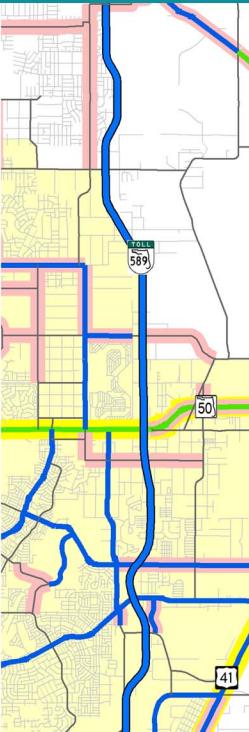




HERNANDO/CITRUS MPO

2040 LONG RANGE TRANSPORTATION PLAN

March 2015



CHAPTER 1

Introduction



CHAPTER 1: INTRODUCTION

WHAT IS THE 2040 LONG RANGE TRANSPORTATION PLAN?

The 2040 Long Range Transportation Plan (LRTP) is prepared by the Hernando/Citrus Metropolitan Planning Organization (MPO). This multimodal plan is the guide for developing the various transportation systems in both Hernando and Citrus counties over the next 25 years. It is consistent with the Comprehensive Plans for each county and meets the standards established in federal law for metropolitan transportation planning.

Acknowledging the increasing importance of and demand for multimodal improvements, this plan considers the mobility needs of people and freight by addressing the public transit, bicycle and pedestrian, freight, and roadway systems. Public input was received at critical times during the development of the plan to identify the list of projects included in the plan.

In addition, this is the first LRTP adopted by the Hernando/Citrus MPO as a two-county Metropolitan Planning Organization. This plan:

- Is consistent with all applicable state and federal requirements
- Supports regional collaboration and coordination between the two counties and within the greater Tampa Bay region

- Incorporates a wide range of public input and feedback
- Aligns community vision with project priorities
- Provides a fiscally-constrained cost affordable plan of projects to address transportation needs over the next 25 years

WHAT'S INCLUDED IN THE 2040 LONG RANGE TRANSPORTATION PLAN?

This plan has been developed in phases, beginning with a broad understanding of current conditions. With that as the foundation, the plan was developed to reflect the community's vision for its future transportation system. The plan includes the following chapters:

Chapter 2: Background

This chapter documents the population and employment trends and forecasts that formed the basis of the plan in identifying the transportation needs. Land use development trends also are discussed to better understand transportation system needs over the next 25 years.

Chapter 3: Guiding the Plan

This chapter describes the principles and coordination that guided the development of the 2040 LRTP. These include County visions, federal and State planning guidance, regional coordination, public participation, and development of performance measures. This

chapter concludes by documenting how the goals, objectives, and performance measures of the 2040 LRTP guided the selection of projects for the cost affordable plan.

Chapter 4: Constrained 2040 Needs Plan

This chapter documents the development of the transportation needs that result from increased population and employment growth. The Needs Plan chapter includes:

- A review of the existing + committed (E+C) transportation system improvements already included in the local five-year Capital Improvement Program and the MPO's five-year Transportation Improvement Program (TIP)
- Coordination with existing plans already in place, including Hernando County's Transit Development Plan and the adopted bicycle and pedestrian master plan for Citrus County
- Identification of the needs for highways, transit, bicycle, and pedestrian facilities and safety improvements

Chapter 5: 2040 Cost Affordable Plan

This chapter documents the approaches used by the MPO to set priorities and transition to a fiscally-constrained, cost-affordable plan. Priorities were established through a technical analysis based on policy direction, citizen input, prioritization methodology, performance measures, and financial resources. Goods movement, safety and security, sociocultural effects and environmental justice, and environmental considerations also were included.

Chapter 6: Measures of Effectiveness

This chapter documents the performance evaluation of the 2040 Long Range Transportation Plan. Using the Goals and Objectives for developing the 2040 LRTP discussed in Chapter 3, performance measures were used to indicate how well the decisions for selecting future transportation projects addressed the vision for the future of Hernando and Citrus counties. Targets for measuring performance of the transportation system to meet national goals are still being developed in response to MAP-21. To show progress between current conditions and those estimated for 2040, a series of measures for the Cost Affordable Plan have been included in this chapter.

Chapter 7: Achievements and Implementation Actions

Chapter 7 concludes the report with a summary of the LRTP and identification of next steps that must be taken to ensure the plan transitions to implementation.

HOW WAS THE PLAN DEVELOPED?

Federal Requirements

The Hernando/Citrus MPO is the federally-designated metropolitan planning organization for Hernando and Citrus counties. MPOs are formed in urbanized areas with populations greater than 50,000 to provide a forum for the cooperative decision-making process. Federal funds for transportation projects and programs are channeled through this process and are subsequently awarded to local agencies and jurisdictions to address planned transportation needs.

The 2010 Census established the Homosassa Springs–Beverly Hills–Citrus Springs Urbanized Area. Based upon its proximity to the existing Spring Hill (Hernando County) Urbanized Area, the coordination of a potential merger was initiated with the Hernando County MPO by the Citrus County Transportation Planning Organization (TPO).

The merger of the Citrus County TPO and the Hernando County MPO was approved by the Governor and local elected officials from both counties. The first board meeting of the Hernando/Citrus MPO occurred in July 2014.

Moving Ahead for Progress in the 21st Century (MAP-21)

Signed into law by President Obama on July 6, 2012, MAP-21 (Public Law 112-141) is the first long-term highway authorization enacted since the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) became law in 2005.

MAP-21 became a legislative milestone for the U.S. economy and the nation's surface transportation program by creating a streamlined, performance-based surface transportation program that builds on many of the multimodal transportation policies first established under the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. Establishing a performance- and outcome-based program requires states to invest financial resources in projects that collectively will make progress toward achieving national multimodal transportation goals. The 2040 LRTP has been developed to ensure compliance with the requirements of MAP-21 and includes a performance-based approach to the transportation decision-making process.

MAP-21 also continues many of the previous requirements contained in SAFETEA-LU, including **eight planning factors** that illustrate the need for Metropolitan Transportation Plans to recognize and address the relationship between transportation, land use, and economic development. The federal planning factors form the cornerstone for the 2040 LRTP and include:

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
2. Increase the safety of the transportation system for motorized and non-motorized users.
3. Increase the security of the transportation system for motorized and non-motorized users.
4. Increase accessibility and mobility of people and freight.
5. Protect and enhance the environment, promote energy conservation, improve quality of life, and promote consistency between transportation improvements and state and local growth and economic development patterns.
6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
7. Promote efficient system management and operation.
8. Emphasize the preservation of the existing transportation system.

MAP-21 also includes additional requirements related to performance measures and targets in the metropolitan planning process. MPOs are now required to coordinate with state and public transportation

providers to establish performance targets to assess the performance of the multimodal transportation system.

State Requirements

The Florida Department of Transportation (FDOT), Office of Policy Planning coordinates with Florida MPOs to publish an *MPO Program Management Handbook*. This handbook is used to provide guidance to MPOs on meeting and addressing the appropriate state and federal requirements. Specifically related to the 2040 LRTP, the handbook provides guidance on coordinating plan development at the local level with existing plans and consideration of human and environmental impacts of new projects that are considered. The Hernando/Citrus 2040 LRTP was developed consistent with the guidance provided in this handbook.

A major emphasis in federal regulations and the Florida Statutes is coordination with citizens, public agencies, and other known interested parties, including the opportunity to comment during development of the LRTP.

Additional requirements for public access to governmental proceedings are addressed in Chapter 286, F.S., commonly referred to as the “Sunshine Law.” This law requires that meetings of boards and commissions be open to the public, that reasonable notice of such meetings is given, and that minutes are taken and made available to

the public in a timely manner. All public outreach and documentation for Hernando/Citrus 2040 LRTP is done in accordance with the Sunshine Law.

Consistency with Other County and Regional Plans

The Long Range Transportation Plan was developed to be consistent with the following county, state, and regional plans and programs:

- The Florida Transportation Plan
- FDOT Strategic Highway Safety Plan
- Transportation Improvement Program (TIP)
- Comprehensive Plans for Hernando and Citrus counties
- Tampa Bay Area Regional Transportation Authority (TBARTA) Master Plan
- Congestion Management Process (CMP)
- Public Participation Plan (PPP)
- Other local and regional modal and land use plans, as appropriate

Goals and Objectives

Goals and objectives that reflect the counties’ visions were developed early in the planning process. The goals are included in **Table 1-1**. A matrix showing consistency between the LRTP Goals and the eight planning factors from MAP-21 is shown in **Table 1-2**.

Table 1-1: Hernando/Citrus MPO 2040 LRTP Goals

| | |
|---|--|
| 1 | Support the development of the county's economy and manage growth through the development of financially-feasible multimodal facilities and services and affordable growth strategies. (Economic Development, Growth Management) |
| 2 | Increase the safety and security of the county's transportation system. (Safety and Security). |
| 3 | Provide for the mobility needs of the county's population and economy by providing safe, secure, effective, and efficient movement of people and goods. (Highway Capacity and Mobility) |
| 4 | Support the efficient, safe, and secure integration of port, airport, and rail modes of transportation and associated intermodal facilities into one cohesive intermodal system. (Goods Movement) |
| 5 | Preserve, where possible, and enhance community social and environmental values. (Social and Environmental Value) |

Table 1-2: Hernando/Citrus 2040 LRTP Goals and MAP-21 Planning Factors Comparison

| Plan Goals | MAP-21 Goals | Economic Vitality | Safety | Security | Movement of People / Freight | Environment and Quality of Life | Integration / Connectivity | System Management & Operation | System Preservation |
|--|--------------|-------------------|--------|----------|------------------------------|---------------------------------|----------------------------|-------------------------------|---------------------|
| Support the development of the county's economy and manage growth through the development of financially-feasible multimodal facilities and services and affordable growth strategies. (Economic Development, Growth Management) | X | | | | X | X | X | | |
| Increase the safety and security of the County's transportation System. (Safety and Security) | | X | X | | | | | | |
| Provide for the mobility needs of the county's population and economy by providing safe, secure, effective, and efficient movement of people and goods. (Highway Capacity and Mobility) | X | | | | | X | X | X | |
| Support the efficient, safe, and secure integration of port, airport, and rail modes of transportation and associated intermodal facilities into one cohesive intermodal system. (Goods Movement) | X | X | X | | X | | X | X | X |
| Preserve, where possible, and enhance community social and environmental values. (Social and Environmental Value) | X | | | | X | X | X | | |

Public Input

A number of public workshops were held throughout plan development to obtain feedback about the different elements of the plan. Events included:

- 2 Needs Plan workshops in Hernando County
- 2 Needs Plan workshops in Citrus County
- 2 Environmental Justice workshops
- 2 Consensus Building workshops
- 4 Cost Affordable Plan workshops
- Cost Affordable Plan adoption (30-day) public comment period, consistent with the Public Participation Plan

A project website was also maintained to facilitate community involvement (<http://hernandocitrus2040ltp.com/>).

2040 Plan Adoption

This LRTP was adopted by resolution on December 9, 2014, by the Hernando/Citrus MPO Board. The MPO Board endorsement was presented in the beginning of this plan report.

CHAPTER 2

Background



CHAPTER 2: BACKGROUND

HOW WILL HERNANDO AND CITRUS COUNTIES GROW IN THE FUTURE?

Both Hernando and Citrus counties experienced high percentages of population growth between 2000 and 2010 (32.1% and 19.6%, respectively) and have since, like most of Florida, experienced a slowdown in both population and employment growth. Growth is starting to occur, albeit at a slower pace, and is anticipated to pick up speed by 2015. Along with this growth, some trends may develop that could influence the county's transportation needs.

Both counties already include a higher population of older adults than the state overall. In 2015, 25.8% of residents of Hernando County were age 65 and over. In Citrus County, this group makes up 31.9% of the county population. Overall, older adults make up 17.3% of the state population. Both counties have a smaller percentage of households with children under age 18 than the state, and although Hernando's percentage has increased since 2010, the households with children under age 18 in Citrus County have dropped slightly. As these changes continue to occur, their impacts on the future transportation system will need to be addressed in both counties.

There is an increasing emphasis on encouraging more efficient land use patterns and multimodal transportation options, as well as

protecting the rural landscapes that are integral to both counties.

Regional coordination is growing as the Tampa Bay Region grows economically, strengthening the inter-county connections, as business and social interactions have been enhanced with the growing urbanized areas. These regional connections are being planned for in the form of regional transit routes and improvements to the expressways and roadways that cross county boundaries.

Closer to home, increases in the number of active and mobile older adults is driving the need to enhance the local public transportation system and mobility options in the form of sidewalks and multi-use trails. In both counties, areas of economic emphasis are being developed to increase employment opportunities. These current trends, along with historical patterns, help guide the growth of the individual counties and the role each plays in the region.



Historic Population and Employment Trends

Hernando County

Hernando County lies on the Gulf coast of West Central Florida and contains 478 square miles of land area. The county is bounded to the west by the Gulf of Mexico, to the east by Sumter County, to the north by Citrus County, and to the south by Pasco County.

Two incorporated areas exist within the county: the City of Brooksville, located approximately in the center of the county, and the City of Weeki Wachee, located in the west-central area. Brooksville is the County seat and, as such, serves as a major commercial and employment center. A total of 7,700 persons lived within the incorporated limits of Brooksville in 2010, accounting for approximately 4.4 percent of the county's population. The unincorporated area of Spring Hill remains the main population and employment center of Hernando County. The Spring Hill Urbanized Area (UZA) is 115 square miles in southwestern and central Hernando County. Generally located east of US 19 and south of the State Road 50 corridor into Brooksville, the Spring Hill UZA extends south into Pasco County near the Suncoast Parkway. Through agreement, the Pasco MPO plans for the portion of the UZA extending into Pasco County. In 2010, the population of the Spring Hill UZA was estimated to be 148,220 persons.

Citrus County

Also on the Gulf Coast, Citrus County is approximately 720 square miles in size and includes two incorporated cities and several

unincorporated communities. Located to the north of Hernando County on the Gulf Coast, the Withlacoochee River forms the northern and eastern border of the county. The oldest city and the County seat is Inverness. Located at the crossroads of US 41 and SR 44 in the central eastern part of the county, it was home to 7,200 people in 2010. On the western side of the county is Crystal River at the intersection of SR 44 and US 19. As the smaller of the two cities, Crystal River had a population of 3,100 in 2010. The most heavily-populated area outside of the municipalities is along the SR 44 corridor. Beverly Hills and Pine Ridge are located north of SR 44, each with individual populations larger than Inverness. Located to the south of SR 44 at CR 491 and in the center of the county is Lecanto, which hosts the county's government center and other offices.

US 19 provides a connection to the Tampa Bay region to the south. The future extension of the Suncoast Parkway eventually will provide a direct highway connection to Hernando County and the rest of the Tampa Bay region.

Over time, much of Citrus County has developed in a scattered pattern, with its largest community, Homosassa Springs, and several smaller ones, including Inverness and Crystal River, developing as important centers. Much of the residential development has taken place in the area north of SR 44 in Citrus Springs. This pattern has left the county with primarily a low-density, rural land use pattern lacking a large defined urban center and a limited transportation network.

Future Land Use and Transportation Coordination

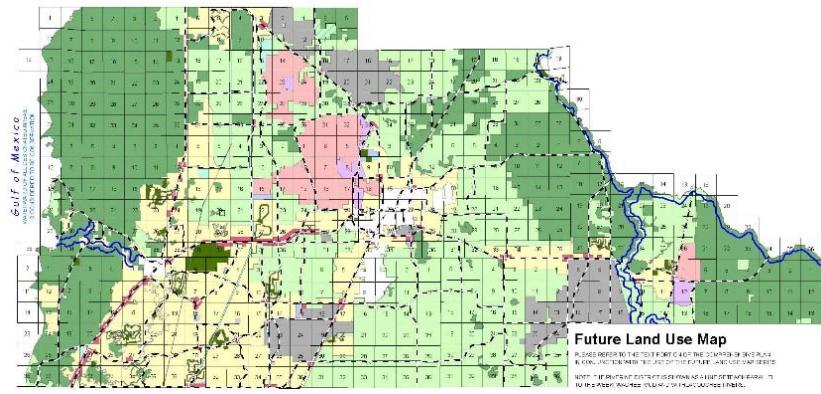
Coordinating the growth forecasts for the LRTP with adopted Future Land Use Plans is a key component to accurately representing future transportation needs. The Future Land Use Plan is a key tool used to determine where growth will occur in the future as well as the permitted and allowed types of development. Each future land use category has maximum allowable residential density and non-residential intensity. To protect natural resources while optimizing social infrastructure enhancements, including transportation, designation of wetlands and other protected areas are factored into the future land use designations. The Future Land Use Plan was used in the development of the socioeconomic data in the following ways:

- Determination of maximum allocable units to be added to an area
- Identification of physical constraints imposed by coastal zones and coastal hazard areas
- Direction 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 Plan for Hernando County, effective October 9, 2012, used to develop the socioeconomic data projections for this LRTP is shown in **Figure 2-1** and also can be found on the Hernando County website at

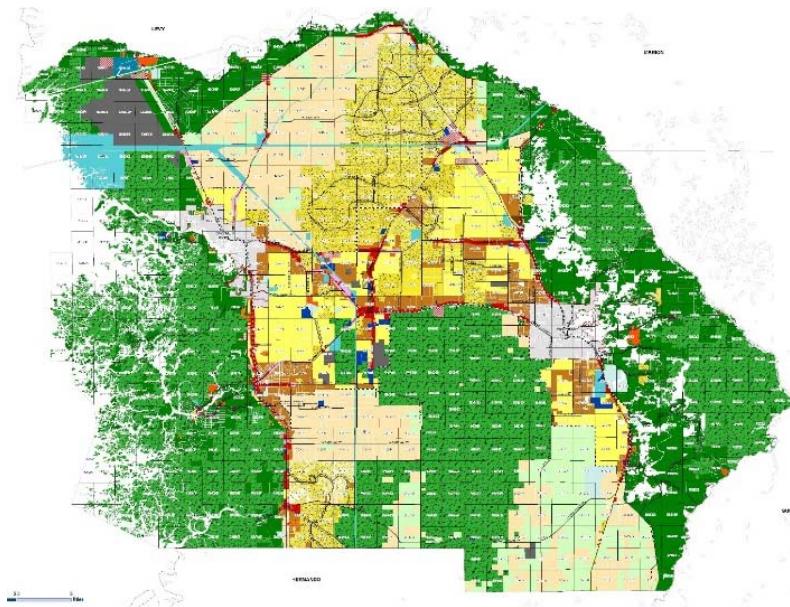
<http://www.hernandocounty.us/plan/apps/CompPlanDec05/maps/flummap.pdf>.

Figure 2-1: Hernando County Adopted Future Land Use Map



The adopted Future Land Use Plan for Citrus County, effective July 22, 2014, used to develop the socioeconomic data projections for this LRTP, is shown in **Figure 2-2** and also can be found on the Citrus County website at <http://www.bocc.citrus.fl.us/maps/ldca/GFLUM/pdfmaps/AH000151.pdf>.

Figure 2-2: Citrus County Adopted Future Land Use Map



Hernando County Areas of Growth

During the development of the socioeconomic data, areas of economic growth were identified around Spring Hill and the Hernando County Airport, Brooksville, and the area around I-75 and SR 50 as focus areas for economic development. These areas, shown in **Figure 2-3**, align with areas identified in the Comprehensive Plan.

Population and Employment Forecasts

How Were the Population Projections Developed?

The 2040 socioeconomic forecasts involved a four-step process that builds on current land use policies. This process uses countywide growth forecasts provided by the Bureau of Economic and Business Research (BEBR) and a land use allocation model outlined below:

- Identify vacant land that is suitable for future development, avoiding wetlands and protected lands consistent with current land use policies.
- Identify current developed areas that could be redeveloped at higher intensities in the future.
- Confirm that development already approved has been included.
- Through professional experience and local knowledge, make manual adjustments to finalize growth to 2040.

Table 2-1 compares the existing population and employment totals from 2010 with the 2040 horizon, and **Table 2-2** compares growth for the plan years. **Figures 2-4** and **2-5** compare aspects of the socioeconomic data as well as the ratio of employment to population. These ratios are similar to previous forecasts completed for each county and follow the historical trends. A ratio of 0.33 means that there is one job available for every three people. Higher ratios in 2040 than 2010 indicate employment is expected to grow faster than population. This is indicative of the growth anticipated in

the wake of the recent economic downturn as well as a trend of moving from a more rural to suburban development pattern.

More information on the methodology used to develop the socioeconomic data for Hernando County can be found in the separately bound Socioeconomic Data Forecast Technical Report.

Figure 2-3: Hernando County Future Growth Areas

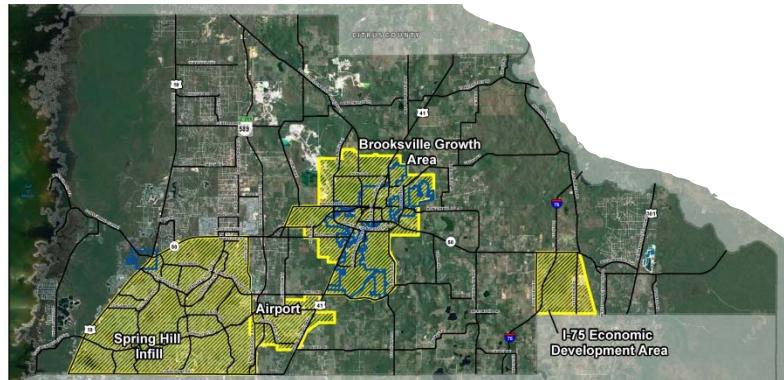


Table 2-1: Population and Employment Forecast for Hernando and Citrus Counties

| | Population | | Employment | |
|----------|------------|---------|------------|--------|
| | 2010 | 2040 | 2010 | 2040 |
| Hernando | 170,947 | 258,464 | 55,700 | 94,464 |
| Citrus | 138,985 | 188,500 | 50,000 | 71,739 |

Table 2-2: Population and Employment Growth for Hernando and Citrus Counties

| | Population | | Employment | |
|----------|------------------|------------------|------------|--------|
| | 2010-2040 Growth | 2010-2040 Growth | 2010 | 2040 |
| Hernando | 51% | 70% | 87,517 | 38,764 |
| Citrus | 36% | 43% | 49,515 | 21,639 |

Figure 2-4: Hernando Socioeconomic Data, 2010 and 2040

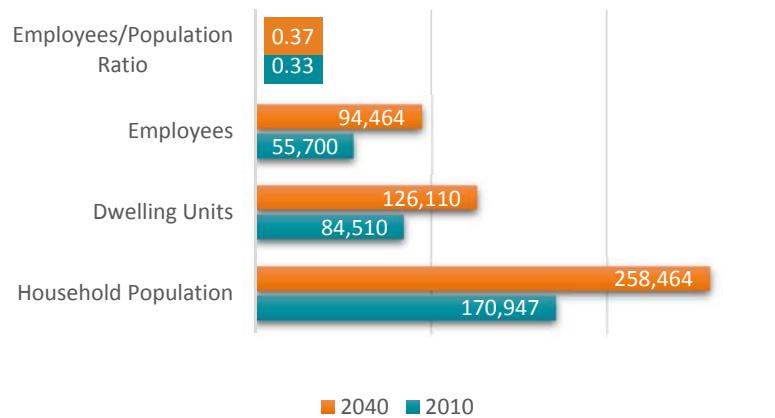


Figure 2-5: Citrus Socioeconomic Data, 2010 and 2040



The future forecasts of expected population and employment growth by 2040 are included as **Maps 2-1 through 2-4**. Consistent with the future land use plans in Hernando County, growth is expected in the Brooksville area, along the I-75/SR 50 corridor, and in Spring Hill. Planned Developments of Regional Impact (DRIs) to the north account for job growth and population. Projected impacts to the transportation system include increased demand along the

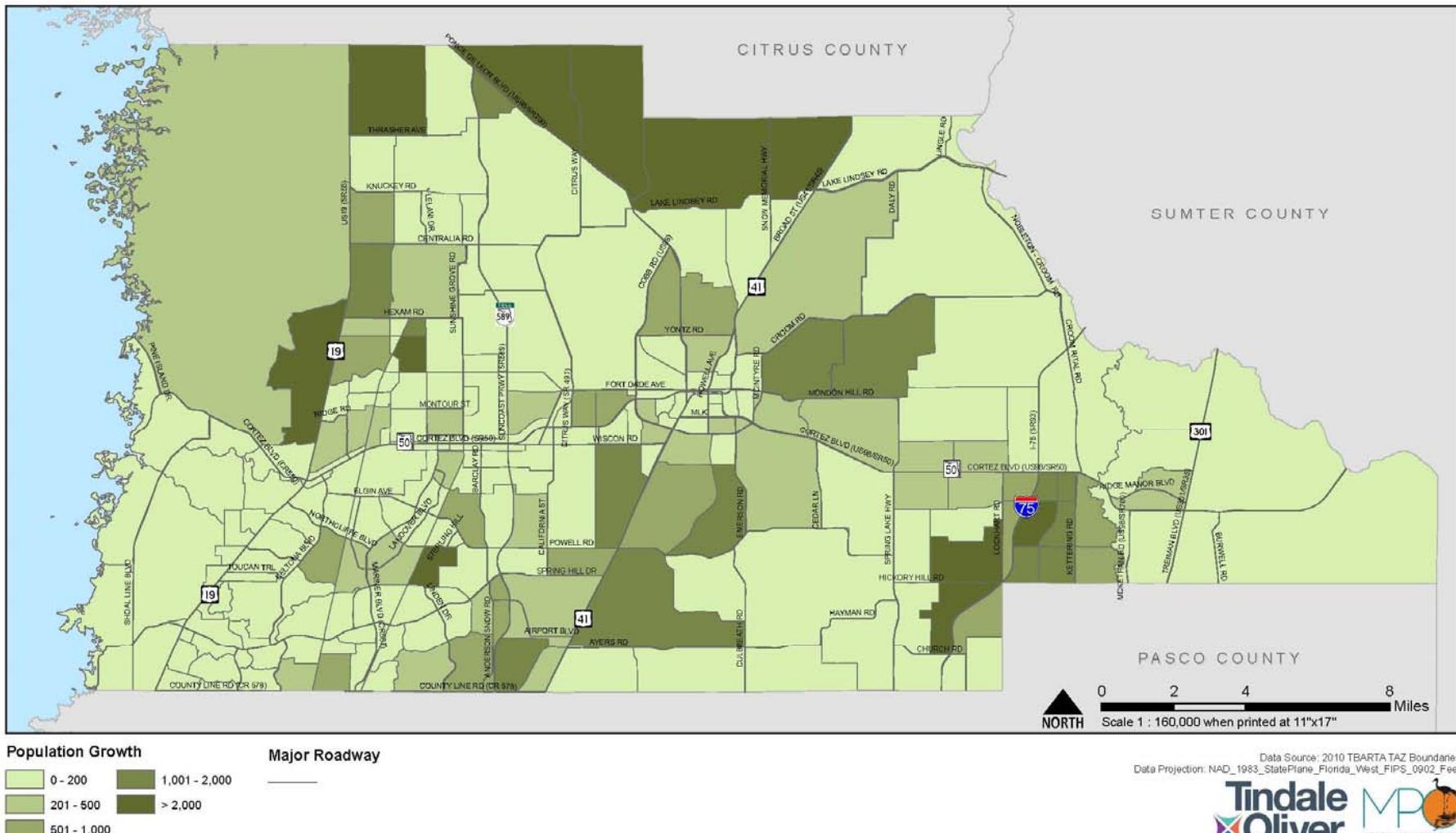
Cortez Boulevard corridor both at the I-75 interchange and through Brooksville and along US 41. Citrus County population growth is forecasted along SR 44 and in Citrus Springs. Employment growth is focused along SR 44 and along CR 491, which is consistent with County plans to develop the corridor. Projected impacts in Citrus County may include increased travel demand along US 41 and the focus on CR 491.

Trends That May Influence Travel Patterns

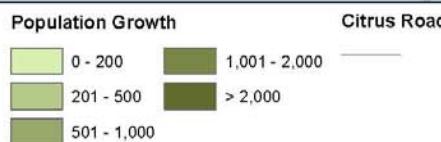
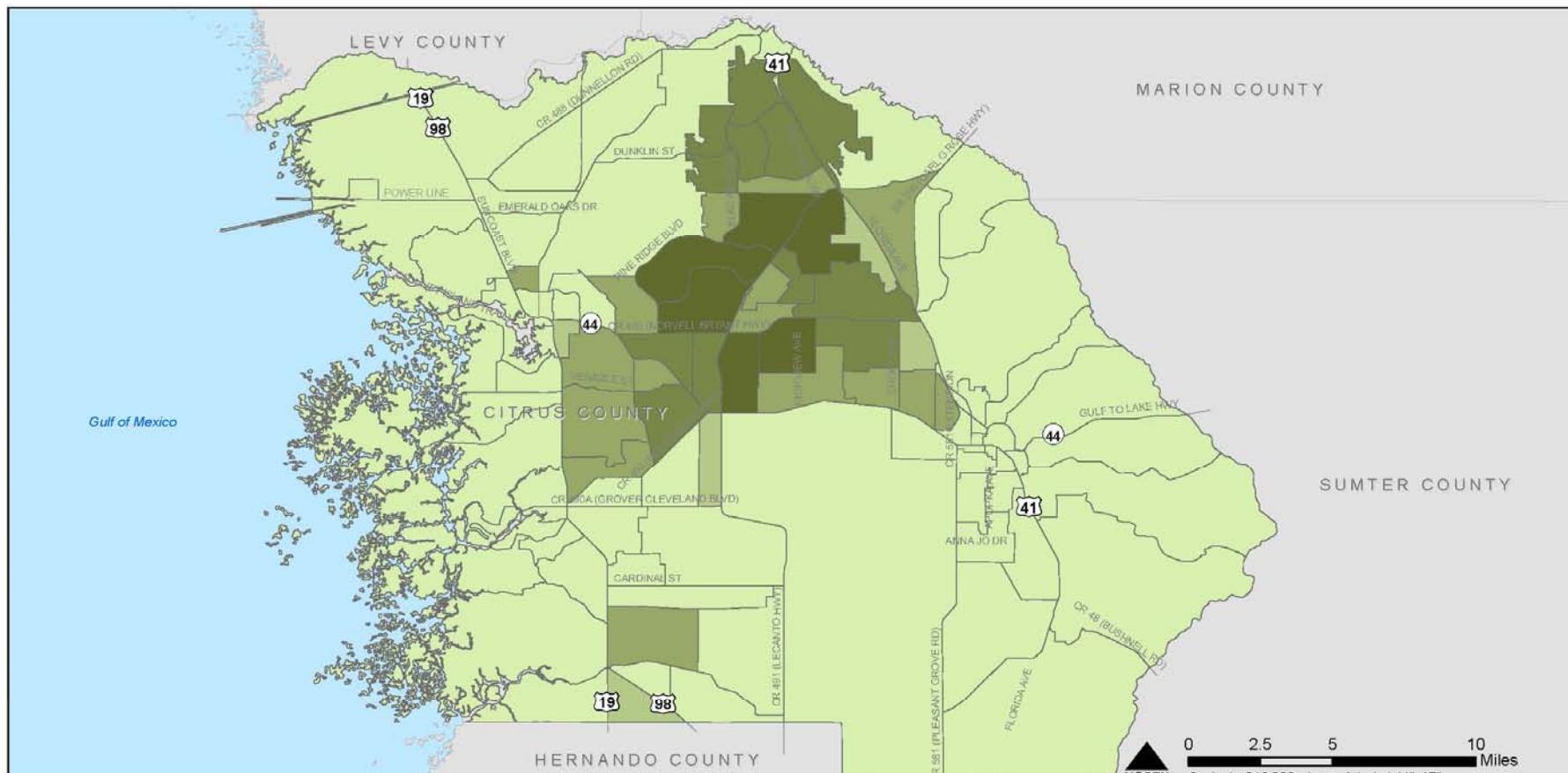
Population and employment growth typically result in increased travel and demand on all transportation systems. Other demographic and economic factors, such as age distribution, income per capita, location of housing to services and employment, household composition, education level, and transportation costs, all influence travel needs and behavior.

Travel behaviors often differ between various age groups. Recent trends suggest that younger Americans are driving less than previous generations for a number of reasons. Older Americans are also experiencing a more active lifestyle than previous generations. These shifts influence the transportation decisions made to develop a more balanced multimodal transportation system and a tighter integration of transportation and land use.

Map 2-1: 2010–2040 Population Growth, Hernando County



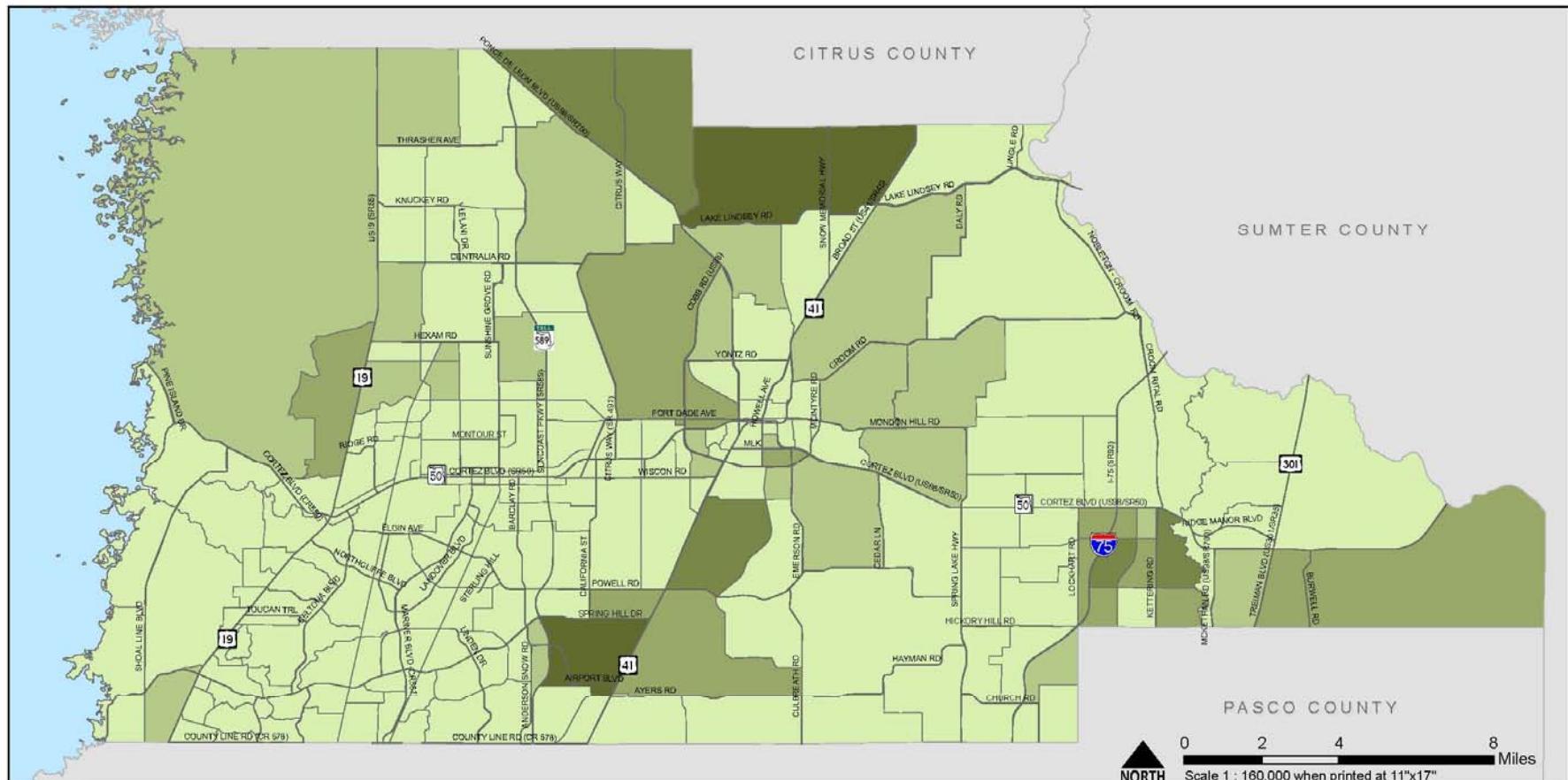
Map 2-2: 2010–2040 Population Growth, Citrus County



Data Source: 2040 LRTP Socioeconomic Data
Data Projection: NAD_1983_StatePlane_Florida_West_FIPS_0902_Feet

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Map 2-3: 2010–2040 Employment Growth, Hernando County

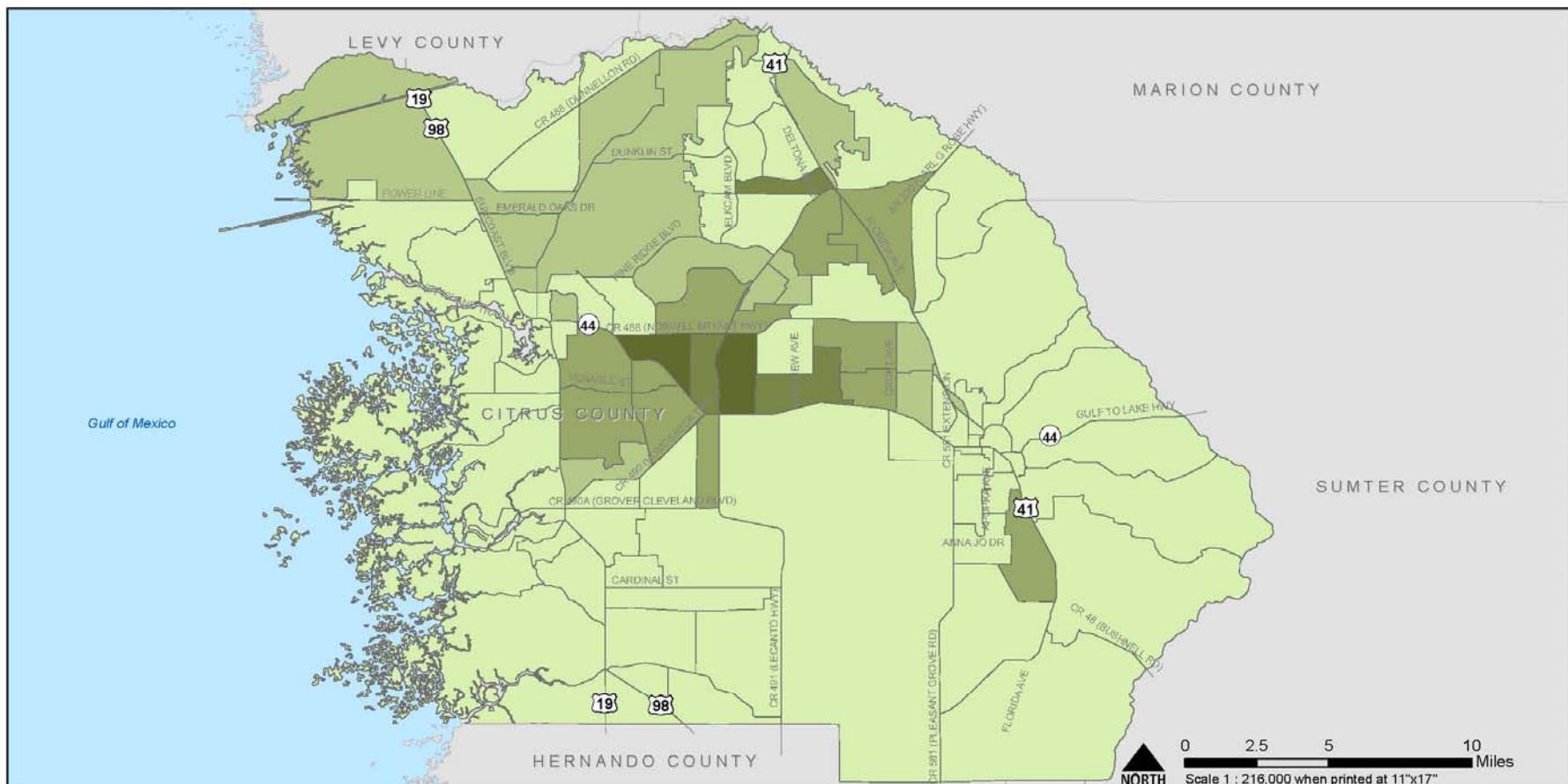


Data Source: 2010 TBARTA TAZ Boundaries
Data Projection: NAD_1983_StatePlane_Florida_West_FIPS_0902_Feet

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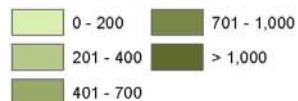


Map 2-4: 2010–2040 Employment Growth, Citrus County



Number of Employees Growth

Major Roadway

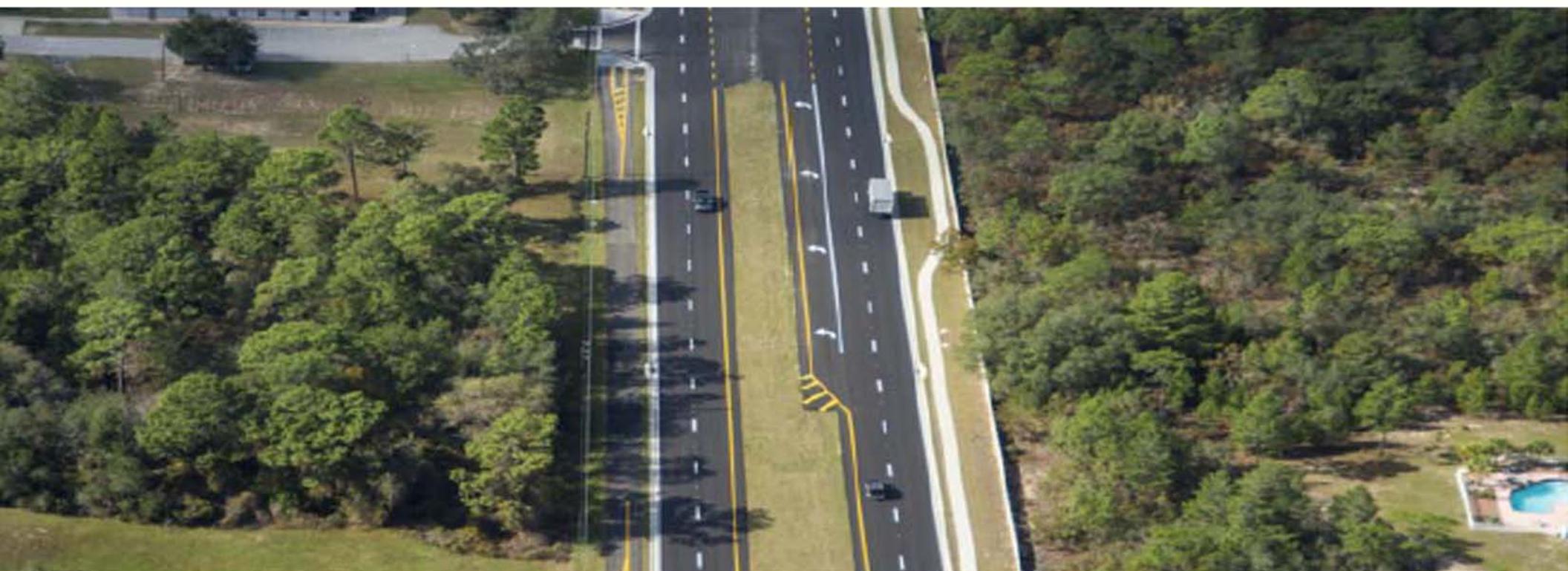


Data Source: 2040 LRTP Socioeconomic Data
Data Projection: NAD 1983 StatePlane Florida West FIPS 0902 Feet

Tindale Oliver MPO
TINDALE OLIVER METROPOLITAN PLANNING ORGANIZATION

CHAPTER 3

Guiding the Plan



CHAPTER 3: GUIDING THE PLAN

This plan is guided by local and regional input. Hernando and Citrus counties are part of FDOT District 7, the Tampa Bay Area Regional Transportation Authority (TBARTA), and the West Central Florida Chairs Coordinating Committee (CCC). With the merger of the Hernando MPO and Citrus County TPO in 2014, this is the first long range plan adopted by the joint Hernando/Citrus MPO Board. Representation on the MPO Board consists of local elected officials. Input to the MPO Board comes from citizens and local community groups serving on the Citizen's Advisory Committee and local governments represented by the Technical Advisory Committee.

This chapter summarizes the efforts taken to develop the framework for the 2040 LRTP and includes highlights of the public feedback incorporated into the plan.

COUNTY VISIONS

Hernando County

Hernando County is in the process of updating its comprehensive plan and will be incorporating the following concepts:

- Retain the current Future Land Use Map (FLUM) pattern of residential/commercial development concentration in the existing urbanized area and retention of the rural countryside.

- Provide expanded mechanisms for encouraging mixed use and infill in the urbanized area in order to encourage the retention of the FLUM pattern.
- Provide expanded clustering and open space mechanisms to incentivize the retention of the rural landscape and ecological greenways.
- Continue using the Planned Development District as a tool for flexible planning of future development focus areas such as the I-75/SR 50 Interchange Area and the Brooksville–Tampa Bay Regional Airport & Technology Center.
- Provide for directed infrastructure that discourages urban sprawl.
- Provide for a multimodal transportation network consistent with the MPO's Long Range Transportation Plan and coordinated with the region.
- Implement land use mechanisms that encourage economic development and workforce retention.

The 2040 LRTP is aligned with this new comprehensive plan vision.

Citrus County

Citrus County went through the process of conducting an Evaluation and Appraisal Report (EAR) for the Comprehensive Plan in 2011. More recently, the Board of County Commissioners (BOCC) amended the Comprehensive Plan in February 2014 to include a

corridor overlay plan for CR 491. This overlay plan included a system of land use tiers that provide a strategic planning approach that will guide future development in the corridor, coordinate with the future extension of the Suncoast Parkway, and promote the growth of a medical center.

During the EAR development, several major issues were identified relative to future development in Citrus County. Issues also were identified that deal with the coordination of transportation and land use plans. To the extent feasible, the LRTP was developed with these considerations in mind. As Citrus County moves forward with updates to the Comprehensive Plan, the MPO will coordinate the future development and update of the LRTP accordingly.

REGIONAL COORDINATION

Planning for successful communities within Hernando and Citrus counties also requires coordinating with regional partners in the Tampa Bay area.

The MPO participates with regional planning groups at all levels, including citizen, county, and regional. Over time, these coordination efforts have progressed to now include TBARTA and the West Central Florida CCC. In a larger context, the MPO also coordinates with the State of Florida through the local FDOT District 7 office.

Tampa Bay Area Regional Transportation Authority

Covering the coastal counties of West Central Florida from Citrus to Sarasota, TBARTA was formed by bringing together local leaders to develop a Regional Master Plan. Last updated in 2013, the TBARTA Master Plan, *A Connected Region for Our Future*, identified regional transit, freight, and highway needs through the year 2050. These transportation needs were identified based on a long-term vision for the region created in cooperation with FDOT, MPOs, transit agencies, and the public.

Recently, the CCC's regional planning efforts for Citrus to Sarasota counties, along with Polk County, have been better integrated with those of TBARTA. Representing the MPOs, the CCC was formed to address transportation challenges on a regional, long-range basis. Comprising the chairperson from each MPO or TPO, the CCC (now as a subcommittee to TBARTA) calls for the MPO perspective to be more integrated into the TBARTA Master Plan.

Chairs Coordinating Committee (CCC)

The Chairs Coordinating Committee (CCC) was created in 1991 to address our region's transportation challenge on a regional, long-range basis. Issues such as personal mobility, access to jobs, goods movement, emergency evacuation, and growth management are some of the concerns addressed by the CCC, which comprises the chairpersons from metropolitan and transportation planning organization (MPOs and TPOs) and their affiliated, transportation-

related organizations. **Figure 3-1** illustrates the regional trail priorities that have been established by the CCC.

Figure 3-1: Chair Coordinating Committee Regional Trails Priorities



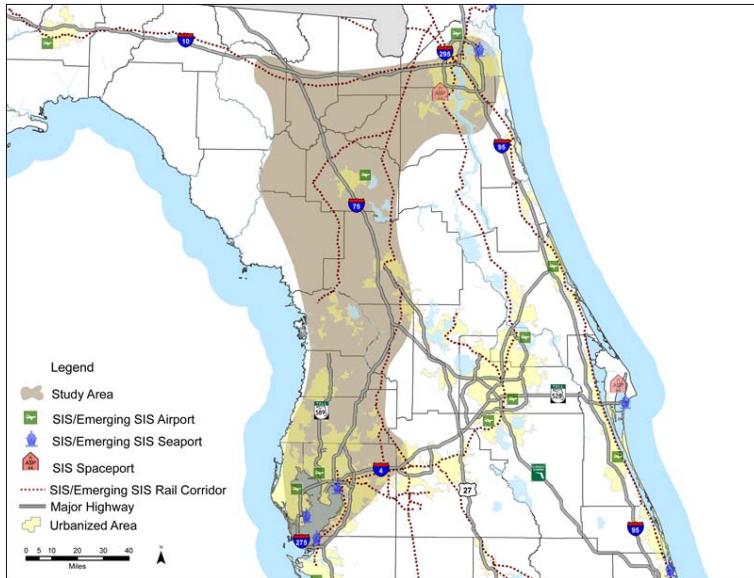
The goal of the CCC is to prioritize and find ways to address the transportation needs of West Central Florida. The CCC achieves these goals through the support and cooperation of its member agencies, partner entities, and advisory committees. The CCC develops regional solutions to transportation problems and strives to achieve a consistent regional planning approach among the six member agencies. Additionally, the CCC sets regional multi-use trail priorities. The Suncoast Trail/Good Neighbor Trail Connector (Coast-to-Coast Connector) in Hernando County and the Suncoast II Trail in Citrus County have been identified as regional priorities.

Future Corridors Initiative

The Future Corridors initiative is a statewide effort led by FDOT to plan for the future of major transportation corridors critical to the state's economic competitiveness and quality of life over the next 50 years. Hernando and Citrus counties are part of the Tampa Bay to Northeast Florida future corridor and the Tampa Bay to Central Florida study area shown in Figure 3-2 and 3-3.

Tampa Bay to Northeast Florida Study Area – This study will assess better ways to connect Tampa Bay and Jacksonville. Early evaluation will focus on ways to increase safety and reduce congestion along I-75 north of Wildwood. Operational improvements to I-75 and extension of the Suncoast Parkway will be studied, as will the possibility of a new connection between I-75 and the Suncoast Parkway in the Gainesville/Ocala area and between Gainesville/Ocala and the Jacksonville area.

Figure 3-2: Tampa Bay to Northeast Florida Study Area



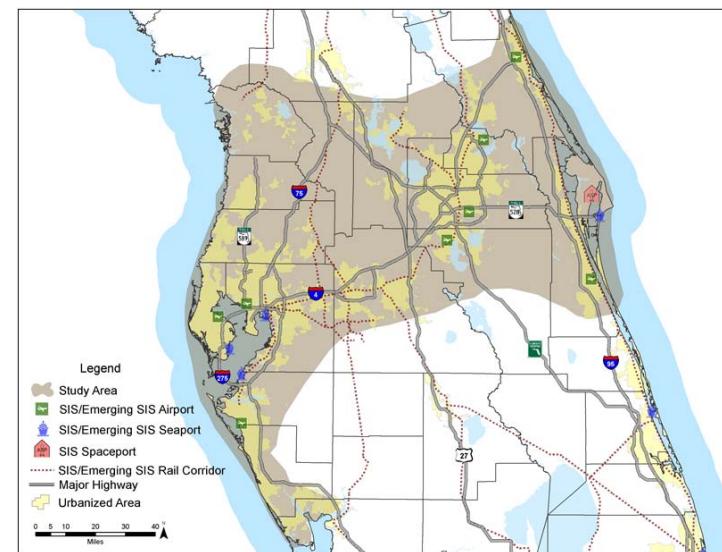
Tampa Bay to Central Florida Study Area – This study will explore better ways to connect Tampa Bay and Central Florida. This emerging “super region” is expected to experience high growth over the next 50 years. Operational improvements may include I-4 express lanes, parallel corridors and possible alternative mode solutions such as SunRail extensions. Within the future corridors are several urbanized areas and job centers:

- The Zephyrhills and Spring Hill urbanized areas are located in Pasco and Hernando counties to the north of Tampa. Traditionally, these have been amenity-rich retirement communities that are attractive options for the large Baby

Boomer generation that has just begun to leave the workforce. These counties are trying to diversify their economic base. Industry is growing along I-75, US 19, and the Suncoast Parkway, and growth is targeted around key sites such as the Hernando County Airport Industrial Park in Brooksville.

- As of the 2010 Census, three Citrus County cities—Homosassa Springs, Beverly Hills, and Citrus Springs—were together designated as one of the nation’s newest urbanized areas, with a combined population exceeding 80,000 residents. They also are targeting growth in technology industries through developing business incubators and airport industrial parks.

Figure 3-3: Tampa Bay to Central Florida Study Area



PUBLIC INVOLVEMENT

To collect important input from a variety of community members and stakeholders throughout the development of this plan, a variety of outreach methods were used. This section serves as an overview of the public outreach process used during the development of the 2040 LRTP and highlights key findings from these activities. The outreach efforts for the 2040 LRTP resulted in 132 comments on the Needs Plan, 42 comments on the Cost Affordable Plan, and approximately 35 people engaged through the various activities listed in **Table 3-1**. A thorough recap of the public involvement activities of the 2040 LRTP has been included in the 2040 LRTP Public Involvement Technical Report.

Table 3-1: LRTP Development Public Involvement Opportunities

| |
|--|
| Needs Plan Workshops |
| Environmental Justice Workshops |
| Cost Affordable Plan Workshops |
| Web-based Survey, Needs Plan |
| Web-based Survey, Cost Affordable Plan |
| MPO Newsletter: <i>Transportation Talk</i> |
| CAC, TAC Input |
| Consensus Building Workshops |
| Public Comment Period Workshops |

Public Participation Plan

The Hernando/Citrus MPO currently has a Public Participation Plan (PPP) that was adopted by the MPO Board on September 30, 2014. The Plan is a federally-required document that outlines the MPO's public outreach goals and overall process and strategies that the MPO uses to engage interested parties in the development and review of transportation plans and programs. The PPP outlines the specific strategies and activities that were used to involve the community in the development of 2040 LRTP.

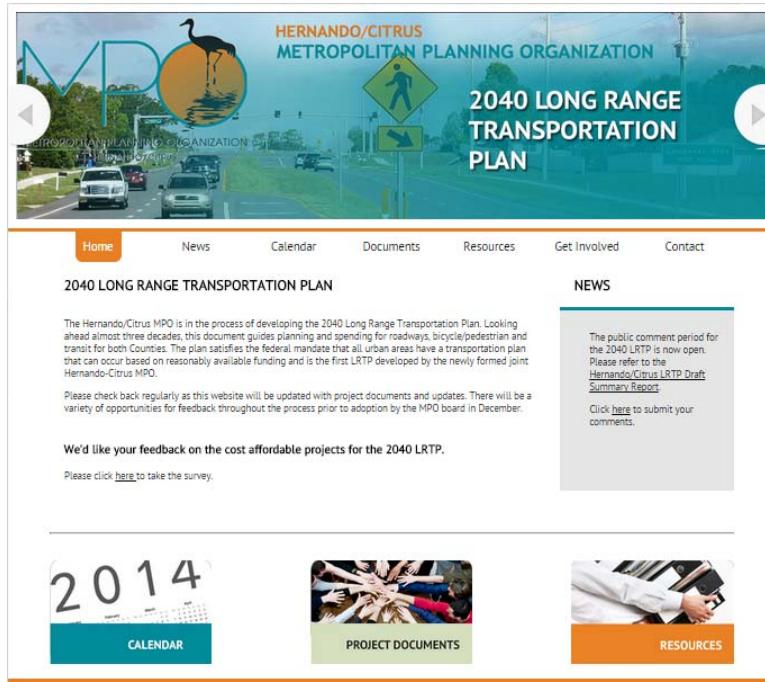
The MPO maintains a PPP that is responsive to and consistent with the changing makeup and needs of the community. It continues to seek new and innovative ways to engage the public and keep them informed about the plans, programs and policies that are under consideration by the MPO. Additionally, the PPP conforms to the current federal legislation under MAP-21 and its requirements.

Project Website

A project website was maintained throughout the development of the plan. All project documents were posted for review and comment. For both the Needs Plan and Cost Affordable Plan phases, an interactive survey was posted. Notice of the document postings and opportunities for public input were sent to the MPO mailing lists for the CAC, TAC, MPO Board, and BPAC and community members, including citizens, business owners, homeowner associations, community groups, and civic associations. All events

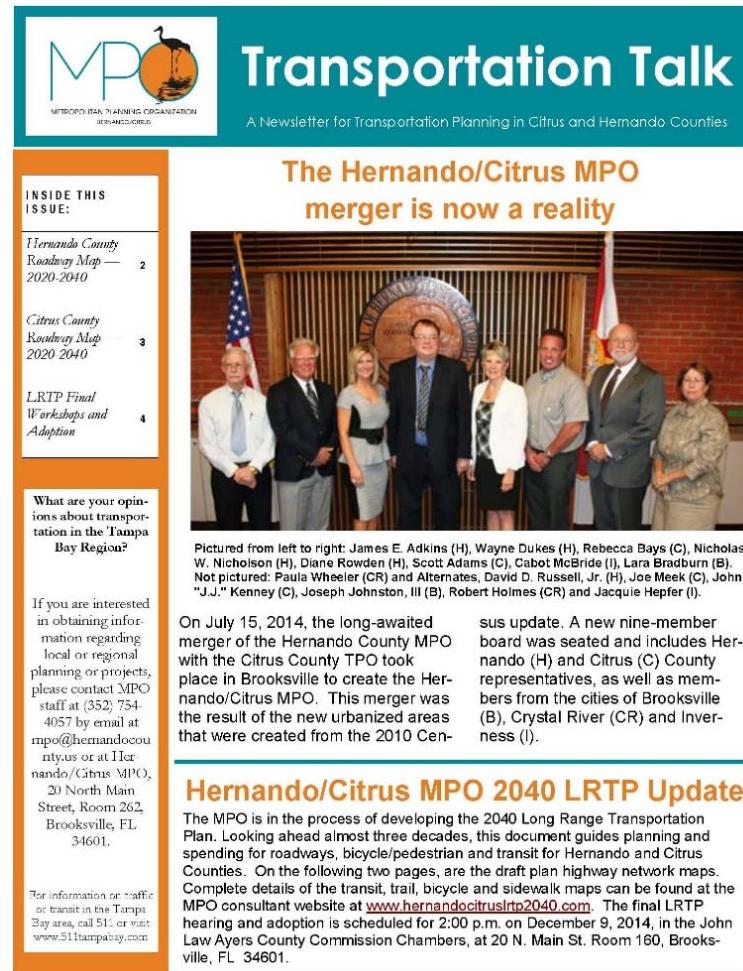
and opportunities were cross-posted on the MPO website. (www.hernandocitrusmpo.com).

Figure 3-4: LRTP Project Website



Transportation Talk – The March 2014 issue of the Hernando MPO Newsletter, *Transportation Talk*, included an update on the plan development process and identified potential improvements. The newsletter was distributed to the MPO email list and immediately posted to the MPO's website. Other issues of *Transportation Talk* have also addressed the LRTP development process

Figure 3-5: MPO Newsletter Highlighting the 2040 LRTP



Environmental Justice Discussion Groups

To address the federal Environmental Justice (EJ) evaluation requirements, the LRTP development process included efforts to assess the area-wide performance with regard to socio-cultural effects and EJ. The potential positive and adverse impacts of proposed transportation projects were considered during the development of the LRTP. Efforts in this update focused on impacted areas with a high concentration of minority, low-income, and other traditionally under-served and under-represented populations. This section highlights the efforts. A detailed report can be found in Environmental Justice Technical Report posted on the project website.

Map 3-1 and **Map 3-2** show the environmental justice areas identified for the 2040 Long Range Transportation Plan based on demographic analysis. This analysis and identification of EJ areas helped guide the selection of the public workshops.

Two discussion group workshops were held in each county to discuss the potential impacts of transportation improvements on elderly, minority, and low-income populations in Hernando and Citrus counties. The feedback and opinions received at these workshops were used to develop and prioritize the future transportation projects in the LRTP. These results were used to guide the selection of projects so as to minimize the negative impacts on low-income, minority, and/or other traditionally under-served population segments.

The following is a summary of dates and locations of each discussion group workshop.

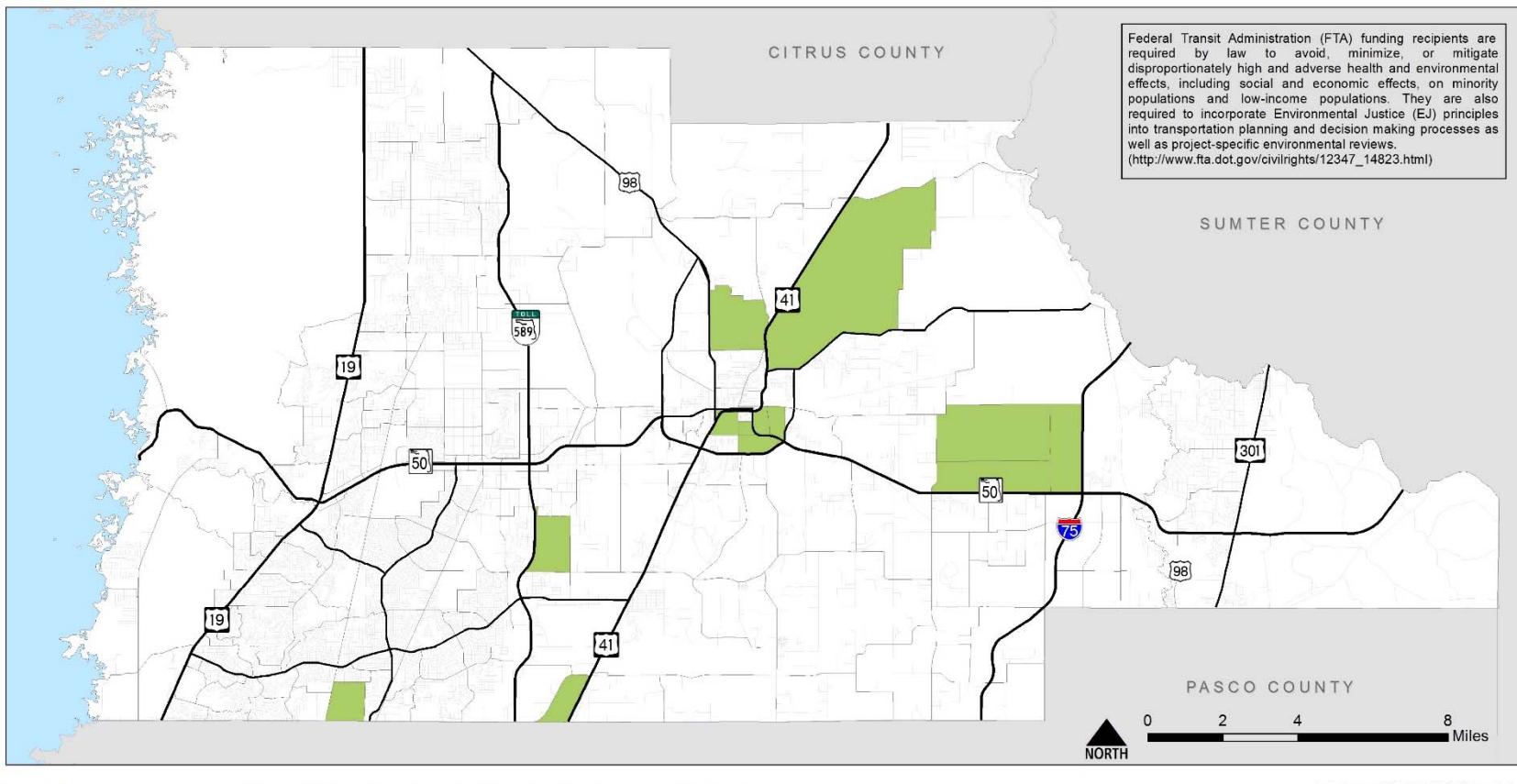
Hernando County

- South Brooksville Community Center (601 E Martin Luther King Jr. Blvd., Brooksville on August 19, 2014, from 4:00–6:00 PM)
- Ridge Manor Community Center (34240 Cortez Blvd, Ridge Manor on August 20, 2014, from 4:00–6:00 PM)

Citrus County

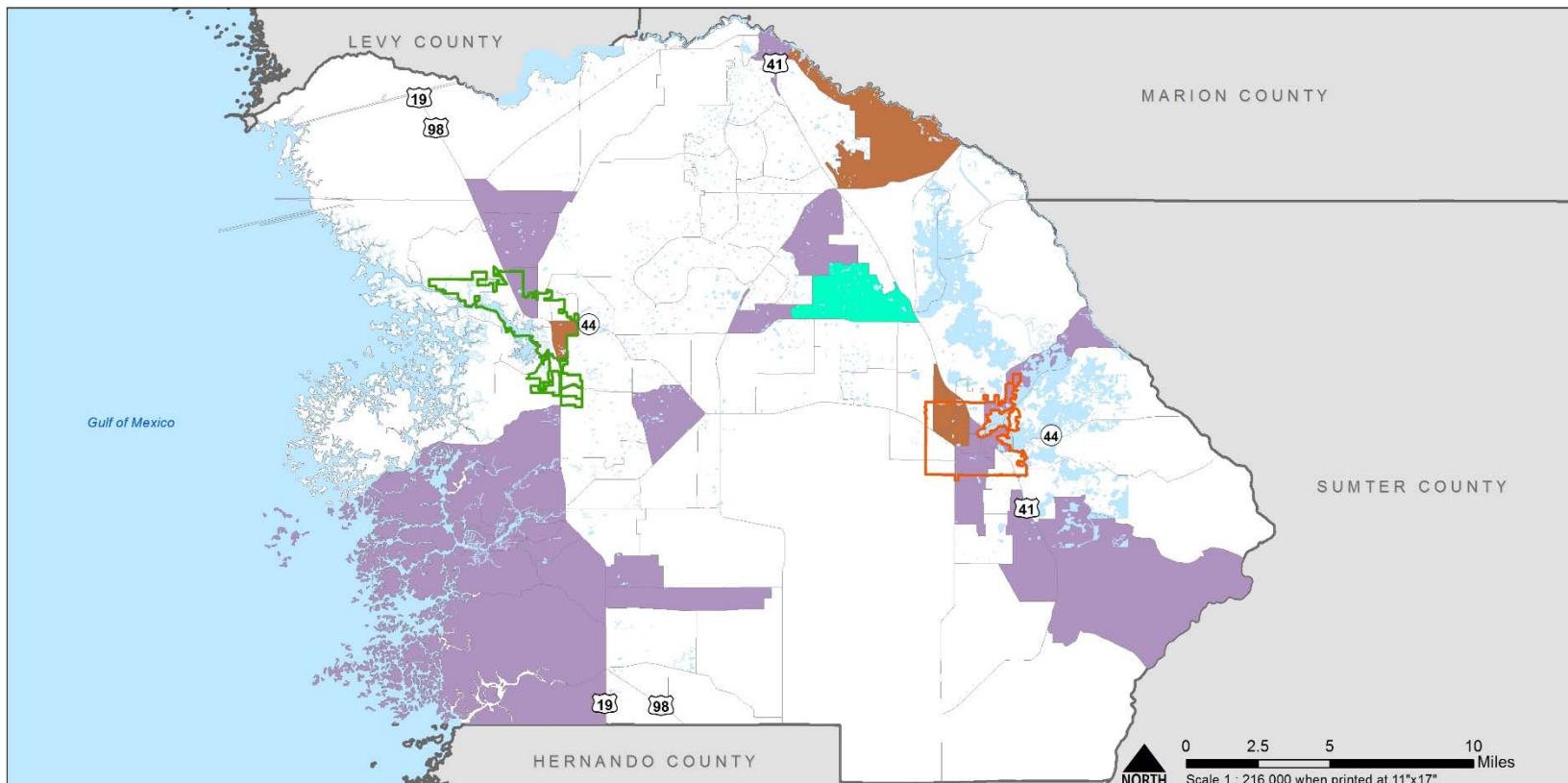
- Old Courthouse Heritage Museum (One Courthouse Square, Inverness on August 25, 2014, from 4:00–6:00 PM)
- Citrus County Transportation (1300 S. Lecanto Hwy, Lecanto on August 25, 2014, from 4:00–6:00 PM)

Map 3-1: Hernando County Environmental Justice Areas



Data Source: 2010 TBARTA TAZ Boundaries
Data Projection: NAD_1983_StatePlane_Florida_West_FIPS_0902 Feet

Map 3-2: Citrus County Environmental Justice Area



Legend

- TAZ boundaries
- Crystal River
- Inverness
- Older Adults and Poverty
- Older Adults, Poverty, and Minority
- Minority

This map shows areas within Citrus County with a population of older adults (65 and above), below poverty, and minority populations.

Data Source: TOA LRTP
Data Projection: NAD_1983_StatePlane_Florida_West_FIPS_0902_Feet

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Workshop Summary – Hernando County

Participants at the four public workshops held in Hernando County were generally satisfied with the transportation needs identified. The Needs Plan was displayed on a series of boards highlighting the transportation system projects. Specifically, participants expressed the following concerns that were considered in finalizing the 2040 Needs Plan:

- There is currently no Saturday transit service provided by Hernando Bus (THE Bus). Saturday service and frequency improvements in the future are the top two transit improvement needs.
- Regarding bicycle facilities, participants indicated there was an accessibility issue found around the intersection of US 19 and SR 50. The stated preference was to fix the gap between the existing bicycle lanes so the accessibility issue can be solved.
- In terms of sidewalk facilities, participants would like to see a new sidewalk built along California Street near the Lighthouse for the Visually Impaired office.

Workshop Summary – Citrus County

Comments from the participants at the two public workshops held in Citrus County are summarized below:

- Participants were generally satisfied with the public transportation service provided by Citrus County Board of County Commissioners.
- Participants also indicated there was a need to improve the transit service. More frequent service and expanded service area are the top two improvements needs in the future.
- Regarding expanded service area improvements, participants further indicated there was a need to have regional service connecting to Ocala County and new service operating between Crystal River and Inverness in Citrus County.
- The future extension of Suncoast Parkway was mentioned by the participants as a definite roadway improvement need.

Needs Plan Open Houses and Survey

Four meetings were held to get community feedback on the Needs Plan along with a survey that was posted to the County website. Some of the comments from the Needs Plan Open House Workshops and Surveys included:

- Requests were made for more sidewalks, specifically along Spring Hill Drive in Hernando County and US 19 in Citrus County.
- Comments supporting the addition of multi-use trails or bicycle lanes were made, although there were two comments about there being enough bicycle facilities.
- Comments were made about specific trails in each county and also about wanting better connections to some of the major trail facilities such as the Suncoast Parkway Trail.
- In Hernando County, County Line Road, Deltona Boulevard, and Cortez Boulevard all received comments regarding maintenance or safety.
- In Citrus County, US 19 and US 41 received comments about maintenance and widening.

Consensus Building Workshops

Two Consensus Building Workshops (CBW) were held on October 16, 2014, at the Quarry Golf Course Enrichment Center in Brooksville and the Central Ridge Community Center in Beverly Hills. The participants included stakeholders selected and invited by the Hernando/Citrus MPO staff. The workshop format included large group polling exercises accompanied by small group question and response activities. The large group exercises covered the plan goals, preferred improvements, and finance and revenue options. The small group exercises covered roadway priorities, public transportation, trail facilities, bicycle facilities, and congested intersections and safety. A separately-bound technical report documents the participants and outcomes of these workshops comprehensively. Following are some of the individual projects that were most mentioned as priorities by the stakeholders.

The top roadway projects were the following:

Hernando County

- County Line Rd from Cobblestone Dr to Mariner Blvd
- Deltona Blvd from Northcliffe Blvd to Cortez Blvd
- Cortez Blvd Bypass from Jefferson Rd to Jefferson St (SR50)
- Emerson Rd from Jefferson St to Mondon Hill Rd
- Two-way conversion of E Jefferson St and Broad St in downtown Brooksville
- Cortez Blvd from Treiman Blvd to the Sumter County Line
- Dashbach St from Lockhart Rd to Kettering Rd

Citrus County

- Suncoast Parkway Phase II
- CR 490 (Homosassa Trail) from US 19 to SR 44
- CR 490A (Grover Cleveland Blvd) from US 19 to CR 491
- US 19 from Cardinal St to south of CR 491A
- CR 491 (Lecanto Highway)
- US 41 from SR 200 to SR 44
- Croft Ave from SR 44 to E Hayes St

Hernando County participants indicated that regional transit service to the Tampa Bay area was important and, when asked about service by timing of implementation, the participants identified the connection to the Tampa Bay area as more important than the connection to Citrus County.

Citrus County participants expressed a desire for service to Ocala along SR 200 and then to the Tampa Bay area along the Suncoast Parkway.

The workshop participants also were asked to identify their three most important new or proposed trail or pathway projects within each county from the list below:

- Dunnellon Trail
- 3 Sisters Trail
- Inverness Area/SW Trail
- Grover Cleveland Trail
- Fort Island Trail
- Good Neighbor Trail Extension through Brooksville

- Trail along County Line Rd
- Powerline Trails

In addition to the trail projects provided for comment, a new trail along CR 480 in Citrus County was also mentioned by participants as a new trail for consideration.

Cost Affordable Plan Open Houses and Survey

Four meetings were held to get community feedback on the Cost Affordable Plan during the public comment period. The meeting dates and locations were as follows:

- November 17, 2014, Monday, 1:00–3:00 PM, Lakes Region Library, 1511 Druid Road, Inverness, FL 34452
- November 17, 2014, Monday, 5:00–7:00 PM, Citrus County Transit, 1300 S Lecanto Highway, Lecanto, FL 34461
- November 18, 2014, Tuesday, 9:00–11:00 AM, Hernando County Government Center, Atrium, 20 N Main Street, Brooksville, FL 34601
- November 18, 2014, Tuesday, 5:00–7:00 PM, Spring Hill Branch Library, 9220 Spring Hill Drive, Spring Hill, FL 34608

Some of the comments from the Cost Affordable Plan open house workshops and surveys include:

- Support for regional bus lines
- Support for local bus and connections to surrounding counties
- Support for Emerson Rd extension

Freight Survey

A survey asking for input about good movement issues was submitted to a group of key freight providers. Figure 3-7 and 3-8 illustrate key freight corridors and connections between the counties and to I-75. Feedback from the survey included:

- Concern about implementing “time-of-day” restrictions on business operations
- Concern about restricting truck route designations and any additional regulations that would have an adverse impact on business due to increased travel time and cost
- Ensuring consistency between designation of truck routes and the roadways most suitable to truck travel
- No specific roadways or intersections in either county were identified as causing difficulties for truck drivers

Figure 3-6: Hernando County Freight Infrastructure



Figure 3-7: Citrus County Freight Infrastructure



Key Themes

Public comment and feedback were collected throughout the development of the plan. Key themes included a desire to preserve existing infrastructure and the desire to provide transportation options, including more robust regional transit, multi-use trails, and additional sidewalks. Generally speaking, there was support for improving US 41 in Citrus County and for the planned

reconfiguration of E Jefferson Street and Broad Street in Hernando County from the current one-way pair to two-way.

Changes to the plan because of public comment include:

- Addition of a multi-use trail project in Citrus County
- Sidewalk project in Brooksville
- Addition of a Trail Corridor Analysis Study in Brooksville
- Complete streets project at Kass Circle and Cortez Blvd

CHAPTER 4

Constrained 2040 Needs Plan



CHAPTER 4: CONSTRAINED 2040 NEEDS PLAN

INTRODUCTION

Identifying future transportation needs for Hernando and Citrus counties is based on existing long- and short-range plans. Future highway, transit, bicycle, pedestrian, multi-use trail, intersection/safety improvements, technology, and other transportation-related projects make up the multimodal LRTP. A Long Range Transportation Plan is required to cover at least a 20-year planning horizon as a guide for future needed projects. Because conditions change, so does the LRTP. Updated on a five-year cycle, the LRTP is guided by current conditions and vision for the future, as discussed in Chapter 3. Using the vision, a set of transportation projects is identified to ensure that the mobility needs of both existing and future growth are well-served.

In Hernando and Citrus counties, these needs are expressed as a Policy Constrained Needs Plan. This means that the existing transportation system and future improvements are conditioned based on existing policies such as environmental impacts, impacts to existing neighborhoods and businesses, and limitations of existing rights-of-way for widening existing roads. Since transportation planning is continuous, a Five-Year Transportation Improvement Program (TIP) outlines the projects that previously

were prioritized through the long range planning process and are now funded by various implementing agencies, including FDOT, Hernando and Citrus counties, and the cities of Brooksville, Inverness, and Crystal River through the year 2019. Projects completed by 2019 become the starting point for developing the 2040 Needs Plan.

According to the Florida MPO Advisory Council, transportation projects included in an MPO Needs Plan should meet the identified transportation needs while advancing the goals and policies of the MPO. Projects extremely unlikely to be implemented may distort the total estimated cost of transportation “needs” in the metropolitan area to unrealistic amounts; therefore, these projects are not considered to be truly needed, and their costs are not included in the MPO Needs Plan.

The remainder of this chapter discusses the process of developing the future transportation projects needed to achieve the vision for 2040.

COMMITTED TRANSPORTATION SYSTEM PLANS

As referenced above, transportation projects scheduled over the next five years (2015–2019) are part of the TIP and are referred to as committed projects. Along with the existing roadway network and transit service, the planned transportation system of 2019 is labeled the Existing + Committed (E+C) network. These committed projects have been prioritized by the Hernando/Citrus MPO. Construction of these projects occurs through strong partnerships with FDOT and County and City departments. Updated on an annual basis, the TIP used as the starting point for the LRTP was last adopted on June 15, 2014.

Roadway

The E+C roadway network includes maintaining the existing network and implementing the projects shown in **Table 4-1** and shown in **Map 4-1** for Hernando County and **Map 4-2** for Citrus County.

Table 4-1: Committed Roadway Projects, Hernando and Citrus Counties

| Project | Project Description | Project Location |
|---|------------------------|------------------|
| Cortez Blvd from Lockhart to US 98 | Widen to 6 lanes | Hernando |
| Cortez Blvd from US 98 to US 301 | Widen to 4 lanes | Hernando |
| Ayers Rd Extension from County Line to US 41 | Widen to 4 lanes | Hernando |
| Governor Blvd from US 41 to Cortez Rd Bypass | New 2-lane with median | Hernando |
| Star Road from Sunshine Grove Rd to Weeping Willow St | New 2-lane | Hernando |
| I-75 from Pasco County to Sumter County | Widen to 6 lanes | Hernando |
| US 19 from Green Acres to Fort Island Trl | Widen to 6 lanes | Citrus |
| CR 491 from Horace Allen to SR 44 | Widen to 4 lanes | Citrus |

Transit

Hernando County

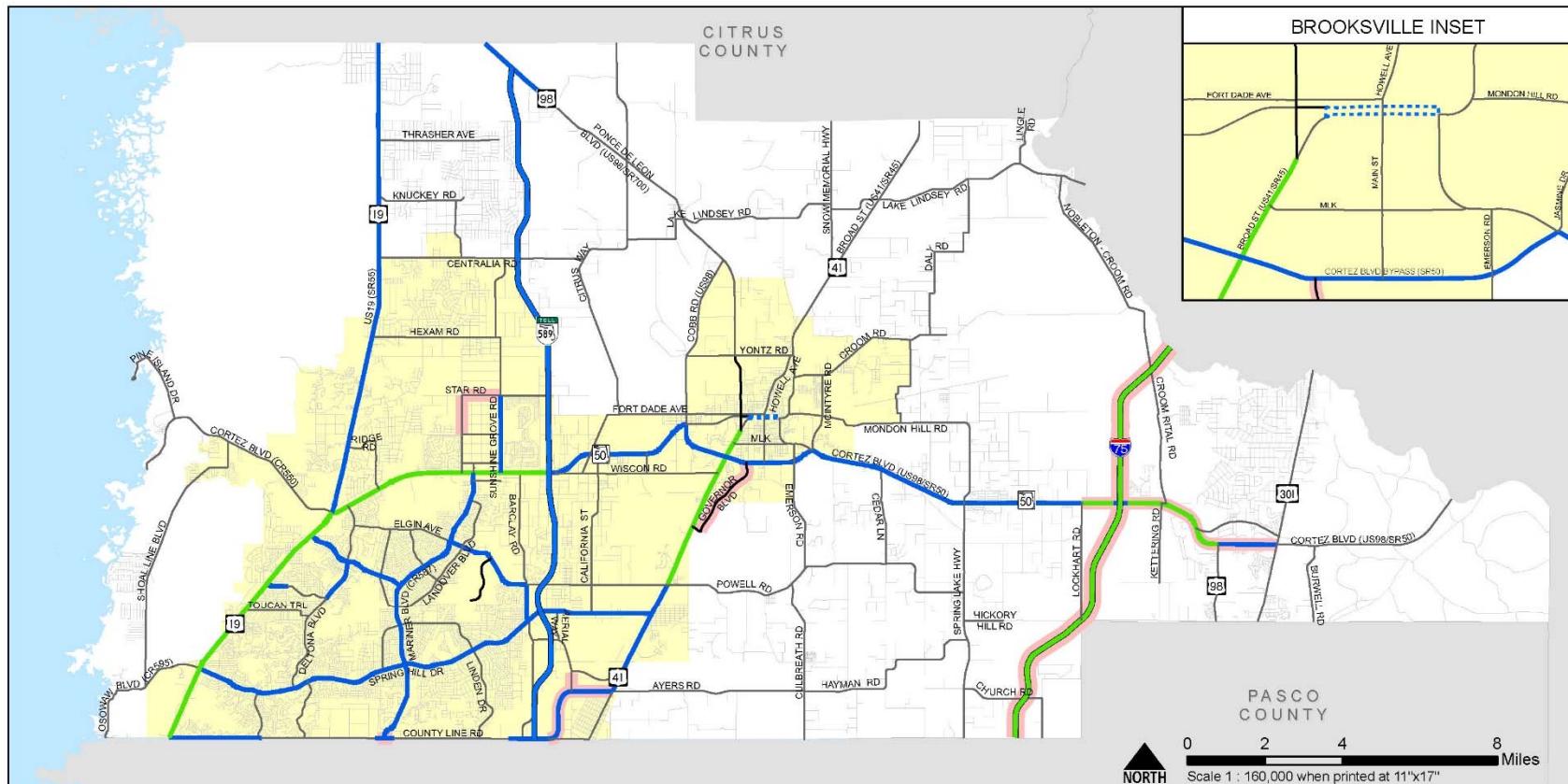
The E+C network for transit includes maintaining the existing services with the Red, Blue and Purple routes and adding a new route connecting Spring Hill to Brookville via the Brooksville-Tampa Bay Airport area. The new route, already identified for implementation in the MPO's 2014 adopted Transit Development Plan (TDP), will serve the airport area currently not connected with THE Bus services. Other than the current major facilities and an ongoing bus sign/shelter/ bench program and bus stop accessibility assessments, no other capital facilities are planned for the transit network by 2019.

Citrus County

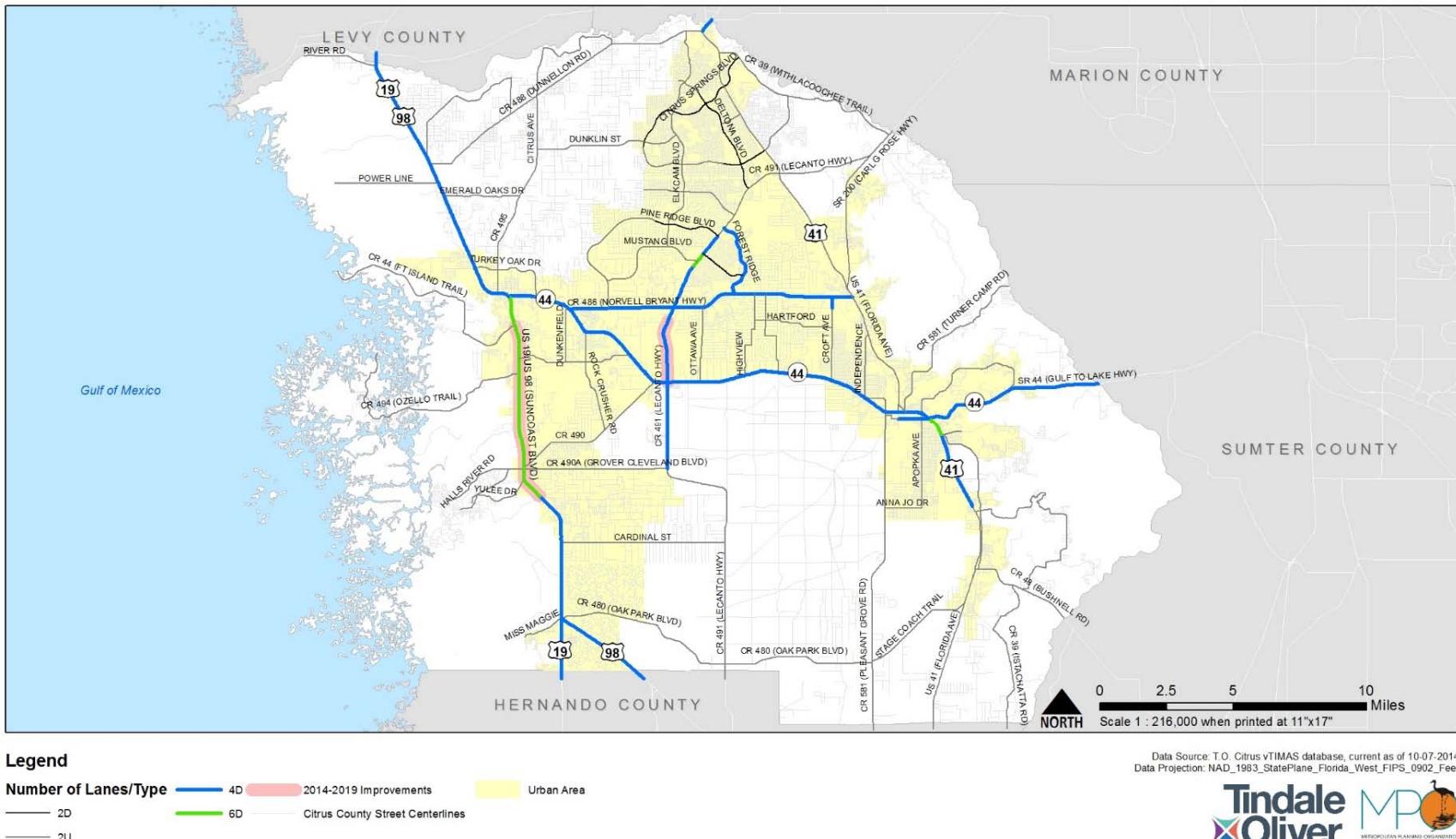
In the E+C timeframe, no changes are scheduled for Citrus County's bus service. The transit services in Citrus County include continuing the current network of four deviated fixed routes serving the key areas of the county. In addition, no new bus facilities are planned for Citrus Transit through 2020.

In addition to the services previously summarized, complementary ADA paratransit service also is provided in Citrus County within a $\frac{3}{4}$ - mile radius of its fixed-route bus network. However, both counties provide transportation disadvantaged services, which are available for eligible users through an advance reservation system.

Map 4-1: Hernando County Existing and Committed Roadway Projects



Map 4-2: Citrus County Existing and Committed Roadway Projects



MULTIMODAL NEEDS PLAN

Development of a multimodal LRTP follows an established and iterative process. The first major milestone in the development of the updated 2040 LRTP is the identification of future transportation needs unconstrained by cost. These transportation needs are a mixture of roadway widening projects or new transit service. Only policy considerations that have been established by the MPO would constrain the type, size, and/or location of new or widened roads that will provide capacity to meet future travel demand.

The MPO followed a rigorous technical process throughout the development of the Plan Update. As with previous LRTP updates, the technical process for forecasting future travel demand used the Regional Planning Model developed through the ongoing Regional Transportation Analysis. MPO staff and/or the Consultant attended meetings of a Technical Review Team (TRT) during the plan development to coordinate transportation projects within the larger Tampa Bay region. The result of this work effort is the Tampa Bay Regional Planning Model (TBRPM). The roadway needs were determined, in part, by using the TBRPM to identify deficiencies in the roadway network based on travel needs of the future population. These needs were identified as individual projects, and their effectiveness at addressing the transportation deficiencies was evaluated. This analysis includes future expected growth in population and jobs along with the capacity of the existing transportation system bolstered by improvements that are funded through 2019. Performing this level of analysis identifies the most

critical locations where new projects are most needed. Since the model used in this analysis is used throughout the Tampa Bay region, the growth, future travel, and identified needs are coordinated with the surrounding counties. Additionally, the West Central Florida CCC and TBARTA have reviewed the regional issues associated with the Needs Plan and have coordinated their review through the MPO Staff Directors Coordination Team.

Through the TRT, the MPO coordinated with adjoining MPOs concerning the development of projects crossing county boundaries for the Needs Plan, specifically those projects going into Sumter, Pasco, Levy and Marion counties. After the completion of the 2040 Needs Plan, the Hernando/Citrus MPO Prioritization Process was applied to the Needs Plan to establish project priorities for the Cost Affordable Plan, which is described in further detail in Chapter 5.

In 2014, the estimated cost of the 2040 Hernando County Needs Plan is \$2.5 billion. With \$610 million in projected revenues, the shortfall for funding the Needs Plan is \$1.9 billion. The estimated cost of the 2040 Citrus County Needs Plan is \$1.5 billion. With \$430 million in projected revenues, the shortfall for funding the Needs Plan is nearly \$1.1 billion. If additional revenues become available after the adoption of the LRTP, unfunded projects from the Needs Plan may be advanced and built earlier than scheduled. This is accommodated through an LRTP amendment.

The Needs Plan is multimodal, meaning that it addresses a variety of transportation modes and is not limited to just personal automobiles. It is divided into four sections:

- Roadway needs (highways and arterials)
- Transit needs (buses)
- Bicycle, trails, and pedestrian needs
- Congestion management and safety

Roadway Needs

Developing a Needs Plan includes a multi-step process of evaluating current travel conditions, considering projects that are already funded for construction, and forecasting future travel demand based on population and employment growth to determine the roadway projects. This determination of projects is limited by existing policy constraints, such as impacts on neighborhoods, businesses, and the environment or other policy considerations included as part of local comprehensive plan. In developing the Needs Plan, cost is not considered a limiting factor for identifying projects. Once the needs are identified, costs are used to develop the Cost Affordable Plan, which is documented in Chapter 5.

The technical process for evaluating projects is coordinated with the three other MPOs in the Tampa Bay region. Coordinated through the TRT, staff from the Hernando/Citrus, Hillsborough, Pasco, and Pinellas MPOs meet an average of twice monthly to coordinate the selection of projects and review the travel demand results from the TBRPM. Starting with the projects included in the MPO's TIP for the next five years (2015–2019), the MPO uses the TBRPM to evaluate roadways where future travel exceeds the roadway capacity. A volume adjustment process, consistent with National Cooperative

Highway Research Program (NCHRP) Report 255, also is used to make decisions concerning new projects. This process identifies the most critical locations where new projects are needed.

Running the model was done iteratively to develop and refine the projects included in the Needs Plan. In addition to the technical analysis, public outreach activities were conducted during the plan development, during which the Needs Plan shared with citizens to obtain feedback on future road improvements.

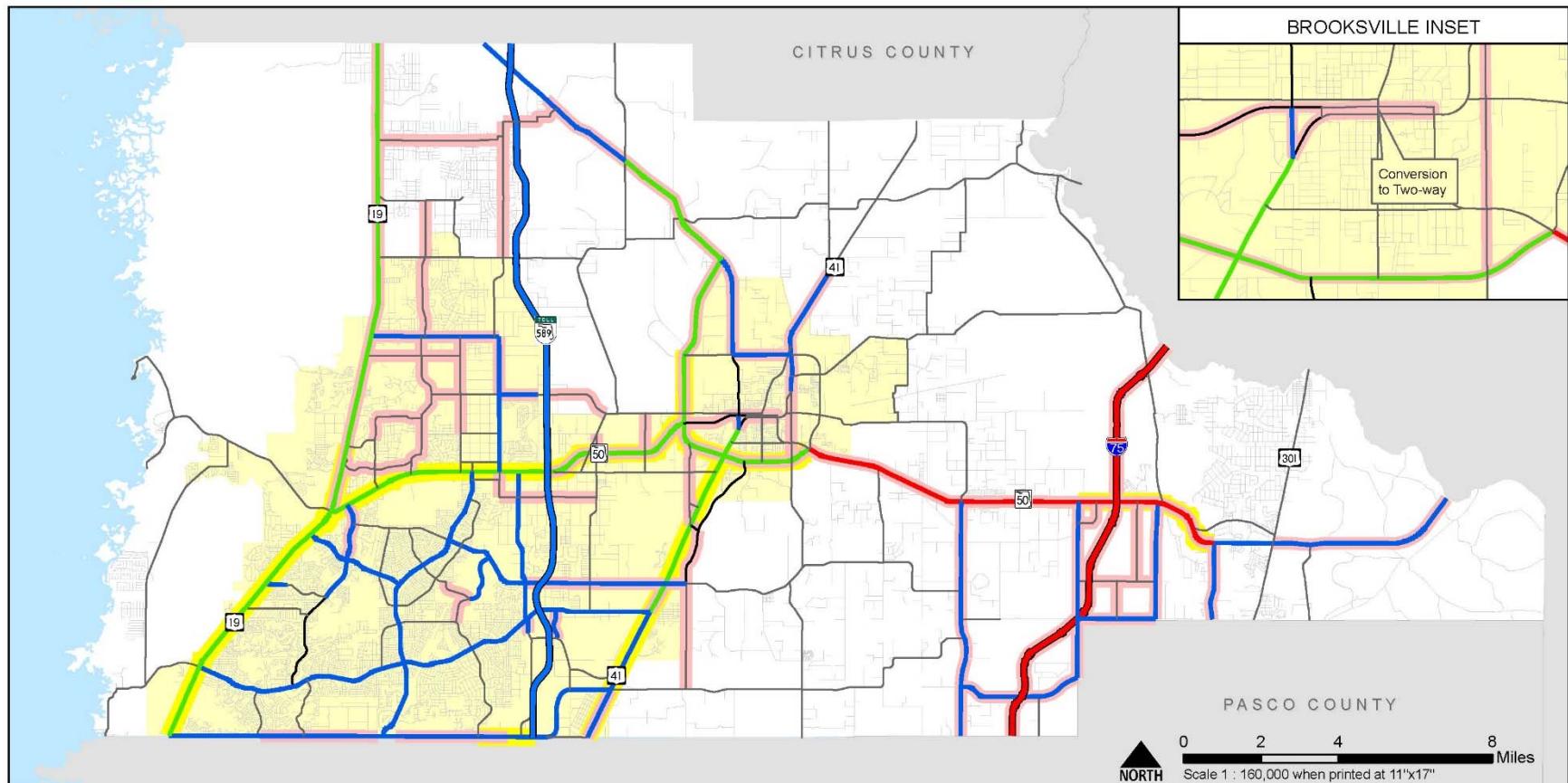
Hernando County

The Roadway Needs Plan for Hernando County includes the widening of 240 miles of roadway and an overpass. The 2040 Roadway Needs Network, shown in **Map 4-3**, highlights the number of lanes for each roadway and also identifies the projects that are included in the Needs Plan. Completing these needed projects is estimated to cost \$2.5 billion (in 2014 dollars or present day costs).

Citrus County

The Roadway Needs Plan for Citrus County includes the widening of 119 miles of roadway. The 2040 Roadway Needs Network, shown in **Map 4-4**, highlights the number of lanes for each roadway and also identifies the projects that are included in the Needs Plan. Completing these needed projects is estimated to cost \$1.5 billion (PDC). In summary, the total cost of roadway projects included in the 2040 Needs Plan is \$4 billion (PDC).

Map 4-3: Hernando County Roadway Needs

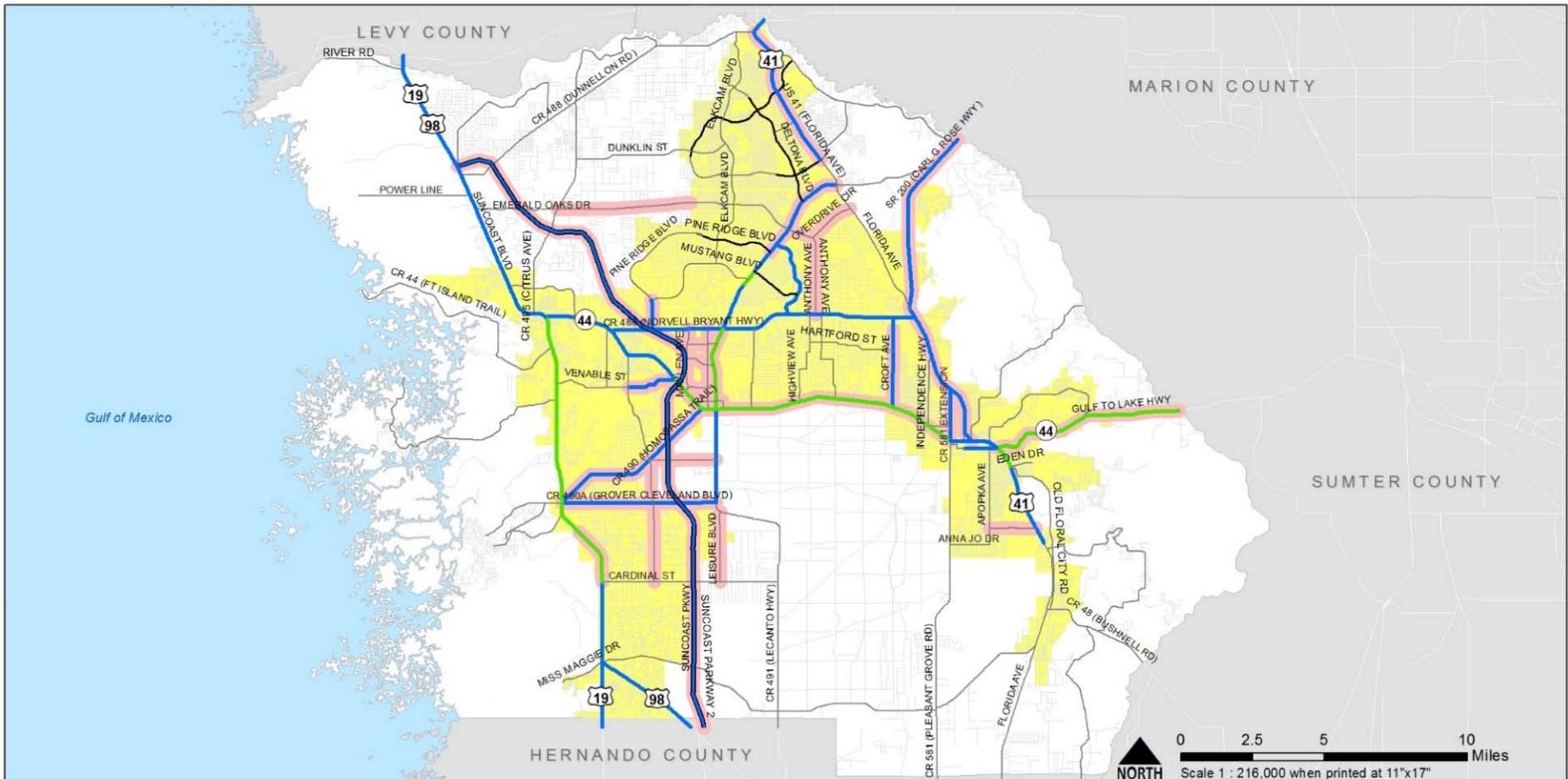


Legend

| | | | | |
|--------------------|------------------|------------------|--------------------|------------|
| Lanes/Type | 4 Lanes, Divided | 8 Lanes, Divided | Improved 2020-2040 | Urban Area |
| — | — | — | — | — |
| 2 Lanes, Undivided | 4 Lanes, Freeway | 8 Lanes, Freeway | Frontage Needs | — |

Data Source: Data Source: T.O. Hernando vTIMAS database, current as of 12-09-2014
Data Projection: NAD_1983_StatePlane_Florida_West_FIPS_0902_Feet

Map 4-4: Citrus County Roadway Needs



Legend

Number of Lanes/Type: 2U (grey line), 2D (black line), 4D (dark blue line), 6D (green line). 2020-2040 Improvements: 2020-2040 (pink bar), 2020-2030 (light blue bar), 2020-2025 (yellow bar). Urban Area (yellow bar).

Data Source: TOAvTIMAS

Data Projection: NAD_1983_StatePlane_Florida_West_FIPS_0902_Feet

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Transit Needs

2040 Transit Needs Plan

This section presents the public transportation needs for Hernando and Citrus counties for the next 25 years. These public transportation improvements include service and capital/infrastructure enhancements to the services existing today as well as new services in additional areas currently not connected with transit. Numerous improvements are identified for potential consideration to improve current transit services and facilities to make transit a viable travel option locally and to connect with the regional services.

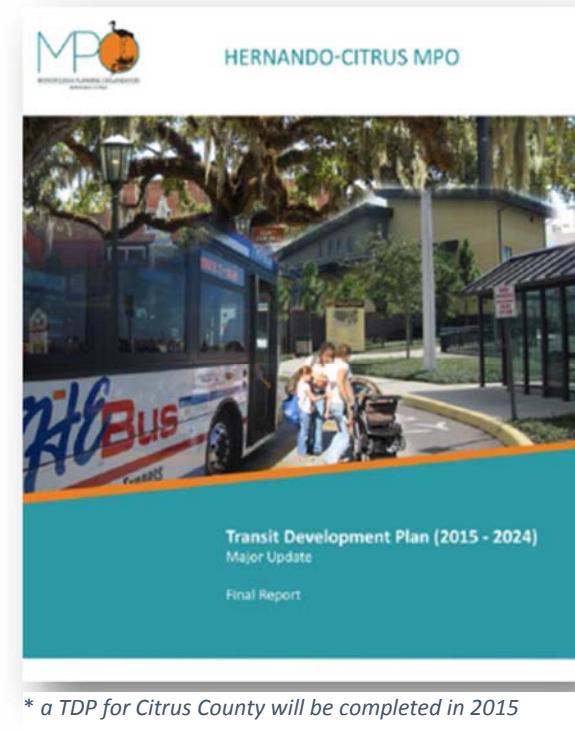
The public transportation needs plans for Hernando and Citrus counties identify significant need for transit services, including a local circulator and connectors, regional and city-to-city connections and express services along major corridors. These needs were identified through the following methods:

- **Hernando County Transit Development Plan (TDP)** – The recently-adopted 2015–2024 Hernando TDP, prepared for Hernando County's transit service provider, THE Bus, is the strategic guide for public transportation in Hernando County. The report (cover shown in Figure 4-1) provides THE Bus's vision for public transportation in its service area during the next 10-year period. Transit needs information identified in this document was used as a key component in assessing the transit needs for Hernando County in next 25

years.

- **Citrus and Hernando 2035 LRTPs** – Both Citrus and Hernando 2035 LRTPs addressed the transportation system needs and cost feasible improvements in the two-county area through the year 2035. The transit service and capital needs identified for the

Figure 4-1: The MPO completed the Hernando TDP in 2014.*



* a TDP for Citrus County will be completed in 2015

two counties were used as a baseline in developing new/revised transit needs through the year 2040.

- **Discretionary Transit Market** – This refers to potential riders living in higher-density areas of the county that may choose to use transit as a commuting or transportation alternative. This component considers the importance of the year 2040 population and employment density and its importance as a factor related to transit use. The discretionary transit market was analyzed for both counties.
- **Traditional Transit Market** – This component considers demographic factors that are traditionally conducive to transit use, including older adults, youth, low-income households, and zero-vehicle households, in Hernando and Citrus counties.
- **Public Input** – Public input, including on board surveys like the shown being completed in **Figure 4-2**, received as part of various LRTP public outreach events and the recent Hernando TDP public outreach efforts were reviewed and considered in developing the transit needs plans for the two-county area. Needs Plan alternatives reflect the public opinions on topics related to the quality of existing transit service and how the existing service can be improved.
- **Regional Transit Connectivity** – This component considers consistency with the regional vision plan for public transportation, as reflected in the recently-adopted TBARTA Master Plan. The Master Plan includes mid- and long-term

regional projections on transit connectivity between counties, including Citrus and Hernando.

Figure 4-2: On board surveys are used to gather feedback on ridership and future needs



These components, in addition to input from various review committees and Citrus and Hernando county planning staffs were used to guide the development of the 2040 transit service needs and capital needs for Hernando and Citrus counties.

Hernando County

Map 4-5 illustrates the 2040 Transit Needs for Hernando County. The 2040 Transit Needs include improvements to existing service and new service expansion.

Improvements to Existing Service

- Increase service frequency to 30 minutes on existing routes – Increase the current 75-minute headway service to every 30-minutes on all current routes, including Red, Blue, and Purple.
- Expand early/late service to all routes by 3 hours – Add 3 hours of service to provide approximately 13 hours of weekday service each day.
- Add Saturday service on existing routes – Currently, all three routes operate from Monday to Friday. This improvement will add weekend service to current service.

New Service Expansion

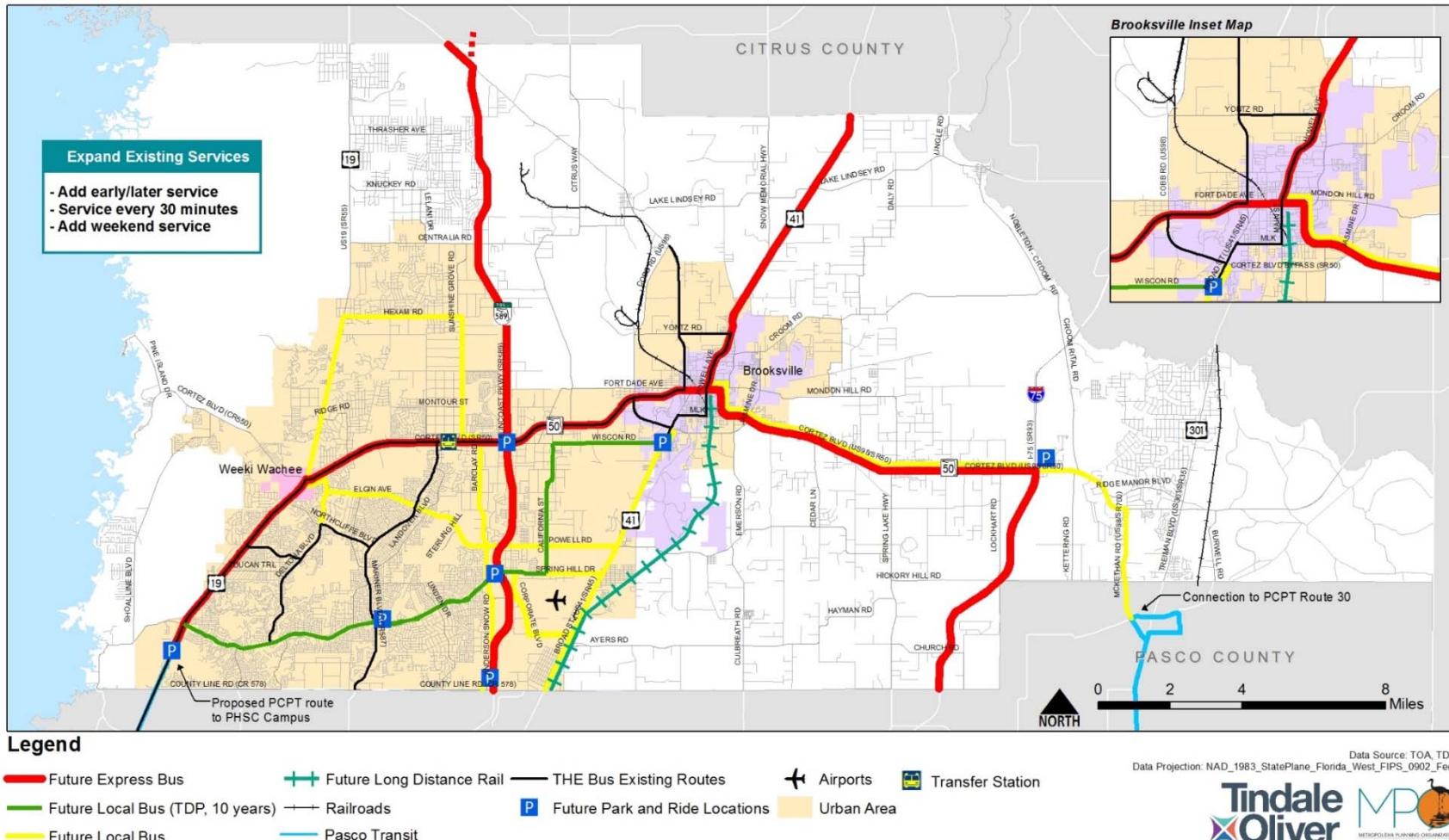
- New Local Service
 - *Green Route, connecting Hernando Airport area to Spring Hill and Brooksville* – Local bus route that operates along Wiscon Road, California Street, and Spring Hill Drive between Brooksville and Walmart Super Center located at US 19 and Spring Hill Drive.
 - *East Hernando Connector, connecting Brooksville to I-75* – Local bus service providing west-east connection along SR 50 and US 98 between Brooksville in Hernando

County and Ridge Manor area would also connect to transit services in Pasco County.

- *Spring Hill- Airport Circulator* – Local circulator service that connects the Spring Hill area with the airport, operating primarily on Elgin Avenue, Powell Road, and US 41 and circulating around the airport.
- *North-South Connector* – Local route that extends north from Cortez Boulevard on US 19 and operates west along Hexam Road and south on Sunshine Grove Road to the Mariner Square Shopping Center, then travels south on Barclay and Anderson Snow roads to County Line Road, serving the southeast Spring Hill area.
- *US 41 Service* – local bus route that connects Brooksville with the Brooksville–Tampa Bay Regional Airport along US 41 and Spring Hill Drive. This route further extends south along US 41 to County Line Road and connects with regional local service from US 41, as identified in the Pasco LRTP Transit Needs Plan.
- Express Service
 - *I-75 Regional Express* – Express service providing inter-county connection between Brooksville in Hernando County and Pasco County.
 - *Citrus Connector Express* – Express service that provides inter-county connection between Mariner Square Shopping Center in Hernando County and Citrus County.

- *US 19/SR 50 Express* – Express service that runs along US 19 and SR 50 from the intersection of Suncoast Parkway and SR 50 to Pasco Hernando State College near the County Line Road.
- *Suncoast Parkway Express* – Express service providing north-south connection to Citrus County and Pasco County along Suncoast Parkway.
- Rail Service
 - *Commuter Rail* – As part of the TBARTA regional rail system, connects Pasco County with Brooksville in Hernando County, operating along the existing CSX rail corridor paralleling US 41 in Pasco and Hernando Counties

Map 4-5: Hernando 2040 Transit Needs Plan



Citrus County

Map 4-6 illustrates the 2040 Transit Needs for Citrus County. The 2040 Transit Needs include improvements to existing service and new service expansion.

Improvements to Existing Service

- *Increase service frequency to 30 minutes on existing routes* – This improvement will increase current headways of 2+ hour to 30 minutes by 2040.
- *Expand early/late service on all routes by 3 hours* - Add 3 hours of service to provide approximately 13 hours of weekday and Saturday service.

New Service Expansions

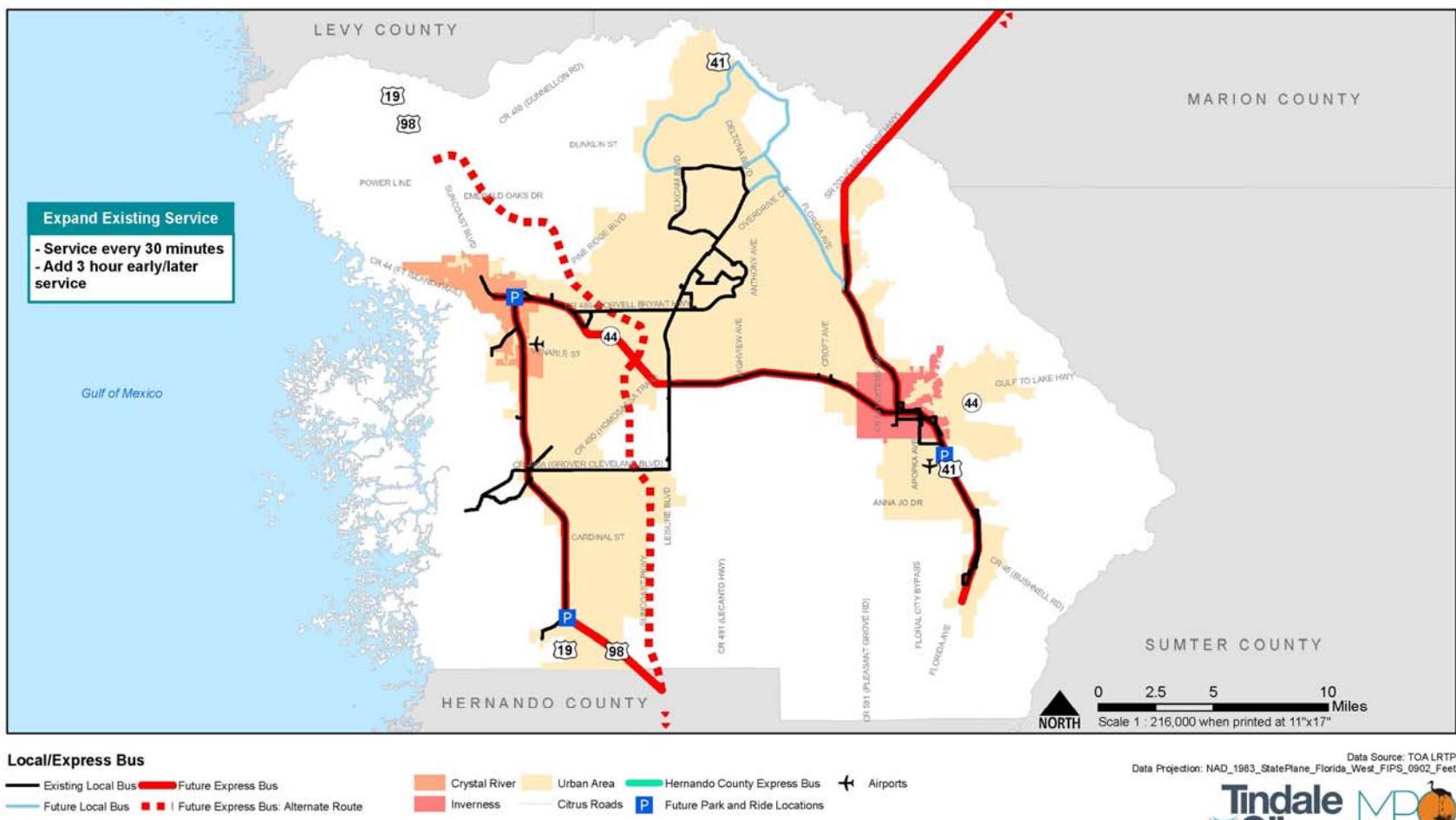
- New Local Service
 - *Citrus Springs Connector* – Local bus service that extends from Downtown Inverness north to Citrus Springs along US 41. This route provides a transfer opportunity with the existing Beverly Hills route.
- Express Service
 - *Crystal-Inverness Limited Express* – Express service providing intra-county connection between Inverness and Crystal River along SR 44. It connects to the proposed Citrus Connector Express in Hernando County at south end.

- *US 19 Express* – This express service provides inter-county connection between Crystal River in Citrus County and Hernando County along US 19 and US 98.
- *Ocala Express* – This express service runs north from Inverness along US 41 and SR 200 and connects to Ocala in Marion County.

Capital Needs

The capital needs include those capital components that need to be implemented to accommodate the transit service improvements presented previously for Hernando and Citrus counties. These include new bus vehicles, new stop amenities, and new park-and-ride facilities for proposed transit needs alternatives included in Hernando and Citrus Long Range Transit Element (LRTE) Needs Plans found in a separately bound Technical Report.

Map 4-6: Citrus County Transit Needs



Hernando Bicycle and Pedestrian Facilities

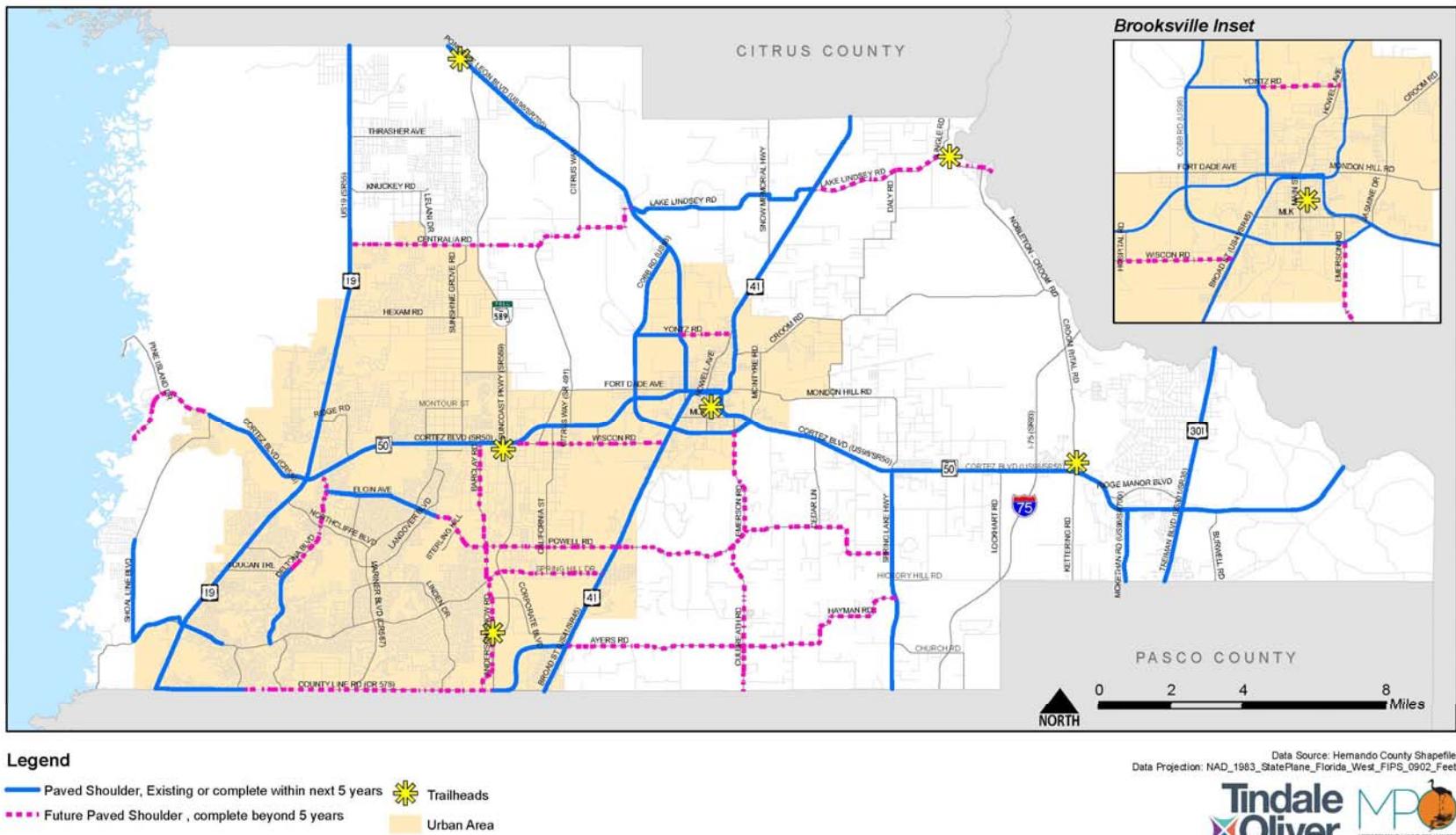
Hernando County used the 2035 LRTP as the *starting point* for *developing projects for the 2040 Plan*, as well as significant input from the Bicycle Pedestrian Advisory Committee and other MPO committees.

Hernando County's bicycle, pedestrian, and multi-use trail plans are shown in **Maps 4-7, 4-8, and 4-9**. A tabular listing of these projects is included in **Appendix D**

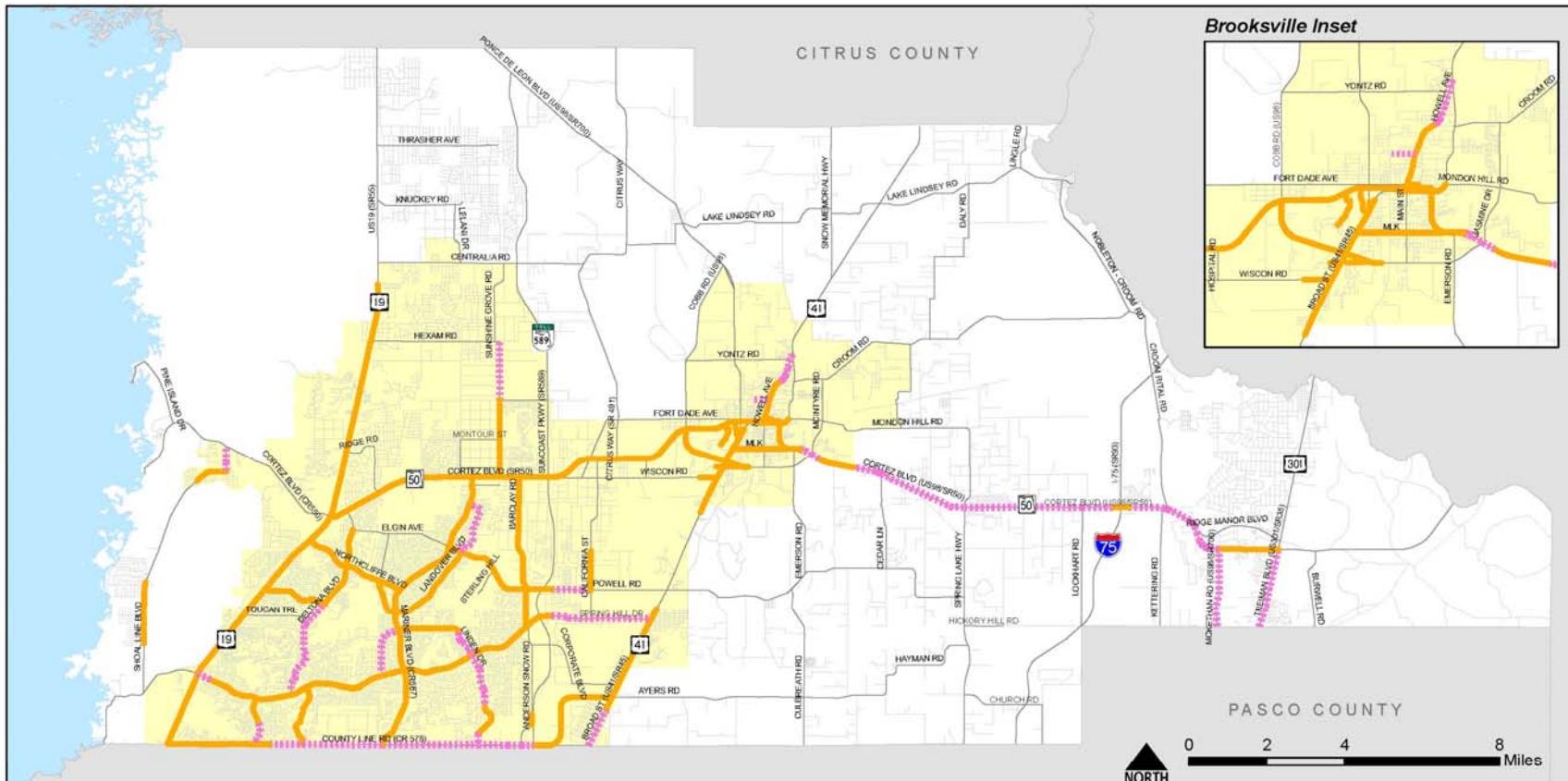
Citrus Bicycle and Pedestrian Facilities

Citrus County adopted a Multi-Use Trail Plan in 2014 and has coordinated its connectivity with adjacent counties. The Multi-Use Trail Plan reflects existing trails, funded trails, and conceptual trails for when funding becomes available. Citrus County's multi-use trail and bicycle needs are shown on **Map 4-10**. A tabular listing of these projects is included **Appendix D**

Map 4-7: Hernando County Existing and Proposed Bicycle Facilities



Map 4-8: Hernando County Existing and Proposed Pedestrian Projects

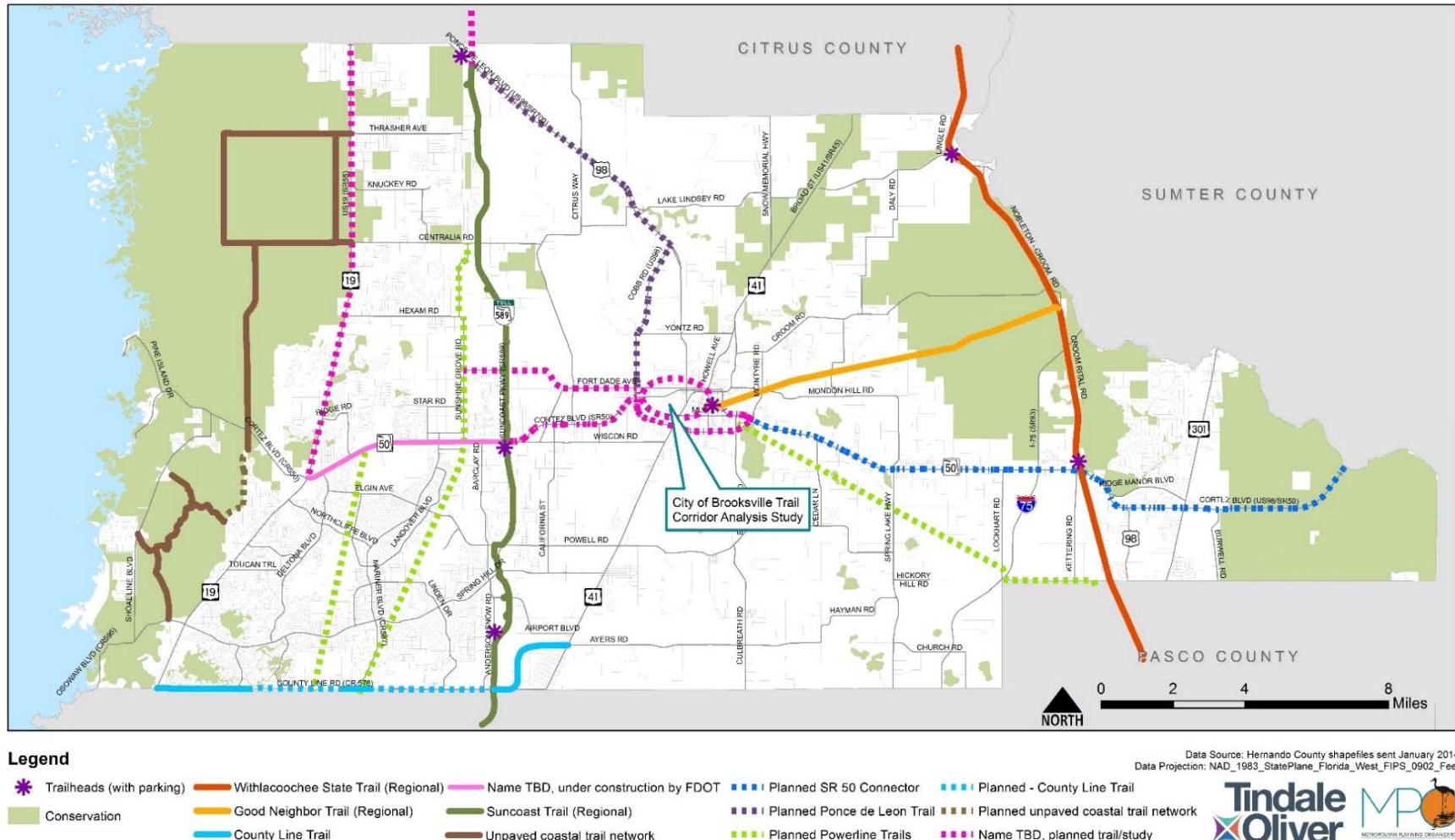


Legend

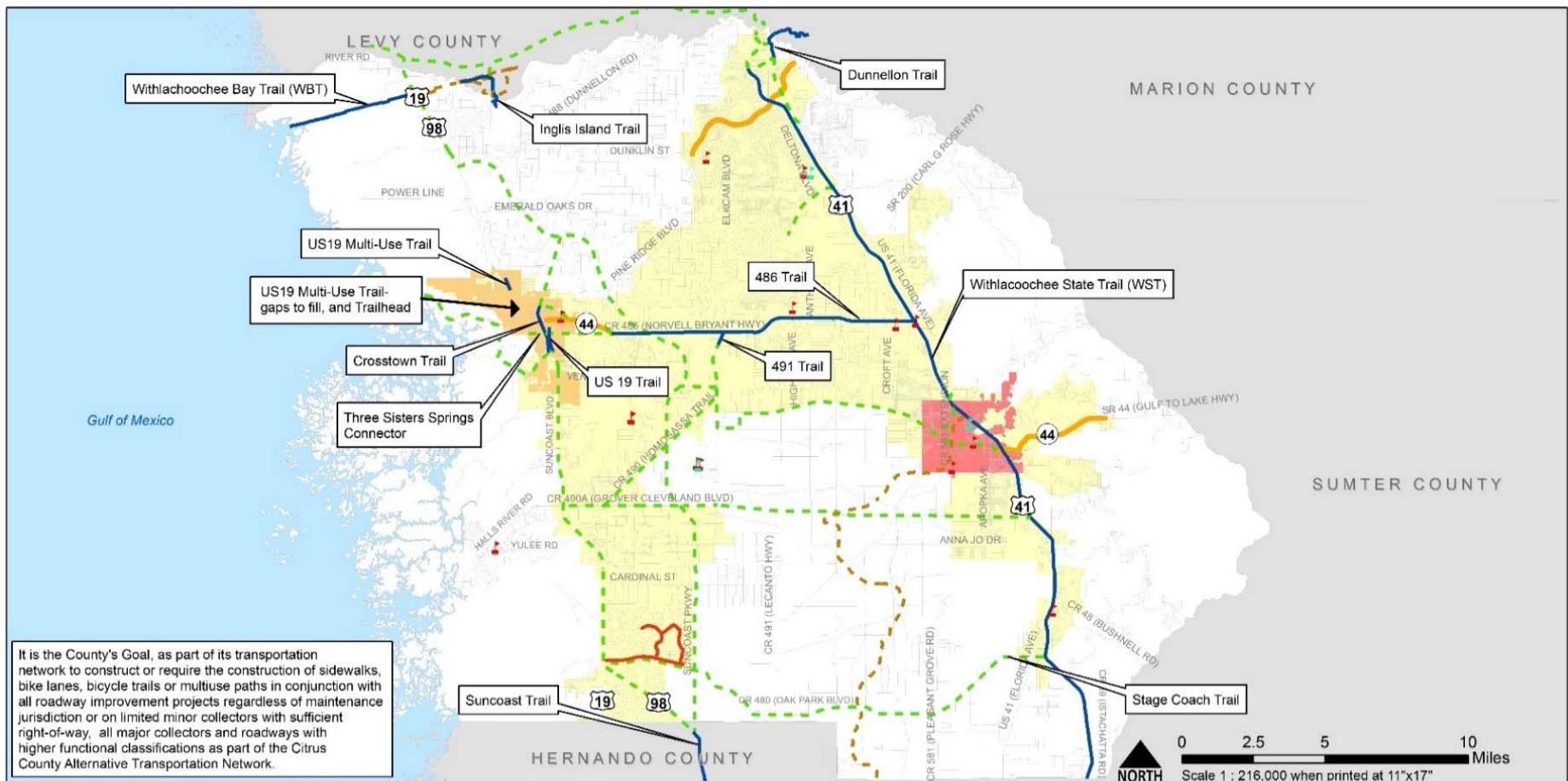
- Existing sidewalks or sidewalks completed within 5 years ■ Urban Area
- Future Sidewalks, complete beyond 5 years by 2040

Data Source: Hernando County MPO
Data Projection: NAD_1983_StatePlane_Florida_West_FIPS_0902_Feet

Map 4-9: Hernando County Existing and Proposed Multiuse Trail Projects



Map 4-10: Citrus County Bicycle, Pedestrian, and Multiuse Trail Needs



Existing Facilities

— Trails - - - Unpaved
— Bike Lanes

Proposed Facilities

Proposed Trails
Proposed Bike Lanes

Schools

- Elementary
- Middle

Data Source: TOA LRTP

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CHAPTER 5

2040 Cost Affordable Plan



Photo courtesy of www.floridastateparks.org/park/Withlacoochee

CHAPTER 5: 2040 COST AFFORDABLE PLAN INTRODUCTION

This chapter presents the Hernando/Citrus MPO's 2040 Long Range Cost Affordable Transportation Plan. The plan consists of four main sections:

- Roadway projects
- Transit projects
- Bicycle, pedestrian and trail projects
- Intelligent transportation and Congestion Management Process projects

Additional elements of the plan include Goods Movement, Sociocultural Effects and Environmental Justice, Environmental Mitigation, and Safety and Security.

FINANCIAL OVERVIEW

The 2040 Cost Affordable LRTP reflects a \$622 million multimodal transportation program from 2020–2040 for Hernando County and \$383 million for Citrus County. All costs and revenues are presented in year of expenditure. **Table 5-1** presents the distribution of revenues by source and **Tables 5-2 and 5-3** provide the distribution of costs by transportation mode/program from 2020–2040 for each county. Revenues and corresponding projects are shown in the following time frames:

- 2020–2025
- 2026–2030
- 2031–2040

The following sources and assumptions were used to develop estimates for revenues available to fund the multimodal transportation system, including roadways, public transportation, bicycle facilities, sidewalks, and access to intermodal facilities. The LRTP includes revenue projections from federal, State, and County sources.

Hernando County funds bicycle and pedestrian projects using the transportation alternatives application process and congestion management process through grants and Transportation Alternative Funds. Citrus County elected to box annually 2% of State Other Arterial revenues and 2% of County Capital revenues for bicycle and pedestrian projects. Similarly, 4% of State Other Arterial revenues and 4% of County Capital revenues were boxed annually for congestion management process projects.

Table 5-1: Funding Sources by Multi-Year Band (Year of Expenditure)

| County | Jurisdiction | Funding Source | 2020-2025 | 2026-2030 | 2031-2040 | Total |
|----------------------------------|--------------|---|---------------------|---------------------|----------------------|----------------------|
| Hernando | Federal | SIS | \$0 | \$24,818,000 | \$257,438,000 | \$282,256,000 |
| | State | Other Arterial & Construction | \$33,816,769 | \$25,246,540 | \$53,708,351 | \$112,771,660 |
| | County | Transportation Impact Fees | \$24,998,726 | \$25,088,234 | \$57,583,095 | \$107,670,055 |
| | County | 2nd Local Option Fuel Tax (2¢) | \$6,879,328 | \$5,790,347 | \$11,817,464 | \$24,487,139 |
| | County | Local Gov't Infr. Surtax (0.50%), 25% Rds | \$16,656,923 | \$17,540,611 | \$48,862,883 | \$83,051,044 |
| Total Available(roadway) | | | \$82,351,746 | \$98,483,732 | \$429,409,793 | \$610,245,271 |
| Citrus | Federal | SIS | \$0 | \$0 | \$0 | \$0 |
| | State | Other Arterial & Construction | 26,790,000 | 20,586,000 | 44,932,000 | \$92,308,000 |
| | County | Transportation Impact Fees | \$17,282,067 | \$33,084,403 | \$90,246,928 | \$140,613,398 |
| | County | Constitutional Fuel Tax (2¢) | \$1,598,308 | \$1,330,169 | \$2,680,782 | \$5,609,259 |
| | County | County Fuel Tax (1¢) | \$704,602 | \$585,380 | \$1,182,559 | \$2,472,541 |
| | County | 1st Local Option Fuel Tax (6¢) | \$3,019,959 | \$2,513,350 | \$5,065,844 | \$10,599,153 |
| | County | 2nd Local Option Fuel Tax (2¢) | \$11,274,189 | \$9,385,512 | \$18,916,716 | \$39,576,417 |
| | County | Ninth Cent Fuel Tax (1¢) | \$536,681 | \$445,819 | \$902,040 | \$1,884,540 |
| | County | Transportation Millage | \$33,133,428 | \$31,212,378 | \$72,595,622 | \$136,941,428 |
| Total Available (roadway) | | | \$94,339,234 | \$99,143,011 | \$236,522,491 | \$430,004,736 |

Table 5-2: Comparison of Revenues and Costs for Hernando County by Time Period for Roadway Capacity Projects

| Source | 2020-2025 | 2026-2030 | 2031-2040 | Total |
|----------------------------------|--------------------|-----------------------|------------------|-----------------------|
| Federal / State Revenues* | \$33,816,769 | \$50,064,540 | \$311,146,351 | \$395,027,660 |
| State Project Costs | \$27,086,743 | \$47,199,730 | \$320,605,739 | \$394,892,212 |
| County / Municipal Revenues | \$48,534,977 | \$48,419,192 | \$118,263,442 | \$215,217,611 |
| County / Municipal Project Costs | \$56,103,736 | \$62,496,189 | \$108,495,359 | \$227,095,284 |
| Total Revenues | \$82,351,746 | \$98,483,732 | \$429,409,793 | \$610,245,271 |
| Total Costs | \$83,190,479 | \$109,695,919 | \$429,101,098 | \$621,987,496 |
| Balance | (\$838,733) | (\$11,212,187) | \$308,695 | (\$11,742,225) |

* Federal / State Revenues include the Strategic Intermodal System, and Other Arterial programs.

Table 5-3: Comparison of Revenues and Costs for Citrus County by Time Period for Roadway Capacity Projects

| Source | 2020–2025 | 2026–2030 | 2031–2040 | Total |
|------------------------------------|--------------|----------------|---------------|---------------|
| Federal / State Revenues* | \$26,790,000 | \$20,586,000 | \$44,932,000 | \$92,308,000 |
| State Project Costs** | \$18,069,253 | \$56,945,668 | \$2,695,920 | \$77,710,841 |
| County / Municipal Revenues | \$67,549,234 | \$78,557,011 | \$191,590,491 | \$337,696,736 |
| County / Municipal Project Costs** | \$57,897,257 | \$105,669,434 | \$167,100,698 | \$330,667,389 |
| Total Revenues | \$94,339,234 | \$99,143,011 | \$236,522,491 | \$430,004,736 |
| Total Costs | \$75,966,510 | \$162,615,102 | \$169,796,618 | \$408,378,230 |
| Balance | \$18,372,724 | (\$63,472,091) | \$66,725,873 | \$21,626,506 |

* Federal / State Revenues include the Strategic Intermodal System and Other Arterial programs.

** Cost includes allocation of \$5.5 million of State funds to bicycle and pedestrian projects

*** Cost includes allocations for congestion management, bicycle, and pedestrian projects

Revenue Sources

Strategic Intermodal System/Florida Interstate Highway System
 This federal capacity program provides funds for roadways designated as part of the Strategic Intermodal System (SIS) or the Florida Interstate Highway System (FIHS). FDOT has identified approximately **\$282.2 million** for 2020–2040 in Hernando County. There is no SIS allocation for Citrus County.

Other Arterial Construction/Right-of-Way

This capacity program provides funds for roadways not designated as part of the SIS. Approximately **\$112.7 million** will be available for roadway infrastructure projects for 2020–2040 in Hernando County and **\$98.2 million** in Citrus County.

Transportation Regional Incentive Program

The Transportation Regional Incentive Program (TRIP) is intended to encourage regional planning by providing matching funds for improvements to regionally-significant transportation facilities identified and prioritized by regional partners. FDOT District 7 revenues are projected at approximately **\$29.7 million** for 2020–2040. Based on a distribution of population within District 7, Hernando County would receive approximately **\$1.7 million** and Citrus County would receive approximately **\$1.4 million**. Regional facilities already identified in the West Central Florida MPO CCC's Regional LRTP and projects planned by TBARTA are eligible for TRIP funds. TRIP funds are not applied to any specific projects in Hernando or Citrus counties. Application for TRIP funds will be coordinated with District 7 and made on a case by case basis for specific projects.

Federal/State Transit Revenues

A detailed breakdown of federal and State transit revenues is included in the Long Range Transit Element, available as a separate report. The revenues used for the 2040 LRTP total approximately **\$102.1 million** for Hernando County, of which \$25.5 million goes to fund capital projects, and **\$96.5 million** for Citrus County, of which \$33.8 million goes to capital projects.

Fuel Tax

Local fuel tax revenues are based on a set pennies-per-gallon charge, not a percentage of the sale (as with a sales tax) and, therefore, they do not increase as gas prices increase or with the effects of inflation.

Currently, Hernando County collects the 2-cent constitutional fuel tax, the 1-cent county fuel tax, the ninth-cent fuel tax, the 6-cent First Local Option Fuel Tax (LOFT), and 2 cents of the 5-cent Second LOFT, for a total of 12 cents. Similarly, Citrus County collects the 2-cent constitutional fuel tax, the 1-cent county fuel tax, the ninth-cent fuel tax, the 6-cent First LOFT, and the 5-cent Second LOFT, for a total of 15 cents. These do not include State and federal gas taxes. The majority of fuel tax revenue is used for transportation infrastructure maintenance.

Local Government Infrastructure Surtax (0.5%)

Hernando County scheduled a referendum to adopt a Local Government Infrastructure Sales Surtax on November 6, 2014, to fund countywide infrastructure needs, including specific transportation-related projects totaling approximately \$70 million.

These projects were assumed to be committed and built projects in the 2040 LRTP, with Local Government Infrastructure Sales Surtax Revenue collections scheduled to begin January 1, 2015. However, this revenue source was not adopted in the 2014 referendum. The effect of the failed referendum will be addressed through an amendment to the MPO Board-adopted 2040 LRTP.

Transportation Impact Fees

Transportation impact fees (TIFs) are assessed to provide revenue for financing the addition and expansion of roadway facilities. TIFs in Hernando County are projected to be **\$107.7 million** for 2020–2040 and **\$140.6 million** in Citrus County.

Comparison of Revenues and Costs by Time Period for Roadway Capacity Projects

Revenue sources and projections were presented to and approved for inclusion in the 2040 LRTP by the Citrus County BOCC and the MPO Board during the development of this Plan. However, the result of the recent referendum has affected the cost affordability of the Plan. Since the Plan must be cost affordable, the MPO has elected to reevaluate projects, plans, and revenue sources and will develop an amendment to the Plan to be adopted in early 2015.

Additional information about the cost and revenue assumptions can be found in a separately-bound technical Report.

Table 5-4 shows the year-of-expenditure costs for the transportation network, including maintenance.

Table 5-4: County Transportation System Costs, 2020 - 2040 (in millions, YOE)

| Mode/Program | Hernando County | | Citrus County | |
|---|----------------------|---------|----------------------|---------|
| | Total Cost 2020-2040 | Percent | Total Cost 2020-2040 | Percent |
| Highway Expansion | \$394.9 | 56% | \$382.5 | 61% |
| Highway Maintenance | \$153.2 | 22% | \$116.5 | 19% |
| Transit, Operations | \$113.8 | 16% | \$80.7 | 13% |
| Transit, Capital | \$23.9 | 3% | \$18.8 | 3% |
| Intelligent Transportation Systems/CMP | \$17.6 | 3% | \$17.2 | 3%* |
| Trails, Sidewalks, and Bicycle Facilities | \$0 | 0% | \$8.5 | 1%* |
| Total | \$703.4 | | \$624.20 | |

* Citrus County has allotted 4% for ITS/CMP and 2% for Trails, Sidewalks, and Bicycle Facilities. The percentage shown is of the total budget, including maintenance.

PUBLIC INPUT

Public input was obtained through a public outreach process that has been integral to the development of this Plan. Workshops were held during the different phases of the development of the Plan and additional public input was received during the 30-day comment period that was initiated at the October 2014 MPO Board meeting on the draft Cost Affordable Plan.

Public comments were considered and addressed, as appropriate, based on consultation with the MPO Staff and LRTP Working Group (collectively, MPO staff and additional support staff defined earlier). A listing of the public comments, including a report received from U.T.O.P.I.A. in Floral City documenting its visioning exercise, is

included in the Public Involvement Technical Report. Some of the changes or additions that occurred as a result of this input include the following:

- Trail along CR 480/E Stage Coach Trail in Citrus County
- Sidewalk along W Oak Park Blvd in Citrus County
- Feasibility study for the extension of Watson Street in Citrus County
- Opportunities for potential congestion management and safety studies identified for Crystal River, Floral City, Inverness, and Homosassa Springs
- City of Brooksville Trail Corridor Analysis Study
- Sidewalk addition along Main St in Brooksville

- Spring Hill Dr/Kass Cir Complete Streets project in Hernando County

SETTING PRIORITIES

In the 2040 LRTP, available revenues do not cover the costs of all needed transportation projects. Projects were prioritized using a set of criteria to determine an ordered ranking to identify projects for funding. These criteria were developed in support of the goals and objectives and long-term vision for the counties. The LRTP Working Group then applied these criteria, each of which was assigned a point value to develop a technical ranking. This technical ranking was reviewed and adjusted by staff, taking into account local knowledge and community vision. Public comment on the proposed projects was incorporated into the final Cost Affordable Plan.

Roadway Priorities

Prioritization of projects was completed using the following criteria:

- Project status
- Existing congestion level
- Safety
- Multimodal connectivity
- Sociocultural effects/environmental justice/environmental impact
- Emergency evacuation routes
- Truck route
- Access to activity centers

- Encourage development in targeted growth areas

The Prioritization Criteria and Weighting can be found in **Appendix B**.

Transit Priorities

A separate methodology was developed to evaluate and prioritize the transit alternatives presented in Hernando and Citrus LRTE Needs Plans. To prioritize and program these service improvements, it was important to weigh the benefits of each service improvement against other improvements. By conducting an alternatives evaluation, the Hernando/Citrus MPO can prioritize projects and allocate funding using an objective service implementation process. A multi-criteria evaluation process was used for alternatives prioritization purposes. Three evaluation categories were identified for determining criteria for the evaluation:

- Public Outreach
- Transit Markets
- Productivity and Efficiency

The Long Range Transit Element (LRTE) Technical Report, found on the project website, summarizes the evaluation categories, each category's corresponding criteria, the associated measure of effectiveness, and the assigned weighting for each criterion. The LRTE Tech Report also documents the results of the evaluation and includes the priority rankings of the service alternatives for developing the cost affordable transit plan.

MULTIMODAL COST AFFORDABLE PLAN

Roadway Projects

The 2040 Cost Affordable roadway network includes capacity improvements throughout Hernando and Citrus counties. Costs associated with projects listed below are in YOE dollars within the 2020–2025, 2026–2030, and 2031–2040 timeframes. Highlights of the proposed highway improvements include the following.

Hernando County

Several key SHS projects are included in the Hernando County component of the Hernando/Citrus MPO 2040 LRTP:

- *Interstate 75* – Expansion of I-75 in Hernando County to an 8-lane facility, including significant improvements to the interchange at SR 50. Improvements on SR 50 extend approximately $\frac{1}{4}$ mile on both sides. Costs for this improvement in the 2031–2040 time period total just over \$257 million.
- *Emerson Road Extension* – Includes the purchase of right-of-way to accommodate a 4-lane roadway from the SR 50 Bypass to connect to a new northern connection to US 41 just south of Twingate Ave. The project includes the reconstruction of Emerson Road as a 2-lane facility from the SR 50 Bypass to Martin Luther King (MLK) Dr. From MLK Dr, Emerson will be constructed along a new northerly roadway alignment to US 41. Initial construction will be as a new

2-lane facility, with future expansion to 4-lanes when needed. Costs for this improvement in the 2020–2025 time period total is approximately \$25 million.

- *Reversion of Downtown Brooksville One-Way Pairs* – Conversion to two-way traffic is a major change to downtown traffic flows. This project is shown as an E+C project in Table 4-1 (Needs Chapter) because it is not currently shown in the five-year TIP; however, discussions to fund this project are ongoing among the City, the County, and FDOT. As part of these conversations, the future off-system maintenance responsibility will be shifted from the state to local government(s).
- *Re-designation of Cobb Road as a State Facility* – To facilitate the improved movement of truck traffic and in conjunction with the Brooksville one-way pair reversion, Cobb Road will be constructed to federal and State standards and designated as US 98 from SR 50 to US 98 (Ponce de Leon Blvd). This project will help alleviate truck traffic movement through downtown Brooksville. Development of this project will be coordinated with FDOT. Costs for this improvement in the 2020–2025 time period total approximately \$17 million for the section from SR 50 to Yontz Rd and \$34 million for the section from Yontz Rd to US 98, with construction planned in the 2031–2040 time period.

Several key county road projects are included in the Hernando/Citrus MPO 2040 Cost Affordable LRTP:

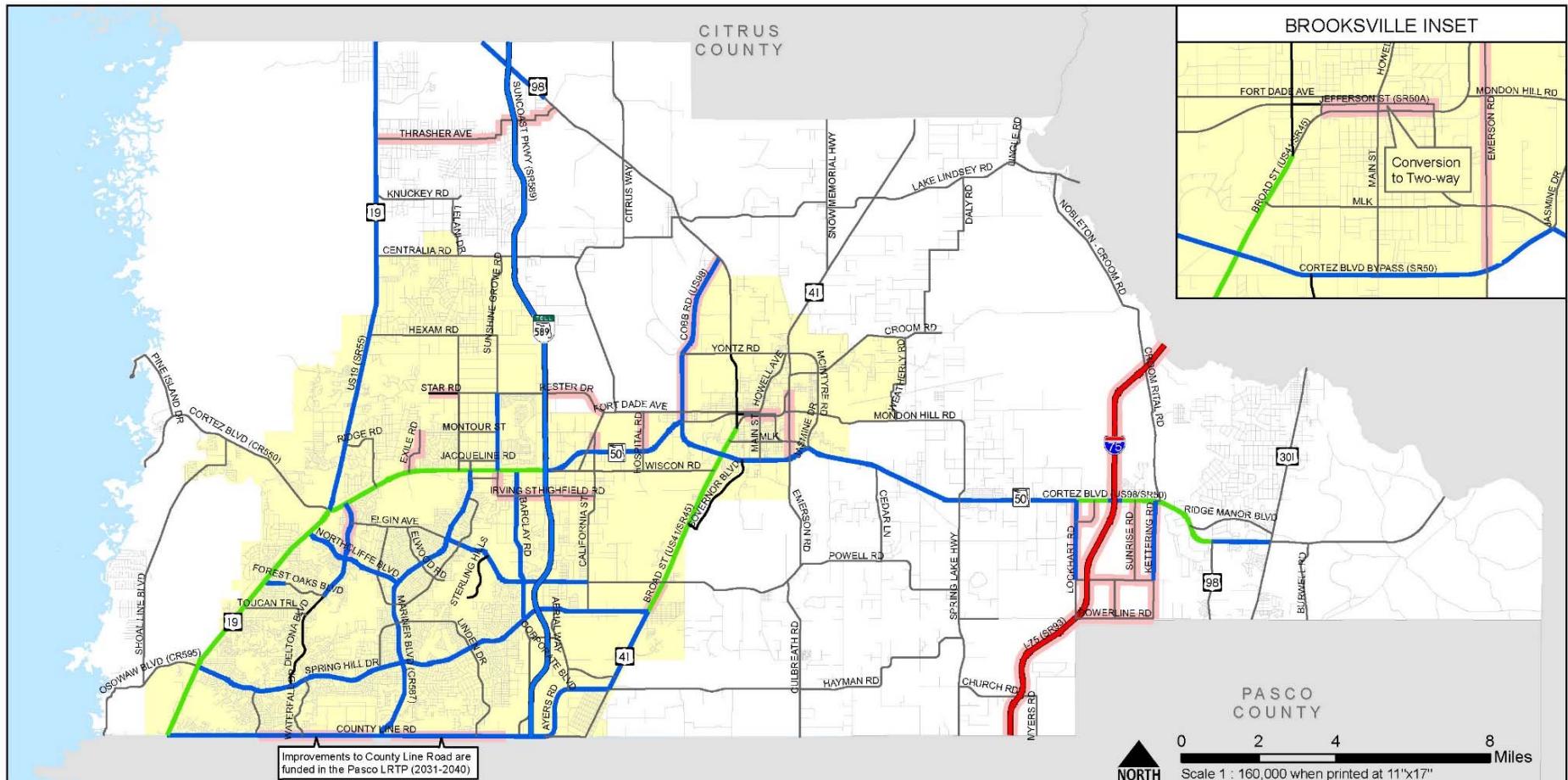
- *Deltona Boulevard Widening* – Includes widening Deltona Blvd from Northcliffe Blvd to SR 50 to a 4-lane divided facility. Costs for this improvement in the 2026–2030 time period total approximately \$11 million.
- *California Street Widening* – Includes widening California St from SR 50 to Sam C Rd to a 4-lane divided facility. Costs for this improvement in the 2026–2030 time period total approximately \$9 million.
- *Rester Dr (Road Extension)* – Extends Rester Dr from Fort Dade to the Suncoast Parkway to a 2-lane facility. Costs for this improvement in the 2026–2030 time period total approximately \$17 million.
- *Interstate 75 and SR 50 Targeted Growth Area* – Area generally includes Power Line Rd on the south, Kettering Rd on the east, SR 50 on the north, and Lockhart Rd on the West. Funding of projects includes a combination of developer, County, and FDOT participation. Project improvements include Power Line Rd, Kettering Rd, Lockhart Rd, Sunrise Rd, Spine Rd, New Road C, and

Dashbach St, including a new I-75 overpass. Total infrastructure investment is in the range of \$150 million.

- *Thrasher Ave and Other Associated Road Improvements* – Improvements to Thrasher Ave and other associated road improvements extend from US 19 to the Suncoast Parkway. Improvements include building Thrasher Ave from US 19 to the Sunshine Grove Extension as a 2-lane facility and improvements to 2-lane on Velvet Scooter Ave, Downey Woodpecker Rd, and Sunshine Grove Extension. Costs for these improvements in the 2020–2025 and 2026–2030 time periods total approximately \$42 million and include both County and developer participation.

Map 5-1 illustrates the adopted Cost Affordable Roadway Plan, and **Map 5-2** illustrates the 2030 Interim Cost Affordable Roadway Plan. **Table 5-5** lists the Cost Affordable SIS Projects, **Table 5-6** identifies the Cost Affordable State Roadway Projects, **Table 5-7** identifies the Cost Affordable County Roadway Projects, and **Table 5-8** lists the Cost Affordable County and Developer funded projects.

Map 5-1: Hernando County 2040 Cost Affordable Roadway Projects



Data Source: Data Source: T.O. Hernando vTIMAS database, current as of 12-09-2014
Data Projection: NAD_1983_StatePlane_Florida_West_FIPS_0902_Feet

Map 5-2: Hernando County 2030 Cost Affordable Interim Roadway Projects

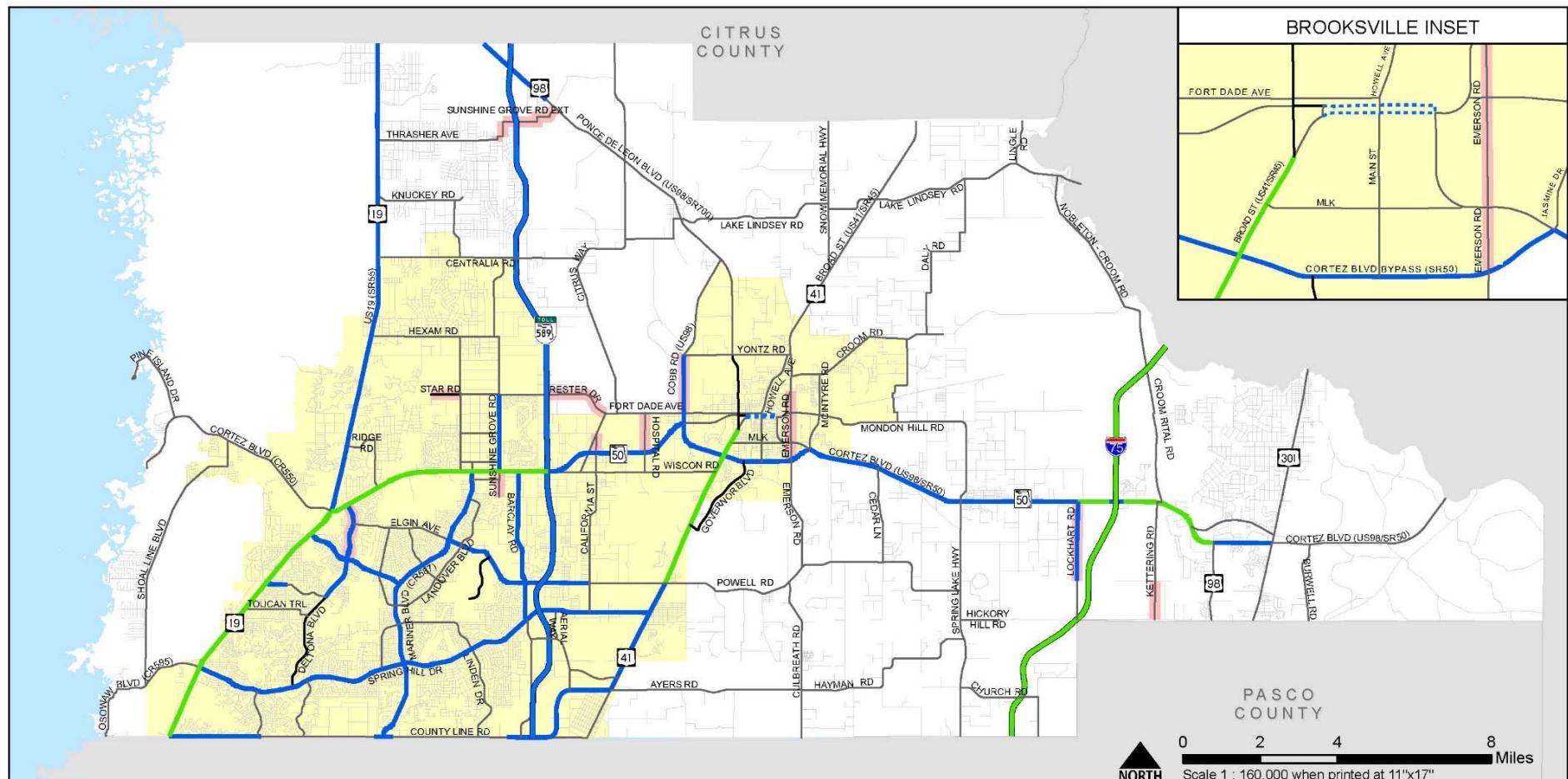


Table 5-5: Hernando County Cost Affordable SIS Projects

| Project # | Project Name | Improvement Type | Project Phase and Cost (millions) | Timeframe |
|-----------|--|------------------|-----------------------------------|-----------|
| | I-75, from Pasco/Hernando County line to S of US98/SR50/Cortez Blvd | 8-lane divided | Design: \$1.91 (SIS) | 2031-2040 |
| | | | ROW: unfunded (SIS) | 2031-2040 |
| | | | CST: unfunded (SIS) | 2031-2040 |
| | I-75, from S of US98/SR50/Cortez Blvd to N of US98/SR50/Cortez Blvd | 8-lane divided | Design: \$1.91 (SIS) | 2031-2040 |
| | | | ROW: unfunded (SIS) | 2031-2040 |
| | | | CST: unfunded (SIS) | 2031-2040 |
| | I-75, from N of US98/SR50/Cortez Blvd to Hernando/Sumter County Line | 8-lane divided | Design: \$1.91 (SIS) | 2031-2040 |
| | | | ROW: unfunded (SIS) | 2031-2040 |
| | | | CST: unfunded (SIS) | 2031-2040 |
| | I-75, from Hernando/Sumter County Line to N of CR476B | 8-lane divided | Design: \$1.91 (SIS) | 2031-2040 |
| | | | ROW: unfunded (SIS) | 2031-2040 |
| | | | CST: unfunded (SIS) | 2031-2040 |
| 413 | SR 50, from SR 589 (Suncoast Parkway) to California St | 6-lane divided | Design: \$1.91 (SIS) | 2026-2030 |
| | | | ROW: unfunded (SIS) | |
| | | | CST: unfunded (SIS) | |
| 414/478 | SR 50, from Brooksville Bypass to I-75 | 6-lane divided | Design: \$22.9 (SIS) | 2026-2030 |
| | | | ROW: unfunded (SIS) | |
| | | | CST: unfunded (SIS) | |

SIS = State Intermodal System, ROW = right-of-way, CST = construction, OA =Other Arterial

Table 5-6: Hernando County Cost Affordable State Roadway Projects

| Project # | Project Name | Improvement Type | Project Phase and Cost (millions) | Timeframe |
|-----------|---|------------------|-----------------------------------|-----------|
| 404 | Broad St (US41/SR45), from Mildred Ave to Jefferson St (SR50) | 2-lane undivided | Design: \$.44 (OA) | Committed |
| | | | ROW: \$1.0 (OA) | Committed |
| | | | CST: \$2.0 (OA) | Committed |
| 477 | Jefferson St (SR50A), from Mildred Ave to Broad St (US41/SR45) | 2-lane undivided | Design: \$.44 (OA) | Committed |
| | | | ROW: \$1.0 (OA) | Committed |
| | | | CST: \$2.0 (OA) | Committed |
| 406 | Broad St (US41/SR45), from Spring Hill Dr to Powell Rd | 6-lane divided | Design: \$2.2 (OA) | 2026-2030 |
| | | | ROW: \$5.0 (OA) | 2026-2030 |
| | | | CST: \$12.7 (OA) | 2031-2040 |
| 489 | Cobb Rd (US 98), from Cortez Blvd (SR50) to Yontz Rd | 4-lane divided | Design: \$1.2 (OA) | 2026-2030 |
| | | | ROW: \$4.6 (OA) | 2026-2030 |
| | | | CST: \$12.8 (OA) | 2026-2030 |
| 489 | Cobb Rd (US 98), from Yontz Rd to Ponce de Leon Blvd (US98/SR700) | 4-lane divided | Design: \$1.8 (OA) | 2026-2030 |
| | | | ROW: \$9.2 (OA) | 2031-2040 |
| | | | CST: \$25.4 (OA) | 2031-2040 |
| 493 | SR 50, from Treiman Blvd (US 301/SR35) to Burwell Rd | 4-lane divided | Design: \$2.3 (OA) | 2025-2030 |
| | | | ROW: \$5.2 (OA) | 2031-2040 |
| | | | CST: unfunded (OA) | |

SIS = State Intermodal System, ROW = right-of-way, CST = construction, OA =Other Arterial

Table 5-7: Hernando County Cost Feasible County Projects

| Project # | Project Name | Improvement Type | Project Phase and Cost (millions) | Timeframe |
|-----------|--|------------------|-----------------------------------|-----------|
| 424 | Emerson Rd, from Cortez Blvd (SR50) to Broad St, South of Twingate | 2-lane undivided | Design: \$3.5 (OA) | 2020-2025 |
| | | | ROW: \$5.5 (OA) | 2020-2025 |
| | | | CST: \$16.3 (OA) | 2020-2025 |
| 420 | Deltona Blvd, from Northcliffe Blvd to Cortez Blvd (SR50) | 4-lane divided | Design: \$.8 (County) | 2026-2030 |
| | | | ROW: \$3.3 (County) | 2026-2030 |
| | | | CST: \$10.9 (County) | 2026-2030 |
| 408 | California St, from Cortez Blvd (SR50) to Sam C Rd | 2-lane undivided | Design: \$6.7 (County) | 2020-2025 |
| | | | ROW: \$2.6 (County) | 2020-2025 |
| | | | CST: \$8.6 (County) | 2026-2030 |
| 439 | Kettering Rd, from Powerline Rd to Dashbach St | 2-lane undivided | Design: \$4.7 (County) | 2020-2025 |
| | | | ROW: \$1.8 (County) | 2020-2025 |
| | | | CST: \$5.1 (County) | 2020-2025 |
| 459 | Rester Rd, from N Suncoast Parkway to Fort Dade Ave | 2-lane undivided | Design: \$1.9 (County) | 2020-2025 |
| | | | ROW: \$7.4 (County) | 2020-2025 |
| | | | CST: \$24.1 (County) | 2026-2030 |
| 470 | Velvet Scooter Ave, from Downy Woodpecker Rd to Courland Rd | 4-lane divided | Design: \$.8 (County) | 2020-2025 |
| | | | ROW: \$.8 (County) | 2020-2025 |
| | | | CST: \$1.1 (County) | 2020-2025 |
| 422 | Downy Woodpecker Rd, from Thrasher Ave to Velvet Scooter Ave | 4-lane divided | Design: \$49k (County) | 2020-2025 |
| | | | ROW: \$.2 (County) | 2020-2025 |
| | | | CST: \$.5 (County) | 2020-2025 |
| 502 | Sunshine Grove Ext, from Suncoast Parkway to Velvet Scooter Ave | 2-lane divided | Design: \$.4 (County) | 2020-2025 |
| | | | ROW: already acquired | 2020-2025 |
| | | | CST: \$4.5 (County) | 2020-2025 |
| 504 | Thrasher Rd, from US 19 to Downy Woodpecker Rd | 2-lane undivided | Design: \$1.4 (County) | 2020-2025 |
| | | | ROW: \$5.8 (County) | 2020-2025 |
| | | | CST: \$16.1 (County) | 2020-2025 |
| 464 | Sunshine Grove Ext S, from Irving St to Cortez Blvd (SR50) | 2-lane undivided | Design: \$.4 (County) | 2026-2030 |
| | | | ROW: \$1.7 (County) | 2026-2030 |

| Project # | Project Name | Improvement Type | Project Phase and Cost (millions) | Timeframe |
|-----------|---|--------------------------------|-----------------------------------|-----------|
| | | | CST: \$4.9 (County) | 2026-2030 |
| 511 | Kettering Rd, from Dashbach St to Cortez Blvd (SR50) | 4-lane divided | Design: \$2.1 (County) | 2026-2030 |
| | | | ROW: \$3.9 (County) | 2026-2030 |
| | | | CST: \$24.0 (County) | 2031-2040 |
| 431 | Irving St/Highfield, from Sunshine Grove EXT to California St | 2-lane undivided | Design: \$2.1 (County) | 2031-2040 |
| | | | ROW: \$3.9 (County) | 2031-2040 |
| | | | CST: \$24.0 (County) | 2031-2040 |
| | Frontage Road Projects | Construction of frontage roads | \$2M (set aside) | 2020-2040 |

SIS = State Intermodal System, ROW = right-of-way, CST = construction, OA =Other Arterial

Table 5-8: Hernando County Cost Affordable County/Developer Funded Projects

| Project # | Project Name | Improvement Type | Project Phase and Cost (millions) | Timeframe |
|-----------|---|------------------|-----------------------------------|-----------|
| 449 | Dashbach St, from Kettering Rd to Lockhart Rd | 2 lane undivided | Design: \$4.4 (OA/CTY/DEV) | 2031-2040 |
| | | | ROW: \$8.1 (OA/CTY/DEV) | 2031-2040 |
| | | | CST: \$68 (OA/CTY/DEV) | 2031-2040 |
| 461 | Star Rd, from Exile to Weeping Willow | 2 lane undivided | Design: \$.4 (CTY/DEV) | 2026-2030 |
| | | | ROW: \$1.9 (CTY/DEV) | 2026-2030 |
| | | | CST: \$5.5 (CTY/DEV) | 2026-2030 |
| 452 | Spine Rd, from Powerline Rd to Dashbach St | 2 lane undivided | Design: \$.8 (CTY/DEV) | 2031-2040 |
| | | | ROW: \$.3.4 (CTY/DEV) | 2031-2040 |
| | | | CST: \$9.4 (CTY/DEV) | 2031-2040 |
| 451 | Sunrise, from Dashbach St to Cortez Blvd | 4 lane divided | Design: \$1.7 (DEV) | 2031-2040 |
| | | | ROW: \$5.5 (DEV) | 2031-2040 |
| | | | CST: \$19.6 (DEV) | 2031-2040 |
| 450 | New Road C, from Cortez Blvd to Lockhart Rd | 2 lane undivided | Design: \$.8 (DEV) | 2031-2040 |
| | | | ROW: \$3.4 (DEV) | 2031-2040 |
| | | | CST: \$19.5 (DEV) | 2031-2040 |
| 458 | Powerline Rd, from Lockhart Rd to Kettering Rd | 2 lane undivided | Design: \$1.4 (DEV) | 2031-2040 |
| | | | ROW: \$5.7 (DEV) | 2031-2040 |
| | | | CST: \$15.5 (DEV) | 2031-2040 |
| 433 | Hospital Rd, from Cortez Blvd to Fort Dade Rd | 2 lane undivided | Design: \$.6 (DEV) | 2026-2030 |
| | | | ROW: \$2.7 (DEV) | 2026-2030 |
| | | | CST: \$7.6 (DEV) | 2026-2030 |
| 503 | Sunshine Grove Ext, from Ponce de Leon Rd to Suncoast Parkway | 2 lane undivided | Design: \$.6 (DEV) | 2026-2030 |
| | | | ROW: \$2.5 (DEV) | 2026-2030 |
| | | | CST: \$8.1 (DEV) | 2026-2030 |
| 425 | Exile Rd, Cortez Blvd to Flock Ave | 4 lane divided | Design: \$.7 (DEV) | 2026-2030 |
| | | | ROW: \$2.9 (DEV) | 2026-2030 |
| | | | CST: \$9.4 (DEV) | 2026-2030 |
| 442 | Lockhart Rd from Dashbach St to Cortez Blvd | 4 lane divided | Design: \$1.1 (DEV) | 2026-2030 |
| | | | ROW: \$4.5 (DEV) | 2026-2030 |
| | | | CST: \$12.5 (DEV) | 2026-2030 |

SIS = State Intermodal System, ROW = right-of-way, CST = construction, OA =Other Arterial

Citrus County

One significant SHS project is included in the Citrus County component of the Hernando/Citrus MPO 2040 LRTP:

- *Widening of US 41* – Includes the widening of US 41 from SR 44 to SR 200 to a 4-lane divided facility. This 5.4-mile improvement has been a priority of the City of Inverness and Citrus County for many years. Costs for this improvement in the 2026–2030 time period total approximately \$104 million. Funding of this project was achieved by using a combination of other arterial funds and County funds. At the MPO Board meeting on December 16, 2014, FDOT District 7 indicated that funding priorities would be reviewed to determine if this project could be completed earlier than the 2026–2030 time period.

Several key county road projects are included in the Hernando/Citrus MPO 2040 Cost Affordable LRTP:

- *Croft Avenue Widening* – Includes widening from SR 44 to E Hayes St to a 4-lane divided facility. The project has been discussed for several years and creates a needed north/south connection between SR 44 and CR 486. Costs for this improvement in the 2020–2025 time period total approximately \$23 million.
- *Grover Cleveland Blvd Widening* – Includes widening from US 19 to Lecanto Highway to a 4-lane divided facility. Costs

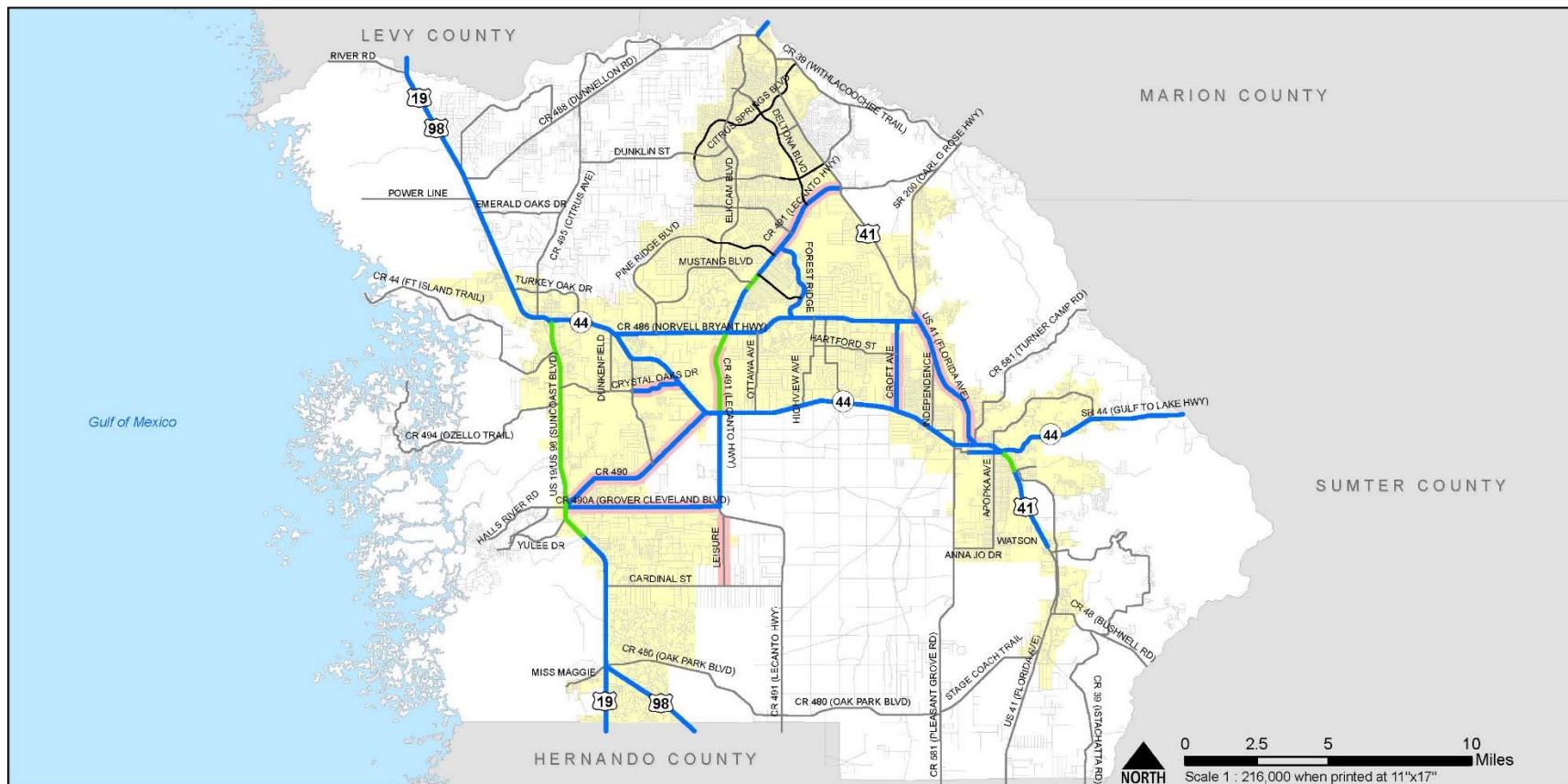
for this improvement in the 2026–2030 time period total approximately \$33 million.

- *Lecanto Highway (CR 491) Widening Projects* – Includes widening from Pine Ridge Blvd W to US 41 N to a 4-lane divided facility (costs for this improvement in the 2031–2040 time period total approximately \$51 million) and widening from SR 44 to Horace Allen Rd to a 6-lane divided facility (costs for this improvement in the 2031–2040 time period total approximately \$24 million).
- *Homosassa Trail Widening* – Includes widening from US 19 to SR 44 to a 4-lane divided facility. Costs for this improvement in the 2031–2040 time period total approximately \$76 million.
- *Crystal Oaks Drive* – Includes widening from Rock Crusher Rd to SR 44 to a 4-lane divided facility. Costs for this improvement in the 2031–2040 time period total approximately \$21 million.
- *Leisure Boulevard Extension* – Includes building Leisure Blvd from Cardinal Rd to Lecanto Hwy as a new 2-lane facility. Costs for this improvement in the 2031–2040 time period total approximately \$31 million.
- *Watson Street Extension Study* – Because of the County's interest in the economic development of the airport area, a feasibility study for the extension of Watson is proposed in the 2020–2025 timeframe.

Map 5-3 illustrates the adopted Cost Affordable Roadway Plan, and **Map 5-4** illustrates the 2030 Interim Cost Affordable Plan.

Table 5-9 identifies the Cost Affordable State Roadway Projects, and **Table 5-10** identifies the Cost Affordable County Roadway Projects.

Map 5-3: Citrus 2040 Cost Affordable Roadway Project Map



Legend

Number of Lanes/Type — 4D 2020-2040 Improvement

Urban Area

— 2 —

— 20

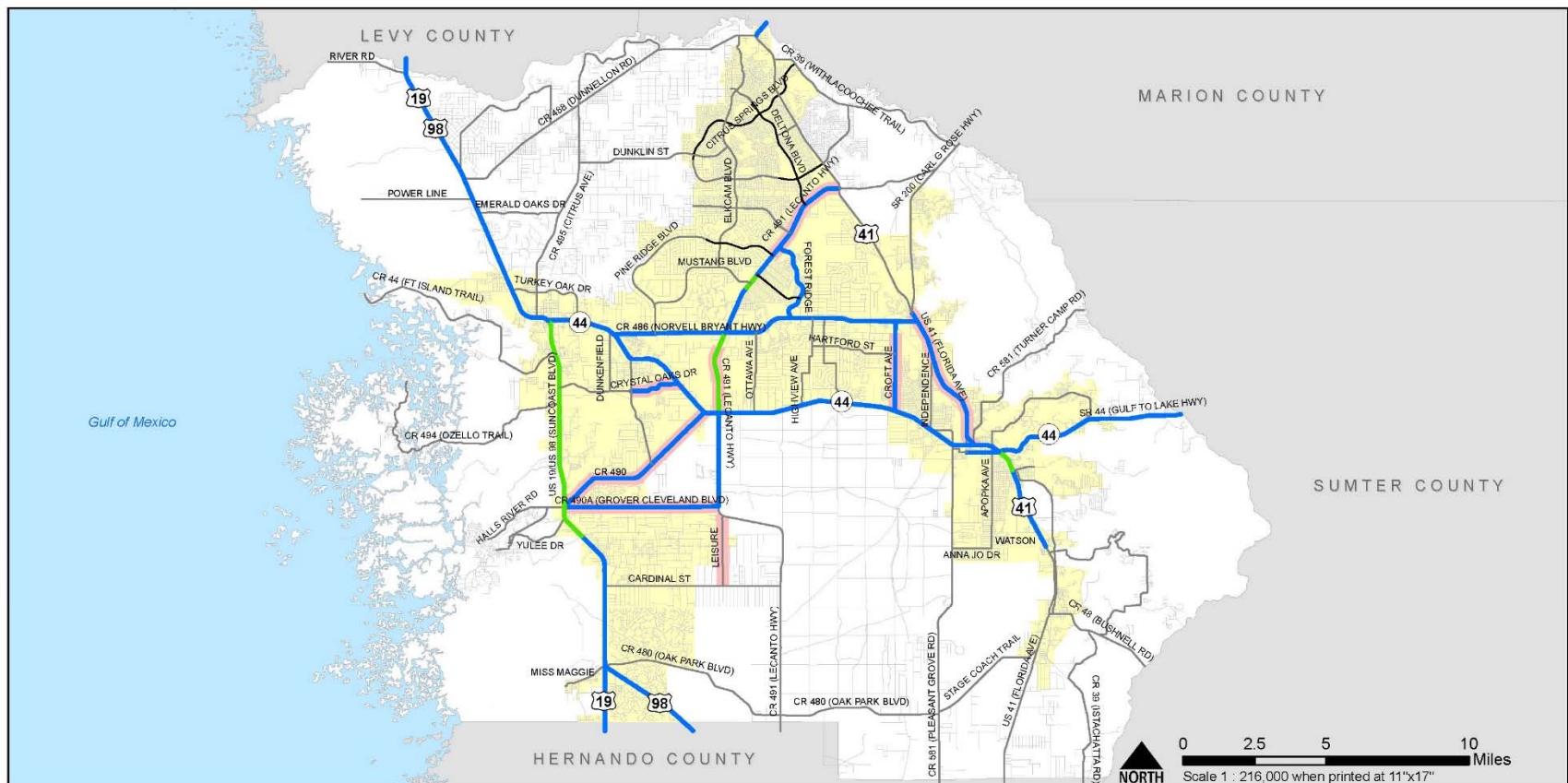
6D Citrus County Street Centerlines

Data Source: T.O. Citrus vTIMAS database, current as of 12-09-2014
Data Projection: NAD_1983_StatePlane_Florida_West_FIPS_0902_Feet

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Map 5-4: Citrus Interim 2030 Cost Affordable Roadway Project Map



Legend

Number of Lanes/Type: 4D (Blue), 6D (Green), 2D (Grey), 2U (Grey). 2020-2040 Improvements: Citrus County Street Centerline (Red).

Urban Area

Data Source: T.O. Citrus vTIMAS database, current as of 12-09-2014
Data Projection: NAD 1983 StatePlane Florida West FIPS 0902 Feet

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Table 5-9: Citrus County Cost Feasible State Roadway Projects**

| Project # | Project Name | Improvement Type | Project Phase and Cost (millions) | Timeframe |
|-----------|--|------------------|-----------------------------------|-----------|
| 424 | US 41 (Florida Ave) from SR 200 N to SR 44 | 4-lane divided | Design: \$15.11 (OA/County) | 2020-2025 |
| | | | ROW: \$8.7 (OA) | 2020-2025 |
| | | | CST:\$80.7 (OA/County)* | 2026-2030 |

SIS = State Intermodal System, ROW = right-of-way, CST = construction, OA =Other Arterial

* This project is funded with \$32 million contribution from Citrus County

Table 5-10: Citrus County Cost Affordable County Projects

| Project # | Project Name | Improvement Type | Project Phase and Cost (millions) | Timeframe |
|-----------|--|------------------|-----------------------------------|-----------|
| 407 | Croft Ave from SR 44 to E Hayes St | 4-lane divided | Design: \$1 | 2020-2025 |
| | | | ROW: \$6.0 | 2020-2025 |
| | | | CST: \$15 | 2020-2025 |
| | | | CEI: \$1.0 | 2020-2025 |
| 403 | CR 490A (W Grover Cleveland Blvd), from US 19S to CR 491 S | 4-lane divided | Design: \$2.1 | 2020-2025 |
| | | | ROW: \$11.8 | 2020-2025 |
| | | | CST: \$34.8 | 2026-2030 |
| | | | CEI: \$2.4 | 2026-2030 |
| 405 | CR 491 (Lecanto Hwy), from Pine Ridge Blvd W to US 41 N | 4-lane divided | Design: \$1.3 | 2020-2025 |
| | | | ROW: \$7.5 | 2020-2025 |
| | | | CST: \$22.1 | 2026-2030 |
| | | | CEI: \$1.9 | 2026-2030 |
| 402 | CR 490 (Homosassa Trail), from US 19 S to SR 44 W | 4-lane divided | Design: \$3.4 | 2031-2040 |
| | | | ROW: \$19.6 | 2031-2040 |
| | | | CST: \$49.0 | 2031-2040 |
| | | | CEI: \$3.4 | 2031-2040 |
| 408 | Crystal Oaks Dr, from Rock Crusher Rd to SE 44 W | 4-lane divided | Design: \$1.0 | 2031-2040 |
| | | | ROW: \$5.9 | 2031-2040 |
| | | | CST: \$13.9 | 2031-2040 |
| | | | CEI: \$1.0 | 2031-2040 |
| 426 | Watson St, from Apopka Ave to US 41 | 2-lane undivided | Design: \$.6 | 2020-2025 |
| | | | ROW: \$4.2 | 2026-2030 |
| | | | CST: \$10.4 | 2026-2030 |
| | | | CEI: \$.7 | 2026-2030 |
| 404 | CR 491 (Lecanto Hwy), from SR 44 E to Horace Allen | 6-lane divided | Design: \$1.2 | 2026-2030 |
| | | | ROW: already acquired | |
| | | | CST: \$ 21.3 | 2031-2040 |
| | | | CEI: \$1.4 | 2031-2040 |
| 413 | Leisure Blvd, from Cardinal St to CR 491 S | 2-lane undivided | Design: \$1.4 | 2031-2040 |
| | | | ROW: \$8.1 | 2031-2040 |
| | | | CST: \$20.2 | 2031-2040 |
| | | | CEI: \$1.4 | 2031-2040 |

Transit Projects

The 2040 Cost Affordable Transit Plan includes a number of service and capital/infrastructure improvements throughout Hernando and Citrus counties. The plan was developed using the following:

- Transit needs assessment and priority rankings
- Projected transit costs and revenues
- Input from the public, MPO committees, and the MPO Board

Major elements of the 2040 Cost Affordable Transit Plan are summarized below in four major categories of transit improvements.

Hernando County

Improvements to Existing Local Service

- 3 additional hours of early/later service
- Increased frequency to 30-minute service
- Saturday service

Future Local Service

- Green Route (connecting Hernando Airport area to Spring Hill and Brooksville)
- East Hernando Connector (connecting Brooksville to I-75)
- Spring Hill– Airport Circulator
- US 41 service

Future Express Service

- Suncoast Parkway Express (connecting into Pasco County)
- Citrus Connector Express (connecting into Citrus County)
- US 19/SR 50 Express (Pasco Hernando State College to Suncoast Parkway)

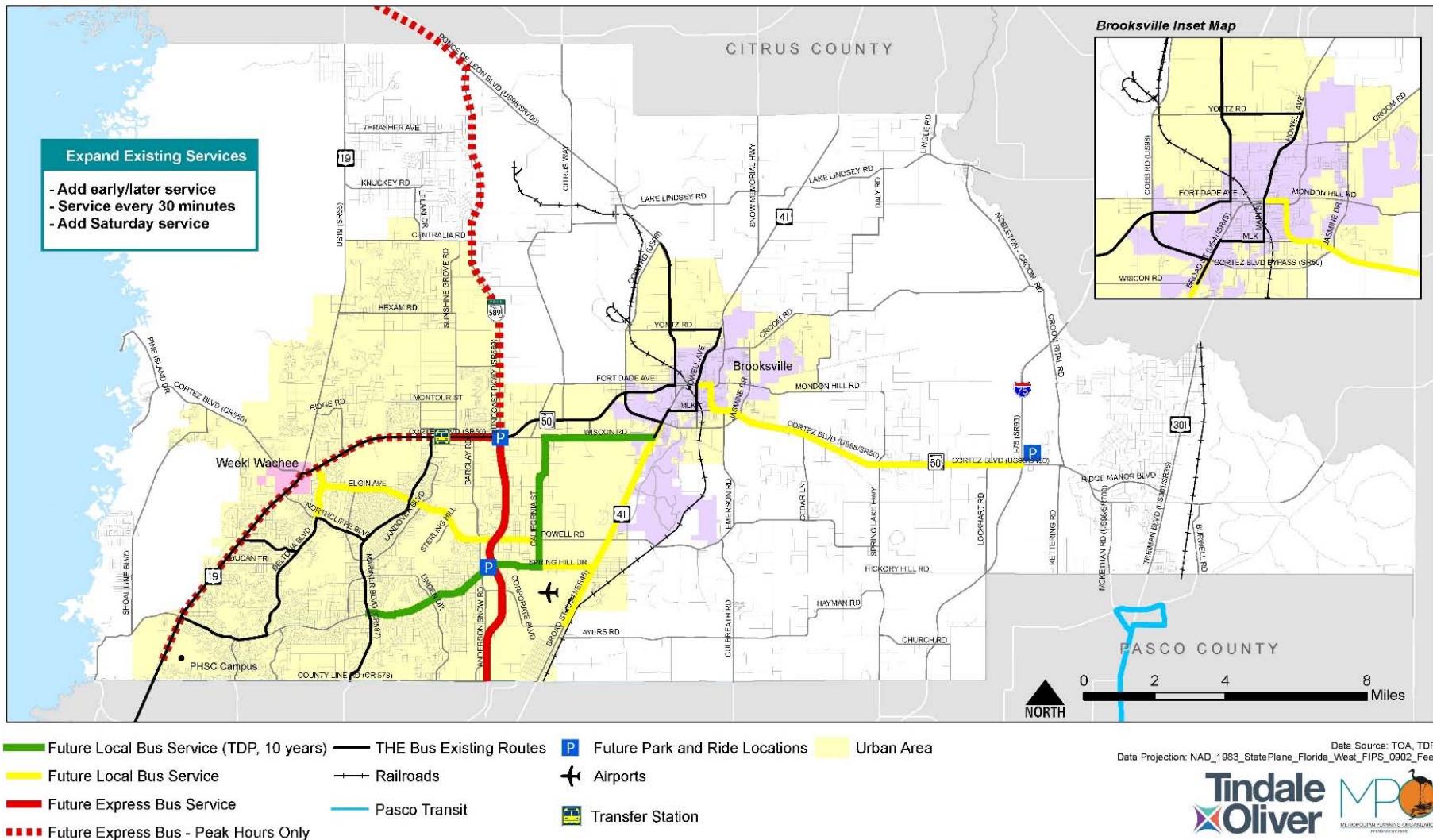
Transit Infrastructure/Access

- 3 shared-use park-and-ride lots
- Bus stop signs, benches, shelters, and other stop infrastructure/amenities
- Transfer center on SR 50 corridor

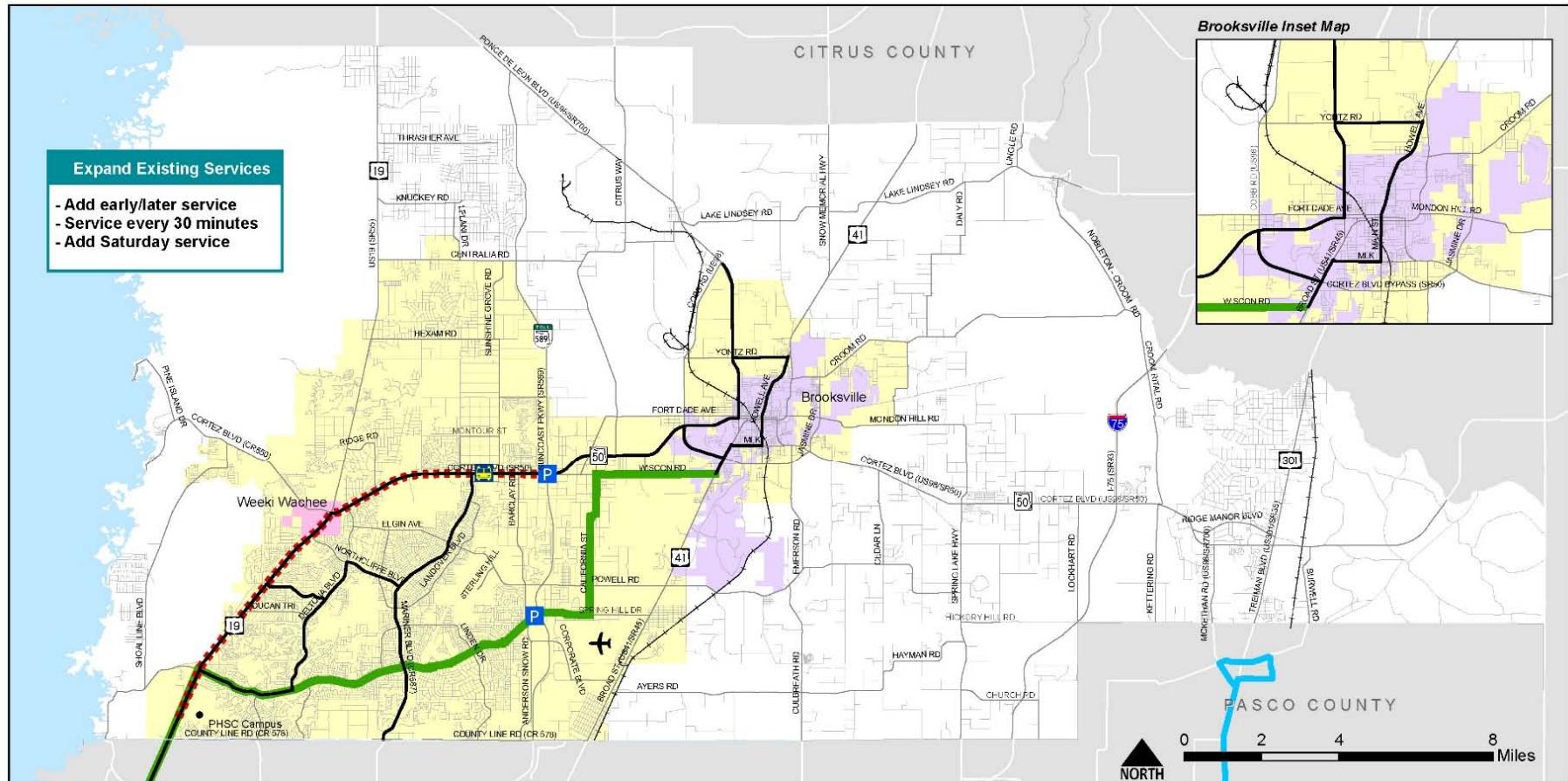
Also included are multiple transit accessibility improvements (sidewalks, crosswalks, ramps, ADA access, safety, etc.) consistent with the ongoing bus stop ADA Implementation Plan. Existing and future transit facilities and services through the year 2040 are illustrated in **Map 5-5**. In addition, existing and 2030 interim transit facilities and services are illustrated in **Map 5-6**.

Table 5-11 presents a summary of costs for the 2040 Cost Affordable Transit Plan for Hernando County, including improvement costs and projected revenues in three time periods: 2020–25, 2026–30, and 2031–40.

Map 5-5: Hernando County 2040 Cost Affordable Transit Map



Map 5-6: Hernando County 2030 Interim Cost Affordable Transit Map



Legend

| | | | |
|--|--------------|----------------------------------|--------------------|
| — THE Bus Existing Routes | ✈ Airports | ■ Future Park and Ride Locations | ■ Urban Area |
| — Future Local Bus Service (TDP, 10 years) | —+ Railroads | — Pasco Transit | ■ Transfer Station |
| ■■■ Future Express Bus - Peak Hours Only | | | |

Data Source: TOA, TDP
Data Projection: NAD_1983_StatePlane_Florida_West_FIPS_0902_Feet

Table 5-11: Hernando County Cost Affordable Transit Plan

| Project Description | Implementation Year | Capital Costs (YOE ¹) | | | Operating Cost (YOE ¹) | Total Cost (YOE ¹) |
|--|---------------------|--|------------------------------------|------------------|------------------------------------|--------------------------------|
| | | Replacement Vehicles for Existing Services | Vehicle Purchases for New Services | Infrastructure | | |
| Fixed-route service enhancements ² | Ongoing | \$9,739,331 | \$0 | \$0 | \$50,625,665 | \$60,364,996 |
| ADA paratransit service | Ongoing | \$3,243,514 | \$0 | \$0 | \$17,054,627 | \$20,298,141 |
| Increase frequency to 30 mins on existing routes | 2033 | \$0 | \$1,933,832 | \$0 | \$19,893,717 | \$21,827,549 |
| Hernando Route 50 | 2034 | \$0 | \$663,949 | \$0 | \$3,140,362 | \$3,804,311 |
| Spring Hill–airport Connector | 2032 | \$0 | \$1,877,507 | \$0 | \$11,837,800 | \$13,715,307 |
| US 41/Airport | 2036 | \$0 | \$1,408,767 | \$0 | \$4,591,318 | \$6,000,085 |
| Citrus Connector Express | 2038 | \$0 | \$1,494,561 | \$0 | \$604,253 | \$2,098,814 |
| US 19/SR 50 Express | 2029 | \$0 | \$1,389,301 | \$0 | \$1,089,614 | \$2,478,915 |
| Suncoast Parkway express | 2039 | \$0 | \$769,699 | \$0 | \$951,051 | \$1,720,750 |
| Paratransit (ADA) service for new local routes | n/a | \$0 | \$830,982 | \$0 | \$3,998,593 | \$4,829,575 |
| Stop amenities/ADA compliance | 2020-2040 | - | - | \$515,240 | - | \$515,240 |
| Shared-use park-and-rides (4 lots) | 2020-2040 | - | - | \$0 | - | \$0 |
| Total | | \$12,982,845 | \$10,368,598 | \$515,240 | \$113,787,000 | \$137,653,683 |

Notes:

1. Transit improvements funded by a mixture of local, State, and federal revenue sources. Fare revenues used only to cover operating expenses.
2. Local sources for operating include local general revenues and matching funds for Federal Section 5307, 5311, and FDOT Block, Service Development, and Urban Corridor Grants.
3. For Capital, local sources include general funds and/or other future local sources to be determined.
4. State sources for operating include FDOT Block Grant, Urban Corridor, and Service Development Grants; no State funds assumed for transit capital projects.
5. Federal Section 5307, 5311, and 5339 assumed for funding operating and/or capital improvements. Transit improvements funded by a mixture of local, State, and federal revenue sources. Fare revenues used only to cover operating.
6. For purposes of this plan, it is assumed that Charter County Surtax does not leverage additional federal transit funding. This will likely change once surtax is approved by referendum and available to pursue additional federal funding.

Table 5-12: Hernando Cost Affordable Transit Plan Revenue (millions, YOE)

| | 2020–2025 | 2026–2030 | 2031–2040 | Total |
|--|-----------|-----------|-----------|---------|
| <i>Operating</i> | | | | |
| Costs | \$15.5 | \$15.6 | \$82.7 | \$113.8 |
| Revenues | \$15.7 | \$18.9 | \$79.1 | \$113.8 |
| Local | \$3.2 | \$4.0 | \$22.5 | \$29.7 |
| State | \$5.1 | \$6.6 | \$24.8 | \$36.5 |
| Federal | \$6.4 | \$7.3 | \$26.5 | \$40.1 |
| Fares | \$1.1 | \$1.1 | \$5.3 | \$7.4 |
| <i>Capital</i> | | | | |
| Costs | \$2.1 | \$4.2 | \$17.5 | \$23.9 |
| Revenues | \$3.5 | \$5.8 | \$16.5 | \$25.8 |
| Local | \$0.0 | \$0.0 | \$0.3 | \$0.3 |
| State | \$0.0 | \$0.0 | \$0.0 | \$0.0 |
| Federal | \$3.5 | \$5.8 | \$16.2 | \$25.5 |
| <i>Total Costs & Revenues</i> | | | | |
| Costs | \$17.7 | \$19.8 | \$100.2 | \$137.7 |
| Revenues | \$19.2 | \$24.7 | \$95.7 | \$139.6 |
| Local | \$3.2 | \$4.0 | \$22.8 | \$30.0 |
| State | \$5.1 | \$6.6 | \$24.8 | \$36.5 |
| Federal | \$9.8 | \$13.1 | \$42.6 | \$65.6 |
| Fares | \$1.1 | \$1.1 | \$5.3 | \$7.4 |

Citrus County

Improvements to Existing Local Service

- Add 3 hours of early/later service
- Increase frequency to 60 minutes

Future Local Service

- Citrus Springs Connector

Future Express Service

- Crystal-Inverness Limited Express (connecting Crystal Rider to Inverness)
- Ocala Express (peak-hour-only service connecting Inverness to Ocala)
- US 19 Express

Transit Infrastructure/Access

- Bus stop infrastructure
- 3 shared-use park-and-ride lots

Bi-County/Regional Connections

Regional transit improvements that connect Citrus and Hernando counties and that provide access to other regional destinations are summarized below.

Hernando County

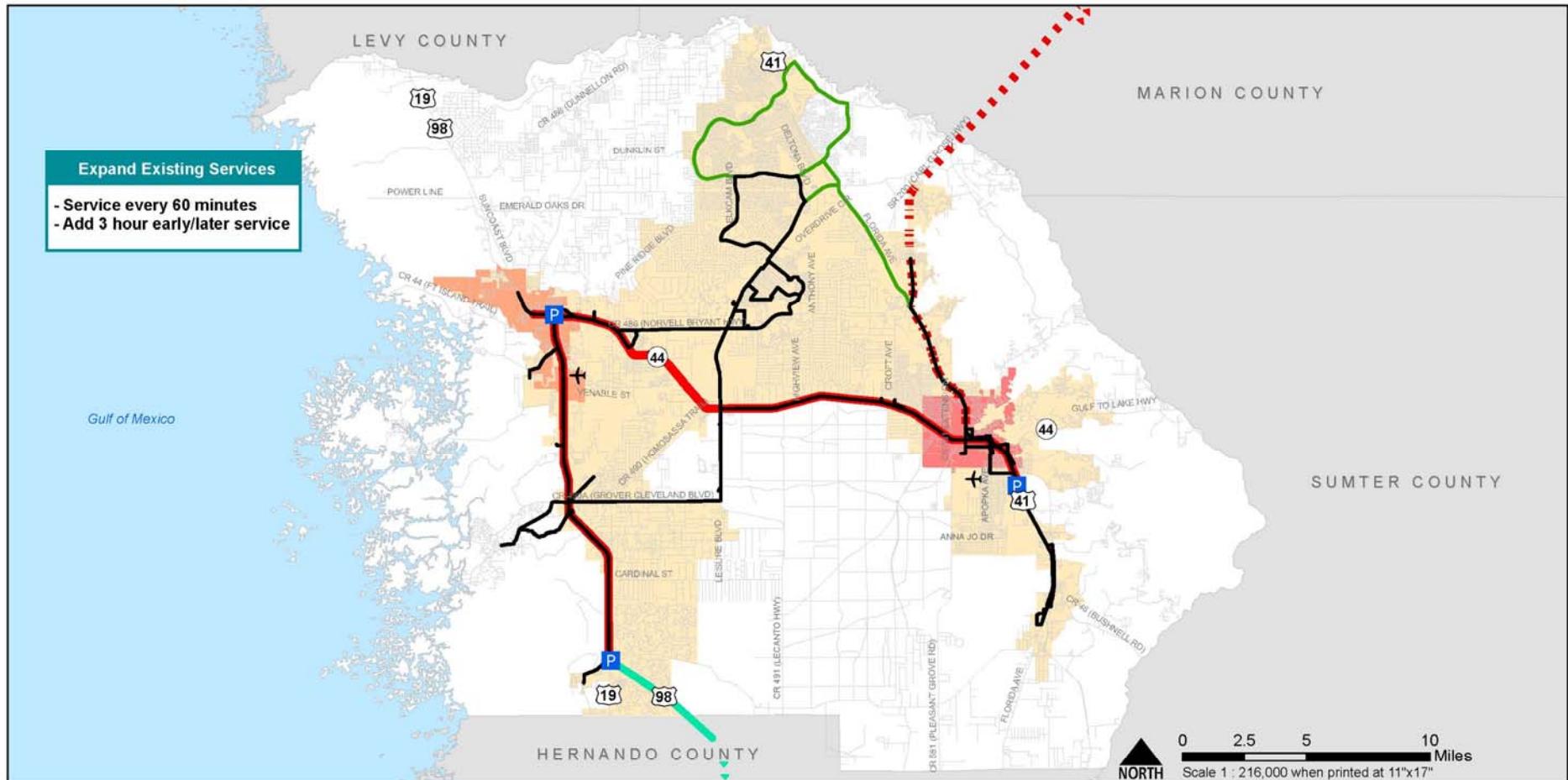
- Suncoast Parkway Express (connecting into Pasco County)
- Citrus Connector Express (connecting into Citrus County)

Citrus County

- Ocala Express (peak-hour-only service connecting Inverness to Ocala)

Similar to Hernando County, the existing and future transit facilities and services for Citrus County through the year 2040 are illustrated in **Map 5-7**, and existing and 2030 interim transit facilities and services are illustrated in **Map 5-8**. **Table 5-13** presents a summary of costs for the 2040 Cost Affordable Transit Plan for Citrus County, including improvement costs and projected revenues in three time periods: 2020–25, 2026–30, and 2031–40.

Map 5-7: Citrus County 2040 Cost Affordable Transit Plan



Local/Express Service

- Existing Local Service
- Future Local Service
- Future Express Service
- ■ Future Express - Peak Hours Only

Legend

| | | |
|---------------|--------------|---------------------------------------|
| Crystal River | Urban Area | Regional Express From Hernando County |
| Inverness | Citrus Roads | P Future Park and Ride Locations |

Data Source: TOA LRTP
Data Projection: NAD_1983_StatePlane_Florida_West_FIPS_0902_Feet

Map 5-8: Citrus County 2030 Interim Cost Affordable Transit Plan

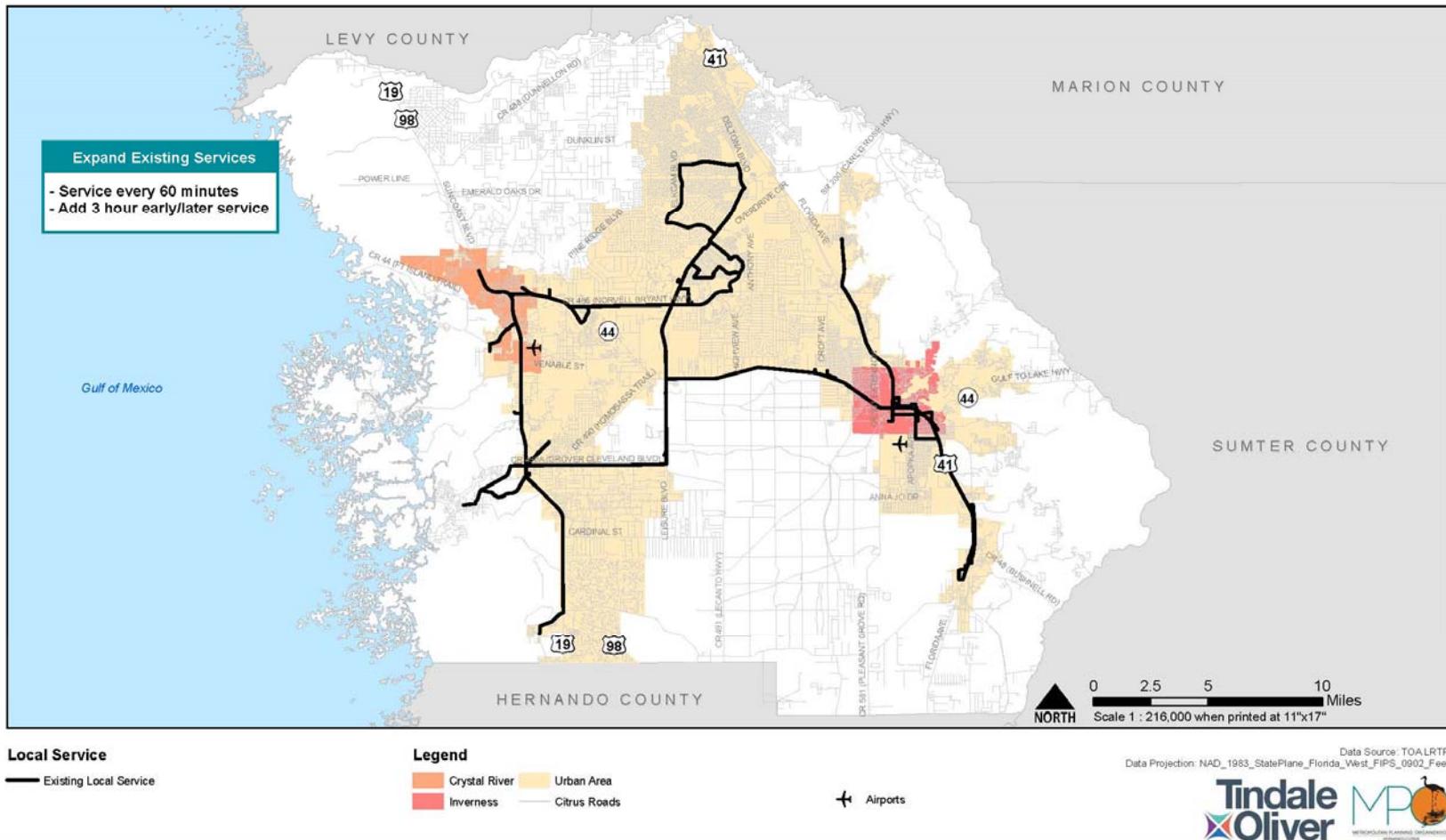


Table 5-13: Citrus County Cost Affordable Transit Plan

| Project Description | Implementation Year | Capital Costs (YOE*) | | | Operating Cost (YOE) | Total Cost (YOE) |
|--|---------------------|--|------------------------------------|------------------|----------------------|---------------------|
| | | Replacement Vehicles for Existing Services | Vehicle Purchases for New Services | Infrastructure | | |
| Continue existing fixed-route service | Ongoing | \$7,005,721 | \$0 | \$0 | \$36,640,200 | \$43,645,921 |
| Expand hours of service 3 hrs on all routes | 2030 | \$0 | \$0 | \$0 | \$8,211,283 | \$8,211,283 |
| Increase frequency to 60 mins on existing routes | 2028 | \$0 | \$6,593,019 | \$0 | \$24,781,130 | \$31,374,149 |
| Crystal-Inverness Limited Express (90-min) | 2039 | \$0 | \$434,189 | \$0 | \$2,662,724 | \$3,096,913 |
| Citrus Springs Connector (90-min) | 2039 | \$0 | \$434,189 | \$0 | \$2,662,724 | \$3,096,913 |
| US 19 Express (90-min) | 2038 | \$0 | \$421,543 | \$0 | \$3,947,465 | \$4,369,008 |
| Ocala Express (90-min); peak only (2 trips AM, 2 PM) | 2036 | \$0 | \$3,041,914 | \$0 | \$1,807,683 | \$4,849,597 |
| Additional bus stop infrastructure | 2020-2040 | \$0 | \$0 | \$831,108 | - | \$831,108 |
| Total | | \$7,005,721 | \$10,924,854 | \$831,108 | \$80,713,209 | \$99,474,892 |

Notes:

1. Transit improvements funded by mixture of local, State, and federal revenue sources. Fare revenues used only to cover operating expenses.
2. Local sources for operating include local general revenues and matching funds for Federal Section 5311, FDOT Urban Corridor, and Service Development Grants.
3. For Capital, local sources include general funds and/or other future local sources to be determined.
4. State sources for operating include FDOT Urban Corridor and Service Development Grants. State Block Grant funds not included but expected to be available in near future.
5. Federal Section 5310 and 5311 assumed for funding operating and/or capital improvements.
6. Table 5-15 shows the distribution of various sources of transit funding for LRTP transit improvements.

Table 5-14: Citrus County Transit Project Costs & Revenues (millions, YOE)

| | 2020–2025 | 2026–2030 | 2031–2040 | Total |
|--|-----------|-----------|-----------|---------|
| <i>Operating</i> | | | | |
| Costs | \$8.7 | \$14.0 | \$58.1 | \$80.7 |
| Revenues | \$15.1 | \$12.7 | \$52.9 | \$80.7 |
| Local | \$7.0 | \$6.9 | \$30.3 | \$44.2 |
| State | \$0.0 | \$0.0 | \$7.1 | \$7.1 |
| Federal | \$7.5 | \$4.9 | \$12.1 | \$24.5 |
| Fares | \$0.6 | \$0.9 | \$3.4 | \$4.9 |
| <i>Capital</i> | | | | |
| Costs | \$2.4 | \$3.4 | \$12.9 | \$18.8 |
| Revenues | \$11.5 | \$7.2 | \$18.0 | \$36.7 |
| Local | \$0.7 | \$0.7 | \$1.6 | \$3.0 |
| State | \$0.0 | \$0.0 | \$0.0 | \$0.0 |
| Federal | \$10.9 | \$6.5 | \$16.4 | \$33.8 |
| <i>Total Costs & Revenues</i> | | | | |
| Costs | \$11.1 | \$17.4 | \$71.0 | \$99.5 |
| Revenues | \$26.6 | \$19.9 | \$70.9 | \$117.4 |
| Local | \$7.7 | \$7.5 | \$31.9 | \$47.1 |
| State | \$0.0 | \$0.0 | \$7.1 | \$7.1 |
| Federal | \$18.4 | \$11.4 | \$28.5 | \$58.3 |
| Fares | \$0.6 | \$0.9 | \$3.4 | \$4.9 |

Multi-Use Trail Projects

Hernando and Citrus counties have long recognized the importance of multi-use trail projects and have built an extensive program of trails. Citrus County recently completed a Trails Master Plan that has been integrated into the 2040 Cost Affordable Plan. Multi-use trail projects are illustrated in **Map 4-9 and 4-10** in Chapter 4 and are listed in a table in **Appendix D**, as both counties have a prioritization process in place that allows for the identification of projects. As in previous years, additional projects will be developed and prioritized through the Bicycle Pedestrian Advisory Committee (BPAC) project identification process and the MPO's annual update to the TIP.

Hernando County

Hernando County uses a combination of grants and the Transportation Alternatives Program to fund proposed multi-use trail projects and bicycle and pedestrian projects. Highlights of the proposed multi-use trail projects in Hernando County include the following:

- Trail connectors along SR 50 and the SR 50 Bypass from Suncoast Parkway to Hernando County Line
- Trail corridor feasibility analysis study proposed for the City of Brooksville
- Additional planned trails make use of power line corridors in the Spring Hill area from SR 50 to County Line Rd and east of

Brooksville to the southeast, down to the Hernando County Line

Citrus County

Citrus County is proposing to commit two percent of transportation funding revenues to fund bicycle, pedestrian, and multi-use trail projects (approximately \$7 million). Highlights of proposed multi-use trail projects in Citrus County for which this funding could be used include the following:

- Trails along US 19, Suncoast Trail, and SR 44
- Beach Trail (Ft. Island Trail)
- Three Sisters Springs Trail (Crystal River)
- Trail from Grover Cleveland at Suncoast Trail east to US 41
- Trail along SR 480/E Stage Coach Trail

Pedestrian Projects

Pedestrian projects focus on improving safety and transit accessibility and filling in sidewalk gaps to improve the continuity of the pedestrian network. Expansion of the sidewalk network is accomplished, in part, with new roadway construction or the expansion of existing roadways in a cost-effective fashion in the urbanized area. Pedestrian projects in the 2040 Cost Affordable Plan are illustrated in **Map 4-10** in Chapter 4 and listed in a table in **Appendix D**. Additional projects will be developed and prioritized through the MPO's annual update to the Transportation Improvement Program.

Hernando County

Hernando County uses a combination of grants and the Transportation Alternatives Program to fund proposed multi-use trail projects and bicycle and pedestrian projects. Highlights of the proposed pedestrian projects in Hernando County include completing sidewalks along the following roadways:

- Cortez Blvd
- Spring Hill Dr
- Deltona Blvd
- Powell Rd
- Broad St

Citrus County

Citrus County has chosen to use two percent of transportation funding revenues (approximately \$7 million) to fund bicycle, pedestrian, and multi-use trail projects. Highlights of the proposed pedestrian projects in Citrus County include completion of sidewalks along the following roadways:

- East Vine St and Gospel Island Rd
- Forest Ridge Blvd
- Halls River Rd
- Miss Maggie Dr

Bicycle Projects

Bicycle projects include the addition of bike lanes/paved shoulders on several County roads. These projects can be completed as part of a roadway project or as a capitalized resurfacing project. Bicycle projects in the 2040 Cost Affordable Plan are illustrated in **Maps 4-7 and 4-10** and in **Appendix D**. Additional projects will be developed and prioritized through the MPO's annual update to the TIP.

Hernando County

Hernando County uses a combination of grants and the Transportation Alternatives Program to fund proposed multi-use trail projects and bicycle and pedestrian projects. Proposed bicycle projects in Hernando County include bike lanes along the following:

- Centralia Rd and Lake Lindsey Rd
- Powell Rd
- County Line Rd and Ayers Rd
- Deltona Blvd
- Anderson Snow Rd and Barclay Rd

Citrus County

Citrus County is proposing to commit two percent of transportation funding revenues (approximately \$7 million) to fund bicycle, pedestrian, and multi-use trail projects.

Proposed bicycle lanes in Citrus County include the following:

- Corkwood Blvd
- CR 480/Oak Park Blvd

- Cypress Blvd East
- Gospel Island Rd

OTHER ELEMENTS OF THE PLAN

Goods Movement

Despite the burgeoning “buy local” movement, a majority of products purchased come from outside Florida and many of the goods produced in Florida are transported to other states and countries. The safe and efficient movement of goods is a critical component of any economy, including that of the Tampa Bay region. The transport of goods via the road and rail network throughout Hernando and Citrus counties supports commercial and industrial growth, job creation, and a high quality of life as a larger extension of good movement throughout the region, state, and country.

Recognizing that goods movement is a critical component of the regional and state economy, FDOT District 7 and its partners on the Regional Goods Movement Advisory Committee, including the Hernando/Citrus County MPO, have worked to prepare the Tampa Bay Regional Strategic Freight Plan in response to a steadily-increasing emphasis on freight mobility concerns and economic development in recent years. The Plan study area covers a sizeable region that includes 8 counties and more than 50 municipalities.

The Strategic Freight Plan accomplishes the following objectives:

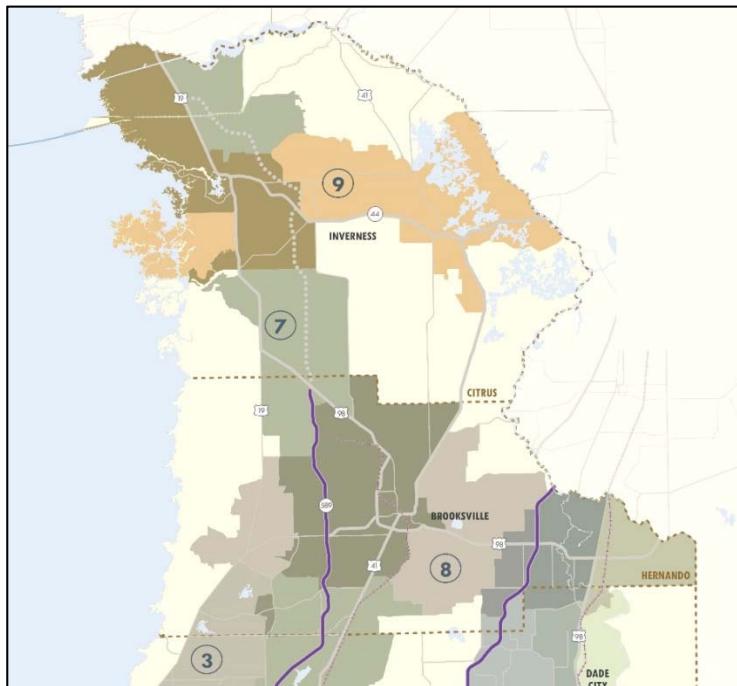
- Identifies strategic freight transportation investments that promote and foster economic development in the region.
- Responds to the balance between goods movement and community livability.
- Positions the Tampa Bay region to take advantage of the rapid growth in the global economy.
- Positions the region for new funding opportunities to implement infrastructure improvements on the regional freight network.
- Integrates freight considerations into the planning, project development, and roadway design processes.

Investments in roadway improvements that enhance the movement of goods must be strategically coordinated throughout the region. Federal and State regulations for transportation planning give FDOT and MPOs in the Tampa Bay region broad responsibility for planning and programming transportation projects, including projects that benefit freight mobility and goods movement. It is important to integrate freight mobility and access needs in land use decisions to ensure the efficient use of prime industrial lands, protection of critical freight corridors, and access for commercial delivery activities. This includes improving and protecting major interchanges that provide access to major industrial areas as well as the last-mile connections to both current and emerging industrial areas and terminals.

As part of the needs assessment for the Strategic Freight Plan, an

analysis of network conditions and truck trip-making characteristics was undertaken for the major freight travel markets in the Tampa Bay region. The freight travel markets focus on major highways and parallel and connecting facilities that provide for truck mobility into, out of, within, and across the region. The Plan identifies 12 freight travel markets, 5 of which are in Hernando and Citrus Counties –

Figure 5-1: Freight Market Areas in Hernando and Citrus Counties



Port of Tampa to East

Hernando, Port of Tampa to North Citrus, Hernando County East-West, and Citrus County East-West.

Hernando, Plant City to East

Sociocultural Effects and Environmental Justice

For metropolitan transportation plans, compliance with environmental justice is required by Title VI of the Civil Rights Act of 1964 and reinforced by the Executive Order on Environmental Justice, #12898 (February 11, 1994). Environmental justice prohibits discrimination based on race, color, and national origin and requires the inclusion of minority and low-income populations in the planning process. This process ensures that the following three major components are addressed in the planning process:

- Avoid, minimize, or mitigate disproportionately high and adverse human health and environmental impacts, including social and economic effects, on minority and low-income populations.
- Ensure the participation of the traditionally under-served and under-represented segments of the population in the transportation plan development process.
- Prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

2040 LRTP Environmental Justice Assessment

The 2040 LRTP development process included various efforts in both Hernando and Citrus counties to assess each county's performance with regard to sociocultural effects and environmental justice. Through efforts that included data analysis and public outreach, potential positive and adverse impacts of proposed

transportation projects were considered for transportation projects identified, including potential impact on minority, low-income, and other traditionally under-served and under-represented populations.

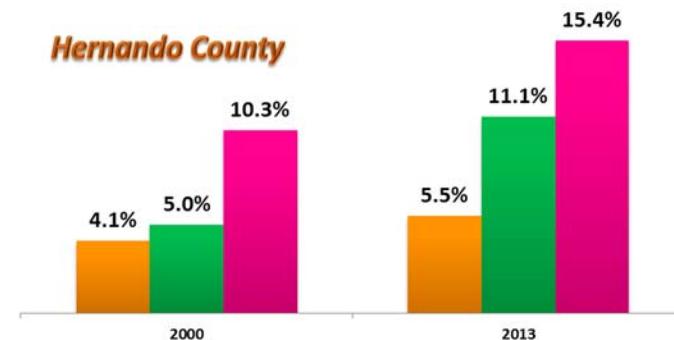
Sociocultural/Environmental Justice Data Analysis

Data related to sociocultural effects and Environmental Justice, including minority and low-income population segments in Citrus and Hernando counties, were analyzed for the 2040 LRTP. This included a review of the overall outlook and trends for these population segments in these areas as part of the LRTP objective of ensuring the LRTP is compliant with Title VI and Environmental Justice. **Figure 5-2** shows the trends in the key population segments analyzed for the Environmental Justice Impact assessment. In addition, data from the American Community Survey and the U.S. Census were used to perform a multi-layered, GIS-based analysis to identify the minority and low-income population areas in both Hernando and Citrus counties. **Maps 5-9 and 5-10** show the Environmental Justice Areas in each county, which consists of the low-income and minority areas selected based on the analysis methodology/criteria. The analysis methodology and criteria/thresholds used for selecting Environmental Justice areas is summarized together with a series of maps in the Technical Report, posted separately on the project website.

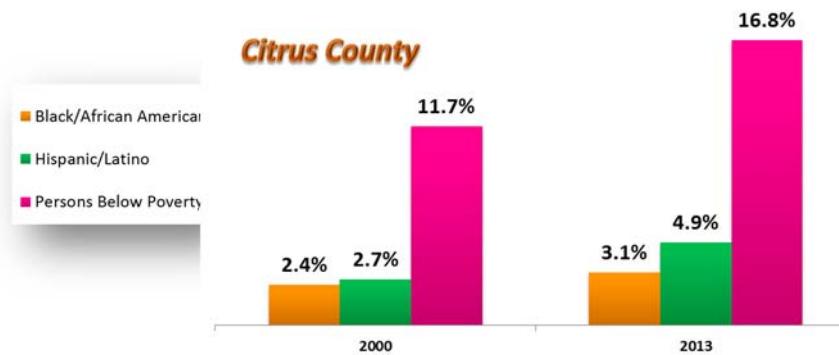
The data analysis assisted in identifying areas with socio-cultural and environmental justice impacts with regards to future transportation projects in Hernando and Citrus counties. The results

Figure 5-2: Trends in Key Population Segments

Hernando County

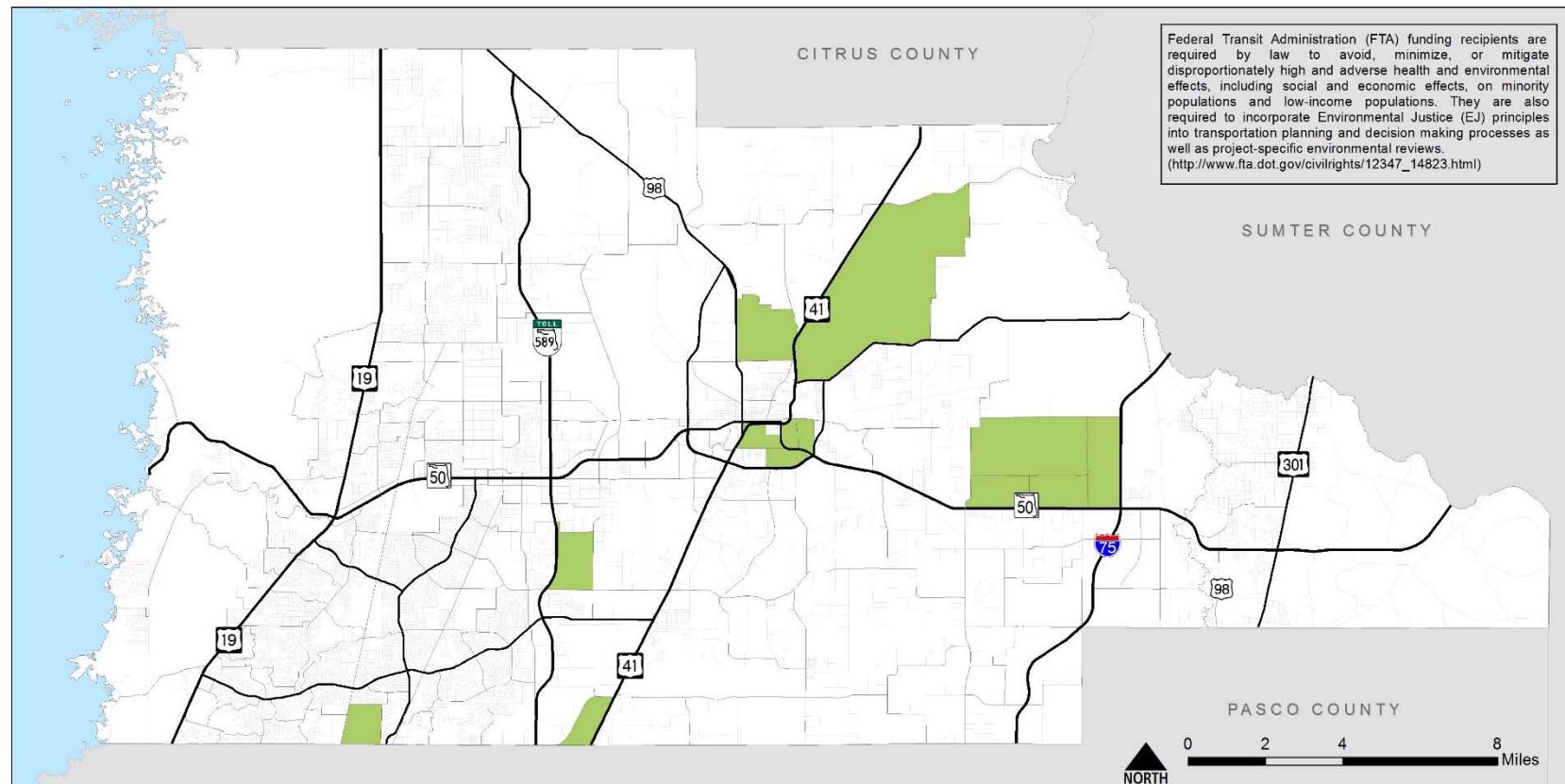


Citrus County



of this analysis, together with information on proposed improvement projects were presented to attendees from various social service agencies through various public involvement efforts. The results of this analysis allowed these representatives of traditionally under-served and under-represented population segments to provide potential positive or negative impact of transportation projects on the identified areas.

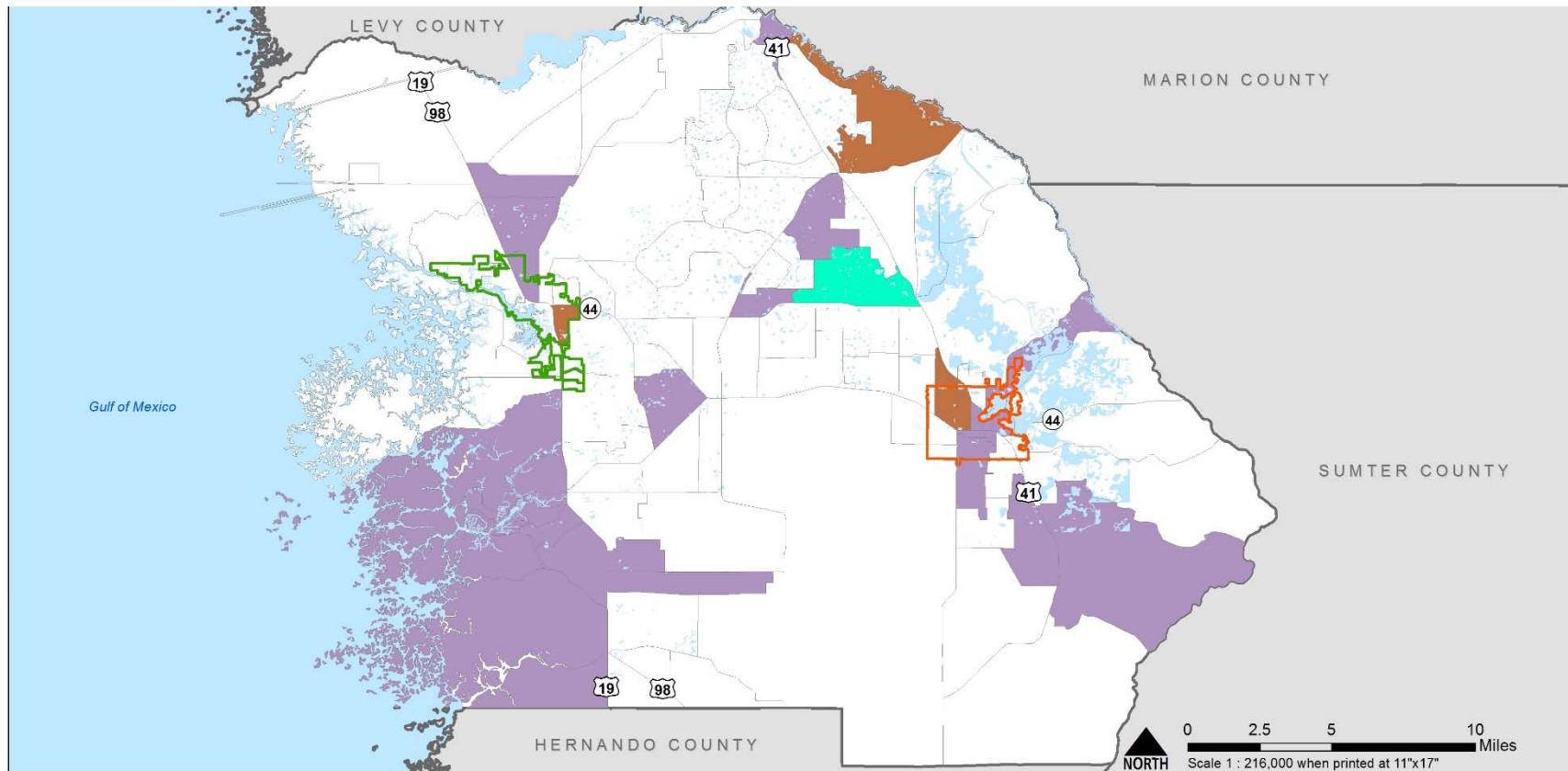
Map 5-9: Environmental Justice Areas in Hernando County



Data Source: 2010 TBARTA TAZ Boundaries
Data Projection: NAD_1983_StatePlane_Florida_West_FIPS_0002 Feet



Map 5-10: Environmental Justice Areas in Citrus County



Legend

- TAZ boundaries
- Crystal River
- Inverness
- Older Adults and Poverty
- Older Adults, Poverty, and Minority
- Minority

This map shows areas within Citrus County with a population of older adults (65 and above), below poverty, and minority populations.

Data Source: TOA LRTP
Data Projection: NAD_1983_StatePlane_Florida_West_FIPS_0902_Feet

**Tindale
Oliver**

MPO
METROPOLITAN PLANNING ORGANIZATION
HERNANDO / CITRUS

Public Outreach Efforts

The purpose of the outreach effort conducted for the 2040 LRTP was to evaluate the extent to which the benefits of each transportation alternative are evenly distributed and whether the consequences of each alternative fall disproportionately on low-income or minority populations. The feedback and opinions received were used to develop and prioritize the future transportation improvement projects so the proposed projects minimize any negative impact on low-income, minority, and/or other traditionally under-served population segments.

In Hernando County, two workshops were held, on August 20, 2014, in central Hernando (south Brooksville Community Center) and Eastern Hernando County (Ridge Manor Community Center) to enable access by participants from all areas of the county. Two workshops also were held in Citrus County on August 25, 2014, at two locations—the Old Courthouse Heritage Museum in Inverness and the Citrus County Transportation administration and operations facility in Lecanto.

For both workshops, special emphasis was placed on ensuring that social service agencies were represented. These service providers contribute valuable insight as to what geographic areas and modes of transportation can provide increased mobility. The workshops were conducted to provide a forum to generate ideas that could be used to determine priorities for transportation projects.

Figure 5-3: Environmental Justice Workshop Survey



Hernando-Citrus MPO Long Range Transportation

Environmental Justice Workshop – August 2014

Exercise 1: Identify Traditionally Under-Represented and Under-Served Populations

- Who do you represent? (Circle all that apply)

Low-Income Minority Older Adult Other _____

- Circle on large map (on display) where these population segments live.

Exercise 2: Review/Identify Potential Transit/Bike/Sidewalk/Trail Improvements

- Draw **Red** lines on map where you would like to see **Transit** improvements.
- Draw **Blue** lines on map where you would like to see **Bicycle** facility improvements.
- Draw **Green** lines on map where you would like to see **Sidewalk/Multi-use Trail** improvements. (Use solid lines for sidewalks and dotted lines for multi-use trails.)

Exercise 3: Critical Transportation Improvements

The maps identify potential transportation improvements from a technical perspective.

In your opinion, do any of these transportation improvements, or the lack thereof, have a significant positive or negative impact on traditionally under-represented/under-served populations?

- Use the **Black** marker to identify any **Road** improvements. Label them using "P" if Impact is Positive and "N" if Negative
- Use the **Red** marker to identify any **Transit** improvements. P - Positive, N - Negative.
- Use the **Blue** marker to identify any **Bicycle** facility improvements. P - Positive, N - Negative.
- Use the **Green** marker to identify any **Sidewalk/Trail** improvements. P - Positive, N - Negative.

Each workshop provided an overview of the 2040 LRTP process and a general discussion of Environmental Justice. Also, a series of maps was presented to participants to show demographic trends and to illustrate roadway, transit, safety, and bike/sidewalk improvements proposed for the next 20 years. A survey was provided to each participant, including four exercises with the objectives to:

- Discuss Environmental Justice and make sure the concept is understood by all participants.
- Review and discuss maps illustrating high concentrations of minority, low-income, and older adult populations.
- Review and discuss maps illustrating existing and future road widening improvements, bus routes, bicycle facilities, and sidewalks.
- Identify and discuss potential positive and negative impacts of future transportation improvements on specific communities.
- Identify and discuss transportation improvements that are needed by specific communities but are not currently reflected in the maps.

The workshops for Environmental Justice were attended by a number of social service agencies/individuals representing low-income and minority populations.

Key improvements needs identified included the following.

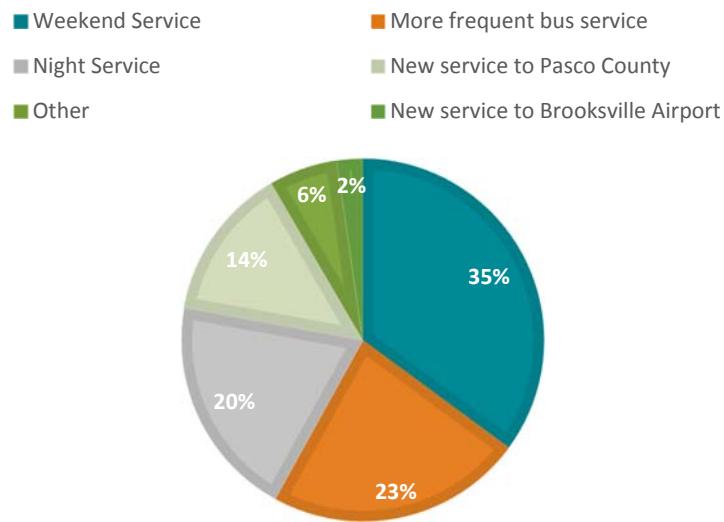
Hernando County

- Saturday service and frequency improvements in the future were the top two transit improvement needs. There is currently no Saturday transit service provided by Hernando Bus (THE Bus).
- Participants indicated there was an accessibility issue in the vicinity of the intersection of US 19 and SR 50. They preferred to fix the gap between the existing bicycle lanes so the accessibility issue can be solved.
- New sidewalk facility needs to be built along California Street at the Lighthouse for the Visually Impaired.

Citrus County

- There is a need to improve the transit service. More frequent service and expanded service area were the top two improvements needed in the future.
- Regarding expanded service area improvements, participants further indicated there was a need to have a regional service connecting to Ocala and a new service operating between Crystal River and Inverness in Citrus County.
- The future extension of the Suncoast Parkway was mentioned by participants as a definite roadway improvement need.

Figure 5-4: Hernando Survey Results Showing Desired Transit Improvements



As summarized, the input from the workshops indicated a strong emphasis on public transportation and sidewalk needs, rather than new roadway projects or potential adverse impacts from them. The consensus of the participants was that although public transportation and bicycle/pedestrian projects may make up a small percentage of the total planned improvements, the ability for low-income/minority populations to fulfill their transportation needs is predominantly dependent on the availability of reliable fixed-route bus transit services and support facilities such as accessible sidewalks.

The public transportation and bicycle/sidewalk facility needs identified at the workshops were considered in the 2040 LRTP planning process and were further evaluated against other transportation improvements.

2040 LRTP Impact on Environmental Justice Areas

Projects identified in 2040 LRTP that are in Environmental Justice areas that have high minority and low-income populations in both counties focus on access to transit, bike/sidewalk improvements, and intersection/safety improvements. Although the public outreach activities that engaged minority and low-income populations and their representatives did not result in identifying any major adverse impacts from the proposed 2040 LRTP improvements, they did highlight that transit and sidewalk access are the most important LRTP improvements for those population segments.

In addressing these needs critical to ensuring a more equitable and fair planning process, the Hernando/Citrus MPO's 2040 LRTP includes a number of projects in areas with high levels of low-income and minority populations that will benefit from transit, sidewalk/bicycle, safety, and roadway improvement projects during the next 25 years.

Environmental Mitigation and ETDM

The LRTP considers the types of potential environmental mitigation activities and the potential areas in which to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the transportation plan. This analysis has been developed in consultation with federal, State, land management, and regulatory agencies.

Although a detailed environmental analysis is not required during the LRTP process, the intent of SAFETEA-LU and its successor law, MAP-21, is to identify mitigation strategies that facilitate discussions with environmental resource agencies, such as federal, State, tribal land management, wildlife, and regulatory agencies. While the mitigation strategies and recommendations regarding environmental impacts are considered during the initial long-range planning process, a more detailed environmental analysis of individual projects is required as part of a Project Development and Environmental (PD&E) Study conducted for major roadway and transit projects. At this stage, the scope of any environmental impacts can be ascertained, and appropriate environmental mitigation strategies can then be identified.

During development of the LRTP, extensive materials developed by agencies responsible for environmental planning and regulation within the area were gathered. As discussed in greater detail later in this section, those partner agencies consist of the following:

- Department of Environmental Protection (DEP)
- Southwest Florida Water Management District (SWFWMD)
- Florida Fish and Wildlife Conservation Commission)

Coordination with these agencies was accomplished primarily through the Hernando County Environmental Planning section, part of the Hernando County Planning Department and the Citrus County Planning Department. The MPO has ready access to the extensive mapping tools developed by both counties. These have proven indispensable to visually identifying potential environmental conflict areas. Where such issues have occurred, additional analysis has been conducted and discussions have taken place to initially pinpoint mitigation strategies.

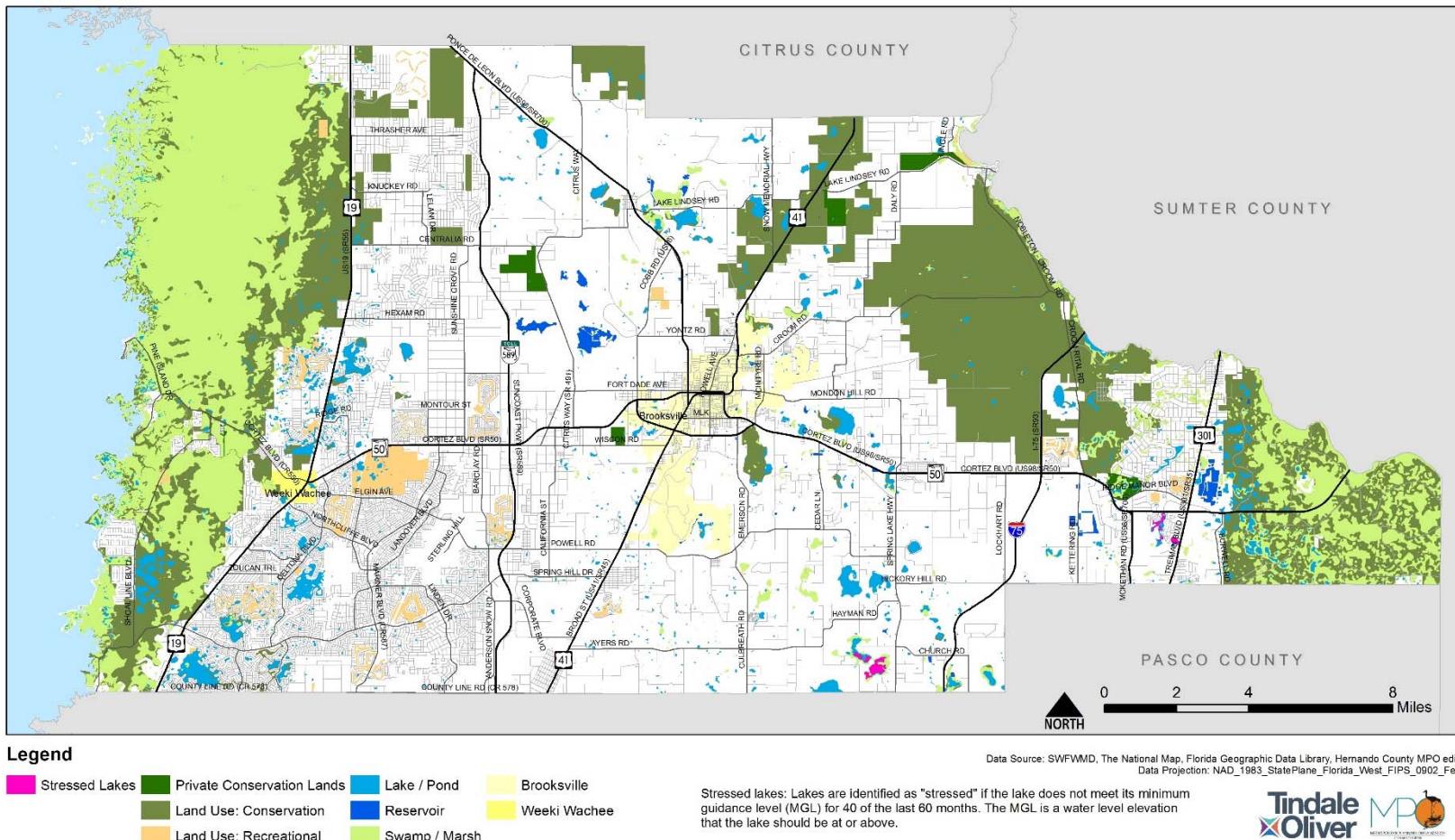
Both counties are part of the nine-county Nature Coast. Developed in the early 1990s as a marketing designation, this concept has come to emphasize the regions' identification with the environment and its significance. As a result, features that have been considered as part of the LRTP development process include:

- Identification and potential acquisition of wildlife crossings/corridors
- Need for State coordination (Federal Wildlife Service) related to additional roadway crossings
- Identification of environmentally-sensitive areas and the potential impact of roadway improvements
- Consideration of "critical habitat area," specifically strategic habitat conservation areas as identified by the State (FWS).

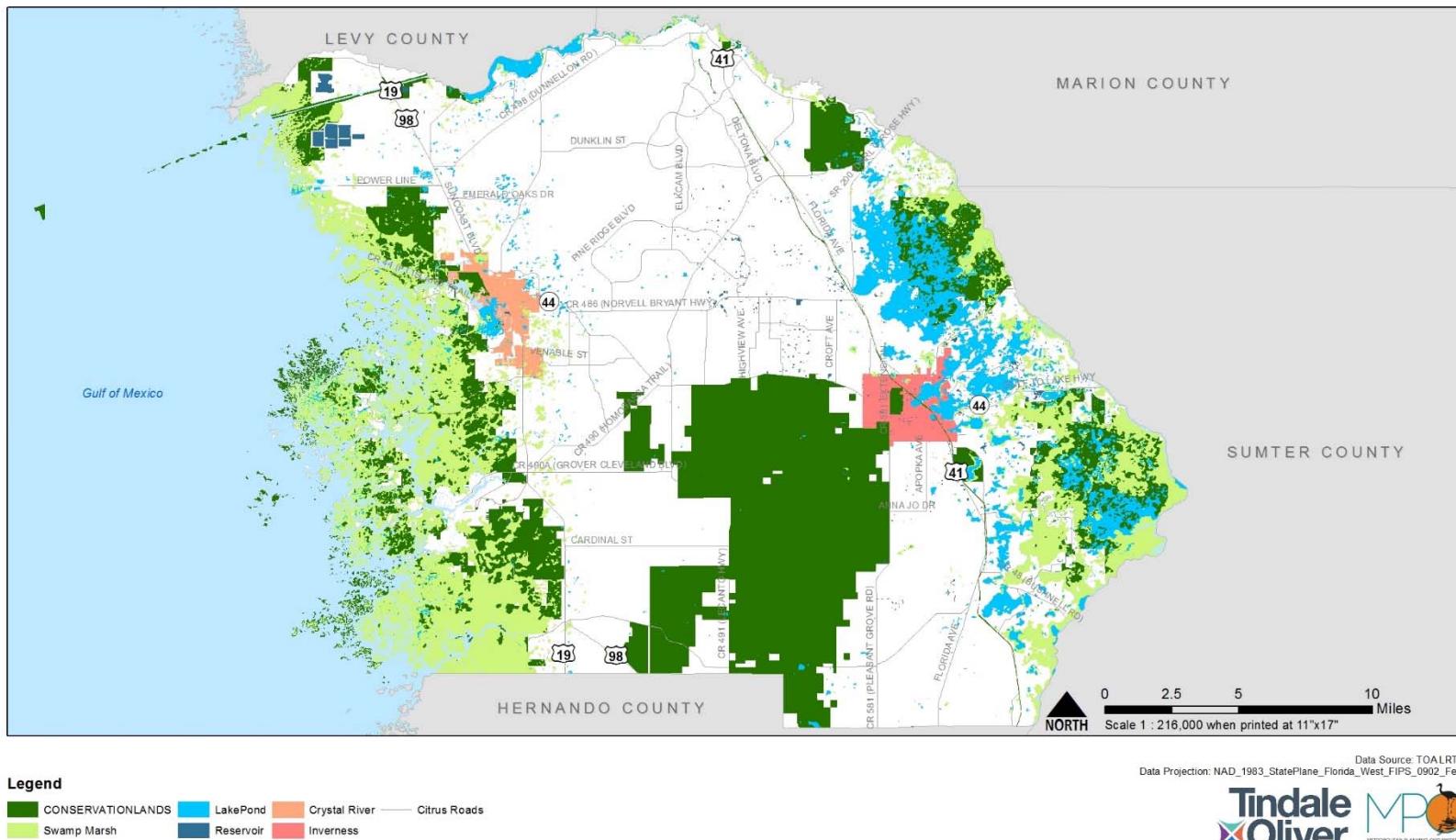
As shown in **Map 5-11**, more than 27% of the land in Hernando County is conservation area, including the Chassahowitzka National Wildlife Refuge and the Weeki Wachee Preserve. More than 46% of Citrus County lies in federal, State and county parks and preserves, including the Crystal River National Wildlife Refuge, the Crystal River Preserve State Park, and the Homosassa Springs Wildlife State Park (**Map 5-12**). Both counties are home to the Withlacoochee State Forest and the Withlacoochee State Trail, a popular rails-to-trails multi-use recreational trail

At this level, no projects were identified that needed to go through the environmental screening process. As projects proceed through the PD&E process, however, Citrus and Hernando counties will work with various regulatory agencies that manage the process at the State level.

Map 5-11: Hernando County Environmental Lands



Map 5-12: Citrus County Environmental Lands



Congestion Management Process

A Congestion Management Process (CMP) is defined as “a systematic approach collaboratively developed and implemented throughout a metropolitan region, that provides for the safe and effective management and operation of new and existing transportation facilities through the use of demand reduction and operational management strategies.” Maintenance of a CMP is a requirement for all MPOs under Florida law and for MPOs in Transportation Management Areas (TMAs) under federal law. Consistent with federal guidance, the intent of a CMP Update is to “address congestion management through a process that provides for safe and effective integrated management and operation of the multimodal transportation system.” Although the Hernando/Citrus MPO is not in a TMA, which is defined as an urbanized area with a population over 200,000, both counties have developed and implemented congestion management efforts “to provide the information needed to make informed decisions regarding the proper allocation of transportation resources” as required by Florida law.

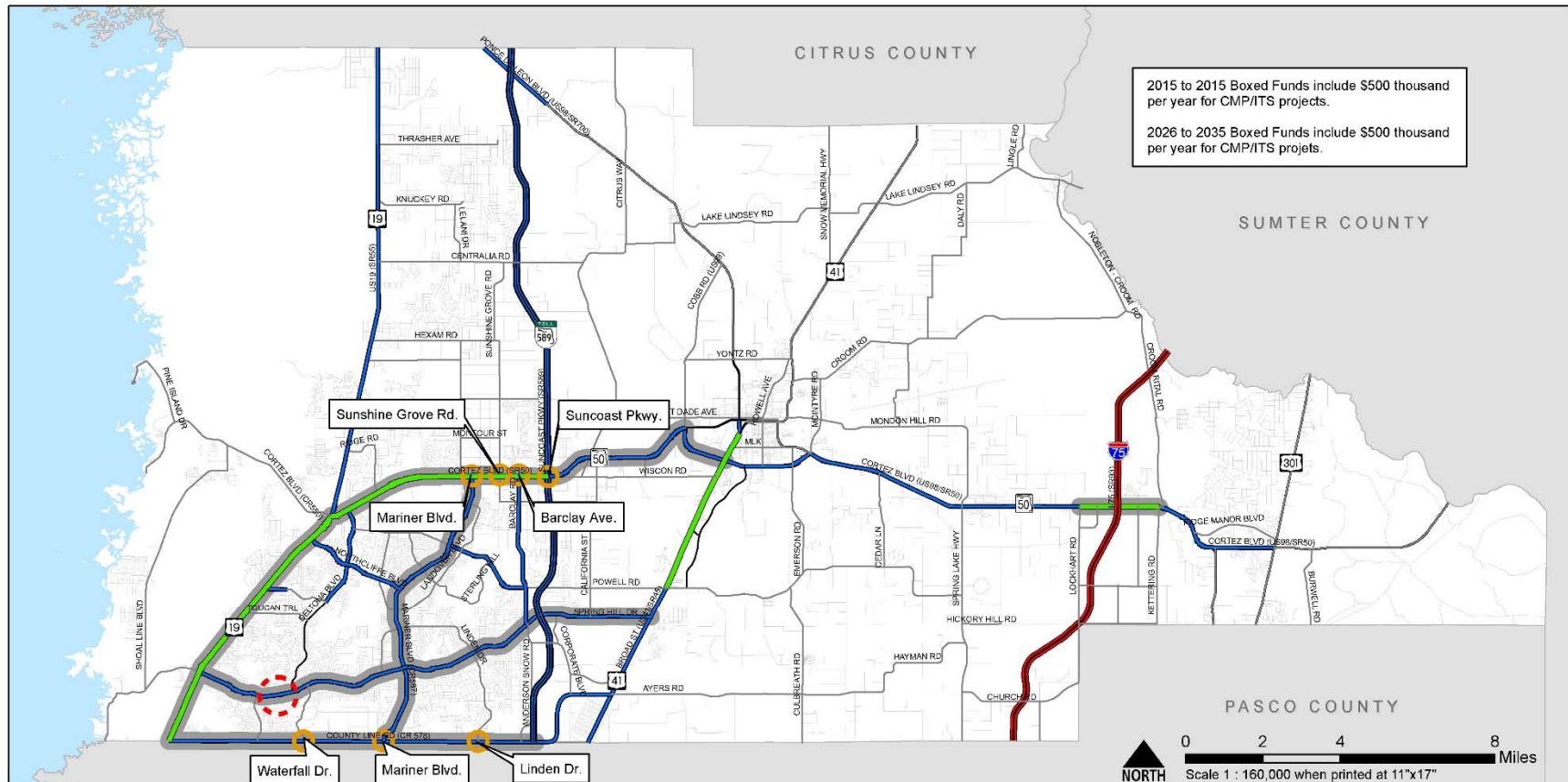
Congestion Management/ITS

A number of CMP and ITS projects and strategies to reduce congestion or mitigate the impacts of congestion are identified for the 2040 LRTP. Highlights of the proposed projects include the following:

- Implementation of Advanced Traffic Management Systems (ATMS) and Variable Message signs
- Signalized intersection improvements and congestion mitigation strategies and measures
- For Hernando County, funding for ITS/CMP occurs on an annual basis as the TIP is developed
- Citrus County proposes to commit 4% of transportation funding revenues (approximately \$13 million) to fund ITS/CMP improvements that will be identified on an annual basis consistent with the CMP priorities in Citrus County
- Programs and management systems to support the development of annual Capital Improvement Element for transportation facilities in Citrus and Hernando counties
- Opportunities for congestion management and safety studies identified for Crystal River, Inverness, Floral City, and Homosassa Springs in Citrus County

The target areas/corridors for implementing these ITS/CMP projects are illustrated in **Maps 5-13 and 5-14** for Hernando and Citrus counties, respectively. In addition, **Tables 5-15 and 5-16** show the list of projects and/or target areas for the improvements in Hernando County and Citrus County, respectively.

Map 5-13: Hernando County Safety Emphasis Corridors



Data Source: Hernando/Citrus MPO
Data Projection: NAD_1983_StatePlane_Florida_West_FIPS_0902_Feet

Map 5-14: Citrus County Safety Emphasis Corridors

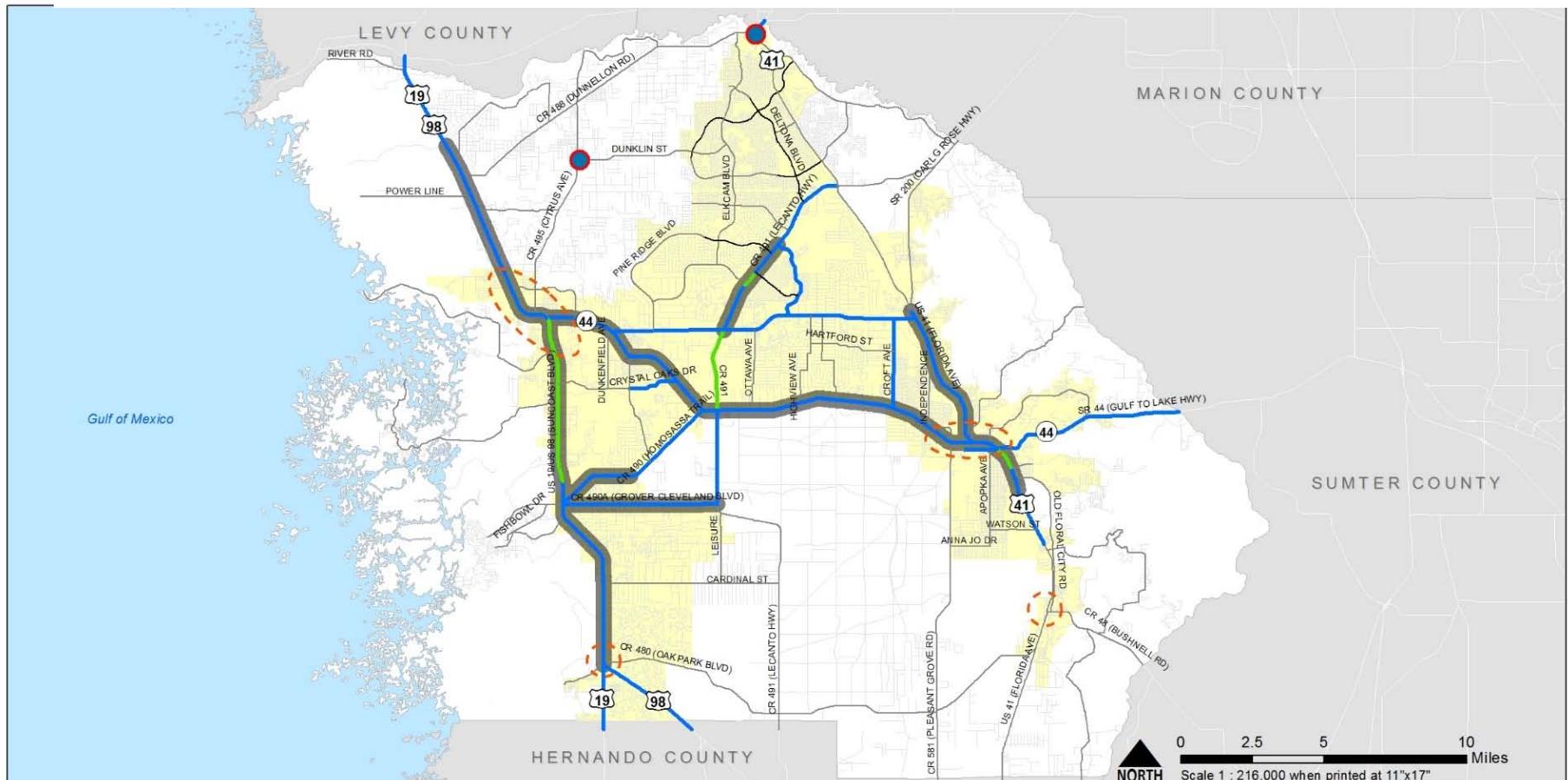


Table 5-15: ITS & Congestion Management Process (CMP) Projects for Hernando County (millions of dollars)

| On Street/ Intersection | From | To | Improvement | Present Day Costs (PDC) | | | | Year of Expenditure (YOE) | | | |
|-------------------------------|----------------|---------------|--|-------------------------|-----------|-----------|-------------|---------------------------|-----------|-----------|-------------|
| | | | | 2020-2025 | 2026-2030 | 2031-2040 | Total (PDC) | 2020-2025 | 2026-2030 | 2031-2040 | Total (YOE) |
| US 19 | County Line Rd | SR 50 | ITS/CMP corridor improvements to be determined | \$3.00 | \$2.50 | \$5.00 | \$10.50 | \$3.90 | \$3.90 | \$9.90 | \$17.60 |
| SR 50 | US 19 | US 41 | | | | | | | | | |
| Mariner Blvd | County Line Rd | SR 50 | | | | | | | | | |
| Spring Hill Dr | US 19 | US 41 | | | | | | | | | |
| Spring Hill Dr (Kass Cir) | Deltona Blvd | Pinehurst Dr | | | | | | | | | |
| County Line Rd | US 19 | Suncoast Pkwy | | | | | | | | | |
| Spring Hill Dr @ East Rd | n/a | n/a | | | | | | | | | |
| Spring Hill Dr @ Waterfall Dr | n/a | n/a | | | | | | | | | |
| Spring Hill Dr @ Mariner Blvd | n/a | n/a | | | | | | | | | |
| Spring Hill Dr @ Linden Dr | n/a | n/a | | | | | | | | | |
| SR 50 @ Mariner Blvd | n/a | n/a | | | | | | | | | |
| SR 50 @ Sunshine Grove Rd | n/a | n/a | | | | | | | | | |
| SR 50 @ Barclay Ave | n/a | n/a | | | | | | | | | |
| SR 50 @ Suncoast Pkwy | n/a | n/a | | | | | | | | | |

Table 5-16: ITS & Congestion Management Process (CMP) Projects for Citrus County (millions of dollars)

| On Street/Intersection | From | To | Improvement | Present Day Costs (PDC) | | | | Year of Expenditure (YOE) | | | |
|-----------------------------|----------------------|---------------------|---|-------------------------|-----------|-----------|-------------|---------------------------|-----------|-----------|-------------|
| | | | | 2020-2025 | 2026-2030 | 2031-2040 | Total (PDC) | 2020-2025 | 2026-2030 | 2031-2040 | Total (YOE) |
| US 19/US 98 | US 98 | N Basswood Ave | ITS/CMP corridor improvements to be determined. | \$2.9 | \$2.6 | \$4.9 | \$10.4 | \$3.8 | \$4.0 | \$9.6 | \$17.4 |
| N Citrus Ave | US 19 | Emerald Oaks Dr | | | | | | | | | |
| SR 44 | US 19/US 98 | US 41 | | | | | | | | | |
| US 41 | E Stage Coach Trail | SR 200 | | | | | | | | | |
| CR 491 | W Norvell Bryant Hwy | N Forest Ridge Blvd | | | | | | | | | |
| W Grover Cleveland Blvd | US 19/US 98 | S Lacanto Hwy | | | | | | | | | |
| E Watson St | US 19 | E Sage St | | | | | | | | | |
| W Homosassa Trail | US 19/US 99 | W Rosedale Dr | | | | | | | | | |
| N Citrus Ave @ W Dunklin St | n/a | n/a | | | | | | | | | |
| US 41 @ W Dunnellon Rd | n/a | n/a | | | | | | | | | |
| Inverness | n/a | n/a | | | | | | | | | |
| Crystal River | n/a | n/a | | | | | | | | | |
| Floral City | n/a | n/a | Study area to be determined | | | | | | | | |

Table 5-17: ITS & Congestion Management Process (CMP) Project Cost Allocation Hernando County (millions of dollars)

| | | | | | | | | | | | |
|--|--|--|--|--------------|--------------|--------------|---------------|--------------|--------------|--------------|---------------|
| Hernando County Total ITS/CMP Project Costs | | | | \$3.0 | \$2.5 | \$5.0 | \$10.5 | \$3.9 | \$3.9 | \$9.9 | \$17.6 |
| Local | | | | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 |
| State | | | | \$3.0 | \$2.5 | \$5.0 | \$10.5 | \$3.9 | \$3.9 | \$9.9 | \$17.6 |
| Federal | | | | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 |
| Revenues | | | | \$3.0 | \$2.5 | \$5.0 | \$10.5 | \$3.9 | \$3.9 | \$9.9 | \$17.6 |

Table 5-18: ITS & Congestion Management Process (CMP) Project Cost Allocation for Citrus County (millions of dollars)

| | | | | | | | | | | | |
|--|--|--|--|--------------|--------------|--------------|---------------|--------------|--------------|--------------|---------------|
| Citrus County Total ITS/CMP Project Costs | | | | \$2.9 | \$2.6 | \$4.9 | \$10.4 | \$3.8 | \$4.0 | \$9.6 | \$17.4 |
| Local | | | | \$2.1 | \$2.0 | \$3.9 | \$8.0 | \$2.7 | \$3.1 | \$7.7 | \$13.5 |
| State | | | | \$0.9 | \$0.6 | \$1.0 | \$2.4 | \$1.1 | \$0.9 | \$1.9 | \$3.9 |
| Federal | | | | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 |
| Revenues | | | | \$2.9 | \$2.6 | \$4.9 | \$10.4 | \$3.8 | \$4.0 | \$9.6 | \$17.4 |

MPO Congestion Management Efforts

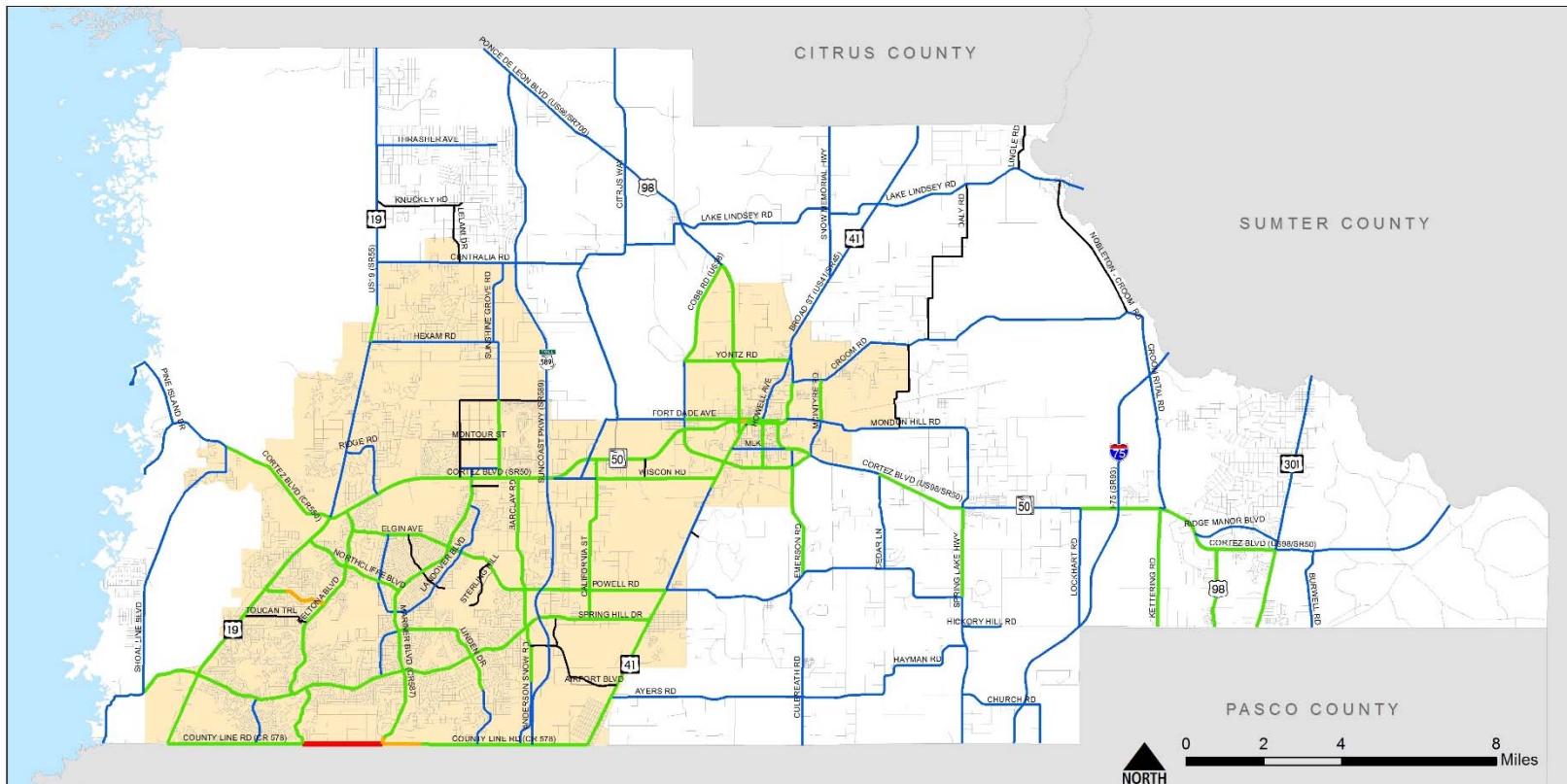
An objectives-driven, performance-based CMP starts with the monitoring and evaluation of current conditions to identify where congestion exists in Hernando and Citrus counties. **Maps 5-15 and 5-16** illustrate the levels of congestion, including congested roadways in each county. The congestion management efforts by both counties are effectively integrated into the metropolitan planning process for identification of projects as well as the project prioritization process for the 2040 LRTP.

As the more populated and urbanized county in the two-county MPO planning area, Hernando County has used a three-step process to effectively identify and reduce congestion, including identifying congested corridors, screening the corridors to identify potential strategies, and identifying/implementing potential projects, as summarized below:

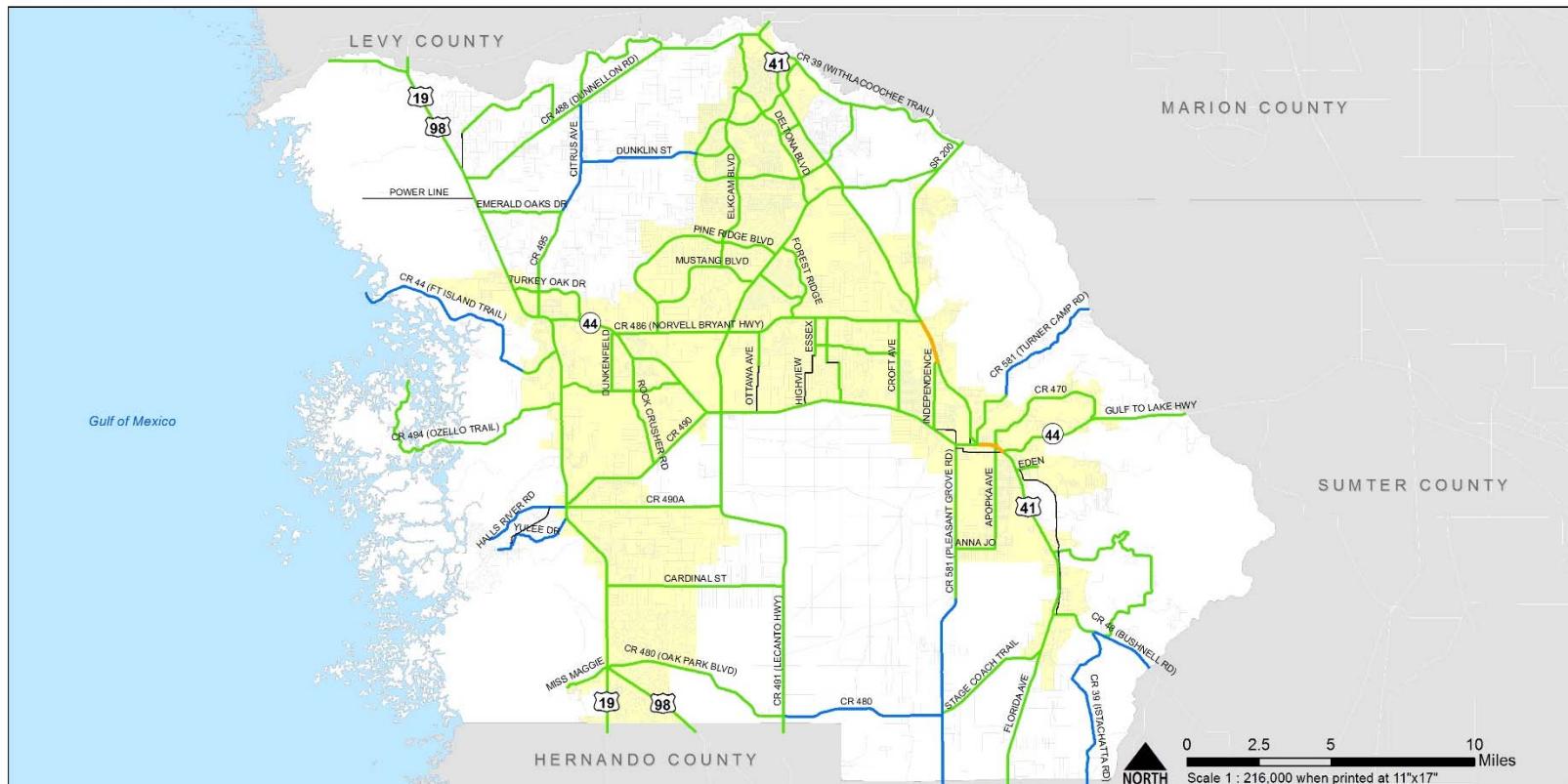
- **Phase 1: Congested Corridor Network Identification –** Annual monitoring efforts are used to review the level of service on the roadway network to identify recurring congestion. Roadways that are congested today or forecasted to be congested in five years are considered for review through the CMP screening process in Phase 2. Crash data management systems are used to identify corridors or intersections with a high frequency of crashes that result in non-recurring congestion. Safety improvements can reduce the potential harm to persons in our communities and also can reduce congestion.

- **Phase 2: CMP and Safety Strategy Screening –** Once congested corridors are selected for review, they are screened to identify mitigation strategies appropriate to reduce congestion or improve safety to reduce crashes. Various congestion mitigation and safety enhancement strategies are used to address recurring and non-recurring congestion. The congestion mitigation strategies are typically reviewed in a workshop setting to quickly review a corridor, and the safety strategies are applied based on a review of crash data.
- **Phase 3: Project and Identification/Implementation –** Congestion/safety mitigation strategies that are identified as having the greatest potential benefit then are evaluated in greater detail based on committee/technical recommendations. Analysis of potential projects is undertaken to identify specific improvements, implementation issues, and costs. “Programs” such as demand-reducing programs or policy changes are evaluated to identify recommended action items. Recommendations are made for the projects or programs to be implemented. This may result in a near-immediate refocusing of existing resources, such as existing rideshare programs or local maintenance crews where possible, programming improvements in the local agency capital improvement programs, or using boxed funds controlled by the MPO, and finally may be identified as candidate projects for implementation in future LRTPs.

Map 5-15: Congested Roadways in Hernando County, 2014



Map 5-16: Congested Roadways in Citrus County, 2014



Data Source: TOA vTIMAS
Data Projection: NAD_1983_StatePlane_Florida_West_FIPS_0902_Feet

Data Projection: NAD_1983_StatePlane_Florida_West_FIPS_0902_Feet

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With the merger of Citrus County with the Hernando County MPOs, the Hernando/Citrus MPO is working cooperatively with Citrus County Engineering staff on using a process similar to Hernando to identify and mitigate existing and future congestion in Citrus County.

Although Citrus County had not completed a CMP prior to merging with the MPO, the Citrus County Engineering Division has continued to identify congested corridors/segments and hot spots through various monitoring efforts, including regular traffic counts/stations, corridor studies, and other monitoring efforts. The County also has implemented various demand management and operational strategies to mitigate congestion at these corridors, including operational improvements at intersections, bike/sidewalk accessibility improvements, public transit, and transportation demand management (TDM) strategies such as carpool and vanpools.

Congestion Monitoring Efforts

In addition to identifying and mitigating congestion through the process summarized previously, Hernando County regularly tracks the effectiveness of the implemented strategies using a number of evaluation measures. These measures, some of which are also used in Citrus County, include the following.

- Roadway performance – Measures include roadway level of service, traffic volume-to-capacity ratio.
- Public transportation performance – Measures include passenger trips per revenue hour, average peak service frequency, and annual ridership.

- Bicycle/pedestrian/trail facility performance – Measures include percent of congested CMP roadway centerline miles with bicycle facilities, percent of congested CMP roadway centerline miles with sidewalk facilities, and miles of multi-use trails.
- Goods movement performance – Measures include vehicle miles traveled (VMT) below the adopted standard on designated truck routes in the study area and crashes involving heavy vehicles.
- Safety performance – Measures for monitoring safety, consistent with Florida's Strategic Highway Safety Plan, include intersection crashes, vulnerable users bicycle, pedestrians and motorcycles, lane departure, aggressive driving, impaired driving, at risk older adult and teenage drivers and distracted drivers.

Congestion Management Strategy Toolbox

To manage and mitigate the congestion identified using the screening criteria/local processes summarized previously, both Hernando and Citrus counties use numerous demand reduction and operational management strategies from a toolbox of strategies compiled by the MPO, as summarized in **Figure 5-5**. This “top-down” approach, which is currently used for Hernando, will be used for both counties in the future by the newly-formed Hernando/Citrus MPO. This approach promotes the growing sentiment in today's transportation planning arena and follows FHWA's clear direction to consider all available solutions before

recommending any new lane capacity additions. In addition, the MPO's *CMP Policy and Procedures Handbook* (January 2011) summarizes the congestion mitigation and safety enhancement strategies for each tier in the strategy toolbox, which are used to address recurring and non-recurring roadway congestion in Hernando and Citrus counties.

The Hernando CMP can be viewed on the MPO website at <http://www.hernandocitrusmpo.us/index.php/downloads-2/programs/congestion-management-plan/archive-congestion-management-plan/60-2010-cmp-policy-procedures-final/file>.

Congestion Management Strategies in 2040 LRTP

The 2040 LRTP planning process, which included a closer look at the multimodal needs and involved local and regional stakeholders, resulted in identifying a number of key congestion management project/strategies for the next 20 years. Some of the highlights include:

- ATMS on key corridors in both Citrus and Hernando counties
- Funding for dynamic/variable message signs to warn motorists of downstream queues, travel time estimates, alternate route information, and information on special events, weather, or accidents
- Signalized intersection improvements, including operational/design enhancements, lane restriping, widened shoulders, and enhanced signal coordination

Figure 5-5: Congestion Mitigation Strategy Toolbox

| Type of Mitigation | Strategies |
|---|---|
| Reduce vehicle miles of travel (VMT) per capita | Tier 1:  Strategies to Reduce Person Trips or Vehicle Miles Traveled |
| Increase viability and use on non-automobile modes of travel | Tier 2:  Strategies to Shift Automobile Trips to Other Modes |
| Improve and increase transit as a viable transportation alternative | Tier 3:  Strategies to Shift Trips from SOV to HOV Auto/Van |
| Improve roadway operations to reduce congestion | Tier 4:  Strategies to Improve Roadway Operations |
| | Tier 5:  Strategies to Add Capacity |

- Transit capacity expansions, including adding new vehicles to expand transit services.
- Increasing bus route coverage or frequencies to provide better accessibility to transit to a greater share of the population. Increasing frequencies makes transit more attractive to use as an alternative to single occupant vehicles.
- Implementing local and regional express bus services to connect to Pasco County to the south and Ocala to the north.
- Establishing park-and-ride facilities in both counties to accommodate express/regional travel.
- Numerous new sidewalk and bicycle projects, increasing sidewalk connectivity to encourage pedestrian/bike traffic for short trips
- Guaranteed Ride Home Programs in coordination with TBARTA commuter assistance programs
- Ridesharing program coordination with TBARTA, offering carpools and vanpools

In addition, increasing the capacity of congested roadways through additional general purpose travel lanes is also included. However, the MPO recognizes that adding capacity is the most costly and least desirable CMP strategy and considers them as the last resort method for reducing congestion.

Safety and Security

Safety and security of multimodal transportation networks are key parts of the federal requirements for metropolitan transportation planning process. This section reviews and summarizes the safety and security element for the 2040 LRTP.

Safety Element

MAP-21, the new federal transportation legislation introduced in 2012, creates a performance-based multimodal program, with a key focus on creating a safer multimodal transportation network. While building on and refining the highway, transit, bicycle, and pedestrian programs/policies, MAP-21 supports an aggressive safety agenda by identifying safety as a national goal and setting performance measures/targets “to achieve a significant reduction in traffic fatalities and serious injuries on all public roads.”

At this time, FHWA and FTA are in the process of establishing measures/targets to achieve the MAP-21 goals on safety. Once these targets are determined, Florida and other states will be required to establish their own targets within one year, adjusting them as appropriate for Florida’s MPOs and other applicable agencies.

At the State level, Florida’s Strategic Highway Safety Plan (SHSP) guides the safety planning to reduce fatalities and injuries on Florida’s streets and highways. The interagency plan is developed by FDOT and was updated recently to address the challenges by focusing on engineering, enforcement, education, and emergency

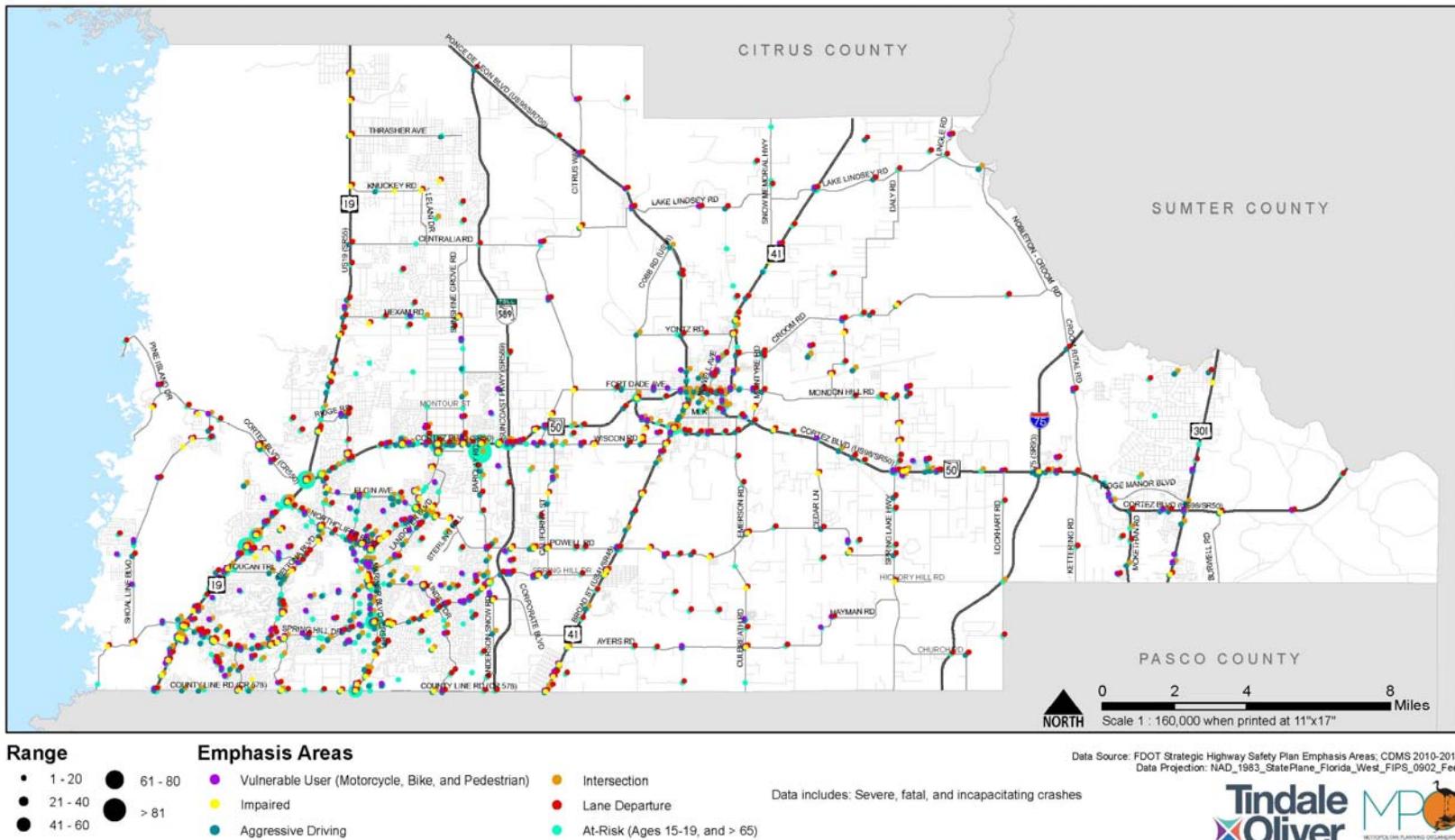
response (3E) solutions. The 2012 SHSP lays out data-driven and research-based strategies for fatality and injury reduction. The plan has identified eight safety emphasis areas, increasing its focus from the four emphasis areas identified in the 2006 SHSP. The emphasis areas from the 2012 SHSP update include the following:

- Aggressive Driving
- Intersection Crashes
- Vulnerable Road Users, including Pedestrians, Bicyclists, and Motorcyclists
- Lane Departure Crashes
- Impaired Driving (added *in 2012 SHSP*)
- At-Risk Drivers, including Aging Road Users and Teens (added *in 2012 SHSP*)

- Distracted Driving (added *in 2012 SHSP*)
- Traffic Data (added *in 2012 SHSP*)

As part of the Hernando/Citrus LRTP, safety performance in both counties in each of these emphasis areas was analyzed. **Maps 5-17** and **5-18** illustrate the high frequency crash locations for each of the FDOT Strategic Highway Safety Plan Emphasis Areas from 2010 through 2012. **Figures 5-6** through **5-17** show the SHSP emphasis area crash distributions in Hernando and Citrus counties compared with the surrounding FDOT District 7 region, which includes Hillsborough, Pasco, Pinellas, Hernando, and Citrus. A series of maps illustrating a more comprehensive analysis of crashes and corridors is included in **Appendix E**

Map 5-17: SHSP Emphasis Area Crashes in Hernando County, 2010-2012



Map 5-18: SHSP Emphasis Area Crashes in Citrus County, 2010-2012

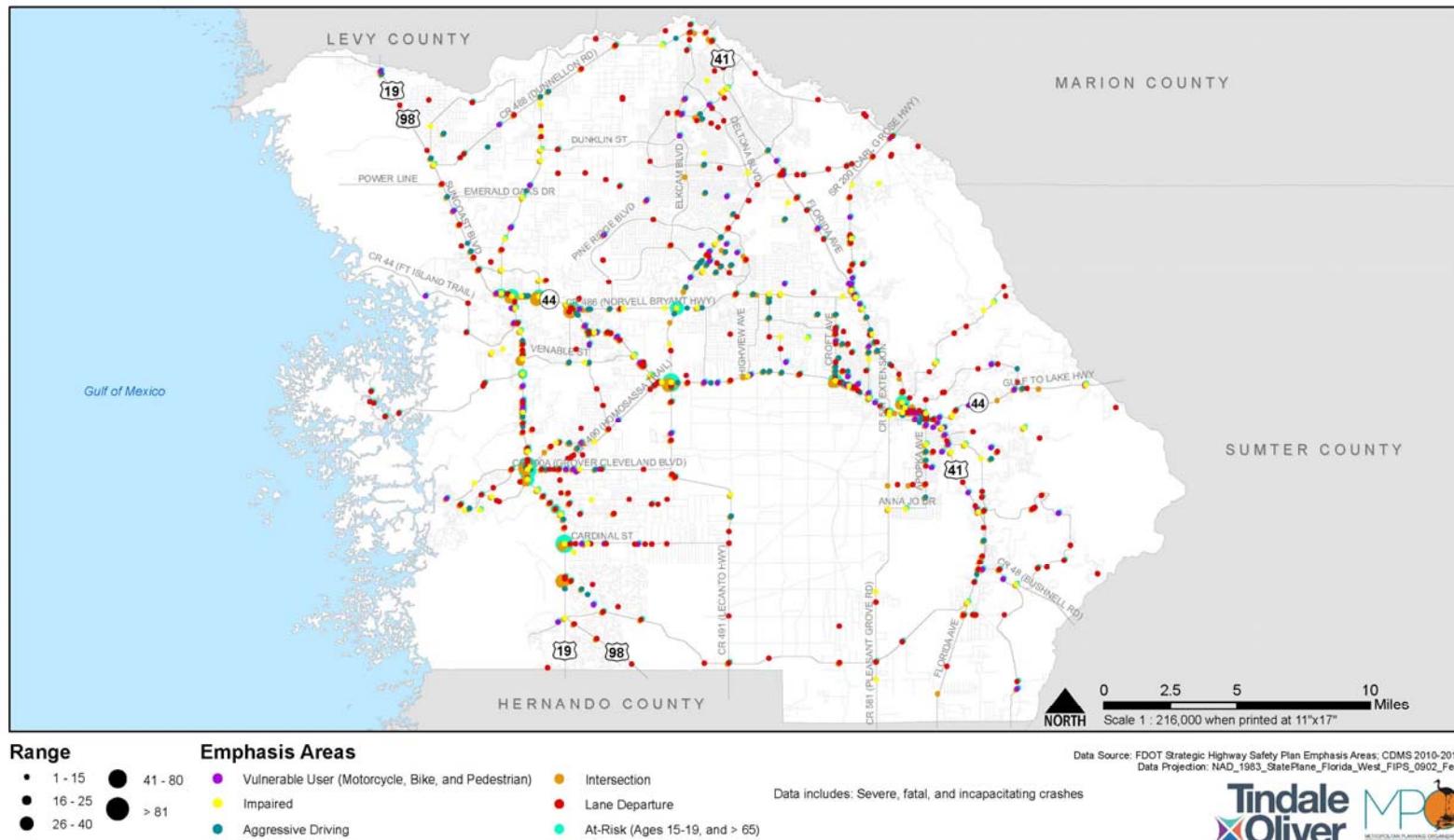


Figure 5-6: Aggressive Driving Crashes, 2010–2012, Hernando County

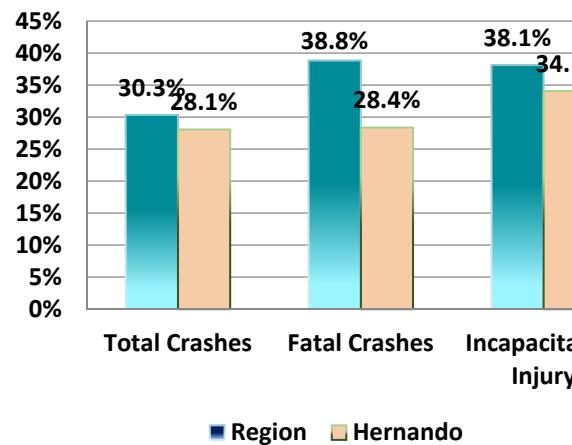


Figure 5-7: Vulnerable Road User Crashes, 2010–2012, Hernando County

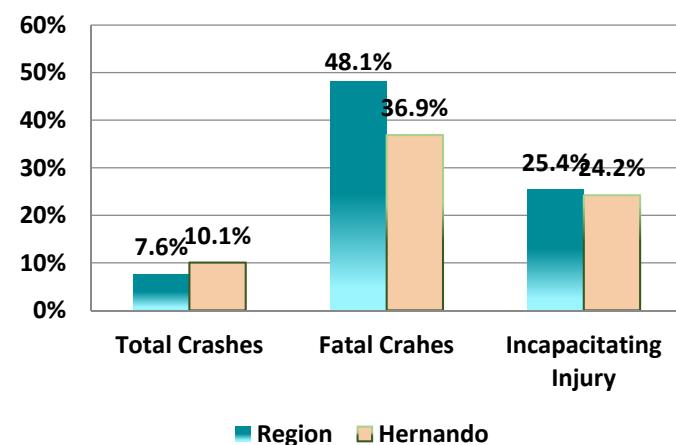


Figure 5-8: At Intersection Crashes, 2010–2012, Hernando County

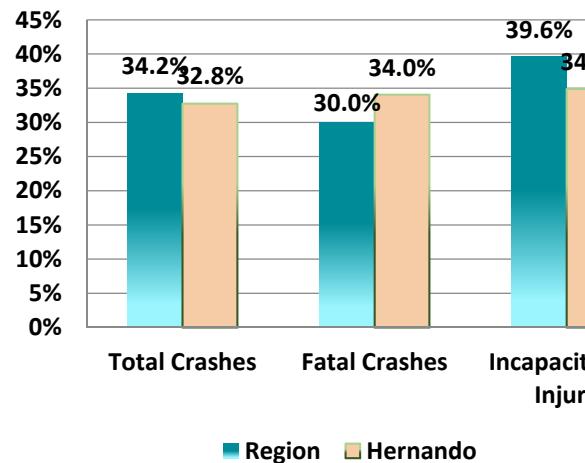


Figure 5-9: Lane Departure Crashes, 2010–2012, Hernando County

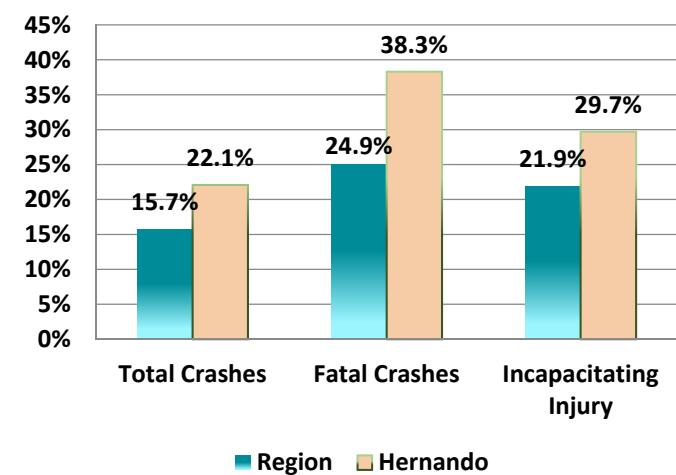


Figure 5-10: Lane Departure Crashes, 2010–2012, Hernando County

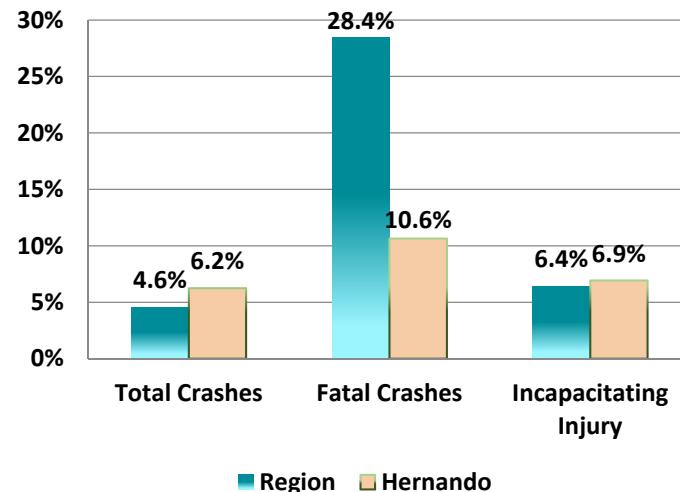


Figure 5-12: At-Risk Crashes, 2010–2012, Hernando County

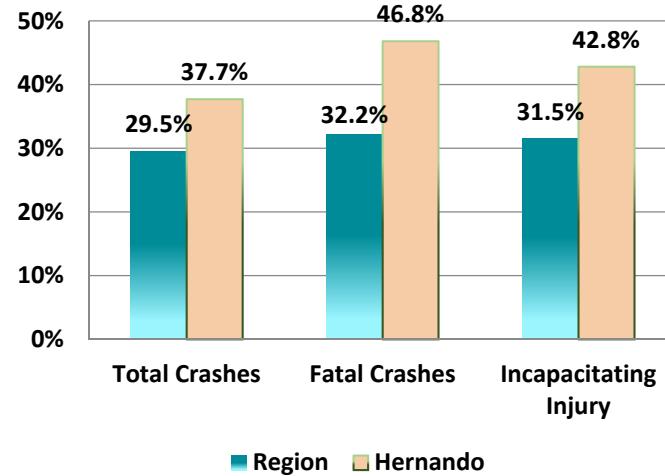


Figure 5-11: Aggressive Driving Crashes, 2010–2012, Citrus County

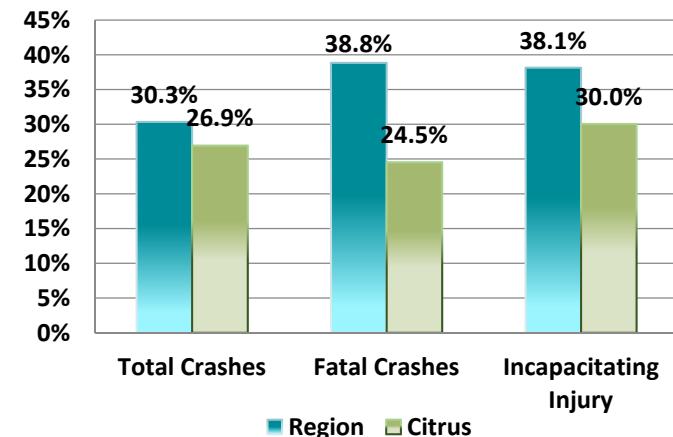


Figure 5-13: At Intersection Crashes, 2010–2012, Citrus County

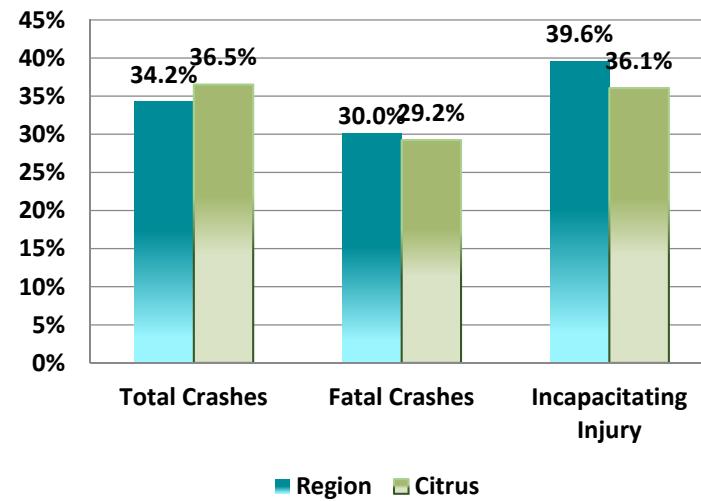


Figure 5-14: Vulnerable Road User Crashes, 2010–2012, Citrus County

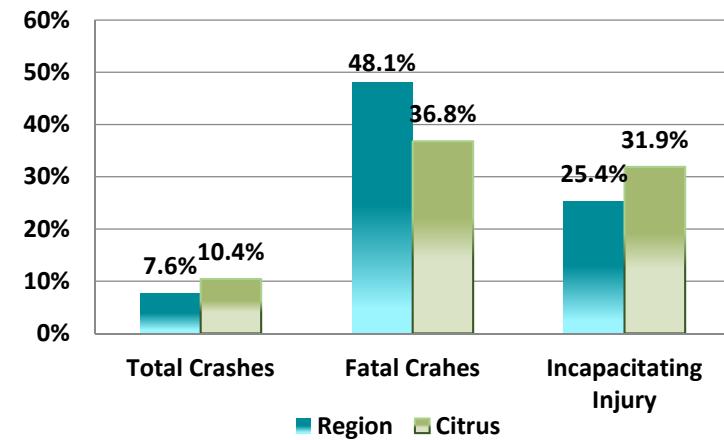


Figure 5-15: Impaired Driving Crashes, 2010–2012, Citrus County

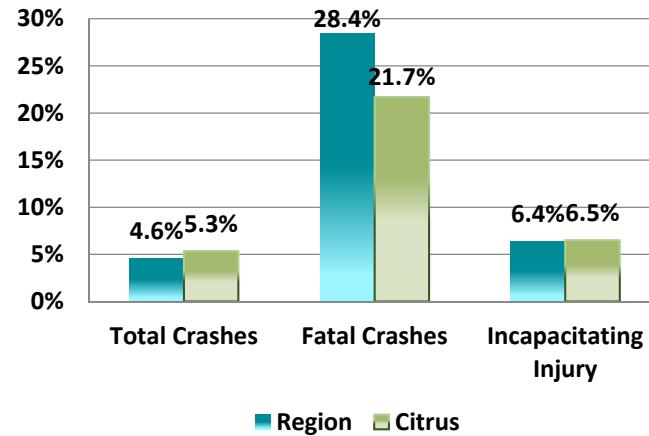


Figure 5-16: Lane Departure Crashes, 2010–2012, Citrus County

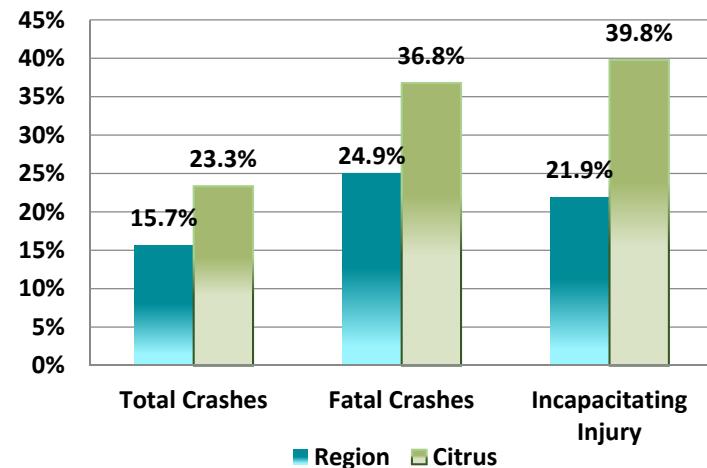
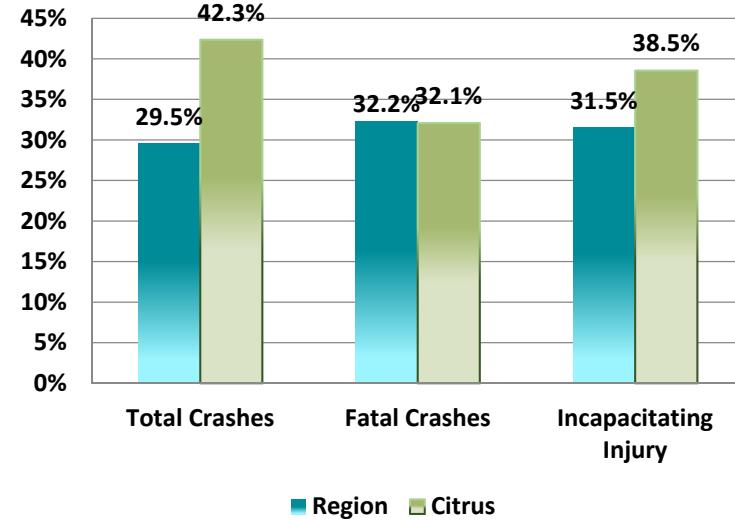


Figure 5-17: At-Risk Crashes, 2010–2012, Citrus County



In addition, crash locations on the major roadway network were geographically located for both Hernando and Citrus counties. Using the crash data management systems maintained by FDOT and/or Hernando and Citrus counties, the crashes were mapped to illustrate their locations for the SHSP safety emphasis areas. Then, using this information, roadway corridors in both counties with the highest frequency of crashes in each emphasis area were identified, as illustrated in **Map 5-19** for Hernando County.

Appendix E illustrates crash locations and corresponding corridors in each SHSP safety emphasis area. This information was then used in the prioritization of projects on the basis of safety in the 2040 Cost Affordable LRTP.

[Safety Strategies/Projects in 2040 LRTP](#)

Hernando and Citrus counties include many multimodal facility improvements geared toward supporting the national safety goals as well as goals and strategies identified in the Florida SHSP. These include intersection improvements, ITS improvements, road resurface/maintenance, bridge repairs, and improvements that help improve safety in alternative modes of transportation, including transit stop and accessibility improvements, and adding sidewalks and bike lanes.

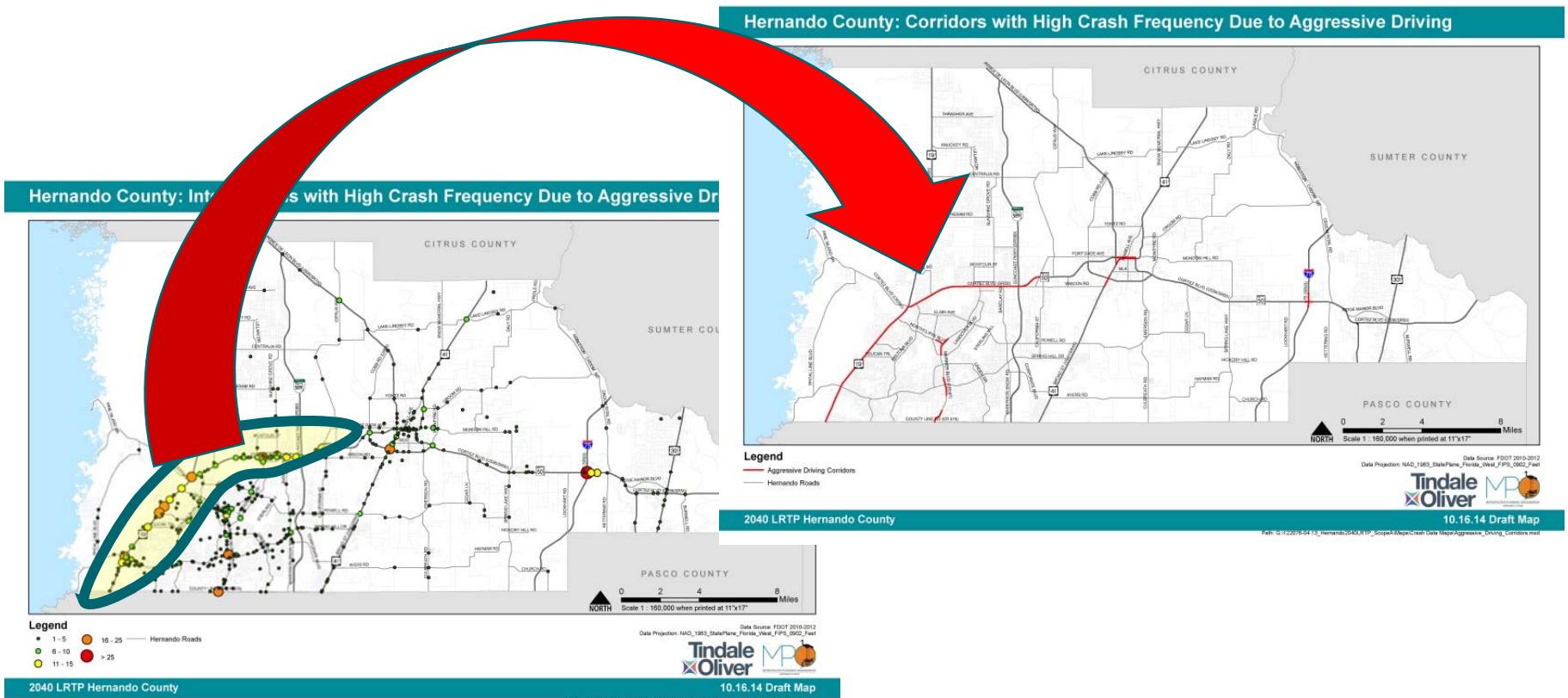
[Security Element](#)

Better planning in transportation security can help reduce the negative impacts to local and regional transportation systems from major natural or manmade events, such as hurricanes, tornadoes, flooding, or terror attacks. In addition, Federal requirements for

metropolitan planning also include considering security as a factor in LRTPs. The metropolitan planning process should provide for consideration and implementation of projects, strategies, and services that will increase the security of the transportation system for motorized and non-motorized users. USDOT defines transportation system security as the freedom from intentional harm and tampering that affects both motorized and non-motorized travelers.

The vulnerability of the transportation system and its use in emergency evacuations have become key concerns for the Department of Homeland Security (DHS), created in 2001. Established by DHS, the Urban Areas Security Initiative (UASI) focuses on enhancing regional preparedness in major metropolitan areas. The Tampa UASI, which includes Hernando and Citrus counties and six other neighboring counties, has been established to coordinate with the Florida Division of Emergency Management on expanding regional collaboration and developing integrated regional systems for prevention, protection, response, and recovery.

Map 5-19: Map Illustrating Crashes Developed to Identify Corridors



Emergency Preparedness in Hernando County

To ensure local emergency preparedness for natural disasters or man-made emergencies, a Local Mitigation Strategy (LMS) plan is a federal requirement by both the Federal Emergency Management Agency (FEMA) and DHS under 44 CFR Part 201. Hernando County has prepared a LMS plan, and the 2013 update has identified three hazard mitigation goals:

- Increase public awareness regarding disaster mitigation.
- Promote a disaster resistant community.
- Partner with the Division of Forestry to Develop a Wildfire mitigation program.

To achieve those goals, the County has identified specific objectives, which are reviewed annually by the Hernando County Local Mitigation Strategy Committee, to assess the activities undertaken during the prior year to achieve the objectives.

As part of the mitigation strategy, Hernando County regularly reviews and updates its guidelines for evacuations and shelter assistance. **Maps 5-20 and 5-21** show the hurricane evacuation routes and shelters in 2014 in Hernando County and Citrus County, prepared by each County's Emergency Management Office.

Emergency Preparedness in Citrus County

Flooding is the most common natural hazard in Citrus County with the greatest potential for significant financial and human impact. In addition to floods, emergency management officials in Citrus County coordinates with other local agencies to prepare residents for other natural disasters, including hurricanes, as well as other

catastrophic events such as a terrorist attack or problems at the nuclear power plant. The Citrus County Local Mitigation Strategy Working Group has prepared a Local Mitigation Strategy (LMS) plan and the 2015 update has identified following hazard mitigation goals:

- Minimize future losses from all disasters by reducing the risk to people and property
- Support a balance between government regulation/enforcement, and a personal awareness/responsibility for hazard mitigation by emphasizing education and training for property owners, families and individuals
- Prevent flood-related repetitive losses from natural disasters through regulation and education
- Reduce economic vulnerability and increase recovery capabilities of business and industry
- Emphasize pre- and post-disaster planning to decrease vulnerability of existing and new construction to loss
- Encourage public support and commitment to hazard mitigation, by communicating its benefits and justification in simple and understandable terms

Citrus County's hazard mitigation strategy includes numerous action items to achieve these goals, including but not limited to:

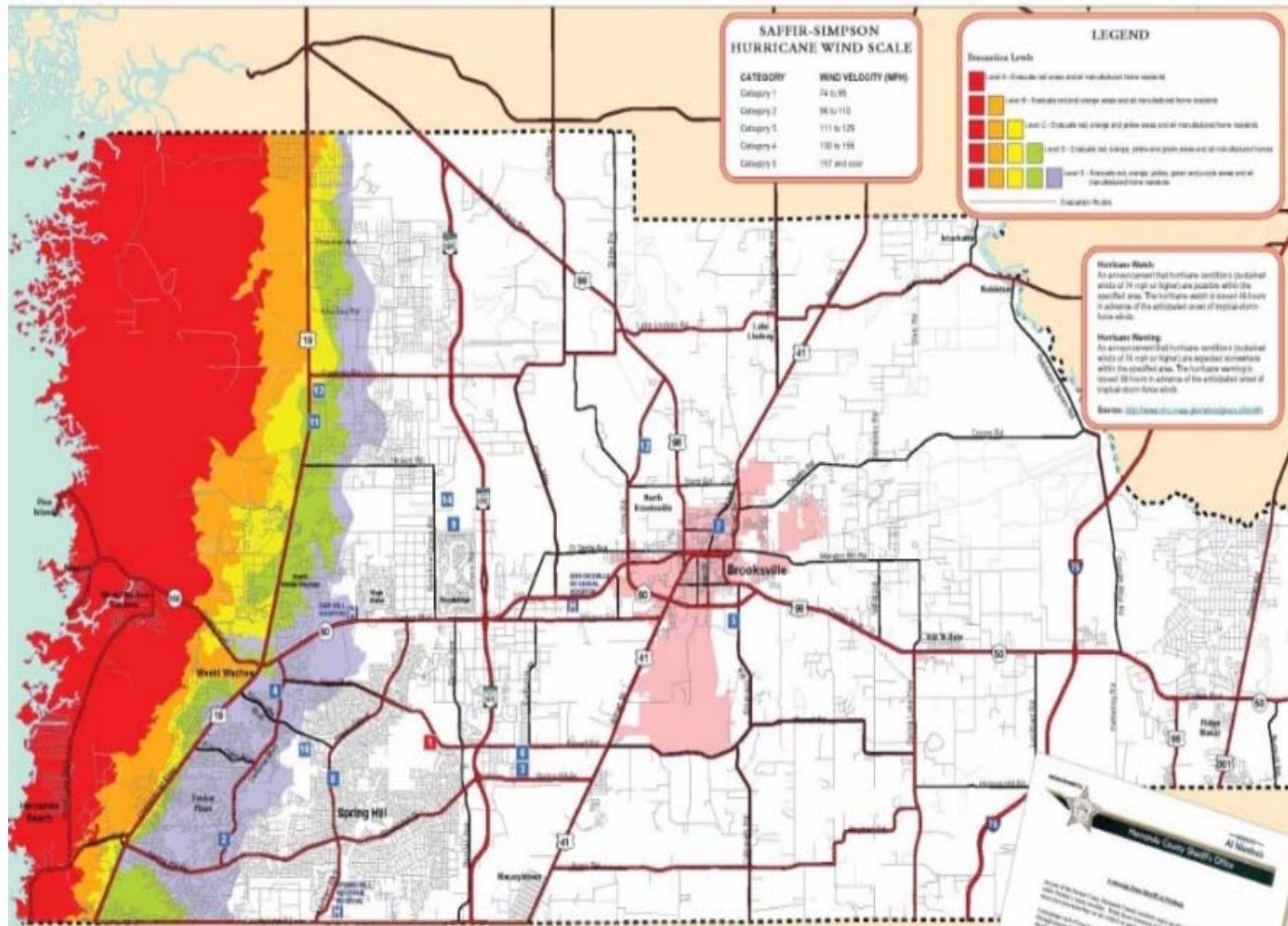
- Preventive measures (ordinances, additional planning, building codes, operation and maintenance activities, public education)

- Emergency services (hazard warning enhancements, emergency response improvements)
- Property protection (structure relocation/acquisition, elevation, flood-proofing, insurance, brush/shrub removal, and emergency response planning)

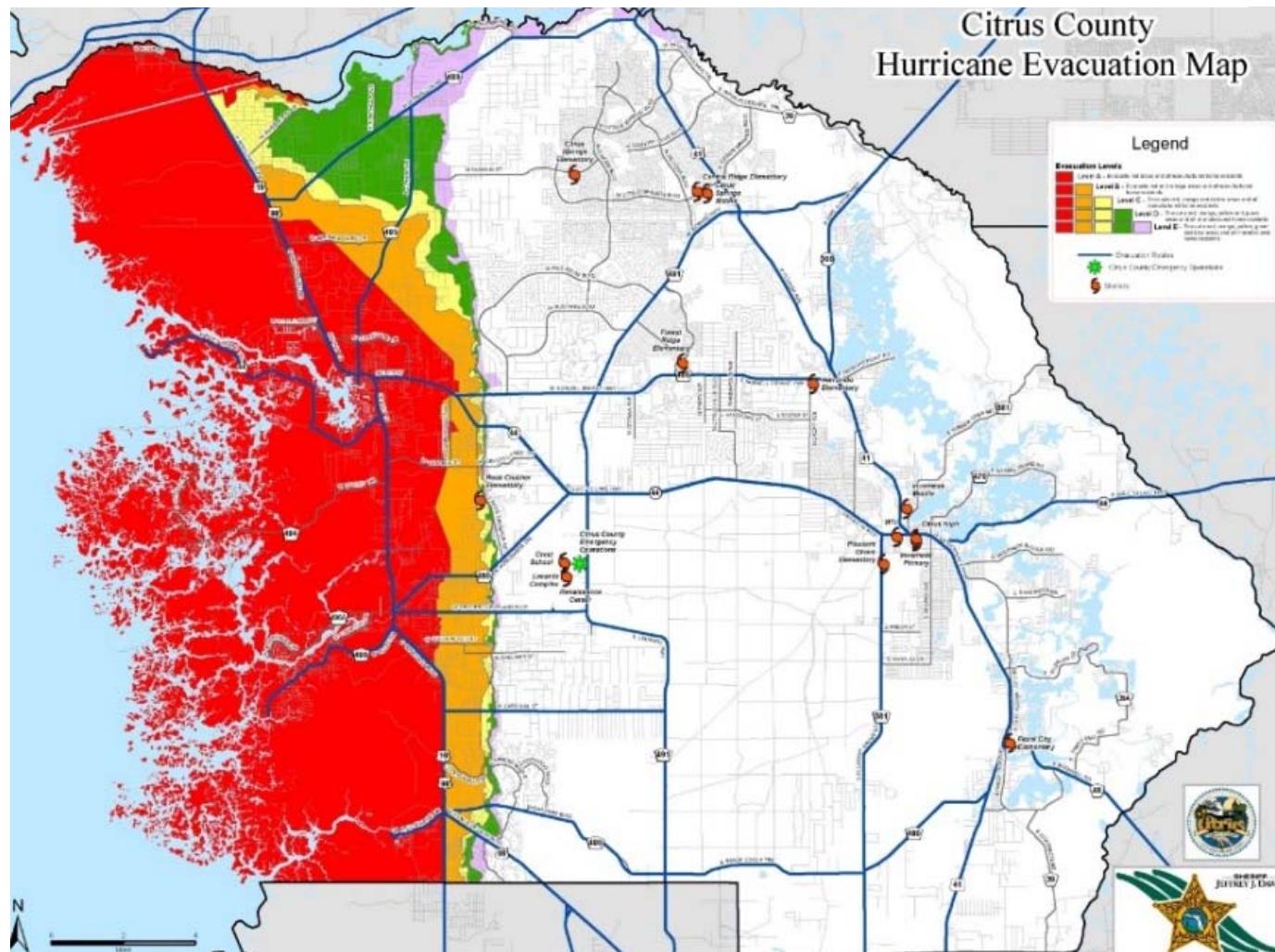
In addition, the County regularly provides public information through various outreach efforts on emergency evacuation and shelter locations.

The MPO's 2040 LRTP has identified numerous project priorities related to enhancing security in the two-county area. Examples include intersection capacity/safety/operational improvements on major evacuation routes, ITS improvements, and road widening/capacity additions on major evacuation routes in both Hernando and Citrus counties.

Map 5-20: Hurricane Evacuation Routes and Shelters in Hernando County, 2015



Map 5-21: Hurricane Evacuation Routes and Shelters in Citrus County, 2015

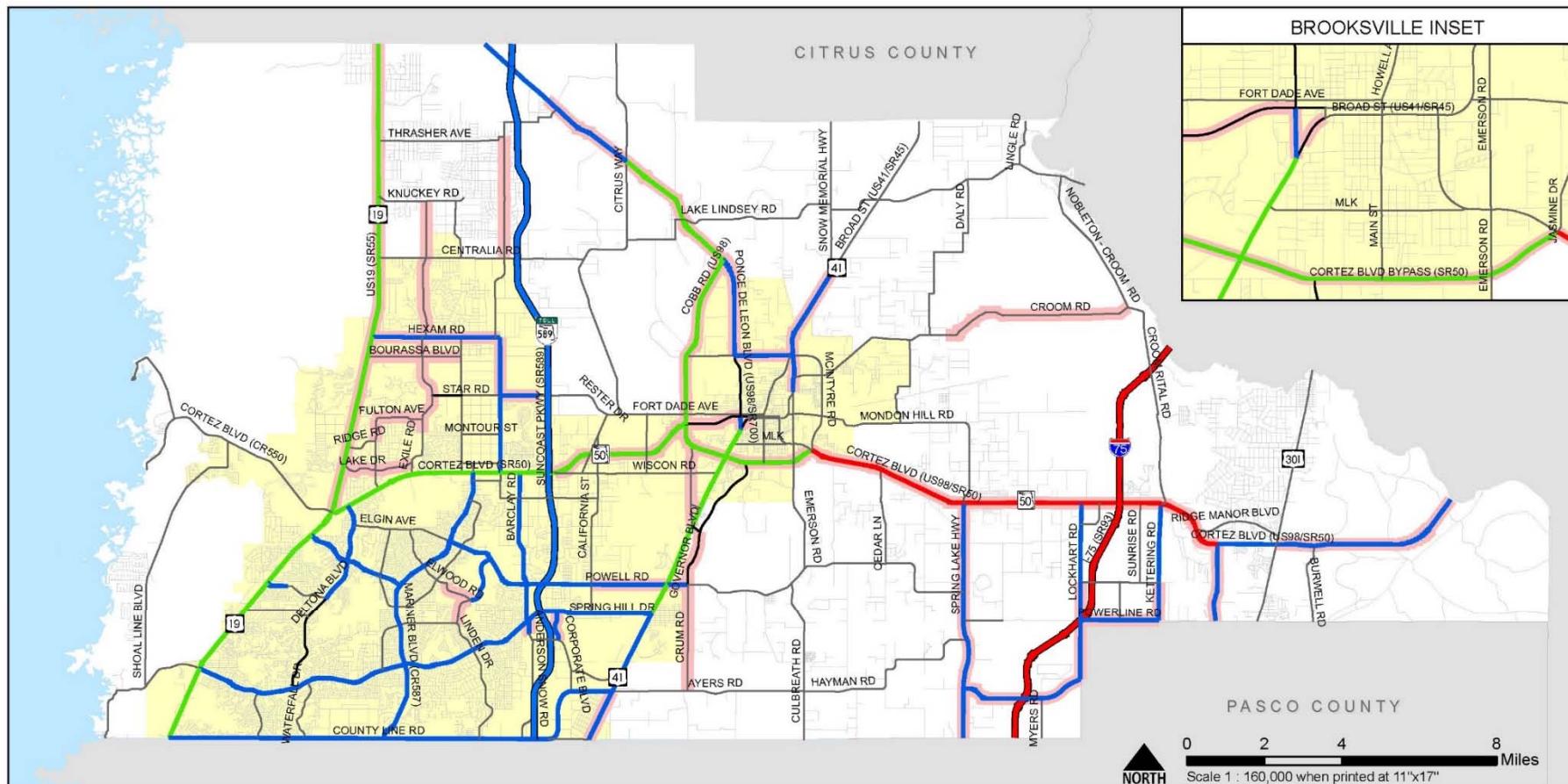


UNFUNDED TRANSPORTATION PROJECTS

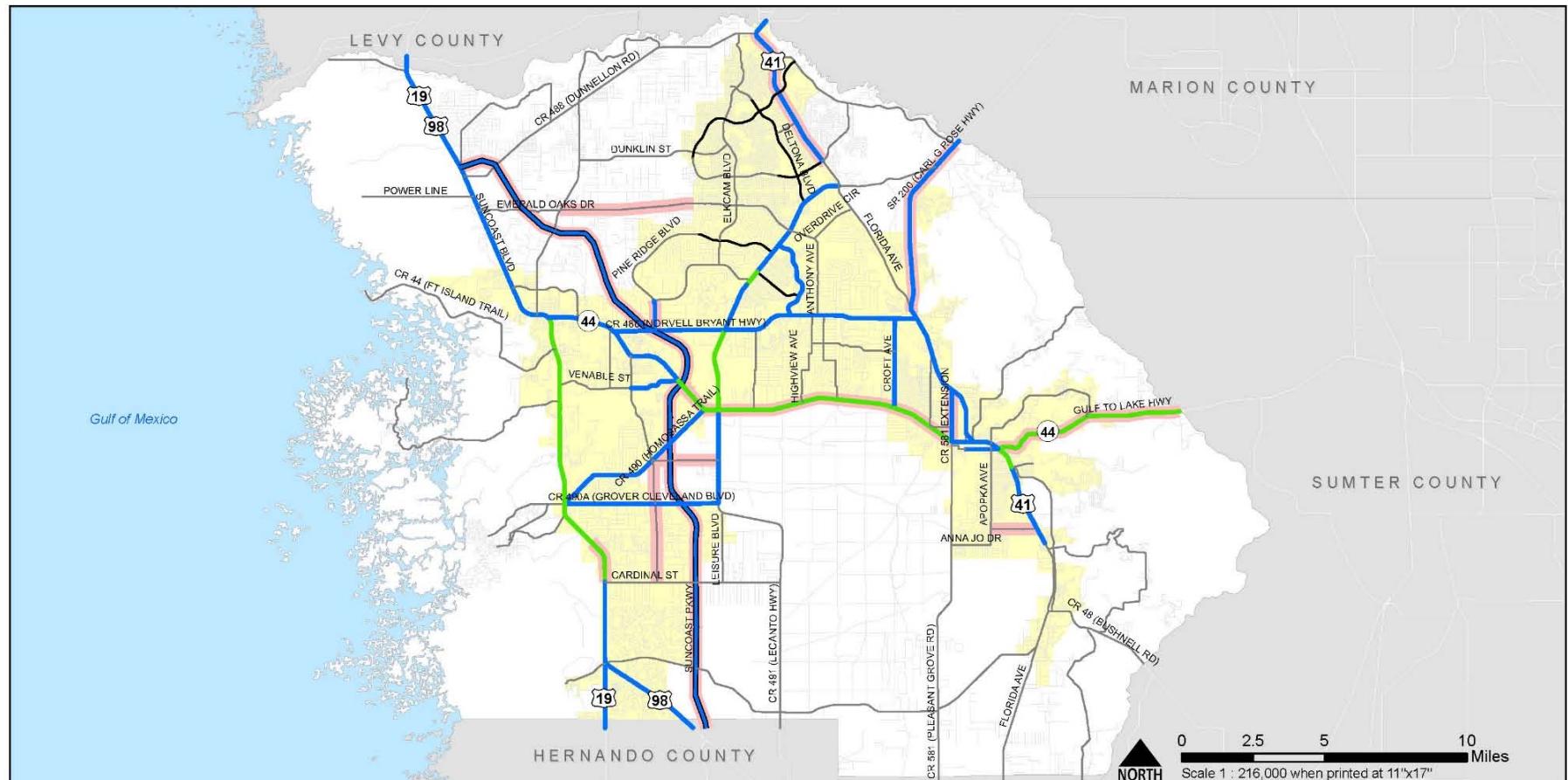
After all the projects have been funded, a list of needed projects still remains that are not expected to be completed by 2040 due to funding constraints. Those projects remain part of the LRTP, but are not included as Cost Feasible. Through amendment, the MPO has the opportunity change the listing of projects that are considered to

be Cost Feasible if local priorities change, new funding is identified, or if project costs are considerably different than planned for. **Map 5-22** illustrates the unfunded projects for Hernando County and **Map 5-23** illustrates the unfunded roadway needs for Citrus County. Tables listing the unfunded needs can be found in **Appendix C**.

Map 5-22: Hernando County Unfunded Roadway Needs Map

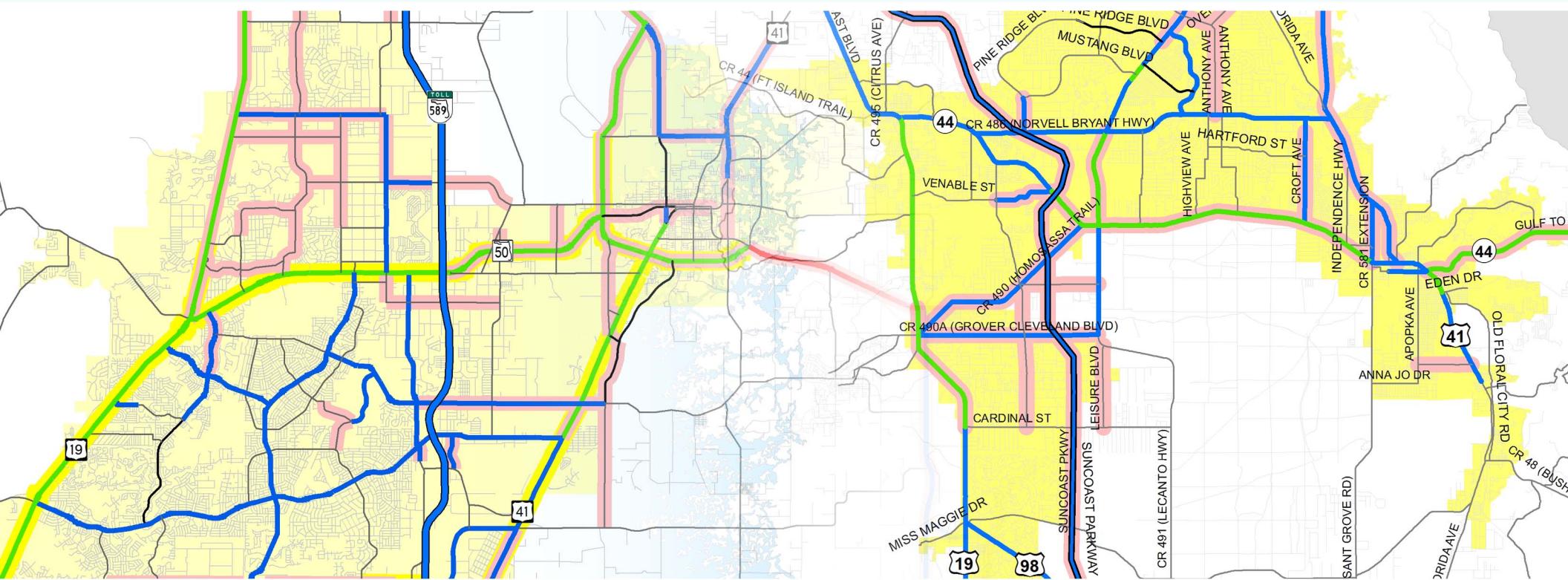


Map 5-13: Citrus County Unfunded Roadway Needs Plan



CHAPTER 6

Measures of Effectiveness



CHAPTER 6: MEASURES OF EFFECTIVENESS

INTRODUCTION

This chapter provides a summary of performance for the Hernando/Citrus 2040 Long Range Transportation Plan. Developing Measures of Effectiveness (MOEs) and analyzing performance allows the MPO to evaluate progress towards goals and determine the extent to which the goals are being achieved.

MOEs are presented and summarized to illustrate the differences in performance between existing (2014) conditions and 2040. The measures also are applied to both the Needs and the Cost Affordable networks. Plan performance is looked at in two ways: overall network performance and compared to the MPO identified goals and objectives.

NETWORK PERFORMANCE

Two roadway congestion measures were used to measure network performance for existing conditions, the 2040 Needs Plan, the 2040 Cost Affordable Plan, and the 2030 Interim Cost Affordable Plan:

- *Percent of Travel Occurring on Congested Highways* – Computes the percent of VMT that are traveling in congested conditions (volume-to-capacity ratio > 1.0).
- *Weighted Average Congestion* – An estimate of the percent of capacity consumed, with each highway being weighted

according to the VMT on that highway. As a result, highways that are traveled more heavily carry a greater weight in the computation of Weighted Average Congestion.

In addition to these quantitative congestion measures, Table 6-1 also includes other quantitative measures including the number of centerline miles of various types of roadways within the network and the number of lane miles for the same networks.

Table 6-2 lists the quantitative measures for transit, bicycle, and pedestrian facilities. These measures are designed to evaluate the accessibility of the multimodal transportation system. The following observations can be drawn from the data listed in these tables.

Hernando County

- The percent of VMT traveling under congested conditions decreases from 1.06% for existing conditions to 0.74% in the Needs Plan. This signifies that the increased capacity in the Needs Plan is addressing the congestion that results from future growth. This same measure for the Cost Affordable Plan increases to nearly 2.77%. Due to the financial constraints of the Cost Affordable Plan, increases in capacity are not adequate to address growth in future travel. While this is a true statement, this increase in the level of congestion is not significant for a projection of system-wide congestion for the year 2040.

- The weighted average volume-to-capacity ratio increases from 0.43 in 2014 to 0.46 in the Needs Plan and 0.54 in the Cost Affordable Plan. This indicates that while congestion is increasing in 2040, the 0.54 volume-to-capacity ratio projected for Cost Affordable Plan is just over one-half of the available transportation system capacity.
- Centerline miles of roadway are projected to increase from 397 miles in 2014 to 452 miles in the Needs Plan and 420 miles in the Cost Affordable Plan.
- Centerline miles of roads providing direct access to Activity Centers are projected to increase from 50 miles in 2014 to 87 miles in the Needs Plan and 86 miles in the Cost Affordable Plan. This means that new roadways are being added to the transportation system based on funding identified in the LRTP.
- Route miles of transit service are projected to increase from about 47 miles in 2014 to 104 miles in the Cost Affordable Plan and 153 miles in the Needs Plan.
- Both sidewalk and bicycle lane coverage will increase in the Cost Affordable Plan. In 2014, there were approximately 126 miles of roadway with bicycle lanes and 82 miles with sidewalks. This is expected to increase to 250 miles of bicycle lanes and 154 miles of sidewalks in the Cost Affordable Plan.

Citrus County

- The percent of VMT traveling under congested conditions increases from 0% for existing conditions to 5% under the Needs Plan and nearly 12% under the Cost Affordable Plan. This means that approximately 1 out of every 8 vehicle miles of travel will be travelling on a congested roadway.
- The weighted average volume-to-capacity ratio increases from 0.51 in 2014 to 0.54 in the Needs Plan and 0.64 in the Cost Affordable Plan.
- Centerline miles of roadway are projected to increase from 381 miles in 2014 to 432 miles in the Needs Plan and 388 miles in the Cost Affordable Plan.
- Route miles of transit service are projected to increase from about 89 miles in 2014 to 121 miles in the Cost Affordable Plan and 147 miles in the Needs Plan.
- Both sidewalk and bicycle lane coverage will increase in the Cost Affordable Plan. In 2014, there were approximately 21 miles of roadway with bicycle lanes and 60 miles with sidewalks. This is expected to increase to 68 miles of bicycle lanes and 117 miles of sidewalks in the Cost Affordable Plan.

Table 6-1: System-Wide Congestion Measures

| Performance Measure | 2014 Existing Conditions | | 2030 Cost Affordable Plan | | 2040 Cost Affordable Plan | | 2040 Needs Plan | |
|--|--------------------------|--------|---------------------------|--------|---------------------------|----------|-----------------|----------|
| | Hernando | Citrus | Hernando | Citrus | Hernando | Citrus | Hernando | Citrus |
| % OF VMT WITH VOLUME TO CAPACITY RATIO GREATER THAN 1.0 | | | | | | | | |
| All Major Roads | 1.06% | 0.00% | 2.94% | 6.00% | 2.77% | 11.71% | 0.74% | 4.79% |
| Regional Roads | 1.52% | 0.00% | 3.67% | 3.49% | 2.64% | 10.78% | 0.41% | 1.33% |
| Intermodal Access Roads | 0.00% | 0.00% | 0.00% | 0.00% | 3.53% | 5.10% | 0.46% | 0.00% |
| Activity Center Access Roads | 0.00% | 0.00% | 1.28% | 10.19% | 5.05% | 11.63% | 0.49% | 4.92% |
| Primary Truck Routes | 1.37% | 0.00% | 2.55% | 1.68% | 1.19% | 11.74% | 0.56% | 1.43% |
| Hurricane Evacuation Routes | 1.22% | 0.00% | 3.49% | 6.28% | 2.67% | 11.95% | 0.87% | 4.16% |
| AVERAGE WEIGHTED VOLUME-TO-CAPACITY RATIO | | | | | | | | |
| All Major Roads | 0.43 | 0.51 | 0.51 | 0.60 | 0.54 | 0.64 | 0.46 | 0.54 |
| Regional Roads | 0.43 | 0.56 | 0.54 | 0.64 | 0.57 | 0.69 | 0.47 | 0.54 |
| Intermodal Access Roads | 0.46 | 0.58 | 0.52 | 0.51 | 0.57 | 0.55 | 0.53 | 0.49 |
| Activity Center Access Roads | 0.46 | 0.60 | 0.53 | 0.70 | 0.59 | 0.72 | 0.49 | 0.57 |
| Primary Truck Routes | 0.46 | 0.55 | 0.55 | 0.62 | 0.58 | 0.68 | 0.50 | 0.52 |
| Hurricane Evacuation Routes | 0.45 | 0.54 | 0.54 | 0.62 | 0.56 | 0.67 | 0.48 | 0.55 |
| CENTERLINE MILES | | | | | | | | |
| All Major Roads | 396.81 | 381.30 | 407.49 | 387.51 | 420.36 | 387.51 | 452.19 | 432.07 |
| Regional Roads | 182.03 | 127.30 | 187.06 | 127.30 | 187.06 | 127.30 | 187.06 | 160.26 |
| Intermodal Access Roads | 19.53 | 14.83 | 31.25 | 26.91 | 47.11 | 26.91 | 63.79 | 29.55 |
| Activity Center Access Roads | 50.80 | 71.37 | 83.75 | 73.61 | 85.82 | 73.61 | 87.46 | 91.96 |
| Primary Truck Routes | 177.56 | 117.12 | 181.32 | 117.12 | 181.32 | 117.12 | 183.11 | 150.07 |
| Hurricane Evacuation Routes | 256.02 | 210.02 | 260.53 | 210.02 | 260.53 | 210.02 | 260.53 | 236.82 |
| LANE MILES | | | | | | | | |
| All Major Roads | 1,064.00 | 929.15 | 1,145.70 | 986.42 | 1,217.65 | 1,015.10 | 1,471.66 | 1,221.99 |
| Activity Center Access Roads | 158.44 | 200.89 | 286.81 | 223.58 | 301.30 | 245.02 | 347.79 | 324.77 |
| Primary Truck Routes | 605.75 | 384.00 | 657.33 | 412.63 | 699.46 | 418.44 | 841.25 | 600.04 |

Table 6-2: Multimodal System Measures

| Performance Measure | 2014 Existing Conditions | | 2030 Cost Affordable Plan | | 2040 Cost Affordable Plan | | 2040 Needs Plan | |
|---|--------------------------|---------------|---------------------------|---------------|---------------------------|---------------|-----------------|---------------|
| | <i>Herndon</i> | <i>Citrus</i> | <i>Herndon</i> | <i>Citrus</i> | <i>Herndon</i> | <i>Citrus</i> | <i>Herndon</i> | <i>Citrus</i> |
| TRANSIT FACILITIES | | | | | | | | |
| Miles of Transit Service | 47.415 | 88.52 | 62.615 | 92.35 | 103.847 | 121.54 | 152.627 | 146.53 |
| % of Corridor Miles with Transit Service | 11.95% | 23.21% | 15.37% | 23.83% | 24.70% | 31.36% | 33.75% | 33.91% |
| % of Corridor Miles with Transit Service that are Congested | 0.0% | 0.0% | 2.4% | 0.00% | 3.4% | 6.82% | 1.2% | .28% |
| Land Area within ¼ mile of Transit Service (sq. mi.) | 23.10 | 40.96 | 29.99 | 42.87 | 49.21 | 56.43 | 70.42 | 68.02 |
| BICYCLE LANES | | | | | | | | |
| Miles with Bicycle Lanes | 126.54 | 21.21 | 152.41 | 42.83 | 250.52 | 68.93 | 285.63 | 111.92 |
| % of Corridor Miles with Bicycle lanes | 31.89% | 5.56% | 37.40% | 11.05% | 59.60% | 17.79% | 63.17% | 25.90% |
| SIDEWALKS | | | | | | | | |
| Miles with Sidewalks | 82.65 | 60.66 | 107.93 | 80.30 | 154.66 | 117.20 | 201.41 | 133.65 |
| % of Corridor Miles with Sidewalks | 20.83% | 15.91% | 26.49% | 20.72% | 36.79% | 30.24% | 44.54% | 30.93% |

GOALS, OBJECTIVES, AND PERFORMANCE MEASURES

Performance measures are established to track the extent to which objectives are being achieved as a result of the 2040 LRTP. Tables 6-3 through 6-7 present each goal, the objectives associated with the goal, and the corresponding performance measure for each objective.

Specific thresholds for each performance measure will be established in the future when the new federal rules are adopted. In the interim, the Hernando/Citrus MPO is participating in statewide meetings and federal webinars to better understand future expectations concerning measurable targets. The targets

shown in Tables 6-3 through 6-7 are based on current trends and whether the current trend will be maintained, increased or decreased over time. Some targets require a simple yes or no answer. The measurements recorded for each objective indicate the performance that can be expected from the transportation solutions identified in the 2040 LRTP.

With this LRTP, the Hernando/Citrus MPO has made progress toward a more performance-based planning approach. The next step for the MPO is to work towards defining specific thresholds for performance measures that subsequently can be tracked to monitor the progress and performance of the transportation system in Hernando and Citrus counties.

Table 6-3: Goal 1 – Support Economic Development and Manage Growth

| Objective | Measure | Target | Hernando | | Citrus | |
|---|---|-------------------|----------------------------|------------------------------|----------------------------|------------------------------|
| | | | 2014 | 2040CA | 2014 | 2040CA |
| Improved access and connections to port, rail, and airport facilities. | Lane miles of projects that improve access and connections to the port, rail, and airport facilities | Maintain/increase | 66 lane miles | 187 lane miles | 48 lane miles | 96 lane miles |
| Support economic development in specific geographic areas (Brooksville CBD, Brooksville-Tampa Bay Regional Airport, I-75/SR-50 Planned Development District, CR 491 in Citrus County). | Maintain LOS on corridors providing access to these areas | Maintain/increase | 0 centerline miles > LOS D | 3.7 centerline miles > LOS D | 0 centerline miles > LOS D | 6.1 centerline miles > LOS D |
| | Projects identified and funded to improve access to targeted growth areas | Maintain/increase | 158 lane miles | 301 lane miles | 201 lane miles | 245 lane miles |
| Identify projects in corridors that allow high density and intensity land uses to be served by public transit. | Include map identifying potential high transit ridership areas? | Yes/no | Yes | Yes | Yes | Yes |
| Ensure that regional and local markets are adequately served by the transportation system. | Number of regional transit routes | Maintain/increase | 0 | 3 | 0 | 3 |
| | Are regional and local markets served by the identified projects? | Yes/no | N/A | Yes | N/A | Yes |
| Promote the application of affordable growth strategies in future land use and transportation planning. | Does the plan consider affordable growth strategies? | Yes/no | Yes | Yes | Yes | Yes |
| Identify rights-of-way for preservation that will include not only sufficient space for roadway improvements, but also improvements for mass transit and bicycle and pedestrian modes, and will support an advanced right-of-way acquisition program for future planned improvements. | Does the plan consider advanced right-of-way acquisition for improvements for roadway as well as mass transit, bicycle, and pedestrian modes? | Yes/no | N/A | Yes | Yes | Yes |
| | Does the plan consider right-of-way acquisition as a phase that can be planned independently? | Yes/no | N/A | Yes | N/A | Yes |

Table 6-3: Goal 1 – Support Economic Development and Manage Growth. continued

| Objectives | Goal | Target | Hernando | | Citrus | |
|--|---|----------|----------|--------|--------|--------|
| | | | 2014 | 2040CA | 2014 | 2040CA |
| Identify transportation issues regarding the role of the Brooksville downtown area within the community and identify methods for preserving and enhancing the commercial and social integrity of this area. | Does the plan identify transportation issues for the downtown Brooksville area? | Yes/no | Yes | Yes | N/A | N/A |
| Identify transportation issues regarding Hernando and Citrus counties Activity Centers and targeted multimodal corridors within the community and identify measures for preserving and enhancing the commercial and social integrity of these areas. | Are transportation issues in Hernando/Citrus county Activity Centers and Activity Corridors identified? | Yes/no | | Yes | | Yes |
| | Are methods to preserve and enhance Activity Centers and Multimodal Corridors identified in the plan? | Yes/no | | Yes | | Yes |
| Preserve corridors for future planned improvements | Centerline miles preserved on corridor preservation map | Increase | | N/A | | N/A |
| Identify and provide for special land use needs within the Suncoast Parkway Corridor, especially at interchange areas. | Does the plan identify special land use need within the Suncoast Parkway Corridor? | Yes/no | | N/A | | N/A |

Table 6-4: Goal 2 – Increase Safety and Security

| Objective | Measure | Target | Hernando | | Citrus | |
|--|---|---------------------|----------|---------------------|--------|---------------------|
| | | | 2014 | 2040CA | 2014 | 2040CA |
| Consistency with FDOT Strategic Highway Safety Plan (SHSP). | Is the plan consistent with the Strategic Highway Safety Plan and Safety Emphasis Areas? | Yes/no | Yes | Yes | Yes | Yes |
| Reduce transportation-related crashes, injuries, and fatalities using current design standards, advanced technologies, and education. | Crash areas as percentage of total projects | Meet SHPP standards | | Meet SHPP standards | | Meet SHPP standards |
| | Acceptable operating conditions during the peak hour? (MAP-21) | Yes/no | Yes | Yes | Yes | Yes |
| | Daily vehicle hours of delay (MAP-21) | Meet | 9,537 | 18,763 | 5,413 | 8,224 |
| | Travel time reliability (MAP-21) | Increase | 97% | N/A | 97% | N/A |
| | Does the plan use crash data to prioritize projects in CMP and LRTP? | Yes/no | Yes | Yes | Yes | Yes |
| Encourage transportation investments and policies that result in a higher level of personal security for pedestrians, cyclists, motorists, and users of transit. | Are security plans and policies considered in the plan? | Yes/no | | Yes | | Yes |
| | Are security plans considered for intermodal facilities, including the port, airport, rail, etc.? | Yes/no | | Yes | | Yes |

Source : Map21 2014 Performance Measure Report; <http://www.dot.state.fl.us/planning/performance/MAP-21/MAP-21PerformanceReport.pdf>; FDOT 2014 Multimodal Mobility Performance Measure Source Book; <http://www.dot.state.fl.us/planning/statistics/sourcebook/2014.pdf>

Table 6-5: Goal 3 – Provide for the Mobility Needs of People and Freight

| Objective | Measure | Target | Hernando | | Citrus | |
|--|---|-------------------|----------|----------|--|------------|
| | | | 2014 | 2040CA | 2014 | 2040CA |
| Provide for the transportation needs of older adults, persons with disabilities, and low-income population of Hernando and Citrus counties and ensure the facilities are designed in such a manner as to not impair their use by these populations. | % of low-income population and older adults within ¼ mile of bus stops | Maintain/increase | 17% | 30% | Transit Development Plan being developed | |
| | % service area coverage | Maintain/increase | 3.78% | 9.00% | 5.80% | 7.80% |
| Use other forms of transportation to reduce the demand for highway usage on congested facilities. | % of congested roads with transit | Maintain/increase | 0.00% | 3.40% | 0.00% | 6.82% |
| | Miles of bicycle/sidewalk facilities on congested facilities | Maintain/increase | 0 of 82 | 8 of 155 | 0 of 60 | 3.5 of 137 |
| Address and promote alternative forms of transportation such as mass transit, high occupancy toll (HOT), ridesharing, and other techniques when developing operational management strategies to increase the efficiency of traffic flow and increase vehicle occupancy rate. | Are alternative modes of transportation considered when developing operational management strategies? | Yes/no | Yes | Yes | Yes | Yes |
| Ensure that existing bicycle and pedestrian systems are enhanced and protected and provide for the safety of their users. | % of major road network with bicycle facilities | Maintain/increase | 31.89% | 59.6% | 5.56% | 17.79% |
| | % of major road network with sidewalk facilities | Maintain/increase | 20.83% | 36.79% | 15.91 | 30.24% |
| Identify appropriate safe and secure user-friendly support facilities for bicycle and pedestrian modes to ensure their usage as viable transportation modes. | Is life cycle cost maintenance budgeted for bicycle and pedestrian facilities? | Yes/no | | Yes | | Yes |
| | Are support facilities included in plans for non-motorized facilities? | Yes/no | | Yes | | Yes |
| Fund provision of mobility services to transportation disadvantaged where fixed route public transportation is not available. | <i>% of major road network serviced by transit</i> | Maintain/increase | 11.95% | 24.7% | 23.21% | 31.36% |

| Objective | Measure | Target | Hernando | | Citrus | |
|---|---|-------------------|--|--|--|--|
| | | | 2014 | 2040CA | 2014 | 2040CA |
| Include provisions for non-motorized modes in new projects and in reconstructions. | Do roadway projects include bicycle/pedestrian facilities consistent with local policies? | Yes/no | | Yes | | Yes |
| | Are operations and maintenance costs included in the identified projects? | Yes/no | | Yes | | Yes |
| Where effective, consider transportation demand and systems management strategies to reduce the demand for or delay the need for major improvements to the transportation system. | Does the plan make use of TDM strategies? | Yes/no | Yes. Part of CMP strategies and transit plan | Yes. Part of CMP strategies and transit plan | Yes. Part of CMP strategies and transit plan | Yes. Part of CMP strategies and transit plan |
| Identify corridors that provide for the interconnection of urbanized areas through a well-developed network of roadways. | Does plan identify corridors that connect the urbanized areas? | Yes/no | | Yes | | Yes |
| | LOS/Centerline miles of corridors, not congested, providing access to activity centers | Maintain/increase | 47.14 centerline mi. <=LOS D | 68.41 centerline mi. <=LOS D | 81.06 centerline mi. <=LOS D | 65.34 centerline mi. <=LOS D |
| | % VMT on roadways connecting major activity centers | Maintain | 19.10% | 29.80% | 31.63% | 29.78% |
| Review and document emergency evacuation routes. | Does the plan identify evacuation routes? | Yes/no | Yes | Yes | Yes | Yes |
| | Does the plan consider projects that maintain or enhance evacuation routes? | Yes/no | N/A | Yes | N/A | Yes |
| | Total lane miles of evacuation routes | Maintain/increase | 770 | 858 | 577 | 642 |
| | Is an evacuation plan in place? | Yes/no | Yes | | Yes | |
| | Does the plan prioritize improvements of existing facilities over the creation of new ones? | Yes/no | | Yes | | Yes |

Table 6-6: Goal 4 – Support the Efficient, Safe, and Secure Integration of Intermodal Systems

| Objective | Measure | Target | Hernando | | Citrus | |
|--|---|-------------------|------------|---|-----------|---|
| | | | 2014 | 2040CA | 2014 | 2040CA |
| Accommodate the safe and efficient goods movement via highway, airport, port, and rail systems. | % of roadway miles of projects on existing corridors vs. new corridors | Maintain/increase | | 75.00% | | 91.70% |
| | % VMT below adopted standard on roads designated as truck routes | Maintain/Reduce | 1.37% | 1.19% | 0.00% | 11.74% |
| | Average weighted volume-to-capacity ratio on roads designated as truck routes | Maintain/Reduce | 0.46 | 0.58 | 0.55 | 0.68 |
| | Percent VMT below adopted standard on roads designated as access routes to intermodal facilities | Maintain/Reduce | 0.00% | 3.53% | 0.0% | 5.10% |
| | Average weighted volume-to-capacity ratio on roads designated as access routes to intermodal facilities | Maintain/Reduce | 0.46 | 0.55 | 0.58 | 0.68 |
| | Does the plan consider freight specific infrastructure improvements/programs? | Yes/no | | Yes, freight is considered part of project prioritization process | | Yes, freight is considered part of project prioritization process |
| | Does the plan identify and improve high crash truck route corridors? | Yes/no | Yes | Yes | Yes | Yes |
| | Freight travel time reliability (MAP-21) | Maintain/Increase | Not avail* | N/A | Not avail | N/A |
| | Combination truck delay (MAP-21) | Maintain/Decrease | Not avail* | N/A | Not avail | N/A |
| | Truck miles traveled | Maintain | 261,117 | 509,511 | 100,468 | 171,805 |
| Identify and provide for enhancement and maintenance of roads providing access to intermodal facilities. | % truck miles severely congested (V/C > 1.2)** (MAP-21) | Decrease | 0.3% | 7.7% | 1.4% | 1.1% |
| | Does the plan consider maintenance for roadways providing access to intermodal facilities? | Yes/no | Yes | Yes | Yes | Yes |
| | Are intermodal facility improvements included in the plan? | Yes/no | Yes | Yes | Yes | Yes |

* not available at the county level

Table 6-7: Goal 5 – Preserve and Enhance Community Social and Environmental Values

| Objective | Measure | Target | Hernando | | Citrus | |
|---|--|-------------------|----------------------|----------------------|----------------------|----------------------|
| | | | 2014 | 2040CA | 2014 | 2040CA |
| Sensitivity to preserving the quality of the environment and in responding to air quality and energy conservation consistent with required federal regulations. | Does the plan consider air quality and environmental impacts of projects? | Yes/no | | Yes | | N/A |
| | VMT below adopted standard, providing access to designated Activity Centers | Maintain/Reduce | | 5.05% | | 11.63% |
| | % miles severely congested*** (MAP-21) | Maintain/Reduce | 0.00% | 0.55% | 0.00 | 1.87 |
| Constrain the development of highway facilities within corridors that are scenic in nature and, when appropriate, apply "parkway" treatments that enhance the overall social and aesthetic values of the community. | Scenic highway facility miles of roadway network | Maintain | 18 | 18 | 0 | Yes |
| Minimize disruption to established communities, activity centers, redevelopment areas, and infill areas | Does the plan minimize impacts on established neighborhoods? | Yes/no | Yes | Yes | Yes | Yes |
| Designate routes that minimize potential exposure from hazardous materials to the community. | Miles of designated evacuation routes | Maintain/increase | 256 centerline miles | 261 centerline miles | 210 centerline miles | 210 centerline miles |
| | Has an analysis been done to determine if planned projects disproportionately impact low-income, minority and older-adult populations? | Yes/no | | Yes | | Yes |

| Objective | Measure | Target | Hernando | | Citrus | |
|--|--|--------|----------|---------------------------------------|--------|---------------------------------------|
| | | | 2014 | 2040CA | 2014 | 2040CA |
| | Does the plan include mitigation strategies on projects that impact the environment and the low-income, minority, and older-adult populations? | Yes/no | | No adverse impact projects identified | | No adverse impact projects identified |
| To the greatest extent possible, ensure that transportation corridors are consistent with the character of surrounding areas and, whenever possible, used as a tool for preserving that character. | Does the plan preserve the character of surrounding areas and corridors? | Yes/no | | Yes | | Yes |

Source : Map21 2014 Performance Measure Report; <http://www.dot.state.fl.us/planning/performance/MAP-21/MAP-21PerformanceReport.pdf>; FDOT 2014 Multimodal Mobility Performance Measure Source Book; <http://www.dot.state.fl.us/planning/statistics/sourcebook/2014.pdf>

**% Truck miles severely congested refers to the percent of truck miles of travel, on links with volume to capacity ratios of 1.2 or greater during the worst daily time period.

*** % Miles severely congested refers to the percent of vTIMAS roadway segment centerline miles operating with a peak hour, peak direction volume to capacity ratio of 1.2 or greater.

CHAPTER 7

Achievements and Implementation Actions



CHAPTER 7: ACHIEVEMENTS AND IMPLEMENTATION ACTIONS

SUMMARY

This first 2040 Long Range Transportation Plan is a significant accomplishment for the newly-designated Hernando/Citrus MPO. The new MPO was created by the apportionment agreement that merged the Citrus County TPO with the Hernando County MPO. The first meeting of the Board of the new MPO was on July 15, 2015.

The 2040 LRTP establishes the blueprint that will guide multimodal transportation decisions for the 2040 horizon. The Plan provides continuing emphasis on roadway projects, with an expanded emphasis on transit, multiuse trails, sidewalks, and bicycle facility improvements. It is important to acknowledge major achievements and outcomes of the 2040 LRTP, as well as implementation actions that must be accomplished during the next five years.

2040 LRTP MAJOR ACHIEVEMENTS

- Ensured consistency with all applicable federal and State planning requirements, including meeting December 2014 deadline that required completion of the Citrus County component of the 2040 LRTP in less than five months.

- Developed socioeconomic data that identified targeted development areas, better integrating transportation investment decisions with land use. Additionally, developed weighting criteria that award points for projects that improve access to and through targeted development areas.
- Increased emphasis on safety and congestion management process, strategies, and improvements.
- Expanded the use of alternative modes of travel, including transit system improvements, multiuse trails, sidewalks, and bike facility improvements.
- Considered and relied heavily on public input to help identify and prioritize multimodal transportation improvements and alternative funding sources.
- Developed performance-based metrics, including general initial targets to measure the success of completed projects and study initiatives.

- Evaluated the environmental justice impacts that transportation improvements have on traditionally-underserved populations and whether such improvements created disproportionate impacts when compared to other populations.
- Developed a fiscally-constrained financial plan to meet the top priority multimodal transportation projects.

PLAN OUTCOMES

The 2040 LRTP provides several outcomes that provide benefits to the residents, visitors, and businesses of Hernando and Citrus counties. Some of the key outcomes are listed below:

- The population of the two counties is projected to grow to 446,964, an increase of 137,032 new residents by 2040. The 2040 LRTP provides the transportation infrastructure to support this level of population growth.
- Employment growth in the two counties is projected to grow to 166,203, an increase of 60,503 new employees by 2040. Both counties have identified targeted areas in which employment growth is desired. The 2040 multimodal transportation system can accommodate the projected level of employment growth.
- The 2040 LRTP used a variety of opportunities to obtain public input. Techniques included stakeholder interviews; consensus-building, environmental justice, and geographic workshops that included digital polling; email blasts; social

media use; web-based public surveys; and an interactive website for public comments during the Plan's public comment period. Public comment also was heard at CAC and TAC meetings and at MPO Board meetings.

- Based on LRTP Working Group and public input, several areas in Citrus County were identified for review as part of the upcoming Citrus County Safety and Congestion Management Process Study.
- The 2040 LRTP contains several key state transportation system projects:
 - *Interstate 75 in Hernando County* – Expansion of I-75 to an 8-lane facility, including significant improvements to the interchange at SR 50.
 - *Widening of US 41 in Citrus County* – Includes widening US 41 from SR 44 to SR 200 to a 4-lane divided facility. This 5.4-mile improvement has been a priority of Inverness and Citrus County for many years.
 - *Reversion of Downtown Brooksville One-Way Pairs* – This conversion to two-way traffic is a major change to Downtown traffic flows. Discussions to fund this project are ongoing among the City, the County, and FDOT.
 - *Re-designation of Cobb Road as a State facility in Hernando County* – To facilitate the improved movement of truck traffic and in conjunction with the Brooksville one-way pair reversion, Cobb Road will be



constructed to federal and State standards and designated as US 98 from SR 50 to US 98 (Ponce de Leon Blvd).

- *Emerson Road Extension in Hernando County* – Includes the reconstruction of Emerson Road as a 2-lane facility from the SR 50 Bypass to Martin Luther King (MLK) Dr. From MLK Dr, Emerson will then become US 41.
- Similarly, the 2040 LRTP contains several key county transportation system projects.

Hernando County:

- *Deltona Boulevard Widening* – Includes widening Deltona Blvd from Northcliffe Blvd to SR 50 to a 4-lane divided facility.
- *California Street Widening* – Includes widening California St from SR 50 to Sam C Rd to a 4-lane divided facility.
- *Rester Drive (Road Extension)* – Extends Rester Dr from Fort Dade to the Suncoast Parkway to a 2-lane facility.
- *I- 75 and SR 50 Targeted Growth Area* – Area generally includes Power Line Rd on the south, Kettering Rd on the east, SR 50 on the north, and Lockhart Rd on the west. Project funding includes a combination of developer, County, and FDOT participation. Improvements include Power Line Rd, Kettering Rd, Lockhart Rd, Sunrise Rd, Spine Rd, New Road C, and Dashbach St, including a new I-75 overpass.
- *Thrasher Ave/Other Associated Road Improvements* – Improvements to Thrasher Avenue and other associated

road improvements extend from US 19 to the Suncoast Parkway and include building Thrasher Ave from US 19 to the Sunshine Grove Extension as a 2-lane facility and improvements to 2-lane on Velvet Scooter Ave, Downey Woodpecker Rd, and Sunshine Grove Extension.

- *Brooksville Trail Corridor Feasibility Study* – Funded by FDOT D7, will develop a preferred alternative through Brooksville that will be part of the Coast to Coast Connector.
- *Additional Transit Service Frequency* - Increase service frequency and extend service hours



Citrus County:

- *Croft Avenue Widening* – Includes widening from SR 44 to East Hayes St to a 4-lane divided facility. Project has been discussed for several years and creates a needed north/south connection between SR 44 and CR 486.
- *Grover Cleveland Blvd Widening* – Includes widening from US 19 to Lecanto Highway to a 4-lane divided facility.
- *Lecanto Highway (CR 491) Widening Projects* – Includes widening from Pine Ridge Blvd W to US 41 N to a 4-lane

divided facility (cost for this improvement in the 2031–2040 time period total approximately \$51 million) and widening from SR 44 to Horace Allen Rd to a 6-lane divided facility.

- *Watson Street Extension Study* – To address the County's interest in the economic development of the airport area, a feasibility study for the extension of Watson is proposed in the 2020–2025 timeframe.
- *Stagecoach Trail along CR480* – Alignment for a multi-use trail was identified during the public involvement process.
- *Crystal River–Inverness Limited Express Bus Service* – Transit route connecting Crystal River to Inverness.



Citrus and Hernando Counties:

- *Unfunded multimodal project needs* (illustrative projects) were identified during the plan development process. Having illustrative projects in the 2040 LRTP enables these types of projects to be administratively amended into the Cost Affordable Plan if additional funding becomes available.

IMPLEMENTATION ACTIONS

Several implementation actions are necessary to advance the 2040 LRTP. These actions offer significant challenges to the MPO and include the following:

- Given the failed Local Option Sales Surtax referendum, a 2040 LRTP amendment must be implemented to clearly demonstrate cost affordability of the 2040 LRTP through commitment to the funding sources the Plan is using to fund projects and maintenance. If a Local Option Sales Tax continues to be a funding source for the 2040 LRTP in Hernando County, it will need to be supported by a Board of County Commissioners resolution that can be included in the 2040 LRTP Plan Amendment.
- Funding will continue to be a critical issue and a significant challenge given the recent sales tax funding failures and transportation impact fee deferrals in both counties. Alternative revenue sources will need to be evaluated for potential public and political support prior to the start of the 2045 LRTP update process.
- The 2045 LRTP will need to create project priorities being established as a single project list across two counties. Efforts to accomplish this should begin now.
- The 2040 LRTP should be used to guide annual updates to the Five-Year TIP and County Capital Improvements Programs, including prioritized projects for congestion management and safety and bicycle, pedestrian, and

multiuse trails. Annual updates must be consistent with projects included in the 2040 LRTP.

- It will be necessary to confirm that follow-up studies and plans identify more specific action plans and timeframes for improvements (such as subarea and corridor studies, pedestrian safety action plans, transit system operational studies, etc.) and are consistent with the 2040 LRTP.
- Citrus County should complete its Transit Development Plan by September 2015, which will facilitate the continuation of State and federal funding for transit in the county.
- The first MPO Congestion Management Plan for Citrus County should be completed by March 2016.
- Regional priorities for the movement of people and goods will need to be reviewed so that supporting land use and infrastructure needs can be better coordinated and evaluated.
- Adopted federal rules concerning metropolitan planning will be in place by 2016 that will require MPOs to meet requirements one year later. The emphasis will be on performance measures and targets that confirm that the expenditure of funds results in measurable benefits that move the MPO toward meeting established targets. Targets will need to be flexible and able to be changed as local government and MPO priorities change.

Each year, the MPO will prepare an Annual Progress Report on the status of Implementation Actions that will present the progress toward meeting the above Implementation Actions and any new

priorities added during the year. The Annual Progress Report will be distributed to the MPO Board and its Committees and will be posted on the MPO website.

