

CULPEPPER & TERPENING, INC.
CONSULTING ENGINEERS | LAND SURVEYORS

TRAFFIC IMPACT STUDY

For

ROCLA CROSSTIE FACILITY

In

The City of Fort Pierce

Prepared for

Rocla Concrete Tie, Inc.

Prepared By

Culpepper & Terpening, Inc.
2980 South 25th Street
Fort Pierce, FL 34981

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A LEGACY OF EXPERTISE AND EXCELLENCE

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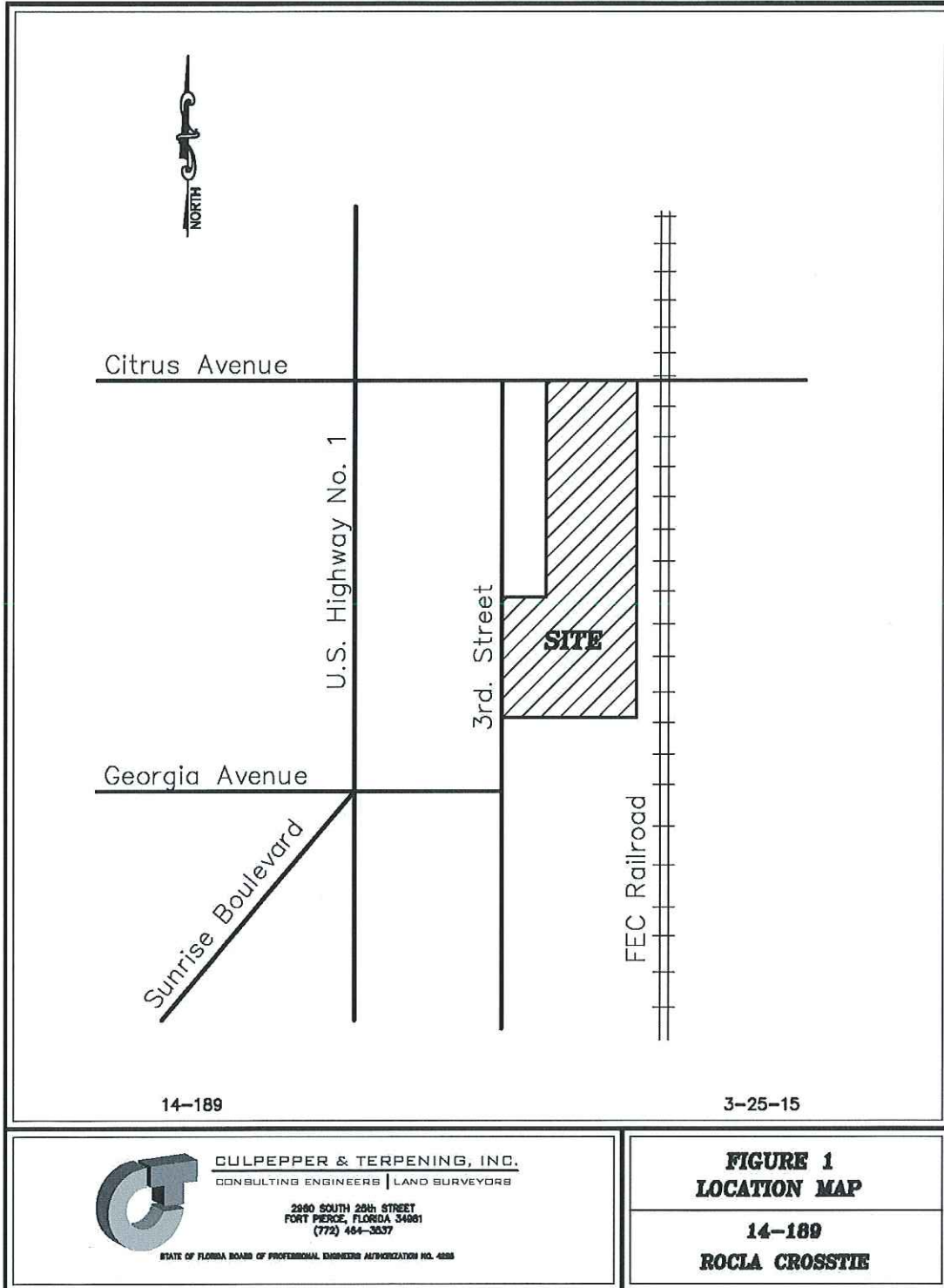
Project Description

The proposed project, Rocla Crosstie Facility, is to be located along the east side of South 3rd Street, south of the Citrus Avenue overpass, in the eastern section of the City of Ft. Pierce, Florida (See Figure No. 1, Location Map). The site is located in Section 10, Township 35 South, Range 40 East, St. Lucie County, Florida. The overall property is comprised of 2 separate parcels, totaling 7.18 acres or land, that will be leased from the Florida East Coast Railroad.

The Rocla Crosstie Facility is an industrial/light manufacturing activity that will produce concrete railroad ties for both heavy and light rail projects in the southeastern parts of the United States. These ties will be manufactured onsite, stored onsite and the removed from the site via the adjoining FEC rail lines. In only the rarest of instances will the completed crosstie product be ‘trucked’ off-site. The Ft. Pierce facility will consist of a 16,850 square foot, railroad crosstie manufacturing building with a separate 2,625 square foot office building.

This report will summarize the areas existing traffic conditions; assess the trip impacts from this facility on the local area roadway network and identify any Level of Service (LOS) deficiencies. If LOS deficiencies are identified, recommended improvements will be cited.

Figure 1 (Location Map and Study Area)



Study Methodology

As the project is located within the City of Ft. Pierce, the Scope and Methodology of this report is prepared in accordance with the requirements of the City. The project is anticipated for construction in late 2015 to and therefore it was determined that the impacts of project development will be analyzed in 2020 forecast condition.

Section A – Definition of Study Area

The study area as defined by the City of Fort Pierce Chapter 22.217.f/2 shall be according to the Table I below:

Table I		
Size of Project	Trips Generated	Study Area
Minimal Scale	Trips 9-50	1.0 Mile Radius
Small Scale	Trips 51-100	1.5 Mile Radius
Intermediate Scale	Trips 101-500	2.0 Mile Radius
Medium Scale	Trips 501-1000	3.0 Mile Radius
Large Scale	Trips 1000-Up	5.0 Mile Radius

The Study Area includes all major roadways and intersections within the zone of influence. From the data collected in Table IV it has been determined that the Rocla Crosstie Facility is a Small Scale project. The study area shall include the following roadway segments and intersections:

Roadway Segments

- US Highway No. 1: Virginia Avenue to Orange Avenue
- Georgia Avenue: South 3rd Street to US Highway No. 1

Intersections

- US Highway No. 1 and Georgia Avenue

The following traffic study will be prepared in accordance with Chapter 22.217 of the City of Ft. Pierce Code. The analysis will be based upon the Level-of Service (LOS) standards established by the Florida Department of Transportation (FDOT) 2012 Level of Service Handbook for both the Average Daily traffic (ADT) and pm Peak Hour traffic conditions. The LOS standards found in the FDOT 2012 Level of Service Handbook are provided as Table 1 (Generalized Annual Average Daily Volumes for Florida’s Urbanized Areas), and Table 2 (Generalized Peak Hour Directional Volumes for Florida’s Urbanized Areas) of this report.

Table 1

Generalized Annual Average Daily Volumes for Florida's Urbanized Areas

12/18/12

INTERRUPTED FLOW FACILITIES						UNINTERRUPTED FLOW FACILITIES					
STATE SIGNALIZED ARTERIALS						FREEWAYS					
Class I (40 mph or higher posted speed limit)						Core Urbanized					
Lanes	Median	B	C	D	E	Lanes	B	C	D	E	
2	Undivided	*	16,800	17,700	**	4	47,400	64,000	77,900	84,600	
4	Divided	*	37,900	39,800	**	6	69,900	95,200	116,600	130,600	
6	Divided	*	58,400	59,900	**	8	92,500	126,400	154,300	176,600	
8	Divided	*	78,800	80,100	**	10	115,100	159,700	194,500	222,700	
						12	162,400	216,700	256,600	268,900	
Class II (35 mph or slower posted speed limit)						Urbanized					
Lanes	Median	B	C	D	E	Lanes	B	C	D	E	
2	Undivided	*	7,300	14,800	15,600	4	45,800	61,500	74,400	79,900	
4	Divided	*	14,500	32,400	33,800	6	68,100	93,000	111,800	123,300	
6	Divided	*	23,300	50,000	50,900	8	91,500	123,500	148,700	166,800	
8	Divided	*	32,000	67,300	68,100	10	114,800	156,000	187,100	210,300	
Non-State Signalized Roadway Adjustments (Alter corresponding state volumes by the indicated percent.)						Freeway Adjustments					
Non-State Signalized Roadways - 10%						Auxiliary Lanes Present in Both Directions + 20,000					
						Ramp Metering + 5%					
Median & Turn Lane Adjustments						UNINTERRUPTED FLOW HIGHWAYS					
Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors		Lanes	Median	B	C	D	E
2	Divided	Yes	No	+5%		2	Undivided	8,600	17,000	24,200	33,300
2	Undivided	No	No	-20%		4	Divided	36,700	51,800	65,600	72,600
Multi	Undivided	Yes	No	-5%		6	Divided	55,000	77,700	98,300	108,800
Multi	Undivided	No	No	-25%		Uninterrupted Flow Highway Adjustments					
-	-	-	Yes	+ 5%		Lanes	Median	Exclusive left lanes		Adjustment factors	
One-Way Facility Adjustment Multiply the corresponding two-directional volumes in this table by 0.6						2	Divided	Yes		+5%	
						Multi	Undivided	Yes		-5%	
						Multi	Undivided	No		-25%	
BICYCLE MODE² (Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)						¹ Values shown are presented as two-way annual average daily 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 Highway Capacity Manual and the Transit Capacity and Quality of Service Manual.					
Paved Shoulder/Bicycle Lane Coverage						² Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.					
	B	C	D	E		³ Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.					
0-49%	*	2,900	7,600	19,700		⁴ Cannot be achieved using table input value defaults.					
50-84%	2,100	6,700	19,700	>19,700		** 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.					
85-100%	9,300	19,700	>19,700	**		Sources: Florida Department of Transportation Systems Planning Office www.dot.state.fl.us/planning/systems/sm/os/default.shtm					
PEDESTRIAN MODE² (Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)						2012 FDOT QUALITY/LEVEL OF SERVICE HANDBOOK TABLES					
Sidewalk Coverage											
	B	C	D	E							
0-49%	*	*	2,800	9,500							
50-84%	*	1,600	8,700	15,800							
85-100%	3,800	10,700	17,400	>19,700							
BUS MODE (Scheduled Fixed Route)³ (Buses in peak hour in peak direction)											
Sidewalk Coverage											
	B	C	D	E							
0-84%	> 5	≥ 4	≥ 3	≥ 2							
85-100%	> 4	≥ 3	≥ 2	≥ 1							

Table 2

TABLE 7 Generalized Peak Hour Directional Volumes for Florida's Urbanized Areas¹

12/18/12

INTERRUPTED FLOW FACILITIES						UNINTERRUPTED FLOW FACILITIES						
STATE SIGNALIZED ARTERIALS						FREEWAYS						
Class I (40 mph or higher posted speed limit)						Lanes	B	C	D	E		
Lanes	Median	B	C	D	E	2	2,260	3,020	3,660	3,940		
1	Undivided	*	830	880	**	3	3,360	4,580	5,500	6,080		
2	Divided	*	1,910	2,000	**	4	4,500	6,080	7,320	8,220		
3	Divided	*	2,940	3,020	**	5	5,660	7,680	9,220	10,360		
4	Divided	*	3,970	4,040	**	6	7,900	10,320	12,060	12,500		
Class II (35 mph or slower posted speed limit)						Freeway Adjustments						
Lanes	Median	B	C	D	E	Auxiliary Lane			Ramp Metering			
1	Undivided	*	370	750	800	+ 1,000			+ 5%			
2	Divided	*	730	1,630	1,700							
3	Divided	*	1,170	2,520	2,560							
4	Divided	*	1,610	3,390	3,420							
Non-State Signalized Roadway Adjustments (Alter corresponding state volumes by the indicated percent.)												
Non-State Signalized Roadways - 10%												
Median & Turn Lane Adjustments						UNINTERRUPTED FLOW HIGHWAYS						
Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors		Lanes	Median	B	C	D	E	
1	Divided	Yes	No	+5%		1	Undivided	420	840	1,190	1,640	
1	Undivided	No	No	-20%		2	Divided	1,810	2,560	3,240	3,590	
Multi	Undivided	Yes	No	-5%		3	Divided	2,720	3,840	4,860	5,380	
Multi	Undivided	No	No	-25%		Uninterrupted Flow Highway Adjustments						
-	-	-	Yes	+ 5%		Lanes	Median	Exclusive left lanes		Adjustment factors		
One-Way Facility Adjustment Multiply the corresponding directional volumes in this table by 1.2						1	Divided	Yes		+5%		
						Multi	Undivided	Yes		-5%		
						Multi	Undivided	No		-25%		
BICYCLE MODE² (Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)						¹ 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 Highway Capacity Manual and the Transit Capacity and Quality of Service Manual.						
Paved Shoulder/Bicycle						² Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.						
Lane Coverage	B	C	D	E		³ Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.						
0-49%	*	150	390	1,000		* Cannot be achieved using table input value defaults.						
50-84%	110	340	1,000	>1,000		** 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.						
85-100%	470	1,000	>1,000	**		Source: Florida Department of Transportation Systems Planning Office www.dot.state.fl.us/planning/systems/sn/los/default.shtml						
PEDESTRIAN MODE² (Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)												
Sidewalk Coverage	B	C	D	E								
0-49%	*	*	140	480								
50-84%	*	80	440	800								
85-100%	200	540	880	>1,000								
BUS MODE (Scheduled Fixed Route)³ (Buses in peak hour in peak direction)												
Sidewalk Coverage	B	C	D	E								
0-84%	> 5	≥ 4	≥ 3	≥ 2								
85-100%	> 4	≥ 3	≥ 2	≥ 1								

Section B – Inventory of Existing Facilities

The project traffic analysis is based upon the current condition of the surrounding roadway network that is anticipated to be impacted by the project. An inventory of the existing surrounding roadway network is provided as follows:

Roadways:

US Highway No. 1

US Highway No. 1 within the defined study area currently consists of a 4-lane divided roadway section containing two (2) 12' lanes northbound, two (2) 12' lanes southbound and left turn bays at all major intersections. The existing right-of-way of US Highway No. 1 is 70' to 80' in width.

US Highway No. 1 within the study area is classified as a State Two-Way Class II – Interrupted Flow Arterial and under the jurisdiction of the Florida Department of Transportation (FDOT).

South 3rd Street

The South 3rd Street Corridor consists of a 2-lane undivided roadway section containing 11' wide lanes in both the northbound and southbound direction. The existing right-of-way of South 3rd Street is 40' in width. This corridor is classified as a City Roadway and is under the jurisdiction of the City of Ft. Pierce.

Georgia Avenue

Georgia Avenue within the study area is a 2-lane undivided rural roadway east of US Highway 1 and a 2-lane undivided urban roadway west of US Highway containing 11' wide travel lanes in both the east and west bound direction. The existing right-of-way for this portion of Georgia Avenue is approximately 60 feet in width. This corridor is classified as a City Roadway and is under the jurisdiction of the City of Ft. Pierce.

Sunrise Boulevard

Sunrise Boulevard within the study area is a 2-lane divided urban roadway that terminates at US Highway 1 at the intersection with Georgia Avenue. The roadway contains 11' wide travel lanes in both the east and west bound direction and includes parallel parking along the outside of each travel lane. The existing right-of-way for this portion of Sunrise Boulevard is approximately 80 feet in width. This corridor is classified as a City Roadway and is under the jurisdiction of the City of Ft. Pierce.

Intersections:

US Highway No. 1 and Georgia Avenue/Sunrise Boulevard

The intersection of US Highway No. 1 and Georgia Avenue/Sunrise Boulevard is signalized. The intersection geometry is as follows:

Eastbound	2 Lane	Lt/Thru	Westbound	1 Lane	Left/Thru/Rt
	1 Lane	Right			
Southbound	1 Lane	Left	Northbound	1 Lane	Left
	1 Lane	Thru		1 Lane	Thru
	1 Lane	Thru/Rt		1 Lane	Thru/Rt

Existing Traffic Conditions

The Peak Season Average Daily Traffic Volume for the roadway of the project area were obtained from the Fall 2014, St. Lucie Transportation Planning Organization Counts, and augmented by Culpepper & Terpening, Inc. with traffic counts taken during the week of March 23, 2015. These counts include the committed trips as provided in the TPO data sheets and are provided in Table 3 – Existing Traffic Conditions.

**Table 3
Existing Traffic Conditions**

Roadway	Classification		LOS D Capacity	ADT	Committed Trips	Total /LOS	
	Type	Lanes					
<u>South 3rd Street</u>							
N. of Georgia Ave	Local	2 ln	13,320	270	0	270	B
<u>Georgia Avenue</u>							
West of US 1	Mc/Mc	2 ln	13,320	1,964	0	1,964	B
East of US 1	Local	2 ln	13,320	540	0	540	B
<u>US 1 North</u>							
North of Georgia Ave	CII	4 ln	32,400	24,720	0	24,720	C
South of Georgia Ave	CII	4 ln	32,400	27,870	0	27,870	C

The PM Peak Hour Directional Volume for the roadways located within the study area were obtained from the Fall 2014, St. Lucie Transportation Planning Organization Counts, and augmented by Culpepper & Terpening, Inc. with traffic counts taken during the week of March 23, 2015. These counts include the committed trips as provided in the TPO data sheets and are provided in Table 4 – Existing Roadway Link LOS.

**Table 4
Existing Roadway Link LOS**

Roadway	Classification		ADT LOS Capacity	ADT Committed/ LOS	PM Peak Hr/LOS Capacity	PM PK Hr Directional Volumes/LOS		
	Type	Lanes						
<u>South 3rd Street</u>								
N. of Georgia Ave	Local	2 ln	13,320	270	B	510	17	B
<u>Georgia Avenue</u>								
West of US 1	Mc/Mc	2 ln	13,320	1,964	B	510	123	B
East of US 1	Local	2 ln	13,320	540	B	510	34	B
<u>US 1 North</u>								
North of Georgia Ave	Cl-II	4 ln	32,400	24,720	C	1,630	1,218	C
South of Georgia Ave	Cl-II	4 ln	32,400	27,870	C	1,630	1,352	C

Trip Generation

The proposed crosstie manufacturing facility will consist of a 16,850 square foot manufacturing building and a 2,625 square foot office building. The facility is a specialized operation that will provide rail crosstie production in two eight hour work shifts. The work shifts will be from 7 AM to 3 PM and 7 PM to 3 AM. Administration staff will work from 7 AM to 4 PM.

Trip Generation for the proposed crosstie manufacturing facility will be estimated on the number of employees and deliveries that are anticipated for the facility. The Average Daily Traffic (ADT) is based upon the following:

Administrative Staff:	4 Employees @ 2.5 trips/employee
Early Shift:	20 Employees @ 2.5 trips/employee
Late Shift:	18 Employees @ 2 trips/employee
Deliveries:	14 deliveries/day

The total average daily traffic is calculated as follows:

$ADT = (4 \text{ employees} \times 2.5) + (20 \text{ employees} \times 2.5) + (18 \text{ employees} \times 2) + (14 \text{ deliveries} \times 2) = 124$
trips per day

The peak hour of operation traffic will be the combined administrative staff and early shift employee start of work which will be a total of 24 Vehicles Per Hour (VPH) between 6:00 AM and 7:00 AM.

It should be noted that due to the nature of the facilities operations, and timing of the shift work, there will be negligible trips during the AM and PM peak hours of traffic on the roadway network.

Trip Distribution

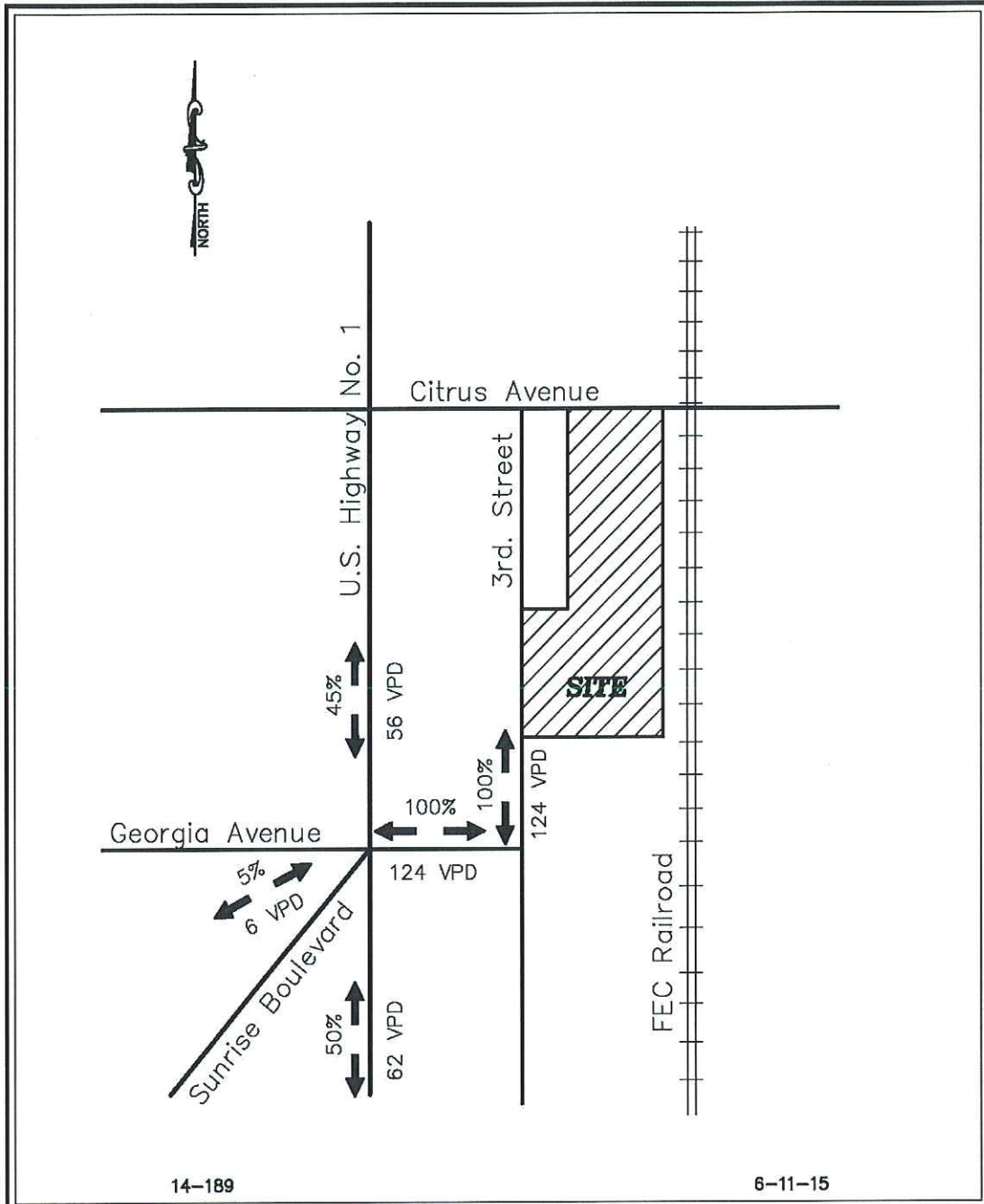
The Trip Distribution from the site onto local streets was derived based upon the surrounding developments as well as the existing Transportation Network. The Distribution onto the surrounding links was then derived and is portrayed as Figure No. 2. A summary of the Major Trip Assignments were estimated as follows:

**Table 5
Trip Distribution**

<u>Link</u>	<u>%</u>	<u>ADT</u>	<u>PM Peak Hr. Dir.</u>
<u>South 3rd Street</u>			
North of Georgia	100%	124 vpd	0 vph
<u>Georgia Avenue</u>			
East of US 1	100%	124 vpd	0 vph
West of US 1	5%	6 vpd	0 vph
<u>US 1 North</u>			
North of Georgia	45%	56 vpd	0 vph
South of Georgia	50%	62 vpd	0 vph

A complete trip assignment by percentage is shown on Figure No. 2.

Figure 2 – Trip Distribution



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6-11-15



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FIGURE 2
TRIP DISTRIBUTION

14-189
ROCLA CROSSTIE

Capacity Analysis

Roadway Link Analysis:

The Trip Assignment Volumes calculated in the previous sections were added to the existing volumes and background trips assigned to the roadway links within the study area. Project trip distribution onto the surrounding links was then derived and is portrayed as Figure No. 2. The existing traffic volumes provided in the fall St. Lucie County TPO Traffic Counts were increased by 2.0% per year from 2015 to account for growth through the 2020 forecasting year. The 2.0% growth factor was determined by utilizing the St. Lucie County TPO count data for the past 3 years to calculate the actual growth experienced within the transportation service area, and then applying additional growth to account for the possible change in economic development conditions within the region.

Level of Service, Table 1, of the Florida FDOT 2012 Quality / Level of Service Handbook was used for both the existing (Pre-Development, including background) and Post-Development Levels of Service. Table 6, Roadway Link Analysis (ADT) provides a summary of the results of the project's impact on the roadway network.

**Table 6
Roadway Link Analysis (ADT)**

<u>Roadway</u>	<u>LOS Capacity</u>	<u>Existing Conditions</u>		<u>Growth (2020)*</u>	<u>Pre-Development Conditions</u>		<u>Project Traffic</u>	<u>Post-Development Conditions</u>	
				<u>2.0%</u>					
<u>South 3rd Street</u>									
North of Georgia	13,320	270	B	34	304	B	124	428	B
<u>Georgia Avenue</u>									
West of US 1	13,320	1,964	B	248	2,212	B	6	2,218	B
East of US 1	13,320	540	B	68	608	B	124	732	B
<u>US 1 North</u>									
North of Georgia	32,400	24,720	C	3,119	27,839	C	56	27,895	C
South of Georgia	32,400	27,870	C	3,516	31,386	C	62	31,448	C

Table 7 (Impact on Local Roadway Network (ADT)) and Table 8 (Local Roadway Network & Impact (PM Peak Hour Directional)) provide for the actual impact anticipated from the development of the project through the 2020 horizon year for both the ADT and PM peak Hour conditions.

Table 7 Impact on Local Roadway Network (ADT)							
		ADT LOS Capacity	Project Traffic	ADT Post- Development Conditions		ADT % Impact	Remaining Capacity
<u>South 3rd Street</u>							
North of Georgia		13,320	124	428	B	0.93%	12,891
<u>Georgia Avenue</u>							
West of US 1		13,320	6	2,218	B	0.05%	11,102
East of US 1		13,320	124	732	B	0.93%	12,588
<u>US 1 North</u>							
North of Georgia		32,400	56	27,895	C	0.17%	4,505
South of Georgia		32,400	62	31,448	C	0.19%	952

Table 8 Roadway Network & Impact (PM Peak Hour Directional)									
Roadway		PM Peak LOS D Capacity	PM Peak Pre- Development	Project Traffic	PM Peak Post- Development Conditions		% Impact	Remaining Capacity	
			2020						
<u>South 3rd Street</u>									
N. of Georgia Ave		510	19	B	0	19	B	0.0%	491
<u>Georgia Avenue</u>									
West of US 1		510	139	B	0	139	B	0.0%	371
East of US 1		510	38	B	0	38	B	0.0%	472
<u>US 1 North</u>									
North of Georgia Ave		1,630	1,372	C	0	1,372	C	0.0%	258
South of Georgia Ave		1,630	1,523	C	0	1,523	C	0.0%	107

As demonstrated by the Tables 6, 7 and 8; the project will not have an impact on the existing roadway network in either the Average Daily or PM Peak Hour traffic conditions. The roadways are expected to operate at acceptable levels of service through the 2020 horizon year.

Intersection Analysis

In order to determine the project's impact is on the intersecting roadways, analysis has been conducted during the time periods that experience the most traffic volumes within any hour of the weekday. The AM and PM Peak Hour Traffic conditions typically experience the highest traffic volumes during the weekday. The existing Peak Hour Volumes at the intersection of US Highway No. 1 and Georgia Ave/Sunrise Boulevard were taken by Culpepper & Terpening, Inc. on March 26, 2015 during both the AM and PM peak hour time periods.

The traffic counts determined that the peak hour conditions at the intersection are as follows:

AM Peak Hour: 7:45 am to 8:45 am

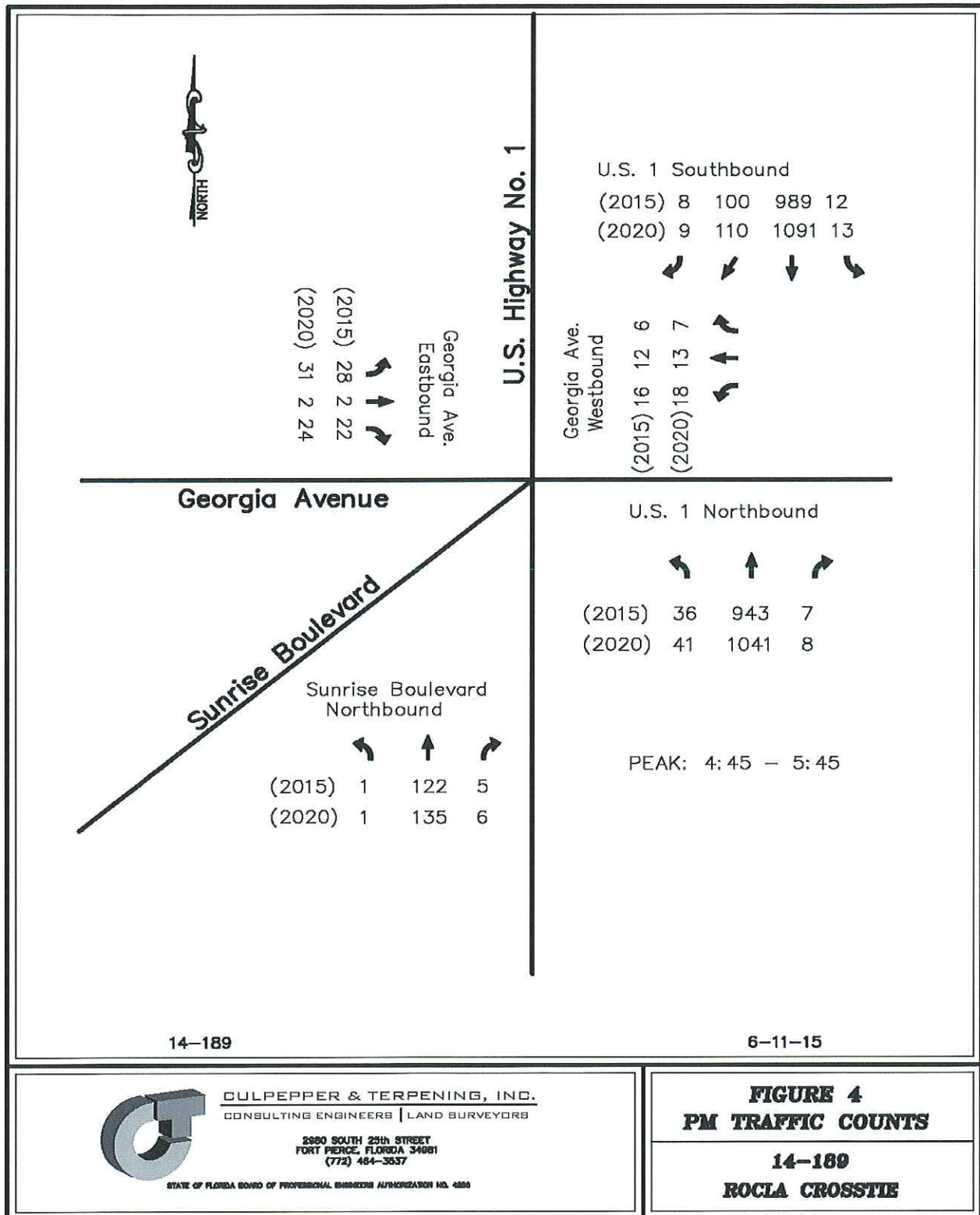
PM Peak Hour: 4:45 pm to 5:45 pm

The individual turning movement counts for both the AM and PM peak hours were then grown to the 2020 analysis year by the 2.0% growth factor established consistent with the Average Daily Traffic.

Project traffic, as mentioned in the trip generation section of this report, will be negligible on the roadway network due to the timing of the proposed shift work. Intersection analysis is however provided in this report to show the current (2015), and horizon analysis (2020) years performance of the closest intersection to the project, US Highway No. 1 and Georgia Ave/Sunrise Boulevard.

The Pre-Development and Post-Development AM and PM Peak Hour turning movements for the project intersections are depicted in Figures 3 and 4 for both the current 2015 and future 2020 conditions.

Figure 4 – PM Peak Hour Turning Movements



The following is a summary of the results of the Levels of Service for each approach and the overall intersection. A detailed analysis of each lane group in a graphical representation of the lane geometry for the each of the studied intersections can be found in the attached Appendix A and C for the Pre-Development conditions and well as the Post-Development Conditions. A summary of the intersection capacity is as follows:

**US Highway No. 1 and Georgia Ave/Sunrise Boulevard
A.M. Peak Hour (2015)**

<u>Approach</u>	<u>Pre-Development</u>	<u>Post-Development</u>
Northbound	C	C
Southbound	C	C
Eastbound	D	D
Westbound	D	D
Intersection	C	C

**US Highway No. 1 and Georgia Ave/Sunrise Boulevard
P.M. Peak Hour (2015)**

<u>Approach</u>	<u>Pre-Development</u>	<u>Post-Development</u>
Northbound	C	C
Southbound	C	C
Eastbound	D	D
Westbound	D	D
Intersection	C	C

**US Highway No. 1 and Georgia Ave/Sunrise Boulevard
A.M. Peak Hour (2020)**

<u>Approach</u>	<u>Pre-Development</u>	<u>Post-Development</u>
Northbound	C	C
Southbound	C	C
Eastbound	D	D
Westbound	D	D
Intersection	C	C

**US Highway No. 1 and Georgia Ave/Sunrise Boulevard
P.M. Peak Hour (2020)**

<u>Approach</u>	<u>Pre-Development</u>	<u>Post-Development</u>
Northbound	C	C
Southbound	C	C
Eastbound	D	D
Westbound	D	D
Intersection	C	C

Conclusion

The traffic impact of the proposed Rocla Crosstie Manufacturing facility project have been analyzed in both the current and future 2020 horizon year condition for the annual daily traffic as well as the AM and PM peak hour condition in accordance with the requirements of the City of Ft. Pierce City Code Chapter 22.217. The results of the analysis is that the development of the facility will have no effect on the levels of service within the project impact area, and the local roadway network will continue to maintain an acceptable level of service and function properly after the development of the project. The results of the analysis are as follows:

- The Rocla Crosstie facility will have a minimal impact of the Annual Daily traffic condition on the surrounding roadway network and result in no change in Level of Service performance as demonstrated in Table 6 “Roadway Link Analysis (ADT)” found on page 12 of this report.
- The Rocla Crosstie facility will have no impact on the AM or PM peak hour of traffic condition on the surrounding roadway network and result in no change in Level of Service performance as demonstrated in Table 8 “Roadway Network & Impact (PM Peak Hour Directional)” found on page 13 of this report.
- The Rocla Crosstie facility will have no impact on the peak hour of traffic at the surrounding intersections as demonstrated by the Intersection Capacity analysis as provided on page 17 of this report.
- The development of the Rocla Crosstie facility will not result in any roadway links or intersections within the area of study to fall below acceptable levels of service through the 2020 horizon year, thus no transportation capacity related improvements are required.

Submitted By

Stefan K. Matthes
Florida Registration No. 38723

References

1. State of Florida Department of Transportation, Quality/Level of Service Handbook, 2012.
2. Transportation Engineers, Trip Generation, Ninth Edition, 2012.
3. St. Lucie Urban Area Transportation Planning Organization Traffic Counts, Fall 2012, 2013 & 2014.
4. HCS + Highway Capacity Software.

Appendix A

Capacity Analysis Peak Hour (2015)

SHORT REPORT												
General Information						Site Information						
Analyst <i>skm</i> Agency or Co. <i>City of Ft. Pierce</i> Date Performed <i>3/29/2015</i> Time Period <i>AM peak (7:45 - 8:45)</i>						Intersection <i>US 1 & Georgia Ave</i> Area Type <i>CBD or Similar</i> Jurisdiction <i>FDOT/CFP</i> Analysis Year <i>2015</i>						
Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	0	0	1	0	1	2	0	1	2	0
Lane Group	L	TR			LTR		L	TR		L	TR	
Volume (vph)	143	15	6	9	2	4	43	893	5	15	737	79
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	0.73	0.54	0.50	0.56	0.50	0.50	0.77	0.90	0.63	0.63	0.87	0.66
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0			2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0			2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3			3		3	3		3	3	
Unit Extension	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0			12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0			0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	
Phasing	EB Only	WB Only	03	04	Excl. Left	NS Perm	07	08				
Timing	G = 20.0	G = 10.0	G =	G =	G = 6.0	G = 56.5	G =	G =				
	Y = 8	Y = 4	Y =	Y =	Y = 4	Y = 4	Y =	Y =				
Duration of Analysis (hrs) = 1.00						Cycle Length C = 112.5						
Lane Group Capacity, Control Delay, and LOS Determination												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate	196	40			28		56	1000		24	967	
Lane Group Capacity	275	276			135		248	1555		238	1528	
v/c Ratio	0.71	0.14			0.21		0.23	0.64		0.10	0.63	
Green Ratio	0.18	0.18			0.09		0.59	0.50		0.59	0.50	
Uniform Delay d ₁	43.5	39.0			47.6		12.2	20.6		12.0	20.4	
Delay Factor k	0.28	0.11			0.11		0.11	0.22		0.11	0.21	
Incremental Delay d ₂	8.8	0.2			0.8		0.5	0.9		0.2	0.9	
PF Factor	1.000	1.000			1.000		1.000	1.000		1.000	1.000	
Control Delay	52.4	39.3			48.3		12.7	21.5		12.2	21.3	
Lane Group LOS	D	D			D		B	C		B	C	
Approach Delay	50.1			48.3			21.0			21.1		
Approach LOS	D			D			C			C		
Intersection Delay	24.4			Intersection LOS						C		

SHORT REPORT																
General Information						Site Information										
Analyst <i>skm</i> Agency or Co. <i>City of Ft. Pierce</i> Date Performed <i>3/29/2015</i> Time Period <i>PM peak (4:45 - 5:45)</i>						Intersection <i>US 1 & Georgia Ave</i> Area Type <i>CBD or Similar</i> Jurisdiction <i>FDOT/CFP</i> Analysis Year <i>2015</i>										
Volume and Timing Input																
	EB			WB			NB			SB						
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT				
Number of Lanes	1	1	0	0	1	0	1	2	0	1	2	0				
Lane Group	L	TR			LTR		L	TR		L	TR					
Volume (vph)	150	7	22	16	12	6	36	943	7	12	987	108				
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5				
PHF	0.83	0.88	0.61	0.80	0.50	0.75	0.53	0.95	0.58	0.75	0.95	0.93				
Pretimed/Actuated (PIA)	A	A	A	A	A	A	A	A	A	A	A	A				
Startup Lost Time	2.0	2.0			2.0		2.0	2.0		2.0	2.0					
Extension of Effective Green	2.0	2.0			2.0		2.0	2.0		2.0	2.0					
Arrival Type	3	3			3		3	3		3	3					
Unit Extension	3.0	3.0			3.0		3.0	3.0		3.0	3.0					
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0				
Lane Width	12.0	12.0			12.0		12.0	12.0		12.0	12.0					
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N				
Parking/Hour																
Bus Stops/Hour	0	0			0		0	0		0	0					
Minimum Pedestrian Time		3.2			3.2			3.2			3.2					
Phasing	EB Only		WB Only		03		04		Excl. Left		NS Perm		07		08	
Timing	G = 18.0		G = 8.0		G =		G =		G = 8.0		G = 55.0		G =		G =	
	Y = 8		Y = 4		Y =		Y =		Y = 4		Y = 4		Y =		Y =	
Duration of Analysis (hrs) = 1.00									Cycle Length C = 109.0							
Lane Group Capacity, Control Delay, and LOS Determination																
	EB			WB			NB			SB						
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT				
Adjusted Flow Rate	181	44			52		68	1005		16	1155					
Lane Group Capacity	255	236			115		230	1562		270	1541					
v/c Ratio	0.71	0.19			0.45		0.30	0.64		0.06	0.75					
Green Ratio	0.17	0.17			0.07		0.61	0.50		0.61	0.50					
Uniform Delay d ₁	43.0	39.2			48.4		12.6	19.8		10.6	21.5					
Delay Factor k	0.27	0.11			0.11		0.11	0.22		0.11	0.30					
Incremental Delay d ₂	9.3	0.4			2.8		0.7	0.9		0.1	2.1					
PF Factor	1.000	1.000			1.000		1.000	1.000		1.000	1.000					
Control Delay	52.3	39.6			51.2		13.3	20.7		10.7	23.6					
Lane Group LOS	D	D			D		B	C		B	C					
Approach Delay	49.8			51.2			20.3			23.5						
Approach LOS	D			D			C			C						
Intersection Delay	25.0						Intersection LOS				C					

Appendix B

Capacity Analysis Peak Hour (2020)

SHORT REPORT												
General Information						Site Information						
Analyst	skm					Intersection	US 1 & Georgia Ave					
Agency or Co.	City of Ft. Pierce					Area Type	CBD or Similar					
Date Performed	6/5/2015					Jurisdiction	FDOT/CFP					
Time Period	PM peak (4:45 - 5:45)					Analysis Year	2020					
Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	0	0	1	0	1	2	0	1	2	0
Lane Group	L	TR			LTR		L	TR		L	TR	
Volume (vph)	166	8	24	18	13	7	41	1041	8	13	1091	119
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	0.83	0.88	0.61	0.80	0.50	0.75	0.53	0.95	0.58	0.75	0.95	0.93
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0			2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0			2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3			3		3	3		3	3	
Unit Extension	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0			12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0			0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	
Phasing	EB Only	WB Only	03	04	Excl. Left	NS Perm	07	08				
Timing	G = 19.0	G = 8.0	G =	G =	G = 5.0	G = 55.0	G =	G =				
	Y = 8	Y = 5	Y =	Y =	Y = 5	Y = 5	Y =	Y =				
Duration of Analysis (hrs) = 1.00						Cycle Length C = 110.0						
Lane Group Capacity, Control Delay, and LOS Determination												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate	200	48			57		77	1110		17	1276	
Lane Group Capacity	267	247			114		158	1548		198	1527	
v/c Ratio	0.75	0.19			0.50		0.49	0.72		0.09	0.84	
Green Ratio	0.17	0.17			0.07		0.59	0.50		0.59	0.50	
Uniform Delay d ₁	43.2	38.9			49.1		15.9	21.4		12.6	23.6	
Delay Factor k	0.30	0.11			0.11		0.11	0.28		0.11	0.37	
Incremental Delay d ₂	11.9	0.4			3.5		2.4	1.6		0.2	4.4	
PF Factor	1.000	1.000			1.000		1.000	1.000		1.000	1.000	
Control Delay	55.2	39.3			52.5		18.2	23.1		12.8	28.0	
Lane Group LOS	E	D			D		B	C		B	C	
Approach Delay	52.1			52.5			22.8			27.8		
Approach LOS	D			D			C			C		
Intersection Delay	28.3						Intersection LOS				C	

SHORT REPORT												
General Information						Site Information						
Analyst	skm					Intersection	US 1 & Georgia Ave					
Agency or Co.	City of Ft. Pierce					Area Type	CBD or Similar					
Date Performed	6/5/2015					Jurisdiction	FDOT/CFP					
Time Period	AM peak (7:45 - 8:45)					Analysis Year	2020					
Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1	1	0	0	1	0	1	2	0	1	2	0
Lane Group	L	TR			LTR		L	TR		L	TR	
Volume (vph)	158	16	7	10	2	4	47	985	6	17	814	88
% Heavy Vehicles	5	5	5	5	5	5	5	5	5	5	5	5
PHF	0.73	0.54	0.50	0.56	0.50	0.50	0.77	0.90	0.63	0.63	0.87	0.66
Pretimed/Actuated (P/A)	A	A	A	A	A	A	A	A	A	A	A	A
Startup Lost Time	2.0	2.0			2.0		2.0	2.0		2.0	2.0	
Extension of Effective Green	2.0	2.0			2.0		2.0	2.0		2.0	2.0	
Arrival Type	3	3			3		3	3		3	3	
Unit Extension	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width	12.0	12.0			12.0		12.0	12.0		12.0	12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0	0			0		0	0		0	0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	
Phasing	EB Only	WB Only	03	04	Excl. Left	NS Perm	07	08				
Timing	G = 18.0	G = 5.0	G =	G =	G = 6.0	G = 50.0	G =	G =				
	Y = 8	Y = 5	Y =	Y =	Y = 5	Y = 5	Y =	Y =				
Duration of Analysis (hrs) = 1.00						Cycle Length C = 102.0						
Lane Group Capacity, Control Delay, and LOS Determination												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate	216	44			30		61	1104		27	1069	
Lane Group Capacity	273	274			75		226	1518		216	1492	
v/c Ratio	0.79	0.16			0.40		0.27	0.73		0.13	0.72	
Green Ratio	0.18	0.18			0.05		0.60	0.49		0.60	0.49	
Uniform Delay d ₁	40.2	35.6			47.0		11.7	20.6		11.6	20.4	
Delay Factor k	0.34	0.11			0.11		0.11	0.29		0.11	0.28	
Incremental Delay d ₂	16.2	0.3			3.5		0.6	1.8		0.3	1.7	
PF Factor	1.000	1.000			1.000		1.000	1.000		1.000	1.000	
Control Delay	56.4	35.9			50.6		12.4	22.4		11.8	22.1	
Lane Group LOS	E	D			D		B	C		B	C	
Approach Delay	52.9			50.6			21.9			21.9		
Approach LOS	D			D			C			C		
Intersection Delay	25.4						Intersection LOS			C		

Appendix C

Traffic Data



Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
Fall 2014

Roadway Name	Location	AADT	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
				Volume	LOS	V/C	Volume	LOS	V/C
US 1	S OF SAEGER AVE to EASY ST	30,989	3,170	1,515	C	0.490	1,372	C	0.444
US 1	EASY ST to MIDWAY RD	29,394	3,170	1,370	C	0.443	1,332	C	0.431
US 1	MIDWAY RD to WEATHERBEE RD	29,824	2,100	1,401	C	0.697	1,418	C	0.705
US 1	WEATHERBEE RD to FARMERS MARKET RD	29,824	2,000	1,401	C	0.734	1,418	C	0.742
US 1	FARMERS MARKET RD to EDWARDS RD	29,824	2,000	1,401	C	0.734	1,418	C	0.742
US 1	EDWARDS RD to SAVANNAH RD	30,490	2,000	1,397	C	0.731	1,370	C	0.717
US 1	GARDENIA AVE to VIRGINIA AVE	30,490	2,000	1,397	C	0.731	1,370	C	0.717
US 1	SAVANNAH RD to GARDENIA AVE	30,490	2,000	1,397	C	0.731	1,370	C	0.717
US 1	VIRGINIA AVE to OHIO AVE	27,870	2,000	1,342	C	0.703	1,370	C	0.717
US 1	OHIO AVE to GEORGIA AVE	27,870	1,630	1,342	D	0.823	1,352	C	0.708
US 1	GEORGIA AVE to DELAWARE AVE	24,720	1,630	1,275	D	0.782	1,218	D	0.829
US 1	DELAWARE AVE to CITRUS AVE	25,675	1,630	1,301	D	0.798	1,267	D	0.777
US 1	CITRUS AVE to ORANGE AVE	24,421	1,630	1,216	D	0.746	1,096	D	0.672
US 1	ORANGE AVE to AVENUE A	25,675	1,630	1,301	D	0.798	1,267	D	0.777
US 1	AVENUE A to AE BACKUS AVE	25,675	1,630	1,301	D	0.798	1,267	D	0.777
US 1	AE BACKUS AVE to AVENUE D	25,675	1,630	1,301	D	0.798	1,267	D	0.777
US 1	AVENUE D to SR A1A SOUTH	25,675	1,630	1,301	D	0.798	1,267	D	0.777
US 1	SR A1A SOUTH to AVENUE H	28,000	2,100	1,496	C	0.744	1,378	C	0.686
US 1	AVENUE H to OLD DIXIE HWY	28,000	2,000	1,496	C	0.783	1,378	C	0.721
US 1	OLD DIXIE HWY to AVENUE O	23,190	2,000	1,610	C	0.843	1,258	C	0.659
US 1	AVENUE O to SR A1A NORTH	23,190	2,100	1,610	C	0.801	1,258	C	0.626
US 1	SR A1A NORTH to JUANITA AVE	15,177	2,100	911	C	0.453	729	C	0.363
US 1	JUANITA AVE to ST LUCIE BLVD	15,177	2,100	911	C	0.453	729	C	0.363
US 1	ST LUCIE BLVD to 25TH ST	15,795	2,100	940	C	0.468	902	C	0.449
US 1	25TH ST to INDRIO RD	15,795	2,100	940	C	0.468	902	C	0.449
US 1	INDRIO RD to TURNPIKE FEEDER RD	18,319	2,100	997	C	0.496	991	C	0.493
US 1	TURNPIKE FEEDER RD to INDIAN RIVER C.L.	18,319	2,100	997	C	0.496	991	C	0.493
VETERANS MEMORIAL PKWY	PORT ST LUCIE BLVD to LYNGATE DR	16,500	1,890	1,080	C	0.600	1,027	C	0.571
VETERANS MEMORIAL PKWY	LYNGATE DR to US 1	13,500	1,890	804	C	0.447	780	C	0.433

* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic

Coco Vista Centre
 466 SW Port St. Lucie Blvd, Suite 111
 Port St. Lucie, FL 34953
 772-462-1593 www.stlucietpo.org

Transportation
 Planning
 Organization
St. Lucie

Traffic Counts and Level of Service Report
 Fall 2014

Roadway Name	Location	AADT	PK Hr Service Capacity	AM PK Hr PK Dir			PM PK Hr PK Dir		
				Volume	LOS	V/C	Volume	LOS	V/C
GATLIN BLVD	SAVAGE BLVD to ROSSER BLVD	39,000	2,850	2,935	F	1.030	2,392	C	0.860
GATLIN BLVD	ROSSER BLVD to SAVONA BLVD	39,000	2,850	2,935	F	1.030	2,392	C	0.860
GATLIN BLVD	SAVONA BLVD to PORT ST LUCIE BLVD	39,000	2,850	2,935	F	1.030	2,392	C	0.860
GEORGIA AVE	25TH ST to OKEECHOBEE RD	4,167	510	230	C	0.920	228	C	0.912
GEORGIA AVE	OKEECHOBEE RD to 17TH ST	4,167	640	230	C	0.719	228	C	0.713
GEORGIA AVE	17TH ST to 13TH ST	4,350	510	257	D	0.504	242	C	0.968
GEORGIA AVE	13TH ST to 7TH ST	1,825	510	106	C	0.424	119	C	0.476
GEORGIA AVE	7TH ST to US 1	1,964	510	119	C	0.476	123	C	0.492
GILSON RD	MARTIN C.L. to BECKER RD	9,200	640	833	F	1.225	849	F	1.249
GILSON RD	BECKER RD to LAKERIDGE DR	9,200	510	833	F	1.543	849	F	1.572
GLADES CUT-OFF RD	RANGE LINE RD to RESERVE BLVD	2,100	800	176	B	0.629	195	B	0.696
GLADES CUT-OFF RD	RESERVE BLVD to COMMERCE CENTER DR	2,768	1,020	375	C	0.521	325	B	0.903
GLADES CUT-OFF RD	CARLTON RD to RANGE LINE RD	2,100	290	176	C	0.607	195	C	0.672
GLADES CUT-OFF RD	COMMERCE CENTER DR to MIDWAY RD	2,250	830	174	C	0.223	159	C	0.204
GLADES CUT-OFF RD	MIDWAY RD to JENKINS RD	6,652	710	445	D	0.627	397	D	0.559
GLADES CUT-OFF RD	JENKINS RD to SELVITZ RD	4,913	830	301	C	0.386	272	C	0.349
GRAHAM RD	KINGS HWY to JENKINS RD	3,500	590	241	C	0.430	210	C	0.375
GREEN RIVER PKWY	MARTIN C.L. to CHARLESTON DR	3,635	800	253	B	0.904	231	B	0.825
GREEN RIVER PKWY	CHARLESTON DR to MELALEUCA BLVD	3,635	800	253	B	0.904	231	B	0.825
GREEN RIVER PKWY	MELALEUCA BLVD to WALTON RD	3,635	800	253	B	0.904	231	B	0.825
HARTMAN RD	OKEECHOBEE RD to PETERSON RD	5,900	640	433	D	0.677	374	D	0.584
HARTMAN RD	PETERSON RD to DELAWARE AVE	5,900	510	433	D	0.849	374	D	0.733
HARTMAN RD	DELAWARE AVE to ORANGE AVE	5,900	710	433	D	0.610	374	D	0.527
HEADER CANAL RD	OKEECHOBEE RD to ORANGE AVE	450	500	32	B	0.200	30	B	0.188
HILLMOOR DR	US 1 to LENNARD RD	72,983	710	213	C	0.609	250	C	0.714
I-95	GATLIN BLVD to ST LUCIE WEST BLVD	54,912	4,580	3,737	C	0.816	3,376	C	0.737
I-95	ST LUCIE WEST BLVD to MIDWAY RD	65,849	4,580	3,088	B	0.919	2,663	B	0.793
I-95	MIDWAY RD to OKEECHOBEE RD	45,500	7,320	3,975	C	0.868	3,227	B	0.960
I-95	OKEECHOBEE RD to ORANGE AVE	45,500	7,320	1,822	B	0.405	1,894	B	0.421

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Transportation
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Traffic Counts and Level of Service Report
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Roadway Name	Location	AADT	Pk Hr Service Capacity	AM Pk Hr Pk Dir		PM Pk Hr Pk Dir	
				Volume	V/C	Volume	V/C
EDWARDS RD	SELVITZ RD to 25TH ST	11,925	790	643	C	606	C
EDWARDS RD	25TH ST to SUNRISE BLVD	16,738	1,590	865	C	868	C
EDWARDS RD	SUNRISE BLVD to CLEANDER AVE	12,500	1,760	613	B	598	B
EDWARDS RD	CLEANDER AVE to US 1	8,500	1,590	431	C	442	C
EMERSON AVE	INDRID RD to RUSSOS ROAD	5,113	1,140	413	C	377	B
EMERSON AVE	RUSSOS ROAD to INDIAN RIVER COUNTY LINE	5,113	800	413	C	377	B
FARMER'S MARKET R	CLEANDER AVE to US 1	1,979	570	115	B	118	B
FLORESTA DR/SOUTHBEND BL...	BECKER RD to FLORESTA DR	10,220	830	674	C	558	C
FLORESTA DR	OAK RIDGE DR to PORT ST LUCIE BLVD	12,405	830	954	F	680	C
FLORESTA DR	THORNHILL DR to CROSSTOWN PKWY	16,500	790	1,231	F	1,012	F
FLORESTA DR	PORT ST LUCIE BLVD to THORNHILL DR	16,500	790	1,231	F	1,012	F
FLORESTA DR	CROSSTOWN PKWY to PRIMA VISTA BLVD	13,758	830	1,037	F	783	D
FLORESTA DR	PRIMA VISTA BLVD to AIROSO BLVD	11,539	830	670	C	736	C
FLORESTA DR	BAYSHORE BLVD to SELVITZ RD	3,800	630	327	B	281	B
FLORESTA DR	SELVITZ RD to AIROSO BLVD	3,800	790	327	B	281	B
FT PIERCE BLVD	EMERSON AVE to INDRID RD	3,019	630	223	B	195	B
GARDENIA AVE	CLEANDER AVE to US 1	2,400	530	166	C	142	C
GATLIN BLVD	W OF INTERSTATE 95 to E OF INTERSTATE 95	32,500	2,530	2,446	D	1,993	D
GATLIN BLVD	E OF INTERSTATE 95 to SAVAGE BLVD	32,500	2,530	2,446	D	1,993	D
GATLIN BLVD	SAVAGE BLVD to ROSSER BLVD	32,500	2,530	2,446	D	1,993	D
GATLIN BLVD	ROSSER BLVD to SAVONA BLVD	32,500	2,780	2,446	C	1,993	B
GATLIN BLVD	SAVONA BLVD to PORT ST LUCIE BLVD	32,500	2,780	2,446	C	1,993	B
GEORGIA AVE	25TH ST to OKEECHOBEE RD	4,000	420	221	C	219	C
GEORGIA AVE	OKEECHOBEE RD to 17TH ST	4,000	790	221	B	219	B
GEORGIA AVE	17TH ST to 13TH ST	4,400	580	260	C	245	C
GEORGIA AVE	13TH ST to 7TH ST	1,864	580	109	C	121	C
GEORGIA AVE	7TH ST to US 1	1,960	450	118	C	123	C
GILSON RD	MARTIN COUNTY LINE to BECKER RD	10,992	830	904	F	916	F
GILSON RD	BECKER RD to LAKERIDGE DR	10,992	630	904	F	916	F

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				Volume	LOS	Volume	LOS	V/C	V/C
TULIP BLVD	PAAR DR to DARWIN BLVD	3,300	550	227	C	217	C	0.597	0.571
US 1	MARTIN COUNTY LINE to LENNARD RD	48,802	3,770	2,222	C	2,613	C	0.748	0.880
US 1	LENNARD RD to FORT ST LUCIE BLVD	48,802	3,590	2,222	C	2,613	C	0.785	0.923
US 1	MARIPOSA AVE to JENWINGS RD	39,607	2,940	1,613	B	1,712	B	0.672	0.713
US 1	JENNINGS RD to TIFFANY AVE	33,607	2,940	1,613	B	1,712	B	0.672	0.713
US 1	TIFFANY AVE to WALTON RD	33,607	2,940	1,613	B	1,712	B	0.672	0.713
US 1	WALTON RD to VILLAGE GREEN DR	49,377	2,940	2,350	B	2,107	B	0.979	0.878
US 1	VILLAGE GREEN DR to SPANISH LAKES BLVD	59,770	3,090	2,803	C	2,625	C	0.934	0.875
US 1	SPANISH LAKES BLVD to PRIMA VISTA BLVD	59,770	3,090	2,803	D	2,625	D	0.998	0.934
US 1	PRIMA VISTA BLVD to RIO MAR DR	35,436	3,090	1,639	B	1,613	B	0.650	0.640
US 1	RIO MAR DR to KITTERMAN RD	29,505	2,810	1,442	C	1,306	C	0.661	0.599
US 1	KITTERMAN RD to SAEGER AVE	29,505	2,940	1,442	B	1,306	B	0.601	0.544
US 1	SAEGER AVE to EASY ST	29,505	2,450	1,442	D	1,306	D	0.589	0.533
US 1	EASY ST to MIDWAY RD	27,709	3,090	1,292	B	1,255	B	0.513	0.498
US 1	MIDWAY RD to WEATHERBEE RD	29,941	1,860	1,407	D	1,424	D	0.755	0.766
US 1	MIDWAY RD to FARMER'S MARKET RD	29,941	1,960	1,407	B	1,424	B	0.902	0.913
US 1	FARMER'S MARKET RD to EDWARDS RD	29,941	1,960	1,407	B	1,424	B	0.902	0.913
US 1	EDWARDS RD to SAVANNAH RD	31,459	1,770	1,441	D	1,413	D	0.814	0.798
US 1	GARDENIA AVE to VIRGINIA AVE	31,459	1,770	1,441	D	1,413	D	0.814	0.798
US 1	SAVANNAH RD to GARDENIA AVE	31,459	1,500	1,441	D	1,413	D	0.961	0.942
US 1	VIRGINIA AVE to OHIO AVE	30,672	1,770	1,477	D	1,489	D	0.834	0.841
US 1	OHIO AVE to GEORGIA AVE	30,672	1,770	1,477	D	1,489	D	0.834	0.841
US 1	GEORGIA AVE to DELAWARE AVE	25,426	1,770	1,311	C	1,253	C	0.966	0.942
US 1	DELAWARE AVE to CITRUS AVE	27,451	1,500	1,391	D	1,355	D	0.927	0.903
US 1	CITRUS AVE to ORANGE AVE	22,239	1,500	1,107	D	998	D	0.738	0.665
US 1	ORANGE AVE to AVENUE A	27,451	1,500	1,391	D	1,355	D	0.927	0.903
US 1	AVENUE A to AVENUE C	27,451	1,500	1,391	D	1,355	D	0.927	0.903
US 1	AVENUE C to AVENUE D	27,451	1,500	1,391	D	1,355	D	0.927	0.903
US 1	AVENUE D to SEAWAY DR	27,451	1,500	1,391	D	1,355	D	0.927	0.903

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				Volume	LOS	V/C	Volume	LOS	V/C
EDWARDS RD	25TH ST to SUNRISE BLVD	16,436	1,680	859	C	0.517	853	C	0.508
EDWARDS RD	SUNRISE BLVD to OLEANDER AVE	15,452	1,750	770	B	0.438	812	B	0.461
EDWARDS RD	OLEANDER AVE to US 1	9,133	1,680	456	C	0.277	475	C	0.283
EMERSON AVE	INDRIO RD to RUSSOS ROAD	5,049	1,140	408	C	0.358	372	B	0.326
EMERSON AVE	RUSSOS ROAD to INDIAN RIVER COUNTY LINE	5,049	800	408	C	0.510	372	B	0.465
FARMERS MARKET R	OLEANDER AVE to US 1	2,014	570	117	B	0.205	120	B	0.211
FLORESTA DR/SOUTHBEND BL...	BECKER RD to FLORESTA DR	9,991	830	659	C	0.794	546	C	0.658
FLORESTA DR	OAK RIDGE DR to PORT ST LUCIE BLVD	11,945	830	918	F	1.106	655	C	0.789
FLORESTA DR	THORNHILL DR to CROSSTOWN PKWY	15,771	790	1,160	F	1.468	953	F	1.206
FLORESTA DR	PORT ST LUCIE BLVD to THORNHILL DR	15,771	790	1,160	F	1.468	953	F	1.206
FLORESTA DR	CROSSTOWN PKWY to PRIMA VISTA BLVD	13,599	830	1,025	F	1.235	774	D	0.933
FLORESTA DR	PRIMA VISTA BLVD to AIROSO BLVD	11,192	830	650	C	0.783	713	C	0.859
FLORESTA DR	BAYSHORE BLVD to SELVITZ RD	3,881	630	322	B	0.511	352	B	0.559
FLORESTA DR	SELVITZ RD to AIROSO BLVD	3,881	790	322	B	0.408	352	B	0.446
FT PIERCE BLVD	EMERSON AVE to INDRIO RD	2,997	630	221	B	0.351	193	B	0.306
GARDENIA AVE	OLEANDER AVE to US 1	2,400	530	166	C	0.313	142	C	0.268
GATLIN BLVD	W OF INTERSTATE 95 to E OF INTERSTATE 95	40,075	2,670	3,016	F	1.130	2,458	D	0.921
GATLIN BLVD	E OF INTERSTATE 95 to SAVAGE BLVD	40,075	2,670	3,016	F	1.130	2,458	D	0.921
GATLIN BLVD	SAVAGE BLVD to ROSSER BLVD	40,075	2,670	3,016	F	1.130	2,458	D	0.921
GATLIN BLVD	ROSSER BLVD to SAVONA BLVD	40,075	2,780	3,016	F	1.085	2,458	C	0.884
GATLIN BLVD	SAVONA BLVD to PORT ST LUCIE BLVD	17,079	2,780	821	B	0.295	804	B	0.289
GEORGIA AVE	25TH ST to OKEECHOBEE RD	3,900	420	241	C	0.574	221	C	0.526
GEORGIA AVE	OKEECHOBEE RD to 17TH ST	3,900	790	241	B	0.305	221	B	0.280
GEORGIA AVE	17TH ST to 13TH ST	4,450	580	263	C	0.453	248	C	0.428
GEORGIA AVE	13TH ST to 7TH ST	1,903	580	111	C	0.191	124	C	0.214
GEORGIA AVE	7TH ST to US 1	1,955	450	118	C	0.262	123	C	0.273
GILSON RD	MARTIN COUNTY LINE to BECKER RD	10,813	830	889	F	1.071	901	F	1.086
GILSON RD	BECKER RD to LAKERIDGE DR	10,813	630	889	F	1.411	901	F	1.430
GLADES CUT-OFF RD	RANGE LINE RD to 0.6 MILE EAST OF RESERVE BL...	1,800	1,120	135	B	0.121	153	B	0.137

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				Volume	LOS	V/C	Volume	LOS	V/C
US 1	MARTIN COUNTY LINE to LENNARD RD	49,454	3,770	2,252	C	0.597	2,648	C	0.702
US 1	LENNARD RD to PORT ST LUCIE BLVD	49,454	3,590	2,252	C	0.627	2,648	C	0.728
US 1	MARIPOSA AVE to JENNINGS RD	34,734	2,940	1,668	B	0.567	1,770	B	0.602
US 1	JENNINGS RD to TIFFANY AVE	34,734	2,940	1,668	B	0.567	1,770	B	0.602
US 1	TIFFANY AVE to WALTON RD	34,734	2,940	1,668	B	0.567	1,770	B	0.602
US 1	WALTON RD to VILLAGE GREEN DR	43,551	2,940	2,359	B	0.802	2,115	B	0.719
US 1	VILLAGE GREEN DR to SPANISH LAKES BLVD	52,771	3,090	2,803	C	0.907	2,625	C	0.850
US 1	SPANISH LAKES BLVD to PRIMA VISTA BLVD	52,771	2,810	2,803	D	0.998	2,625	D	0.934
US 1	PRIMA VISTA BLVD to RIO MAR DR	36,045	3,090	1,657	B	0.539	1,641	B	0.531
US 1	RIO MAR DR to KITTERMAN RD	30,326	2,810	1,482	C	0.527	1,242	C	0.478
US 1	KITTERMAN RD to SAEGER AVE	30,326	2,940	1,482	B	0.504	1,342	B	0.456
US 1	SAEGER AVE to EASY ST	30,326	2,450	1,482	D	0.605	1,342	D	0.548
US 1	EASY ST to MIDWAY RD	28,799	3,090	1,342	B	0.434	1,305	B	0.422
US 1	MIDWAY RD to WEATHERBEE RD	30,913	1,860	1,452	D	0.781	1,470	D	0.790
US 1	MIDWAY RD to FARMERS MARKET RD	30,913	1,960	1,452	B	0.741	1,470	B	0.750
US 1	FARMERS MARKET RD to EDWARDS RD	30,913	1,960	1,452	B	0.741	1,470	B	0.750
US 1	EDWARDS RD to SAVANNAH RD	32,286	1,770	1,479	D	0.836	1,451	D	0.820
US 1	GARDENIA AVE to VIRGINIA AVE	32,286	1,500	1,479	D	0.986	1,451	D	0.967
US 1	SAVANNAH RD to GARDENIA AVE	32,286	1,500	1,479	D	0.986	1,451	D	0.967
US 1	VIRGINIA AVE to OHIO AVE	31,306	1,770	1,508	D	0.852	1,519	D	0.858
US 1	OHIO AVE to GEORGIA AVE	31,306	1,770	1,508	D	0.852	1,519	D	0.858
US 1	GEORGIA AVE to DELAWARE AVE	26,466	1,770	1,365	D	0.771	1,304	C	0.737
US 1	DELAWARE AVE to CITRUS AVE	27,620	1,500	1,399	D	0.933	1,363	D	0.909
US 1	CITRUS AVE to ORANGE AVE	23,186	1,500	1,154	D	0.769	1,040	D	0.693
US 1	ORANGE AVE to AVENUE A	27,620	1,500	1,399	D	0.933	1,363	D	0.909
US 1	AVENUE A to AVENUE C	27,620	1,500	1,399	D	0.933	1,363	D	0.909
US 1	AVENUE C to AVENUE D	27,620	1,500	1,399	D	0.933	1,363	D	0.909
US 1	AVENUE D to SEAWAY DR	27,620	1,500	1,399	D	0.933	1,363	D	0.909
US 1	SEAWAY DR to AVENUE H	26,500	2,060	1,518	B	0.737	1,405	B	0.682

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