

BICYCLE PEDESTRIAN COORDINATING COMMITTEE

10:00 a.m., Tuesday, May 27, 2014
Fort Myers Regional Library, Room A
1651 Lee Street, Fort Myers, FL 33901
239-244-2220



AGENDA

Call to Order/Roll Call

- 1) *Approval of the April 22, 2014 BPCC Meeting Minutes

New Business

- 2) Florida Greenways and Trails Foundation Presentation (Dale Allen)
- 3) *Review and Approval of the Roundabout Feasibility Study Scope (Ron Gogoi)
- 4) Presentation and Update on the Lee County Land Use Project Scenario (Don Scott)
- 5) VCB Update on Tourism Trends, Ecotourism Activities and Web Site Development (Simone Behr)

Old Business

- 6) Staff Update on Ongoing Projects and BPCC Input (Don Scott)

Other Business

- 7) Public and Member Comments on Items not on the Agenda
- 8) Local Government Reports on Bicycle Pedestrian Related Projects
- 9) LeeTran Report
- 10) FDOT Report
- 11) Announcements
- 12) Information and Distribution Items

Adjournment

* Action Items + May Require Action

All meetings of the Lee County Metropolitan Planning Organization (MPO) are open to the public. In accordance with the Americans with Disabilities Act, any person requiring special accommodations to participate in this meeting should contact Mr. Ron Gogoi at the Lee MPO 48 hours prior to the meeting by calling (239) 244-2220; if you are hearing or speech impaired call (800) 955-8770 Voice / (800) 955-8771 TDD. Or, e-mail rgogoi@leempo.com.

The MPO's planning process is conducted in accordance with Title VI of the Civil Rights Act of 1964 and related statutes. Any person or beneficiary who believes he or she has been discriminated against because of race, color, religion, sex, age, national origin, disability or familial status may file a complaint with the Florida Department of Transportation District One Title VI Coordinator Robin Parrish at (863) 519-2675, or by writing her at P.O. Box 1249, Bartow, Florida 33831.

**MINUTES OF THE LEE COUNTY MPO BICYCLE PEDESTRIAN
COORDINATING COMMITTEE**

Held on April 22, 2014

The meeting of the Bicycle Pedestrian Coordinating Committee was held on April 22, 2014 at the Fort Myers Regional Library, Room A, 1651 Lee Street, Fort Myers.

Those in attendance included:

Andy Getch	LCDOT
Dawn Huff	Lee County School District
Elisa Yanes	Lee County School District
Diane Holm	Injury Prevention Council
Dan Moser	Injury Prevention Council
Jason Lamey	LC Parks and Recreation
Lee Waller	LC Parks and Recreation
Steve Jansen	CTST
Jay Anderson	CTST
Patricia Young	Member-At-Large
Gary Gasperini	City of Cape Coral
Avelino Cancel	City of Fort Myers
Anna Bielawska	LeeTran
Linda Carter	CAC
Simone Behr	Visitors Convention Bureau
Stacy Revay	Collier County Growth Management Division

Others in attendance included Brian Raimondo and Ron Gogoi with the Lee County MPO, Darla Letourneau with BikeWalkLee, Providence Nagy with FDOT, Masood Mirza with the City of Cape Coral, Jim Molnar with TY Lin, Sarah Clark and Rob Phelan with LCDOT, Bruce Butcher with Town of Fort Myers Beach, Alexandria Whalen with Lee County School District, and Lisa Indovino with All Childrens Hospital.

CALL TO ORDER

Mr. Jansen called the meeting to order at 10:00 am and asked the attendees to introduce themselves. Mr. Gogoi reported that a quorum was present.

AGENDA ITEM #1 – APPROVAL OF THE March 25, 2014 BPCC MEETING MINUTES

MOTION BY MR. GETCH TO APPROVE THE MARCH 25, 2014 BPCC MEETING MINUTES. SECONDED BY MS. BEHR. MOTION CARRIED UNANIMOUSLY.

NEW BUSINESS

AGENDA ITEM #2 – WEB PRESENTATION OF OHIO DOT GIS CRASH ANALYSIS TOOL

Mr. Gogoi introduced Michael McNeill with the Ohio Department of Transportation. Mr. McNeill stated that the Department of Transportation designed the GIS Crash Analysis Tool internally in 2008 through a collaborative effort between the IT and Safety departments. In 2012, the Tool was revamped and it coincided with the introduction of Ohio's new crash reporting form. It is a web based application that was developed primarily for planners and traffic engineers from the local governments to query and analyze the crash reports, and it is now also being accessed by safety consultants. Mr. McNeill gave a demonstration on how this tool and the CAM - Crash Analysis Module - worked. A CAM user could pick counter measures from a drop down list to address a high crash location and conduct a benefit cost analysis. Discussion ensued on how Signal Four is just a data based query tool and does not have real GIS analysis capabilities. It does not generate collision diagrams like the GCAT tool. Mr. Moser asked if Ohio has a system in place to evaluate the effectiveness of a countermeasure once it was implemented. The answer was yes, as the GCAT tool could do a before and after comparison based on the crashes in a location.

Ms. Letourneau felt that the Ohio Tool is a far superior tool given its analytic capabilities and asked if the state of Florida could switch to the Ohio model, or if it had plans to develop a similar tool. Ms. Nagy said she would look into it while Mr. Gogoi stated the Geoplan Center from the University of Florida could update its current version of Signal 4 Analytics. Mr. Raimondo stated that the Florida tool was not used by very many users, and the program is funded by FDOT. He reported that he had contacted the Center by electronic mail about their plans to upgrade System Four Analytics and if the upgrades included GIS analysis capabilities but he never heard back from them.

AGENDA ITEM #3 – PRESENTATION ON ESTERO BOULEVARD IMPROVEMENTS

Mr. Rob Phelan of LCDOT provided a background of the Estero Boulevard improvement project. In 2008, the design of the first 1 mile segment from Andre Mar Drive to Lani Kai was suspended with the remaining funds used for a survey to determine the road right of way for the entire corridor. The survey was completed in 2010. The County recently completed the 30% design plans for the entire 6 mile segment from Crescent Drive to Big Carlos Pass where consistent with Town's direction they accommodated sidewalks along the entire length of the project, bike lanes (except in the core area where right of way constrains allowed them to put sharrows only, center turn lanes for the entire length except where chicanes are being designed to accommodate trolley stops and a portion in the Quiet Center, and an innovative drainage system where there would be no gutters at the curb side and instead the road would slope towards the middle carrying runoffs to a gutter running below the center turn lane, and the 3' saved in the process will be used to build 9 ½' sidewalks. There is funding in the CIP for doing the final design and construction for the first mile segment from Crescent Drive to Red Coconut RV Park with construction estimated to commence in early 2015.

AGENDA ITEM #4 – PRESENTATION ON LEE COUNTY SCHOOL DISTRICT'S EXISTING AND PLANNED BIKE PED SAFETY/EDUCATION PROGRAM

Ms. Alexandria Whalen from the Lee County School District provided a background on the SRTS Program, and explained the Lee County Public School Bike/Ped Curriculum and what was offered under that curriculum. She also reported the School District's Bike Ped Education goals.

AGENDA ITEM #5 – COMMITTEE REPORT FROM APRIL 18TH SAFETY WORKING GROUP MEETING

Mr. Moser reported that the Safety Working Group met last week for 90 minutes and exchanged ideas on a way to make the crash data more manageable to review and analyze. The two corridors that were being reviewed for crashes were Del Prado Boulevard and US 41.

OLD BUSINESS

AGENDA ITEM #6 – STAFF UPDATE ON ONGOING PROJECTS AND BPCP INPUT

Mr. Raimondo provided updates on the TIGER project, and the Bus Pullout and Bus Queue Jump RFPs. He also provided the latest crash statistics.

OTHER BUSINESS

AGENDA ITEM #7 – PUBLIC AND MEMBER COMMENTS ON ITEMS NOT ON THE AGENDA

Mr. Moser reported that the new shared use paths on SR 80 had regulatory one way signs for bicyclists on both sides of the road at Lexington Avenue, and that he was concerned that bicyclists may get citations when they are involved crossing the ramps for riding the wrong way. Chairman Jansen asked Ms. Nagy to look into the concern and report back to the committee.

AGENDA ITEM #8 – LOCAL GOVERNMENT REPORTS

None.

AGENDA ITEM #9 – LEETRAN REPORT

Ms. Bielawksa reported that the March ridership numbers declined by 4 1/2% as compared to last year. There were 386,526 passenger trips in March 2014 compared to 404,230 from March 2013.

AGENDA ITEM #10 – FDOT REPORT

Ms. Nagy provided new FDOT contact numbers for the Southwest Area Office. She announced that a Florida Crossing Guard Training Event will be held in Fort Myers on May 14th and 15th.

AGENDA ITEM #11 – ANNOUNCEMENTS

Ms. Huff reported that Elisa Yanes would be replacing her as the school district representative at the BPC. Mr. Moser announced a Show and Tell Bike Ride on Wednesday, April 9th in Fort Myers. Mayor Henderson would be attending with City staff.

AGENDA ITEM #12 – INFORMATION AND DISTRIBUTION ITEMS

None.

The meeting adjourned at 12:00 P.M.

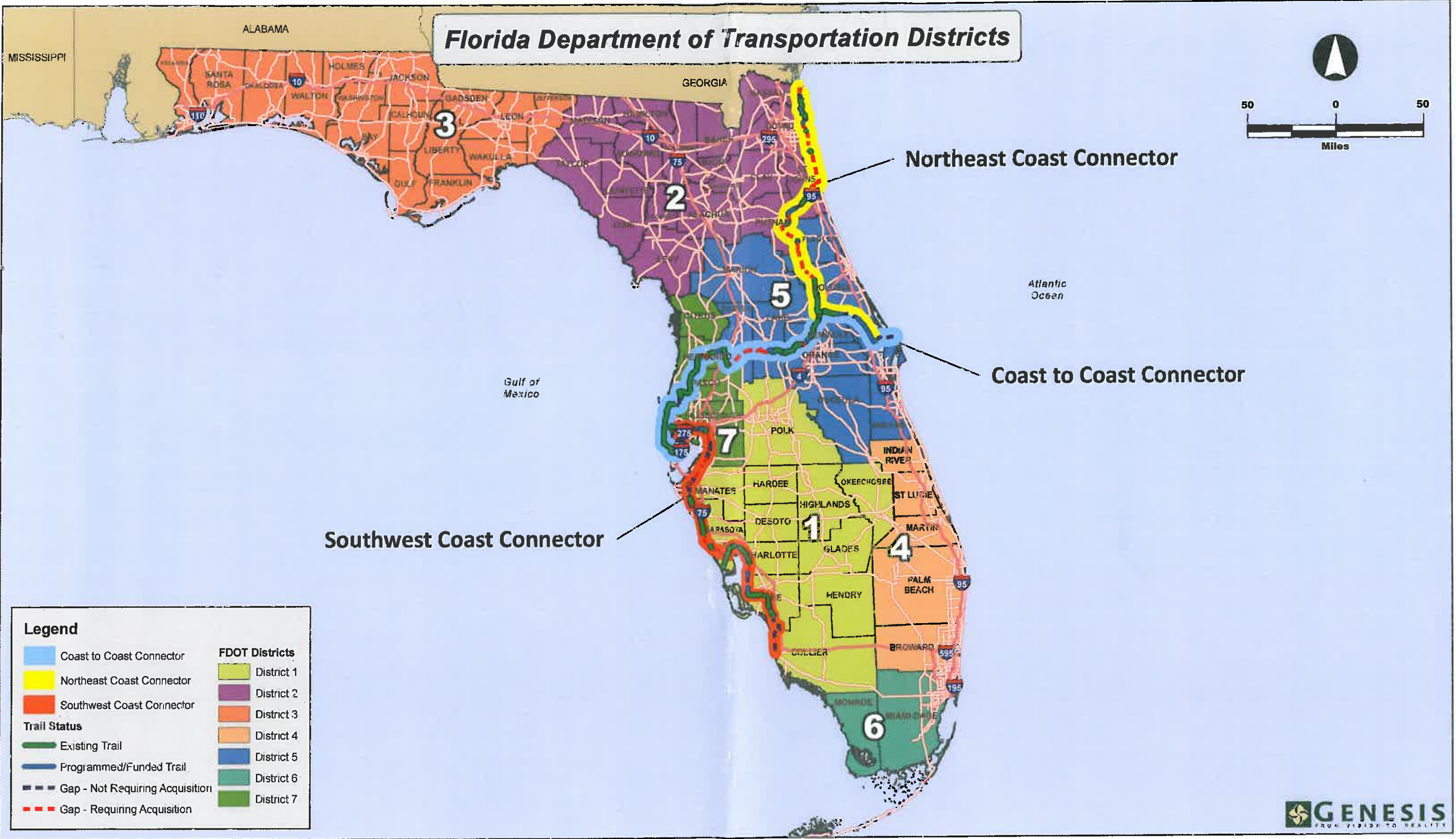
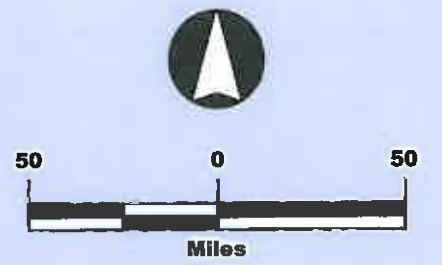
FLORIDA GREENWAYS AND TRAILS FOUNDATION PRESENTATION

RECOMMENDED ITEM: This is not an action item. A presentation will be provided by the President of the Florida Greenways and Trails Foundation.

Mr. Dale Allen of the Florida Greenways and Trail Foundation will give a status update on the funding and implementation of the 275 mile long Coast to Coast Connector (St. Pete to Titusville), and present two new proposed trails including the Southwest Coast Connector and the North East Connector (**attached map**). *Note that the Southwest Connector proposal as shown in attachment has now been modified to tie in with the River of Grass Greenway.* He will also talk about the Florida Water and Land Conservation Initiative, Amendment 1 which is in on the November 2014 ballot in Florida as an initiated by constitutional amendment. If it is passed, the amendment will create the Land Acquisition Trust Fund which will receive no less than 33% of the proceeds from the documentary stamp tax, with the funds proposed to be expended for a variety of purposes including recreational trails, parks, urban open space, etc. While this would be a boon for recreational trail construction, it could be a double edged sword as 38.2% of the collections from the documentary stamp tax currently goes to the State Transportation Trust Funds some of which pays for the Transportation Regional Incentive Program (TRIP) projects. In Lee County several highway and transit projects have been funded by TRIP funds including the new LeeTran Operations Facility on Evans Avenue, Bus Pullouts, and the Burnt Store Road widening which also includes the construction of shared use paths.

Documentary stamp tax is levied at a rate of \$.70 per \$100 (or portion thereof) on documents that transfer interest in Florida real property, such as warranty deeds and quit claim deeds.

Florida Department of Transportation Districts

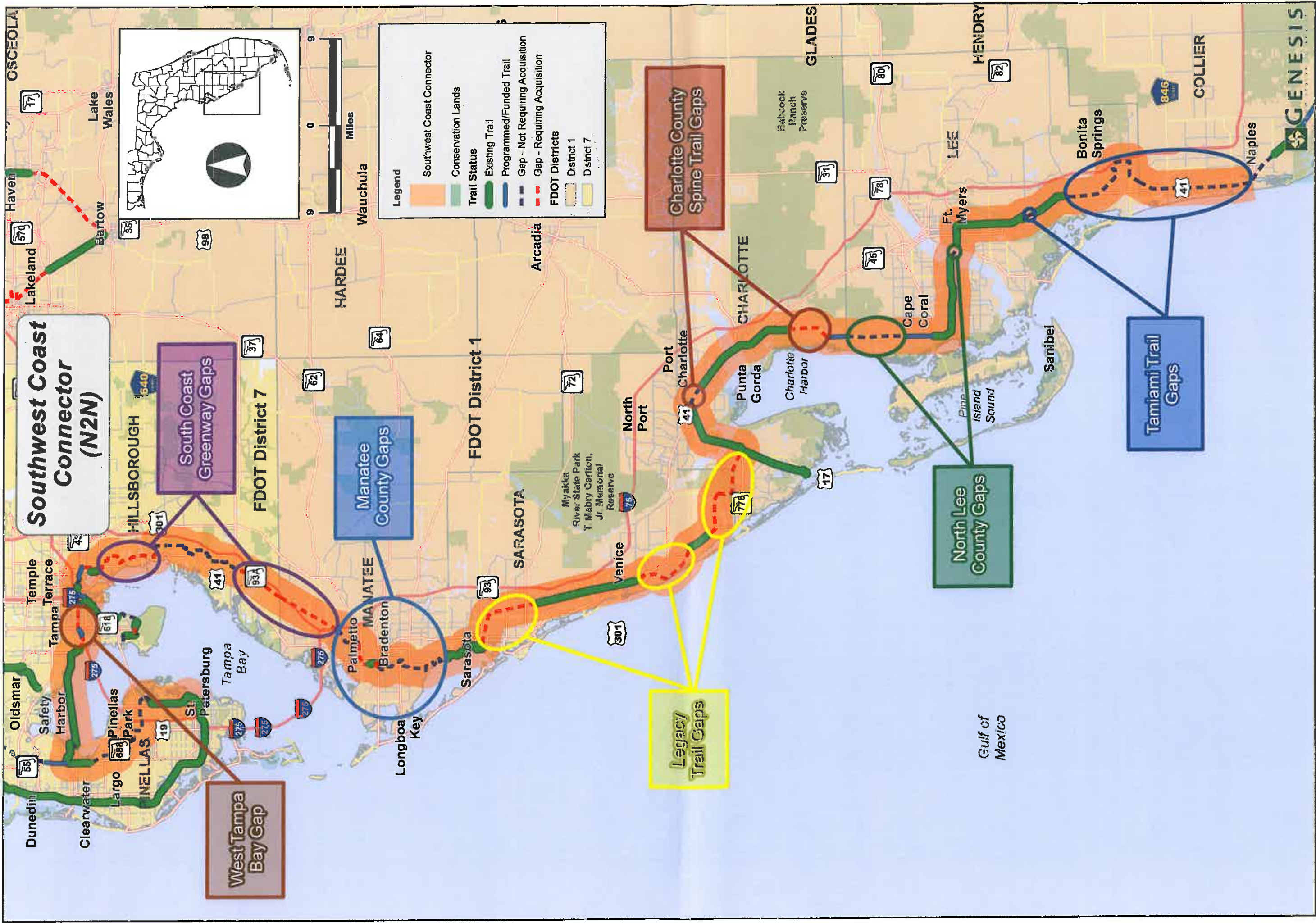


Legend

Coast to Coast Connector	FDOT Districts District 1
Northeast Coast Connector	District 2
Southwest Coast Connector	District 3
Existing Trail	District 4
Programmed/Funded Trail	District 5
Gap - Not Requiring Acquisition	District 6
Gap - Requiring Acquisition	District 7



Data Source: Florida Greenways and Trails Inc.
 Basemap courtesy of Florida Department of Transportation
 Prepared Date: January 9, 2014
 This map is for display purpose only. Any other use is not advised.



REVIEW AND APPROVAL OF ROUNDABOUT FEASIBILITY STUDY SCOPE

RECOMMENDED ITEM: Recommend that the MPO approve the attached Roundabout Feasibility Study Scope of Services.

FDOT funded an MPO priority for a roundabout feasibility study by including it in its FY 2015-2019 Tentative Work Program. The project is programmed in fiscal year 2014/15 at \$400,000. The list of tentative intersections that were submitted to FDOT prior to project programming has been revised following input from the TMOC, BPCC, TAC, CAC and the MPO Board. Staff has now developed the attached scope of services that calls for screening the final list of 21 locations for fatal flaws, and doing roundabout feasibility analysis on those that pass the screening test. The scope also calls for developing conceptual design layouts at these intersections. The BPCC will be asked to review the scope and recommend MPO approval at its May 27th meeting.

Lee County Metropolitan Planning Organization Roundabout Study

Scope of Services

INTRODUCTION

Research in the US and elsewhere in the world have indicated that roundabouts provide annual savings of \$5,000 in electrical and maintenance costs versus a traffic signal, and that they provide a service life of 100 years or more versus 10 to 20 years for a traffic signal. Unlike signalized intersections they are also not impacted by power outages caused by hurricanes and tropical storms, a phenomenon that happens with some regularity in Florida. They also reduce vehicle delays by around as much as 50% as traffic flows continuously through an intersection. With traffic moving inside a roundabout between 15-25 mph, and with significantly less number of conflict points than a conventional traffic signal, roundabouts have also been found to increase safety by reducing potential fatal crashes at an intersection by 90%, injuries by 76%, and all crashes by 39%.

For their demonstrated ability in making intersections safer and their substantial operational and capacity characteristics, as well as their other merits, local jurisdictions in Lee County have built 5 roundabouts while 2 more have been funded. Several others are identified in local government plans. The Lee MPO has now identified a comprehensive list of intersections to conduct roundabout feasibility analysis.

On its part FDOT is placing added emphasis on the development and construction of roundabouts statewide and have directed their district offices to include two (2) projects on state highways annually in their 5 year construction budget for implementing roundabouts. The Lee MPO is trying to position itself for FDOT support for financing the construction of a few of its own roundabout projects by identifying some potential roundabout locations on state highways.

PURPOSE OF SCOPE

The purpose of this scope is to prepare an intersection analysis to determine the design year operational efficiency of roundabouts at the intersections identified in Exhibit A. For those intersections where roundabouts are determined a viable option, conceptual geometric designs and cost estimates for each will be developed.

This scope of services includes the following tasks:

TASK 1. KICK OFF MEETING

The CONSULTANT will schedule and conduct a project kick-off meeting with the project team via conference call, or in person within two weeks of the issuance of a Notice to Proceed by the MPO. At the kick off meeting, the specific needs and plans of the roundabout feasibility analysis, ideas to screen the initial list of intersections for fatal flaws, and the traffic analysis software to be used will be discussed. The CONSULTANT will also present and discuss a list of the data/resources that may need to be provided by MPO staff, or at least direction given on the most reliable resources to tap for the information. MPO and Consultant staff will agree on how the data/resources will be collected and set an appropriate timeline for completing the effort. Other decisions regarding a public involvement component and deliverables will be also decided at the kick-off meeting.

TASK 2: METHODOLOGY FOR SCREENING INITIAL LIST OF INTERSECTIONS FOR ROUNDABOUT FEASIBILITY ANALYSIS

The CONSULTANT will develop a methodology to screen a list of 21 intersections from Exhibit A for fatal flaws, and conduct roundabout feasibility analysis on the ones that pass the screening test. Of the 21 intersections, eleven (11) are currently signalized, four (4) have 2 way stops, and the remainder have 1 way stops. Also, all have two lane roadways at the intersection approaches, except for two which have multi-lanes. Following are some criteria from *Chapter 7 of the Florida Intersection Design Guide* that could be considered in the methodology to screen the list of roundabout locations:

- ❖ Significant right of way impacts that could make a roundabout uneconomical
- ❖ Significant drainage or utility impacts that could make a roundabout uneconomical
- ❖ Immitigable environmental impacts
- ❖ Proximity to historical sites and socially significant trees that may rule out a roundabout
- ❖ Proximity of bottlenecks that would routinely back up traffic into the roundabout such as overcapacity signals and freeway entrance ramps
- ❖ Proximity of grades or unfavorable topography that may limit visibility or complicate construction
- ❖ Routes where large combination vehicles or over dimensional vehicles frequently use an intersection and insufficient space is available
- ❖ Locations where vehicles exiting the roundabout would be interrupted by downstream traffic control that could create queues backing up into the roundabout
- ❖ Proximity of other traffic control devices that would require signal preemption such as railroad tracks
- ❖ Isolated intersections located within a coordinated signal network where it is felt that LOS might be better with a signalized intersection incorporated into the system

Local knowledge about the locations from the project team would feed into and supplement the screening process.

Deliverables: A memo documenting the methodology developed to screen the list of intersections and results of the screening process.

TASK 3: TRAFFIC DATA COLLECTION

The CONSULTANT will collect approach counts and turning movement counts at the intersections which passed the screening test in Task 2. The approach counts will be collected for a full day (24 hours) and the turning movement counts will be collected for the AM, Midday, and PM Peak hours as determined by the approach counts. Vehicle classification will be included as part of the approach counts. The traffic data will be reviewed for accuracy with a deviation of approach counts versus peak hour traffic of no more than 10%. Bicycle and pedestrian traffic shall also be observed and measured. The CONSULTANT will also develop traffic volume growth factors and use them to forecast the existing turning movement counts for the design year (Year 2035).

Deliverables: Maps, tables, photos of existing conditions. Memo documenting existing conditions, data collection, approach counts, peak hour turning movement counts, pedestrian and bicycle traffic volumes, and traffic projections.

TASK 4: ROUNDABOUT OPERATIONAL ANALYSIS

Using the traffic data from Task 3, the CONSULTANT will evaluate the feasibility of installing roundabouts at each of the intersections that makes it through the screening test in Task 2. *NCHRP Report 672, Roundabouts: An Informational Guide, 2nd Edition, Chapter 21 of the Highway Capacity Manual, TRB 2010, and Chapter 7 of the Florida Intersection Design Guide* will be referred to by CONSULTANT for doing the operational analysis. The CONSULTANT will perform the following services under this task.

- A. Use the existing traffic volumes from Task 3 to conduct intersection analysis for the existing intersection geometry and the roundabout alternative. The analysis will consist of capacity and level of service analysis using the Highway Capacity Manual methodology for un-signalized and signalized intersections (existing conditions). The intersection analysis will allow the consultant to determine the critical movements and delay by approach at each intersection. The intersection analysis considering the roundabout alternative will be conducted using Sidra.
- B. Use the forecasted turning movement counts from Task 3 to conduct intersection analysis for the roundabout alternative for the 2035 design year. The analysis results will provide the design year operational efficiency of the roundabouts at each intersection. Based on the results, the consultant will make a recommendation on whether to pursue a roundabout at a particular intersection and develop conceptual design layout for that intersection in Task 5.
- C. MPO staff will analyze the crash patterns and severity at each intersection. The analysis will be summarized in tabular format and provided to consultant for documentation in technical memo to be developed at the end of this task.

- D. Analyze existing intersection geometry using Synchro 8 and analyze the roundabout alternative using the latest approved version of Sidra. The type of traffic analysis software to be used is flexible, and CONSULTANT may recommend a different analysis tool. All assumptions regarding operating parameters must be clearly identified.

Deliverables: A technical memo documenting the intersection analysis results for each intersection and recommendations on whether to proceed with conceptual design and evaluation of roundabout concepts at any particular intersection. The memo will also include safety analysis and descriptions of the intersection analysis software used in this task.

TASK 5: CONCEPTUAL DESIGN

This task will include preparation of conceptual roundabout layout designs at those intersections from Task 4 where roundabouts were determined to be viable options based on the results of the roundabout intersection analysis. The conceptual roundabout design layouts will be used in doing a concept level evaluation of existing drainage, utilities, and right of way at each intersection for potential impacts resulting from the proposed roundabout.

The CONSULTANT will perform the following services as part of this task:

- A. Conduct a field visit to the intersections to photograph critical features and to identify existing features, roadway conditions and traffic control devices in the field. Perform field measurements to supplement as-built plans.
- B. Approximately locate underground utilities or structures that may be within the footprint of the proposed roundabout. Such utilities include, but are not limited to wastewater, water, gas, electric, storm sewer, telephone, and television cable. CONSULTANT will contact Sunshine 811 directly (or through the City of Fort Myers and LCDOT who are Florida Sunshine members), or individual utility companies to mark existing underground utilities in the field and shall show such utilities on a base map based either upon field locations or available construction as-builts.
- C. Based on the information obtained above, prepare conceptual roundabout layouts at each intersection over existing aerial maps showing all the roadway features and the approximate right of way. The conceptual layouts will be to scale and will also show required signs and pavement markings in accordance with FHWA guidelines and the Florida MUTCD. While developing the conceptual layouts CONSULTANT will refer to *NCHRP Report 672, Roundabouts: An Informational Guide, 2nd Edition*, and *Chapter 7 of the Florida Intersection Design Guide*. Appropriate design treatment for pedestrian mobility and access will be considered.
- D. For those intersections which are within the project limits of planned roadway projects, the proposed roundabouts shall be designed in a way that they will be able

to accommodate the planned improvements. These intersections are identified in the list of intersections in Exhibit A under the “Ultimate Improvements” column.

- E. Determine the vehicle envelope and swept path for the design vehicle (which is usually a WB-50 truck) using AutoTURN 8. The truck turning dimension for the largest fire engine in Lee County will be also coded into a custom fire truck in AutoTURN to test each concept design.
- F. Perform a concept level drainage evaluation to identify possible drainage modifications and utility adjustments that may be necessary as a result of the intersection reconfiguration.
- G. Identify any right-of-way needs for the proposed roundabouts and estimate the area needed.

Deliverables: A set of conceptual roundabout design layouts at all the intersections over aerial maps showing how each roundabout will fit the surrounding developments. The conceptual design layouts will be completed at a 1" = 40' scale on 11" x 17" page size. Exhibits showing critical design vehicle turning paths within the proposed roundabouts developed with AutoTURN. A memo documenting design criteria used in the roundabout layout designs, description of the proposed roundabouts and their design features, accommodation of transit and non-motorized modes in the concept designs, design treatments for pedestrian mobility access, and access management issues, and AutoTURN generated design vehicle paths . The memo will also document the results of a concept level evaluation for drainage, right of way, and utility impacts resulting from the proposed roundabouts.

TASK 6: OPINION OF PROBABLE CONSTRUCTION COSTS

Using the conceptual design layout and concept level quantity estimates, a concept level Engineer’s Opinion of Probable Construction Cost will be prepared for each roundabout design concept. Besides the typical construction items, project cost will also include street lighting and landscaping.

Deliverables: The memo will include concept level Engineer’s Opinion of Probable Construction Costs for each roundabout improvement.

TASK 7: EVALUATION AND RANKING PROPOSED ROUNDABOUT PROJECTS

The CONSULTANT will develop criteria and methodology to evaluate and rank the proposed roundabout concepts. Based on the rankings priorities will be established that will assist in identifying projects for project development and funding.

TASK 8: TRAFFIC MODELLING AND SIMULATION (OPTIONAL)

The CONSULTANT will identify two roundabout concepts where the proposed roundabout geometry is complicated and challenging, and roundabout operations may be hard to visualize for the public without doing a computer simulation. The CONSULTANT will prepare VISSIM to model traffic flow on the approach streets and within the roundabouts at the two locations. Four scenarios of the model will be prepared which will include two critical peak hours and the years 2014 and 2035. The critical peak hours typically are the weekday AM and PM peak. If it is determined that the noon peak is more critical, then the less critical peak period will be dropped. The simulations will be used for presentations at public meetings.

Deliverables: Video clips of the traffic simulation in a power point.

TASK 9: CONDUCT SURVEY AND DEVELOP 30% DESIGN DRAWINGS (OPTIONAL)

The CONSULTANT shall conduct surveys at the top 2 priority projects from Task 7, and develop preliminary engineering drawings and cost estimates for roundabout implementation.

Deliverables: A set of preliminary design drawings of roundabouts at 2 intersections. The design layouts will be completed at a 1" = 40' scale on 11" x 17" page size.

TASK 10: LITERATURE REVIEW

The CONSULTANT will do a literature review of state of Florida and US DOT documents (e.g. *NCHRP Report 672, Roundabouts: An Informational Guide, 2nd Edition, Chapter 21 of the Highway Capacity Manual, TRB 2010, Chapter 7 of the Florida Intersection Design, etc.*) and evaluate whether (1) design standards/requirements would justify replacing at - capacity and failing multi-lane signalized intersections in Lee County with roundabouts, and (2) whether observed traffic patterns and conditions, and capacity LOS and V/C from available intersection analysis meet thresholds from the *Highway Capacity Manual* to even consider roundabouts at such intersections. Instead of looking at all such intersections in Lee County use 1 or 2 representative intersection(s) which have available intersection analysis data. MPO staff will provide the intersection analysis data. Examples of at-capacity or failing intersections in Lee County include the intersections of Colonial and Six Mile Parkway, US 41 and Six Mile Parkway, US 41 and Bonita Beach Road, and Colonial Boulevard and Summerlin Road.

Deliverables: Memo on results of a literature review evaluation and conclusion of at capacity or failing signalized intersections in Lee County.

TASK 11: PUBLIC INVOLVEMENT, PRESENTATION AND PREPARATION OF FINAL REPORT

The CONSULTANT will provide staff with presentation material for updates on the study to the various MPO committees throughout the study. In addition, the Consultant will assist staff

in making presentations to the BPCC, TAC, CAC and MPO Board following the production of a final draft of the study for input prior to producing a final report. This task includes the following specific subtasks:

- A. The Consultant will attend a BPCC, TAC, CAC and MPO meeting to present the results of the study as well as up to two additional public meetings at the discretion of the MPO staff if necessary.
- B. The Consultant will prepare maps, graphics, memo reports and handouts for staff to use at different times throughout the study to cover additional public involvement meetings. It is envisioned that much of this material will be what is produced as deliverables at the completion of each of the tasks.
- C. A draft and final report will be produced by the Consultant documenting the results of the study. A draft report will be submitted to the Lee MPO staff for review and comment prior to producing a final draft for distribution and presentation to the Committee's and the Board.

Deliverables: Draft and Final Reports, VISSIM model, A power point presentation documenting the feasibility analysis, results and traffic simulation.

SCHEDULE

It is anticipated that this study will be completed in eight (8) months from issuance of a Notice to Proceed date.

FEE ESTIMATE

The budget for this project is \$400,000.

PRESENTATION AND UPDATE ON THE LAND USE SCENARIO PROJECT

RECOMMENDED ITEM: This is not an action item. A presentation on the results of the Land Use Scenario Project will be provided for committee discussion and input.

The MPO is currently undertaking an intensive effort to explore alternative ways the county could grow that would reduce or shorten vehicle trips and increase other travel options. Identifying future land use patterns as alternative scenarios will allow the MPO and citizens of Lee County to evaluate the costs and benefits of different patterns. In June, the MPO will select a preferred land use scenario, which will become the basis of the future transportation vision in the MPO's forthcoming 2040 Long Range Transportation Plan (LRTP).

Over the last several months the Consultant team has been analyzing the results, conducting the public engagement process and drafting the reports. **Attached** is a report on the public involvement results. MPO staff will provide the results of the study to date.

1. Introduction

The Lee County Metropolitan Planning Organization (MPO) is the county’s transportation partnership between the cities of Bonita Springs, Cape Coral, Fort Myers, Fort Myers Beach, Sanibel, unincorporated Lee County, and the Florida Department of Transportation. The MPO, in partnership with the municipalities and local residents, is responsible for planning a surface transportation system to serve the entire county.

This document describes the planning, development, and evaluation of alternative land use scenarios for Lee County. Four phases were required, with some tasks overlapping phases:

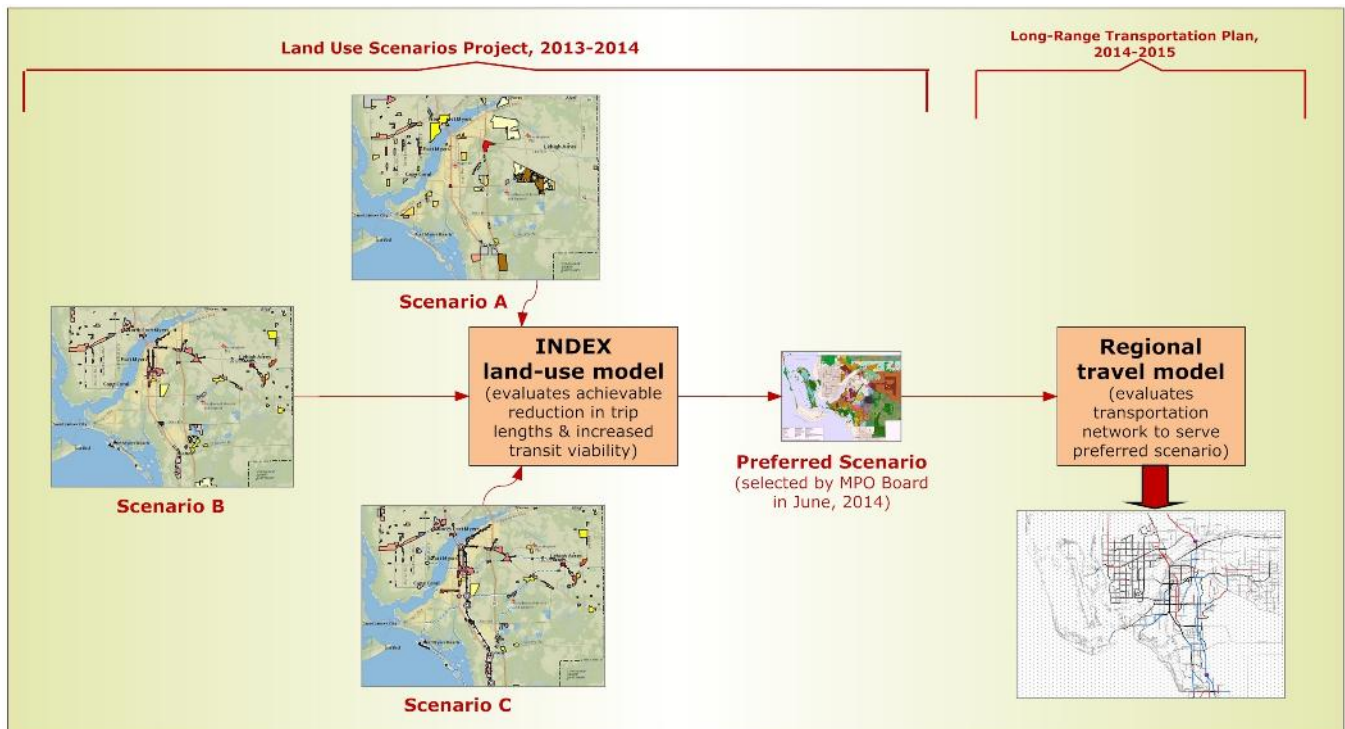
- Identify a community vision and establish specific goals and objectives
- Develop alternative scenarios for future growth in Lee County
- Evaluate the scenarios using technical criteria and public responses
- Select a preferred alternative for use in creating the MPOs 2040 long-range transportation plan

Scenario planning was used by the MPO because quality transportation planning requires specific assumptions on the intensity and location of future development. Instead of relying on assumptions created entirely by transportation experts, the MPO wanted broader input and a firm community consensus on anticipated growth patterns before beginning to create a transportation plan for the year 2040.

Scenario planning is a widely used analytical process that assesses alternative futures. The Federal Highway Administration (FHWA) strongly endorses scenario planning at the MPO level.

Future land-use patterns are a key variable that affects transportation networks and the public investments required to build and maintain them. Other important variables include demographic and economic trends, the future cost of fuel, and social factors such as the willingness to commute by private vehicle or public transit.

The scenario planning process was organized and developed by the MPO and its consultants, in close cooperation with local government staffs and in accordance with FHWA guidance.



Public Review Through MetroQuest

After completion of the technical evaluation of all three scenarios using INDEX, public input was solicited from residents and landowners through an online survey. Participants were asked to choose and rank their highest priorities and to rate each scenario. The survey is summarized here; further details are in Appendix A.

The survey was created using MetroQuest, a well-established tool for evaluating complex scenarios. MetroQuest is highly visual, with interactive displays that let participants learn about potential priorities and review the technical evaluation of the scenarios before being asked to rank each scenario.

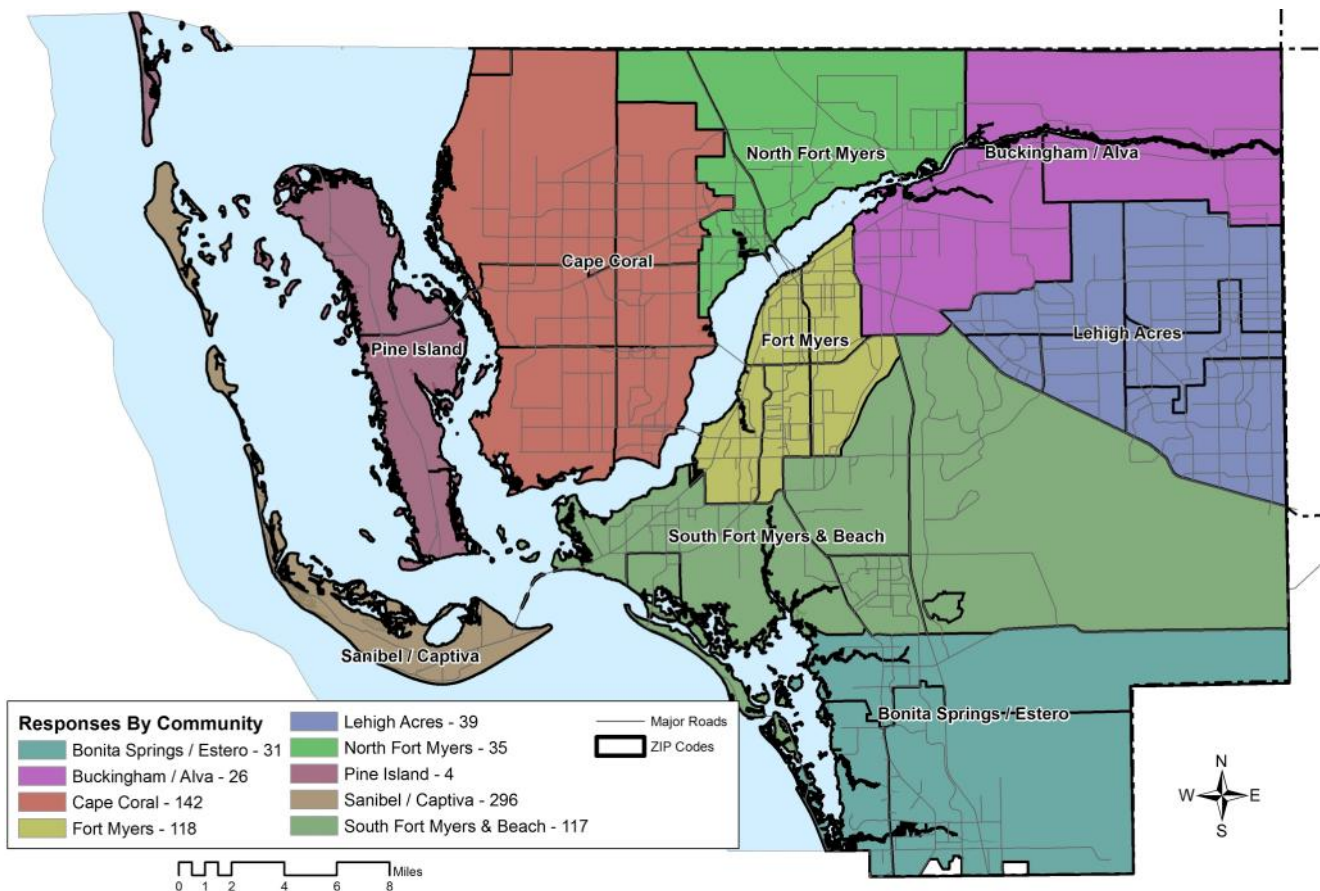
Participation in the Survey – The survey was available for six weeks in early 2014. Participants were actively solicited via web links and e-mail distribution lists from Lee County government, its five cities, all chambers of commerce, schools, hospitals, and the MPO’s own distribution list. Flyers were posted in libraries and on local buses. Social media links were also used to solicit input.

The survey was completed by 1,227 individuals. Each was asked to provide their home zip code; 808 did so, which allowed their results to be compiled by geographic area (see map below).

Participants could also volunteer information about their age and occupation, allowing some tabulations using that information. A significant majority were over 55. Those under 24 participated the least, despite considerable effort to reach this group. Of the 66% who listed an occupational status, just over half worked outside their home, a third were retired, and 12% worked from home. Less than five percent were students, unemployed, or visitors.

The survey elicited a strong response compared to standard public input methods for transportation planning. The survey generated over 18,500 data points and over 900 written comments, many of them quite detailed.

This survey was not a scientific poll and did not use formal sampling techniques. Participation was voluntary and thus caution is advised regarding how well this survey represents the overall perspectives of all Lee County residents.



Priorities – Survey participants began by viewing a list of eleven priorities that they might see as important for the future. Each priority represented a numerical measure from the INDEX model or from GIS analysis. A description of each priority was provided, along with the data that was being measured (as shown in the chart below). Each participant was asked to select their personal top five priorities and rank each from #1 to #5.

The chart at the bottom of this page summarizes the priority rankings from each community, with the number of participants shown for each. The top five priorities overall are highlighted in yellow:

1. **Walking and Bicycling**
2. **Water Conservation**
3. **Less Driving**
4. **Preserve Rural Land**
5. **Access to Transit**

Diverse Housing Options <i>(ratio of total number of multi-family homes to total number of homes)</i>	Homes come in many shapes and sizes; price and location also vary. With a wider selection of housing types, residents can choose that which suits them the best during different periods of their lives.
Walking and Bicycling <i>(intersections per square mile)</i>	Neighborhoods with small block sizes create an environment that is safer and easier for walking and bicycling. Being able to walk and bike more places increases travel options and reduces miles traveled in cars.
Less Driving <i>(home-based vehicle miles travelled per person, per day)</i>	Compact neighborhoods with a blend of jobs, schools and shops can reduce the miles a person must drive. This can affect time spent in traffic, air quality, and energy consumption.
Water Conservation <i>(water use in gallons per home, per day)</i>	A growing population will require more water. Multi-family homes use less water than single-family homes due to lawn size. Outdoor irrigation is a major factor in water use.
Reduce Greenhouse Gas <i>(tons of CO₂ emissions per home, per year)</i>	Car exhaust contributes a large proportion of greenhouse gas emissions which have significant impacts that could impact the climate, sea level rise, and public health.
Access to Jobs & Shopping <i>(number of residents near major employment and shopping centers)</i>	Jobs and shopping being close to home is convenient. This can reduce transportation costs, and offer more opportunities to find rewarding work.

Homes on Large Lots <i>(amount of rural and suburban areas that would have homes on large lots)</i>	Extra living and yard space found in more rural or suburban areas is appealing, particularly to families with children.
Access to Transit <i>(development focused along major corridors and commercial nodes)</i>	Public transit is important to those who cannot or prefer not to drive. Focusing development along major corridors and commercial nodes helps transit work efficiently.
Less Coastal Development <i>(new homes in designated coastal high hazard areas)</i>	Homes near the coast are appealing and in high demand. However, those homes are susceptible to storm damage, can impact the natural environment, and are vulnerable to rising sea levels.
Grow in Undeveloped Areas <i>(amount of rural areas that would be developed)</i>	Rural uplands offer new opportunities to grow. However, the cost of extending roads and utilities to new areas is often greater than the new tax revenue generated.
Preserve Rural Land <i>(amount of rural areas that would remain rural)</i>	Rural lands include agricultural land and undeveloped, natural resources such as wetlands and wildlife habitats. Rural lands can provide jobs, healthy ecosystems, and recreational opportunities.

Priority Ranking	Bonita Springs (31)	B'ham/Alva (26)	Cape Coral (142)	Fort Myers (118)	Lehigh Acres (39)	North Fort Myers (35)	Pine Island (4)	S. FM & Beach (117)	Sanibel/Captiva (296)	Combined (808)
1	walking and bicycling	walking and bicycling	access to jobs/shopping	walking and bicycling	access to transit	preserve rural land	preserve rural land	walking and bicycling	walking and bicycling	walking and bicycling
2	water conservation	access to transit	walking and bicycling	access to jobs/shopping	access to jobs/shopping	access to transit	water conservation	water conservation	less coastal development	water conservation
3	less driving	less driving	less driving	access to transit	less driving	less driving	reduce ghg	less driving	preserve rural land	less driving
4	access to jobs/shopping	water conservation	water conservation	less driving	walking and bicycling	water conservation	less coastal development	access to transit	water conservation	preserve rural land
5	access to transit	preserve rural land	access to transit	preserve rural land	preserve rural land	access to jobs/shopping	walking and bicycling	less coastal development	less driving	access to transit
6	less coastal development	access to jobs/shopping	preserve rural land	water conservation	grow in undeveloped	walking and bicycling	access to transit	access to jobs/shopping	access to transit	less coastal development
7	diverse housing	diverse housing	less coastal development	diverse housing	less coastal development	less coastal development	homes on large lots	preserve rural land	reduce ghg	access to jobs/shopping
8	preserve rural land	less coastal development	diverse housing	less coastal development	water conservation	diverse housing	access to jobs/shopping	diverse housing	access to jobs/shopping	reduce ghg
9	reduce ghg	reduce ghg	reduce ghg	reduce ghg	reduce ghg	reduce ghg	diverse housing	reduce ghg	diverse housing	diverse housing
10	grow in undeveloped	grow in undeveloped	homes on large lots	grow in undeveloped	diverse housing	homes on large lots	grow in undeveloped	homes on large lots	grow in undeveloped	grow in undeveloped
11	homes on large lots	homes on large lots	grow in undeveloped	homes on large lots	homes on large lots	grow in undeveloped	less driving	grow in undeveloped	homes on large lots	homes on large lots

Scenario scoring by survey participants – After participants had ranked their top five priorities, they were presented with a map of each land use scenario. The list of priorities was shown next to each map, with that participant’s five top priorities listed first. The technical score for each priority was symbolized by either:

- a red left-facing arrow, meaning this scenario scored poorly regarding that particularly priority; or
- a green right-facing arrow, meaning this scenario scored well regarding that particularly priority.

The length of the red and green arrows approximates the level of negative or positive effect on that priority.

A short description of each scenario was presented above the map, with a link to a more detailed description. The maps could be enlarged or reduced in size. Participants were then asked to rate each scenario on a scale of 1 to 5 stars, 1 being the lowest score and 5 being the highest, according to their own viewpoints.

An image from the MetroQuest survey is shown below; it is an example of one participant’s view of the “Filling In” scenario map, with that participant’s own priorities shown at the top of the priority list.



Scenario Ranking By Community –

The bar charts below break down the scenario rankings by community and show the number of participants from each community.

A: Spreading Out – 57% of participants gave this scenario 1 star and another 17% gave it 2 stars; 5% of respondents gave it 5 stars. The county-wide average of the scores was 1.85. The scores for each community are shown with a blue bar.

B: Filling In – This scenario received a better response. More than 56% of respondents gave this scenario a 4- or 5-star rating, while only 13% gave it a 1- or 2-star rating. The county-wide average of the scores was 3.63.

C: Transit-Focused – This scenario received the best response from every community. More than half of the respondents gave this scenario 5 stars, with only 10% of respondents giving 1- or 2-star ratings. The county-wide average of the scores was 4.12.

