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FIDDLESTICKS PROPERTY
COMPREHENSIVE PLAN AMENDMENT
TRAFFIC STUDY METHODOLOGY OUTLINE

Project #11533

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Introduction

Fiddlesticks Property, hereafter referred to as the Project, is a proposed residential development located within the unincorporated Lee County. The Project site is located just west of I-75, approximately half way between Daniels Parkway to the north and Alico Road to the south, Exhibit 1.

The subject property is currently under agricultural zoning (AG-2) and identified as rural/wetlands on Lee County's Future Land Use map. As part of a Comprehensive Plan Amendment (CPA) process, the applicant desires to change the land use designation of the property to Residential.

The purpose of this report, therefore, is to provide a methodology outline for the traffic study that will be prepared in support of the Comprehensive Plan Amendment (CPA) application to change the land use designation of the subject property from AG-2 to Residential.

Study Area

As required by the Lee County Application for a Comprehensive Plan Amendment (Appendix A) the study area will include the roadway segments within a 3-mile radius of the site. Based on that criterion, the study area is generally bounded by the following.

Study Area – 3-Mile Radius

To North	Penzance Boulevard and Plantation Gardens Parkway
To South	San Carlos Boulevard
To East	Southwest Florida International Airport
To West	Metro Parkway

The study area boundary is identified in Exhibit 2.

Development Parameters

The proposed land development program is summarized below.

Preliminary Development Parameters ⁽¹⁾

<u>Land Use</u>	<u>5-Years</u>		<u>Build-out</u>	
	<u>Size</u>	<u>Units</u>	<u>Size</u>	<u>Units</u>
Residential – Single Family	240	d.u.	1,182	d.u.

Footnotes:

(1) Preliminary land use projections. Subjected to some changes.

As shown above, the preliminary development plan reflects approximately 1,182 single-family residential units at build-out. Of which, approximately 20% (240 d.u.) of the development is anticipated within the first five years.

Property Access

The subject property is anticipated to have access to/from Fiddlesticks Boulevard, which connects to Daniels Parkway. In addition, it also anticipated that the property will have access onto the future Three Oaks Parkway Extension.

Horizon Year

Consistent with the requirements identified in Lee County Application for a Comprehensive Plan Amendment, B.1. Traffic Circulation Analysis, the traffic study will evaluate the effect of the proposed land use change on the Financial Feasible Transportation Plan/Map 3A (20-year horizon) and on the Capital Improvements Element (5-year horizon).

It is noted that the Financial Feasible Plan/Map 3A from The Lee Plan has not been updated yet to reflect the recently adopted Lee County MPO 2035 Long Range Transportation Plan (LRTP), Lee County Highway Cost Feasible Plan, Appendix B. Therefore, the traffic analysis will use and reflect the adopted MPO 2035 LRTP, Cost Feasible Plan. In addition, it is noted that the long-term analysis described in the Lee County CPA analysis requirements refers to a 20-year horizon, which is sooner than 2035. Therefore, it is also acknowledged that using the MPO 2035 LRTP in the traffic analysis is appropriate to reflect the long-term analysis.

The short-term (5-year) analysis will be based on the current Lee County DOT Major Road Improvements Tentatively Programmed Through Construction Phase F.Y. 2010/11 - 2014/15 (June 2010), Appendix C, and a horizon year of 2016. Some additional major roadway improvements have been included into the recently adopted FDOT Five Year Program. Some of those improvements include the following.

- I-75 Airport Access at SWFIA CD System – Fiscal Year 2012
- 6-lane widening of I-75 from North of SR 80 to South of SR 78 – Fiscal Year 2014

These improvements will be included as part of the existing plus committed network that will be used in the short-term (5-year) analysis.

Level of Service Standards

Per The Lee Plan, Policy 37.1.1., appropriate level of service (LOS) standards will be used in the traffic analysis, which acknowledges State LOS standards on FIHS, SIS and TRIP-funded facilities.

Traffic Analysis

Long Range – 20-Year Horizon

The recently adopted Lee County MPO CUBE travel model (FSUTMS) will be used to run comparative travel model assignments, both without and with the proposed CPA, under the adopted Lee County MPO 2035 Cost Feasible Plan. For these assignments, the future year 2035 Cost Feasible road network, as provided by the MPO, will be used.

The Lee County MPO's 2035 socio-economic data projections will be used for both of these travel model assignments.

For the travel model assignment without the CPA, the MPO zonal data will be used without any changes. For the travel model assignment with the proposed CPA, the land uses associated with the proposed CPA will be input into the ZONEDATA file as a new Traffic Analysis Zone (TAZ). The new TAZ representing the proposed CPA and the corresponding land use data will also be identified and documented in the report.

The roadway segment PSWADT volume projections from the comparative travel model runs will be converted to peak hour, peak season (K_{100}) volumes using the adjustment factors from the corresponding permanent count station data identified in the Lee County 2010 Traffic Count Report and the Florida DOT 2010 Traffic Information DVD, which ever is applicable.

Short Range – 5-Year Horizon

Similar to the long-term analysis, the short-term (5-year) analysis will be based on the CUBE travel model. However, the horizon year will be 2016, with corresponding interpolated socioeconomic data and the existing plus committed (E+C) roadway network.

For the travel model assignment without the CPA, the MPO interpolated zonal data (2016) will be used without any changes. For the travel model assignment with the proposed CPA, the land uses associated with the proposed CPA, within the first five years, will be input into the ZONEDATA file as a new Traffic Analysis Zone (TAZ). The new TAZ representing the

proposed CPA and the corresponding land use data will also be identified and documented in the report.

The roadway segment PSWADT volume projections from the comparative travel model runs will be converted to peak hour, peak season (K₁₀₀) volumes using the adjustment factors from the corresponding permanent count station data identified in the Lee County 2010 Traffic Count Report and the Florida DOT 2010 Traffic Information DVD, which ever is applicable.

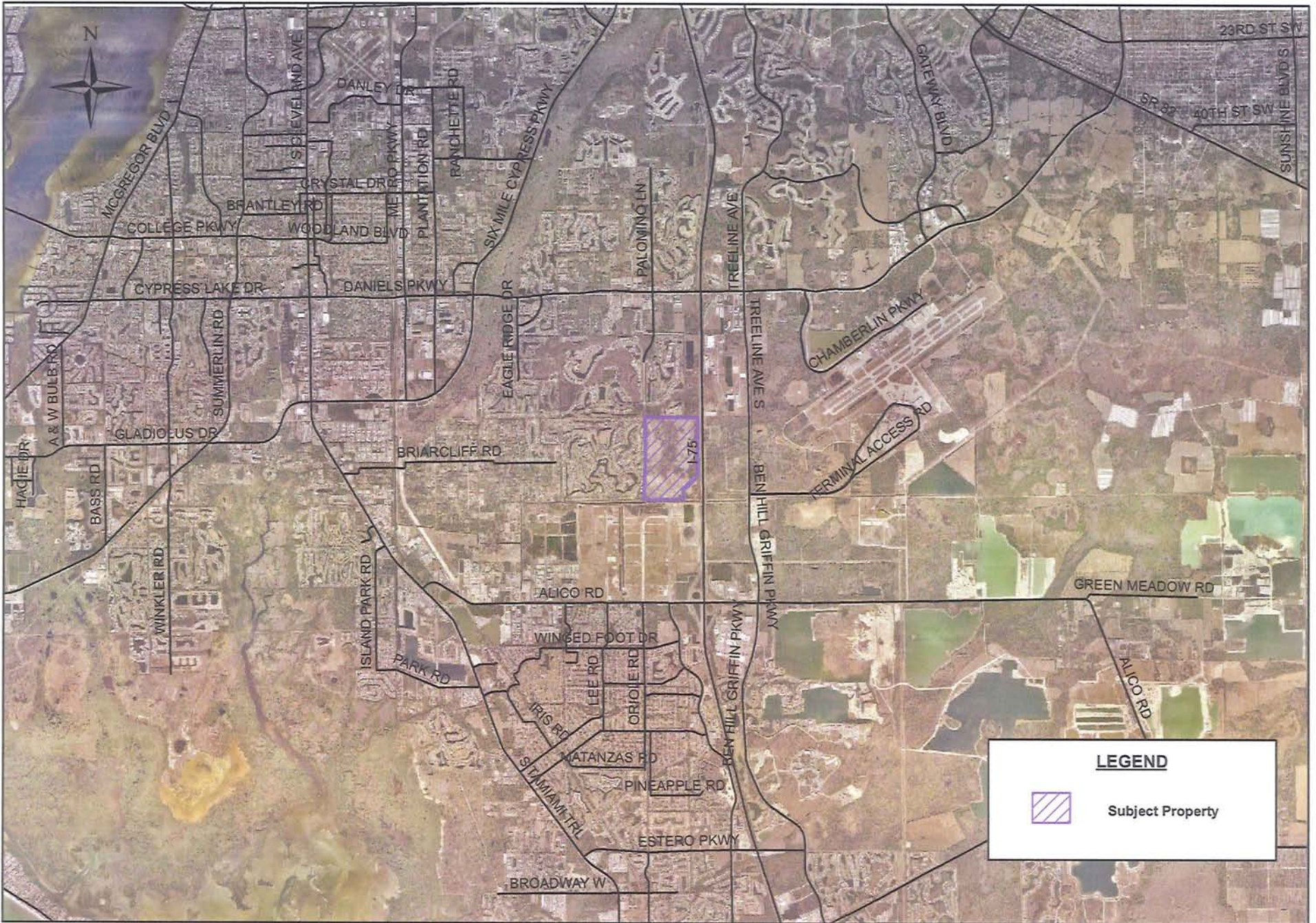
Traffic Mitigation

Based on the comparative travel model analysis, the deficient roadway segments will be identified corresponding to the respective horizon years, both without and with the proposed CPA. In addition, the roadway deficiencies, if any, as a result of the proposed CPA will be clearly identified.

Based on the above, needed modifications to the Financial Feasible Plan/Map 3A from The Lee Plan (which is currently represented by the MPO LRTP, Cost Feasible Plan) and the Lee County CIP will be identified.

Final Report

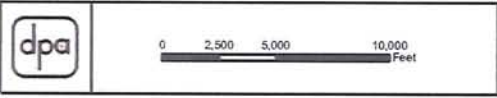
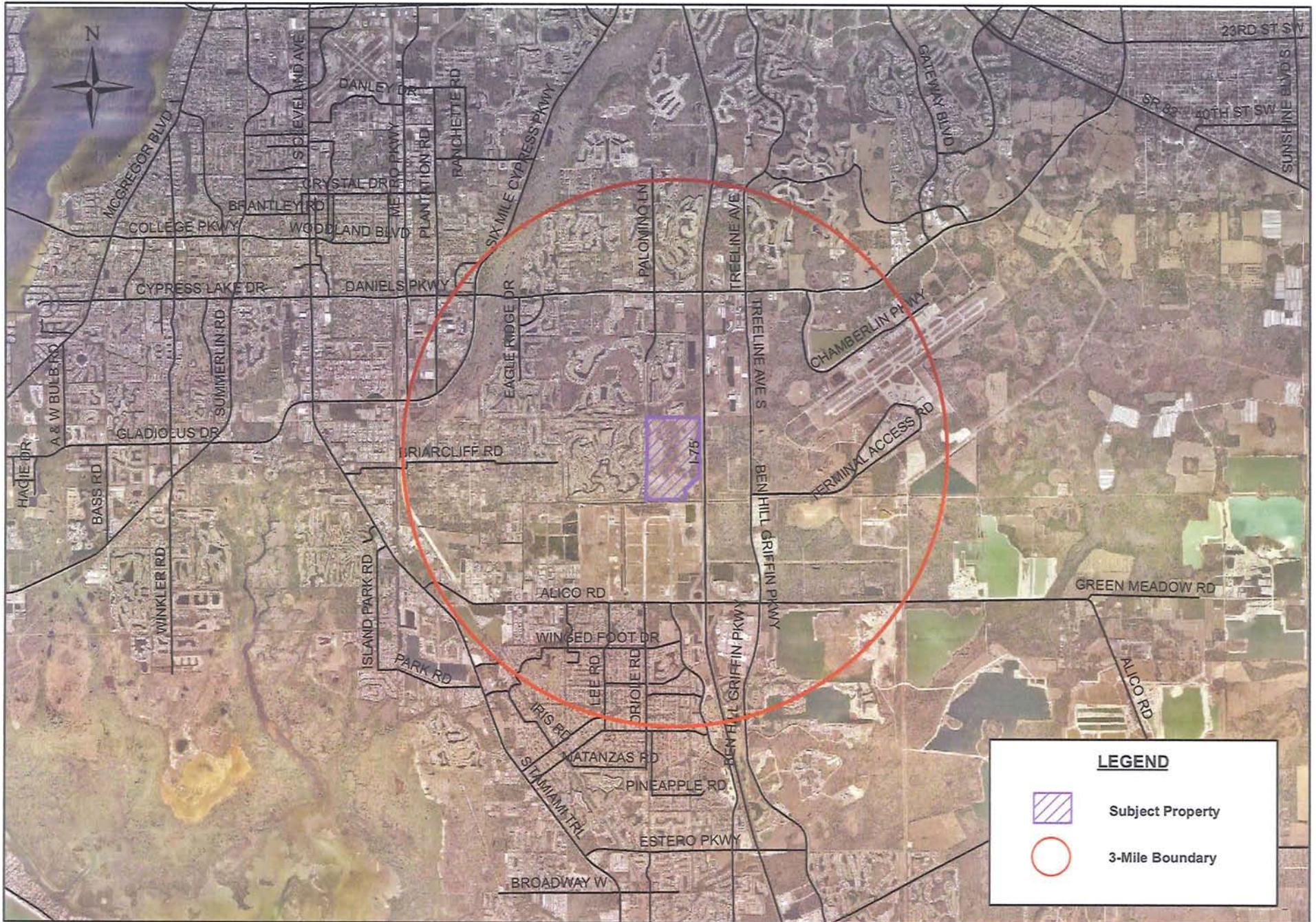
The results of the travel model evaluation will be summarized in the final report and submitted to the Lee County DOT. The submittal will also include the digital files of the CUBE travel model runs, including the corresponding social-economic data.



**FIDDESTICKS PROPERTY
COMPREHENSIVE PLAN AMENDMENT**

Project Location Map

11533/02A/0811



**FIDDLESTICKS PROPERTY
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3-Mile Radius Map

APPENDIX A

**EXCERPTS FROM LEE COUNTY APPLICATION FOR A
COMPREHENSIVE PLAN AMEDMENT**

7. A copy of the deed(s) for the property subject to the requested change.
8. An aerial map showing the subject property and surrounding properties.
9. If applicant is not the owner, a letter from the owner of the property authorizing the applicant to represent the owner.

B. Public Facilities Impacts

NOTE: The applicant must calculate public facilities impacts based on a maximum development scenario (see Part II.H.).

1. Traffic Circulation Analysis

The analysis is intended to determine the effect of the land use change on the Financially Feasible Transportation Plan/Map 3A (20-year horizon) and on the Capital Improvements Element (5-year horizon). Toward that end, an applicant must submit the following information:

Long Range – 20-year Horizon:

- a. Working with Planning Division staff, identify the traffic analysis zone (TAZ) or zones that the subject property is in and the socio-economic data forecasts for that zone or zones;
- b. Determine whether the requested change requires a modification to the socio-economic data forecasts for the host zone or zones. The land uses for the proposed change should be expressed in the same format as the socio-economic forecasts (number of units by type/number of employees by type/etc.);
- c. If no modification of the forecasts is required, then no further analysis for the long range horizon is necessary. If modification is required, make the change and provide to Planning Division staff, for forwarding to DOT staff. DOT staff will rerun the FSUTMS model on the current adopted Financially Feasible Plan network and determine whether network modifications are necessary, based on a review of projected roadway conditions within a 3-mile radius of the site;
- d. If no modifications to the network are required, then no further analysis for the long range horizon is necessary. If modifications are necessary, DOT staff will determine the scope and cost of those modifications and the effect on the financial feasibility of the plan;
- e. An inability to accommodate the necessary modifications within the financially feasible limits of the plan will be a basis for denial of the requested land use change;
- f. If the proposal is based on a specific development plan, then the site plan should indicate how facilities from the current adopted Financially Feasible Plan and/or the Official Trafficways Map will be accommodated.

Short Range – 5-year CIP horizon:

- a. Besides the 20-year analysis, for those plan amendment proposals that include a specific and immediated development plan, identify the existing roadways serving the site and within a 3-mile radius (indicate laneage, functional classification, current LOS, and LOS standard);
 - b. Identify the major road improvements within the 3-mile study area funded through the construction phase in adopted CIP's (County or Cities) and the State's adopted Five-Year Work Program;
Projected 2030 LOS under proposed designation (calculate anticipated number of trips and distribution on roadway network, and identify resulting changes to the projected LOS);
 - c. For the five-year horizon, identify the projected roadway conditions (volumes and levels of service) on the roads within the 3-mile study area with the programmed improvements in place, with and without the proposed development project. A methodology meeting with DOT staff prior to submittal is required to reach agreement on the projection methodology;
 - d. Identify the additional improvements needed on the network beyond those programmed in the five-year horizon due to the development proposal.
2. Provide an existing and future conditions analysis for (see Policy 95.1.3):
- a. Sanitary Sewer
 - b. Potable Water
 - c. Surface Water/Drainage Basins
 - d. Parks, Recreation, and Open Space
 - e. Public Schools.

Analysis should include (but is not limited to) the following (see the Lee County Concurrency Management Report):

- Franchise Area, Basin, or District in which the property is located;
- Current LOS, and LOS standard of facilities serving the site;
- Projected 2030 LOS under existing designation;
- Projected 2030 LOS under proposed designation;
- Existing infrastructure, if any, in the immediate area with the potential to serve the subject property.
- Improvements/expansions currently programmed in 5 year CIP, 6-10 year CIP, and long range improvements; and
- Anticipated revisions to the Community Facilities and Services Element and/or Capital Improvements Element (state if these revisions are included in this amendment).
- Provide a letter of service availability from the appropriate utility for sanitary sewer and potable water.

In addition to the above analysis for Potable Water:

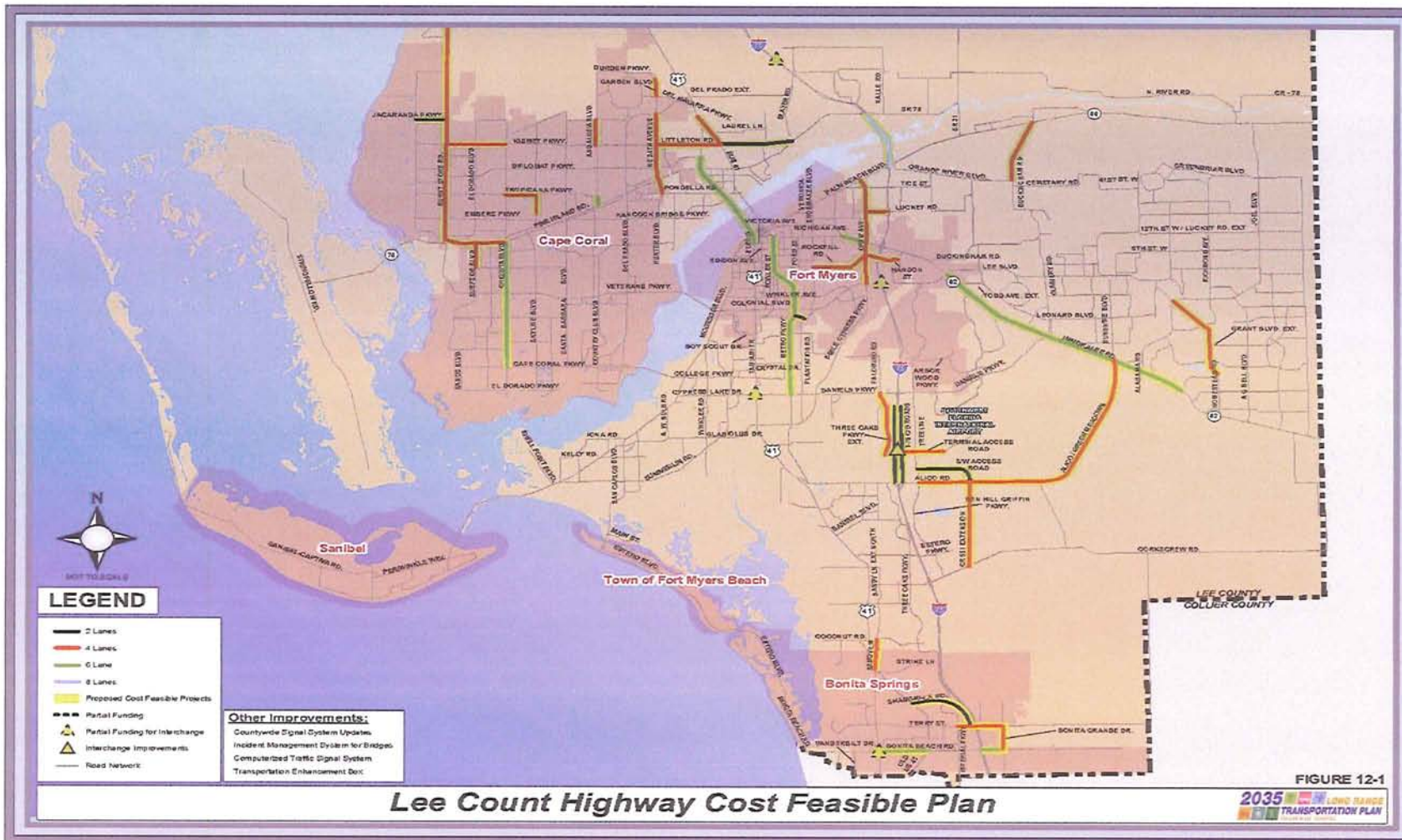
- Determine the availability of water supply within the franchise area using the current water use allocation (Consumptive Use Permit) based on the annual average daily withdrawal rate.

APPENDIX B

LEE COUNTY MPO 2035 LRTP, COST FEASIBLE PLAN



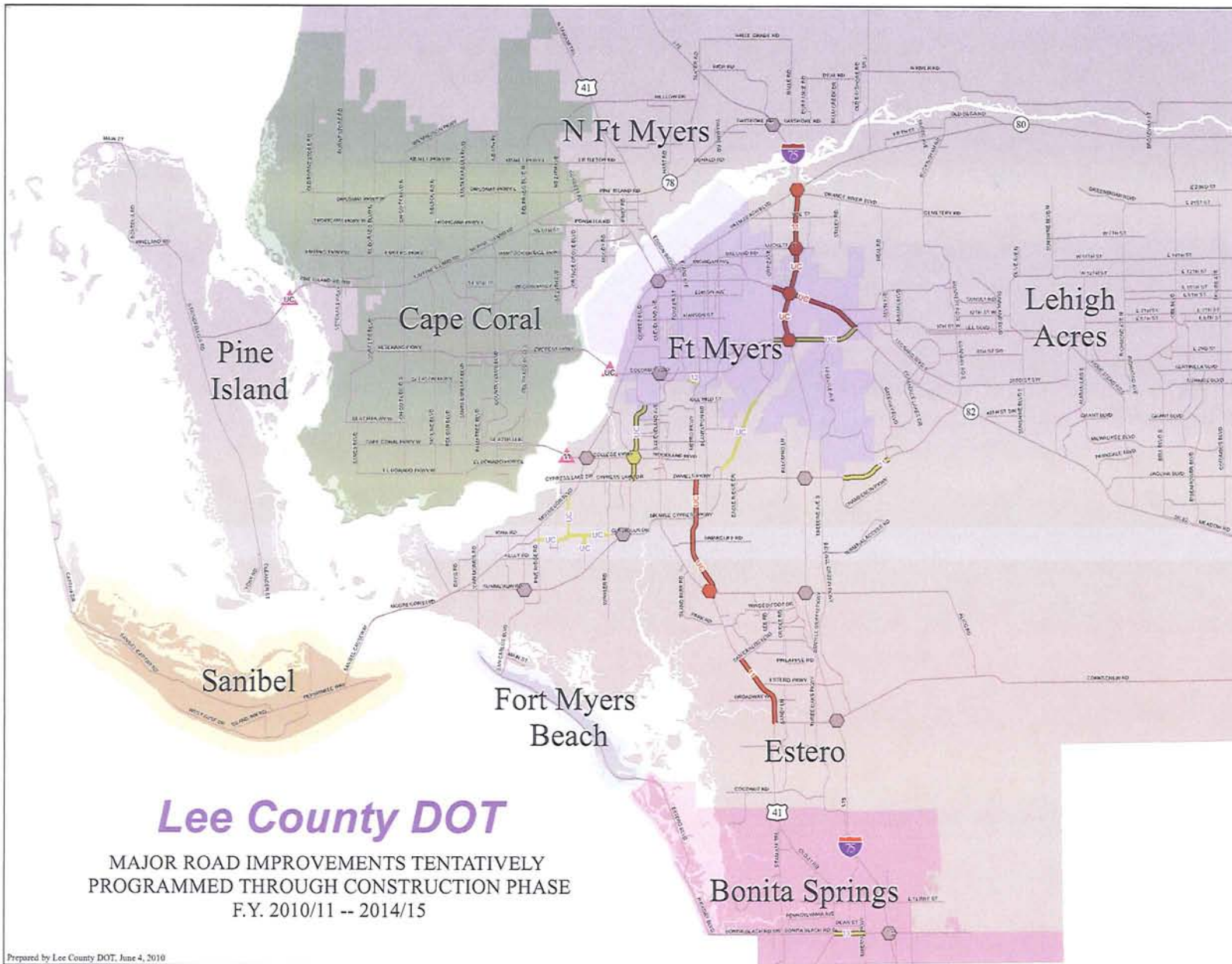
Figure 12-1



APPENDIX C

LEE COUNTY CIP (FY 2010/11 – 2014/15)





Lee County DOT
 MAJOR ROAD IMPROVEMENTS TENTATIVELY
 PROGRAMMED THROUGH CONSTRUCTION PHASE
 F.Y. 2010/11 -- 2014/15

- Legend**
- COUNTY ROAD PROJECTS**
- LANES**
- 2
 - 4
 - 6
- STATE ROAD PROJECTS**
- LANES**
- 3
 - 4
 - 6
- COUNTY
 - EXISTING
 - STATE
 - UNDER STUDY
 - BRIDGE IMPROVEMENTS
 - INTERSECTION IMPROVEMENTS



NOTE: All Projects are Subject to Change

US - Under Study
 UC - Under Construction
 08-12 - Year Construction Budgeted

