

**MINNEOLA ADJUNCT PROJECT**

Project № 16-065

August 2016

**TRANSPORTATION FACILITIES ANALYSIS  
FOR COMPREHENSIVE PLAN AMENDMENT  
LAKE COUNTY, FL**

*Prepared by:*



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## **EXECUTIVE SUMMARY**

This traffic analysis was performed to support a proposed comprehensive plan amendment for the Minneola Adjunct property in the City of Minneola. The site is located south of the Turnpike and east of Hancock Road Extension. The proposed amendment will increase the allowable development on the ±21-acre property from 7 single family units to 160 multifamily units.

The results of the study as documented herein are summarized below:

- The proposed amendment will generate 1,002 additional trips per day, of which 96 trips occur during the PM peak hour.
- An analysis of existing conditions reveals that all study roadway segments currently operate within their adopted LOS standards.
- Transportation improvements are planned or programmed in the study area surrounding the property including the new Turnpike interchange, the Hancock Road extension to CR 561A, and the expansion of Citrus Grove Road to 4 lanes between US 27 and Hancock Road.
- An analysis of projected capacity demand on the transportation network conducted for 2030 background conditions indicates that segments of CR 561, US 27, and SR 50 are projected to be deficient. The project's impact on the deficient segments is negligible and does not exceed 0.4% of capacity.
- The project development will undergo further analysis as development activity occurs to evaluate the project's impact on the transportation network and to assess traffic operations in the vicinity of the site.

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## 1.0 INTRODUCTION

This traffic analysis was performed to support an application to amend the comprehensive plan of the City of Minneola for the subject property. The site is located south of the Turnpike and east of the Hancock Road Extension. **Figure 1** depicts the location of the project site and the surrounding roadway network. The property information is included in **Appendix A**.

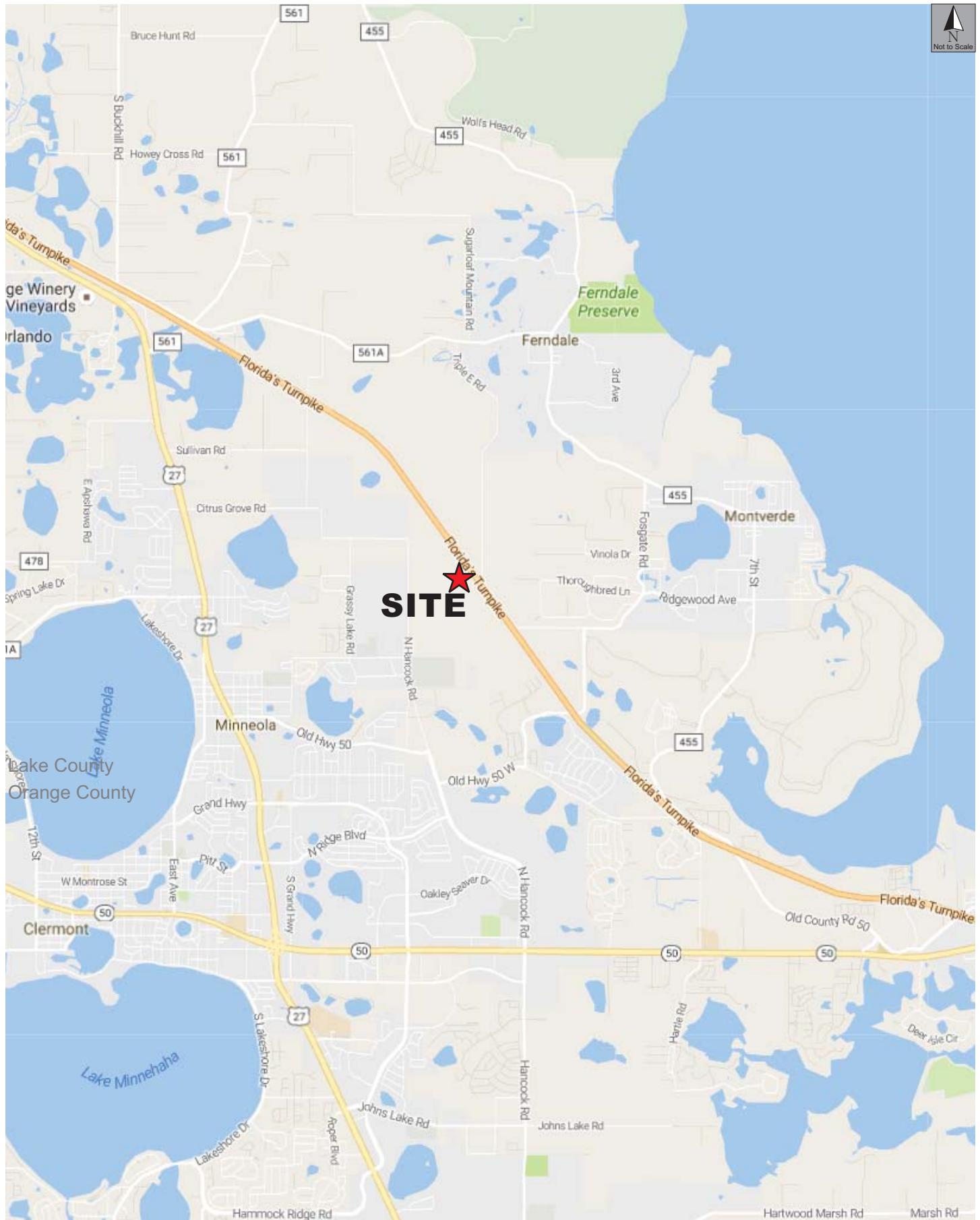
The maximum allowable development program for the ±21-acre Minneola Adjunct property under the existing and proposed Future Land Use designations are shown in **Table 1**.

**Table 1**  
**PUD Development Program**

Land Use	Size
<b>Approved Land Use</b>	
Single Family Homes	7 DU
<b>Proposed Land Use</b>	
Multifamily Apartments	160 DU

The following analysis was conducted to determine the impact of the amendment on the transportation network in the surrounding area. The impact area was determined in coordination with the Lake~Sumter MPO based on the typical traffic analysis methodology. The analysis considers the project's impacts on the roadway segments within 4.55 driven miles from the project site, which includes the facilities listed in **Table 2**.

Data used in the analysis includes information obtained from the Client, the Lake~Sumter MPO, the Florida Department of Transportation, and/or collected by Traffic & Mobility Consultants, LLC (TMC).



**Table 2**  
**Study Roadway Segments**

Seg ID	Roadway	Segment Limits	
		From	To
100	BLACKSTILL LAKE ROAD	FOSGATE ROAD	CR 50
1290	C.R. 50	US 27	TURKEY FARM ROAD
1300	C.R. 50	TURKEY FARM ROAD	CR 455
1450	C.R. 561	HOWEY CROSS ROAD	TURNPIKE ROAD / CR 561A
1460	C.R. 561 / C.R. 561A	TURNPIKE ROAD / CR 561A	US 27
1470	C.R. 561 (MAIN AVENUE)	US 27	EAST AVENUE
1540	C.R. 561A	TURNPIKE ROAD / CR 561	SCRUB JAY LN
1545	C.R. 561A	SCRUB JAY LN	CR 455
1560	C.R. 561A	CR 565A	JALARMY ROAD
1670	CITRUS TOWER BOULEVARD	US 27	OAKLEY SEAVER DRIVE
1680	CITRUS TOWER BOULEVARD	OAKLEY SEAVER DRIVE	SR 50
1690	CITRUS TOWER BOULEVARD	SR 50	HOOKS STREET
1910	GRAND HIGHWAY	CITRUS TOWER BOULEVARD	SR 50
1920	GRASSY LAKE RD/CITRUS GROVE RD	US 27	TURKEY FARM ROAD
2060	N. HANCOCK ROAD	CR 50	N RIDGE BOULEVARD
2070	N. HANCOCK ROAD	N RIDGE BOULEVARD	SR 50
2080	S. HANCOCK ROAD	SR 50	HOOKS STREET
3540	SR 50	US 27	HANCOCK ROAD
3550	SR 50	HANCOCK ROAD	CR 455
3620	TURKEY FARM ROAD	E GRASSY LAKE ROAD	CR 50
3830	US 27/SR 25	SR 19	CR 561
3840	US 27/SR 25	CR 561	CR 561A
3850	US 27/SR 25	CR 561A	CR 561/ MAIN AVENUE
3860	US 27/SR 25	CR 561/ MAIN AVENUE	CR 50
3870	US 27/SR 25	CR 50	GRAND HIGHWAY
3880	US 27/SR 25	GRAND HIGHWAY	SR 50

## 2.0 EXISTING CONDITIONS ANALYSIS

Existing roadway capacity was analyzed to establish the current operating conditions of the transportation facilities. **Table 3** presents a summary of the existing conditions for the roadway segments examined in this study. Roadway segments were analyzed by comparing the existing Level of Service (LOS) for each roadway segment with the adopted LOS standard. Existing PM peak hour directional traffic volumes and capacities were obtained from the Lake County TCMS and the latest Lake County Traffic Counts, and FDOT Online Traffic Data. Relevant data sheets are included in **Appendix B**.

The results of the existing conditions analysis reveal that all roadway segments within the project's study area currently operate at satisfactory LOS.

**Table 3**  
**Existing Roadway Capacity Analysis**

Road Name	From	To	Seg ID	No Lns	LOS Std	Cap	Existing Volume NB/EB	Existing Volume SB/WB	Existing LOS
BLACKSTILL LAKE ROAD	FOSGATE ROAD	CR 50	100	2	D	612	144	156	C
C.R. 50	US 27	TURKEY FARM ROAD	1290	2	D	792	378	272	C
C.R. 50	TURKEY FARM ROAD	CR 455	1300	2	D	792	448	172	C
C.R. 561	HOWEY CROSS ROAD	TURNPIKE ROAD / CR 561A	1450	2	D	720	287	338	C
C.R. 561 / C.R. 561A	TURNPIKE ROAD / CR 561A	US 27	1460	2	D	720	643	474	D
C.R. 561 (MAIN AVENUE)	US 27	EAST AVENUE	1470	2	D	675	98	74	C
C.R. 561A	TURNPIKE ROAD / CR 561	SCRUB JAY LN	1540	2	D	720	82	63	C
C.R. 561A	SCRUB JAY LN	CR 455	1545	2	D	720	85	61	C
C.R. 561A	CR 565A	JALARMY ROAD	1560	2	D	675	174	200	C
CITRUS TOWER BOULEVARD	US 27	OAKLEY SEAVER DRIVE	1670	2	D	792	444	601	C
CITRUS TOWER BOULEVARD	OAKLEY SEAVER DRIVE	SR 50	1680	4	D	1,800	684	692	C
CITRUS TOWER BOULEVARD	SR 50	HOOKS STREET	1690	4	D	1,800	634	922	C
GRAND HIGHWAY	CITRUS TOWER BOULEVARD	SR 50	1910	2	D	675	281	309	C
CITRUS GROVE RD	US 27	TURKEY FARM ROAD	1920	2	D	675	63	67	C
N. HANCOCK ROAD	CR 50	N RIDGE BOULEVARD	2060	4	D	1,800	472	448	C
N. HANCOCK ROAD	N RIDGE BOULEVARD	SR 50	2070	4	D	1,800	643	552	C
S. HANCOCK ROAD	SR 50	HOOKS STREET	2080	4	D	1,800	637	932	C
SR 50	US 27	HANCOCK ROAD	3540	6	D	3,020	1982	2383	C
SR 50	HANCOCK ROAD	CR 455	3550	6	D	3,020	1982	2383	C
TURKEY FARM ROAD	E GRASSY LAKE ROAD	CR 50	3620	2	D	675	14	22	C
US 27/SR 25	SR 19	CR 561	3830	4	C	1,740	1007	838	C
US 27/SR 25	CR 561	CR 561A	3840	4	C	1,910	1308	1572	C
US 27/SR 25	CR 561A	CR 561/ MAIN AVENUE	3850	4	C	1,910	1512	1818	C
US 27/SR 25	CR 561/ MAIN AVENUE	CR 50	3860	4	C	1,910	1512	1818	C
US 27/SR 25	CR 50	GRAND HIGHWAY	3870	6	C	2,940	1843	1532	C
US 27/SR 25	GRAND HIGHWAY	SR 50	3880	6	C	2,940	1499	1246	C

### **3.0 TRANSPORTATION IMPROVEMENTS**

Short and long term transportation network improvement plans were reviewed to identify any roadway network changes that will affect the project or the study area. This review includes the Lake County Capital Improvement Plan (CIP) as outlined in the Lake~Sumter MPO CIP Map Tool, and the Lake~Sumter MPO Long Range Transportation Plan (LRTP).

The CIP and LRTP include the transportation network improvements outlined in **Table 4**. The detailed sheets and maps are included in **Appendix C**.

**Table 4**  
**Roadway Network Improvements**

Roadway	Limits	Project
Turnpike	Minneola Interchange	New Interchange
Hancock Rd Ext	Hancock Rd to CR 561A	New 4-Lane Rd
Citrus Grove Rd	US 27 to Hancock Rd Ext	Add Lanes (4-Lanes)
Turnpike	OC Line to Minneola Interchange	Add Lanes

## 4.0 PROJECT TRAFFIC

### 4.1 Trip Generation

Information published by the Institute of Transportation Engineers (ITE) in the *Trip Generation Manual, 9<sup>th</sup> Edition* was used to determine the trip generation of the proposed development as summarized in **Table 5**. The trip generation for the existing and proposed FLU were compared to determine the net increase in trips resulting from the amendment. Trip generation information sheets are included in **Appendix D**.

**Table 5**  
**Trip Generation Analysis**

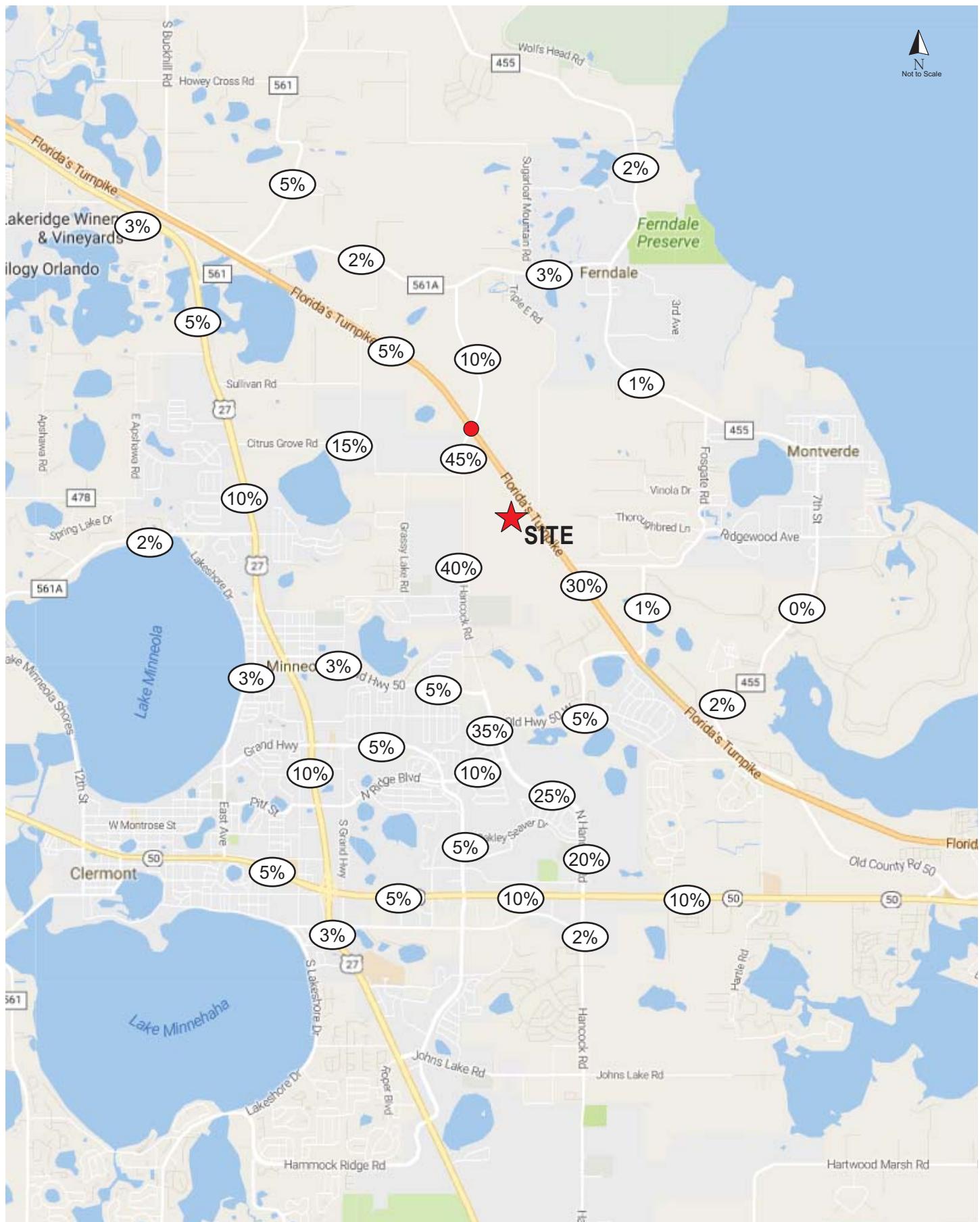
ITE Code	Land Use	Size	Daily		PM Peak Hour			
			Rate	Trips	Rate	Total	Enter	Exit
<b>Approved Land Use</b>								
210	Single Family	7 DU	12.99	91	1.37	10	6	4
<b>Proposed Land Use</b>								
220	Apartment	160 DU	6.83	1,093	0.66	106	69	37
<b>Net Trip Generation Differential</b>			<b>1,002</b>		<b>96</b>	<b>63</b>	<b>33</b>	

*Trip Generation analysis based on ITE Trip Generation Manual, 9<sup>th</sup> Edition*

The proposed amendment is projected to result in 1,002 additional trips per day, of which 96 trips occur during the PM peak hour.

### 4.2 Trip Distribution/Assignment

The trip distribution pattern for project trips was determined using the Central Florida Regional Transportation Model (CFRPM). The model network was modified to include the proposed project Traffic Analysis Zone (TAZ). The model was then executed with a select zone analysis. The model generated distribution was slightly modified using professional judgement to reflect specific local network preferences. The CFRPM model distribution output plot is provided in **Appendix E** and the final distribution pattern is illustrated in **Figure 2**.



## **5.0 PROJECTED CONDITIONS ANALYSIS**

Analysis of projected conditions in the year 2030 was conducted to determine the potential capacity demand associated with the proposed comprehensive plan amendment.

### **5.1 Projected Traffic Volume**

2030 Background traffic volumes were calculated based on a minimum 2% annual growth rate for all existing roadway segments. The background traffic on the segments of Hancock Road that are under construction were extracted from the transportation model. In addition to background traffic, trips from the property were added to the study roadway segments using the project trips distribution pattern. The total projected traffic volume on the transportation network for the study horizon in the year 2030 was calculated by adding the projected background volume and project trips for each study segment.

### **5.2 Projected Roadway Capacity**

The analysis of projected LOS was conducted for the background traffic volumes and for the total volume, including project traffic. The LOS analysis as summarized in **Table 6** indicates that three roadways are projected to be deficient under background traffic volumes. The roadways are listed as follows:

- CR 561 from CR 561A to US 27 is projected to be deficient under projected background volume. The project's impact to this segment is less than 0.3% of capacity.
- SR 50 from US 27 to CR 455 is projected to be deficient under projected background volume. The project's impact to this roadway is less than 0.3% of capacity.
- US 27 from CR 561 to CR 50 is projected to be deficient under projected background volume. The project's impact to this segment is less than 0.4% of capacity.

The results of the capacity analysis reveal that the proposed amendment will not cause any roadway segments to be deficient. Additionally, the project's impact is negligible (less than 0.4%) on roadway segments projected to be deficient in the year 2030. Finally, the project will undergo further analysis through the City's concurrency management system as part of any development application.

**Table 6**  
**Projected Roadway Capacity Analysis**

Road Name	From	To	Seg ID	No Lns	LOS Std	Cap	2030 Backg'd		Backg'd LOS	Proj Dist	Project Trips		2030 Backg'd		Total LOS
							NB/EB	SB/WB			NB/EB	SB/WB	NB/EB	SB/WB	
BLACKSTILL LAKE ROAD	FOSGATE ROAD	CR 50	100	2	D	612	184	200	C	1%	0	1	184	201	C
C.R. 50	US 27	TURKEY FARM ROAD	1290	2	D	792	484	348	C	5%	3	2	487	350	C
C.R. 50	TURKEY FARM ROAD	CR 455	1300	2	D	792	573	220	C	5%	2	3	575	223	C
C.R. 561	HOWEY CROSS ROAD	TURNPIKE ROAD / CR 561A	1450	2	D	720	367	433	C	5%	2	3	369	436	C
C.R. 561 / C.R. 561A	TURNPIKE ROAD / CR 561A	US 27	1460	2	D	720	823	607	F	3%	1	2	824	609	F
C.R. 561 (MAIN AVENUE)	US 27	EAST AVENUE	1470	2	D	675	125	95	C	3%	2	1	127	96	C
C.R. 561A	TURNPIKE ROAD / CR 561	SCRUB JAY LN	1540	2	D	720	105	81	C	2%	1	1	106	82	C
C.R. 561A	SCRUB JAY LN	CR 455	1545	2	D	720	109	78	C	3%	1	2	110	80	C
C.R. 561A	CR 565A	JALARMY ROAD	1560	2	D	675	223	256	C	2%	1	1	224	257	C
CITRUS TOWER BOULEVARD	US 27	OAKLEY SEAVER DRIVE	1670	2	D	792	568	769	D	5%	3	2	571	771	D
CITRUS TOWER BOULEVARD	OAKLEY SEAVER DRIVE	SR 50	1680	4	D	1,800	876	886	C	5%	3	2	879	888	C
CITRUS TOWER BOULEVARD	SR 50	HOOKS STREET	1690	4	D	1,800	812	1,180	C	1%	1	0	813	1,180	C
GRAND HIGHWAY	CITRUS TOWER BOULEVARD	SR 50	1910	2	D	675	360	396	D	1%	1	0	361	396	D
CITRUS GROVE RD	US 27	TURKEY FARM ROAD	1920	4	D	1,800	81	86	C	15%	10	6	91	92	C
N. HANCOCK ROAD	CR 561A	TURNPIKE INTERCHANGE	N/A	4	D	1,800	663	552	C	10%	4	7	667	559	C
N. HANCOCK ROAD	TURNPIKE INTERCHANGE	CITRUS GROVE RD	N/A	4	D	1,800	552	663	C	45%	31	17	583	680	C
N. HANCOCK ROAD	CITRUS TOWER BOULEVARD	CR 50	N/A	4	D	1,800	388	467	C	40%	28	15	416	482	C
N. HANCOCK ROAD	CR 50	N RIDGE BOULEVARD	2060	4	D	1,800	604	573	C	35%	24	13	628	586	C
N. HANCOCK ROAD	N RIDGE BOULEVARD	SR 50	2070	4	D	1,800	823	707	C	20%	14	7	837	714	C
S. HANCOCK ROAD	SR 50	HOOKS STREET	2080	4	D	1,800	815	1,193	C	2%	1	1	816	1,194	C
SR 50	US 27	HANCOCK ROAD	3540	6	D	3,020	2,537	3,050	F	10%	7	4	2,544	3,054	F
SR 50	HANCOCK ROAD	CR 455	3550	6	D	3,020	2,537	3,050	F	10%	4	7	2,541	3,057	F
US 27/SR 25	SR 19	CR 561	3830	4	C	1,740	1,289	1,073	C	3%	1	2	1,290	1,075	C
US 27/SR 25	CR 561	CR 561A	3840	4	C	1,910	1,674	2,012	F	10%	4	7	1,678	2,019	F
US 27/SR 25	CR 561A	CR 561/ MAIN AVENUE	3850	4	C	1,910	1,935	2,327	F	8%	6	3	1,941	2,330	F
US 27/SR 25	CR 561/ MAIN AVENUE	CR 50	3860	4	C	1,910	1,935	2,327	F	5%	3	2	1,938	2,329	F
US 27/SR 25	CR 50	GRAND HIGHWAY	3870	6	C	2,940	2,359	1,961	C	8%	6	3	2,365	1,964	C
US 27/SR 25	GRAND HIGHWAY	SR 50	3880	6	C	2,940	1,919	1,595	C	10%	7	4	1,926	1,599	C

## **6.0 STUDY CONCLUSIONS**

This traffic analysis was performed to support a proposed comprehensive plan amendment for the Minneola Adjunct property in the City of Minneola. The site is located south of the Turnpike and east of Hancock Road Extension. The proposed amendment will increase the allowable development on the ±21-acre property from 7 single family units to 160 multifamily units.

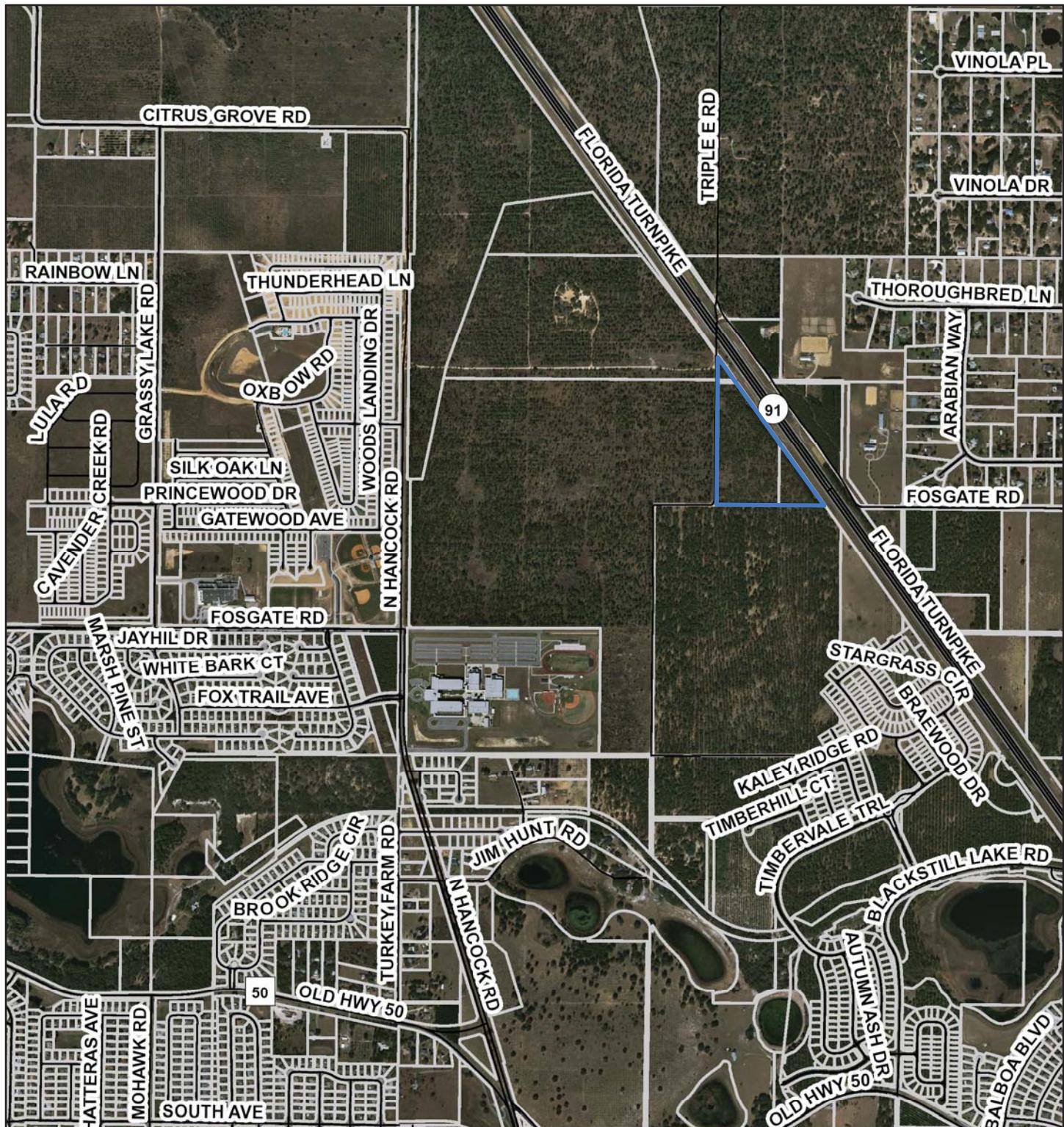
The results of the study as documented herein are summarized below:

- The proposed amendment will generate 1,002 additional trips per day, of which 96 trips occur during the PM peak hour.
- An analysis of existing conditions reveals that all study roadway segments currently operate within their adopted LOS standards.
- Transportation improvements are planned or programmed in the study area surrounding the property including the new Turnpike interchange, the Hancock Road extension to CR 561A, and the expansion of Citrus Grove Road to 4 lanes between US 27 and Hancock Road.
- An analysis of projected capacity demand on the transportation network conducted for 2030 background conditions indicates that segments of CR 561, US 27, and SR 50 are projected to be deficient. The project's impact on the deficient segments is negligible and does not exceed 0.4% of capacity.
- The project development will undergo further analysis as development activity occurs to evaluate the project's impact on the transportation network and to assess traffic operations in the vicinity of the site.

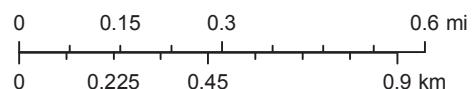
## **APPENDICES**

**Appendix A**  
Property Info

# Minneola Adjunct



1:18,000



- County Boundary       Surrounding Counties
- Highways
- Street Names
- Local Streets
- Tax Parcels

**Appendix B**  
Lake County TCMS







# *2016 Lake County Annual Traffic Counts*



LAKE COUNTY  

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FLORIDA

Lake County Public Works

Engineering Division

350 N. Sinclair Ave.

Tavares, Florida 32778















**Appendix C**  
CIP/ LRTP









## LIST OF PRIORITY PROJECTS

2020/21 - 2039/40

**Adopted April 27, 2016**

Prepared by the  
Lake~Sumter Metropolitan Planning Organization  
1616 South 14th Street  
Leesburg, FL 34748

**RIGHT OF WAY PROJECTS**  
**TABLE 3**

RANK	FM NUMBER	PROJECT NAME	FROM	TO	SPONSOR/LOCATION	PROJECT DESCRIPTION	FUNDED PHASE(S)	FISCAL YEAR	REQUEST FOR NEW FUNDING	COST ESTIMATE
1	4309752	WEKIVA TRAIL SEGMENT 1	TREMAIN STREET	CR 437	LC/MD	MIXED USE TRAIL	PE	2015/16	ROW	\$5 M
2	4309753	WEKIVA TRAIL SEGMENT 2	CR 437	RED TAIL BLVD	LC	MIXED USE TRAIL	PE	2015/16	ROW	\$1 M
3	4270561	SR 50 REALIGNMENT/ SOUTH LAKE TRAIL, PHASE 3	CRITTENDEN RD	VILLA CITY	FDOT	REALIGNMENT	PD&E PE	2014/15	ROW	\$25 M
4	4354711	SOUTH SUMTER CONNECTOR TRAIL	VAN FLEET TRAIL	WITHALOCHOOCHEE TRAIL	FDOT	MIXED USE TRAIL	PD&E PE	2018/19 2016/17	ROW	\$9 M
5	4301321	SR 35 (US 301)	C-470 (W)	SR 44	FDOT	WIDEN TO 4 LANES	PD&E PE	2013/14 2016/17	ROW	TBD BY FDOT
6	4355411	CITRUS GROVE ROAD (PHASE 1&2)	US 27	N HANCOCK RD	LC	WIDEN TO 4 LANES	PE	2014/15	ROW	\$15 M
7	4374641	EUDORA ROAD/OLD 441/CR 19A			LC	ROUNDABOUT/INTERSECTION IMPROVEMENT	PE	2017/18	ROW	\$201 K
8	-	CR 470	BAY RD	CR 33	LC	WIDEN TO 4 LANES	PER PE	2009/10	ROW	\$150 K
9	-	CR 48	CR 33	EAST OF PALATLAKAHA BRIDGE	LC	WIDEN TO 4 LANES	PER PE	2009/10	ROW	\$800 K
10	4349121	C-470	CR 527	SR 91 (FL TPK)	FDOT	WIDEN TO 4 LANES	PD&E PE	2014/15 2019/20	ROW	TBD BY FDOT
11	2383191	SR 19	CR 561	CR 48	FDOT	WIDEN TO 4 LANES	PD&E PE	2011/12 2013/14	ROW	TBD BY FDOT

**PD&E PROJECTS**  
**TABLE 5**

PROJECT NAME	FROM	TO	SPONSOR/ LOCATION	PROJECT DESCRIPTION	FUNDED PHASE(S)	FISCAL YEAR	REQUEST FOR NEW FUNDING	COST ESTIMATE
US 27 & SR 44			FDOT	INTERSECTION IMPROVEMENT	PER/ STUDY	2013/14 2014/15	PD&E 2016/17	\$1 M
NORTH LAKE TRAIL	CR 450	SR 40	UM	NEW TRAIL	N/A		PD&E 2016/17	\$2.1 M
SR 44	SR 44 & ORANGE AVENUE	CR 46A	FDOT	WIDEN TO 4 LANES	N/A		PD&E 2016/17	TBD BY FDOT
W. SR 50/FM#4358591	US 98 (HERNANDO CO.)	CR 33 (LAKE COUNTY)	FDOT	WIDEN TO 4 LANES	STUDY	2015/16	PD&E 2016/17	\$1 M
SR 19	SR 50	CR 455	FDOT	WIDEN TO 4 LANES	N/A		PD&E 2016/17	TBD BY FDOT
US 27	CR 561 (S)	FL TPK NORTH RAMPS	FDOT	WIDEN TO 6 LANES	N/A		PD&E	TBD BY FDOT

**CANDIDATE PROJECTS**  
**TABLE 7**

PROJECT NAME	FROM	TO	SPONSOR/ LOCATION	PROJECT DESCRIPTION	FUNDED PHASE(S)	FISCAL YEAR	REQUEST FOR NEW FUNDING	COST ESTIMATE
WELLNESS WAY/ FM#4357231	US 27	SR 429	LC	NEW ROAD, ALTERNATIVE CORRIDOR EVALUATION	N/A		STUDY	TBD
CAGAN'S CROSSING PEDESTRIAN OVERPASS			LC	NEW US 27 OVERPASS FOR PEDESTRIANS	N/A		STUDY	TBD
CR 561/561A REALIGN	CR 455	SR 91 (FL TURNPIKE)	LC	CORRIDOR STUDY	N/A		PD&E	\$750 K
HARTLE RD	SR 50	HARTWOOD MARSH RD	LC	WIDEN TO 4 LANES	PD&E		PE	\$800 K
HOOKS ST	HANCOCK RD	EMIL JAHNA RD	LC	WIDEN TO 4 LANES	N/A		PE	\$800 K
C-501	C-468	C-470	SC	WIDEN TO 4 LANES	PER	2014/15	PE	\$1.4 M
HARTWOOD MARSH RD	SR 25 (US 27)	HANCOCK RD	LC	WIDEN TO 4 LANES	PE	2013/14	ROW	\$2 M

PD&E = PROJECT DEVELOPMENT AND ENVIRONMENTAL STUDY  
PE = PRELIMINARY ENGINEERING (DESIGN)

CST = CONSTRUCTION  
ROW = RIGHT-OF-WAY

\* ELIGIBILITY TO BE DETERMINED OR APPLICATION PARTIALLY COMPLETED OR NEED FOR APPLICATION TO BE DETERMINED.

REQUESTING AGENCY & LOCATION CODE:

AST = ASTATULA  
BUSH = BUSHNELL  
CLR = CLERMONT  
EUS = EUSTIS  
FP = FRUITLAND PARK  
GRV = GROVELAND  
HOW = HOWEY-IN-THE-HILLS  
LC = LAKE COUNTY  
LL = LADY LAKE  
LEES = LEESBURG

LSMPO = LAKE-SUMTER MPO  
MAS = MASCOTTE  
MD = MOUNT DORA  
MIN = MINNEOLA  
MON = MONTVERDE  
SC = SUMTER COUNTY  
TAV = TAVARES  
UMA = UMATILLA  
WW = WILDWOOD

**Appendix D**  
Trip Generation Sheets

## Single-Family Detached Housing (210)

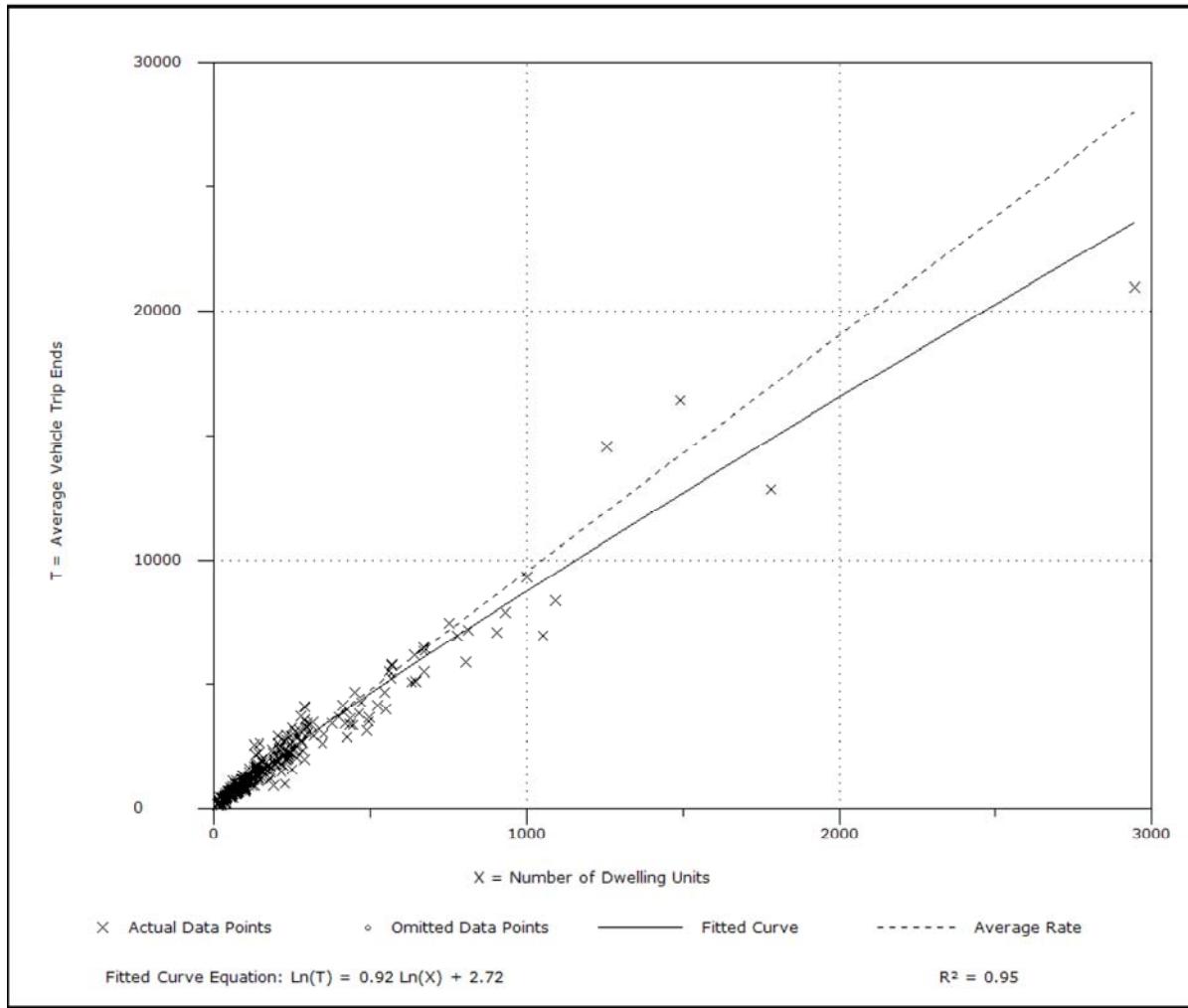
Average Vehicle Trip Ends vs: Dwelling Units  
On a: Weekday

Number of Studies: 355  
Avg. Number of Dwelling Units: 198  
Directional Distribution: 50% entering, 50% exiting

### Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
9.52	4.31 - 21.85	2.05

### Data Plot and Equation



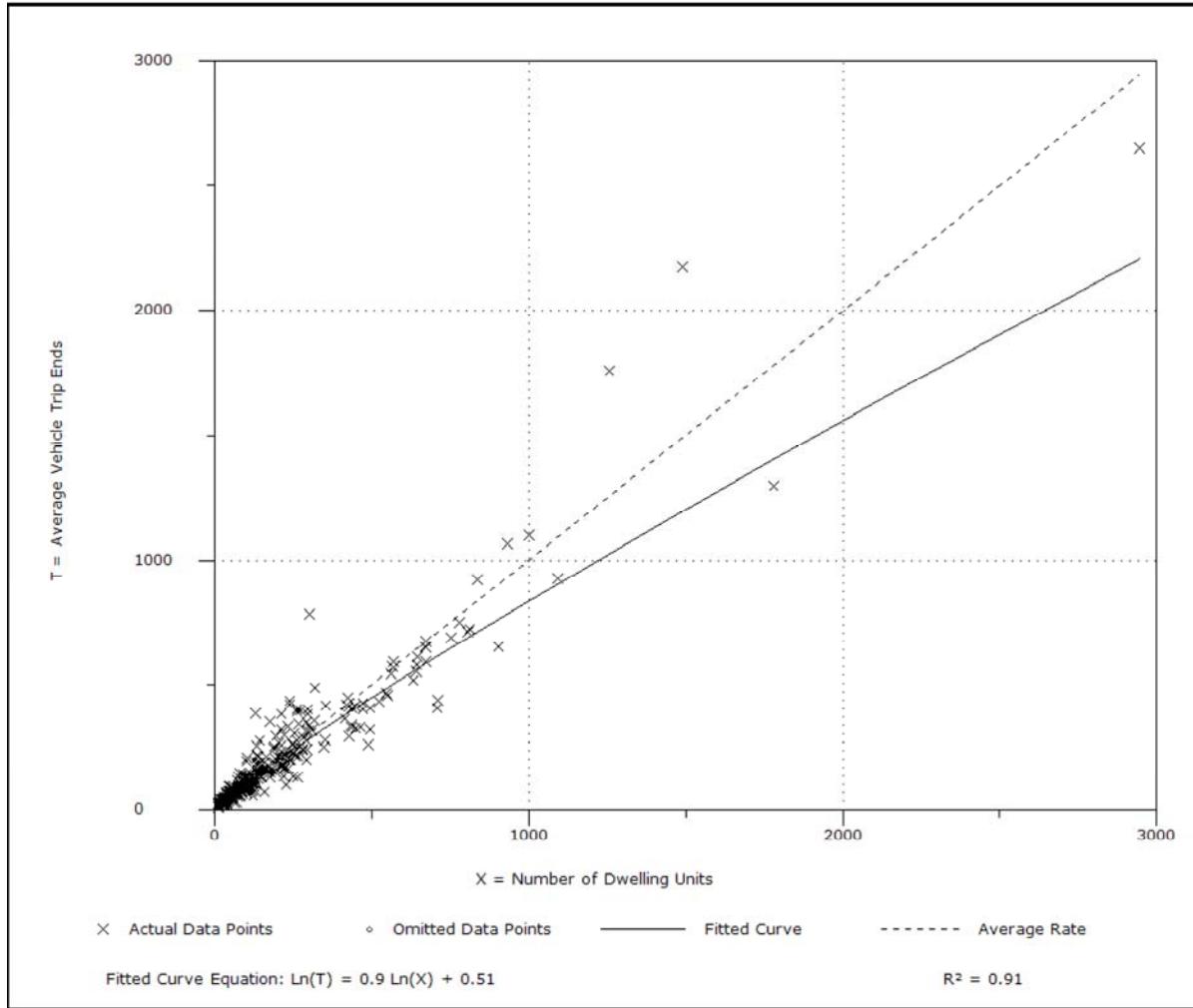
## Single-Family Detached Housing (210)

Average Vehicle Trip Ends vs:	Dwelling Units
On a:	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.
Number of Studies:	321
Avg. Number of Dwelling Units:	207
Directional Distribution:	63% entering, 37% exiting

### Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
1.00	0.42 - 2.98	0.31

### Data Plot and Equation



## Apartment (220)

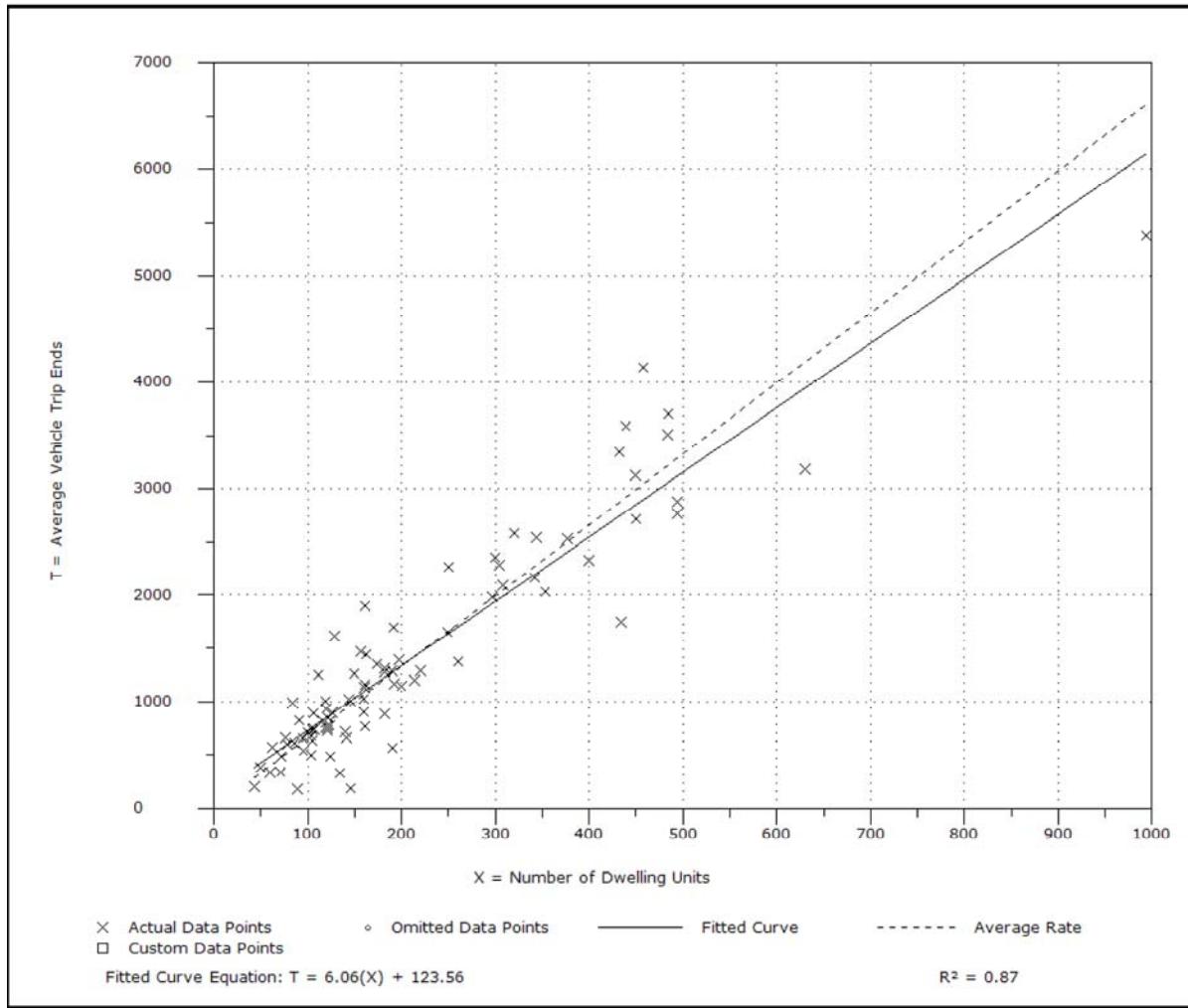
**Average Vehicle Trip Ends vs: Dwelling Units  
On a: Weekday**

Number of Studies: 88  
Avg. Number of Dwelling Units: 210  
Directional Distribution: 50% entering, 50% exiting

### Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
6.65	1.27 - 12.50	3.07

### Data Plot and Equation



## Apartment (220)

**Average Vehicle Trip Ends vs:**  
**On a:**

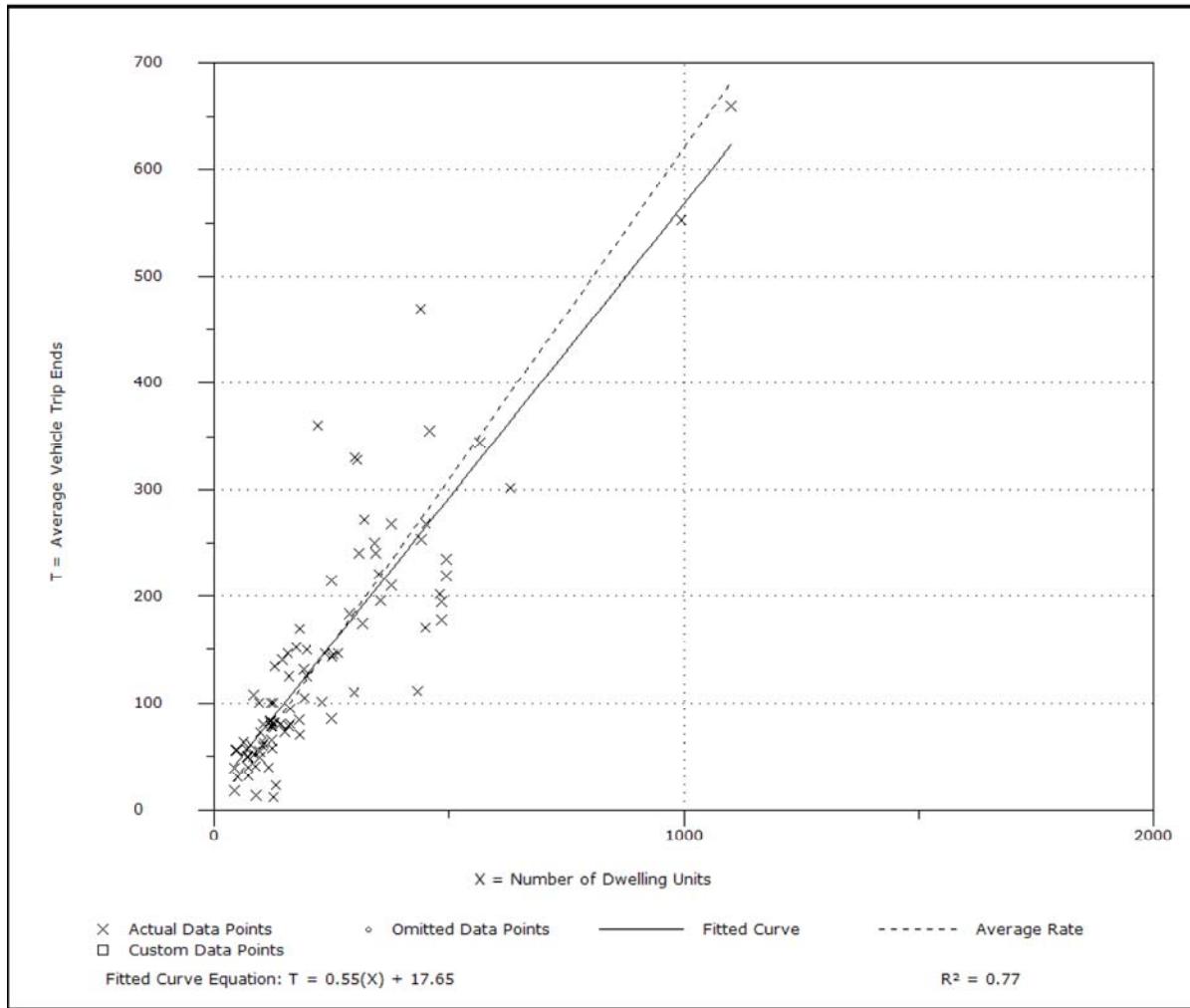
- Dwelling Units**
- Weekday**
- Peak Hour of Adjacent Street Traffic**
- One Hour Between 4 and 6 p.m.**

Number of Studies: 90  
 Avg. Number of Dwelling Units: 233  
 Directional Distribution: 65% entering, 35% exiting

### Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.62	0.10 - 1.64	0.82

### Data Plot and Equation



**Appendix E**  
CFRPM Distribution Plot

North (NTS)

