	0	28	99
Total	21	106	0	0	127	0	0	0	0	0	0	142	12	0	154	34	1	57	0	92	373

Trident Engineering, LLC  
 10232 NW 47th Street  
 Sunrise, FL 33351

File Name : NORTHE~2  
 Site Code : 00000000  
 Start Date : 01/28/2020  
 Page No : 2

Groups PrintedCars & Peds - Trucks & Bicycles - U-Turns

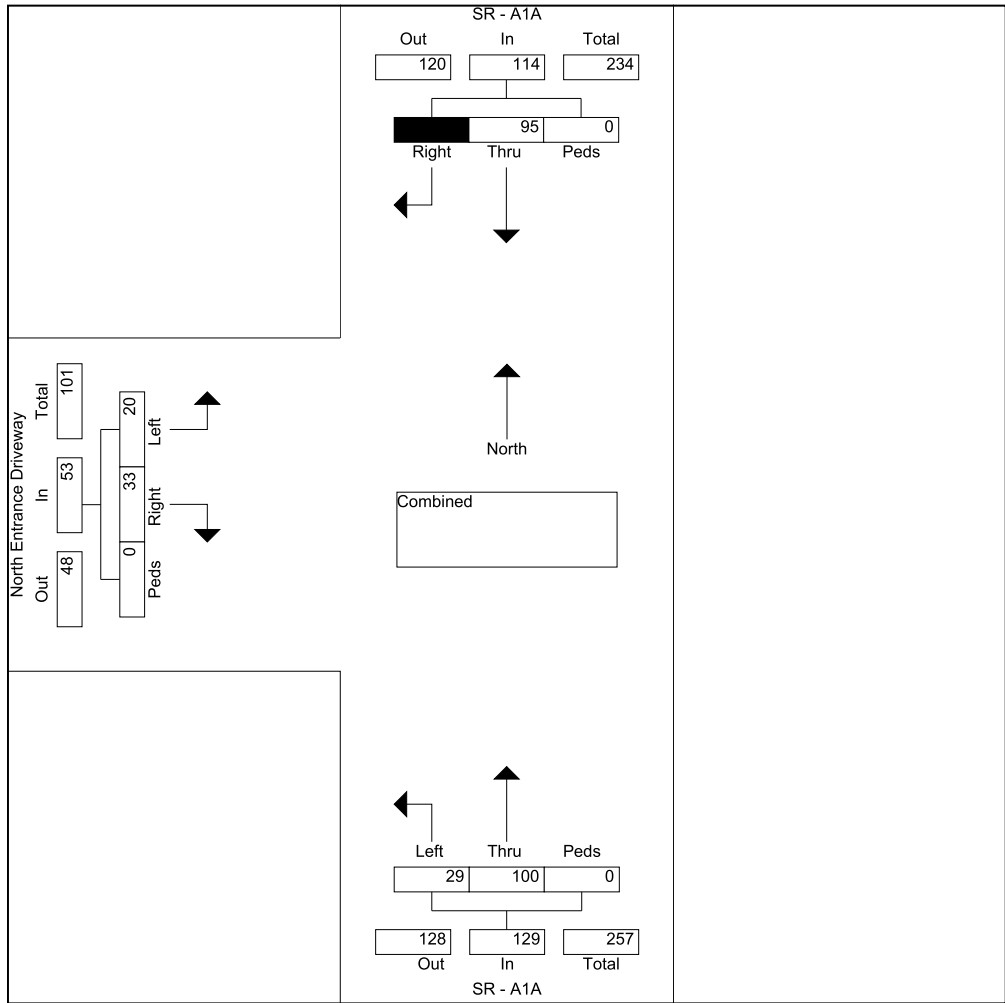
Start Time	SR - A1A Southbound					Westbound					SR - A1A Northbound					North Entrance Driveway Eastbound					Int. Total
	Rig ht	Thru	Left	Ped s	App. Total	Rig ht	Thru	Left	Ped s	App. Total	Rig ht	Thru	Left	Ped s	App. Total	Rig ht	Thru	Left	Ped s	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
06:00 PM	6	25	0	0	31	0	0	0	0	0	0	16	5	0	21	3	1	4	0	8	60
06:15 PM	8	10	0	0	18	0	0	0	0	0	0	23	2	0	25	3	0	2	0	5	48
06:30 PM	6	13	0	0	19	0	0	0	0	0	0	16	4	0	20	4	0	2	0	6	45
06:45 PM	6	8	0	0	14	0	0	0	0	0	0	12	2	0	14	3	0	2	0	5	33
Total	26	56	0	0	82	0	0	0	0	0	0	67	13	0	80	13	1	10	0	24	186
Grand Total	190	989	1	0	1180	0	0	0	0	0	0	909	187	0	1096	174	2	173	0	349	2625
Apprch %	16.1	83.8	0.1	0.0		0.0	0.0	0.0	0.0		0.0	82.9	17.1	0.0		49.9	0.6	49.6	0.0		
Total %	7.2	37.7	0.0	0.0	45.0	0.0	0.0	0.0	0.0	0.0	0.0	34.6	7.1	0.0	41.8	6.6	0.1	6.6	0.0	13.3	



Trident Engineering, LLC  
 10232 NW 47th Street  
 Sunrise, FL 33351

File Name : NORTHE~2  
 Site Code : 00000000  
 Start Date : 01/28/2020  
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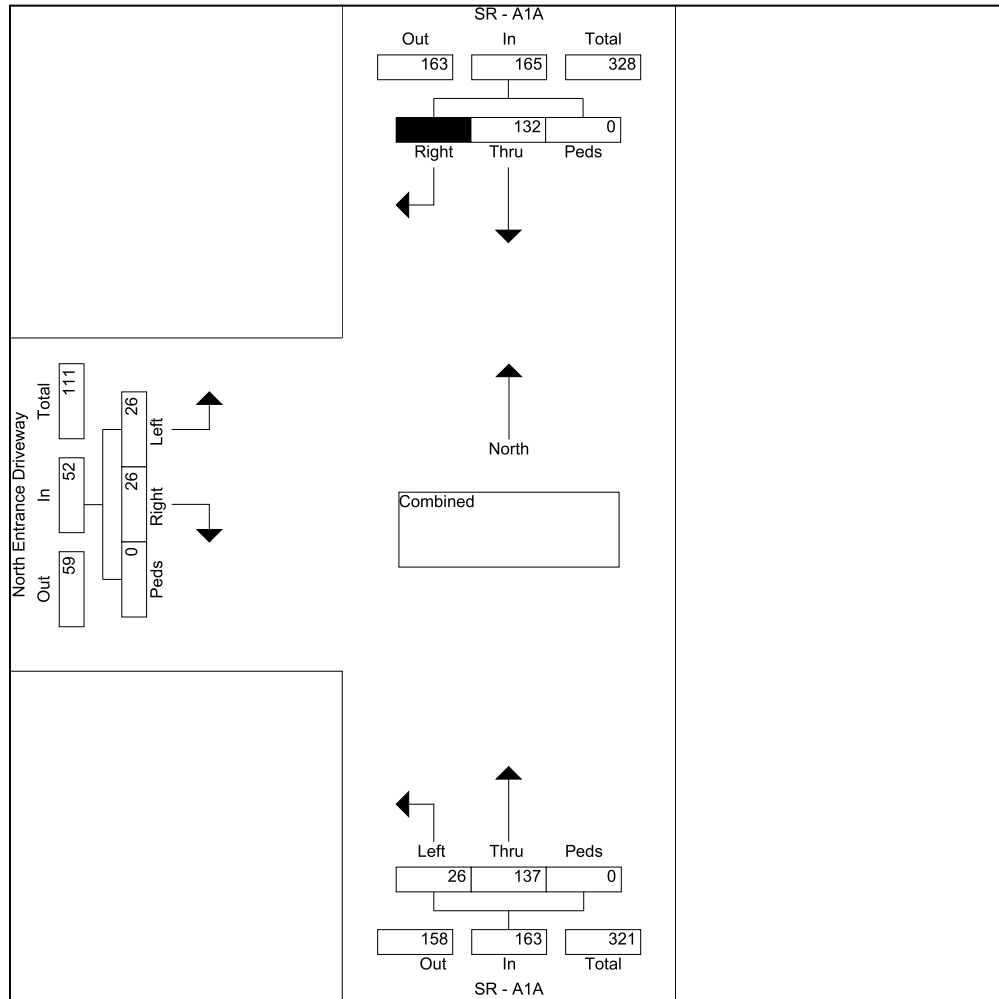
Start Time	SR - A1A Southbound					Westbound					SR - A1A Northbound					North Entrance Driveway Eastbound					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Peak Hour From 06:00 AM to 12:30 PM - Peak 1 of 1																					
Intersecti on	11:45 AM																				
Volume	19	95	0	0	114	0	0	0	0	0	0	100	29	0	129	33	0	20	0	53	296
Percent	16.7	83.3	0.0	0.0		0.0	0.0	0.0	0.0		0.0	77.5	22.5	0.0		62.3	0.0	37.7	0.0		
High Int. Peak Factor	12:15 PM					5:45:00 AM					12:15 PM					12:00 PM					12:30
	3	26	0	0	29	0	0	0	0	0	0	29	6	0	35	9	0	4	0	13	77
	0.95										0.89					0.82					0.96
	0										6					8					1

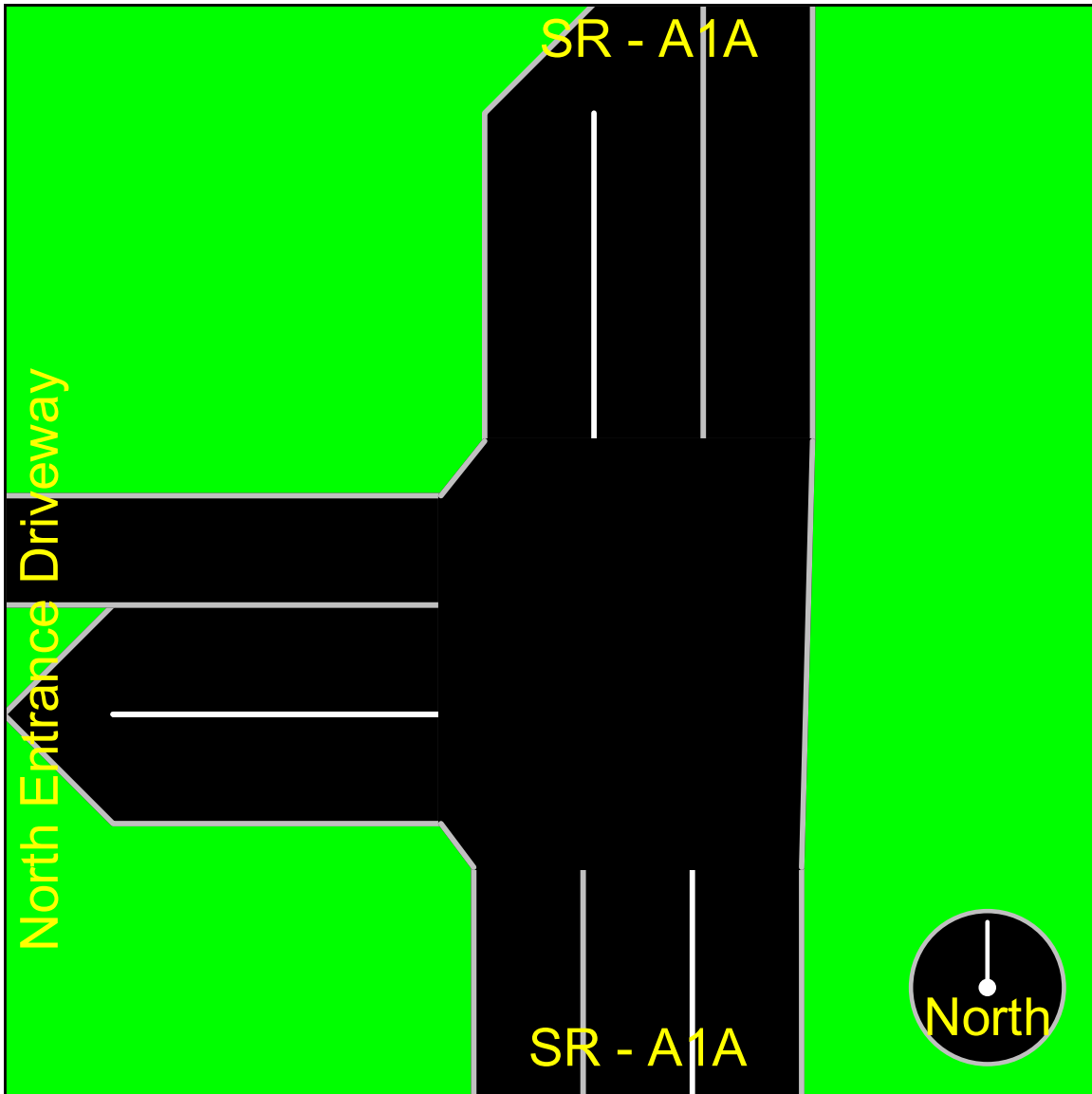


Trident Engineering, LLC  
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File Name : NORTHE~2  
Site Code : 00000000  
Start Date : 01/28/2020  
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Start Time	SR - A1A Southbound					Westbound					SR - A1A Northbound					North Entrance Driveway Eastbound					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Peak Hour From 12:45 PM to 06:45 PM - Peak 1 of 1																					
Intersecti on	03:15 PM																				
Volume	33	132	0	0	165	0	0	0	0	0	0	137	26	0	163	26	0	26	0	52	380
Percent	20.0	80.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	84.0	16.0	0.0		50.0	0.0	50.0	0.0		
High Int. Volume	03:15 PM										03:45 PM					04:00 PM					03:30
Peak Factor	9	38	0	0	47	0	0	0	0	0	0	35	7	0	42	5	0	9	0	14	103
	0.778										0.832					0.813					0.922





Trident Engineering, LLC  
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Sunrise, FL 33351

Sebastian Inlet State Park  
Driveway Entrance/Exit

File Name : NORTHE~3  
Site Code : 00000000  
Start Date : 01/28/2020  
Page No : 1

Groups PrintedCars & Peds - Trucks & Bicycles - U-Turns

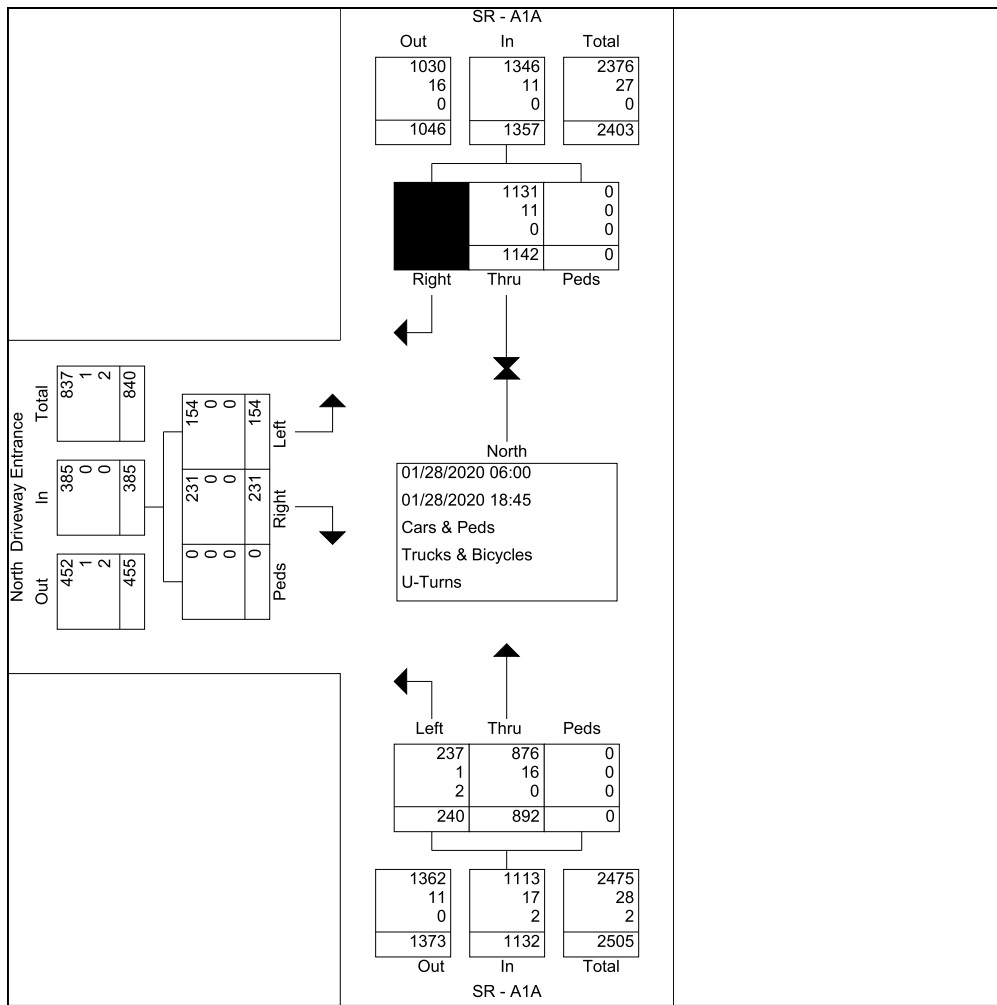
Start Time	SR - A1A Southbound					Westbound					SR - A1A Northbound					North Driveway Entrance Eastbound					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
*** BREAK ***																					
07:00 AM	5	17	0	0	22	0	0	0	0	0	0	13	7	0	20	2	0	0	0	2	44
07:15 AM	3	14	0	0	17	0	0	0	0	0	0	13	4	0	17	0	0	4	0	4	38
07:30 AM	6	14	0	0	20	0	0	0	0	0	0	10	2	0	12	3	0	1	0	4	36
07:45 AM	2	33	0	0	35	0	0	0	0	0	0	14	2	0	16	3	0	3	0	6	57
Total	16	78	0	0	94	0	0	0	0	0	0	50	15	0	65	8	0	8	0	16	175
08:00 AM	9	18	0	0	27	0	0	0	0	0	0	6	1	0	7	0	0	4	0	4	38
08:15 AM	3	27	0	0	30	0	0	0	0	0	0	13	10	0	23	11	0	3	0	14	67
08:30 AM	5	33	0	0	38	0	0	0	0	0	0	10	2	0	12	2	0	2	0	4	54
08:45 AM	3	28	0	0	31	0	0	0	0	0	0	17	3	0	20	3	0	2	0	5	56
Total	20	106	0	0	126	0	0	0	0	0	0	46	16	0	62	16	0	11	0	27	215
09:00 AM	1	32	0	0	33	0	0	0	0	0	0	17	7	0	24	1	0	3	0	4	61
09:15 AM	3	17	0	0	20	0	0	0	0	0	0	17	4	0	21	2	0	1	0	3	44
09:30 AM	1	21	0	0	22	0	0	0	0	0	0	19	2	0	21	3	0	3	0	6	49
09:45 AM	3	22	0	0	25	0	0	0	0	0	0	20	6	0	26	7	0	2	0	9	60
Total	8	92	0	0	100	0	0	0	0	0	0	73	19	0	92	13	0	9	0	22	214
10:00 AM	2	19	0	0	21	0	0	0	0	0	0	12	9	0	21	5	0	6	0	11	53
10:15 AM	4	20	0	0	24	0	0	0	0	0	0	17	2	0	19	2	0	3	0	5	48
10:30 AM	5	14	0	0	19	0	0	0	0	0	0	23	4	0	27	6	0	1	0	7	53
10:45 AM	4	27	0	0	31	0	0	0	0	0	0	27	2	0	29	2	0	1	0	3	63
Total	15	80	0	0	95	0	0	0	0	0	0	79	17	0	96	15	0	11	0	26	217
11:00 AM	4	25	0	0	29	0	0	0	0	0	0	24	8	0	32	0	0	3	0	3	64
11:15 AM	4	27	0	0	31	0	0	0	0	0	0	27	6	0	33	2	0	6	0	8	72
11:30 AM	6	34	0	0	40	0	0	0	0	0	0	25	5	0	30	3	0	6	0	9	79
11:45 AM	8	28	0	0	36	0	0	0	0	0	0	25	9	0	34	6	0	2	0	8	78
Total	22	114	0	0	136	0	0	0	0	0	0	101	28	0	129	11	0	17	0	28	293
12:00 PM	8	28	0	0	36	0	0	0	0	0	0	29	6	0	35	7	0	2	0	9	80
12:15 PM	5	18	0	0	23	0	0	0	0	0	0	20	4	0	24	1	1	3	0	5	52
12:30 PM	8	30	0	0	38	0	0	0	0	0	0	24	6	0	30	5	0	1	0	6	74
12:45 PM	7	42	0	0	49	0	0	0	0	0	0	36	8	0	44	6	0	1	0	7	100
Total	28	118	0	0	146	0	0	0	0	0	0	109	24	0	133	19	1	7	0	27	306
*** BREAK ***																					
03:00 PM	5	32	0	0	37	0	0	0	0	0	0	40	8	0	48	8	0	7	0	15	100
03:15 PM	8	40	0	0	48	0	0	0	0	0	0	34	9	0	43	10	0	10	0	20	111
03:30 PM	7	37	0	0	44	0	0	0	0	0	0	26	6	0	32	8	0	4	0	12	88
03:45 PM	8	25	0	0	33	0	0	0	0	0	0	35	7	0	42	16	0	1	0	17	92
Total	28	134	0	0	162	0	0	0	0	0	0	135	30	0	165	42	0	22	0	64	391
04:00 PM	6	33	0	0	39	0	0	0	0	0	0	27	6	0	33	8	0	7	0	15	87
04:15 PM	2	31	0	0	33	0	0	0	0	0	0	26	13	0	39	11	0	7	0	18	90
04:30 PM	3	41	0	0	44	0	0	0	0	0	0	27	5	0	32	8	0	3	0	11	87
04:45 PM	9	44	0	0	53	0	0	0	0	0	0	38	9	0	47	7	0	5	0	12	112
Total	20	149	0	0	169	0	0	0	0	0	0	118	33	0	151	34	0	22	0	56	376
05:00 PM	2	33	0	0	35	0	0	0	0	0	0	36	7	0	43	6	0	5	0	11	89
05:15 PM	6	59	0	0	65	0	0	0	0	0	0	17	12	0	29	8	0	6	0	14	108
05:30 PM	14	28	0	0	42	0	0	0	0	0	0	39	7	0	46	16	0	10	0	26	114
05:45 PM	8	45	0	0	53	0	0	0	0	0	0	28	8	0	36	8	1	5	0	14	103
Total	30	165	0	0	195	0	0	0	0	0	0	120	34	0	154	38	1	26	0	65	414

Trident Engineering, LLC  
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Sunrise, FL 33351

File Name : NORTHE~3  
Site Code : 00000000  
Start Date : 01/28/2020  
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Groups PrintedCars & Peds - Trucks & Bicycles - U-Turns

Start Time	SR - A1A Southbound					Westbound					SR - A1A Northbound					North Driveway Entrance Eastbound					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
06:00 PM	9	36	0	0	45	0	0	0	0	0	0	18	8	0	26	12	0	2	0	14	85
06:15 PM	4	22	0	0	26	0	0	0	0	0	0	13	9	0	22	10	1	6	0	17	65
06:30 PM	7	26	0	0	33	0	0	0	0	0	1	17	4	0	22	10	0	9	0	19	74
06:45 PM	8	22	0	0	30	0	0	0	0	0	0	13	3	0	16	3	0	4	0	7	53
<b>Total</b>	<b>28</b>	<b>106</b>	<b>0</b>	<b>0</b>	<b>134</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>61</b>	<b>24</b>	<b>0</b>	<b>86</b>	<b>35</b>	<b>1</b>	<b>21</b>	<b>0</b>	<b>57</b>	<b>277</b>
<b>Grand Total</b>	<b>215</b>	<b>1142</b>	<b>0</b>	<b>0</b>	<b>1357</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>892</b>	<b>240</b>	<b>0</b>	<b>1133</b>	<b>231</b>	<b>3</b>	<b>154</b>	<b>0</b>	<b>388</b>	<b>2878</b>
<b>Apprch %</b>	<b>15.8</b>	<b>84.2</b>	<b>0.0</b>	<b>0.0</b>		<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>	<b>78.7</b>	<b>21.2</b>	<b>0.0</b>		<b>59.5</b>	<b>0.8</b>	<b>39.7</b>	<b>0.0</b>		
<b>Total %</b>	<b>7.5</b>	<b>39.7</b>	<b>0.0</b>	<b>0.0</b>	<b>47.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>31.0</b>	<b>8.3</b>	<b>0.0</b>	<b>39.4</b>	<b>8.0</b>	<b>0.1</b>	<b>5.4</b>	<b>0.0</b>	<b>13.5</b>	

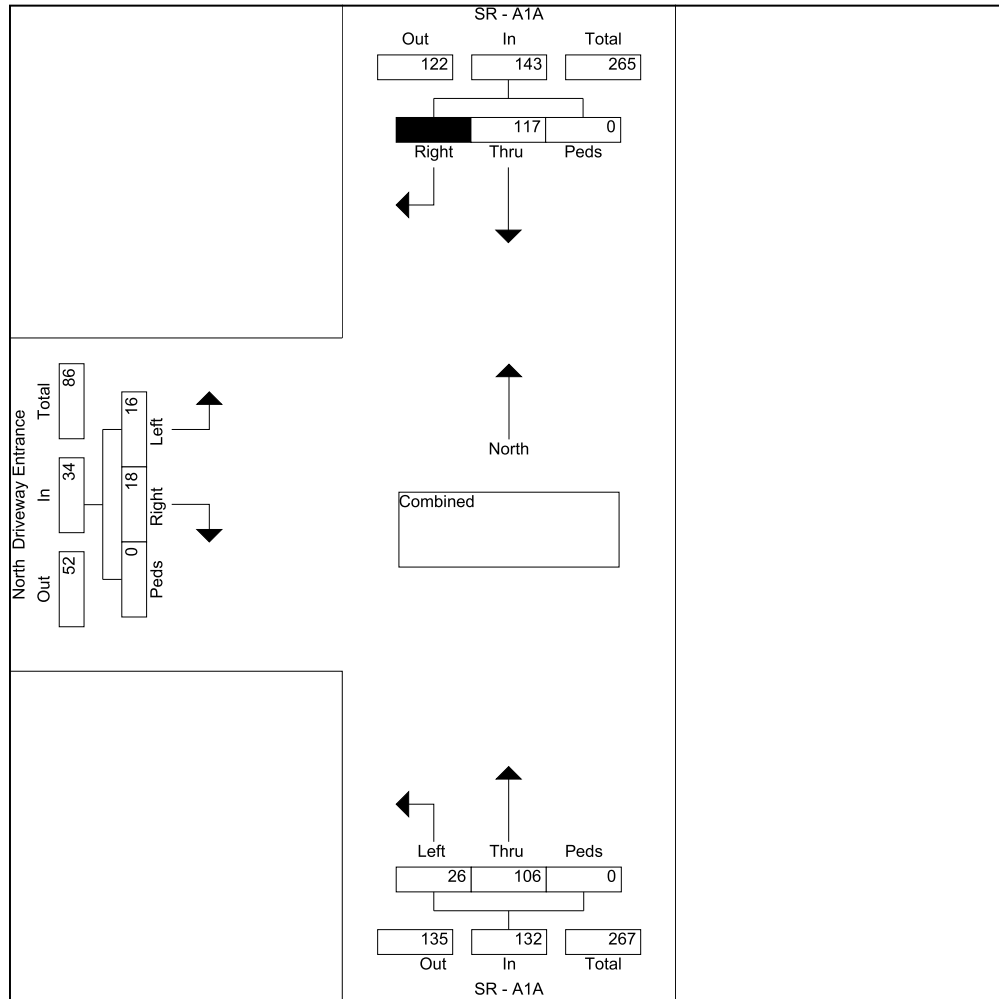




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 Sunrise, FL 33351

File Name : NORTHE~3  
 Site Code : 00000000  
 Start Date : 01/28/2020  
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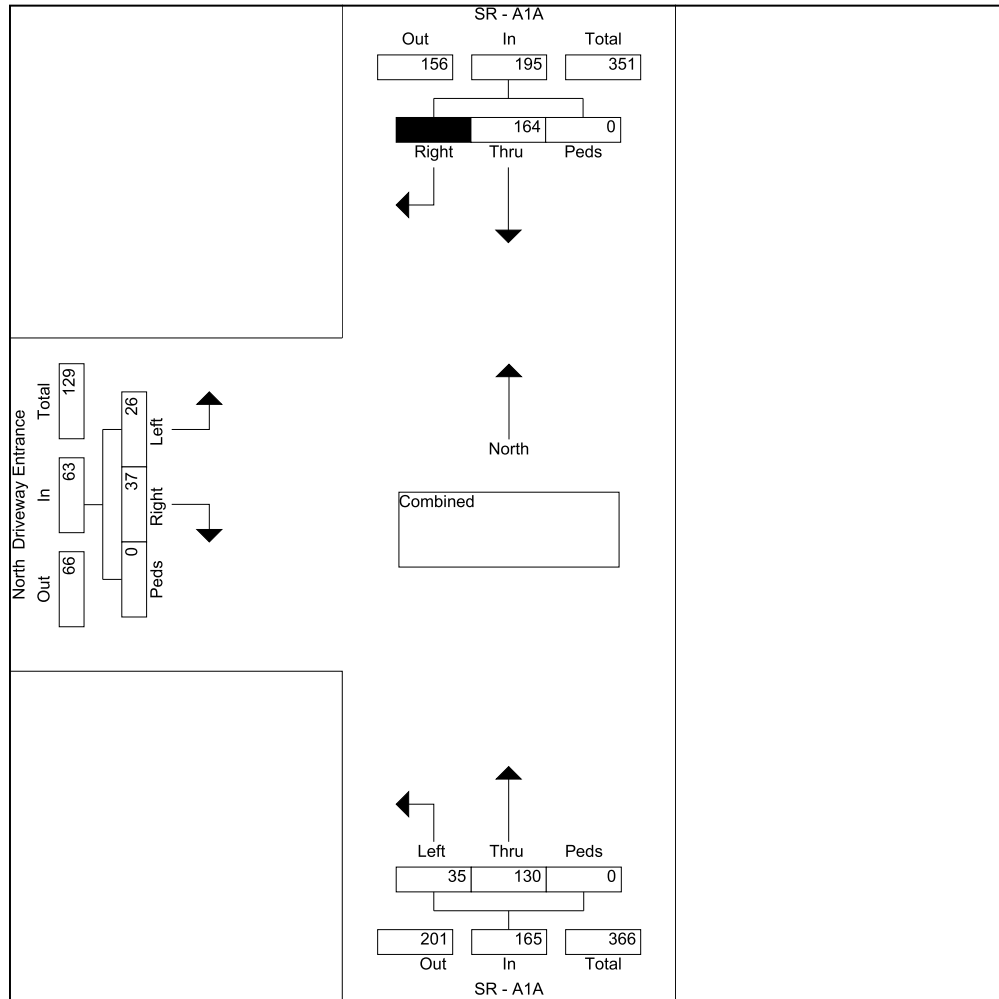
Start Time	SR - A1A Southbound					Westbound					SR - A1A Northbound					North Driveway Entrance Eastbound					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Peak Hour From 06:00 AM to 12:30 PM - Peak 1 of 1																					
Intersecti on	11:15 AM																				
Volume	26	117	0	0	143	0	0	0	0	0	0	106	26	0	132	18	0	16	0	34	309
Percent	18.2	81.8	0.0	0.0		0.0	0.0	0.0	0.0		0.0	80.3	19.7	0.0		52.9	0.0	47.1	0.0		
High Int. Volume	11:30 AM					5:45:00 AM					12:00 PM					11:30 AM					12:00
Peak Factor	8	28	0	0	36	0	0	0	0	0	0	29	6	0	35	7	0	2	0	9	80
					0.89										0.94					0.94	0.96
					4										3					4	6

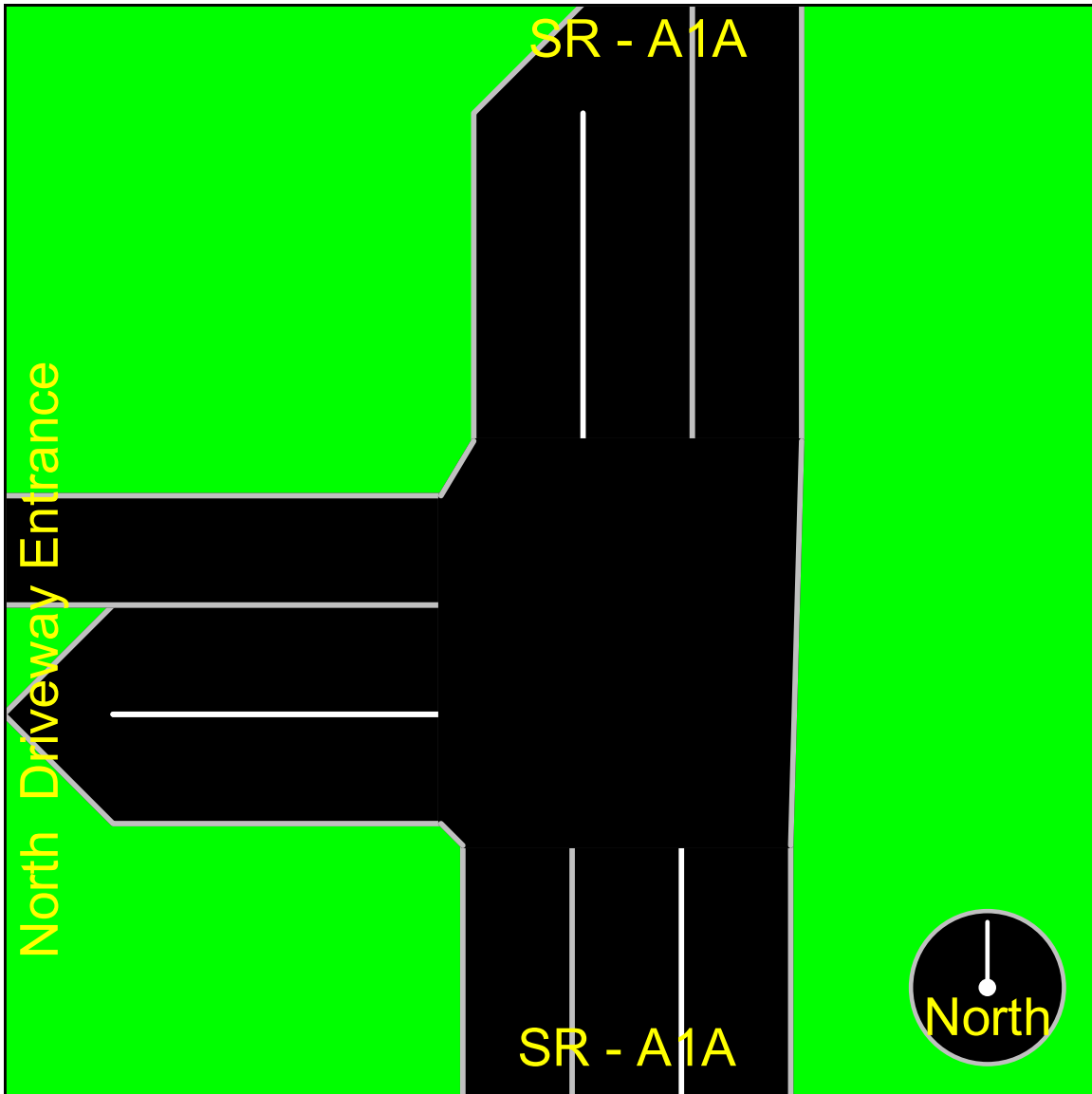


Trident Engineering, LLC  
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 Sunrise, FL 33351

File Name : NORTHE~3  
 Site Code : 00000000  
 Start Date : 01/28/2020  
 Page No : 4

Start Time	SR - A1A Southbound					Westbound					SR - A1A Northbound					North Driveway Entrance Eastbound					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Peak Hour From 12:45 PM to 06:45 PM - Peak 1 of 1																					
Intersecti on	04:45 PM																				
Volume	31	164	0	0	195	0	0	0	0	0	0	130	35	0	165	37	0	26	0	63	423
Percent	15.9	84.1	0.0	0.0		0.0	0.0	0.0	0.0		0.0	78.8	21.2	0.0		58.7	0.0	41.3	0.0		
High Int. Volume	05:15 PM										04:45 PM					05:30 PM					05:30
Peak Factor	14	28	0	0	42	0	0	0	0	0	0	39	7	0	46	16	0	10	0	26	114
					0.75										0.87					0.60	0.92
					0										8					6	8





Trident Engineering, LLC  
10232 NW 47th Street  
Sunrise, FL 33351

Sebastian Inlet State Park  
Driveway Entrance/Exit

File Name : NORTHE~4  
Site Code : 00000000  
Start Date : 01/28/2020  
Page No : 1

Groups PrintedCars & Peds - Trucks & Bicycles - U-Turns

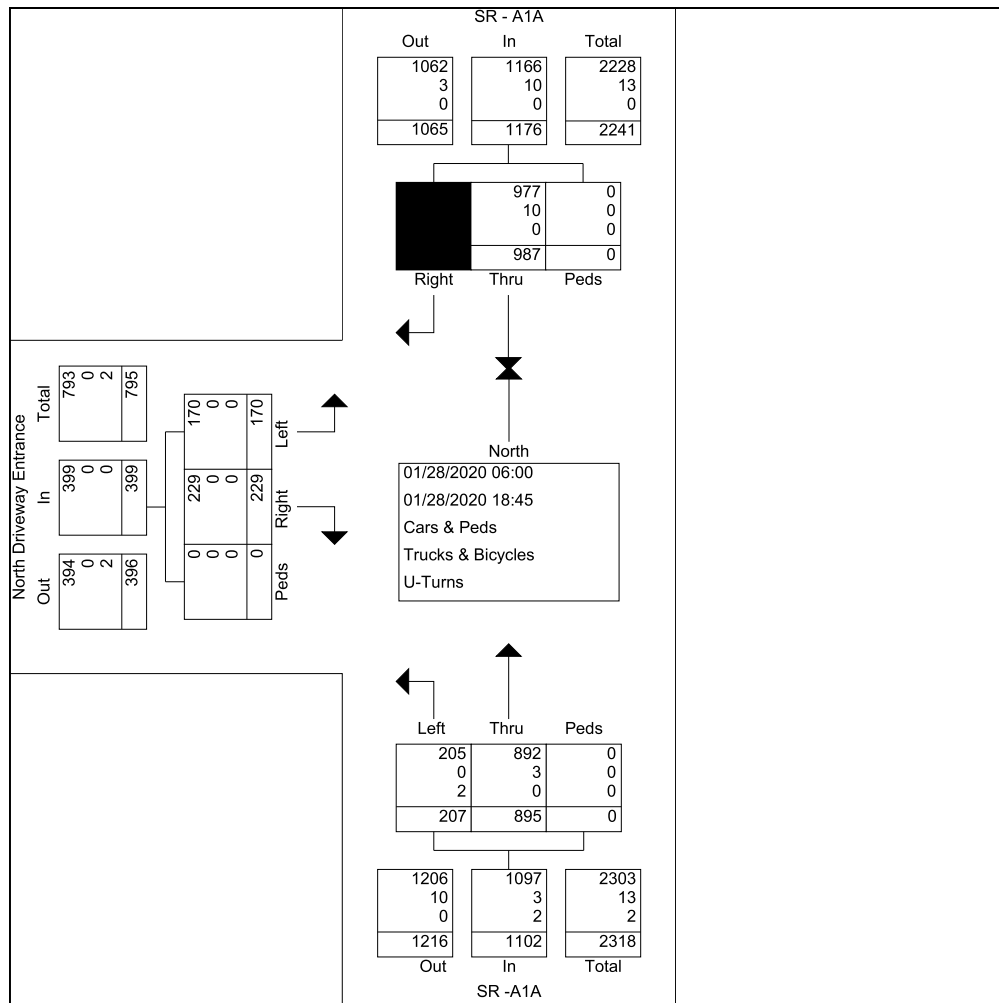
Start Time	SR - A1A Southbound					Westbound					SR -A1A Northbound					North Driveway Entrance Eastbound					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
*** BREAK ***																					
07:00 AM	10	7	0	0	17	0	0	0	0	0	0	5	4	0	9	1	0	1	0	2	28
07:15 AM	2	17	0	0	19	0	0	0	0	0	0	6	4	0	10	3	0	0	0	3	32
07:30 AM	2	15	0	0	17	0	0	0	0	0	0	4	6	0	10	5	0	0	0	5	32
07:45 AM	6	10	0	0	16	0	0	0	0	0	0	11	0	0	11	1	0	2	0	3	30
Total	20	49	0	0	69	0	0	0	0	0	0	26	14	0	40	10	0	3	0	13	122
08:00 AM	5	15	0	0	20	0	0	0	0	0	0	8	4	0	12	4	0	3	0	7	39
08:15 AM	4	13	0	0	17	0	0	0	0	0	0	16	8	0	24	0	0	0	0	0	41
08:30 AM	4	12	0	0	16	0	0	0	0	0	0	13	4	0	17	4	0	3	0	7	40
08:45 AM	5	19	0	0	24	0	0	0	0	0	0	12	3	0	15	1	0	1	0	2	41
Total	18	59	0	0	77	0	0	0	0	0	0	49	19	0	68	9	0	7	0	16	161
09:00 AM	5	23	1	0	29	0	0	0	0	0	0	13	3	0	16	2	0	3	0	5	50
09:15 AM	4	29	0	0	33	0	0	0	0	0	0	17	1	0	18	4	0	2	0	6	57
09:30 AM	4	33	0	0	37	0	0	0	0	0	0	27	2	0	29	6	0	8	0	14	80
09:45 AM	5	35	0	0	40	0	0	0	0	0	0	16	3	0	19	1	0	5	0	6	65
Total	18	120	1	0	139	0	0	0	0	0	0	73	9	0	82	13	0	18	0	31	252
10:00 AM	7	31	0	0	38	0	0	0	0	0	0	34	2	0	36	5	0	2	0	7	81
10:15 AM	6	25	0	0	31	0	0	0	0	0	0	18	8	0	26	2	0	2	0	4	61
10:30 AM	7	33	0	0	40	0	0	0	0	0	0	30	12	0	42	6	0	3	0	9	91
10:45 AM	6	22	0	0	28	0	0	0	0	0	0	22	4	0	26	5	0	3	0	8	62
Total	26	111	0	0	137	0	0	0	0	0	0	104	26	0	130	18	0	10	0	28	295
11:00 AM	9	22	0	0	31	0	0	0	0	0	0	26	3	0	29	5	0	3	0	8	68
11:15 AM	6	38	0	0	44	0	0	0	0	0	0	18	8	0	26	4	0	2	0	6	76
11:30 AM	5	32	0	0	37	0	0	0	0	0	0	26	9	0	35	5	0	3	0	8	80
11:45 AM	7	41	0	0	48	0	0	0	0	0	0	36	8	0	44	6	0	2	0	8	100
Total	27	133	0	0	160	0	0	0	0	0	0	106	28	0	134	20	0	10	0	30	324
12:00 PM	11	50	0	0	61	0	0	0	0	0	0	35	13	0	48	13	0	4	0	17	126
12:15 PM	2	33	0	0	35	0	0	0	0	0	0	25	15	0	40	9	0	6	0	15	90
12:30 PM	5	30	0	0	35	0	0	0	0	0	0	44	14	0	58	7	0	5	0	12	105
12:45 PM	11	22	0	0	33	0	0	0	0	0	0	28	6	0	34	7	0	7	0	14	81
Total	29	135	0	0	164	0	0	0	0	0	0	132	48	0	180	36	0	22	0	58	402
*** BREAK ***																					
03:00 PM	2	35	0	0	37	0	0	0	0	0	0	33	4	0	37	5	0	7	0	12	86
03:15 PM	5	29	0	0	34	0	0	0	0	0	0	39	7	0	46	8	0	13	0	21	101
03:30 PM	6	42	0	0	48	0	0	0	0	0	0	38	8	0	46	14	0	11	0	25	119
03:45 PM	3	27	0	0	30	0	0	0	0	0	0	36	6	0	42	10	0	2	0	12	84
Total	16	133	0	0	149	0	0	0	0	0	0	146	25	0	171	37	0	33	0	70	390
04:00 PM	9	32	0	0	41	0	0	0	0	0	0	29	7	0	36	13	0	5	0	18	95
04:15 PM	5	36	0	0	41	0	0	0	0	0	0	24	6	0	30	12	0	10	0	22	93
04:30 PM	6	31	0	0	37	0	0	0	0	0	0	28	9	0	37	11	0	3	0	14	88
04:45 PM	0	16	0	0	16	0	0	0	0	0	0	27	5	0	32	7	0	7	0	14	62
Total	20	115	0	0	135	0	0	0	0	0	0	108	27	0	135	43	0	25	0	68	338
05:00 PM	3	24	0	0	27	0	0	0	0	0	0	25	1	0	26	1	0	4	0	5	58
05:15 PM	1	23	0	0	24	0	0	0	0	0	0	25	3	0	28	9	0	6	0	15	67
05:30 PM	2	23	0	0	25	0	0	0	0	0	0	14	1	0	15	6	0	8	0	14	54
05:45 PM	2	13	0	0	15	0	0	0	0	0	0	23	3	0	26	8	0	5	0	13	54
Total	8	83	0	0	91	0	0	0	0	0	0	87	8	0	95	24	0	23	0	47	233

Trident Engineering, LLC  
 10232 NW 47th Street  
 Sunrise, FL 33351

File Name : NORTHE~4  
 Site Code : 00000000  
 Start Date : 01/28/2020  
 Page No : 2

Groups PrintedCars & Peds - Trucks & Bicycles - U-Turns

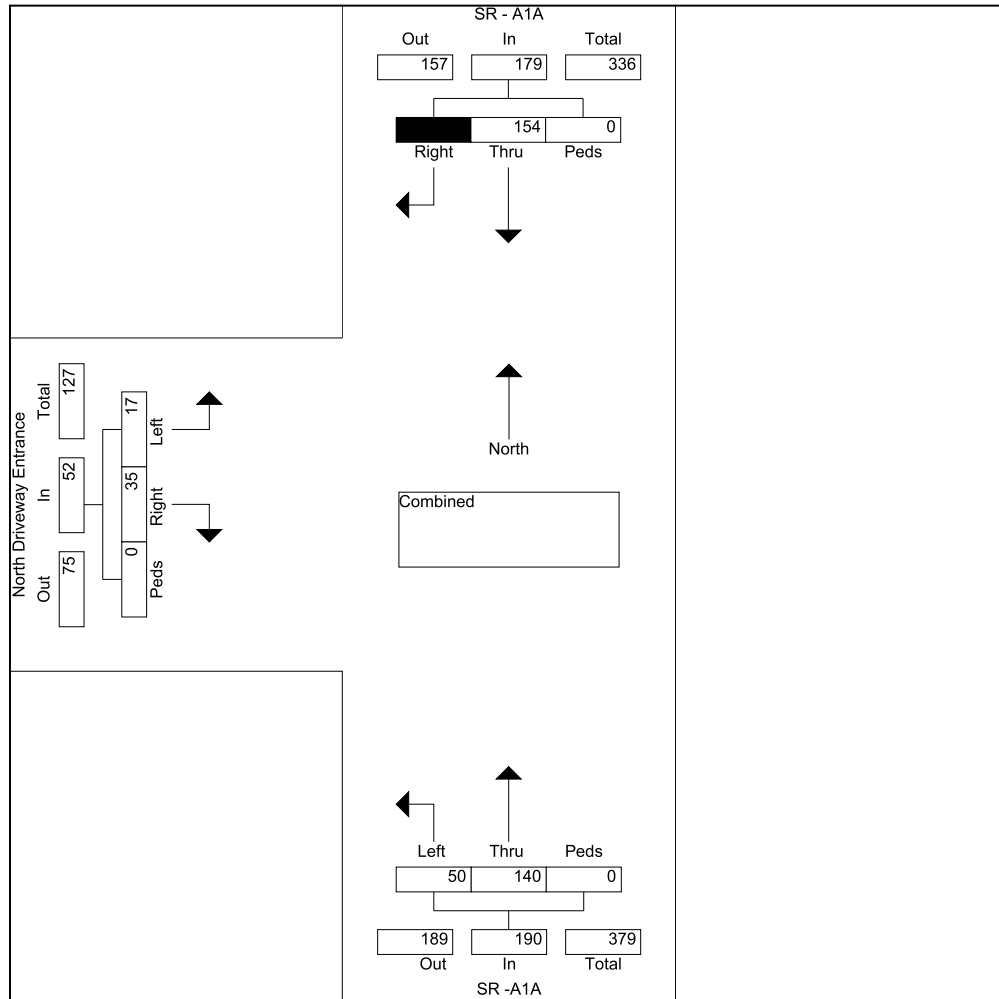
Start Time	SR - A1A Southbound					Westbound					SR -A1A Northbound					North Driveway Entrance Eastbound					Int. Total
	Rig ht	Thru	Left	Ped s	App. Total	Rig ht	Thru	Left	Ped s	App. Total	Rig ht	Thru	Left	Ped s	App. Total	Rig ht	Thru	Left	Ped s	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
06:00 PM	2	11	0	0	13	0	0	0	0	0	0	24	0	0	24	9	0	8	0	17	54
06:15 PM	1	6	0	0	7	0	0	0	0	0	0	15	1	0	16	6	0	5	0	11	34
06:30 PM	3	20	0	0	23	0	0	0	0	0	0	15	0	0	15	1	0	6	0	7	45
06:45 PM	1	12	0	0	13	0	0	0	0	0	0	10	2	0	12	3	0	0	0	3	28
Total	7	49	0	0	56	0	0	0	0	0	0	64	3	0	67	19	0	19	0	38	161
Grand Total	189	987	1	0	1177	0	0	0	0	0	0	895	207	0	1102	229	0	170	0	399	2678
Apprch %	16.1	83.9	0.1	0.0		0.0	0.0	0.0	0.0		0.0	81.2	18.8	0.0		57.4	0.0	42.6	0.0		
Total %	7.1	36.9	0.0	0.0	44.0	0.0	0.0	0.0	0.0	0.0	0.0	33.4	7.7	0.0	41.2	8.6	0.0	6.3	0.0	14.9	



Trident Engineering, LLC  
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File Name : NORTHE~4  
 Site Code : 00000000  
 Start Date : 01/28/2020  
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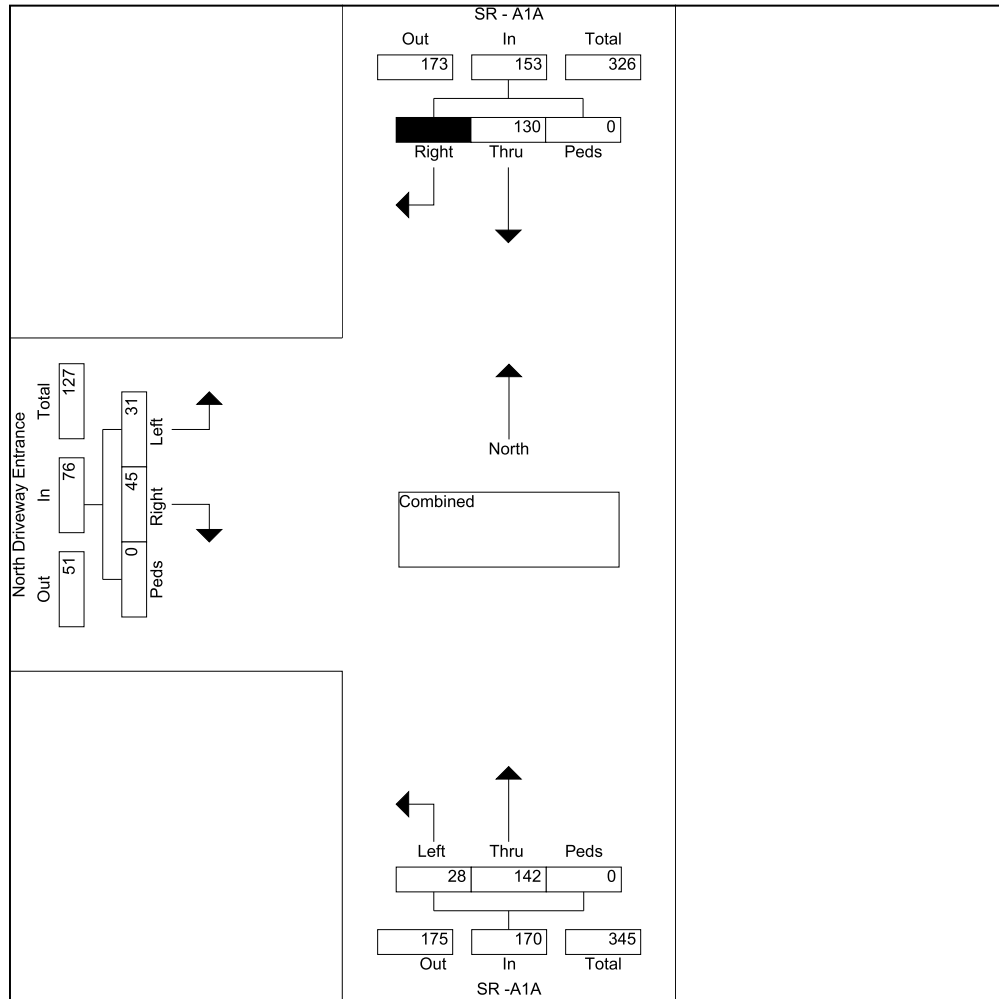
Start Time	SR - A1A Southbound					Westbound					SR -A1A Northbound					North Driveway Entrance Eastbound					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Peak Hour From 06:00 AM to 12:30 PM - Peak 1 of 1																					
Intersecti on	11:45 AM																				
Volume	25	154	0	0	179	0	0	0	0	0	0	140	50	0	190	35	0	17	0	52	421
Percent	14.0	86.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	73.7	26.3	0.0		67.3	0.0	32.7	0.0		
High Int. Volume	12:00 PM					5:45:00 AM					12:30 PM					12:00 PM					12:00
Peak Factor	11	50	0	0	61	0	0	0	0	0	0	35	13	0	48	13	0	4	0	17	126
					0.73										0.81					0.76	0.83
					4										9					5	5

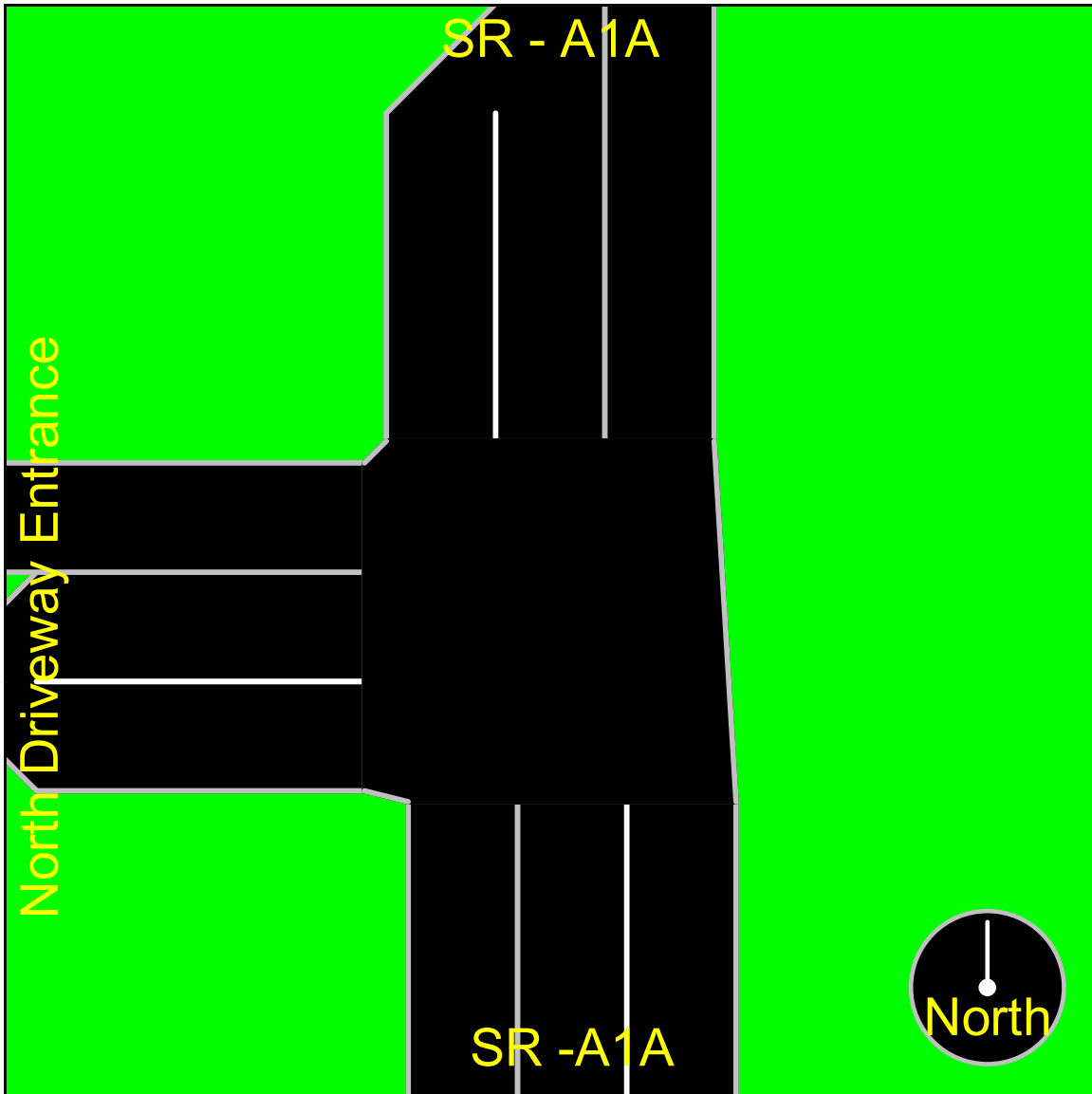


Trident Engineering, LLC  
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 Sunrise, FL 33351

File Name : NORTHE~4  
 Site Code : 00000000  
 Start Date : 01/28/2020  
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Start Time	SR - A1A Southbound					Westbound					SR -A1A Northbound					North Driveway Entrance Eastbound					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Peak Hour From 12:45 PM to 06:45 PM - Peak 1 of 1																					
Intersecti on	03:15 PM																				
Volume	23	130	0	0	153	0	0	0	0	0	0	142	28	0	170	45	0	31	0	76	399
Percent	15.0	85.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	83.5	16.5	0.0		59.2	0.0	40.8	0.0		
High Int. Volume	03:30 PM										03:15 PM					03:30 PM					03:30
Peak Factor	6	42	0	0	48	0	0	0	0	0	0	38	8	0	46	14	0	11	0	25	119
					0.79										0.92					0.76	0.83
					7										4					0	8







Trident Engineering, LLC  
10232 NW 47th Street  
Sunrise, FL 33351

Sebastian Inlet State Park  
Driveway Entrance/Exit

File Name : SOUTHE~1  
Site Code : 00000000  
Start Date : 01/28/2020  
Page No : 1

Groups PrintedCars & Peds - Trucks & Bicycles - U-Turns

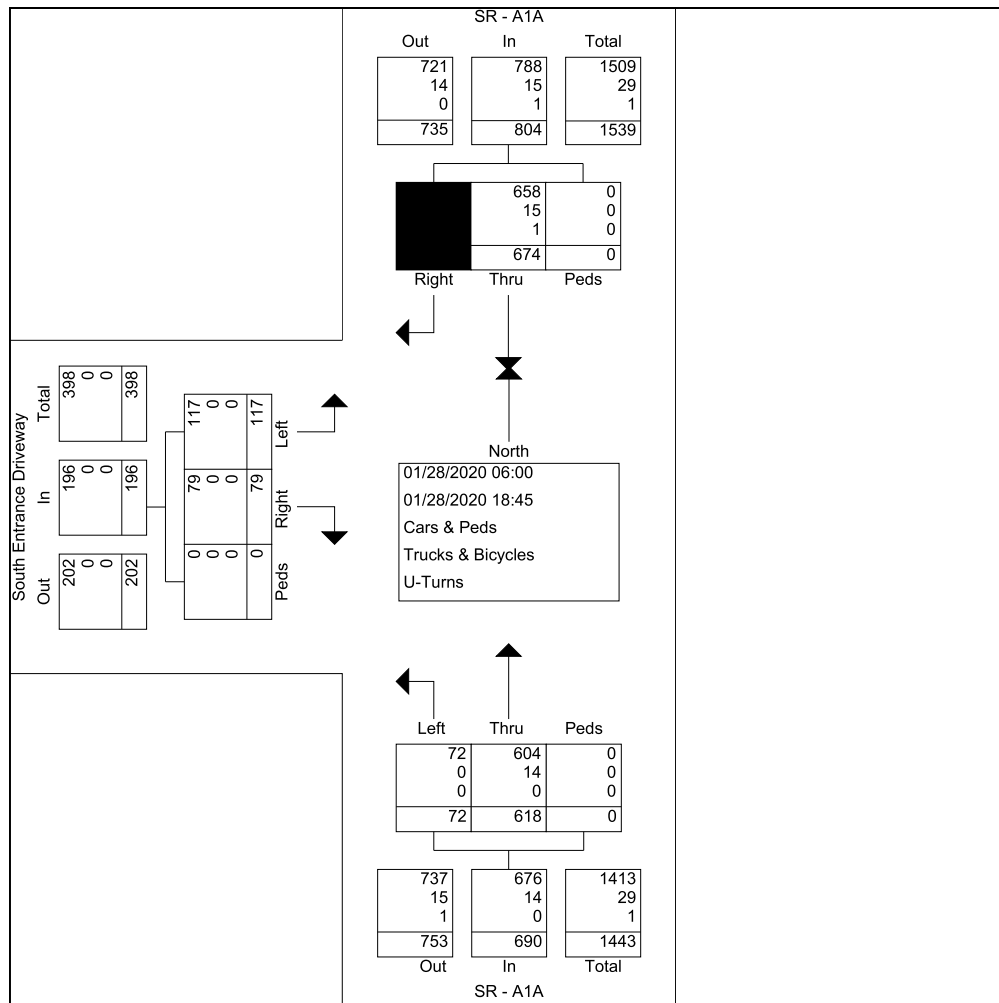
Start Time	SR - A1A Southbound					South Entrance Drive Westbound					SR - A1A Northbound					South Entrance Driveway Eastbound					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
*** BREAK ***																					
07:00 AM	4	21	0	0	25	0	0	0	0	0	0	12	1	0	13	0	0	0	0	0	38
07:15 AM	7	28	0	0	35	0	0	0	0	0	0	4	6	0	10	0	0	0	0	0	45
07:30 AM	4	25	0	0	29	0	0	0	0	0	0	12	6	0	18	0	0	2	0	2	49
07:45 AM	6	21	0	0	27	0	0	0	0	0	0	10	2	0	12	2	0	4	0	6	45
Total	21	95	0	0	116	0	0	0	0	0	0	38	15	0	53	2	0	6	0	8	177
08:00 AM	3	20	0	0	23	0	0	0	0	0	0	14	2	0	16	2	0	5	0	7	46
08:15 AM	4	35	1	0	40	0	0	0	0	0	0	15	2	0	17	1	0	5	0	6	63
08:30 AM	4	22	0	0	26	0	0	0	0	0	0	10	3	0	13	1	0	3	0	4	43
08:45 AM	4	22	1	0	27	0	0	0	0	0	0	17	1	0	18	2	0	6	0	8	53
Total	15	99	2	0	116	0	0	0	0	0	0	56	8	0	64	6	0	19	0	25	205
09:00 AM	5	15	1	0	21	0	0	0	0	0	0	15	4	0	19	3	0	2	0	5	45
09:15 AM	3	19	0	0	22	0	0	0	0	0	0	11	2	0	13	3	0	6	0	9	44
09:30 AM	3	23	0	0	26	0	0	0	0	0	0	22	0	0	22	1	0	3	0	4	52
09:45 AM	9	16	0	0	25	0	0	0	0	0	0	14	1	0	15	5	0	3	0	8	48
Total	20	73	1	0	94	0	0	0	0	0	0	62	7	0	69	12	0	14	0	26	189
10:00 AM	3	24	0	0	27	0	0	0	0	0	0	10	2	0	12	1	0	3	0	4	43
10:15 AM	1	21	0	0	22	0	0	0	0	0	0	10	2	0	12	5	0	5	0	10	44
10:30 AM	5	23	0	0	28	0	0	0	0	0	0	19	0	0	19	2	0	6	0	8	55
10:45 AM	9	25	0	0	34	0	0	0	0	0	0	9	2	0	11	5	0	6	0	11	56
Total	18	93	0	0	111	0	0	0	0	0	0	48	6	0	54	13	0	20	0	33	198
11:00 AM	0	26	0	0	26	0	0	0	0	0	0	13	0	0	13	4	0	4	0	8	47
11:15 AM	3	15	1	0	19	0	0	0	0	0	0	18	1	0	19	2	0	6	0	8	46
11:30 AM	5	13	0	0	18	0	0	0	0	0	0	20	1	0	21	1	0	4	0	5	44
11:45 AM	1	23	0	0	24	0	0	0	0	0	0	16	0	0	16	1	0	2	0	3	43
Total	9	77	1	0	87	0	0	0	0	0	0	67	2	0	69	8	0	16	0	24	180
12:00 PM	2	11	1	0	14	0	0	0	0	0	0	21	0	0	21	1	0	0	0	1	36
12:15 PM	1	18	0	0	19	0	0	0	0	0	0	24	1	0	25	0	0	2	0	2	46
12:30 PM	9	14	0	0	23	0	0	0	0	0	0	6	2	0	8	0	0	7	0	7	38
12:45 PM	1	10	1	0	12	0	0	0	0	0	0	19	0	0	19	4	0	3	0	7	38
Total	13	53	2	0	68	0	0	0	0	0	0	70	3	0	73	5	0	12	0	17	158
*** BREAK ***																					
03:00 PM	2	13	0	0	15	0	0	0	0	0	0	11	1	0	12	0	0	4	0	4	31
03:15 PM	0	16	0	0	16	0	0	0	0	0	0	23	1	0	24	1	0	1	0	2	42
03:30 PM	5	16	0	0	21	0	0	0	0	0	0	18	3	0	21	2	0	4	0	6	48
03:45 PM	0	9	0	0	9	0	0	0	0	0	0	19	4	0	23	2	0	1	0	3	35
Total	7	54	0	0	61	0	0	0	0	0	0	71	9	0	80	5	0	10	0	15	156
04:00 PM	0	18	0	0	18	0	0	0	0	0	0	11	2	0	13	4	0	2	0	6	37
04:15 PM	1	15	0	0	16	0	0	0	0	0	0	17	2	0	19	5	0	4	0	9	44
04:30 PM	4	18	0	0	22	0	0	0	0	0	0	30	0	0	30	5	0	2	0	7	59
04:45 PM	1	9	0	0	10	0	0	0	0	0	0	23	2	0	25	3	0	1	0	4	39
Total	6	60	0	0	66	0	0	0	0	0	0	81	6	0	87	17	0	9	0	26	179
05:00 PM	3	9	0	0	12	0	0	0	0	0	0	24	2	0	26	2	0	0	0	2	40
05:15 PM	5	11	0	0	16	0	0	0	0	0	0	22	3	0	25	1	0	1	0	2	43
05:30 PM	0	8	0	0	8	0	0	0	0	0	0	20	3	0	23	0	0	2	0	2	33
05:45 PM	2	7	0	0	9	0	0	0	0	0	0	15	0	0	15	3	0	2	0	5	29
Total	10	35	0	0	45	0	0	0	0	0	0	81	8	0	89	6	0	5	0	11	145

Trident Engineering, LLC  
 10232 NW 47th Street  
 Sunrise, FL 33351

File Name : SOUTHE~1  
 Site Code : 00000000  
 Start Date : 01/28/2020  
 Page No : 2

Groups PrintedCars & Peds - Trucks & Bicycles - U-Turns

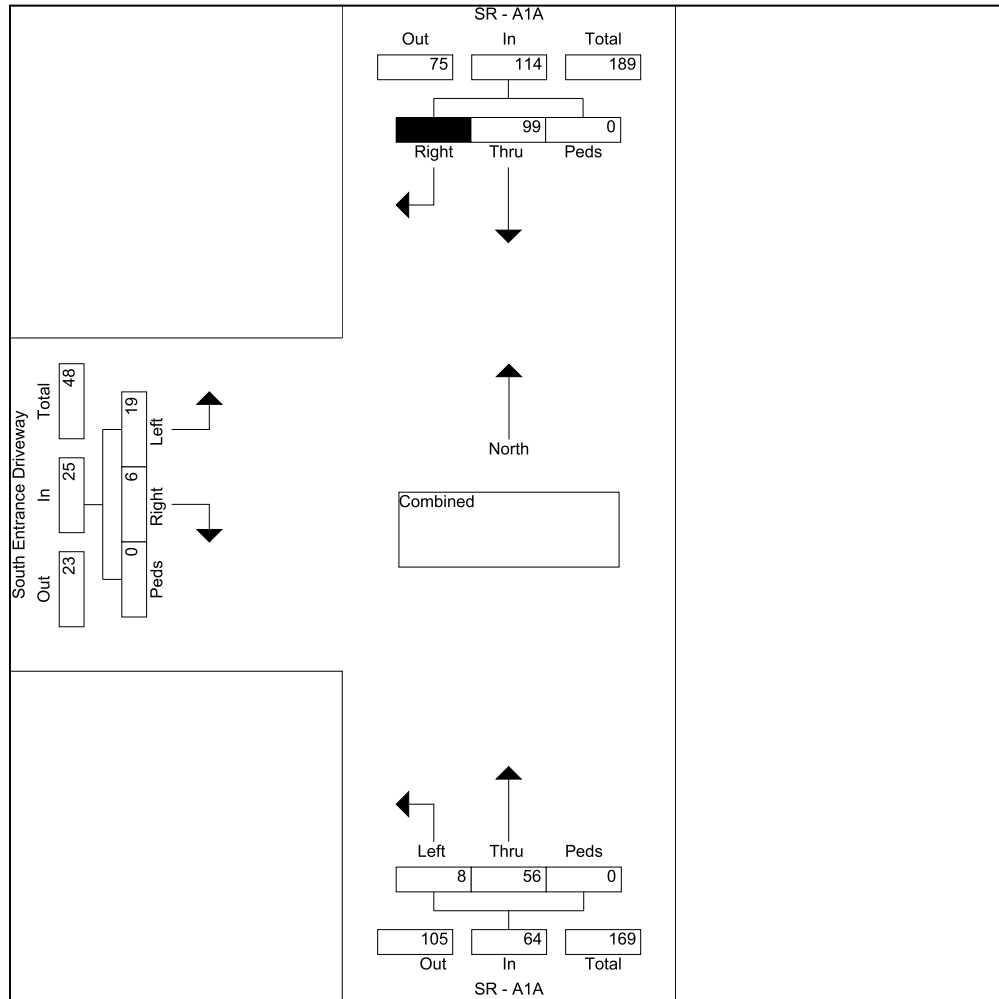
Start Time	SR - A1A Southbound					South Entrance Drive Westbound					SR - A1A Northbound					South Entrance Driveway Eastbound					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
06:00 PM	2	8	0	0	10	0	0	0	0	0	0	7	1	0	8	4	0	0	0	4	22
06:15 PM	1	9	0	0	10	0	0	0	0	0	0	16	1	0	17	0	0	1	0	1	28
06:30 PM	5	12	0	0	17	0	0	0	0	0	0	9	5	0	14	1	0	3	0	4	35
06:45 PM	3	6	0	0	9	0	0	0	0	0	0	12	1	0	13	0	0	2	0	2	24
Total	11	35	0	0	46	0	0	0	0	0	0	44	8	0	52	5	0	6	0	11	109
Grand Total	130	674	6	0	810	0	0	0	0	0	0	618	72	0	690	79	0	117	0	196	1696
Apprch %	16.0	83.2	0.7	0.0		0.0	0.0	0.0	0.0		0.0	89.6	10.4	0.0		40.3	0.0	59.7	0.0		
Total %	7.7	39.7	0.4	0.0	47.8	0.0	0.0	0.0	0.0	0.0	0.0	36.4	4.2	0.0	40.7	4.7	0.0	6.9	0.0	11.6	



Trident Engineering, LLC  
 10232 NW 47th Street  
 Sunrise, FL 33351

File Name : SOUTHE~1  
 Site Code : 00000000  
 Start Date : 01/28/2020  
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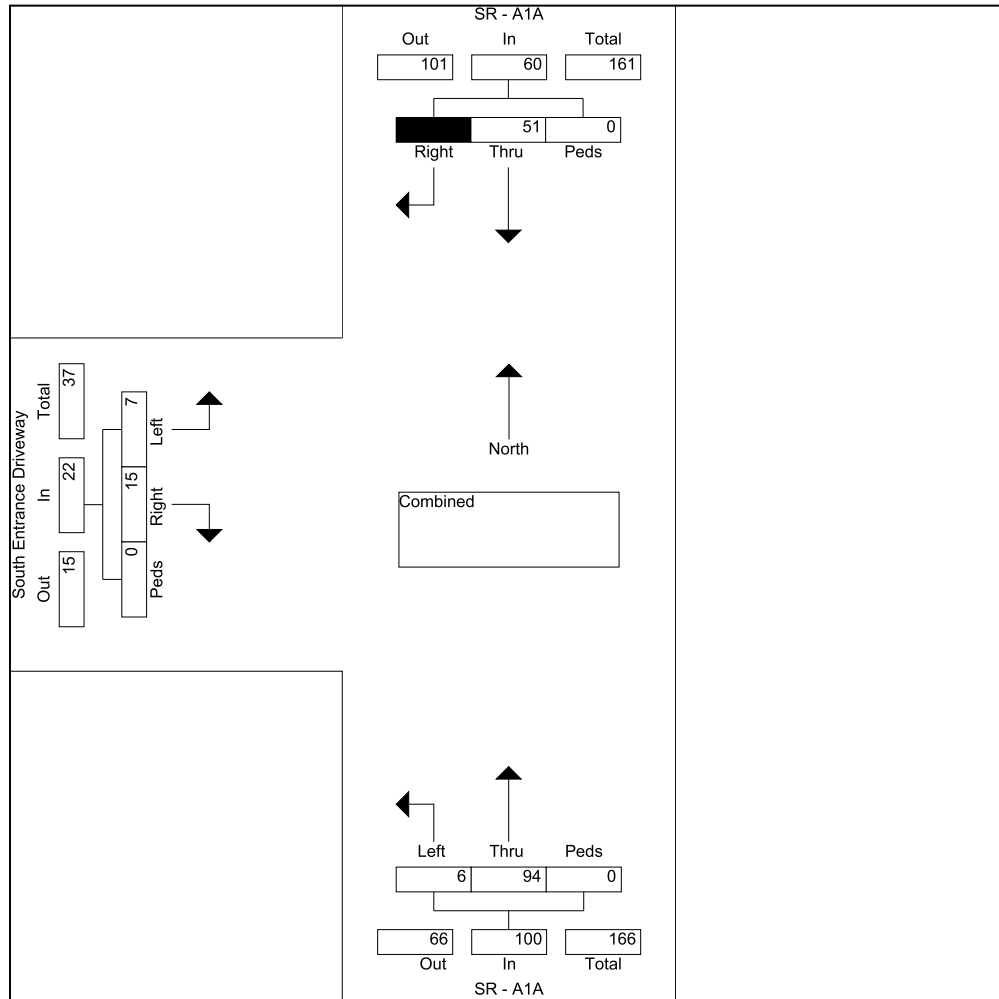
Start Time	SR - A1A Southbound					South Entrance Drive Westbound					SR - A1A Northbound					South Entrance Driveway Eastbound					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Peak Hour From 06:00 AM to 12:30 PM - Peak 1 of 1																					
Intersecti on	08:00 AM					5:45:00 AM					08:45 AM					08:45 AM					08:15
Volume	15	99	2	0	116	0	0	0	0	0	0	56	8	0	64	6	0	19	0	25	205
Percent	12.9	85.3	1.7	0.0		0.0	0.0	0.0	0.0		0.0	87.5	12.5	0.0		24.0	0.0	76.0	0.0		
High Int. Peak Factor	08:15 AM					5:45:00 AM					08:45 AM					08:45 AM					08:15
	4	35	1	0	40	0	0	0	0	0	0	15	2	0	17	1	0	5	0	6	63
	0.72										0.88					0.78					0.81
	5										9					1					3

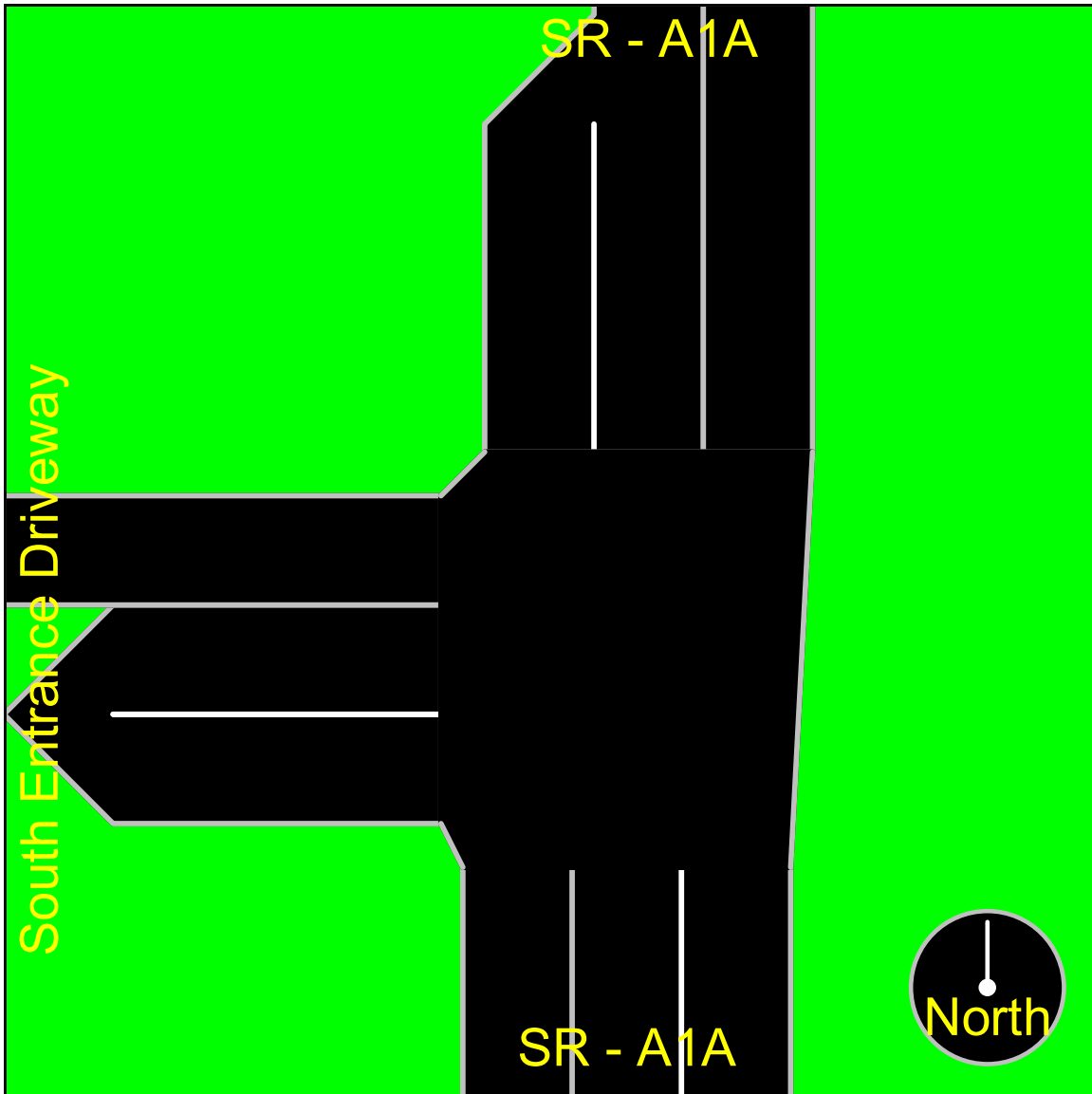


Trident Engineering, LLC  
 10232 NW 47th Street  
 Sunrise, FL 33351

File Name : SOUTHE~1  
 Site Code : 00000000  
 Start Date : 01/28/2020  
 Page No : 4

Start Time	SR - A1A Southbound					South Entrance Drive Westbound					SR - A1A Northbound					South Entrance Driveway Eastbound					Int. Total
	Rig ht	Thru	Left	Peds	App. Total	Rig ht	Thru	Left	Peds	App. Total	Rig ht	Thru	Left	Peds	App. Total	Rig ht	Thru	Left	Peds	App. Total	
Peak Hour From 12:45 PM to 06:45 PM - Peak 1 of 1																					
Intersecti on	04:15 PM																				
Volume	9	51	0	0	60	0	0	0	0	0	0	94	6	0	100	15	0	7	0	22	182
Percent	15.0	85.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	94.0	6.0	0.0		68.2	0.0	31.8	0.0		
High Int. Peak Factor	04:30 PM										04:30 PM					04:15 PM					04:30
	4	18	0	0	22	0	0	0	0	0	0	30	0	0	30	5	0	2	0	7	59
					0.68										0.83					0.61	0.77
					2										3					1	1





Trident Engineering, LLC  
10232 NW 47th Street  
Sunrise, FL 33351

Sebastian Inlet State Park  
Driveway Entrance/Exit

File Name : SOUTHE~2  
Site Code : 00000000  
Start Date : 01/28/2020  
Page No : 1

Groups PrintedCars & Peds - Trucks & Bicycles - U-Turns

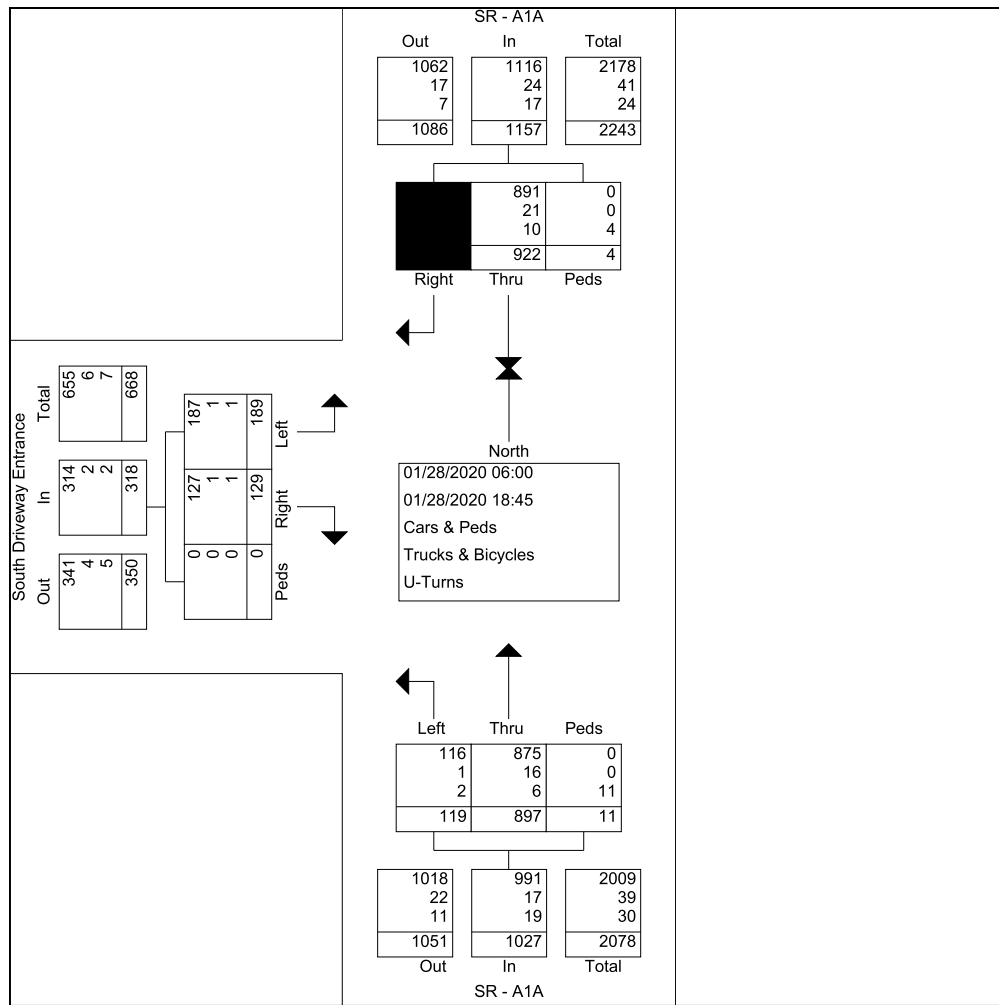
Start Time	SR - A1A Southbound					Westbound					SR - A1A Northbound					South Driveway Entrance Eastbound					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
*** BREAK ***																					
07:00 AM	4	19	0	0	23	0	0	0	0	0	0	8	5	0	13	0	0	2	0	2	38
07:15 AM	7	21	0	0	28	0	0	0	0	0	0	8	3	0	11	2	0	5	0	7	46
07:30 AM	5	21	0	0	26	0	0	0	0	0	0	13	2	0	15	4	0	3	0	7	48
07:45 AM	1	25	0	0	26	0	0	0	0	0	0	14	1	0	15	3	0	4	0	7	48
Total	17	86	0	0	103	0	0	0	0	0	0	43	11	0	54	9	0	14	0	23	180
08:00 AM	4	16	0	0	20	0	0	0	0	0	0	8	1	0	9	0	0	5	0	5	34
08:15 AM	6	24	0	0	30	0	0	0	0	0	0	16	1	0	17	0	0	6	0	6	53
08:30 AM	4	16	0	0	20	0	0	0	0	0	0	18	3	0	21	4	0	3	0	7	48
08:45 AM	5	19	1	0	25	0	0	0	0	0	0	16	1	0	17	2	0	8	0	10	52
Total	19	75	1	0	95	0	0	0	0	0	0	58	6	0	64	6	0	22	0	28	187
09:00 AM	6	27	1	0	34	0	0	0	0	0	0	18	1	0	19	1	0	4	0	5	58
09:15 AM	2	28	0	0	30	0	0	0	0	0	0	17	2	0	19	1	0	6	0	7	56
09:30 AM	5	24	0	0	29	0	0	0	0	0	0	14	3	0	17	3	0	5	0	8	54
09:45 AM	6	20	0	0	26	0	0	0	0	0	0	17	5	0	22	4	0	4	0	8	56
Total	19	99	1	0	119	0	0	0	0	0	0	66	11	0	77	9	0	19	0	28	224
10:00 AM	6	24	1	0	31	0	0	0	0	0	0	12	4	0	16	7	0	2	0	9	56
10:15 AM	6	22	0	0	28	0	0	0	0	0	0	16	6	0	22	7	0	2	0	9	59
10:30 AM	3	16	0	0	19	0	0	0	0	0	0	17	3	0	20	2	0	6	0	8	47
10:45 AM	1	16	0	0	17	0	0	0	0	0	0	23	3	0	26	3	0	2	0	5	48
Total	16	78	1	0	95	0	0	0	0	0	0	68	16	0	84	19	0	12	0	31	210
11:00 AM	9	29	0	0	38	0	0	0	0	0	0	31	2	0	33	3	0	5	0	8	79
11:15 AM	5	25	0	0	30	0	0	0	0	0	0	21	5	0	26	5	0	6	0	11	67
11:30 AM	8	25	0	1	34	0	0	0	0	0	0	22	2	1	25	4	0	1	0	5	64
11:45 AM	9	24	0	0	33	0	0	0	0	0	0	25	4	0	29	4	0	6	0	10	72
Total	31	103	0	1	135	0	0	0	0	0	0	99	13	1	113	16	0	18	0	34	282
12:00 PM	4	25	1	0	30	0	0	0	0	0	0	30	1	0	31	6	0	6	0	12	73
12:15 PM	6	23	0	0	29	0	0	0	0	0	0	21	1	0	22	3	0	7	0	10	61
12:30 PM	10	25	0	0	35	0	0	0	0	0	0	30	4	0	34	2	0	5	0	7	76
12:45 PM	7	23	0	1	31	0	0	0	0	0	0	25	2	0	27	9	0	5	0	14	72
Total	27	96	1	1	125	0	0	0	0	0	0	106	8	0	114	20	0	23	0	43	282
*** BREAK ***																					
03:00 PM	5	19	0	0	24	0	0	0	0	0	0	18	5	1	24	4	0	6	0	10	58
03:15 PM	7	37	0	0	44	0	0	0	0	0	0	27	2	0	29	4	0	4	0	8	81
03:30 PM	3	40	0	0	43	0	0	0	0	0	0	31	5	0	36	6	0	9	0	15	94
03:45 PM	9	22	0	2	33	0	0	0	0	0	0	36	1	2	39	3	0	10	0	13	85
Total	24	118	0	2	144	0	0	0	0	0	0	112	13	3	128	17	0	29	0	46	318
04:00 PM	10	24	0	0	34	0	0	0	0	0	0	36	2	0	38	9	0	6	0	15	87
04:15 PM	9	18	0	0	27	0	0	0	0	0	0	30	2	0	32	4	0	6	0	10	69
04:30 PM	8	32	0	0	40	0	0	0	0	0	0	38	7	2	47	1	0	5	0	6	93
04:45 PM	10	29	0	0	39	0	0	0	0	0	0	33	2	3	38	6	0	5	0	11	88
Total	37	103	0	0	140	0	0	0	0	0	0	137	13	5	155	20	0	22	0	42	337
05:00 PM	3	29	0	0	32	0	0	0	0	0	0	49	4	0	53	2	0	6	0	8	93
05:15 PM	3	30	0	0	33	0	0	0	0	0	0	35	5	1	41	2	0	2	0	4	78
05:30 PM	4	25	0	0	29	0	0	0	0	0	0	27	4	0	31	4	0	3	0	7	67
05:45 PM	8	32	0	0	40	0	0	0	1	1	0	30	1	1	32	1	0	7	0	8	81
Total	18	116	0	0	134	0	0	0	1	1	0	141	14	2	157	9	0	18	0	27	319

Trident Engineering, LLC  
 10232 NW 47th Street  
 Sunrise, FL 33351

File Name : SOUTHE~2  
 Site Code : 00000000  
 Start Date : 01/28/2020  
 Page No : 2

Groups PrintedCars & Peds - Trucks & Bicycles - U-Turns

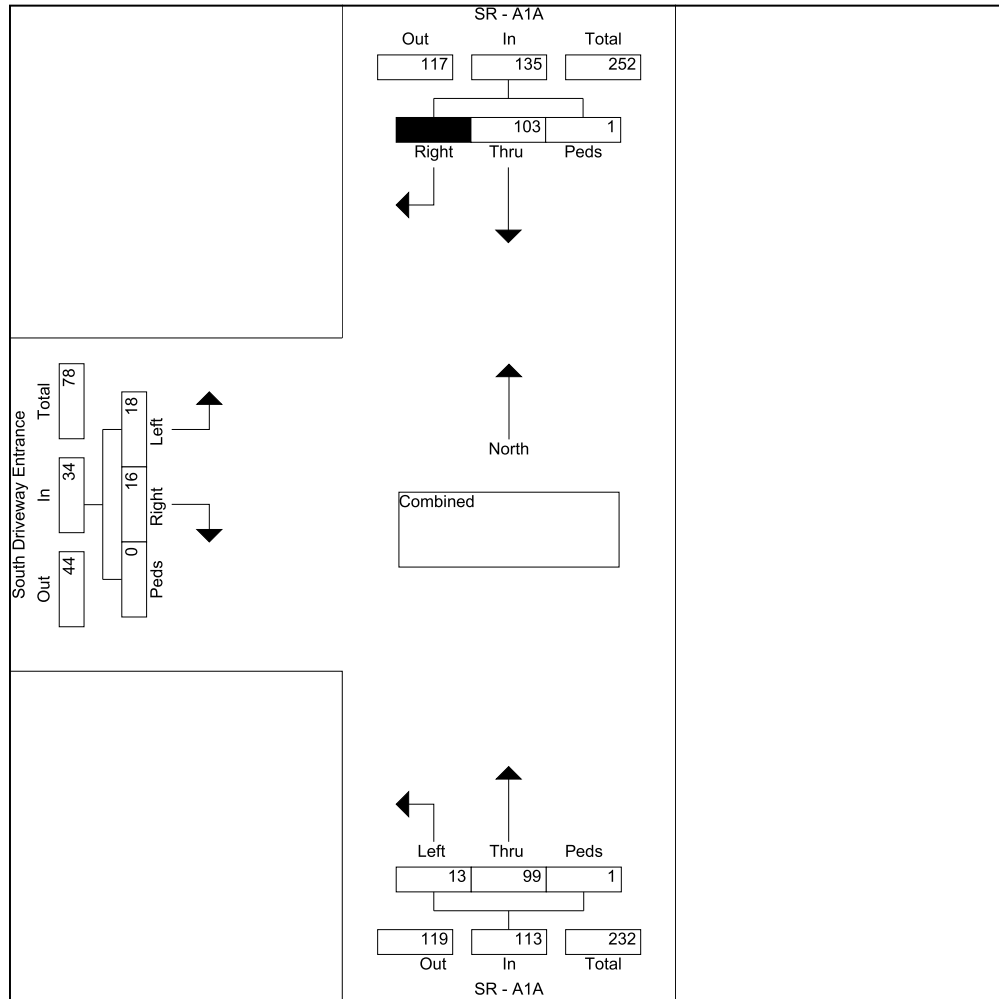
Start Time	SR - A1A Southbound					Westbound					SR - A1A Northbound					South Driveway Entrance Eastbound					Int. Total
	Rig ht	Thru	Left	Ped s	App. Total	Rig ht	Thru	Left	Ped s	App. Total	Rig ht	Thru	Left	Ped s	App. Total	Rig ht	Thru	Left	Ped s	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
06:00 PM	8	23	0	0	31	0	0	0	0	0	0	20	2	0	22	1	0	1	0	2	55
06:15 PM	2	11	0	0	13	0	0	0	0	0	0	22	6	0	28	2	0	3	0	5	46
06:30 PM	8	7	0	0	15	0	0	0	0	0	0	15	1	0	16	0	0	5	0	5	36
06:45 PM	5	7	0	0	12	0	0	0	0	0	0	10	5	0	15	1	0	3	0	4	31
Total	23	48	0	0	71	0	0	0	0	0	0	67	14	0	81	4	0	12	0	16	168
Grand Total	231	922	4	4	1161	0	0	0	1	1	0	897	119	11	1027	129	0	189	0	318	2507
Apprch %	19.9	79.4	0.3	0.3		0.0	0.0	0.0	100.0		0.0	87.3	11.6	1.1		40.6	0.0	59.4	0.0		
Total %	9.2	36.8	0.2	0.2	46.3	0.0	0.0	0.0	0.0	0.0	0.0	35.8	4.7	0.4	41.0	5.1	0.0	7.5	0.0	12.7	



Trident Engineering, LLC  
10232 NW 47th Street  
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File Name : SOUTHE~2  
Site Code : 00000000  
Start Date : 01/28/2020  
Page No : 3

Start Time	SR - A1A Southbound					Westbound					SR - A1A Northbound					South Driveway Entrance Eastbound					Int. Total
	Rig ht	Thru	Left	Ped s	App. Total	Rig ht	Thru	Left	Ped s	App. Total	Rig ht	Thru	Left	Ped s	App. Total	Rig ht	Thru	Left	Ped s	App. Total	
Peak Hour From 06:00 AM to 12:30 PM - Peak 1 of 1																					
Intersecti on	11:00 AM																				
Volume	31	103	0	1	135	0	0	0	0	0	0	99	13	1	113	16	0	18	0	34	282
Percent	23.0	76.3	0.0	0.7		0.0	0.0	0.0	0.0		0.0	87.6	11.5	0.9		47.1	0.0	52.9	0.0		
High Int. Peak Factor	11:00 AM					5:45:00 AM					11:00 AM					11:15 AM					11:00
	9	29	0	0	38	0	0	0	0	0	0	31	2	0	33	3	0	5	0	8	79
	0.88										0.85					0.77					0.89
	8										6					3					2

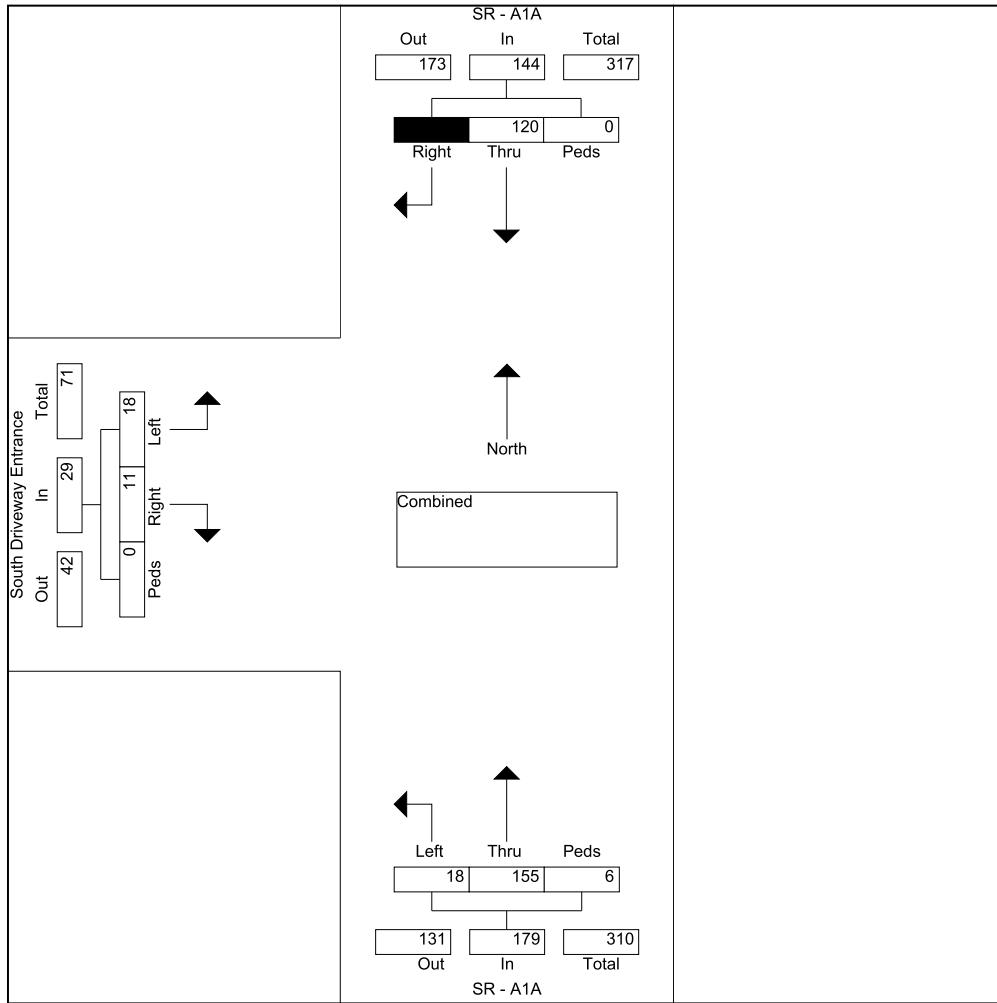


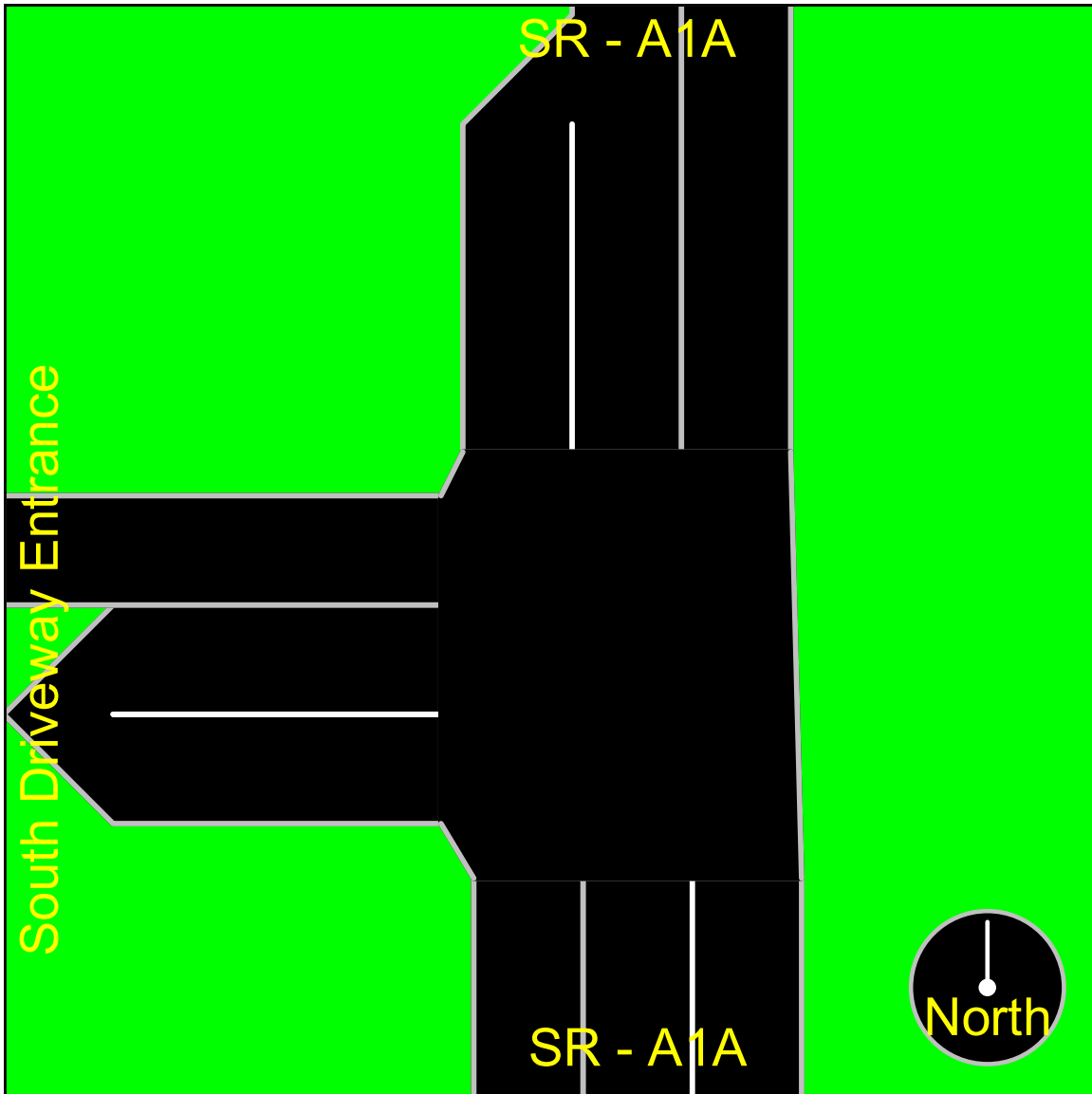


Trident Engineering, LLC  
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 Sunrise, FL 33351

File Name : SOUTHE~2  
 Site Code : 00000000  
 Start Date : 01/28/2020  
 Page No : 4

Start Time	SR - A1A Southbound					Westbound					SR - A1A Northbound					South Driveway Entrance Eastbound					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Peak Hour From 12:45 PM to 06:45 PM - Peak 1 of 1																					
Intersecti on	04:30 PM																				
Volume	24	120	0	0	144	0	0	0	0	0	0	155	18	6	179	11	0	18	0	29	352
Percent	16.7	83.3	0.0	0.0		0.0	0.0	0.0	0.0		0.0	86.6	10.1	3.4		37.9	0.0	62.1	0.0		
High Int. Peak Factor	04:30 PM										05:00 PM					04:45 PM					04:30
	3	29	0	0	32	0	0	0	0	0	0	49	4	0	53	2	0	6	0	8	93
					0.90										0.84					0.65	0.94
					0										4					9	6





Trident Engineering, LLC  
10232 NW 47th Street  
Sunrise, FL 33351

Sebastian Inlet State Park  
Driveway Entrance/Exit

File Name : SOUTHE~3  
Site Code : 00000000  
Start Date : 01/28/2020  
Page No : 1

Groups PrintedCars & Peds - Trucks & Bicycles - U-Turns

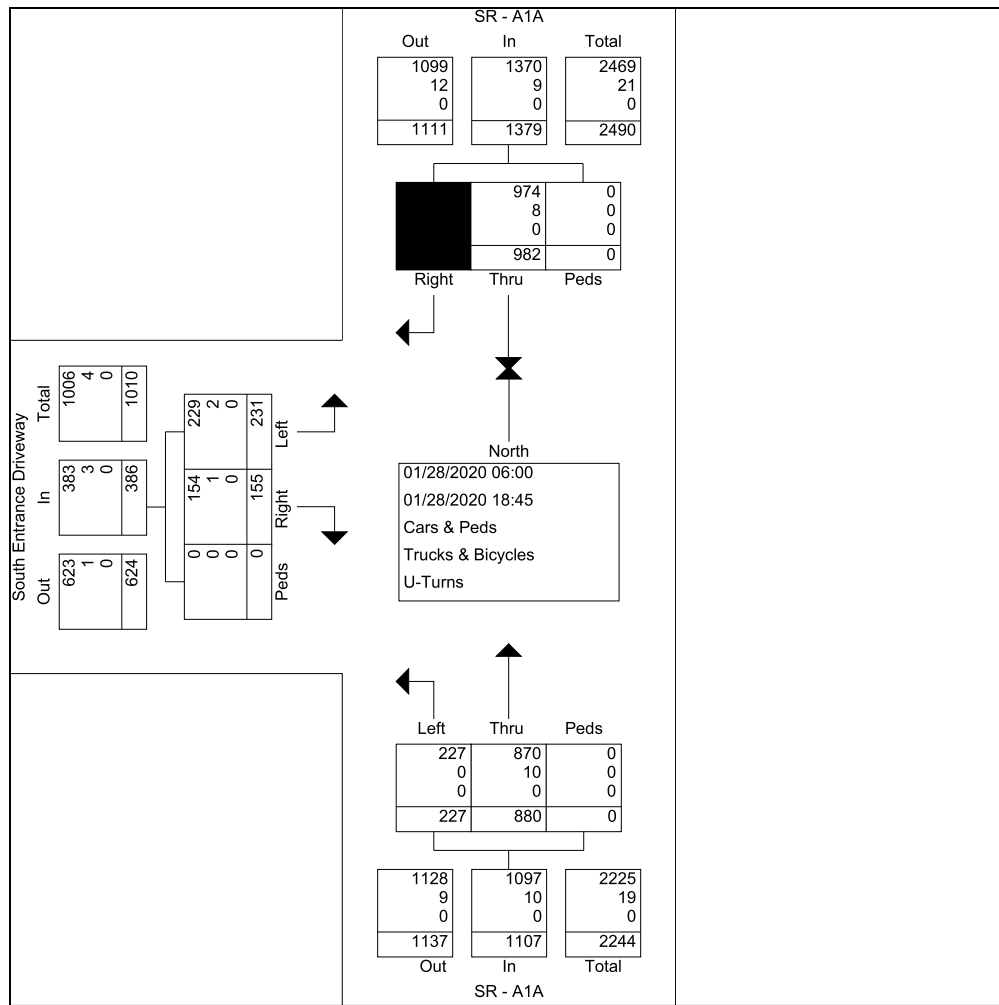
Start Time	SR - A1A Southbound					Westbound					SR - A1A Northbound					South Entrance Driveway Eastbound					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
*** BREAK ***																					
07:00 AM	5	13	0	0	18	0	0	0	0	0	0	16	5	0	21	2	0	2	0	4	43
07:15 AM	3	13	0	0	16	0	0	0	0	0	0	13	3	0	16	1	0	4	0	5	37
07:30 AM	2	13	0	0	15	0	0	0	0	0	0	12	2	0	14	0	0	0	0	0	29
07:45 AM	12	24	2	0	38	0	0	0	0	0	0	11	1	0	12	1	0	3	0	4	54
Total	22	63	2	0	87	0	0	0	0	0	0	52	11	0	63	4	0	9	0	13	163
08:00 AM	2	17	0	0	19	0	0	0	0	0	0	8	1	0	9	5	0	1	0	6	34
08:15 AM	6	28	0	0	34	0	0	0	0	0	0	18	1	0	19	5	0	2	0	7	60
08:30 AM	6	29	0	0	35	0	0	0	0	0	0	10	7	0	17	3	0	4	0	7	59
08:45 AM	6	25	0	0	31	0	0	0	0	0	0	14	4	0	18	2	0	5	0	7	56
Total	20	99	0	0	119	0	0	0	0	0	0	50	13	0	63	15	0	12	0	27	209
09:00 AM	9	25	0	0	34	0	0	0	0	0	0	16	2	0	18	10	0	10	0	20	72
09:15 AM	4	18	0	0	22	0	0	0	0	0	0	14	2	0	16	5	0	5	0	10	48
09:30 AM	4	22	0	0	26	0	0	0	0	0	0	15	1	0	16	2	0	6	0	8	50
09:45 AM	3	28	0	0	31	0	0	0	0	0	1	19	3	0	23	4	0	4	0	8	62
Total	20	93	0	0	113	0	0	0	0	0	1	64	8	0	73	21	0	25	0	46	232
10:00 AM	3	19	0	0	22	0	0	0	0	0	0	14	1	0	15	2	0	7	0	9	46
10:15 AM	7	17	0	0	24	0	0	0	0	0	1	17	1	0	19	2	0	2	0	4	47
10:30 AM	4	14	0	0	18	0	0	0	0	0	0	23	3	0	26	6	0	3	0	9	53
10:45 AM	8	21	0	0	29	0	0	0	0	0	0	26	4	0	30	5	0	2	0	7	66
Total	22	71	0	0	93	0	0	0	0	0	1	80	9	0	90	15	0	14	0	29	212
11:00 AM	2	23	0	0	25	0	0	0	0	0	0	26	3	0	29	2	0	6	0	8	62
11:15 AM	7	24	0	0	31	0	0	0	0	0	0	25	3	0	28	3	0	10	0	13	72
11:30 AM	7	30	0	0	37	0	0	0	0	0	0	24	5	0	29	2	0	4	0	6	72
11:45 AM	9	28	0	0	37	0	0	0	0	0	0	26	5	0	31	4	0	9	0	13	81
Total	25	105	0	0	130	0	0	0	0	0	0	101	16	0	117	11	0	29	0	40	287
12:00 PM	5	28	0	0	33	0	0	0	0	0	0	27	2	0	29	5	0	5	0	10	72
12:15 PM	7	16	0	0	23	0	0	0	0	0	0	21	3	0	24	2	0	4	0	6	53
12:30 PM	7	28	0	0	35	0	0	0	0	0	0	24	5	0	29	5	0	6	0	11	75
12:45 PM	16	31	0	0	47	0	0	0	0	0	0	35	3	0	38	0	0	6	0	6	91
Total	35	103	0	0	138	0	0	0	0	0	0	107	13	0	120	12	0	21	0	33	291
*** BREAK ***																					
03:00 PM	5	40	0	0	45	0	0	0	0	0	0	36	5	0	41	3	0	9	0	12	98
03:15 PM	13	31	0	0	44	0	0	0	0	0	0	35	12	0	47	4	0	7	0	11	102
03:30 PM	14	35	0	0	49	0	0	0	0	0	0	21	7	0	28	2	0	10	0	12	89
03:45 PM	10	34	0	0	44	0	0	0	0	0	0	33	2	0	35	4	0	6	0	10	89
Total	42	140	0	0	182	0	0	0	0	0	0	125	26	0	151	13	0	32	0	45	378
04:00 PM	3	37	0	0	40	0	0	0	0	0	0	28	10	0	38	5	0	8	0	13	91
04:15 PM	13	30	0	0	43	0	0	0	0	0	1	26	5	0	32	2	0	9	0	11	86
04:30 PM	14	39	0	0	53	0	0	0	0	0	0	25	5	0	30	4	0	3	0	7	90
04:45 PM	17	31	0	0	48	0	0	0	0	0	2	37	5	0	44	5	0	9	0	14	106
Total	47	137	0	0	184	0	0	0	0	0	3	116	25	0	144	16	0	29	0	45	373
05:00 PM	13	24	0	0	37	0	0	0	0	0	0	38	21	0	59	6	0	5	0	11	107
05:15 PM	28	35	0	0	63	0	0	0	0	0	0	26	11	0	37	10	0	7	0	17	117
05:30 PM	26	19	0	0	45	0	0	0	0	0	0	33	20	0	53	6	0	7	0	13	111
05:45 PM	32	20	0	0	52	0	0	0	0	0	0	34	17	0	51	4	1	9	0	14	117
Total	99	98	0	0	197	0	0	0	0	0	0	131	69	0	200	26	1	28	0	55	452

Trident Engineering, LLC  
 10232 NW 47th Street  
 Sunrise, FL 33351

File Name : SOUTHE~3  
 Site Code : 00000000  
 Start Date : 01/28/2020  
 Page No : 2

Groups PrintedCars & Peds - Trucks & Bicycles - U-Turns

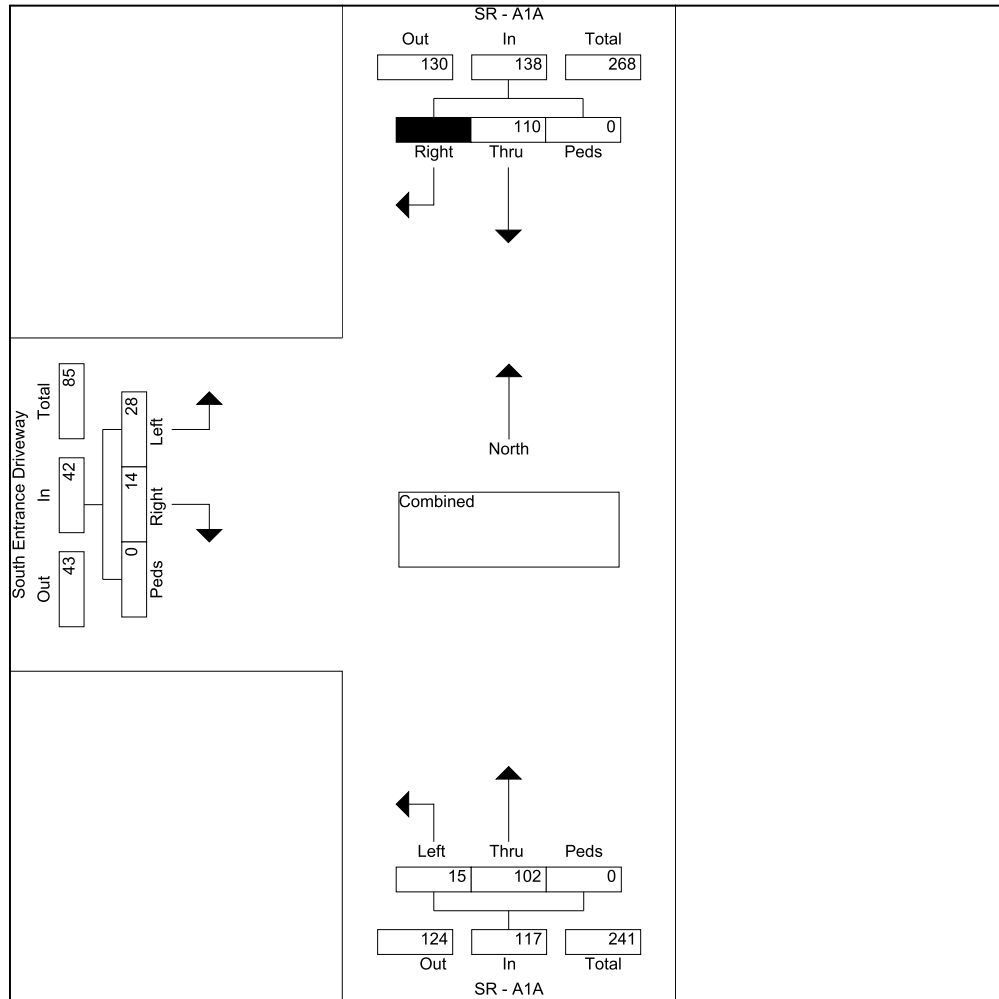
Start Time	SR - A1A Southbound					Westbound					SR - A1A Northbound					South Entrance Driveway Eastbound					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
06:00 PM	23	25	0	0	48	0	0	0	0	0	0	11	11	0	22	6	1	10	0	17	87
06:15 PM	10	20	0	0	30	0	0	0	0	0	15	10	0	25	7	0	9	0	16	71	
06:30 PM	16	18	0	0	34	0	0	0	0	0	16	14	0	30	6	0	9	0	15	79	
06:45 PM	16	10	0	0	26	0	0	0	0	0	12	2	0	14	3	0	4	0	7	47	
Total	65	73	0	0	138	0	0	0	0	0	54	37	0	91	22	1	32	0	55	284	
Grand Total	397	982	2	0	1381	0	0	0	0	0	5880	227	0	1112	155	2	231	0	388	2881	
Apprch %	28.7	71.1	0.1	0.0		0.0	0.0	0.0	0.0		0.4	79.1	20.4	0.0		39.9	0.5	59.5	0.0		
Total %	13.8	34.1	0.1	0.0	47.9	0.0	0.0	0.0	0.0	0.0	0.2	30.5	7.9	0.0	38.6	5.4	0.1	8.0	0.0	13.5	



Trident Engineering, LLC  
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 Sunrise, FL 33351

File Name : SOUTHE~3  
 Site Code : 00000000  
 Start Date : 01/28/2020  
 Page No : 3

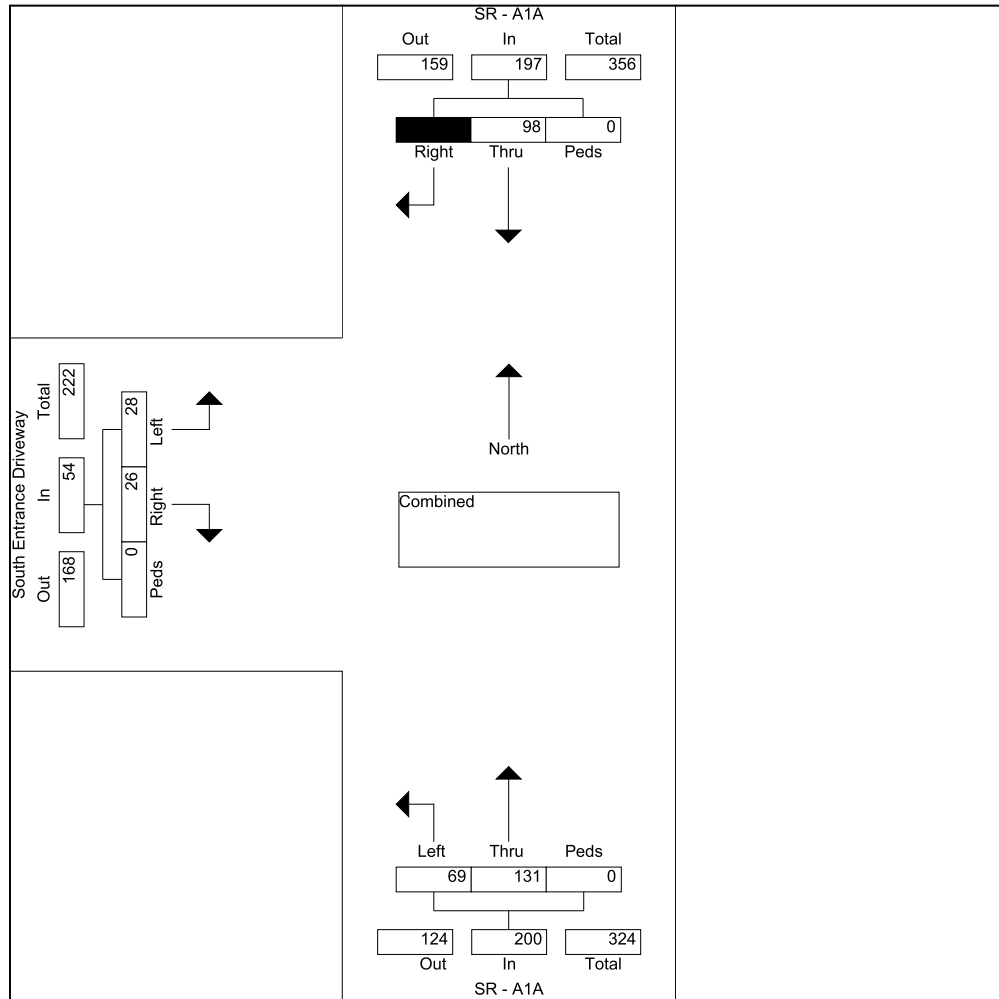
Start Time	SR - A1A Southbound					Westbound					SR - A1A Northbound					South Entrance Driveway Eastbound					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Peak Hour From 06:00 AM to 12:30 PM - Peak 1 of 1																					
Intersecti on	11:15 AM																				
Volume	28	110	0	0	138	0	0	0	0	0	0	102	15	0	117	14	0	28	0	42	297
Percent	20.3	79.7	0.0	0.0		0.0	0.0	0.0	0.0		0.0	87.2	12.8	0.0		33.3	0.0	66.7	0.0		
High Int. Volume	11:30 AM					5:45:00 AM					11:45 AM					11:15 AM					11:45
Peak Factor	9	28	0	0	37	0	0	0	0	0	0	26	5	0	31	4	0	9	0	13	81
					0.93										0.94					0.80	0.91
					2										4					8	7

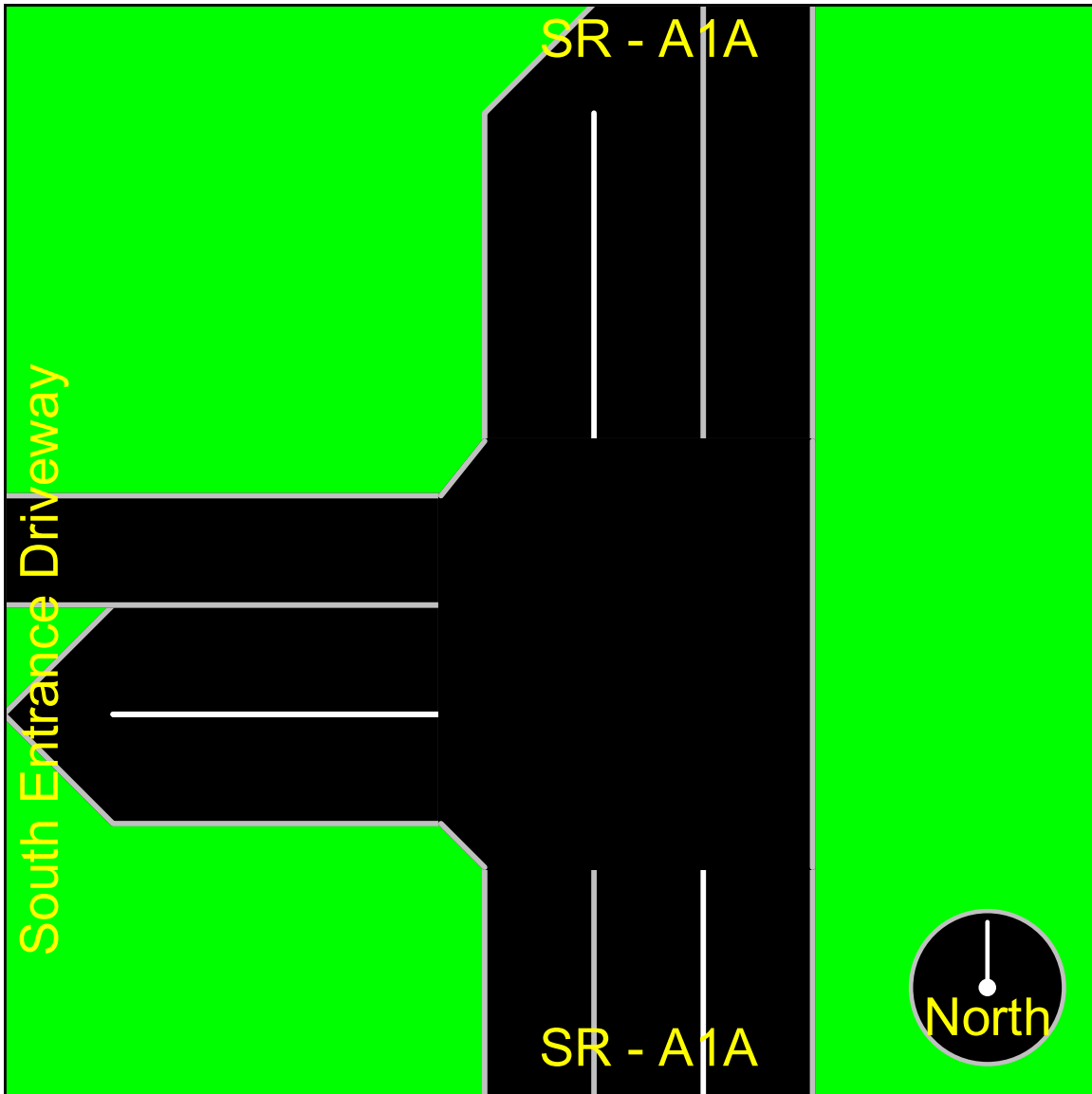


Trident Engineering, LLC  
 10232 NW 47th Street  
 Sunrise, FL 33351

File Name : SOUTHE~3  
 Site Code : 00000000  
 Start Date : 01/28/2020  
 Page No : 4

Start Time	SR - A1A Southbound					Westbound					SR - A1A Northbound					South Entrance Driveway Eastbound					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Peak Hour From 12:45 PM to 06:45 PM - Peak 1 of 1																					
Intersecti on	05:00 PM																				
Volume	99	98	0	0	197	0	0	0	0	0	0	131	69	0	200	26	1	28	0	55	452
Percent	50.3	49.7	0.0	0.0		0.0	0.0	0.0	0.0		0.0	65.5	34.5	0.0		47.3	1.8	50.9	0.0		
High Int. Peak Factor	05:15 PM										05:00 PM					05:15 PM					05:15
	32	20	0	0	52	0	0	0	0	0	0	34	17	0	51	4	1	9	0	14	117
	0.78										0.84					0.80					0.96
	2										7					9					6





Trident Engineering, LLC  
10232 NW 47th Street  
Sunrise, FL 33351

Sebastian Inlet State Park  
Driveway Entrance/Exit

File Name : SOUTHE~4  
Site Code : 00000000  
Start Date : 01/28/2020  
Page No : 1

Groups PrintedCars & Peds - Trucks & Bicycles - U-Turns

Start Time	SR - A1A Southbound					Westbound					SR - A1A Northbound					South Entrance Driveway Eastbound					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
*** BREAK ***																					
07:00 AM	2	6	0	0	8	0	0	0	0	0	0	8	2	0	10	1	0	0	0	1	19
07:15 AM	5	13	0	0	18	0	0	0	0	0	0	5	1	0	6	3	0	3	0	6	30
07:30 AM	5	15	1	0	21	0	0	0	0	0	0	8	0	0	8	4	0	1	0	5	34
07:45 AM	1	12	0	0	13	0	0	0	0	0	0	6	6	0	12	2	0	5	0	7	32
Total	13	46	1	0	60	0	0	0	0	0	0	27	9	0	36	10	0	9	0	19	115
08:00 AM	7	8	0	0	15	0	0	0	0	0	0	9	7	0	16	2	0	2	0	4	35
08:15 AM	3	14	0	0	17	0	0	0	0	0	0	21	5	0	26	1	0	5	0	6	49
08:30 AM	3	10	0	0	13	0	0	0	0	0	0	12	5	0	17	1	0	3	0	4	34
08:45 AM	3	17	0	0	20	0	0	0	0	0	0	11	2	0	13	5	0	4	0	9	42
Total	16	49	0	0	65	0	0	0	0	0	0	53	19	0	72	9	0	14	0	23	160
09:00 AM	5	18	0	0	23	0	0	0	0	0	0	15	2	0	17	1	0	2	0	3	43
09:15 AM	7	26	0	0	33	0	0	0	0	0	0	14	3	0	17	3	0	4	0	7	57
09:30 AM	6	32	0	0	38	0	0	0	0	0	0	23	3	0	26	3	0	6	0	9	73
09:45 AM	3	32	0	0	35	0	0	0	0	0	0	17	1	0	18	3	0	2	0	5	58
Total	21	108	0	0	129	0	0	0	0	0	0	69	9	0	78	10	0	14	0	24	231
10:00 AM	7	28	0	0	35	0	0	0	0	0	0	30	0	0	30	2	0	2	0	4	69
10:15 AM	10	18	0	0	28	0	0	0	0	0	0	16	5	0	21	0	0	9	0	9	58
10:30 AM	11	28	0	0	39	0	0	0	0	0	0	32	6	0	38	10	0	8	0	18	95
10:45 AM	9	21	0	0	30	0	0	0	0	0	0	32	3	0	35	5	0	0	0	5	70
Total	37	95	0	0	132	0	0	0	0	0	0	110	14	0	124	17	0	19	0	36	292
11:00 AM	5	20	0	0	25	0	0	0	0	0	0	19	3	0	22	4	0	7	0	11	58
11:15 AM	4	38	0	0	42	0	0	0	0	0	0	21	5	0	26	3	0	5	0	8	76
11:30 AM	6	27	0	0	33	0	0	0	0	0	0	30	7	0	37	6	0	4	0	10	80
11:45 AM	6	44	0	0	50	0	0	0	0	0	0	36	7	0	43	8	0	7	0	15	108
Total	21	129	0	0	150	0	0	0	0	0	0	106	22	0	128	21	0	23	0	44	322
12:00 PM	15	45	0	0	60	0	0	0	0	0	0	29	5	0	34	3	0	20	0	23	117
12:15 PM	7	40	0	0	47	0	0	0	0	0	0	32	5	0	37	5	0	7	0	12	96
12:30 PM	6	30	0	0	36	0	0	0	0	0	0	45	4	0	49	4	0	11	0	15	100
12:45 PM	10	19	0	0	29	0	0	0	0	0	0	31	5	0	36	4	0	3	0	7	72
Total	38	134	0	0	172	0	0	0	0	0	0	137	19	0	156	16	0	41	0	57	385
*** BREAK ***																					
03:00 PM	3	36	0	0	39	0	0	0	0	0	0	32	2	0	34	6	0	4	0	10	83
03:15 PM	7	29	0	0	36	0	0	0	0	0	0	39	5	0	44	4	0	11	0	15	95
03:30 PM	9	48	1	0	58	0	0	0	0	0	0	32	7	0	39	8	0	8	0	16	113
03:45 PM	8	29	0	0	37	0	0	0	0	0	0	32	6	0	38	5	0	8	0	13	88
Total	27	142	1	0	170	0	0	0	0	0	0	135	20	0	155	23	0	31	0	54	379
04:00 PM	10	39	0	0	49	0	0	0	0	0	0	32	1	0	33	5	0	4	0	9	91
04:15 PM	7	41	0	0	48	0	0	0	0	0	0	28	3	0	31	5	0	4	0	9	88
04:30 PM	9	34	1	0	44	0	0	0	0	0	0	30	2	0	32	3	0	3	0	6	82
04:45 PM	3	23	0	0	26	0	0	0	0	0	0	22	2	0	24	3	0	6	0	9	59
Total	29	137	1	0	167	0	0	0	0	0	0	112	8	0	120	16	0	17	0	33	320
05:00 PM	1	22	0	0	23	0	0	0	0	0	0	23	3	0	26	5	0	4	0	9	58
05:15 PM	8	24	0	0	32	0	0	0	0	0	0	25	1	0	26	4	0	3	0	7	65
05:30 PM	3	25	0	0	28	0	0	0	0	0	0	17	3	0	20	8	0	2	0	10	58
05:45 PM	3	18	0	0	21	0	0	0	0	0	0	17	1	0	18	6	0	8	0	14	53
Total	15	89	0	0	104	0	0	0	0	0	0	82	8	0	90	23	0	17	0	40	234

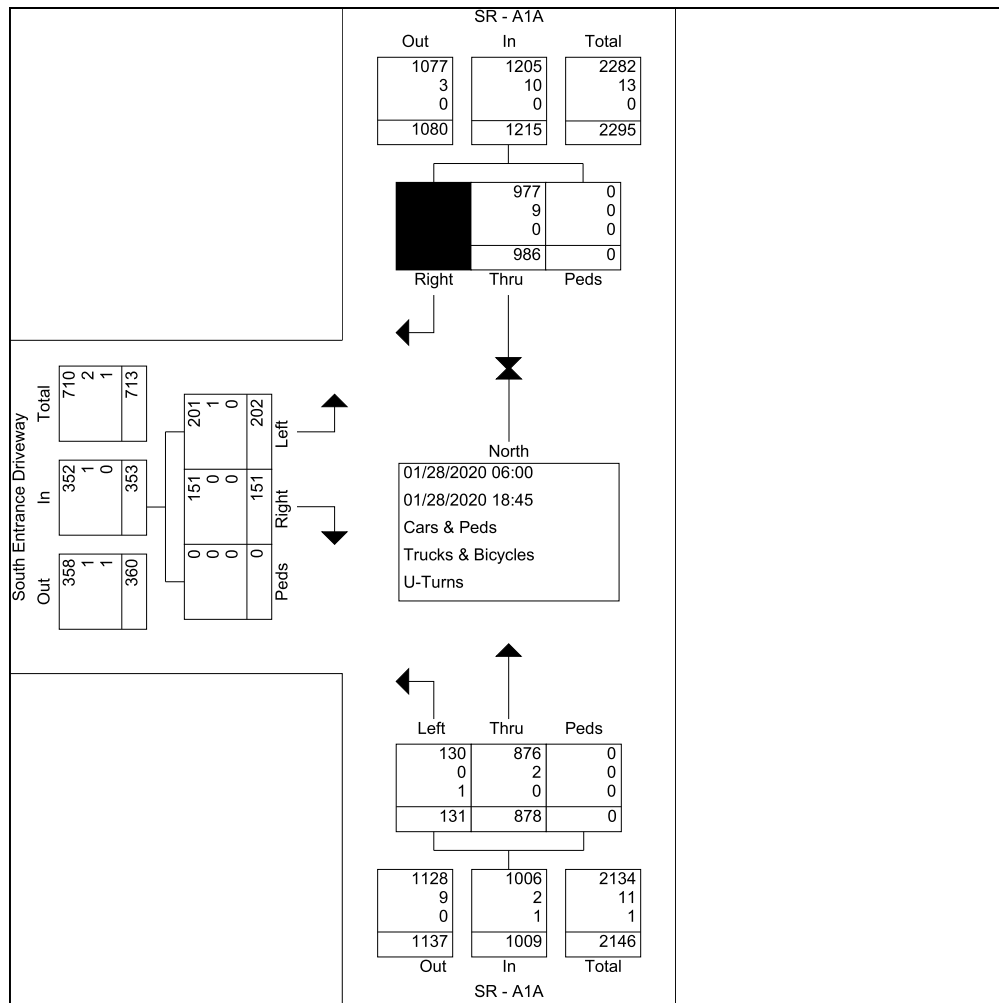


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Groups PrintedCars & Peds - Trucks & Bicycles - U-Turns

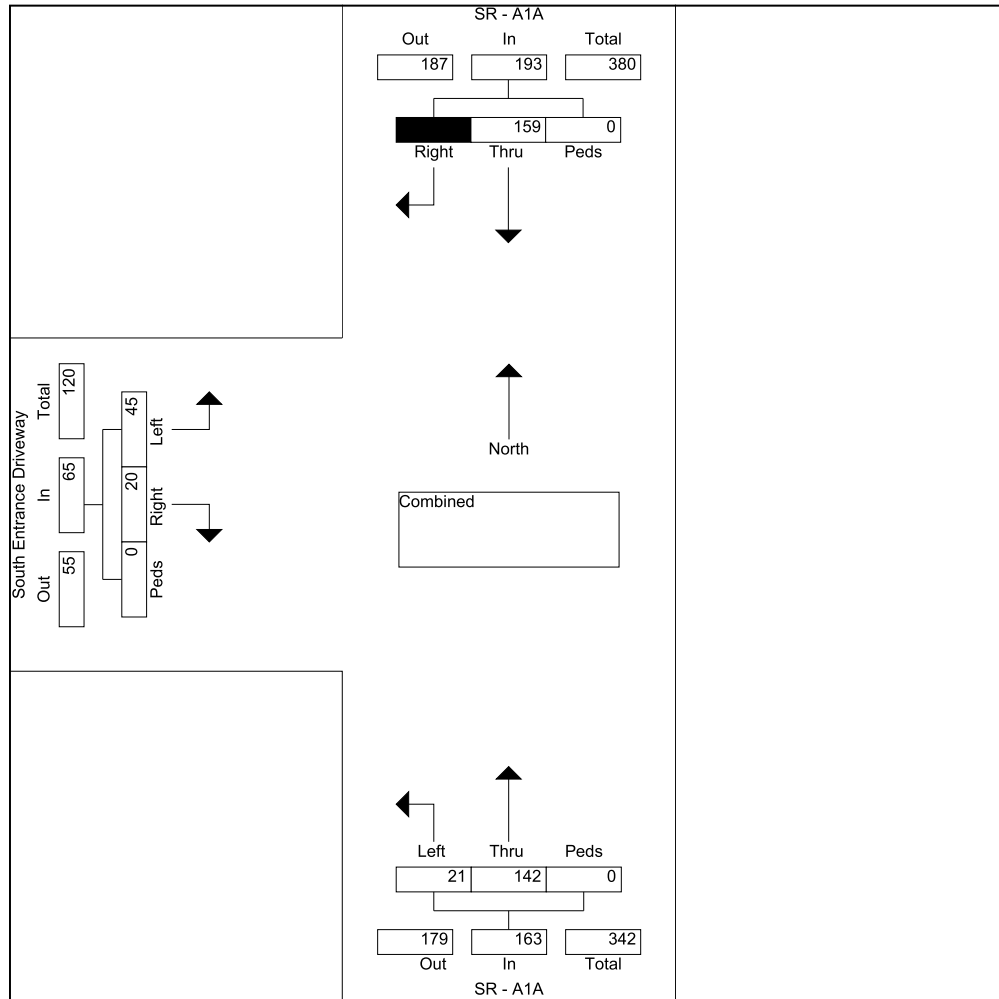
Start Time	SR - A1A Southbound					Westbound					SR - A1A Northbound					South Entrance Driveway Eastbound					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
06:00 PM	4	17	0	0	21	0	0	0	0	0	0	17	2	0	19	4	0	6	0	10	50
06:15 PM	1	10	0	0	11	0	0	0	0	0	0	11	0	0	11	1	0	5	0	6	28
06:30 PM	2	19	0	0	21	0	0	0	0	0	0	10	0	0	10	0	0	2	0	2	33
06:45 PM	5	11	0	0	16	0	0	0	0	0	0	9	1	0	10	1	0	4	0	5	31
Total	12	57	0	0	69	0	0	0	0	0	0	47	3	0	50	6	0	17	0	23	142
Grand Total	229	986	3	0	1218	0	0	0	0	0	0	878	131	0	1009	151	0	202	0	353	2580
Apprch %	18.8	81.0	0.2	0.0		0.0	0.0	0.0	0.0		0.0	87.0	13.0	0.0		42.8	0.0	57.2	0.0		
Total %	8.9	38.2	0.1	0.0	47.2	0.0	0.0	0.0	0.0	0.0	0.0	34.0	5.1	0.0	39.1	5.9	0.0	7.8	0.0	13.7	



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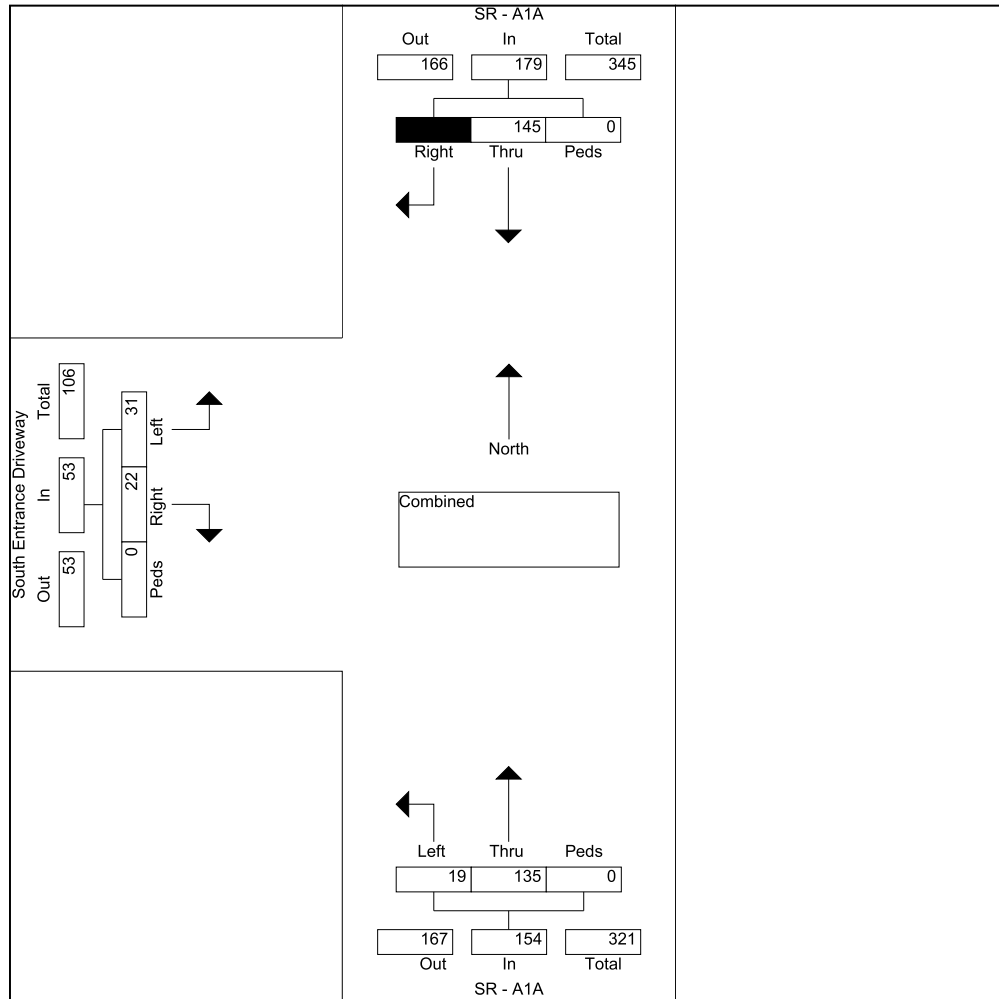
Start Time	SR - A1A Southbound					Westbound					SR - A1A Northbound					South Entrance Driveway Eastbound					Int. Total
	Rig ht	Thru	Left	Ped s	App. Total	Rig ht	Thru	Left	Ped s	App. Total	Rig ht	Thru	Left	Ped s	App. Total	Rig ht	Thru	Left	Ped s	App. Total	
Peak Hour From 06:00 AM to 12:30 PM - Peak 1 of 1																					
Intersecti on	11:45 AM																				
Volume	34	159	0	0	193	0	0	0	0	0	0	142	21	0	163	20	0	45	0	65	421
Percent	17.6	82.4	0.0	0.0		0.0	0.0	0.0	0.0		0.0	87.1	12.9	0.0		30.8	0.0	69.2	0.0		
High Int. Volume	12:00 PM					5:45:00 AM					12:30 PM					12:00 PM					12:00
Peak Factor	15	45	0	0	60	0	0	0	0	0	0	29	5	0	34	3	0	20	0	23	117
					0.80										0.83					0.70	0.90
					4										2					7	0

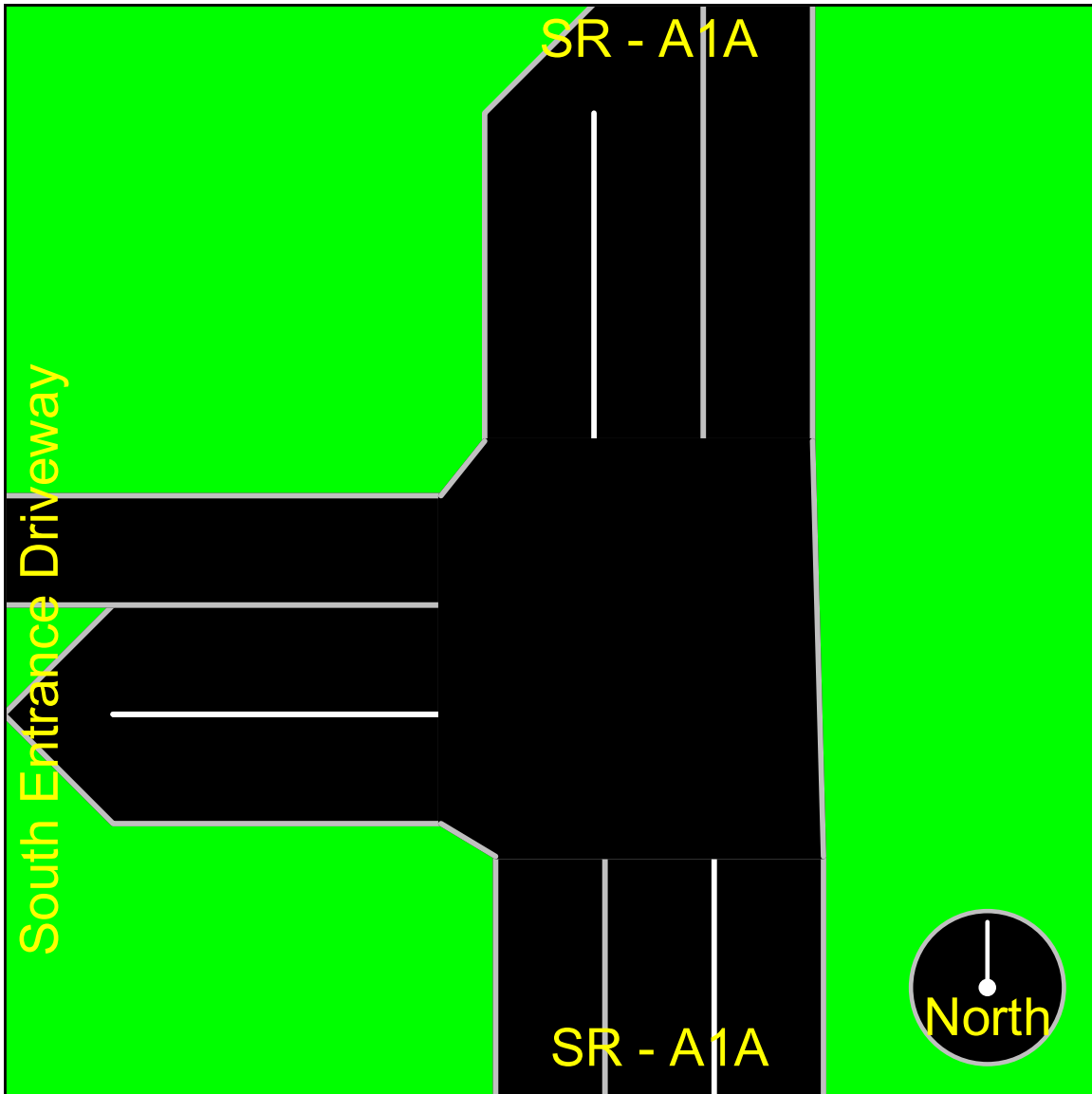


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Start Time	SR - A1A Southbound					Westbound					SR - A1A Northbound					South Entrance Driveway Eastbound					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Peak Hour From 12:45 PM to 06:45 PM - Peak 1 of 1																					
Intersecti on	03:15 PM																				
Volume	34	145	1	0	180	0	0	0	0	0	0	135	19	0	154	22	0	31	0	53	387
Percent	18.9	80.6	0.6	0.0		0.0	0.0	0.0	0.0		0.0	87.7	12.3	0.0		41.5	0.0	58.5	0.0		
High Int. Volume	03:30 PM										03:15 PM					03:30 PM					03:30
Peak Factor	9	48	1	0	58	0	0	0	0	0	0	32	7	0	39	8	0	8	0	16	113
					0.77										0.87					0.82	0.85
					6										5					8	6





**Appendix B**  
**Turning Movement Volume**  
**(TMC) Counts**

**Appendix D**  
**72-Hr. Bi-Directional**  
**Vehicle Classifications Counts**



10232 NW 47 Street  
Sunrise FL, 33351  
954.451.3795

## Sebastian Inlet Bridge - NB 72 Hrs. bi-directional vehicle classification counts (11/12/2019 to 11/14/2019)

Sebastian Inlet Bridge

**Northbound**

Start Time	Bikes	Cars & Trailer	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	Not Classe	Total
12 PM	2	18	7	1	1	0	0	0	0	0	0	0	0	0	29
12:15	0	33	9	0	3	0	0	0	0	0	0	0	0	0	45
12:30	2	19	13	0	3	0	0	2	0	0	0	0	0	0	39
12:45	2	19	11	0	1	0	0	0	0	0	0	0	0	0	33
13:00	6	89	40	1	8	0	0	2	0	0	0	0	0	0	146
13:15	0	14	5	1	3	0	0	0	0	0	0	0	0	0	23
13:30	2	20	9	0	2	0	0	0	0	0	0	0	0	0	33
13:45	0	24	4	0	0	0	0	0	0	0	0	0	0	0	28
13:45	1	24	5	0	2	1	0	0	0	0	0	0	0	0	33
14:00	3	82	23	1	7	1	0	0	0	0	0	0	0	0	117
14:15	0	20	6	0	0	0	0	1	0	0	0	0	0	0	27
14:30	2	24	9	0	4	0	0	2	0	0	0	0	0	0	41
14:45	1	18	15	0	1	0	0	0	1	0	0	0	0	0	36
14:45	1	26	11	0	4	0	0	0	1	0	0	0	0	0	43
15:00	4	88	41	0	9	0	0	3	2	0	0	0	0	0	147
15:15	0	15	5	0	0	0	0	0	0	0	0	0	0	0	20
15:30	1	24	10	0	1	0	0	1	0	0	0	0	0	0	37
15:45	0	26	5	0	2	0	0	0	0	0	0	0	0	0	33
15:45	0	27	10	0	1	0	0	1	0	0	0	0	0	0	39
16:00	1	92	30	0	4	0	0	2	0	0	0	0	0	0	129
16:15	1	23	4	0	2	0	0	0	0	0	0	0	0	0	30
16:30	2	35	10	0	2	0	0	0	0	0	0	0	0	0	49
16:45	2	27	10	1	0	0	0	0	0	0	0	0	0	0	40
16:45	0	18	7	0	3	0	0	0	0	0	0	0	0	0	28
17:00	5	103	31	1	7	0	0	0	0	0	0	0	0	0	147
17:15	1	27	5	0	0	0	0	0	0	0	0	0	0	0	33
17:30	1	25	6	0	1	0	0	0	0	0	0	0	0	0	33
17:45	0	28	5	0	1	0	0	0	0	0	0	0	0	0	34
17:45	0	20	4	0	0	0	0	0	0	0	0	0	0	0	24
18:00	2	100	20	0	2	0	0	0	0	0	0	0	0	0	124
18:15	0	19	4	0	0	0	0	0	0	0	0	0	0	0	23
18:30	0	8	1	0	0	0	0	0	0	0	0	0	0	0	9
18:45	0	22	2	0	0	0	0	0	0	0	0	0	0	0	24
18:45	0	12	2	0	1	0	0	0	0	0	0	0	0	0	15
19:00	0	61	9	0	1	0	0	0	0	0	0	0	0	0	71
19:15	1	7	2	0	0	0	0	0	0	0	0	0	0	0	10
19:30	0	4	2	0	1	0	0	0	0	0	0	0	0	0	7
19:45	0	8	1	0	0	0	0	0	0	0	0	0	0	0	9
19:45	1	10	5	0	0	0	0	0	0	0	0	0	0	0	16
20:00	2	29	10	0	1	0	0	0	0	0	0	0	0	0	42
20:15	0	7	2	0	0	0	0	0	0	0	0	0	0	0	9
20:30	0	2	3	0	0	0	0	0	0	0	0	0	0	0	5
20:45	0	4	3	0	1	0	0	0	0	0	0	0	0	0	8
20:45	0	9	1	0	0	0	0	0	0	0	0	0	0	0	10
21:00	0	22	9	0	1	0	0	0	0	0	0	0	0	0	32
21:15	0	2	3	0	1	0	0	0	0	0	0	0	0	0	6
21:30	1	4	2	0	0	0	0	0	0	0	0	0	0	0	7
21:45	0	2	4	0	0	0	0	0	0	0	0	0	0	0	6
21:45	0	4	1	0	0	0	0	1	0	0	0	0	0	0	6
22:00	1	12	10	0	1	0	0	1	0	0	0	0	0	0	25
22:15	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
22:30	0	4	1	0	0	0	0	0	0	0	0	0	0	0	5
22:45	0	4	0	0	1	0	0	0	0	0	0	0	0	0	5
22:45	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4
23:00	0	12	3	0	1	0	0	0	0	0	0	0	0	0	16
23:15	0	2	1	0	1	0	0	0	0	0	0	0	0	0	4
23:30	0	3	4	0	0	0	0	0	0	0	0	0	0	0	7
23:45	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
23:45	0	4	2	0	0	0	0	0	0	0	0	0	0	0	6
23:45	0	9	10	0	1	0	0	0	0	0	0	0	0	0	20
<b>Total</b>	<b>24</b>	<b>699</b>	<b>236</b>	<b>3</b>	<b>43</b>	<b>1</b>	<b>0</b>	<b>8</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1016</b>
<b>Percent</b>	<b>2.4%</b>	<b>68.8%</b>	<b>23.2%</b>	<b>0.3%</b>	<b>4.2%</b>	<b>0.1%</b>	<b>0.0%</b>	<b>0.8%</b>	<b>0.2%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	
<b>Daily Total</b>	<b>39</b>	<b>1046</b>	<b>389</b>	<b>4</b>	<b>75</b>	<b>3</b>	<b>0</b>	<b>15</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1575</b>
<b>Percent</b>	<b>2.5%</b>	<b>66.4%</b>	<b>24.7%</b>	<b>0.3%</b>	<b>4.8%</b>	<b>0.2%</b>	<b>0.0%</b>	<b>1.0%</b>	<b>0.3%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	





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## Sebastian Inlet Bridge - NB 72 Hrs. bi-directional vehicle classification counts (11/12/2019 to 11/14/2019)

Sebastian Inlet Bridge

**Northbound**

Start Time	Bikes	Cars & Trailer	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	Not Classe	Total
12 PM	0	13	5	1	2	1	0	0	0	0	0	0	0	0	22
12:15	0	19	6	1	1	0	0	0	0	0	0	0	0	0	27
12:30	0	21	4	0	2	0	0	0	0	0	0	0	0	0	27
12:45	0	16	6	1	1	0	0	0	0	0	0	0	0	0	24
13:00	0	69	21	3	6	1	0	0	0	0	0	0	0	0	100
13:15	0	9	10	0	2	0	0	1	0	0	0	0	0	0	22
13:30	0	15	4	0	1	0	0	0	0	0	0	0	0	0	20
13:45	0	10	3	0	3	0	0	0	0	0	0	0	0	0	16
14:00	0	19	3	0	1	0	0	0	0	0	0	0	0	0	23
14:15	0	53	20	0	7	0	0	1	0	0	0	0	0	0	81
14:30	0	17	6	0	0	0	0	0	0	0	0	0	0	0	23
14:45	0	9	7	0	1	1	0	0	0	0	0	0	0	0	18
15:00	0	18	2	0	4	0	0	0	0	0	0	0	0	0	24
15:15	0	13	11	0	0	1	0	0	0	0	0	0	0	0	25
15:30	0	57	26	0	5	2	0	0	0	0	0	0	0	0	90
15:45	0	14	6	0	1	1	0	0	0	0	0	0	0	0	22
16:00	0	15	7	1	1	0	0	0	0	0	0	0	0	0	24
16:15	0	9	2	0	2	0	0	0	0	0	0	0	0	0	13
16:30	0	18	5	0	0	0	0	0	0	0	0	0	0	0	23
16:45	0	56	20	1	4	1	0	0	0	0	0	0	0	0	82
17:00	1	17	3	1	1	0	0	0	0	0	0	0	0	0	23
17:15	0	29	9	0	2	0	0	1	0	0	0	0	0	0	41
17:30	0	26	7	0	1	0	0	0	0	0	0	0	0	0	34
17:45	0	17	3	0	4	0	0	0	0	0	0	0	0	0	24
18:00	1	89	22	1	8	0	0	1	0	0	0	0	0	0	122
18:15	1	21	13	0	1	0	0	0	0	0	0	0	0	0	36
18:30	0	36	2	0	0	0	0	0	0	0	0	0	0	0	38
18:45	0	29	3	0	1	0	0	0	0	0	0	0	0	0	33
19:00	0	18	5	0	2	0	0	0	0	0	0	0	0	0	25
19:15	1	104	23	0	4	0	0	0	0	0	0	0	0	0	132
19:30	0	8	5	0	2	0	0	0	0	0	0	0	0	0	15
19:45	0	16	3	0	1	0	0	0	0	0	0	0	0	0	20
20:00	0	12	2	0	0	0	0	0	1	0	0	0	0	0	15
20:15	0	7	3	0	0	0	0	0	0	0	0	0	0	0	10
20:30	0	43	13	0	3	0	0	0	1	0	0	0	0	0	60
20:45	0	6	0	0	2	0	0	0	0	0	0	0	0	0	8
21:00	0	9	5	0	1	0	0	0	0	0	0	0	0	0	15
21:15	0	6	2	0	1	0	0	0	0	0	0	0	0	0	9
21:30	0	5	2	0	0	0	0	0	0	0	0	0	0	0	7
21:45	0	26	9	0	4	0	0	0	0	0	0	0	0	0	39
22:00	0	4	3	0	0	0	0	0	0	0	0	0	0	0	7
22:15	0	4	3	0	0	0	0	0	0	0	0	0	0	0	7
22:30	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
22:45	0	7	5	0	0	0	0	1	0	0	0	0	0	0	13
23:00	0	15	13	0	0	0	0	1	0	0	0	0	0	0	29
23:15	0	7	1	0	0	0	0	0	0	0	0	0	0	0	8
23:30	0	2	1	0	1	0	0	1	0	0	0	0	0	0	5
23:45	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
24:00	0	4	2	0	0	0	0	0	0	0	0	0	0	0	6
24:15	0	17	4	0	1	0	0	1	0	0	0	0	0	0	23
24:30	0	3	2	0	0	0	0	0	0	0	0	0	0	0	5
24:45	0	7	0	0	0	0	0	0	0	0	0	0	0	0	7
25:00	0	6	3	0	1	0	0	0	0	0	0	0	0	0	10
25:15	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
25:30	0	17	6	0	1	0	0	0	0	0	0	0	0	0	24
25:45	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
26:00	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
26:15	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
26:30	0	2	0	0	0	0	0	1	0	0	0	0	0	0	3
26:45	0	13	1	0	0	0	0	1	0	0	0	0	0	0	15
<b>Total</b>	<b>2</b>	<b>559</b>	<b>178</b>	<b>5</b>	<b>43</b>	<b>4</b>	<b>0</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>797</b>
<b>Percent</b>	<b>0.3%</b>	<b>70.1%</b>	<b>22.3%</b>	<b>0.6%</b>	<b>5.4%</b>	<b>0.5%</b>	<b>0.0%</b>	<b>0.6%</b>	<b>0.1%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	
<b>Daily Total</b>	<b>3</b>	<b>805</b>	<b>321</b>	<b>9</b>	<b>74</b>	<b>6</b>	<b>1</b>	<b>14</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1235</b>
<b>Percent</b>	<b>0.2%</b>	<b>65.2%</b>	<b>26.0%</b>	<b>0.7%</b>	<b>6.0%</b>	<b>0.5%</b>	<b>0.1%</b>	<b>1.1%</b>	<b>0.2%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	

10232 NW 47 Street  
Sunrise FL, 33351  
954.451.3795

## Sebastian Inlet Bridge - NB 72 Hrs. bi-directional vehicle classification counts (11/12/2019 to 11/14/2019)

Sebastian Inlet Bridge

**Northbound**

Start Time	Bikes	Cars & Trailer	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	Not Classe	Total
11/14/19	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
00:15	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
00:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
00:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	2	5	0	0	0	0	0	0	0	0	0	0	0	7
01:15	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
01:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:45	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
02:15	0	5	2	0	0	0	0	0	0	0	0	0	0	0	7
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2
03:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	1	1	0	1	0	0	0	0	0	0	0	0	0	3
04:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
05:00	0	4	2	0	0	0	0	0	0	0	0	0	0	0	6
05:15	0	7	2	0	0	0	0	0	0	0	0	0	0	0	9
05:30	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
05:45	0	2	4	0	0	0	0	0	0	0	0	0	0	0	6
06:00	0	2	1	0	0	0	0	1	0	0	0	0	0	0	4
06:15	0	5	5	0	0	0	0	0	0	0	0	0	0	0	10
06:30	0	10	11	0	0	0	0	1	0	0	0	0	0	0	22
06:45	0	3	4	0	0	0	0	0	0	0	0	0	0	0	7
07:00	0	3	3	1	1	0	0	0	0	0	0	0	0	0	8
07:15	0	5	4	0	0	0	0	0	0	0	0	0	0	0	9
07:30	0	9	2	0	0	0	0	0	0	0	0	0	0	0	11
07:45	0	14	2	0	3	0	0	0	0	0	0	0	0	0	19
08:00	0	20	13	1	1	0	0	0	0	0	0	0	0	0	35
08:15	0	5	6	0	1	0	0	1	0	0	0	0	0	0	13
08:30	0	6	8	0	1	0	0	1	0	0	0	0	0	0	16
08:45	0	3	3	0	1	0	0	0	0	0	0	0	0	0	9
09:00	0	14	2	0	3	0	0	0	0	0	0	0	0	0	19
09:15	0	30	19	0	6	0	0	2	0	0	0	0	0	0	57
09:30	0	13	6	0	1	0	0	0	0	0	0	0	0	0	20
09:45	0	5	4	0	0	0	0	0	0	0	0	0	0	0	9
10:00	0	13	4	0	1	0	0	0	0	0	0	0	0	0	18
10:15	0	12	3	0	5	0	0	1	0	0	0	0	0	0	21
10:30	0	43	17	0	7	0	0	1	0	0	0	0	0	0	68
10:45	0	2	4	0	1	0	0	1	0	0	0	0	0	0	8
11:00	0	14	4	0	1	0	0	1	0	0	0	0	0	0	20
11:15	0	8	7	1	0	0	0	0	0	0	0	0	0	0	16
11:30	0	16	8	0	2	0	0	0	0	0	0	0	0	0	26
11:45	0	40	23	1	4	0	0	2	0	0	0	0	0	0	70
12:00	0	15	5	0	2	0	0	0	0	0	0	0	0	0	22
12:15	2	8	3	0	3	0	0	0	0	0	0	0	0	0	16
12:30	0	22	7	0	1	0	0	1	1	0	0	0	0	0	32
12:45	1	10	6	0	1	0	0	0	1	0	0	0	0	0	19
Total	4	273	135	3	33	0	0	9	2	0	0	0	0	0	459
Percent	0.9%	59.5%	29.4%	0.7%	7.2%	0.0%	0.0%	2.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	

10232 NW 47 Street  
Sunrise FL, 33351  
954.451.3795

## Sebastian Inlet Bridge - NB 72 Hrs. bi-directional vehicle classification counts (11/12/2019 to 11/14/2019)

Sebastian Inlet Bridge

**Northbound**

Start Time	Bikes	Cars & Trailer	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	Not Classe	Total
12 PM	2	15	10	0	2	0	0	0	0	0	0	0	0	0	29
12:15	0	22	5	1	0	2	0	3	0	0	0	0	0	0	33
12:30	0	18	11	0	0	0	0	1	0	0	0	0	0	0	30
12:45	0	18	8	0	1	0	0	0	0	0	0	0	0	0	27
13:00	2	73	34	1	3	2	0	4	0	0	0	0	0	0	119
13:15	1	20	7	0	2	0	0	0	0	0	0	0	0	0	30
13:30	0	18	5	0	2	1	0	0	0	0	0	0	0	0	26
13:45	0	16	8	0	3	0	0	0	0	0	0	0	0	0	27
14:00	0	22	9	0	3	0	0	0	0	0	0	0	0	0	34
14:15	1	76	29	0	10	1	0	0	0	0	0	0	0	0	117
14:30	0	18	9	1	1	0	0	0	0	0	0	0	0	0	29
14:45	0	13	8	0	1	0	0	0	0	0	0	0	0	0	22
15:00	0	16	8	0	6	0	0	0	0	0	0	0	0	0	30
15:15	0	11	10	0	0	0	0	1	0	0	0	0	0	0	22
15:30	0	58	35	1	8	0	0	1	0	0	0	0	0	0	103
15:45	0	11	9	0	0	0	0	1	0	0	0	0	0	0	21
16:00	0	18	5	0	4	0	0	0	0	0	0	0	0	0	27
16:15	0	24	5	0	2	0	0	0	0	0	0	0	0	0	31
16:30	0	29	4	0	2	0	0	0	0	0	0	0	0	0	35
16:45	0	82	23	0	8	0	0	1	0	0	0	0	0	0	114
17:00	1	24	7	0	2	0	0	0	0	0	0	0	0	0	34
17:15	0	17	8	0	1	0	0	0	0	0	0	0	0	0	26
17:30	0	29	7	0	1	0	0	0	0	0	0	0	0	0	37
17:45	0	23	6	0	1	0	0	1	0	0	0	0	0	0	31
18:00	1	93	28	0	5	0	0	1	0	0	0	0	0	0	128
18:15	0	20	4	0	2	0	0	0	0	0	0	0	0	0	26
18:30	0	30	10	0	1	0	0	0	0	0	0	0	0	0	41
18:45	0	21	8	0	1	0	0	2	0	0	0	0	0	0	32
19:00	0	17	2	0	1	0	0	0	0	0	0	0	0	0	20
19:15	0	88	24	0	5	0	0	2	0	0	0	0	0	0	119
19:30	0	18	2	0	1	0	0	0	0	0	0	0	0	0	21
19:45	0	14	8	0	1	0	0	0	0	0	0	0	0	0	23
20:00	0	6	5	0	1	0	0	0	0	0	0	0	0	0	12
20:15	0	8	3	0	1	0	0	0	0	0	0	0	0	0	12
20:30	0	46	18	0	4	0	0	0	0	0	0	0	0	0	68
20:45	0	5	2	0	1	0	0	0	0	0	0	0	0	0	8
21:00	0	9	4	0	0	0	0	0	0	0	0	0	0	0	13
21:15	0	3	4	0	1	0	0	0	0	0	0	0	0	0	8
21:30	0	3	4	0	0	0	0	0	0	0	0	0	0	0	7
21:45	0	20	14	0	2	0	0	0	0	0	0	0	0	0	36
22:00	0	7	2	0	0	0	0	0	0	0	0	0	0	0	9
22:15	0	5	3	0	0	0	0	0	0	0	0	0	0	0	8
22:30	0	7	2	0	0	0	0	0	0	0	0	0	0	0	9
22:45	0	7	2	0	0	0	0	0	0	0	0	0	0	0	9
23:00	0	26	9	0	0	0	0	0	0	0	0	0	0	0	35
23:15	0	3	3	0	0	0	0	0	0	0	0	0	0	0	6
23:30	0	6	3	0	0	0	0	0	0	0	0	0	0	0	9
23:45	0	6	4	0	0	0	0	0	0	0	0	0	0	0	10
24:00	0	4	1	0	3	0	0	0	0	0	0	0	0	0	8
24:15	0	19	11	0	3	0	0	0	0	0	0	0	0	0	33
24:30	0	5	2	0	0	0	0	0	0	0	0	0	0	0	7
24:45	0	8	2	0	0	0	0	0	0	0	0	0	0	0	10
25:00	0	2	5	0	1	0	0	0	0	0	0	0	0	0	8
25:15	0	5	1	0	0	0	0	0	0	0	0	0	0	0	6
25:30	0	20	10	0	1	0	0	0	0	0	0	0	0	0	31
25:45	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
26:00	0	4	1	0	0	0	0	0	0	0	0	0	0	0	5
26:15	0	2	1	0	1	0	0	0	0	0	0	0	0	0	4
26:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26:45	0	10	2	0	1	0	0	0	0	0	0	0	0	0	13
<b>Total</b>	<b>4</b>	<b>611</b>	<b>237</b>	<b>2</b>	<b>50</b>	<b>3</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>916</b>
<b>Percent</b>	<b>0.4%</b>	<b>66.7%</b>	<b>25.9%</b>	<b>0.2%</b>	<b>5.5%</b>	<b>0.3%</b>	<b>0.0%</b>	<b>1.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	
<b>Daily Total</b>	<b>8</b>	<b>884</b>	<b>372</b>	<b>5</b>	<b>83</b>	<b>3</b>	<b>0</b>	<b>18</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1375</b>
<b>Percent</b>	<b>0.6%</b>	<b>64.3%</b>	<b>27.1%</b>	<b>0.4%</b>	<b>6.0%</b>	<b>0.2%</b>	<b>0.0%</b>	<b>1.3%</b>	<b>0.1%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	
<b>Grand Total</b>	<b>50</b>	<b>2735</b>	<b>1082</b>	<b>18</b>	<b>232</b>	<b>12</b>	<b>1</b>	<b>47</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4185</b>
<b>Percent</b>	<b>1.2%</b>	<b>65.4%</b>	<b>25.9%</b>	<b>0.4%</b>	<b>5.5%</b>	<b>0.3%</b>	<b>0.0%</b>	<b>1.1%</b>	<b>0.2%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	

10232 NW 47 Street  
Sunrise FL, 33351  
954.451.3795

## Sebastian Inlet Bridge - SB 72 Hrs. bi-directional vehicle classification counts (12/10/2019 to 12/12/2019)

Sebastian Inlet Bridge

Southbound

Start Time	Bikes	Cars & Trailer	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	Not Classe	Total
12/10/19	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	1	3	0	0	0	0	0	0	0	0	0	0	0	4
01:15	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
01:30	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:15	0	1	2	0	1	0	0	0	0	0	0	0	0	0	4
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:45	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
05:00	0	5	1	0	0	0	0	0	0	0	0	0	0	0	6
05:15	0	2	3	0	2	0	0	0	0	0	0	0	0	0	7
05:30	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
05:45	0	8	0	0	0	0	0	0	0	0	0	0	0	0	8
06:00	0	5	5	0	0	0	0	1	0	0	0	0	0	0	11
06:15	1	16	9	0	2	0	0	1	0	0	0	0	0	0	28
06:30	0	5	3	0	0	0	0	0	0	0	0	0	0	0	9
06:45	0	6	4	0	1	0	0	2	0	0	0	0	0	0	13
07:00	0	18	6	0	1	0	0	1	0	0	0	0	0	0	26
07:15	2	15	3	1	2	0	0	0	0	0	0	0	0	0	23
07:30	3	44	16	1	4	0	0	3	0	0	0	0	0	0	71
07:45	0	16	6	0	0	0	0	1	0	0	0	0	0	0	23
08:00	1	20	12	0	4	0	0	2	0	0	0	0	0	0	39
08:15	0	20	10	0	1	1	0	0	0	0	0	0	0	0	32
08:30	0	27	3	0	0	0	0	0	0	0	0	0	0	0	30
08:45	1	83	31	0	5	1	0	3	0	0	0	0	0	0	124
09:00	0	26	7	0	0	0	1	0	0	0	0	0	0	0	34
09:15	0	16	7	0	1	0	0	0	0	0	0	0	0	0	24
09:30	1	23	8	0	0	0	0	1	0	0	0	0	0	0	33
09:45	0	12	3	0	2	0	0	0	0	0	0	0	0	0	17
10:00	1	77	25	0	3	0	1	1	0	0	0	0	0	0	108
10:15	0	16	3	1	3	2	0	1	0	0	0	0	0	0	26
10:30	0	17	5	0	3	2	0	0	1	0	0	0	0	0	28
10:45	0	15	10	0	1	0	0	0	0	0	0	0	0	0	26
11:00	0	16	5	0	2	0	0	0	0	0	0	0	0	0	23
11:15	0	64	23	1	9	4	0	1	1	0	0	0	0	0	103
11:30	2	23	3	0	4	0	0	2	0	0	0	0	0	0	34
11:45	0	25	6	0	1	0	0	0	0	0	0	0	0	0	32
12/11/19	0	25	12	0	4	0	0	1	0	0	0	0	0	0	42
12/12/19	0	23	8	0	4	0	0	0	0	0	0	0	0	0	35
12/10/19	2	96	29	0	13	0	0	3	0	0	0	0	0	0	143
12/11/19	0	24	10	0	2	1	0	0	0	0	0	0	0	0	37
12/12/19	0	28	8	1	4	1	0	0	0	0	0	0	0	0	42
12/10/19	1	20	11	0	2	2	0	1	0	0	0	0	0	0	37
12/11/19	0	20	10	0	4	0	0	0	0	0	0	0	0	0	34
12/12/19	1	92	39	1	12	4	0	1	0	0	0	0	0	0	150
<b>Total</b>	<b>8</b>	<b>481</b>	<b>179</b>	<b>3</b>	<b>49</b>	<b>9</b>	<b>1</b>	<b>13</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>744</b>
<b>Percent</b>	<b>1.1%</b>	<b>64.7%</b>	<b>24.1%</b>	<b>0.4%</b>	<b>6.6%</b>	<b>1.2%</b>	<b>0.1%</b>	<b>1.7%</b>	<b>0.1%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	

10232 NW 47 Street  
Sunrise FL, 33351  
954.451.3795

## Sebastian Inlet Bridge - SB 72 Hrs. bi-directional vehicle classification counts (12/10/2019 to 12/12/2019)

Sebastian Inlet Bridge

Southbound

Start Time	Bikes	Cars & Trailer	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	Not Classe	Total
12 PM	0	16	5	0	0	0	0	1	0	0	0	0	0	0	22
12:15	0	22	11	0	2	0	0	4	0	0	0	0	0	0	39
12:30	0	11	6	0	3	0	0	1	0	0	0	0	0	0	21
12:45	5	16	8	0	2	0	0	0	0	0	0	0	0	0	31
	5	65	30	0	7	0	0	6	0	0	0	0	0	0	113
13:00	2	23	5	1	3	0	0	0	0	0	0	0	0	0	34
13:15	0	18	7	0	1	2	0	0	0	0	0	0	0	0	28
13:30	1	29	9	0	2	2	0	0	0	0	0	0	0	0	43
13:45	1	25	8	1	0	0	0	0	0	0	0	0	0	0	35
	4	95	29	2	6	4	0	0	0	0	0	0	0	0	140
14:00	0	27	10	0	3	0	0	0	0	0	0	0	0	0	40
14:15	1	14	5	0	3	0	0	0	0	0	0	0	0	0	23
14:30	3	16	11	0	1	0	0	0	0	0	0	0	0	0	31
14:45	0	18	10	0	2	0	0	0	0	0	0	0	0	0	30
	4	75	36	0	9	0	0	0	0	0	0	0	0	0	124
15:00	0	17	12	0	2	0	0	0	0	0	0	0	0	0	31
15:15	1	14	15	0	1	1	0	0	0	0	0	0	0	0	32
15:30	2	17	15	0	1	1	0	0	0	0	0	0	0	0	36
15:45	0	20	11	0	4	0	0	1	1	0	0	0	0	0	37
	3	68	53	0	8	2	0	1	1	0	0	0	0	0	136
16:00	2	14	7	0	4	0	0	0	0	0	0	0	0	0	27
16:15	0	24	8	0	1	0	0	2	0	0	0	0	0	0	35
16:30	3	20	6	0	1	1	0	0	0	0	0	0	0	0	31
16:45	0	21	11	0	0	0	0	1	0	0	0	0	0	0	33
	5	79	32	0	6	1	0	3	0	0	0	0	0	0	126
17:00	0	23	9	0	3	1	0	0	1	0	0	0	0	0	37
17:15	1	19	10	0	3	0	0	0	1	0	0	0	0	0	34
17:30	0	13	7	1	1	6	0	0	0	0	0	0	0	0	28
17:45	0	26	5	0	1	2	0	0	0	0	0	0	0	0	34
	1	81	31	1	8	9	0	0	2	0	0	0	0	0	133
18:00	0	16	2	0	2	0	0	0	0	0	0	0	0	0	20
18:15	0	10	3	0	1	0	0	1	0	0	0	0	0	0	15
18:30	0	6	5	0	0	0	0	0	0	0	0	0	0	0	11
18:45	0	9	4	0	0	0	0	0	0	0	0	0	0	0	13
	0	41	14	0	3	0	0	1	0	0	0	0	0	0	59
19:00	0	10	5	0	0	0	0	0	0	0	0	0	0	0	15
19:15	0	7	0	0	0	0	0	0	0	0	0	0	0	0	7
19:30	1	4	1	0	0	0	0	0	0	0	0	0	0	0	6
19:45	0	6	1	0	1	0	0	0	0	0	0	0	0	0	8
	1	27	7	0	1	0	0	0	0	0	0	0	0	0	36
20:00	0	2	1	0	1	0	0	0	0	0	0	0	0	0	4
20:15	0	4	2	0	0	0	0	1	0	0	0	0	0	0	7
20:30	0	5	1	0	0	0	0	0	0	0	0	0	0	0	6
20:45	0	4	1	0	1	0	0	0	0	0	0	0	0	0	6
	0	15	5	0	2	0	0	1	0	0	0	0	0	0	23
21:00	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
21:15	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
21:30	0	2	2	0	0	0	0	1	0	0	0	0	0	0	5
21:45	0	9	2	0	0	0	0	1	0	0	0	0	0	0	12
	0	19	5	0	0	0	0	2	0	0	0	0	0	0	26
22:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
22:15	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
22:30	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4
22:45	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
	0	7	4	0	0	0	0	0	0	0	0	0	0	0	11
23:00	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
23:15	0	4	0	0	1	0	0	0	0	0	0	0	0	0	5
23:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
23:45	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
	0	7	3	0	1	0	0	0	0	0	0	0	0	0	11
<b>Total</b>	<b>23</b>	<b>579</b>	<b>249</b>	<b>3</b>	<b>51</b>	<b>16</b>	<b>0</b>	<b>14</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>938</b>
<b>Percent</b>	<b>2.5%</b>	<b>61.7%</b>	<b>26.5%</b>	<b>0.3%</b>	<b>5.4%</b>	<b>1.7%</b>	<b>0.0%</b>	<b>1.5%</b>	<b>0.3%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	
<b>Daily Total</b>	<b>31</b>	<b>1060</b>	<b>428</b>	<b>6</b>	<b>100</b>	<b>25</b>	<b>1</b>	<b>27</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1682</b>
<b>Percent</b>	<b>1.8%</b>	<b>63.0%</b>	<b>25.4%</b>	<b>0.4%</b>	<b>5.9%</b>	<b>1.5%</b>	<b>0.1%</b>	<b>1.6%</b>	<b>0.2%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	

10232 NW 47 Street  
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Sebastian Inlet Bridge

Southbound

Start Time	Bikes	Cars & Trailer	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	Not Classe	Total
12/11/19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:15	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
02:15	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:30	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
02:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	3	4	0	0	0	0	0	0	0	0	0	0	0	7
03:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
03:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	1	1	0	0	1	0	0	0	0	0	0	0	0	3
04:45	0	1	2	0	1	0	0	0	0	0	0	0	0	0	4
05:00	0	2	3	0	1	1	0	0	0	0	0	0	0	0	7
05:15	0	2	0	0	1	0	0	0	0	0	0	0	0	0	3
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	4	3	0	0	0	0	0	0	0	0	0	0	0	7
06:00	0	8	2	0	0	0	0	1	0	0	0	0	0	0	11
06:15	0	14	5	0	1	0	0	1	0	0	0	0	0	0	21
06:30	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
06:45	0	8	6	0	2	0	0	0	0	0	0	0	0	0	16
07:00	0	15	4	0	0	0	0	0	0	0	0	0	0	0	19
07:15	2	14	3	0	0	0	0	0	0	0	0	0	0	0	19
07:30	2	42	13	0	2	0	0	0	0	0	0	0	0	0	59
07:45	0	10	4	1	0	0	0	1	0	0	0	0	0	0	16
08:00	1	18	8	0	2	0	0	0	1	0	0	0	0	0	30
08:15	0	21	8	0	0	0	0	0	0	0	0	0	0	0	29
08:30	0	24	5	0	0	0	0	1	0	0	0	0	0	0	30
08:45	1	73	25	1	2	0	0	2	1	0	0	0	0	0	105
09:00	0	15	6	0	3	0	0	0	0	0	0	0	0	0	24
09:15	1	20	6	0	0	0	0	0	0	0	0	0	0	0	27
09:30	0	18	10	0	4	0	0	1	0	0	0	0	0	0	33
09:45	0	14	8	0	0	0	0	2	0	0	0	0	0	0	24
10:00	1	67	30	0	7	0	0	3	0	0	0	0	0	0	108
10:15	0	12	10	0	0	0	0	0	0	0	0	0	0	0	22
10:30	0	13	8	0	0	0	0	0	0	0	0	0	0	0	21
10:45	0	12	6	0	1	0	0	0	0	0	0	0	0	0	19
11:00	0	10	11	0	0	0	0	0	0	0	0	0	0	0	21
11:15	0	47	35	0	1	0	0	0	0	0	0	0	0	0	83
11:30	0	25	13	0	0	0	0	1	0	0	0	0	0	0	39
11:45	0	22	2	0	2	0	0	0	0	0	0	0	0	0	26
12/10/19	1	10	5	0	2	1	0	1	0	0	0	0	0	0	20
12/11/19	2	18	11	0	1	0	0	1	0	0	0	0	0	0	33
12/12/19	3	75	31	0	5	1	0	3	0	0	0	0	0	0	118
00:00	0	21	10	0	1	0	0	0	0	0	0	0	0	0	32
00:15	0	20	8	0	3	0	0	2	0	0	0	0	0	0	33
00:30	0	20	6	1	3	0	0	1	0	0	0	0	0	0	31
00:45	0	16	6	0	3	0	0	0	0	0	0	0	0	0	25
01:00	0	77	30	1	10	0	0	3	0	0	0	0	0	0	121
<b>Total</b>	<b>7</b>	<b>403</b>	<b>178</b>	<b>2</b>	<b>29</b>	<b>2</b>	<b>0</b>	<b>12</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>634</b>
<b>Percent</b>	<b>1.1%</b>	<b>63.6%</b>	<b>28.1%</b>	<b>0.3%</b>	<b>4.6%</b>	<b>0.3%</b>	<b>0.0%</b>	<b>1.9%</b>	<b>0.2%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	

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Sebastian Inlet Bridge

Southbound

Start Time	Bikes	Cars & Trailer	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	Not Classe	Total
12 PM	0	21	5	2	3	0	0	0	0	0	0	0	0	0	31
12:15	0	17	6	0	2	0	0	0	0	0	0	0	0	0	25
12:30	0	21	10	1	4	0	0	0	1	0	0	0	0	0	37
12:45	0	13	12	0	2	0	0	0	0	0	0	0	0	0	27
	0	72	33	3	11	0	0	0	1	0	0	0	0	0	120
13:00	0	24	13	0	0	0	0	1	0	0	0	0	0	0	38
13:15	0	22	5	0	3	0	0	0	0	0	0	0	0	0	30
13:30	0	12	8	0	0	0	0	0	0	0	0	0	0	0	20
13:45	0	20	6	0	3	0	0	1	0	0	0	0	0	0	30
	0	78	32	0	6	0	0	2	0	0	0	0	0	0	118
14:00	0	26	11	0	0	1	0	0	0	0	0	0	0	0	38
14:15	0	17	4	0	1	0	0	1	0	0	0	0	0	0	23
14:30	0	22	8	0	3	0	0	0	0	0	0	0	0	0	33
14:45	0	17	5	0	0	0	0	0	0	0	0	0	0	0	22
	0	82	28	0	4	1	0	1	0	0	0	0	0	0	116
15:00	1	18	12	0	3	0	0	0	0	0	0	0	0	0	34
15:15	0	19	8	0	3	0	0	0	0	0	0	0	0	0	30
15:30	0	13	12	0	3	0	0	0	1	0	0	0	0	0	29
15:45	0	19	8	0	0	0	1	1	0	0	0	0	0	0	29
	1	69	40	0	9	0	1	1	1	0	0	0	0	0	122
16:00	0	15	6	0	1	1	0	1	0	0	0	0	0	0	24
16:15	1	11	9	0	2	0	0	0	0	0	0	0	0	0	23
16:30	0	15	7	1	2	0	0	0	0	0	0	0	0	0	25
16:45	0	17	10	0	3	0	0	0	0	0	0	0	0	0	30
	1	58	32	1	8	1	0	1	0	0	0	0	0	0	102
17:00	1	13	4	1	1	3	0	0	0	0	0	0	0	0	23
17:15	0	15	3	0	0	2	0	0	0	0	0	0	0	0	20
17:30	0	11	10	0	2	0	0	0	0	0	0	0	0	0	23
17:45	0	6	4	0	4	1	0	0	0	0	0	0	0	0	15
	1	45	21	1	7	6	0	0	0	0	0	0	0	0	81
18:00	0	13	4	0	1	0	0	0	0	0	0	0	0	0	18
18:15	0	11	2	0	3	1	0	0	0	0	0	0	0	0	17
18:30	0	10	4	0	1	0	0	0	0	0	0	0	0	0	15
18:45	0	9	1	0	0	0	0	0	0	0	0	0	0	0	10
	0	43	11	0	5	1	0	0	0	0	0	0	0	0	60
19:00	0	6	3	0	1	0	0	0	0	0	0	0	0	0	10
19:15	0	6	2	0	0	0	0	0	0	0	0	0	0	0	8
19:30	0	6	4	0	0	0	0	0	0	0	0	0	0	0	10
19:45	0	6	10	0	0	0	0	0	0	0	0	0	0	0	16
	0	24	19	0	1	0	0	0	0	0	0	0	0	0	44
20:00	0	5	2	0	0	0	0	0	0	0	0	0	0	0	7
20:15	0	5	3	0	0	0	0	0	0	0	0	0	0	0	8
20:30	0	7	3	0	0	0	0	0	0	0	0	0	0	0	10
20:45	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
	0	19	8	0	0	0	0	0	0	0	0	0	0	0	27
21:00	0	9	3	0	0	0	0	0	0	0	0	0	0	0	12
21:15	0	4	2	0	0	0	0	0	0	0	0	0	0	0	6
21:30	0	3	4	0	0	0	0	0	0	0	0	0	0	0	7
21:45	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
	0	17	10	0	0	0	0	0	0	0	0	0	0	0	27
22:00	0	5	2	0	0	0	0	0	0	0	0	0	0	0	7
22:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
22:30	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
22:45	0	5	1	0	0	0	0	0	0	0	0	0	0	0	6
	0	12	4	0	0	0	0	0	0	0	0	0	0	0	16
23:00	0	3	4	0	0	0	0	0	0	0	0	0	0	0	7
23:15	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
23:30	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
23:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	8	4	0	0	0	0	0	0	0	0	0	0	0	12
<b>Total</b>	<b>3</b>	<b>527</b>	<b>242</b>	<b>5</b>	<b>51</b>	<b>9</b>	<b>1</b>	<b>5</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>845</b>
<b>Percent</b>	<b>0.4%</b>	<b>62.4%</b>	<b>28.6%</b>	<b>0.6%</b>	<b>6.0%</b>	<b>1.1%</b>	<b>0.1%</b>	<b>0.6%</b>	<b>0.2%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	
<b>Daily Total</b>	<b>10</b>	<b>930</b>	<b>420</b>	<b>7</b>	<b>80</b>	<b>11</b>	<b>1</b>	<b>17</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1479</b>
<b>Percent</b>	<b>0.7%</b>	<b>62.9%</b>	<b>28.4%</b>	<b>0.5%</b>	<b>5.4%</b>	<b>0.7%</b>	<b>0.1%</b>	<b>1.1%</b>	<b>0.2%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	





10232 NW 47 Street  
Sunrise FL, 33351  
954.451.3795

## Sebastian Inlet Bridge - SB 72 Hrs. bi-directional vehicle classification counts (12/10/2019 to 12/12/2019)

Sebastian Inlet Bridge

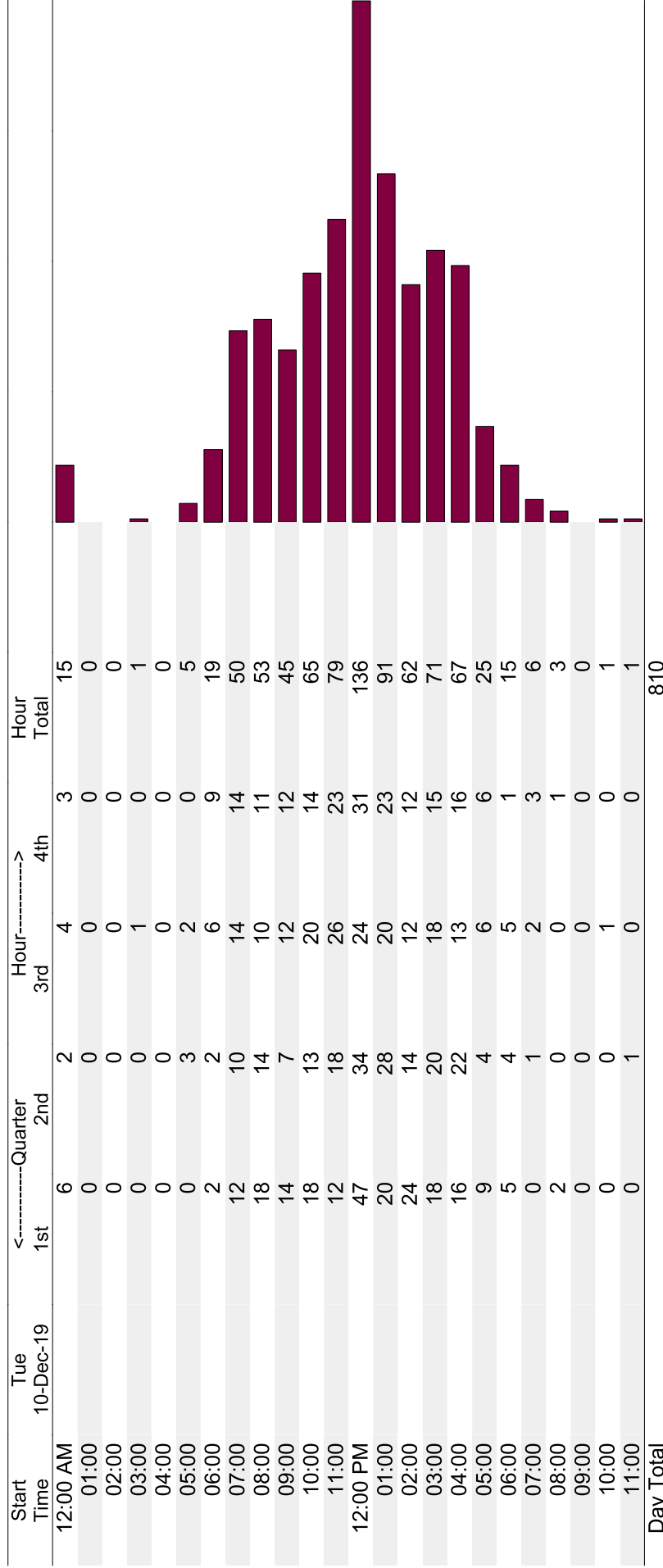
Southbound

Start Time	Bikes	Cars & Trailer	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	Not Classe	Total
12 PM	0	7	5	0	1	0	0	2	0	0	0	0	0	0	15
12:15	0	10	9	0	1	0	0	0	0	0	0	0	0	0	20
12:30	0	12	8	0	3	0	0	0	0	0	0	0	0	0	23
12:45	0	8	2	0	1	0	0	1	0	0	0	0	0	0	12
	0	37	24	0	6	0	0	3	0	0	0	0	0	0	70
13:00	0	11	5	0	3	0	0	0	0	0	0	0	0	0	19
13:15	0	14	2	0	3	1	0	0	0	0	0	0	0	0	20
13:30	0	15	2	0	0	0	0	1	0	0	0	0	0	0	18
13:45	0	9	8	0	3	1	0	1	0	0	0	0	0	0	22
	0	49	17	0	9	2	0	2	0	0	0	0	0	0	79
14:00	0	15	7	0	1	0	0	1	0	0	0	0	0	0	24
14:15	0	14	5	0	1	0	0	0	0	0	0	0	0	0	20
14:30	0	7	7	0	0	0	0	0	0	0	0	0	0	0	14
14:45	0	14	6	0	2	0	0	0	0	0	0	0	0	0	22
	0	50	25	0	4	0	0	1	0	0	0	0	0	0	80
15:00	0	6	3	0	4	0	0	1	0	0	0	0	0	0	14
15:15	0	12	3	0	1	0	0	0	0	0	0	0	0	0	16
15:30	0	13	7	0	1	0	0	0	0	0	0	0	0	0	21
15:45	0	4	3	0	1	0	0	0	0	0	0	0	0	0	8
	0	35	16	0	7	0	0	1	0	0	0	0	0	0	59
16:00	0	12	6	0	1	0	0	0	0	0	0	0	0	0	19
16:15	0	9	2	0	3	2	0	0	0	0	0	0	0	0	16
16:30	1	10	7	0	1	3	0	0	0	0	0	0	0	0	22
16:45	0	7	2	0	1	2	0	0	0	0	0	0	0	0	12
	1	38	17	0	6	7	0	0	0	0	0	0	0	0	69
17:00	0	7	3	0	2	0	0	0	0	0	0	0	0	0	12
17:15	0	10	6	0	0	0	0	0	0	0	0	0	0	0	16
17:30	0	3	3	0	2	0	0	0	0	0	0	0	0	0	8
17:45	0	5	2	0	2	0	0	0	0	0	0	0	0	0	9
	0	25	14	0	6	0	0	0	0	0	0	0	0	0	45
18:00	0	7	1	0	1	0	0	0	0	0	0	0	0	0	9
18:15	0	8	2	0	1	0	0	0	0	0	0	0	0	0	11
18:30	0	9	5	0	2	0	0	0	0	0	0	0	0	0	16
18:45	1	6	0	0	2	0	0	0	0	0	0	0	0	0	9
	1	30	8	0	6	0	0	0	0	0	0	0	0	0	45
19:00	0	3	1	0	2	0	0	0	0	0	0	0	0	0	6
19:15	0	4	1	0	1	0	0	0	0	0	0	0	0	0	6
19:30	0	2	2	0	1	0	0	0	0	0	0	0	0	0	5
19:45	1	3	2	0	1	1	0	0	0	0	0	0	0	0	8
	1	12	6	0	5	1	0	0	0	0	0	0	0	0	25
20:00	0	3	2	0	0	0	0	0	0	0	0	0	0	0	5
20:15	0	3	2	0	1	0	0	0	0	0	0	0	0	0	6
20:30	0	1	3	0	1	0	0	0	0	0	0	0	0	0	5
20:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	8	7	0	2	0	0	0	0	0	0	0	0	0	17
21:00	0	7	2	0	0	0	0	0	0	0	0	0	0	0	9
21:15	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
21:30	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
21:45	0	2	4	0	1	0	0	0	0	0	0	0	0	0	7
	0	14	6	0	1	0	0	0	0	0	0	0	0	0	21
22:00	0	1	1	0	1	0	0	0	0	0	0	0	0	0	3
22:15	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
22:30	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
22:45	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
	0	3	4	0	2	0	0	0	0	0	0	0	0	0	9
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
23:15	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
23:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
23:45	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
	0	5	2	0	0	0	0	0	0	0	0	0	0	0	7
<b>Total</b>	<b>3</b>	<b>306</b>	<b>146</b>	<b>0</b>	<b>54</b>	<b>10</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>526</b>
<b>Percent</b>	<b>0.6%</b>	<b>58.2%</b>	<b>27.8%</b>	<b>0.0%</b>	<b>10.3%</b>	<b>1.9%</b>	<b>0.0%</b>	<b>1.3%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	
<b>Daily Total</b>	<b>4</b>	<b>707</b>	<b>316</b>	<b>2</b>	<b>98</b>	<b>10</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1150</b>
<b>Percent</b>	<b>0.3%</b>	<b>61.5%</b>	<b>27.5%</b>	<b>0.2%</b>	<b>8.5%</b>	<b>0.9%</b>	<b>0.0%</b>	<b>1.1%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	
<b>Grand Total</b>	<b>45</b>	<b>2697</b>	<b>1164</b>	<b>15</b>	<b>278</b>	<b>46</b>	<b>2</b>	<b>57</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4311</b>
<b>Percent</b>	<b>1.0%</b>	<b>62.6%</b>	<b>27.0%</b>	<b>0.3%</b>	<b>6.4%</b>	<b>1.1%</b>	<b>0.0%</b>	<b>1.3%</b>	<b>0.2%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	

**Appendix D**  
**72-Hr. Bi-Directional Vehicle Volume**  
**Counts**

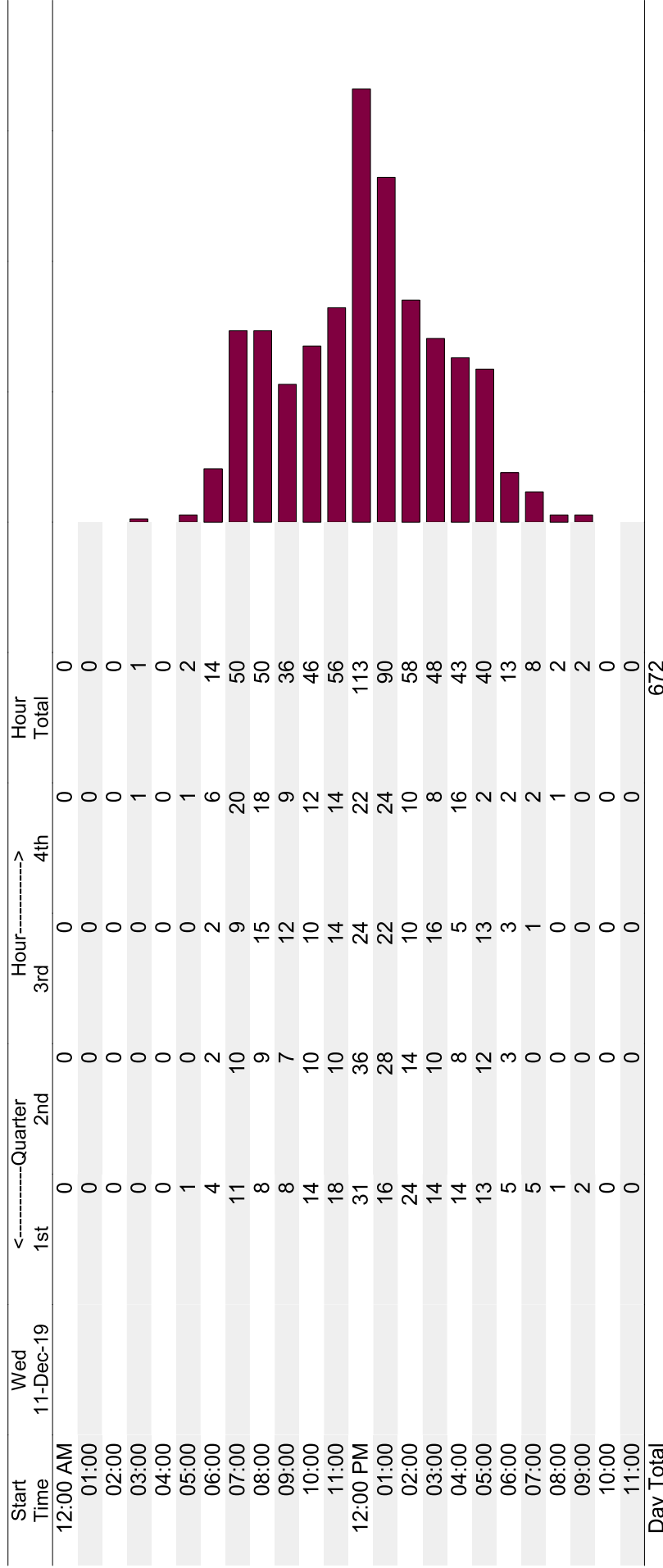
**A1A & CR 510 - East Leg (EB)**  
72 Hrs. bi-directional volume counts  
(12/10/2019 to 12/12/2019)

A1A & CR 510  
East leg



**A1A & CR 510 - East Leg (EB)**  
72 Hrs. bi-directional volume counts  
(12/10/2019 to 12/12/2019)

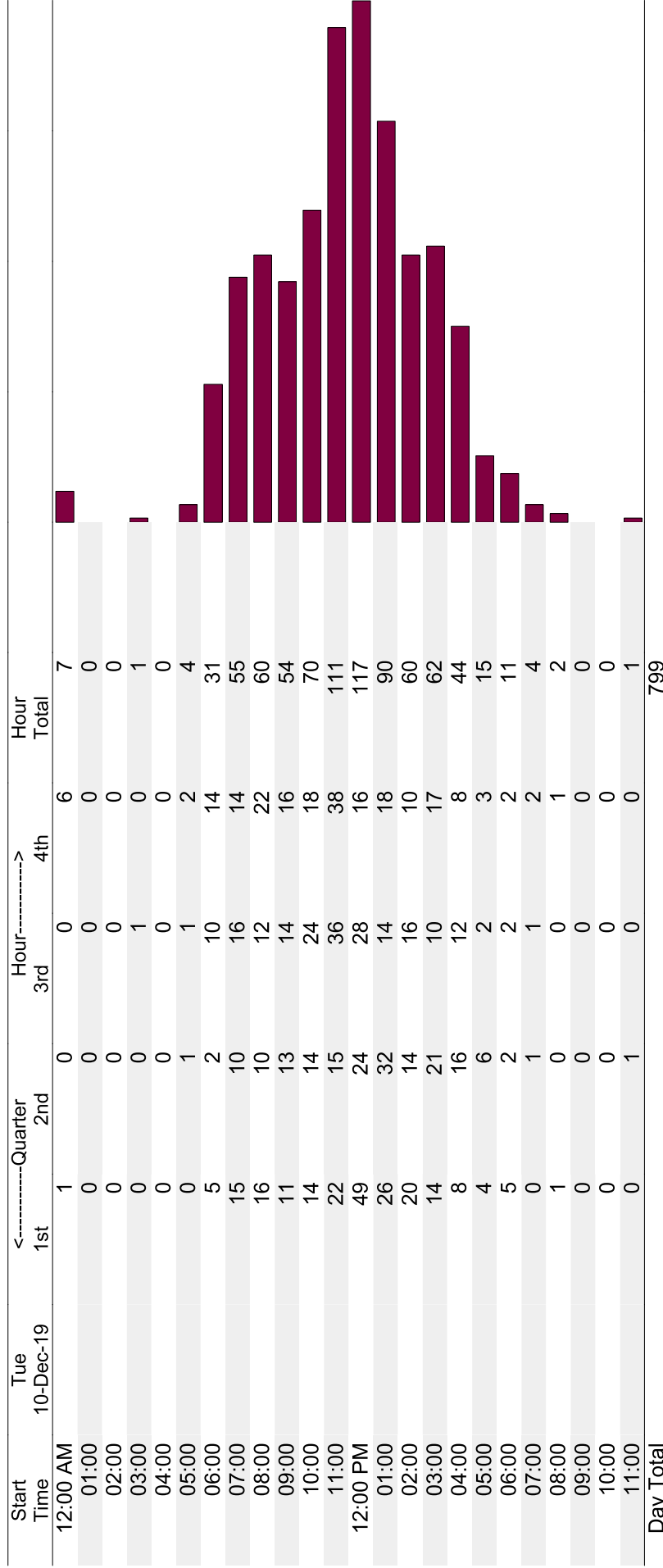
A1A & CR 510  
East leg





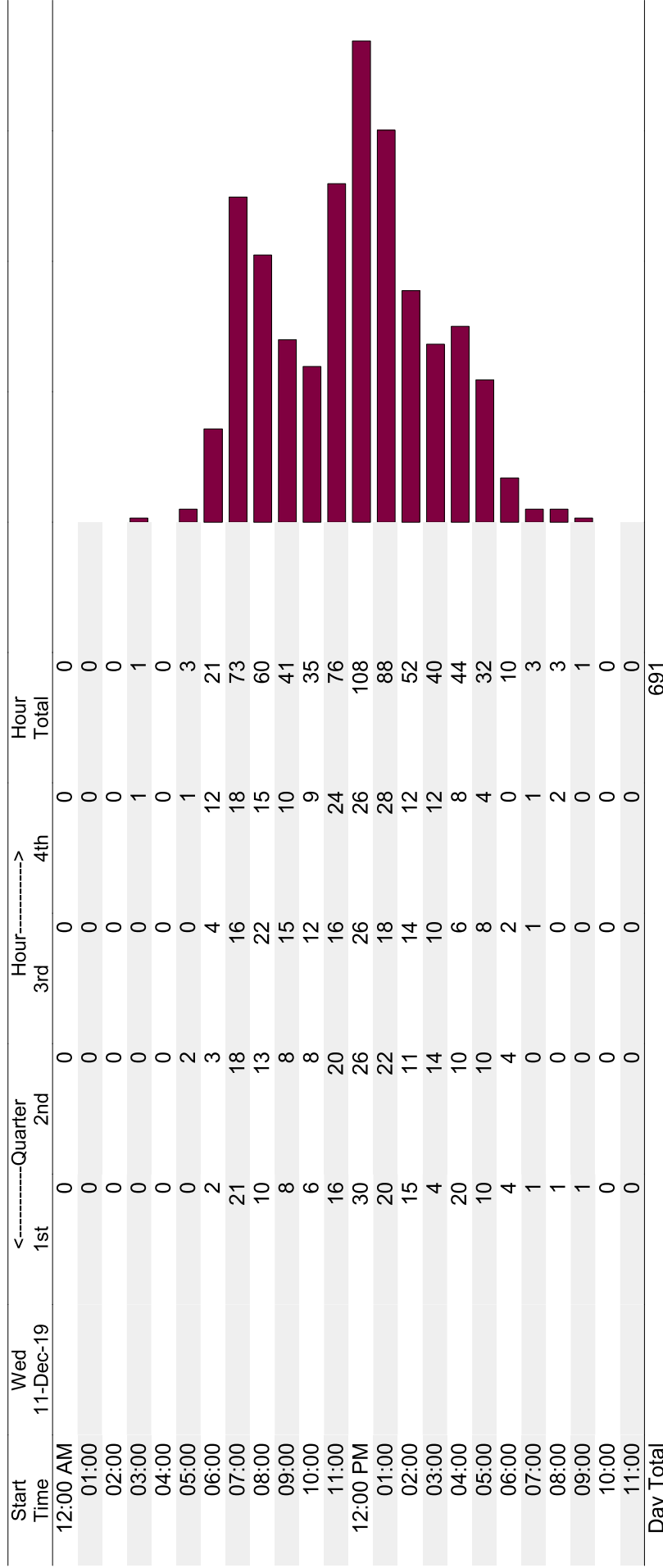
**A1A & CR 510 - East Leg (WB)**  
72 Hrs. bi-directional volume counts  
(12/10/2019 to 12/12/2019)

A1A & CR 510  
East leg



**A1A & CR 510 - East Leg (WB)**  
72 Hrs. bi-directional volume counts  
(12/10/2019 to 12/12/2019)

A1A & CR 510  
East leg





**A1A & CR 510 - East Leg (WB)**  
72 Hrs. bi-directional volume counts  
(12/10/2019 to 12/12/2019)

A1A & CR 510  
East leg

Start Time	Thu 12-Dec-19	1st	2nd	3rd	4th	Hour Total
12:00 AM		0	0	0	0	0
01:00		0	1	0	2	3
02:00		2	0	0	0	2
03:00		0	0	0	1	1
04:00		2	0	1	0	3
05:00		0	0	0	1	1
06:00		0	4	2	2	8
07:00		18	6	7	7	38
08:00		10	7	10	20	47
09:00		12	10	8	6	36
10:00		12	10	12	6	40
11:00		6	12	8	13	39
12:00 PM		14	8	16	4	42
01:00		6	8	5	6	25
02:00		3	8	10	2	23
03:00		4	8	6	6	24
04:00		3	3	4	8	18
05:00		4	5	1	1	11
06:00		0	2	2	0	4
07:00		0	0	1	2	3
08:00		0	0	0	2	2
09:00		0	1	1	0	2
10:00		0	0	0	0	0
11:00		0	0	0	0	0
Day Total						372
Grand Total						1862

ADT 621

ADT 621

ADT

**A1A & CR 510 North Leg - NB**  
72 Hrs. bi-directional volume counts  
(11/12/2019 to 11/14/2019)

A1A & CR 510  
North Leg

Start Time	Tue 12-Nov-19	1st	2nd	3rd	4th	Hour Total
12:00 AM		4	1	2	2	9
01:00		1	3	1	1	6
02:00		2	3	2	0	7
03:00		1	1	2	0	4
04:00		0	1	5	8	14
05:00		13	19	12	36	80
06:00		19	22	27	32	100
07:00		46	85	89	85	305
08:00		86	68	76	98	328
09:00		82	50	62	61	255
10:00		59	56	76	86	277
11:00		92	98	82	70	342
12:00 PM		87	94	83	70	334
01:00		72	74	60	64	270
02:00		78	66	54	67	265
03:00		61	64	72	48	245
04:00		66	56	55	46	223
05:00		58	56	44	46	204
06:00		34	36	27	24	121
07:00		24	14	25	16	79
08:00		10	14	8	14	46
09:00		10	14	13	8	45
10:00		6	7	6	6	25
11:00		2	3	6	2	13
Day Total						3597

**A1A & CR 510 North Leg - NB**  
 72 Hrs. bi-directional volume counts  
 (11/12/2019 to 11/14/2019)

A1A & CR 510  
 North Leg

Start Time	Wed 13-Nov-19	1st	2nd	3rd	4th	Hour Total
12:00 AM	1	1	0	1	0	3
01:00	0	1	0	3	2	6
02:00	2	0	0	0	2	4
03:00	0	1	1	1	1	3
04:00	1	5	3	3	6	15
05:00	4	8	16	18	28	56
06:00	14	28	42	69	74	82
07:00	42	68	81	80	76	263
08:00	68	92	60	46	58	305
09:00	53	52	57	66	50	256
10:00	54	57	52	57	46	208
11:00	64	52	58	62	50	227
12:00 PM	58	58	58	60	62	236
01:00	56	44	40	48	52	234
02:00	44	44	40	52	68	210
03:00	44	64	64	40	54	204
04:00	60	52	57	57	43	202
05:00	45	24	20	20	21	212
06:00	23	21	16	10	18	110
07:00	12	13	4	17	11	82
08:00	12	4	5	6	2	49
09:00	4	4	5	6	7	36
10:00	4	4	4	5	2	30
11:00						15
Day Total						3048

10232 NW 47 Street  
 Sunrise FL, 33351  
 954.451.3795

**A1A & CR 510 North Leg - NB**  
 72 Hrs. bi-directional volume counts  
 (11/12/2019 to 11/14/2019)

A1A & CR 510  
 North Leg

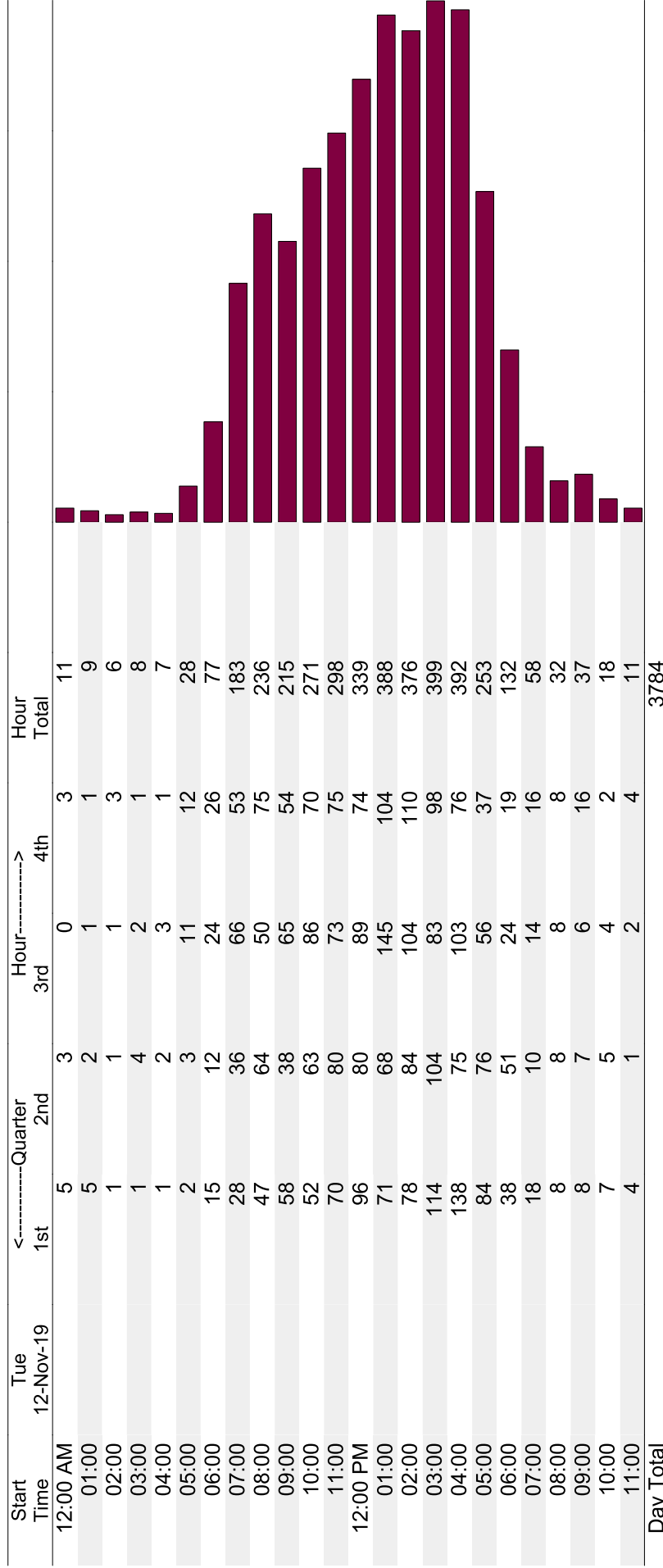
Start Time	Thu 14-Nov-19	1st	2nd	3rd	4th	Hour Total
12:00 AM	1	2	2	0	5	
01:00	1	1	0	0	2	
02:00	0	1	1	1	3	
03:00	0	2	1	0	3	
04:00	1	0	7	9	17	
05:00	6	8	18	37	69	
06:00	17	18	20	30	85	
07:00	35	80	66	76	257	
08:00	78	72	66	94	310	
09:00	75	67	52	78	272	
10:00	48	64	65	60	237	
11:00	70	65	75	74	284	
12:00 PM	60	80	66	67	273	
01:00	56	46	55	56	213	
02:00	64	54	59	50	227	
03:00	54	60	46	64	224	
04:00	61	54	48	56	219	
05:00	44	60	45	39	188	
06:00	32	24	18	25	99	
07:00	20	23	20	15	78	
08:00	11	26	17	14	68	
09:00	17	18	24	10	69	
10:00	8	14	8	6	36	
11:00	7	4	4	8	23	
Day Total					3261	
Grand Total					9906	

ADT 3,302      AADT 3,302

ADT

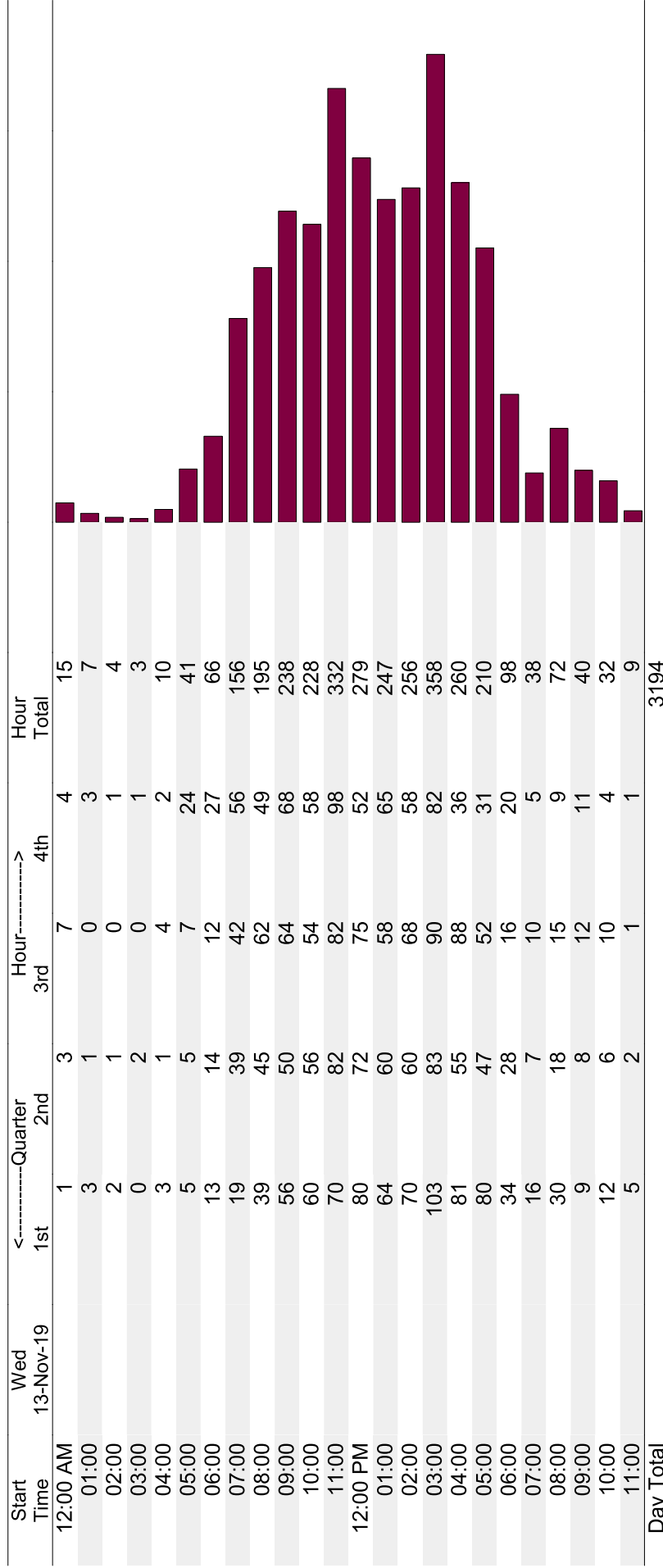
**A1A & CR 510 North Leg - SB**  
 72 Hrs. bi-directional volume counts  
 (11/12/2019 to 11/14/2019)

A1A & CR 510  
 North Leg



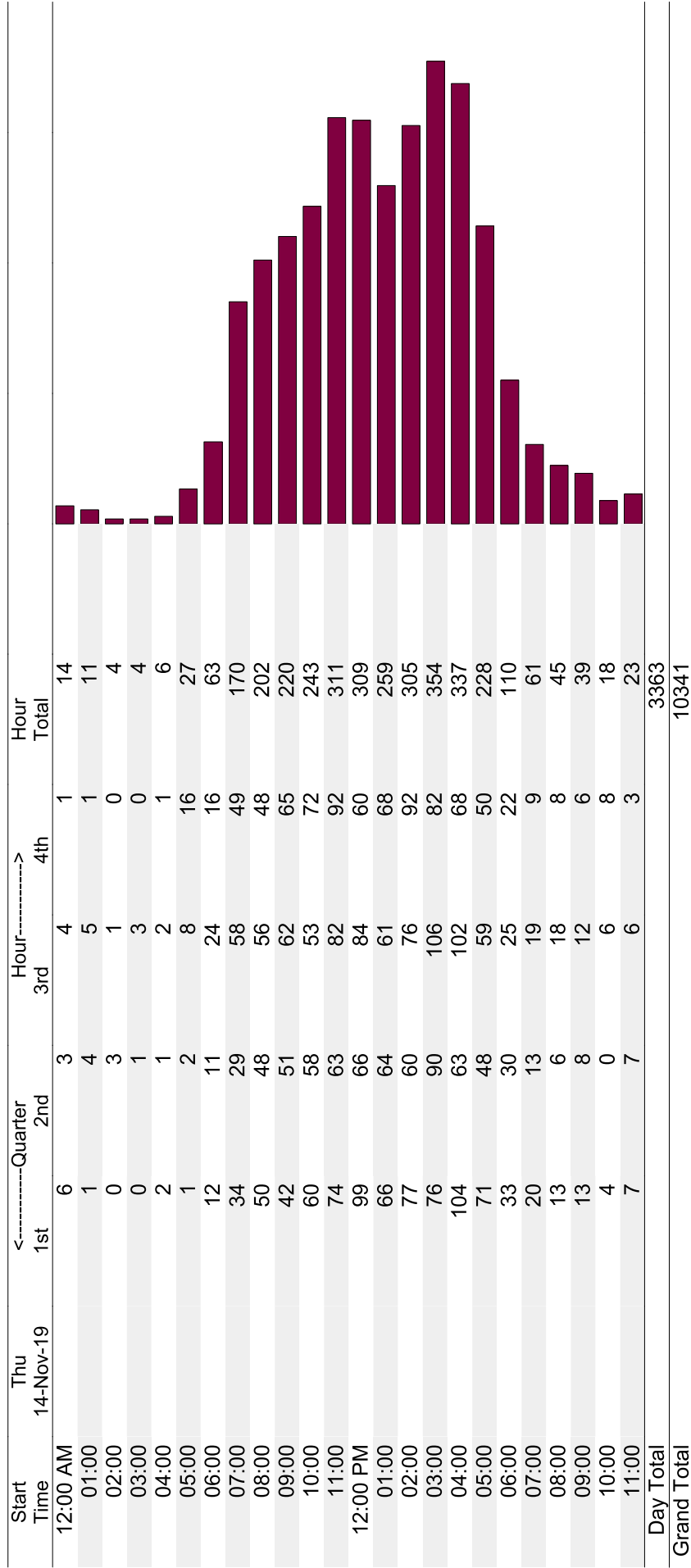
**A1A & CR 510 North Leg - SB**  
72 Hrs. bi-directional volume counts  
(11/12/2019 to 11/14/2019)

A1A & CR 510  
North Leg



**A1A & CR 510 North Leg - SB**  
72 Hrs. bi-directional volume counts  
(11/12/2019 to 11/14/2019)

A1A & CR 510  
North Leg



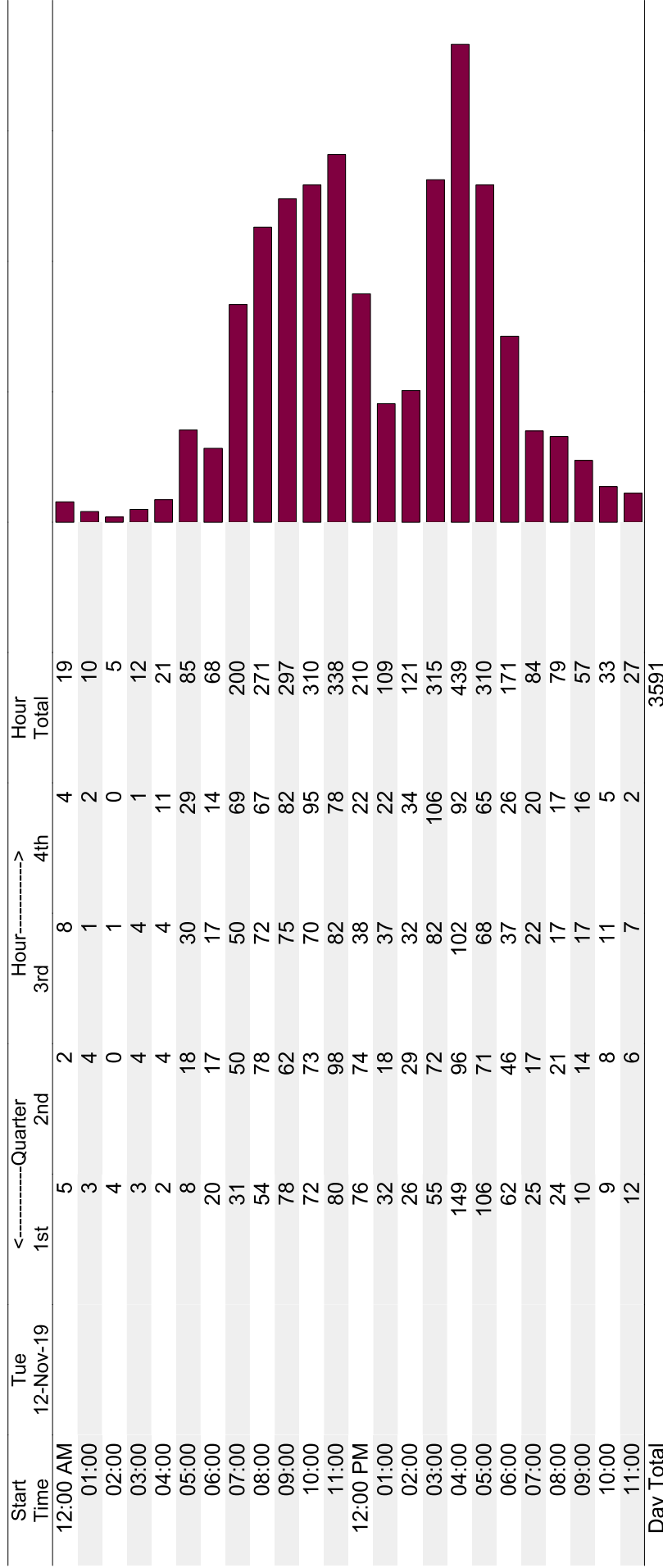
ADT 3,447

ADT 3,447

ADT

**A1A & CR 510 South Leg - NB**  
 72 Hrs. bi-directional volume counts  
 (11/12/2019 to 11/14/2019)

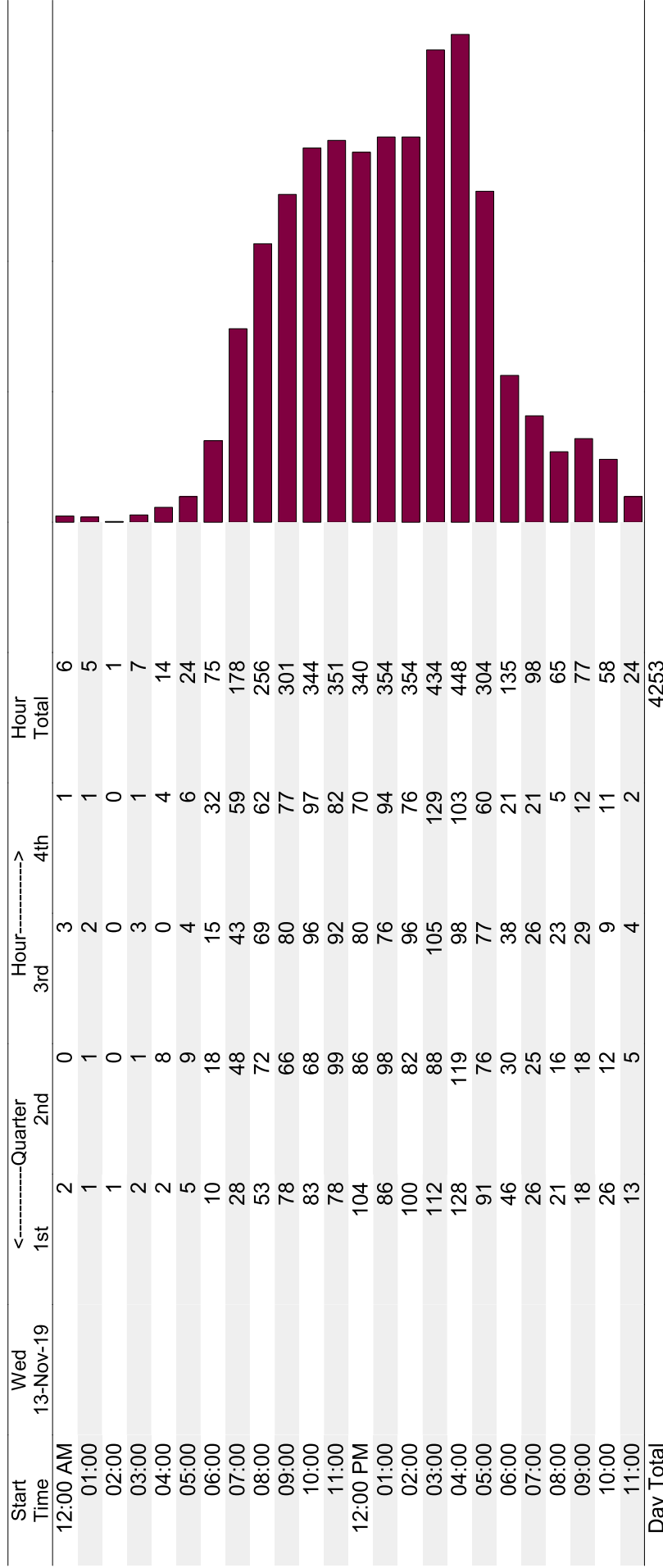
A1A & CR 510  
 South leg





**A1A & CR 510 South Leg - NB**  
 72 Hrs. bi-directional volume counts  
 (11/12/2019 to 11/14/2019)

A1A & CR 510  
 South leg



**A1A & CR 510 South Leg - NB**  
72 Hrs. bi-directional volume counts  
(11/12/2019 to 11/14/2019)

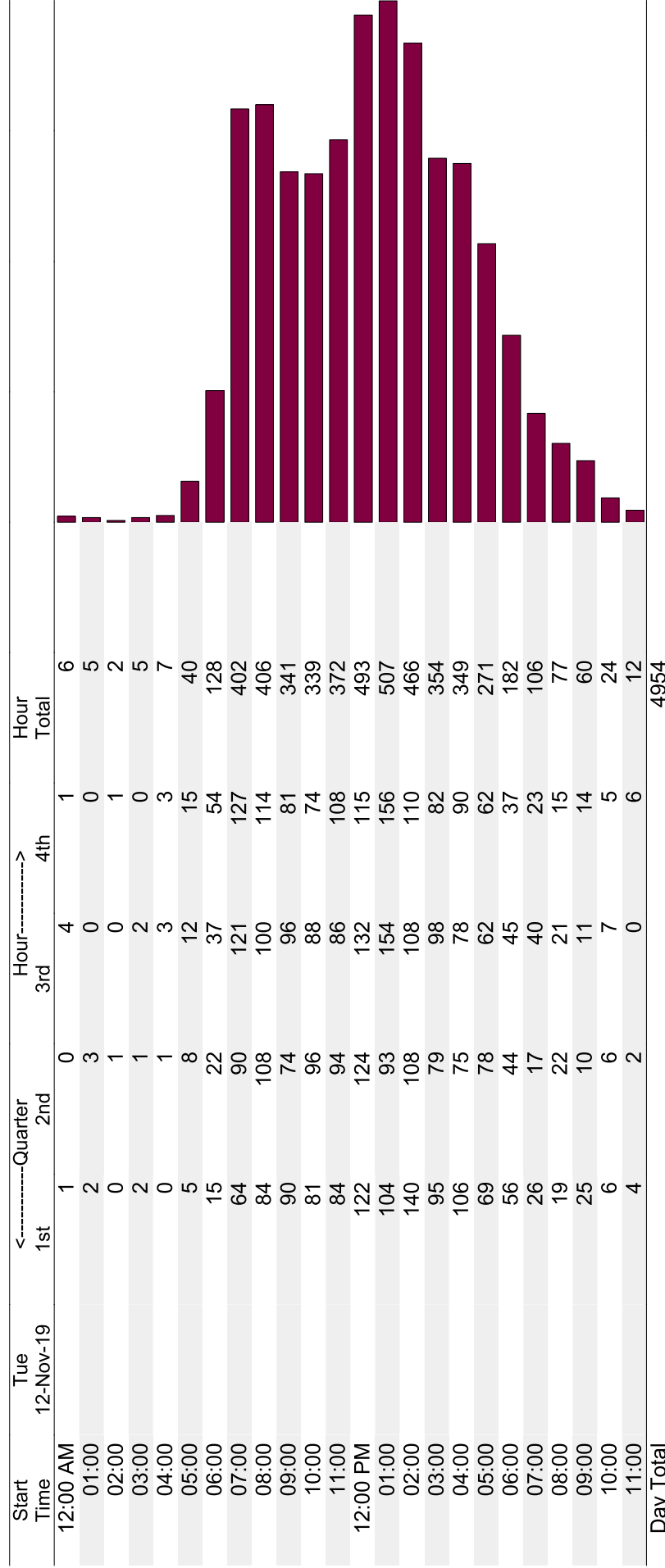
A1A & CR 510  
South leg

Start Time	Thu 14-Nov-19	1st	2nd	3rd	4th	Hour Total
12:00 AM		5	3	4	0	12
01:00		1	0	0	1	2
02:00		1	2	0	0	3
03:00		2	1	1	1	5
04:00		2	0	2	5	9
05:00		6	3	4	6	19
06:00		9	14	12	26	61
07:00		34	48	45	66	193
08:00		68	62	72	62	264
09:00		78	76	101	82	337
10:00		72	90	102	77	341
11:00		84	89	117	112	402
12:00 PM		95	98	82	76	351
01:00		72	106	96	92	366
02:00		92	95	96	98	381
03:00		109	120	127	123	479
04:00		122	90	94	90	396
05:00		104	84	70	69	327
06:00		49	39	38	26	152
07:00		18	29	17	18	82
08:00		25	32	19	20	96
09:00		16	15	22	16	69
10:00		22	21	17	6	66
11:00		26	16	13	7	62
Day Total						4475
Grand Total						12319

ADT 4,106      AADT 4,106

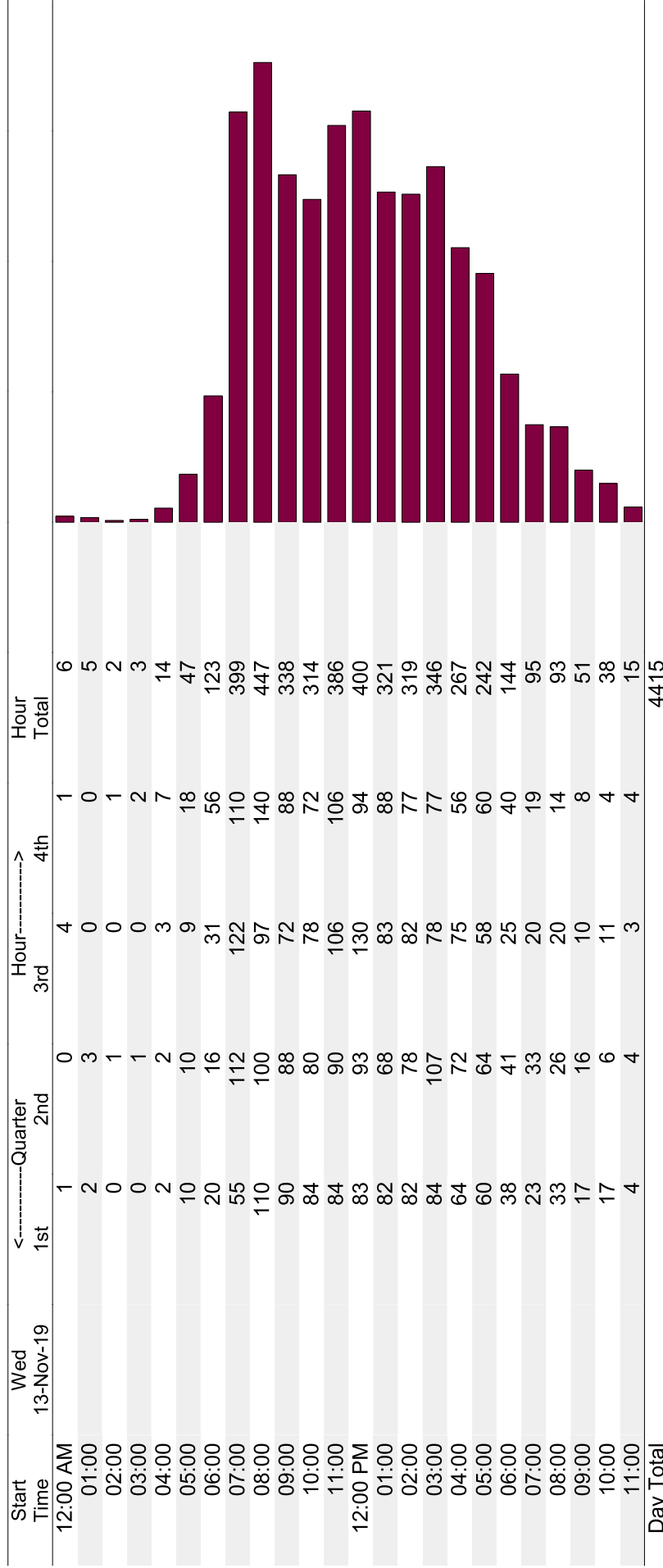
**A1A & CR 510 South Leg - SB**  
72 Hrs. bi-directional volume counts  
(11/12/2019 to 11/14/2019)

A1A & CR 510  
South Leg



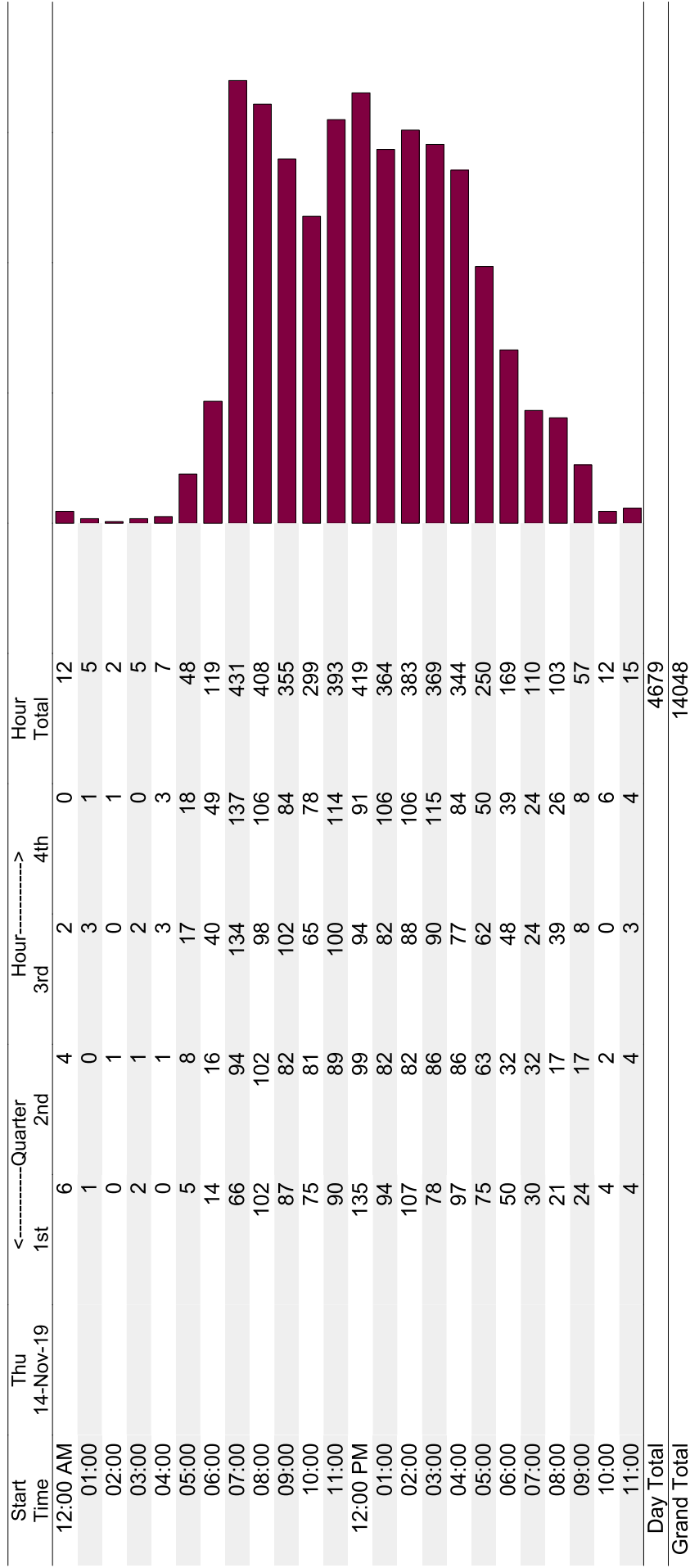
**A1A & CR 510 South Leg - SB**  
 72 Hrs. bi-directional volume counts  
 (11/12/2019 to 11/14/2019)

A1A & CR 510  
 South Leg



**A1A & CR 510 South Leg - SB**  
72 Hrs. bi-directional volume counts  
(11/12/2019 to 11/14/2019)

A1A & CR 510  
South Leg



ADT 4,683      AADT 4,683

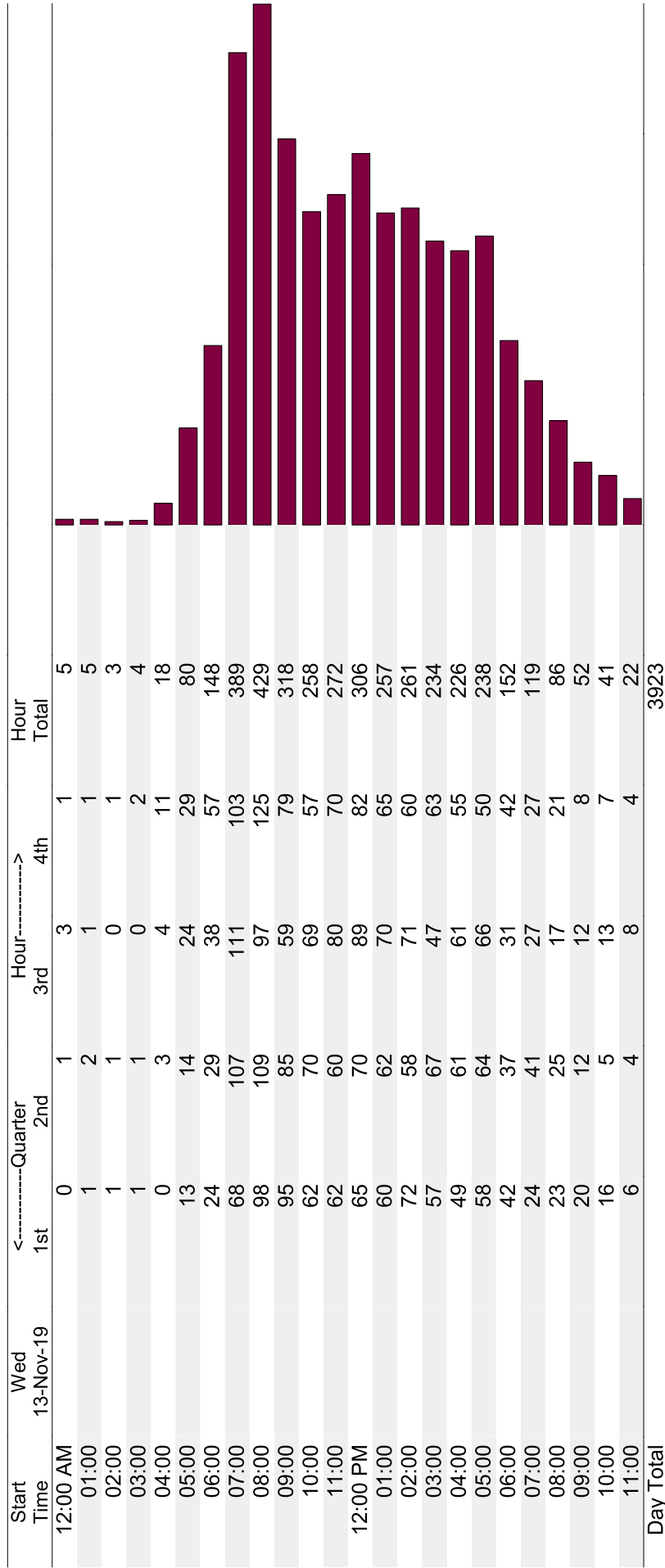
**A1A & CR 510 West Leg - EB**  
72 Hrs. bi-directional volume counts  
(11/12/2019 to 11/14/2019)

A1A & CR 510  
West leg (EB)

Start Time	Tue 12-Nov-19	1st	2nd	3rd	4th	Hour Total
12:00 AM	5	2	6	3	16	
01:00	1	1	2	1	5	
02:00	3	2	2	0	7	
03:00	0	1	3	1	5	
04:00	0	2	6	14	22	
05:00	15	29	23	34	101	
06:00	18	25	43	59	145	
07:00	79	97	118	113	407	
08:00	99	97	95	111	402	
09:00	92	77	83	67	319	
10:00	81	87	68	74	310	
11:00	81	85	86	88	340	
12:00 PM	108	95	98	81	382	
01:00	76	88	68	99	331	
02:00	114	88	66	76	344	
03:00	62	53	84	60	259	
04:00	59	57	51	64	231	
05:00	63	54	67	67	251	
06:00	51	39	40	39	169	
07:00	35	24	47	28	134	
08:00	21	26	21	19	87	
09:00	27	16	16	13	72	
10:00	7	10	9	11	37	
11:00	5	3	7	6	21	
Day Total						4397

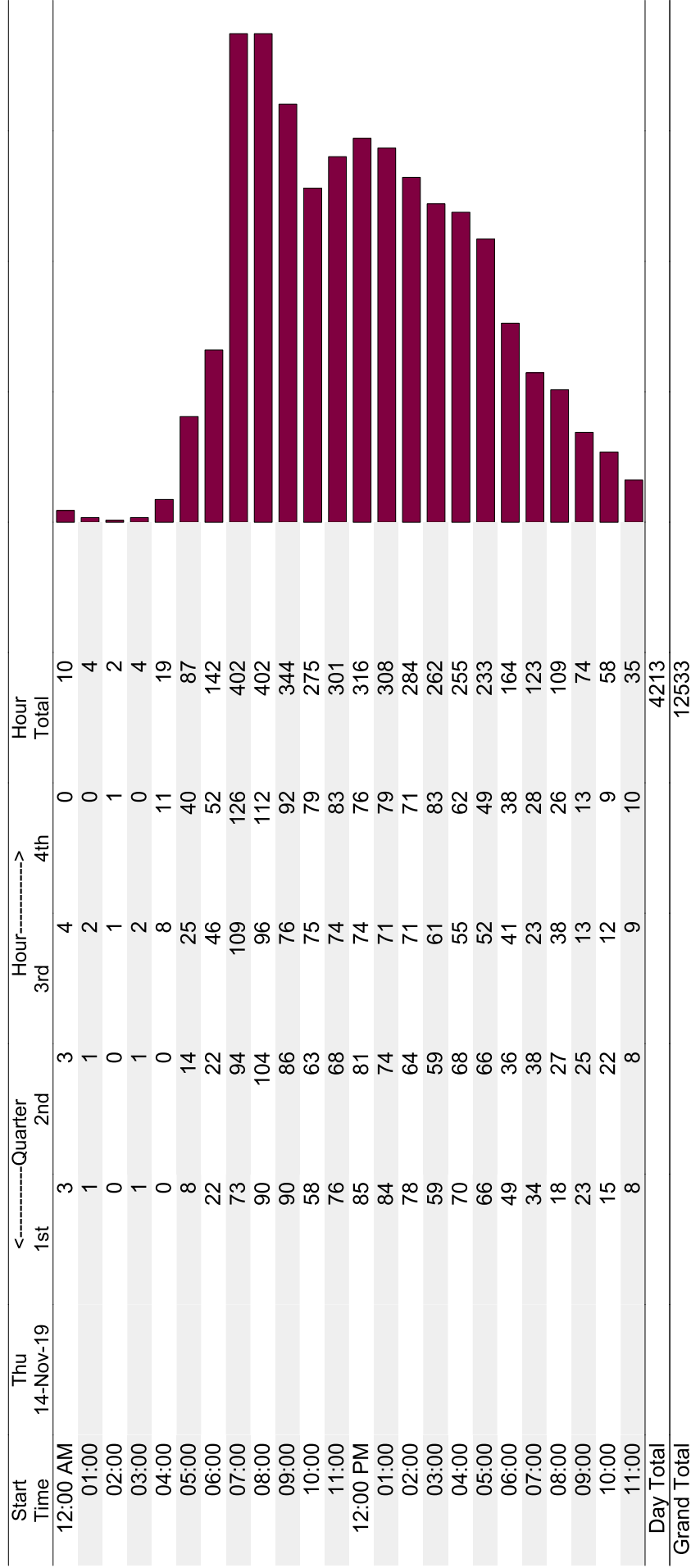
**A1A & CR 510 West Leg - EB**  
 72 Hrs. bi-directional volume counts  
 (11/12/2019 to 11/14/2019)

A1A & CR 510  
 West leg (EB)



**A1A & CR 510 West Leg - EB**  
72 Hrs. bi-directional volume counts  
(11/12/2019 to 11/14/2019)

A1A & CR 510  
West leg (EB)



ADT 4,178

ADT 4,178

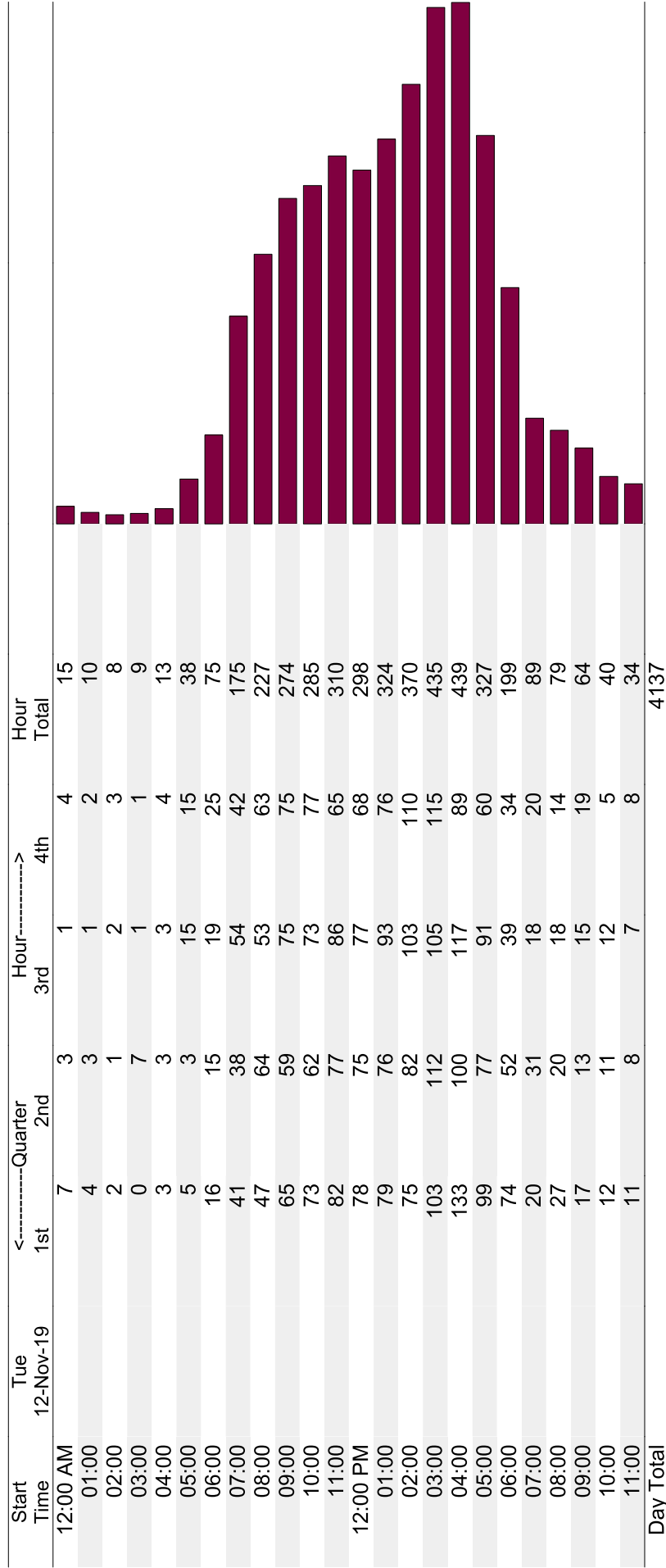
ADT

AADT 4,178



**A1A & CR 510 West Leg - WB**  
72 Hrs. bi-directional volume counts  
(11/12/2019 to 11/14/2019)

A1A & CR 510  
West Leg (WB)



**A1A & CR 510 West Leg - WB**  
72 Hrs. bi-directional volume counts  
(11/12/2019 to 11/14/2019)

A1A & CR 510  
West Leg (WB)

Start Time	Wed 13-Nov-19	1st	2nd	3rd	4th	Hour Total
12:00 AM		2	3	6	17	
01:00		4	0	1	3	8
02:00		2	0	0	0	2
03:00		2	2	1	2	7
04:00		2	3	4	3	12
05:00		10	9	11	16	46
06:00		17	20	22	36	95
07:00		22	32	39	54	147
08:00		45	51	55	37	188
09:00		65	61	71	71	268
10:00		77	54	80	86	297
11:00		78	74	70	88	310
12:00 PM		86	85	64	52	287
01:00		66	81	73	70	290
02:00		84	76	103	73	336
03:00		110	98	107	99	414
04:00		116	102	95	81	394
05:00		101	63	66	40	270
06:00		46	31	32	23	132
07:00		28	11	23	20	82
08:00		28	16	24	7	75
09:00		21	17	25	19	82
10:00		22	14	13	11	60
11:00		18	3	5	3	29
Day Total						3848

**A1A & CR 510 West Leg - WB**  
 72 Hrs. bi-directional volume counts  
 (11/12/2019 to 11/14/2019)

A1A & CR 510  
 West Leg (WB)

Start Time	Thu 14-Nov-19	Quarter				Hour				Hour Total
		1st	2nd	3rd	4th	1st	2nd	3rd	4th	
12:00 AM		6	5	8	1	20				
01:00		0	3	3	1	7				
02:00		1	3	0	0	4				
03:00		1	1	3	2	7				
04:00		3	0	2	2	7				
05:00		6	4	6	12	28				
06:00		10	12	27	18	67				
07:00		38	35	46	37	156				
08:00		56	52	51	45	204				
09:00		70	51	80	60	261				
10:00		90	74	82	75	321				
11:00		69	68	90	99	326				
12:00 PM		70	79	78	89	316				
01:00		64	77	86	71	298				
02:00		86	74	94	88	342				
03:00		95	104	121	100	420				
04:00		112	81	110	83	386				
05:00		92	70	81	76	319				
06:00		63	50	39	20	172				
07:00		19	21	25	19	84				
08:00		27	22	18	14	81				
09:00		17	13	18	15	63				
10:00		9	11	12	6	38				
11:00		21	15	9	3	48				
Day Total						3975				
Grand Total						11960				

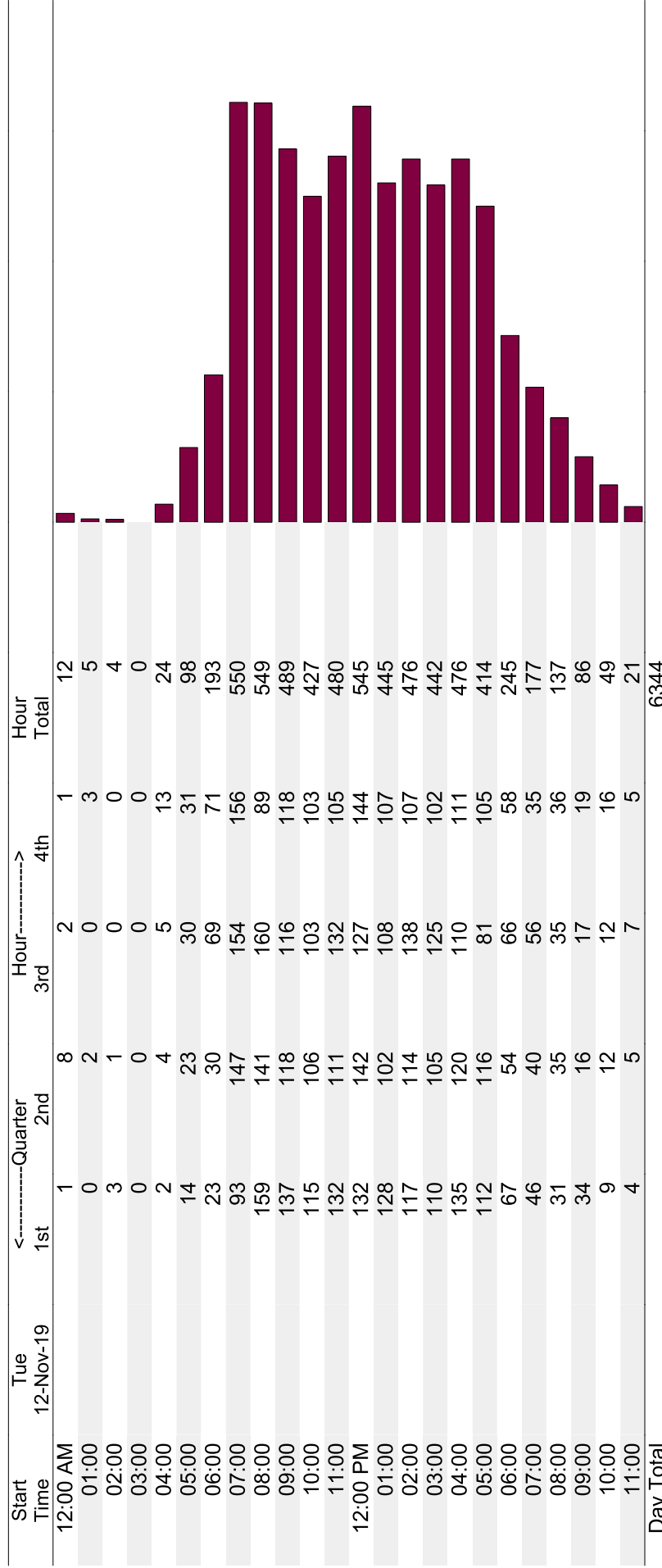
AADT 3,987

ADT 3,987

ADT

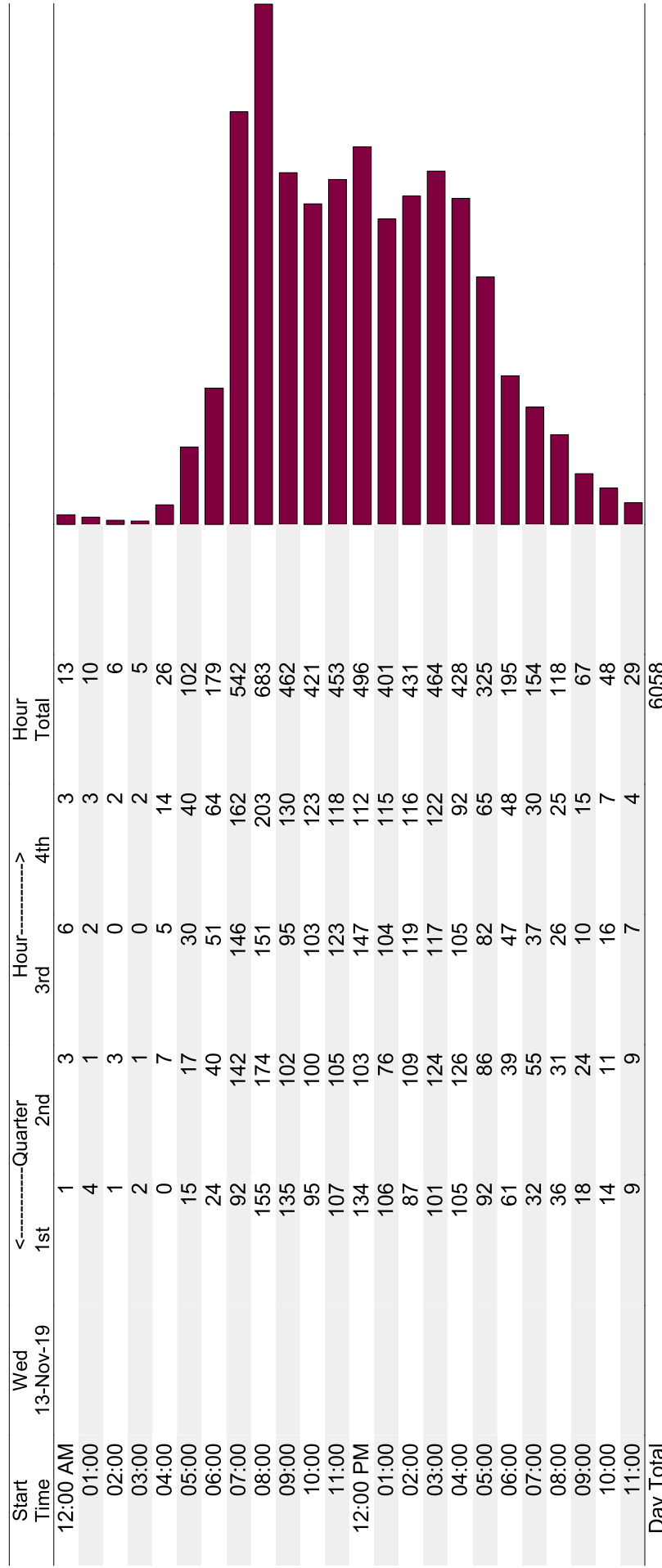
**CR510 & US-1 - East Leg (EB)**  
 72 Hrs. bi-directional volume counts  
 (11/12/2019 to 11/14/2019)

CR510 & US-1  
 East leg



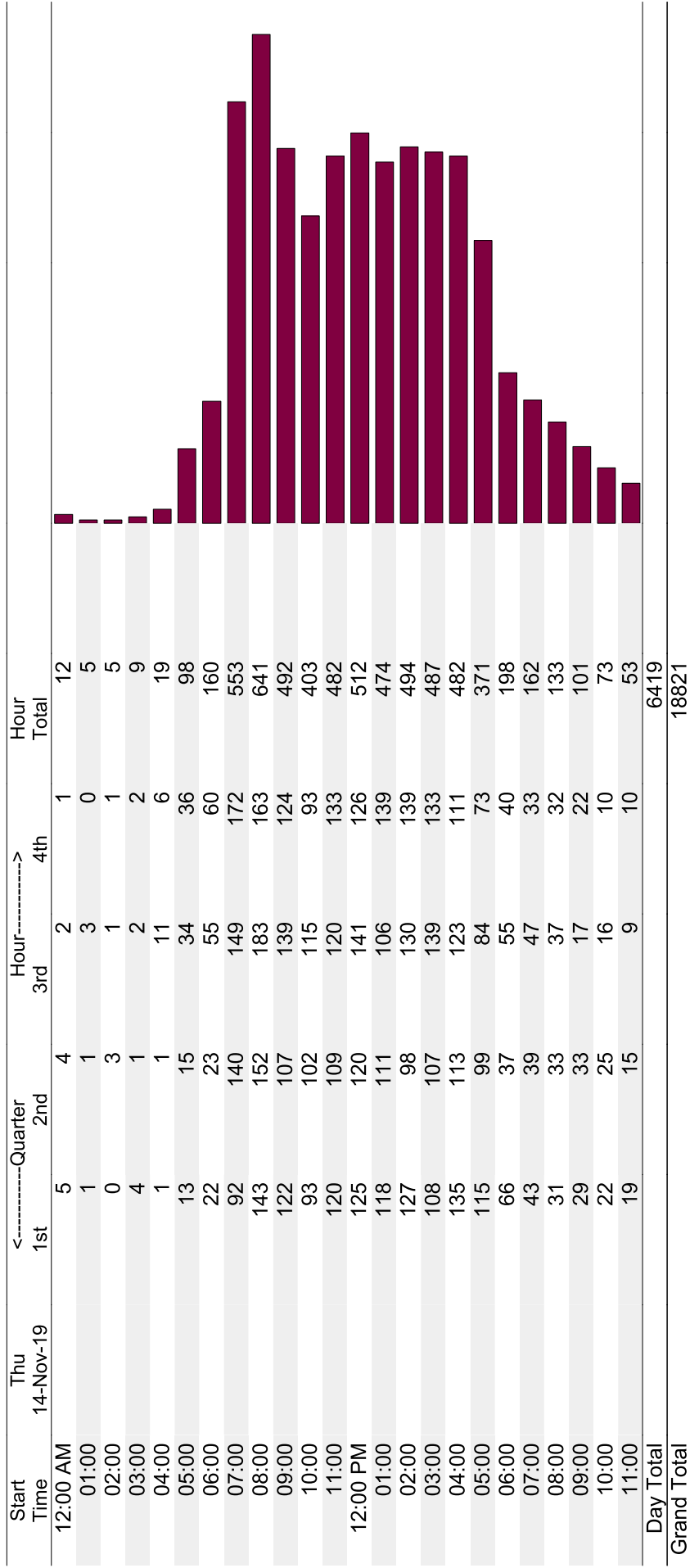
**CR510 & US-1 - East Leg (EB)**  
72 Hrs. bi-directional volume counts  
(11/12/2019 to 11/14/2019)

CR510 & US-1  
East leg



**CR510 & US-1 - East Leg (EB)**  
72 Hrs. bi-directional volume counts  
(11/12/2019 to 11/14/2019)

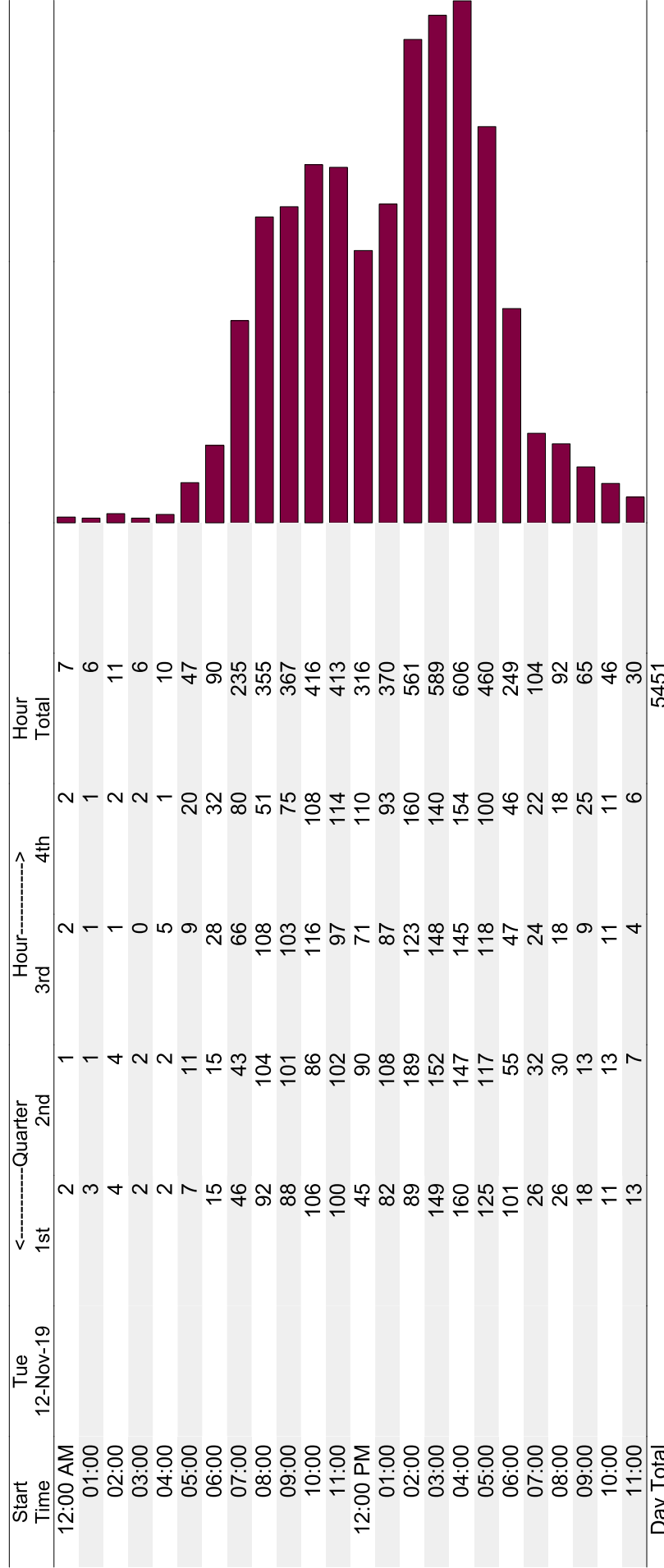
CR510 & US-1  
East leg



ADT 6,274      AADT 6,274

**CR510 & US-1 - East Leg (WB)**  
 72 Hrs. bi-directional volume counts  
 (11/12/2019 to 11/14/2019)

CR510 & US-1  
 East leg



**CR510 & US-1 - East Leg (WB)**  
 72 Hrs. bi-directional volume counts  
 (11/12/2019 to 11/14/2019)

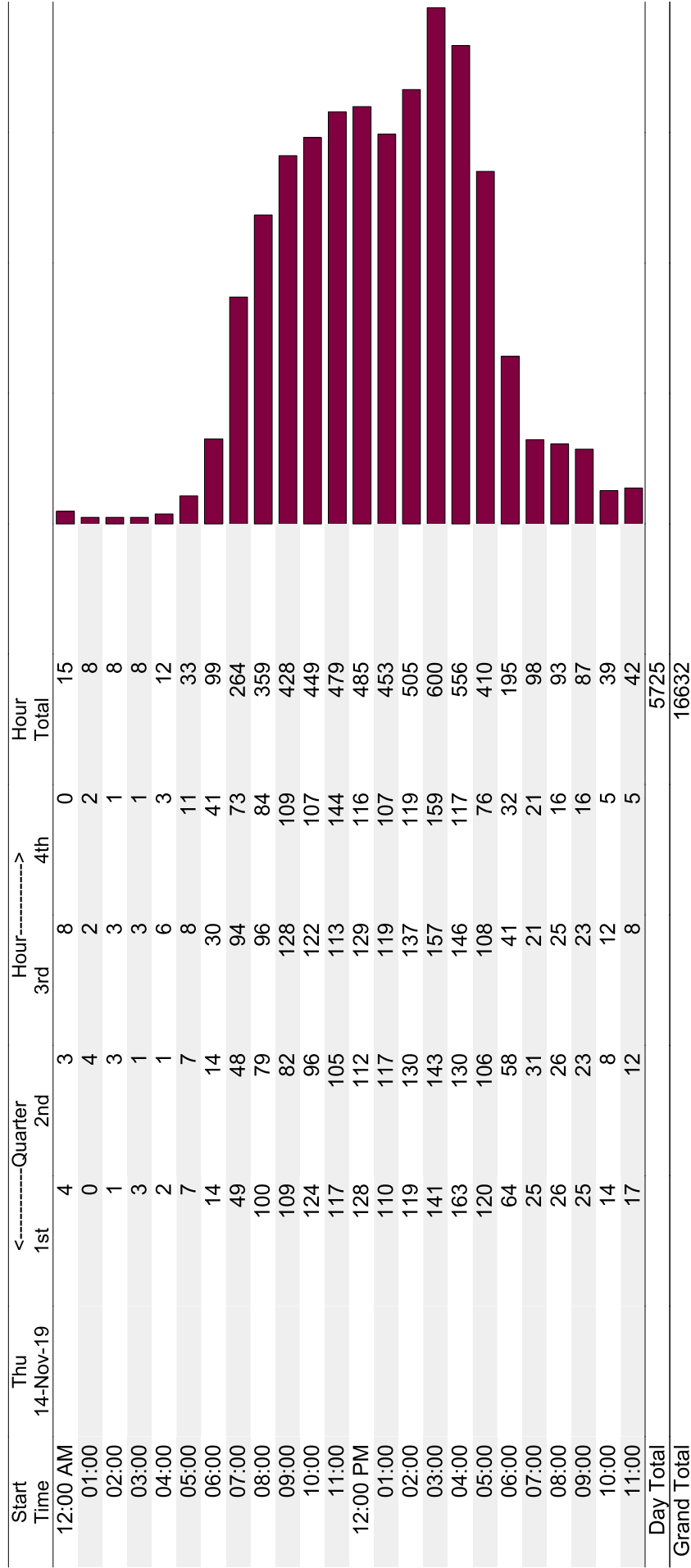
CR510 & US-1  
 East leg

Start Time	Wed 13-Nov-19	1st	2nd	3rd	4th	Hour Total
12:00 AM		4	4	5	7	20
01:00		6	1	1	4	12
02:00		2	3	0	0	5
03:00		1	3	1	1	6
04:00		2	4	7	1	14
05:00		11	13	11	15	50
06:00		27	23	21	48	119
07:00		38	51	91	79	259
08:00		95	86	101	99	381
09:00		95	95	100	103	393
10:00		107	109	115	117	448
11:00		123	108	121	126	478
12:00 PM		117	121	97	103	438
01:00		103	114	113	116	446
02:00		103	102	116	114	435
03:00		135	149	130	127	541
04:00		149	111	147	111	518
05:00		112	91	92	76	371
06:00		61	41	40	30	172
07:00		34	28	22	18	102
08:00		20	18	18	15	71
09:00		18	19	23	21	81
10:00		19	18	10	14	61
11:00		16	6	7	6	35
<b>Day Total</b>						<b>5456</b>



**CR510 & US-1 - East Leg (WB)**  
72 Hrs. bi-directional volume counts  
(11/12/2019 to 11/14/2019)

CR510 & US-1  
East leg



ADT 5,544      AADT 5,544

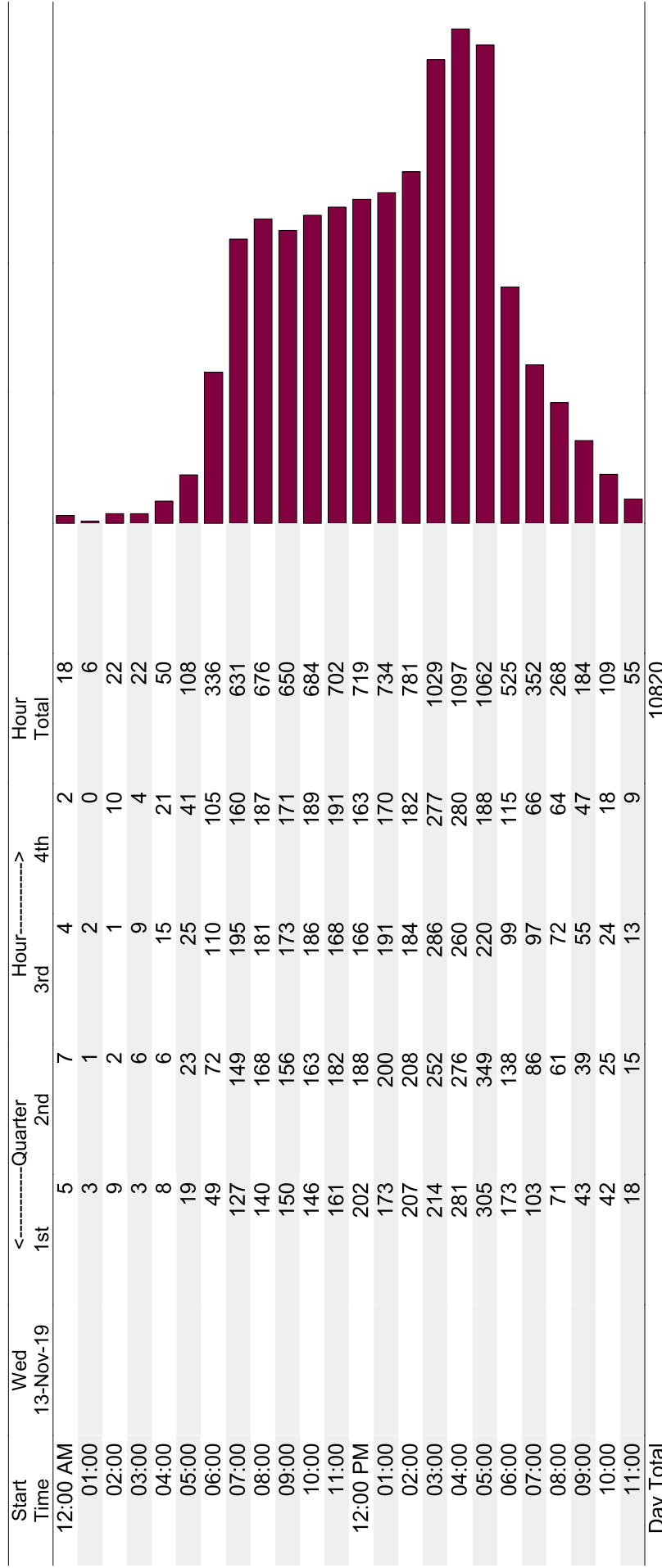
**CR510 & US-1 - North Leg (NB)**  
72Hrs. bi-directional volume counts  
(11/12/2019 to 11/14/2019)

CR 510 and US-1  
North Leg

Start Time	Tue 12-Nov-19	1st	2nd	3rd	4th	Hour Total
12:00 AM	10	8	4	7	29	
01:00	5	3	2	3	13	
02:00	8	7	1	7	23	
03:00	5	5	4	8	22	
04:00	9	11	15	9	44	
05:00	15	19	31	46	111	
06:00	39	82	71	110	302	
07:00	117	170	166	144	597	
08:00	179	178	175	176	708	
09:00	162	158	199	155	674	
10:00	148	160	191	192	691	
11:00	175	159	206	194	734	
12:00 PM	203	206	187	213	809	
01:00	168	182	188	206	744	
02:00	209	230	219	211	869	
03:00	270	269	254	236	1029	
04:00	242	320	290	286	1138	
05:00	305	339	283	229	1156	
06:00	165	155	117	115	552	
07:00	100	94	82	72	348	
08:00	55	57	54	40	206	
09:00	37	40	44	49	170	
10:00	35	30	23	11	99	
11:00	26	18	11	8	63	
<b>Day Total</b>						<b>11131</b>

**CR510 & US-1 - North Leg (NB)**  
72Hrs. bi-directional volume counts  
(11/12/2019 to 11/14/2019)

CR 510 and US-1  
North Leg



**CR510 & US-1 - North Leg (NB)**  
72Hrs. bi-directional volume counts  
(11/12/2019 to 11/14/2019)

CR 510 and US-1  
North Leg

Start Time	Thu 14-Nov-19	1st	2nd	3rd	4th	Hour Total
12:00 AM		10	7	5	4	26
01:00		5	7	2	5	19
02:00		12	6	7	5	30
03:00		5	4	2	9	20
04:00		12	13	20	16	61
05:00		15	19	29	38	101
06:00		47	58	114	118	337
07:00		116	146	156	163	581
08:00		146	176	178	179	679
09:00		153	166	184	155	658
10:00		199	161	173	200	733
11:00		193	171	194	196	754
12:00 PM		209	206	204	190	809
01:00		196	211	221	214	842
02:00		208	211	221	211	851
03:00		215	252	245	264	976
04:00		282	271	273	267	1093
05:00		305	378	245	175	1103
06:00		149	139	122	95	505
07:00		112	84	70	62	328
08:00		57	61	52	51	221
09:00		46	40	41	36	163
10:00		37	22	23	29	111
11:00		23	21	27	20	91
Day Total						11092
Grand Total						33043

ADT 11,014      AADT 11,014



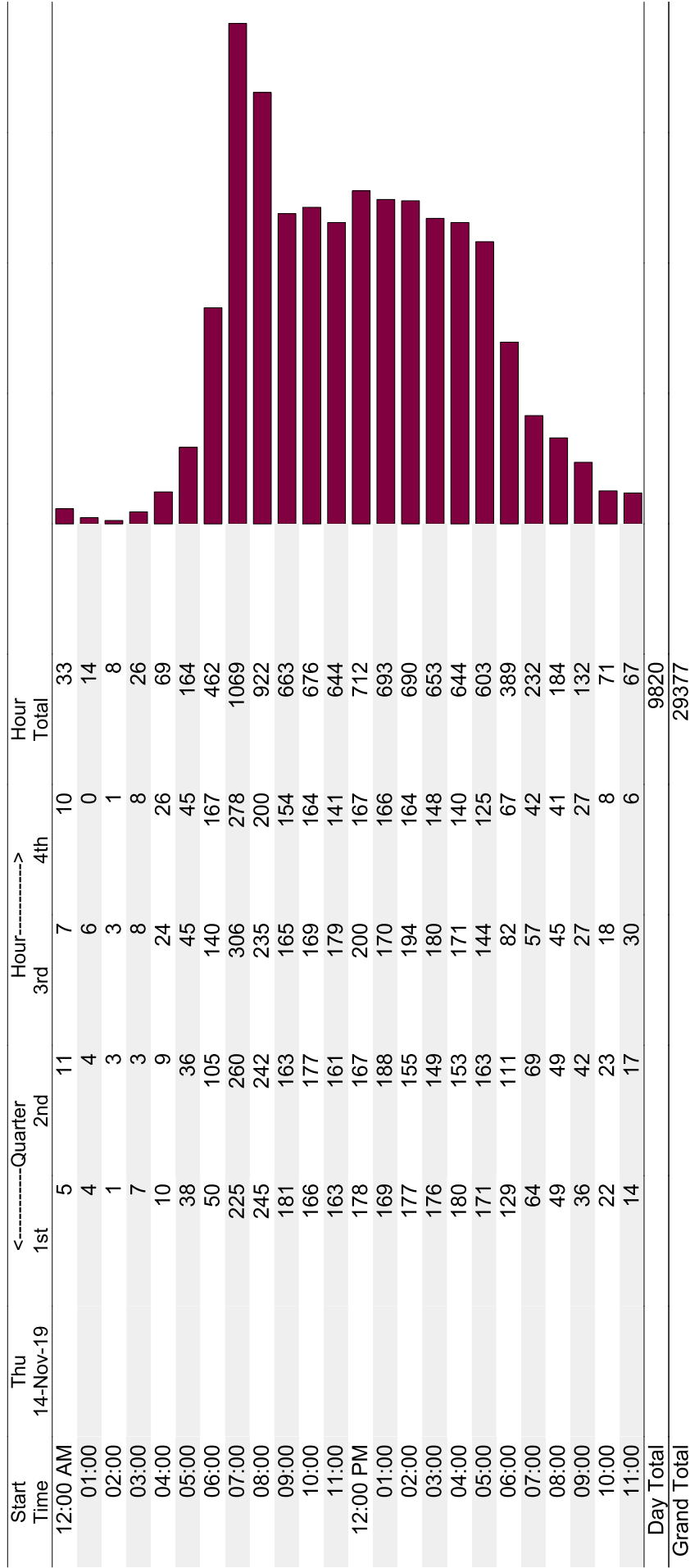
**CR510 & US-1 - North Leg (SB)**  
72Hrs. bi-directional volume counts  
(11/12/2019 to 11/14/2019)

CR 510 and US-1  
North Leg

Start Time	Wed 13-Nov-19	1st	2nd	3rd	4th	Hour Total
12:00 AM		4	7	7	13	31
01:00		4	5	2	3	14
02:00		3	0	5	3	11
03:00		2	2	7	5	16
04:00		6	11	26	17	60
05:00		37	34	55	34	160
06:00		69	98	151	173	491
07:00		203	287	317	307	1114
08:00		264	238	259	204	965
09:00		146	189	201	147	683
10:00		172	147	188	173	680
11:00		156	192	163	135	646
12:00 PM		189	156	158	157	660
01:00		158	136	186	158	638
02:00		159	137	192	141	629
03:00		157	164	165	146	632
04:00		149	162	167	154	632
05:00		164	136	178	112	590
06:00		120	81	84	85	370
07:00		58	51	49	56	214
08:00		53	36	26	35	150
09:00		30	23	22	28	103
10:00		24	24	16	19	83
11:00		16	13	13	3	45
Day Total						9617

**CR510 & US-1 - North Leg (SB)**  
72Hrs. bi-directional volume counts  
(11/12/2019 to 11/14/2019)

CR 510 and US-1  
North Leg



ADT 9,792      AADT 9,792

**CR510 & US-1 - South Leg (NB)**  
72Hrs. bi-directional volume counts  
(12/10/2019 to 12/12/2019)

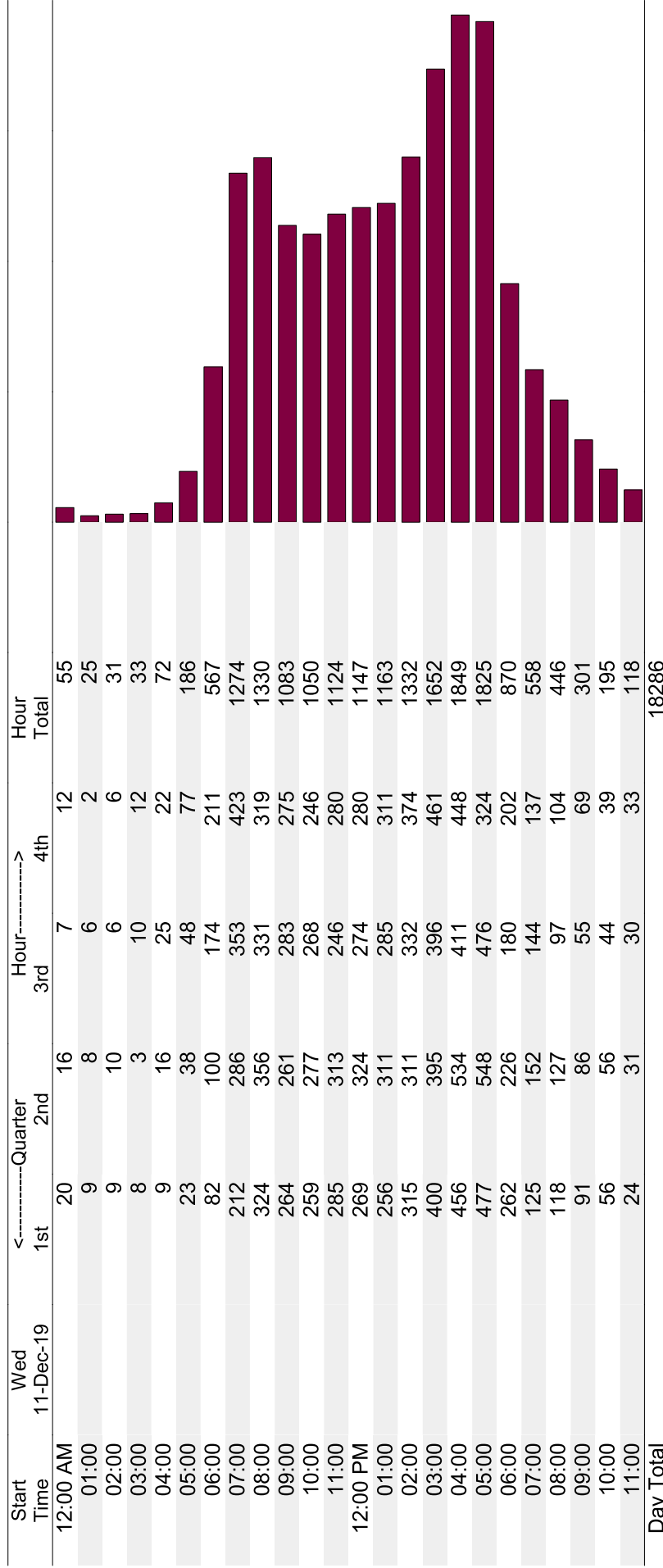
CR510 & US-1  
South Leg

Start Time	Tue 10-Dec-19	<-----Quarter 1st	2nd	3rd	4th	Hour Total
12:00 AM		22	16	15	7	60
01:00		7	6	5	8	26
02:00		11	14	4	2	31
03:00		9	7	5	11	32
04:00		8	15	23	24	70
05:00		28	35	44	66	173
06:00		58	87	133	178	456
07:00		178	285	401	357	1221
08:00		323	284	337	341	1285
09:00		256	302	279	343	1180
10:00		260	264	304	282	1110
11:00		299	292	323	285	1199
12:00 PM		275	298	336	281	1190
01:00		286	276	320	275	1157
02:00		345	331	321	332	1329
03:00		371	437	393	481	1682
04:00		398	566	474	463	1901
05:00		503	571	449	368	1891
06:00		231	265	176	178	850
07:00		132	188	141	99	560
08:00		109	119	80	107	415
09:00		98	61	74	61	294
10:00		50	40	43	47	180
11:00		29	36	15	26	106
<b>Day Total</b>						<b>18398</b>



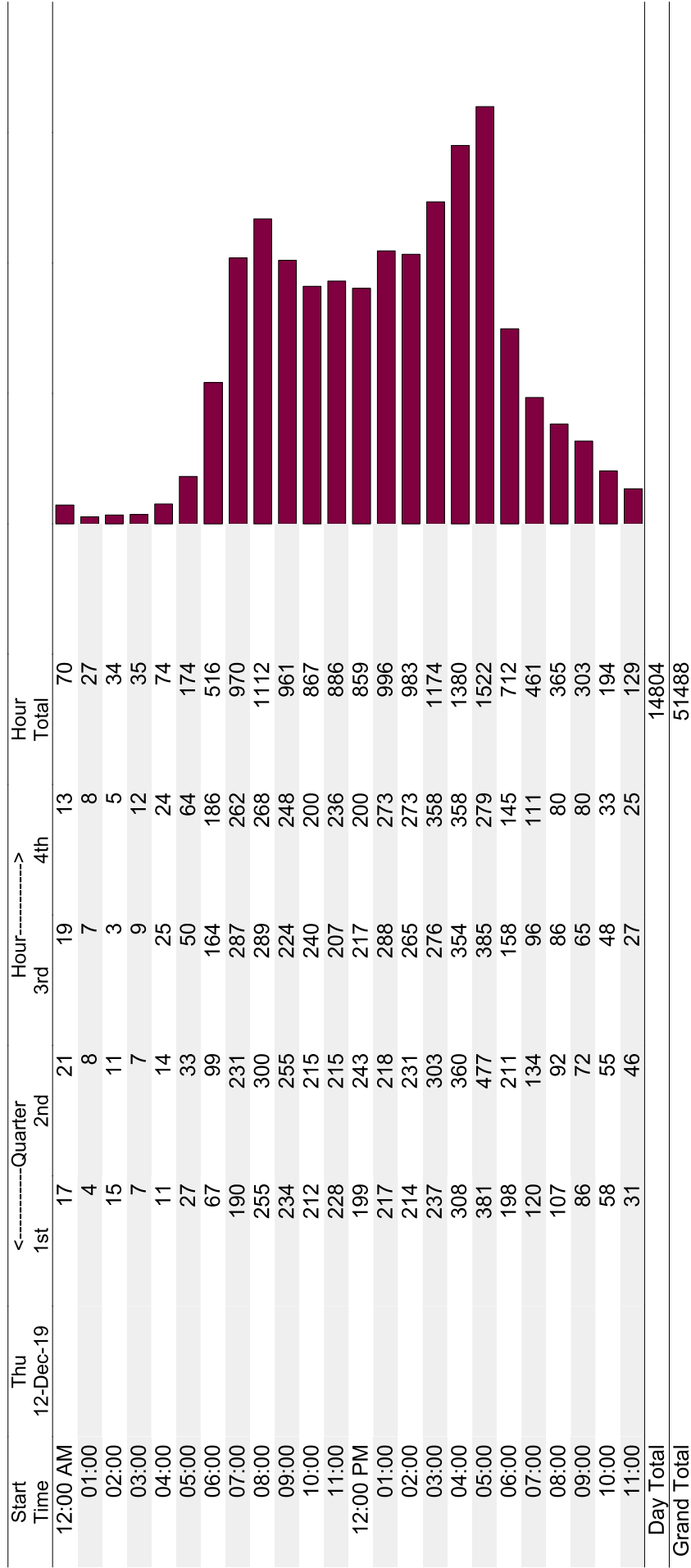
**CR510 & US-1 - South Leg (NB)**  
72Hrs. bi-directional volume counts  
(12/10/2019 to 12/12/2019)

CR510 & US-1  
South Leg



**CR510 & US-1 - South Leg (NB)**  
72Hrs. bi-directional volume counts  
(12/10/2019 to 12/12/2019)

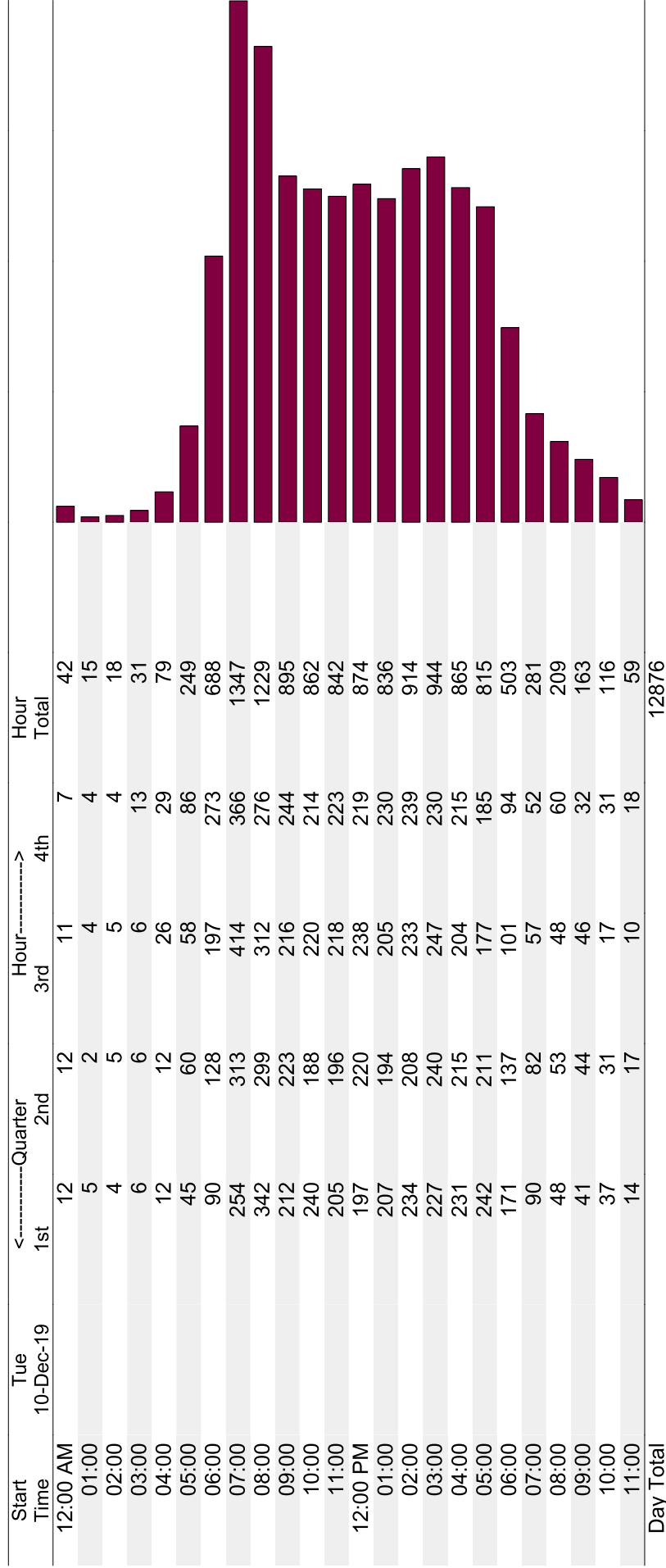
CR510 & US-1  
South Leg



ADT ADT 17,163 AADT 17,163

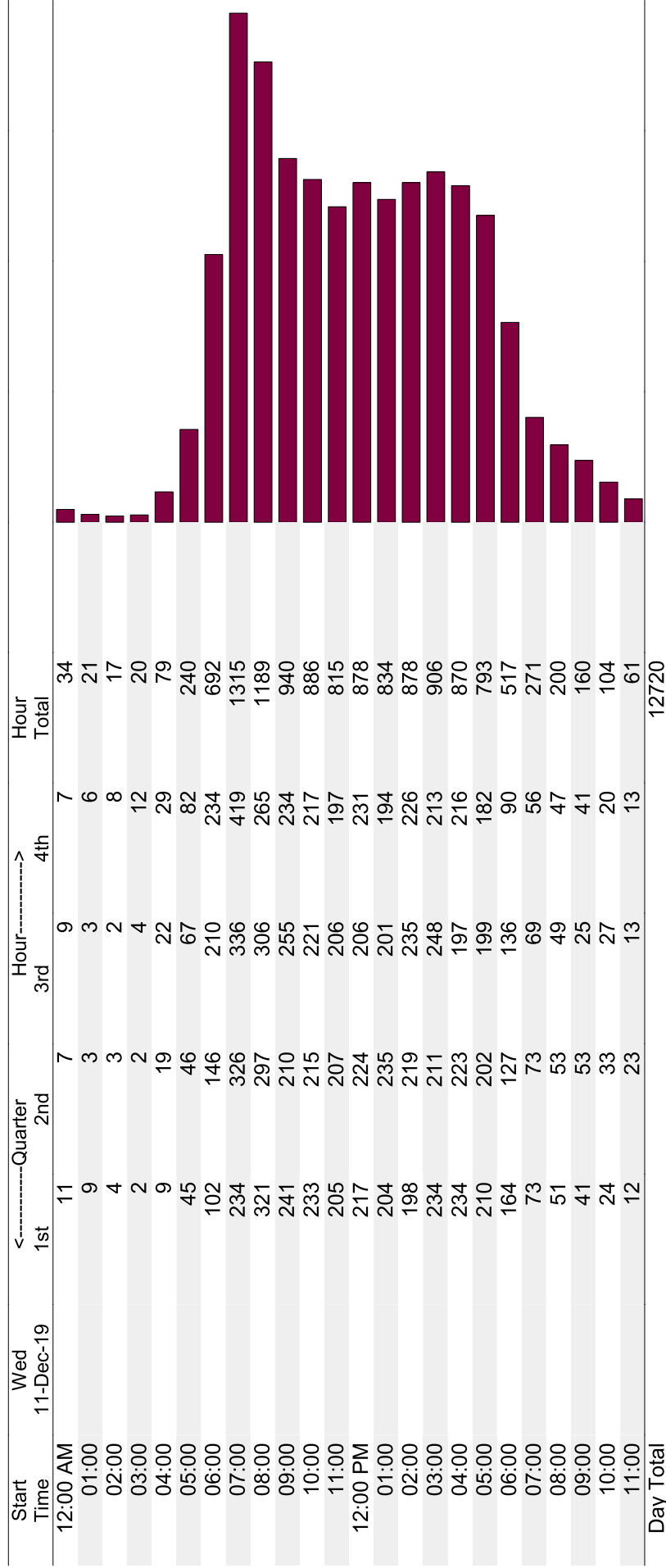
**CR510 & US-1 - South Leg (SB)**  
 72Hrs. bi-directional volume counts  
 (12/10/2019 to 12/12/2019)

CR510 & US-1  
 South Leg



**CR510 & US-1 - South Leg (SB)**  
 72Hrs. bi-directional volume counts  
 (12/10/2019 to 12/12/2019)

CR510 & US-1  
 South Leg



**CR510 & US-1 - South Leg (SB)**  
 72Hrs. bi-directional volume counts  
 (12/10/2019 to 12/12/2019)

CR510 & US-1  
 South Leg

Start Time	Thu 12-Dec-19	1st	2nd	3rd	4th	Hour Total
12:00 AM	7	12	13	6	38	
01:00	9	5	10	2	26	
02:00	10	6	3	6	25	
03:00	2	6	12	8	28	
04:00	12	14	29	39	94	
05:00	36	63	62	78	239	
06:00	81	138	193	226	638	
07:00	242	282	375	378	1277	
08:00	286	315	297	257	1155	
09:00	205	238	246	206	895	
10:00	187	205	216	191	799	
11:00	174	225	186	246	831	
12:00 PM	184	193	232	197	806	
01:00	169	150	185	170	674	
02:00	197	245	182	150	774	
03:00	180	205	176	202	763	
04:00	180	194	171	183	728	
05:00	150	180	129	142	601	
06:00	109	105	102	68	384	
07:00	83	59	52	36	230	
08:00	44	54	47	47	192	
09:00	38	32	42	46	158	
10:00	37	40	24	23	124	
11:00	12	18	22	17	69	
Day Total					11548	
Grand Total					37144	

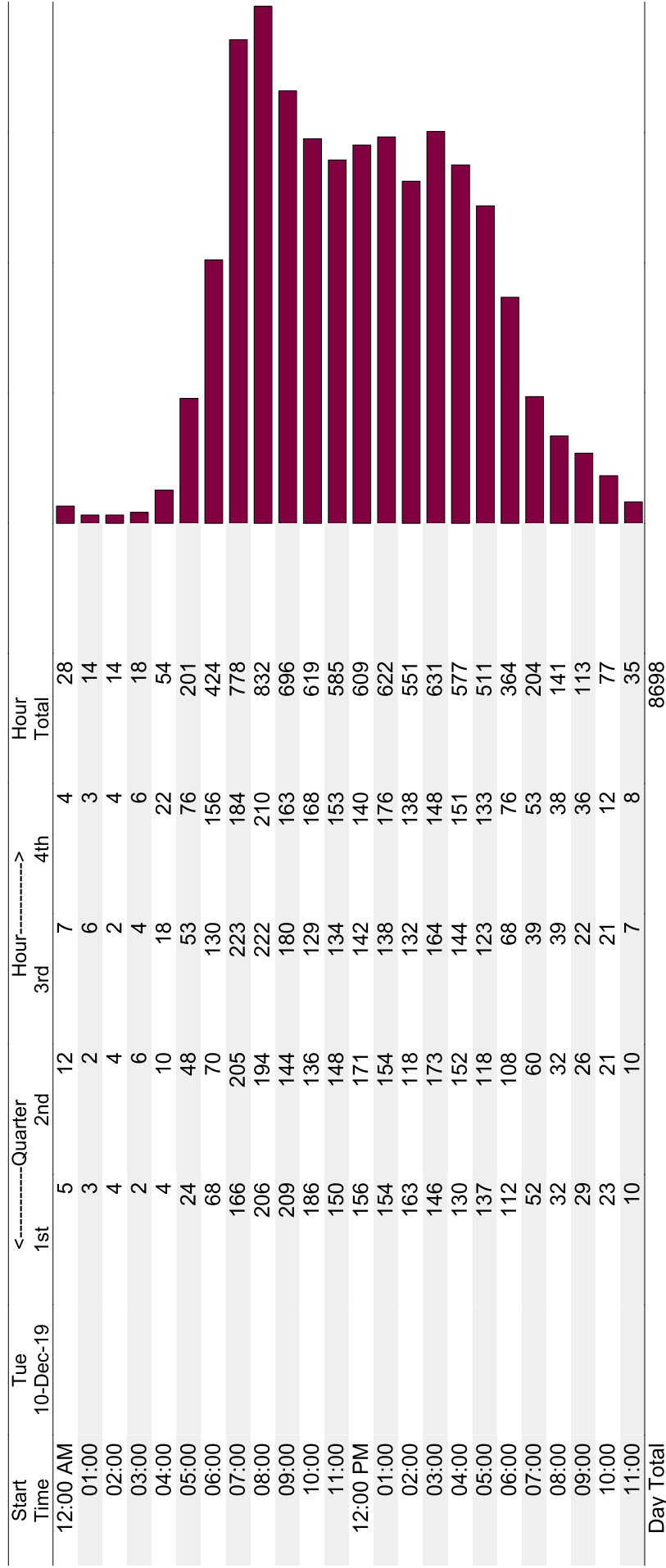
ADT 12,381

ADT 12,381

ADT 12,381

**CR510 & US-1 West Leg - EB**  
72Hrs. bi-directional volume counts  
(12/10/2019 to 12/12/2019)

CR 510 & US 1  
EB



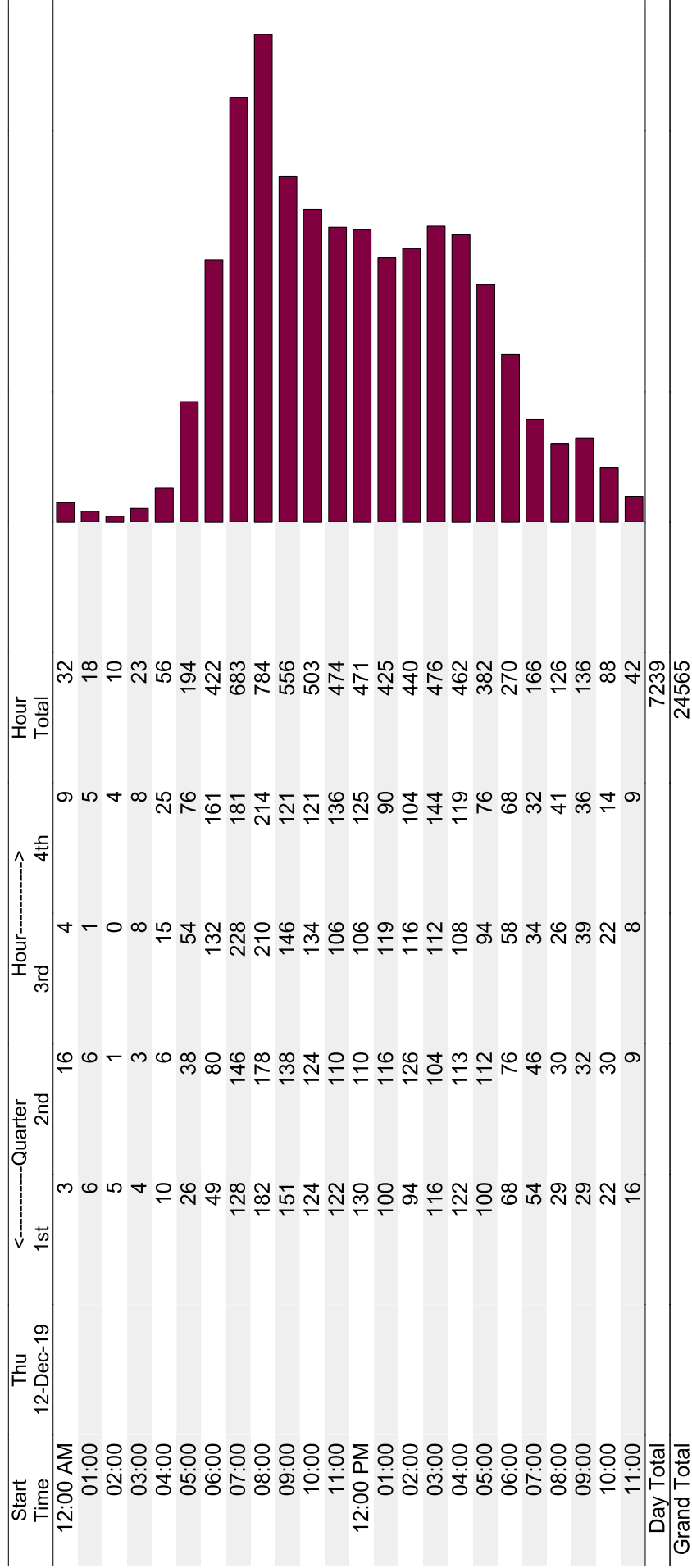
**CR510 & US-1 West Leg - EB**  
72Hrs. bi-directional volume counts  
(12/10/2019 to 12/12/2019)

CR 510 & US 1  
EB

Start Time	Wed 11-Dec-19	1st	2nd	3rd	4th	Hour Total
12:00 AM		4	11	7	7	29
01:00		2	3	3	3	11
02:00		0	3	0	3	6
03:00		4	2	2	5	13
04:00		3	10	11	22	46
05:00		26	30	52	73	181
06:00		70	90	126	154	440
07:00		124	204	186	228	742
08:00		204	198	198	238	838
09:00		152	140	142	188	622
10:00		118	134	143	162	557
11:00		136	146	128	162	572
12:00 PM		137	142	167	124	570
01:00		131	168	165	170	634
02:00		150	152	180	162	644
03:00		138	160	157	157	612
04:00		142	136	136	178	592
05:00		140	139	124	121	524
06:00		130	93	98	69	390
07:00		74	50	48	40	212
08:00		43	39	44	46	172
09:00		40	26	26	30	122
10:00		15	21	16	10	62
11:00		10	6	10	11	37
Day Total						8628

**CR510 & US-1 West Leg - EB**  
 72Hrs. bi-directional volume counts  
 (12/10/2019 to 12/12/2019)

CR 510 & US 1  
 EB

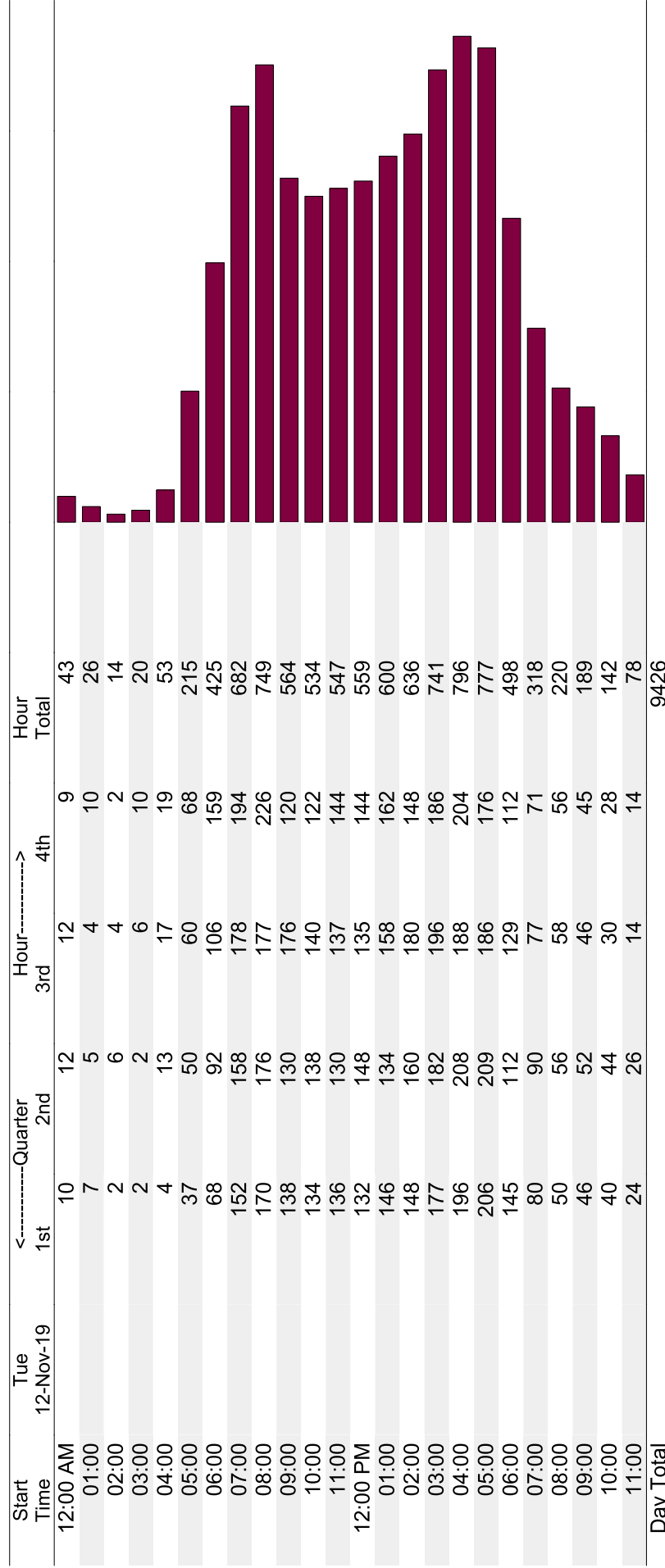


ADT 8,188      AADT 8,188



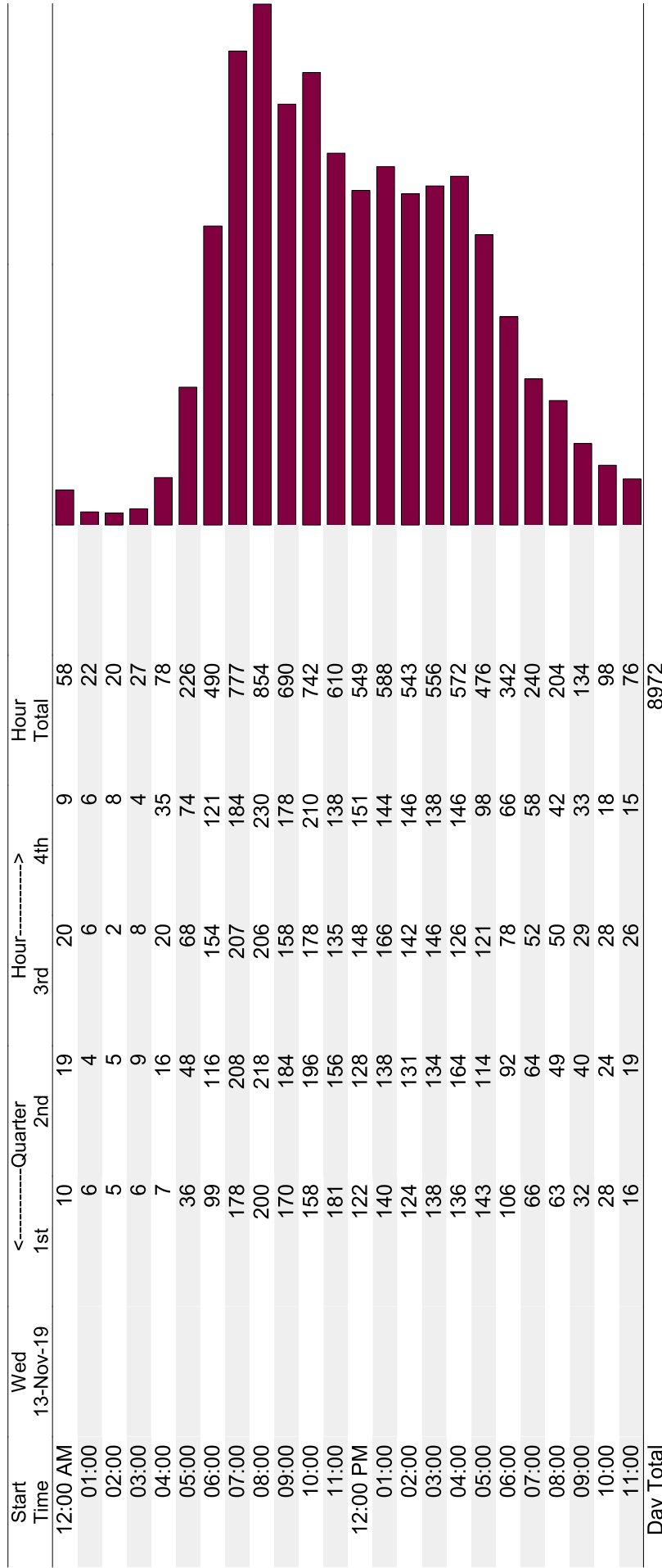
**CR510 & US-1 West Leg - WB**  
 72Hrs. bi-directional volume counts  
 (11/12/2019 to 11/14/2019)

CR510 & US-1  
 West leg (WB)



**CR510 & US-1 West Leg - WB**  
 72Hrs. bi-directional volume counts  
 (11/12/2019 to 11/14/2019)

CR510 & US-1  
 West leg (WB)



**CR510 & US-1 West Leg - WB**  
72Hrs. bi-directional volume counts  
(11/12/2019 to 11/14/2019)

CR510 & US-1  
West leg (WB)

Start Time	Thu 14-Nov-19	1st	2nd	3rd	4th	Hour Total
12:00 AM	7	8	6	5	26	
01:00	4	6	4	4	18	
02:00	5	6	3	4	18	
03:00	9	7	8	4	28	
04:00	10	5	17	30	62	
05:00	30	43	56	71	200	
06:00	70	80	142	160	452	
07:00	145	166	194	231	736	
08:00	181	196	196	200	773	
09:00	171	166	166	158	661	
10:00	146	122	132	182	582	
11:00	170	170	171	166	677	
12:00 PM	198	167	144	183	692	
01:00	185	164	168	150	667	
02:00	180	155	167	194	696	
03:00	192	168	166	174	700	
04:00	178	153	150	176	657	
05:00	153	136	121	122	532	
06:00	110	101	80	68	359	
07:00	56	64	58	55	233	
08:00	44	58	54	52	208	
09:00	51	58	42	44	195	
10:00	44	46	35	22	147	
11:00	21	23	14	18	76	
Day Total					9395	
Grand Total					27793	

ADT 9,264      AADT 9,264

ADT

**Melbourne Causeway/ SR 192 - EB**  
 72 Hrs. bi-directional vehicle classification counts  
 (11/12/2019 to 11/14/2019)

Melbourne Causeway  
 EB

Start Time	Tue 12-Nov-19	<-----Quarter 1st	2nd	3rd	Hour-----> 4th	Hour Total
12:00 AM		35	37	16	14	102
01:00		18	9	8	12	47
02:00		6	8	3	5	22
03:00		7	10	13	9	39
04:00		14	15	23	23	75
05:00		22	31	36	54	143
06:00		60	88	130	131	409
07:00		163	162	174	177	676
08:00		204	214	232	210	860
09:00		199	179	219	211	808
10:00		197	194	198	211	800
11:00		221	212	218	231	882
12:00 PM		245	219	248	217	929
01:00		201	215	203	224	843
02:00		224	210	213	235	882
03:00		233	235	258	336	1062
04:00		272	287	293	326	1178
05:00		345	357	325	307	1334
06:00		264	244	234	187	929
07:00		177	219	172	161	729
08:00		164	145	120	136	565
09:00		124	94	90	78	386
10:00		43	52	43	40	178
11:00		31	37	23	14	105
<b>Day Total</b>						<b>13983</b>

**Melbourne Causeway/ SR 192 - EB**  
 72 Hrs. bi-directional vehicle classification counts  
 (11/12/2019 to 11/14/2019)

Melbourne Causeway  
 EB

Start Time	Wed 13-Nov-19	1st	2nd	3rd	4th	Hour Total
12:00 AM		23	19	11	26	79
01:00		7	8	7	5	27
02:00		5	2	6	9	22
03:00		5	3	7	8	23
04:00		8	10	22	17	57
05:00		14	21	39	44	118
06:00		65	83	106	120	374
07:00		157	176	173	200	706
08:00		220	199	221	228	868
09:00		187	159	178	204	728
10:00		189	171	177	176	713
11:00		183	179	188	185	735
12:00 PM		198	203	207	218	826
01:00		181	199	184	233	797
02:00		229	201	209	227	866
03:00		209	231	222	317	979
04:00		287	281	279	278	1125
05:00		361	323	320	289	1293
06:00		259	245	195	186	885
07:00		190	164	150	145	649
08:00		143	140	95	99	477
09:00		118	114	82	96	410
10:00		58	52	35	36	181
11:00		44	40	32	23	139
<b>Day Total</b>						<b>13077</b>

**Melbourne Causeway/ SR 192 - EB**  
 72 Hrs. bi-directional vehicle classification counts  
 (11/12/2019 to 11/14/2019)

Melbourne Causeway  
 EB

Start Time	Thu 14-Nov-19	1st	2nd	3rd	4th	Hour Total
12:00 AM		28	18	11	9	66
01:00		15	7	12	6	40
02:00		5	12	11	17	45
03:00		10	9	15	16	50
04:00		12	9	17	14	52
05:00		18	23	44	36	121
06:00		60	72	120	115	367
07:00		142	152	181	183	658
08:00		190	201	203	216	810
09:00		183	178	186	213	760
10:00		180	161	157	179	677
11:00		205	193	198	203	799
12:00 PM		218	202	220	195	835
01:00		219	218	232	214	883
02:00		229	215	218	232	894
03:00		224	250	257	333	1064
04:00		329	279	287	316	1211
05:00		335	338	319	282	1274
06:00		258	253	219	206	936
07:00		163	180	151	159	653
08:00		143	157	123	128	551
09:00		95	109	86	86	376
10:00		72	65	52	68	257
11:00		56	46	36	38	176
Day Total						13555
Grand Total						40615

ADT ADT 13,538 AADT 13,538







**Melbourne Causeway/ SR 192 - WB**  
72 Hrs. bi-directional vehicle classification counts  
(11/12/2019 to 11/14/2019)

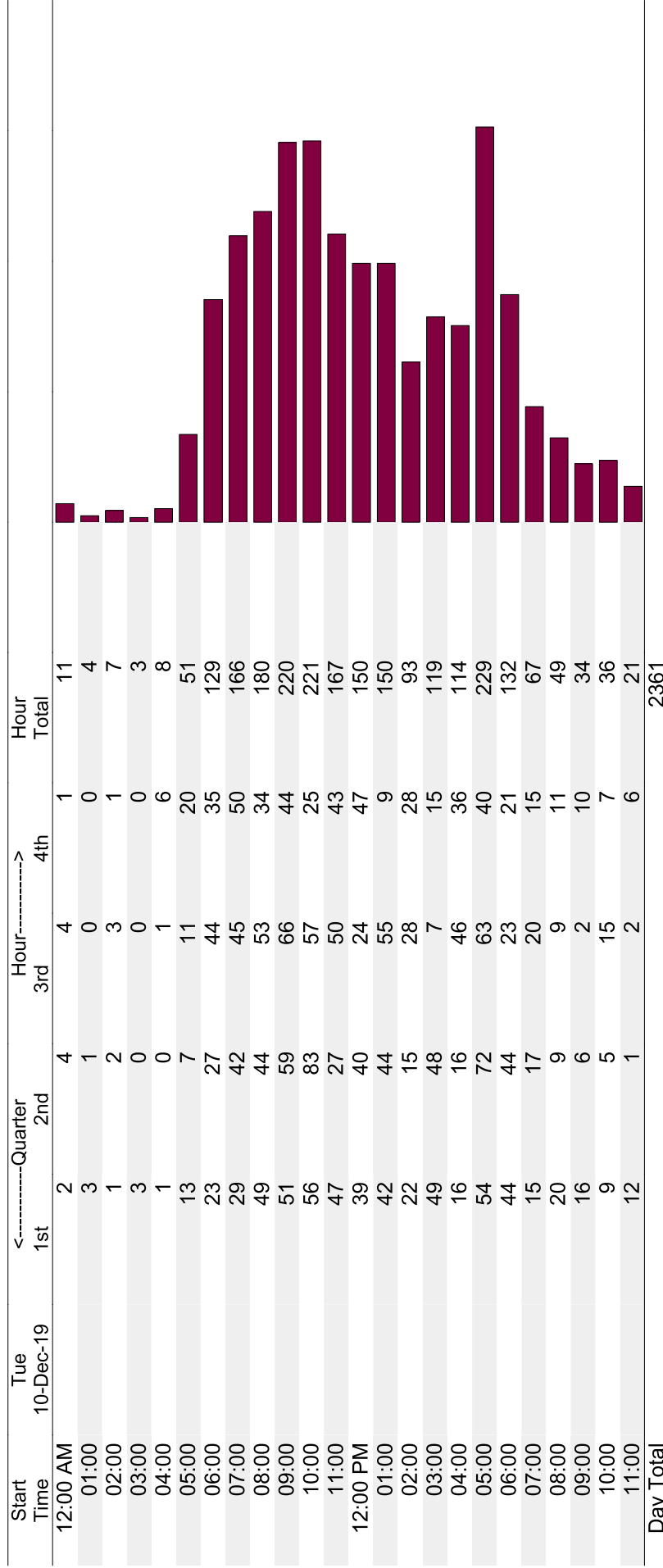
Melbourne Causeway  
WB

Start Time	Thu 14-Nov-19	1st	2nd	3rd	4th	Hour Total
12:00 AM	24	15	20	14	73	
01:00	10	8	6	6	30	
02:00	8	10	4	10	32	
03:00	7	5	6	8	26	
04:00	14	12	17	23	66	
05:00	28	38	55	79	200	
06:00	102	132	183	246	663	
07:00	320	366	495	539	1720	
08:00	538	490	382	334	1744	
09:00	306	361	285	290	1242	
10:00	274	288	290	262	1114	
11:00	268	284	256	258	1066	
12:00 PM	292	253	344	306	1195	
01:00	321	285	300	328	1234	
02:00	252	286	262	318	1118	
03:00	284	338	324	298	1244	
04:00	300	298	290	300	1188	
05:00	290	306	248	268	1112	
06:00	236	221	193	168	818	
07:00	128	134	111	120	493	
08:00	108	85	94	103	390	
09:00	106	103	68	60	337	
10:00	53	56	49	40	198	
11:00	48	28	16	24	116	
Day Total					17419	
Grand Total					52864	

ADT ADT 17,621 AADT 17,621

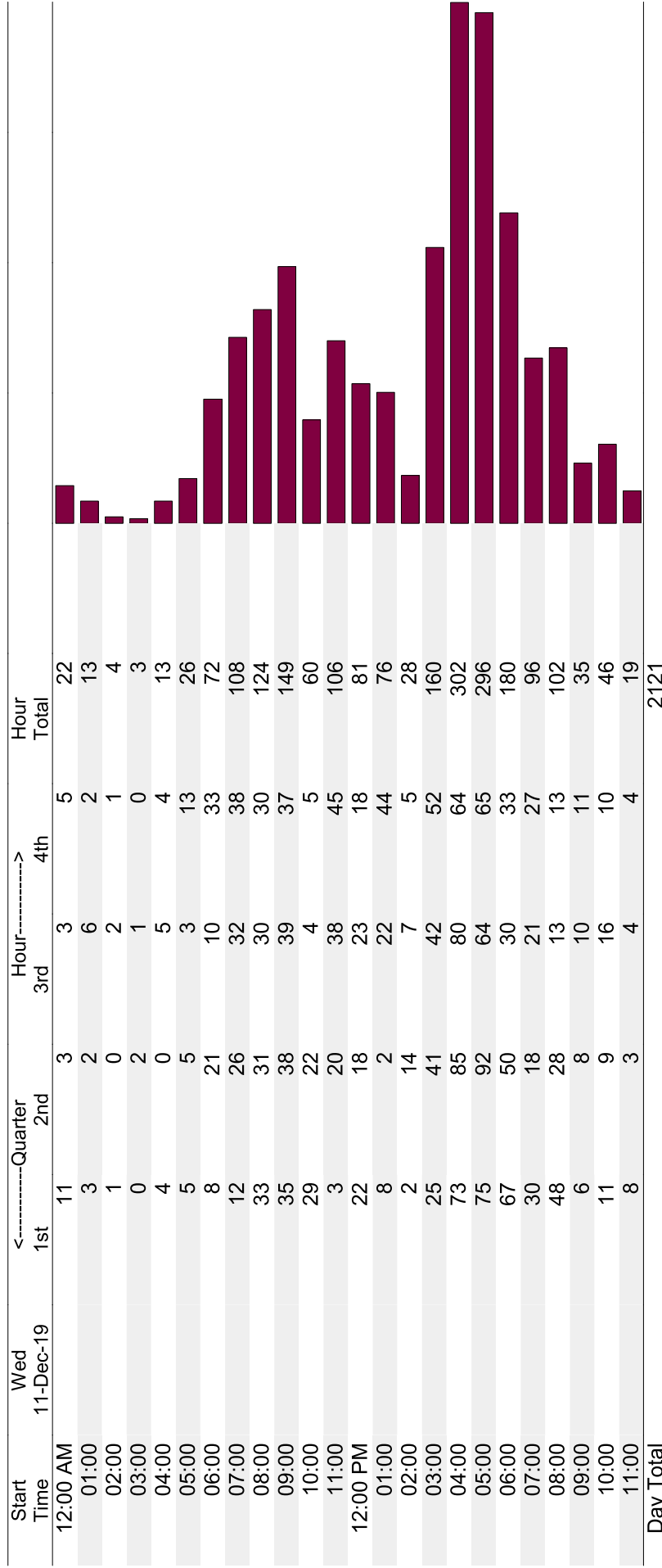
**North of Hammock Trail Entrance - NB**  
 72Hrs. bi-directional volume counts  
 (12/10/2019 to 12/12/2019)

North of Hammock Trail Entrance



**North of Hammock Trail Entrance - NB**  
72Hrs. bi-directional volume counts  
(12/10/2019 to 12/12/2019)

North of Hammock Trail Entrance



**North of Hammock Trail Entrance - NB**  
 72Hrs. bi-directional volume counts  
 (12/10/2019 to 12/12/2019)

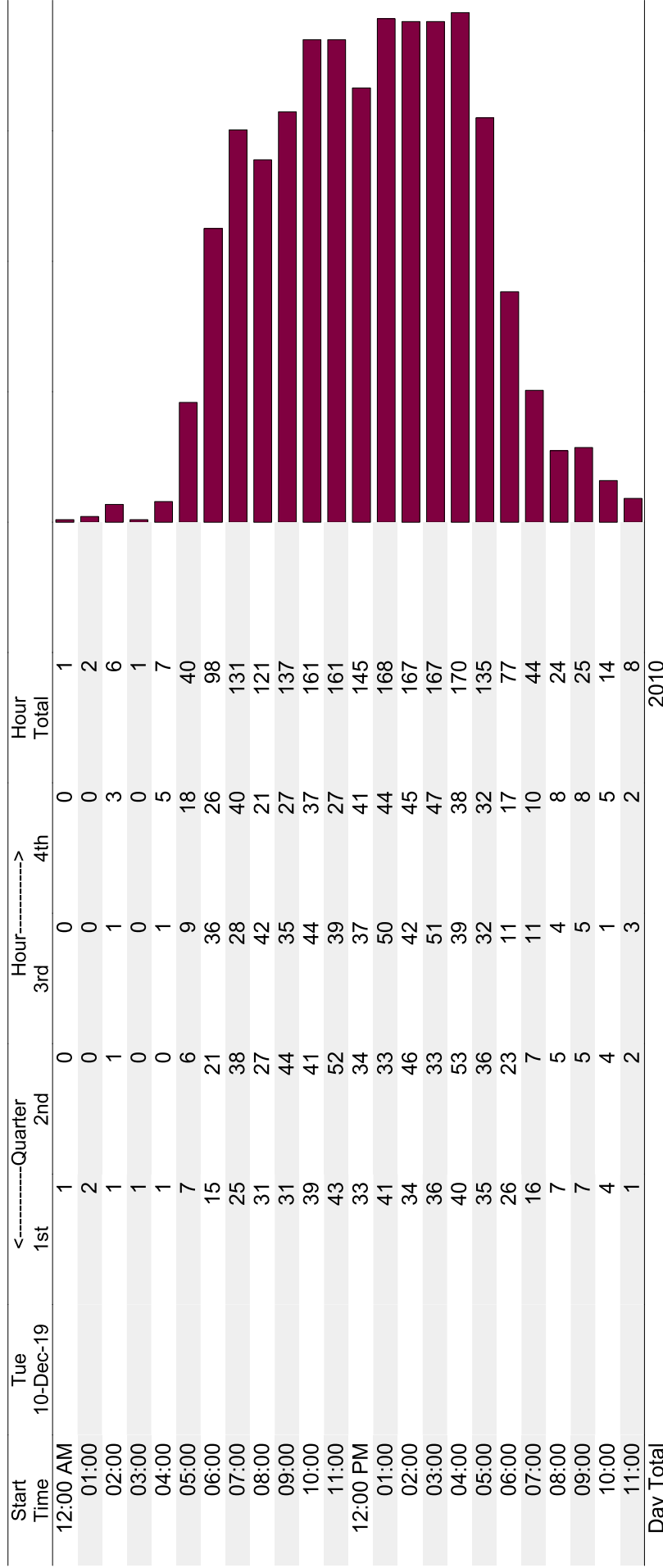
North of Hammock Trail Entrance

Start Time	Thu 12-Dec-19	<-----1st	-----2nd	-----3rd	-----4th	Hour Total
12:00 AM		3	2	3	10	18
01:00		10	3	2	4	19
02:00		4	5	2	1	12
03:00		2	4	2	0	8
04:00		2	3	2	7	14
05:00		2	1	1	6	10
06:00		10	9	13	9	41
07:00		8	7	13	10	38
08:00		18	21	13	11	63
09:00		19	14	28	17	78
10:00		15	16	27	23	81
11:00		20	20	25	20	85
12:00 PM		23	27	15	19	84
01:00		14	22	16	22	74
02:00		14	20	19	18	71
03:00		14	14	32	18	78
04:00		15	21	31	26	93
05:00		31	20	24	20	95
06:00		11	18	16	13	58
07:00		8	10	12	8	38
08:00		28	18	8	7	61
09:00		5	3	5	5	18
10:00		2	2	5	3	12
11:00		7	3	4	3	17
<b>Day Total</b>						<b>1166</b>
<b>Grand Total</b>						<b>5648</b>

ADT 3,606      AADT 3,606

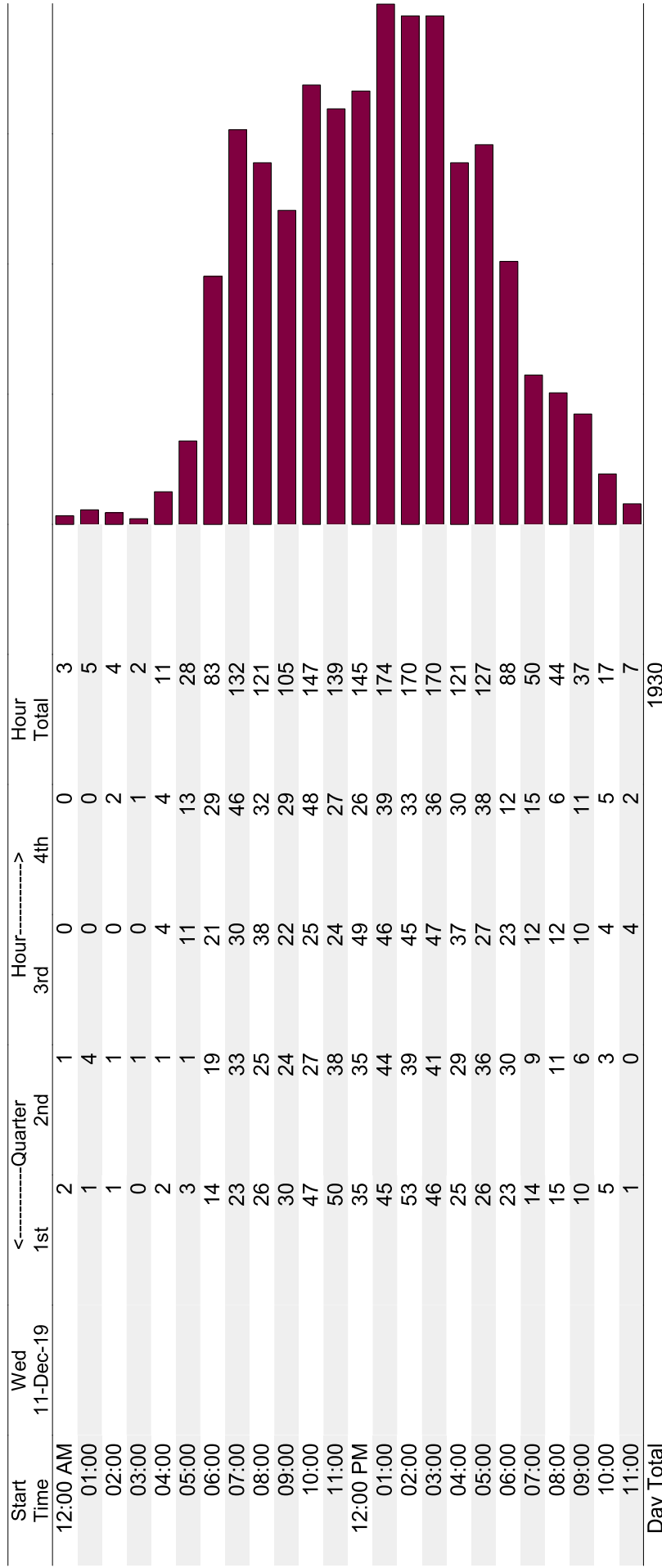
**North of Hammock Trail Entrance - SB**  
 72Hrs. bi-directional volume counts  
 (12/10/2019 to 12/12/2019)

North of Hammock Trail Entrance



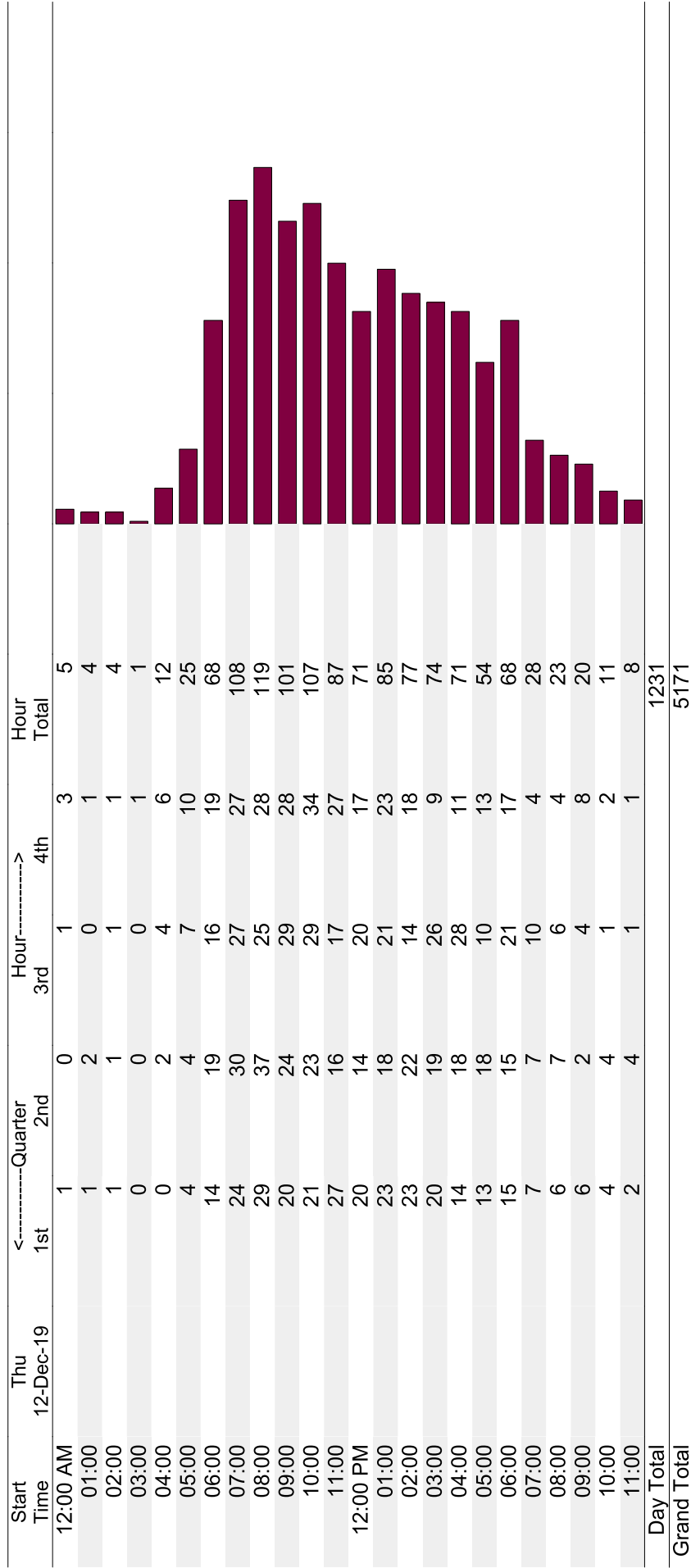
**North of Hammock Trail Entrance - SB**  
72Hrs. bi-directional volume counts  
(12/10/2019 to 12/12/2019)

North of Hammock Trail Entrance



**North of Hammock Trail Entrance - SB**  
 72Hrs. bi-directional volume counts  
 (12/10/2019 to 12/12/2019)

North of Hammock Trail Entrance



ADT 1,724      AADT 1,724

**SR192 & A1A - North Leg (NB)**  
72 Hrs. bi-directional vehicle classification counts  
(12/10/2019 to 12/12/2019)

SR192 & A1A  
North Leg

Start Time	Tue 10-Dec-19	<-----Quarter 1st	2nd	3rd	4th	Hour Total
12:00 AM		21	16	11	7	55
01:00		10	6	7	7	30
02:00		8	6	6	1	21
03:00		1	2	5	3	11
04:00		2	5	0	21	28
05:00		22	29	26	36	113
06:00		44	70	90	116	320
07:00		98	147	194	198	637
08:00		178	201	165	161	705
09:00		199	191	180	200	770
10:00		145	175	188	200	708
11:00		162	173	180	184	699
12:00 PM		170	184	181	181	716
01:00		172	188	176	200	736
02:00		180	156	218	178	732
03:00		185	190	202	170	747
04:00		213	198	184	218	813
05:00		182	219	223	205	829
06:00		170	181	177	143	671
07:00		136	110	80	103	429
08:00		87	96	100	72	355
09:00		72	65	60	42	239
10:00		37	32	27	25	121
11:00		38	18	14	18	88
<b>Day Total</b>						<b>10573</b>



**SR192 & A1A - North Leg (NB)**  
72 Hrs. bi-directional vehicle classification counts  
(12/10/2019 to 12/12/2019)

SR192 & A1A  
North Leg

Start Time	Wed 11-Dec-19	1st	2nd	3rd	4th	Hour Total
12:00 AM		9	15	7	9	40
01:00		10	6	6	3	25
02:00		3	3	4	2	12
03:00		4	4	3	2	13
04:00		5	12	8	12	37
05:00		30	13	24	32	99
06:00		43	55	76	117	291
07:00		104	136	208	188	636
08:00		206	160	182	180	728
09:00		192	172	174	160	698
10:00		174	172	180	188	714
11:00		183	172	213	198	766
12:00 PM		190	192	160	190	732
01:00		164	186	192	164	706
02:00		198	196	150	207	751
03:00		169	178	185	190	722
04:00		206	200	180	212	798
05:00		196	224	200	226	846
06:00		156	184	146	110	596
07:00		126	104	100	74	404
08:00		85	91	82	73	331
09:00		78	78	65	66	287
10:00		47	41	35	36	159
11:00		21	22	23	21	87
<b>Day Total</b>						<b>10478</b>

**SR192 & A1A - North Leg (NB)**  
72 Hrs. bi-directional vehicle classification counts  
(12/10/2019 to 12/12/2019)

SR192 & A1A  
North Leg

Start Time	Thu 12-Dec-19	<-----Quarter 1st	2nd	3rd	4th	Hour Total
12:00 AM		13	17	18	7	55
01:00		8	13	5	3	29
02:00		7	4	8	3	22
03:00		4	3	2	11	20
04:00		5	9	12	16	42
05:00		20	26	22	34	102
06:00		43	59	78	104	284
07:00		117	140	174	164	595
08:00		170	168	157	168	663
09:00		200	192	133	180	705
10:00		171	168	162	171	672
11:00		166	198	200	185	749
12:00 PM		169	179	168	181	697
01:00		166	175	191	150	682
02:00		164	178	158	180	680
03:00		154	143	166	183	646
04:00		176	178	152	183	689
05:00		174	202	173	162	711
06:00		190	126	150	111	577
07:00		92	96	85	88	361
08:00		80	64	69	74	287
09:00		60	66	29	42	197
10:00		45	40	33	27	145
11:00		21	18	19	16	74
Day Total						9684
Grand Total						30735

ADT 10,245      AADT 10,245





## SR192 & A1A - North Leg (SB) 72 Hrs. bi-directional vehicle classification counts (12/10/2019 to 12/12/2019)

SR192 & A1A  
North Leg

Start Time	Thu 12-Dec-19	<-----Quarter 1st	2nd	3rd	4th	Hour Total	Hour Total
12:00 AM		17	22	20	17	76	
01:00		12	5	8	4	29	
02:00		8	7	6	2	23	
03:00		2	4	2	5	13	
04:00		4	9	14	8	35	
05:00		9	17	20	39	85	
06:00		42	68	77	106	293	
07:00		127	160	213	206	706	
08:00		212	212	175	163	762	
09:00		188	171	183	156	698	
10:00		154	154	180	134	622	
11:00		156	171	182	182	691	
12:00 PM		180	200	170	171	721	
01:00		200	168	163	177	708	
02:00		160	142	176	184	662	
03:00		158	172	164	158	652	
04:00		159	183	184	193	719	
05:00		188	184	178	160	710	
06:00		150	157	142	124	573	
07:00		146	136	116	84	482	
08:00		96	78	86	52	312	
09:00		75	73	48	51	247	
10:00		52	56	36	32	176	
11:00		34	24	23	19	100	
Day Total						10095	
Grand Total						32024	

ADT ADT 20,920 AADT 20,920

## SR192 & A1A - South Leg (NB) 72 Hrs. bi-directional vehicle classification counts (12/10/2019 to 12/12/2019)

SR192 & A1A  
South Leg

Start Time	Tue 10-Dec-19	Quarter				Hour			Hour Total
		1st	2nd	3rd	4th	1st	2nd	3rd	
12:00 AM		9	8	8	8	5	30		
01:00		6	9	6	4	4	25		
02:00		5	3	4	4	4	16		
03:00		4	3	3	5	5	15		
04:00		5	11	16	22	22	54		
05:00		24	24	42	42	42	132		
06:00		48	87	105	122	122	362		
07:00		143	175	230	215	215	763		
08:00		194	215	169	179	179	757		
09:00		180	197	160	198	198	735		
10:00		168	188	165	185	185	706		
11:00		163	186	183	164	164	696		
12:00 PM		187	171	158	211	211	727		
01:00		165	190	167	212	212	734		
02:00		180	182	194	191	191	747		
03:00		185	182	184	169	169	720		
04:00		169	144	154	166	166	633		
05:00		144	138	148	143	143	573		
06:00		131	155	105	101	101	492		
07:00		82	59	53	61	61	255		
08:00		60	70	47	34	34	211		
09:00		38	39	39	24	24	140		
10:00		33	22	20	16	16	91		
11:00		22	15	6	8	8	51		
<b>Day Total</b>							<b>9665</b>		



## SR192 & A1A - South Leg (NB) 72 Hrs. bi-directional vehicle classification counts (12/10/2019 to 12/12/2019)

SR192 & A1A  
South Leg

Start Time	Thu 12-Dec-19	Quarter				Hour			Hour Total
		1st	2nd	3rd	4th	1st	2nd	3rd	
12:00 AM		8	10	7	2	27			
01:00		8	10	8	5	31			
02:00		4	5	5	0	14			
03:00		6	2	3	8	19			
04:00		5	9	13	17	44			
05:00		20	26	22	36	104			
06:00		47	62	86	102	297			
07:00		117	148	159	172	596			
08:00		190	176	131	162	659			
09:00		177	177	163	160	677			
10:00		155	178	156	170	659			
11:00		160	162	169	174	665			
12:00 PM		144	189	157	169	659			
01:00		158	142	145	128	573			
02:00		160	147	167	156	630			
03:00		138	150	156	146	590			
04:00		166	162	139	139	606			
05:00		137	132	128	140	537			
06:00		96	111	103	91	401			
07:00		69	71	71	47	258			
08:00		62	58	54	42	216			
09:00		49	39	42	42	172			
10:00		39	22	31	22	114			
11:00		17	18	12	12	59			
<b>Day Total</b>						<b>8607</b>			
<b>Grand Total</b>									<b>27335</b>

ADT 15,787                      AADT 15,787





**SR192 & A1A - South Leg (SB)**  
72 Hrs. bi-directional vehicle classification counts  
(12/10/2019 to 12/12/2019)

SR192 & A1A  
South Leg

Start Time	Wed 11-Dec-19	1st	2nd	3rd	4th	Hour Total
12:00 AM		10	5	6	8	29
01:00		14	7	6	2	29
02:00		2	7	5	2	16
03:00		2	2	6	5	15
04:00		1	9	5	7	22
05:00		8	14	17	27	66
06:00		52	55	87	82	276
07:00		73	79	101	105	358
08:00		109	137	137	116	499
09:00		110	140	141	155	546
10:00		139	149	141	150	579
11:00		142	149	131	176	598
12:00 PM		181	160	170	143	654
01:00		149	168	170	182	669
02:00		162	176	153	164	655
03:00		180	164	173	185	702
04:00		205	183	194	219	801
05:00		176	196	218	202	792
06:00		188	174	145	144	651
07:00		142	112	132	124	510
08:00		106	99	110	91	406
09:00		77	75	87	73	312
10:00		67	44	34	39	184
11:00		23	29	15	14	81
<b>Day Total</b>						<b>9450</b>

**SR192 & A1A - South Leg (SB)**  
72 Hrs. bi-directional vehicle classification counts  
(12/10/2019 to 12/12/2019)

SR192 & A1A  
South Leg

Start Time	Thu 12-Dec-19	1st	2nd	3rd	4th	Hour Total
12:00 AM		16	12	10	17	55
01:00		13	4	8	4	29
02:00		6	5	3	4	18
03:00		3	4	6	5	18
04:00		3	7	7	8	25
05:00		18	10	26	32	86
06:00		44	49	76	106	275
07:00		90	133	115	125	463
08:00		129	134	156	138	557
09:00		138	130	149	150	567
10:00		121	154	136	144	555
11:00		127	160	152	159	598
12:00 PM		166	187	156	134	643
01:00		146	147	157	149	599
02:00		147	165	155	237	704
03:00		215	174	188	187	764
04:00		184	175	162	159	680
05:00		143	137	141	130	551
06:00		148	162	130	135	575
07:00		127	118	87	103	435
08:00		81	81	102	78	342
09:00		81	89	63	60	293
10:00		52	46	30	28	156
11:00		35	21	17	13	86
Day Total						9074
Grand Total						27810

ADT ADT 15,787 AADT 15,787

**Appendix E**  
**Seasonal and Axel**  
**Correction Factors**

2018 WEEKLY AXLE FACTOR CATEGORY REPORT - REPORT TYPE: DISTRICT

COUNTY: 88 - INDIAN RIVER

WEEK	DATES	8810 COUNTY ROADS-RURAL	SR 656	8811	8812 27 AVENUE/EMERSON	8813 SR5, ST. LUCIE-65 ST
1	01/01/2018 - 01/06/2018	0.81		0.95	0.99	0.99
2	01/07/2018 - 01/13/2018	0.80		0.95	0.99	0.99
3	01/14/2018 - 01/20/2018	0.78		0.95	0.99	0.99
4	01/21/2018 - 01/27/2018	0.79		0.95	0.99	0.99
5	01/28/2018 - 02/03/2018	0.79		0.95	0.99	0.99
6	02/04/2018 - 02/10/2018	0.80		0.95	0.99	0.99
7	02/11/2018 - 02/17/2018	0.80		0.95	0.99	0.99
8	02/18/2018 - 02/24/2018	0.80		0.95	0.99	0.99
9	02/25/2018 - 03/03/2018	0.81		0.95	0.99	0.99
10	03/04/2018 - 03/10/2018	0.81		0.95	0.99	0.99
11	03/11/2018 - 03/17/2018	0.81		0.95	0.99	0.99
12	03/18/2018 - 03/24/2018	0.81		0.95	0.99	0.99
13	03/25/2018 - 03/31/2018	0.81		0.95	0.99	0.99
14	04/01/2018 - 04/07/2018	0.80		0.95	0.99	0.99
15	04/08/2018 - 04/14/2018	0.80		0.95	0.99	0.99
16	04/15/2018 - 04/21/2018	0.80		0.95	0.99	0.99
17	04/22/2018 - 04/28/2018	0.80		0.95	0.99	0.99
18	04/29/2018 - 05/05/2018	0.80		0.95	0.99	0.99
19	05/06/2018 - 05/12/2018	0.80		0.95	0.99	0.99
20	05/13/2018 - 05/19/2018	0.80		0.95	0.99	0.99
21	05/20/2018 - 05/26/2018	0.80		0.95	0.99	0.99
22	05/27/2018 - 06/02/2018	0.81		0.95	0.99	0.99
23	06/03/2018 - 06/09/2018	0.81		0.95	0.99	0.99
24	06/10/2018 - 06/16/2018	0.81		0.95	0.99	0.99
25	06/17/2018 - 06/23/2018	0.81		0.95	0.99	0.99
26	06/24/2018 - 06/30/2018	0.81		0.95	0.99	0.99
27	07/01/2018 - 07/07/2018	0.81		0.95	0.99	0.99
28	07/08/2018 - 07/14/2018	0.81		0.95	0.99	0.99
29	07/15/2018 - 07/21/2018	0.81		0.95	0.99	0.99
30	07/22/2018 - 07/28/2018	0.81		0.95	0.99	0.99
31	07/29/2018 - 08/04/2018	0.81		0.95	0.99	0.99
32	08/05/2018 - 08/11/2018	0.80		0.95	0.99	0.99
33	08/12/2018 - 08/18/2018	0.80		0.95	0.99	0.99
34	08/19/2018 - 08/25/2018	0.80		0.95	0.99	0.99
35	08/26/2018 - 09/01/2018	0.81		0.95	0.99	0.99
36	09/02/2018 - 09/08/2018	0.81		0.95	0.99	0.99
37	09/09/2018 - 09/15/2018	0.81		0.95	0.99	0.99
38	09/16/2018 - 09/22/2018	0.81		0.95	0.99	0.99
39	09/23/2018 - 09/29/2018	0.80		0.95	0.99	0.99
40	09/30/2018 - 10/06/2018	0.80		0.95	0.99	0.99
41	10/07/2018 - 10/13/2018	0.79		0.95	0.99	0.99
42	10/14/2018 - 10/20/2018	0.79		0.95	0.99	0.99
43	10/21/2018 - 10/27/2018	0.81		0.95	0.99	0.99
44	10/28/2018 - 11/03/2018	0.84		0.95	0.99	0.99
45	11/04/2018 - 11/10/2018	0.86		0.95	0.99	0.99
46	11/11/2018 - 11/17/2018	0.88		0.95	0.99	0.99
47	11/18/2018 - 11/24/2018	0.86		0.95	0.99	0.99
48	11/25/2018 - 12/01/2018	0.85		0.95	0.99	0.99
49	12/02/2018 - 12/08/2018	0.83		0.95	0.99	0.99
50	12/09/2018 - 12/15/2018	0.81		0.95	0.99	0.99
51	12/16/2018 - 12/22/2018	0.80		0.95	0.99	0.99
52	12/23/2018 - 12/29/2018	0.79		0.95	0.99	0.99
53	12/30/2018 - 12/31/2018	0.78		0.95	0.99	0.99

2018 WEEKLY AXLE FACTOR CATEGORY REPORT - REPORT TYPE: DISTRICT

COUNTY: 88 - INDIAN RIVER

WEEK	DATES	8814 SR60, 66 AVE-A1A	8815 SR 60, OSC.CO-102AVE	8816 SR60, 102 AVE - 66AVE	8817 A1A, ST LUC-WINTER F
1	01/01/2018 - 01/06/2018	0.99	0.81	0.83	0.98
2	01/07/2018 - 01/13/2018	0.99	0.80	0.83	0.98
3	01/14/2018 - 01/20/2018	0.99	0.78	0.83	0.98
4	01/21/2018 - 01/27/2018	0.99	0.79	0.83	0.98
5	01/28/2018 - 02/03/2018	0.99	0.79	0.83	0.98
6	02/04/2018 - 02/10/2018	0.99	0.80	0.83	0.98
7	02/11/2018 - 02/17/2018	0.99	0.80	0.83	0.98
8	02/18/2018 - 02/24/2018	0.99	0.80	0.83	0.98
9	02/25/2018 - 03/03/2018	0.99	0.81	0.83	0.98
10	03/04/2018 - 03/10/2018	0.99	0.81	0.83	0.98
11	03/11/2018 - 03/17/2018	0.99	0.81	0.83	0.98
12	03/18/2018 - 03/24/2018	0.99	0.81	0.83	0.98
13	03/25/2018 - 03/31/2018	0.99	0.81	0.83	0.98
14	04/01/2018 - 04/07/2018	0.99	0.80	0.83	0.98
15	04/08/2018 - 04/14/2018	0.99	0.80	0.83	0.98
16	04/15/2018 - 04/21/2018	0.99	0.80	0.83	0.98
17	04/22/2018 - 04/28/2018	0.99	0.80	0.83	0.98
18	04/29/2018 - 05/05/2018	0.99	0.80	0.83	0.98
19	05/06/2018 - 05/12/2018	0.99	0.80	0.83	0.98
20	05/13/2018 - 05/19/2018	0.99	0.80	0.83	0.98
21	05/20/2018 - 05/26/2018	0.99	0.80	0.83	0.98
22	05/27/2018 - 06/02/2018	0.99	0.81	0.83	0.98
23	06/03/2018 - 06/09/2018	0.99	0.81	0.83	0.98
24	06/10/2018 - 06/16/2018	0.99	0.81	0.83	0.98
25	06/17/2018 - 06/23/2018	0.99	0.81	0.83	0.98
26	06/24/2018 - 06/30/2018	0.99	0.81	0.83	0.98
27	07/01/2018 - 07/07/2018	0.99	0.81	0.83	0.98
28	07/08/2018 - 07/14/2018	0.99	0.81	0.83	0.98
29	07/15/2018 - 07/21/2018	0.99	0.81	0.83	0.98
30	07/22/2018 - 07/28/2018	0.99	0.81	0.83	0.98
31	07/29/2018 - 08/04/2018	0.99	0.81	0.83	0.98
32	08/05/2018 - 08/11/2018	0.99	0.80	0.83	0.98
33	08/12/2018 - 08/18/2018	0.99	0.80	0.83	0.98
34	08/19/2018 - 08/25/2018	0.99	0.80	0.83	0.98
35	08/26/2018 - 09/01/2018	0.99	0.81	0.83	0.98
36	09/02/2018 - 09/08/2018	0.99	0.81	0.83	0.98
37	09/09/2018 - 09/15/2018	0.99	0.81	0.83	0.98
38	09/16/2018 - 09/22/2018	0.99	0.81	0.83	0.98
39	09/23/2018 - 09/29/2018	0.99	0.80	0.83	0.98
40	09/30/2018 - 10/06/2018	0.99	0.80	0.83	0.98
41	10/07/2018 - 10/13/2018	0.99	0.80	0.83	0.98
42	10/14/2018 - 10/20/2018	0.99	0.79	0.83	0.98
43	10/21/2018 - 10/27/2018	0.99	0.80	0.83	0.98
44	10/28/2018 - 11/03/2018	0.99	0.80	0.83	0.98
45	11/04/2018 - 11/10/2018	0.99	0.81	0.83	0.98
46	11/11/2018 - 11/17/2018	0.99	0.81	0.83	0.98
47	11/18/2018 - 11/24/2018	0.99	0.81	0.83	0.98
48	11/25/2018 - 12/01/2018	0.99	0.81	0.83	0.98
49	12/02/2018 - 12/08/2018	0.99	0.81	0.83	0.98
50	12/09/2018 - 12/15/2018	0.99	0.81	0.83	0.98
51	12/16/2018 - 12/22/2018	0.99	0.83	0.83	0.98
52	12/23/2018 - 12/29/2018	0.99	0.79	0.83	0.98
53	12/30/2018 - 12/31/2018	0.99	0.78	0.83	0.98

2018 WEEKLY AXLE FACTOR CATEGORY REPORT - REPORT TYPE: DISTRICT

COUNTY: 88 - INDIAN RIVER

WEEK	DATES	8819 ALA, WINTER BCH-SR510	8820 COUNTY ROADS-URBAN	8822 SR 5, 65ST-BREVARD	8823 I-95, INDIAN RIVER
1	01/01/2018 - 01/06/2018	0.98	0.99	0.98	0.88
2	01/07/2018 - 01/13/2018	0.98	0.99	0.98	0.88
3	01/14/2018 - 01/20/2018	0.98	0.99	0.98	0.87
4	01/21/2018 - 01/27/2018	0.98	0.99	0.98	0.87
5	01/28/2018 - 02/03/2018	0.98	0.99	0.98	0.88
6	02/04/2018 - 02/10/2018	0.98	0.99	0.98	0.88
7	02/11/2018 - 02/17/2018	0.98	0.99	0.98	0.88
8	02/18/2018 - 02/24/2018	0.98	0.99	0.98	0.88
9	02/25/2018 - 03/03/2018	0.98	0.99	0.98	0.88
10	03/04/2018 - 03/10/2018	0.98	0.99	0.98	0.88
11	03/11/2018 - 03/17/2018	0.98	0.99	0.98	0.88
12	03/18/2018 - 03/24/2018	0.98	0.99	0.98	0.88
13	03/25/2018 - 03/31/2018	0.98	0.99	0.98	0.88
14	04/01/2018 - 04/07/2018	0.98	0.99	0.98	0.88
15	04/08/2018 - 04/14/2018	0.98	0.99	0.98	0.88
16	04/15/2018 - 04/21/2018	0.98	0.99	0.98	0.88
17	04/22/2018 - 04/28/2018	0.98	0.99	0.98	0.88
18	04/29/2018 - 05/05/2018	0.98	0.99	0.98	0.88
19	05/06/2018 - 05/12/2018	0.98	0.99	0.98	0.87
20	05/13/2018 - 05/19/2018	0.98	0.99	0.98	0.87
21	05/20/2018 - 05/26/2018	0.98	0.99	0.98	0.87
22	05/27/2018 - 06/02/2018	0.98	0.99	0.98	0.88
23	06/03/2018 - 06/09/2018	0.98	0.99	0.98	0.88
24	06/10/2018 - 06/16/2018	0.98	0.99	0.98	0.88
25	06/17/2018 - 06/23/2018	0.98	0.99	0.98	0.88
26	06/24/2018 - 06/30/2018	0.98	0.99	0.98	0.88
27	07/01/2018 - 07/07/2018	0.98	0.99	0.98	0.88
28	07/08/2018 - 07/14/2018	0.98	0.99	0.98	0.88
29	07/15/2018 - 07/21/2018	0.98	0.99	0.98	0.88
30	07/22/2018 - 07/28/2018	0.98	0.99	0.98	0.88
31	07/29/2018 - 08/04/2018	0.98	0.99	0.98	0.88
32	08/05/2018 - 08/11/2018	0.98	0.99	0.98	0.88
33	08/12/2018 - 08/18/2018	0.98	0.99	0.98	0.88
34	08/19/2018 - 08/25/2018	0.98	0.99	0.98	0.88
35	08/26/2018 - 09/01/2018	0.98	0.99	0.98	0.89
36	09/02/2018 - 09/08/2018	0.98	0.99	0.98	0.89
37	09/09/2018 - 09/15/2018	0.98	0.99	0.98	0.89
38	09/16/2018 - 09/22/2018	0.98	0.99	0.98	0.89
39	09/23/2018 - 09/29/2018	0.98	0.99	0.98	0.88
40	09/30/2018 - 10/06/2018	0.98	0.99	0.98	0.88
41	10/07/2018 - 10/13/2018	0.98	0.99	0.98	0.87
42	10/14/2018 - 10/20/2018	0.98	0.99	0.98	0.87
43	10/21/2018 - 10/27/2018	0.98	0.99	0.98	0.88
44	10/28/2018 - 11/03/2018	0.98	0.99	0.98	0.88
45	11/04/2018 - 11/10/2018	0.98	0.99	0.98	0.88
46	11/11/2018 - 11/17/2018	0.98	0.99	0.98	0.98
47	11/18/2018 - 11/24/2018	0.98	0.99	0.98	0.88
48	11/25/2018 - 12/01/2018	0.98	0.99	0.98	0.88
49	12/02/2018 - 12/08/2018	0.98	0.99	0.98	0.88
50	12/09/2018 - 12/15/2018	0.98	0.99	0.98	0.98
51	12/16/2018 - 12/22/2018	0.98	0.99	0.98	0.88
52	12/23/2018 - 12/29/2018	0.98	0.99	0.98	0.87
53	12/30/2018 - 12/31/2018	0.98	0.99	0.98	0.87

2018 WEEKLY AXLE FACTOR CATEGORY REPORT - REPORT TYPE: DISTRICT

COUNTY: 88 - INDIAN RIVER

WEEK	DATES	SR510, ICWW	8825	A1A, SR 510-BREVARD	8826
1	01/01/2018 - 01/06/2018		0.97		0.98
2	01/07/2018 - 01/13/2018		0.97		0.98
3	01/14/2018 - 01/20/2018		0.97		0.97
4	01/21/2018 - 01/27/2018		0.97		0.97
5	01/28/2018 - 02/03/2018		0.97		0.98
6	02/04/2018 - 02/10/2018		0.97		0.98
7	02/11/2018 - 02/17/2018		0.97		0.98
8	02/18/2018 - 02/24/2018		0.97		0.98
9	02/25/2018 - 03/03/2018		0.97		0.97
10	03/04/2018 - 03/10/2018		0.97		0.97
11	03/11/2018 - 03/17/2018		0.97		0.96
12	03/18/2018 - 03/24/2018		0.97		0.96
13	03/25/2018 - 03/31/2018		0.97		0.95
14	04/01/2018 - 04/07/2018		0.97		0.95
15	04/08/2018 - 04/14/2018		0.97		0.94
16	04/15/2018 - 04/21/2018		0.97		0.94
17	04/22/2018 - 04/28/2018		0.97		0.95
18	04/29/2018 - 05/05/2018		0.97		0.96
19	05/06/2018 - 05/12/2018		0.97		0.97
20	05/13/2018 - 05/19/2018		0.97		0.98
21	05/20/2018 - 05/26/2018		0.97		0.98
22	05/27/2018 - 06/02/2018		0.97		0.98
23	06/03/2018 - 06/09/2018		0.97		0.97
24	06/10/2018 - 06/16/2018		0.97		0.97
25	06/17/2018 - 06/23/2018		0.97		0.97
26	06/24/2018 - 06/30/2018		0.97		0.97
27	07/01/2018 - 07/07/2018		0.97		0.98
28	07/08/2018 - 07/14/2018		0.97		0.98
29	07/15/2018 - 07/21/2018		0.97		0.98
30	07/22/2018 - 07/28/2018		0.97		0.98
31	07/29/2018 - 08/04/2018		0.97		0.98
32	08/05/2018 - 08/11/2018		0.97		0.98
33	08/12/2018 - 08/18/2018		0.97		0.98
34	08/19/2018 - 08/25/2018		0.97		0.98
35	08/26/2018 - 09/01/2018		0.97		0.98
36	09/02/2018 - 09/08/2018		0.97		0.98
37	09/09/2018 - 09/15/2018		0.97		0.98
38	09/16/2018 - 09/22/2018		0.97		0.98
39	09/23/2018 - 09/29/2018		0.97		0.98
40	09/30/2018 - 10/06/2018		0.97		0.98
41	10/07/2018 - 10/13/2018		0.97		0.98
42	10/14/2018 - 10/20/2018		0.97		0.98
43	10/21/2018 - 10/27/2018		0.97		0.98
44	10/28/2018 - 11/03/2018		0.97		0.98
45	11/04/2018 - 11/10/2018		0.97		0.98
46	11/11/2018 - 11/17/2018		0.97		0.98
47	11/18/2018 - 11/24/2018		0.97		0.98
48	11/25/2018 - 12/01/2018		0.97		0.98
49	12/02/2018 - 12/08/2018		0.97		0.98
50	12/09/2018 - 12/15/2018		0.97		0.98
51	12/16/2018 - 12/22/2018		0.97		0.98
52	12/23/2018 - 12/29/2018		0.97		0.97
53	12/30/2018 - 12/31/2018		0.97		0.97



2018 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL  
 CATEGORY: 8800 EAST-A1A TO US1

WEEK	DATES	SF	MOCF: 0.89 PSCF
1	01/01/2018 - 01/06/2018	1.03	1.16
2	01/07/2018 - 01/13/2018	1.01	1.13
3	01/14/2018 - 01/20/2018	0.98	1.10
4	01/21/2018 - 01/27/2018	0.95	1.07
* 5	01/28/2018 - 02/03/2018	0.92	1.03
* 6	02/04/2018 - 02/10/2018	0.89	1.00
* 7	02/11/2018 - 02/17/2018	0.86	0.97
* 8	02/18/2018 - 02/24/2018	0.86	0.97
* 9	02/25/2018 - 03/03/2018	0.86	0.97
*10	03/04/2018 - 03/10/2018	0.86	0.97
*11	03/11/2018 - 03/17/2018	0.86	0.97
*12	03/18/2018 - 03/24/2018	0.87	0.98
*13	03/25/2018 - 03/31/2018	0.88	0.99
*14	04/01/2018 - 04/07/2018	0.89	1.00
*15	04/08/2018 - 04/14/2018	0.90	1.01
*16	04/15/2018 - 04/21/2018	0.91	1.02
*17	04/22/2018 - 04/28/2018	0.95	1.07
18	04/29/2018 - 05/05/2018	0.99	1.11
19	05/06/2018 - 05/12/2018	1.03	1.16
20	05/13/2018 - 05/19/2018	1.07	1.20
21	05/20/2018 - 05/26/2018	1.06	1.19
22	05/27/2018 - 06/02/2018	1.06	1.19
23	06/03/2018 - 06/09/2018	1.05	1.18
24	06/10/2018 - 06/16/2018	1.04	1.17
25	06/17/2018 - 06/23/2018	1.04	1.17
26	06/24/2018 - 06/30/2018	1.03	1.16
27	07/01/2018 - 07/07/2018	1.03	1.16
28	07/08/2018 - 07/14/2018	1.03	1.16
29	07/15/2018 - 07/21/2018	1.03	1.16
30	07/22/2018 - 07/28/2018	1.04	1.17
31	07/29/2018 - 08/04/2018	1.06	1.19
32	08/05/2018 - 08/11/2018	1.07	1.20
33	08/12/2018 - 08/18/2018	1.09	1.22
34	08/19/2018 - 08/25/2018	1.09	1.22
35	08/26/2018 - 09/01/2018	1.08	1.21
36	09/02/2018 - 09/08/2018	1.08	1.21
37	09/09/2018 - 09/15/2018	1.08	1.21
38	09/16/2018 - 09/22/2018	1.09	1.22
39	09/23/2018 - 09/29/2018	1.10	1.24
40	09/30/2018 - 10/06/2018	1.10	1.24
41	10/07/2018 - 10/13/2018	1.11	1.25
42	10/14/2018 - 10/20/2018	1.12	1.26
43	10/21/2018 - 10/27/2018	1.11	1.25
44	10/28/2018 - 11/03/2018	1.09	1.22
45	11/04/2018 - 11/10/2018	1.07	1.20
46	11/11/2018 - 11/17/2018	1.06	1.19
47	11/18/2018 - 11/24/2018	1.05	1.18
48	11/25/2018 - 12/01/2018	1.05	1.18
49	12/02/2018 - 12/08/2018	1.04	1.17
50	12/09/2018 - 12/15/2018	1.03	1.16
51	12/16/2018 - 12/22/2018	1.02	1.15
52	12/23/2018 - 12/29/2018	1.00	1.12
53	12/30/2018 - 12/31/2018	0.98	1.10

\* PEAK SEASON

25-FEB-2019 16:26:26

830UPD

4\_8800\_PKSEASON.TXT

2018 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL  
 CATEGORY: 8801 CEN.-W OF US1 TO I95

MOCF: 0.95

WEEK	DATES	SF	PSCF
1	01/01/2018 - 01/06/2018	1.01	1.06
2	01/07/2018 - 01/13/2018	1.00	1.05
3	01/14/2018 - 01/20/2018	1.00	1.05
4	01/21/2018 - 01/27/2018	0.98	1.03
* 5	01/28/2018 - 02/03/2018	0.97	1.02
* 6	02/04/2018 - 02/10/2018	0.95	1.00
* 7	02/11/2018 - 02/17/2018	0.94	0.99
* 8	02/18/2018 - 02/24/2018	0.93	0.98
* 9	02/25/2018 - 03/03/2018	0.93	0.98
*10	03/04/2018 - 03/10/2018	0.93	0.98
*11	03/11/2018 - 03/17/2018	0.93	0.98
*12	03/18/2018 - 03/24/2018	0.94	0.99
*13	03/25/2018 - 03/31/2018	0.95	1.00
*14	04/01/2018 - 04/07/2018	0.95	1.00
*15	04/08/2018 - 04/14/2018	0.96	1.01
*16	04/15/2018 - 04/21/2018	0.97	1.02
*17	04/22/2018 - 04/28/2018	0.98	1.03
18	04/29/2018 - 05/05/2018	1.00	1.05
19	05/06/2018 - 05/12/2018	1.01	1.06
20	05/13/2018 - 05/19/2018	1.02	1.07
21	05/20/2018 - 05/26/2018	1.02	1.07
22	05/27/2018 - 06/02/2018	1.02	1.07
23	06/03/2018 - 06/09/2018	1.02	1.07
24	06/10/2018 - 06/16/2018	1.02	1.07
25	06/17/2018 - 06/23/2018	1.02	1.07
26	06/24/2018 - 06/30/2018	1.03	1.08
27	07/01/2018 - 07/07/2018	1.03	1.08
28	07/08/2018 - 07/14/2018	1.04	1.09
29	07/15/2018 - 07/21/2018	1.04	1.09
30	07/22/2018 - 07/28/2018	1.04	1.09
31	07/29/2018 - 08/04/2018	1.04	1.09
32	08/05/2018 - 08/11/2018	1.04	1.09
33	08/12/2018 - 08/18/2018	1.04	1.09
34	08/19/2018 - 08/25/2018	1.05	1.11
35	08/26/2018 - 09/01/2018	1.05	1.11
36	09/02/2018 - 09/08/2018	1.06	1.12
37	09/09/2018 - 09/15/2018	1.06	1.12
38	09/16/2018 - 09/22/2018	1.05	1.11
39	09/23/2018 - 09/29/2018	1.04	1.09
40	09/30/2018 - 10/06/2018	1.03	1.08
41	10/07/2018 - 10/13/2018	1.02	1.07
42	10/14/2018 - 10/20/2018	1.02	1.07
43	10/21/2018 - 10/27/2018	1.02	1.07
44	10/28/2018 - 11/03/2018	1.02	1.07
45	11/04/2018 - 11/10/2018	1.02	1.07
46	11/11/2018 - 11/17/2018	1.02	1.07
47	11/18/2018 - 11/24/2018	1.01	1.06
48	11/25/2018 - 12/01/2018	1.01	1.06
49	12/02/2018 - 12/08/2018	1.01	1.06
50	12/09/2018 - 12/15/2018	1.01	1.06
51	12/16/2018 - 12/22/2018	1.00	1.05
52	12/23/2018 - 12/29/2018	1.00	1.05
53	12/30/2018 - 12/31/2018	1.00	1.05

\* PEAK SEASON

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2018 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL  
 CATEGORY: 8802 WEST- W OF I95

WEEK	DATES	SF	MOCF: 0.91 PSCF
1	01/01/2018 - 01/06/2018	1.00	1.10
2	01/07/2018 - 01/13/2018	0.98	1.08
3	01/14/2018 - 01/20/2018	0.96	1.05
* 4	01/21/2018 - 01/27/2018	0.94	1.03
* 5	01/28/2018 - 02/03/2018	0.93	1.02
* 6	02/04/2018 - 02/10/2018	0.91	1.00
* 7	02/11/2018 - 02/17/2018	0.89	0.98
* 8	02/18/2018 - 02/24/2018	0.89	0.98
* 9	02/25/2018 - 03/03/2018	0.89	0.98
*10	03/04/2018 - 03/10/2018	0.89	0.98
*11	03/11/2018 - 03/17/2018	0.89	0.98
*12	03/18/2018 - 03/24/2018	0.90	0.99
*13	03/25/2018 - 03/31/2018	0.90	0.99
*14	04/01/2018 - 04/07/2018	0.91	1.00
*15	04/08/2018 - 04/14/2018	0.91	1.00
*16	04/15/2018 - 04/21/2018	0.92	1.01
17	04/22/2018 - 04/28/2018	0.95	1.04
18	04/29/2018 - 05/05/2018	0.99	1.09
19	05/06/2018 - 05/12/2018	1.02	1.12
20	05/13/2018 - 05/19/2018	1.05	1.15
21	05/20/2018 - 05/26/2018	1.05	1.15
22	05/27/2018 - 06/02/2018	1.05	1.15
23	06/03/2018 - 06/09/2018	1.05	1.15
24	06/10/2018 - 06/16/2018	1.05	1.15
25	06/17/2018 - 06/23/2018	1.07	1.18
26	06/24/2018 - 06/30/2018	1.08	1.19
27	07/01/2018 - 07/07/2018	1.10	1.21
28	07/08/2018 - 07/14/2018	1.11	1.22
29	07/15/2018 - 07/21/2018	1.13	1.24
30	07/22/2018 - 07/28/2018	1.12	1.23
31	07/29/2018 - 08/04/2018	1.11	1.22
32	08/05/2018 - 08/11/2018	1.11	1.22
33	08/12/2018 - 08/18/2018	1.10	1.21
34	08/19/2018 - 08/25/2018	1.10	1.21
35	08/26/2018 - 09/01/2018	1.10	1.21
36	09/02/2018 - 09/08/2018	1.10	1.21
37	09/09/2018 - 09/15/2018	1.10	1.21
38	09/16/2018 - 09/22/2018	1.09	1.20
39	09/23/2018 - 09/29/2018	1.07	1.18
40	09/30/2018 - 10/06/2018	1.06	1.16
41	10/07/2018 - 10/13/2018	1.04	1.14
42	10/14/2018 - 10/20/2018	1.03	1.13
43	10/21/2018 - 10/27/2018	1.02	1.12
44	10/28/2018 - 11/03/2018	1.01	1.11
45	11/04/2018 - 11/10/2018	1.00	1.10
46	11/11/2018 - 11/17/2018	0.99	1.09
47	11/18/2018 - 11/24/2018	0.99	1.09
48	11/25/2018 - 12/01/2018	0.99	1.09
49	12/02/2018 - 12/08/2018	0.99	1.09
50	12/09/2018 - 12/15/2018	1.00	1.10
51	12/16/2018 - 12/22/2018	0.98	1.08
52	12/23/2018 - 12/29/2018	0.97	1.07
53	12/30/2018 - 12/31/2018	0.96	1.05

\* PEAK SEASON

2018 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL  
 CATEGORY: 8895 INDIAN RIVER I95

WEEK	DATES	SF	MOCF: 0.97 PSCF
1	01/01/2018 - 01/06/2018	0.94	0.97
2	01/07/2018 - 01/13/2018	0.99	1.02
3	01/14/2018 - 01/20/2018	1.04	1.07
4	01/21/2018 - 01/27/2018	1.03	1.06
5	01/28/2018 - 02/03/2018	1.02	1.05
* 6	02/04/2018 - 02/10/2018	1.01	1.04
* 7	02/11/2018 - 02/17/2018	1.00	1.03
* 8	02/18/2018 - 02/24/2018	0.98	1.01
* 9	02/25/2018 - 03/03/2018	0.96	0.99
*10	03/04/2018 - 03/10/2018	0.94	0.97
*11	03/11/2018 - 03/17/2018	0.92	0.95
*12	03/18/2018 - 03/24/2018	0.93	0.96
*13	03/25/2018 - 03/31/2018	0.94	0.97
*14	04/01/2018 - 04/07/2018	0.96	0.99
*15	04/08/2018 - 04/14/2018	0.97	1.00
*16	04/15/2018 - 04/21/2018	0.98	1.01
*17	04/22/2018 - 04/28/2018	1.00	1.03
*18	04/29/2018 - 05/05/2018	1.01	1.04
19	05/06/2018 - 05/12/2018	1.02	1.05
20	05/13/2018 - 05/19/2018	1.03	1.06
21	05/20/2018 - 05/26/2018	1.03	1.06
22	05/27/2018 - 06/02/2018	1.03	1.06
23	06/03/2018 - 06/09/2018	1.03	1.06
24	06/10/2018 - 06/16/2018	1.02	1.05
25	06/17/2018 - 06/23/2018	1.02	1.05
26	06/24/2018 - 06/30/2018	1.02	1.05
27	07/01/2018 - 07/07/2018	1.02	1.05
28	07/08/2018 - 07/14/2018	1.02	1.05
29	07/15/2018 - 07/21/2018	1.01	1.04
30	07/22/2018 - 07/28/2018	1.02	1.05
31	07/29/2018 - 08/04/2018	1.02	1.05
32	08/05/2018 - 08/11/2018	1.02	1.05
33	08/12/2018 - 08/18/2018	1.02	1.05
34	08/19/2018 - 08/25/2018	1.04	1.07
35	08/26/2018 - 09/01/2018	1.05	1.08
36	09/02/2018 - 09/08/2018	1.07	1.10
37	09/09/2018 - 09/15/2018	1.08	1.11
38	09/16/2018 - 09/22/2018	1.08	1.11
39	09/23/2018 - 09/29/2018	1.07	1.10
40	09/30/2018 - 10/06/2018	1.06	1.09
41	10/07/2018 - 10/13/2018	1.05	1.08
42	10/14/2018 - 10/20/2018	1.04	1.07
43	10/21/2018 - 10/27/2018	1.02	1.05
44	10/28/2018 - 11/03/2018	0.99	1.02
45	11/04/2018 - 11/10/2018	0.97	1.00
46	11/11/2018 - 11/17/2018	0.95	0.98
47	11/18/2018 - 11/24/2018	0.95	0.98
48	11/25/2018 - 12/01/2018	0.95	0.98
49	12/02/2018 - 12/08/2018	0.94	0.97
50	12/09/2018 - 12/15/2018	0.94	0.97
51	12/16/2018 - 12/22/2018	0.98	1.01
52	12/23/2018 - 12/29/2018	1.01	1.04
53	12/30/2018 - 12/31/2018	1.04	1.07

\* PEAK SEASON

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FLORIDA DEPARTMENT OF TRANSPORTATION  
 TRANSPORTATION STATISTICS OFFICE  
 2018 HISTORICAL AADT REPORT

COUNTY: 88 - INDIAN RIVER

SITE: 0009 - SR A1A - N OF CR 510/WABASSO RD

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2018	6600 C	N 3200	S 3400	9.00	52.30	7.50
2017	6900 C	N 3400	S 3500	9.00	52.00	6.50
2016	7300 F	N 3600	S 3700	9.00	52.50	6.50
2015	7100 C	N 3500	S 3600	9.00	52.70	6.50
2014	5300 F	N 2600	S 2700	9.00	52.70	16.00
2013	5300 C	N 2600	S 2700	9.00	53.40	16.00
2012	5900 C	N 2900	S 3000	9.00	53.00	6.00
2011	5600 S	N 2800	S 2800	9.00	53.20	14.70
2010	5600 F	N 2800	S 2800	11.90	53.92	14.70
2009	5800 C	N 2900	S 2900	12.99	52.42	14.70
2007	6700 C	N 3300	S 3400	10.00	52.85	6.50
2006	6500 C	N 3200	S 3300	12.59	54.46	2.80
2005	6800 C	N 3400	S 3400	12.70	51.40	6.30
2004	6500 C	N 3300	S 3200	11.70	54.20	6.30
2003	7100 C	N 3500	S 3600	11.60	53.50	4.10

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE  
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE  
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN  
 \*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION  
TRANSPORTATION STATISTICS OFFICE  
2018 HISTORICAL AADT REPORT

COUNTY: 88 - INDIAN RIVER

SITE: 0101 - SR 5 - S OF CR 510/WABASSO RD (COUNTY LINK 1385)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2018	23500 C	N 11500	S 12000	9.00	52.30	4.40
2017	24000 C	N 12000	S 12000	9.00	52.00	4.40
2016	21600 C	N 9600	S 12000	9.00	52.50	4.10
2015	25500 C	N 12500	S 13000	9.00	52.70	4.10
2014	21000 C	N 10500	S 10500	9.00	52.70	3.10
2013	24000 C	N 10500	S 13500	9.00	53.40	3.70
2012	15400 C	N 7700	S 7700	9.00	53.00	3.70
2011	21000 C	N 10500	S 10500	9.00	53.20	5.50
2010	9600 C	N 4700	S 4900	11.90	53.92	5.50
2009	20500 C	N 10000	S 10500	12.99	52.42	5.50
2007	21500 C	N 10500	S 11000	10.00	52.85	4.90
2006	24500 C	N 12000	S 12500	12.59	54.46	3.70
2005	25500 C	N 12500	S 13000	12.70	51.40	3.70
2004	25000 C	N 12500	S 12500	11.70	54.20	3.70
2003	24500 C	N 12000	S 12500	11.60	53.50	7.00

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE  
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE  
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN  
\*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION  
TRANSPORTATION STATISTICS OFFICE  
2018 HISTORICAL AADT REPORT

COUNTY: 88 - INDIAN RIVER

SITE: 0108 - CR 510/WABASSO RD - E END ICWW BRIDGE

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2018	13100 C	E 6500	W 6600	9.00	52.30	7.50
2017	12900 C	E 6500	W 6400	9.00	52.00	6.60
2016	13300 C	E 6700	W 6600	9.00	52.50	6.60
2015	13200 C	E 6500	W 6700	9.00	52.70	6.60
2014	11900 C	E 5900	W 6000	9.00	52.70	12.60
2013	11900 F	E 6000	W 5900	9.00	53.40	12.60
2012	11900 C	E 6000	W 5900	9.00	53.00	12.60
2011	11500 C	E 5700	W 5800	9.00	53.20	14.60
2010	11700 C	E 5800	W 5900	11.90	53.92	14.60
2009	10300 C	E 5100	W 5200	12.99	52.42	14.60
2008	9200 C	E 4800	W 4400	11.93	52.34	6.50
2007	11900 C	E 5900	W 6000	10.00	52.85	6.50
2006	12200 C	E 6100	W 6100	12.59	54.46	7.60
2005	12400 C	E 6200	W 6200	12.70	51.40	7.60
2004	10800 C	E 5900	W 4900	11.70	54.20	7.60
2003	10000 C	E 5200	W 4800	11.60	53.50	5.40

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE  
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE  
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN  
\*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION  
 TRANSPORTATION STATISTICS OFFICE  
 2018 HISTORICAL AADT REPORT

COUNTY: 88 - INDIAN RIVER

SITE: 0174 - SR A1A - S OF CR 510/WABASSO RD

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2018	9100 C	N 4500	S 4600	9.00	52.30	6.60
2017	9100 C	N 4500	S 4600	9.00	52.00	4.90
2016	6500 C	N 3200	S 3300	9.00	52.50	5.10
2015	8600 F	N 4300	S 4300	9.00	52.70	5.10
2014	8400 C	N 4200	S 4200	9.00	52.70	5.10
2013	7000 C	N 3400	S 3600	9.00	53.40	5.00
2012	7400 C	N 3700	S 3700	9.00	53.00	6.20
2011	7300 F	N 3600	S 3700	9.00	53.20	9.20
2010	7300 C	N 3600	S 3700	11.90	53.92	9.20
2009	7900 C	N 3900	S 4000	12.99	52.42	9.20
2008	7800 C	N 3900	S 3900	11.93	52.34	5.90
2007	8700 C	N 4300	S 4400	10.00	52.85	5.90
2006	8200 C	N 4100	S 4100	12.59	54.46	4.10
2005	9200 C	N 4600	S 4600	12.70	51.40	4.10
2004	9900 C	N 4800	S 5100	11.70	54.20	4.10
2003	8800 C	N 4200	S 4600	11.60	53.50	7.20

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE  
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE  
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN  
 \*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES



FLORIDA DEPARTMENT OF TRANSPORTATION  
 TRANSPORTATION STATISTICS OFFICE  
 2018 HISTORICAL AADT REPORT

COUNTY: 88 - INDIAN RIVER

SITE: 0291 - SR A1A-0.5 MI S SEBASTIAN INLET BR INDIAN RIVER CO

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2018	3149 C	N 1531	S 1618	9.50	52.80	7.30
2017	3086 C	N 1497	S 1589	9.50	53.00	6.90
2016	3023 C	N 1462	S 1561	9.00	53.30	5.80
2015	2930 C	N 1415	S 1515	9.00	53.30	5.90
2014	2788 C	N 1349	S 1439	9.00	53.30	5.30
2013	2701 C	N 1319	S 1382	9.00	54.00	5.20
2012	2632 C	N 1276	S 1356	9.00	53.40	4.80
2011	2709 C	N 1314	S 1395	9.00	53.20	4.60
2010	2681 C	N 1298	S 1383	15.67	53.05	4.40
2009	2837 C	N 1376	S 1461	15.83	53.96	4.50
2008	2912 C	N 1413	S 1499	15.45	53.99	4.50
2007	3200 F	N 0	S 0	15.52	55.16	4.90
2006	3144 C	N 1547	S 1597	15.52	55.16	4.90
2005	3150 C	N 1548	S 1602	15.20	51.30	4.90
2004	3205 C	N 1569	S 1636	15.40	54.20	2.70
2003	3313 C	N 1618	S 1695	15.20	51.90	2.00

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE  
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE  
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN  
 \*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION  
 TRANSPORTATION STATISTICS OFFICE  
 2018 HISTORICAL AADT REPORT

COUNTY: 88 - INDIAN RIVER

SITE: 7035 - CR 510/85 ST E OF 58 AVE (COUNTY LINK: 1830)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2018	13700	C				
2017	13000	C				
2016	12800	C				
2015	12200	F				
2014	12200	C				
2013	11900	C				
2012	11400	C				
2011	12600	C				
2010	13000	C				
2009	12400	C				
2008	6000	C				

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE  
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE  
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN  
 \*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

**Appendix F**  
**Countrywide Population**  
**Growth Data**

**Table 4 Projections of Florida Population by County (2020–2070 with Estimates)**

County	Census	Estimate (BEBR)	Projections (BEBR)						
	2010	2018	2020	2025	2030	2035	2040	2045	2050
<b>Alachua</b>	247,336	263,291	268,300	279,300	288,600	296,500	303,500	309,800	316,100
<b>Baker</b>	27,115	27,652	28,300	29,500	30,600	31,400	32,200	32,800	33,400
<b>Bay</b>	168,852	181,199	178,500	189,600	198,200	205,600	211,800	216,900	222,000
<b>Bradford</b>	28,520	28,057	28,600	28,800	28,900	29,000	29,100	29,200	29,300
<b>Brevard</b>	543,376	583,563	598,500	630,300	656,300	678,700	698,700	716,900	735,100
<b>Broward</b>	1,748,066	1,897,976	1,942,700	2,041,100	2,120,300	2,183,000	2,238,300	2,290,500	2,335,800
<b>Calhoun</b>	14,625	15,093	14,900	15,500	15,900	16,300	16,700	17,000	17,300
<b>Charlotte</b>	159,978	177,987	183,700	196,000	206,100	214,600	222,100	229,100	236,100
<b>Citrus</b>	141,236	145,721	148,600	155,300	161,100	166,200	170,200	173,700	177,200
<b>Clay</b>	190,865	212,034	220,200	239,100	255,700	269,700	281,700	292,600	303,500
<b>Collier</b>	321,520	367,347	382,800	418,400	449,500	475,200	496,800	516,100	535,400
<b>Columbia</b>	67,531	69,721	71,000	73,900	76,500	78,600	80,300	81,800	83,300
<b>DeSoto</b>	34,862	35,520	36,000	36,900	37,700	38,400	39,000	39,500	40,000
<b>Dixie</b>	16,422	16,489	16,600	16,800	16,900	17,000	17,100	17,200	17,300
<b>Duval</b>	864,263	952,861	981,900	1,044,700	1,095,200	1,139,100	1,177,600	1,212,100	1,246,600
<b>Escambia</b>	297,619	318,560	324,400	337,300	347,600	355,500	362,100	367,700	373,300
<b>Flagler</b>	95,696	107,511	112,500	123,900	134,400	143,600	151,600	159,000	166,400
<b>Franklin</b>	11,549	12,009	12,100	12,700	13,100	13,500	13,800	14,000	14,200
<b>Gadsden</b>	46,389	47,828	48,100	48,400	48,500	48,600	48,700	48,800	48,900
<b>Gilchrist</b>	16,939	17,424	17,800	18,700	19,400	20,000	20,600	21,100	21,600
<b>Glades</b>	12,884	13,002	13,200	13,600	13,900	14,100	14,300	14,500	14,700
<b>Gulf</b>	15,863	16,499	16,400	16,900	17,300	17,700	18,100	18,400	18,700
<b>Hamilton</b>	14,799	14,621	14,900	15,200	15,300	15,400	15,500	15,600	15,700
<b>Hardee</b>	27,731	27,296	27,300	27,300	27,400	27,400	27,400	27,400	27,400
<b>Hendry</b>	39,140	39,586	40,300	41,900	43,200	44,400	45,500	46,500	47,500
<b>Hernando</b>	172,778	185,604	191,700	205,800	218,300	229,200	238,400	246,900	255,400
<b>Highlands</b>	98,786	102,525	104,100	107,500	110,300	112,700	114,600	116,300	118,000
<b>Hillsborough</b>	1,229,226	1,408,864	1,466,800	1,598,400	1,708,600	1,800,200	1,878,700	1,950,500	2,018,300
<b>Holmes</b>	19,927	20,133	20,300	20,600	20,900	21,000	21,200	21,400	21,600
<b>Indian River</b>	138,028	151,825	157,200	169,300	179,400	187,700	194,700	200,900	207,100

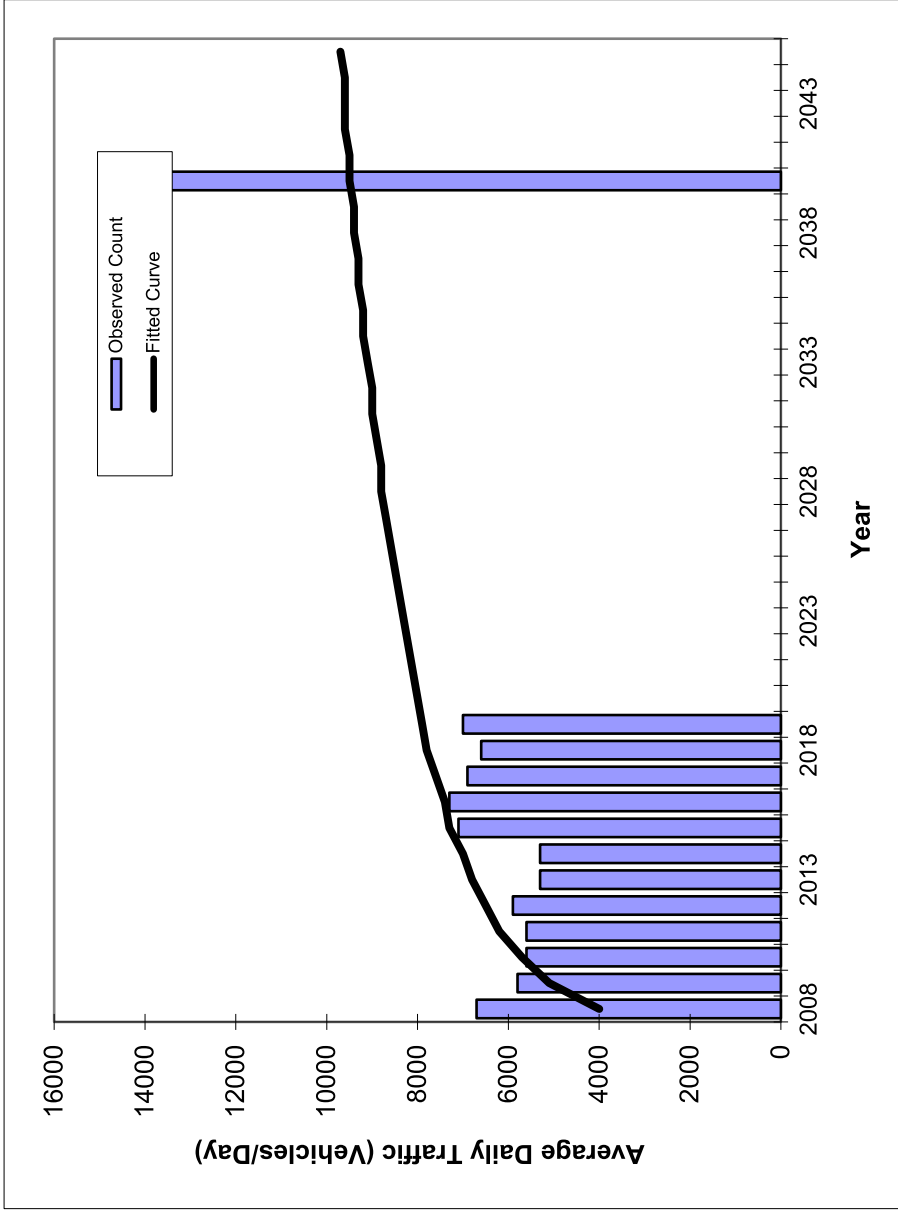
## Appendix G

# Regression Analysis

# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	880009
Highway:	0

FIN#	1234
Location	0



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	6700	4000
2009	5800	5100
2010	5600	5700
2011	5600	6200
2012	5900	6500
2013	5300	6800
2014	5300	7000
2015	7100	7300
2016	7300	7400
2017	6900	7600
2018	6600	7800
2019	7000	7900
<b>2020 Opening Year Trend</b>		
2020	N/A	8000
<b>2030 Mid-Year Trend</b>		
2030	N/A	8900
<b>2045 Design Year Trend</b>		
2045	N/A	9700
<b>TRANPLAN Forecasts/Trends</b>		

Trend R-squared:	39.95%
Compounded Annual Historic Growth Rate:	6.38%
Compounded Growth Rate (2019 to Design Year):	0.79%
Printed:	2-Mar-20
<b>Decaying Exponential Growth Option</b>	

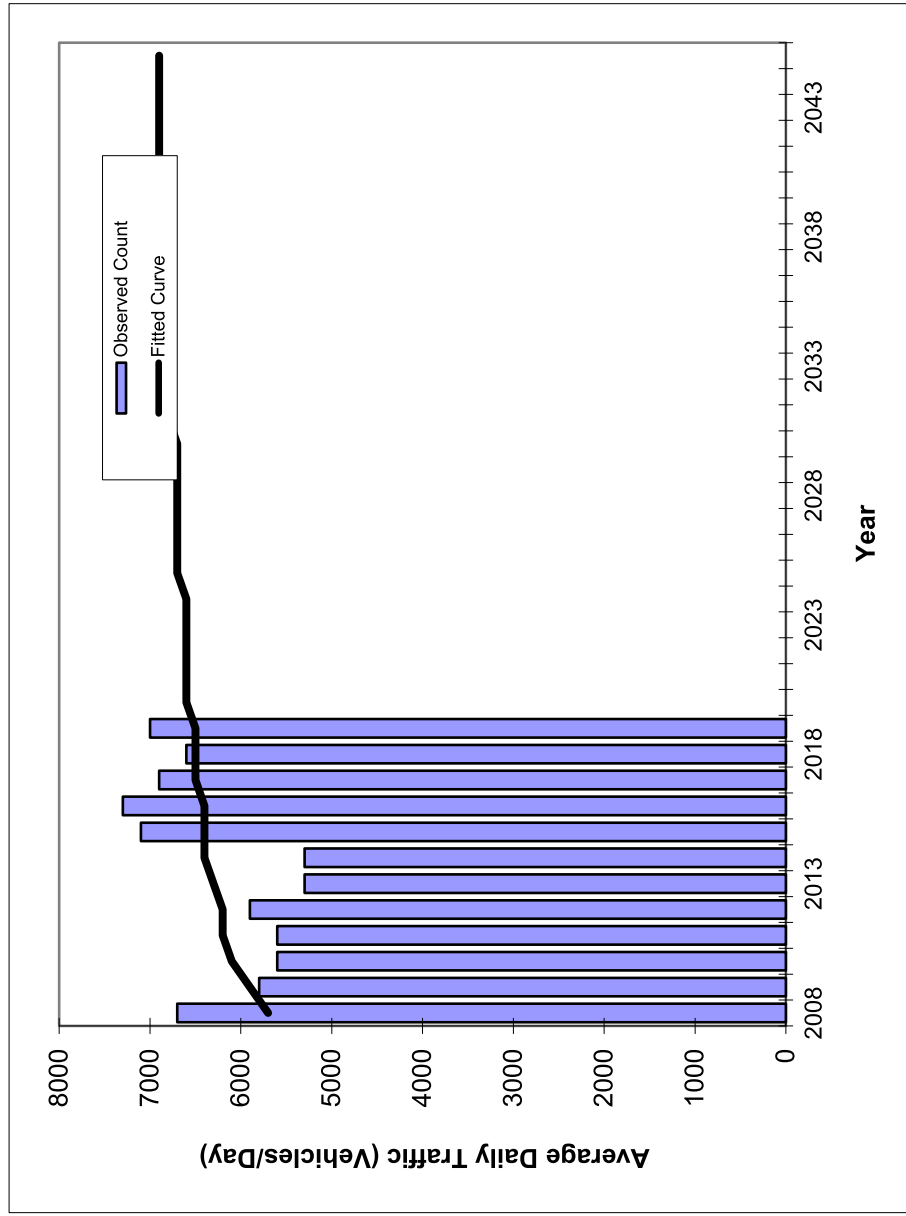
\*Axle-Adjusted



# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	880009
Highway:	0

FIN#	1234
Location	0



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	6700	5700
2009	5800	5900
2010	5600	6100
2011	5600	6200
2012	5900	6200
2013	5300	6300
2014	5300	6400
2015	7100	6400
2016	7300	6400
2017	6900	6500
2018	6600	6500
2019	7000	6500
<b>2020 Opening Year Trend</b>		
2020	N/A	6600
<b>2030 Mid-Year Trend</b>		
2030	N/A	6700
<b>2045 Design Year Trend</b>		
2045	N/A	6900
<b>TRANPLAN Forecasts/Trends</b>		

Trend R-squared:	11.12%
Compounded Annual Historic Growth Rate:	1.20%
Compounded Growth Rate (2019 to Design Year):	0.23%
Printed:	2-Mar-20
<b>Decaying Exponential Growth Option</b>	

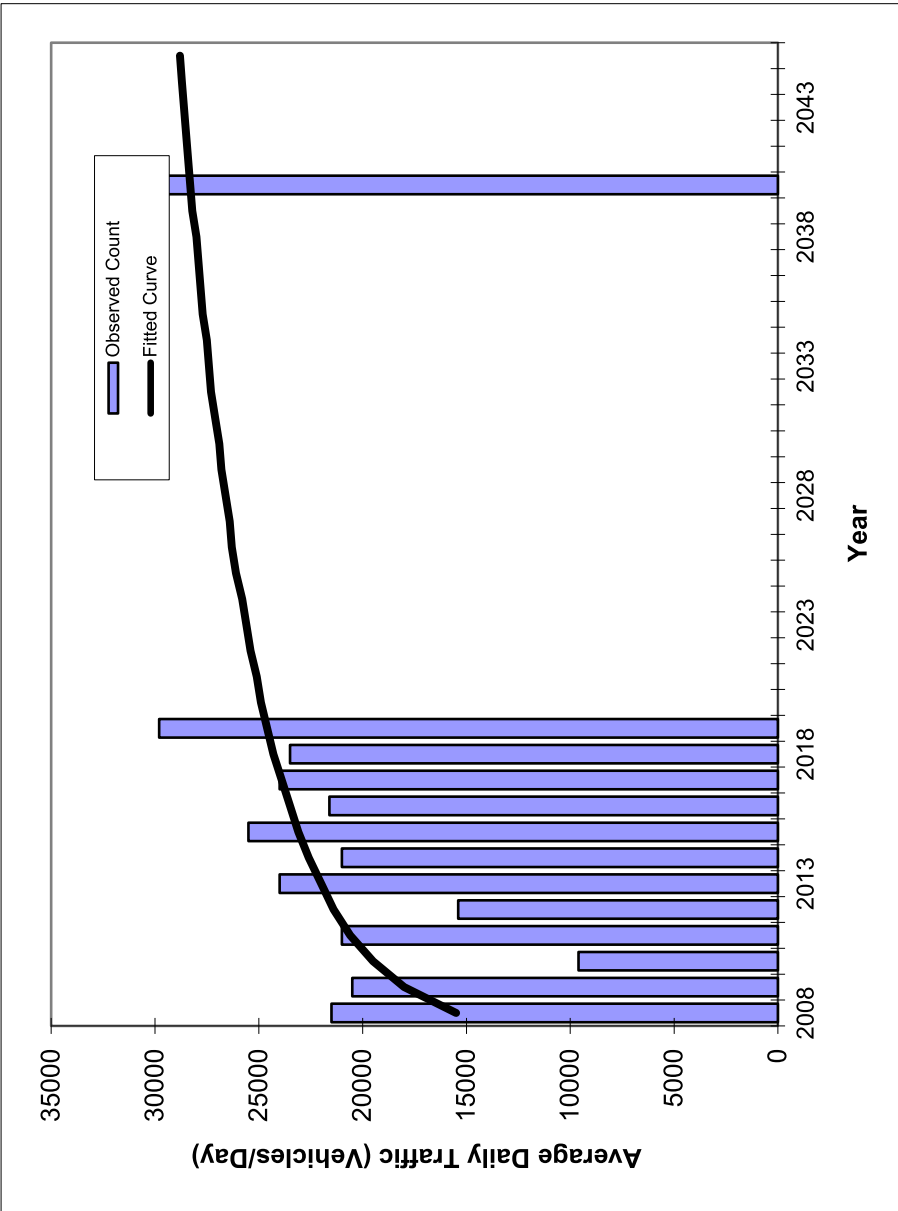
\* Axle-Adjusted



# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	880101
Highway:	0

FIN#	1234
Location	0



Trend R-squared:	35.93%
Compounded Annual Historic Growth Rate:	4.29%
Compounded Growth Rate (2019 to Design Year):	0.61%
Printed:	2-Mar-20
<b>Decaying Exponential Growth Option</b>	

Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	21500	15500
2009	20500	18000
2010	9600	19500
2011	21000	20600
2012	15400	21400
2013	24000	22000
2014	21000	22600
2015	25500	23100
2016	21600	23500
2017	24000	23900
2018	23500	24300
2019	29800	24600
<b>2020 Opening Year Trend</b>		
2020	N/A	24900
<b>2030 Mid-Year Trend</b>		
2030	N/A	26900
<b>2045 Design Year Trend</b>		
2045	N/A	28800
<b>TRANPLAN Forecasts/Trends</b>		

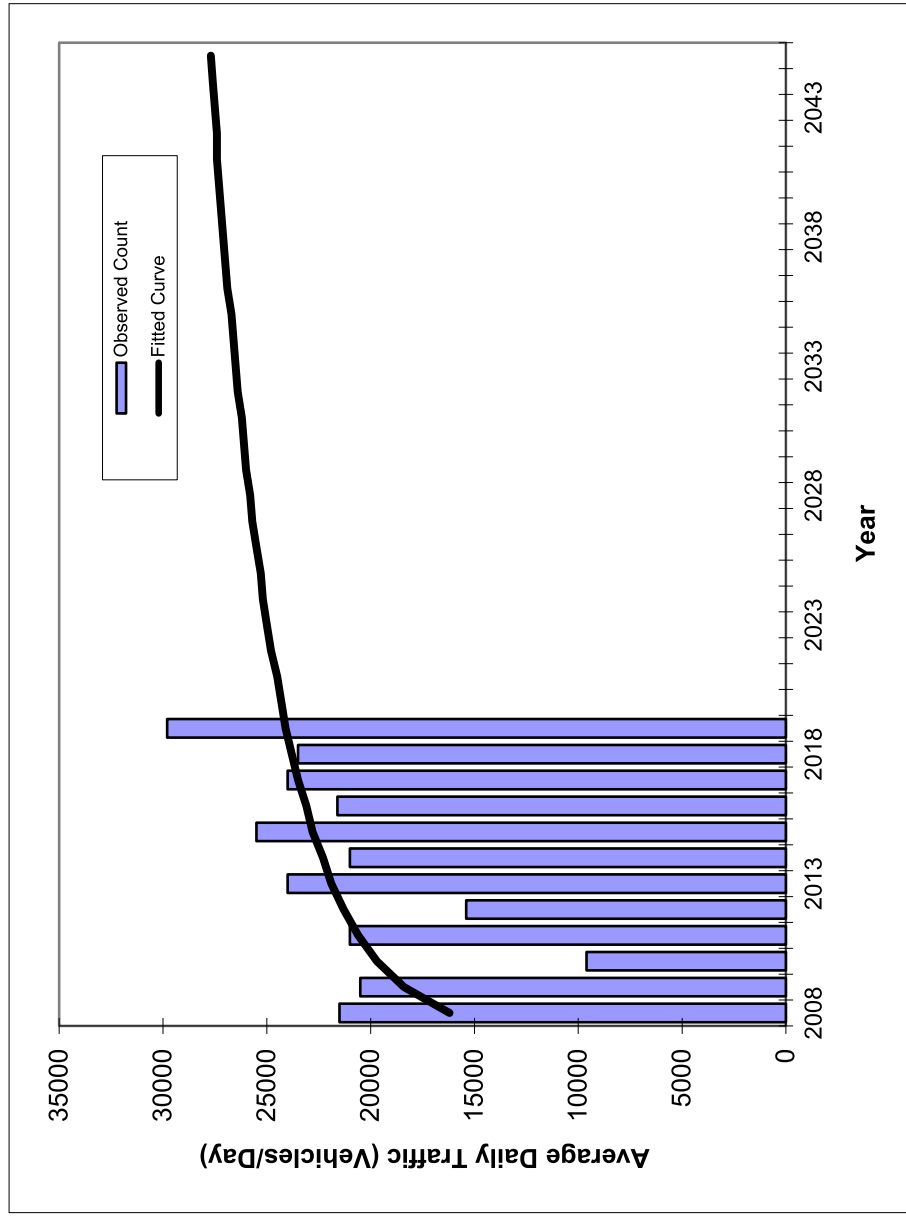
\* Axle-Adjusted



# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	880101
Highway:	0

FIN#	1234
Location	0



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	21500	16200
2009	20500	18400
2010	9600	19700
2011	21000	20600
2012	15400	21300
2013	24000	21900
2014	21000	22300
2015	25500	22800
2016	21600	23100
2017	24000	23500
2018	23500	23800
2019	29800	24100
<b>2020 Opening Year Trend</b>		
2020	N/A	24300
<b>2030 Mid-Year Trend</b>		
2030	N/A	26100
<b>2045 Design Year Trend</b>		
2045	N/A	27700
<b>TRANPLAN Forecasts/Trends</b>		

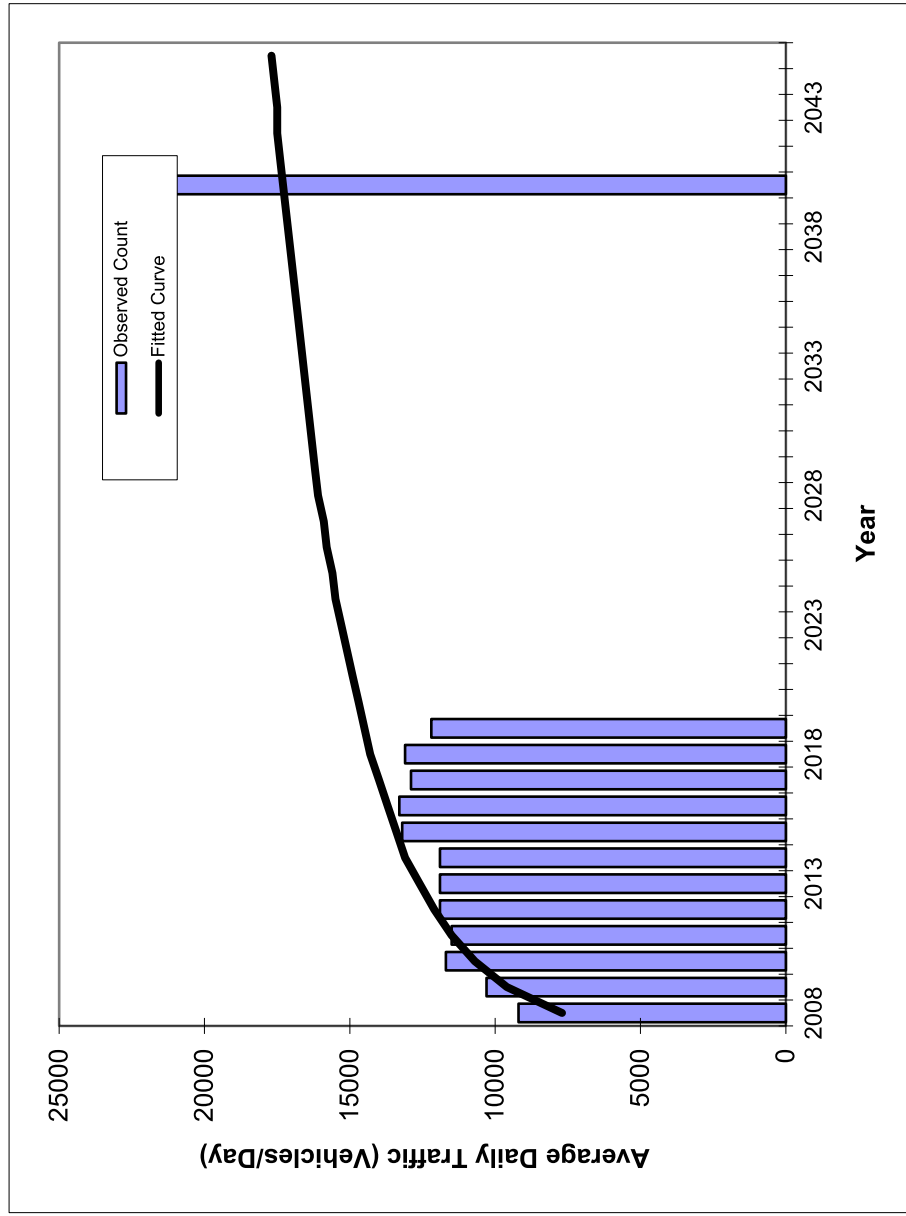
Trend R-squared:	22.47%
Compounded Annual Historic Growth Rate:	3.68%
Compounded Growth Rate (2019 to Design Year):	0.54%
Printed:	2-Mar-20
<b>Decaying Exponential Growth Option</b>	

\* Axle-Adjusted

# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	880108
Highway:	0

FIN#	1234
Location	0



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	9200	7700
2009	10300	9600
2010	11700	10700
2011	11500	11500
2012	11900	12100
2013	11900	12600
2014	11900	13100
2015	13200	13400
2016	13300	13700
2017	12900	14000
2018	13100	14300
2019	12200	14500
<b>2020 Opening Year Trend</b>		
2020	N/A	14700
<b>2030 Mid-Year Trend</b>		
2030	N/A	16300
<b>2045 Design Year Trend</b>		
2045	N/A	17700
<b>TRANPLAN Forecasts/Trends</b>		

Trend R-squared:	68.48%
Compounded Annual Historic Growth Rate:	5.92%
Compounded Growth Rate (2019 to Design Year):	0.77%
Printed:	2-Mar-20
<b>Decaying Exponential Growth Option</b>	

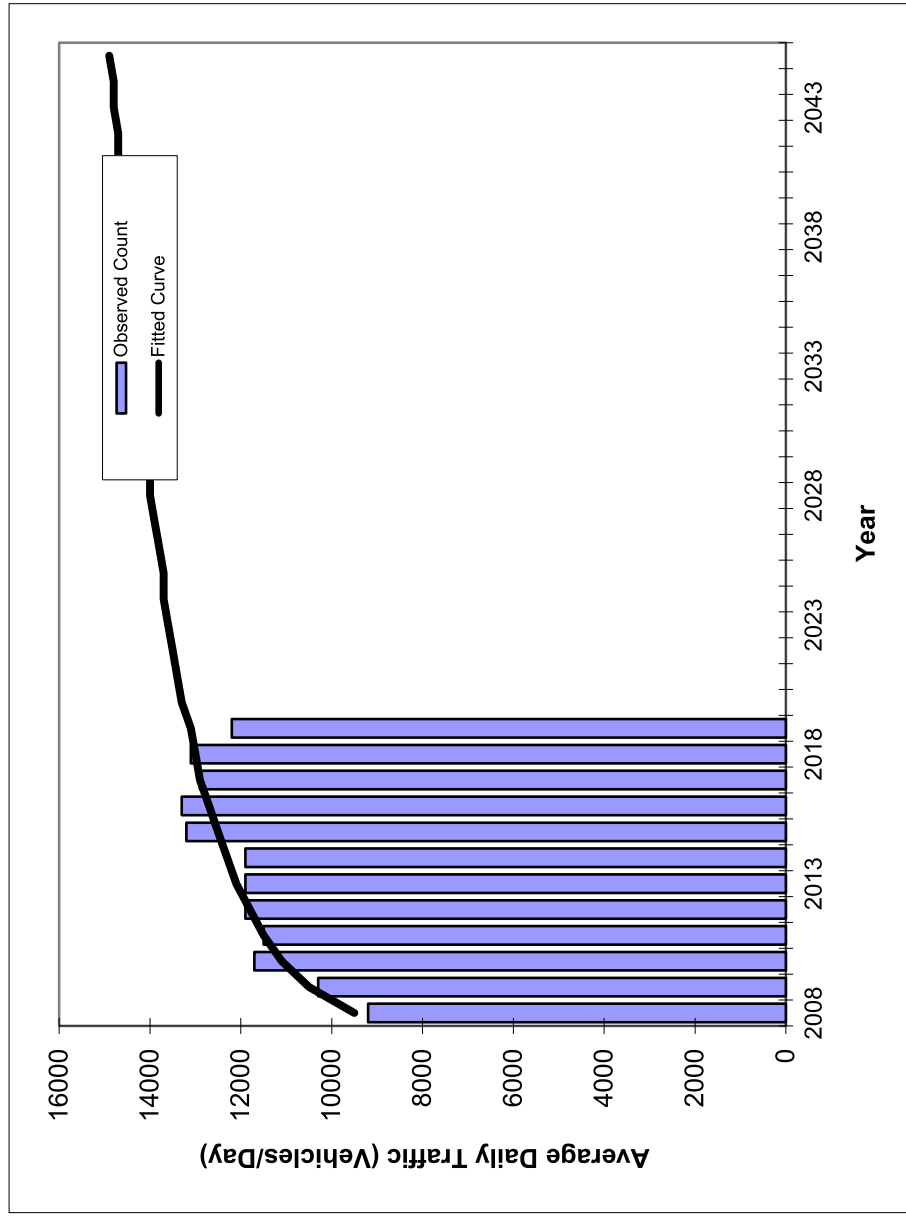
\*Axle-Adjusted



# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	880108
Highway:	0

FIN#	1234
Location	0



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	9200	9500
2009	10300	10500
2010	11700	11100
2011	11500	11500
2012	11900	11800
2013	11900	12100
2014	11900	12300
2015	13200	12500
2016	13300	12700
2017	12900	12900
2018	13100	13000
2019	12200	13100
<b>2020 Opening Year Trend</b>		
2020	N/A	13300
<b>2030 Mid-Year Trend</b>		
2030	N/A	14100
<b>2045 Design Year Trend</b>		
2045	N/A	14900
<b>TRANPLAN Forecasts/Trends</b>		

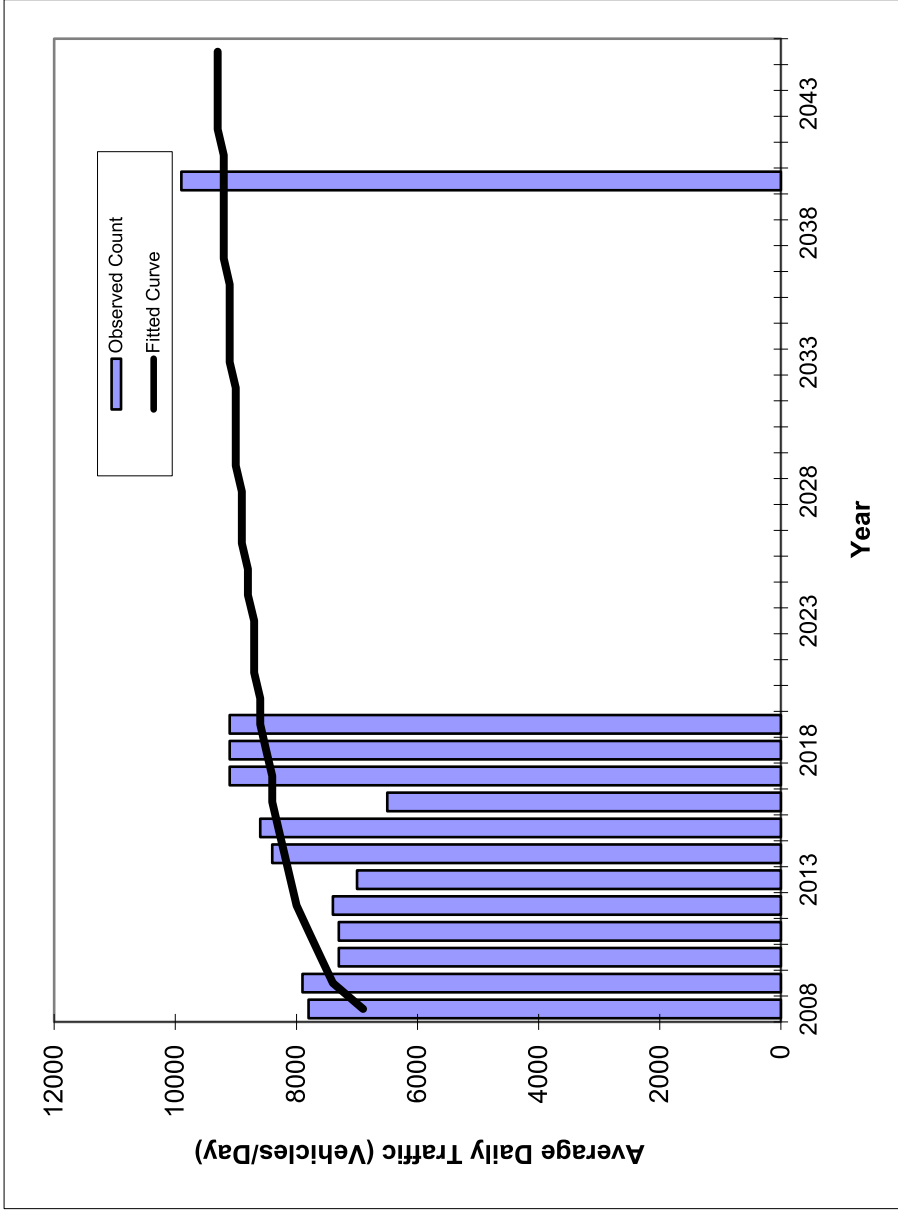
Trend R-squared:	85.24%
Compounded Annual Historic Growth Rate:	2.96%
Compounded Growth Rate (2019 to Design Year):	0.50%
Printed:	2-Mar-20
<b>Decaying Exponential Growth Option</b>	

\* Axle-Adjusted

# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	880174
Highway:	0

FIN#	1234
Location	900030



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	7800	6900
2009	7900	7400
2010	7300	7600
2011	7300	7800
2012	7400	8000
2013	7000	8100
2014	8400	8200
2015	8600	8300
2016	6500	8400
2017	9100	8400
2018	9100	8500
2019	9100	8600
<b>2020 Opening Year Trend</b>		
2020	N/A	8600
<b>2030 Mid-Year Trend</b>		
2030	N/A	9000
<b>2045 Design Year Trend</b>		
2045	N/A	9300
<b>TRANPLAN Forecasts/Trends</b>		

Trend R-squared:	33.27%
Compounded Annual Historic Growth Rate:	2.02%
Compounded Growth Rate (2019 to Design Year):	0.30%
Printed:	2-Mar-20
<b>Decaying Exponential Growth Option</b>	

\* Axle-Adjusted

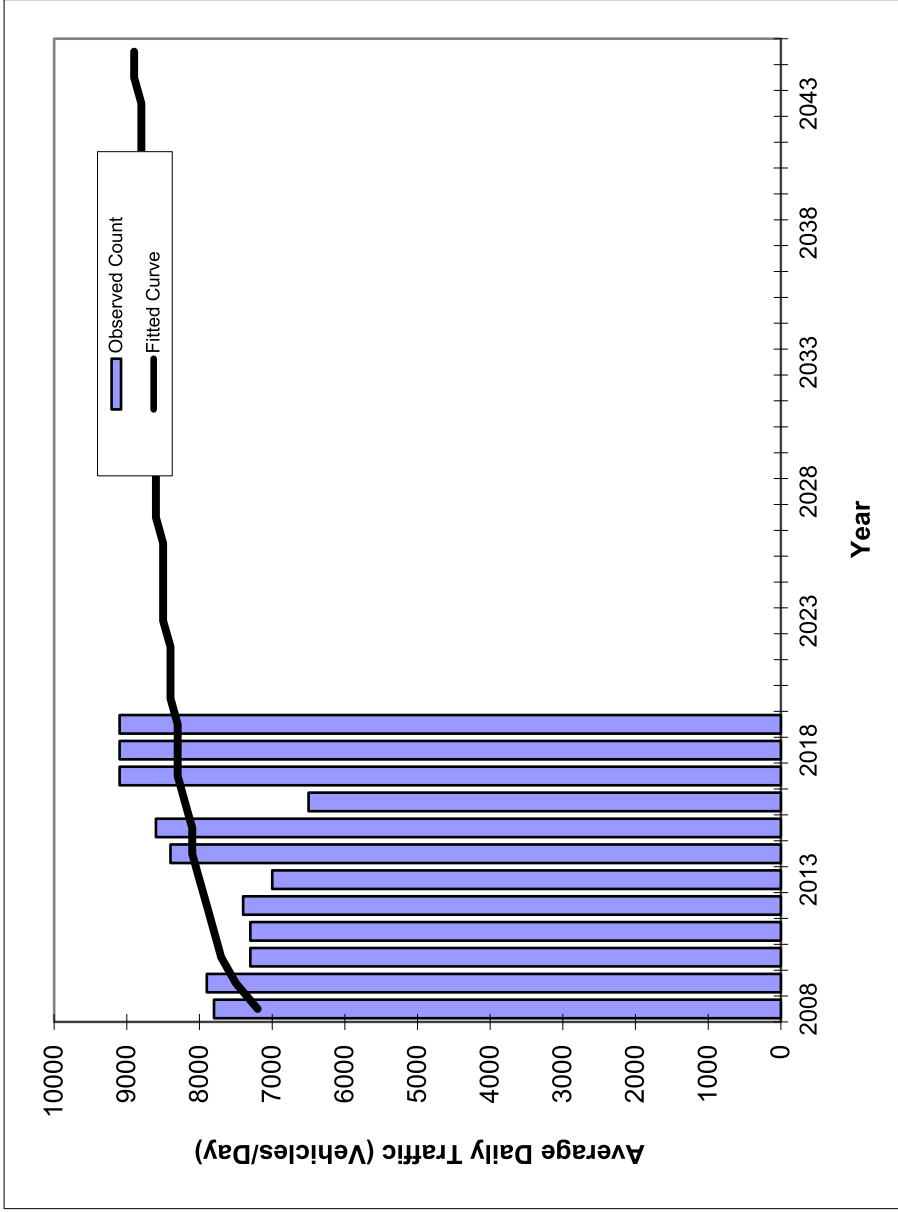




# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	880174
Highway:	0

FIN#	1234
Location	900030



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	7800	7200
2009	7900	7500
2010	7300	7700
2011	7300	7800
2012	7400	7900
2013	7000	8000
2014	8400	8100
2015	8600	8100
2016	6500	8200
2017	9100	8300
2018	9100	8300
2019	9100	8300
<b>2020 Opening Year Trend</b>		
2020	N/A	8400
<b>2030 Mid-Year Trend</b>		
2030	N/A	8600
<b>2045 Design Year Trend</b>		
2045	N/A	8900
<b>TRANPLAN Forecasts/Trends</b>		

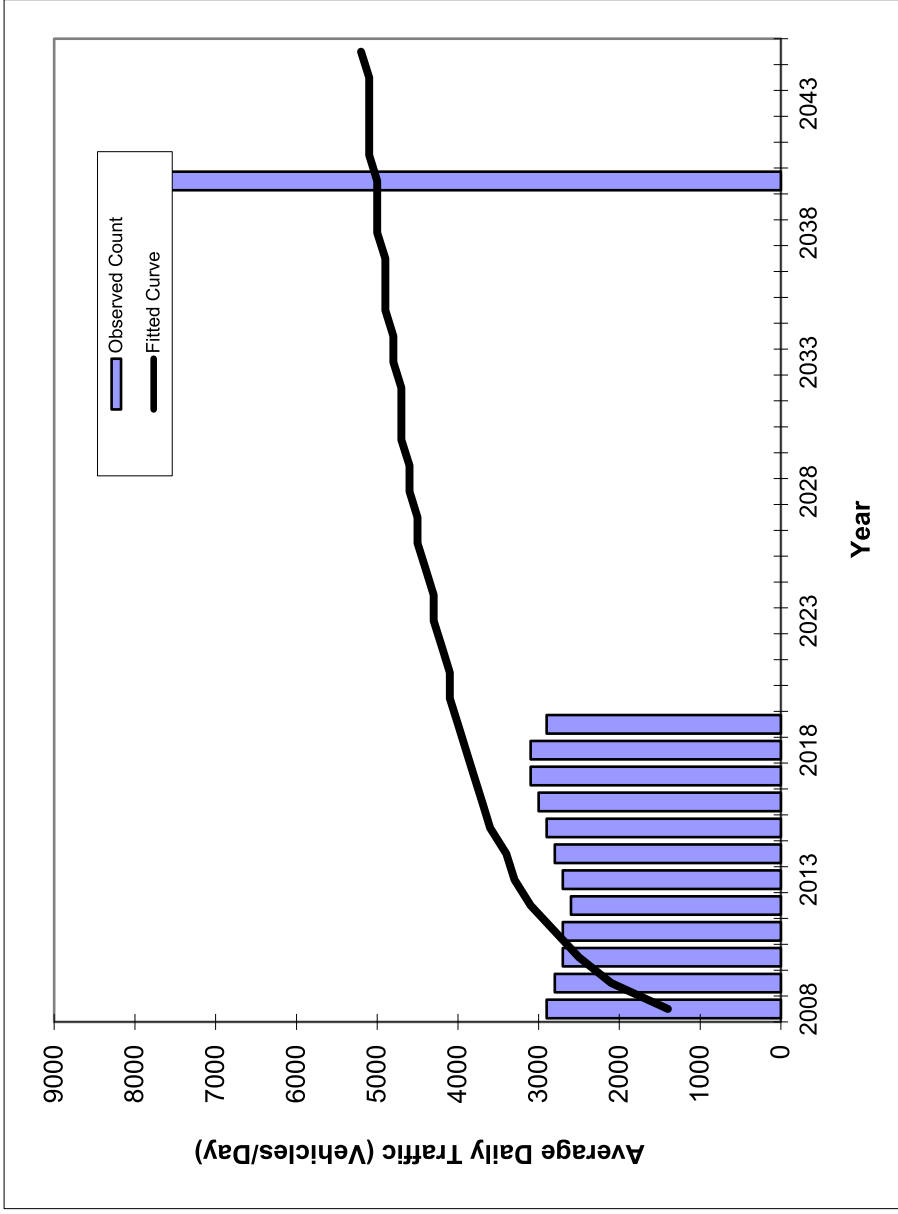
Trend R-squared:	15.27%
Compounded Annual Historic Growth Rate:	1.30%
Compounded Growth Rate (2019 to Design Year):	0.27%
Printed:	2-Mar-20
<b>Decaying Exponential Growth Option</b>	

\* Axle-Adjusted

# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	880291
Highway:	0

FIN#	1234
Location	0



Trend R-squared:	36.72%
Compounded Annual Historic Growth Rate:	10.01%
Compounded Growth Rate (2019 to Design Year):	1.01%
Printed:	2-Mar-20
<b>Decaying Exponential Growth Option</b>	

Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	2900	1400
2009	2800	2100
2010	2700	2500
2011	2700	2800
2012	2600	3100
2013	2700	3300
2014	2800	3400
2015	2900	3600
2016	3000	3700
2017	3100	3800
2018	3100	3900
2019	2900	4000
<b>2020 Opening Year Trend</b>		
2020	N/A	4100
<b>2030 Mid-Year Trend</b>		
2030	N/A	4700
<b>2045 Design Year Trend</b>		
2045	N/A	5200
<b>TRANPLAN Forecasts/Trends</b>		

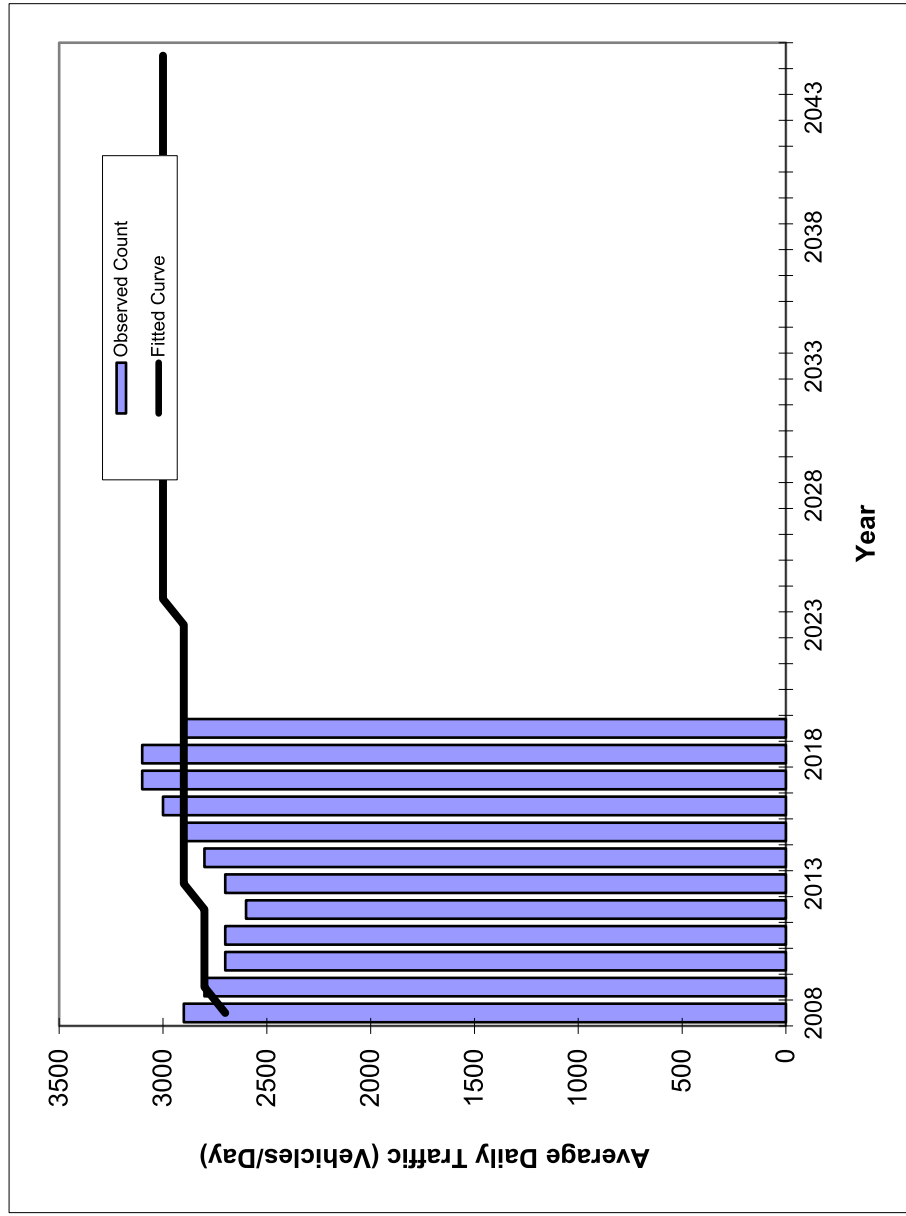
\*Axle-Adjusted



# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	880291
Highway:	0

FIN#	1234
Location	0



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	2900	2700
2009	2800	2800
2010	2700	2800
2011	2700	2800
2012	2600	2800
2013	2700	2900
2014	2800	2900
2015	2900	2900
2016	3000	2900
2017	3100	2900
2018	3100	2900
2019	2900	2900
<b>2020 Opening Year Trend</b>		
2020	N/A	2900
<b>2030 Mid-Year Trend</b>		
2030	N/A	3000
<b>2045 Design Year Trend</b>		
2045	N/A	3000
<b>TRANPLAN Forecasts/Trends</b>		

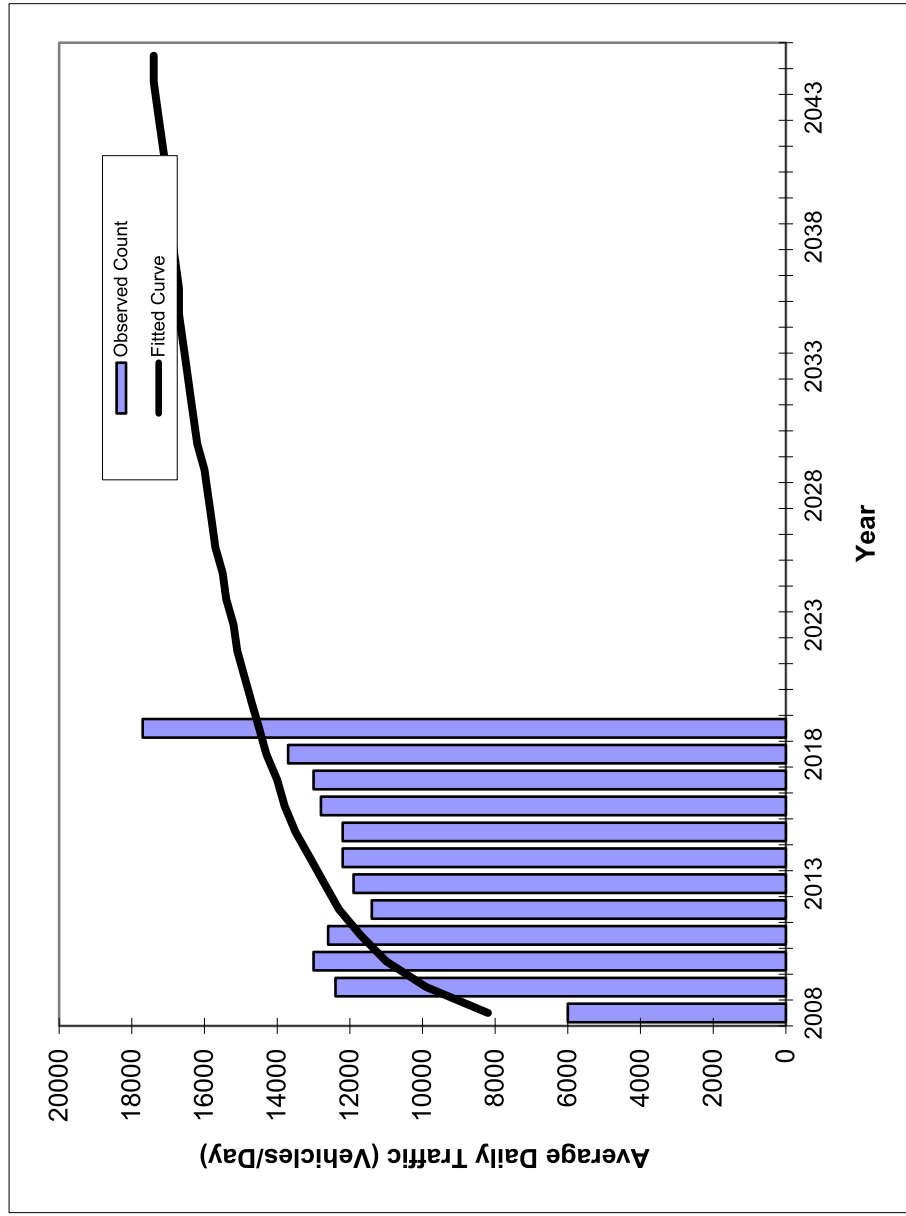
Trend R-squared:	17.03%
Compounded Annual Historic Growth Rate:	0.65%
Compounded Growth Rate (2019 to Design Year):	0.13%
Printed:	2-Mar-20
<b>Decaying Exponential Growth Option</b>	

\* Axle-Adjusted

# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	887035
Highway:	0

FIN#	1234
Location	0



Trend R-squared:	55.86%
Compounded Annual Historic Growth Rate:	5.32%
Compounded Growth Rate (2019 to Design Year):	0.70%
Printed:	2-Mar-20
<b>Decaying Exponential Growth Option</b>	

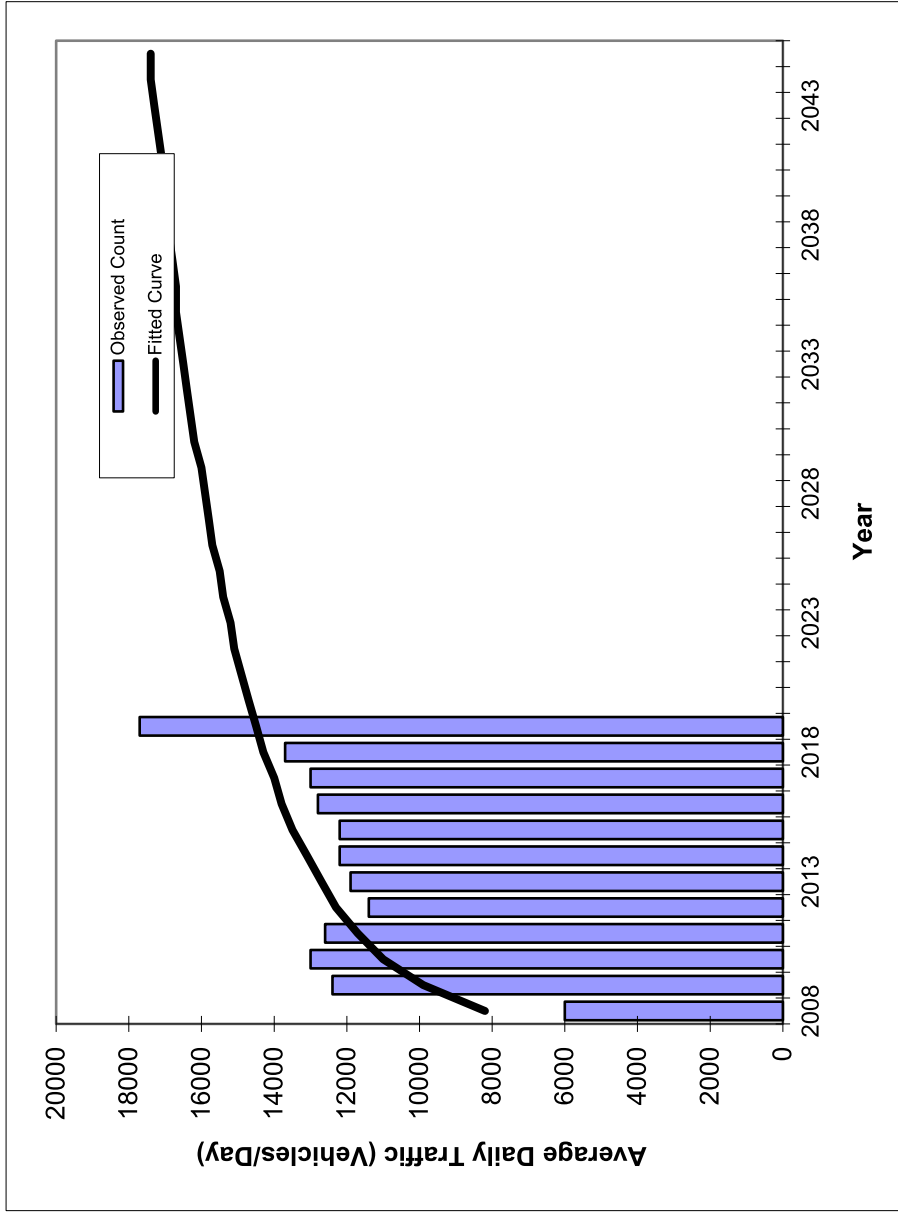
Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	6000	8200
2009	12400	9900
2010	13000	11000
2011	12600	11700
2012	11400	12300
2013	11900	12700
2014	12200	13100
2015	12200	13500
2016	12800	13800
2017	13000	14000
2018	13700	14300
2019	17700	14500
<b>2020 Opening Year Trend</b>		
2020	N/A	14700
<b>2030 Mid-Year Trend</b>		
2030	N/A	16200
<b>2045 Design Year Trend</b>		
2045	N/A	17400
<b>TRANPLAN Forecasts/Trends</b>		

\* Axle-Adjusted

# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	887035
Highway:	0

FIN#	1234
Location	0



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	6000	8200
2009	12400	9900
2010	13000	11000
2011	12600	11700
2012	11400	12300
2013	11900	12700
2014	12200	13100
2015	12200	13500
2016	12800	13800
2017	13000	14000
2018	13700	14300
2019	17700	14500
<b>2020 Opening Year Trend</b>		
2020	N/A	14700
<b>2030 Mid-Year Trend</b>		
2030	N/A	16200
<b>2045 Design Year Trend</b>		
2045	N/A	17400
<b>TRANPLAN Forecasts/Trends</b>		

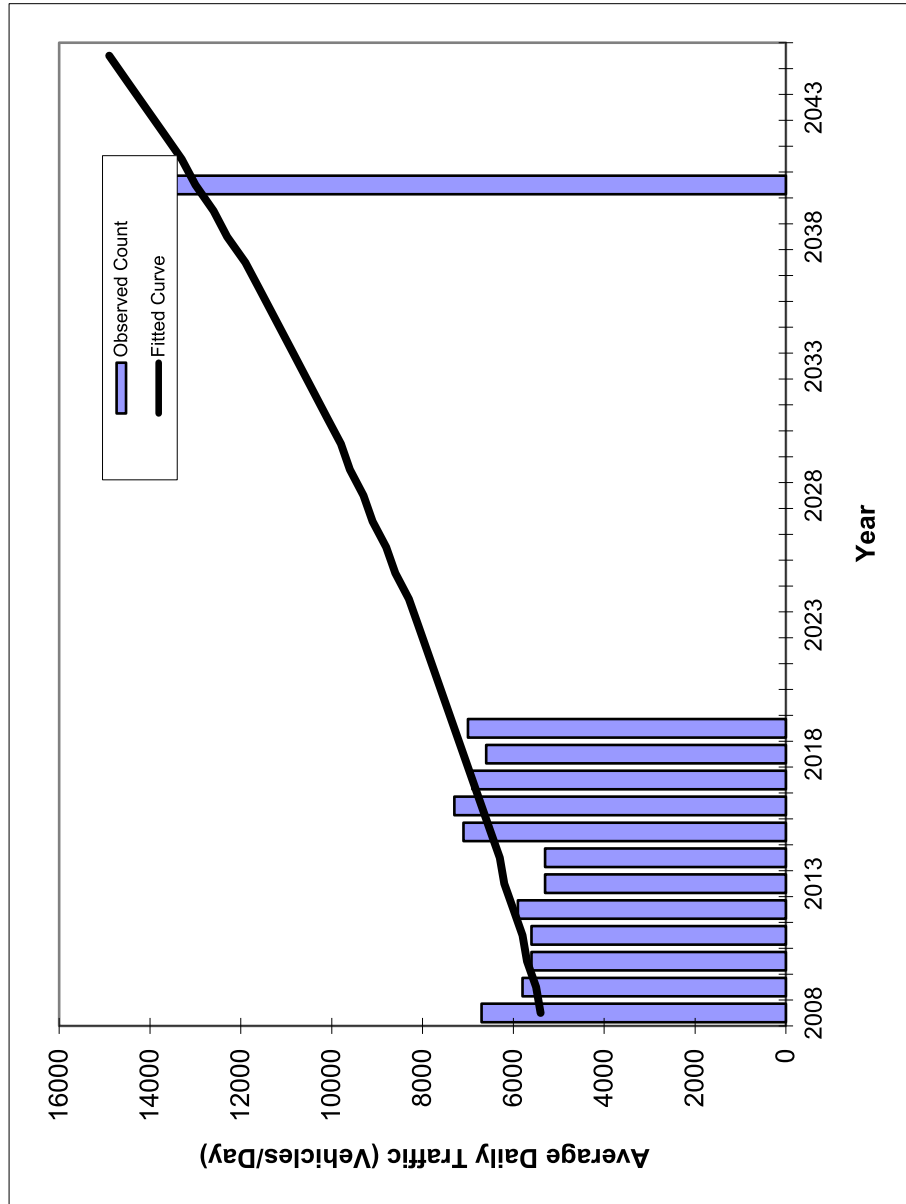
Trend R-squared:	55.86%
Compounded Annual Historic Growth Rate:	5.32%
Compounded Growth Rate (2019 to Design Year):	0.70%
Printed:	2-Mar-20
<b>Decaying Exponential Growth Option</b>	

\* Axle-Adjusted

# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	880009
Highway:	0

FIN#	1234
Location	0



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	6700	5400
2009	5800	5500
2010	5600	5700
2011	5600	5800
2012	5900	6000
2013	5300	6200
2014	5300	6300
2015	7100	6500
2016	7300	6700
2017	6900	6900
2018	6600	7100
2019	7000	7300
<b>2020 Opening Year Trend</b>		
2020	N/A	7500
<b>2030 Mid-Year Trend</b>		
2030	N/A	9800
<b>2045 Design Year Trend</b>		
2045	N/A	14900
<b>TRANPLAN Forecasts/Trends</b>		

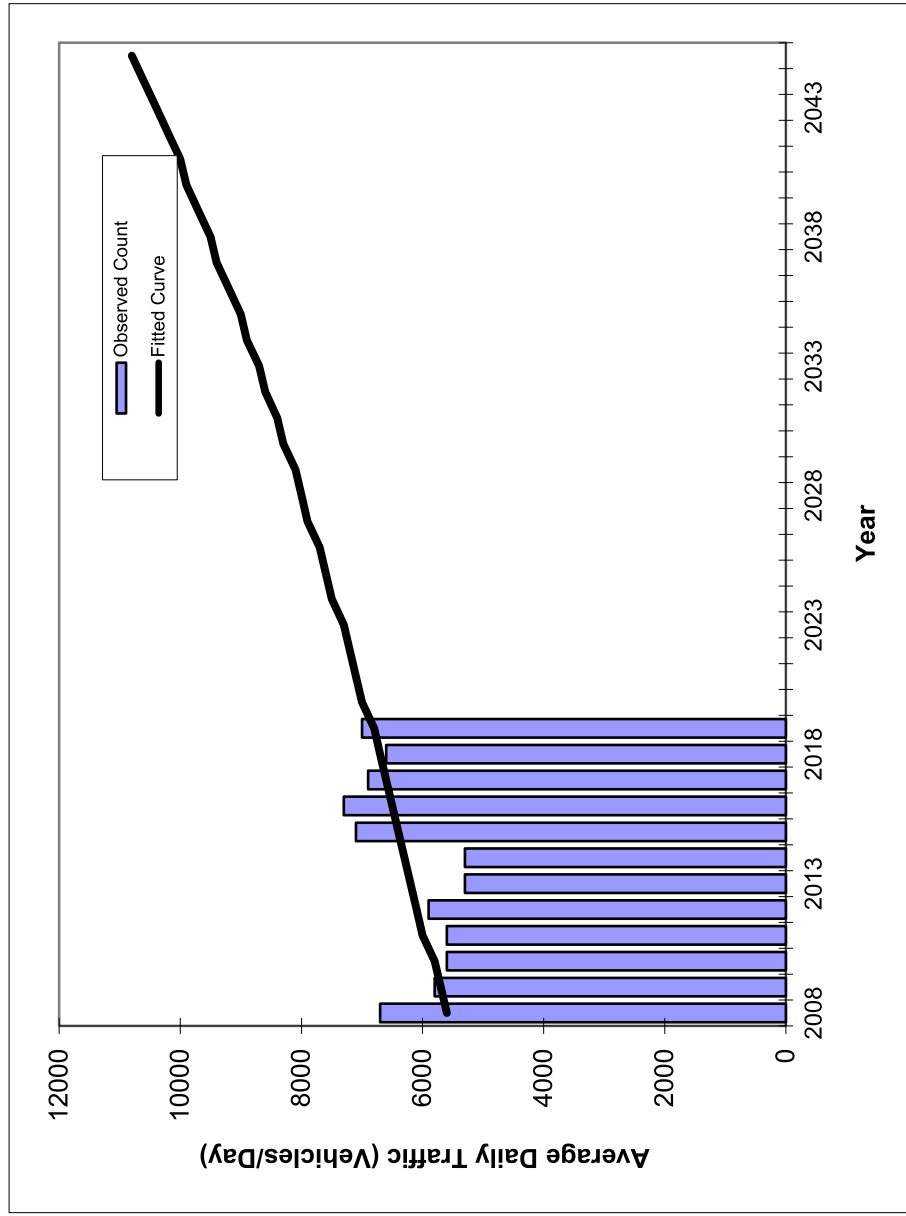
Trend R-squared:	81.97%
Compounded Annual Historic Growth Rate:	2.78%
Compounded Growth Rate (2019 to Design Year):	2.78%
Printed:	2-Mar-20
<b>Exponential Growth Option</b>	

\*Axle-Adjusted

# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	880009
Highway:	0

FIN#	1234
Location	3



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	6700	5600
2009	5800	5700
2010	5600	5800
2011	5600	6000
2012	5900	6100
2013	5300	6200
2014	5300	6300
2015	7100	6400
2016	7300	6500
2017	6900	6600
2018	6600	6700
2019	7000	6800
<b>2020 Opening Year Trend</b>		
2020	N/A	7000
<b>2030 Mid-Year Trend</b>		
2030	N/A	8300
<b>2045 Design Year Trend</b>		
2045	N/A	10800
<b>TRANPLAN Forecasts/Trends</b>		

Trend R-squared:	27.54%
Compounded Annual Historic Growth Rate:	1.78%
Compounded Growth Rate (2019 to Design Year):	1.80%
Printed:	2-Mar-20
<b>Exponential Growth Option</b>	

\*Axle-Adjusted

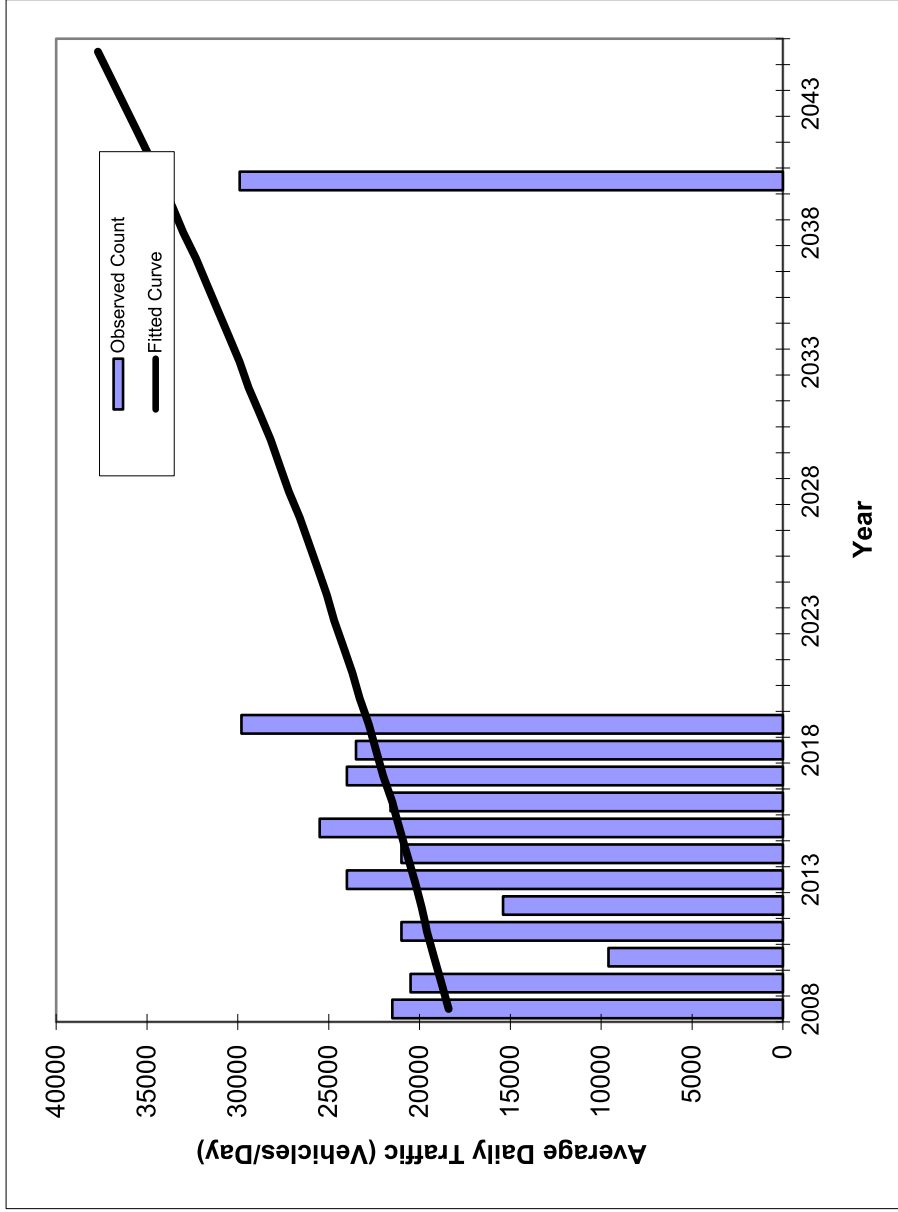


# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	880101
Highway:	0

FIN#	1234
Location	900030

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Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	21500	18400
2009	20500	18800
2010	9600	19200
2011	21000	19600
2012	15400	19900
2013	24000	20300
2014	21000	20700
2015	25500	21100
2016	21600	21500
2017	24000	22000
2018	23500	22400
2019	29800	22800
<b>2020 Opening Year Trend</b>		
2020	N/A	23300
<b>2030 Mid-Year Trend</b>		
2030	N/A	28200
<b>2045 Design Year Trend</b>		
2045	N/A	37700
<b>TRANPLAN Forecasts/Trends</b>		

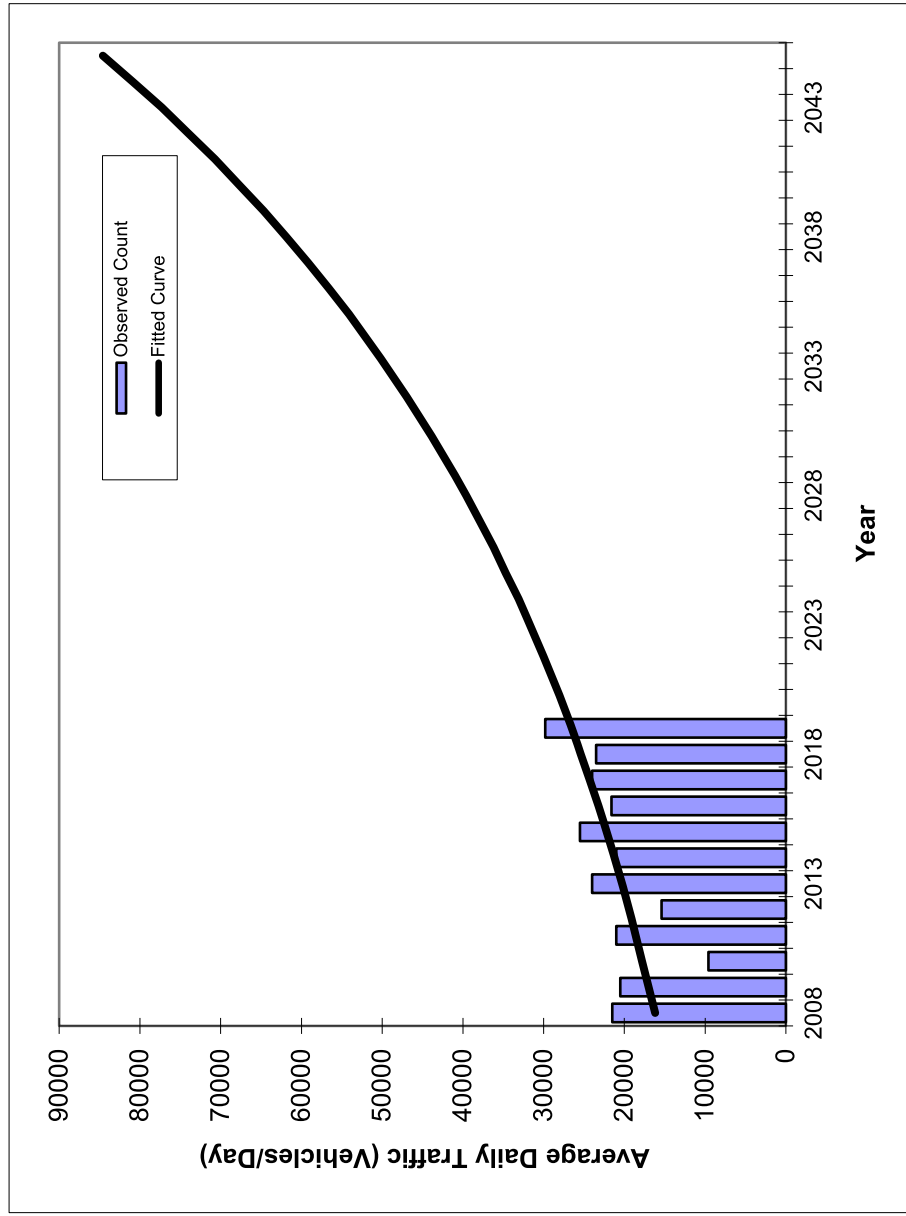
Trend R-squared:	28.46%
Compounded Annual Historic Growth Rate:	1.97%
Compounded Growth Rate (2019 to Design Year):	1.95%
Printed:	2-Mar-20
<b>Exponential Growth Option</b>	

\* Axle-Adjusted

# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	880101
Highway:	0

FIN#	1234
Location	900030



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	21500	16200
2009	20500	17000
2010	9600	17800
2011	21000	18600
2012	15400	19400
2013	24000	20300
2014	21000	21200
2015	25500	22200
2016	21600	23200
2017	24000	24300
2018	23500	25400
2019	29800	26500
<b>2020 Opening Year Trend</b>		
2020	N/A	27700
<b>2030 Mid-Year Trend</b>		
2030	N/A	43300
<b>2045 Design Year Trend</b>		
2045	N/A	84600
<b>TRANPLAN Forecasts/Trends</b>		

Trend R-squared:	30.99%
Compounded Annual Historic Growth Rate:	4.58%
Compounded Growth Rate (2019 to Design Year):	4.57%
Printed:	2-Mar-20
<b>Exponential Growth Option</b>	

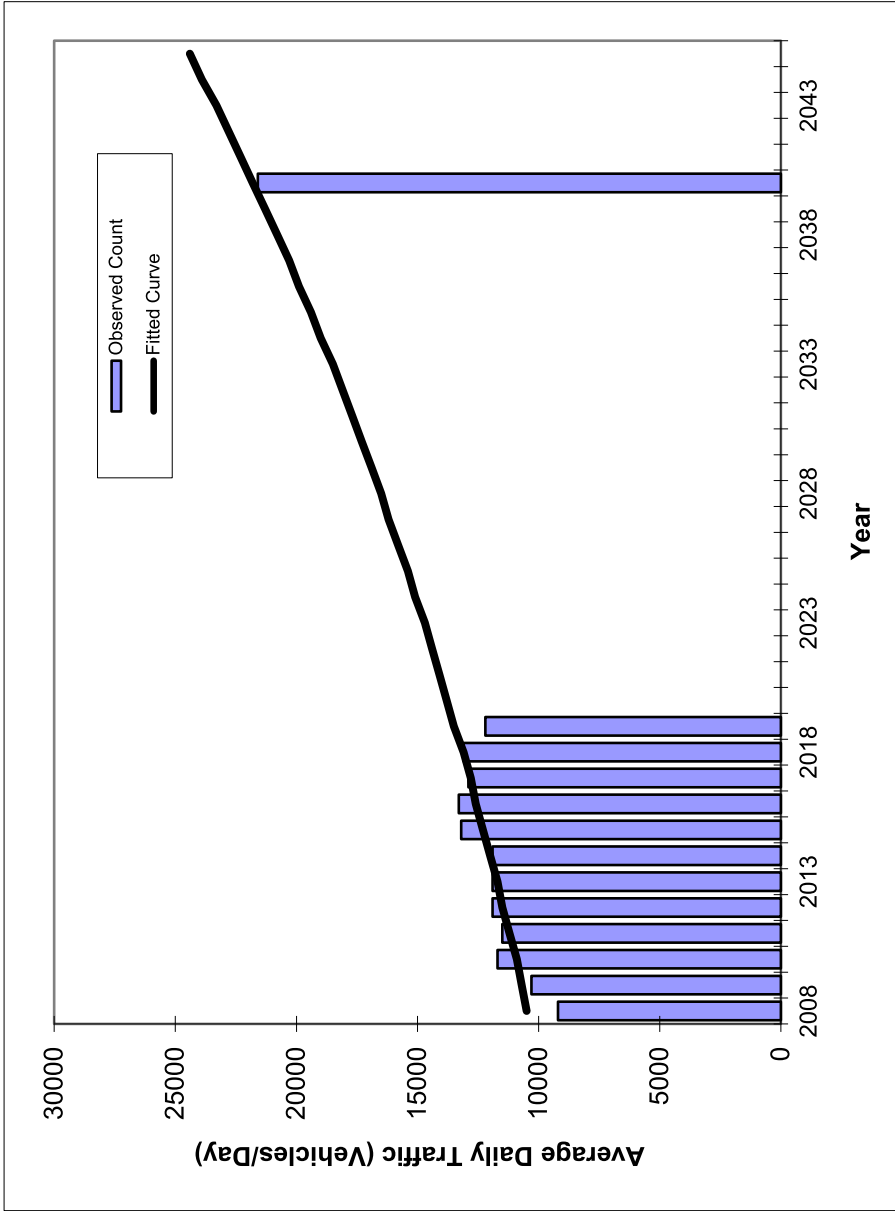
\* Axle-Adjusted

# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	880108
Highway:	0

FIN#	1234
Location	900030

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Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	9200	10500
2009	10300	10700
2010	11700	10900
2011	11500	11200
2012	11900	11500
2013	11900	11700
2014	11900	12000
2015	13200	12300
2016	13300	12600
2017	12900	12800
2018	13100	13100
2019	12200	13500
<b>2020 Opening Year Trend</b>		
2020	N/A	13800
<b>2030 Mid-Year Trend</b>		
2030	N/A	17300
<b>2045 Design Year Trend</b>		
2045	N/A	24400
<b>TRANPLAN Forecasts/Trends</b>		

Trend R-squared:	90.67%
Compounded Annual Historic Growth Rate:	2.31%
Compounded Growth Rate (2019 to Design Year):	2.30%
Printed:	2-Mar-20
<b>Exponential Growth Option</b>	

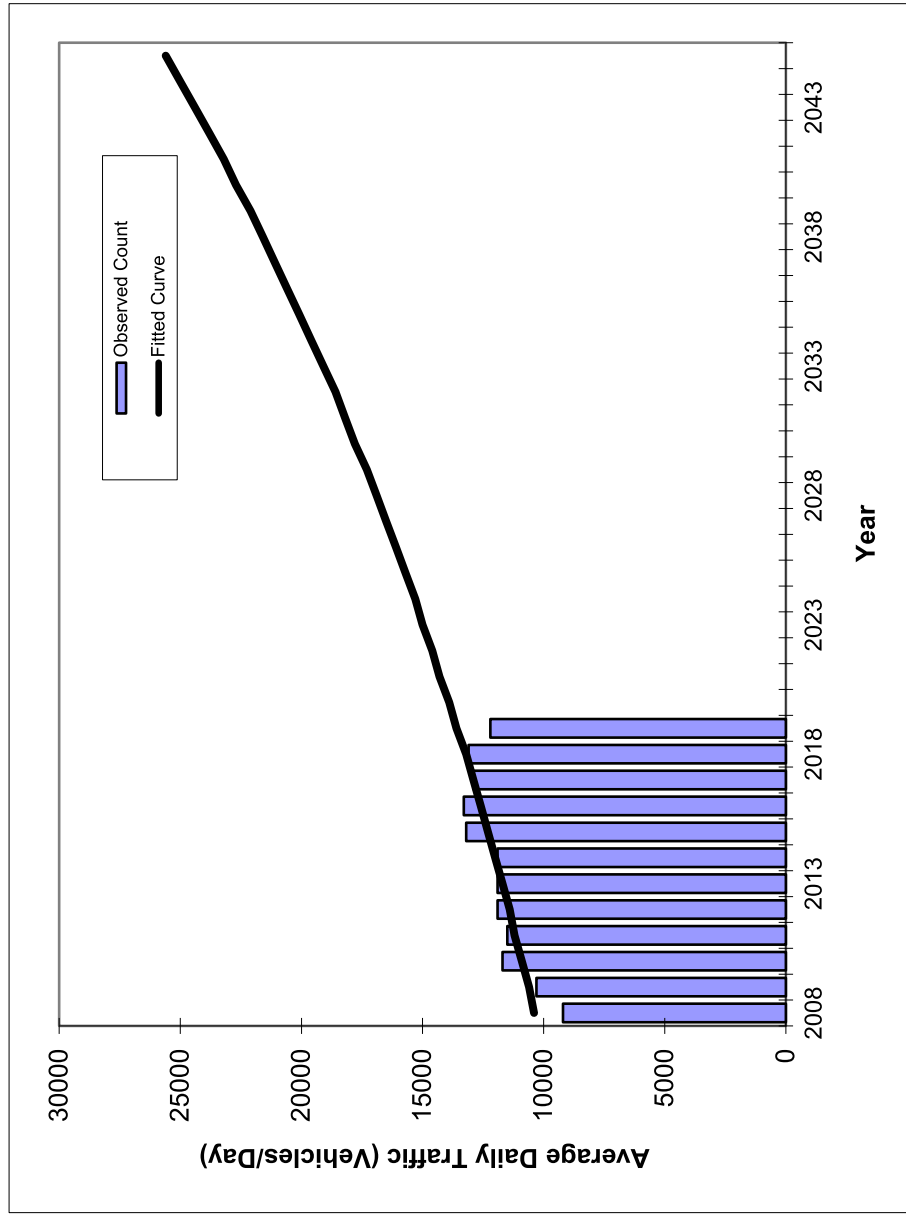
\*Axle-Adjusted



# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	880108
Highway:	0

FIN#	1234
Location	900030



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	9200	10400
2009	10300	10600
2010	11700	10900
2011	11500	11200
2012	11900	11400
2013	11900	11700
2014	11900	12000
2015	13200	12300
2016	13300	12600
2017	12900	12900
2018	13100	13200
2019	12200	13600
<b>2020 Opening Year Trend</b>		
2020	N/A	13900
<b>2030 Mid-Year Trend</b>		
2030	N/A	17800
<b>2045 Design Year Trend</b>		
2045	N/A	25600
<b>TRANPLAN Forecasts/Trends</b>		

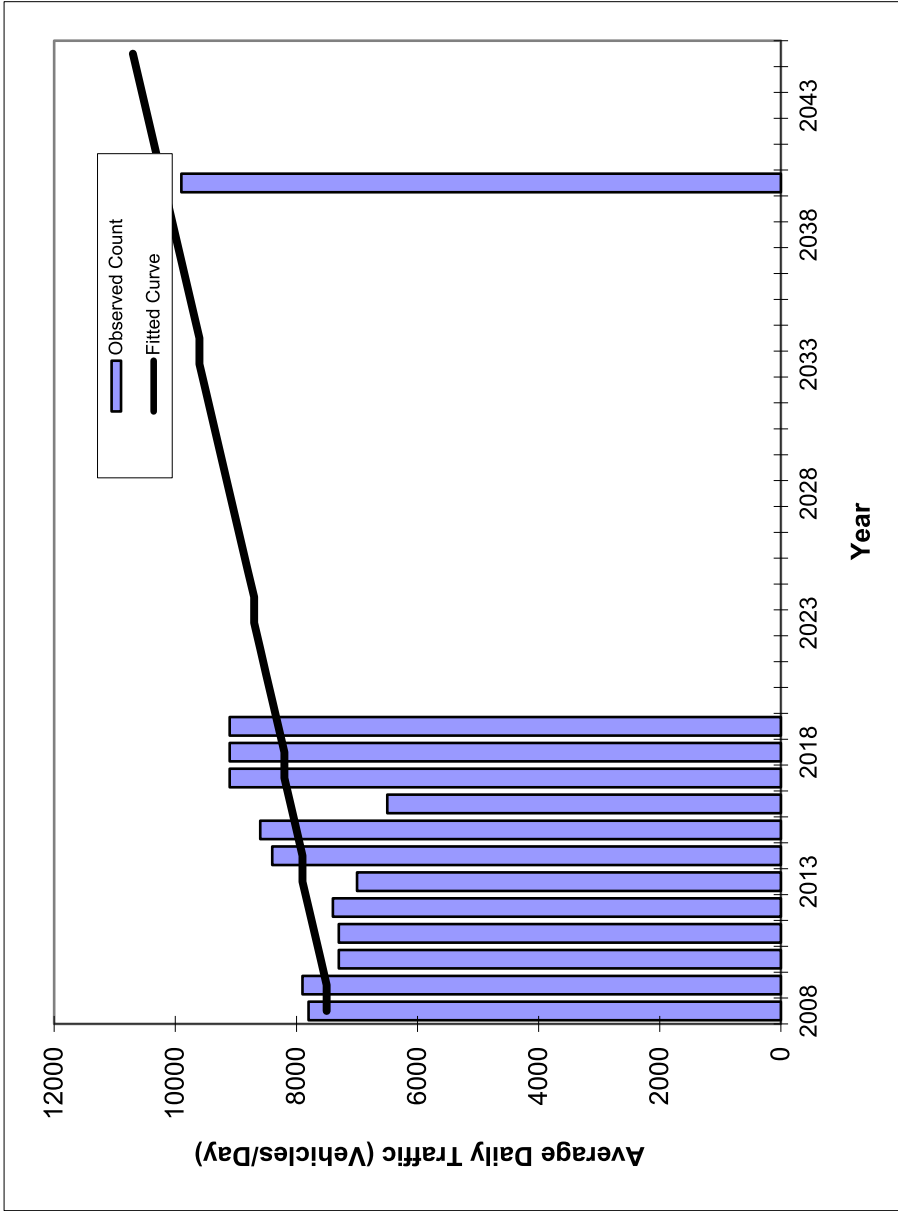
Trend R-squared:	66.79%
Compounded Annual Historic Growth Rate:	2.47%
Compounded Growth Rate (2019 to Design Year):	2.46%
Printed:	2-Mar-20
<b>Exponential Growth Option</b>	

\*Axle-Adjusted

# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	880174
Highway:	0

FIN#	1234
Location	900030



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	7800	7500
2009	7900	7500
2010	7300	7600
2011	7300	7700
2012	7400	7800
2013	7000	7900
2014	8400	7900
2015	8600	8000
2016	6500	8100
2017	9100	8200
2018	9100	8200
2019	9100	8300
<b>2020 Opening Year Trend</b>		
2020	N/A	8400
<b>2030 Mid-Year Trend</b>		
2030	N/A	9300
<b>2045 Design Year Trend</b>		
2045	N/A	10700
<b>TRANPLAN Forecasts/Trends</b>		

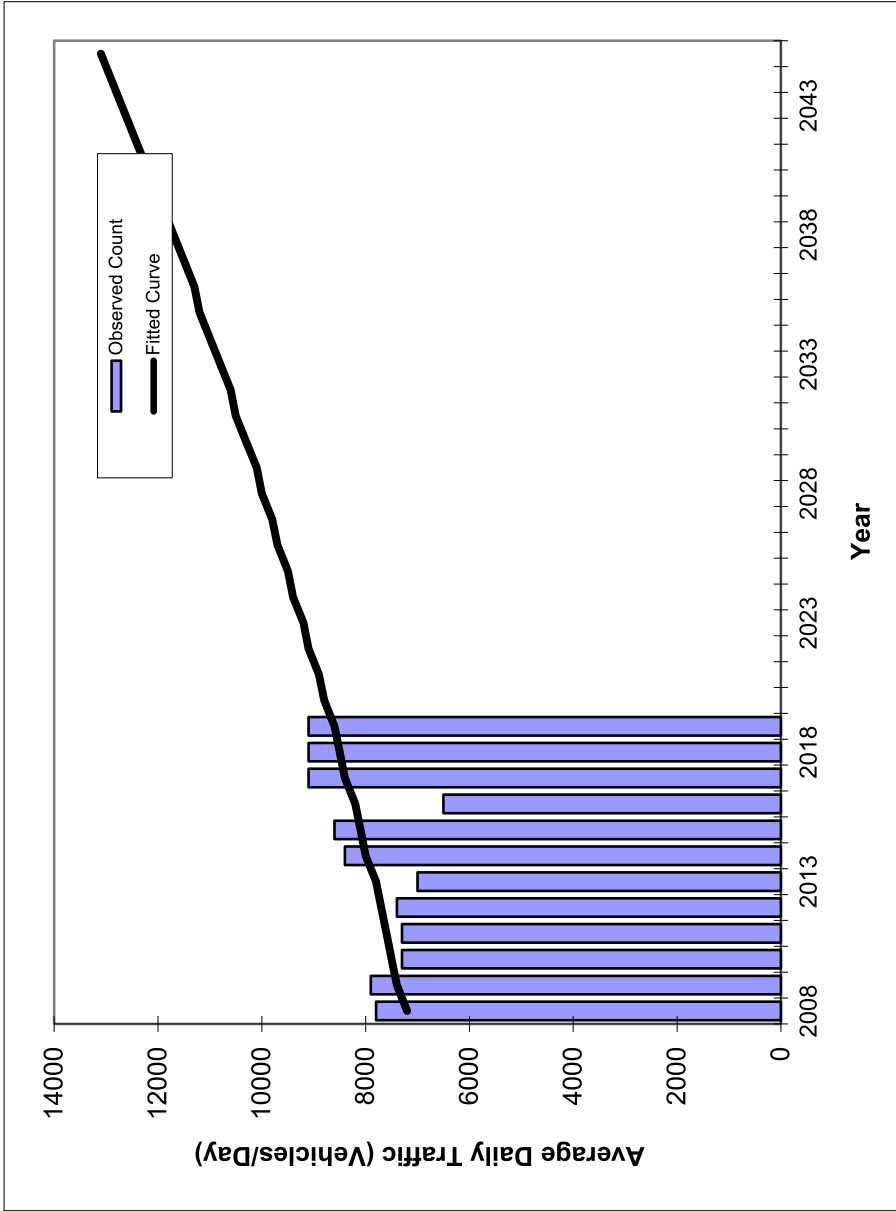
Trend R-squared:	40.77%
Compounded Annual Historic Growth Rate:	0.93%
Compounded Growth Rate (2019 to Design Year):	0.98%
Printed:	2-Mar-20
<b>Exponential Growth Option</b>	

\*Axle-Adjusted

# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	880174
Highway:	0

FIN#	1234
Location	900030



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	7800	7200
2009	7900	7400
2010	7300	7500
2011	7300	7600
2012	7400	7700
2013	7000	7800
2014	8400	8000
2015	8600	8100
2016	6500	8200
2017	9100	8400
2018	9100	8500
2019	9100	8600
<b>2020 Opening Year Trend</b>		
2020	N/A	8800
<b>2030 Mid-Year Trend</b>		
2030	N/A	10300
<b>2045 Design Year Trend</b>		
2045	N/A	13100
<b>TRANPLAN Forecasts/Trends</b>		

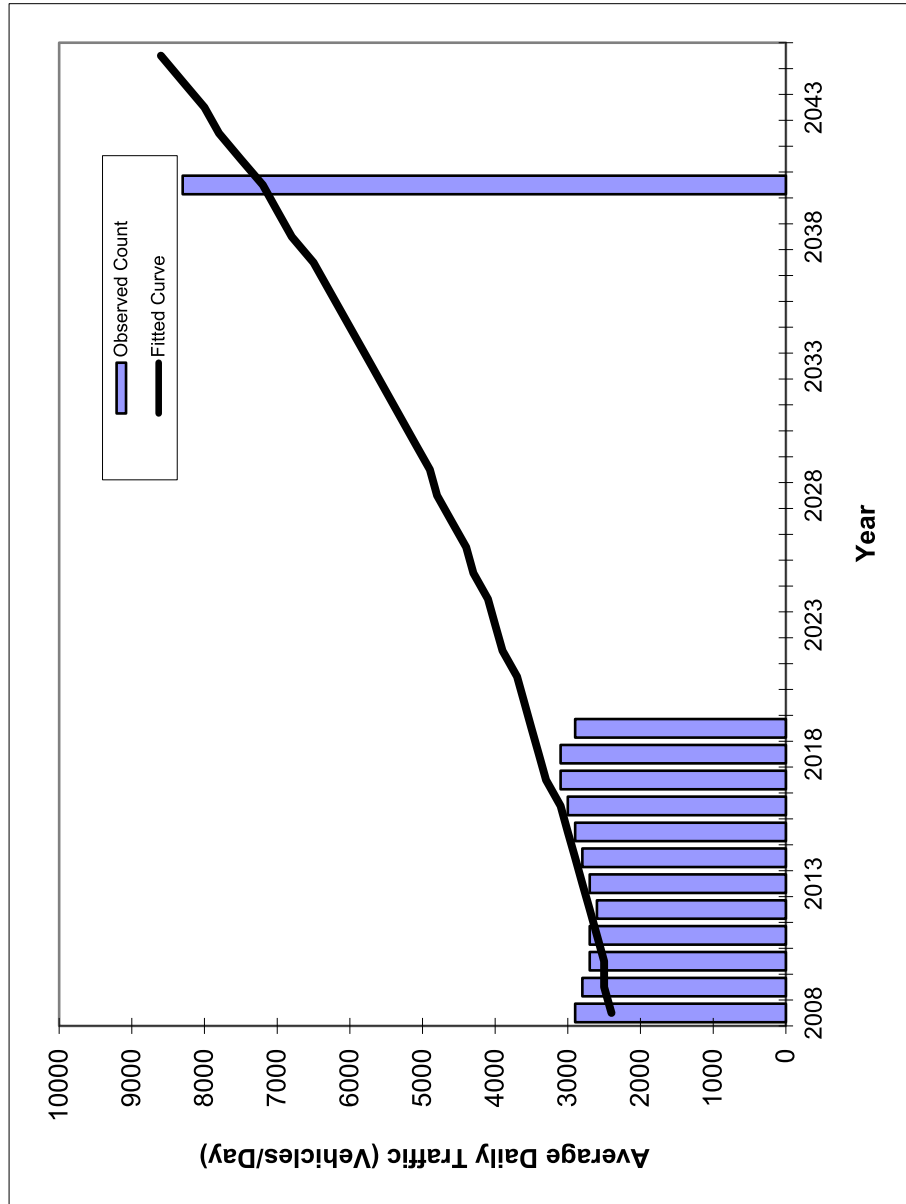
Trend R-squared:	25.91%
Compounded Annual Historic Growth Rate:	1.63%
Compounded Growth Rate (2019 to Design Year):	1.63%
Printed:	2-Mar-20
<b>Exponential Growth Option</b>	

\* Axle-Adjusted

# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	880291
Highway:	0

FIN#	1234
Location	900030



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	2900	2400
2009	2800	2500
2010	2700	2500
2011	2700	2600
2012	2600	2700
2013	2700	2800
2014	2800	2900
2015	2900	3000
2016	3000	3100
2017	3100	3300
2018	3100	3400
2019	2900	3500
<b>2020 Opening Year Trend</b>		
2020	N/A	3600
<b>2030 Mid-Year Trend</b>		
2030	N/A	5100
<b>2045 Design Year Trend</b>		
2045	N/A	8600
<b>TRANPLAN Forecasts/Trends</b>		

Trend R-squared:	87.89%
Compounded Annual Historic Growth Rate:	3.49%
Compounded Growth Rate (2019 to Design Year):	3.52%
Printed:	2-Mar-20
<b>Exponential Growth Option</b>	

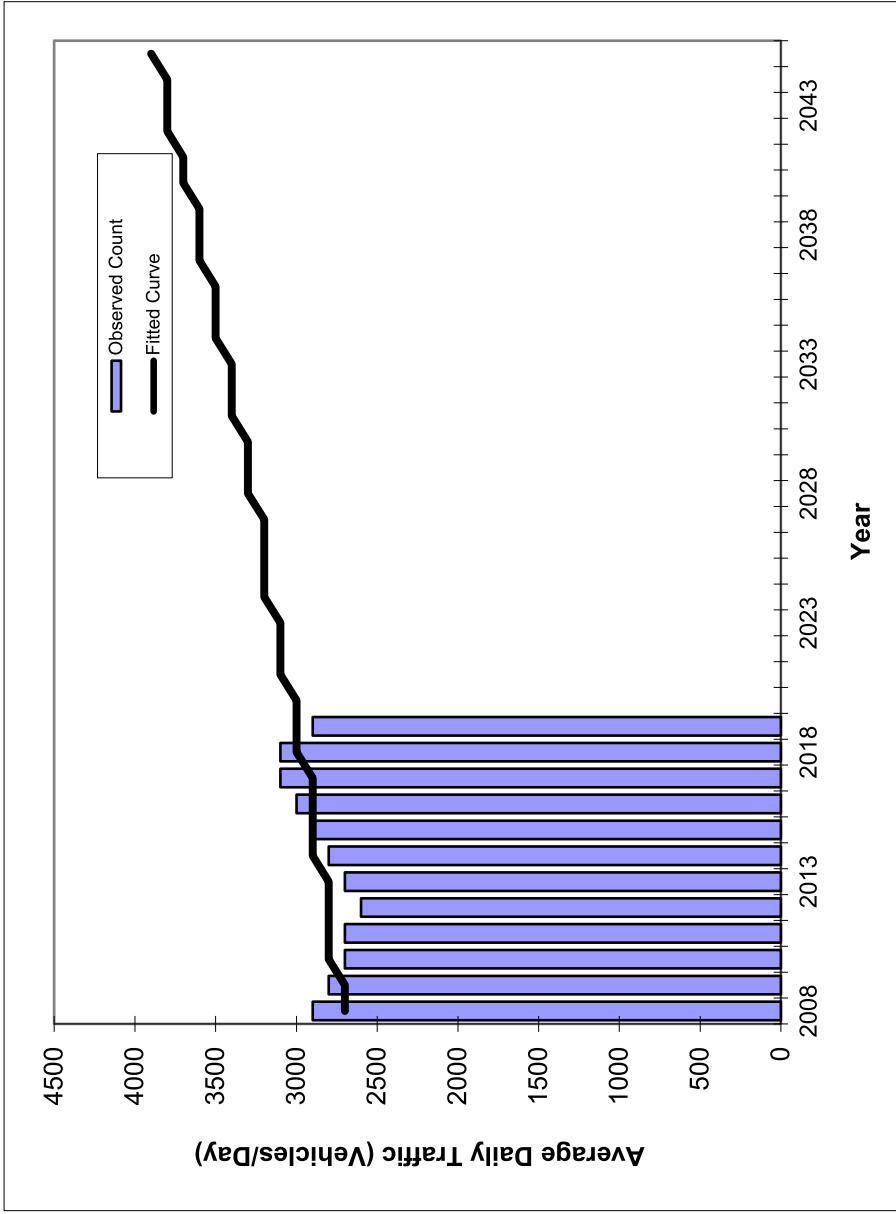
\*Axle-Adjusted



# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	880291
Highway:	0

FIN#	1234
Location	900030



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	2900	2700
2009	2800	2700
2010	2700	2800
2011	2700	2800
2012	2600	2800
2013	2700	2800
2014	2800	2900
2015	2900	2900
2016	3000	2900
2017	3100	2900
2018	3100	3000
2019	2900	3000
<b>2020 Opening Year Trend</b>		
2020	N/A	3000
<b>2030 Mid-Year Trend</b>		
2030	N/A	3300
<b>2045 Design Year Trend</b>		
2045	N/A	3900
<b>TRANPLAN Forecasts/Trends</b>		

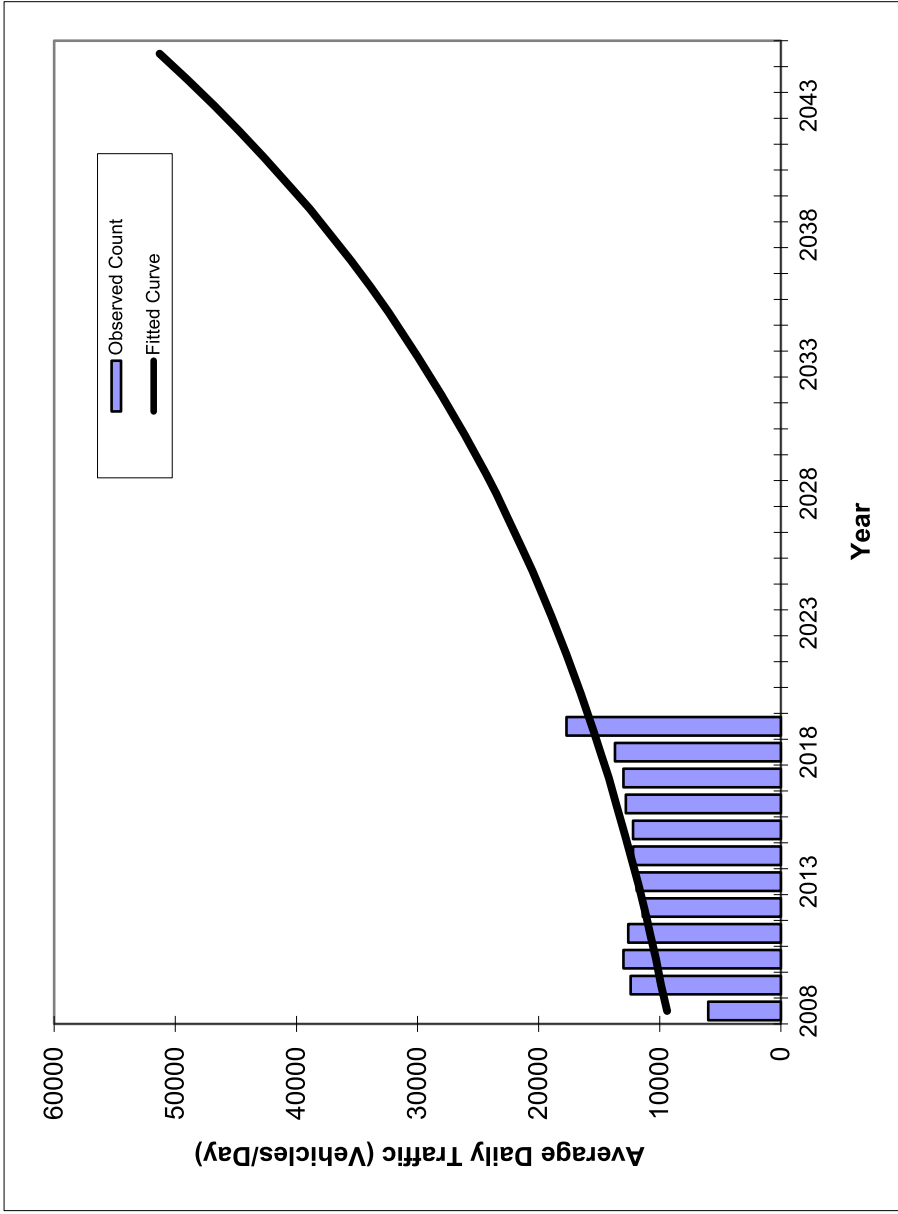
Trend R-squared:	37.92%
Compounded Annual Historic Growth Rate:	0.96%
Compounded Growth Rate (2019 to Design Year):	1.01%
Printed:	2-Mar-20
<b>Exponential Growth Option</b>	

\*Axle-Adjusted

# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	887035
Highway:	0

FIN#	1234
Location	900030



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	6000	9400
2009	12400	9900
2010	13000	10300
2011	12600	10800
2012	11400	11300
2013	11900	11800
2014	12200	12400
2015	12200	13000
2016	12800	13600
2017	13000	14200
2018	13700	14900
2019	17700	15600
<b>2020 Opening Year Trend</b>		
2020	N/A	16300
<b>2030 Mid-Year Trend</b>		
2030	N/A	25800
<b>2045 Design Year Trend</b>		
2045	N/A	51300
<b>TRANPLAN Forecasts/Trends</b>		

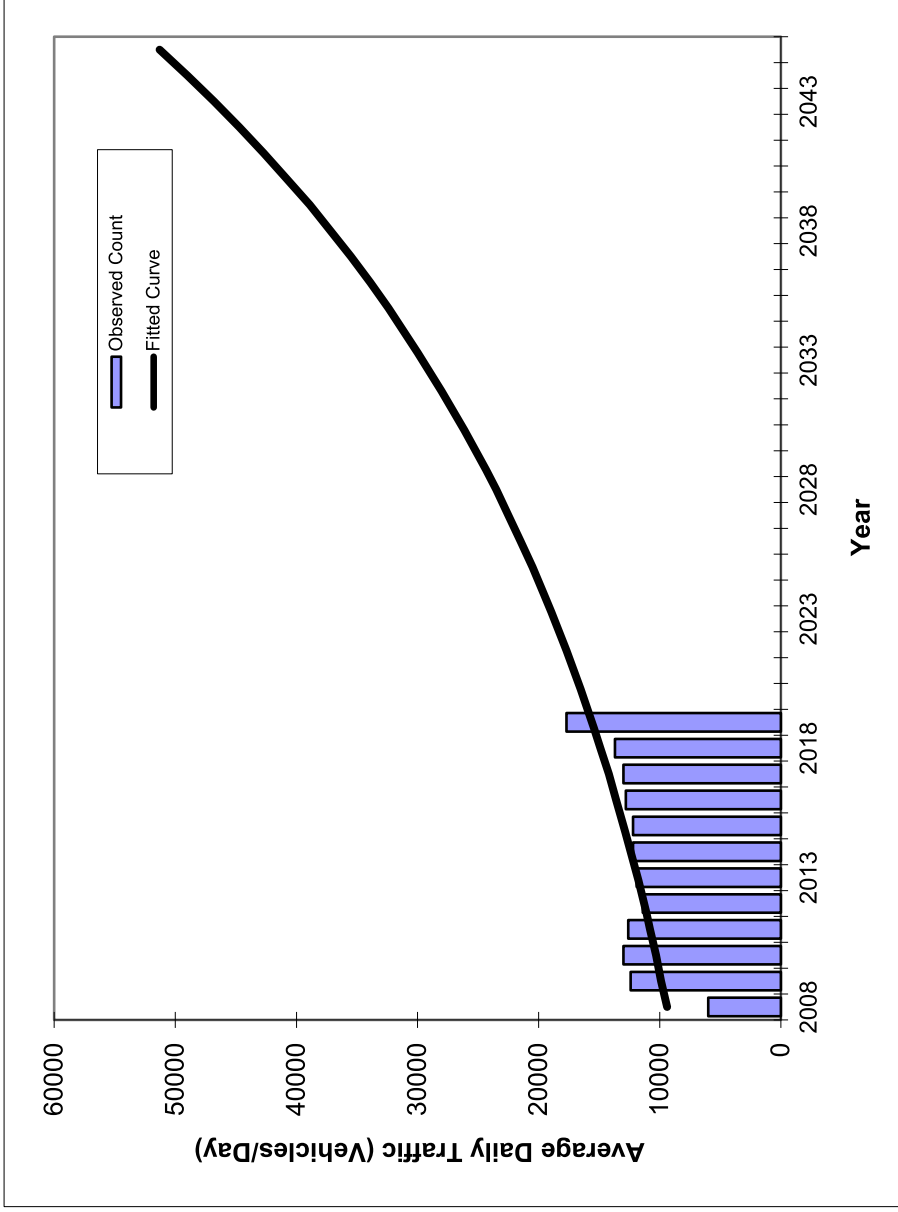
Trend R-squared:	44.69%
Compounded Annual Historic Growth Rate:	4.71%
Compounded Growth Rate (2019 to Design Year):	4.68%
Printed:	2-Mar-20
<b>Exponential Growth Option</b>	

\* Axle-Adjusted

# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	887035
Highway:	0

FIN#	1234
Location	900030



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	6000	9400
2009	12400	9900
2010	13000	10300
2011	12600	10800
2012	11400	11300
2013	11900	11800
2014	12200	12400
2015	12200	13000
2016	12800	13600
2017	13000	14200
2018	13700	14900
2019	17700	15600
<b>2020 Opening Year Trend</b>		
2020	N/A	16300
<b>2030 Mid-Year Trend</b>		
2030	N/A	25800
<b>2045 Design Year Trend</b>		
2045	N/A	51300
<b>TRANPLAN Forecasts/Trends</b>		

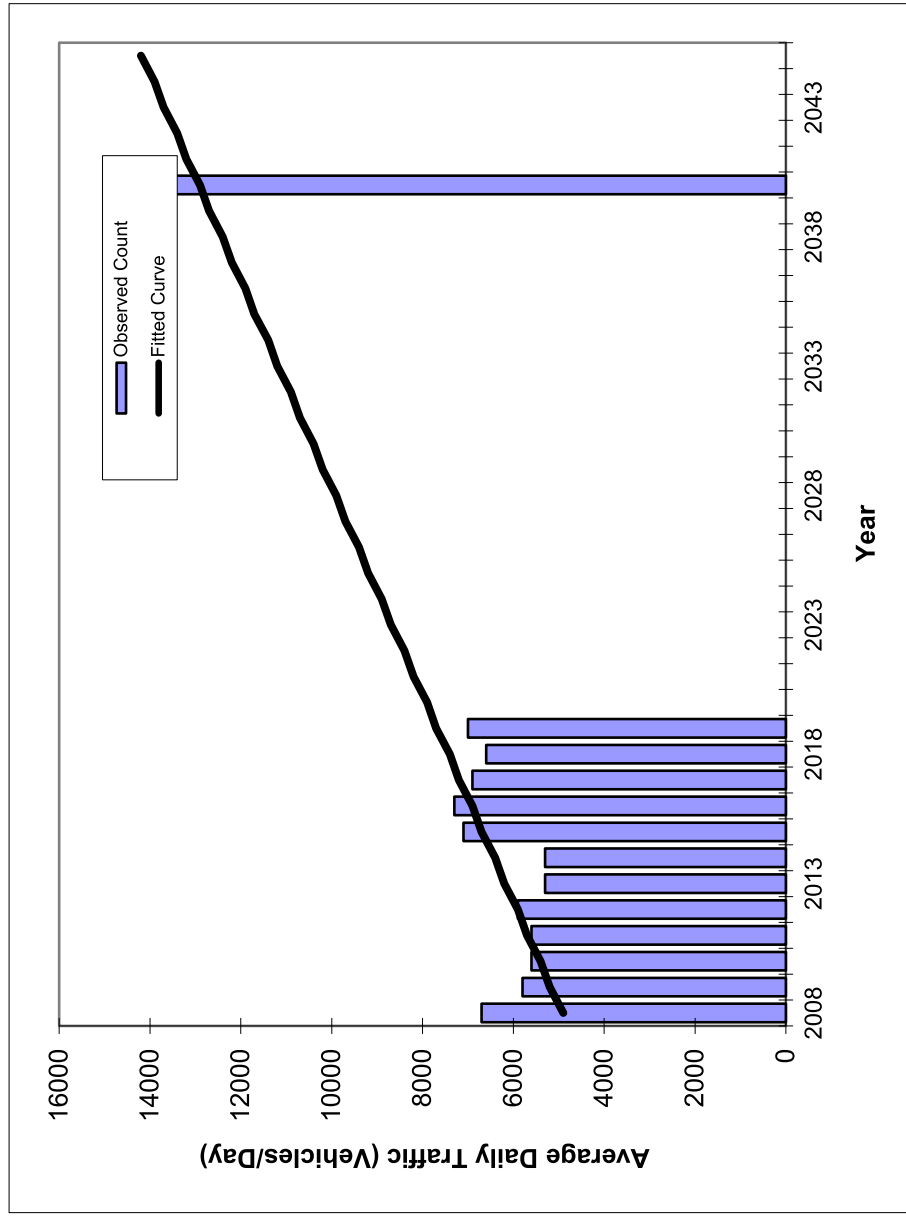
Trend R-squared:	44.69%
Compounded Annual Historic Growth Rate:	4.71%
Compounded Growth Rate (2019 to Design Year):	4.68%
Printed:	2-Mar-20
<b>Exponential Growth Option</b>	

\* Axle-Adjusted

# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	880009
Highway:	0

FIN#	1234
Location	0



** Annual Trend Increase:	250
Trend R-squared:	86.48%
Trend Annual Historic Growth Rate:	5.19%
Trend Growth Rate (2019 to Design Year):	3.25%
Printed:	2-Mar-20

**Straight Line Growth Option**

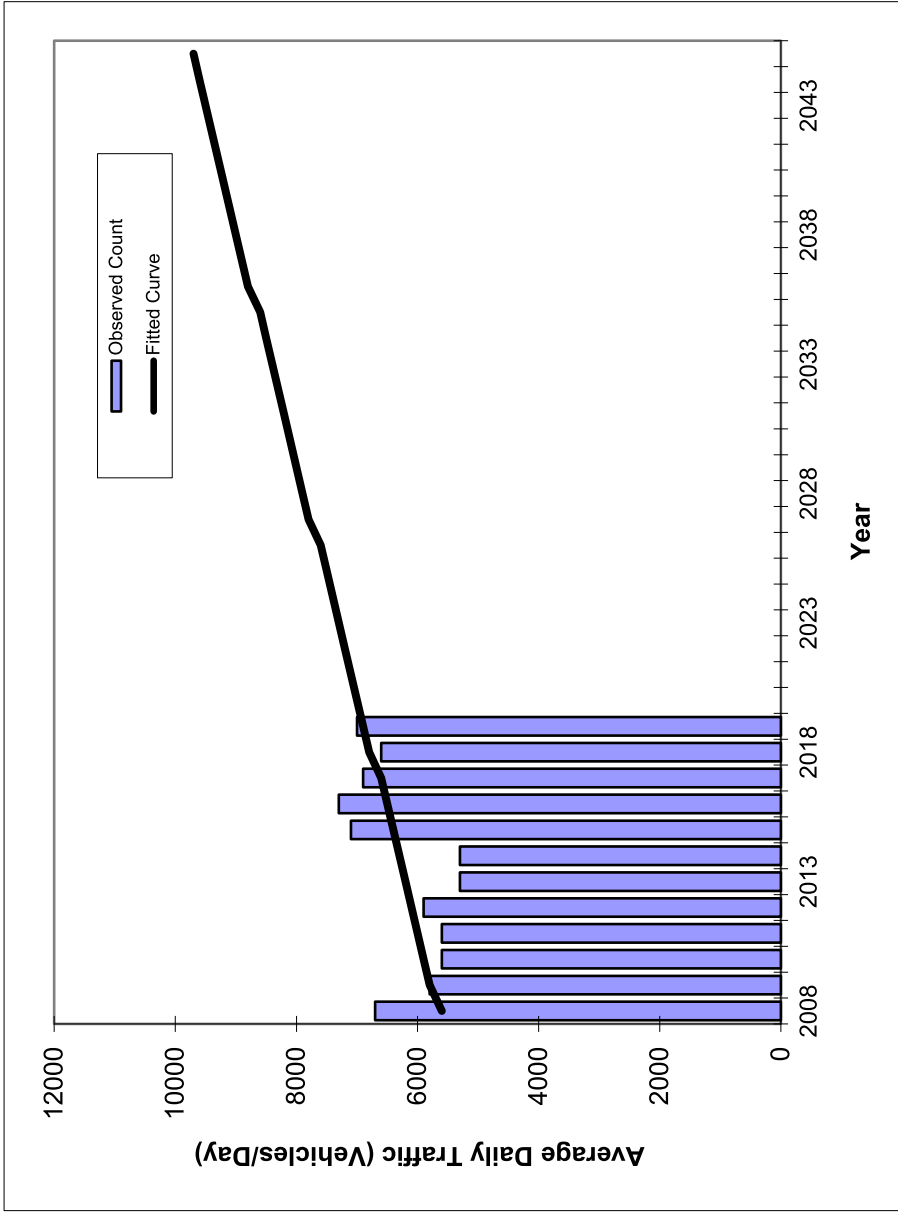
Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	6700	4900
2009	5800	5200
2010	5600	5400
2011	5600	5700
2012	5900	5900
2013	5300	6200
2014	5300	6400
2015	7100	6700
2016	7300	6900
2017	6900	7200
2018	6600	7400
2019	7000	7700
2020 Opening Year Trend		
2020	N/A	7900
2030 Mid-Year Trend		
2030	N/A	10400
2045 Design Year Trend		
2045	N/A	14200
TRANPLAN Forecasts/Trends		

\*Axle-Adjusted

# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	880009
Highway:	0

FIN#	1234
Location	0



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	6700	5600
2009	5800	5800
2010	5600	5900
2011	5600	6000
2012	5900	6100
2013	5300	6200
2014	5300	6300
2015	7100	6400
2016	7300	6500
2017	6900	6600
2018	6600	6800
2019	7000	6900
2020	N/A	7000
2030	N/A	8100
2045	N/A	9700
TRANPLAN Forecasts/Trends		

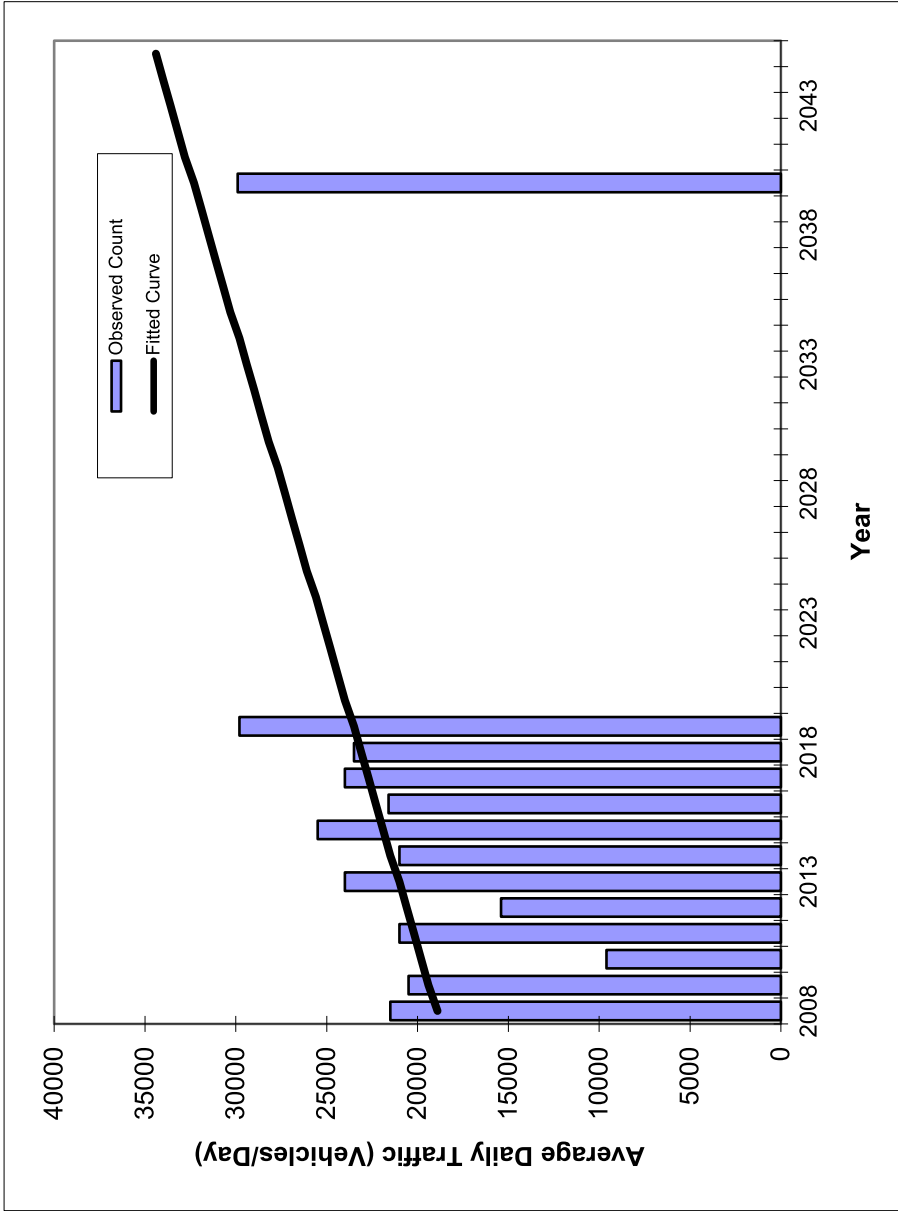
** Annual Trend Increase:	111
Trend R-squared:	28.76%
Trend Annual Historic Growth Rate:	2.11%
Trend Growth Rate (2019 to Design Year):	1.56%
Printed:	2-Mar-20
<b>Straight Line Growth Option</b>	

\*Axle-Adjusted

# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	880101
Highway:	0

FIN#	1234
Location	900030



** Annual Trend Increase:	419
Trend R-squared:	39.93%
Trend Annual Historic Growth Rate:	2.21%
Trend Growth Rate (2019 to Design Year):	1.78%
Printed:	2-Mar-20

**Straight Line Growth Option**

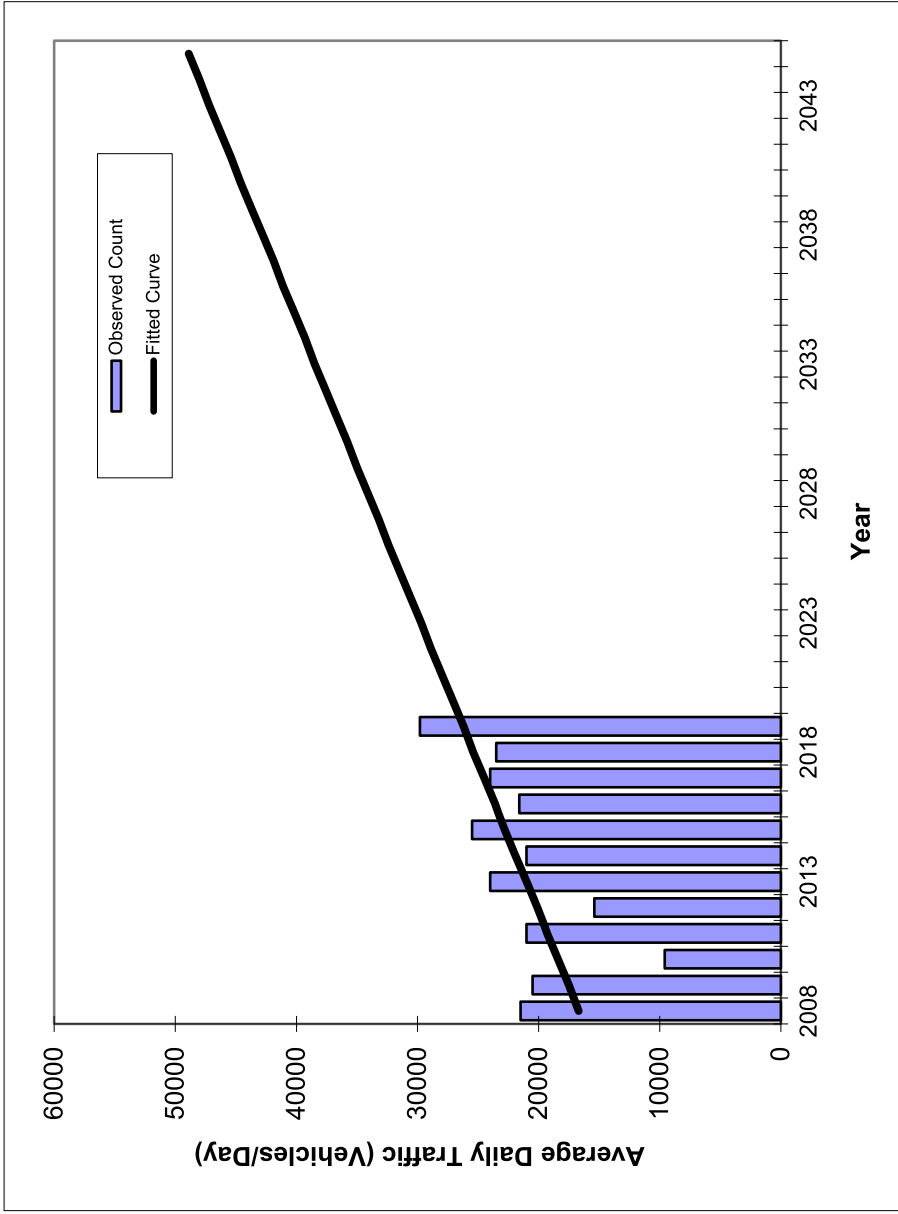
Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	21500	18900
2009	20500	19400
2010	9600	19800
2011	21000	20200
2012	15400	20600
2013	24000	21000
2014	21000	21500
2015	25500	21900
2016	21600	22300
2017	24000	22700
2018	23500	23100
2019	29800	23500
<b>2020 Opening Year Trend</b>		
2020	N/A	24000
<b>2030 Mid-Year Trend</b>		
2030	N/A	28200
<b>2045 Design Year Trend</b>		
2045	N/A	34400
<b>TRANPLAN Forecasts/Trends</b>		

\*Axle-Adjusted

# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	880101
Highway:	0

FIN#	1234
Location	900030



** Annual Trend Increase:	872
Trend R-squared:	38.60%
Trend Annual Historic Growth Rate:	5.17%
Trend Growth Rate (2019 to Design Year):	3.33%
Printed:	2-Mar-20

**Straight Line Growth Option**

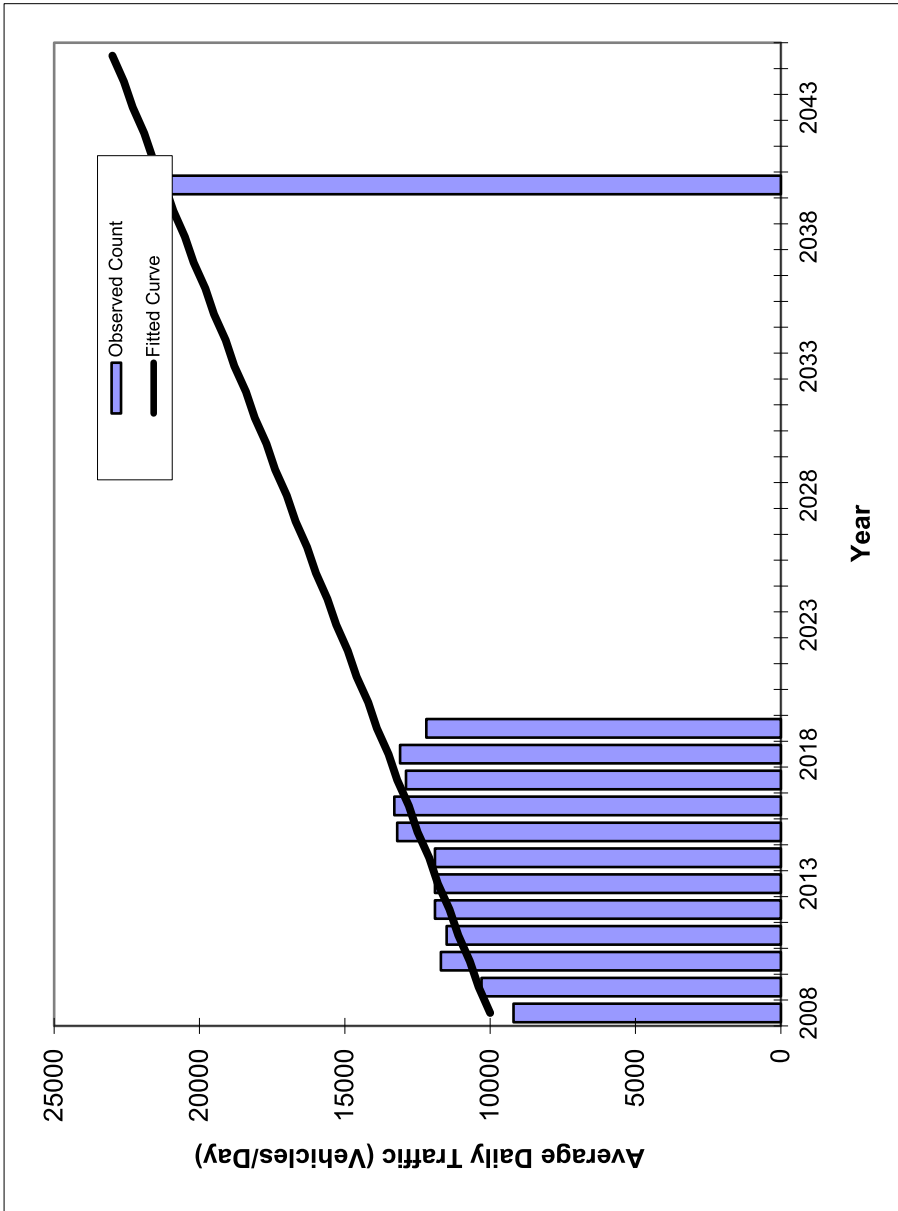
Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	21500	16700
2009	20500	17500
2010	9600	18400
2011	21000	19300
2012	15400	20100
2013	24000	21000
2014	21000	21900
2015	25500	22800
2016	21600	23600
2017	24000	24500
2018	23500	25400
2019	29800	26200
<b>2020 Opening Year Trend</b>		
2020	N/A	27100
<b>2030 Mid-Year Trend</b>		
2030	N/A	35800
<b>2045 Design Year Trend</b>		
2045	N/A	48900
<b>TRANPLAN Forecasts/Trends</b>		

\*Axle-Adjusted

# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	880108
Highway:	0

FIN#	1234
Location	900030



** Annual Trend Increase:	349
Trend R-squared:	94.09%
Trend Annual Historic Growth Rate:	3.55%
Trend Growth Rate (2019 to Design Year):	2.52%
Printed:	2-Mar-20

**Straight Line Growth Option**

Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	9200	10000
2009	10300	10400
2010	11700	10700
2011	11500	11100
2012	11900	11400
2013	11900	11800
2014	11900	12100
2015	13200	12500
2016	13300	12800
2017	12900	13200
2018	13100	13500
2019	12200	13900
<b>2020 Opening Year Trend</b>		
2020	N/A	14200
<b>2030 Mid-Year Trend</b>		
2030	N/A	17700
<b>2045 Design Year Trend</b>		
2045	N/A	23000
<b>TRANPLAN Forecasts/Trends</b>		

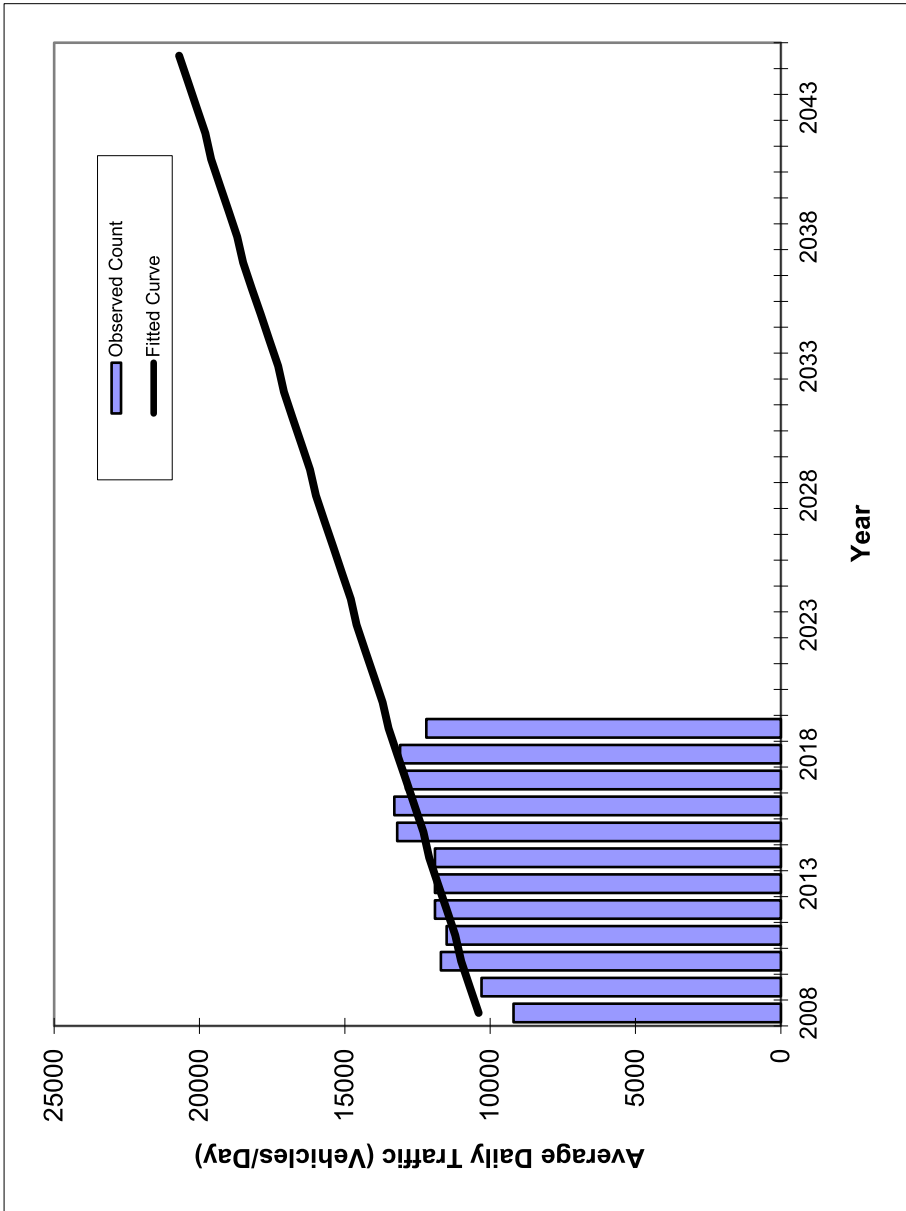
\*Axle-Adjusted



# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	880108
Highway:	0

FIN#	1234
Location	900030



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	9200	10400
2009	10300	10700
2010	11700	11000
2011	11500	11200
2012	11900	11500
2013	11900	11800
2014	11900	12100
2015	13200	12300
2016	13300	12600
2017	12900	12900
2018	13100	13200
2019	12200	13500
<b>2020 Opening Year Trend</b>		
2020	N/A	13700
<b>2030 Mid-Year Trend</b>		
2030	N/A	16500
<b>2045 Design Year Trend</b>		
2045	N/A	20700
<b>TRANPLAN Forecasts/Trends</b>		

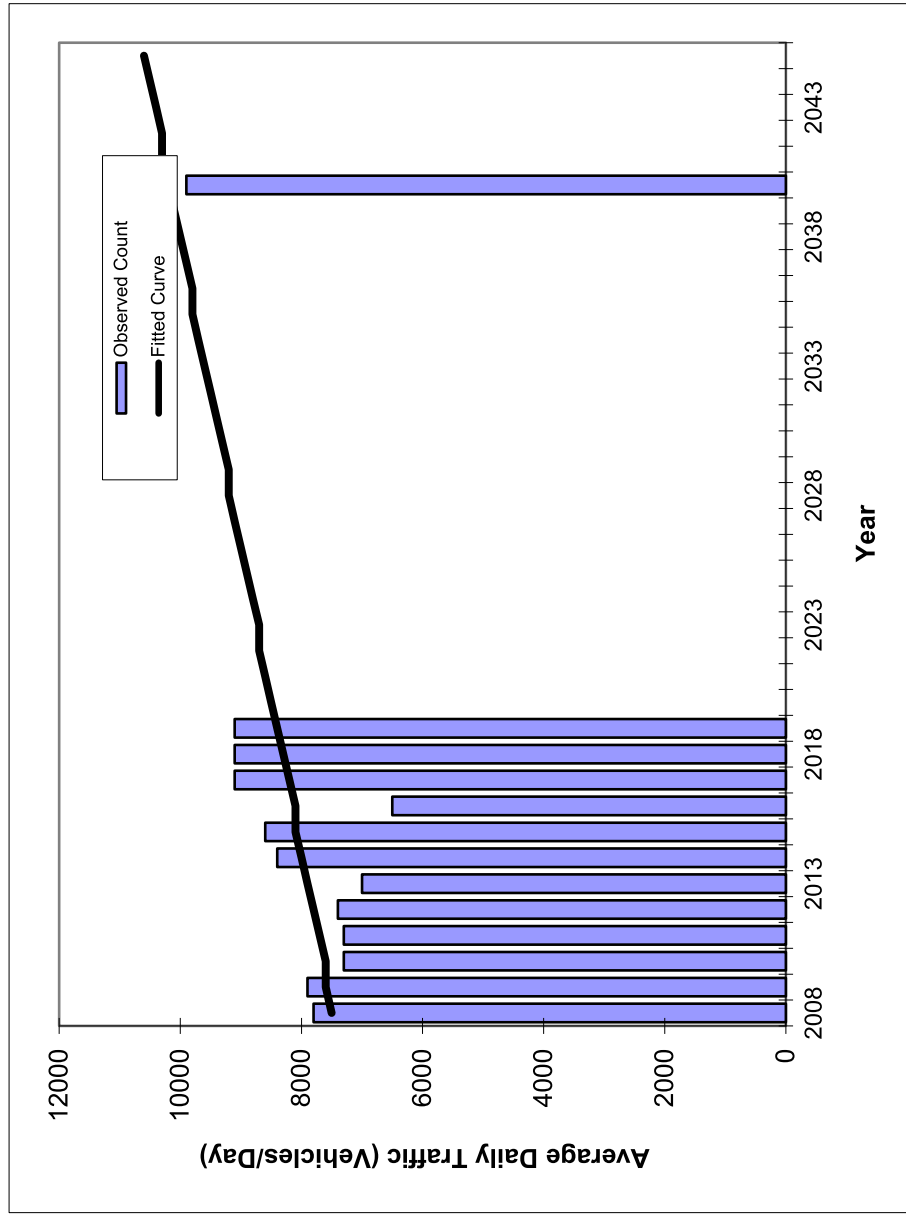
** Annual Trend Increase:	278
Trend R-squared:	68.11%
Trend Annual Historic Growth Rate:	2.71%
Trend Growth Rate (2019 to Design Year):	2.05%
Printed:	2-Mar-20
<b>Straight Line Growth Option</b>	

\*Axle-Adjusted

# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	880174
Highway:	0

FIN#	1234
Location	900030



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	7800	7500
2009	7900	7600
2010	7300	7600
2011	7300	7700
2012	7400	7800
2013	7000	7900
2014	8400	8000
2015	8600	8100
2016	6500	8100
2017	9100	8200
2018	9100	8300
2019	9100	8400
<b>2020 Opening Year Trend</b>		
2020	N/A	8500
<b>2030 Mid-Year Trend</b>		
2030	N/A	9300
<b>2045 Design Year Trend</b>		
2045	N/A	10600
<b>TRANPLAN Forecasts/Trends</b>		

** Annual Trend Increase:	84
Trend R-squared:	46.10%
Trend Annual Historic Growth Rate:	1.09%
Trend Growth Rate (2019 to Design Year):	1.01%
Printed:	2-Mar-20

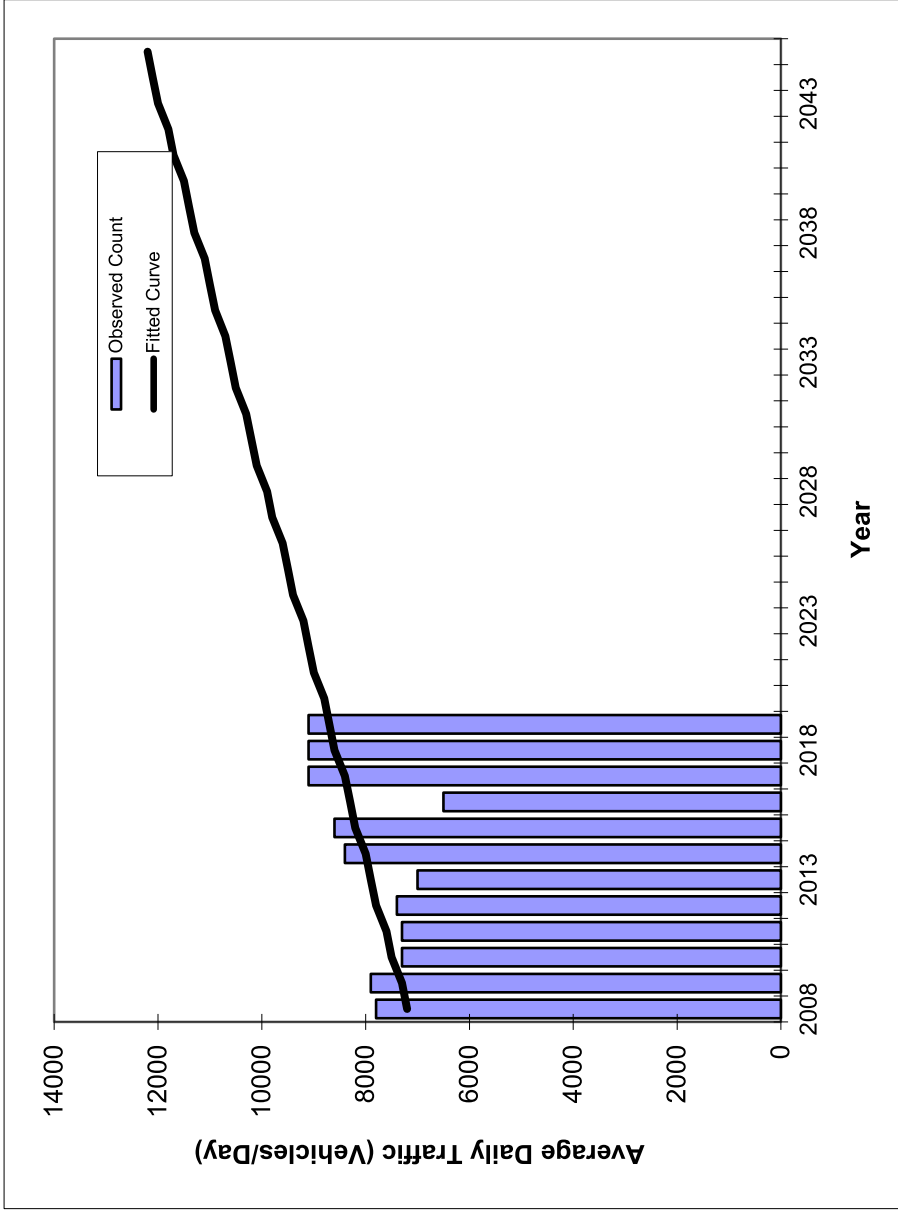
**Straight Line Growth Option**

\*Axle-Adjusted

# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	880174
Highway:	0

FIN#	1234
Location	900030



** Annual Trend Increase:	135
Trend R-squared:	29.86%
Trend Annual Historic Growth Rate:	1.89%
Trend Growth Rate (2019 to Design Year):	1.55%
Printed:	2-Mar-20

**Straight Line Growth Option**

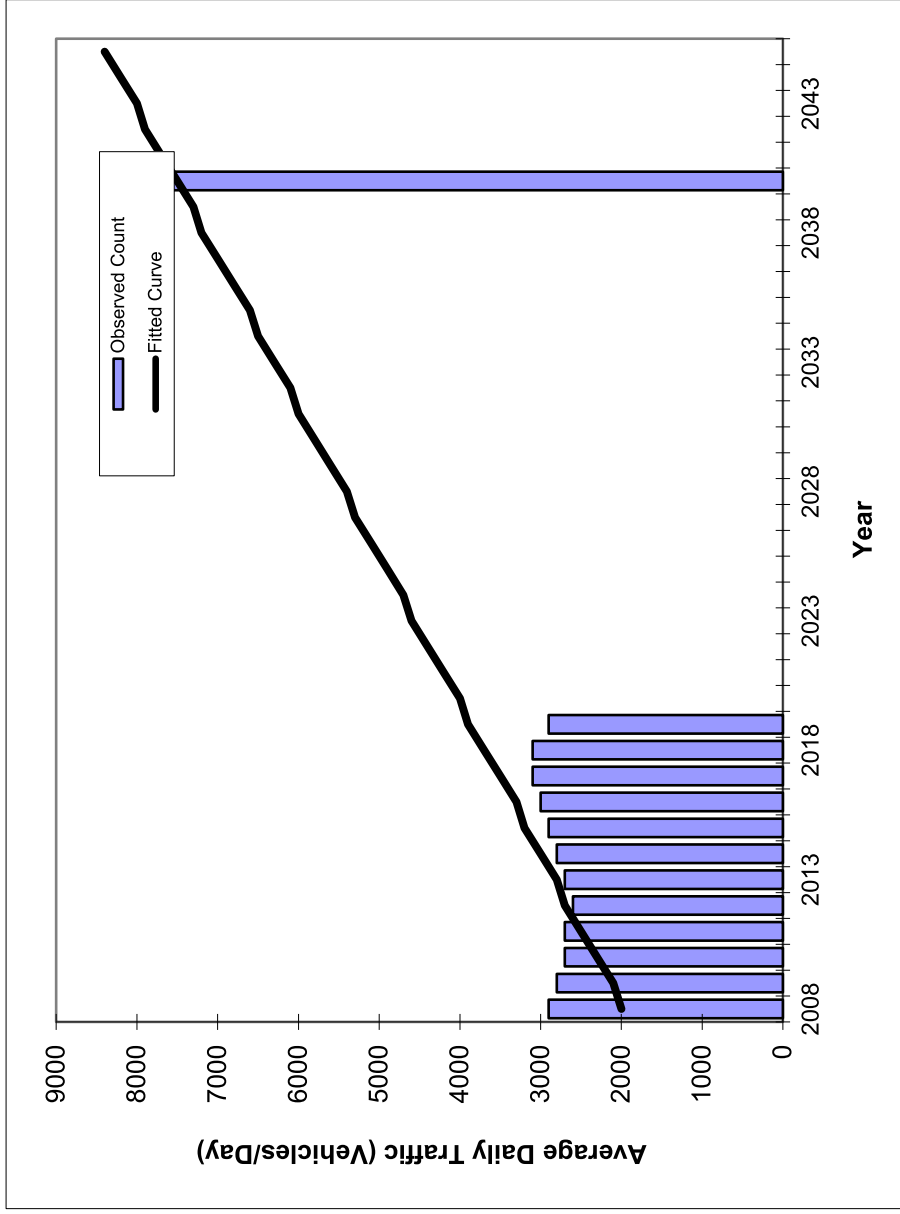
Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	7800	7200
2009	7900	7300
2010	7300	7500
2011	7300	7600
2012	7400	7800
2013	7000	7900
2014	8400	8000
2015	8600	8200
2016	6500	8300
2017	9100	8400
2018	9100	8600
2019	9100	8700
<b>2020 Opening Year Trend</b>		
2020	N/A	8800
<b>2030 Mid-Year Trend</b>		
2030	N/A	10200
<b>2045 Design Year Trend</b>		
2045	N/A	12200
<b>TRANPLAN Forecasts/Trends</b>		

\*Axle-Adjusted

# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	880291
Highway:	0

FIN#	1234
Location	900030



** Annual Trend Increase:	174
Trend R-squared:	86.01%
Trend Annual Historic Growth Rate:	8.64%
Trend Growth Rate (2019 to Design Year):	4.44%
Printed:	2-Mar-20
<b>Straight Line Growth Option</b>	

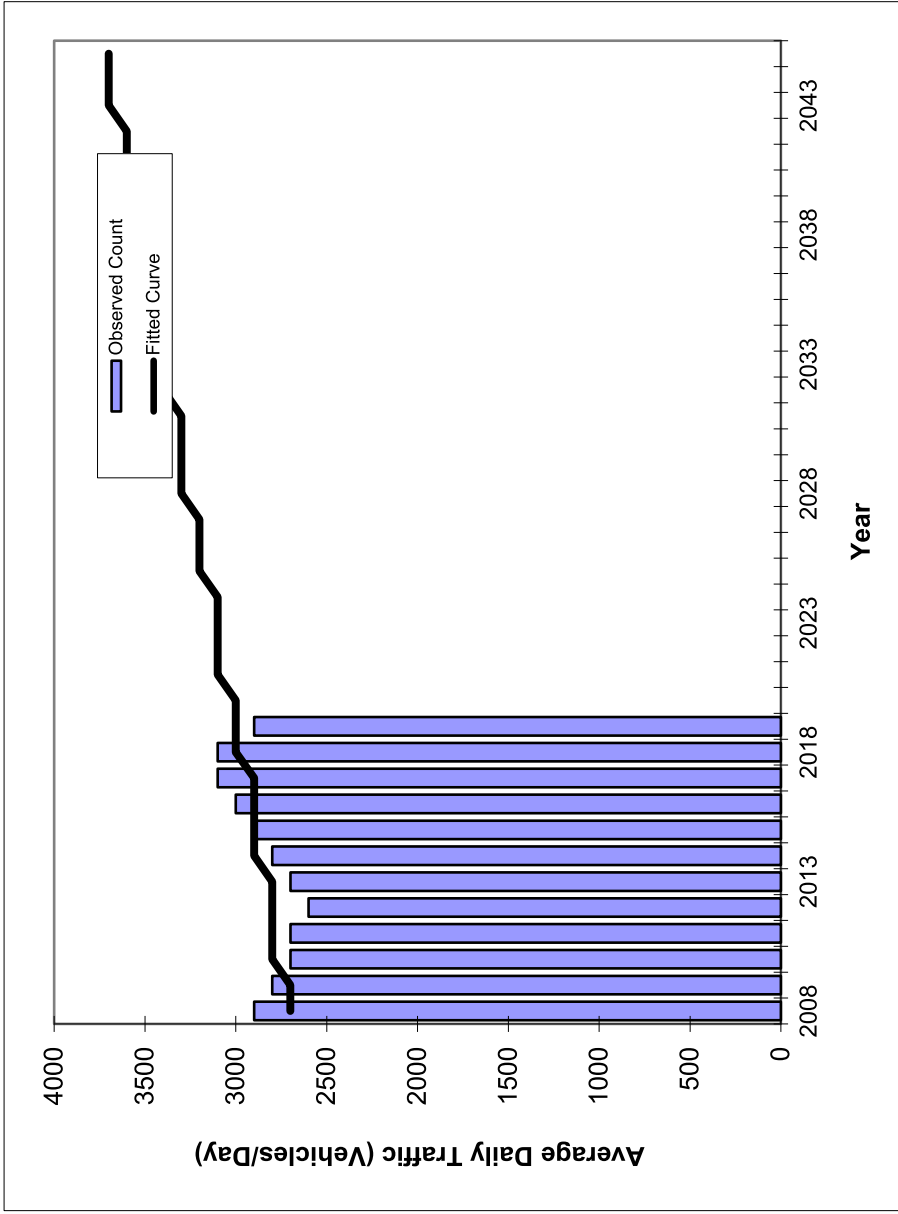
Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	2900	2000
2009	2800	2100
2010	2700	2300
2011	2700	2500
2012	2600	2700
2013	2700	2800
2014	2800	3000
2015	2900	3200
2016	3000	3300
2017	3100	3500
2018	3100	3700
2019	2900	3900
<b>2020 Opening Year Trend</b>		
2020	N/A	4000
<b>2030 Mid-Year Trend</b>		
2030	N/A	5800
<b>2045 Design Year Trend</b>		
2045	N/A	8400
<b>TRANPLAN Forecasts/Trends</b>		

\*Axle-Adjusted

# Traffic Trends - V03.a

County:	Indian River (88)
Station #:	880291
Highway:	0

FIN#	1234
Location	900030



** Annual Trend Increase:	28
Trend R-squared:	38.58%
Trend Annual Historic Growth Rate:	1.01%
Trend Growth Rate (2019 to Design Year):	0.90%
Printed:	2-Mar-20

**Straight Line Growth Option**

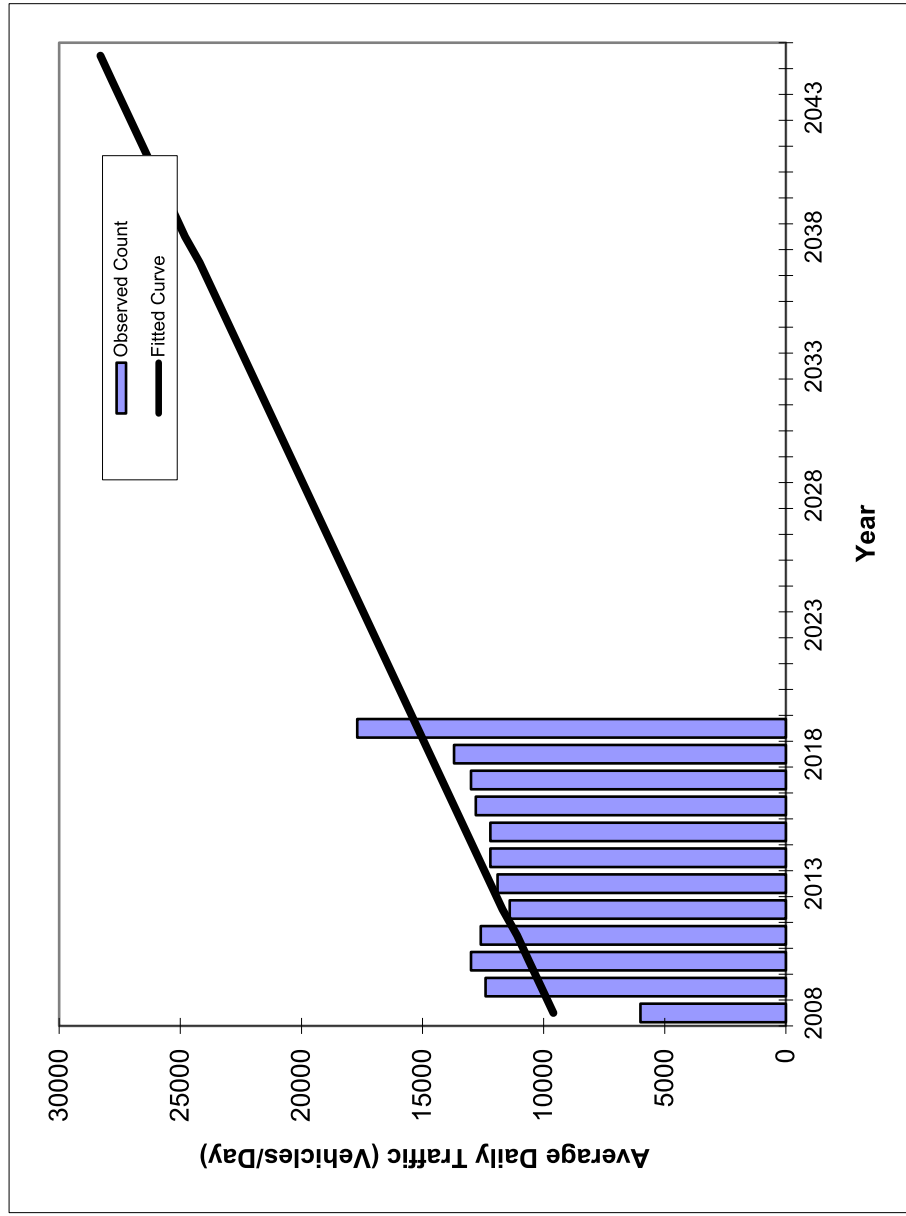
Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	2900	2700
2009	2800	2700
2010	2700	2800
2011	2700	2800
2012	2600	2800
2013	2700	2800
2014	2800	2900
2015	2900	2900
2016	3000	2900
2017	3100	2900
2018	3100	3000
2019	2900	3000
2020 Opening Year Trend		
2020	N/A	3000
2030 Mid-Year Trend		
2030	N/A	3300
2045 Design Year Trend		
2045	N/A	3700
TRANPLAN Forecasts/Trends		

\*Axle-Adjusted

# Traffic Trends - V03.a

County: Indian River (88)  
 Station #: 887035  
 Highway: 0

FIN# 1234  
 Location 900030



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	6000	9600
2009	12400	10100
2010	13000	10600
2011	12600	11100
2012	11400	11700
2013	11900	12200
2014	12200	12700
2015	12200	13200
2016	12800	13700
2017	13000	14200
2018	13700	14700
2019	17700	15200
<b>2020 Opening Year Trend</b>		
2020	N/A	15700
<b>2030 Mid-Year Trend</b>		
2030	N/A	20700
<b>2045 Design Year Trend</b>		
2045	N/A	28300
<b>TRANPLAN Forecasts/Trends</b>		

**\*\* Annual Trend Increase:** 504  
**Trend R-squared:** 49.74%  
**Trend Annual Historic Growth Rate:** 5.30%  
**Trend Growth Rate (2019 to Design Year):** 3.31%  
 Printed: 2-Mar-20

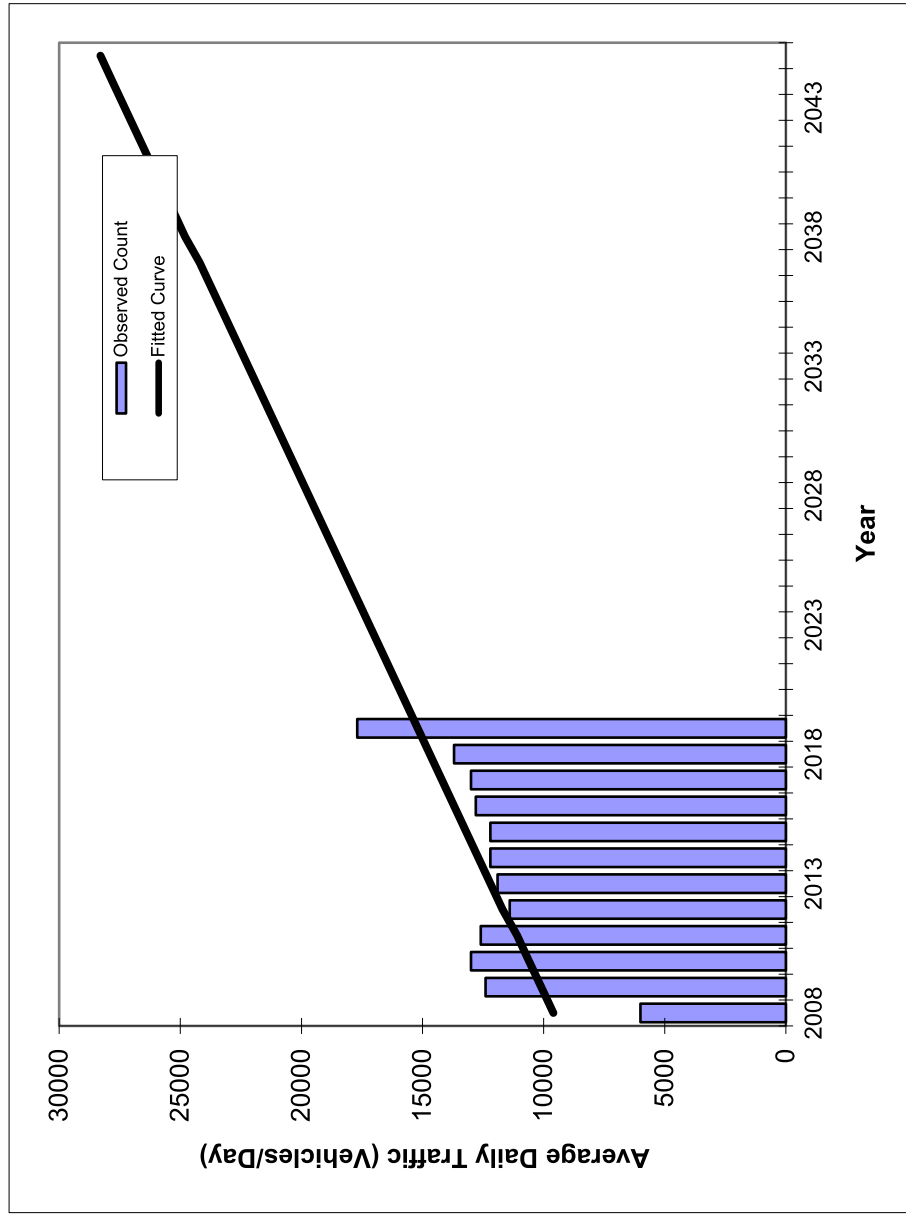
**Straight Line Growth Option**

\* Axle-Adjusted

# Traffic Trends - V03.a

County: Indian River (88)  
 Station #: 887035  
 Highway: 0

FIN# 1234  
 Location 900030



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	6000	9600
2009	12400	10100
2010	13000	10600
2011	12600	11100
2012	11400	11700
2013	11900	12200
2014	12200	12700
2015	12200	13200
2016	12800	13700
2017	13000	14200
2018	13700	14700
2019	17700	15200
<b>2020 Opening Year Trend</b>		
2020	N/A	15700
<b>2030 Mid-Year Trend</b>		
2030	N/A	20700
<b>2045 Design Year Trend</b>		
2045	N/A	28300
<b>TRANPLAN Forecasts/Trends</b>		

\*\* Annual Trend Increase: 504  
 Trend R-squared: 49.74%  
 Trend Annual Historic Growth Rate: 5.30%  
 Trend Growth Rate (2019 to Design Year): 3.31%  
 Printed: 2-Mar-20

**Straight Line Growth Option**

\* Axle-Adjusted

**Appendix G**  
**TmTool Spreadsheets**



**TMTOOL INPUT SHEET**

**Project Description:**

SECTION NO:	88070000	PREPARED BY:	
FM NO.:	445618-1	FILE:	Version 2
PROJECT LIMITS:		DATE:	2/11/2020
DESIGN YEAR:	2045	MID-DAY PEAK HOUR:	Included
INTERSECTION:	Sebastian Inlet Bridge	T-INTERSECTION?	
		MISSING Leg:	

**NOTES:**

**Historical AADTs:**

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
	2015	3,023	-	3,023	
	2016	3,086	-	3,086	
	2017	3,149	-	3,149	
	2018	2,900	-	2,900	
Model Volume:	2045				

**Growth Rates:**

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
Historic Trend GR =								
Historic + Model Trend GR =								
Base Year Model to Future Year Model GR =								
Recommended Growth Rate:	1.00%	CGR	-	CGR	1.00%	CGR	-	CGR

**Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)**

1 = Compound Growth Throughout All Years

2 = Linear Growth Throughout All Years

3 = Blend of Compound Growth First Ten Years, Linear Growth Thereafter (Based Upon the Base Year AADT)

	YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	
	2019		2,959		-		2,959			
NO. YEARS	6	2025	1.060	3,100	-	-	1.060	3,100	1.060	0
NO. YEARS	16	2035	1.160	3,400	-	-	1.160	3,400	1.160	0
NO. YEARS	26	2045	1.260	3,700	-	-	1.260	3,700	1.260	0

**TMTOOL "TURNS" REPORT**

**DESIGN HOUR TURNS CALCULATIONS**

SECTION NO: 88070000	DATE: 2/11/2020
FM NO.: 445618-1	NOTES:
PROJECT LIMITS: 0	
DESIGN YEAR: 2045	
INTERSECTION: Sebastian Inlet Bridge	
PREPARED BY:	
FILE: Version 2	

**ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:**

	<u>YEAR</u>	<u>NORTH LEG</u>	<u>EAST LEG</u>	<u>SOUTH LEG</u>	<u>WEST LEG</u>
24 HR EST. AADT	2019	2,959	-	2,959	0
24 HR EST. AADT	2025	3,100	-	3,100	0
24 HR EST. AADT	2035	3,400	-	3,400	0
24 HR EST. AADT	2045	3,700	-	3,700	0

**Percent Turns Calculated From Base Year AADTs:**

JKTURNS	<u>FROM NORTH LEG</u>			<u>FROM EAST LEG</u>			<u>FROM SOUTH LEG</u>			<u>FROM WEST LEG</u>		
	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>
2019 2-WAY ADT		2,959			-			2,959			0	
	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>
	0	2,959	-	-	-	-	-	2,959	0	2,959	-	2,959
	0%	97%	-	-	-	-	-	97%	0%	49%	-	49%
2025 2-WAY ADT		3,100			-			3,100			0	
	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>
	0	3,100	-	-	-	-	-	3,100	0	3,100	-	3,100
	0%	97%	-	-	-	-	-	97%	0%	49%	-	49%
2035 2-WAY ADT		3,400			-			3,400			0	
	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>
	0	3,400	-	-	-	-	-	3,400	0	3,400	-	3,400
	0%	97%	-	-	-	-	-	97%	0%	49%	-	49%
2045 2-WAY ADT		3,700			-			3,700			0	
	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>
	0	3,700	-	-	-	-	-	3,700	0	3,700	-	3,700
	0%	97%	-	-	-	-	-	97%	0%	49%	-	49%

**TMTOOL INPUT SHEET**

**Project Description:**

SECTION NO:	88070000	PREPARED BY:	
FM NO.:	445618-1	FILE:	Version 2
PROJECT LIMITS:		DATE:	2/11/2020
DESIGN YEAR:	2045		
INTERSECTION:	SR-A1A & CR-510		

**NOTES:**

**Historical AADTs:**

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
	2016	7,300		6,500	13,300
	2017	6,900		9,100	12,900
	2018	6,600		9,100	13,100
	2019	7,011	1,259	9,130	8,395
Model Volume:	2045				

**Growth Rates:**

	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG
Historic Trend GR =				
Historic + Model Trend GR =				
Base Year Model to Future Year Model GR =				
Recommended Growth Rate:	1.70% CGR	2.80% CGR	1.37% CGR	2.71% CGR

**Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)**

1 = Compound Growth Throughout All Years                       

2 = Linear Growth Throughout All Years

3 = Blend of Compound Growth First Ten Years, Linear Growth Thereafter (Based Upon the Base Year AADT)

	YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	
	2019		7,011		1,259		9,130		8,395	
NO. YEARS	6	2025	1.102	7,700	1.168	1,500	1.082	9,900	1.163	9,800
NO. YEARS	16	2035	1.272	8,900	1.448	1,800	1.219	11,100	1.434	12,000
NO. YEARS	26	2045	1.442	10,100	1.728	2,200	1.356	12,400	1.705	14,300

**Percent Turns Calculated From Base Year TMCs:**

TURN STUDY	FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			TOTAL
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
A.M. 7/20/2014	2-Way Pk Hr Vol:	0			0			0			0		0
% TURNS:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0
P.M. 7/20/2014	2-Way Pk Hr Vol:	0			0			0			0		0
% TURNS:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0

**TMTOOL "TURNS" REPORT**

**DESIGN HOUR TURNS CALCULATIONS**

SECTION NO: 88070000  
 FM NO.: 445618-1  
 PROJECT LIMITS: 0  
 DESIGN YEAR: 2045  
 INTERSECTION: SR-A1A & CR-510  
 PREPARED BY:  
 FILE: Version 2

DATE: 2/11/2020  
 NOTES:

**ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:**

	<u>YEAR</u>	<u>NORTH LEG</u>	<u>EAST LEG</u>	<u>SOUTH LEG</u>	<u>WEST LEG</u>
24 HR EST. AADT	2019	7,011	1,259	9,130	8,395
24 HR EST. AADT	2025	7,700	1,500	9,900	9,800
24 HR EST. AADT	2035	8,900	1,800	11,100	12,000
24 HR EST. AADT	2045	10,100	2,200	12,400	14,300

**Percent Turns Calculated From Base Year AADTs:**

JKTURNS	<u>FROM NORTH LEG</u>			<u>FROM EAST LEG</u>			<u>FROM SOUTH LEG</u>			<u>FROM WEST LEG</u>		
	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>
2019 2-WAY ADT		7,011			1,259			9,130			8,395	
	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>
	8,395	9,130	1,259	7,011	8,395	9,130	1,259	7,011	8,395	9,130	1,259	7,011
	45%	49%	7%	29%	34%	37%	8%	42%	50%	52%	7%	40%
2025 2-WAY ADT		7,700			1,500			9,900			9,800	
	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>
	9,800	9,900	1,500	7,700	9,800	9,900	1,500	7,700	9,800	9,900	1,500	7,700
	46%	47%	7%	28%	36%	36%	8%	41%	52%	52%	8%	40%
2035 2-WAY ADT		8,900			1,800			11,100			12,000	
	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>
	12,000	11,100	1,800	8,900	12,000	11,100	1,800	8,900	12,000	11,100	1,800	8,900
	48%	45%	7%	28%	38%	35%	8%	39%	53%	51%	8%	41%
2045 2-WAY ADT		10,100			2,200			12,400			14,300	
	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>
	14,300	12,400	2,200	10,100	14,300	12,400	2,200	10,100	14,300	12,400	2,200	10,100
	49%	43%	8%	27%	39%	34%	8%	38%	54%	50%	9%	41%

2-WAY		NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
2019 MIDDAY DESIGN HOUR VOLUMES	210	10	230	70					
2025 MIDDAY DESIGN HOUR VOLUMES	230	10	250	80					
2035 MIDDAY DESIGN HOUR VOLUMES	270	10	270	100					
2045 MIDDAY DESIGN HOUR VOLUMES	300	10	310	120					

DESIGN HOUR MID-DAY:	NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES	111	99	210	3	7	10	106	124	230	37	33	70
2019 VOLUME #1	111	100	211	3	3	6	106	120	226	37	34	71
2019 VOLUME #2	115	99	214	3	7	10	106	124	230	39	33	72
2019 VOLUME #3	115	99	214	3	7	10	107	124	231	38	33	71
2019 VOLUME #4	115	99	214	3	7	10	107	124	231	38	33	71
2019 VOLUME #5	114	99	213	3	7	10	108	124	232	38	33	71
CONTROL LINK VOLUMES	122	108	230	4	6	10	115	135	250	43	37	80
2025 VOLUME #1	122	105	227	4	5	9	115	128	243	43	45	88
2025 VOLUME #2	125	108	233	4	6	10	113	135	248	45	37	82
2025 VOLUME #3	125	108	233	4	6	10	114	135	249	43	37	80
2025 VOLUME #4	124	108	232	4	6	10	115	135	250	43	37	80
2025 VOLUME #5	124	108	232	4	6	10	115	135	250	43	37	80
CONTROL LINK VOLUMES	141	129	270	4	6	10	129	141	270	53	47	100
2035 VOLUME #1	141	119	260	4	7	11	129	148	277	53	54	107
2035 VOLUME #2	133	129	262	4	6	10	133	141	274	53	47	100
2035 VOLUME #3	135	129	264	4	6	10	131	141	272	52	47	99
2035 VOLUME #4	137	129	266	4	6	10	130	141	271	52	47	99
2035 VOLUME #5	138	129	267	4	6	10	129	141	270	52	47	99
CONTROL LINK VOLUMES	160	140	300	5	5	10	144	166	310	63	57	120
2045 VOLUME #1	160	131	291	5	9	14	144	166	310	63	66	129
2045 VOLUME #2	155	140	295	5	5	10	144	166	310	64	57	121
2045 VOLUME #3	157	140	297	5	5	10	144	166	310	62	57	119
2045 VOLUME #4	157	140	297	5	5	10	144	166	310	62	57	119
2045 VOLUME #5	158	140	298	5	5	10	143	166	309	62	57	119
	NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2019 MIDDAY TURNS 1	12	98	1	1	1	1	1	84	21	21	1	15
2019 MIDDAY TURNS 2	12	101	2	1	1	1	2	83	20	22	2	15
2019 MIDDAY TURNS 3	11	101	2	1	1	1	2	84	21	21	2	14
2019 MIDDAY TURNS 4	11	101	2	1	1	1	2	84	21	22	2	14
2019 MIDDAY TURNS 5	11	101	2	1	1	1	2	84	21	22	2	14
2025 MIDDAY TURNS 1	18	103	2	1	1	1	2	87	26	24	1	17
2025 MIDDAY TURNS 2	14	108	2	1	1	1	2	89	22	25	2	18
2025 MIDDAY TURNS 3	14	109	2	1	1	2	2	90	22	25	2	17
2025 MIDDAY TURNS 4	14	108	2	1	1	2	2	90	22	25	2	17
2025 MIDDAY TURNS 5	14	108	2	1	1	2	2	90	22	25	2	16
2035 MIDDAY TURNS 1	22	117	2	1	1	1	2	96	31	30	2	22
2035 MIDDAY TURNS 2	19	111	2	1	1	1	2	104	27	28	2	23
2035 MIDDAY TURNS 3	20	113	2	2	1	1	2	104	26	27	2	24
2035 MIDDAY TURNS 4	21	114	2	2	1	1	2	103	25	26	2	24
2035 MIDDAY TURNS 5	21	114	2	2	1	1	2	103	25	26	2	25
2045 MIDDAY TURNS 1	28	129	3	2	2	2	3	104	37	35	2	26
2045 MIDDAY TURNS 2	24	129	2	2	1	2	2	111	32	35	1	27
2045 MIDDAY TURNS 3	24	130	2	2	1	2	2	111	31	34	1	27
2045 MIDDAY TURNS 4	25	131	2	2	2	2	2	111	31	34	1	27
2045 MIDDAY TURNS 5	25	131	2	2	2	2	2	111	31	33	1	27

**TMTOOL INPUT SHEET**

**Project Description:**

SECTION NO:	88070000	PREPARED BY:	
FM NO:	445618-1	FILE:	Version 2
PROJECT LIMITS:		DATE:	2/11/2020
DESIGN YEAR:	2045		
INTERSECTION:	CR-510 & US-1		

**NOTES:**

**Historical AADTs:**

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
	2015	25,500	13,300	25,500	12,800
	2016	21,600	12,900	21,600	13,000
	2017	24,000	13,100	24,000	13,700
	2018	21,614	12,151	29,822	17,707
Model Volume:	2045				

**Growth Rates:**

	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG
Historic Trend GR =				
Historic + Model Trend GR =				
Base Year Model to Future Year Model GR =				
Recommended Growth Rate:	1.79% CGR	2.71% CGR	1.98% CGR	2.71% CGR

**Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)**

1 = Compound Growth Throughout All Years				
2 = Linear Growth Throughout All Years	2	2	2	2
3 = Blend of Compound Growth First Ten Years, Linear Growth Thereafter (Based Upon the Base Year AADT)				

	YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	
	2019		21,614		12,151		29,822		17,707	
NO. YEARS	6	2025	1.107	23,900	1.163	14,100	1.119	33,400	1.163	20,600
NO. YEARS	16	2035	1.286	27,800	1.434	17,400	1.317	39,300	1.434	25,400
NO. YEARS	26	2045	1.465	31,700	1.705	20,700	1.515	45,200	1.705	30,200

**Percent Turns Calculated From Base Year TMCs:**

TURN STUDY	FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			TOTAL
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
A.M.	2-Way Pk Hr Vol:	0			0			0			0		0
% TURNS:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
P.M.	2-Way Pk Hr Vol:	0			0			0			0		0
% TURNS:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	

**TMTOOL "TURNS" REPORT**

**DESIGN HOUR TURNS CALCULATIONS**

SECTION NO: 88070000  
 FM NO.: 445618-1  
 PROJECT LIMITS: 0  
 DESIGN YEAR: 2045  
 INTERSECTION: CR-510 & US-1  
 PREPARED BY:  
 FILE: Version 2

DATE: 2/11/2020  
 NOTES:

**ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:**

	<u>YEAR</u>	<u>NORTH LEG</u>	<u>EAST LEG</u>	<u>SOUTH LEG</u>	<u>WEST LEG</u>
24 HR EST. AADT	2019	21,614	12,151	29,822	17,707
24 HR EST. AADT	2025	23,900	14,100	33,400	20,600
24 HR EST. AADT	2035	27,800	17,400	39,300	25,400
24 HR EST. AADT	2045	31,700	20,700	45,200	30,200

**Percent Turns Calculated From Base Year AADTs:**

JKTURNS	<u>FROM NORTH LEG</u>			<u>FROM EAST LEG</u>			<u>FROM SOUTH LEG</u>			<u>FROM WEST LEG</u>		
	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>
2019 2-WAY ADT	17,707	29,822	12,151	21,614	17,707	29,822	12,151	21,614	17,707	29,822	12,151	21,614
	30%	50%	20%	31%	26%	43%	24%	42%	34%	47%	19%	34%
2025 2-WAY ADT	20,600	33,400	14,100	23,900	20,600	33,400	14,100	23,900	20,600	33,400	14,100	23,900
	30%	49%	21%	31%	26%	43%	24%	41%	35%	47%	20%	33%
2035 2-WAY ADT	25,400	39,300	17,400	27,800	25,400	39,300	17,400	27,800	25,400	39,300	17,400	27,800
	31%	48%	21%	30%	27%	42%	25%	39%	36%	47%	21%	33%
2045 2-WAY ADT	30,200	45,200	20,700	31,700	30,200	45,200	20,700	31,700	30,200	45,200	20,700	31,700
	31%	47%	22%	30%	28%	42%	25%	38%	37%	46%	21%	32%

2-WAY		NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
2019 MIDDAY DESIGN HOUR VOLUMES	210	10	230	70					
2025 MIDDAY DESIGN HOUR VOLUMES	230	10	250	80					
2035 MIDDAY DESIGN HOUR VOLUMES	270	10	300	100					
2045 MIDDAY DESIGN HOUR VOLUMES	310	10	340	120					

DESIGN HOUR MID-DAY:	NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES	111	99	210	3	7	10	106	124	230	37	33	70
2019 VOLUME #1	111	100	211	3	3	6	106	120	226	37	34	71
2019 VOLUME #2	115	99	214	3	7	10	106	124	230	39	33	72
2019 VOLUME #3	115	99	214	3	7	10	107	124	231	38	33	71
2019 VOLUME #4	115	99	214	3	7	10	107	124	231	38	33	71
2019 VOLUME #5	114	99	213	3	7	10	108	124	232	38	33	71
CONTROL LINK VOLUMES	123	107	230	3	7	10	119	131	250	43	37	80
2025 VOLUME #1	123	108	231	3	9	12	119	129	248	43	42	85
2025 VOLUME #2	122	107	229	3	7	10	114	131	245	43	37	80
2025 VOLUME #3	122	107	229	3	7	10	115	131	246	42	37	79
2025 VOLUME #4	121	107	228	3	7	10	116	131	247	42	37	79
2025 VOLUME #5	121	107	228	3	7	10	116	131	247	42	37	79
CONTROL LINK VOLUMES	143	127	270	4	6	10	140	160	300	53	47	100
2035 VOLUME #1	143	126	269	4	13	17	140	150	290	53	51	104
2035 VOLUME #2	147	127	274	4	6	10	135	160	295	54	47	101
2035 VOLUME #3	146	127	273	4	6	10	137	160	297	53	47	100
2035 VOLUME #4	145	127	272	4	6	10	138	160	298	53	47	100
2035 VOLUME #5	144	127	271	4	6	10	139	160	299	53	47	100
CONTROL LINK VOLUMES	163	147	310	5	5	10	161	179	340	63	57	120
2045 VOLUME #1	163	143	306	5	19	24	161	169	330	63	61	124
2045 VOLUME #2	164	147	311	5	5	10	156	179	335	63	57	120
2045 VOLUME #3	163	147	310	5	5	10	157	179	336	63	57	120
2045 VOLUME #4	163	147	310	5	5	10	158	179	337	62	57	119
2045 VOLUME #5	162	147	309	5	5	10	158	179	337	62	57	119
	NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2019 MIDDAY TURNS 1	12	98	1	1	1	1	1	84	21	21	1	15
2019 MIDDAY TURNS 2	12	101	2	1	1	1	2	83	20	22	2	15
2019 MIDDAY TURNS 3	11	101	2	1	1	1	2	84	21	21	2	14
2019 MIDDAY TURNS 4	11	101	2	1	1	1	2	84	21	22	2	14
2019 MIDDAY TURNS 5	11	101	2	1	1	1	2	84	21	22	2	14
2025 MIDDAY TURNS 1	16	104	4	1	1	1	4	90	25	24	2	17
2025 MIDDAY TURNS 2	14	106	3	1	1	1	3	89	22	24	1	17
2025 MIDDAY TURNS 3	14	106	3	1	1	1	3	90	23	24	1	16
2025 MIDDAY TURNS 4	13	105	3	1	1	1	3	90	23	24	1	16
2025 MIDDAY TURNS 5	13	105	3	1	1	1	3	90	23	25	1	16
2035 MIDDAY TURNS 1	19	119	5	1	1	1	5	104	31	29	3	21
2035 MIDDAY TURNS 2	18	127	2	1	1	1	3	105	28	31	1	21
2035 MIDDAY TURNS 3	17	127	2	1	1	2	3	105	29	32	1	20
2035 MIDDAY TURNS 4	16	126	2	1	1	2	3	106	29	32	1	20
2035 MIDDAY TURNS 5	16	126	2	1	1	2	3	106	30	32	1	20
2045 MIDDAY TURNS 1	23	133	7	2	2	2	8	117	36	35	4	25
2045 MIDDAY TURNS 2	22	140	2	2	2	2	2	120	34	37	1	25
2045 MIDDAY TURNS 3	21	140	2	2	1	2	2	121	34	37	1	25
2045 MIDDAY TURNS 4	21	140	2	2	1	2	2	121	35	37	1	24
2045 MIDDAY TURNS 5	21	140	2	2	1	2	2	121	35	37	1	24



**TMTOOL INPUT SHEET**

**Project Description:**

SECTION NO:	88070000	PREPARED BY:	
FM NO:	445618-1	FILE:	Version 2
PROJECT LIMITS:		DATE:	2/11/2020
DESIGN YEAR:	2045	T-INTERSECTION?	Yes
INTERSECTION:	Sebastian Inlet State Park -North Driveway	MISSING Leg:	East Leg

**NOTES:**

**Historical AADTs:**

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
	2016		-		
	2017		-		
	2018		-		
	2019		-		
Model Volume:	2045		-		

**Growth Rates:**

	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG
Historic Trend GR =				
Historic + Model Trend GR =				
Base Year Model to Future Year Model GR =				
Recommended Growth Rate:	1.00% CGR	- CGR	1.00% CGR	1.00% CGR

**Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)**

- 1 = Compound Growth Throughout All Years
- 2 = Linear Growth Throughout All Years
- 3 = Blend of Compound Growth First Ten Years, Linear Growth Thereafter (Based Upon the Base Year AADT)

	YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	
	2019		2,959		-		2,959		400	
NO. YEARS	6	2025	1.060	3,100	-	-	1.060	3,100	1.060	400
NO. YEARS	16	2035	1.160	3,400	-	-	1.160	3,400	1.160	500
NO. YEARS	26	2045	1.260	3,700	-	-	1.260	3,700	1.260	500

**Percent Turns Calculated From Base Year TMCs:**

TURN STUDY	FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			TOTAL
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
A.M.	2-Way Pk Hr Vol:	207						227			76		
12/10/2019		12	103	-	-	-	-	75	26	21	-	15	258
% TURNS:		10%	89%	-	-	-	-	74%	25%	57%	-	41%	
P.M.	2-Way Pk Hr Vol:	245						243			70		
12/100/2019		19	86	-	-	-	-	122	16	17	-	16	282
% TURNS:		18%	81%	-	-	-	-	88%	12%	50%	-	47%	

**Est. % Turns Calculated From Base Year AADTs & TMCs:**

**SUGGESTED STARTING POINTS**

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
A.M.	2019	10%	89%	-	-	-	-	-	74%	25%	57%	-	41%
	2025	10%	89%	-	-	-	-	-	75%	24%	56%	-	41%
	2035	11%	88%	-	-	-	-	-	75%	24%	56%	-	42%
	2045	11%	88%	-	-	-	-	-	76%	23%	56%	-	42%
P.M.	2019	18%	81%	-	-	-	-	-	88%	12%	50%	-	47%
	2025	17%	82%	-	-	-	-	-	88%	11%	50%	-	47%
	2035	17%	82%	-	-	-	-	-	87%	12%	50%	-	47%
	2045	17%	82%	-	-	-	-	-	87%	12%	50%	-	47%

**K & D FACTORS:**

		NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
		AM	PM	AM	PM	AM	PM	AM	PM
K FACTOR	2019	9.0%	9.0%	-	-	9.0%	9.0%	9.0%	9.0%
	2025	9.0%	9.0%	-	-	9.0%	9.0%	9.0%	9.0%
	2035	9.0%	9.0%	-	-	9.0%	9.0%	9.0%	9.0%
	2045	9.0%	9.0%	-	-	9.0%	9.0%	9.0%	9.0%
D FACTOR	2019	56.0%	43.3%	-	-	44.9%	57.2%	48.7%	48.6%
	2025	56.0%	43.3%	-	-	44.9%	57.2%	48.7%	48.6%
	2035	56.0%	43.3%	-	-	44.9%	57.2%	48.7%	48.6%
	2045	56.0%	43.3%	-	-	44.9%	57.2%	48.7%	48.6%

**TMTOOL "TURNS" REPORT**

**DESIGN HOUR TURNS CALCULATIONS**

SECTION NO: 88070000	DATE: 2/11/2020
FM NO.: 445618-1	NOTES:
PROJECT LIMITS: 0	
DESIGN YEAR: 2045	
INTERSECTION: Sebastian Inlet State Park -North Driveway	
PREPARED BY:	
FILE: Version 2	

**ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:**

	<u>YEAR</u>	<u>NORTH LEG</u>	<u>EAST LEG</u>	<u>SOUTH LEG</u>	<u>WEST LEG</u>
24 HR EST. AADT	2019	2,959	-	2,959	400
24 HR EST. AADT	2025	3,100	-	3,100	400
24 HR EST. AADT	2035	3,400	-	3,400	500
24 HR EST. AADT	2045	3,700	-	3,700	500

**Percent Turns Calculated From Base Year AADTs:**

JKTURNS		<u>FROM NORTH LEG</u>			<u>FROM EAST LEG</u>			<u>FROM SOUTH LEG</u>			<u>FROM WEST LEG</u>		
		<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>
2019	2-WAY ADT	2,959	-	-	-	-	2,959	-	-	400	-	-	2,959
		<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>
		400	2,959	-	-	-	-	-	2,959	400	2,959	-	2,959
2025	2-WAY ADT	3,100	-	-	-	-	3,100	-	-	400	-	-	3,100
		<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>
		400	3,100	-	-	-	-	-	3,100	400	3,100	-	3,100
2035	2-WAY ADT	3,400	-	-	-	-	3,400	-	-	500	-	-	3,400
		<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>
		500	3,400	-	-	-	-	-	3,400	500	3,400	-	3,400
2045	2-WAY ADT	3,700	-	-	-	-	3,700	-	-	500	-	-	3,700
		<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>
		500	3,700	-	-	-	-	-	3,700	500	3,700	-	3,700

A.M. DESIGN HR. TURNS		<u>NORTH LEG</u>			<u>EAST LEG</u>			<u>SOUTH LEG</u>			<u>WEST LEG</u>			
		<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	
2019	EST. TURNS	8	140	-	-	-	-	-	111	13	9	-	9	
		2025	EST. TURNS	8	145	-	-	-	-	114	13	9	-	9
		2035	EST. TURNS	11	161	-	-	-	-	126	17	11	-	11
		2045	EST. TURNS	11	168	-	-	-	-	131	17	11	-	10
P.M. DESIGN HR. TURNS	EST. TURNS	12	108	-	-	-	-	-	146	11	9	-	8	
		2025	EST. TURNS	12	99	-	-	-	-	150	11	9	-	8
		2035	EST. TURNS	14	122	-	-	-	-	166	13	12	-	10
		2045	EST. TURNS	14	128	-	-	-	-	175	13	11	-	10

LINK VOLUME CHECK		<u>NORTH LEG</u>			<u>EAST LEG</u>			<u>SOUTH LEG</u>			<u>WEST LEG</u>			
		<u>FROM</u>	<u>TO</u>	<u>LINK</u>	<u>FROM</u>	<u>TO</u>	<u>LINK</u>	<u>FROM</u>	<u>TO</u>	<u>LINK</u>	<u>FROM</u>	<u>TO</u>	<u>LINK</u>	
<b>DESIGN HOUR A.M.:</b>	CONTROL LINK VOLUMES	149	121	270	-	-	-	120	150	270	18	22	40	
	2019	TURN SUMMARY	151	121	272	-	-	-	127	150	277	19	22	41
	CONTROL LINK VOLUMES	156	124	280	-	-	-	125	155	280	18	22	40	
	2025	TURN SUMMARY	157	124	281	-	-	-	130	155	285	18	22	40
<b>DESIGN HOUR P.M.:</b>	CONTROL LINK VOLUMES	171	139	310	-	-	-	137	173	310	22	28	50	
	2035	TURN SUMMARY	175	139	314	-	-	-	146	173	319	23	28	51
	CONTROL LINK VOLUMES	187	143	330	-	-	-	150	180	330	22	28	50	
	2045	TURN SUMMARY	183	143	326	-	-	-	151	180	331	22	28	50
CONTROL LINK VOLUMES	115	155	270	-	-	-	152	118	270	17	23	40		
2019	TURN SUMMARY	122	155	277	-	-	-	160	118	278	18	23	41	
CONTROL LINK VOLUMES	121	159	280	-	-	-	160	120	280	17	23	40		
2025	TURN SUMMARY	113	159	272	-	-	-	164	109	273	17	23	40	
CONTROL LINK VOLUMES	132	178	310	-	-	-	175	135	310	22	28	50		
2035	TURN SUMMARY	139	178	317	-	-	-	183	135	318	23	28	51	
CONTROL LINK VOLUMES	144	186	330	-	-	-	190	140	330	22	28	50		
2045	TURN SUMMARY	145	186	331	-	-	-	191	140	331	22	28	50	

Note: Boxed number indicates manual adjustment.

2-WAY	NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
2019 AM DESIGN HOUR VOLUMES	270	10	270	40								
2025 AM DESIGN HOUR VOLUMES	280	10	280	40								
2035 AM DESIGN HOUR VOLUMES	310	10	310	50								
2045 AM DESIGN HOUR VOLUMES	330	10	330	50								
<b>DESIGN HOUR A.M.:</b>	<b>NORTH LEG</b>			<b>EAST LEG</b>			<b>SOUTH LEG</b>			<b>WEST LEG</b>		
	<b>FROM</b>	<b>TO</b>	<b>LINK</b>	<b>FROM</b>	<b>TO</b>	<b>LINK</b>	<b>FROM</b>	<b>TO</b>	<b>LINK</b>	<b>FROM</b>	<b>TO</b>	<b>LINK</b>
CONTROL LINK VOLUMES	149	121	270	3	7	10	120	150	270	18	22	40
2019 VOLUME #1	149	97	246	3	3	6	120	144	264	18	47	65
2019 VOLUME #2	149	121	270	3	7	10	128	150	278	21	22	43
2019 VOLUME #3	150	121	271	3	7	10	128	150	278	19	22	41
2019 VOLUME #4	151	121	272	3	7	10	127	150	277	19	22	41
2019 VOLUME #5	151	121	272	3	7	10	127	150	277	19	22	41
CONTROL LINK VOLUMES	156	124	280	3	7	10	125	155	280	18	22	40
2025 VOLUME #1	156	102	258	3	4	7	125	149	274	18	47	65
2025 VOLUME #2	154	124	278	3	7	10	131	155	286	20	22	42
2025 VOLUME #3	156	124	280	3	7	10	131	155	286	18	22	40
2025 VOLUME #4	156	124	280	3	7	10	130	155	285	18	22	40
2025 VOLUME #5	157	124	281	3	7	10	130	155	285	18	22	40
CONTROL LINK VOLUMES	171	139	310	3	7	10	137	173	310	22	28	50
2035 VOLUME #1	171	113	284	3	4	7	137	164	301	22	52	74
2035 VOLUME #2	172	139	311	3	7	10	147	173	320	25	28	53
2035 VOLUME #3	174	139	313	3	7	10	147	173	320	23	28	51
2035 VOLUME #4	175	139	314	3	7	10	146	173	319	23	28	51
2035 VOLUME #5	175	139	314	3	7	10	146	173	319	23	28	51
CONTROL LINK VOLUMES	187	143	330	3	7	10	150	180	330	22	28	50
2045 VOLUME #1	187	124	311	3	4	7	150	178	328	22	55	77
2045 VOLUME #2	180	143	323	3	7	10	152	180	332	24	28	52
2045 VOLUME #3	182	143	325	3	7	10	152	180	332	22	28	50
2045 VOLUME #4	182	143	325	3	7	10	151	180	331	22	28	50
2045 VOLUME #5	183	143	326	3	7	10	151	180	331	22	28	50
	<b>NORTH LEG</b>			<b>EAST LEG</b>			<b>SOUTH LEG</b>			<b>WEST LEG</b>		
	<b>RIGHT</b>	<b>THRU</b>	<b>LEFT</b>	<b>RIGHT</b>	<b>THRU</b>	<b>LEFT</b>	<b>RIGHT</b>	<b>THRU</b>	<b>LEFT</b>	<b>RIGHT</b>	<b>THRU</b>	<b>LEFT</b>
2019 A.M. TURNS 1	15	132	1	1	1	1	1	88	31	10	0	7
2019 A.M. TURNS 2	7	138	3	1	0	1	3	111	14	11	1	9
2019 A.M. TURNS 3	8	140	3	1	1	1	3	111	14	9	1	8
2019 A.M. TURNS 4	8	140	3	1	1	1	3	111	14	9	1	9
2019 A.M. TURNS 5	8	140	3	2	1	1	3	111	13	9	1	9
2025 A.M. TURNS 1	16	138	2	1	1	1	1	93	30	10	0	7
2025 A.M. TURNS 2	8	143	3	1	0	1	3	114	14	10	1	9
2025 A.M. TURNS 3	8	145	3	1	0	1	3	114	14	9	1	8
2025 A.M. TURNS 4	8	145	3	1	0	1	3	114	13	9	1	9
2025 A.M. TURNS 5	8	145	3	1	0	1	3	114	13	9	1	9
2035 A.M. TURNS 1	18	151	2	1	1	1	2	103	33	12	1	9
2035 A.M. TURNS 2	10	159	3	1	0	1	3	126	18	13	1	11
2035 A.M. TURNS 3	10	160	3	1	1	1	3	127	17	11	1	11
2035 A.M. TURNS 4	11	161	3	1	1	1	3	127	17	11	1	11
2035 A.M. TURNS 5	11	161	3	2	1	1	3	126	17	11	1	11
2045 A.M. TURNS 1	20	165	2	1	1	1	2	113	35	12	1	9
2045 A.M. TURNS 2	10	167	3	1	0	1	3	131	18	12	1	11
2045 A.M. TURNS 3	10	168	3	1	0	1	3	132	17	11	1	10
2045 A.M. TURNS 4	11	168	3	1	0	1	3	131	17	11	1	10
2045 A.M. TURNS 5	11	168	4	1	0	1	3	131	17	11	1	10

2-WAY		NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
2019 MIDDAY DESIGN HOUR VOLUMES	210	10	230	70					
2025 MIDDAY DESIGN HOUR VOLUMES	220	10	240	70					
2035 MIDDAY DESIGN HOUR VOLUMES	240	10	260	90					
2045 MIDDAY DESIGN HOUR VOLUMES	260	10	280	90					

DESIGN HOUR MID-DAY:	NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES	111	99	210	3	7	10	106	124	230	37	33	70
2019 VOLUME #1	111	100	211	3	3	6	106	120	226	37	34	71
2019 VOLUME #2	115	99	214	3	7	10	106	124	230	39	33	72
2019 VOLUME #3	115	99	214	3	7	10	107	124	231	38	33	71
2019 VOLUME #4	115	99	214	3	7	10	107	124	231	38	33	71
2019 VOLUME #5	114	99	213	3	7	10	108	124	232	38	33	71
CONTROL LINK VOLUMES	116	104	220	3	7	10	111	129	240	37	33	70
2025 VOLUME #1	116	105	221	3	3	6	111	124	235	37	35	72
2025 VOLUME #2	121	104	225	3	7	10	110	129	239	39	33	72
2025 VOLUME #3	121	104	225	3	7	10	111	129	240	38	33	71
2025 VOLUME #4	120	104	224	3	7	10	112	129	241	38	33	71
2025 VOLUME #5	120	104	224	3	7	10	112	129	241	38	33	71
CONTROL LINK VOLUMES	128	112	240	3	7	10	122	138	260	46	44	90
2035 VOLUME #1	128	118	246	3	4	7	122	139	261	46	38	84
2035 VOLUME #2	130	112	242	3	7	10	122	138	260	46	44	90
2035 VOLUME #3	130	112	242	3	7	10	122	138	260	46	44	90
2035 VOLUME #4	129	112	241	3	7	10	122	138	260	46	44	90
2035 VOLUME #5	129	112	241	3	7	10	122	138	260	46	44	90
CONTROL LINK VOLUMES	139	121	260	3	7	10	133	147	280	46	44	90
2045 VOLUME #1	139	127	266	3	4	7	133	149	282	46	41	87
2045 VOLUME #2	140	121	261	3	7	10	131	147	278	45	44	89
2045 VOLUME #3	139	121	260	3	7	10	131	147	278	46	44	90
2045 VOLUME #4	139	121	260	3	7	10	131	147	278	46	44	90
2045 VOLUME #5	139	121	260	3	7	10	132	147	279	46	44	90
	NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2019 MIDDAY TURNS 1	12	98	1	1	1	1	1	84	21	21	1	15
2019 MIDDAY TURNS 2	12	101	2	1	1	1	2	83	20	22	2	15
2019 MIDDAY TURNS 3	11	101	2	1	1	1	2	84	21	21	2	14
2019 MIDDAY TURNS 4	11	101	2	1	1	1	2	84	21	22	2	14
2019 MIDDAY TURNS 5	11	101	2	1	1	1	2	84	21	22	2	14
2025 MIDDAY TURNS 1	13	102	1	1	1	1	1	89	21	21	1	15
2025 MIDDAY TURNS 2	12	106	3	1	1	1	3	88	20	22	2	15
2025 MIDDAY TURNS 3	12	106	3	1	1	1	3	88	20	22	2	15
2025 MIDDAY TURNS 4	11	106	2	1	1	1	3	89	21	22	2	14
2025 MIDDAY TURNS 5	11	106	2	1	1	1	3	89	21	22	2	14
2035 MIDDAY TURNS 1	14	112	1	1	1	1	1	98	23	26	1	19
2035 MIDDAY TURNS 2	16	112	2	1	1	1	2	93	27	25	2	18
2035 MIDDAY TURNS 3	16	111	2	1	1	1	2	93	27	26	2	18
2035 MIDDAY TURNS 4	16	111	2	1	1	1	2	93	27	26	2	18
2035 MIDDAY TURNS 5	16	111	2	1	1	1	2	93	27	26	2	18
2045 MIDDAY TURNS 1	15	122	2	1	1	1	2	107	25	26	1	19
2045 MIDDAY TURNS 2	16	121	3	1	1	1	3	102	27	25	2	18
2045 MIDDAY TURNS 3	16	120	3	1	1	1	3	102	27	26	2	18
2045 MIDDAY TURNS 4	16	120	3	1	1	1	3	102	27	26	2	18
2045 MIDDAY TURNS 5	16	120	3	1	1	1	3	102	27	26	2	18

2-WAY		NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
2019 PM DESIGN HOUR VOLUMES	270	10	270	40					
2025 PM DESIGN HOUR VOLUMES	280	10	280	40					
2035 PM DESIGN HOUR VOLUMES	310	10	310	50					
2045 PM DESIGN HOUR VOLUMES	330	10	330	50					

DESIGN HOUR P.M.:	NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES	115	155	270	3	7	10	152	118	270	17	23	40
2019 VOLUME #1	115	142	257	3	3	6	152	103	255	17	39	56
2019 VOLUME #2	122	155	277	3	7	10	158	118	276	20	23	43
2019 VOLUME #3	123	155	278	3	7	10	159	118	277	18	23	41
2019 VOLUME #4	122	155	277	3	7	10	159	118	277	18	23	41
2019 VOLUME #5	122	155	277	3	7	10	160	118	278	18	23	41
CONTROL LINK VOLUMES	121	159	280	3	7	10	160	120	280	17	23	40
2025 VOLUME #1	121	149	270	3	3	6	160	108	268	17	40	57
2025 VOLUME #2	124	159	283	3	7	10	163	120	283	19	23	42
2025 VOLUME #3	125	159	284	3	7	10	164	120	284	17	23	40
2025 VOLUME #4	125	159	284	3	7	10	164	120	284	17	23	40
2025 VOLUME #5	125	159	284	3	7	10	164	120	284	17	23	40
CONTROL LINK VOLUMES	132	178	310	3	7	10	175	135	310	22	28	50
2035 VOLUME #1	132	164	296	3	4	7	175	120	295	22	44	66
2035 VOLUME #2	139	178	317	3	7	10	182	135	317	25	28	53
2035 VOLUME #3	139	178	317	3	7	10	182	135	317	23	28	51
2035 VOLUME #4	139	178	317	3	7	10	183	135	318	23	28	51
2035 VOLUME #5	139	178	317	3	7	10	183	135	318	23	28	51
CONTROL LINK VOLUMES	144	186	330	3	7	10	190	140	330	22	28	50
2045 VOLUME #1	144	178	322	3	4	7	190	130	320	22	47	69
2045 VOLUME #2	144	186	330	3	7	10	190	140	330	24	28	52
2045 VOLUME #3	145	186	331	3	7	10	191	140	331	22	28	50
2045 VOLUME #4	145	186	331	3	7	10	191	140	331	22	28	50
2045 VOLUME #5	145	186	331	3	7	10	191	140	331	22	28	50

	NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2019 P.M. TURNS 1	21	93	1	1	1	1	1	133	17	9	1	8
2019 P.M. TURNS 2	12	107	3	1	1	1	3	145	10	10	1	9
2019 P.M. TURNS 3	12	108	3	1	1	1	3	146	10	9	1	8
2019 P.M. TURNS 4	12	108	3	1	1	1	3	146	10	9	1	8
2019 P.M. TURNS 5	12	108	3	1	1	1	3	146	11	9	1	8
2025 P.M. TURNS 1	21	99	1	1	1	1	1	140	18	8	0	8
2025 P.M. TURNS 2	12	109	3	1	1	1	3	149	11	9	1	9
2025 P.M. TURNS 3	12	110	3	1	1	1	3	150	11	9	1	8
2025 P.M. TURNS 4	12	110	3	1	1	1	3	150	11	9	1	8
2025 P.M. TURNS 5	12	110	3	1	1	1	3	150	11	9	1	8
2035 P.M. TURNS 1	23	108	2	1	1	1	2	153	20	11	1	10
2035 P.M. TURNS 2	14	121	3	1	1	1	3	166	13	12	1	11
2035 P.M. TURNS 3	14	122	3	1	1	1	3	166	13	12	1	10
2035 P.M. TURNS 4	14	122	3	1	1	1	3	166	13	12	1	10
2035 P.M. TURNS 5	14	122	3	1	1	1	3	166	13	12	1	10
2045 P.M. TURNS 1	24	118	2	1	1	1	2	166	22	11	1	10
2045 P.M. TURNS 2	14	127	3	1	1	1	3	174	13	12	1	11
2045 P.M. TURNS 3	14	128	3	1	1	1	3	175	13	11	1	10
2045 P.M. TURNS 4	14	128	3	1	1	1	3	175	13	11	1	10
2045 P.M. TURNS 5	14	128	3	1	1	1	3	175	13	11	1	10

**TMTOOL INPUT SHEET**

**Project Description:**

SECTION NO:	88070000	PREPARED BY:	
FM NO:	445618-1	FILE:	Version 2
PROJECT LIMITS:		DATE:	2/11/2020
DESIGN YEAR:	2045	T-INTERSECTION?	Yes
INTERSECTION:	Sebastian Inlet State Park -North Driveway	MISSING Leg:	East Leg

**NOTES:**

**Historical AADTs:**

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
	2016		-		
	2017		-		
	2018		-		
	2019		-		
Model Volume:	2045		-		

**Growth Rates:**

	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG
Historic Trend GR =				
Historic + Model Trend GR =				
Base Year Model to Future Year Model GR =				
Recommended Growth Rate:	1.00% CGR	- CGR	1.00% CGR	1.00% CGR

**Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)**

1 = Compound Growth Throughout All Years                       

2 = Linear Growth Throughout All Years

3 = Blend of Compound Growth First Ten Years, Linear Growth Thereafter (Based Upon the Base Year AADT)

	YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
	2019		2,959		-		2,959		1,000
NO. YEARS	6	2025	1.060	3,100	-	-	1.060	3,100	1,100
NO. YEARS	16	2035	1.160	3,400	-	-	1.160	3,400	1,200
NO. YEARS	26	2045	1.260	3,700	-	-	1.260	3,700	1,300

**Percent Turns Calculated From Base Year TMCs:**

TURN STUDY	FROM NORTH LEG (Southbound)			FROM EAST LEG (Westbound)			FROM SOUTH LEG (Northbound)			FROM WEST LEG (Eastbound)			TOTAL
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	
<b>A.M.</b>													
2-Way Pk Hr Vol:		305						327			110		
12/10/2019	26	139	-	-	-	-	-	121	38	27	-	17	374
% TURNS:	16%	84%	-	-	-	-	-	76%	24%	60%	-	38%	
<b>P.M.</b>													
2-Way Pk Hr Vol:		336						353			131		
12/100/2019	27	147	-	-	-	-	-	131	32	41	-	29	413
% TURNS:	15%	84%	-	-	-	-	-	80%	20%	58%	-	41%	

**Est. % Turns Calculated From Base Year AADTs & TMCs:**

**SUGGESTED STARTING POINTS**

		NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
		RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
<b>A.M.</b>													
	2019	16%	84%	-	-	-	-	-	76%	24%	60%	-	38%
	2025	17%	83%	-	-	-	-	-	75%	24%	59%	-	39%
	2035	17%	82%	-	-	-	-	-	75%	24%	59%	-	39%
	2045	17%	82%	-	-	-	-	-	75%	24%	58%	-	40%
<b>P.M.</b>													
	2019	15%	84%	-	-	-	-	-	80%	20%	58%	-	41%
	2025	16%	83%	-	-	-	-	-	79%	20%	57%	-	42%
	2035	17%	83%	-	-	-	-	-	79%	20%	57%	-	42%
	2045	17%	82%	-	-	-	-	-	79%	21%	56%	-	42%

**K & D FACTORS:**

		NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
		AM	PM	AM	PM	AM	PM	AM	PM
<b>K FACTOR</b>									
	2019	9.0%	9.0%	-	-	9.0%	9.0%	9.0%	9.0%
	2025	9.0%	9.0%	-	-	9.0%	9.0%	9.0%	9.0%
	2035	9.0%	9.0%	-	-	9.0%	9.0%	9.0%	9.0%
	2045	9.0%	9.0%	-	-	9.0%	9.0%	9.0%	9.0%
<b>D FACTOR</b>									
	2019	54.4%	52.1%	-	-	48.9%	46.5%	40.9%	54.2%
	2025	54.4%	52.1%	-	-	48.9%	46.5%	40.9%	54.2%
	2035	54.4%	52.1%	-	-	48.9%	46.5%	40.9%	54.2%
	2045	54.4%	52.1%	-	-	48.9%	46.5%	40.9%	54.2%

**TMTOOL "TURNS" REPORT**

**DESIGN HOUR TURNS CALCULATIONS**

SECTION NO: 88070000      DATE: 2/11/2020  
 FM NO.: 445618-1      NOTES:  
 PROJECT LIMITS: 0  
 DESIGN YEAR: 2045  
 INTERSECTION: Sebastian Inlet State Park -North Driveway  
 PREPARED BY:  
 FILE: Version 2

**ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:**

	<u>YEAR</u>	<u>NORTH LEG</u>	<u>EAST LEG</u>	<u>SOUTH LEG</u>	<u>WEST LEG</u>
24 HR EST. AADT	2019	2,959	-	2,959	1,000
24 HR EST. AADT	2025	3,100	-	3,100	1,100
24 HR EST. AADT	2035	3,400	-	3,400	1,200
24 HR EST. AADT	2045	3,700	-	3,700	1,300

**Percent Turns Calculated From Base Year AADTs:**

JKTURNS		<u>FROM NORTH LEG</u>			<u>FROM EAST LEG</u>			<u>FROM SOUTH LEG</u>			<u>FROM WEST LEG</u>		
		<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>
2019	2-WAY ADT	2,959	-	-	-	-	-	2,959	-	-	1,000	-	-
		<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>
		1,000	2,959	-	-	-	-	-	2,959	1,000	2,959	-	2,959
		25%	73%	-	-	-	-	-	73%	25%	49%	-	49%
2025	2-WAY ADT	3,100	-	-	-	-	-	3,100	-	-	1,100	-	-
		<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>
		1,100	3,100	-	-	-	-	-	3,100	1,100	3,100	-	3,100
		26%	72%	-	-	-	-	-	72%	26%	49%	-	49%
2035	2-WAY ADT	3,400	-	-	-	-	-	3,400	-	-	1,200	-	-
		<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>
		1,200	3,400	-	-	-	-	-	3,400	1,200	3,400	-	3,400
		26%	72%	-	-	-	-	-	72%	26%	49%	-	49%
2045	2-WAY ADT	3,700	-	-	-	-	-	3,700	-	-	1,300	-	-
		<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>
		1,300	3,700	-	-	-	-	-	3,700	1,300	3,700	-	3,700
		25%	73%	-	-	-	-	-	73%	25%	49%	-	49%

A.M. DESIGN HR. TURNS		<u>NORTH LEG</u>			<u>EAST LEG</u>			<u>SOUTH LEG</u>			<u>WEST LEG</u>		
		<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>
2019	EST. TURNS	25	120	-	-	-	-	107	27	-	19	-	17
2025	EST. TURNS	28	121	-	-	-	-	108	30	-	21	-	18
2035	EST. TURNS	32	136	-	-	-	-	121	33	-	23	-	20
2045	EST. TURNS	35	141	-	-	-	-	126	36	-	25	-	22
P.M. DESIGN HR. TURNS		<u>NORTH LEG</u>			<u>EAST LEG</u>			<u>SOUTH LEG</u>			<u>WEST LEG</u>		
2019	EST. TURNS	20	119	-	-	-	-	107	20	-	26	-	22
2025	EST. TURNS	23	120	-	-	-	-	109	22	-	28	-	25
2035	EST. TURNS	26	135	-	-	-	-	122	25	-	32	-	28
2045	EST. TURNS	29	141	-	-	-	-	127	28	-	33	-	29

LINK VOLUME CHECK		<u>NORTH LEG</u>			<u>EAST LEG</u>			<u>SOUTH LEG</u>			<u>WEST LEG</u>		
<u>DESIGN HOUR A.M.:</u>		<u>FROM</u>	<u>TO</u>	<u>LINK</u>	<u>FROM</u>	<u>TO</u>	<u>LINK</u>	<u>FROM</u>	<u>TO</u>	<u>LINK</u>	<u>FROM</u>	<u>TO</u>	<u>LINK</u>
CONTROL LINK VOLUMES		145	125	270	-	-	-	130	140	270	37	53	90
2019	TURN SUMMARY	147	125	272	-	-	-	136	140	276	38	53	91
CONTROL LINK VOLUMES		152	128	280	-	-	-	137	143	280	41	59	100
2025	TURN SUMMARY	152	128	280	-	-	-	141	143	284	41	59	100
CONTROL LINK VOLUMES		167	143	310	-	-	-	150	160	310	44	66	110
2035	TURN SUMMARY	170	143	313	-	-	-	157	160	317	45	66	111
CONTROL LINK VOLUMES		181	149	330	-	-	-	163	167	330	48	72	120
2045	TURN SUMMARY	179	149	328	-	-	-	165	167	332	48	72	120
<u>DESIGN HOUR P.M.:</u>		<u>FROM</u>	<u>TO</u>	<u>LINK</u>	<u>FROM</u>	<u>TO</u>	<u>LINK</u>	<u>FROM</u>	<u>TO</u>	<u>LINK</u>	<u>FROM</u>	<u>TO</u>	<u>LINK</u>
CONTROL LINK VOLUMES		139	131	270	-	-	-	124	146	270	49	41	90
2019	TURN SUMMARY	142	131	273	-	-	-	129	146	275	51	41	92
CONTROL LINK VOLUMES		145	135	280	-	-	-	130	150	280	54	46	100
2025	TURN SUMMARY	146	135	281	-	-	-	134	149	283	55	46	101
CONTROL LINK VOLUMES		159	151	310	-	-	-	142	168	310	59	51	110
2035	TURN SUMMARY	164	151	315	-	-	-	149	168	317	61	51	112
CONTROL LINK VOLUMES		173	157	330	-	-	-	155	175	330	63	57	120
2045	TURN SUMMARY	173	157	330	-	-	-	157	175	332	63	57	120

Note: Boxed number indicates manual adjustment.

2-WAY		NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
2019 AM DESIGN HOUR VOLUMES	270	10	270	90					
2025 AM DESIGN HOUR VOLUMES	280	10	280	100					
2035 AM DESIGN HOUR VOLUMES	310	10	310	110					
2045 AM DESIGN HOUR VOLUMES	330	10	330	120					

DESIGN HOUR A.M.:	NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES	145	125	270	3	7	10	130	140	270	37	53	90
2019 VOLUME #1	145	113	258	3	3	6	130	145	275	37	55	92
2019 VOLUME #2	142	125	267	3	7	10	141	140	281	39	53	92
2019 VOLUME #3	145	125	270	3	7	10	139	140	279	38	53	91
2019 VOLUME #4	146	125	271	3	7	10	137	140	277	38	53	91
2019 VOLUME #5	147	125	272	3	7	10	136	140	276	38	53	91
CONTROL LINK VOLUMES	152	128	280	3	7	10	137	143	280	41	59	100
2025 VOLUME #1	152	120	272	3	3	6	137	151	288	41	59	100
2025 VOLUME #2	147	128	275	3	7	10	145	143	288	42	59	101
2025 VOLUME #3	149	128	277	3	7	10	143	143	286	41	59	100
2025 VOLUME #4	151	128	279	3	7	10	142	143	285	41	59	100
2025 VOLUME #5	152	128	280	3	7	10	141	143	284	41	59	100
CONTROL LINK VOLUMES	167	143	310	3	7	10	150	160	310	44	66	110
2035 VOLUME #1	167	131	298	3	3	6	150	164	314	44	65	109
2035 VOLUME #2	165	143	308	3	7	10	162	160	322	46	66	112
2035 VOLUME #3	168	143	311	3	7	10	160	160	320	45	66	111
2035 VOLUME #4	169	143	312	3	7	10	158	160	318	45	66	111
2035 VOLUME #5	170	143	313	3	7	10	157	160	317	45	66	111
CONTROL LINK VOLUMES	181	149	330	3	7	10	163	167	330	48	72	120
2045 VOLUME #1	181	143	324	3	4	7	163	177	340	48	71	119
2045 VOLUME #2	174	149	323	3	7	10	170	167	337	48	72	120
2045 VOLUME #3	176	149	325	3	7	10	168	167	335	48	72	120
2045 VOLUME #4	178	149	327	3	7	10	166	167	333	48	72	120
2045 VOLUME #5	179	149	328	3	7	10	165	167	332	48	72	120
	NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2019 A.M. TURNS 1	23	121	1	1	1	1	1	98	31	22	1	14
2019 A.M. TURNS 2	22	118	2	1	1	1	2	108	30	21	2	15
2019 A.M. TURNS 3	23	119	3	1	1	1	2	108	29	20	2	16
2019 A.M. TURNS 4	24	119	3	1	1	1	2	108	28	20	2	16
2019 A.M. TURNS 5	25	120	3	1	1	1	2	107	27	19	2	17
2025 A.M. TURNS 1	25	126	1	1	1	1	1	103	33	24	1	16
2025 A.M. TURNS 2	25	119	3	1	1	1	2	110	33	23	2	17
2025 A.M. TURNS 3	27	120	3	1	1	1	2	109	31	22	2	18
2025 A.M. TURNS 4	27	121	3	1	1	1	2	109	31	21	2	18
2025 A.M. TURNS 5	28	121	3	1	1	1	2	108	30	21	2	18
2035 A.M. TURNS 1	28	137	1	1	1	1	1	113	36	26	1	17
2035 A.M. TURNS 2	29	134	3	1	1	1	2	123	36	25	2	19
2035 A.M. TURNS 3	30	135	3	1	1	1	2	122	35	24	2	19
2035 A.M. TURNS 4	31	135	3	1	1	1	2	122	34	24	2	20
2035 A.M. TURNS 5	32	136	3	1	1	1	2	121	33	23	2	20
2045 A.M. TURNS 1	31	148	2	1	1	1	1	122	39	28	1	19
2045 A.M. TURNS 2	32	140	3	1	1	1	2	128	40	26	2	20
2045 A.M. TURNS 3	33	141	3	1	1	1	2	127	38	25	2	21
2045 A.M. TURNS 4	34	141	3	1	1	1	2	127	37	25	2	21
2045 A.M. TURNS 5	35	141	3	1	1	1	2	126	36	25	2	22



2-WAY		NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
2019 MIDDAY DESIGN HOUR VOLUMES	210	10	230	70					
2025 MIDDAY DESIGN HOUR VOLUMES	220	10	240	80					
2035 MIDDAY DESIGN HOUR VOLUMES	240	10	260	90					
2045 MIDDAY DESIGN HOUR VOLUMES	260	10	280	90					

DESIGN HOUR MID-DAY:	NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES	111	99	210	3	7	10	106	124	230	37	33	70
2019 VOLUME #1	111	100	211	3	3	6	106	120	226	37	34	71
2019 VOLUME #2	115	99	214	3	7	10	106	124	230	39	33	72
2019 VOLUME #3	115	99	214	3	7	10	107	124	231	38	33	71
2019 VOLUME #4	115	99	214	3	7	10	107	124	231	38	33	71
2019 VOLUME #5	114	99	213	3	7	10	108	124	232	38	33	71
CONTROL LINK VOLUMES	116	104	220	3	7	10	111	129	240	41	39	80
2025 VOLUME #1	116	105	221	3	3	6	111	125	236	41	38	79
2025 VOLUME #2	121	104	225	3	7	10	112	129	241	43	39	82
2025 VOLUME #3	121	104	225	3	7	10	113	129	242	42	39	81
2025 VOLUME #4	120	104	224	3	7	10	113	129	242	42	39	81
2025 VOLUME #5	120	104	224	3	7	10	114	129	243	42	39	81
CONTROL LINK VOLUMES	128	112	240	3	7	10	122	138	260	44	46	90
2035 VOLUME #1	128	115	243	3	4	7	122	136	258	44	42	86
2035 VOLUME #2	132	112	244	3	7	10	123	138	261	45	46	91
2035 VOLUME #3	132	112	244	3	7	10	123	138	261	45	46	91
2035 VOLUME #4	131	112	243	3	7	10	124	138	262	45	46	91
2035 VOLUME #5	131	112	243	3	7	10	124	138	262	45	46	91
CONTROL LINK VOLUMES	139	121	260	3	7	10	133	147	280	48	42	90
2045 VOLUME #1	139	125	264	3	4	7	133	147	280	48	47	95
2045 VOLUME #2	138	121	259	3	7	10	128	147	275	48	42	90
2045 VOLUME #3	138	121	259	3	7	10	129	147	276	47	42	89
2045 VOLUME #4	138	121	259	3	7	10	129	147	276	47	42	89
2045 VOLUME #5	137	121	258	3	7	10	130	147	277	47	42	89
	NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2019 MIDDAY TURNS 1	12	98	1	1	1	1	1	84	21	21	1	15
2019 MIDDAY TURNS 2	12	101	2	1	1	1	2	83	20	22	2	15
2019 MIDDAY TURNS 3	11	101	2	1	1	1	2	84	21	21	2	14
2019 MIDDAY TURNS 4	11	101	2	1	1	1	2	84	21	22	2	14
2019 MIDDAY TURNS 5	11	101	2	1	1	1	2	84	21	22	2	14
2025 MIDDAY TURNS 1	14	101	1	1	1	1	1	87	23	23	1	17
2025 MIDDAY TURNS 2	15	104	2	1	1	1	2	86	23	24	2	17
2025 MIDDAY TURNS 3	14	104	2	1	1	1	2	87	24	24	2	16
2025 MIDDAY TURNS 4	14	104	2	1	1	1	3	87	24	24	2	16
2025 MIDDAY TURNS 5	14	104	2	1	1	1	3	87	24	24	2	16
2035 MIDDAY TURNS 1	16	110	1	1	1	1	1	96	25	25	1	18
2035 MIDDAY TURNS 2	18	112	2	1	1	1	2	93	27	25	2	18
2035 MIDDAY TURNS 3	17	112	2	1	1	1	2	93	28	25	2	18
2035 MIDDAY TURNS 4	17	112	2	1	1	1	3	93	28	25	2	18
2035 MIDDAY TURNS 5	17	112	2	1	1	1	3	94	28	25	2	17
2045 MIDDAY TURNS 1	18	119	1	1	1	1	1	104	28	27	1	20
2045 MIDDAY TURNS 2	16	119	3	1	1	1	2	100	25	27	2	19
2045 MIDDAY TURNS 3	16	119	2	1	1	1	3	101	25	26	2	19
2045 MIDDAY TURNS 4	16	119	2	1	1	1	3	101	25	27	2	19
2045 MIDDAY TURNS 5	16	119	2	1	1	1	3	102	25	27	2	18

2-WAY	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG
2019 PM DESIGN HOUR VOLUMES	270	10	270	90
2025 PM DESIGN HOUR VOLUMES	280	10	280	100
2035 PM DESIGN HOUR VOLUMES	310	10	310	110
2045 PM DESIGN HOUR VOLUMES	330	10	330	120

DESIGN HOUR P.M.:	NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES	139	131	270	3	7	10	124	146	270	49	41	90
2019 VOLUME #1	139	120	259	3	2	5	124	146	270	49	47	96
2019 VOLUME #2	138	131	269	3	7	10	132	146	278	52	41	93
2019 VOLUME #3	140	131	271	3	7	10	131	146	277	51	41	92
2019 VOLUME #4	141	131	272	3	7	10	130	146	276	51	41	92
2019 VOLUME #5	142	131	273	3	7	10	129	146	275	51	41	92
CONTROL LINK VOLUMES	145	135	280	3	7	10	130	150	280	54	46	100
2025 VOLUME #1	145	126	271	3	3	6	130	152	282	54	51	105
2025 VOLUME #2	143	135	278	3	7	10	136	150	286	56	46	102
2025 VOLUME #3	145	135	280	3	7	10	135	150	285	55	46	101
2025 VOLUME #4	146	135	281	3	7	10	134	150	284	55	46	101
2025 VOLUME #5	146	135	281	3	7	10	134	150	284	55	46	101
CONTROL LINK VOLUMES	159	151	310	3	7	10	142	168	310	59	51	110
2035 VOLUME #1	159	138	297	3	3	6	142	166	308	59	56	115
2035 VOLUME #2	160	151	311	3	7	10	151	168	319	63	51	114
2035 VOLUME #3	162	151	313	3	7	10	150	168	318	61	51	112
2035 VOLUME #4	163	151	314	3	7	10	149	168	317	61	51	112
2035 VOLUME #5	164	151	315	3	7	10	149	168	317	61	51	112
CONTROL LINK VOLUMES	173	157	330	3	7	10	155	175	330	63	57	120
2045 VOLUME #1	173	150	323	3	4	7	155	179	334	63	62	125
2045 VOLUME #2	169	157	326	3	7	10	160	175	335	64	57	121
2045 VOLUME #3	171	157	328	3	7	10	159	175	334	63	57	120
2045 VOLUME #4	172	157	329	3	7	10	158	175	333	63	57	120
2045 VOLUME #5	173	157	330	3	7	10	157	175	332	63	57	120
	NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2019 P.M. TURNS 1	21	117	1	1	1	1	1	99	24	28	1	20
2019 P.M. TURNS 2	19	117	2	1	1	1	2	108	21	28	2	22
2019 P.M. TURNS 3	20	118	3	1	1	1	2	108	21	27	2	22
2019 P.M. TURNS 4	20	119	3	1	1	1	2	108	20	26	2	22
2019 P.M. TURNS 5	20	119	3	1	1	1	2	107	20	26	2	22
2025 P.M. TURNS 1	24	120	1	1	1	1	1	103	26	31	1	23
2025 P.M. TURNS 2	22	119	3	1	1	1	2	110	24	30	2	24
2025 P.M. TURNS 3	22	120	3	1	1	1	2	110	23	29	2	24
2025 P.M. TURNS 4	23	120	3	1	1	1	2	109	22	29	2	25
2025 P.M. TURNS 5	23	121	3	1	1	1	2	109	22	28	2	25
2035 P.M. TURNS 1	27	131	1	1	1	1	1	112	29	33	1	25
2035 P.M. TURNS 2	24	133	3	1	1	1	2	123	26	34	2	27
2035 P.M. TURNS 3	25	135	3	1	1	1	2	123	25	32	2	27
2035 P.M. TURNS 4	25	135	3	1	1	1	2	122	25	32	2	28
2035 P.M. TURNS 5	26	135	3	1	1	1	2	122	25	32	2	28
2045 P.M. TURNS 1	30	142	1	1	1	1	1	122	32	35	1	27
2045 P.M. TURNS 2	27	139	3	1	1	1	3	128	29	35	2	28
2045 P.M. TURNS 3	28	140	3	1	1	1	2	128	28	34	2	28
2045 P.M. TURNS 4	28	141	3	1	1	1	2	127	28	33	2	28
2045 P.M. TURNS 5	29	141	3	1	1	1	2	127	28	33	2	29

**TMTOOL INPUT SHEET**

**Project Description:**

SECTION NO:	88070000	PREPARED BY:	
FM NO:	445618-1	FILE:	Version 2
PROJECT LIMITS:		DATE:	2/11/2020
DESIGN YEAR:	2045	T-INTERSECTION?	Yes
INTERSECTION:	Sebastian Inlet State Park -South Driveway	MISSING Leg:	East Leg

**NOTES:**

**Historical AADTs:**

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
	2016		-		
	2017		-		
	2018		-		
	2019		-		
Model Volume:	2045		-		

**Growth Rates:**

	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG
Historic Trend GR =				
Historic + Model Trend GR =				
Base Year Model to Future Year Model GR =				
Recommended Growth Rate:	1.00% CGR	- CGR	1.00% CGR	1.00% CGR

**Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)**

1 = Compound Growth Throughout All Years                       

2 = Linear Growth Throughout All Years

3 = Blend of Compound Growth First Ten Years, Linear Growth Thereafter (Based Upon the Base Year AADT)

	YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	
	2019		2,959		-		2,959		500	
NO. YEARS	6	2025	1.060	3,100	-	-	1.060	3,100	1.060	500
NO. YEARS	16	2035	1.160	3,400	-	-	1.160	3,400	1.160	600
NO. YEARS	26	2045	1.260	3,700	-	-	1.260	3,700	1.260	600

**Percent Turns Calculated From Base Year TMCs:**

TURN STUDY	FROM NORTH LEG (Southbound)		FROM EAST LEG (Westbound)		FROM SOUTH LEG (Northbound)		FROM WEST LEG (Eastbound)		TOTAL
	RIGHT	THRU	RIGHT	THRU	RIGHT	THRU	RIGHT	THRU	
A.M.	2-Way Pk Hr Vol:	222				204		66	
12/10/2019		23	101	-	-	78	11	12	18
% TURNS:		18%	81%	-	-	87%	12%	39%	58%
P.M.	2-Way Pk Hr Vol:	243				238		57	
12/100/2019		17	86	-	-	125	12	13	13
% TURNS:		16%	83%	-	-	91%	9%	48%	48%

**Est. % Turns Calculated From Base Year AADTs & TMCs:**

**SUGGESTED STARTING POINTS**

		NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
		RIGHT	THRU	RIGHT	THRU	RIGHT	THRU	RIGHT	THRU
A.M.	2019	18%	81%	-	-	-	87%	12%	39%
	2025	18%	81%	-	-	-	86%	12%	40%
	2035	18%	81%	-	-	-	86%	13%	40%
	2045	18%	81%	-	-	-	86%	12%	40%
P.M.	2019	16%	83%	-	-	-	91%	9%	48%
	2025	16%	83%	-	-	-	90%	9%	48%
	2035	16%	83%	-	-	-	90%	9%	48%
	2045	16%	83%	-	-	-	89%	10%	48%

**K & D FACTORS:**

		NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
		AM	PM	AM	PM	AM	PM	AM	PM
K FACTOR	2019	9.0%	9.0%	-	-	9.0%	9.0%	9.0%	9.0%
	2025	9.0%	9.0%	-	-	9.0%	9.0%	9.0%	9.0%
	2035	9.0%	9.0%	-	-	9.0%	9.0%	9.0%	9.0%
	2045	9.0%	9.0%	-	-	9.0%	9.0%	9.0%	9.0%
D FACTOR	2019	56.3%	42.8%	-	-	44.1%	58.0%	47.0%	47.4%
	2025	56.3%	42.8%	-	-	44.1%	58.0%	47.0%	47.4%
	2035	56.3%	42.8%	-	-	44.1%	58.0%	47.0%	47.4%
	2045	56.3%	42.8%	-	-	44.1%	58.0%	47.0%	47.4%

**TMTOOL "TURNS" REPORT**

**DESIGN HOUR TURNS CALCULATIONS**

SECTION NO: 88070000	DATE: 2/11/2020
FM NO.: 445618-1	NOTES:
PROJECT LIMITS: 0	
DESIGN YEAR: 2045	
INTERSECTION: Sebastian Inlet State Park -South Driveway	
PREPARED BY:	
FILE: Version 2	

**ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:**

	<u>YEAR</u>	<u>NORTH LEG</u>	<u>EAST LEG</u>	<u>SOUTH LEG</u>	<u>WEST LEG</u>
24 HR EST. AADT	2019	2,959	-	2,959	500
24 HR EST. AADT	2025	3,100	-	3,100	500
24 HR EST. AADT	2035	3,400	-	3,400	600
24 HR EST. AADT	2045	3,700	-	3,700	600

**Percent Turns Calculated From Base Year AADTs:**

JKTURNS		<u>FROM NORTH LEG</u>			<u>FROM EAST LEG</u>			<u>FROM SOUTH LEG</u>			<u>FROM WEST LEG</u>		
		<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>
	2019 2-WAY ADT		2,959	-	-	-	2,959	-	500				
		<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>
		500	2,959	-	-	-	-	2,959	500	-	2,959	-	2,959
		14%	83%	-	-	-	-	83%	14%	-	49%	-	49%
	2025 2-WAY ADT		3,100	-	-	-	3,100	-	500				
		<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>
		500	3,100	-	-	-	-	3,100	500	-	3,100	-	3,100
		14%	84%	-	-	-	-	84%	14%	-	49%	-	49%
	2035 2-WAY ADT		3,400	-	-	-	3,400	-	600				
		<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>
		600	3,400	-	-	-	-	3,400	600	-	3,400	-	3,400
		15%	83%	-	-	-	-	83%	15%	-	49%	-	49%
	2045 2-WAY ADT		3,700	-	-	-	3,700	-	600				
		<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>
		600	3,700	-	-	-	-	3,700	600	-	3,700	-	3,700
		14%	84%	-	-	-	-	84%	14%	-	49%	-	49%

		<u>NORTH LEG</u>			<u>EAST LEG</u>			<u>SOUTH LEG</u>			<u>WEST LEG</u>		
		<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>
<b>A.M. DESIGN HR. TURNS</b>													
	2019 EST. TURNS	17	142	-	-	-	-	108	11	-	10	-	11
	2025 EST. TURNS	17	146	-	-	-	-	111	11	-	10	-	11
	2035 EST. TURNS	15	162	-	-	-	-	124	10	-	12	-	13
	2045 EST. TURNS	15	170	-	-	-	-	129	10	-	11	-	12
<b>P.M. DESIGN HR. TURNS</b>													
	2019 EST. TURNS	16	104	-	-	-	-	146	12	-	11	-	9
	2025 EST. TURNS	15	99	-	-	-	-	150	13	-	11	-	10
	2035 EST. TURNS	13	119	-	-	-	-	166	11	-	13	-	12
	2045 EST. TURNS	13	124	-	-	-	-	174	11	-	12	-	12

<u>LINK VOLUME CHECK</u>		<u>NORTH LEG</u>			<u>EAST LEG</u>			<u>SOUTH LEG</u>			<u>WEST LEG</u>		
		<u>FROM</u>	<u>TO</u>	<u>LINK</u>	<u>FROM</u>	<u>TO</u>	<u>LINK</u>	<u>FROM</u>	<u>TO</u>	<u>LINK</u>	<u>FROM</u>	<u>TO</u>	<u>LINK</u>
<u>DESIGN HOUR A.M.:</u>													
	CONTROL LINK VOLUMES	150	120	270	-	-	-	117	153	270	21	29	50
	2019 TURN SUMMARY	162	120	282	-	-	-	122	153	275	22	29	51
	CONTROL LINK VOLUMES	157	123	280	-	-	-	123	157	280	21	29	50
	2025 TURN SUMMARY	166	123	289	-	-	-	125	157	282	22	29	51
	CONTROL LINK VOLUMES	172	138	310	-	-	-	135	175	310	25	25	50
	2035 TURN SUMMARY	180	138	318	-	-	-	137	175	312	26	25	51
	CONTROL LINK VOLUMES	188	142	330	-	-	-	147	183	330	25	25	50
	2045 TURN SUMMARY	188	142	330	-	-	-	142	183	325	25	25	50
<u>DESIGN HOUR P.M.:</u>													
	CONTROL LINK VOLUMES	114	156	270	-	-	-	154	116	270	21	29	50
	2019 TURN SUMMARY	122	156	278	-	-	-	161	116	277	22	29	51
	CONTROL LINK VOLUMES	119	161	280	-	-	-	162	118	280	21	29	50
	2025 TURN SUMMARY	116	161	277	-	-	-	166	110	277	22	29	51
	CONTROL LINK VOLUMES	131	179	310	-	-	-	177	133	310	26	24	50
	2035 TURN SUMMARY	134	179	313	-	-	-	179	133	312	26	24	50
	CONTROL LINK VOLUMES	143	187	330	-	-	-	193	137	330	26	24	50
	2045 TURN SUMMARY	139	187	326	-	-	-	188	137	325	25	24	49

Note: Boxed number indicates manual adjustment.

2-WAY	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG
2019 AM DESIGN HOUR VOLUMES	270	10	270	50
2025 AM DESIGN HOUR VOLUMES	280	10	280	50
2035 AM DESIGN HOUR VOLUMES	310	10	310	50
2045 AM DESIGN HOUR VOLUMES	330	10	330	50

DESIGN HOUR A.M.:	<u>NORTH LEG</u>			<u>EAST LEG</u>			<u>SOUTH LEG</u>			<u>WEST LEG</u>		
	<u>FROM</u>	<u>TO</u>	<u>LINK</u>	<u>FROM</u>	<u>TO</u>	<u>LINK</u>	<u>FROM</u>	<u>TO</u>	<u>LINK</u>	<u>FROM</u>	<u>TO</u>	<u>LINK</u>
CONTROL LINK VOLUMES	150	120	270	3	7	10	117	153	270	21	29	50
2019 VOLUME #1	150	115	265	3	3	6	117	130	247	21	43	64
2019 VOLUME #2	164	120	284	3	7	10	119	153	272	24	29	53
2019 VOLUME #3	163	120	283	3	7	10	120	153	273	22	29	51
2019 VOLUME #4	162	120	282	3	7	10	121	153	274	22	29	51
2019 VOLUME #5	162	120	282	3	7	10	122	153	275	22	29	51
CONTROL LINK VOLUMES	157	123	280	3	7	10	123	157	280	21	29	50
2025 VOLUME #1	157	119	276	3	4	7	123	137	260	21	44	65
2025 VOLUME #2	168	123	291	3	7	10	122	157	279	23	29	52
2025 VOLUME #3	167	123	290	3	7	10	124	157	281	22	29	51
2025 VOLUME #4	166	123	289	3	7	10	125	157	282	22	29	51
2025 VOLUME #5	166	123	289	3	7	10	125	157	282	22	29	51
CONTROL LINK VOLUMES	172	138	310	3	7	10	135	175	310	25	25	50
2035 VOLUME #1	172	132	304	3	4	7	135	150	285	25	49	74
2035 VOLUME #2	181	138	319	3	7	10	134	175	309	28	25	53
2035 VOLUME #3	181	138	319	3	7	10	135	175	310	26	25	51
2035 VOLUME #4	180	138	318	3	7	10	136	175	311	26	25	51
2035 VOLUME #5	180	138	318	3	7	10	137	175	312	26	25	51
CONTROL LINK VOLUMES	188	142	330	3	7	10	147	183	330	25	25	50
2045 VOLUME #1	188	142	330	3	5	8	147	164	311	25	52	77
2045 VOLUME #2	189	142	331	3	7	10	138	183	321	27	25	52
2045 VOLUME #3	189	142	331	3	7	10	140	183	323	24	25	49
2045 VOLUME #4	189	142	331	3	7	10	141	183	324	24	25	49
2045 VOLUME #5	188	142	330	3	7	10	142	183	325	25	25	50

	<u>NORTH LEG</u>			<u>EAST LEG</u>			<u>SOUTH LEG</u>			<u>WEST LEG</u>		
	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>
2019 A.M. TURNS 1	28	121	1	1	1	1	1	101	14	8	1	12
2019 A.M. TURNS 2	19	142	3	1	1	1	3	106	10	10	1	13
2019 A.M. TURNS 3	18	142	3	1	1	1	3	107	10	9	1	12
2019 A.M. TURNS 4	18	142	3	1	1	1	3	108	10	9	1	11
2019 A.M. TURNS 5	17	142	2	1	1	1	3	108	11	10	1	11
2025 A.M. TURNS 1	28	127	2	1	1	1	2	106	15	8	1	12
2025 A.M. TURNS 2	18	146	3	1	1	1	3	110	10	10	1	12
2025 A.M. TURNS 3	18	146	3	1	1	1	3	111	10	9	1	11
2025 A.M. TURNS 4	18	146	3	1	1	1	3	111	11	10	1	11
2025 A.M. TURNS 5	17	146	3	1	1	1	3	111	11	10	1	11
2035 A.M. TURNS 1	31	139	2	1	1	1	2	116	17	10	1	14
2035 A.M. TURNS 2	16	162	3	1	0	1	3	122	9	12	1	15
2035 A.M. TURNS 3	15	163	3	1	1	1	3	123	9	11	1	13
2035 A.M. TURNS 4	15	162	3	1	1	1	3	124	9	11	1	13
2035 A.M. TURNS 5	15	162	3	1	1	1	3	124	10	12	1	13
2045 A.M. TURNS 1	33	153	2	1	1	1	2	127	18	10	1	14
2045 A.M. TURNS 2	16	171	3	1	0	1	3	127	9	11	1	14
2045 A.M. TURNS 3	15	171	3	1	0	1	3	128	9	11	1	13
2045 A.M. TURNS 4	15	171	3	1	0	1	3	128	9	11	1	12
2045 A.M. TURNS 5	15	170	3	1	0	1	3	129	10	11	1	12

2-WAY		NORTH LEG EAST LEG		SOUTH LEG WEST LEG	
2019 MIDDAY DESIGN HOUR VOLUMES	210	10	230	70	
2025 MIDDAY DESIGN HOUR VOLUMES	220	10	240	70	
2035 MIDDAY DESIGN HOUR VOLUMES	240	10	260	90	
2045 MIDDAY DESIGN HOUR VOLUMES	260	10	280	90	

DESIGN HOUR MID-DAY:	NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES	111	99	210	3	7	10	106	124	230	37	33	70
2019 VOLUME #1	111	100	211	3	3	6	106	120	226	37	34	71
2019 VOLUME #2	115	99	214	3	7	10	106	124	230	39	33	72
2019 VOLUME #3	115	99	214	3	7	10	107	124	231	38	33	71
2019 VOLUME #4	115	99	214	3	7	10	107	124	231	38	33	71
2019 VOLUME #5	114	99	213	3	7	10	108	124	232	38	33	71
CONTROL LINK VOLUMES	116	104	220	3	7	10	111	129	240	37	33	70
2025 VOLUME #1	116	105	221	3	3	6	111	124	235	37	35	72
2025 VOLUME #2	121	104	225	3	7	10	110	129	239	39	33	72
2025 VOLUME #3	121	104	225	3	7	10	111	129	240	38	33	71
2025 VOLUME #4	120	104	224	3	7	10	112	129	241	38	33	71
2025 VOLUME #5	120	104	224	3	7	10	112	129	241	38	33	71
CONTROL LINK VOLUMES	128	112	240	3	7	10	122	138	260	44	46	90
2035 VOLUME #1	128	117	245	3	4	7	122	138	260	44	39	83
2035 VOLUME #2	132	112	244	3	7	10	124	138	262	44	46	90
2035 VOLUME #3	131	112	243	3	7	10	124	138	262	45	46	91
2035 VOLUME #4	131	112	243	3	7	10	124	138	262	45	46	91
2035 VOLUME #5	131	112	243	3	7	10	124	138	262	45	46	91
CONTROL LINK VOLUMES	139	121	260	3	7	10	133	147	280	44	46	90
2045 VOLUME #1	139	126	265	3	4	7	133	147	280	44	42	86
2045 VOLUME #2	142	121	263	3	7	10	132	147	279	44	46	90
2045 VOLUME #3	141	121	262	3	7	10	133	147	280	44	46	90
2045 VOLUME #4	141	121	262	3	7	10	133	147	280	44	46	90
2045 VOLUME #5	140	121	261	3	7	10	133	147	280	44	46	90
	NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2019 MIDDAY TURNS 1	12	98	1	1	1	1	1	84	21	21	1	15
2019 MIDDAY TURNS 2	12	101	2	1	1	1	2	83	20	22	2	15
2019 MIDDAY TURNS 3	11	101	2	1	1	1	2	84	21	21	2	14
2019 MIDDAY TURNS 4	11	101	2	1	1	1	2	84	21	22	2	14
2019 MIDDAY TURNS 5	11	101	2	1	1	1	2	84	21	22	2	14
2025 MIDDAY TURNS 1	13	102	1	1	1	1	1	88	21	21	1	15
2025 MIDDAY TURNS 2	12	106	3	1	1	1	3	88	20	22	2	15
2025 MIDDAY TURNS 3	12	106	2	1	1	1	3	88	20	22	2	15
2025 MIDDAY TURNS 4	11	106	2	1	1	1	3	89	21	22	2	14
2025 MIDDAY TURNS 5	11	106	2	1	1	1	3	89	21	22	2	14
2035 MIDDAY TURNS 1	14	112	1	1	1	1	1	97	23	25	1	18
2035 MIDDAY TURNS 2	17	112	3	1	1	1	2	93	28	25	2	18
2035 MIDDAY TURNS 3	17	112	2	1	1	1	2	93	28	25	2	18
2035 MIDDAY TURNS 4	17	112	2	1	1	1	2	93	28	25	2	18
2035 MIDDAY TURNS 5	17	112	2	1	1	1	3	93	28	25	2	18
2045 MIDDAY TURNS 1	16	122	2	1	1	1	2	106	25	24	1	18
2045 MIDDAY TURNS 2	17	122	3	1	1	1	3	102	28	24	2	18
2045 MIDDAY TURNS 3	17	121	3	1	1	1	3	102	28	25	2	18
2045 MIDDAY TURNS 4	17	121	3	1	1	1	3	102	28	25	2	18
2045 MIDDAY TURNS 5	17	121	3	1	1	1	3	103	28	25	2	17

2-WAY

	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG
2019 PM DESIGN HOUR VOLUMES	270	10	270	50
2025 PM DESIGN HOUR VOLUMES	280	10	280	50
2035 PM DESIGN HOUR VOLUMES	310	10	310	50
2045 PM DESIGN HOUR VOLUMES	330	10	330	50

DESIGN HOUR P.M.:	NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES	114	156	270	3	7	10	154	116	270	21	29	50
2019 VOLUME #1	114	151	265	3	3	6	154	105	259	21	33	54
2019 VOLUME #2	123	156	279	3	7	10	159	116	275	23	29	52
2019 VOLUME #3	123	156	279	3	7	10	160	116	276	22	29	51
2019 VOLUME #4	122	156	278	3	7	10	160	116	276	22	29	51
2019 VOLUME #5	122	156	278	3	7	10	161	116	277	22	29	51
CONTROL LINK VOLUMES	119	161	280	3	7	10	162	118	280	21	29	50
2025 VOLUME #1	119	157	276	3	4	7	162	110	272	21	35	56
2025 VOLUME #2	125	161	286	3	7	10	165	118	283	23	29	52
2025 VOLUME #3	125	161	286	3	7	10	166	118	284	22	29	51
2025 VOLUME #4	124	161	285	3	7	10	166	118	284	22	29	51
2025 VOLUME #5	124	161	285	3	7	10	166	118	284	22	29	51
CONTROL LINK VOLUMES	131	179	310	3	7	10	177	133	310	26	24	50
2035 VOLUME #1	131	172	303	3	4	7	177	122	299	26	39	65
2035 VOLUME #2	134	179	313	3	7	10	178	133	311	28	24	52
2035 VOLUME #3	134	179	313	3	7	10	179	133	312	27	24	51
2035 VOLUME #4	134	179	313	3	7	10	179	133	312	26	24	50
2035 VOLUME #5	134	179	313	3	7	10	179	133	312	26	24	50
CONTROL LINK VOLUMES	143	187	330	3	7	10	193	137	330	26	24	50
2045 VOLUME #1	143	186	329	3	4	7	193	132	325	26	42	68
2045 VOLUME #2	139	187	326	3	7	10	187	137	324	27	24	51
2045 VOLUME #3	139	187	326	3	7	10	188	137	325	25	24	49
2045 VOLUME #4	139	187	326	3	7	10	188	137	325	25	24	49
2045 VOLUME #5	139	187	326	3	7	10	188	137	325	25	24	49
	NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2019 P.M. TURNS 1	19	94	1	1	1	1	1	139	13	10	1	10
2019 P.M. TURNS 2	16	104	3	1	1	1	3	144	12	11	2	10
2019 P.M. TURNS 3	16	104	3	1	1	1	3	145	12	11	2	10
2019 P.M. TURNS 4	16	104	3	1	1	1	3	145	12	11	2	10
2019 P.M. TURNS 5	16	104	2	1	1	1	3	146	12	11	2	9
2025 P.M. TURNS 1	19	99	1	1	1	1	1	146	15	10	1	10
2025 P.M. TURNS 2	16	106	3	1	1	1	3	150	12	11	1	10
2025 P.M. TURNS 3	16	106	3	1	1	1	3	150	13	11	1	10
2025 P.M. TURNS 4	16	106	3	1	1	1	3	150	13	11	1	10
2025 P.M. TURNS 5	15	106	3	1	1	1	3	150	13	11	1	10
2035 P.M. TURNS 1	21	108	2	1	1	1	2	159	17	13	1	13
2035 P.M. TURNS 2	13	118	3	1	1	1	3	165	10	14	2	13
2035 P.M. TURNS 3	13	119	3	1	1	1	3	166	10	13	1	12
2035 P.M. TURNS 4	13	119	3	1	1	1	3	166	10	13	1	12
2035 P.M. TURNS 5	13	119	3	1	1	1	3	166	11	13	1	12
2045 P.M. TURNS 1	23	119	2	1	1	1	2	173	18	13	1	13
2045 P.M. TURNS 2	13	123	3	1	0	1	3	173	11	13	1	13
2045 P.M. TURNS 3	13	124	3	1	1	1	3	174	10	12	1	12
2045 P.M. TURNS 4	13	124	3	1	1	1	3	174	11	12	1	12
2045 P.M. TURNS 5	13	124	3	1	1	1	3	174	11	12	1	12

**TMTOOL INPUT SHEET**

**Project Description:**

SECTION NO:	88070000	PREPARED BY:	
FM NO:	445618-1	FILE:	Version 2
PROJECT LIMITS:		DATE:	2/11/2020
DESIGN YEAR:	2045	T-INTERSECTION?	Yes
INTERSECTION:	Sebastian Inlet State Park - South Driveway	MISSING Leg:	East Leg

**NOTES:**

**Historical AADTs:**

	YEAR	NORTH LEG AADT	EAST LEG AADT	SOUTH LEG AADT	WEST LEG AADT
	2016		-		
	2017		-		
	2018		-		
	2019		-		
Model Volume:	2045		-		

**Growth Rates:**

	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG
Historic Trend GR =	3.00% CGR	- CGR	3.00% CGR	3.00% CGR
Historic + Model Trend GR =	2.00% CGR	- CGR	2.00% CGR	2.00% CGR
Base Year Model to Future Year Model GR =	1.00% CGR	- CGR	1.00% CGR	1.00% CGR
Recommended Growth Rate:	1.00% CGR	- CGR	1.00% CGR	1.00% CGR

**Choose Methodology for Calculating Growth Factor on Each Leg (Input 1, 2 or 3)**

1 = Compound Growth Throughout All Years                       

2 = Linear Growth Throughout All Years

3 = Blend of Compound Growth First Ten Years, Linear Growth Thereafter (Based Upon the Base Year AADT)

	YEAR	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT	FACTOR	AADT
	2019		2,959		-		2,959		990
NO. YEARS	6	2025	1.060	3,100	-	-	1.060	3,100	1,000
NO. YEARS	16	2035	1.160	3,400	-	-	1.160	3,400	1,100
NO. YEARS	26	2045	1.260	3,700	-	-	1.260	3,700	1,200

**Percent Turns Calculated From Base Year TMCs:**

TURN STUDY	FROM NORTH LEG (Southbound)		FROM EAST LEG (Westbound)		FROM SOUTH LEG (Northbound)		FROM WEST LEG (Eastbound)		TOTAL
	RIGHT	THRU	RIGHT	THRU	RIGHT	THRU	RIGHT	THRU	
<b>A.M.</b>	2-Way Pk Hr Vol:	327				294		105	
12/10/2019		31	135	-	-	-	122	18	17
% TURNS:		19%	81%	-	-	-	87%	13%	31%
<b>P.M.</b>	2-Way Pk Hr Vol:	354				325		167	
12/100/2019		67	122	-	-	-	133	44	24
% TURNS:		35%	64%	-	-	-	75%	25%	44%

**Est. % Turns Calculated From Base Year AADTs & TMCs:**

SUGGESTED STARTING POINTS	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
	RIGHT	THRU	RIGHT	THRU	RIGHT	THRU	RIGHT	THRU
<b>A.M.</b>								
2019	19%	81%	-	-	-	87%	13%	31%
2025	19%	80%	-	-	-	85%	14%	33%
2035	19%	80%	-	-	-	85%	14%	33%
2045	19%	80%	-	-	-	84%	15%	34%
<b>P.M.</b>								
2019	35%	64%	-	-	-	75%	25%	44%
2025	34%	65%	-	-	-	75%	25%	44%
2035	34%	65%	-	-	-	75%	25%	44%
2045	33%	66%	-	-	-	75%	25%	45%

**K & D FACTORS:**

K & D FACTORS:	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
	AM	PM	AM	PM	AM	PM	AM	PM
<b>K FACTOR</b>								
2019	9.0%	9.0%	-	-	9.0%	9.0%	9.0%	9.0%
2025	9.0%	9.0%	-	-	9.0%	9.0%	9.0%	9.0%
2035	9.0%	9.0%	-	-	9.0%	9.0%	9.0%	9.0%
2045	9.0%	9.0%	-	-	9.0%	9.0%	9.0%	9.0%
<b>D FACTOR</b>								
2019	51.1%	53.7%	-	-	48.0%	54.8%	52.4%	32.9%
2025	51.1%	53.7%	-	-	48.0%	54.8%	52.4%	32.9%
2035	51.1%	53.7%	-	-	48.0%	54.8%	52.4%	32.9%
2045	51.1%	53.7%	-	-	48.0%	54.8%	52.4%	32.9%



**TMTOOL "TURNS" REPORT**

**DESIGN HOUR TURNS CALCULATIONS**

SECTION NO: 88070000	DATE: 2/11/2020
FM NO.: 445618-1	NOTES:
PROJECT LIMITS: 0	
DESIGN YEAR: 2045	
INTERSECTION: Sebastian Inlet State Park - South Driveway	
PREPARED BY:	
FILE: Version 2	

**ESTIMATED TWO-WAY 24 HOUR AADT FOR EACH LEG OF THE INTERSECTION:**

	YEAR	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG
24 HR EST. AADT	2019	2,959	-	2,959	990
24 HR EST. AADT	2025	3,100	-	3,100	1,000
24 HR EST. AADT	2035	3,400	-	3,400	1,100
24 HR EST. AADT	2045	3,700	-	3,700	1,200

**Percent Turns Calculated From Base Year AADTs:**

JKTURNS	FROM NORTH LEG			FROM EAST LEG			FROM SOUTH LEG			FROM WEST LEG		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2019 2-WAY ADT	990	2,959	-	-	-	-	-	2,959	990	-	-	-
	24%	73%	-	-	-	-	-	73%	24%	-	-	49%
2025 2-WAY ADT	1,000	3,100	-	-	-	-	-	3,100	1,000	-	-	3,100
	24%	74%	-	-	-	-	-	74%	24%	-	-	49%
2035 2-WAY ADT	1,100	3,400	-	-	-	-	-	3,400	1,100	-	-	3,400
	24%	74%	-	-	-	-	-	74%	24%	-	-	49%
2045 2-WAY ADT	1,200	3,700	-	-	-	-	-	3,700	1,200	-	-	3,700
	24%	74%	-	-	-	-	-	74%	24%	-	-	49%

A.M. DESIGN HR. TURNS	NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2019 EST. TURNS	22	121	-	-	-	-	-	107	20	20	-	27
2025 EST. TURNS	22	125	-	-	-	-	-	111	20	20	-	26
2035 EST. TURNS	24	139	-	-	-	-	-	124	23	23	-	29
2045 EST. TURNS	27	145	-	-	-	-	-	128	25	24	-	31
2019 EST. TURNS	33	109	-	-	-	-	-	113	27	14	-	13
2025 EST. TURNS	32	98	-	-	-	-	-	116	27	14	-	13
2035 EST. TURNS	36	125	-	-	-	-	-	130	31	16	-	15
2045 EST. TURNS	39	130	-	-	-	-	-	134	34	17	-	16

LINK VOLUME CHECK	NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
<b>DESIGN HOUR A.M.:</b>												
CONTROL LINK VOLUMES	136	134	270	-	-	-	128	142	270	47	43	90
2019 TURN SUMMARY	145	134	279	-	-	-	129	142	271	49	43	92
CONTROL LINK VOLUMES	142	138	280	-	-	-	134	146	280	47	43	90
2025 TURN SUMMARY	149	138	287	-	-	-	134	146	280	48	43	91
CONTROL LINK VOLUMES	156	154	310	-	-	-	147	163	310	52	48	100
2035 TURN SUMMARY	166	154	320	-	-	-	149	163	312	54	48	102
CONTROL LINK VOLUMES	170	160	330	-	-	-	160	170	330	57	53	110
2045 TURN SUMMARY	174	160	334	-	-	-	157	170	327	57	53	110
<b>DESIGN HOUR P.M.:</b>												
CONTROL LINK VOLUMES	143	127	270	-	-	-	146	124	270	29	61	90
2019 TURN SUMMARY	144	127	271	-	-	-	143	124	267	29	61	90
CONTROL LINK VOLUMES	150	130	280	-	-	-	153	127	280	30	60	90
2025 TURN SUMMARY	132	130	262	-	-	-	146	113	259	29	60	89
CONTROL LINK VOLUMES	164	146	310	-	-	-	168	142	310	33	67	100
2035 TURN SUMMARY	163	146	309	-	-	-	164	142	306	32	67	99
CONTROL LINK VOLUMES	179	151	330	-	-	-	182	148	330	36	74	110
2045 TURN SUMMARY	172	151	323	-	-	-	171	148	319	34	74	108

Note: Boxed number indicates manual adjustment.

2-WAY		NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG					
2019 AM DESIGN HOUR VOLUMES	270	10	270	90									
2025 AM DESIGN HOUR VOLUMES	280	10	280	90									
2035 AM DESIGN HOUR VOLUMES	310	10	310	100									
2045 AM DESIGN HOUR VOLUMES	330	10	330	110									
		<u>NORTH LEG</u>			<u>EAST LEG</u>			<u>SOUTH LEG</u>			<u>WEST LEG</u>		
<b>DESIGN HOUR A.M.:</b>	<b>FROM</b>	<b>TO</b>	<b>LINK</b>	<b>FROM</b>	<b>TO</b>	<b>LINK</b>	<b>FROM</b>	<b>TO</b>	<b>LINK</b>	<b>FROM</b>	<b>TO</b>	<b>LINK</b>	
CONTROL LINK VOLUMES	136	134	270	3	7	10	128	142	270	47	43	90	
2019 VOLUME #1	136	143	279	3	3	6	128	125	253	47	43	90	
2019 VOLUME #2	152	134	286	3	7	10	122	142	264	48	43	91	
2019 VOLUME #3	149	134	283	3	7	10	126	142	268	48	43	91	
2019 VOLUME #4	147	134	281	3	7	10	128	142	270	48	43	91	
2019 VOLUME #5	145	134	279	3	7	10	129	142	271	49	43	92	
CONTROL LINK VOLUMES	142	138	280	3	7	10	134	146	280	47	43	90	
2025 VOLUME #1	142	146	288	3	3	6	134	130	264	47	47	94	
2025 VOLUME #2	155	138	293	3	7	10	128	146	274	48	43	91	
2025 VOLUME #3	152	138	290	3	7	10	131	146	277	48	43	91	
2025 VOLUME #4	150	138	288	3	7	10	133	146	279	48	43	91	
2025 VOLUME #5	149	138	287	3	7	10	134	146	280	48	43	91	
CONTROL LINK VOLUMES	156	154	310	3	7	10	147	163	310	52	48	100	
2035 VOLUME #1	156	160	316	3	3	6	147	143	290	52	52	104	
2035 VOLUME #2	172	154	326	3	7	10	142	163	305	54	48	102	
2035 VOLUME #3	170	154	324	3	7	10	146	163	309	53	48	101	
2035 VOLUME #4	167	154	321	3	7	10	148	163	311	54	48	102	
2035 VOLUME #5	166	154	320	3	7	10	149	163	312	54	48	102	
CONTROL LINK VOLUMES	170	160	330	3	7	10	160	170	330	57	53	110	
2045 VOLUME #1	170	173	343	3	4	7	160	156	316	57	57	114	
2045 VOLUME #2	181	160	341	3	7	10	149	170	319	57	53	110	
2045 VOLUME #3	178	160	338	3	7	10	153	170	323	56	53	109	
2045 VOLUME #4	175	160	335	3	7	10	155	170	325	57	53	110	
2045 VOLUME #5	174	160	334	3	7	10	157	170	327	57	53	110	
		<u>NORTH LEG</u>			<u>EAST LEG</u>			<u>SOUTH LEG</u>			<u>WEST LEG</u>		
	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	<u>RIGHT</u>	<u>THRU</u>	<u>LEFT</u>	
2019 A.M. TURNS 1	25	110	1	1	1	1	1	111	16	15	1	32	
2019 A.M. TURNS 2	25	124	2	1	1	1	2	104	16	16	2	30	
2019 A.M. TURNS 3	24	123	2	1	1	1	3	105	18	18	2	28	
2019 A.M. TURNS 4	23	122	2	1	1	1	3	106	19	19	2	27	
2019 A.M. TURNS 5	22	121	2	1	1	1	3	107	20	20	2	27	
2025 A.M. TURNS 1	27	114	1	1	1	1	1	114	19	15	1	31	
2025 A.M. TURNS 2	25	128	2	1	1	1	3	108	17	17	2	29	
2025 A.M. TURNS 3	24	127	2	1	1	1	3	110	19	18	2	27	
2025 A.M. TURNS 4	23	126	2	1	1	1	3	110	20	19	2	27	
2025 A.M. TURNS 5	22	125	2	1	1	1	3	111	20	20	2	26	
2035 A.M. TURNS 1	30	125	1	1	1	1	1	125	21	17	1	34	
2035 A.M. TURNS 2	28	142	3	1	1	1	3	120	19	20	2	33	
2035 A.M. TURNS 3	26	141	2	1	1	1	3	122	21	21	2	31	
2035 A.M. TURNS 4	25	140	2	1	1	1	3	123	22	22	2	30	
2035 A.M. TURNS 5	24	139	2	1	1	1	3	124	23	23	2	29	
2045 A.M. TURNS 1	33	135	1	1	1	1	1	135	23	19	1	37	
2045 A.M. TURNS 2	31	148	3	1	1	1	3	125	22	21	2	34	
2045 A.M. TURNS 3	29	146	2	1	1	1	3	127	23	22	2	32	
2045 A.M. TURNS 4	28	145	2	1	1	1	3	128	24	23	2	31	
2045 A.M. TURNS 5	27	145	2	1	1	1	3	128	25	24	2	31	

2-WAY	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG
2019 MIDDAY DESIGN HOUR VOLUMES	210	10	230	70
2025 MIDDAY DESIGN HOUR VOLUMES	220	10	240	70
2035 MIDDAY DESIGN HOUR VOLUMES	240	10	260	80
2045 MIDDAY DESIGN HOUR VOLUMES	260	10	280	90

DESIGN HOUR MID-DAY:	NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES	111	99	210	3	7	10	106	124	230	37	33	70
2019 VOLUME #1	111	100	211	3	3	6	106	120	226	37	34	71
2019 VOLUME #2	115	99	214	3	7	10	106	124	230	39	33	72
2019 VOLUME #3	115	99	214	3	7	10	107	124	231	38	33	71
2019 VOLUME #4	115	99	214	3	7	10	107	124	231	38	33	71
2019 VOLUME #5	114	99	213	3	7	10	108	124	232	38	33	71
CONTROL LINK VOLUMES	116	104	220	3	7	10	111	129	240	37	33	70
2025 VOLUME #1	116	104	220	3	3	6	111	122	233	37	37	74
2025 VOLUME #2	121	104	225	3	7	10	110	129	239	39	33	72
2025 VOLUME #3	121	104	225	3	7	10	111	129	240	38	33	71
2025 VOLUME #4	120	104	224	3	7	10	112	129	241	38	33	71
2025 VOLUME #5	120	104	224	3	7	10	112	129	241	38	33	71
CONTROL LINK VOLUMES	128	112	240	3	7	10	122	138	260	41	39	80
2035 VOLUME #1	128	114	242	3	4	7	122	135	257	41	42	83
2035 VOLUME #2	131	112	243	3	7	10	120	138	258	42	39	81
2035 VOLUME #3	131	112	243	3	7	10	121	138	259	41	39	80
2035 VOLUME #4	130	112	242	3	7	10	122	138	260	41	39	80
2035 VOLUME #5	130	112	242	3	7	10	122	138	260	41	39	80
CONTROL LINK VOLUMES	139	121	260	3	7	10	133	147	280	45	45	90
2045 VOLUME #1	139	124	263	3	4	7	133	145	278	45	46	91
2045 VOLUME #2	141	121	262	3	7	10	131	147	278	46	45	91
2045 VOLUME #3	140	121	261	3	7	10	131	147	278	45	45	90
2045 VOLUME #4	140	121	261	3	7	10	132	147	279	45	45	90
2045 VOLUME #5	140	121	261	3	7	10	132	147	279	45	45	90
	NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2019 MIDDAY TURNS 1	12	98	1	1	1	1	1	84	21	21	1	15
2019 MIDDAY TURNS 2	12	101	2	1	1	1	2	83	20	22	2	15
2019 MIDDAY TURNS 3	11	101	2	1	1	1	2	84	21	21	2	14
2019 MIDDAY TURNS 4	11	101	2	1	1	1	2	84	21	22	2	14
2019 MIDDAY TURNS 5	11	101	2	1	1	1	2	84	21	22	2	14
2025 MIDDAY TURNS 1	14	101	1	1	1	1	1	87	22	21	1	15
2025 MIDDAY TURNS 2	12	106	3	1	1	1	2	88	20	22	2	15
2025 MIDDAY TURNS 3	12	106	2	1	1	1	3	88	20	22	2	15
2025 MIDDAY TURNS 4	12	106	2	1	1	1	3	89	20	22	2	14
2025 MIDDAY TURNS 5	11	106	2	1	1	1	3	89	21	22	2	14
2035 MIDDAY TURNS 1	16	111	1	1	1	1	1	96	25	23	1	17
2035 MIDDAY TURNS 2	15	113	3	1	1	1	3	94	23	23	2	17
2035 MIDDAY TURNS 3	15	114	3	1	1	1	3	95	24	23	2	16
2035 MIDDAY TURNS 4	14	113	2	1	1	1	3	95	24	24	2	16
2035 MIDDAY TURNS 5	14	113	2	1	1	1	3	95	24	24	2	16
2045 MIDDAY TURNS 1	18	119	2	1	1	1	1	104	27	25	1	19
2045 MIDDAY TURNS 2	18	121	3	1	1	1	3	102	27	25	2	18
2045 MIDDAY TURNS 3	17	121	3	1	1	1	3	102	27	25	2	18
2045 MIDDAY TURNS 4	17	120	3	1	1	1	3	102	27	25	2	18
2045 MIDDAY TURNS 5	17	120	2	1	1	1	3	102	27	26	2	18

2-WAY	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG	
2019 PM DESIGN HOUR VOLUMES	270	10	270	90				
2025 PM DESIGN HOUR VOLUMES	280	10	280	90				
2035 PM DESIGN HOUR VOLUMES	310	10	310	100				
2045 PM DESIGN HOUR VOLUMES	330	10	330	110				

DESIGN HOUR P.M.:	NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK	FROM	TO	LINK
CONTROL LINK VOLUMES	143	127	270	3	7	10	146	124	270	29	61	90
2019 VOLUME #1	143	126	269	3	2	5	146	105	251	29	88	117
2019 VOLUME #2	146	127	273	3	7	10	138	124	262	33	61	94
2019 VOLUME #3	146	127	273	3	7	10	141	124	265	29	61	90
2019 VOLUME #4	145	127	272	3	7	10	143	124	267	29	61	90
2019 VOLUME #5	144	127	271	3	7	10	143	124	267	29	61	90
CONTROL LINK VOLUMES	150	130	280	3	7	10	153	127	280	30	60	90
2025 VOLUME #1	150	131	281	3	3	6	153	112	265	30	90	120
2025 VOLUME #2	148	130	278	3	7	10	141	127	268	32	60	92
2025 VOLUME #3	148	130	278	3	7	10	144	127	271	29	60	89
2025 VOLUME #4	147	130	277	3	7	10	145	127	272	29	60	89
2025 VOLUME #5	146	130	276	3	7	10	146	127	273	29	60	89
CONTROL LINK VOLUMES	164	146	310	3	7	10	168	142	310	33	67	100
2035 VOLUME #1	164	144	308	3	3	6	168	123	291	33	98	131
2035 VOLUME #2	165	146	311	3	7	10	158	142	300	36	67	103
2035 VOLUME #3	165	146	311	3	7	10	162	142	304	33	67	100
2035 VOLUME #4	164	146	310	3	7	10	163	142	305	32	67	99
2035 VOLUME #5	163	146	309	3	7	10	164	142	306	32	67	99
CONTROL LINK VOLUMES	179	151	330	3	7	10	182	148	330	36	74	110
2045 VOLUME #1	179	156	335	3	3	6	182	135	317	36	105	141
2045 VOLUME #2	174	151	325	3	7	10	166	148	314	38	74	112
2045 VOLUME #3	174	151	325	3	7	10	169	148	317	34	74	108
2045 VOLUME #4	173	151	324	3	7	10	170	148	318	34	74	108
2045 VOLUME #5	172	151	323	3	7	10	171	148	319	34	74	108
	NORTH LEG			EAST LEG			SOUTH LEG			WEST LEG		
	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT	RIGHT	THRU	LEFT
2019 P.M. TURNS 1	50	92	1	1	1	1	1	109	36	13	1	16
2019 P.M. TURNS 2	35	108	3	1	1	1	3	110	25	15	2	16
2019 P.M. TURNS 3	34	109	2	1	1	1	3	112	26	14	2	14
2019 P.M. TURNS 4	33	109	2	1	1	1	3	113	27	14	2	13
2019 P.M. TURNS 5	33	109	2	1	1	1	3	113	27	14	2	13
2025 P.M. TURNS 1	51	98	1	1	1	1	1	114	38	13	1	16
2025 P.M. TURNS 2	34	111	3	1	1	1	3	113	25	15	1	16
2025 P.M. TURNS 3	33	112	3	1	1	1	3	115	26	14	1	14
2025 P.M. TURNS 4	33	112	3	1	1	1	3	115	27	14	1	14
2025 P.M. TURNS 5	32	111	3	1	1	1	3	116	27	14	1	13
2035 P.M. TURNS 1	56	107	1	1	1	1	1	125	41	15	1	18
2035 P.M. TURNS 2	38	124	3	1	1	1	3	127	28	17	1	18
2035 P.M. TURNS 3	37	125	3	1	1	1	3	129	29	16	1	16
2035 P.M. TURNS 4	36	125	3	1	1	1	3	130	30	16	1	15
2035 P.M. TURNS 5	36	125	3	1	1	1	3	130	31	16	1	15
2045 P.M. TURNS 1	60	118	1	1	1	1	1	136	45	16	1	19
2045 P.M. TURNS 2	42	129	3	1	1	1	3	131	31	18	1	19
2045 P.M. TURNS 3	41	130	3	1	1	1	3	133	33	17	1	17
2045 P.M. TURNS 4	40	130	3	1	1	1	3	134	33	17	1	16
2045 P.M. TURNS 5	39	130	3	1	1	1	3	134	34	17	1	16

# **APPENDIX B**

## **TRAFFIC FACTOR CALCULATIONS**

## Daily Truck Percent

PD&E Study for SR A1A Over Sebastian Inlet - Bridge 880005 - Bridge Replacement - FM No. 445618-1-22-02

### FDOT Telemetered Traffic Monitoring Station

Site	Location	T Factor
880291	SR A1A, 0.5 mile south of Sebastian Inlet Bridge	7.40%

### 72-Hour Vehicle Classification Counts along Sebastian Inlet Bridge

Direction	Date	Vehicle Classification %														Truck Total %	
		Bikes	Cars & Trailer	2-Axle Long	Buses	2 Axle, 6 tires	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Class		
Northbound	11/12/2019	2.5	66.4	24.7	0.3	4.8	0.2	0.0	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	6.6
	11/13/2019	0.2	65.2	26.0	0.7	6.0	0.5	0.1	1.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	8.6
	11/14/2019	1.2	65.4	25.9	0.4	5.5	0.3	0.0	1.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	7.5
Southbound	12/10/2019	1.8	63.0	25.4	0.4	5.9	1.5	0.1	1.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	9.7
	12/11/2019	0.7	62.9	28.4	0.5	5.4	0.7	0.1	1.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	8.0
	12/12/2019	1.0	62.6	27.0	0.3	6.4	1.1	0.0	1.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	9.3
															<b>Average</b>	<b>8.3</b>	

Note: 72-hour vehicle classification data obtained from the PD&E Study Pre-work report titled: Traffic Counts and Traffic Projections (dated March 2020)

**Selected Truck Daily Factor = 8%**

FLORIDA DEPARTMENT OF TRANSPORTATION  
 TRANSPORTATION STATISTICS OFFICE  
 2020 HISTORICAL AADT REPORT

COUNTY: 88 - INDIAN RIVER

SITE: 0291 - SR A1A-0.5 MI S SEBASTIAN INLET BR INDIAN RIVER CO

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	2836	C	N 1371		S 1465	9.50	53.40	7.40
2019	3125	C	N 1513		S 1612	9.50	53.40	6.00
2018	3149	C	N 1531		S 1618	9.50	52.80	7.30
2017	3086	C	N 1497		S 1589	9.50	53.00	6.90
2016	3023	C	N 1462		S 1561	9.00	53.30	5.80
2015	2930	C	N 1415		S 1515	9.00	53.30	5.90
2014	2788	C	N 1349		S 1439	9.00	53.30	5.30
2013	2701	C	N 1319		S 1382	9.00	54.00	5.20
2012	2632	C	N 1276		S 1356	9.00	53.40	4.80
2011	2709	C	N 1314		S 1395	9.00	53.20	4.60
2010	2681	C	N 1298		S 1383	15.67	53.05	4.40
2009	2837	C	N 1376		S 1461	15.83	53.96	4.50
2008	2912	C	N 1413		S 1499	15.45	53.99	4.50
2007	3200	F	N 0		S 0	15.52	55.16	4.90
2006	3144	C	N 1547		S 1597	15.52	55.16	4.90
2005	3150	C	N 1548		S 1602	15.20	51.30	4.90

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE  
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE  
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

\*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

## Peak Hour Factor Selection

PD&E Study for SR A1A Over Sebastian Inlet - Bridge 880005 - Bridge Replacement - FM No. 445618-1-22-02

**2021 FDOT Traffic Analysis Handbook, Rural Facilities, in absence of field-measured data = 0.88**

Intersection Turning Movement Counts					Peak Hour Factor (PHF)					Selected PHF	
Period	Intersection #	Description	Day	Time	Southbound	Westbound	Northbound	Eastbound	Intersection	Weekday Average by Time Period	Weekend Average by Time Period
AM	1	North Access	Thursday	10:30 AM	0.76	0.00	0.73	0.67	0.84	0.83	0.91
			Friday	11:45 AM	0.95	0.00	0.89	0.82	0.96		
			Saturday	11:15 AM	0.89	0.00	0.94	0.94	0.96		
			Sunday	11:45 AM	0.73	0.00	0.81	0.76	0.83		
	2	South Access	Thursday	8:00 AM	0.72	0.00	0.88	0.78	0.81		
			Friday	11:00 AM	0.88	0.00	0.85	0.77	0.89		
			Saturday	11:15 AM	0.93	0.00	0.94	0.80	0.91		
			Sunday	11:45 AM	0.80	0.00	0.83	0.70	0.90		
PM	1	North Access	Thursday	4:45 PM	0.66	0.00	0.87	0.60	0.76	0.77	0.90
			Friday	3:15 PM	0.77	0.00	0.83	0.81	0.92		
			Saturday	4:45 PM	0.75	0.00	0.87	0.60	0.92		
			Sunday	3:15 PM	0.79	0.00	0.92	0.76	0.83		
	2	South Access	Thursday	4:15 PM	0.68	0.00	0.83	0.61	0.77		
			Friday	4:30 PM	0.90	0.00	0.84	0.65	0.94		
			Saturday	5:00 PM	0.78	0.00	0.84	0.80	0.96		
			Sunday	3:15 PM	0.77	0.00	0.87	0.82	0.85		

Note: intersection turning movement count data obtained from the PD&E Study Pre-work report titled: Traffic Counts and Traffic Projections (dated March 2020)



# APPENDIX C

## EXISTING INTERSECTION OPERATIONAL ANALYSIS

## **AM PEAK HOUR**

HCM 6th TWSC  
1: SR A1A & North Access

Existing-Weekday-AM

Intersection						
Int Delay, s/veh	2.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	↔
Traffic Vol, veh/h	15	21	26	75	103	12
Future Vol, veh/h	15	21	26	75	103	12
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	-	190	-	-	200
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	18	25	31	90	124	14

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	276	124	138	0	-	0
Stage 1	124	-	-	-	-	-
Stage 2	152	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	709	921	1433	-	-	-
Stage 1	897	-	-	-	-	-
Stage 2	871	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	693	921	1433	-	-	-
Mov Cap-2 Maneuver	693	-	-	-	-	-
Stage 1	877	-	-	-	-	-
Stage 2	871	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	1.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1433	-	810	-	-
HCM Lane V/C Ratio	0.022	-	0.054	-	-
HCM Control Delay (s)	7.6	-	9.7	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

HCM 6th TWSC  
2: SR A1A & South Access

Existing-Weekday-AM

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	↔
Traffic Vol, veh/h	18	12	11	78	101	23
Future Vol, veh/h	18	12	11	78	101	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	Yield
Storage Length	0	-	370	-	-	220
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	22	14	13	94	122	28

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	242	122	122	0	0
Stage 1	122	-	-	-	-
Stage 2	120	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-
Pot Cap-1 Maneuver	742	924	1453	-	-
Stage 1	898	-	-	-	-
Stage 2	900	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	735	924	1453	-	-
Mov Cap-2 Maneuver	735	-	-	-	-
Stage 1	890	-	-	-	-
Stage 2	900	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	0.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1453	-	800	-	-
HCM Lane V/C Ratio	0.009	-	0.045	-	-
HCM Control Delay (s)	7.5	-	9.7	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

HCM 6th TWSC  
1: SR A1A & North Access

Existing-Weekend-AM

Intersection						
Int Delay, s/veh	2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	↔
Traffic Vol, veh/h	17	27	38	121	139	26
Future Vol, veh/h	17	27	38	121	139	26
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	-	190	-	-	200
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	19	30	42	133	153	29

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	370	153	182	0	0
Stage 1	153	-	-	-	-
Stage 2	217	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-
Pot Cap-1 Maneuver	626	888	1381	-	-
Stage 1	870	-	-	-	-
Stage 2	814	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	607	888	1381	-	-
Mov Cap-2 Maneuver	607	-	-	-	-
Stage 1	844	-	-	-	-
Stage 2	814	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.1	1.8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1381	-	753	-	-
HCM Lane V/C Ratio	0.03	-	0.064	-	-
HCM Control Delay (s)	7.7	-	10.1	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

HCM 6th TWSC  
2: SR A1A & South Access

Existing-Weekend-AM

Intersection						
Int Delay, s/veh	2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	↔
Traffic Vol, veh/h	37	17	18	122	135	31
Future Vol, veh/h	37	17	18	122	135	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	Yield
Storage Length	0	-	370	-	-	220
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	41	19	20	134	148	34

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	322	148	148	0	0
Stage 1	148	-	-	-	-
Stage 2	174	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-
Pot Cap-1 Maneuver	668	894	1421	-	-
Stage 1	875	-	-	-	-
Stage 2	851	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	659	894	1421	-	-
Mov Cap-2 Maneuver	659	-	-	-	-
Stage 1	863	-	-	-	-
Stage 2	851	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.5	1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1421	-	718	-	-
HCM Lane V/C Ratio	0.014	-	0.083	-	-
HCM Control Delay (s)	7.6	-	10.5	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

## **PM PEAK HOUR**

HCM 6th TWSC  
1: SR A1A & North Access

Existing-Weekday-PM

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	↔
Traffic Vol, veh/h	16	17	16	122	86	19
Future Vol, veh/h	16	17	16	122	86	19
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	-	190	-	-	200
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	21	22	21	158	112	25

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	312	112	137	0	-	0
Stage 1	112	-	-	-	-	-
Stage 2	200	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	676	936	1435	-	-	-
Stage 1	908	-	-	-	-	-
Stage 2	829	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	666	936	1435	-	-	-
Mov Cap-2 Maneuver	666	-	-	-	-	-
Stage 1	894	-	-	-	-	-
Stage 2	829	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.9	0.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1435	-	782	-	-
HCM Lane V/C Ratio	0.014	-	0.055	-	-
HCM Control Delay (s)	7.5	-	9.9	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-



HCM 6th TWSC  
2: SR A1A & South Access

Existing-Weekday-PM

Intersection						
Int Delay, s/veh	1.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘↗		↘	↑	↑	↘
Traffic Vol, veh/h	13	13	12	125	86	17
Future Vol, veh/h	13	13	12	125	86	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	Yield
Storage Length	0	-	370	-	-	220
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	17	17	16	162	112	22

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	306	112	112	0	-	0
Stage 1	112	-	-	-	-	-
Stage 2	194	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	682	936	1465	-	-	-
Stage 1	908	-	-	-	-	-
Stage 2	834	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	674	936	1465	-	-	-
Mov Cap-2 Maneuver	674	-	-	-	-	-
Stage 1	898	-	-	-	-	-
Stage 2	834	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.8	0.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1465	-	784	-	-
HCM Lane V/C Ratio	0.011	-	0.043	-	-
HCM Control Delay (s)	7.5	-	9.8	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

HCM 6th TWSC  
1: SR A1A & North Access

Existing-Weekend-PM

Intersection						
Int Delay, s/veh	2.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	29	41	32	131	147	27
Future Vol, veh/h	29	41	32	131	147	27
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	-	190	-	-	200
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	32	46	36	146	163	30

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	381	163	193	0	-	0
Stage 1	163	-	-	-	-	-
Stage 2	218	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	617	877	1368	-	-	-
Stage 1	861	-	-	-	-	-
Stage 2	814	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	601	877	1368	-	-	-
Mov Cap-2 Maneuver	601	-	-	-	-	-
Stage 1	839	-	-	-	-	-
Stage 2	814	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.5	1.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1368	-	737	-	-
HCM Lane V/C Ratio	0.026	-	0.106	-	-
HCM Control Delay (s)	7.7	-	10.5	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

HCM 6th TWSC  
2: SR A1A & South Access

Existing-Weekend-PM

Intersection						
Int Delay, s/veh	2.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘		↘	↑	↑	↘
Traffic Vol, veh/h	30	24	44	133	122	67
Future Vol, veh/h	30	24	44	133	122	67
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	Yield
Storage Length	0	-	370	-	-	220
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	33	27	49	148	136	74

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	382	136	136	0	-	0
Stage 1	136	-	-	-	-	-
Stage 2	246	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	617	907	1436	-	-	-
Stage 1	886	-	-	-	-	-
Stage 2	790	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	596	907	1436	-	-	-
Mov Cap-2 Maneuver	596	-	-	-	-	-
Stage 1	856	-	-	-	-	-
Stage 2	790	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.6	1.9	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1436	-	703	-	-
HCM Lane V/C Ratio	0.034	-	0.085	-	-
HCM Control Delay (s)	7.6	-	10.6	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

# **APPENDIX D**

## **FDOT QUALITY/LEVEL OF SERVICE**

TABLE 9

Generalized **Peak Hour Directional** Volumes for Florida's  
Rural Undeveloped Areas and  
Developed Areas Less Than 5,000 Population<sup>1</sup>

January 2020

INTERRUPTED FLOW FACILITIES						UNINTERRUPTED FLOW FACILITIES					
<b>STATE SIGNALIZED ARTERIALS</b>						<b>FREEWAYS</b>					
Lanes	Median	B	C	D	E	Lanes	B	C	D	E	
1	Undivided	*	670	740	**	2	2,010	2,770	3,270	3,650	
2	Divided	*	1,530	1,580	**	3	2,820	3,990	4,770	5,470	
3	Divided	*	2,360	2,400	**	4	3,630	5,220	6,260	7,300	
<b>Non-State Signalized Roadway Adjustments</b> (Alter corresponding state volumes by the indicated percent.) Non-State Signalized Roadways - 10%						<b>Freeway Adjustments</b> Auxiliary Lane + 1,000					
<b>Median &amp; Turn Lane Adjustments</b>						<b>UNINTERRUPTED FLOW HIGHWAYS</b>					
Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors		<b>Rural Undeveloped</b>					
1	Divided	Yes	No	+5%		Lanes	Median	B	C	D	E
1	Undivided	No	No	-20%		1	Undivided	240	450	730	1,490
Multi	Undivided	Yes	No	-5%		2	Divided	1,630	2,350	2,910	3,280
Multi	Undivided	No	No	-25%		3	Divided	2,450	3,530	4,360	4,920
-	-	-	Yes	+ 5%		<b>Developed Areas</b>					
<b>One-Way Facility Adjustment</b> Multiply the corresponding directional volumes in this table by 1.2						Lanes	Median	B	C	D	E
						1	Undivided	540	820	1,110	1,490
						2	Divided	1,530	2,210	2,820	3,220
						3	Divided	2,300	3,320	4,240	4,830
<b>BICYCLE MODE<sup>2</sup></b> (Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)						<b>Passing Lane Adjustments</b> Alter LOS B-D volumes in proportion to the passing lane length to the highway segment length					
<b>Rural Undeveloped</b>						<b>Uninterrupted Flow Highway Adjustments</b>					
Paved Shoulder/Bicycle Lane Coverage						Lanes	Median	Exclusive left lanes	Adjustment factors		
0-49%						1	Divided	Yes	+5%		
50-84%						Multi	Undivided	Yes	-5%		
85-100%						Multi	Undivided	No	-25%		
<b>Developed Areas</b>											
Paved Shoulder/Bicycle Lane Coverage											
0-49%											
50-84%											
85-100%											
<b>PEDESTRIAN MODE<sup>2</sup></b> (Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)											
Sidewalk Coverage											
0-49%											
50-84%											
85-100%											

<sup>1</sup>Values shown are presented as peak hour directional volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the HCM and the Transit Capacity and Quality of Service Manual.

<sup>2</sup>Level of service for the bicycle and pedestrian modes in this table is based on number of vehicles, not number of bicyclists or pedestrians using the facility.

\* Cannot be achieved using table input value defaults.

\*\* Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:  
Florida Department of Transportation  
Systems Implementation Office  
<https://www.fdot.gov/planning/systems/>

TABLE 9  
(continued)

Generalized **Peak Hour Directional** Volumes for Florida's  
Rural Undeveloped Areas **and**  
Developed Areas Less Than 5,000 Population

January 2020

INPUT VALUE ASSUMPTIONS	Uninterrupted Flow Facilities					Interrupted Flow Facilities				
	Freeways	Highways				Arterials	Bicycle	Pedestrian		
		Undeveloped	Developed							
<b>ROADWAY CHARACTERISTICS</b>										
Area type (urban, rural)	rural									
Number of through lanes (both dir.)	4-8	2	4-6	2	4-6	2	4-6	4	4	2
Posted speed (mph)	70	55	55	50	50	45	45	55	45	45
Free flow speed (mph)	75	60	60	55	55	50	50	60	50	50
Auxiliary lanes (n,y)	n									
Median (d, n, nr, r)			d		d	n	r	r	r	n
Terrain (l,r)	l	l	l	l	l	l	l	l	l	l
% no passing zone		20		60						
Exclusive left turn lanes (n, y)		[n]	y	[n]	y	y	y	y	y	y
Exclusive right turn lanes (n, y)						n	n	n	n	n
Facility length (mi)	18	10	10	5	5	1.9	2.2	4	2	2
<b>TRAFFIC CHARACTERISTICS</b>										
Planning analysis hour factor (K)	0.105	0.095	0.095	0.095	0.095	0.095	0.095	0.095	0.095	0.095
Directional distribution factor (D)	0.55	0.55	0.55	0.55	0.55	0.550	0.550	0.570	0.570	0.550
Peak hour factor (PHF)	0.88	0.88	0.88	0.88	0.88	1.000	1.000	1.000	1.000	1.000
Base saturation flow rate (pcphpl)	2,400	1,700	2,200	1,700	2,200	1,950	1,950	1,950	1,950	1,950
Heavy vehicle percent	12.0	5.0	12.0	5.0	8.0	3.0	3.0	6.0	3.5	3.0
Speed Adjustment Factor (SAF)	0.975		0.975		0.975					
Capacity Adjustment Factor (CAF)	0.968		0.968		0.968					
% left turns						12	12		12	12
% right turns						12	12		12	12
<b>CONTROL CHARACTERISTICS</b>										
Number of signals						5	6	2	4	4
Arrival type (1-6)						3	3	3	3	3
Signal type (a, c, p)						c	c	a	a	a
Cycle length (C)						90	90	60	90	90
Effective green ratio (g/C)						0.44	0.44	0.37	0.44	0.44
<b>MULTIMODAL CHARACTERISTICS</b>										
Paved shoulder/bicycle lane (n, y)								n,50%,y	n,50%,y	n
Outside lane width (n, t, w)								t	t	t
Pavement condition (d, t, u)								t	t	
Sidewalk (n, y)										n,50%,y
Sidewalk/roadway separation(a, t,w)										t
Sidewalk protective barrier (n, y)										n
<b>LEVEL OF SERVICE THRESHOLDS</b>										
Level of Service	Freeways	Highways								
		Two-Lane ru		Two-Lane rd	Multilane ru	Multilane rd				
		Density	%tsf	ats	%ffs	Density	Density			
B	≤ 14	≤ 50	≤ 55	> 83.3	≤ 14	≤ 14				
C	≤ 22	≤ 65	≤ 50	> 75.0	≤ 22	≤ 22				
D	≤ 29	≤ 80	≤ 45	> 66.7	≤ 29	≤ 29				
E	≤ 36	> 80	≤ 40	> 58.3	≤ 34	≤ 34				
Level of Service	Arterials		Bicycle		Pedestrian					
	Major City/Co.(ats)		Score		Score					
	B	> 31 mph	≤ 2.75		≤ 2.75					
C	> 23 mph	≤ 3.50		≤ 3.50						
D	> 18 mph	≤ 4.25		≤ 4.25						
E	> 15 mph	≤ 5.00		≤ 5.00						

%tsf = Percent time spent following %ffs = Percent of free flow speed ats = Average travel speed ru = Rural undeveloped rd = Rural developed

# **APPENDIX E**

## **SAFETY ANALYSIS MEMO**

SAFETY ANALYSIS MEMO

Florida Department of Transportation

District 4

Project Development and Environment (PD&E) Study

SR A1A over Sebastian Inlet - Bridge 880005

Bridge Replacement

Indian River County and Brevard County, Florida

Financial Project ID: 445618-1-22-02

ETDM Number: 14433

January 24, 2022

*The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016, and executed by FHWA and FDOT.*

\_\_\_\_\_  
Authorized Signature

Godfrey Lampsey, P.E., PTOE

Print/Type Name

Principal & Project Safety Engineer

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## 1.0 INTRODUCTION

The Florida Department of Transportation (FDOT or Department) District Four is conducting a Project Development & Environment (PD&E) Study to evaluate the replacement of the Sebastian Inlet Bridge (No. 880005) crossing the Sebastian Inlet located at the Indian River County and Brevard County boundary (**Figure 1-1**).

The project development process, alternatives developed, and the associated social, economic, and environmental analyses follow the guidance provided in the Department's current version of the PD&E Manual and FDOT Design Manual (FDM). The project also satisfies state and federal processes and incorporates the requirements of the National Environmental Policy Act (NEPA). The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. §327 and a Memorandum of Understanding dated December 14, 2016, and executed by the Federal Highway Administration (FHWA) and FDOT.

### 1.1 PROJECT DESCRIPTION

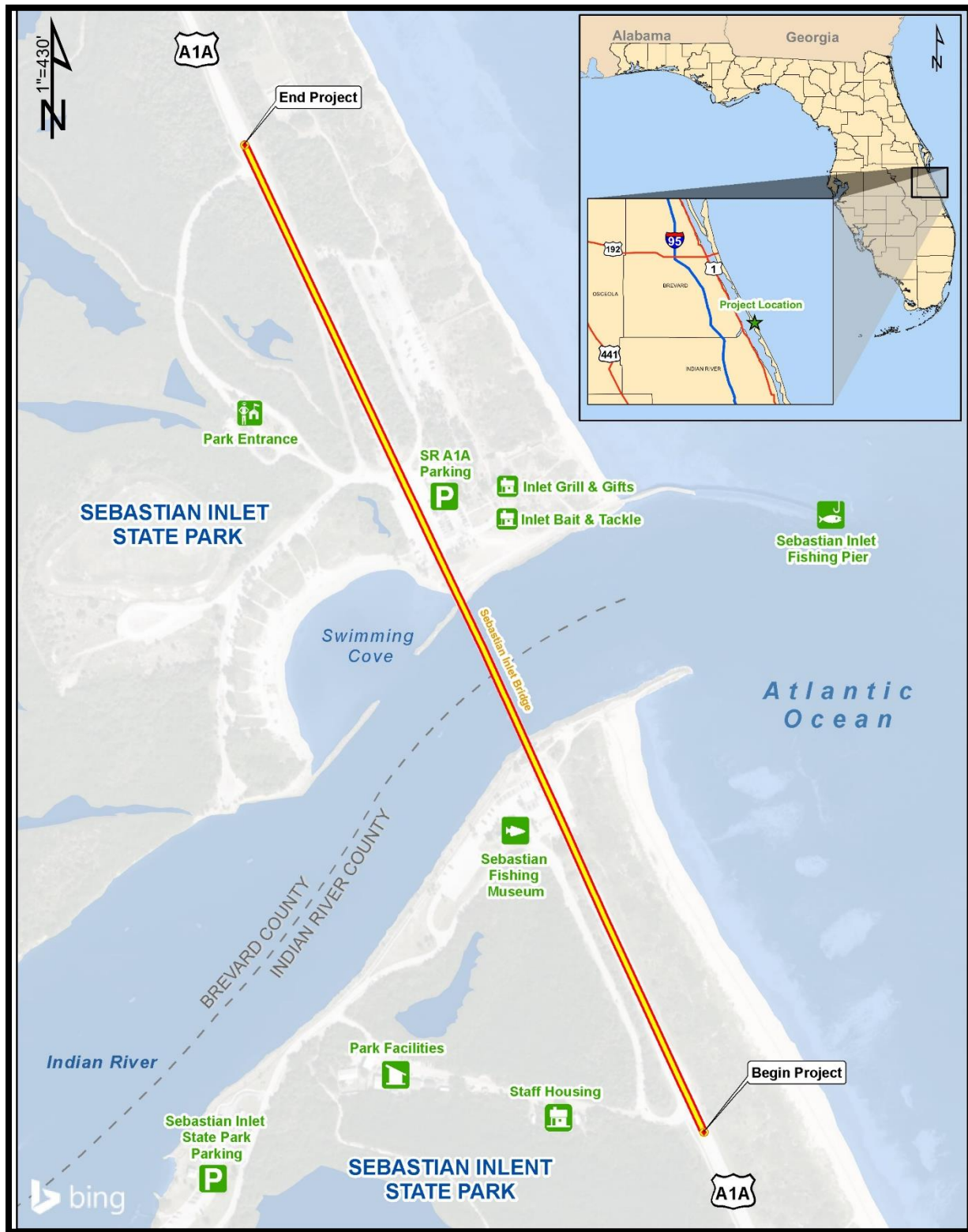
The Sebastian Inlet Bridge (bridge), also known as the James H. Pruitt Memorial Bridge, was constructed in 1964 to carry State Road (SR) A1A across the Sebastian Inlet. The bridge is approximately 1, 500-feet long with 19 spans, the longest of which is approximately 180-feet long. The bridge vertical clearance is 39-feet and horizontal clearance is 150-feet between the bridge fenders. The Inlet provides access for vessels between the Indian River Lagoon and the Atlantic Ocean and is approximately 525-feet wide at the bridge. The bridge is located within FDOT and Sebastian Inlet District (SID) right-of-way (ROW) and is adjacent to the Sebastian Inlet State Park. The Inlet was created from privately owned uplands. In 1919 the SID was formed to maintain the Inlet and owns the submerged lands under the bridge.

The project limits extend approximately one mile along SR A1A from Mile Post (MP) 21.945 north to MP 22.665 of Roadway ID 88070000 in Indian River County continuing north from MP 0.00 north to MP 0.307 of Roadway ID 70060000 in Brevard County.

The existing bridge has two 12-foot travel lanes and 2-foot shoulders. The approach roadway has two 12-foot travel lanes. North and south of the bridge, paved shoulders are 2 to 4-feet wide. South of the bridge, shoulders are marked as designated bicycle lanes. There are currently no pedestrian or bicycle facilities located within the bridge approaches or on the bridge, creating a gap in the multimodal network along SR A1A. An 8-foot shared use path, separated from SR A1A, is located on the west side of the roadway north and south of the bridge.

This project was evaluated through FDOT's Efficient Transportation Decision Making (ETDM) process as project #14433. An ETDM Programming Screen Summary Report containing comments from the Environmental Technical Advisory Team (ETAT) was published on June 3, 2020. The ETAT evaluated the project's effects on natural, physical, cultural, social, and economic resources.

Figure 1-1- Project Location Map



The bridge is recommended National Register of Historic Places (NRHP)-eligible under Criterion C in the area of Engineering for its high-integrity embodiment of a prestressed concrete bridge in Florida. The bridge is also situated within the Sebastian Inlet State Park, a Section 4(f) resource.

The project includes the evaluation of Build and Rehabilitation alternatives for the bridge and the No-Action (No-Build) alternative, replacement of the existing under deck observation/fishing piers, and the addition of bicycle and pedestrian facilities across the bridge. The underdeck observation/ fishing piers are located under the north and south portions of the bridge. Build alternatives will include evaluation of the bridge vertical clearance as required by the U.S. Coast Guard (USCG).

## 2.0 DESCRIPTION OF PROJECT ALTERNATIVES

The PD&E Study considers a range of alternatives that meet the purpose and need of the project while balancing engineering requirements, environmental impacts., and public input. Project alternatives include the No-Action (No-Build), Transportation Systems Management & Operations (TSM&O), Rehabilitation, and Build Alternatives.

The development of alternatives and the associated environmental effects were evaluated according to FDOT's PD&E manual and FDM and were undertaken in a collaborative process utilizing input from the Department, stakeholders, and the study team. A detailed discussion of each alternative evaluated in the PD&E Study is summarized in the following sections.

### 2.1 PREVIOUS PLANNING STUDIES

FDOT performed an assessment to evaluate the feasibility of replacing the existing bridge as part of a planning level activity. The results of the feasibility study are reported in the Bridge Replacement Feasibility Report (April 2020). This study conducted evaluations to determine ROW requirements, as well as the feasibility of phased construction of a proposed bridge and the approach to maintenance of traffic. Additional feasibility study activities included:

- Traffic Data
- Operational Analysis
- Benthic Survey of Inlet
- Vessel Survey
- Section 4(f) Research Memo
- Preliminary Geotechnical Review

### 2.2 NO-ACTION (NO-BUILD) ALTERNATIVE

The No-Action alternative is an alternative solution that assumes the retention of existing conditions within the projects limits and would not have any direct impacts to the physical, natural, cultural, and social environments. Continuous maintenance is performed to make the bridge safe to use. Although this alternative does not meet the purpose and need for the project, it will remain under consideration and serve as a baseline for comparison against other alternatives throughout the PD&E Study.

### 2.3 TRANSPORTATION SYSTEMS MANAGEMENT AND OPERATIONS ALTERNATIVE (TSM&O)

The TSM&O alternative consists of short-term improvements aimed at extending the service life of the bridge or optimizing the performance of the existing facility. However, they do not address the structural deficiency of the bridge. The TSM&O alternative does not meet the purpose and need for the project.

## 2.4 BUILD ALTERNATIVES(S)

Build Alternatives were developed and evaluated based on the following criteria:

- Ability to satisfy the purpose and need for the project
- Vertical and horizontal navigational clearances
- Bridge, roadway, and park entrance geometry
- Natural, social, cultural, and physical environment impacts
- Section 4(f) impacts
- Section 106 criteria of the National Historic Preservation Act (NHPA)
- Required ROW
- Project costs
- Avoidance of bridge closure during construction

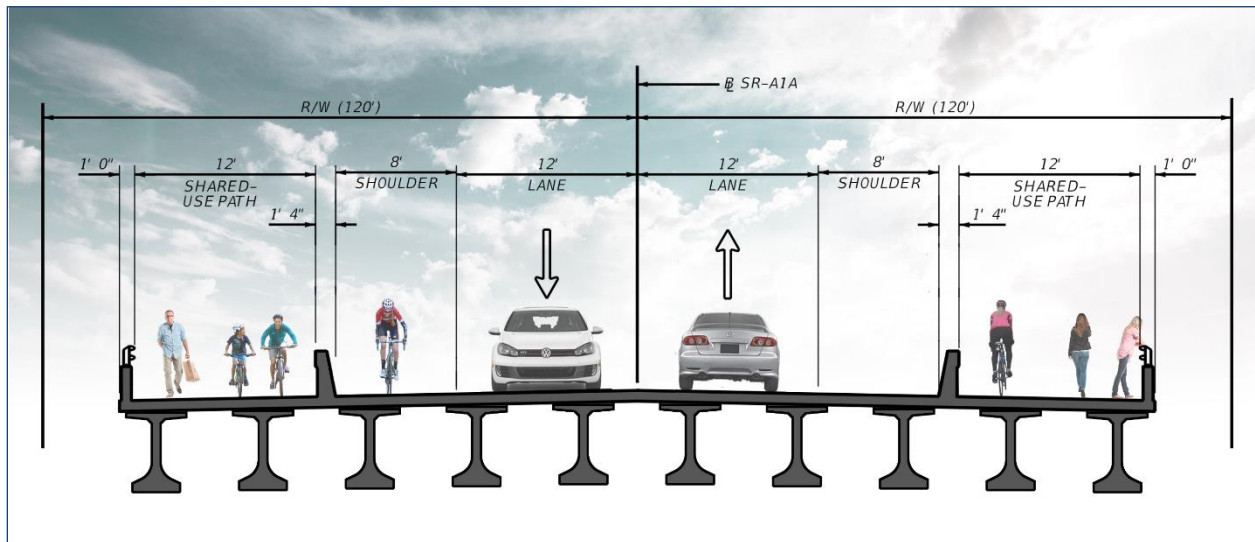
A key criterion for the Alternatives development is the vertical and horizontal clearances of the bridge. A navigation needs analysis memorandum was submitted to the USCG and a preliminary clearance determination was received which stated a desired minimum vertical clearance of 65-feet above mean high water (MHW) for a fixed bridge and 125-foot minimum horizontal clearance.

Based on the USCG response, a vertical clearance evaluation was completed to demonstrate a bridge vertical clearance of less than 65-feet, as preliminarily determined by the USCG, provides for reasonable needs of navigation at the Inlet. Also considered were the purpose and need for the project, impacts to the north and south park entrances, character of the Inlet, bathymetry, surrounding resources, maintenance of the Inlet and adjacent waterways, and connectivity to the Intracoastal Waterway (ICW).

The proposed typical section developed during the feasibility study was modified during the PD&E Study. The proposed typical section is shown in **Figure 2-1** and includes:

- Two 12-foot travel lanes
- Two 8-foot shoulders
- Two 12-foot shared use paths

Figure 2-1 – Proposed Bridge Typical Section



## 2.4.1 REHABILITATION ALTERNATIVE

Because the bridge is considered an eligible historic resource under Section 106 of the National Historic Preservation Act, a rehabilitation alternative was considered. The bridge is eligible under Criterion C – Engineering indicating the bridge “*embodies the distinctive characteristics of type, period, or method of construction*”.

A determination of whether rehabilitation can be completed to an acceptable level in a feasible and prudent manner is a function of its ability to perform adequately in both structural and functional areas.

If the bridge is rehabilitated to meet the purpose and need for the project, at minimum, it must:

- Meet current FDOT Design Standards
- Be widened by adding shoulders and bicycle/pedestrian facilities
- Provide a 75-Year service life
- Maintains existing vertical and horizontal clearances
- Maintain traffic during construction
- Minimize impacts to the natural, cultural, and physical environments

Whether the bridge is rehabilitated to its existing condition or not, this option does not meet the purpose and need for the project and the bridge remains structurally and functionally deficient. Based on the results of the rehabilitation alternative analysis, this alternative was removed from further consideration.

## 2.4.2 BUILD ALTERNATIVE 1

Build Alternative 1 includes a new bridge on the existing alignment. This alternative requires the installation of a temporary bridge to maintain traffic and avoid bridge closing or lengthy detours.

South of the bridge, proposed Build Alternative 1 improvements include:

- The beginning of the temporary bridge
- Reconfiguration of the south Park entrance including the addition of an exit right turn lane
- A southbound acceleration lane from the south Park entrance
- Lengthened storage of the southbound right turn lane into the Park
- Continuation of the shared use path on the west side of the bridge and roadway
- Addition of a shared use path on the east side of the bridge and roadway that extends to the public parking lot located on the east side of SR A1A
- Addition of a crosswalk crossing SR A1A at the south Park entrance

North of the bridge, proposed Build Alternative 1 improvements include:

- The end of the temporary bridge
- Reconfiguration of the north Park entrance including the addition of an exit right turn lane
- Lengthened storage of the southbound right turn lane into the Park
- Continuation of the shared use path on the west side of the bridge and roadway
- Addition of a shared use path on the east side of the bridge and roadway terminating at the north Park entrance
- Addition of a crosswalk crossing SR A1A at the north Park entrance
- Reconfiguration of the Sebastian Inlet District Access Road

All bridge improvements are located within existing FDOT ROW. Approximately 2.03 Acres of ROW is required to meet current design standards for clear zone and maintenance associated with bridge approaches, roadway, Park entrances, and shared use path improvements.

## 2.4.3 BUILD ALTERNATIVE 2

Build Alternative 2 includes a new bridge alignment that is shifted to the east of the centerline of the existing bridge. The western limit of the new bridge is generally located near the western limit of the existing bridge.



South and north of the bridge, the proposed Build Alternative 2 improvements are the same as Build Alternative 1 except that a temporary bridge is not required.

All bridge improvements are located within existing FDOT ROW. Approximately 1.0 Acre of ROW is required to meet current design standards for clear zone and maintenance associated with bridge approaches, roadway, Park entrances, and shared use path improvements.

Because the new bridge will be constructed in phases, the existing bridge will remain in place while the east portion of the new bridge is constructed. This new construction will include the shared use path, shoulder, and northbound travel lane.

Once construction of the east portion of the new bridge is completed, traffic will be diverted to the newly constructed portion of the bridge. The existing bridge will then be demolished followed by construction of the west side of the bridge completing the new bridge.

#### **2.4.4 BUILD ALTERNATIVE 3**

Build Alternative 3 includes a new bridge on alignment that is shifted to the west of the centerline of the existing bridge. The eastern limit of the new bridge is generally located near the eastern limit of the existing bridge.

South and north of the bridge, the proposed Build Alternative 3 improvements are the same as Build Alternative 1 except that a temporary bridge is not required.

All bridge improvements are located within existing FDOT ROW. Approximately 1.22 Acres of ROW is required to meet current design standards for clear zone and maintenance associated with bridge approaches, roadway, Park entrances, and shared use path improvements.

Because the new bridge will be constructed in phases, the existing bridge will remain in place while the west portion of the new bridge is constructed. This new construction will include the shared use path, shoulder, and southbound travel lane.

Once construction of the west portion of the new bridge is completed, traffic will be diverted to the newly constructed portion of the bridge. The existing bridge will then be demolished followed by construction of the east side of the bridge completing the new bridge.

## 3.0 SAFETY ANALYSIS

A safety analysis was performed along SR A1A over the Sebastian Inlet roadway segment within the study area using the latest available 5 years of crash data to identify crash patterns, contributing causes, countermeasures, and provide recommendations for further studies, if needed. The following sections summarize the safety analysis performed.

### 3.1 CRASH DATA

Crash data from 2016 to 2020 for SR A1A between the southern and northern access points to Sebastian Inlet State Park was obtained from the FDOT State Safety Office GIS (SSOGis) Query Tool on the Traffic Safety Web Portal. The data includes environmental and driver characteristics that were existent at the time of each crash and provides the basis for the crash data analysis (See **Appendix A**).

### 3.2 CRASH SUMMARY

Based on the crash analysis, a total of six crashes occurred on the SR A1A mainline within the study area from 2016 to 2020. Four crashes occurred in 2016, and one crash each in 2018 and 2020. Off-road crashes were the predominant crash type with overturn/rollover crashes accounting for 3 (50%) of the total crashes. Others included, one bicycle crash, one crash with utility pole, and one fire/explosion crash. 5 of the 6 of the crashes occurred under daylight and dry weather conditions.

One (1) fatal crash occurred within the study limits during the five-year period under wet surface conditions. Property Damage Only (PDO) crashes accounted for 2 crashes and the remaining 3 crashes resulted in injury. Among the contributing causes documented in the crash data, 'carelessness or negligent manner' (2 crashes) resulted in the most crashes. Other contributing causes included 'improper turn' (1 crash), 'failed to keep in proper lane' (1 crash), 'ran off roadway' (1 crash), and 'other contributing action' (1 crash). **Table 3-1** and **Figure 3-1** show the crash summary along SR A1A mainline within the study area.

Table 3-1 SR A1A Crash Summary Statistics									
SR A1A Sebastian Inlet State Park Bridge		Number of Crashes					5 Year Total Crashes	Mean Crashes Per Year	%
		Year							
		2016	2017	2018	2019	2020			
CRASH TYPE	Rear End	0	0	0	0	0	0	0	0.0%
	Head On	0	0	0	0	0	0	0	0.0%
	Angle	0	0	0	0	0	0	0	0.0%
	Left-turn	0	0	0	0	0	0	0	0.0%
	Right-turn	0	0	0	0	0	0	0	0.0%
	Sideswipe	0	0	0	0	0	0	0	0.0%
	Backed Into	0	0	0	0	0	0	0	0.0%
	Pedestrian	0	0	0	0	0	0	0	0.0%
	Bicycle	1	0	0	0	0	1	0	16.7%
	<b>Fixed Object</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>16.7%</b>
	Impact Attenuator/Crash Cushion	0	0	0	0	0	0	0	0.0%
	Bridge Overhead Structure	0	0	0	0	0	0	0	0.0%
	Bridge Pier or Support	0	0	0	0	0	0	0	0.0%
	Bridge Rail	0	0	0	0	0	0	0	0.0%
	Culvert	0	0	0	0	0	0	0	0.0%
	Curb	0	0	0	0	0	0	0	0.0%
	Ditch	0	0	0	0	0	0	0	0.0%
	Embankment	0	0	0	0	0	0	0	0.0%
	Guardrail Face	0	0	0	0	0	0	0	0.0%
	Guardrail End	0	0	0	0	0	0	0	0.0%
	Cable Barrier	0	0	0	0	0	0	0	0.0%
	Concrete Traffic Barrier	0	0	0	0	0	0	0	0.0%
	Other Traffic Barrier	0	0	0	0	0	0	0	0.0%
	Tree (Standing)	0	0	0	0	0	0	0	0.0%
	Utility Pole/Light Support	0	0	0	0	1	1	0	16.7%
	Traffic Sign Support	0	0	0	0	0	0	0	0.0%
	Traffic Signal Support	0	0	0	0	0	0	0	0.0%
	Other Post, Pole or Support	0	0	0	0	0	0	0	0.0%
	Fence	0	0	0	0	0	0	0	0.0%
	Mailbox	0	0	0	0	0	0	0	0.0%
	Other Fixed Object	0	0	0	0	0	0	0	0.0%
	<b>Other Non-Fixed Object Collisions</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0%</b>
	Railway Vehicle (Train, Engine)	0	0	0	0	0	0	0	0.0%
	Animal	0	0	0	0	0	0	0	0.0%
	Motor Vehicle in Transport	0	0	0	0	0	0	0	0.0%
	Parked Motor Vehicle	0	0	0	0	0	0	0	0.0%
	Work Zone/Maintenance Equip.	0	0	0	0	0	0	0	0.0%
	Struck by Falling/Shifting Cargo	0	0	0	0	0	0	0	0.0%
	Other Non-Fixed Object	0	0	0	0	0	0	0	0.0%
	<b>Non-Collisions</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>1</b>	<b>66.7%</b>
Overturn/Rollover	2	0	1	0	0	3	1	50.0%	
Fire/Explosion	1	0	0	0	0	1	0	16.7%	
Immersion	0	0	0	0	0	0	0	0.0%	
Jackknife	0	0	0	0	0	0	0	0.0%	

Table 3-1 SR A1A Crash Summary Statistics									
SR A1A Sebastian Inlet State Park Bridge		Number of Crashes					5 Year Total Crashes	Mean Crashes Per Year	%
		Year							
		2016	2017	2018	2019	2020			
	Cargo/Equipment Loss or Shift	0	0	0	0	0	0	0	0.0%
	Fell/Jumped from Motor Vehicle	0	0	0	0	0	0	0	0.0%
	Thrown or Falling Object	0	0	0	0	0	0	0	0.0%
	Ran into Water/Canal	0	0	0	0	0	0	0	0.0%
	Other Non-Collision	0	0	0	0	0	0	0	0.0%
	Others	0	0	0	0	0	0	0	0.0%
	<b>Total Crashes</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>6</b>	<b>1</b>	<b>100.0%</b>
SEVERITY	PDO Crashes	1	0	0	0	1	2	0	33.3%
	Fatal Crashes	1	0	0	0	0	1	0	16.7%
	Injury Crashes	2	0	1	0	0	3	1	50.0%
LIGHTING CONDITIONS	Daylight	4	0	1	0	1	6	1	100.0%
	Dusk	0	0	0	0	0	0	0	0.0%
	Dawn	0	0	0	0	0	0	0	0.0%
	Dark	0	0	0	0	0	0	0	0.0%
	Unknown	0	0	0	0	0	0	0	0.0%
SURFACE CONDITIONS	Dry	4	0	1	0	1	6	1	100.0%
	Wet	0	0	0	0	0	0	0	0.0%
	Others	0	0	0	0	0	0	0	0.0%
MONTH OF YEAR	January	1	0	1	0	0	2	0	33.3%
	February	1	0	0	0	0	1	0	16.7%
	March	0	0	0	0	0	0	0	0.0%
	April	1	0	0	0	0	1	0	16.7%
	May	0	0	0	0	0	0	0	0.0%
	June	0	0	0	0	0	0	0	0.0%
	July	1	0	0	0	0	1	0	16.7%
	August	0	0	0	0	0	0	0	0.0%
	September	0	0	0	0	0	0	0	0.0%
	October	0	0	0	0	1	1	0	16.7%
	November	0	0	0	0	0	0	0	0.0%
	December	0	0	0	0	0	0	0	0.0%
DAY OF WEEK	Monday	0	0	0	0	0	0	0	0.0%
	Tuesday	1	0	0	0	0	1	0	16.7%
	Wednesday	0	0	0	0	0	0	0	0.0%
	Thursday	0	0	1	0	0	1	0	16.7%
	Friday	0	0	0	0	1	1	0	16.7%
	Saturday	2	0	0	0	0	2	0	33.3%
	Sunday	1	0	0	0	0	1	0	16.7%
HOUR OF DAY	00:00-06:00	0	0	0	0	0	0	0	0.0%
	06:00-09:00	0	0	0	0	0	0	0	0.0%
	09:00-11:00	1	0	0	0	1	2	0	33.3%
	11:00-13:00	1	0	1	0	0	2	0	33.3%

Table 3-1 SR A1A Crash Summary Statistics									
SR A1A Sebastian Inlet State Park Bridge		Number of Crashes					5 Year Total Crashes	Mean Crashes Per Year	%
		Year							
		2016	2017	2018	2019	2020			
	13:00-15:00	0	0	0	0	0	0	0	0.0%
	15:00-18:00	1	0	0	0	0	1	0	16.7%
	18:00-24:00	1	0	0	0	0	1	0	16.7%
CONTRIBUTING CAUSES (VEHICLE ONLY)	No Contributing Action	0	0	0	0	0	0	0	0.0%
	Careless or Negligent Manner	1	0	1	0	0	2	0	33.3%
	Failed to Yield Right of way	0	0	0	0	0	0	0	0.0%
	Improper Backing	0	0	0	0	0	0	0	0.0%
	Improper Turn	1	0	0	0	0	1	0	16.7%
	Followed too Closely	0	0	0	0	0	0	0	0.0%
	Ran Red Light	0	0	0	0	0	0	0	0.0%
	Drove too Fast for Conditions	0	0	0	0	0	0	0	0.0%
	Ran Stop Sign	0	0	0	0	0	0	0	0.0%
	Improper Passing	0	0	0	0	0	0	0	0.0%
	Exceed Posted Speed	0	0	0	0	0	0	0	0.0%
	Wrong Side or Wrong Way	0	0	0	0	0	0	0	0.0%
	Failed to Keep in Proper Lane	1	0	0	0	0	1	0	16.7%
	Ran Off Roadway	1	0	0	0	0	1	0	16.7%
	Disregarded Other Traffic Sign	0	0	0	0	0	0	0	0.0%
	Disregarded Road Markings	0	0	0	0	0	0	0	0.0%
	Over-Correcting/Steering	0	0	0	0	0	0	0	0.0%
	Swerved or avoided	0	0	0	0	0	0	0	0.0%
	Erratic, Reckless or Aggressive	0	0	0	0	0	0	0	0.0%
Other Contributing Action	0	0	0	0	1	1	0	16.7%	
WEATHER CONDITIONS	Clear	3	0	1	0	1	5	1	83.3%
	Cloudy	1	0	0	0	0	1	0	16.7%
	Rain	0	0	0	0	0	0	0	0.0%
	Fog, Smog, Smoke	0	0	0	0	0	0	0	0.0%
	Sleet/Hail/Freezing Rain	0	0	0	0	0	0	0	0.0%
	Blowing Sand, Soil, Dirt	0	0	0	0	0	0	0	0.0%
	Severe Crosswinds	0	0	0	0	0	0	0	0.0%
	Other	0	0	0	0	0	0	0	0.0%

**Figure 3-1 SR A1A Crash Summary Statistics Histograms**

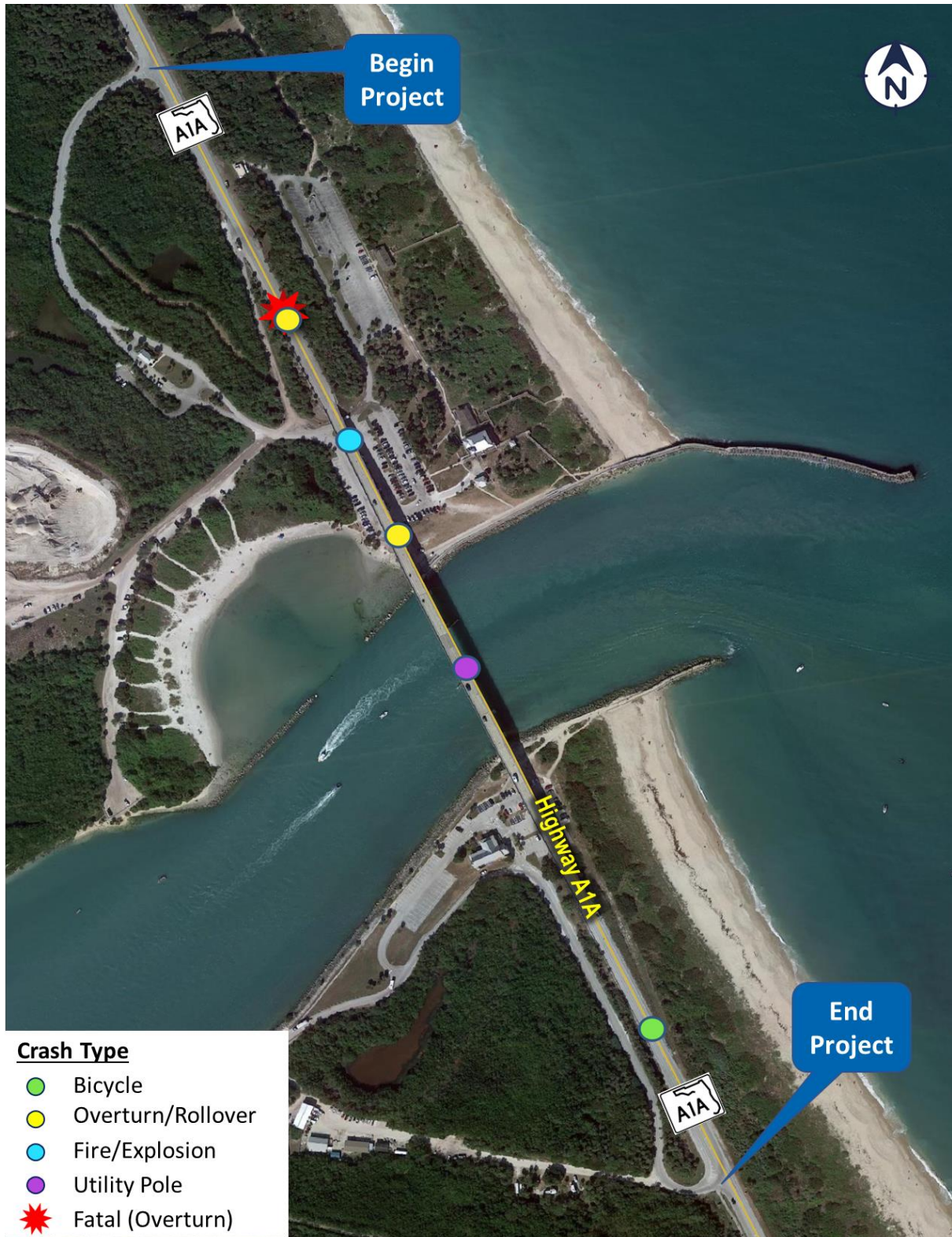


### 3.3 FATAL CRASHES

Fatal crashes are a major concern in roadway safety analysis. Based on the crash data, there was 1 fatal crash within the study area along SR A1A. The police report for this crash was obtained from the FDOT and reviewed to identify specific contributing factors that may have caused or influenced this fatal crash. The description of the fatal crash, as obtained from the crash report, is presented below.

On 07/03/2016, a vehicle traveling southbound failed to keep in the proper lane and overturned/rolled over. The driver of this vehicle who died, was alone in the vehicle and found to have been under the influence of drugs at the time of the incident. This crash occurred under wet surface conditions and during the daytime. **Figure 3-2** shows the fatal crash location identified within the study area.

Figure 3-2 Crash Locations within Study Area





### 3.4 CRASH RATES AND SAFETY RATIO

Crash Rates, Safety Ratios and Confidence Levels were calculated for the SR A1A project corridor for the analysis years 2016 to 2020 and summarized in **Table 3-2**. Average crash rates for a rural 2-3 lane 2-way undivided roadway segment were utilized in computing the safety ratios and confidence levels. A safety ratio greater than one indicates that the roadway segment presents abnormally high crash occurrences. Safety ratios less than one translate into random occurrences of crashes within normal ranges based on the safety ratio analysis.

Based on the analysis, except for 2016 which recorded 4 crashes, all the remaining years recorded only one or no crashes. This results in a statistically significant crash occurrence for 2016 with calculated safety ratio of 3.018 for 2016 which is greater than one. The calculated overall 5-year safety ratios and confidence levels as shown in **Table 3-2** suggests that the crash rates at this location were not abnormally high.

Table 3-2 Crash Rates and Safety Ratios									
Year	Num of Crashes	ADT	Actual Crash Rate (ACR)	District 4 Average Crash Rate (A)	Average Vehicle Exposure (M)	Critical Crash Rate (CCR)	Safety Ratio	Statistical Significance	Confidence Level
2016	4	3023	3.251	0.469	1.230	1.077	3.018	5.167	99.99%
2017	-	-	-	-	-	-	-	-	-
2018	1	3149	0.780	0.469	1.282	1.073	0.727	1.161	85.00%
2019	-	-	-	-	-	-	-	-	-
2020	1	3125	0.786	0.469	1.272	1.074	0.732	1.171	85.00%
Overall	6	3099	0.951	0.469	1.261	1.075	0.885	1.442	90.00%

Notes:  
 ADT – Average Daily Traffic  
 ACR – Actual Crash Rate = No. of crashes in a year / Average Vehicle Exposure (M)  
 M – Average Vehicle Exposure (million vehicles or million vehicles miles) = [(ADT \* 365 \* L) / 1,000,000]  
 A – Average Crash Rate  
 CCR – Critical Crash Rate  
 Safety Ratio = ACR/CCR  
 Level of statistical significance = (ACR - A + (1/2M))/SQRT(A/M)

Confidence Level = Percent probability that the crash rate is abnormally high for the location under study, using the district-wide average as a basis.

### 3.5 PROJECT ALTERNATIVES TO BE EVALUATED

The project alternatives that were evaluated for safety include the No-Action alternative and the Build Alternative. Multiple build alternatives are being evaluated during the PD&E study; however, the differences between the alternatives are construction and alignment options (i.e., construct bridge to the east, west, and along existing bridge alignment). The three Build Alternatives will have a similar effect on safety; therefore, the Build Alternatives were evaluated as one alternative for the safety analysis.

From a safety analysis perspective, the primary difference between the No-Action and the Build Alternative are the improved multi-modal facilities and wider shoulder. The Build Alternative includes the following features:

- Two 8-foot shoulders
- Two 12-foot shared use paths

### 3.6 QUANTITATIVE SAFETY ANALYSIS

A future crash prediction analysis for the SR A1A corridor within the project limits was performed as part of the safety study. The Highway Safety Manual (HSM) Predictive Method for Rural Two-Lane, Two-Way Roads Analysis Spreadsheet Tool was used for the predictive safety analysis. The crash prediction analysis follows the methodology outlined in the Highway Safety Manual.

Expected crashes were predicted for the No-Build and Build Alternative for the 2025 opening year and the 2045 design year using the HSM Predictive Spreadsheet Tool. The crash prediction spreadsheet tool implements the Empirical Bayes Analysis Methodology which combines the predicted crashes from the safety performance functions with the historical crash data to obtain the expected crashes.

The geometric, cross sectional and traffic operation characteristics as well as the historic crash data for the No-Build and Build Alternative were input into the HSM Predictive Spreadsheet Tool to obtain the expected crashes for the analysis years. The Build Alternative provides wider shoulders as well as a shared use path and auxiliary lanes to enhance safety within the project limits. The HSM Spreadsheets are provided in **Appendix B**.

**Table 3-3** shows the average predicted crash frequency along the SR A1A corridor within the project limits. The detailed crash prediction analyses are provided in the Project Traffic Forecast Analysis Report on file with FDOT District Four.

<b>Table 3-3 Expected Crash Prediction</b>						
<b>Crash Severity</b>	<b>Crash Frequency</b>				<b>% Change from No-Build</b>	
	<b>2025</b>		<b>2045</b>		<b>2025</b>	<b>2045</b>
	<b>No-Build</b>	<b>Build Alternative</b>	<b>No-Build</b>	<b>Build Alternative</b>		
Fatal & Injury	0.35	0.24	0.41	0.28	-31.4%	-31.7%
Property Damage Only	0.74	0.50	0.88	0.60	-32.4%	-31.8%
<b>Total</b>	<b>1.08</b>	<b>0.74</b>	<b>1.29</b>	<b>0.88</b>	<b>-31.5%</b>	<b>-31.8%</b>

Based on the results shown in **Table 3-3**, the Build Alternative will result in a lower number of expected total crashes with an overall crash reduction of 31.5% for the 2025 opening year and 31.8% for the 2045 design year compared to the No-Build Alternative.

# **APPENDIX A**

## **CRASH DATA**

**State of Florida Department of Transportation  
CRASH SUMMARY**

SECTION: <b>88070000</b>												STATE ROUTE: <b>0</b>							
ROADWAY LIMITS: <b>MP</b>												M.P. <b>0.000</b>		TO <b>1.115</b>		ENGINEER: <b>GOAL Associates Inc.</b>			
STUDY PERIOD: <b>FROM 1/ 2016</b>												TO <b>12/ 2016</b>		COUNTY: <b>Indian River</b>					
No.	MILE POST	DATE	DAY	TIME	CRASH TYPE			FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)						
1	0.133	01/12/2016	Tue	1625	Fire/Explosion			0	0	1	Day	Dry	Ran Off Roadway						
2	0.205	04/02/2016	Sat	2100	Overturn/Rollover			0	2	0	Day	Dry	Careless or Negligent Manner						
3	0.210	07/03/2016	Sun	1250	Overturn/Rollover			1	0	0	Day	Wet	Failed To Keep In Proper Lane						
4	22.295	02/20/2016	Sat	1050	Pedalcycle			0	1	0	Day	Dry	Improper Turn						
Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Ped/Bike	Parked Car	Fixed Object	Ran into Water	Other				
4	1	2	1	0	0	0	0	0	0	0	1	0	0	0	0				
Percent	25.00%	50.00%	25.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	25.00%	0.00%	0.00%	0.00%	0.00%				
Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/Aggress	Ran off Road	DUI	Wrong Way				
Total	4	0	1	3	1	0	1	0	0	0	0	0	1	0	0				
Percent	100.00%	0.00%	25.00%	75.00%	25.00%	0.00%	25.00%	0.00%	0.00%	0.00%	0.00%	0.00%	25.00%	0.00%	0.00%				
TOTAL ENTERING VEHICLES/ADT: <b>3,023</b>								SEGMENT CRASH RATE: <b>3.251</b> CRASHES PER MILLION VEHICLE MILES											

**State of Florida Department of Transportation  
CRASH SUMMARY**

SECTION:		<b>88070000</b>						STATE ROUTE: <b>0</b>									
ROADWAY LIMITS:		<b>MP</b>						M.P. <b>0.000</b>		TO <b>1.115</b>		ENGINEER: <b>GOAL Associates Inc.</b>					
STUDY PERIOD:		FROM <b>1/ 2018</b>			TO <b>12/ 2018</b>			COUNTY: <b>Indian River</b>									
No.	MILE POST	DATE	DAY	TIME	CRASH TYPE					FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)		
1	0.076	01/18/2018	Thu	1215	Overturn/Rollover					0	4	0	Day	Dry	Careless or Negligent Manner		
Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Ped/Bike	Parked Car	Fixed Object	Ran into Water	Other		
1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
Percent	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/Aggress	Ran off Road	DUI	Wrong Way		
Total	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0		
Percent	100.00%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
TOTAL ENTERING VEHICLES/ADT: <b>3,149</b>									SEGMENT CRASH RATE: <b>0.780</b> CRASHES PER MILLION VEHICLE MILES								

**State of Florida Department of Transportation  
CRASH SUMMARY**

SECTION: **88070000** STATE ROUTE: **0**  
 ROADWAY LIMITS: **MP** **0.000** TO **1.115** ENGINEER: **GOAL Associates Inc.**  
 STUDY PERIOD: FROM **1/ 2020** TO **12/ 2020** COUNTY: **Indian River**

Crash Number	No.	MILE POST	DATE	DAY	TIME	CRASH TYPE				FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)				
900014470	1	22.512	10/02/2020	Fri	1015	Utility Pole/Light Support				0	0	1	Day	Dry	Other Contributing Action				
	<b>Total No.</b>	<b>Fatal</b>	<b>Injury</b>	<b>PDO</b>	<b>Rear-End</b>	<b>Head-On</b>	<b>Angle</b>	<b>Left-Turn</b>	<b>Right-Turn</b>	<b>Sideswipe</b>	<b>Backed Into</b>	<b>Ped/Bike</b>	<b>Parked Car</b>	<b>Fixed Object</b>	<b>Ran into Water</b>	<b>Other</b>			
	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0			
	<b>Percent</b>	<b>0.00%</b>	<b>0.00%</b>	<b>100.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>			
	<b>Contrib. Cause</b>	<b>Day</b>	<b>Night</b>	<b>Wet</b>	<b>Dry</b>	<b>Careless Driving</b>	<b>FTYRW</b>	<b>Improper Turn</b>	<b>Ran Red Light</b>	<b>Exceeded Speed</b>	<b>Improper Passing</b>	<b>Disreg Cntl Dev</b>	<b>Erratic/Aggress</b>	<b>Ran off Road</b>	<b>DUI</b>	<b>Wrong Way</b>			
	<b>Total</b>	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0			
	<b>Percent</b>	<b>100.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.00%</b>			
<b>TOTAL ENTERING VEHICLES/ADT:</b>										<b>3,149</b>		<b>SEGMENT CRASH RATE:</b>						<b>0.780 CRASHES PER MILLION VEHICLE MILES</b>	

# **APPENDIX B**

## **HSM PREDICTIVE ANALYSIS**





**Worksheet 1C -- Roadway Segment Crashes for Rural Two-Lane Two-Way Roadway Segments**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Crash Severity Level	N spf rs	Overdispersion Parameter, k	Crash Severity Distribution	N spf rs by Severity Distribution	Combined CMFs	Calibration Factor, Cr	Predicted average crash frequency, N
	from Equation 10-6	from Equation 10-7	from Table 10-3 (proportion)	(2)TOTAL x (4)	(13) from Worksheet 1B		(5)x(6)x(7)
Total	0.923	0.21	1.000	0.923	1.17	1.00	1.083
Fatal and Injury (FI)	--	--	0.321	0.296	1.17	1.00	0.347
Property Damage Only (PDO)	--	--	0.679	0.627	1.17	1.00	0.735

**Worksheet 1D -- Crashes by Severity Level and Collision Type for Rural Two-Lane Two-Way Roadway Segments**

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Collision Type	Proportion of Collision Type <sub>(TOTAL)</sub>	N <sub>predicted rs (TOTAL)</sub> (crashes/year)	Proportion of Collision Type <sub>(FI)</sub>	N <sub>predicted rs (FI)</sub> (crashes/year)	Proportion of Collision Type <sub>(PDO)</sub>	N <sub>predicted rs (PDO)</sub> (crashes/year)
	from Table 10-4	(8) <sub>TOTAL</sub> from Worksheet 1C	from Table 10-4	(8) <sub>FI</sub> from Worksheet 1C	from Table 10-4	(8) <sub>PDO</sub> from Worksheet 1C
Total	1.000	1.083	1.000	0.347	1.000	0.735
		(2)x(3) <sub>TOTAL</sub>		(4)x(5) <sub>FI</sub>		(6)x(7) <sub>PDO</sub>

**SINGLE-VEHICLE**

Collision with animal	0.121	0.131	0.038	0.013	0.184	0.135
Collision with bicycle	0.002	0.002	0.004	0.001	0.001	0.001
Collision with pedestrian	0.003	0.003	0.007	0.002	0.001	0.001
Overtuned	0.025	0.027	0.037	0.013	0.015	0.011
Ran off road	0.521	0.564	0.545	0.189	0.505	0.371
Other single-vehicle collision	0.021	0.023	0.007	0.002	0.029	0.021
Total single-vehicle crashes	0.693	0.750	0.638	0.222	0.735	0.540

**MULTIPLE-VEHICLE**

Angle collision	0.085	0.092	0.100	0.035	0.072	0.053
Head-on collision	0.016	0.017	0.034	0.012	0.003	0.002
Rear-end collision	0.142	0.154	0.164	0.057	0.122	0.090
Sideswipe collision	0.037	0.040	0.038	0.013	0.038	0.028
Other multiple-vehicle collision	0.027	0.029	0.026	0.009	0.030	0.022
Total multiple-vehicle crashes	0.307	0.332	0.362	0.126	0.265	0.195

**Worksheet 1E -- Summary Results for Rural Two-Lane Two-Way Roadway Segments**

(1)	(2)	(3)	(4)	(5)
Crash severity level	Crash Severity Distribution (proportion)	Predicted average crash frequency (crashes/year)	Roadway segment length (mi)	Crash rate (crashes/mi/year)
	(4) from Worksheet 1C	(8) from Worksheet 1C		(3)/(4)
Total	1.000	1.08	1.115	1.0
Fatal and Injury (FI)	0.321	0.35	1.115	0.3
Property Damage Only (PDO)	0.679	0.74	1.115	0.7

**Worksheet 3A -- Predicted and Observed Crashes by Severity and Site Type Using the Site-Specific EB Method**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Site type	Predicted average crash frequency (crashes/year)			Observed crashes, $N_{\text{observed}}$ (crashes/year)	Overdispersion Parameter, k	Weighted adjustment, w  Equation A-5 from Part C Appendix	Expected average crash frequency,  Equation A-4 from Part C Appendix
	$N_{\text{predicted}}$ (TOTAL)	$N_{\text{predicted}}$ (FI)	$N_{\text{predicted}}$ (PDO)				
<b>ROADWAY SEGMENTS</b>							
Segment_1	1.083	0.347	0.735	1.200	0.212	0.814	1.104
Segment_2	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Segment_3	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Segment_4	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Segment_5	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Segment_6	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Segment_7	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Segment_8	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Segment Totals:	1.083	0.347	0.735	1.200			1.104
<b>INTERSECTIONS</b>							
Intersection_1	0.000	0.000	0.000	0.000	0.540	1.000	0.000
Intersection_2	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Intersection_3	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Intersection_4	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Intersection_5	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Intersection_6	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Intersection_7	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Intersection_8	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Intersection Totals:	0.000	0.000	0.000	0.000			0.000
COMBINED (sum of column)	1.083	0.347	0.735	1.200	--	--	1.104

**Worksheet 3B -- Site-Specific EB Method Summary Results**

(1)	(2)	(3)
<b>Crash severity level</b>	$N_{\text{predicted}}$	$N_{\text{expected}}$
Total	(2) <sub>COMB</sub> from Worksheet 3A 1.083	(8) <sub>COMB</sub> from Worksheet 3A 1.104
Fatal and Injury (FI)	(3) <sub>COMB</sub> from Worksheet 3A 0.347	(3) <sub>TOTAL</sub> * (2) <sub>FI</sub> / (2) <sub>TOTAL</sub> 0.355
Property Damage Only (PDO)	(4) <sub>COMB</sub> from Worksheet 3A 0.735	(3) <sub>TOTAL</sub> * (2) <sub>PDO</sub> / (2) <sub>TOTAL</sub> 0.750

**Worksheet 1A -- General Information and Input Data for Rural Two-Lane Two-Way Roadway Segments**

General Information		Location Information				
Analyst	Daniel Torres	Roadway	SR A1A			
Agency or Company	GOAL Associates	Roadway Section	88070000 & 70060000			
Date Performed	08/23/21	Alternative	Build Alternative			
		Analysis Year	2025			
Input Data		Base Conditions	Site Conditions			
Length of segment, L (mi)		--	1.115			
AADT (veh/day)	AADT <sub>MAX</sub> = 17,800 (veh/day)	--	3,100			
Lane width (ft)		12	12			
Shoulder width (ft)		6	Right Shld:	8	Left Shld:	8
Shoulder type		Paved	Right Shld:	Paved	Left Shld:	Paved
Length of horizontal curve (mi)		0	0.0			
Radius of curvature (ft)		0	0			
Spiral transition curve (present/not present)		Not Present	Not Present			
Superelevation variance (ft/ft)		< 0.01	0			
Grade (%)		0	3			
Driveway density (driveways/mile)		5	2.00			
Centerline rumble strips (present/not present)		Not Present	Present			
Passing lanes [present (1 lane) /present (2 lane) / not present]		Not Present	Not Present			
Two-way left-turn lane (present/not present)		Not Present	Not Present			
Roadside hazard rating (1-7 scale)		3	3			
Segment lighting (present/not present)		Not Present	Present			
Auto speed enforcement (present/not present)		Not Present	Not Present			
Calibration Factor, Cr		1	1.00			

**Worksheet 1B -- Crash Modification Factors for Rural Two-Lane Two-Way Roadway Segments**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
CMF for Lane Width	CMF for Shoulder Width and Type	CMF for Horizontal Curves	CMF for Super-elevation	CMF for Grades	CMF for Driveway Density	CMF for Centerline Rumble Strips	CMF for Passing Lanes	CMF for Two-Way Left-Turn Lane	CMF for Roadside Design	CMF for Lighting	CMF for Automated Speed Enforcement	Combined CMF
<i>CMF 1r</i>	<i>CMF 2r</i>	<i>CMF 3r</i>	<i>CMF 4r</i>	<i>CMF 5r</i>	<i>CMF 6r</i>	<i>CMF 7r</i>	<i>CMF 8r</i>	<i>CMF 9r</i>	<i>CMF 10r</i>	<i>CMF 11r</i>	<i>CMF 12r</i>	<i>CMF comb</i>
from Equation 10-11	from Equation 10-12	from Equation 10-13	from Equations 10-14, 10-15, or 10-16	from Table 10-11	from Equation 10-17	from Section 10.7.1	from Section 10.7.1	from Equation 10-18 & 10-19	from Equation 10-20	from Equation 10-21	from Section 10.7.1	(1)x(2)x ... x(11)x(12)
1.00	0.93	1.00	1.00	1.00	1.00	0.94	1.00	1.00	1.00	0.92	1.00	0.802

**Worksheet 1C -- Roadway Segment Crashes for Rural Two-Lane Two-Way Roadway Segments**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Crash Severity Level	N spf rs	Overdispersion Parameter, k	Crash Severity Distribution	N spf rs by Severity Distribution	Combined CMFs	Calibration Factor, Cr	Predicted average crash frequency, N
	from Equation 10-6	from Equation 10-7	from Table 10-3 (proportion)	(2) <sub>TOTAL</sub> x (4)	(13) from Worksheet 1B		(5)x(6)x(7)
Total	0.923	0.21	1.000	0.923	0.80	1.00	0.740
Fatal and Injury (FI)	--	--	0.321	0.296	0.80	1.00	0.238
Property Damage Only (PDO)	--	--	0.679	0.627	0.80	1.00	0.503

**Worksheet 1D -- Crashes by Severity Level and Collision Type for Rural Two-Lane Two-Way Roadway Segments**

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Collision Type	Proportion of Collision Type <sub>(TOTAL)</sub>	N <i>predicted rs</i> (TOTAL) (crashes/year)	Proportion of Collision Type <sub>(FI)</sub>	N <i>predicted rs</i> (FI) (crashes/year)	Proportion of Collision Type <sub>(PDO)</sub>	N <i>predicted rs</i> (PDO) (crashes/year)
	from Table 10-4	(8) <sub>TOTAL</sub> from Worksheet 1C	from Table 10-4	(8) <sub>FI</sub> from Worksheet 1C	from Table 10-4	(8) <sub>PDO</sub> from Worksheet 1C
Total	1.000	0.740	1.000	0.238	1.000	0.503
		(2)x(3) <sub>TOTAL</sub>		(4)x(5) <sub>FI</sub>		(6)x(7) <sub>PDO</sub>
<b>SINGLE-VEHICLE</b>						
Collision with animal	0.121	0.090	0.038	0.009	0.184	0.092
Collision with bicycle	0.002	0.001	0.004	0.001	0.001	0.001
Collision with pedestrian	0.003	0.002	0.007	0.002	0.001	0.001
Overtaken	0.025	0.019	0.037	0.009	0.015	0.008
Ran off road	0.521	0.386	0.545	0.130	0.505	0.254
Other single-vehicle collision	0.021	0.016	0.007	0.002	0.029	0.015
Total single-vehicle crashes	0.693	0.513	0.638	0.152	0.735	0.369
<b>MULTIPLE-VEHICLE</b>						
Angle collision	0.085	0.063	0.100	0.024	0.072	0.036
Head-on collision	0.016	0.012	0.034	0.008	0.003	0.002
Rear-end collision	0.142	0.105	0.164	0.039	0.122	0.061
Sideswipe collision	0.037	0.027	0.038	0.009	0.038	0.019
Other multiple-vehicle collision	0.027	0.020	0.026	0.006	0.030	0.015
Total multiple-vehicle crashes	0.307	0.227	0.362	0.086	0.265	0.133

**Worksheet 1E -- Summary Results for Rural Two-Lane Two-Way Roadway Segments**

(1)	(2)	(3)	(4)	(5)
Crash severity level	Crash Severity Distribution (proportion)	Predicted average crash frequency (crashes/year)	Roadway segment length (mi)	Crash rate (crashes/mi/year)
	(4) from Worksheet 1C	(8) from Worksheet 1C		(3)/(4)
Total	1.000	0.74	1.115	0.7
Fatal and Injury (FI)	0.321	0.24	1.115	0.2
Property Damage Only (PDO)	0.679	0.50	1.115	0.5

**Worksheet 3A -- Predicted and Observed Crashes by Severity and Site Type Using the Site-Specific EB Method**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Site type	Predicted average crash frequency (crashes/year)			Observed crashes, $N_{\text{observed}}$ (crashes/year)	Overdispersion Parameter, k	Weighted adjustment, w  Equation A-5 from Part C Appendix	Expected average crash frequency,  Equation A-4 from Part C Appendix
	$N_{\text{predicted}}$ (TOTAL)	$N_{\text{predicted}}$ (FI)	$N_{\text{predicted}}$ (PDO)				
<b>ROADWAY SEGMENTS</b>							
Segment_1	0.740	0.238	0.503	1.200	0.212	0.865	0.803
Segment_2	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Segment_3	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Segment_4	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Segment_5	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Segment_6	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Segment_7	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Segment_8	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Segment Totals:	0.740	0.238	0.503	1.200			0.803
<b>INTERSECTIONS</b>							
Intersection_1	0.000	0.000	0.000	0.000	0.540	1.000	0.000
Intersection_2	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Intersection_3	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Intersection_4	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Intersection_5	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Intersection_6	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Intersection_7	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Intersection_8	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Intersection Totals:	0.000	0.000	0.000	0.000			0.000
COMBINED (sum of column)	0.740	0.238	0.503	1.200	--	--	0.803

**Worksheet 3B -- Site-Specific EB Method Summary Results**

(1)	(2)	(3)
Crash severity level	$N_{\text{predicted}}$	$N_{\text{expected}}$
Total	(2) <sub>COMB</sub> from Worksheet 3A 0.740	(8) <sub>COMB</sub> from Worksheet 3A 0.803
Fatal and Injury (FI)	(3) <sub>COMB</sub> from Worksheet 3A 0.238	(3) <sub>TOTAL</sub> * (2) <sub>FI</sub> / (2) <sub>TOTAL</sub> 0.258
Property Damage Only (PDO)	(4) <sub>COMB</sub> from Worksheet 3A 0.503	(3) <sub>TOTAL</sub> * (2) <sub>PDO</sub> / (2) <sub>TOTAL</sub> 0.545





**Worksheet 1C -- Roadway Segment Crashes for Rural Two-Lane Two-Way Roadway Segments**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Crash Severity Level	N spf rs from Equation 10-6	Overdispersion Parameter, k from Equation 10-7	Crash Severity Distribution from Table 10-3 (proportion)	N spf rs by Severity Distribution (2)TOTAL x (4)	Combined CMFs (13) from Worksheet 1B	Calibration Factor, Cr	Predicted average crash frequency, N (5)x(6)x(7)
Total	1.102	0.21	1.000	1.102	1.17	1.00	1.292
Fatal and Injury (FI)	--	--	0.321	0.354	1.17	1.00	0.415
Property Damage Only (PDO)	--	--	0.679	0.748	1.17	1.00	0.877

**Worksheet 1D -- Crashes by Severity Level and Collision Type for Rural Two-Lane Two-Way Roadway Segments**

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Collision Type	Proportion of Collision Type <sub>(TOTAL)</sub> from Table 10-4	N predicted rs (TOTAL) (crashes/year) (8) <sub>TOTAL</sub> from Worksheet 1C	Proportion of Collision Type <sub>(FI)</sub> from Table 10-4	N predicted rs (FI) (crashes/year) (8) <sub>FI</sub> from Worksheet 1C	Proportion of Collision Type <sub>(PDO)</sub> from Table 10-4	N predicted rs (PDO) (crashes/year) (8) <sub>PDO</sub> from Worksheet 1C
		(2)x(3) <sub>TOTAL</sub>		(4)x(5) <sub>FI</sub>		(6)x(7) <sub>PDO</sub>
<b>Total</b>	1.000	1.292	1.000	0.415	1.000	0.877
<b>SINGLE-VEHICLE</b>						
Collision with animal	0.121	0.156	0.038	0.016	0.184	0.161
Collision with bicycle	0.002	0.003	0.004	0.002	0.001	0.001
Collision with pedestrian	0.003	0.004	0.007	0.003	0.001	0.001
Overtuned	0.025	0.032	0.037	0.015	0.015	0.013
Ran off road	0.521	0.673	0.545	0.226	0.505	0.443
Other single-vehicle collision	0.021	0.027	0.007	0.003	0.029	0.025
Total single-vehicle crashes	0.693	0.895	0.638	0.265	0.735	0.645
<b>MULTIPLE-VEHICLE</b>						
Angle collision	0.085	0.110	0.100	0.041	0.072	0.063
Head-on collision	0.016	0.021	0.034	0.014	0.003	0.003
Rear-end collision	0.142	0.183	0.164	0.068	0.122	0.107
Sideswipe collision	0.037	0.048	0.038	0.016	0.038	0.033
Other multiple-vehicle collision	0.027	0.035	0.026	0.011	0.030	0.026
Total multiple-vehicle crashes	0.307	0.397	0.362	0.150	0.265	0.232

**Worksheet 1E -- Summary Results for Rural Two-Lane Two-Way Roadway Segments**

(1)	(2)	(3)	(4)	(5)
Crash severity level	Crash Severity Distribution (proportion)	Predicted average crash frequency (crashes/year)	Roadway segment length (mi)	Crash rate (crashes/mi/year)
	(4) from Worksheet 1C	(8) from Worksheet 1C		(3)/(4)
Total	1.000	1.29	1.115	1.2
Fatal and Injury (FI)	0.321	0.41	1.115	0.4
Property Damage Only (PDO)	0.679	0.88	1.115	0.8

**Worksheet 3A -- Predicted and Observed Crashes by Severity and Site Type Using the Site-Specific EB Method**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Site type	Predicted average crash frequency (crashes/year)			Observed crashes, $N_{\text{observed}}$ (crashes/year)	Overdispersion Parameter, $k$	Weighted adjustment, $w$  Equation A-5 from Part C Appendix	Expected average crash frequency,  Equation A-4 from Part C Appendix
	$N_{\text{predicted}}$ (TOTAL)	$N_{\text{predicted}}$ (FI)	$N_{\text{predicted}}$ (PDO)				
<b>ROADWAY SEGMENTS</b>							
Segment_1	1.292	0.415	0.877	1.200	0.212	0.785	1.272
Segment_2	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Segment_3	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Segment_4	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Segment_5	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Segment_6	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Segment_7	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Segment_8	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Segment Totals:	1.292	0.415	0.877	1.200			1.272
<b>INTERSECTIONS</b>							
Intersection_1	0.000	0.000	0.000	0.000	0.540	1.000	0.000
Intersection_2	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Intersection_3	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Intersection_4	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Intersection_5	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Intersection_6	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Intersection_7	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Intersection_8	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Intersection Totals:	0.000	0.000	0.000	0.000			0.000
COMBINED (sum of column)	1.292	0.415	0.877	1.200	--	--	1.272

**Worksheet 3B -- Site-Specific EB Method Summary Results**

(1)	(2)	(3)
<b>Crash severity level</b>	$N_{\text{predicted}}$	$N_{\text{expected}}$
Total	(2) <sub>COMB</sub> from Worksheet 3A 1.292	(8) <sub>COMB</sub> from Worksheet 3A 1.272
Fatal and Injury (FI)	(3) <sub>COMB</sub> from Worksheet 3A 0.415	(3) <sub>TOTAL</sub> * (2) <sub>FI</sub> / (2) <sub>TOTAL</sub> 0.408
Property Damage Only (PDO)	(4) <sub>COMB</sub> from Worksheet 3A 0.877	(3) <sub>TOTAL</sub> * (2) <sub>PDO</sub> / (2) <sub>TOTAL</sub> 0.864

**Worksheet 1A -- General Information and Input Data for Rural Two-Lane Two-Way Roadway Segments**

General Information		Location Information				
Analyst	Daniel Torres	Roadway	SR A1A			
Agency or Company	GOAL Associates	Roadway Section	88070000 & 70060000			
Date Performed	08/23/21	Alternative	Build Alternative			
		Analysis Year	2045			
Input Data		Base Conditions	Site Conditions			
Length of segment, L (mi)		--	1.115			
AADT (veh/day)	AADT <sub>MAX</sub> = 17,800 (veh/day)	--	3,700			
Lane width (ft)		12	12			
Shoulder width (ft)		6	Right Shld: 8	Left Shld: 8		
Shoulder type		Paved	Right Shld: Paved	Left Shld: Paved		
Length of horizontal curve (mi)		0	0.0			
Radius of curvature (ft)		0	0			
Spiral transition curve (present/not present)		Not Present	Not Present			
Superelevation variance (ft/ft)		< 0.01	0			
Grade (%)		0	3			
Driveway density (driveways/mile)		5	2.00			
Centerline rumble strips (present/not present)		Not Present	Present			
Passing lanes [present (1 lane) /present (2 lane) / not present]]		Not Present	Not Present			
Two-way left-turn lane (present/not present)		Not Present	Not Present			
Roadside hazard rating (1-7 scale)		3	3			
Segment lighting (present/not present)		Not Present	Present			
Auto speed enforcement (present/not present)		Not Present	Not Present			
Calibration Factor, Cr		1	1.00			

**Worksheet 1B -- Crash Modification Factors for Rural Two-Lane Two-Way Roadway Segments**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
CMF for Lane Width	CMF for Shoulder Width and Type	CMF for Horizontal Curves	CMF for Super-elevation	CMF for Grades	CMF for Driveway Density	CMF for Centerline Rumble Strips	CMF for Passing Lanes	CMF for Two-Way Left-Turn Lane	CMF for Roadside Design	CMF for Lighting	CMF for Automated Speed Enforcement	Combined CMF
<i>CMF 1r</i>	<i>CMF 2r</i>	<i>CMF 3r</i>	<i>CMF 4r</i>	<i>CMF 5r</i>	<i>CMF 6r</i>	<i>CMF 7r</i>	<i>CMF 8r</i>	<i>CMF 9r</i>	<i>CMF 10r</i>	<i>CMF 11r</i>	<i>CMF 12r</i>	<i>CMF comb</i>
from Equation 10-11	from Equation 10-12	from Equation 10-13	from Equations 10-14, 10-15, or 10-16	from Table 10-11	from Equation 10-17	from Section 10.7.1	from Section 10.7.1	from Equation 10-18 & 10-19	from Equation 10-20	from Equation 10-21	from Section 10.7.1	(1)x(2)x...x(11)x(12)
1.00	0.93	1.00	1.00	1.00	1.00	0.94	1.00	1.00	1.00	0.92	1.00	0.802

**Worksheet 1C -- Roadway Segment Crashes for Rural Two-Lane Two-Way Roadway Segments**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Crash Severity Level	N spf rs from Equation 10-6	Overdispersion Parameter, k from Equation 10-7	Crash Severity Distribution from Table 10-3 (proportion)	N spf rs by Severity Distribution (2)TOTAL x (4)	Combined CMFs (13) from Worksheet 1B	Calibration Factor, Cr	Predicted average crash frequency, N (5)x(6)x(7)
Total	1.102	0.21	1.000	1.102	0.80	1.00	0.884
Fatal and Injury (FI)	--	--	0.321	0.354	0.80	1.00	0.284
Property Damage Only (PDO)	--	--	0.679	0.748	0.80	1.00	0.600

**Worksheet 1D -- Crashes by Severity Level and Collision Type for Rural Two-Lane Two-Way Roadway Segments**

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Collision Type	Proportion of Collision Type <sub>(TOTAL)</sub> from Table 10-4	N predicted rs (TOTAL) (crashes/year) (8) <sub>TOTAL</sub> from Worksheet 1C	Proportion of Collision Type <sub>(FI)</sub> from Table 10-4	N predicted rs (FI) (crashes/year) (8) <sub>FI</sub> from Worksheet 1C	Proportion of Collision Type <sub>(PDO)</sub> from Table 10-4	N predicted rs (PDO) (crashes/year) (8) <sub>PDO</sub> from Worksheet 1C
		(2)x(3) <sub>TOTAL</sub>		(4)x(5) <sub>FI</sub>		(6)x(7) <sub>PDO</sub>
<b>SINGLE-VEHICLE</b>						
Collision with animal	0.121	0.107	0.038	0.011	0.184	0.110
Collision with bicycle	0.002	0.002	0.004	0.001	0.001	0.001
Collision with pedestrian	0.003	0.003	0.007	0.002	0.001	0.001
Overtuned	0.025	0.022	0.037	0.010	0.015	0.009
Ran off road	0.521	0.460	0.545	0.155	0.505	0.303
Other single-vehicle collision	0.021	0.019	0.007	0.002	0.029	0.017
Total single-vehicle crashes	0.693	0.612	0.638	0.181	0.735	0.441
<b>MULTIPLE-VEHICLE</b>						
Angle collision	0.085	0.075	0.100	0.028	0.072	0.043
Head-on collision	0.016	0.014	0.034	0.010	0.003	0.002
Rear-end collision	0.142	0.125	0.164	0.047	0.122	0.073
Sideswipe collision	0.037	0.033	0.038	0.011	0.038	0.023
Other multiple-vehicle collision	0.027	0.024	0.026	0.007	0.030	0.018
Total multiple-vehicle crashes	0.307	0.271	0.362	0.103	0.265	0.159

**Worksheet 1E -- Summary Results for Rural Two-Lane Two-Way Roadway Segments**

(1)	(2)	(3)	(4)	(5)
Crash severity level	Crash Severity Distribution (proportion)	Predicted average crash frequency (crashes/year)	Roadway segment length (mi)	Crash rate (crashes/mi/year)
	(4) from Worksheet 1C	(8) from Worksheet 1C		(3)/(4)
Total	1.000	0.88	1.115	0.8
Fatal and Injury (FI)	0.321	0.28	1.115	0.3
Property Damage Only (PDO)	0.679	0.60	1.115	0.5

**Worksheet 3A -- Predicted and Observed Crashes by Severity and Site Type Using the Site-Specific EB Method**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Site type	Predicted average crash frequency (crashes/year)			Observed crashes, $N_{observed}$ (crashes/year)	Overdispersion Parameter, k	Weighted adjustment, w  Equation A-5 from Part C Appendix	Expected average crash frequency,  Equation A-4 from Part C Appendix
	$N_{predicted}$ (TOTAL)	$N_{predicted}$ (FI)	$N_{predicted}$ (PDO)				
<b>ROADWAY SEGMENTS</b>							
Segment_1	0.884	0.284	0.600	1.200	0.212	0.842	0.933
Segment_2	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Segment_3	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Segment_4	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Segment_5	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Segment_6	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Segment_7	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Segment_8	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Segment Totals:	0.884	0.284	0.600	1.200			0.933
<b>INTERSECTIONS</b>							
Intersection_1	0.000	0.000	0.000	0.000	0.540	1.000	0.000
Intersection_2	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Intersection_3	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Intersection_4	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Intersection_5	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Intersection_6	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Intersection_7	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Intersection_8	0.000	0.000	0.000	0.000	0.000	1.000	0.000
Intersection Totals:	0.000	0.000	0.000	0.000			0.000
COMBINED (sum of column)	0.884	0.284	0.600	1.200	--	--	0.933

**Worksheet 3B -- Site-Specific EB Method Summary Results**

(1)	(2)	(3)
<b>Crash severity level</b>	$N_{predicted}$	$N_{expected}$
Total	(2) <sub>COMB</sub> from Worksheet 3A	(8) <sub>COMB</sub> from Worksheet 3A
	0.884	0.933
Fatal and Injury (FI)	(3) <sub>COMB</sub> from Worksheet 3A	(3) <sub>TOTAL</sub> * (2) <sub>FI</sub> / (2) <sub>TOTAL</sub>
	0.284	0.300
Property Damage Only (PDO)	(4) <sub>COMB</sub> from Worksheet 3A	(3) <sub>TOTAL</sub> * (2) <sub>PDO</sub> / (2) <sub>TOTAL</sub>
	0.600	0.634



# **APPENDIX F**

## **FUTURE INTERSECTION OPERATIONAL ANALYSIS**

**OPENING YEAR (2025)**  
**AM PEAK HOUR**

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	↔
Traffic Vol, veh/h	9	9	13	114	145	8
Future Vol, veh/h	9	9	13	114	145	8
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	-	190	-	-	200
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	11	11	16	137	175	10

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	344	175	185	0	-	0
Stage 1	175	-	-	-	-	-
Stage 2	169	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	648	863	1378	-	-	-
Stage 1	851	-	-	-	-	-
Stage 2	856	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	640	863	1378	-	-	-
Mov Cap-2 Maneuver	640	-	-	-	-	-
Stage 1	841	-	-	-	-	-
Stage 2	856	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10	0.8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1378	-	735	-	-
HCM Lane V/C Ratio	0.011	-	0.03	-	-
HCM Control Delay (s)	7.6	-	10	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	↔
Traffic Vol, veh/h	11	10	11	111	146	17
Future Vol, veh/h	11	10	11	111	146	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	Yield
Storage Length	0	-	370	-	-	220
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	13	12	13	134	176	20

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	336	176	176	0	-	0
Stage 1	176	-	-	-	-	-
Stage 2	160	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	655	862	1388	-	-	-
Stage 1	850	-	-	-	-	-
Stage 2	864	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	649	862	1388	-	-	-
Mov Cap-2 Maneuver	649	-	-	-	-	-
Stage 1	842	-	-	-	-	-
Stage 2	864	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.1	0.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1388	-	736	-	-
HCM Lane V/C Ratio	0.01	-	0.034	-	-
HCM Control Delay (s)	7.6	-	10.1	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	1.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	↔
Traffic Vol, veh/h	18	21	30	108	121	28
Future Vol, veh/h	18	21	30	108	121	28
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	-	190	-	-	200
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	20	23	33	119	133	31

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	318	133	164	0	-	0
Stage 1	133	-	-	-	-	-
Stage 2	185	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	671	911	1402	-	-	-
Stage 1	888	-	-	-	-	-
Stage 2	842	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	655	911	1402	-	-	-
Mov Cap-2 Maneuver	655	-	-	-	-	-
Stage 1	867	-	-	-	-	-
Stage 2	842	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.9	1.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1402	-	772	-	-
HCM Lane V/C Ratio	0.024	-	0.056	-	-
HCM Control Delay (s)	7.6	-	9.9	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection						
Int Delay, s/veh	1.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	26	20	20	111	125	22
Future Vol, veh/h	26	20	20	111	125	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	Yield
Storage Length	0	-	370	-	-	220
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	29	22	22	122	137	24

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	303	137	137	0	-	0
Stage 1	137	-	-	-	-	-
Stage 2	166	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	685	906	1435	-	-	-
Stage 1	885	-	-	-	-	-
Stage 2	859	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	675	906	1435	-	-	-
Mov Cap-2 Maneuver	675	-	-	-	-	-
Stage 1	872	-	-	-	-	-
Stage 2	859	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.1	1.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1435	-	759	-	-
HCM Lane V/C Ratio	0.015	-	0.067	-	-
HCM Control Delay (s)	7.5	-	10.1	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↗	↖
Traffic Vol, veh/h	9	9	13	114	145	8
Future Vol, veh/h	9	9	13	114	145	8
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	100	330	-	-	450
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	11	11	16	137	175	10

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	344	175	185	0	-	0
Stage 1	175	-	-	-	-	-
Stage 2	169	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	648	863	1378	-	-	-
Stage 1	851	-	-	-	-	-
Stage 2	856	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	640	863	1378	-	-	-
Mov Cap-2 Maneuver	640	-	-	-	-	-
Stage 1	841	-	-	-	-	-
Stage 2	856	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10	0.8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1378	-	640	863	-	-
HCM Lane V/C Ratio	0.011	-	0.017	0.013	-	-
HCM Control Delay (s)	7.6	-	10.7	9.2	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0	-	-

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↗	↖
Traffic Vol, veh/h	11	10	11	111	146	17
Future Vol, veh/h	11	10	11	111	146	17
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	100	370	-	-	320
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	13	12	13	134	176	20

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	336	176	196	0	-
Stage 1	176	-	-	-	-
Stage 2	160	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-
Pot Cap-1 Maneuver	655	862	1365	-	-
Stage 1	850	-	-	-	-
Stage 2	864	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	648	862	1365	-	-
Mov Cap-2 Maneuver	648	-	-	-	-
Stage 1	842	-	-	-	-
Stage 2	864	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10	0.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1365	-	648	862	-	-
HCM Lane V/C Ratio	0.01	-	0.02	0.014	-	-
HCM Control Delay (s)	7.7	-	10.7	9.2	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0	-	-



Intersection						
Int Delay, s/veh	1.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	21	30	108	121	28
Future Vol, veh/h	18	21	30	108	121	28
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	100	330	-	-	450
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	20	23	33	119	133	31

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	318	133	164	0	-	0
Stage 1	133	-	-	-	-	-
Stage 2	185	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	671	911	1402	-	-	-
Stage 1	888	-	-	-	-	-
Stage 2	842	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	655	911	1402	-	-	-
Mov Cap-2 Maneuver	655	-	-	-	-	-
Stage 1	867	-	-	-	-	-
Stage 2	842	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.8	1.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1402	-	655	911	-	-
HCM Lane V/C Ratio	0.024	-	0.03	0.025	-	-
HCM Control Delay (s)	7.6	-	10.7	9.1	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	0.1	-	-

Intersection						
Int Delay, s/veh	1.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↗	↖
Traffic Vol, veh/h	26	20	20	111	125	22
Future Vol, veh/h	26	20	20	111	125	22
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	100	370	-	-	320
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	29	22	22	122	137	24

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	303	137	161	0	-	0
Stage 1	137	-	-	-	-	-
Stage 2	166	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	685	906	1406	-	-	-
Stage 1	885	-	-	-	-	-
Stage 2	859	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	674	906	1406	-	-	-
Mov Cap-2 Maneuver	674	-	-	-	-	-
Stage 1	871	-	-	-	-	-
Stage 2	859	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.9	1.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1406	-	674	906	-	-
HCM Lane V/C Ratio	0.016	-	0.042	0.024	-	-
HCM Control Delay (s)	7.6	-	10.6	9.1	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0.1	-	-

**OPENING YEAR (2025)**  
**PM PEAK HOUR**

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	↔
Traffic Vol, veh/h	8	9	11	150	99	12
Future Vol, veh/h	8	9	11	150	99	12
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	-	190	-	-	200
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	10	12	14	195	129	16

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	352	129	145	0	-	0
Stage 1	129	-	-	-	-	-
Stage 2	223	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	642	916	1425	-	-	-
Stage 1	892	-	-	-	-	-
Stage 2	809	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	636	916	1425	-	-	-
Mov Cap-2 Maneuver	636	-	-	-	-	-
Stage 1	883	-	-	-	-	-
Stage 2	809	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.9	0.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1425	-	759	-	-
HCM Lane V/C Ratio	0.01	-	0.029	-	-
HCM Control Delay (s)	7.6	-	9.9	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	↔
Traffic Vol, veh/h	10	11	13	150	99	15
Future Vol, veh/h	10	11	13	150	99	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	Yield
Storage Length	0	-	370	-	-	220
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	13	14	17	195	129	19

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	358	129	129	0	0
Stage 1	129	-	-	-	-
Stage 2	229	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-
Pot Cap-1 Maneuver	636	916	1444	-	-
Stage 1	892	-	-	-	-
Stage 2	804	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	628	916	1444	-	-
Mov Cap-2 Maneuver	628	-	-	-	-
Stage 1	881	-	-	-	-
Stage 2	804	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10	0.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1444	-	752	-	-
HCM Lane V/C Ratio	0.012	-	0.036	-	-
HCM Control Delay (s)	7.5	-	10	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	2.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	25	28	22	109	120	23
Future Vol, veh/h	25	28	22	109	120	23
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	-	190	-	-	200
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	28	31	24	121	133	26

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	302	133	159	0	-	0
Stage 1	133	-	-	-	-	-
Stage 2	169	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	685	911	1408	-	-	-
Stage 1	888	-	-	-	-	-
Stage 2	856	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	673	911	1408	-	-	-
Mov Cap-2 Maneuver	673	-	-	-	-	-
Stage 1	873	-	-	-	-	-
Stage 2	856	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10	1.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1408	-	781	-	-
HCM Lane V/C Ratio	0.017	-	0.075	-	-
HCM Control Delay (s)	7.6	-	10	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	↔
Traffic Vol, veh/h	13	14	27	116	98	32
Future Vol, veh/h	13	14	27	116	98	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	Yield
Storage Length	0	-	370	-	-	220
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	14	16	30	129	109	36

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	298	109	109	0	0
Stage 1	109	-	-	-	-
Stage 2	189	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-
Pot Cap-1 Maneuver	689	939	1469	-	-
Stage 1	911	-	-	-	-
Stage 2	838	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	675	939	1469	-	-
Mov Cap-2 Maneuver	675	-	-	-	-
Stage 1	893	-	-	-	-
Stage 2	838	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	1.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1469	-	790	-	-
HCM Lane V/C Ratio	0.02	-	0.038	-	-
HCM Control Delay (s)	7.5	-	9.7	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↗	↖
Traffic Vol, veh/h	8	9	11	150	99	12
Future Vol, veh/h	8	9	11	150	99	12
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	100	330	-	-	450
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	10	12	14	195	129	16

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	352	129	145	0	-	0
Stage 1	129	-	-	-	-	-
Stage 2	223	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	642	916	1425	-	-	-
Stage 1	892	-	-	-	-	-
Stage 2	809	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	636	916	1425	-	-	-
Mov Cap-2 Maneuver	636	-	-	-	-	-
Stage 1	883	-	-	-	-	-
Stage 2	809	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.8	0.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1425	-	636	916	-	-
HCM Lane V/C Ratio	0.01	-	0.016	0.013	-	-
HCM Control Delay (s)	7.6	-	10.8	9	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0	-	-



Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↗	↖
Traffic Vol, veh/h	10	11	13	150	99	15
Future Vol, veh/h	10	11	13	150	99	15
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	100	370	-	-	320
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	13	14	17	195	129	19

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	358	129	148	0	-	0
Stage 1	129	-	-	-	-	-
Stage 2	229	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	636	916	1421	-	-	-
Stage 1	892	-	-	-	-	-
Stage 2	804	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	628	916	1421	-	-	-
Mov Cap-2 Maneuver	628	-	-	-	-	-
Stage 1	881	-	-	-	-	-
Stage 2	804	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.9	0.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1421	-	628	916	-	-
HCM Lane V/C Ratio	0.012	-	0.021	0.016	-	-
HCM Control Delay (s)	7.6	-	10.9	9	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0	-	-

Intersection						
Int Delay, s/veh	2.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↗	↖
Traffic Vol, veh/h	25	28	22	109	120	23
Future Vol, veh/h	25	28	22	109	120	23
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	100	330	-	-	450
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	28	31	24	121	133	26

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	302	133	159	0	-	0
Stage 1	133	-	-	-	-	-
Stage 2	169	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	685	911	1408	-	-	-
Stage 1	888	-	-	-	-	-
Stage 2	856	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	673	911	1408	-	-	-
Mov Cap-2 Maneuver	673	-	-	-	-	-
Stage 1	873	-	-	-	-	-
Stage 2	856	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.8	1.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1408	-	673	911	-	-
HCM Lane V/C Ratio	0.017	-	0.041	0.034	-	-
HCM Control Delay (s)	7.6	-	10.6	9.1	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	0.1	-	-

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↗	↖
Traffic Vol, veh/h	13	14	27	116	98	32
Future Vol, veh/h	13	14	27	116	98	32
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	100	370	-	-	320
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	14	16	30	129	109	36

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	298	109	145	0	-	0
Stage 1	109	-	-	-	-	-
Stage 2	189	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	689	939	1425	-	-	-
Stage 1	911	-	-	-	-	-
Stage 2	838	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	675	939	1425	-	-	-
Mov Cap-2 Maneuver	675	-	-	-	-	-
Stage 1	892	-	-	-	-	-
Stage 2	838	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	1.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1425	-	675	939	-	-
HCM Lane V/C Ratio	0.021	-	0.021	0.017	-	-
HCM Control Delay (s)	7.6	-	10.5	8.9	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	0.1	-	-

**DESIGN YEAR (2045)**  
**AM PEAK HOUR**

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	↔
Traffic Vol, veh/h	10	11	17	131	168	11
Future Vol, veh/h	10	11	17	131	168	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	190	-	-	200
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	12	13	20	158	202	13

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	400	202	215	0	-	0
Stage 1	202	-	-	-	-	-
Stage 2	198	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	602	834	1343	-	-	-
Stage 1	827	-	-	-	-	-
Stage 2	831	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	593	834	1343	-	-	-
Mov Cap-2 Maneuver	593	-	-	-	-	-
Stage 1	815	-	-	-	-	-
Stage 2	831	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.3	0.9	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1343	-	699	-	-
HCM Lane V/C Ratio	0.015	-	0.036	-	-
HCM Control Delay (s)	7.7	-	10.3	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	↔
Traffic Vol, veh/h	12	11	10	129	170	15
Future Vol, veh/h	12	11	10	129	170	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	Yield
Storage Length	0	-	370	-	-	220
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	14	13	12	155	205	18

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	384	205	205	0	-	0
Stage 1	205	-	-	-	-	-
Stage 2	179	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	615	831	1355	-	-	-
Stage 1	825	-	-	-	-	-
Stage 2	847	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	609	831	1355	-	-	-
Mov Cap-2 Maneuver	609	-	-	-	-	-
Stage 1	818	-	-	-	-	-
Stage 2	847	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.4	0.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1355	-	698	-	-
HCM Lane V/C Ratio	0.009	-	0.04	-	-
HCM Control Delay (s)	7.7	-	10.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	↔
Traffic Vol, veh/h	22	25	36	126	141	35
Future Vol, veh/h	22	25	36	126	141	35
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	-	190	-	-	200
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	24	27	40	138	155	38

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	373	155	193	0	-	0
Stage 1	155	-	-	-	-	-
Stage 2	218	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	624	886	1368	-	-	-
Stage 1	868	-	-	-	-	-
Stage 2	814	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	606	886	1368	-	-	-
Mov Cap-2 Maneuver	606	-	-	-	-	-
Stage 1	843	-	-	-	-	-
Stage 2	814	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.3	1.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1368	-	728	-	-
HCM Lane V/C Ratio	0.029	-	0.071	-	-
HCM Control Delay (s)	7.7	-	10.3	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection						
Int Delay, s/veh	2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	TT		T	T	T	T
Traffic Vol, veh/h	31	24	25	128	145	27
Future Vol, veh/h	31	24	25	128	145	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	Yield
Storage Length	0	-	370	-	-	220
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	34	26	27	141	159	30

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	354	159	159	0	-	0
Stage 1	159	-	-	-	-	-
Stage 2	195	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	640	881	1408	-	-	-
Stage 1	865	-	-	-	-	-
Stage 2	833	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	628	881	1408	-	-	-
Mov Cap-2 Maneuver	628	-	-	-	-	-
Stage 1	849	-	-	-	-	-
Stage 2	833	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.5	1.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1408	-	718	-	-
HCM Lane V/C Ratio	0.02	-	0.084	-	-
HCM Control Delay (s)	7.6	-	10.5	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-



Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔	↔	↔	↑	↑	↔
Traffic Vol, veh/h	10	11	17	131	168	11
Future Vol, veh/h	10	11	17	131	168	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	330	-	-	450
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	12	13	20	158	202	13

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	400	202	215	0	-	0
Stage 1	202	-	-	-	-	-
Stage 2	198	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	602	834	1343	-	-	-
Stage 1	827	-	-	-	-	-
Stage 2	831	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	593	834	1343	-	-	-
Mov Cap-2 Maneuver	593	-	-	-	-	-
Stage 1	815	-	-	-	-	-
Stage 2	831	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.3	0.9	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1343	-	593	834	-	-
HCM Lane V/C Ratio	0.015	-	0.02	0.016	-	-
HCM Control Delay (s)	7.7	-	11.2	9.4	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0	-	-

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔	↔	↔	↑	↑	↔
Traffic Vol, veh/h	12	11	10	129	170	15
Future Vol, veh/h	12	11	10	129	170	15
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	100	370	-	-	320
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	14	13	12	155	205	18

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	384	205	223	0	-	0
Stage 1	205	-	-	-	-	-
Stage 2	179	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	615	831	1334	-	-	-
Stage 1	825	-	-	-	-	-
Stage 2	847	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	609	831	1334	-	-	-
Mov Cap-2 Maneuver	609	-	-	-	-	-
Stage 1	818	-	-	-	-	-
Stage 2	847	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.3	0.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1334	-	609	831	-	-
HCM Lane V/C Ratio	0.009	-	0.024	0.016	-	-
HCM Control Delay (s)	7.7	-	11.1	9.4	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0	-	-

Intersection						
Int Delay, s/veh	1.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↗	↖
Traffic Vol, veh/h	22	25	36	126	141	35
Future Vol, veh/h	22	25	36	126	141	35
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	100	330	-	-	450
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	24	27	40	138	155	38

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	373	155	193	0	-	0
Stage 1	155	-	-	-	-	-
Stage 2	218	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	624	886	1368	-	-	-
Stage 1	868	-	-	-	-	-
Stage 2	814	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	606	886	1368	-	-	-
Mov Cap-2 Maneuver	606	-	-	-	-	-
Stage 1	843	-	-	-	-	-
Stage 2	814	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.1	1.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1368	-	606	886	-	-
HCM Lane V/C Ratio	0.029	-	0.04	0.031	-	-
HCM Control Delay (s)	7.7	-	11.2	9.2	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	0.1	-	-

Intersection						
Int Delay, s/veh	2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↗	↖
Traffic Vol, veh/h	31	24	25	128	145	27
Future Vol, veh/h	31	24	25	128	145	27
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	100	370	-	-	320
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	34	26	27	141	159	30

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	354	159	189	0	-	0
Stage 1	159	-	-	-	-	-
Stage 2	195	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	640	881	1373	-	-	-
Stage 1	865	-	-	-	-	-
Stage 2	833	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	627	881	1373	-	-	-
Mov Cap-2 Maneuver	627	-	-	-	-	-
Stage 1	848	-	-	-	-	-
Stage 2	833	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.3	1.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1373	-	627	881	-	-
HCM Lane V/C Ratio	0.02	-	0.054	0.03	-	-
HCM Control Delay (s)	7.7	-	11.1	9.2	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	0.1	-	-

**DESIGN YEAR (2045)**  
**PM PEAK HOUR**

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	↔
Traffic Vol, veh/h	10	11	13	175	128	14
Future Vol, veh/h	10	11	13	175	128	14
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	-	190	-	-	200
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	13	14	17	227	166	18

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	427	166	184	0	-	0
Stage 1	166	-	-	-	-	-
Stage 2	261	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	581	873	1379	-	-	-
Stage 1	859	-	-	-	-	-
Stage 2	778	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	574	873	1379	-	-	-
Mov Cap-2 Maneuver	574	-	-	-	-	-
Stage 1	849	-	-	-	-	-
Stage 2	778	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.4	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1379	-	699	-	-
HCM Lane V/C Ratio	0.012	-	0.039	-	-
HCM Control Delay (s)	7.6	-	10.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	↔
Traffic Vol, veh/h	12	12	11	174	124	13
Future Vol, veh/h	12	12	11	174	124	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	Yield
Storage Length	0	-	370	-	-	220
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	16	16	14	226	161	17

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	415	161	161	0	-	0
Stage 1	161	-	-	-	-	-
Stage 2	254	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	590	879	1406	-	-	-
Stage 1	863	-	-	-	-	-
Stage 2	784	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	584	879	1406	-	-	-
Mov Cap-2 Maneuver	584	-	-	-	-	-
Stage 1	854	-	-	-	-	-
Stage 2	784	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.4	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1406	-	702	-	-
HCM Lane V/C Ratio	0.01	-	0.044	-	-
HCM Control Delay (s)	7.6	-	10.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	2.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	↔
Traffic Vol, veh/h	29	33	28	127	141	29
Future Vol, veh/h	29	33	28	127	141	29
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	-	190	-	-	200
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	32	37	31	141	157	32

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	360	157	189	0	-	0
Stage 1	157	-	-	-	-	-
Stage 2	203	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	635	883	1373	-	-	-
Stage 1	867	-	-	-	-	-
Stage 2	826	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	620	883	1373	-	-	-
Mov Cap-2 Maneuver	620	-	-	-	-	-
Stage 1	847	-	-	-	-	-
Stage 2	826	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.4	1.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1373	-	737	-	-
HCM Lane V/C Ratio	0.023	-	0.093	-	-
HCM Control Delay (s)	7.7	-	10.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-



Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	↔
Traffic Vol, veh/h	16	17	34	134	130	39
Future Vol, veh/h	16	17	34	134	130	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	Yield
Storage Length	0	-	370	-	-	220
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	18	19	38	149	144	43

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	369	144	144	0	-	0
Stage 1	144	-	-	-	-	-
Stage 2	225	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	627	898	1426	-	-	-
Stage 1	878	-	-	-	-	-
Stage 2	808	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	610	898	1426	-	-	-
Mov Cap-2 Maneuver	610	-	-	-	-	-
Stage 1	854	-	-	-	-	-
Stage 2	808	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.2	1.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1426	-	731	-	-
HCM Lane V/C Ratio	0.026	-	0.05	-	-
HCM Control Delay (s)	7.6	-	10.2	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↗	↖
Traffic Vol, veh/h	10	11	13	175	128	14
Future Vol, veh/h	10	11	13	175	128	14
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	100	330	-	-	450
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	13	14	17	227	166	18

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	427	166	184	0	-	0
Stage 1	166	-	-	-	-	-
Stage 2	261	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	581	873	1379	-	-	-
Stage 1	859	-	-	-	-	-
Stage 2	778	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	574	873	1379	-	-	-
Mov Cap-2 Maneuver	574	-	-	-	-	-
Stage 1	849	-	-	-	-	-
Stage 2	778	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.2	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1379	-	574	873	-	-
HCM Lane V/C Ratio	0.012	-	0.023	0.016	-	-
HCM Control Delay (s)	7.6	-	11.4	9.2	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0.1	-	-

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↗	↖
Traffic Vol, veh/h	12	12	11	174	124	13
Future Vol, veh/h	12	12	11	174	124	13
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	100	370	-	-	320
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	16	16	14	226	161	17

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	415	161	178	0	-	0
Stage 1	161	-	-	-	-	-
Stage 2	254	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	590	879	1386	-	-	-
Stage 1	863	-	-	-	-	-
Stage 2	784	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	584	879	1386	-	-	-
Mov Cap-2 Maneuver	584	-	-	-	-	-
Stage 1	854	-	-	-	-	-
Stage 2	784	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.3	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1386	-	584	879	-	-
HCM Lane V/C Ratio	0.01	-	0.027	0.018	-	-
HCM Control Delay (s)	7.6	-	11.3	9.2	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0.1	-	-

Intersection						
Int Delay, s/veh	2.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↗	↖
Traffic Vol, veh/h	29	33	28	127	141	29
Future Vol, veh/h	29	33	28	127	141	29
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	100	330	-	-	450
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	32	37	31	141	157	32

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	360	157	189	0	-	0
Stage 1	157	-	-	-	-	-
Stage 2	203	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	635	883	1373	-	-	-
Stage 1	867	-	-	-	-	-
Stage 2	826	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	620	883	1373	-	-	-
Mov Cap-2 Maneuver	620	-	-	-	-	-
Stage 1	847	-	-	-	-	-
Stage 2	826	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.1	1.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1373	-	620	883	-	-
HCM Lane V/C Ratio	0.023	-	0.052	0.042	-	-
HCM Control Delay (s)	7.7	-	11.1	9.3	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	0.1	-	-

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↗	↖
Traffic Vol, veh/h	16	17	34	134	130	39
Future Vol, veh/h	16	17	34	134	130	39
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	100	370	-	-	320
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	18	19	38	149	144	43

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	369	144	187	0	-	0
Stage 1	144	-	-	-	-	-
Stage 2	225	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	627	898	1375	-	-	-
Stage 1	878	-	-	-	-	-
Stage 2	808	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	609	898	1375	-	-	-
Mov Cap-2 Maneuver	609	-	-	-	-	-
Stage 1	853	-	-	-	-	-
Stage 2	808	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.1	1.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1375	-	609	898	-	-
HCM Lane V/C Ratio	0.027	-	0.029	0.021	-	-
HCM Control Delay (s)	7.7	-	11.1	9.1	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	0.1	-	-