CHAPTER 3

Developing the Plan

CHAPTER 3: Developing the Plan

The LRTP was developed using a step-by-step process, as shown in **Figure 3-1**, beginning with defining the assumptions for the Plan to guide what is needed for transportation and mobility for the MPO's planning area through the year 2040. This includes identifying the goals and objectives of the Plan and estimating the population and employment anticipated by 2040.

Based on the population and employment forecasts, the transportation improvements needed to provide suitable mobility for residents and visitors throughout the county were identified. Due to the limited funding available, select projects were prioritized for having the highest impact to mobility within the constraints of the funding available.

Throughout the update, workshops were conducted to include the public and other transportation stakeholders in development of the plan. Further information on public involvement activities are summarized in **Chapter 4**.

The study team worked with the LRTP Subcommittee made up of select MPO advisory committee members, as well as MPO Staff to further ensure the plan development process reflects the needs and desires of the community and for technical guidance regarding coordination with Charlotte County and City of Punta Gorda plans and projects. The LRTP Subcommittee meetings were held September 16, 2014, December 18, 2014, March 25, 2015, and June 22, 2015.

Develop Goals and Objectives How do we expect and want to grow and travel? Forecast 2040 Population and Employment **Identify Transportation Issues and Potential Solutions** Where are the problems, and where will they be in the future Community Workshops Round 1 Identify Needs Plan Projects What are the best solutions based on the previous plan, the public, and local experts? **Identify Needs Plan Project Costs and Potential Revenues**What would potential solutions cost, and what funding can be expected Community Workshops Round 2 Assess the Benefits, Costs, and Impacts to Prioritize Projects Which projects have the most impact and meet the goals and objectives of the plan? **Develop Financially Constrained Plan** How do we balance the needs with available revenue? **Public** Hearing ADOPT THE PLAN

Figure 3-1: Plan Development Process

Federal Requirements

As signed into law on July 6, 2012, MAP-21, a two-year surface transportation bill, replaced the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). MAP-21 emphasizes increased safety, infrastructure, system reliability, movement of people and freight, economic vitality, environment, and reduced project delivery delays for the metropolitan planning process.

The planning strategies provided in the law include:

- Support economic vitality of the metropolitan area to enable global competitiveness, productivity and efficiency
- Increase safety of the transportation system for motorized and non-motorized users
- Increase security of the transportation system for motorized and non-motorized users
- · Increase accessibility and mobility of people and freight
- Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements

On December 4, 2015, President Barack Obama signed the FAST Act into law. This new federal transportation funding legislation took affect October 1, 2015. However, due to the timing of the law, this LRTP follows the provisions set forth in MAP-21 as described here.

and State and local planned growth and economic development patterns

- Enhance integration and connectivity of the transportation system, across and between modes, for people and freight
- Promote efficient system management and operation
- Emphasize preservation of the existing transportation system

To ensure the 2040 LRTP complies with federal regulations, the Plan must address the requirements outlined in MAP-21, as described in **Table 3-1**. **Table 3-2** outlines how the 2040 LRTP adheres to other Federal Regulations. **Table 3-3** describes how the 2040 LRTP adheres to the expectations of FHWA and the Federal Transit Administration (FTA).

Table 3-1: 2040 LRTP Compliance with MAP-21

_	Requirements in United States Code (MAP-21)	Where and How Addressed
A-1	Is the plan performance-driven and outcome-based, including to support national goals for the Federal-aid highway program (23 U.S.C. 150) and general purposes for public transportation systems (49 U.S.C. 5301)? 23 U.S.C 134(c)(1)&(h)(2)(A), 49 U.S.C. 5303(c)(1) &(h)(2)(A)	The plan performance is assessed through the use of performance measures that demonstrate how the LRTP performs over time from the base year through the 2040 Needs. Individual projects are measured for performance based on evaluation criteria. See Chapter 2 (Goals and Objectives; Evaluation Criteria) and Chapter 10 (Performance Evaluation).
A-2	Does the plan provide for the development and integrated management and operation of a transportation system and facilities (including accessible pedestrian and bicycle facilities) that will function as an intermodal transportation system for the MPO's metropolitan planning area and as an integral part of an intermodal transportation system for the State and the nation? 23 U.S.C 134(c)(2), 49 U.S.C. 5303(c)(2)	Chapters 6 (Defining the 2040 Needs Plan) and 7 (Defining the 2040 Cost Feasible Plan) Transit and Bicycle and Pedestrian elements and Chapter 8 (Congestion Management) provide for an integrated intermodal system. In addition, road capacity projects take a complete streets approach where possible by including bicycle and pedestrian facilities with each project. Chapter 9 (Other Transportation Program Elements) includes Goods Movement.

Table 3-1: 2040 LRTP Compliance with MAP-21 (cont.)

	Requirements in United States Code (MAP-21)	Where and How Addressed
A-3	Did the process for developing the plan consider all modes of transportation and is it a continuing, cooperative, and comprehensive process?	Chapters 6 through 9 address all modes. Chapter 3 (Developing the Plan) describes the plan development process.
	23 U.S.C. 134(c)(3), 49 U.S.C. 5303(c)(3)	
A-4	Did the MPO coordinate its plan with the plans of other MPOs for the same metropolitan (urbanized) area, including any transportation improvements/projects located within the boundaries of more than one MPO metropolitan planning area?	The MPO participated in the ongoing regional coordination process with the surrounding counties through FDOT District One Model coordination as well as the Coordinated Urban Transportation Studies process. See Chapter 3 (Developing
	23 U.S.C. 134 (g)(1)&(2), 49 U.S.C. 5303(g)(1)&(2)	the Plan).
A-5	Were other related planning activities within the metropolitan area considered in developing the plan (including State and local planned growth, economic development, environmental protection, airport operations, and freight movements)?	The 2040 LRTP integrated the Transit Development Plan, local land use and development plans, and economic development issues related to freight. See Chapters 3 (Developing the Plan) and 5 (Costs and Revenues).
	23 U.S.C. 134(g)(3), 49 U.S.C., 5303(g)(3)	
A-6	Were the eight planning factors considered as they relate to a 20-year forecast period?	The 8 planning factors are reflected in the adopted Goals & Objectives, as well as the prioritization criteria. See Chapter
	23 U.S.C. 134(h)(1)&(i)(2)(A)(ii), 49 U.S.C. 5303(h)(1)&(i)(2)(A)(ii)	2 (Goals and Objectives of the Plan).
A-7	Was the requirement to update the plan at least every five years met?	The Plan was adopted on October 5, 2015.
	23 U.S.C. 134(i)(1)(B)(ii), 49 U.S.C. 5303(i)(1)(B)(ii)	
A-8	Does the plan identify transportation facilities (including major roadways, transit, multimodal and intermodal facilities, non-motorized transportation facilities, and intermodal connectors) that should function as an integrated metropolitan transportation system, giving emphasis to those facilities that serve important national and regional transportation functions? 23 U.S.C. 134 (i)(2)(A)(i), 49 U.S.C. 5303(i)(2)(A)(i)	Multimodal options are addressed in Chapters 6 (Defining the 2040 Needs Plan) and 7 (Defining the 2040 Cost Feasible Plan). In addition, the project prioritization process described in Chapters 2 (Goals and Objectives) and 10 (Performance Evaluation) emphasized regional roadways such as the Strategic Intermodal System (to move goods and people).
A-9	Does the plan include a discussion of types of potential environmental mitigation activities and potential areas to carry them out, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the plan? Was this discussion developed in consultation with Federal, State, and tribal wildlife, land management, and regulatory agencies? 23 U.S.C. 134(i)(2)(D), 49 U.S.C. 5303(i)(2)(D)	Environmental mitigation activities and coordination are addressed in Chapter 9 (Other Transportation Program Elements).

Table 3-1: 2040 LRTP Compliance with MAP-21 (cont.)

	Requirements in United States Code (MAP-21)	Where and How Addressed
A-10	Does the plan include a financial plan that demonstrates how the adopted transportation plan can be implemented, indicates public and private resources reasonably expected to be made available to carry out the plan, and recommends any additional financing strategies for needed projects and programs?	Available revenue projections from federal, state, local, and private sources is addressed in Chapter 5 (Costs and Revenues).
	Does the financial plan include any additional projects for illustrative purposes?	
	Did the MPO, the transit operator(s), and the State cooperatively develop estimates of funds that will be available to support plan implementation?	
	23 U.S.C. 134 (i)(2)(E), 49 U.S.C. 5303(i)(2)(E)	
A-11	Does the plan include operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods?	Operational and management strategies are addressed in Chapter 8 (Congestion Management).
	23 U.S.C. 134 (i)(2)(F), 49 U.S.C. 5303(i)(2)(F)	
A-12	Does the plan include capital investment and other strategies to preserve the existing and projected future metropolitan transportation infrastructure and provide for multimodal capacity increases based on regional priorities and needs?	Chapter 5 (Costs and Revenues) emphasizes preserving the existing system. Chapter 7 (Defining the 2040 Cost Feasible Plan) addresses the existing infrastructure with increased maintenance funds. Chapter 3 (Developing the
	23 U.S.C. 134 (i)(2)(G), 49 U.S.C. 5303(i)(2)(G)	Plan) describes the regional priorities and the measures of effectiveness, including system preservation.
A-13		Complete Streets are encouraged in the design of roadway capacity projects and identified in Chapter 7 (Defining the
	23 U.S.C. 134 (i)(2)(H), 49 U.S.C. 5303(i)(2)(H)	2040 Cost Feasible Plan). The Congestion Management Process also includes enhancement strategies; see Chapter 8 (Congestion Management). Chapter 4 (Public Involvement) documents the type of enhancements that are important to the public and stakeholders.
A-14	In developing the plan, did the MPO consult, as appropriate, with State and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation?	The MPO consulted with appropriate agencies, as described in Chapter 3 (Developing the Plan) and Chapter 4 (Public Involvement).
	23 U.S.C. 134(i)(5), 49 U.S.C. 5303(i)(5)	

Table 3-1: 2040 LRTP Compliance with MAP-21 (cont.)

	Requirements in United States Code (MAP-21)	Where and How Addressed
A-15	Were citizens, affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian and bicycle facilities, representatives of the disabled, and other interested parties provided with a reasonable opportunity to comment on the plan? Was a participation plan developed in consultation with all interested parties? Did this plan provide that all interested parties have reasonable opportunities to comment on the contents of the plan? Did the MPO hold any public meetings at convenient and accessible locations and times, employ visualization techniques, and make public information available in electronically accessible formats and means? 23 U.S.C. 134(i)(6), 49 U.S.C. 5303(i)(6)	All interested parties and those discussed in Chapter 4 (Public Involvement) and Appendix B were coordinated with and provided reasonable opportunity to comment. A Public Involvement Plan was created at the beginning of the update. Public comments were encouraged throughout the development of the plan. Public meetings were held during the day and in the evenings, and at multiple locations throughout the county to allow more opportunities for the public to attend. Chapter 3 (Developing the Plan) and Chapter 4 (Public Involvement) describe the public comment period, public involvement plan, and how information regarding the LRTP was communicated.
A-16	Was the approved plan published or otherwise made readily available for public review including, to the maximum extent practicable, in electronically accessible formats and means? 23 U.S.C. 134 (i)(7), 49 U.S.C. 5303(i)(7)	The approved plan was made available for review electronically and at locations around the county. Chapter 4 (Public Involvement) describe the public comment period, public involvement plan, and how information on the LRTP was communicated.

Table 3-2: 2040 LRTP Compliance with Requirements in Federal Regulations

	Requirements in Federal Regulations	Where and How Addressed
B-1	Does the plan cover a 20-year horizon from the date of adoption?	The Cost Feasible Plan's horizon year is 2040.
	23 C.F.R. 450.322(a)	
B-2	Does the plan include both long-range and short-range strategies/actions?	Chapter 7 (Cost Feasible) shows projects organized by five- year increments beginning in 2019 through 2040.
	23 C.F.R. 450.322(b)	
B-3	Was the plan updated based on the latest available estimates and assumptions for population, land use, travel, employment, congestion, and economic activity?	The plan was developed using the new FDOT District One Regional Planning Model which included the most recent population, employment, land use, and travel/traffic
	23 C.F.R. 450.322(e)	estimates. See Chapter 3 (Developing the Plan).
B-4	Does the plan identify the projected transportation demand of persons and goods in the metropolitan planning area over the period of the plan? 23 C.F.R. 450.322(f)(1)	Transportation modeling was used to identify needs, which helped to develop the Cost Feasible Plan. See Chapter 3 (Developing the Plan). Goods movement was also considered in the prioritization of improvements as described in Chapter 9 (Other Transportation Program Elements) and Chapter 10 (Performance Evaluation).

Table 3-2: 2040 LRTP Compliance with Requirements in Federal Regulations (cont.)

	Requirements in Federal Regulations	Where and How Addressed
B-5	Are the results of the congestion management process considered in the plan and how? 23 C.F.R. 450.322(f)(4), see also 23 U.S.C. 134(k)(3)(A), 49 U.S.C. 5303(k)(3)(A)	A congestion management process was used to identify priority projects that are funded in the committed 5 year improvements. Chapter 7 (Defining the 2040 Cost Feasible Plan) identifies the top two congested corridors and the top 10 intersections with the highest number of crashes and Chapter 8 (Congestion Management) describes the congestion management process and how the crash analysis was conducted.
B-6	Does the plan describe proposed improvements in sufficient detail to develop cost estimates? 23 C.F.R. 450.322(f)(6)	The improvements are described and summarized in the costing tool database provided by FDOT. See Chapters 5 (Costs and Revenues) and 7 (Defining the 2040 Cost Feasible Plan).
B-7	Does the plan identify pedestrian walkway and bicycle transportation facilities in accordance with 23 U.S.C. 217(g) and transportation and transit enhancement activities as appropriate? 23 C.F.R. 450.322(f)(8)&(9)	Chapters 6 (Defining the 2040 Needs Plan) and 7 (Defining the 2040 Cost Feasible Plan) Transit and Bicycle and Pedestrian elements provide for bicycle and pedestrian facilities. In addition, road capacity projects take a complete streets approach where possible by including bicycle and pedestrian facilities with each project.
B-8	Does the plan include system-level estimates of costs and revenue sources to adequately operate and maintain Federal-aid highways and public transportation? 23 C.F.R. 450.322(f)(10)(i)	System level estimates and revenues are discussed in Chapter 5 (Costs and Revenues).
B-9	Are the plan's revenues and project costs reflected in year of expenditure dollars? 23 C.F.R. 450.322(f)(10)(iv)	The revenues and costs are reflected in year of expenditure dollars. See Chapter 5 (Costs and Revenues), Chapter 6 (Defining the 2040 Needs Plan), and Chapter 7 (Defining the 2040 Cost Feasible Plan).
B-10	Was the plan developed in consultation, as appropriate, with State and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation? Did the consultation involve, as appropriate, a comparison of transportation plans with State conservation plans or maps, or a comparison of transportation plans to inventories of natural or historic resources? 23 C.F.R. 450.322(g)	All interested parties and those listed here were coordinated with and provided reasonable opportunity to comment. See Chapter 3 (Developing the Plan) and Chapter 4 (Public Involvement). Ongoing coordination with listed agencies is achieved through the ETDM process.

Table 3-2: 2040 LRTP Compliance with Requirements in Federal Regulations (cont.)

	Requirements in Federal Regulations	Where and How Addressed
B-11	Does the plan include a safety element consistent with the State's Strategic Highway Safety Plan, and (as appropriate) emergency relief and disaster preparedness plans and strategies and policies that support homeland security? 23 C.F.R. 450.322(h)	Safety and security, including hazard mitigation, are described in Chapter 9 (Other Transportation Program Elements).
B-12	Did the MPO use its participation plan developed under 23 C.F.R. 450.316(a) to provide a reasonable opportunity for interested parties to comment on the plan? 23 C.F.R. 450.322(i)	Chapter 3 (Developing the Plan) and Chapter 4 (Public Involvement) describe the public comment period, public involvement plan, and how information regarding the LRTP was communicated.
B-13	In developing the plan, did the MPO seek out and consider the needs of those traditionally underserved by existing transportation systems such as low-income and minority households? 23 C.F.R 450.316(a)(1)(vii)	An Environmental Justice was completed using Charlotte County data. Environmental Justice was a primary topic during the Round Two Community Workshops. See Chapter 9 (Other Transportation Program Elements) regarding the Environmental Justice analysis and Chapter 4 (Public Involvement) regarding responses to the Environmental Justice activity at the workshops.
B-14	Has the MPO demonstrated explicit consideration of and response to public input received during development of the plan? If significant written and oral comments were received on the draft plan, is a summary, analysis, and report on the disposition of the comments part of the final plan? 23 C.F.R. 450.316(a)(1)(vi)&(2)	Chapter 4 (Public Involvement) includes all comments received during the public events and meetings, as well as the public comment period; responses are provided where appropriate.
B-15	Did the MPO provide an additional opportunity for public comment if the final plan differs significantly from the version that was made available for public comment and raises new material issues which interested parties could not reasonably have foreseen from the public involvement efforts? 23 C.F.R 450.316(a)(1)(viii)	There were no significant changes between the draft plan and the final plan document.

Table 3-3: 2040 LRTP Compliance with FHWA/FTA Expectations

	Requirements in Federal Regulations	Where and How Addressed
D-1	Were the requirements for inclusion of projects in the MPO's transportation improvement program (TIP) considered when developing the LRTP?	The projects in the Transportation Improvement Program were considered in the phasing and funding of the Cost Feasible plan. See Chapter 7 (Defining the 2040 Cost Feasible Plan).

	Requirements in Federal Regulations	Where and How Addressed
D-2	 Projects in the LRTP: Does the plan include: Projected transportation demand in the planning area, Existing (E+C) and proposed transportation facilities that function as an integrated system, Operational and management strategies, Consideration of results of the Congestion Management Plan, Strategies to preserve existing and projected future transportation infrastructure, Pedestrian and bicycle facilities, and Transportation and transit enhancement activities? Are projects that meet the definition of regionally significant in 23 CRF 450.104 included in the Cost Feasible LRTP? 	Chapter 3 (Developing the Plan) describes projected demand and the E+C Network. Chapter 4 (Public Involvement) documents the type of enhancements that are important to the public and stakeholders. Bicycle and pedestrian projects are outlined as needs in Chapter 6 (Defining the 2040 Needs Plan) and funded projects in Chapter 7 (Defining the 2040 Cost Feasible Plan). Chapter 7 (Defining the 2040 Cost Feasible Plan) describes the 0&M strategies and system preservation, Complete Streets encouraged in the design of roadway capacity projects, and regionally significant projects. Chapter 8 (Congestion Management) describes the Congestion Management Process and results and includes enhancement strategies. Chapters 2 (Goals and Objectives of the Plan) and 10 (Performance Evaluation) describe the project prioritization.
D-3	Grouped Projects in the LRTP: If non-regionally significant projects have been grouped in the LRTP, are the groups specific enough to determine consistency between the LRTP and the TIP? Are the grouped projects similar in function, work type, and/or geographic area?	Chapter 7 (Defining the 2040 Cost Feasible Plan) groups all Congestion Management projects without regard for timeframe; however identifies specific projects to implement as appropriate.
D-4	Fiscal Constraint/Operations and Maintenance: Does the LRTP provide system level cost estimates for 0&M activities using each of the five-year cost bands or as a total estimate for the entire timeframe of the LRTP? Are 0&M cost estimates included for state- and locally maintained facilities covered in the LRTP? Is the general source of funding for 0&M activities identified? Is there a clear separation of costs for 0&M activities and for capital investment projects?	0&M revenues and cost estimates are identified in Chapters 5 (Costs and Revenues) and 7 (Defining the 2040 Cost Feasible Plan).
D-5	Fiscal Constraint/Total Project Costs: For each capacity expansion and regionally significant project, are all phases described in sufficient detail to estimate and provide an estimated total project cost and explain how the project is expected to be implemented? For any projects that will go beyond the horizon year, does the LRTP explain what and when phases/work will be performed beyond the horizon year with costs estimated using year of expenditure methodologies?	Chapter 7 (Defining the 2040 Cost Feasible Plan) uses the FDOT District One costing tool and shows costs in five-year increments and by phase.
D-6	Fiscal Constraint/Cost Feasible Plan: Has an estimate of the cost and source of funding for each phase been provided for projects included in the CFP? (Phases are PD&E and Design or Preliminary Engineering, ROW, and Construction.) If boxed funds are utilized, are individual projects that will utilize them listed or described in bulk in the LRTP?	Chapter 7 (Defining the 2040 Cost Feasible Plan) uses the FDOT costing tool and shows costs in five-year increments and by phase; it also includes funding source. Congestion Management boxed funds can be applied through the menu of strategies, and project locations identified.

Table 3-3: 2040 LRTP Compliance with FHWA/FTA Expectations (cont.)

	Requirements in Federal Regulations	Where and How Addressed
D-7	Fiscal Constraint/New Revenue Sources: If any new revenue source is assumed as part of the CFP, is it clearly explained? Also, is the following covered: why the new revenue source is considered to be reasonably available, when it will be available, what actions would need to be taken for it to be available, and what would happen if it does not become available?	No new revenue sources are assumed.
D-8	Fiscal Constraint/Federal Revenue Sources: Are projects within the first 10 years planned to be implemented with federal funds notated or flagged? Beyond the first 10 years, is project funding clearly labeled as a combined Federal/State source in the CFP?	Project funding sources are indicated in Chapter 7 (Defining the 2040 Cost Feasible Plan).
D-9	Full Time Span of the LRTP: As a planning document, does the LRTP show all the projects and project funding for the entire period covered by the LRTP (base year to horizon year)?	The 2040 LRTP includes projects from 2019 to 2040. See Chapter 7 (Defining the 2040 Cost Feasible Plan).
D-10	Environmental Mitigation: For highway projects, does the LRTP include a discussion of types of potential environmental mitigation activities and opportunities at a system-wide level developed in consultation with Federal, State and tribal wildlife, land management, and regulatory agencies (beyond project-specific ETDM screenings)? Does the MPO maintain documentation of the consultation with the relevant agencies? Was there a need to state transit environmental benefits, such as reduction in single occupant vehicle trips and vehicle miles traveled, reduction in greenhouse gases, pedestrian and bicycle linkages and transit oriented/compact development, within the broad parameters in the LRTP? Are phases for transit capital projects listed in the LRTP?	Environmentally sensitive lands were taken in to consideration in this Plan and are described in Chapter 9 (Other Transportation Program Elements). The MPO may choose to enter projects into ETDM as the projects progress through the planning and implementation process. Transit environmental benefits were not discussed exclusively, but are included in the performance evaluation of the Cost Feasible Network as shown in Chapter 10 (Performance Evaluation). Transit capital project phases are shown in Chapter 7 (Defining the 2040 Cost Feasible Plan).
D-11	LRTP Documentation/Final Board Approval: Was a substantial amount of the LRTP analysis and documentation completed at the time of MPO board adoption? Will all final documentation/documents be posted online and available through the MPO office no later than 90 days after plan adoption?	The Board adopted the 2040 LRTP on October 5, 2015 after a substantial discussion and close of the public hearing. All final documentation will be posted online within 90 days after plan adoption.
D-12	Documented LRTP Modification Procedures: Does the MPO have procedures that document how modifications to the adopted LRTP are to be addressed? These procedures can be included as part of the LRTP, the public participation plan, or provided elsewhere as appropriate.	The MPO procedures that document the LRTP modification process are identified in the MPO's Public Participation Plan.

Table 3-3: 2040 LRTP Compliance with FHWA/FTA Expectations (cont.)

	Requirements in Federal Regulations	Where and How Addressed	
Transi	Transit Projects and Studies		
D-13	Major Transit Capital Projects: In order to plan for a transit "New Start" in the LRTP, the MPO must assume it will be successful in competing for discretionary FTA New Starts program dollars. Grantees may be proposing use of a Transportation Infrastructure Finance and Innovation Act (TIFIA) loan or other loan to help bridge the gap in capital financing for a New Start. With regard to planning of a major capital facility other than a New Start, the MPO must assume that FTA program funds such as "State of Good Repair" and "Bus and Bus Facilities" will be awarded to the transit system based on formula.	No New Starts projects are included in this plan.	
D-14	Transit Facility: Transit facilities eligible for FTA 5307, 5309, 5337, and 5339 funds or FLEX funds from FHWA should be contained within the TIP and the STIP and be consistent with the LRTP. For example, consistent with the LRTP might mean a general statement, paragraph, line item or section on the specific facilities and their general location if known. Inclusion might also mention feasibility studies, preliminary engineering, appraisals, final design, property acquisition and relocation and NEPA documents, and perhaps the intent to seek local, state, or federal funding for same. The award of such funds may require an LRTP amendment to show such funds in the constrained LRTP.	The plan does not anticipate flexing funds.	
D-15	Transit Service Including Fixed Route Bus, Deviated Route, Paratransit, Enhanced or Express Bus: Specific new transit service proposed by a transit grantee for a new area or corridor should, at a minimum, be consistent with the LRTP. For example, that might mean a general statement, paragraph, line item or section on the specific service improvements to be undertaken (and the general location if known). Inclusion might also mention feasibility studies, operational plans, strategic plans, and perhaps the intent to seek local, state, or federal funding for same. The award of such funds may require an LRTP amendment to show such funds.	Chapter 6 (Defining the 2040 Needs Plan) and Chapter 7 (Defining the 2040 Cost Feasible Plan) identify the future transit needs and projects via project lists and maps.	
D-16	Transit Service Including BRT, LRT, HRT, CRT, Streetcar Through New Starts/Small Starts Program: Specific new fixed guideway transit service proposed by a transit grantee to serve a new area or corridor as part of the FTA New Starts/Small Starts or Core Capacity Program should, at a minimum, be consistent with the LRTP. As such service may be a large capital expenditure, the project, termini, and cost would need to be specified in the constrained LRTP. Inclusion might also mention feasibility studies, NEPA studies, preliminary engineering and final design, right of way acquisition, operational plans, modeling improvements, strategic plans, and perhaps the intent to seek local, state, or federal funding for same. The award of such funds would require an LRTP amendment to show such funds in the constrained LRTP.	Not applicable.	

Table 3-3: 2040 LRTP Compliance with FHWA/FTA Expectations (cont.)

Requirements in Federal Regulations Where and How Addressed Emerging Issues – Not Current Required/New Requirements May Have Short Timeframe for Compliance Safety and Transit Asset Management: MAP-21 includes significant Transportation safety and security are discussed in Chapter additions to safety planning and transit asset management on the part of 9 (Other Transportation Program Elements). transit grantees and the States. Performance Measurement: MPOs are encouraged to consider ways to The Plan considers performance standards of level of incorporate performance measures/metrics for systemwide operation service on the roadway network, as outlined by the as well as more localized measures/metrics in their LRTPs. Measures local governments. No performance targets have been to assess the plan's effectiveness in increasing transportation system established at the time of this plan's adoption. Chapter performance will be needed. State and MPO target setting will follow 2 (Goals and Objectives), Chapter 7 (Cost Feasible). establishment of performance measures under MAP-21 by USDOT. and Chapter 10 (Performance Evaluation) all describe performance measures, the evaluation criteria, individual Related but not vet codified provisions in MAP-21: project performance, as well as system-wide performance. Each MPO shall establish performance targets that address the performance measures described in 23 U.S.C. 150(c), where applicable, to use in tracking progress towards attainment of critical outcomes for the region of the MPO. [23 U.S.C. 134(h)(2)(B)(i)(l), 49 U.S.C. 5303(h)(2)(B)(i)(l)] Selection of performance targets by an MPO shall be coordinated with the State to ensure consistency, to the maximum extent practicable. [23 U.S.C. 134(h)(2)(B)(i)(II), 49 U.S.C. 5303(h)(2)(B)(i)(II)] Selection of performance targets by an MPO shall be coordinated, to the maximum extent practicable, with providers of public transportation to ensure consistency with 49 U.S.C. 5326(c) and 5329(d). [23 U.S.C. 134(h)(2)(B)(ii), 49 U.S.C. 5303(h)(2)(B)(ii)] Each MPO shall establish performance targets under 23 U.S.C. 134(h) (2)(B) and 49 U.S.C. 5303(h)(2)(B) not later than 180 days after the date on which the State or provider of public transportation establishes performance targets. [23 U.S.C. 134(h)(2)(C), 49 U.S.C. 5303(h)(2)(C)] An MPO shall integrate in the metropolitan transportation planning process, directly or by reference, the goals, objectives, performance measures, and targets described in other State transportation plans and transportation processes, as well as plans developed by providers of public transportation, required as part of a performance-based program. [23 U.S.C. 134(h)(2)(D), 49 U.S.C. 5303(h)(2)(D)] In the transportation plan for the MPO's metropolitan planning area, describe the performance measures and performance targets used in assessing the performance of the transportation system and include a system performance report and subsequent updates evaluating the condition and performance of the transportation system with respect to

(B)&(C)

the performance targets. [23 U.S.C. 134 (i)(2)(B)&(C), 49 U.S.C. 5303(i)(2)

Table 3-3: 2040 LRTP Compliance with FHWA/FTA Expectations (cont.)

Requirements in Federal Regulations	Where and How Addressed
Freight: Careful consideration should be given on how to address the eight planning factors (see Table 3-1 , Question A-6). Special emphasis should be given to the freight factor as it is anticipated to play a more prominent role in future planning requirements.	The eight planning factors are outlined in Chapter 2 (Goals and Objectives of the Plan).
Sustainable Transportation and Context Sensitive Solutions: MPOs are encouraged to identify and suggest contextual solutions for appropriate transportation corridors and promote livability.	Stakeholder workshops, as described in Chapter 4 (Public Involvement), discussed sustainable transportation and context sensitive solutions.
Proactive Improvements – Not Currently Required/Positive Strides in I	Long Range Planning
Linking Planning and NEPA: MPOs should strongly consider including purpose and need statements for regionally significant projects in their LRTP cost feasible plans.	Noted.
Climate Change: MPOs may wish to consider climate change and strategies which minimize impacts to the transportation system. State legislation encourages MPOs to consider strategies that integrate transportation and land use planning in their LRTPs to provide for sustainable development and reduce greenhouse gas emissions, as well as include energy considerations in all state, regional, and local planning	Chapter 9 (Other Transportation Program Elements) includes information on Hazard Mitigation and other impacts of climate change.
Scenario Planning: If an MPO elects to do scenario planning as part of development of its LRTP, it is encouraged to consider a number of factors including potential regional investment strategies, assumed distribution of population and employment, a scenario that maintains baseline conditions for identified performance measures, revenue constrained scenarios, and estimated costs and potential revenue available to support each scenario. Related but not yet codified provisions in MAP-21: An MPO may voluntarily elect to develop and evaluate multiple scenarios for consideration as part of development of its transportation plan. [23 U.S.C. 134(i)(4), 49 U.S.C. 5303(i)(4)] For an MPO that voluntarily elects to develop multiple scenarios, its system performance report and subsequent updates are to include an analysis of how the preferred scenario has improved the conditions and performance of the transportation system and how changes in local policies and investments have impacted the costs necessary to achieve the identified performance targets. [23 U.S.C. 134(i) (2)(C)(ii), 49 U.S.C. 5303(i)(2)(C)(iii)]	Noted.

State Requirements

The FDOT Office of Policy Planning's MPO Program Management Handbook provides guidance on state and federal legislation, how MPOs are formed and how membership is apportioned, how transportation planning boundaries are designated, and requirements for cooperation between FDOT and the MPOs. The CC-PG MPO 2040 LRTP was developed consistent with the guidance in this handbook.

Additional state requirements for public involvement mandate that citizens, agencies, and other interested parties be given opportunity to comment during development of the MPO's plans, including the LRTP; and that all governmental proceedings are open to the public and adequately noticed, referred to as Sunshine Law. All public engagement during the 2040 LRTP update was conducted in accordance with this statute. **Table 3-4** describes how the 2040 LRTP adheres to state requirements. **Table 3-5** describes how the 2040 LRTP adheres to the MPOAC Financial Guidelines.

Table 3-4: 2040 LRTP Compliance with State Requirements

State	Statutory Requirements Not Otherwise Addressed in Federal Code or Regulation	Where and How Addressed		
C-1	Are the prevailing principles in ss. 334.046(1), F.S. – preserving the existing transportation infrastructure, enhancing Florida's economic competitiveness, and improving travel choices to ensure mobility – reflected in the plan? Subsection 339.175(1), (5)&(7), F.S.	Chapter 2 (Goals and Objectives of the Plan) describes the goals including travel choices, mobility, improving the economy, and preservation of the system; this chapter also describes the measures of effectiveness, including system preservation. Chapter 5 (Costs and Revenues) emphasizes preserving the existing system through funding.		
C-2	Does the plan give emphasis to facilities that serve important national, state, and regional transportation functions, including SIS and TRIP facilities? Subsection 339.175(1)&(7)(a), F.S.	There is major emphasis placed on Strategic Intermodal System facilities such as I-75 and US 17, and other state roadways including US 41 and SR 776. See Chapter 7 (Defining the 2040 Cost Feasible Plan).		
C-3	Is the plan consistent, to the maximum extent feasible, with future land use elements and the goals, objectives, and policies of the approved comprehensive plans for local governments in the MPO's metropolitan planning area? Subsection 339.175(5)&(7), F.S.	Chapter 2 (Goals and Objectives of the Plan) describes relevance to local government comprehensive plans.		
C-4	Did the MPO consider strategies that integrate transportation and land use planning to provide for sustainable development and reduce greenhouse gas emissions? Subsection 339.175(1) & (7) F.S.	The plan uses the adopted growth plans of local governments which emphasize urban infill and mixed use development. See Chapter 3 (Developing the Plan) for the Population and Employment projections.		
C-5	Were the goals and objectives identified in the Florida Transportation Plan considered? Subsection 339.175(7)(a), F.S.	The goals and objectives in the FTP were considered. See Chapter 2 (Goals and Objectives of the Plan).		

Table 3-4: 2040 LRTP Compliance with State Requirements (cont.)

State Statutory Requirements Not Otherwise Addressed in Federal Code or Regulation		Where and How Addressed		
C-6	Does the plan assess capital investment and other measures necessary to (1) ensure the preservation of the existing metropolitan transportation system including requirements for the operation, resurfacing, restoration, and rehabilitation of major roadways and requirements for the operation, maintenance, modernization, and rehabilitation of public transportation facilities; and (2) make the most efficient use of existing transportation facilities to relieve vehicular congestion and maximize the mobility of people and goods? Subsection 339.175(7)(c), F.S.	Chapter 7 (Defining the 2040 Cost Feasible Plan) outlines investments in Congestion Management projects and road and highway maintenance. Chapter 8 (Congestion Management) describes the Congestion Management Process in greater detail, and Chapter 9 (Other Transportation Program Elements) describes other pertinent transportation program elements.		
C-7	Was the plan approved on a recorded roll call vote or hand-counted vote of the majority of the membership present?	The CC-PG MPO adopted the LRTP by roll call vote on October 5, 2015.		
	Subsection 339.175(13) F.S.			

Table 3-5: 2040 LRTP Compliance with MPOAC Financial Guidelines

MPOAC Financial Guidelines for MPO 2040 LRTPs (January 2013) Where and How Addressed						
Guidel	Guidelines for Defining and Reporting Needs					
E-1	Does the plan include a cost estimate of needs in base year dollars and report estimated needs by mode? Does the needs estimate include all costs associated with all modes?	See Chapters 5 (Costs and Revenues), 6 (Defining the 2040 Needs Plan), and 7 (Defining the 2040 Cost Feasible Plan) for the cost estimates.				
E-2	Does the plan include only transportation projects that are necessary to meet identified future transportation demand or advance the goals, objectives, and policies of the MPO, the region, and the State?	The plan is intended to be realistic and addresses the future needs.				
E-3	Does the plan exclude projects that are extremely unlikely to be implemented and unnecessarily inflate the estimated transportation needs in the metropolitan area?	The evaluation criteria ensured that projects with fatal flaws were not carried forward. See Chapters 2 (Goals and Objectives of the Plan) and 10 (Performance Evaluation).				
E-4	Does the plan include an estimate of unfunded project costs in base year dollars?	Chapter 6 (Defining the 2040 Needs Plan) includes the estimate of unfunded projects. Chapter 7 (Defining the 2040 Cost Feasible Plan) lists the unfunded needs projects.				
E-5	Is reasonably available revenue reported in year of expenditure (YOE) dollars?	Chapter 5 (Costs and Revenue) discusses the revenues reported in YOE dollars.				
E-6	Is an estimate of the cost of all projects and all phases, regardless of mode, included in the cost feasible plan?	Chapter 7 (Defining the 2040 Cost Feasible Plan) includes all project costs.				
E-7	Are the costs of operating and maintaining the existing and future transportation system clearly stated in the cost feasible plan?	Chapter 7 (Defining the 2040 Cost Feasible Plan) includes operational and maintenance costs.				
E-8	Did the MPO include full financial information for all years covered by the LRTP, including information from its transportation improvement program?	Chapter 5 (Costs and Revenue) discusses all financial assumptions for the Plan.				

Table 3-5: 2040 LRTP Compliance with MPOAC Financial Guidelines (cont.)

MPO	AC Financial Guidelines for MPO 2040 LRTPs (January 2013)	Where and How Addressed				
Guidel	Guidelines for Defining and Reporting Needs					
E-9	Did the MPO use State FY 2013/2014 as the base year and State FY 2039/2040 as the horizon year for its plan (for financial reporting purposes)?	The base year for the plan is FY 2014. The horizon year for the Plan is 2040.				
E-10	Has the MPO presented revenue estimates and project costs using five-year periods to the year 2030 and a 10- year period for the remaining years of the plan (2031- 2040)?	Chapter 5 (Costs and Revenue) discusses all financial assumptions for the Plan. Project costs are broken down by periods.				
E-11	Has the MPO included FDOT's revenue estimates for operating and maintaining the State Highway System at the district level in its plan documentation?	Revenue estimates were provided by FDOT as discussed in Chapter 5 (Costs and Revenue).				
E-12	Does the plan adjust project cost estimates expressed in Present Day Cost dollars to YOE using FDOT inflation factors? If alternative inflation factors were used, has an explanation of assumptions used to develop them been provided?	Chapter 5 (Costs and Revenue) includes the inflation factors used to calculate costs and revenues.				
E-13	Does the plan incorporate 2040 SIS Cost Feasible Plan projects as provided by FDOT?	Chapter 7 (Defining the 2040 Cost Feasible Plan) includes projects in the 2040 SIS Cost Feasible Plan.				

Key Planning Tools and Assumptions

Planning Tools

The FDOT District One Regional Planning Model was used to forecast the travel patterns and identify roads that are expected to be deficient in 2040 with and without the proposed projects in place. Geographic Information Systems (GIS) was used to create maps displaying the results in a format fit for general understanding.



Downtown Punta Gorda

Transportation and Land Use

The 2040 LRTP update included an analysis of existing land uses, build out densities and intensities, and developable vacant land by land use plan code to develop the socioeconomic dataset used to forecast travel patterns in the future. Additionally, this analysis considered the impact of approved Developments of Regional Impact (DRIs) and other major developments, as well as future population and employment projections provided by Charlotte County.

Transportation Networks

Development of the 2040 Cost Feasible Plan Network reflects various iterations and refinements of the network alternatives and the final adopted 2040 Cost Feasible Plan Network. While a Needs Plan alternative was not tested, the following alternatives were developed and evaluated using the Regional Planning Model:

- Base Year (2010) Network
- E+C (2020) Network
- Five 2040 Cost Feasible Plan Network Alternatives
- Adopted 2040 Cost Feasible Plan Network

Projects included in each model run and the resulting deficient roads are included in **Appendix C**. More information about the Needs Plan and Cost Feasible Plan is provided in **Chapters 6** and **7**, respectively.

Public Involvement

The future networks were developed cooperatively with guidance from the LRTP Subcommittee, TAC, CAC, and MPO Board. In addition, several community workshops, consensus building workshops, and stakeholder interviews were held to obtain input from citizens of Charlotte County throughout the plan development process. The public participation process is summarized in **Chapter 4**.



Public Comments from Round One Community Workshops

Costs and Revenues

Significant efforts were devoted to the development of standard and reasonable assumptions for the projections of costs and revenues. FDOT provided the 2015 Long Range Estimating (LRE) Costing Tool to calculate the roadway costs for right-of-way, design, construction, and unique costs through calculations based on length, total lane miles, added lane miles, or percent of another cost (such as percent of construction cost).

The Costing Tool also accommodates alternative costing methods such as the use of manual costs. Costs were prepared for the following elements of the LRTP:

- Highways
- Public transportation
- · Bicycle and pedestrian facilities
- Multi-use trail facilities
- ITS
- Intersection improvements
- Transportation Demand Management (TDM)
- Advance right-of-way acquisition

More information on unit cost assumptions and non roadway costs is provided in **Chapter 5**.

Revenues were developed through a collaborative effort between Charlotte County, the City of Punta Gorda, and FDOT District One. Revenues are discussed in **Chapter 5**.

Population and Employment Growth

One element that drives the need for regular updates to the LRTP is the change and shift in demographic and socioeconomic trends. This refers to the number of residents and employees in the county, where they will live and work, and their social and economic factors that affect how and when they travel.

Historic Development Patterns

Charlotte County is approximately 700 square miles in size with one municipality, Punta Gorda. The City is located on US 41 on the eastern shore of Charlotte Harbor and was originally a stop for the first passenger train of the Florida Southern Railroad. In the 1890s, Punta Gorda became a key port for the shipment of cattle to Cuba. The first bridge across the Peace River was built in 1921, allowing the Florida land boom of the 1920's to reach Charlotte County.

Two significant natural disasters helped to shape the city. The first was a fire in 1905 that destroyed the city's downtown. The second was Hurricane Charley in 2004, which caused vast amounts of damage to the county. Fortunately, the City of Punta Gorda had a strong revitalization plan in place that transformed the city with restorations and new buildings and amenities, all built to hurricane resistant building codes.



US 41 Bridge over Charlotte Harbor

Growth Trends

The county is naturally split into three areas: West County, Mid County, and South County, as shown in Figure 3-2. West County includes the Cape Haze Peninsula and lies west of the Myakka River. Mid County consists of Murdock Village/Port Charlotte, and lies between the Myakka River and Peace River. South County includes Punta Gorda and the portion of the county east and south of the Peace River.

Figure 3-2: Charlotte County Areas



Punta Gorda is currently the only municipality in the county. Most new non-residential development is concentrated along the US 41 corridor or near the airport. Murdock Village is located at the crossroads of SR 776 and US 41 and has the potential to become another major destination within the county.

Future Land Use and Transportation Coordination

The future land use, as defined by the Charlotte County Comprehensive Plan is a primary tool used to determine where growth will occur in the future. Each future land use category has maximum allowable residential densities and non-residential intensities associated to ensure natural resource preservation while optimizing social infrastructure enhancements, including transportation.

The future land use plan was used in the development of the socioeconomic data as follows:

- Determination of maximum allowable units to be added to an area
- Identification of physical constraints imposed by coastal zones and coastal hazard areas
- Guidance of new growth towards existing urban areas that can accommodate growth and to vacant lands in the vicinity of urban areas

The adopted Future Land Use Map used to develop the socioeconomic data projections for this LRTP is shown in Figure 3-3.

Population and Employment Forecasts

Past trends and future outlook are used to determine the expected impact to the transportation system through 2040 based on the anticipated shift in demographics. Development of the socioeconomic data guiding the 2040 LRTP involved the following steps:

 Developing countywide control (grand) totals for population, employment, school enrollment, and hotels/motel based on projections calculated by the University of Florida's Bureau of Economic and Business Research (BEBR)

- 2. Allocating approved development to the appropriate areas using the County's database and GIS software
- 3. Calculating vacant developable land in the CC-PG MPO planning area
- 4. Allocating growth to the appropriate zones or areas around the county using GIS

Most of Charlotte County's population growth is expected to occur in existing or redeveloped neighborhoods, such as Murdock Village in Mid County or within the City of Punta Gorda. The exception to this is the planned Babcock Ranch community in southeast Charlotte County. By 2040, this new community is expected to house more than 26,000 people and support more than 2,300 workers when it is completely built and settled.

Table 3-6 on the following page summarizes the forecasted future population and employment within the designated planning area. The current and future land uses, population, and employment, in addition to planned development, represent the basis for this forecast. The allocation of growth to different areas was based on modeling efforts, public involvement, and consultation with Charlotte County and City of Punta Gorda staff.

Future population and employment projections show a decrease as compared to the 2035 LRTP due to the change in growth patterns in the last decade. The 2035 LRTP forecasted population was expected to be more than 260,000. The revised growth rate for the 2040 LRTP forecasts the population to be 207,000 in 2040. While growth is still expected, the rate of growth is lower.

The socioeconomic data forecast results are illustrated in Figures 3-4 through 3-9. Appendix A describes methodology for developing the socioeconomic data.

Lee

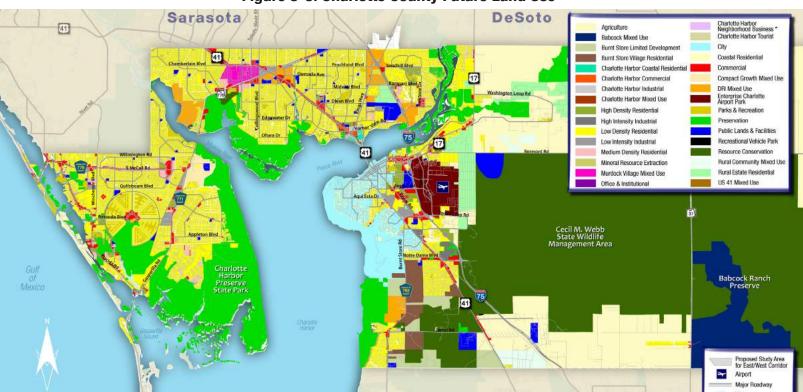


Figure 3-3: Charlotte County Future Land Use

Adjacent Count

Table 3-6: Population and Employment for Charlotte County

Year	Total Population	Dwelling Units	Total Employment	Industrial	Commercial	Service
2010	156,600	96,841	64,797	7,594	17,598	39,605
2035*	261,578		109,234			
2040	207,214	125,683	84,387	10,110	20,814	53,463
Growth 2010-2040	50,614	28,842	19,590	2,516	3,216	13,858
% Growth 2010-2040	32%	30%	30%	33%	18%	35%

^{*} Projections from 2035 LRTP

Source: Bureau of Economic and Business Research (BEBR), Medium Projection (2040 forecasts)

Figure 3-4: Charlotte County 2010 Population

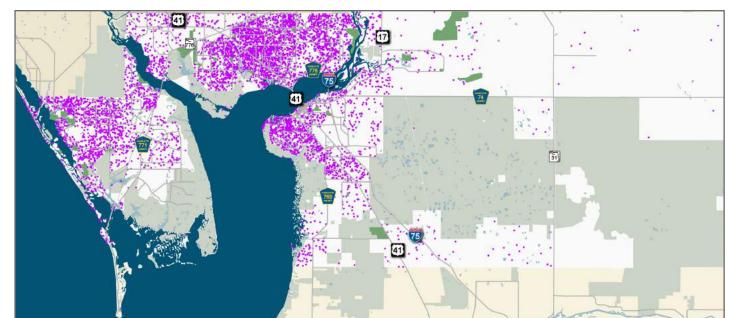


Figure 3-5: Charlotte County 2040 Population

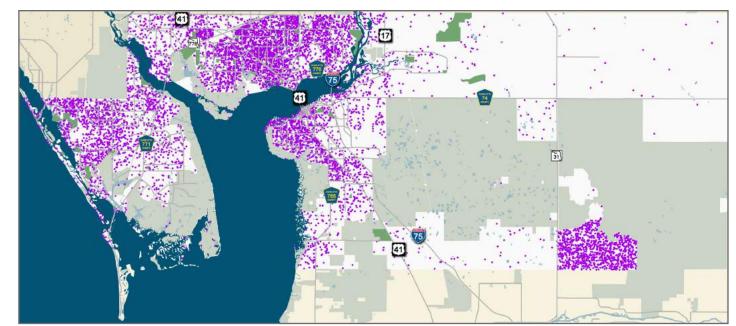
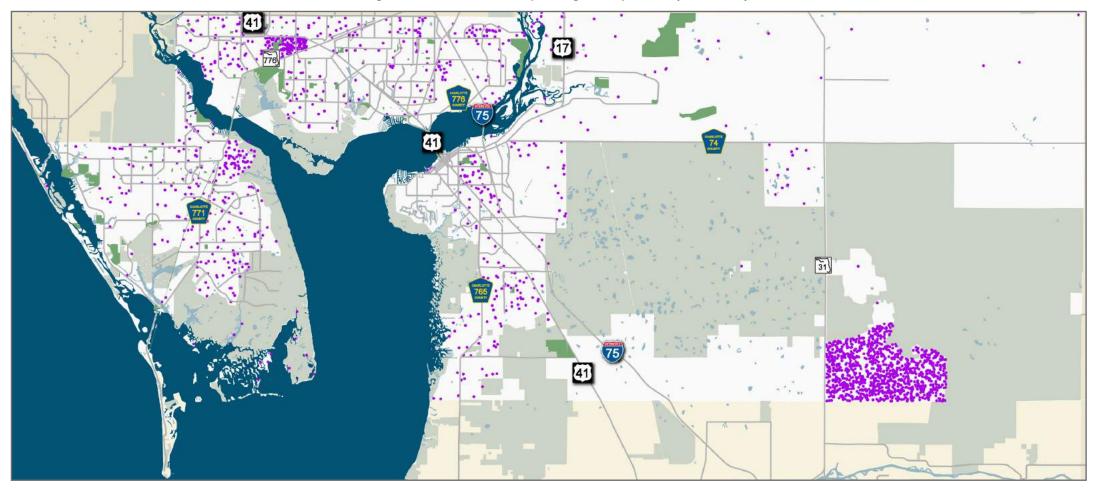


Figure 3-6: Charlotte County Change in Population (2010-2040)







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Figure 3-7: Charlotte County 2010 Employment

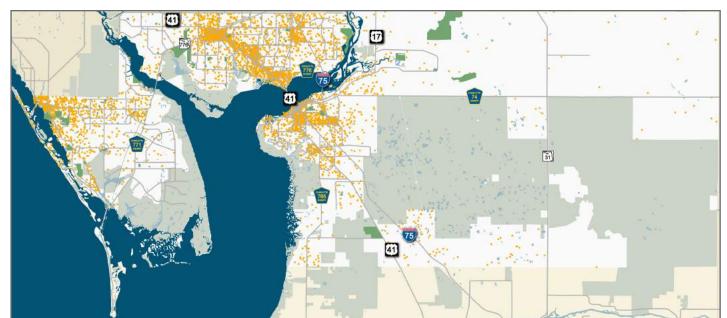


Figure 3-8: Charlotte County 2040 Employment

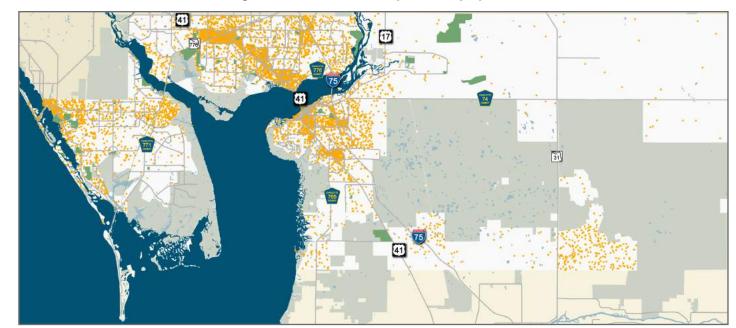
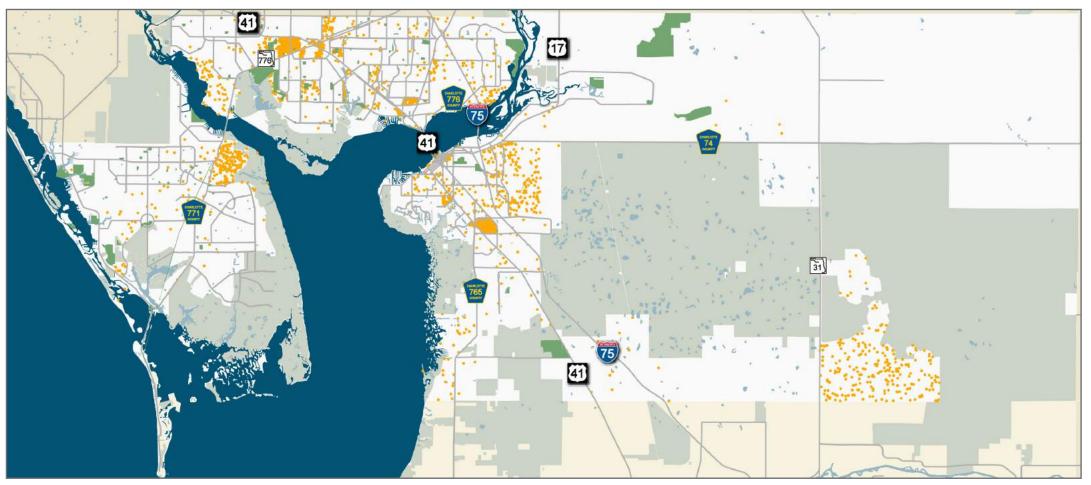


Figure 3-9: Charlotte County Change in Employment (2010-2040)







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