TRAFFIC ANALYSIS

BY: Lassiter Transportation Group, Inc.
123 Live Oak Avenue
Daytona Beach, FL 32114

Does not include Appendices (several hundred pages)

PROFESSIONAL ENGINEERING CERTIFICATION

I hereby certify that I am a Professional Engineer properly registered in the State of Florida practicing with Lassiter Transportation Group, Inc., a corporation authorized to operate as an engineering business, EB 0009227, by the State of Florida Department of Professional Regulation, Board of Professional Engineers, and that I have prepared or approved the evaluations, findings, opinions, conclusions, or technical advice attached hereto for:

PROJECT: Ormond Crossings Planned Mixed-Use Development
LOCATION: City of Ormond Beach, Florida
CLIENT: Tomoka Holdings, Inc.
JOB #: 3137.14

I hereby acknowledge that the procedures and references used to develop the results contained in these computations are standard to the professional practice of Transportation Engineering as applied through professional judgment and experience.

NAME: Daniel M. D'Antonio, P.E.
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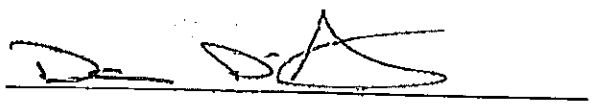
DATE: January 28, 2010

SIGNATURE: 

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INTRODUCTION

Lassiter Transportation Group, Inc. (LTG) was retained by Tomoka Holdings, Inc. (the Developer) to prepare a Traffic Impact Analysis (TIA) for the proposed Ormond Crossings Planned Mixed-Use Development (PMUD). The property is located southwest of US 1, north of Harmony Avenue, and straddles I-95 in the City of Ormond Beach (see Figure 1 for the general location).

The project, which is 3,095 total acres in size, is expected to be completed by the end of year 2025. Table 1 presents the proposed development plan.

Table 1
Proposed Development Plan
Ormond Crossings PMUD

Land Use			
Description	ITE Land Use Code	Quantity	Units
Retail	820	200.00	KSF
General Office	710	900.00	KSF
Business Park	770	350.00	KSF
Light Industrial	110	800.00	KSF
Mini-Warehouse	151	240.00	KSF
Warehouse	150	560.00	KSF
Elementary School	520	720	Students
Church	560	165.00	KSF
Single-Family Residential	210	1,300	SFDU
Single-Family - Age Restricted	251	265	SFDU
Townhouse/Condominium	230	590	MFDU
Apartments	220	795	MFDU

Access to the proposed development will be provided via five existing roadways (Hull Road, Harmony Avenue, Pineland Trail, Tymber Creek Road, and Broadway Avenue) and two proposed roadways (Crossings Boulevard South and Crossings Boulevard North). Crossings Boulevard South will connect to US 1 directly opposite the existing termination of Pine Tree Road while Crossings Boulevard North will connect to US 1 at an existing full median opening approximately 1/2 mile north of the US 1/I-95 SB Ramp intersection. Signalization is anticipated at both proposed intersections and will be the responsibility of the Developer. The conceptual Master Development Plan is attached as Appendix A.

Please note that Ormond Crossings was initially submitted as a Development of Regional Impact (DRI), as required under previous legislation. A Development Order (DO) was subsequently approved by the City in December 2006, but is not final as it was not rendered to the Department of Community Affairs (DCA). Senate Bill 360, approved by the Florida Legislature and Governor during the 2009 spring legislative session, eliminated the state mandated DRI application process for cities that qualify as a Dense Urban Land Area (DULA). A DULA is defined as a municipality that has an average of at least 1,000 people per square mile of land area and a

Ormond Crossings PMUD	N NTS	**Site Location Map**		***Lassiter Transportation Group, Inc.*** *Engineering and Planning*
		Project No.: 3137.14	Figure: 1	123 Live Oak Avenue – Daytona Beach, Florida 32114 Telephone: 386.257.2571 Fax: 386.257.6996 EB# 0009227

minimum total population of at least 5,000, according the state Office of Demographic and Economic Research. The City of Ormond Beach meets the requirements and is therefore identified as a DULA. Thus, the Developer elected to negotiate a Development Agreement (DA) with the City. Approval of the DA will terminate the approved DO.

Also included in Senate Bill 360 was the elimination of the state mandate for local governments to monitor transportation concurrency as long as the municipality qualifies as a DULA. The legislative intent of this provision was to encourage infill in Florida's existing urban areas rather than encourage development sprawl to areas where roadway capacity may be prevalent. The provision was also intended to help the ailing Florida development industry recover from the nationwide housing crash. Florida's economy is heavily dependent on development and redevelopment to generate state and local revenues. Although this dependence may not be sustainable over time, population decreases, which are the current trend, are equally unsustainable for an economically viable state and local communities.

In concert with state statues, the City of Ormond Beach is in the process of amending the future land use element of its comprehensive plan to identify the project as the Ormond Crossings Activity Center. Revisions are also proposed to the transportation element of the comprehensive plan to focus on transportation mobility rather than traditional roadway widening, which is often times constrained by policy and/or infeasible. Additionally, prior proposed comprehensive plan amendments were found to be not in compliance and a proposed compliance agreement and remedial amendments are being considered for adoption with DCA. Refer to the City's remedial comprehensive plan amendments to the transportation element (attached as Appendix B) for specific language on goals, policies, and objectives.

Study Area

The City of Ormond Beach formally adopted the TIA Guidelines proposed by the Volusia Metropolitan Planning Organization (MPO). The study methodology was negotiated between the developer and City staff.

In accordance with the Volusia MPO Guidelines, the study area consists of all roadways on which the project consumes five percent or more (defined as significant) of the PM peak hour two-way capacity and critical and near-critical roadways within 5-mile travel distance from the site. According to the TIA Guidelines, all Major intersections along significant roadways were analyzed. The study area intersections and roadway segments are listed below.

Roadway Segments

- I-95 from I-4/SR 400 (Beville Road) to SR 100
- US 1 from LPGA Boulevard to Belle Terre Parkway
- SR 5A (Nova Road) from Flomich Avenue to US 1
- SR 40 (W. Granada Boulevard) from Breakaway Trail to Beach Street
- Airport Road from SR 40 (W. Granada Boulevard) to US 1
- Beach Street from Division Avenue to Pine Tree Drive
- Broadway Avenue from East Spine Road to US 1
- Clyde Morris Boulevard from Falls Way/Spring Meadows to SR 40 (W. Granada Boulevard)
- Old Dixie Highway from I-95 Northbound Ramps to Pine Tree Drive
- Old Kings Road from Old Dixie Highway to Flagler County Line
- Pineland Trail from Airport Road to East Spine Road
- Pine Tree Drive from US 1 to Beach Street/Old Dixie Highway
- Plantation Oaks Boulevard from US 1 to Old Dixie Highway
- Tymber Creek Road from SR 40 (W. Granada Boulevard) to I-95 Underpass
- Williamson Boulevard from Hand Avenue to SR 40 (W. Granada Boulevard)

Intersections

- US 1 at SR 40 (W. Granada Boulevard)
- US 1 at Wilmette Avenue
- US 1 at SR 5A (Nova Road)
- US 1 at Airport Road
- US 1 at Hull Road
- US 1 at Pine Tree Drive/Crossings Boulevard S.
- US 1 at Broadway Avenue
- US 1 at I-95 NB Ramps
- US 1 at I-95 SB Ramps
- SR 5A (Nova Road) at Hand Avenue
- SR 40 (W. Granada Boulevard) at SR 5A (Nova Road)
- SR 40 (W. Granada Boulevard) at Tymber Creek Road
- SR 40 (W. Granada Boulevard) at Booth Road
- SR 40 (W. Granada Boulevard) at I-95 SB Ramps
- SR 40 (W. Granada Boulevard) at I-95 NB Ramps
- SR 40 (W. Granada Boulevard) at Williamson Boulevard
- Tymber Creek Road at Airport Road
- Airport Road at Pineland Trail
- Pineland Trail at Harmony Avenue
- Hull Road at Harmony Avenue
- US 1 at Crossings Boulevard N.

Study Procedures

Standard engineering and planning procedures were used to determine the impacts of the proposed project. Reference data was obtained from the City of Ormond Beach, the Volusia County Engineering Department, the Volusia County Metropolitan Planning Organization (MPO), the Institute of Transportation Engineers (ITE), and the Florida Department of Transportation (FDOT).

Planned Roadway Improvements

The City of Ormond Beach, Volusia County Public Works Department, and FDOT were contacted to determine if there are any planned roadway improvements within the project study area. The list below provides a description of the programmed improvements, the responsible agency, and the anticipated completion date.

- Tymber Creek Road – Widen from two lanes to four lanes from SR 40 (W. Granada Boulevard) to Peruvian Lane – Volusia County – Estimated Completion 2012
- US 1 at Hull Road – Construct eastbound right-turn lane – City of Ormond Beach – Estimated Completion 2010
- SR 40 (W. Granada Boulevard) – Construct multi-use path from Shadow Crossings to Tymber Creek Road – ARRA – Estimated Completion 2010
- SR 40 (W. Granada Boulevard) at US 1 – Intersection Operation and Safety Improvements – FDOT – Estimated Completion 2012
- SR 40 (W. Granada Boulevard) from I-95 to SR A1A – Install traffic signal interconnect and coordinate signals along SR 40 (Granada Boulevard) between I-95 and SR A1A (Atlantic Avenue) – Ormond Beach – Estimated Completion 2010
- US 1 at SR 5A (Nova Road) – Construct and additional eastbound left-turn lane – FDOT – Under consideration by Traffic Operations (Planned, Not Programmed)

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EXISTING ROADWAY ANALYSIS

Weekday PM peak-period turning movement counts were conducted at each of the study area intersections. The raw count data was converted to peak season data by multiplying the observed traffic volumes by the Season Factor (SF) obtained from FDOT's Florida Traffic Information (FTI) database. Figure 2 graphically shows the factored PM peak hour turning movements at the study area intersections. The raw count data is provided in Appendix C.

Unsignalized Intersection Analysis

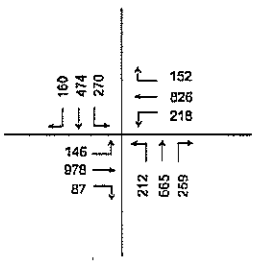
The level of service (LOS) at an unsignalized intersection is based on the average control delay per vehicle for the various movements within the intersection. The operating conditions at the unsignalized intersection were analyzed using the *Highway Capacity Software Version 5.3* (HCS+). HCS+ utilizes the procedures outlined in Chapter 17 of the Highway Capacity Manual, titled "Unsignalized Intersections." Table 2 shows the existing PM peak hour levels of service (LOS). As indicated in Table 2, the unsignalized intersections are currently operating within the adopted LOS with the exception of US 1 at Hull Road. The HCS summary sheets are included in Appendix D.

Table 2
Existing PM Peak Hour Level of Service - Unsignalized Intersections
Ormond Crossings PMUD

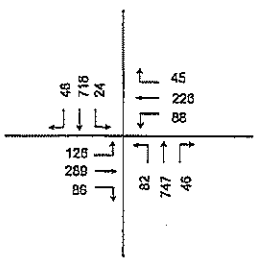
Intersection	Adopted LOS	Critical Approach	PM Peak Hour	
			Delay (sec)	LOS
US 1 at Hull Rd	D	Eastbound	37.4	E
US 1 at Pine Tree Rd	D	Westbound	22.7	C
US 1 at Broadway Ave	D	Eastbound	21.7	C
Airport Rd at Pineland Trl	D	Southbound	11.3	B
Pineland Trl at Harmony Ave	D	Westbound	8.8	A
Hull Rd at Harmony Ave	D	Eastbound	9.2	A

Signalized Intersection Analysis

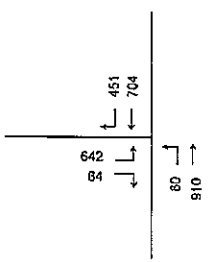
The level of service at a signalized intersection is based on the average control delay per vehicle for the various movements within the intersection. The operating conditions at the signalized intersections were evaluated using HCS+. This software utilizes the methodology outlined in Chapter 16 of the Highway Capacity Manual, titled "Signalized Intersections". Table 3 shows the existing PM peak hour LOS at the signalized intersections. The HCS+ summary sheets are located in Appendix E. It should be noted that these HCS analyses were conducted using signal timings provided by the County.



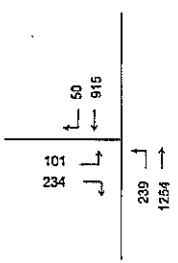
SR 40 (E/W) at
US 1 (N/S)



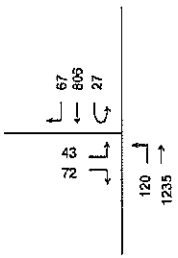
Wilmette Ave. (E/W) at
US 1 (N/S)



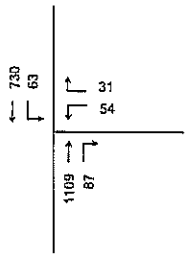
SR 5A (E/W) at
US 1 (N/S)



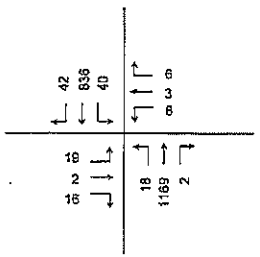
Airport Rd. (E/W) at
US 1 (N/S)



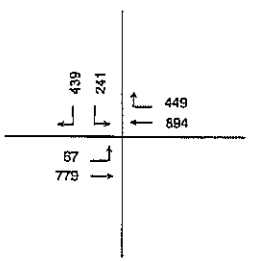
Hull Rd. (E/W) at
US 1 (N/S)



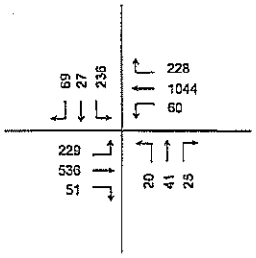
Pine Tree Dr. (E/W) at
US 1 (N/S)



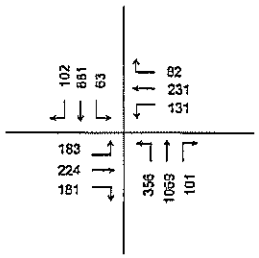
Broadway St. (E/W) at
US 1 (N/S)



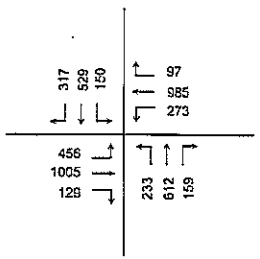
US 1 (E/W) at
I-95 Northbound Ramps (N/S)



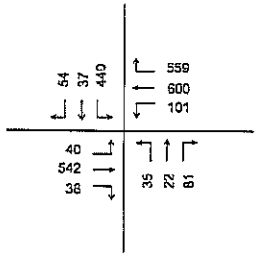
US 1 (E/W) at
I-95 Southbound Ramps (N/S)



Nova Rd. (N/S) at
Hand Ave. (E/W)



SR 40 (E/W) at
Nova Rd. (N/S)



SR 40 (E/W) at
Tymber Creek (N/S)

Ormond Crossings

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NTS

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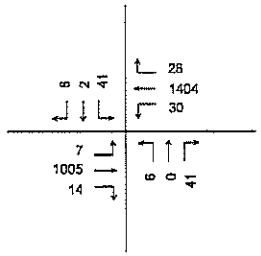
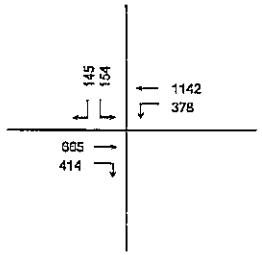
**2009 Existing Traffic –
PM Peak Hour TMCs**

Project Number: 3137.14

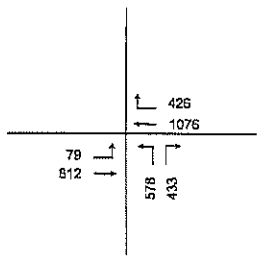
Figure 2
1 of 2



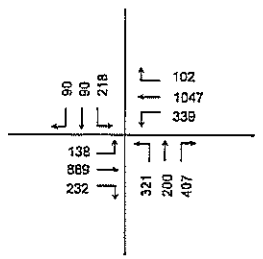
SR 40 (E/W) at
Booth Rd (N/S)



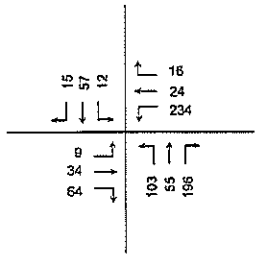
SR 40 (E/W) at
I-95 Southbound (N/S)



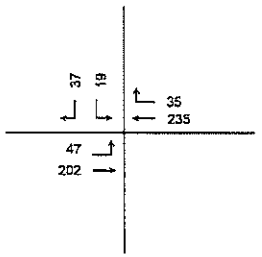
SR 40 (E/W) at
I-95 Northbound (N/S)



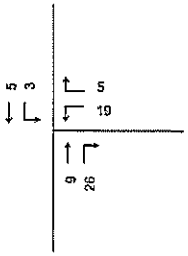
SR 40 (E/W) at
Williamson Blvd (N/S)



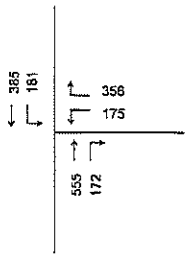
Airport Rd. (E/W) at
Tymber Creek Rd. (N/S)



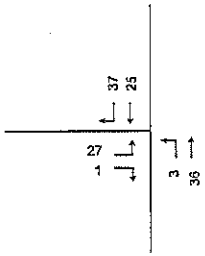
Airport Rd. (E/W) at
Pineland Trl. (N/S)



Harmony Ave. (E/W) at
Pineland Trl. (N/S)



Hand Ave (E/W) at
Williamson Blvd (N/S)



Harmony Ave. (E/W) at
Hull Rd. (N/S)

Ormond Crossings

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2009 Existing Traffic – PM Peak Hour TMCs

Project Number: 3137.14

Figure 2
2 of 2

Table 3
Existing PM Peak Hour Level of Service – Signalized Intersections
Ormond Crossings PMUD

Intersection	Adopted LOS	PM Peak Hour		
		Delay (sec.)	LOS	Max V/C
SR 40 (W. Granada Blvd) at US 1	D	49.9	D	1.03
US 1 at Wilmette Ave	D	26.1	C	0.74
US 1 at SR 5A (Nova Rd)	D	33.2	C	0.92
US 1 at Airport Rd	D	35.7	C	0.87
US 1 at I-95 NB Ramps	D	18.8	B	0.79
US 1 at I-95 SB Ramps	D	40.7	D	0.71
SR 5A (Nova Rd) at Hand Ave	D	42.7	D	1.15
SR 40 (W. Granada Blvd) at SR 5A (Nova Rd)	D	54.0	D	0.98
SR 40 (W. Granada Blvd) at Tymber Creek Rd	C	36.6	D	0.41
SR 40 (W. Granada Blvd) at Booth Rd	C	6.6	A	0.59
SR 40 (W. Granada Blvd) at I-95 SB Ramps	C	19.7	B	0.56
SR 40 (W. Granada Blvd) at I-95 NB Ramps	C	24.5	C	0.73
SR 40 (W. Granada Blvd) at Williamson Blvd	D	38.3	D	0.97
Tymber Creek Rd at Airport Rd	D	14.3	B	0.50

Roadway Segment Analysis

Roadway level of service describes the operating condition determined from the number of vehicles passing over a given section of roadway during a specified time period. It is a qualitative measure of several factors which include speed, travel time, traffic interruptions, freedom to maneuver, driver comfort, convenience, safety and vehicle operating costs. Six LOS have been established as standards by which to gauge roadway performance, designated by the letters A through F. The LOS categories are defined as follows:

Level of Service A: Free flow, individual users virtually unaffected by the presence of others
Level of Service B: Stable flow with a high degree of freedom to select operating conditions
Level of Service C: Flow remains stable, but with significant interactions with others
Level of Service D: High-density stable flow in which the freedom to maneuver is severely restricted
Level of Service E: This condition represents the capacity level of the road
Level of Service F: Forced flow in which the traffic exceeds the amount that can be served

The 2008 annual average daily traffic (AADT) data for the study roadway segments was obtained from FDOT and Volusia County. The AADT volumes were converted to peak hour two-way volumes via application of the K_{100} factor identified for state roads using the FTI database. The K_{100} factor for county roadways was estimated to be 10.0. This represents the "demand" K factor, consistent with the guidance provided in FDOT's *2009 Quality/Level of Service Handbook* for estimating K factors. The roadway capacities were determined using the current version of the *Q/LOS Handbook*. Table 4 presents the results of the existing PM peak hour two-way roadway segment analysis.

Table 4
Existing PM Peak Hour Two-Way Level of Service Analysis - Roadway Links
Ormond Crossings PMUD

Road Name	Limits (To - From)	E+C No. of Lanes	Functional Classification	Area Type	Adopted LOS	Max Peak Hour Capacity at Adopted LOS	Adopted LOS and Capacity Source	Existing AADT	K_{100} Factor	Existing PM Peak Hour Two-Way Volume	Existing LOS	Critical or Near-Critical?
I-95 (SR 9)	I-4/SR 400 (Beville Rd) to US 92	6+2 aux.	Principal Arterial - Interstate	Urban	C	11,920	FDOT	93,200	9.71	9,050	D	
I-95 (SR 9)	US 92 to LPGA Blvd	6	Principal Arterial - Interstate	Urban	C	8,320	FDOT	68,000	9.71	6,603	C	
I-95 (SR 9)	LPGA Blvd to SR 40 (W. Granada Blvd)	6+aux.	Principal Arterial - Interstate	Urban	C	10,120	FDOT	79,000	9.71	7,671	B	
I-95 (SR 9)	SR 40 (W. Granada Blvd) to US 1 (SR 5)	6	Principal Arterial - Interstate	Urban	C	8,320	FDOT	55,000	9.71	5,341	B	
I-95 (SR 9)	US 1 (SR 5) to Old Dixie Hwy	6	Principal Arterial - Interstate	Urban	C	8,320	FDOT	53,000	9.71	5,146	B	
I-95 (SR 9)	Old Dixie Hwy to SR 100	6	Principal Arterial - Interstate	Urban	C	8,320	FDOT	53,000	9.71	5,146	B	
US 1 (SR 5)	LPGA Blvd to Flomich Ave	4	Principal Arterial	Urban	E	3,560	Holly Hill	27,000	10.26	2,770	B	
US 1 (SR 5)	Flomich Ave to Hand Ave	4	Principal Arterial	Urban	E	3,560	Holly Hill	27,000	10.26	2,770	B	
US 1 (SR 5)	Hand Ave to Division Ave	4	Principal Arterial	Urban	D	3,560	Ormond Beach	23,500	10.26	2,411	B	
US 1 (SR 5)	Division Ave to W. Granada Blvd (SR 40)	4	Principal Arterial	Urban	D	3,560	Ormond Beach	23,500	10.26	2,411	B	
US 1 (SR 5)	W. Granada Blvd (SR 40) to Wilmette Ave	4	Principal Arterial	Urban	D	3,560	Ormond Beach	18,200	10.26	1,867	B	
US 1 (SR 5)	Wilmette Ave to Nova Rd (SR 5A)	4	Principal Arterial	Urban	D	3,560	Ormond Beach	18,200	10.26	1,867	B	
US 1 (SR 5)	Nova Rd (SR 5A) to Airport Rd	4	Principal Arterial	Urban	D	3,560	Ormond Beach	29,000	10.26	2,975	C	
US 1 (SR 5)	Airport Rd to Hull Rd	4	Principal Arterial	Urban	D	3,560	Ormond Beach	22,500	10.26	2,309	B	
US 1 (SR 5)	Hull Rd to Pine Tree Rd/Crossings Blvd S.	4	Principal Arterial	Urban	D	3,560	Ormond Beach	22,500	10.26	2,309	B	
US 1 (SR 5)	Pine Tree Rd/Crossings Blvd S. to Broadway Ave/Plantation Oaks Blvd	4	Principal Arterial	Urban	D	3,560	Ormond Beach	22,500	10.26	2,309	B	
US 1 (SR 5)	Broadway Ave/Plantation Oaks Blvd to I-95 NB Ramps	4	Principal Arterial	Urban	D	3,560	Ormond Beach	22,500	10.26	2,309	B	
US 1 (SR 5)	I-95 NB Ramps to I-95 SB Ramps	4	Principal Arterial	Urban	D	3,560	Ormond Beach	19,650	10.26	2,016	B	
US 1 (SR 5)	I-95 SB Ramps to Destination Daytona Ln	4	Principal Arterial	Urban	D	3,560	Ormond Beach	16,800	10.26	1,724	B	
US 1 (SR 5)	Destination Daytona Ln to Crossings Blvd N.	4	Principal Arterial	Urban	D	3,560	Ormond Beach	16,800	10.26	1,724	B	
US 1 (SR 5)	Crossings Blvd. N to Volusia/Flagler County Line	4	Principal Arterial	Urban	D	4,893	Ormond Beach	16,800	10.26	1,724	B	
US 1 (SR 5)	Volusia/Flagler County Line to Aldenham Ln	4	Principal Arterial	Transitioning	C	4,400	Flagler County	16,800	10.26	1,724	B	
US 1 (SR 5)	Aldenham Ln to Old Dixie Hwy	4	Principal Arterial	Transitioning	C	4,400	Flagler County	13,680	10.78	1,475	B	
US 1 (SR 5)	Old Dixie Hwy to Seminole Woods Pkwy	4	Principal Arterial	Transitioning	C	4,400	Flagler County	16,700	9.71	1,622	B	
US 1 (SR 5)	Seminole Woods Pkwy to Belle Terre Pkwy	4	Principal Arterial	Urban	D	6,040	Palm Coast	16,700	9.71	1,622	B	
SR 5A (Nova Rd)	Flomich St to Hand Ave	6	Principal Arterial	Urban	E	5,150	HH / OB	30,500	10.26	3,129	C	
SR 5A (Nova Rd)	Hand Ave to W. Granada Blvd (SR 40)	6	Principal Arterial	Urban	D	4,880	Ormond Beach	29,000	10.26	2,975	C	
SR 5A (Nova Rd)	W. Granada Blvd (SR 40) to Wilmette Ave	6	Principal Arterial	Urban	D	4,880	Ormond Beach	24,500	10.26	2,514	C	
SR 5A (Nova Rd)	Wilmette Ave to US 1 (SR 5)	4	Principal Arterial	Urban	D	3,560	Ormond Beach	14,000	10.26	1,436	B	
SR 40	Rima Ridge Rd/Urban Boundary to Airport Rd Ext	4	Principal Arterial	Urban	C	4,660	FDOT	10,800	10.26	1,108	B	
SR 40	Airport Rd Ext to Shadow Crossings Blvd	4	Principal Arterial	Urban	C	4,660	FDOT	10,800	10.26	1,108	B	
SR 40	Shadow Crossings Blvd to Breakaway Trl	4	Principal Arterial	Urban	C	4,660	FDOT	10,800	10.26	1,108	B	
SR 40	Breakaway Trl to Tymber Creek Rd	4	Principal Arterial	Urban	C	3,440	FDOT	10,800	10.26	1,108	B	
SR 40 (W. Granada Blvd)	Tymber Creek Rd to I-95 SB Ramps	4	Principal Arterial	Urban	C	2,420	FDOT	26,500	10.26	2,719	D	Critical
SR 40 (W. Granada Blvd)	I-95 SB Ramps to I-95 NB Ramps	4	Principal Arterial	Urban	C	2,420	FDOT	26,500	10.26	2,719	D	Critical
SR 40 (W. Granada Blvd)	I-95 NB Ramps to Williamson Blvd	4	Principal Arterial	Urban	D	3,220	Ormond Beach	26,500	10.26	2,719	D	
SR 40 (W. Granada Blvd)	Williamson Blvd to Clyde Morris Blvd	4	Principal Arterial	Urban	D	3,560	Ormond Beach	37,500	10.26	3,848	F	Critical
SR 40 (W. Granada Blvd)	Clyde Morris Blvd to Nova Rd (SR 5A)	4	Principal Arterial	Urban	D	3,560	Ormond Beach	35,000	10.26	3,591	F	Critical
SR 40 (W. Granada Blvd)	Nova Rd (SR 5A) to Orchard St	4	Principal Arterial	Urban	D	3,560	Ormond Beach	32,000	10.26	3,283	C	Near-Critical
SR 40 (W. Granada Blvd)	Orchard St to US 1 (SR 5)	4	Principal Arterial	Urban	D	3,560	Ormond Beach	32,000	10.26	3,283	C	Near-Critical
SR 40 (W. Granada Blvd)	US 1 (SR 5) to Beach St	4	Principal Arterial	Urban	D	3,560	Ormond Beach	26,345	10.26	2,703	B	
SR 40 (W. Granada Blvd)	Beach St to John Anderson Dr	4	Principal Arterial	Urban	D	6,040	Ormond Beach	36,500	10.26	3,745	C	
SR 40 (E. Granada Blvd)	John Anderson Dr to Ocean Shore Blvd (SR A1A)	4	Principal Arterial	Urban	D	3,560	Ormond Beach	24,000	10.26	2,462	B	

Table 4 - Contd.
Existing PM Peak Hour Two-Way Level of Service Analysis - Roadway Links
Ormond Crossings PMUD

Road Name	Limits (To - From)	E+C No. of Lanes	Functional Classification	Area Type	Adopted LOS	Max Peak Hour Capacity at Adopted LOS	Adopted LOS and Capacity Source	Existing AADT	K_{100} Factor	Existing PM Peak Hour Two-Way Volume	Existing LOS	Critical or Near-Critical?
Airport Rd	SR 40 to Hunter's Ridge Blvd	2	Collector	Urban	D	1,440	Ormond Beach	0	10.00	0	B	
Airport Rd	Hunter's Ridge Blvd to Tymber Creek Rd	2	Collector	Urban	D	1,440	Ormond Beach	0	10.00	0	B	
Airport Rd	Tymber Creek Rd to Pineland Trl	2	Collector	Urban	D	1,440	Ormond Beach	4,910	10.00	491	B	
Airport Rd	Pineland Trl to Sunshine Blvd	2	Collector	Urban	D	1,040	Ormond Beach	4,360	10.00	436	B	
Airport Rd	Sunshine Blvd to US 1 (SR 5)	2	Collector	Urban	D	1,040	Ormond Beach	7,380	10.00	738	C	
Beach St	Division Ave to W. Granada Blvd (SR 40)	2	Minor Arterial	Urban	D	1,440	Ormond Beach	7,730	10.00	773	B	
Beach St	W. Granada Blvd (SR 40) to Wilmette Ave	2	Minor Arterial	Urban	D	1,440	Ormond Beach	9,680	10.00	968	C	
Beach St	Wilmette Ave to Inglesa Ave	2	Minor Arterial	Urban	D	2,080	Ormond Beach	6,320	10.00	632	B	
Beach St	Inglesa Ave to Pine Tree Dr	2	Minor Arterial	Urban	D	2,080	Ormond Beach	2,150	10.00	215	B	
Broadway Ave	Pineland Trl to US 1 (SR 5)	2	n/c	Urban	D	1,040	Ormond Beach	0	10.00	0	B	
Clyde Morris Blvd	Falls Way/Spring Meadows to W. Granada Blvd (SR 40)	4	Principal Arterial	Urban	D	3,204	Ormond Beach	12,060	10.00	1,206	B	
Old Dixie Hwy	I-95 NB Ramps to Old Kings Rd	2	Major Collector	Urban	E	1,440	Volusia County	7,720	10.00	772	B	
Old Dixie Hwy	Old Kings Rd to Walter Boardman Ln	2	Major Collector	Transitioning	E	1,332	Volusia County	3,300	10.00	330	B	
Old Dixie Hwy	Walter Boardman Ln to Monaghan Dr	2	Major Collector	Transitioning	E	1,332	Volusia County	2,090	10.00	209	B	
Old Dixie Hwy	Monaghan Dr to Pine Tree Dr	2	Major Collector	Transitioning	E	1,332	Volusia County	2,090	10.00	209	B	
Old Kings Rd	Old Dixie Hwy to Flagler Co Line	2	Collector	Urban	E	2,620	Volusia County	3,290	10.00	329	B	
Pineland Trl	Airport Rd to Harmony Ave	2	n/c	Urban	D	1,040	Ormond Beach	440	10.00	44	B	
Pineland Trl	Harmony Ave to East Spine Rd	2	n/c	Urban	D	1,040	Ormond Beach	300	10.00	30	B	
Pine Tree Dr	US 1 (SR 5) to Addison Dr	2	Local	Urban	D	1,440	Ormond Beach	2,460	10.00	246	B	
Pine Tree Dr	Addison Dr to Beach St/Old Dixie Hwy	2	Local	Urban	D	1,440	Ormond Beach	1,660	10.00	166	B	
Plantation Oaks Blvd	US 1 (SR 5) to Old Dixie Hwy	2	n/c	Urban	E	1,440	Volusia County		10.00	0		
Tymber Creek Rd	W. Granada Blvd (SR 40) to Tymber Run	4	Collector	Urban	D	3,204	Ormond Beach	13,020	10.00	1,302	B	
Tymber Creek Rd	Tymber Run to Peruvian Ln	4	Collector	Urban	D	3,204	Ormond Beach	7,290	10.00	729	B	
Tymber Creek Rd	Peruvian Ln to Airport Rd	2	Collector	Urban	D	1,440	Ormond Beach	7,290	10.00	729	B	
Tymber Creek Rd	Airport Rd to Durrance Ln	2	Collector	Urban	D	1,440	Ormond Beach	1,450	10.00	145	B	
Tymber Creek Rd	Durrance Ln to Project Limits	2	Collector	Urban	D	1,440	Ormond Beach	1,450	10.00	145	B	
Tymber Creek Rd	Project Limits to Overpass	2	Collector	Urban	D	1,440	Ormond Beach	1,450	10.00	145	B	
Tymber Creek Rd	Overpass to Roundabout	2	Collector	Urban	D	1,440	Ormond Beach	1,450	10.00	145	B	
Williamson Blvd	Hand Ave to Ormond Square	4	Principal Arterial	Urban	E	3,204	Volusia County	19,590	10.00	1,959	B	
Williamson Blvd	Ormond Square to W. Granada Blvd (SR 40)	4	Principal Arterial	Urban	D	3,204	Ormond Beach	19,590	10.00	1,959	B	

3

FUTURE TRAFFIC CONDITIONS

The next step in the analysis was to determine the future traffic conditions on the study area roadways at the time of project build-out. The following documents the procedures used to determine the future traffic.

Background Traffic

Traffic on the roadway is expected to grow due to local development approvals. FDOT *Traffic Trends* software was used to calculate the average annual historical growth rates for the area roadway segments, using up to 17 years of the past of available historical AADT data provided by FDOT and the County. The trends worksheets are attached in Appendix F.

Additionally, the Central Florida Regional Planning (CFRPM), Version 4.5 was used to estimate the 2025 background traffic volumes for the study area roadways. The existing plus committed (E + C) roadway network was combined with the 2025 socio-economic (S/E) data. The 2025 S/E data was reviewed for area DRIs including Hunters Ridge DRI, LPGA DRI, Breakaway Trails DRI, Plantation Oaks DRI, Halifax Plantation DRI, Plantation Bay DRI, Bulow Plantation DRI, SR 100 DRI and the Town Center DRI. The model volumes are in peak-season weekly average daily traffic PSWADT so they were then converted to AADT by applying the model output conversion factor (MOCF). The model AADT was compared to the actual 2008 AADT on the study area roadways and a resulting annual growth rate was calculated. Table 5 presents the historic growth rates, the model growth rates, and the applied growth rates. Considering the 15-year build-out and the nature of growth rates to plateau over long time periods due to area build-out, a minimum annual growth rate of two percent was applied to all facilities.

Table 5
Background Growth Rates
Ormond Crossings PMUD

Road Name	Limits (To - From)	2008 Existing AADT	2025 Background Model Volume (PSWADT)	2025 Background Model AADT [1]	Annual Model Growth Rate [2]	Average Annual Historic Growth Rate [3]	Applied Growth Rate	Source
I-95 (SR 9)	I-4/SR 400 (Beville Rd) to US 92	93,200	112,672	102,532	0.59%	n/a	2.00%	Default Minimum
I-95 (SR 9)	US 92 to LPGA Blvd	68,000	104,220	94,840	2.32%	2.71%	2.32%	Model
I-95 (SR 9)	LPGA Blvd to SR 40 (W. Granada Blvd)	79,000	95,569	86,968	0.59%	3.02%	2.00%	Default Minimum
I-95 (SR 9)	SR 40 (W. Granada Blvd) to US 1 (SR 5)	55,000	86,665	78,865	2.55%	2.33%	2.55%	Model
I-95 (SR 9)	US 1 (SR 5) to Old Dixie Hwy	53,000	84,043	77,320	2.70%	1.95%	2.70%	Model
I-95 (SR 9)	Old Dixie Hwy to SR 100	53,000	82,711	76,094	2.56%	1.95%	2.56%	Model
US 1 (SR 5)	LPGA Blvd to Flomich Ave	27,000	36,094	32,845	1.27%	-0.66%	2.00%	Default Minimum
US 1 (SR 5)	Flomich Ave to Hand Ave	27,000	34,660	31,558	0.99%	-0.66%	2.00%	Default Minimum
US 1 (SR 5)	Hand Ave to Division Ave	23,500	35,493	32,217	2.18%	-0.16%	2.18%	Model
US 1 (SR 5)	Division Ave to W. Granada Blvd (SR 40)	23,500	35,610	32,405	2.23%	-0.16%	2.23%	Model
US 1 (SR 5)	W. Granada Blvd (SR 40) to Wilmette Ave	18,200	24,771	22,541	1.40%	0.08%	2.00%	Default Minimum
US 1 (SR 5)	Wilmette Ave to Nova Rd (SR 5A)	18,200	21,168	19,281	0.35%	0.08%	2.00%	Default Minimum
US 1 (SR 5)	Nova Rd (SR 5A) to Airport Rd	29,000	33,670	30,640	0.33%	1.80%	2.00%	Default Minimum
US 1 (SR 5)	Airport Rd to Hull Rd	22,500	32,681	29,740	1.69%	0.48%	2.00%	Default Minimum
US 1 (SR 5)	Hull Rd to Pine Tree Rd/Crossings Blvd S.	22,500	29,230	26,599	1.07%	0.48%	2.00%	Default Minimum
US 1 (SR 5)	Pine Tree Rd/Crossings Blvd S. to Broadway Ave/Plantation Oaks Blvd	22,500	29,429	26,780	1.12%	0.48%	2.00%	Default Minimum
US 1 (SR 5)	Broadway Ave/Plantation Oaks Blvd to I-95 NB Ramps	22,500	32,940	29,975	1.95%	0.48%	2.00%	Default Minimum
US 1 (SR 5)	I-95 NB Ramps to I-95 SB Ramps	19,650	30,397	27,661	2.40%	0.48%	2.40%	Model
US 1 (SR 5)	I-95 SB Ramps to Destination Daytona Ln	16,600	27,609	25,124	2.91%	5.65%	2.91%	Model
US 1 (SR 5)	Destination Daytona Ln to Crossings Blvd N	16,800	23,024	20,952	1.45%	5.65%	2.00%	Default Minimum
US 1 (SR 5)	Crossings Blvd. N to Volusia/Flagler County Line	16,800	24,207	22,028	1.83%	5.65%	2.00%	Default Minimum
US 1 (SR 5)	Volusia/Flagler County Line to Aldenham Ln	16,800	22,571	20,540	1.31%	4.50%	2.00%	Default Minimum
US 1 (SR 5)	Aldenham Ln to Old Dixie Hwy	13,680	21,735	19,779	2.62%	4.50%	2.62%	Model
US 1 (SR 5)	Old Dixie Hwy to Seminole Woods Pkwy	16,700	23,928	21,774	1.78%	4.67%	2.00%	Default Minimum
US 1 (SR 5)	Seminole Woods Pkwy to Belle Terre Pkwy	16,700	20,735	18,871	0.76%	4.67%	2.00%	Default Minimum
SR 5A (Nova Rd)	Flomich St to Hand Ave	39,500	43,766	39,827	1.60%	1.45%	2.00%	Default Minimum
SR 5A (Nova Rd)	Hand Ave to W. Granada Blvd (SR 40)	29,000	32,661	29,904	0.18%	1.34%	2.00%	Default Minimum
SR 5A (Nova Rd)	W. Granada Blvd (SR 40) to Wilmette Ave	24,500	32,822	29,868	1.29%	0.10%	2.00%	Default Minimum
SR 5A (Nova Rd)	Wilmette Ave to US 1 (SR 5)	14,000	20,580	18,728	1.99%	0.87%	2.00%	Default Minimum
SR 40	Rima Ridge Rd/Urban Boundary to Airport Rd Ext	10,800	19,155	17,431	3.61%	1.46%	3.61%	Model
SR 40	Airport Rd Ext to Shadow Crossings Blvd	10,800	17,149	15,606	2.62%	1.46%	2.62%	Model
SR 40	Shadow Crossings Blvd to Breakaway Trl	10,800	25,914	23,582	6.96%	1.46%	6.96%	Model
SR 40	Breakaway Trl to Tymber Creek Rd	10,800	29,465	26,813	8.72%	1.46%	8.72%	Model
SR 40 (W. Granada Blvd)	Tymber Creek Rd to I-95 SB Ramps	26,500	48,832	44,437	3.98%	2.65%	3.98%	Model
SR 40 (W. Granada Blvd)	I-95 SB Ramps to I-95 NB Ramps	26,500	54,915	49,973	5.21%	2.65%	5.21%	Model
SR 40 (W. Granada Blvd)	I-95 NB Ramps to Williamson Blvd	26,500	55,198	50,230	5.27%	3.41%	5.27%	Model
SR 40 (W. Granada Blvd)	Williamson Blvd to Clyde Morris Blvd	37,500	34,007	30,946	-1.03%	3.41%	2.00%	Default Minimum
SR 40 (W. Granada Blvd)	Clyde Morris Blvd to Nova Rd (SR 5A)	35,000	42,220	38,421	0.57%	1.82%	2.00%	Default Minimum
SR 40 (W. Granada Blvd)	Nova Rd (SR 5A) to Orchard St	32,000	37,924	34,511	0.46%	0.34%	2.00%	Default Minimum
SR 40 (W. Granada Blvd)	Orchard St to US 1 (SR 5)	32,000	39,986	36,387	0.81%	-1.59%	2.00%	Default Minimum
SR 40 (W. Granada Blvd)	US 1 (SR 5) to Beach St	26,345	41,741	37,984	2.60%	-1.59%	2.60%	Model
SR 40 (W. Granada Blvd)	Beach St to John Anderson Dr	36,500	52,522	47,795	1.82%	0.85%	2.00%	Default Minimum
SR 40 (E. Granada Blvd)	John Anderson Dr to Ocean Shore Blvd (SR A1A)	24,000	33,068	30,092	1.49%	0.85%	2.00%	Default Minimum
Airport Rd	SR 40 to Hunter's Ridge Blvd	0	6,100	5,551	-	-	-	Model Volumes
Airport Rd	Hunter's Ridge Blvd to Tymber Creek Rd	0	7,101	6,461	-	-	-	Model Volumes
Airport Rd	Tymber Creek Rd to Pineland Trl	4,910	8,017	7,295	2.86%	0.43%	2.86%	Model
Airport Rd	Pineland Trl to Sunshine Blvd	4,360	8,446	7,686	4.49%	-3.96%	4.49%	Model
Airport Rd	Sunshine Blvd to US 1 (SR 5)	7,380	10,661	9,883	2.00%	-1.60%	2.00%	Default Minimum
Beach St	Division Ave to W. Granada Blvd (SR 40)	7,730	12,405	11,289	2.71%	2.70%	2.71%	Model
Beach St	W. Granada Blvd (SR 40) to Wilmette Ave	9,680	8,446	7,688	-1.21%	0.77%	2.00%	Default Minimum
Beach St	Wilmette Ave to Inglesa Ave	6,320	12,624	11,488	4.81%	-1.14%	4.81%	Model
Beach St	Inglesa Ave to Pine Tree Dr	2,150	8,817	8,023	16.07%	2.35%	16.07%	Model
Broadway Ave	Pineland Trl to US 1 (SR 5)	0	3,529	3,211	-	-	-	Model Volumes
Clyde Morris Blvd	Falls Way/Spring Meadows to W. Granada Blvd (SR 40)	12,060	29,054	26,439	7.01%	0.30%	7.01%	Model
Old Dixie Hwy	I-95 NB Ramps to Old Kings Rd	7,720	9,171	8,346	0.48%	2.30%	2.00%	Default Minimum
Old Dixie Hwy	Old Kings Rd to Walter Boardman Ln	3,300	12,137	11,045	13.81%	1.06%	2.00%	Default Minimum
Old Dixie Hwy	Walter Boardman Ln to Monaghan Dr	2,090	10,695	9,732	21.51%	3.76%	2.00%	Default Minimum
Old Dixie Hwy	Monaghan Dr to Pine Tree Dr	2,090	11,816	10,753	24.38%	3.76%	2.00%	Default Minimum
Old Kings Rd	Old Dixie Hwy to Flagler Co Line	3,290	7,431	6,762	6.21%	4.36%	6.21%	Model
Pineland Trl	Airport Rd to Harmony Ave	440	1,460	1,347	12.12%	5.86%	12.12%	Model
Pineland Trl	Harmony Ave to East Spine Rd	300	954	868	11.14%	4.71%	11.14%	Model
Pine Tree Dr	US 1 (SR 5) to Addison Dr	2,460	390	355	-5.03%	1.62%	2.00%	Default Minimum
Pine Tree Dr	Addison Dr to Beach St/Old Dixie Hwy	1,660	390	355	-4.62%	1.62%	2.00%	Default Minimum
Plantation Oaks Blvd	US 1 (SR 5) to Old Dixie Hwy	0	9,374	8,530	-	-	-	Model Volume
Tymber Creek Rd	W. Granada Blvd (SR 40) to Tymber Run	13,020	17,985	16,366	1.51%	3.60%	2.00%	Default Minimum
Tymber Creek Rd	Tymber Run to Peruvian Ln	7,290	17,985	16,366	7.32%	2.39%	7.32%	Model
Tymber Creek Rd	Peruvian Ln to Airport Rd	7,290	12,361	11,249	3.19%	7.56%	3.19%	Model
Tymber Creek Rd	Airport Rd to Durrance Ln	1,450	4,308	3,920	10.02%	7.56%	10.02%	Model
Tymber Creek Rd	Durrance Ln to Project Limits	1,450	4,308	3,920	10.02%	7.56%	10.02%	Model
Tymber Creek Rd	Project Limits to Overpass	1,450	2,585	2,352	3.66%	7.56%	3.66%	Model
Tymber Creek Rd	Overpass to Roundabout	1,450	2,559	2,329	3.56%	7.56%	3.56%	Model
Williamson Blvd	Hand Ave to Ormond Square	19,590	25,873	23,544	1.19%	4.52%	2.00%	Default Minimum
Williamson Blvd	Ormond Square to W. Granada Blvd (SR 40)	19,590	28,982	26,374	2.04%	4.52%	2.04%	Model

PSWADT - Peak Season Weekly Average Daily Traffic

[1] *2025 Background Model AADT obtained by multiply the PSWADT by the model output conversion factor (MOCF = 0.91) obtained from FDOT's Florida Traffic Information (FTI) software*

[2] *Annual Model Growth Rate = (2025 Background AADT - 2008 Existing AADT)/17 years/2008 Existing AADT*

[3] *Annual Average Historic Growth Rate was calculated using 5 years of historic daily counts obtained from FDOT and/or Volusia County and FDOT Traffic Trends software*

Trip Generation

The trip generation for the proposed development was determined using the trip generation rates and procedures published by the Institute of Transportation Engineers (ITE) in the document Trip Generation, 8th Edition. The total daily and PM peak hour trip generation for the proposed development is shown in Table 6.

Due to the mixed-use nature of the site and the commitments made by the Developer to promote internal site circulation and connectivity, a large portion of the trips are expected to remain internal to the site. Consistent with all previous analyses for Ormond Crossings, the CFRPM was used to estimate the trips that will originate and terminate within the site. Single land-use TAZs were coded for Ormond Crossings to evaluate the internal trips. The CFRPM trip matrix for zones representing Ormond Crossings was extracted from the model output and the intrazonal (trips originating and terminating within the same zone) trips were eliminated. The trip matrix and calculations are summarized in Table 7. As indicated in the Table, 23.54% of the trips generated by the project are expected to remain internal to the site.

The developer, resulting from discussions with the City, has agreed to employ strategies to increase the internal capture and self-sustainability of the project. For example, job-based land uses will develop parallel with residential uses to satisfy home-based-work trips on site. Commercial uses have been reduced in size from the initial development plan to only support the demand generated by the internal land uses. The developer will consider a tram system funded by the community development district (CDD) to make travel on site the most convenient option for motorists. Please note that these strategies were not considered in the analysis when estimating the percentage of trips that will remain internal to the site. Historic travel behavior, as coded in the transportation model, was the basis for quantifying the internal trips.

Trip Distribution

The process of determining the directional flow of traffic associated with a new development is called trip distribution. The CFRPM, V.4.5 was used to determine the trip distribution for this project. The process required editing the network to add traffic analysis zones (TAZs) to represent the location of the project and its general orientation to the adjacent road network. The next step involved converting the land use data for the project to socio-economic (S/E) data which the model uses in trip generation and distribution. The model structure was then run which resulted in trip productions and attractions (trip generation) which were then matched with complementary attractions and productions according to statistically determined trip lengths by trip purpose. Figure 3 shows the project trip distribution.

Trip Assignment

The final step in the analysis was to assign the project traffic to the road network. Figure 4 graphically depicts the PM peak hour project trip assignment at the study area intersections.

Table 6
Total and External Trip Generation
Ormond Crossings PMUD

Land Use				Trip Generation Rates				Trip Generation				Net External Trip Generation						
					P.M. Peak-Hour				P.M. Peak-Hour				Daily		P.M. Peak-Hour			
						Directional %				Directional								
Description	ITE Code	Quantity	Units	Daily Rate	Rate	In	Out	Daily Total	Total	In	Out	Internal Capture	Internal Trips	Total	Internal Trips	Total	In	Out
Retail	820	200.00	KSF	53.29	4.95	48%	52%	10,658	989	475	514	23.54%	2,509	8,149	233	756	363	393
General Office	710	900.00	KSF	8.05	1.21	17%	83%	7,244	1,086	185	901	23.54%	1,706	5,538	256	830	141	689
Business Park	770	350.00	KSF	12.89	1.36	23%	77%	4,510	477	110	367	23.54%	1,062	3,448	113	364	84	280
Light Industrial	110	800.00	KSF	7.35	1.23	12%	88%	5,876	980	118	862	23.54%	1,384	4,492	231	749	90	659
Mini-Warehouse	151	240.00	KSF	2.50	0.26	51%	49%	600	62	32	30	23.54%	142	458	15	47	24	23
Warehouse	150	560.00	KSF	4.31	0.45	25%	75%	2,412	254	64	191	23.54%	568	1,844	60	194	49	145
Elementary School	520	720	Students	1.29	0.16	34%	66%	930	115	39	76	23.54%	219	711	28	87	30	57
Church	560	165.00	KSF	9.12	0.65	52%	48%	1,504	108	56	52	23.54%	355	1,149	26	82	43	39
Single-Family Residential	210	1,300	SFDU	8.47	0.83	63%	37%	11,010	1,078	679	399	23.54%	2,592	8,418	254	824	519	305
Single-Family - Age Restricted	251	265	SFDU	4.68	0.37	61%	39%	1,240	99	60	39	23.54%	292	948	24	75	46	29
Townhouse/Condominium	230	590	MFDU	4.92	0.44	67%	33%	2,902	257	172	85	23.54%	684	2,218	61	196	131	65
Apartments	220	795	MFDU	6.20	0.57	65%	35%	4,930	454	295	159	23.54%	1,161	3,769	107	347	226	121
							Totals:	**53,816**	**5,959**	**2,284**	**3,675**		**12,674**	**41,142**	**1,408**	**4,551**	**1,746**	**2,805**

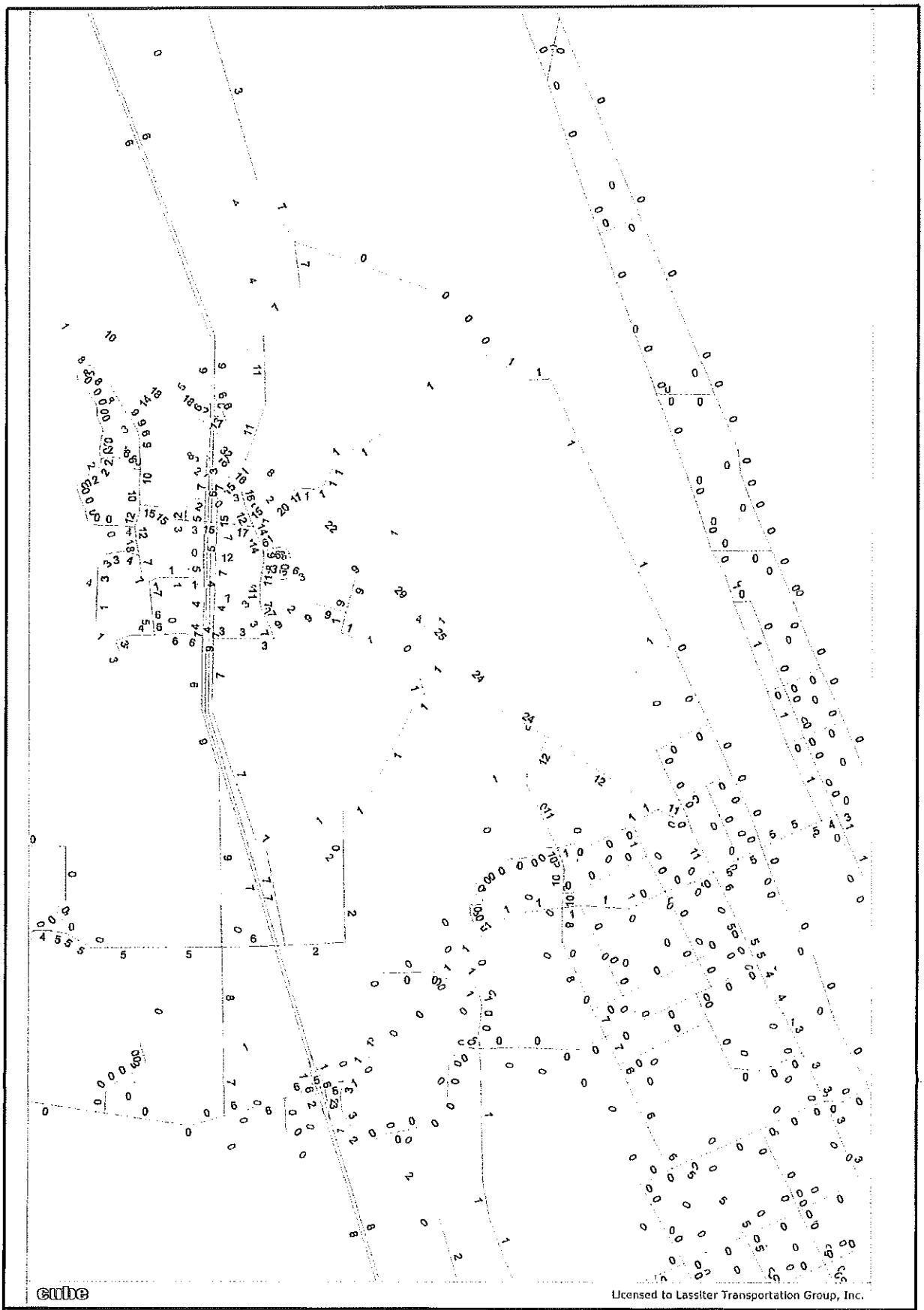
Source: ITE, Trip Generation, 8th Edition

Table 7
CFRPM Trip Matrix - Zones Representing Ormond Crossings
Ormond Crossings PMUD

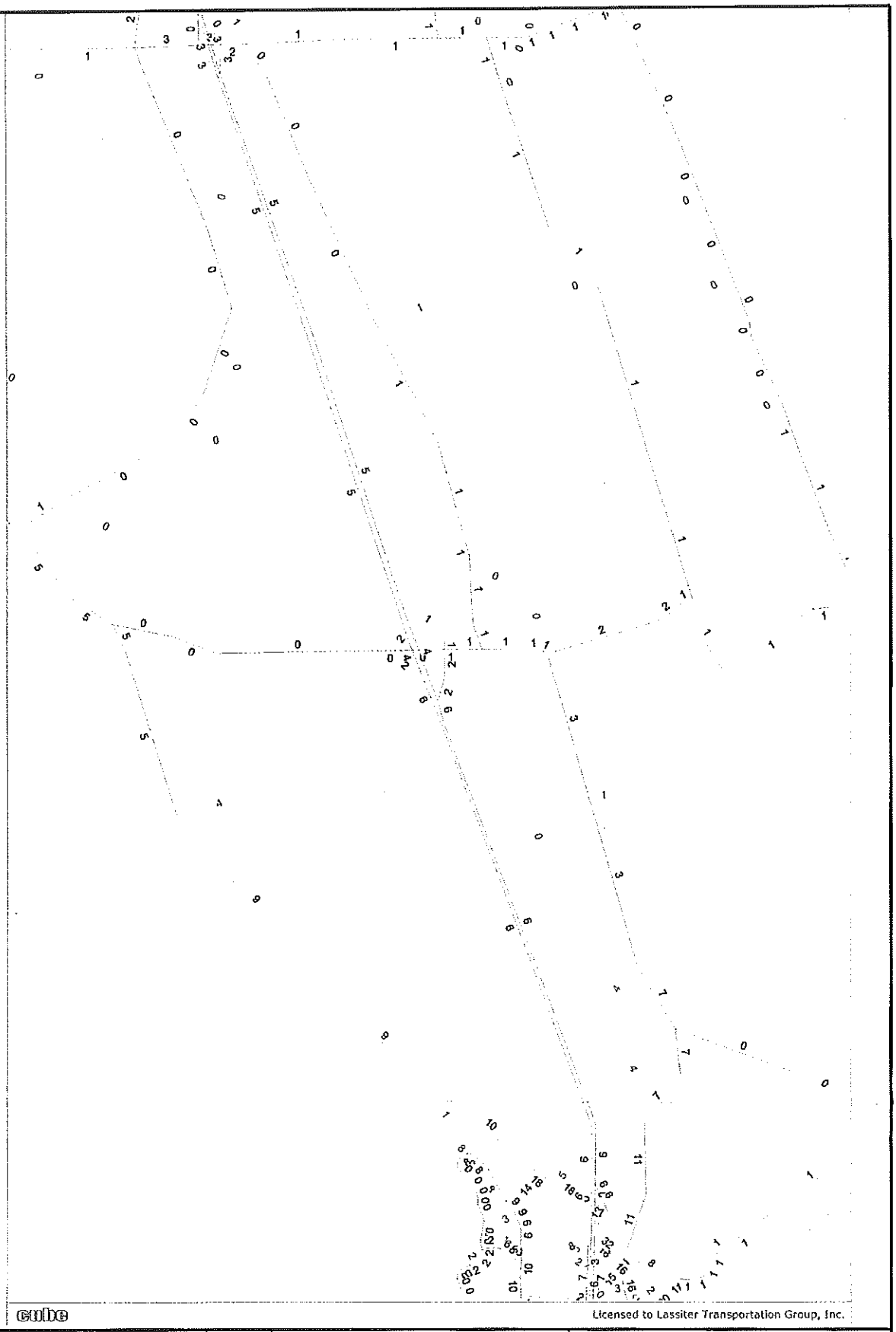
TAZ	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	Interzonal	Intrazonal	Totals (with intrazonal trips)	Totals (without intrazonal trips)
1900	0	34	12	11	7	4	12	24	30	25	0	3	18	26	12	73	8	21	28	16	9	373	114	1,948	1,834
1901	34	0	12	14	7	5	13	27	33	31	0	2	17	23	14	81	9	21	25	16	7	391	55	1,516	1,461
1902	12	12	0	7	3	2	4	9	11	11	0	0	7	7	6	27	2	7	8	6	4	144	9	488	479
1903	11	14	7	0	16	9	25	26	34	31	0	6	17	23	13	79	8	19	22	15	7	383	35	1,195	1,160
1904	7	7	3	16	0	10	15	14	20	15	0	4	10	13	8	46	6	14	14	11	4	238	35	895	859
1905	4	5	2	9	10	0	18	12	13	12	0	3	6	8	5	25	3	6	10	5	3	160	16	602	586
1906	12	13	4	25	15	18	0	31	38	35	0	10	15	21	11	70	8	18	23	14	7	388	75	1,379	1,304
1907	24	27	9	26	14	12	31	0	35	23	0	3	13	23	12	48	8	14	19	11	6	358	55	1,628	1,574
1908	30	33	11	34	20	13	38	35	0	23	0	8	14	26	13	57	8	16	21	13	6	420	244	2,214	1,970
1909	25	31	11	31	15	12	35	23	23	0	0	3	12	18	10	53	7	15	15	11	5	354	40	1,305	1,265
1910	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	26
1911	3	2	0	6	4	3	10	3	8	3	0	0	1	3	1	5	0	2	2	1	0	57	3	182	179
1912	18	17	7	17	10	6	15	13	14	12	0	1	0	25	10	53	10	19	22	13	6	287	33	1,238	1,205
1913	26	23	7	23	13	8	21	23	26	18	0	3	25	0	19	65	11	21	24	14	8	379	68	1,757	1,689
1914	12	14	6	13	8	5	11	12	13	10	0	1	10	19	0	42	7	12	13	8	4	220	19	876	857
1915	73	81	27	79	46	25	70	48	57	53	0	5	53	65	42	0	40	77	102	49	27	1,018	454	4,963	4,508
1916	8	9	2	8	6	3	8	8	8	7	0	0	10	11	7	40	0	19	20	11	8	194	17	832	816
1917	21	21	7	19	14	6	18	14	16	15	0	2	19	21	12	77	19	0	46	21	16	385	92	1,948	1,856
1918	28	25	8	22	14	10	23	19	21	15	0	2	22	24	13	102	20	46	0	39	30	483	188	2,771	2,584
1919	16	16	6	15	11	5	14	11	13	11	0	1	13	14	8	49	11	21	39	0	14	287	45	1,360	1,314
1920	9	7	4	7	4	3	7	6	6	5	0	0	6	8	4	27	8	16	30	14	0	170	19	849	831
Interzonal	373	391	144	383	238	160	388	358	420	354	0	57	287	379	220	1,018	194	385	483	287	170	13,373			
Intrazonal	114	55	9	35	35	16	75	55	244	40	0	3	33	68	19	454	17	92	188	45	19		3,230		
Totals (with intrazonal trips)	1,968	1,532	491	1,209	903	609	1,391	1,635	2,279	1,311	24	187	1,243	1,767	879	4,986	815	1,911	2,722	1,364	831			60,029	
Totals (without intrazonal trips)	1,854	1,477	482	1,174	868	593	1,316	1,581	2,035	1,271	24	185	1,210	1,700	860	4,532	798	1,819	2,535	1,319	813				56,799

Internal Capture 23.54%

External Project Trips 43,427



Ormond Crossings	N NTS	**Project Trip Distribution**		*Lassiter Transportation Group, Inc.* *Engineering and Planning*
		Project No.: 3137.14	Figure: 3 1 of 3	123 Live Oak Avenue – Daytona Beach, Florida 32114 Telephone: 386.257.2571 * Fax: 386.257.6996 * EB# 0009227



Ormond Crossings	N NTS	**Project Trip Distribution**		*Lassiter Transportation Group, Inc.* *Engineering and Planning*
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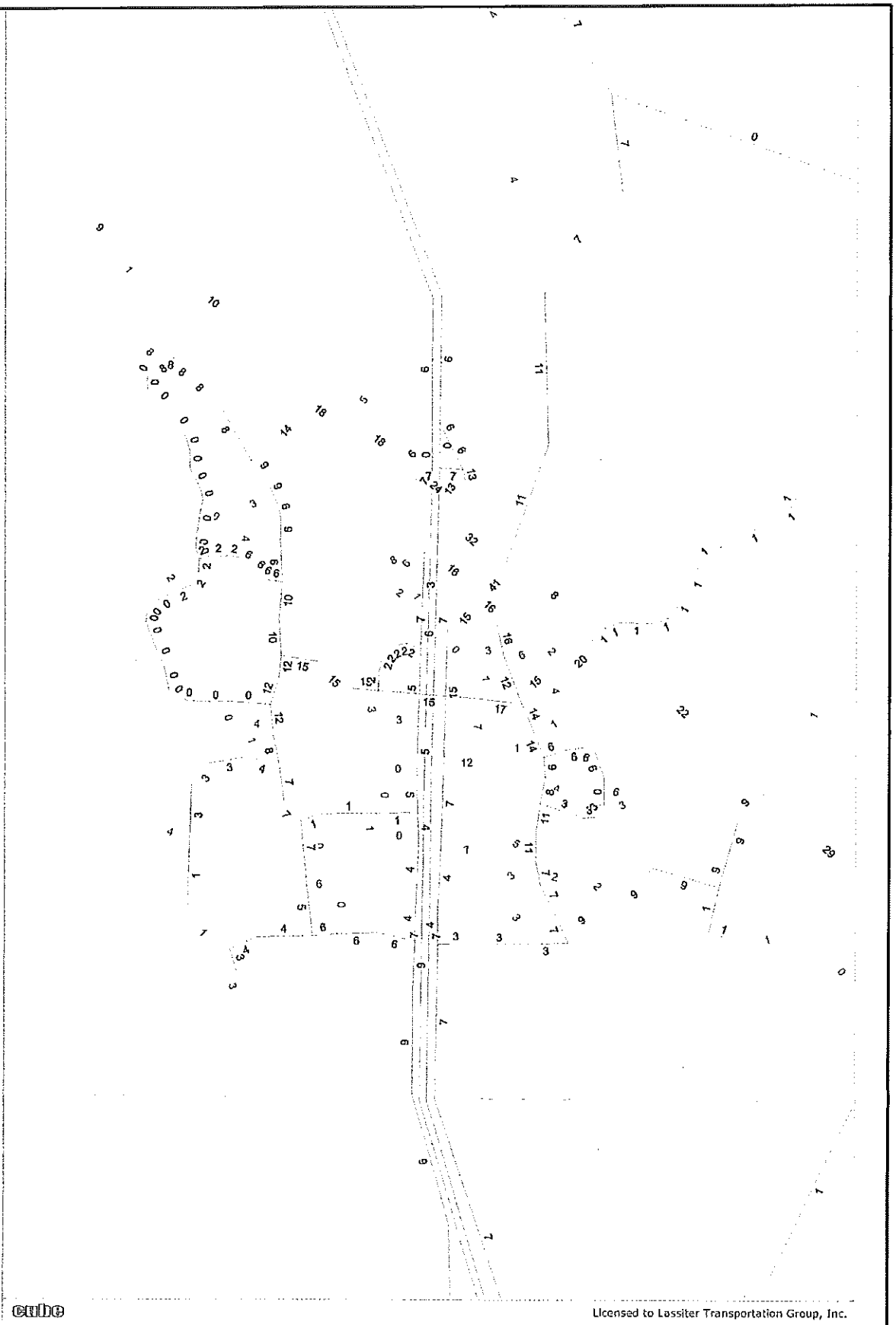

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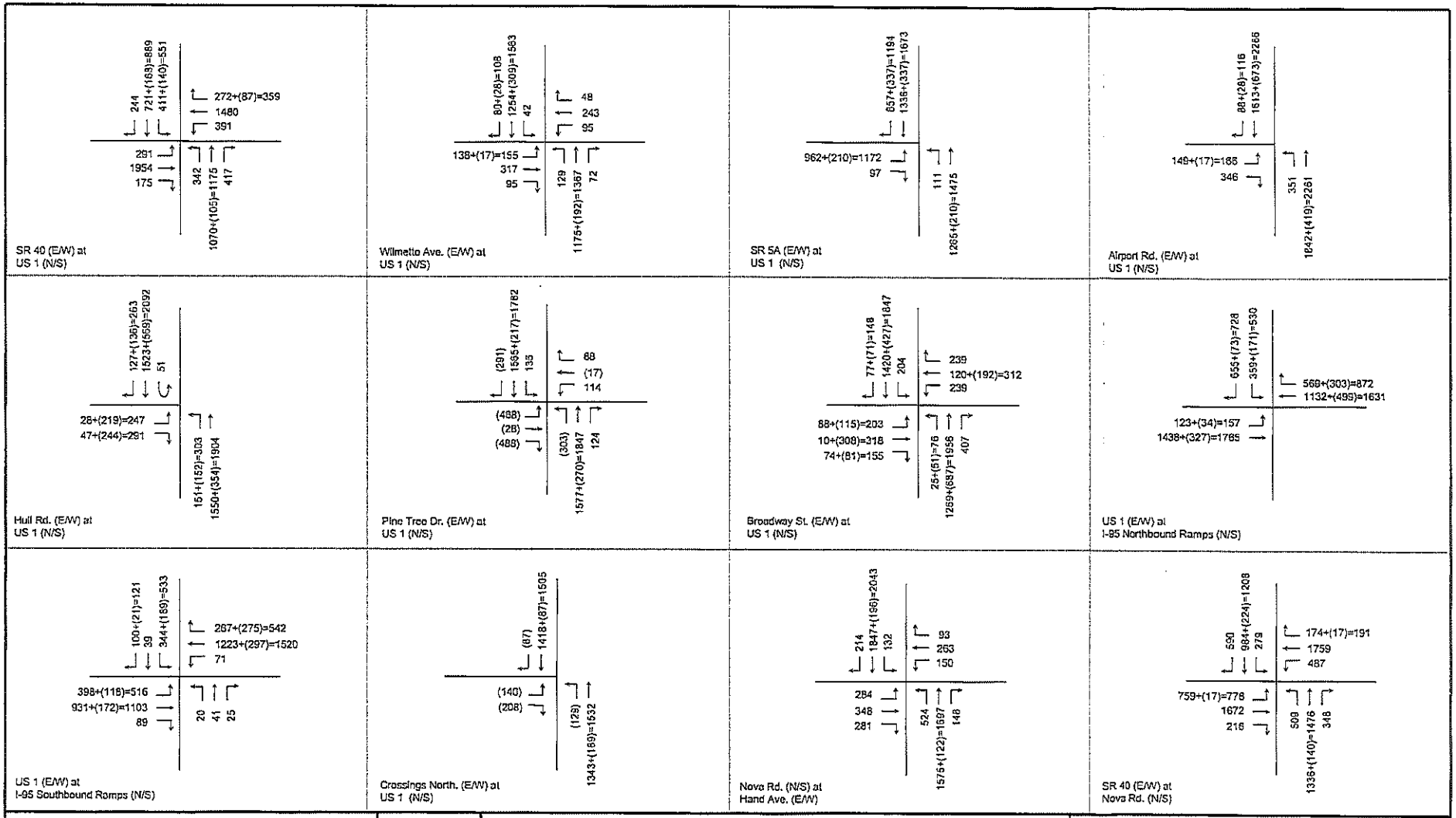
Ormond Crossings	N NTS	**Project Trip Distribution**		*Lassiter Transportation Group, Inc.* *Engineering and Planning*
		Project No.: 3137.14	Figure: 3 3 of 3	123 Live Oak Avenue – Daytona Beach, Florida 32114 Telephone: 386.257.2571 * Fax: 386.257.6996 * EB# 0009227



Ormond Crossings

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NTS

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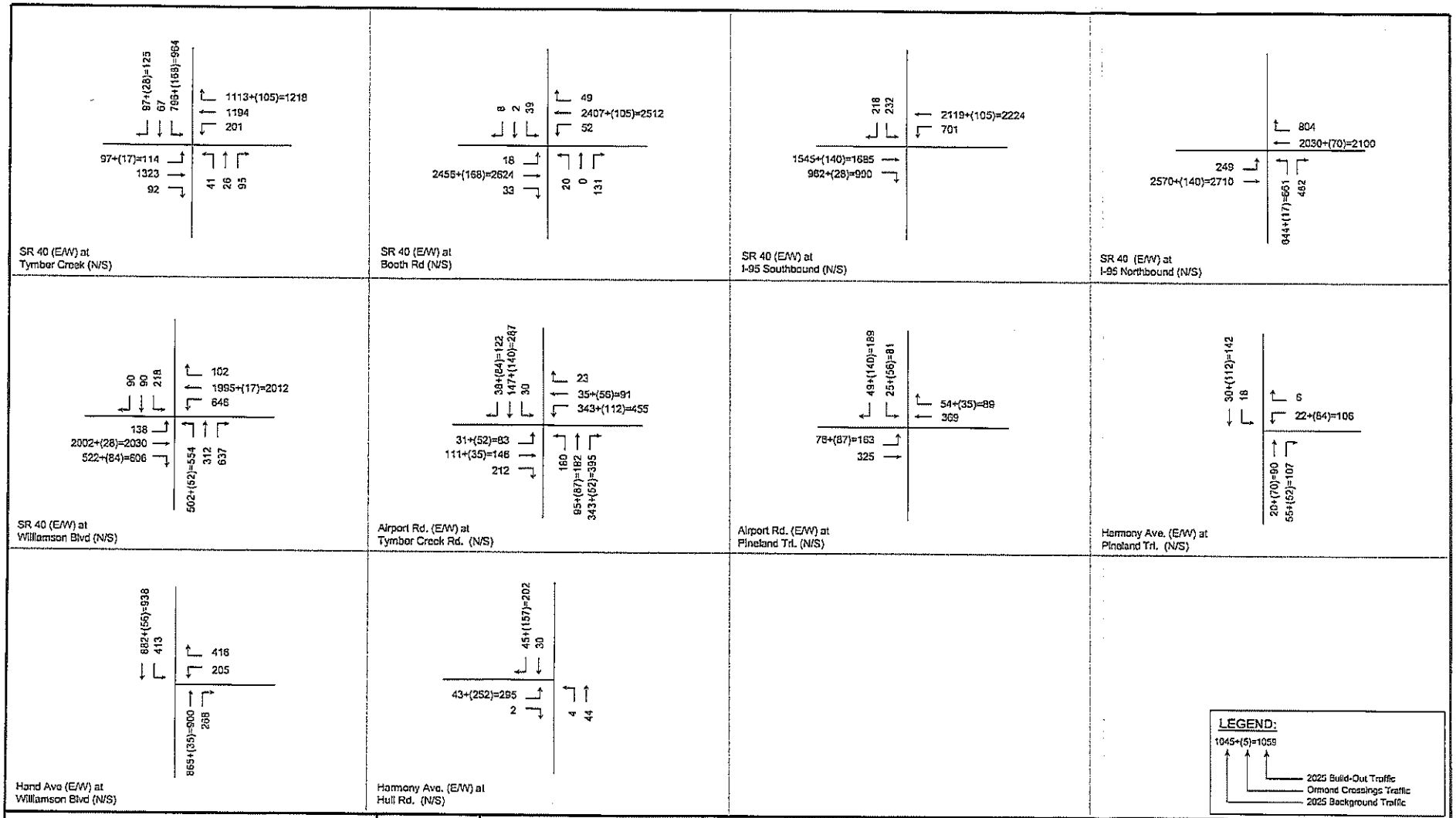
Engineering and Planning
123 Live Oak Avenue – Daytona Beach, Florida 32114
Telephone: 386.257.2571 Fax: 386.257.6996 EB#0009227

2025 Build-Out Traffic – PM Peak Hour TMCs

Project Number: 3137.14

Figure 4
1 of 2



Ormond Crossings

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NTS

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2025 Build-Out Traffic – PM Peak Hour TMCs

Project Number: 3137.14

Figure 4
2 of 2

4

FUTURE ROADWAY ANALYSIS

The critical intersections and road segments were analyzed based on the existing and committed roadway conditions to determine potential impacts and to investigate mitigation requirements.

Unsignalized Intersection Analysis

The unsignalized intersections were analyzed to determine the operational LOS under 2025 build and no build conditions. Table 8 shows the PM peak hour levels of service. As indicated in the table, several of the unsignalized intersections are expected to fail under build-out and no build conditions. The HCS+ printouts for the unsignalized locations are included in Appendix G.

Table 8
2025 Build-Out and No Build PM Peak Hour Level of Service – Unsignalized Intersections
Ormond Crossings PMUD

Intersection	Adopted LOS	Critical Approach	PM Peak Hour			
			Build-Out		No Build	
			Delay (sec)	LOS	Delay (sec)	LOS
US 1 at Hull Rd	D	Eastbound	n/a	F	n/a	F
US 1 at Pine Tree Rd	D	Westbound	n/a	F	n/a	F
US 1 at Broadway Ave	D	Westbound	n/a	F	n/a	F
Airport Rd at Pineland Trl	D	Southbound	33.2	D		
Pineland Trl at Harmony Ave	D	Westbound	11.6	B		
Hull Rd at Harmony Ave	D	Eastbound	12.4	B		

Signalized Intersection Analysis

The signalized intersections were analyzed to determine the operational LOS under 2025 build and no build conditions. Table 9 shows the projected LOS for these intersections. As indicted in Table 9, several of the signalized intersections are expected to operate below the adopted LOS under 2025 build and no build PM peak hour conditions. The HCS+ summary sheets are contained in Appendix H.

Table 9
2025 Build-Out and No Build PM Peak Hour Level of Service – Signalized Intersections
Ormond Crossings PMUD

Intersection	Adopted LOS	PM Peak Hour					
		Build-Out			No Build		
		Delay (sec.)	LOS	Max V/C	Delay (sec.)	LOS	Max V/C
SR 40 (W. Granada Blvd) at US 1	D	192.9	F	2.01	182.0	F	1.93
US 1 at Wilmette Ave	D	41.2	D	0.99			
US 1 at SR 5A (Nova Rd)	D	241.5	F	2.24	179.1	F	1.90
US 1 at Airport Rd	D	47.6	D	1.47	34.7	C	1.28
US 1 at I-95 NB Ramps	D	40.8	D	1.07	23.8	C	0.78
US 1 at I-95 SB Ramps	D	136.3	F	1.83	62.2	E	1.22
SR 5A (Nova Rd) at Hand Ave	D	102.4	F	1.93	101.4	F	1.99
SR 40 (W. Granada Blvd) at SR 5A (Nova Rd)	D	324.4	F	1.74	313.6	F	1.69
SR 40 (W. Granada Blvd) at Tymber Creek Rd	C	152.0	F	1.15	65.0	E	1.18
SR 40 (W. Granada Blvd) at Booth Rd	C	60.3	E	1.13	36.5	D	1.06
SR 40 (W. Granada Blvd) at I-95 SB Ramps	D	46.6	D	1.16	34.9	C	1.16
SR 40 (W. Granada Blvd) at I-95 NB Ramps	D	54.5	D	1.51	55.8	E	1.56
SR 40 (W. Granada Blvd) at Williamson Blvd	D	112.3	F	1.27	106.2	F	1.25
Tymber Creek Rd at Airport Rd	D	29.3	C	0.97			

Roadway Segment Analysis

The traffic analysis for the roadway segments involves the comparison of the future peak hour two-way volumes to available capacity. Table 10 presents the results of the peak hour two-way road segment analysis for the study area roadways under 2015 build and no build conditions. The 2015 analysis was performed to evaluate the roadway network for financial feasibility. Assuming a linear development schedule, one third of Ormond Crossings' build-out traffic was assigned to the area roadways under 2015 build-out conditions. As indicated in the table, seven segments of SR 40 (W. Granada Boulevard) are expected to be deficient within five years. Please note that these segments of SR 40 are deficient under 2015 no build conditions and are five of the seven segments are located within the City's TCEA (Objective 5.5). To mitigate for its impact to these segments of SR 40, the applicant has agreed to measures consistent with policies under Objective 6.6 and 7.7 of the City's comprehensive plan.

Table 11 presents the results of the peak hour two-way road segment analysis for the study area roadways under 2025 build and no build conditions. As indicated in the tables, the following roadway segments within the study area are expected to be deficient under 2025 build-out conditions, US 1 from SR 5A (Nova Road) to I-95 SB Ramps, SR 40 (W. Granada Boulevard) from Tymber Creek Road to Beach Street, Broadway Avenue from Pineland Trail to US 1, and Tymber Creek Road from Peruvian Lane to Airport Road.

Table 10
2015 Capacity Analysis - Roadway Links
Ormond Crossings PMUD

Road Name	Limits (To - From)	E+C No. of Lanes	Functional Classification	Area Type	Adopted LOS	Max Peak Hour Capacity at Adopted LOS	Project Trip Distribution	PM Peak Hour Two-Way Project Trips	Significance	Existing AADT	Average Annual Growth Rate	2015 Background AADT	K_{100} Factor	Hour Two-Way Background Volume	2015 No Build LOS	2015 PM Peak Hour Two-Way Total Volume	Volume/ Capacity	2015 Build Out LOS
I-95 (SR 9)	I-4/SR 400 (Beville Rd) to US 92	6+2 aux.	Principal Arterial - Interstate	Urban	C	11,920	8%	120	1.01%	93,200	2.00%	124,888	6.71	8,380	D	8,500	71.31%	D
I-95 (SR 9)	US 92 to LPGA Blvd	6	Principal Arterial - Interstate	Urban	C	8,320	12%	180	2.16%	68,000	2.32%	94,840	7.71	7,312	C	7,492	90.05%	C
I-95 (SR 9)	LPGA Blvd to SR 40 (W. Granada Blvd)	6+aux.	Principal Arterial - Interstate	Urban	C	10,120	16%	240	2.37%	79,000	2.00%	105,860	8.71	9,220	D	9,460	93.48%	D
I-95 (SR 9)	W. Granada Blvd (SR 40) to US 1 (SR 5)	6	Principal Arterial - Interstate	Urban	C	8,320	14%	210	2.52%	55,000	2.55%	64,827	9.71	6,295	C	6,505	78.19%	C
I-95 (SR 9)	US 1 (SR 5) to Old Dixie Hwy	6	Principal Arterial - Interstate	Urban	C	8,320	12%	180	2.16%	53,000	2.70%	63,014	9.71	6,119	C	6,299	75.71%	C
I-95 (SR 9)	Old Dixie Hwy to SR 100	6	Principal Arterial - Interstate	Urban	C	8,320	10%	150	1.80%	53,000	2.56%	53,000	9.71	5,146	B	5,296	63.65%	B
US 1 (SR 5)	LPGA Blvd to Flomich Ave	4	Principal Arterial	Urban	D	3,560	3%	45	1.26%	27,000	2.56%	38,765	10.26	3,977	F	4,022	112.98%	F
US 1 (SR 5)	Flomich Ave to Hand Ave	4	Principal Arterial	Urban	D	3,560	4%	53	1.49%	27,000	0.00%	27,000	10.26	2,770	B	2,823	79.30%	B
US 1 (SR 5)	Hand Ave to Division Ave	4	Principal Arterial	Urban	D	3,560	5%	75	2.11%	23,500	2.18%	32,217	10.26	3,305	C	3,380	94.94%	C
US 1 (SR 5)	Division Ave to W. Granada Blvd (SR 40)	4	Principal Arterial	Urban	D	3,560	5%	75	2.11%	23,500	2.23%	27,167	10.26	2,787	B	2,862	80.39%	C
US 1 (SR 5)	W. Granada Blvd (SR 40) to Wilmette Ave	4	Principal Arterial	Urban	D	3,560	11%	165	4.63%	18,200	2.00%	20,748	10.26	2,129	B	2,294	64.44%	B
US 1 (SR 5)	Wilmette Ave to Nova Rd (SR 5A)	4	Principal Arterial	Urban	D	3,560	12%	180	5.06%	18,200	2.00%	20,748	10.26	2,129	B	2,309	64.88%	B
US 1 (SR 5)	Nova Rd (SR 5A) to Airport Rd	4	Principal Arterial	Urban	D	6,980	24%	360	5.16%	29,000	2.00%	33,060	10.26	3,392	A	3,752	53.75%	A
US 1 (SR 5)	Airport Rd to Hull Rd	4	Principal Arterial	Urban	D	3,560	29%	438	12.25%	22,500	2.00%	25,650	10.26	2,632	B	3,088	86.18%	C
US 1 (SR 5)	Hull Rd to Pine Tree Rd/Crossings Blvd S.	4	Principal Arterial	Urban	D	3,560	28%	421	11.83%	22,500	2.00%	25,650	10.26	2,632	B	3,053	85.76%	C
US 1 (SR 5)	Pine Tree Rd/Crossings Blvd S. to Broadway Ave/Plantation Oaks Blvd	4	Principal Arterial	Urban	D	3,560	27%	405	11.38%	22,500	2.00%	25,650	10.26	2,632	B	3,037	85.31%	C
US 1 (SR 5)	Broadway Ave/Plantation Oaks Blvd to I-95 NB Ramps	4	Principal Arterial	Urban	D	3,560	29%	436	12.25%	22,500	2.00%	25,650	10.26	2,632	B	3,068	86.18%	C
US 1 (SR 5)	I-95 NB Ramps to I-95 SB Ramps	4	Principal Arterial	Urban	D	3,560	29%	436	12.25%	19,650	2.40%	22,949	10.26	2,355	B	2,791	78.40%	B
US 1 (SR 5)	I-95 SB Ramps to Destination Daytona Ln	4	Principal Arterial	Urban	D	3,560	18%	270	7.58%	16,800	2.91%	20,228	10.26	2,075	B	2,345	65.87%	B
US 1 (SR 5)	Destination Daytona Ln to Crossings Blvd N.	4	Principal Arterial	Urban	D	3,560	18%	270	7.58%	16,800	2.00%	19,152	10.26	1,965	B	2,235	62.78%	B
US 1 (SR 5)	Crossings Blvd. N to Volusia/Flagler County Line	4	Principal Arterial	Urban	D	4,893	10%	151	3.09%	16,800	2.00%	19,152	10.26	1,965	B	2,116	43.25%	B
US 1 (SR 5)	Volusia/Flagler County Line to Aldenham Ln	4	Principal Arterial	Transitioning	C	4,400	10%	151	3.43%	16,800	2.00%	19,152	10.26	1,965	B	2,116	48.09%	B
US 1 (SR 5)	Aldenham Ln to Old Dixie Hwy	4	Principal Arterial	Transitioning	C	4,400	5%	75	1.70%	13,680	2.62%	16,191	10.78	1,745	B	1,820	41.36%	B
US 1 (SR 5)	Old Dixie Hwy to Seminole Woods Pkwy	4	Principal Arterial	Transitioning	C	4,400	5%	228	5.18%	15,700	2.00%	22,378	9.71	2,173	B	2,401	54.57%	B
US 1 (SR 5)	Seminole Woods Pkwy to Belle Terre Pkwy	4	Principal Arterial	Urban	D	6,040	4%	182	3.01%	15,700	2.00%	22,378	9.71	2,173	B	2,355	38.99%	B
SR 5A (Nova Rd)	Flomich St to Hand Ave	6	Principal Arterial	Urban	E	5,150	7%	319	6.19%	30,500	2.00%	40,870	10.26	4,193	D	4,512	87.61%	D
SR 5A (Nova Rd)	Hand Ave to W. Granada Blvd (SR 40)	6	Principal Arterial	Urban	D	4,680	8%	120	2.46%	29,000	2.00%	33,060	10.26	3,392	C	3,512	71.97%	C
SR 5A (Nova Rd)	W. Granada Blvd (SR 40) to Wilmette Ave	6	Principal Arterial	Urban	D	4,880	10%	150	3.07%	24,500	2.00%	27,930	10.26	2,866	C	3,016	61.80%	C
SR 5A (Nova Rd)	Wilmette Ave to US 1 (SR 5)	4	Principal Arterial	Urban	D	3,560	11%	165	4.63%	14,000	2.00%	15,960	10.26	1,637	B	1,802	50.62%	B
SR 40	Rima Ridge Rd/Urban Boundary to Airport Rd Ext	4	Principal Arterial	Urban	C	4,660	2%	91	1.95%	10,800	3.61%	17,431	10.26	1,788	B	1,879	40.32%	B
SR 40	Airport Rd Ext to Shadow Crossings Blvd	4	Principal Arterial	Urban	C	4,660	0%	0	0.00%	10,800	2.62%	15,606	10.26	1,601	B	1,601	34.36%	B
SR 40	Shadow Crossings Blvd to Breakaway Trl	4	Principal Arterial	Urban	C	4,660	0%	0	0.00%	10,800	6.95%	23,582	10.26	2,419	B	2,419	51.91%	B
SR 40	Breakaway Trl to Tymber Creek Rd	4	Principal Arterial	Urban	C	3,440	0%	0	0.00%	10,800	8.72%	17,394	10.26	1,785	B	1,785	51.89%	B
SR 40 (W. Granada Blvd)	Tymber Creek Rd to I-95 SB Ramps	4	Principal Arterial	Urban	C	2,420	6%	90	3.72%	26,500	3.98%	33,886	10.26	3,477	F	3,567	147.40%	F
SR 40 (W. Granada Blvd)	I-95 SB Ramps to I-95 NB Ramps	4	Principal Arterial	Urban	C	2,420	5%	75	3.10%	26,500	5.21%	35,165	10.26	3,711	F	3,786	156.45%	F
SR 40 (W. Granada Blvd)	I-95 NB Ramps to Williamson Blvd	4	Principal Arterial	Urban	D	3,220	5%	75	2.33%	26,500	5.27%	36,271	10.26	3,721	F	3,796	117.89%	F
SR 40 (W. Granada Blvd)	Williamson Blvd to Clyde Morris Blvd	4	Principal Arterial	Urban	D	3,560	1%	15	0.42%	37,500	2.00%	42,750	10.26	4,386	F	4,401	123.62%	F
SR 40 (W. Granada Blvd)	Clyde Morris Blvd to Nova Rd (SR 5A)	4	Principal Arterial	Urban	D	3,560	1%	15	0.42%	35,000	2.00%	39,900	10.26	4,094	F	4,109	115.42%	F
SR 40 (W. Granada Blvd)	Nova Rd (SR 5A) to Orchard St	4	Principal Arterial	Urban	D	3,560	1%	15	0.42%	32,000	2.00%	36,480	10.26	3,743	F	3,758	105.56%	F
SR 40 (W. Granada Blvd)	Orchard St to US 1 (SR 5)	4	Principal Arterial	Urban	D	3,560	0%	0	0.00%	32,000	2.00%	36,480	10.26	3,743	F	3,743	105.14%	F
SR 40 (W. Granada Blvd)	US 1 (SR 5) to Beach St	4	Principal Arterial	Urban	D	3,560	5%	75	2.11%	26,345	2.80%	31,138	10.26	3,195	C	3,270	91.85%	C
SR 40 (W. Granada Blvd)	Beach St to John Anderson Dr	4	Principal Arterial	Urban	D	6,040	5%	219	3.63%	36,500	2.00%	48,910	10.26	5,018	D	5,237	86.71%	D
SR 40 (E. Granada Blvd)	John Anderson Dr to Ocean Shore Blvd (SR A1A)	4	Principal Arterial	Urban	D	3,560	4%	182	5.11%	24,000	2.00%	32,160	10.26	3,300	C	3,482	97.81%	D

Table 10 - Contd.
2015 Capacity Analysis - Roadway Links
Ormond Crossings PMUD

Road Name	Limits (To - From)	E+C No. of Lanes	Functional Classification	Area Type	Adopted LOS	Max Peak Hour Capacity at Adopted LOS	Project Trip Distribution	PM Peak Hour Two-Way Project Trips	Significance	Existing AADT	Average Annual Growth Rate	2015 Background AADT	K_{100} Factor	2015 PM Peak Hour Two-Way Background Volume	2015 No Build LOS	2015 PM Peak Hour Two-Way Total Volume	Volume/ Capacity	2015 Build-Out LOS
Airport Rd	SR 40 to Hunter's Ridge Blvd	2	Collector	Urban	D	1,440	3%	45	3.13%	-	-	5,551	10.00	555	B	600	41.67%	B
Airport Rd	Hunter's Ridge Blvd to Tymber Creek Rd	2	Collector	Urban	D	1,440	5%	75	5.21%	-	-	6,461	10.00	646	B	721	50.07%	B
Airport Rd	Tymber Creek Rd to Pineland Trl	2	Collector	Urban	D	1,440	6%	90	6.25%	4,910	2.86%	5,892	10.00	589	B	679	47.15%	B
Airport Rd	Pineland Trl to Sunshine Blvd	2	Collector	Urban	D	1,040	2%	30	2.88%	4,350	4.49%	5,729	10.00	573	B	603	57.98%	B
Airport Rd	Sunshine Blvd to US 1 (SR 5)	2	Collector	Urban	D	1,040	1%	15	1.44%	7,380	2.00%	8,413	10.00	841	C	856	82.31%	C
Beach St	Division Ave to W. Granada Blvd (SR 40)	2	Minor Arterial	Urban	D	1,440	0%	0	0.00%	7,730	2.71%	11,289	10.00	1,129	C	1,129	78.40%	C
Beach St	W. Granada Blvd (SR 40) to Wilmette Ave	2	Minor Arterial	Urban	D	1,440	0%	0	0.00%	9,680	2.00%	11,035	10.00	1,104	C	1,104	76.67%	C
Beach St	Wilmette Ave to Inglesa Ave	2	Minor Arterial	Urban	D	2,080	0%	0	0.00%	6,320	4.81%	8,448	10.00	845	C	845	40.63%	C
Beach St	Inglesa Ave to Pine Tree Dr	2	Minor Arterial	Urban	D	2,080	1%	15	0.72%	2,150	16.07%	4,568	10.00	457	B	472	22.69%	B
Broadway Ave	Pineland Trl to US 1 (SR 5)	2	n/c	Urban	D	1,040	18%	270	25.96%	-	-	3,211	10.00	321	B	591	56.83%	B
Clyde Morris Blvd	Falls Way/Spring Meadows to W. Granada Blvd (SR 40)	4	Principal Arterial	Urban	D	3,204	1%	46	1.44%	12,060	7.01%	26,439	10.00	2,644	C	2,690	83.96%	C
Old Dixie Hwy	I-95 NB Ramps to Old Kings Rd	2	Major Collector	Urban	E	1,440	1%	35	2.50%	7,720	2.00%	10,345	10.00	1,034	C	1,070	74.31%	C
Old Dixie Hwy	Old Kings Rd to Walter Boardman Ln	2	Major Collector	Transitioning	E	1,332	1%	46	3.45%	3,300	2.00%	4,422	10.00	442	B	488	36.64%	B
Old Dixie Hwy	Walter Boardman Ln to Monaghan Dr	2	Major Collector	Transitioning	E	1,332	3%	137	10.29%	2,090	2.00%	2,801	10.00	280	B	417	31.31%	B
Old Dixie Hwy	Monaghan Dr to Pine Tree Dr	2	Major Collector	Transitioning	E	1,332	7%	319	23.95%	2,090	2.00%	2,801	10.00	280	B	599	44.97%	B
Old Kings Rd	Old Dixie Hwy to Flagler Co Line	2	Collector	Urban	E	2,520	1%	46	1.76%	3,290	6.21%	6,762	10.00	676	B	722	27.56%	B
Pineland Trl	Airport Rd to Harmony Ave	2	n/c	Urban	D	1,040	7%	105	10.10%	440	12.12%	813	10.00	81	B	186	17.88%	B
Pineland Trl	Harmony Ave to East Spine Rd	2	n/c	Urban	D	1,040	11%	165	15.87%	300	11.14%	534	10.00	53	B	218	20.96%	B
Pine Tree Dr	US 1 (SR 5) to Addison Dr	2	Local	Urban	D	1,440	1%	15	1.04%	2,460	2.00%	2,804	10.00	280	B	295	20.49%	B
Pine Tree Dr	Addison Dr to Beach St/Old Dixie Hwy	2	Local	Urban	D	1,440	1%	15	1.04%	1,660	2.00%	1,892	10.00	189	B	204	14.17%	B
Plantation Oaks Blvd	US 1 (SR 5) to Old Dixie Hwy	2	n/c	Urban	E	1,440	11%	165	11.46%	-	-	8,530	10.00	853	C	1,018	70.69%	C
Tymber Creek Rd	W. Granada Blvd (SR 40) to Tymber Run	4	Collector	Urban	D	3,204	7%	105	3.28%	13,020	2.00%	14,843	10.00	1,484	B	1,589	49.59%	B
Tymber Creek Rd	Tymber Run to Peruvian Ln	4	Collector	Urban	D	3,204	8%	120	3.75%	7,290	7.32%	11,027	10.00	1,103	B	1,223	38.17%	B
Tymber Creek Rd	Peruvian Ln to Airport Rd	2	Collector	Urban	D	1,440	8%	120	8.33%	7,290	3.19%	8,920	10.00	892	C	1,012	70.28%	C
Tymber Creek Rd	Airport Rd to Durrance Ln	2	n/c	Urban	D	1,440	9%	135	9.38%	1,450	10.02%	2,467	10.00	247	B	382	26.53%	B
Tymber Creek Rd	Durrance Ln to Project Limits	2	n/c	Urban	D	1,440	9%	135	9.38%	1,450	10.02%	2,467	10.00	247	B	382	26.53%	B
Tymber Creek Rd	Project Limits to Overpass	2	n/c	Urban	D	1,440	4%	60	4.17%	1,450	3.65%	1,822	10.00	182	B	242	16.81%	B
Tymber Creek Rd	Overpass to Roundabout	2	n/c	Urban	D	1,440	4%	60	4.17%	1,450	3.56%	1,812	10.00	181	B	241	16.74%	B
Williamson Blvd	Hand Ave to Ormond Square	4	Principal Arterial	Urban	E	3,204	2%	91	2.84%	19,590	2.00%	26,251	10.00	2,625	C	2,716	84.77%	C
Williamson Blvd	Ormond Square to W. Granada Blvd (SR 40)	4	Principal Arterial	Urban	D	3,204	3%	137	4.28%	19,590	2.04%	26,374	10.00	2,637	C	2,774	86.56%	C

[1] *Capacity was determined using ARTPLAN (See Appendix I)*

Table 11
2025 Capacity Analysis - Roadway Links
Ormond Crossings PMUD

Road Name	Limits (To - From)	E+C No. of Lanes	Functional Classification	Area Type	Adopted LOS	Max Peak Hour Capacity at Adopted LOS	Project Trip Distribution	PM Peak Hour Two-Way Project Trips	Significance	Existing AADT	Average Annual Growth Rate	2025 Background AADT	K_{100} Factor	2025 PM Peak Hour Two-Way Background Volume	2025 No Build LOS	2025 PM Peak Hour Two-Way Total Volume	Volume/ Capacity	2025 Build Out LOS
I-95 (SR 9)	I-4/SR 400 (Beville Rd) to US 92	6+2 aux.	Principal Arterial - Interstate	Urban	C	11,920	8%	364	3.05%	93,200	2.00%	124,888	8.71	8,380	D	8,744	73.36%	D
I-95 (SR 9)	US 92 to LPGA Blvd	6	Principal Arterial - Interstate	Urban	C	8,320	12%	546	6.56%	68,000	2.32%	94,840	7.71	7,312	C	7,858	94.45%	C
I-95 (SR 9)	LPGA Blvd to SR 40 (W. Granada Blvd)	6+aux.	Principal Arterial - Interstate	Urban	C	10,120	16%	728	7.19%	78,000	2.00%	105,850	8.71	9,220	D	9,948	98.30%	D
I-95 (SR 9)	SR 40 (W. Granada Blvd) to US 1 (SR 5)	6	Principal Arterial - Interstate	Urban	C	8,320	14%	637	7.66%	55,000	2.55%	78,665	9.71	7,656	C	8,295	99.70%	C
I-95 (SR 9)	US 1 (SR 5) to Old Dixie Hwy	6	Principal Arterial - Interstate	Urban	C	8,320	12%	546	6.56%	53,000	2.70%	77,320	9.71	7,508	C	8,054	96.80%	C
I-95 (SR 9)	Old Dixie Hwy to SR 100	6	Principal Arterial - Interstate	Urban	C	8,320	10%	455	5.47%	53,000	2.56%	53,000	9.71	5,146	B	5,601	67.32%	B
US 1 (SR 5)	LPGA Blvd to Flomich Ave	4	Principal Arterial	Urban	D	3,560	3%	137	3.85%	27,000	2.00%	36,180	10.26	3,712	F	3,849	108.12%	F
US 1 (SR 5)	Flomich Ave to Hand Ave	4	Principal Arterial	Urban	D	3,560	4%	159	4.47%	27,000	2.00%	36,180	10.26	3,712	F	3,871	108.74%	F
US 1 (SR 5)	Hand Ave to Division Ave	4	Principal Arterial	Urban	D	3,560	5%	228	6.40%	23,500	2.18%	32,217	10.26	3,305	C	3,533	99.24%	D
US 1 (SR 5)	Division Ave to W. Granada Blvd (SR 40)	4	Principal Arterial	Urban	D	3,560	5%	228	6.40%	23,500	2.23%	32,405	10.26	3,325	C	3,553	99.80%	D
US 1 (SR 5)	W. Granada Blvd (SR 40) to Wilmette Ave	4	Principal Arterial	Urban	D	3,560	11%	501	14.07%	18,200	2.00%	24,388	10.26	2,502	B	3,003	84.35%	C
US 1 (SR 5)	Wilmette Ave to Nova Rd (SR 5A)	4	Principal Arterial	Urban	D	3,560	12%	546	15.34%	18,200	2.00%	24,388	10.26	2,502	B	3,048	85.62%	C
US 1 (SR 5)	Nova Rd (SR 5A) to Airport Rd	4	Principal Arterial	Urban	D	3,560	24%	1,092	30.67%	29,000	2.00%	38,860	10.26	3,987	F	5,079	142.67%	F
US 1 (SR 5)	Airport Rd to Hull Rd	4	Principal Arterial	Urban	D	3,560	29%	1,320	37.08%	22,500	2.00%	30,150	10.26	3,093	C	4,413	123.96%	F
US 1 (SR 5)	Hull Rd to Pine Tree Rd/Crossings Blvd S.	4	Principal Arterial	Urban	D	3,560	28%	1,278	35.90%	22,500	2.00%	30,150	10.26	3,093	C	4,371	122.78%	F
US 1 (SR 5)	Pine Tree Rd/Crossings Blvd S. to Broadway Ave/Plantation Oaks Blvd	4	Principal Arterial	Urban	D	3,560	27%	1,246	35.00%	22,500	2.00%	30,150	10.26	3,093	C	4,339	121.88%	F
US 1 (SR 5)	Broadway Ave/Plantation Oaks Blvd to I-95 NB Ramps	4	Principal Arterial	Urban	D	3,560	26%	1,300	36.52%	22,500	2.00%	30,150	10.26	3,093	C	4,393	123.40%	F
US 1 (SR 5)	I-95 NB Ramps to I-95 SB Ramps	4	Principal Arterial	Urban	D	3,560	26%	1,309	36.77%	19,650	2.40%	27,661	10.26	2,838	B	4,147	116.49%	F
US 1 (SR 5)	I-95 SB Ramps to Destination Daytona Ln	4	Principal Arterial	Urban	D	3,560	18%	819	23.01%	16,800	2.91%	25,124	10.26	2,578	B	3,397	95.42%	C
US 1 (SR 5)	Destination Daytona Ln to Crossings Blvd N.	4	Principal Arterial	Urban	D	3,560	18%	819	23.01%	16,800	2.00%	22,512	10.26	2,310	B	3,129	87.89%	C
US 1 (SR 5)	Crossings Blvd. N to Volusia/Flagler County Line	4	Principal Arterial	Urban	D	4,893	10%	456	9.32%	16,800	2.00%	22,512	10.26	2,310	B	2,766	56.53%	B
US 1 (SR 5)	Volusia/Flagler County Line to Aldenham Ln	4	Principal Arterial	Transitioning	C	4,400	10%	456	10.36%	16,800	2.00%	22,512	10.26	2,310	B	2,766	62.86%	B
US 1 (SR 5)	Aldenham Ln to Old Dixie Hwy	4	Principal Arterial	Transitioning	C	4,400	5%	228	5.18%	13,680	2.62%	19,779	10.78	2,132	B	2,360	53.64%	B
US 1 (SR 5)	Old Dixie Hwy to Seminole Woods Pkwy	4	Principal Arterial	Transitioning	C	4,400	5%	228	5.18%	16,700	2.00%	22,378	9.71	2,173	B	2,401	54.57%	B
US 1 (SR 5)	Seminole Woods Pkwy to Belle Terre Pkwy	4	Principal Arterial	Urban	D	6,040	4%	182	3.01%	16,700	2.00%	22,378	9.71	2,173	B	2,355	38.99%	B
SR 5A (Nova Rd)	Flomich St to Hand Ave	6	Principal Arterial	Urban	E	5,150	6%	273	5.30%	30,500	2.00%	40,870	10.26	4,193	D	4,466	86.72%	D
SR 5A (Nova Rd)	Hand Ave to W. Granada Blvd (SR 40)	6	Principal Arterial	Urban	D	4,880	8%	364	7.46%	29,000	2.00%	38,860	10.26	3,987	D	4,351	89.16%	D
SR 5A (Nova Rd)	W. Granada Blvd (SR 40) to Wilmette Ave	6	Principal Arterial	Urban	D	4,880	10%	455	9.32%	24,500	2.00%	32,830	10.26	3,368	C	3,823	78.34%	D
SR 5A (Nova Rd)	Wilmette Ave to US 1 (SR 5)	4	Principal Arterial	Urban	D	3,560	11%	501	14.07%	14,000	2.00%	18,760	10.26	1,925	B	2,426	68.15%	B
SR 40	Rima Ridge Rd/Urban Boundary to Airport Rd Ext	4	Principal Arterial	Urban	C	4,660	2%	91	1.95%	10,800	3.51%	17,431	10.26	1,788	B	1,879	40.32%	B
SR 40	Airport Rd Ext to Shadow Crossings Blvd	4	Principal Arterial	Urban	C	4,560	0%	0	0.00%	10,800	2.62%	15,606	10.26	1,601	B	1,601	34.36%	B
SR 40	Shadow Crossings Blvd to Breakaway Trl	4	Principal Arterial	Urban	C	4,860	0%	0	0.00%	10,800	6.96%	23,562	10.26	2,419	B	2,419	51.91%	B
SR 40	Breakaway Trl to Tymber Creek Rd	4	Principal Arterial	Urban	C	3,440	0%	0	0.00%	10,800	8.72%	26,813	10.26	2,751	B	2,751	79.97%	B
SR 40 (W. Granada Blvd)	Tymber Creek Rd to I-95 SB Ramps	4	Principal Arterial	Urban	C	2,420	6%	273	11.28%	26,500	3.98%	44,437	10.26	4,559	F	4,832	199.67%	F
SR 40 (W. Granada Blvd)	I-95 SB Ramps to I-95 NB Ramps	4	Principal Arterial	Urban	C	2,420	5%	228	9.42%	26,500	5.21%	49,973	10.26	5,127	F	5,355	221.28%	F
SR 40 (W. Granada Blvd)	I-95 NB Ramps to Williamson Blvd	4	Principal Arterial	Urban	D	3,220	5%	228	7.08%	26,500	5.27%	50,230	10.26	5,154	F	5,382	167.14%	F
SR 40 (W. Granada Blvd)	Williamson Blvd to Clyde Morris Blvd	4	Principal Arterial	Urban	D	3,560	1%	46	1.29%	37,500	2.00%	50,250	10.26	5,156	F	5,202	146.12%	F
SR 40 (W. Granada Blvd)	Clyde Morris Blvd to Nova Rd (SR 5A)	4	Principal Arterial	Urban	D	3,560	1%	46	1.29%	35,000	2.00%	46,900	10.26	4,812	F	4,858	136.46%	F
SR 40 (W. Granada Blvd)	Nova Rd (SR 5A) to Orchard St	4	Principal Arterial	Urban	D	3,560	1%	46	1.29%	32,000	2.00%	42,880	10.26	4,399	F	4,445	124.86%	F
SR 40 (W. Granada Blvd)	Orchard St to US 1 (SR 5)	4	Principal Arterial	Urban	D	3,560	0%	0	0.00%	32,000	2.00%	42,880	10.26	4,399	F	4,399	123.57%	F
SR 40 (W. Granada Blvd)	US 1 (SR 5) to Beach St	4	Principal Arterial	Urban	D	3,560	5%	228	6.40%	26,345	2.60%	37,984	10.26	3,897	F	4,125	115.87%	F
SR 40 (W. Granada Blvd)	Beach St to John Anderson Dr	4	Principal Arterial	Urban	D	6,040	5%	218	3.63%	35,500	2.00%	48,910	10.26	5,018	D	5,237	86.71%	D
SR 40 (E. Granada Blvd)	John Anderson Dr to Ocean Shore Blvd (SR A1A)	4	Principal Arterial	Urban	D	3,560	3%	137	3.85%	24,000	2.00%	32,160	10.26	3,300	C	3,437	96.54%	C

Table 11 - Contd.
2025 Capacity Analysis - Roadway Links
Ormond Crossings PMUD

Road Name	Limits (To - From)	E+C No. of Lanes	Functional Classification	Area Type	Adopted LOS	Max Peak Hour Capacity at Adopted LOS	Project Trip Distribution	PM Peak Hour Two-Way Project Trips	Significance	Existing AADT	Average Annual Growth Rate	2025 Background AADT	K_{100} Factor	2025 PM Peak Hour Two-Way Background Volume	2025 No Build LOS	2025 PM Peak Hour Two-Way Total Volume	Volume/ Capacity	2025 Build Out LOS
Airport Rd	SR 40 to Hunter's Ridge Blvd	2	Collector	Urban	D	1,440	3%	137	9.51%	0	-	5,551	10.00	555	B	692	48.06%	B
Airport Rd	Hunter's Ridge Blvd to Tymber Creek Rd	2	Collector	Urban	D	1,440	5%	228	15.83%	0	-	6,461	10.00	646	B	874	60.69%	C
Airport Rd	Tymber Creek Rd to Pineland Trl	2	Collector	Urban	D	1,440	6%	273	18.96%	4,910	2.86%	7,295	10.00	730	B	1,003	69.65%	C
Airport Rd	Pineland Trl to Sunshine Blvd	2	Collector	Urban	D	1,040	2%	91	8.75%	4,360	4.49%	7,686	10.00	769	C	860	82.69%	C
Airport Rd	Sunshine Blvd to US 1 (SR 5)	2	Collector	Urban	D	1,040	1%	46	4.42%	7,380	2.00%	9,889	10.00	989	D	1,035	99.52%	D
Beach St	Division Ave to W. Granada Blvd (SR 40)	2	Minor Arterial	Urban	D	1,440	0%	0	0.00%	7,730	2.71%	11,289	10.00	1,129	C	1,129	78.40%	C
Beach St	W. Granada Blvd (SR 40) to Wilmette Ave	2	Minor Arterial	Urban	D	1,440	0%	0	0.00%	9,650	2.00%	12,971	10.00	1,297	C	1,297	90.07%	C
Beach St	Wilmette Ave to Inglesa Ave	2	Minor Arterial	Urban	D	2,080	0%	0	0.00%	6,320	4.81%	11,488	10.00	1,149	C	1,149	55.24%	C
Beach St	Inglesa Ave to Pine Tree Dr	2	Minor Arterial	Urban	D	2,080	1%	46	2.21%	2,150	16.07%	8,023	10.00	802	C	848	40.77%	C
Broadway Ave	Pineland Trl to US 1 (SR 5)	2	n/c	Urban	D	1,040	18%	1,073	103.17%	0	-	3,211	10.00	321	B	1,394	134.04%	F
Clyde Morris Blvd	Falls Way/Spring Meadows to W. Granada Blvd (SR 40)	4	Principal Arterial	Urban	D	3,204	1%	46	1.44%	12,060	7.01%	26,439	10.00	2,644	C	2,690	83.96%	C
Old Dixie Hwy	I-95 NB Ramps to Old Kings Rd	2	Major Collector	Urban	E	1,440	1%	35	2.50%	7,720	2.00%	10,345	10.00	1,034	C	1,070	74.31%	C
Old Dixie Hwy	Old Kings Rd to Walter Boardman Ln	2	Major Collector	Transitioning	E	1,332	1%	46	3.45%	3,300	2.00%	4,422	10.00	442	B	488	36.64%	B
Old Dixie Hwy	Walter Boardman Ln to Monaghan Dr	2	Major Collector	Transitioning	E	1,332	3%	137	10.29%	2,090	2.00%	2,801	10.00	280	B	417	31.31%	B
Old Dixie Hwy	Monaghan Dr to Pine Tree Dr	2	Major Collector	Transitioning	E	1,332	7%	319	23.95%	2,090	2.00%	2,801	10.00	280	B	599	44.97%	B
Old Kings Rd	Old Dixie Hwy to Flagler Co Line	2	Collector	Urban	E	2,620	1%	46	1.76%	3,290	6.21%	6,762	10.00	676	B	722	27.56%	B
Pineland Trl	Airport Rd to Harmony Ave	2	n/c	Urban	D	1,040	7%	319	30.67%	440	12.12%	1,347	10.00	135	B	454	43.65%	B
Pineland Trl	Harmony Ave to East Spine Rd	2	n/c	Urban	D	1,040	11%	655	62.98%	300	11.14%	868	10.00	87	B	742	71.35%	C
Pine Tree Dr	US 1 (SR 5) to Addison Dr	2	Local	Urban	D	1,440	1%	46	3.19%	2,460	2.00%	3,296	10.00	330	B	376	26.11%	B
Pine Tree Dr	Addison Dr to Beach St/Old Dixie Hwy	2	Local	Urban	D	1,440	1%	46	3.19%	1,660	2.00%	2,224	10.00	222	B	268	18.61%	B
Plantation Oaks Blvd	US 1 (SR 5) to Old Dixie Hwy	2	n/c	Urban	E	1,440	11%	501	34.79%	0	-	8,530	10.00	853	C	1,354	94.03%	D
Tymber Creek Rd	W. Granada Blvd (SR 40) to Tymber Run	4	Collector	Urban	D	3,204	7%	319	9.96%	13,020	2.00%	17,447	10.00	1,745	B	2,064	64.42%	B
Tymber Creek Rd	Tymber Run to Peruvian Ln	4	Collector	Urban	D	3,204	8%	364	11.36%	7,290	7.32%	16,366	10.00	1,637	B	2,001	62.45%	B
Tymber Creek Rd	Peruvian Ln to Airport Rd	2	Collector	Urban	D	1,440	8%	364	25.28%	7,290	3.19%	11,249	10.00	1,125	C	1,489	103.40%	F
Tymber Creek Rd	Airport Rd to Durrance Ln	2	n/c	Urban	D	1,440	9%	410	28.47%	1,450	10.02%	3,920	10.00	392	B	802	55.69%	B
Tymber Creek Rd	Durrance Ln to Project Limits	2	n/c	Urban	D	1,440	9%	410	28.47%	1,450	10.02%	3,920	10.00	392	B	802	55.69%	B
Tymber Creek Rd	Project Limits to Overpass	2	n/c	Urban	D	1,440	4%	238	16.53%	1,450	3.66%	2,352	10.00	235	B	473	32.85%	B
Tymber Creek Rd	Overpass to Roundabout	2	n/c	Urban	D	1,440	4%	238	16.53%	1,450	3.56%	2,329	10.00	233	B	471	32.71%	B
Williamson Blvd	Hand Ave to Ormond Square	4	Principal Arterial	Urban	E	3,204	2%	91	2.84%	19,590	2.00%	25,251	10.00	2,625	C	2,716	84.77%	C
Williamson Blvd	Ormond Square to W. Granada Blvd (SR 40)	4	Principal Arterial	Urban	D	3,204	3%	137	4.28%	19,590	2.04%	26,374	10.00	2,637	C	2,774	86.58%	C

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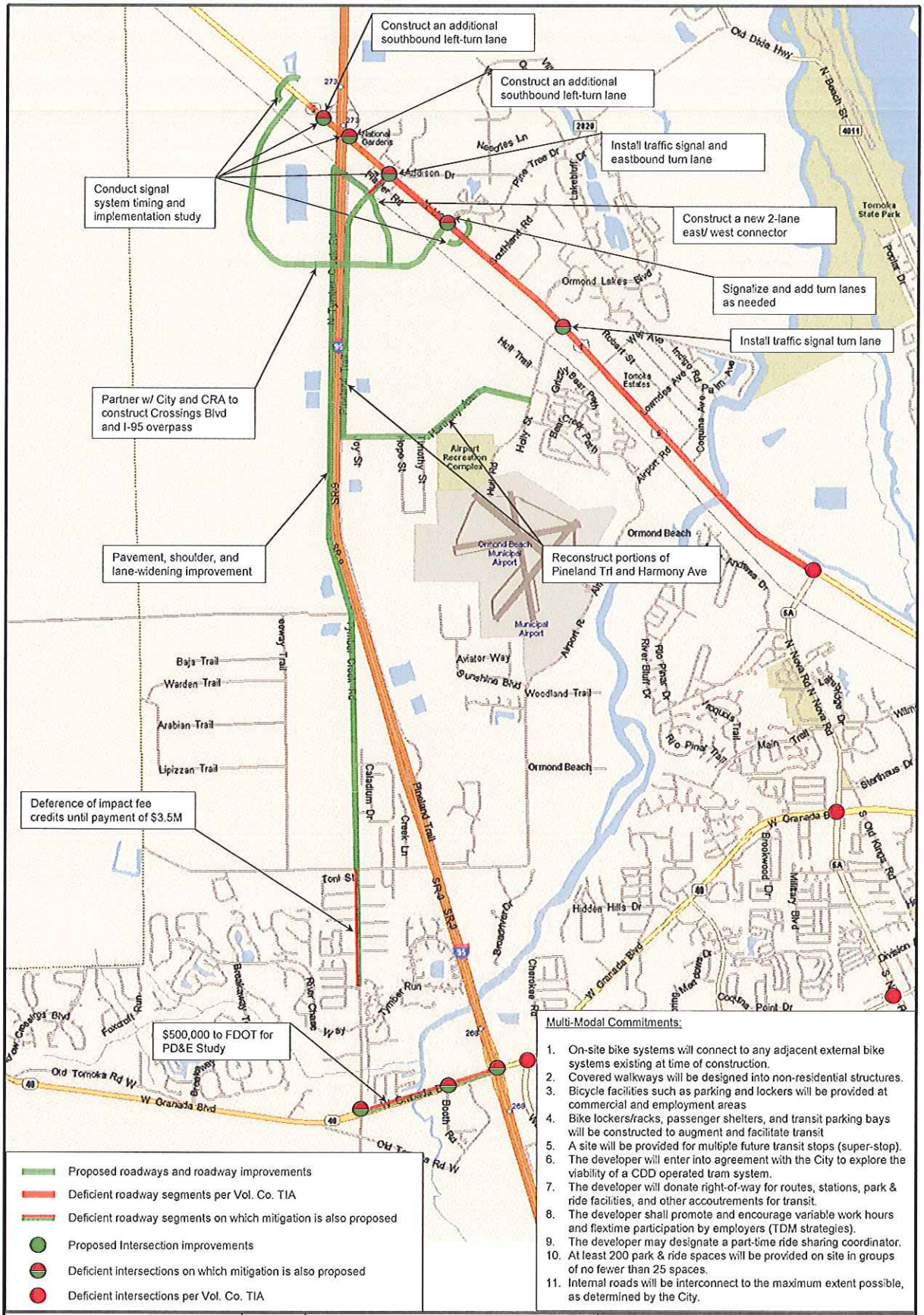
PROPOSED MITIGATION

As stated in the introduction, the City is currently amending its comprehensive plan to incorporate two traffic concurrency exception areas (TCEAs). Please note that the City is currently processing two versions of comprehensive plan amendments. The first are the remedial amendments to modify the comprehensive plan for consistency with the Ormond Crossings development plan. The second are the evaluation and appraisal report-(EAR) based amendments. The remedial amendments address all of the changes necessary for consistency between the comprehensive plan and the Ormond Crossings development.

Goal six of the City's transportation element will be modified to read as-follow:

> *Goal 6: The Ormond Crossing Activity Center shall incorporate a mobility strategy that ensures that a viable transportation network (road, transit, travel demand management) is in place to facilitate an economically viable component of the City's economic development goals. This shall be implemented through the application of a Transportation Concurrency Exception Area (TCEA) so that multiple transportation mitigation solutions that include roadway improvements, multi-modal opportunities and transportation demand management systems can be used to provide for a sustainable transportation network.*

The developer and City Staff have worked diligently together to establish a mitigation plan that is consistent with the City's desire to implement a range of mitigation alternatives to offset transportation impacts. The remedial amendments outline the mitigation strategies acceptable to the City for offsetting transportation demand within the TCEA. Figure 5 presents the specific improvements and strategies that will be employed by the developer. The identified improvements are consistent with Policy 6.1.3 of the City's remedial amendments (excerpt attached in Appendix J).



Multi-Modal Commitments:

1. On-site bike systems will connect to any adjacent external bike systems existing at time of construction.
2. Covered walkways will be designed into non-residential structures.
3. Bicycle facilities such as parking and lockers will be provided at commercial and employment areas
4. Bike lockers/racks, passenger shelters, and transit parking bays will be constructed to augment and facilitate transit
5. A site will be provided for multiple future transit stops (super-stop).
6. The developer will enter into agreement with the City to explore the viability of a CDD operated tram system.
7. The developer will donate right-of-way for routes, stations, park & ride facilities, and other accoutrements for transit.
8. The developer shall promote and encourage variable work hours and flextime participation by employers (TDM strategies).
9. The developer may designate a part-time ride sharing coordinator.
10. At least 200 park & ride spaces will be provided on site in groups of no fewer than 25 spaces.
11. Internal roads will be interconnect to the maximum extent possible, as determined by the City.

Ormond Crossings

N

NTS

Proposed Transportation Mitigation

Project No.: 3137.14

Figure: 5

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Engineering and Planning
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Recommended Intersection Improvements

As indicated in Tables 8 and 9, certain intersections are expected to be deficient under 2025 build and no build conditions. The developer has worked with City staff to identify improvements that are consistent with mitigation strategies identified in the City's comprehensive plan. Table 12 presents the resultant LOS at intersections for which the developer and City have agreed upon mitigation. The HCS+ detailed reports are included in Appendix K along with SYNCHRO summary sheets for the US 1/I-95 interchange. The improvements are as follows:

- US 1 at Hull Road - signalize
  - Southbound - construct an exclusive right-turn lane
  - Northbound - increase the length of the left-turn lane to 600 ft.
  - Construct a directional southbound left-turn into the Ormond Lakes subdivision to remove the U-turns form the Hull Road intersection
- US 1 at Pine Tree Road/Crossings Boulevard S. – signalize
  - Northbound - construct dual left-turn lanes
  - Eastbound – construct dual left-turn lanes, a shared through/right-turn lane, and an exclusive right-turn lane
  - Southbound - construct an exclusive right-turn lane
- US 1 at Broadway Avenue – signalize
  - Eastbound – construct a left-turn lane, a through lane, and a right-turn lane
  - Southbound - construct a right-turn lane
- US 1 at I-95 NB Ramps
  - Southbound – construct and additional northbound I-95 to southbound US 1 left-turn lane (creates dual left-turn lanes)
- US 1 at I-95 SB Ramps
  - Southbound – construct and additional southbound I-95 to southbound US 1 left-turn lane and designate outside left-turn lane a shared through/left-turn
- US 1 at Crossings Boulevard N. – signalize
  - Eastbound – construct an exclusive left-turn and right-turn lane
  - Northbound - construct a northbound left-turn lane
  - Southbound - construct a southbound right-turn lane

Table 12
2025 Build-Out PM Peak Hour Level of Service – Improved Intersections
Ormond Crossings PMUD

Intersection	Adopted LOS	PM Peak Hour		
		Delay (sec.)	LOS	Max V/C
US 1 at Hull Rd	D	51.9	D	1.12
US 1 at Pine Tree Dr/Crossings Blvd S.	D	46.5	D	0.98
US 1 at Broadway Ave/Plantation Oaks Blvd [1]	D	163.6	F	2.01
US 1 at I-95 NB Ramps	D	28.6	C	0.90
US 1 at I-95 SB Ramps [2]	D	85.6	F	1.38
US 1 at Crossings Blvd N.	D	18.6	B	0.85

[1] This intersection can benefit significantly from improvements to facilitate Plantation Oaks ingress and egress such as a northbound right-turn lane and dual southbound left-turn lanes
[2] An additional southbound US 1 to southbound I-95 left-turn lane is needed to achieve an acceptable LOS. This improvement requires widening the I-95 bridges over US 1 and the railroad making is cost prohibitive.

As indicated in the table, the intersections along US 1 are expected to operate within the adopted LOS with the exceptions of US 1 at Broadway Avenue/Plantation Oaks Boulevard and US 1 at I-95 southbound ramps. Please note that the following additional lanes are needed to achieve an acceptable LOS at Plantation Oaks Boulevard: northbound right-turn lane, exclusive westbound left-, through, and right-turn lane, and dual southbound left-turn lanes. These improvements provide direct access to the Plantation Oaks development.

Recommended Roadway and Traffic Operations Improvements

Table 11 shows that roadway segments that are expected to be deficient under 2025 build and no build conditions. The deficiencies primarily occur on US 1 and SR 40 (W. Granada Boulevard). Both are corridors the City identifies in its EAR-based amendments as being candidates for transit service expansion.

As indicated on Figure 5, the developer has made commitments to improve several roadways to facilitate north/south and east/west travel. The improvements are described in detail below and outlined in Policy 6.1.3 of the City's comprehensive plan.

- The developer will significantly upgrade Tymber Creek Road from Airport Road to the I-95 underpass. Tymber Creek Road will serve as a north/south alternative to US 1 and I-95.
- The developer will receive impact fee credits for improvements to the aforementioned segment of Tymber Creek Road. The impact fee credits will be deferred until the developer has paid $3.5 million in impact fees to be directed towards widening Tymber Creek Road from Peruvian Lane to Airport Road.
- The developer will upgrade Pineland Trail from the southern project limits to Broadway Avenue and Harmony Avenue from Pineland Tail to Hull Road. These two improvements will facilitate internal mobility allowing project trips to access US 1 at the southernmost point. Since a large portion of the project trip distribution is to the south, it's important to provide north/south alternatives to relieve US 1.
- Crossings Boulevard will be constructed from US 1 to a collector roadway west of I-95. The collector roadway will intersect US 1 north of the I-95 interchange. An overpass of I-95 will be included in the construction. This network of improvements will provide southbound trips from the west part of the project with an alternative to US 1, thereby relieving the interchange area.
- The developer will make a cash payment to FDOT for funding of a Project Development and Environment (PD&E) study of SR 40 (W. Granada Boulevard), west of I-95. The limits of the PD&E study will be at the discretion of FDOT.
- The developer will fund a traffic signal system timing and implementation study along US 1 from Pine Tree Drive/Crossings Boulevard to Crossings Boulevard N. The anticipated signalized intersections will be spaced less than 1/2-mile from each other and will benefit significantly from a coordinated signal system.

Recommended Transit and Transportation Demand Management (TDM) Strategies

Policy 6.1.3, items 10, and 12 – 16 of the City's remedial comprehensive plan amendments address transit and TDM strategies. Please note that no reduction in PM peak hour project trips have been considered in this analysis as result of transit ridership, ridesharing, or TDM implementation. Please refer to Appendix J for an excerpt from the City's comprehensive plan for specific requirements of this development.

A recent report released by FDOT in November 2009 shows positive trends towards decreasing vehicle-miles traveled (VMT) by commuters in Florida. The summary of the report is attached as Appendix L. As stated previously, no reductions in project traffic or background traffic have been assumed due to anticipated shifts in mode split. Any assumptions would be speculative as this time; however, the attached report seems to support future reductions in commuter travel. Two analysis scenarios were prepared to evaluate the impact of a successful mode shift and implementation of TDM strategies.

The first scenario assumes that TDM strategies are effectively implemented so that 30 percent of the employment center traffic occurs outside of the typical PM peak hour. The reduced PM peak hour trip generation of these

specific uses results in a 14.1 percent reduction of the total PM peak hour trips, or 641 trips. Under this scenario, two of the deficiencies identified on Table 11 are no longer deficient: Tymber Creek Road and Broadway Avenue.

The second scenario assumes a 15 percent mode shift in person-trips for the entire project. An across-the-board assumption of 1.2 persons per vehicle results in a reduction of 704 person-trips, or 586 vehicle-trips. The total reduction in net external trips resulting from a sizable mode shift and effective TDM strategies is 1,228 vehicle-trips, or 27 percent of the analyzed trip generation. These should be initial goals set by the developer and the City.

The City also acknowledges that within two years, it is required to implement a mobility plan, consistent with Chapter 163 of the *Florida Statutes*. The overall mitigation plan associated with the Ormond Crossings Activity Center TCEA will be consistent with the City's mobility plan.

6

CONCLUSIONS

Ormond Crossings is a 3,095-acre mixed-use development located in the City of Ormond Beach, southwest of US 1, north of Harmony Avenue, and straddling I-95. The following conclusions summarize the impacts the proposed development will have on area transportation systems.

- Ormond Crossings will consist of 2,950 residential units, 200,000 sq. ft. of commercial space, 900,000 sq. ft. of office space, 350,000 sq. ft. of business/flex space, 800,000 sq. ft. of industrial space, 240,000 sq. ft. of storage space, 560,000 sq. ft. of warehouse space, 165,000 sq. ft. of institutional space, and a 720-student elementary school.
- The project will be accessible via Tymber Creek Road, Pineland Trail, Hull Road, Broadway Avenue, and two proposed connections to US 1. The south connection will intersect opposite Pine Tree Road and the north connection will be approximately 1/2-mile north of I-95. Anticipated build-out of the project is year 2025.
- The project is expected to generate 5,959 total PM peak hour two way trips with 4,551 of those being external to the project.
- All unsignalized intersections, with the exception of US 1 at Hull Road, are currently operating within the adopted LOS. All signalized intersections, with the exception of SR 40 (W. Granada Boulevard) at US 1 and SR 5A (Nova Road) at Hand Avenue are operating within the adopted LOS.
- All roadway segments within the project study area are currently operating within the adopted LOS with the exception of SR 40 (W. Granada Boulevard) from Tymber Creek Road to SR 5A (Nova Road).
- The City of Ormond Beach is processing a comprehensive plan amendment to designate the Ormond Crossings development as the Ormond Crossings Activity Center Traffic Concurrency Exception Area.
- Under 2015 build and no build conditions, seven segments of SR 40 are expected to be deficient. Five of the segments are within the City's TCEA. The developer will mitigate impacts on SR 40 by employing multi-modal design principles within the site and exploring TDM strategies. The mitigation is consistent policies under Objectives 6.6 and 7.7 of the City's comprehensive plan.
- Under 2025 build and no build conditions, three of the six study area unsignalized intersections are expected to fail.
- Under 2025 build and no build conditions, 11 of the 14 study area signalized intersections are expected to fail. The intersection of US 1 at I-95 NB Ramps is expected to operate satisfactorily under no build conditions and is expected to fail under build conditions.
- Under future no build conditions, all roadway segments within the study area are expected to operate within the adopted LOS with the exception of segments on US 1 and SR 40.
- Under future build-out conditions, all roadway segments within the study area are expected to operate within the adopted LOS with the exception of segments on US 1, SR 40, Tymber Creek Road, and Broadway Avenue.
- The future roadway capacity analysis shows that approximately 9.75 miles of roadway will be deficient at build-out of the project. The developer has committed to construction on approximately 6.87 miles of roadway. The developer has committed to funding engineering studies and right-of-way purchase on another 3.15 miles of roadway. The total length of roadway on which the developer has committed funding is 10.02 miles, which exceeds the total length of deficient roadway segments.
- The proposed planned mixed-use development is consistent with the City's comprehensive plan in that transportation mitigation includes roadway construction, traffic operations improvements, transit provisions and design considerations, sidewalks, trails, bike paths, transportation demand management strategies, park-and-ride consideration, and an overall commitment to reduce vehicle-miles travelled.