

Technical Memorandum

May 9, 2024 Project# 30140

To:

Jon Harvey

Tillman & Associates 1720 SE 16th Ave, Bldg 100

Ocala, FL 34471

From:

Kok Wan Mah, PE

RE:

Adena PUD Traffic Statement

TRAFFIC STATEMENT

Kittelson and Associates has been retained to provide a traffic statement to provide a comparison of trip generation for various residential uses to support a PUD change for Adena. The Adena project is located on the north side of CR 326, west of Anthony Road in northwest Marion County. An approved traffic study for Ocala Meadows (the former name of Adena) was completed by Tindale-Oliver and dated November 16, 2010. The current entitlements include 363 single family residential units. The developer for the property is seeking to provide a mix of residential uses, including single family detached, duplexes, condominiums, townhomes, apartments, and villas.

Trip Generation

Table 1 below presents a comparison of the approved 363 single family residential units to different residential units using ITE Trip Generation Manual 11th Edition, each to a maximum of 363 units to demonstrate that each of the other residential types result in less daily, AM, and PM trip generation than single family. The original entitlements are based on ITE Land Use Code (LUC) 210, single family detached. The proposed change contemplates a mix of residential uses. The individual intensities of each use are still being finalized, but not to exceed 363 units. For the purpose of the comparison, villas are considered the same land use code as single family (LUC 210). Similarly, condominiums and townhomes use LUC 220 (lowrise multi-family, duplexes us LUC 215 (single family attached), and apartments use LUC 221 (mid-rise multifamily).

As shown in **Table 1**, the approved land use, single family detached (LUC 210) results in the highest trip generation of any of the other residential types. A comparison using the maximum dwelling units permitted under the current PUD shows that daily trips are reduced by a minimum of 588 trips, AM trip generation is reduced by a minimum of 58 trips, and PM trip generation is reduced by a minimum of 80 trips.

Conclusion

The comparison of the various residential land uses demonstrates that any mix of land uses up to 363 units would result in a net decrease in trip generation over the approved entitlements.

Should you have any questions, please let us know.



Table 1 Comparison of Trip Generation

				Daily		AM I	Peak P	eriod			PM I	Peak P	eriod	
	ITE			Daily Trip		n	0	ut			ln	0	ut	
Land Use	Code	Inter	nsity	Ends	%	Trips	%	Trips	Total	%	Trips	%	Trips	Total
Current Approved Land Use														
Single Family	210	363	DU	3,304	26%	63	74%	178	241	63%	210	37%	124	334
Proposed Land Uses														
Single-Family (Attached)	215	363	DU	2,716	31%	57	69%	126	183	57%	122	43%	92	214
Multi-Family Housing (Low-Rise)	220	363	DU	2,402	24%	32	76%	103	135	63%	112	37%	65	177
Multi-Family Housing (Mid-Rise)	221	363	DU	1,685	23%	34	77%	114	148	61%	87	39%	55	142

Source: | ITE Trip Generation, 11th Edition

Kittelson & Associates, Inc.



Planning and Engineering

November 16, 2010

Mr. Robert E. Vilak, P.E. Marion County, Traffic Engineering Division 412 SE 25th Avenue Ocala, Florida 34471

Subject: Traffic Impact Study Methodology - Ocala Meadows Farms

Dear Mr. Vilak,

This letter summarizes a traffic impact study methodology for a proposed development (Ocala Meadows Farms) located on the northeast quadrant of U.S. 301 and S.R. 326 in Marion County, Florida. The proposed methodology described below was prepared in general accordance with the Marion County *Traffic Impact Analysis* (effective June 19, 2008), hereafter referred to as the *TIA Guidelines*.

Project Description

Ocala Meadows Farms is a development proposed for a 1,200+/- acre site located on the northeast quadrant of U.S. 301 and S.R. 326, as illustrated in Exhibit A. The development is anticipated to include 363 single-family dwelling units and an 18-hole golf course. Access to the site is proposed via connections to S.R. 326 and West Anthony Road. A preliminary site plan for the proposed project is shown in Exhibit B. Build out of the proposed development is anticipated approximately by 2020.

Study Level

Due to the magnitude of the development (anticipated to generate more than 100 net new peak hour trips) a Traffic Study will be conducted according to the Marion County *TIA Guidelines*.

Analysis Timeframe

The Ocala Meadows Farms is estimated to build out by 2020.

Analysis Period

The TIA will be conducted for the PM peak hour conditions since that time period provides for the worst-case traffic scenario for the adjacent roadway system.

Trip Generation

The daily and PM peak hour trip generation of the proposed development was estimated using the Trip Generation (Institute of Transportation Engineers, 8th edition, 2008). The trip generation for the residential component was obtained using the fitted-curve equation. Pursuant to the land use description included in ITE Trip Generation (Land Use 430: Golf Course – page 744), some studied sites (but not all) had driving ranges

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and club houses with pro shop, restaurant, lounge and banquet facilities. The golf course to be included as part of the Ocala Meadows Farms development will include such facilities; therefore, the trip generation rates (daily and peak hour) were determined based on the sites that showed higher than average trip generation rates on the graphs provided in Trip Generation. As a result of this, the following trip generation rates for the golf course component of the proposed development were used:

Daily:

52.78 trips per hole, resulting in 950 trips per day

• PM Peak Hour:

3.89 trips per hole, resulting in 70 trips during the PM peak hour

Table 1 and Exhibit C summarize the resulting trip generation estimate.

Table 1. Summary of Trip Generation Estimate

				Daily	PM Pe	ak Hour	Trips
TE Land Use, Code, and Size				Trips	ln	Out	Total
Single-Family Detached Housing	210 (Fitted Curve)	363	du	3,404	211	124	335
Golf Course	430 (Data Plot)	18	hole	950	32	38	70
		Total C	Gross Trips	4,354	243	162	405

As shown in Table 1, the proposed development is estimated to generate 405 trip ends per hour (243 inbound, 162 outbound) during the PM peak hour of adjacent street traffic.

No internal capture, pass-by, diverted trips, or mode split reductions were applied.

Trip Distribution

The distribution of project traffic was estimated based on output of the latest version of the Central Florida Regional Planning Model (CFRPM 4.5) using the model's select-zone function, as shown in Exhibit D. The socioeconomic data for 2020 was interpolated using the socioeconomic data from the 2012 Existing Plus Committed (E+C) and the 2025 Cost Affordable (CA) scenarios. The model was reviewed in the project vicinity to confirm its accurate reflection of the E+C network. The only adjustment made on the roadway network was along C.R. 200A from U.S 301/441 to NE 28th Street which was modified to show two lanes instead of the four lanes shown on the 2012 E+C travel demand model. In addition, since there is no current development on TAZ 3086 (located west of West Anthony Road and north of S.R. 326 as shown in Exhibit D), the project traffic assigned to this TAZ (6.4 percent) was reassigned to the east and south proportionally to the project traffic assigned to these areas. Finally, driveway assignment was performed based on directness of route driveway use restrictions (Antony West Road Driveway: residents only).

Trip Assignment

According to Marion County TIA Guidelines, existing, background, project, and future traffic volumes will be shown in figures for all intersections within the study area.

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Study Network Identification

According to Marion County *TIA Guidelines*, the study area is to include any public roadway where the net new traffic from the proposed project consumes at least 3 percent of the maximum service volume (based on the FDOT Generalized Level of Service) of the roadway plus one segment beyond. An intersection will be determined to be in the study area if the total number of PM peak hour project trips is 100 or greater.

Project generated traffic was assigned to the roadway network based on the model adjusted trip distribution, and was compared to service capacities on roadways in the project vicinity. Exhibit E summarizes the model adjusted trip distribution and the resultant percent of the service capacity consumed on each roadway segment.

As shown in Exhibit E, the study area will consist of the following roadway segments:

- C.R. 326 from U.S. 27 to C.R. 255A
- C.R. 326 from C.R. 255A to NW 44th Ave/I-75
- C.R. 326 from NW 44th Ave/I-75 to U.S.301
- S.R. 326 from U.S. 301 to C.R. 200A
- S.R. 326 from C.R. 200A to C.R. 35
- U.S. 301 from NW 77th Street to C.R. 326
- U.S. 301 from C.R. 326 to NW 35th Street
- U.S. 301 from NW 35th Street to NW 2nd Street
- West Anthony Road from NE 95th Street to C.R. 326
- West Anthony Road from C.R. 326 to NE 35th Street

The following intersections are anticipated to have 100 or more PM peak hour project trips and; therefore; shall be analyzed:

- S.R. 326 at C.R. 25A
- S.R. 326 at U.S.301
- S.R. 326 at West Anthony Road
- U.S. 301 at NW 35th Street

The intersection significance analysis is provided in Exhibit F.

The site access connections to S.R.326 and West Anthony Street will be analyzed for level of service and turn lane lengths during PM peak hour conditions. The potential need for right-turn lanes at the project site access connections will be evaluated in consideration of guidelines documented in the Florida Department of Transportation's *Driveway Handbook* (March 2005), and the potential need for left-turn lanes at the project site access connections will be evaluated based on research undertaken by M.D. Harmelink, as documented in *Volume Warrants for Left-Turn Storage Lanes at Unsignalized Grade Intersections* in Highway Research Record No. 211.

Existing Traffic Conditions

The existing conditions analysis was based on information obtained from the Ocala/Marion County TPO Roadway Segment Database and included adopted LOS standard, adopted service capacity, existing LOS,

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current traffic counts, number of lanes, posted speed limit, FDOT group classification and existing volume-to-capacity (v/c) ratios. The existing PM peak hour peak direction traffic volume was obtained by multiplying the existing AADT by the observed K100 and D100 values as reported by FDOT traffic counts. Exhibit G summarizes the level of service analysis for existing PM peak hour peak season conditions and indicates that all study roadways are currently operating at or above adopted LOS standard.

Manual turning movement counts will be collected to use as the basis for PM peak hour traffic volumes at the study intersections. Turning movement counts collected during PM peak hour (4:00 PM to 6:00 PM, respectively) in October and November 2010, and they will be adjusted to reflect peak season (100th highest hour) conditions using the latest 2009 FDOT peak season conversion factor (PSCF).

Background Traffic Conditions

Background traffic will be developed by applying annual growth rates to the existing traffic counts and then compounded annually through the buildout year of the project (2020). Historical traffic counts from the Ocala/Marion County TPO (7/9/10) and the 2009 FDOT Florida Traffic Information (FTI) DVD will be used to develop background traffic annual growth rates on county and state roadways respectively, in addition, a minimum two percent annual average growth rate will be used. Exhibit H documents the proposed annual average growth rates and future PM peak hour peak direction volume forecast.

Planned Improvements

There are no construction improvements within the first three years of the FDOT Work Plan and/or Marion County Capital Improvement Program (CIP); therefore, no committed improvements will be included in the analysis.

Project Analysis

The future total conditions analysis will include all impacted roadway links and intersections, as identified above, and will include a PM peak hour peak direction LOS analysis showing the future roadway conditions after applying the background traffic, and the proposed project traffic. The future conditions table will include information such as: functional classification, FDOT generalized LOS Table classifications, LOS capacity, future projected traffic volumes, future PM peak hour peak direction LOS, and future v/c ratios. In addition, future turning movement traffic volumes distinguishing the background, project, and total traffic at the study intersections will be provided.

Unsignalized intersection analyses will be conducted using Highway Capacity Software. Signalized intersection analyses will be conducted using the Synchro software program. Detailed interrupted flow arterial analyses, if necessary, will be conducted using the Synchro software program (signal spacing less than 2 miles) or HCS software for uninterrupted flow roadways (where signal spacing is equal to, or greater than, 2 miles).

Additional analyses will be performed if mitigation is required to offset project impacts.

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Report

A report summarizing the traffic study analysis, findings and all supporting documentation will be submitted for review and approval.

Sincerely,

Tindale-Oliver and Associates, Inc.

Fabricio A. Ponce, P.E. Senior Project Manager

Attachments: Exhibits A through H

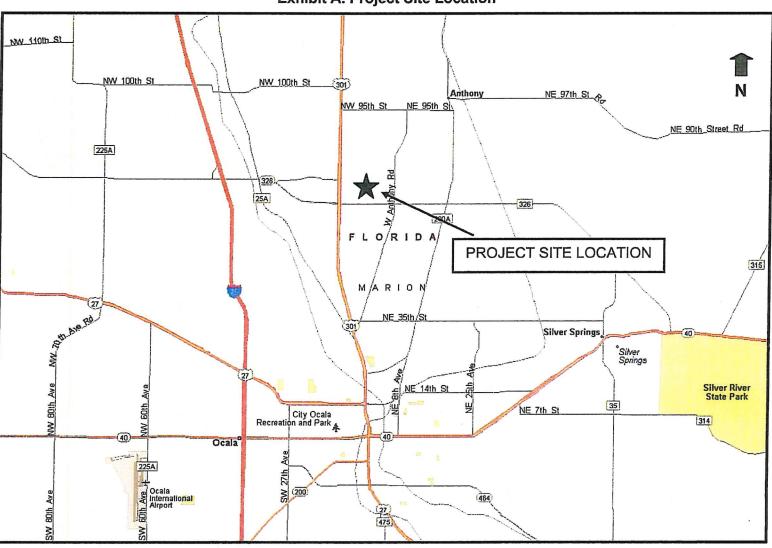
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ATTACHMENT D D-8

EXHIBIT A

Project Site Location

Exhibit A. Project Site Location



A - 1

EXHIBIT B

Preliminary Site Plan

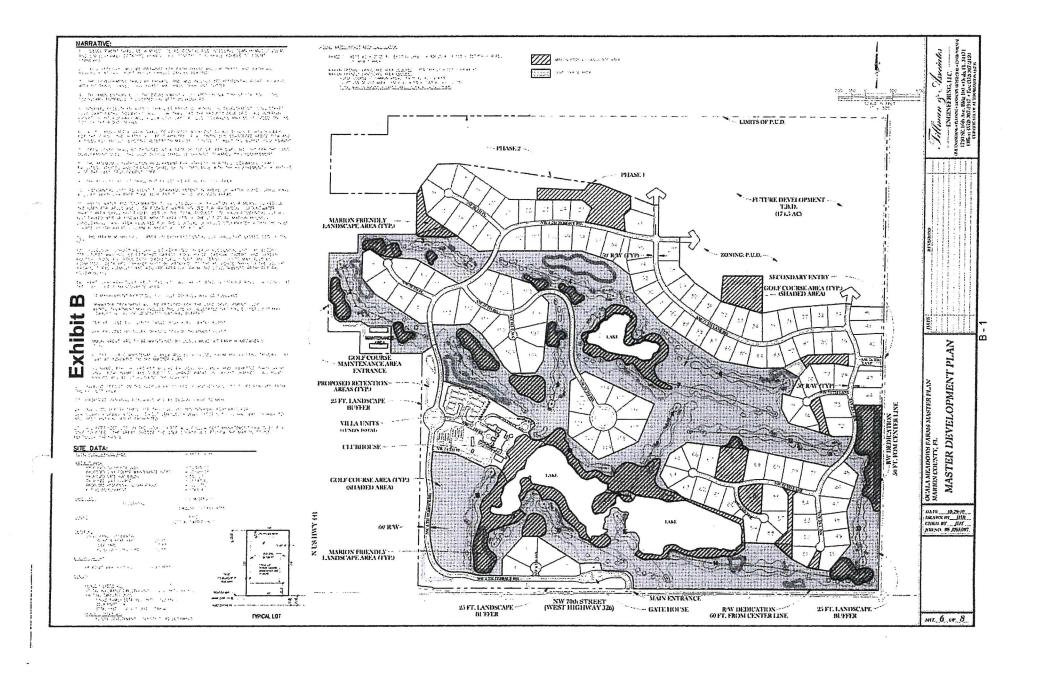


EXHIBIT C

Trip Generation

Exhibit C1

Trip Generation Estimate

TE Land Has Code and St			Daily	PM Pe	ak Hour	Trips
TE Land Use, Code, and Size			Trips	In	Out	Total
Single-Family Detached Housing	210 (Fitted Curve)	363 du	3,404	211	124	335
Golf Course	430 (Data Plot)	18 hole	950	32	38	70
		Total Gross Trips	4,354	243	162	405

Exhibit C2

Golf Course (430)

Average Vehicle Trip Ends vs: Holes On a: Weekday

> Number of Studies: 18 Average Number of Holes:

Directional Distribution: 50% entering, 50% exiting

Trip Generation per Hole

Average Rate	Range of Rates	Standard Deviation
(35.74)	14.50 - 54.44	12.12

950 _ 52.78 >35.74

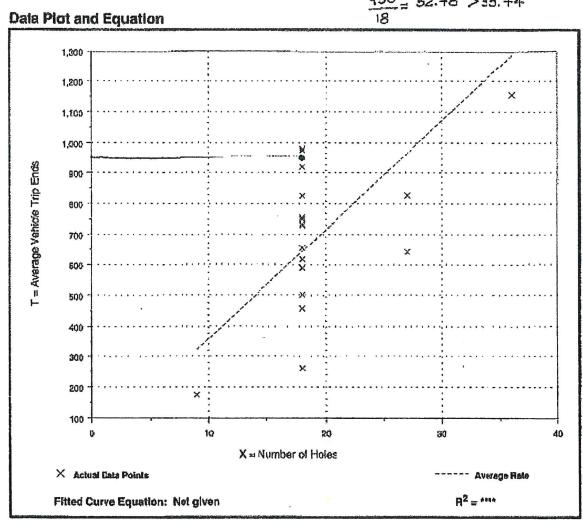


Exhibit C3

Golf Course

(430)

Average Vehicle Trip Ends vs: Holes

On a: Weekday,

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.

Number of Studies: 12 Average Number of Holes: 21

Directional Distribution: 45% entering, 55% exiting

Trip Generation per Hole

Average Rate	Range of Rates	Standard Deviation
(2.78)	1.67 - 4.11	1.79

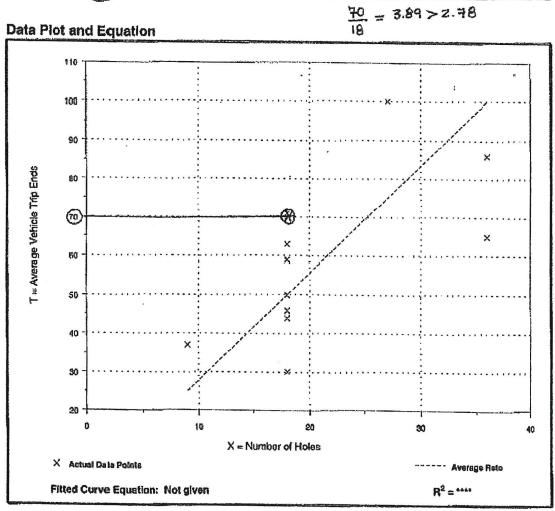


EXHIBIT D

FSUTMS Output
Project Trips Distribution

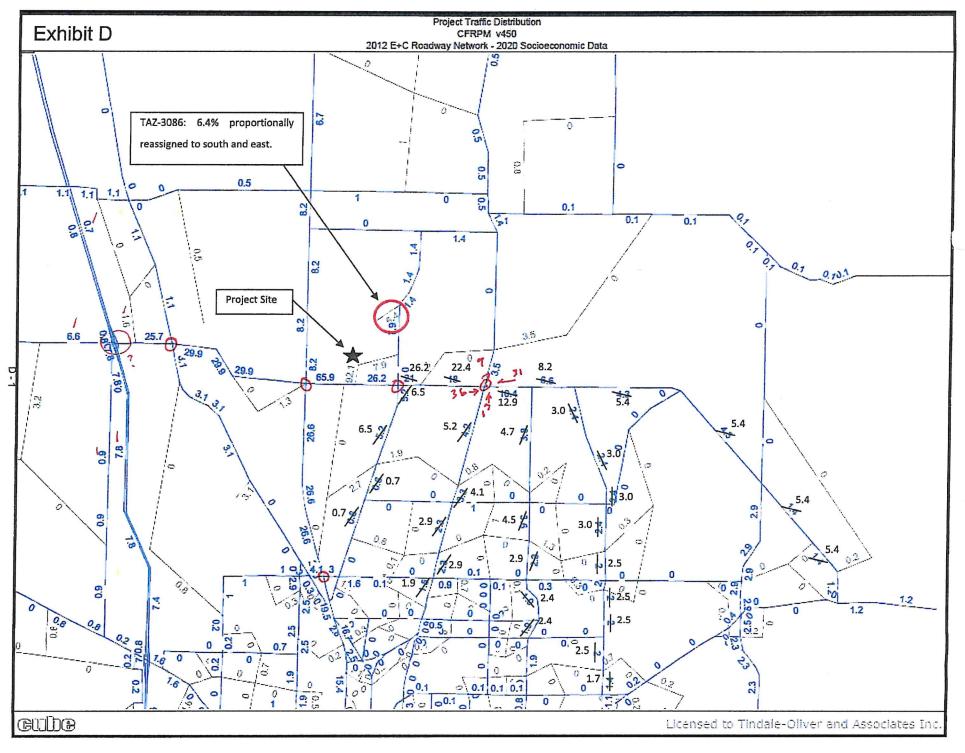


EXHIBIT E

Study Area Identification

EXHIBIT F

Study Intersections Identification

Location: C.R. 326 at NW 44th Avenue

PM Peak Hour Project Traffic

in:

243

	N	lorthbound	1	S	outhbound	d	E	astbound		\	Vestbound		TOTAL
	LT	Т	RT	LT	Т	RT	LT	Т	RT	LT	Т	RT	TOTAL
le.	0.0%	0.0%	0.9%	1.5%	0.0%	0.0%	0.0%	6.5%	0.0%	0.0%	0.0%	0.0%	8.9%
In .	0	0	2	4	0	0	0	16	0	0	0	0	22
0 1	400								Manufacture Property				

Out: 162

	١	orthbound	j	S	Southbound	d		Eastbound		1	Vestbound	1	TOTAL
	LT	Т	RT	LT	Т	RT	LT	T	RT	LT	T	RT	IOIAL
Out	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	6.5%	0.0%	7.4%
Out	0	0	0	0	0	0	0	0	0	1	11	0	12

	1	Northboun	d	S	Southbound	d		Eastbound		١	Vestbound		TOTAL
	LT	T	RT	LT	Т	RT	LT	Τ	RT	LT	T	RT	IOIAL
Total	0	0	2	4	0	0	0	16	0	1	11	0	34

Location: C.R. 326 at I-75 Northbound Ramps

PM Peak Hour Project Traffic

ln:

	N	orthbound	j	S	outhbound	i	1	Eastbound		V	Vestbound		TOTAL
	LT	Т	RT	LT	Т	RT	LT	T	RT	LT	T	RT	TOTAL
	0.0%	0.0%	15.2%	0.0%	0.0%	0.0%	0.0%	8.9%	0.0%	0.0%	0.0%	0.0%	24.1%
In	0	0	37	0	0	0	0	22	0	0	0	0	59
Out:	162												

	N	orthbound		S	outhbound	d		Eastbound		٧	Vestbound		TOTAL
	LT	Т	RT	IOIAL									
Out	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	22.6%	1.5%	24.1%
Out -	0	0	0	0	0	0	0	0	0	0	37	2	39

		Vorthbound	d		Southboun	d		Eastbound		,	Westbound	j	TOTAL
	LT	Т	RT	LT	Т	RT	LT	Т	RT	LT	Т	RT	IOIAL
Total	0	0	37	0	0	0	0	22	0	0	37	2	98

Location: C.R. 326 at C.R. 25A

PM Peak Hour Project Traffic

	1	Vorthbound	i	5	Southbound	d		Eastbound		'	Vestbound	ı	TOTAL
	LT	Т	RT	LT	Т	RT	LT	Т	RT	LT	T	RT	TOTAL
le.	0.0%	0.0%	3.1%	1.1%	0.0%	0.0%	0.0%	25.7%	0.0%	0.0%	0.0%	0.0%	29.9%
ın	0	0	8	3	0	0	0	62	0	0	0	0	73

162 Out:

	N	orthbound		S	Southbound	1		Eastbound		V	Vestbound		TOTAL
	LT	Т	RT	LT	Т	RT	LT	Т	RT	LT	Т	RT	TOTAL
Out	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.1%	25.7%	1.1%	29.9%
Out	0	0	0	0	0	0	0	0	0	5	42	2	49

	١	orthbound	d	5	Southboun	d .		Eastbound		1	Vestbound	1	TOTAL
	LT	Т	RT	LT	Т	RT	LT	T	RT	LT	Т	RT	TOTAL
Total	0	0	8	3	0	0	0	62	0	5	42	2	122

Location: C.R. 326 at U.S. 301

PM Peak Hour Project Traffic

		Northbound	d	5	Southboun	d		Eastbound		1	Vestbound	i	TOTAL
	LT	Т	RT	LT	Т	RT	LT	Т	RT	LT	Т	RT	TOTAL
In	0.0%	0.0%	26.6%	8.2%	0.0%	0.0%	0.0%	31.2%	0.0%	0.0%	0.0%	0.0%	66.0%
		Δ	CE	20	0	^	-	70		-	-	-	404

Out: 162

	N	orthbound		S	outhbound	d		Eastbound		1	Vestbound	i	TOTAL
	LT	T	RT	LT	Т	RT	LT	Т	RT	LT	Т	RT	TOTAL
Out	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	26.6%	31.2%	8.2%	66.0%
Out	0	0	0	0	0	0	0	0	0	43	51	13	107

	1	orthbound	d	S	Southbound	1		Eastbound		١	Vestbound	i	TOTAL
	LT	Т	RT	LT	Т	RT	LT	Т	RT	LT	Т	RT	TOTAL
Total	0	0	65	20	0	0	0	76	0	43	51	13	268

Location: C.R. 326 at West Anthony Road

PM Peak Hour Project Traffic

243

	N	orthbound		S	outhbound		E	astbound		٧	Vestbound		TOTAL
	LT	T	RT	LT	Т	RT	LT	Т	RT	LT	Т	RT	TOTAL
la .	5.3%	1.2%	0.0%	0.0%	0.0%	0.8%	13.2%	0.0%	0.0%	0.0%	21.0%	5.3%	46.8%
In	13	3	0	0	0	2	32	0	0	0	51	13	114

Out: 162

	N	orthbound		S	outhbound	i		Eastbound		1	Vestbound	i	TOTAL
	LT	Т	RT	LT	Т	RT	LT	Т	RT	LT	T	RT	TOTAL
Out	0.0%	0.0%	0.0%	4.9%	1.2%	13.0%	0.6%	21.0%	5.6%	0.0%	0.0%	0.0%	46.3%
Out	0	0	0	8	2	21	1	34	9	0	0	0	75

	N	orthbound	d	S	Southbound	i i	E	astbound		٧	Vestbound		TOTAL
	LT	Т	RT	LT	Т	RT	LT	Т	RT	LT	Т	RT	TOTAL
Total	13	3	0	8	2	23	33	34	9	0	51	13	189

Location: C.R. 326 at C.R. 200A

PM Peak Hour Project Traffic

In:

	1	Northboun	d	5	Southbound	d		Eastbound		V	Vestbound		TOTAL
	LT	Т	RT	LT	Т	RT	LT	Т	RT	LT	T	RT	IOIAL
10	5.2%	0.0%	0.0%	0.0%	0.0%	3.5%	0.0%	0.0%	0.0%	0.0%	12.9%	0.0%	21.6%
in	13	0	0	0	0	9	0	0	0	0	31	0	53
Out:	162												
	1	Northbound	Ė	S	outhbound	i	E	Eastbound		٧	Vestbound		TOTAL
				1					The state of the s		_		IUIAL

	N	lorthbound	Ė	S	Southbound	d		Eastbound		1	Vestbound		TOTAL
	LT	T	RT	LT	Т	RT	LT	T	RT	LT	T	RT	TOTAL
Out	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.5%	12.9%	5.2%	0.0%	0.0%	0.0%	21.6%
Out	0	0	0	0	0	0	6	21	8	0	0	0	35

	N	lorthbound	i	S	outhboun	d	E	astbound		V	Vestbound		TOTAL
	LT	Т	RT	LT	T	RT	LT	Т	RT	LT	T	RT	TOTAL
Total	13	0	0	0	0	9	6	21	8	0	31	0	88

Location: U.S.301 at NW 35th Ave.

PM Peak Hour Project Traffic

243

	N	orthbound	i	S	outhbound		Ē	astbound		٧	Vestbound	i	TOTAL
	LT	Т	RT	LT	Т	RT	LT	Т	RT	LT	Т	RT	TOTAL
In	0.0%	19.5%	0.0%	0.0%	0.0%	0.0%	4.1%	0.0%	0.0%	0.0%	0.0%	3.0%	26.6%
11)	0	47	0	0	0	0	10	0	0	0	0	7	64

162 Out:

	N	orthbound	i	S	outhbound	1		Eastbound		,	d	TOTAL	
	LT	Т	RT	LT	Т	RT	LT	T	RT	LT	Т	RT	TOTAL
Out	0.0%	0.0%	0.0%	3.0%	19.5%	4.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	26.6%
Out	0	0	0	5	32	7	0	0	0	0	0	0	44

	1	Northbound	t	8	Southbound	d		Eastbound		,	3	TOTAL	
	LT	T	RT	LT	T	RT	LT	Т	RT	LT	Т	RT	TOTAL
Total	0	47	0	5	32	7	10	0	0	0	0	7	108

Location: U.S.301 at NW 28th St.

PM Peak Hour Project Traffic

243

	1	Northbound	d	S	outhbound	1	E	astbound		1	Vestbound	į	TOTAL
	LT	Т	RT	LT	T	RT	LT	T	RT	LT	Т	RT	TOTAL
In	0.0%	19.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	19.5%
111	0	47	0	0	0	0	0	0	0	0	0	0	47
Out:	162												
	N	lorthbound	d	Southbound Eastbound Westbound							l	TOTAL	
l	LT	т	RT	IT T PT IT T PT IT T							RT	TOTAL	

											/ C	I TOTAL	
	LT	Т	RT	LT	Т	RT	LT	Т	RT	LT	Т	RT	TOTAL
Out	0.0%	0.0%	0.0%	0.0%	19.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	19.5%
Out	0	0	0	0	32	0	0	0	0	0	0	0	32

	1	Vorthbound	d	S	outhbound		E	astbound		١	Vestbound	1	TOTAL	
	LT	Т	RT	LT	Т	RT	LT	T	RT	LT -		RT	TOTAL	
Total	0	47	0	0	32	0	0	0	0	0	0	0	79	

EXHIBIT G

Existing Level of Service Analysis

EXHIBIT H

Annual Growth Rate Estimate

Exhibit E Study Area Identification Table

	Road Segment		#of	Segment Length	LOS Std.	Juris.	Func. Class	Group Class	Area Type		Da Ser Vol	vice	200	9 AADT	(4)	Project Traffic	Adjusted Project	Project Volume	% of Serv. Cap.	Significant?
On	From	То		_			(1)	(2)		Serv. Cap.	Physical Cap.	Source (3)	AADT	V/C:	LOS	Distrib.	Distrib.		Consumed	,,,
1-75	C.R.318	C.R.326	6D	20.45	В	State	FRWY	FRWY	Rural	56,500	98,300	2009 FDOT Q/LOS	52,500	0.93	В	1.5%	1.5%	65	0.12%	No
1-75	C.R.326	U.S.27	6D	8.55	С	State	FRWY	FRWY	Urban	90,500	122,700	2009 FDOT Q/LOS	56,500	0.62	В	15.2%	15.2%	662	0.73%	No
1-75	U.S.27	S.R.40	6D	2.76	С	State	FRWY	FRWY	Urban	90,500	122,700	2009 FDOT Q/LOS	62,000	0.69	В	13.2%	13.2%	575	0.64%	No
C.R.35	NE97th St. Rd.	S.R.326	2U	3.13	D	County	, MC	RUA -UF	Rural	13,800	27,600	2009 FDOT Q/LOS	2,500	0.18	A	0.0%	0.0%	0	0.00%	No
C.R.35	S.R.326	SR.40	2U	1.82	D	County	COL	NS MCC	Urban	13,680	14,580	2009 FDOT Q/LOS	7,900	0.58	С	2.9%	2.9%	126	0.92%	No
S.R.35	S.R.40	SE 8th St	2U	2.67	D	State	MA	SA C1	Urban	16,500	16,500	2009 FDOT Q/LOS	12,700	0.77	С	2.9%	2.9%	126	0.76%	No
C.R.326	U.S. 27	C.R.255A	2U	6,44	С	County	MC	RUA-UF	Rural	8,100	27,600	2009 FDOT Q/LOS	2,300	0.28	В	0.9%	, 0.9%	39	0.48%	No
C.R.326	C.R.255A	NW 44th Avell-75	2U	2,30	C	County	MC .	RUA-UF	Rural	.8,100	27,600	2009 FDOT QALOS	6,000	0.74	C	6.6%	6,6%	287.	3,54%	Yes
C.R.328	NW 44th Ave/1-75	U.S.301	4D.	2.86	D	County	PA	SA C1	Urban	36,700	36,700	2009 FDOT Q/LOS	18,900	0.51	. В	31.2%	31:2%	1358	3.70%	Yes
S.R.326	U.S.301/441	Project Entrance	20	0.64	D	State	PA:	SA C1	Urban	16,500	16,500	2009 FDOT Q/LOS	9,700	0.59	C	65.9%	65.9%	2869	17.39%	Yes
S.R.326	Project Entrance	C.R.200A	20	1.67	D	State	PA.	SA C1	Urban	16,500	16,500	2009 FDOT Q/LOS	9,700	0.59	C	40.2%	40.2%	1750	10.61%	Yes
S.R.326	C.R.200A	C.R.35	2U	4,11	D	State	PA	SAC1	Urban	16,500	16,500	2009 FDOT Q/LOS	10,500	0.64	C	10.4%	12.9%	563	3.41%	Yes
S.R.326	C.R.35	S.R.40	2U	2.03	D	State	PA	SA C1	Urban	16,500	16,500	2009 FDOT Q/LOS	3.000	0.18	В	1.4%	1.7%	76	0.46%	No
U.S.301	Alachua C.L.	U.S.301	4D	12.18	В	State	PA	RUA -UF	Rural	26,300	59,100	2009 FDOT Q/LOS	8,500	0.32	В	1.7%	1.7%	74	0.28%	No
U.S.301	NW 77th St.	C.R.326	4D	0.51	В	State	PA	RUA -UF	Rural	26,300	59,100	2009 FDOT Q/LOS	25,200	0.96	В	8.2%	8.2%	357	1.36%	No
U.S:301	C.R.326	NW 35th St	4D	3,11	D	State	PA	SA C1	Urban	36,700	36,700	2009 FDOT Q/LOS	19,700	0.54	B	26.6%	26.6%	1158	3:16%	Yes
U.S.301	NW 35th St	NW 2nd St	4D	1.87	D	State	PA	SA C1	Urban	36,700	36,700	2009 FDOT Q/LOS	27,000	0.74	В	19.5%	19.5%	849	2.31%	No
U.S.301	NW 2nd St.	S.R.464	6D	1.17	D	State	PA	SA C2	Urban	50,300	53,100	2009 FDOT QAOS	35,500	0.71	c	10.9%	10.9%	475	0.94%	No
C.R.25A	C.R.329	C.R.326	2U	4.53	D	County	MJC	RUA -UF	Rural	13,800	27,600	2009 FDOT Q/LOS	7,400	0.54	C	1.1%	1.1%	48	0.35%	No
C.R.25A	C.R.326	U.S.441/301	2U	4.18	E	County	COL	NS MCC	Urban	14,580	14,580	2009 FDOT Q/LOS	5,500	0.38	В	3.1%	3.1%	135	0.93%	No
C.R.200A	U.S.301	NE 100th St	2U	7.29	D	County	MA	RUA -UF	Rural	13,800	27,600	2009 FDOT Q/LOS	5,000	0.36	c	0.5%	0.5%	22	0.16%	
C.R.200A	NE 100th St	C.R.326	2U	2.54	D	County	MA	RUA -UF	Rural	13,800	27,600	2009 FDOT Q/LOS	9,600	0.70	D	3.5%	3.5%	152	1,10%	
C.R.200A	C.R.326	NE 35th SL	2U	2.58	E	County	MA	NS MCC	Urban	14,580	14,580	2009 FDOT Q/LOS	9,200	0.63	C	4.2%	5.2%	228	1.56%	
C.R.200A	NE 35th St.	4th Ct.	2U	1.18	E	County	MA	NS MCC	Urban	14,580	14,580	2009 FDOT Q/LOS	11,700	0.80	<u> </u>	1.5%	1.9%	81	0.56%	No
C.R.200A	4th Ct.	U.S.441	2U	0.60	E	County	MA	NS MCC	Urban	14,580	14,580	2009 FDOT Q/LOS		0.63	C	0.9%	1.1%	49	0.34%	
C.R.225A/W 80th Ave.	C.R.329	C.R.326	2U	6.93	D	County	MC	RUA -UF	Rural	13,800	27,600	2009 FDOT Q/LOS	2,700	0.03	В	0.5%	0.0%	0	0.00%	
C.R.225A/W 80th Ave.	C.R.326	U.S.27	2U	2.68	E	County	COL	NS MCC	Urban	14,580	14,580	2009 FDOT Q/LOS	6,000	0.20	c	2.5%	2.5%	109	0.75%	
NW 35th St.	NW 27th Ave.	U.S.301	2U	1.31	E	County	COL	NS MCC	Urban	14,580	14,580	2009 FDOT Q/LOS	8,600	0.59	c	4.1%	4.1%	179	1.23%	
NW 35th St.	U.S.301	C.R.200A	2U	1.42	E	County	COL	NS MCC	Urban	14,580	14,580	2009 FDOT Q/LOS		0.39	c	3.0%	3.0%	131	0.90%	
NE 100th St.	U.S.441	C.R.200A	2U	2.30	- -	County	MC	RUA -UF	Rural	13,800	27,600	2009 FDOT Q/LOS	1,300	0.49	В	1.0%	1.0%	44	0.30%	No
NW 100th St.	U.S.441	C.R.225A	2U	5.28	D	County	MC	RUA -UF	Rural	13,800	27,600	2009 FDOT Q/LOS	1,300	0.09	В	1.0%	1.0%	44	0.32%	No
NE 25th Ave.	C.R.326	NE 35th St.	2U	2.51	E	County	COL	NS MCC	Urban	14,580	14,580	2009 FDOT Q/LOS	5,500	0.03	c	3.8%	4.7%	206	1.41%	No
NE 25th Ave.	NE 35th St.	NE 14th St./S.R.492	2U	1.60	E	County	COL	NS MCC	Urban	14,580	14,580	2009 FDOT Q/LOS	13,200	0.38	D	3.6%	4.7%	195	1.34%	No
NE 25th Ave.	NE 14th St./S.R.492	S.R.40	4D	0.94	E	County	MA	NS MCC	Urban	31,590	31,590	2009 FDOT Q/LOS	15,700	0.50	c	1.9%	2.4%	103	0.33%	No No
NE 36th Ave.	C.R.326	NE 35th St.	20	2.58	듄	County	COL	NS MCC	Urban	14,580	14,580	2009 FDOT Q/LOS	8,100	0.56	c	2.4%	3.0%	130	0.89%	No No
NE 36th Ave.	NE 35th St.	NE 14th St./S.R.492	2U	1.51	E	County	MA	NS MCC	Urban	14,580	14,580	2009 FDOT Q/LOS	10,900	0.75	D	2.0%	2.5%	108	0.74%	
NE 36th Ave.	NE 14th St./S.R.492	S.R.40	4D	0.25	E	County	MA	NS MCC	Urban	31,590	31,590	2009 FDOT Q/LOS	15,200	0.75	C	2.0%	2.5%	10B	0.74%	
	NE 95th St.		2U	1.60	D	County	MAC	RUA -UF		13,800	27,600	2009 FDOT Q/LOS		0.48	В	1,4%	1.4%	61	0.34%	NO NO
W Anthony Rd.		Project Entrance	2U		D	-	WIC		Rural	13,800	27,600	2009 FDOT Q/LOS		0.09	_	19.5%	19.5%			
to Takinony . to.	Project Entrance	C.R.326		0.47	-	County		RUA -UF					1,200		B			849	6.15%	
W Anthony Rd.	C.R.326	NE 35th St.	2U	2.61	E	County	COL	NS MCC	Urban	15,600	15,600	2009 FDOT Q/LOS		0.33	C	5.2%	6.5%	282	1.81%	No No
W Anthony Rd.	NE 35th St.	U.S.441	2U	0.35	E	County	COL	NS MCC	Urban	15,600	15,600	2009 FDOT Q/LOS	1,200	0.08	C	1.5%	1.9%	81	0.52%	
NE 95th St.	U.S.441	C.R.200A	2U	2.43	D	County	MC	RUA -UF	Rural	13,800	27,600	2009 FDOT Q/LOS	2,000	0.14	В	1.4%	1.4%	61	0.44%	No
NE 97th St.Rd./NE 90th St.	C.R.200A	C.R.315	2U	8.29	D	County	MC	RUA -UF	Rural	13,680	14,580	2009 FDOT Q/LOS	2,800	0.20	В	1.0%	1.0%	44	0.32%	No No

NE 97th St.Rd./NE 90th St. | C.R.200A | C.R.315 | 2U | 8.29 | D | County | MC | RUA-UF | Rural | 13,880 | 14,580 | 2009 FDOT OLOS | 2,800 | 0.20 | B |

(1) Funcional Classification: FRWY = Freeway, PA = Principal Arterial, MA = Major Arterial, MJC = Major Collector, MC = Minor Collector, COL = Collector (Ocale/Marion TPO Road Segment Information, 9/29/09)

(2) Group Classification: FRWY = Freeway, SA C! = State Arterial Class 1, SA C2 = State Arterial Class 2, NS MCC = Non State Roadway, RUA-UF = Rural Undeveloped Area Uninterrupted Flow (Ocale/Marion TPO Road Segment Information, 9/29/09)

(3) 2009 FDOT Generalized Level of Service (FDOT OLOS Handbook Tables, 104/10)

(4) County Roadways: 2009 AADT (Ocale/Marion TPO Annual Traffic Counts, 7/9/10); State Roadways: 2009 FDOT FTI DVD

(5) VIC= 2008 Existing AADTA.OS Service Capacity

(6) Significant when proposed project traffic is 3% or more of the maximum service volume

Exhibit G Level of Service Analysis - 2010 Existing PM Peak Hour Peak Season Conditions

			E+C Lanes	E+C Segment Length	LOS Std	Juris.	Posted Speed Limit (mph)	Func. Class. (1)	Group Class. (2)	Area Type (3)	Right Turn Lanes?		LOS	3 Thres	holds			Peak Hour Peak Direction Service Volume		Existin	g Traffic	Chera	cteristics	201	I0 Peak I Volume	lour	L	os	v	ılc
On	From	Та					(при					A	В	С	D	E	Sarv. Cap.	Source (4)	2010 AADT	K100	D Factor	Pk. Dir.	Source	Total (5)	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
C.R.326	U.S. 27	C.R.255A	2U	6.44	С	County	55	MC	RUA -UF	Rural	n/a	0	240	430	740	1,480	430	2009 FDOT Q/LOS	2,300	0.0970	0.5500	WB	TOA Estimate	223	100	123	В	В	0.23	0.29
C.R.326	C.R.255A	NW 44th Ave/1-75	2U	2.30	С	County	45/55	MC	RUA -UF	Rural	n/a	0	240	430	740	1,480	430	2009 FOOT Q/LOS	6,100	0.0970	0.5500	WB	TOA Estimate	592	266	326	С	С	0.62	0.76
C.R.326	NW 44th Ave/I-75	U.S.301/441	4D	2.86	D	County	45/55	PA	SA C1	Urban	No	0	1,560	1,890	1,960	1,960	1,960	2009 FDOT Q/LOS	19,300	0.0939	0.5921	EB	County	1,812	1073	739	В	В	0.55	0,38
S.R.326	U.S.301/441	Project Entrance	2U	0.64	D	State	55	PA	SA C1	Urban	Yes	0	570	900	970	970	970	2009 FDOT Q/LOS	11,200	0.0939	0.5921	EB	FDOT CS 36-0486	1,052	623	429	С	В	0.64	0.44
S.R.326	Project Entrance	C.R.200A	2U	1.67	D	State	55	PA	SA C1	Urban	No	0	510	820	880	880	880	2009 FDOT QAOS	11,200	0.0939	0.5921	EB	FDOT CS 36-0486	1,052	623	429	С	В	0.71	0.49
S.R.326	C.R.200A	C.R.35	2U	4.11	D	State	55	PA	SA C1	Urban	No	0	510	820	880	880	880	2009 FDOT Q/LOS	12,400	0.0939	0.5921	EB	FDOT CS 36-0487	1,164	689	475	С	В	0.78	0.54
U.S.301	NW 77th St.	C.R.326	4D	0.51	В	State	55/65	PA	RUA -UF	Rural	Yes	0	1,480	2,320	2,940	3,340	1,480	2009 FDOT Q/LOS	23,700	0.0939	0.5921	NB	FDOT CS 36-1004	2,225	1317	908	В	В	0.89	0.61
U.S.301	C.R.326	NW 35th St	4D	3.11	D	State	55	PA	SA C1	Urban	Yes	0	1,640	1,980	2,060	2,060	2,060	2009 FDOT Q/LOS	20,900	0.0939	0.5921	NB	FDOT CS 36-0481	1,963	1162	801	В	В	0.56	0.39
U.S.301	NW 35th St	NW 2nd St.	4D	1.87	D	State	45	PA	SA C1	Urban	Yes	0	1,640	1,980	2,060	2,060	2,060	2009 FDOT Q/LOS	29,200	0.0939	0.5921	SB	FDOT CS 36-5044	2,742	1118	1,624	В	В	0.54	0.79
W Anthony Rd.	NE 95th SL	Project Entrance	2U	1.60	D	County	40	MJC	RUA -UF	Rural	No			430				2009 FDOT Q/LOS		0.0970			TOA Estimate	116	64	52	В	В	0.09	0.07
W Anthony Rd.	Project Entrance	C.R.326	2U	0.47	D	County	40	MJC	RUA -UF	Rural	No	0	240	430	740	1,480	740	2009 FDOT Q/LOS	1,200	0.0970	0.5500	NB	TOA Estimate	116	64	52	В	В	0.09	0.07
W Anthony Rd.	C.R.326	NE 35th St.	20	2.61	E	County	40	COL	NS MCC	Urban	No	0	680	1.400	1.500	1.500	1,500	2009 FDOT Q/LOS	5.200	0.0970	0.5500	NB	TOA Estimate	504	277	227	В	В	0.18	0.15

W Antirony Pot. Urs. State I Residents. 120 | 2.51 | E County | 40 COL INSIMCE Urban | No | 1 880 | 1,400 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 1,500 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,

ATTACHMENT D D-32

Exhibit H
Average Annual Growth Rate Estimates

F	Roadway Segment							Annual	Traffic Co (1)	unts						2010	2020	Average	Adjusted Average	Adjusted	Adjusted
On	From	То	Juris.	Source	Site ID	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	AADT Estimate	AADT Forecast	Annual Growth Rate	Annual Growth Rate	2010 AADT	2020 AADT
C.R.326	US 27	C.R.255A	County	County	A-6	n/a	n/a	n/a	n/a	n/a	2,200	2,400	2,300	2,300	2,300	2,330	2,430	0.4%	2.0%	2,300	2,800
C.R.326	C.R.255A	NW 44th Ave/I-75	County	County	A-7	n/a	n/a	n/a	n/a	n/a	6,400	6,600	6,600	6,000	6,000	5,900	4,500	-2.4%	2.0%	6,100	7,300
C.R.326	NW 44th Ave/i-75	U.S.301/441	County	County	A-10	n/a	n/a	n/a	n/a	22,500	22,500	22,500	21,000	19,800	18,900	17,970	8,070	-5.5%	2.0%	19,300	23,100
S.R.326	U.S.441	C.R.200A	State	FDOT	0486	n/a	10,000	10,800	11,400	12,200	13,000	12,400	11,900	10,500	9,700	11,247	11,097	-0.1%	2.0%	11,200	13,500
S.R.326	C.R.200A	C.R.35	State	FDOT	0487	n/a	9,600	10,300	10,800	11,600	12,600	11,900	11,800	12,600	10,500	12,367	14,500	1.7%	2.0%	12,400	14,800
S.R.326	C.R.35	NW 2nd St.	State	FDOT	0488	n/a	3,800	3,300	4,200	4,000	4,400	4,000	4,100	3,500	3,000	3,578	3,111	-1.3%	2.0%	3,600	4,300
U.S.301	NW 77th St.	C.R.326	State	FDOT	1004	21,300	23,000	24,000	25,000	26,500	25,000	25,500	25,000	21,800	21,300	23,727	23,521	-0.1%	2.0%	23,700	28,500
U.S.301	C.R.326	NW 35th St	State	FDOT	0481	21,000	21,500	21,000	23,000	23,000	22,000	21,500	22,000	20,700	19,700	20,947	19,868	-0.5%	2.0%	20,900	25,100
U.S.301	NW 35th St	NW 2nd St.	State	FDOT	5044	34,000	33,000	31,500	32,000	34,000	36,500	31,000	31,500	30,000	27,000	29,233	24,112	-1.8%	2.0%	29,200	35,100
W Anthony Rd.	NE 95th St.	C.R.326	County	County	B-49	n/a	n/a	n/a	n/a	n/a	1,400	1,500	1,300	1,200	1,200	1,110	410	-6.3%	2.0%	1,200	1,500
W Anthony Rd.	C.R.326	NE 35th St.	County	County	C-32	n/a	n/a	n/a	n/a	n/a	5,600	6,000	6,000	5,200	5,100	5,040	3,240	-3.6%	2.0%	5,200	6,200

(1) County Roadways: 2009 AADT (Ocala/Marion TPO Annual Traffic Counts, 7/9/10); State Roadways: 2009 FDOT FTI DVD