

PLAN DEVELOPMENT SCHEDULE

Development of the 2025 Long Range Transportation Plan followed a schedule designed to optimize the production of materials that allowed for committee, citizen and policy review in a timely manner. Figure III-1 depicts major activities conducted during the Plan Update and the time allocated for each task.

Chapter III: Plan Development Process

PRELIMINARY TASKS

Identification of Critical Current Issues

The Plan not only addresses system needs caused by long range travel demand, but also looks at critical areas where urgent issues must be resolved. These issues can be in the form of large or small scale operational deficiencies such as congestion or high accident locations, but impending development that will result in high traffic levels, or by physical deterioration of the system.

Model Validation

For several months during 2002 and 2003, FDOT and its consultant worked to validate the Regional Planning Model to the 2000 base year. Preliminary results of this exercise were made available to MPO staff and were presented to the Technical Advisory Committee.

Update of the Facilities Inventory

To support the development and evaluation of transportation system alternatives, the MPO's facilities inventory has been continually updated. The inventory consists of both physical and operational information about highways, public transportation, bicycle, pedestrian, intermodal facilities (port, airport, transit, and truck routes), and major activity centers. The facility inventory and attribute database was conducted to collect sufficient data for the 2000 base year to support development of analysis tools used in the LRTP development process. Data collected in these tasks was used for the database developed in the Planning and Analysis Management Tools category. *The MPO's ArcView Geographical Information System (GIS) application was used to graphically display the results of database analysis.*

Planning and Analysis Management Tools

Tasks involved refinement of the MPO's database (see above) used to store and maintain data about transportation facilities, development of a methodology for evaluating plan alternatives, a project prioritization strategy for future multi-modal transportation system improvements, and identifying activities and sites which must be uniquely considered from an accessibility point of view (such as airports, railroad stations, major medical facilities, colleges and universities, regional shopping malls, central business districts, etc.). The database, GIS application, and project prioritization strategy continued to be an important management tool to assist the MPO in evaluating various transportation plan alternatives, and in developing recommendations for consideration by the public, the Citizens Advisory Committee (CAC), the Technical Advisory Committee (TAC), the Bicycle/Pedestrian Advisory Committee (BPAC), the Transportation Systems Operations Committee (TSOC), the Transportation Disadvantaged Local Coordinating Board (LCB), and the MPO Board.

TRANSPORTATION AND LAND USE

Existing and Future Land Use

Existing Land Use

The type, distribution, and density/intensity of land use determines travel patterns and characteristics within urban areas. Accurately inventorying existing land use data is essential to creating a database for use in the model validation process. The Existing Land Use map depicted in Figure III-2 was prepared by the Hernando County Planning Department. Land use categories are consistent with Department of Revenue codes that are utilized by the Hernando County Property Appraiser's Office. The map also contains a table showing the approximate number of acres within each land use type.

Acreage distributions are also calculated for each of the 141 traffic analysis zones that comprise Hernando County. These figures were used to adjust socio-economic data for the 2000 base validation year.

Future Land Use

Establishing technically justifiable future land use classifications enables the accurate calculation of future travel demand data. Land use planning for Hernando County is performed by the County Planning Department in cooperation with the City of Brooksville. As shown in the Future Land Use Element of the County's Comprehensive Plan, the map in Figure III-3 depicts the distribution of future land used for all of Hernando County, including the City of Brooksville. As with existing land use data, zonal distributions of future land use categories are used in conjunction with population and employment growth totals (discussed in the following sections) to predict the locations and type of activities that will determine future travel demand.

Socio-Economic Data Development

2000 Base Year ZDATA

Early in 2003, MPO and Hernando County Planning Department staffs conducted a detailed review of the County's socio-economic data using the updated 2000 traffic analysis zone configuration. Several items were inventoried in order to accomplish this task. Current land use data and other data related to levels of existing development by TAZ were available by the Hernando County Planning Department. This information included:

1. Group quarters, homes for the elderly, multi-family projects, and mobile home parks.
2. Residential and Class 1 subdivisions.
3. Lands under public ownership.
4. 100 year flood zones and other environmental conservation areas.

Additionally, current year population data for the new TAZ configuration was available from the Planning Department's demographic division.

The initial inventory of employment data was provided by FDOT District 7 through the Regional Transportation Analysis. This consisted of a database purchased from InfoUSA which gave initial counts by type of employment. Other items related to attraction variables that were updated included:

1. List of major employers (<50 at one location).
2. Countywide list of structures over 50,000 gross sq. ft.

3. Current school enrollment figures, including private schools.
4. Hotel/motel rooms and occupancy rates.
5. Special/major trip generators.

MPO staff developed an equivalency table to allow conversion of socio-economic data from the 1999 TAZ configuration to the 2000 TAZs. Several maps indicating existing levels of development, development potential and projected development were used at these meetings in order to effectively do a zone by zone review of existing and future year data. This review allowed for a logic check of initial population and employment estimates, and adjustments were made based upon this analysis.

Forecasting 2025 Population and Employment

The accurate forecasting of future year population and employment data for use in long range travel demand modeling is one of the most important activities during development of the updated long range transportation plan. During the prior update the MPO reviewed the “control totals” used when allocating this growth into the 141 traffic analysis zones that comprise Hernando County. Control totals are usually calculated for each of the ten comprehensive planning districts in the County. The boundaries for both the traffic analysis zones and the planning districts are shown on the attached map. Under state and federal guidelines for plan updates, it has again been recommended that MPOs review and approve socio-economic revisions.

In order to accurately predict long range travel demand and determine future transportation needs, it was essential to have accurate estimates of population and employment growth over the next 25 years. The TAC conducted an extensive review of Hernando County growth rates from 2000 to the long range planning horizon of 2025. Based upon estimates from the Bureau of Business and Economic Research (BEBR) at the University of Florida, it is anticipated that Hernando County’s population will rise to approximately 276,800 by 2025. This compares to an estimated population of 128,300 in the 2000 base year. Following the initial review, staff worked with FDOT’s consultant to refine this data. Table III-1 lists 2000 estimates and 2025 population forecasts for each of the ten planning districts that comprise Hernando County. Also, Figure III-4 depicts the traffic analysis zone (TAZ) and planning district configurations applied during the 2025 Plan Update.

2025 Zonal Data

The County’s Future Land Use Map (Figure III-3) from the adopted Comprehensive Plan Future Land Use Element was the principal tool used in disaggregating forecast population and employment at the zonal (TAZ) level. The land use map was overlaid with the 2000 TAZ structure and visually examined in order to determine development potential for each zone. The zonal overlays cited in the preceding section were also applied during this task. Updated development data made available by the County Planning Department was indispensable in determining increases in dwelling units in high-growth areas of the county.

Table III-2 shows the factors that were applied when allocating certain socio-economic variables at the zonal level and provides comments on allocation procedures. A summary table of population and employment ZDATA variables for the 2025 long range horizon is provided in Appendix A. Maps depicting population and employment for the 2000 base year as well as growth in employment and population between 2000 and the 2025 long range horizon are shown in Figures III-5 through III-8.

**Table III-2
Allocation of ZDATA Variables**

Allocation Variable	Allocation Factors	Comments
School Enrollment	Dwelling units and school expansion plans	Student enrollment is based on the distribution of population and an inventory of current, planned and potential sites for school facility expansion.
Hotels and Motels	Existing and planned activity centers	Hotels and motels are allocated based on planned development activity and proximity to tourist attractions and routes.
Population	Dwelling units	On a countywide average, population was estimated using the Bureau of Economic and Business Research medium population estimates. At the TAZ level, population was allocated based on the number of dwelling units projected based upon an inventory of available developable parcels.
Dwelling Units	Existing dwelling units, forecast population, and available parcels	On a countywide level, total dwelling units was determined using a ratio developed from 2000 data and BEBR population estimates. At the TAZ level, dwelling units are based on an analysis of existing dwelling units from 2000 RTA data and a detailed inventory of available residential parcels.
Service Employees	Existing service employment and available commercial land use	Info-USA
Commercial Employment	Existing commercial employment and available commercial land use	Info-USA
Industrial Employees	Existing industrial employment and available industrial land use	Info-USA

DEVELOPMENT OF THE 2025 POLICY CONSTRAINED NEEDS PLAN

Overview

The first major milestone in development of the updated 2025 Long Range Transportation Plan was determination of Highway Needs unconstrained by cost. Only policy considerations that have been determined by the MPO would constrain the type, size and/or location of highway facilities that will provide capacity to meet future travel demand.

As shown in Figure III-9, *Development of the 2025 Policy Constrained Needs Plan Flowchart*, the MPO followed a rigorous technical process throughout development of the Plan Update. The chart depicts the

process used by staff to develop the 2025 Policy Constrained Needs Plan. As with previous LRTP updates, the technical process for forecasting future travel demand utilized the Regional Planning Model developed through the ongoing Regional Transportation Analysis. MPO staff have attended meetings of a Technical Review Team every one or two weeks. Additionally, the West Central Florida Chair's Coordinating Committee (CCC), has reviewed regional issues associated with the Needs Plan, and has coordinated review through the MPO Staff Directors Coordination Team.

Figure III-10 depicts the 2009 Existing and Committed highway system for Hernando County. This network reflects existing lane configurations as well as capacity projects contained in the MPO's current adopted Transportation Improvement Program. Based upon an extensive modeling process, the Needs Plan indicates the number of highway lanes required to meet travel demand over the next 20 years. The Plan has also been coordinated with the efforts of the other MPOs and the Florida Department of Transportation through a Technical Review Team (TRT) to identify, evaluate and refine transportation alternatives. Also included is a link to an outer beltway east of I-75 that would connect Sarasota to Pasco/Hernando Counties. In concept, the outer beltway would connect to the East-West Corridor depicted on the attached 2025 Highway Needs Plan map.

From this evaluation, MPO staff developed a preferred alternative which was presented to the MPO in May. The Plan was further refined based on additional public and committee input, as well as coordination with other MPOs in the Tampa Bay area.

Long Range Network Alternatives Development and Evaluation

This series of tasks involved the development, testing and evaluation of 2025 travel demand using the MPO's approved 2025 socio-economic data and a series of alternative transportation networks. The products of this work effort consisted of a 2025 Policy Constrained Needs Plan and Mass Transit Needs Plan. Alternatives were developed and tested using the regional transportation system network and associated regional planning model developed by the Florida Department of Transportation (FDOT). Steps to produce the above plans included:

1. Evaluation of the 2009 Existing plus Committed (E+C) Network, and current 2025 Adopted Network using 2025 population and employment projections to establish an initial "needs network." Network performance was evaluated against highway level of service performance standards adopted by the communities in Hernando County.
2. Evaluation and documentation of a needs system not constrained by policy, financial, or physical constraints.
3. Evaluation and documentation of policy and physically constrained plans through review of previous literature, consideration of transportation Plan goals, objectives, and performance measures, and coordination with the MPO and FDOT staffs.
4. Evaluation and documentation of cost feasible plans considering physical and policy constraints, available resources of the County, local agencies and FDOT, and consideration of transportation Plan goals, objectives, and performance measures.

Development of alternatives for system testing was accomplished through the MPO and TAC. Results of model testing and evaluation of alternatives using the project prioritization methodology were presented to both the CAC and TAC for review and comment. Also, members of the BPAC, the LCB, and the TSOC were encouraged to attend public presentations.

A round of public workshops was held prior to the MPO endorsing the Policy Constrained Transportation Plan. These workshops were designed to present an evaluation of current conditions, system valuation results and

to solicit public comment prior to finalizing the Needs Plan.

Initial Development of Future Alternatives

Following the MPO's approval of the 2025 socio-economic data to be used in estimating long range travel demand, staff conducted extensive systems modeling through the FDOT Regional Transportation Analysis (RTA) process. Using the validated Tampa Bay Regional Planning Model, the four MPOs in FDOT District VII developed coordinated draft Needs Plans that were reviewed by the RTA's Technical Review Team and subsequently by the MPO's Technical Advisory Committee.

At the start of the alternatives analysis process, an Existing plus Committed (E+C) network was developed and modeled. The E+C consisted of the 2000 base network plus those programmed highway projects that would be open to traffic by 2009. The second round of modeling utilized the adopted Year 2020 Cost Affordable Plans of the four MPOs that participated in FDOT's Regional Transportation Analysis. The first phase of the plan development process led to the endorsement of an updated 2025 Policy Constrained Needs Plan for highways.

Items considered during formulation of the draft Needs Plan included:

- ❑ **Constrained Facilities** - As described in a following section, a list of Constrained Facilities was reviewed by the TAC and approved by the MPO. Based upon various planning factors such as political or environmental concerns, additional roadway widenings may be precluded by unacceptable community impacts. In these areas, it may be necessary to seek other solutions to meet anticipated travel demand other than the addition of general purpose lanes.
- ❑ **Areas of Concern** - Based upon issues raised by the TAC, CAC and others, the MPO approved a map depicting Areas of Concern to be addressed through the updated 2025 LRTP.
- ❑ **Analysis of System Alternatives** - In cooperation with FDOT, staff modeled four 2025 highway system alternatives. Each alternative tested a different approach to meeting 2025 travel demands, while at the same time responding to the MPO's Areas of Concern. Results of testing these alternatives were presented by MPO staff to the TAC.
- ❑ **Draft Listing of Facility Needs** - MPO staff developed a draft listing of preliminary recommendations of facility needs based upon 2025 modeling runs.

Based upon TAC and CAC review of findings from modeling activities and an analysis of how these findings relate to long range lane configurations and transit service, a recommendation was presented to the MPO at its May 2004 meeting. Two public workshops on the Draft Needs Plan were held during May, and the MPO endorsed the 2025 Needs Plan at its June 2004 meeting. A Quarterly Newsletter fully devoted to the LRTP Update was prepared and distributed throughout the community.

Constrained Roadways

During each LRTP Update, the MPO has reviewed factors which would constrain or prevent capacity widening of major roadway corridors. On each occasion, the MPO has extensively reviewed the rationale for constraining a roadway to its current configuration or to be a specific planned number of lanes or facility type. In that these designations pertain to the "ultimate" configuration acceptable to the community, constraints have been identified prior to testing of "Needs Plan" alternatives. Although the Needs Plan is not limited by funding considerations, it should be constrained by those factors that make roadway widening projects wither acceptable or unacceptable. In Hernando County these "Policy Constraints" have been defined as follows:

- ❑ **Policy (Political) Constraints** - Instances where prior policies would prohibit roadway widening within all or a portion of a specific jurisdiction.
- ❑ **Right-of Way Constraints** - Applies to situations where the lack of adequate right-of-way is compounded by inadequate building setbacks resulting in a large number of residential/commercial takings.
- ❑ **Scenic/Aesthetic Constraints** - Corridors in which a new or substantially widened roadway would detract from the unique aesthetic and/or scenic quality of an area, e.g., coastal or canopy roads.
- ❑ **Environmental Constraints** - This designation usually applies to areas where potentially severe environmental impacts (particularly in wetlands or coastal areas) would result from roadway construction.
- ❑ **Social Constraints** - This would apply to areas where a new or widened roadway would result in unacceptable impacts to the social structure of an area. This would include impacts to unique social resources such as park/historical places, or the disruption of an established community.

Table III-3 lists facilities and corridors which have been previously constrained by the MPO. Furthermore, the map in Figure III-11 depicts the locations of each of the Constrained Facilities.

Areas of Concern

Based upon issues raised by the Technical Advisory Committee, the Citizens Advisory Committee and others, the MPO approved the Areas of Concern to be addressed through the 2025 LRTP Update. The exact nature of the concerns and associated issues are discussed in Table III-4.

Review of the Endorsed 2025 Highway and Mass Transit Needs Plans

In June 2004 the MPO Board endorsed the 2025 Needs Plan for Highway and Mass Transit. While this action was mostly consistent with facility recommendations made by the TAC, there were minor variations. Features of the 2025 Highway and Transit Needs Plans that were recommended by the MPO's committee structure and endorsed by the MPO include:

- ❑ **East/West Connector** - The effectiveness and feasibility of an East/West Connector from the Suncoast Parkway to I-75 has been discussed for several years. The Regional Planning Model clearly indicates that the East/West Connector is effective in moving traffic between the Suncoast Parkway and I-75. The TAC had previously recognized that the Connector would significantly impact the future amount of traffic on SR 50 east of Brooksville. Specifically, the portion of SR 50 from Brooksville to Lockhart Road would not require six-laning if the East/West Connector is built. Additionally, the TAC expressed concern that Hernando County currently has only one connection to I-75. However, a decision regarding the exact alignment of the facility cannot yet be reached. Discussions with Pasco County MPO staff indicate overall acceptance of the roadway; however, the alignment could occur in either County, and funding options have not been determined.

- ❑ **US 19 Frontage Roads** - The MPO continues to concur that providing a fully operational frontage road system along US 19, between County Line Road and SR 50, is essential for that roadway's proper function. This condition will exist regardless of the northward extension of the Suncoast Parkway into Citrus County.
- ❑ **County Line Road** - Funding, not justification of need, continued to be the primary issue for the widening of County Line Road. A direct tie-in to the East/West Connector also had a moderate impact on the amount of future year traffic on the facility.
- ❑ **SR 50 East of I-75** - Expansion of the easternmost portion of SR 50 would provide an additional east-west connection, providing cross-state accessibility and tying into the Orlando metropolitan area. Environmental concerns have also been noted within the area, such as the State Forest and associated wetlands. Sumter County has not yet expressed interest in the multi-laning, and funding issues will have to be resolved. However, substantial benefits are afforded to both Counties, such as high speed accessibility to the center of the State, an important goods movement corridor, hurricane evacuation, tourism, etc. Furthermore, SR 50 is the only alternative going east-west, while there are several alternatives traveling north-south. Moreover, traffic projections indicate that SR 50 into Sumter County will carry more traffic than US 41 into Citrus County.

SEE TABLES III-3AND III-4 ON FOLLOWING PAGES

**Table III-3
HERNANDO COUNTY CONSTRAINED ROADWAY FACILITIES**

Facility	From	To	Jurisdiction	Constraint
Ft. Dade Avenue	Cobb Road	Citrus Way/CR 491	County	Scenic/Aesthetic
Snow Memorial	US 41	Lake Lindsay Road/CR 476	County	Scenic/Aesthetic
CR 550	Bayport Pier	CR 597	County	Scenic/Aesthetic
Jasmine Drive	SR 50	Mondon Hill Road	County	ROW/Environmental
Broad Street/US 41	Downtown Brooksville*		State/Federal	ROW
Jefferson Street	Downtown Brooksville*		State/Federal	ROW
Spring Hill Drive	US 19	Anderson Snow Road	County	ROW (4 lane)
Mariner Blvd.	SR 50	County Line Road	County	ROW (4 lane)
Deltona Blvd.	SR 50	Spring Hill Drive	County	ROW (4 lane)
CR 495	Pine Island	CR 550	County	Environmental/ Aesthetic
CR 595	Pasco County	US 19	County	Environmental/ Aesthetic
CR 597	CR 550	CR 595	County	Environmental/ Aesthetic
Howell/Main Street	Yontz Road	Lamar Avenue	County	ROW/Policy
County Line Road	US 19	Mariner Blvd.	County	ROW (4 lane)
Elgin Blvd.	Deltona Blvd.	Mariner Blvd.	County	ROW (4 lane)
Cortez Blvd.	Main Street	Jasmine Road	State/Federal	ROW/Scenic/Policy
*From the Hilltop to SR 50A and US 41 to Mildred Avenue				

**Table III- 4
AREAS OF CONCERN**

AREA OF CONCERN		NATURE OF CONCERN	PLANNING FACTORS	TRANSPORTATION IMPROVEMENT
Facility	Limits			
East/West Connector	Suncoast Parkway to I-75	<p>Effectiveness of a new corridor in reducing projected traffic on SR 50, and assisting the State by adding traffic to the Suncoast Parkway.</p> <p>Currently only one east-west corridor connects Spring Hill with I-75.</p>	<p>Identifying an acceptable alignment:</p> <p>-Impacts on environmental features</p> <p>-Impact on existing development, i.e., community impacts</p> <p>Approval for adding an interchange on I-75 is potentially difficult to obtain.</p>	<p>Limited access roadway connecting from the Suncoast Parkway to a new interchange with I-75 or to the existing CR 41 interchange</p> <p>As per coordination with Pasco County, do not indicate alignment on map; rather, depict preferred corridor along Hernando/Pasco County line.</p> <p>Funding of facility will not utilize county revenues.</p>
US 19	County Line Road to Ridge Road	<p>High projected volumes; need to maintain an acceptable level of service.</p> <p>Future role as a viable commercial corridor.</p> <p>Maintaining operational integrity of the roadway through frontage road development and development controls.</p>	<p>Parallel corridors do not significantly reduce future traffic levels on this portion of US 19.</p> <p>Realistically assessing the ability of the frontage system to pull traffic from the main line.</p> <p>Ability to affect trip generation through land use planning and development regulations.</p>	<p>6 lane arterial with fully functioning parallel frontage roads.</p> <p>Conduct a detailed study of traffic operations, frontage road design and continuity, and sensitivity to modifications in land use and development.</p>
SR 50	US 19 to the Suncoast Parkway	<p>High projected volumes; maintaining an adequate level of service.</p> <p>Future role as a viable commercial corridor.</p> <p>Maintaining operational integrity of the roadway through frontage road development and development controls.</p> <p>Integrating widening project as per FDOT PD&E study with County frontage road system.</p>	<p>Existing parallel corridors do not significantly reduce future traffic levels.</p> <p>Need to balance through movement with land service component.</p> <p>Realistically assessing the ability of the frontage system to pull traffic from the main line.</p> <p>Ability to affect trip generation through land use planning and development regulations.</p> <p>Conduct study to coordinate FDOT PD&E with County frontage road system and development controls.</p>	<p>6 lane arterial with fully functioning parallel frontage roads.</p> <p>Implementation of parallel collector roads and connectivity with SR 50.</p>

<p>SR 50</p>	<p>Lockhart Road to Kettering Road</p>	<p>Existing and planned high intensity commercial development around the I-75/SR 50 interchange.</p>	<p>Need to coordinate development with FDOT.</p> <p>Accessibility of existing and planned development</p> <p>Internal circulation and connectivity to external network.</p>	<p>Implementation of fully functioning frontage road system.</p> <p>Widening of main line to 6 lanes divided with interchange reconstruction.</p>
<p>US 41</p>	<p>North of SR 50A in Brooksville</p>	<p>Impact of four-laning on adjacent development.</p> <p>Identified as "politically constrained" by the MPO</p>	<p>Traffic levels will rise significantly along this portion of US 41.</p> <p>Role of Howell Ave. in relieving congestion on Broad Street.</p> <p>Nature of land use and parcel size within the corridor.</p>	<p>Limit widening of US 41 to two lane divided, or accommodate projected traffic by means of intersection improvements.</p>
<p>SR 50A</p>	<p>Ponce de Leon (US 98) to Mildred Ave.</p>	<p>Impact of widening this segment of SR 50A within a heavily developed corridor.</p>	<p>Maintaining an adequate level of service through the downtown, particularly during peak hours.</p> <p>Need to accommodate demand generated by through traffic while maintaining adequate accessibility to the downtown.</p> <p>Lane balancing with the one-way pairs to the east.</p>	<p>Implement planned four lane divided, or constrain to operational improvement such as intersection widenings.</p> <p>Assumes continued operation of the one-way pairs.</p>
<p>Cobb Road</p>	<p>SR 50 to US 98</p>	<p>Implementation of the MPO's policy to divert the movement of heavy through trucks around the Brooksville downtown.</p>	<p>Impact of the movement of heavy vehicles on established and planned communities.</p> <p>Adequate connectivity to major freight distribution centers.</p> <p>Accessibility to major commercial and industrial centers.</p>	<p>Prioritize the full or phased widening project relative to other highway needs.</p> <p>Feasibility of reclassifying SR 50A and US 98 from the State to the County and/or City.</p>
<p>California Street</p>	<p>Powell Road to SR 50</p>	<p>North/south reliever for congestion on area parallel roadways.</p>	<p>Role of California Street in relieving traffic on Barclay Road.</p> <p>Solutions should be supportive of land uses within the corridor.</p>	<p>Widening of California Street from Powell Road to SR 50.</p> <p>Acceptable plan for minimizing unacceptable community impacts while enhancing existing and planned land uses within the corridor.</p>

- **US 41 Corridor North of Brooksville** - The model clearly indicated that US 41 between Snow Memorial and Lake Lindsay Road is needed as a four-lane divided arterial. However, the MPO's committees noted concern over right-of-way and political constraints on the segment from Croom Road into downtown Brooksville.

System Safety

Vehicle crash statistics make excellent indicators of operational problems within the highway network, some of which are correctable through roadway improvement (either capacity or design related) or through operational improvements such as intersection design or signalization.

Monitoring trends in crash data is an important part of the MPO program. Annually, the MPO in cooperation with the Hernando County Engineering Department, compiles a comparison of the previously published lists of the 20 Highest Frequency Crash Locations in Hernando County for available analysis years. The analysis consists of information contained in the Engineering Department's CARS2000 crash database. The database contains selected information acquired from reports submitted by the Florida Highway Patrol, Hernando County Sheriff's Office, and the City of Brooksville Police Department. The locations are identified as crashes occurring within 250 feet of an intersection. Each year's list tabulates the total crashes for that location for that year, and therefore, a specific intersection may or may not be on subsequent year's list. Changes to area land uses, available through and turn lanes, traffic control, and traffic signal phasing and timings will individually and collectively impact an intersection's crash frequency. Additionally, traffic volumes are a factor, with higher volumes presenting increased opportunities for crashes to occur.

Staff first compares each year's crash totals and intersection's ranking by totaling the annual crashes for a combined three year period. This results in a refined list (Table III-4a) of the 20 highest frequency crash locations, based on the total crashes over the available period. The percentage of change in crashes per year is included in this table. Also reviewed is the same listing, with the total crashes, the average crashes per year, the overall change in percentage of crashes over the three-year period, and the type of traffic control. The locations of the 20 highest frequency crash locations are depicted in Figure III-10a.

A more in-depth analysis of these intersections will be accomplished to determine if additional changes are needed to reduce crash frequencies. This analysis will be included in subsequent LRTP updates.

Table III-4a

2005 - 20 HIGHEST CRASH FREQUENCY INTERSECTIONS

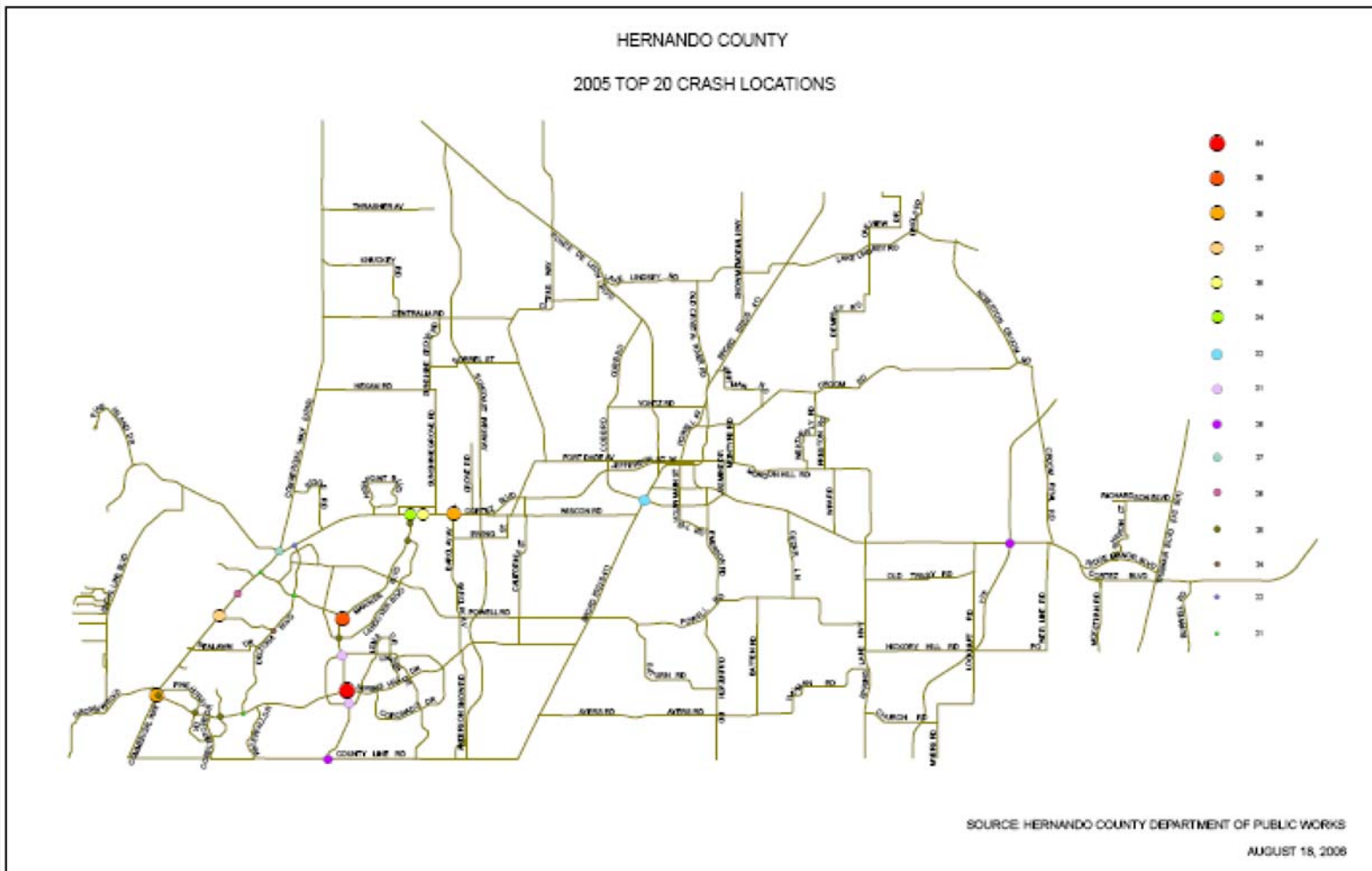
<u>RANK</u>	<u>N / S ROADWAY</u>	<u>E / W ROADWAY</u>	<u>NOTE</u>	<u>CRASHES</u>
1	Mariner Blvd	Spring Hill Dr		84
2	Mariner Blvd	Northcliffe Blvd		39
3	Commercial Way	Spring Hill Dr		38
4	Barclay Ave	Cortez Blvd		38
5	Commercial Way	Forest Oaks Blvd		37
6	Chambord St	Cortez Blvd		35
7	Mariner Blvd	Cortez Blvd		34
8	Broad St	Cortez Blvd		32
9	Mariner Blvd	Linden Dr	1(2)	31
10	I75	Cortez Blvd		28
11	Mariner Blvd	County Line Rd		28
12	Commercial Way	Cortez Blvd		27
13	Commercial Way	Berkeley Manor Blvd		26
14	Mariner Blvd	Landover Blvd	1(3)	25
15	Pinehurst Dr	Spring Hill Dr	1(3)	25
16	Deltona Blvd	Forest Oaks Blvd		24
17	Cortez Blvd	Deltona Blvd		22
18	Commercial Way	Northcliffe Blvd		21
19	Deltona Blvd	Northcliffe Blvd		21
20	Deltona Blvd	Spring Hill Dr		21

NOTES:

1. Note column indicates the number of multiple intersections of the same name, therefore crashes would be distributed among the specific intersections. Those intersections listed individually would rank lower, or be off of this list. (Number in parentheses indicate number of crossings).

2. Intersection crashes based on crash occurring within 250' of referenced intersection. This is a major change in reporting from previous lists that included ALL crashes referenced to said intersection, regardless of distance.

Figure III-10a



System Security

Transportation Security, related to the review and documentation of emergency management routes, is addressed in Table II-1 of the LRTP, under Objective 1.3.5 and designation of routes to delineate exposure to hazardous materials under Objective 4.0.5.

With regard to transit security, the LRTP references the MPO's Transit Development Plan and Transit Operations Plan, which detail the need for funding transit security as part of its capital program for the short-term planning horizon over the next five to ten years.

The intent of the transportation security factor is two-fold, including both personal and homeland security. Personal and homeland security issues should be recognized as transportation security issues in the LRTP. With the exception of the two objectives and the reference to the transit planning documents identified above, the current LRTP does not directly address transportation security.

The MPO is committed to identifying potential coordination efforts among the MPO, local, and state officials. These efforts will be fully incorporated in the subsequent LRTP updates. To this end, the U.S. Department of Transportation has identified potential roles and responsibilities of an MPO during a security/disaster. Table III-4b provides a summary of potential MPO roles and responsibilities. The purpose of this table is to provide a listing of potential actions for future discussion, rather than to suggest that the MPO should undertake all of the actions shown.

**Table III-4b
Potential MPO Roles and Responsibilities**

Stage of Incident	MPO Roles and Responsibilities
Prevention	<ul style="list-style-type: none"> <input type="checkbox"/> Funding new strategies/technologies/projects that can help prevent events <input type="checkbox"/> Conducting vulnerability analyses on regional transportation facilities and services <input type="checkbox"/> Securing management of data and information on transportation system vulnerabilities <input type="checkbox"/> Providing forum for security/safety agencies to coordinate surveillance and prevention strategies <input type="checkbox"/> Funding and perhaps coordinating regional transportation surveillance systems that can identify potential danger prior to its occurrence <input type="checkbox"/> Coordinating drills and exercises among transportation providers to practice emergency plans <input type="checkbox"/> Coordinating with security officials in the development of prevention strategies <input type="checkbox"/> Hazardous route planning <input type="checkbox"/> Disseminating (and possibly coordinating) research on structural integrity in explosion circumstance and standard designs

Mitigation	<ul style="list-style-type: none"> <input type="checkbox"/> Analyzing transportation network for redundancies in moving large numbers of people (e.g., modeling person and vehicle flows with major links removed or reversed, accommodating street closures, adaptive signal control strategies, impact of travel information systems, strategies for dealing with “choke” points such as toll booths) <input type="checkbox"/> Analyzing transportation network for emergency route planning/strategic gaps in network <input type="checkbox"/> Providing forum for discussions on coordinating emergency response <input type="checkbox"/> Disseminating best practices in incident-specific engineering design and emergency response to agencies <input type="checkbox"/> Disseminating public information on options available for possible response <input type="checkbox"/> Funding communication systems and other technology to speed response to incident <input type="checkbox"/> Funding surveillance and detection systems <input type="checkbox"/> Proposing protocols for non-security/safety agency response (e.g., local governments) <input type="checkbox"/> Coordinating public information dissemination strategies <input type="checkbox"/> Funding communication systems for emergency response teams and agencies
Recovery	<ul style="list-style-type: none"> <input type="checkbox"/> Conducting transportation network analyses to determine most effective recovery investment strategies <input type="checkbox"/> Acting as a forum for developing appropriate recovery strategies <input type="checkbox"/> Funding recovery strategies <input type="checkbox"/> Coordinating stockpiling of strategic road/bridge components for rapid reconstruction
Investigation	<ul style="list-style-type: none"> <input type="checkbox"/> Providing any data collected as part of surveillance/monitoring that might be useful for the investigation
Institutional Learning	<ul style="list-style-type: none"> <input type="checkbox"/> Acting as a forum for regional assessment of organizational and transportation systems response <input type="checkbox"/> Conducting targeted studies on identified deficiencies and recommending corrective action <input type="checkbox"/> Coordinating change to multi-agency actions that will improve future response <input type="checkbox"/> Funding new strategies/technologies/projects that will better prepare region for the next event

Source: US Department of Transportation

Environmental Mitigation Activities

Environmental/wildlife preservation issues are very important in Hernando County. To be consistent with the values of the County, as well as to address the requirements of SAFETEA-LU, the MPO will identify alternative solutions for meeting current and projected future demands. This process will provide for a safe and efficient transportation system that meets the mobility needs of the public while limiting the adverse impacts to the human and natural environment. Examples of the human and natural environment are neighborhoods and communities, homes and businesses, cultural resources, parks and recreation areas, wetlands and water sources, forested and other natural areas, agricultural areas, endangered and threatened species, and air quality. SAFETEA-LU legislation calls for the inclusion of potential environmental mitigation activities (or strategies, policies, programs, action, and activities) that, over time, will function to circumvent, diminish, or counteract the adverse impacts to or disruption of the human and natural environment associated with the implementation of the LRTP. According to SAFETEA-LU, the environmental mitigation activities identified are intended to be regional in scope and not necessarily project specific.

While a detailed environmental analysis is not required during the LRTP process, the intent of SAFETEA-LU 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. III-4c provides potential environmental mitigation strategies by type of resource.

**Table III-4c
Potential Environmental Mitigation Strategies**

Resource	Potential Mitigation Strategy
Neighborhoods and Communities, Homes and Businesses	<ul style="list-style-type: none"> Minimize noise impact with sound barriers Prevent the spread of hazardous materials with soil testing and treatment
Wetlands and Water Resources	<ul style="list-style-type: none"> Replace or restore wetlands Submerge or utilize bottomless culverts Bridge sensitive areas instead of laying pavement directly onto the ground Improve storm water management
Forested and Other Natural Areas	<ul style="list-style-type: none"> Use selective cutting and clearing Replace or restore forested areas Preserve existing vegetation

<p>Endangered and Threatened Species</p>	<p>Use selective cutting and clearing</p> <p>Bridge sensitive areas instead of laying pavement directly onto the ground</p> <p>Replace or restore forested areas</p>
<p>Air Quality</p>	<p>Control loose exposed soils with watering or canvas sheets</p> <p>Minimize idling of heavy construction vehicles</p>

Source: Metropolitan Washington Council of Governments

Since this is a new requirement under SAFETEA-LU, the Hernando County MPO LRTP does not currently include a discussion of potential environmental mitigation strategies. The Plan recognizes the importance of preserving the environmental values of Hernando County through the adoption of Objectives 4.0.1 and 4.0.6 in Table II-1 of the LRTP. In addition, the MPO has participated in training of Florida’s Efficient Transportation Decision Making (ETDM) process, which includes consideration of potential environmental effects of proposed transportation improvements and has participated in a review of other ETDM projects throughout the region. Although no Hernando projects have gone into the ETDM review process since the adoption of the LRTP, it is the intention of the MPO to utilize the ETDM review process for LRTP projects in the future.

Separate from this compliance review, but also part of the MPO’s effort to ensure compliance of the LRTP with SAFETEA-LU, the MPO has developed GIS mapping depicting potential wildlife corridors and environmentally sensitive areas within Hernando County, which can then be used as an overlay with the proposed transportation improvements to identify potential impacts of the proposed projects. These maps will act as vital instruments for identifying those projects where environmental mitigation strategies may potentially be needed. These maps are contained within the Addendum to this Plan.

2025 LONG RANGE TRANSIT ELEMENT

The Hernando Express (THE Bus) local bus service began operating in Spring Hill in October 2002, with circulator/shuttle service being added subsequently in Brooksville with a connection to Spring Hill (November 2002). Although ridership has fluctuated at various times of the year, overall ridership trends have continued to increase from 170 daily trips in January 2003 (when passenger fares were instituted) to approximately 250 daily trips in February 2003. By late 2004 daily ridership had routinely exceeded 500 daily trips on THE Bus system. THE Bus also plays an important role in providing special event service. A recent example is the provision of bus transportation for 3,450 trips associated with the Swamp Fest (early March 2004).

In an effort to continue the significant progress made in the development of the public transportation system in Hernando County, the Hernando County MPO supported additional transit planning as part of the 2025 LRTP Update. With this in mind, the LRTE was prepared to serve as the transit component of the 2025 LRTP Update. The LRTE analysis was composed of eight major tasks, as follows:

- 2025 Long Range Transit Element - Updates the transit component of the LRTP adopted in December 2001. This section proposes annual service improvements through the year 2025. In addition, a transit capital acquisition plan is developed to meet the requirements of the service plan. The focus of this planning effort is to develop a 2025 Transit Needs Plan, along with the revenues that would be necessary to fund the Needs Plan.
- Spring Hill Circulator Realignment Evaluation - Included in the evaluation was a status quo option and two realignment options that would transition Spring Hill service from a circulator concept to a more traditional outbound/inbound local bus service. The advantages and disadvantages of the three options were identified to facilitate discussion and ultimately recommend a preferred option.
- Transit Funding Options - These were identified at all levels of government (federal, state, local), as well as cost reduction and cash management techniques that are commonly used in the public transportation industry. The various federal and state grant formulas were reviewed and the potential for increasing/optimizing formula grants was evaluated to determine if any grants have not been fully utilized.
- Transit Governing Structures - Identified governance structures traditionally used in the transit industry. More specifically, five transit governing structures were identified and defined, including (1) local/regional government, (2) regional transportation authority, (3) independent transit authority, (4) private for-profit, and (5) private non-profit. The advantages and disadvantages of the governing structures are identified for comparative purposes.
- Local Transit Funding Evaluation - Five local revenue sources were evaluated in more detail in the context of their potential to support public transportation. Included in the transit funding evaluation are the following revenues sources:
 - Ad valorem (property tax)
 - Municipal Service Taxing Unit (MSTU)

- Local option gas tax
- Local option sales tax
- County/city general revenue

The funding sources were evaluated in the context of three major transit funding considerations, including (1) the potential interest in having a dedicated source of transit funding, (2) the objective of having transit revenue sources that grow with inflation, and (3) the potential involvement of municipalities in funding the transit system. The results of this assessment are provided along with the extent to which each revenue source would need to be implemented to meet the local transit funding requirements identified in Chapter VI.

- Transit Governing Evaluation performed for Hernando County - The LRTE also weighed the advantages and disadvantages of each governing alternative from a general perspective, and evaluates the governing structures in the context of issues and the operating environment specific to Hernando County. Criteria were identified and used to facilitate a comparative evaluation. The legal and organizational requirements were also summarized for an MSTU, regional transportation authority, and an independent transit authority. Recommendations are offered for two time periods, including, (1) short-term recommendations (one to five years), and (2) long-term recommendations (greater than five years) and consistent with the planning horizon for the 2025 LRTP Update.

BICYCLE AND PEDESTRIAN ELEMENT

The MPO had previously determined that the Plan should specifically identifies criteria to be considered during its implementation, and should be done at a facility-specific level, including:

- Typical cross-sections for different types of facilities
- Intersection improvements
- Facility enhancements, i.e., sidewalks, bicycle facilities, landscaping, transit amenities

Inventory of Conditions and Needs

The MPO updated its inventory of existing roadway conditions as they pertain to bicycle and pedestrian movement. The accompanying analysis also shows the location of bicycle/pedestrian accident locations, as well as major generator/attractor locations.

As mandated by TEA-21, bicycling and pedestrian modes of travel have renewed importance as alternative modes of transportation. The federal act mandates state and local planning for bicycle and pedestrian facilities, and that funds also be made available for their implementation. The goal of this mandate is to integrate bicycle and pedestrian modes of travel into the existing transportation system and to ensure through education, engineering, and encouragement, that bicycle and pedestrian travel is a viable means of transportation. Realizing the importance of bicycle and pedestrian modes of transportation in developing the Transportation Plan, the Hernando County Metropolitan Planning Organization (MPO) is including the bicycle and pedestrian element to this LRTP update.

These documents addressed current and future issues and policies, identified existing and future facility locations, and documented accident locations and other pertinent analysis data. The purpose of this analysis is not to replicate the comprehensive plans for these facilities, but to review and document information from these sources which will be pertinent to the development of the LRTP. The MPO's inventory also includes a map series identifying critical data from these sources. The results of this review are documented in the following sections.

Discussion of Issues and Policies

A discussion of existing and future issues for both bicycles and pedestrians will be addressed in this section. In addition, this section will discuss the County's policies relating to these modes of transportation. Since the issues and policies for both modes of travel are similar, the following sections on issues and policies include both bicycles and pedestrians.

Existing and Future Issues

The two major existing issues relating to bicycles and pedestrians are the lack of adequate infrastructure and education on safety issues. These issues are particularly critical near school facilities. In regard to the first issue, Hernando County currently has a very limited number of bicycle and pedestrian facilities. The bicycle facilities include wide curb lanes, paved shoulders, and bicycle paths. Pedestrian facilities include sidewalks on one or both sides of the roadway. Unfortunately, these facilities are scattered throughout the County and currently provide little or no linkage with each other. Thus, the absence of infrastructure around potential bicycle and pedestrian generators/attractors, including school facilities, minimizes community interaction or linkage with other nearby communities, deters the use of the bicycle and pedestrian travel, and in turn, contributes to the potential for bicycle and pedestrian accidents. Consequently, due to the lack of infrastructure, parents of school-age children discourage children from riding their bicycles or walking to school. This situation has been found to minimize children's knowledge of traffic, issues of safety and potential hazards, and contact with people who may reinforce these safety issues. Another issue of concern involves the needs of the elderly community which comprise a significant portion of the County's population.

In addition to the existing issues, several future issues have been identified by the MPO. The first issue is how future bicycle and pedestrian facilities will be built and the second issue is where will they be located.

The first issue involves the design of such facilities. Design criteria as established by the Florida Department of Transportation (FDOT), the American Association of State Highway Transportation Officials (AASHTO), and the Americans with Disabilities Act (ADA), will need to be incorporated into the improvement of existing roadway facilities and the construction of new roadways. The addition of bicycle facilities may include a wide curb lane, a designated bicycle lane, sidewalks, or a separate bicycle path.

The second issue involves the location of future bicycle and pedestrian facilities and corridors. The MPO has identified several areas for future facilities. These areas include circulation around school sites and adjacent neighborhoods, and potential bicycle and pedestrian generator/attractor areas, including shopping and working areas, park areas, and high accident locations. Additionally, as reflected in this figure, a myriad of "neighborhood connectors" and/or local "connector routes" are shown throughout the county. The rationale for

these future connections is to provide some alternative routes along local streets that provide options for travel throughout the Spring Hill area. Other connector routes along existing roads in the county will help to expand this network and provide connections to existing routes and facilities as well.

Policies

As part of these existing and future issues, policies relating to bicycles and pedestrians have been defined by the MPO. These policies are listed under four main categories: engineering, education, encouragement, and enforcement. The engineering policy involves the use of appropriate design criteria of existing and future bicycle and pedestrian facilities and the linkage of these facilities to each other. The policy on education relates to the promotion of bicycle and pedestrian safety issues through school and public agency-sponsored classes. The encouragement policy involves the identification of benefits of bicycling and walking through public service announcements, advertisements, and brochures. The fourth policy, enforcement, relates to the issuance of citations and other reprimands to bicyclists, pedestrians, and automobile drivers who violate the safety of other individuals.

In addition to the above-named policies, the MPO and Department of Public Works staff, are striving to create a process for “early and continuous” involvement to ensure that greater coordination and communication exist between the agencies. This is in an attempt to ensure that future opportunities are not lost with regard to incorporating bike/ped features and facilities into the county’s road building and road improvement program.

Review of Bicycle and Pedestrian Data

A review of data obtained through the MPO staff relating to bicycle and pedestrians was conducted. The results of this review, which are discussed below, involved the documentation and identification of existing/planned facilities, accident locations, and future corridors through a series of maps. Data for these maps were compiled in the MPO’s database and then mapped by attribute using the MPO’s GIS system to prepare the appropriate maps. These maps are depicted in the following section of this report.

Bicycle Data

The location of existing bicycle facilities was first reviewed. Based on field data obtained by MPO staff, existing/planned bicycle facilities are located on several functionally classified roads within the County. These roads include:

- US 19 - County Line Rd. to Citrus/Hernando County Line,
- US 41 - Pasco County to Citrus County Line,
- US 98 - Yontz Rd. to Citrus County Line,
- SR 50 - US 19 to Lockhart Rd. and Kettering Rd. to Sumter County Line,
- SR 50A - SR 50 to US 41,
- Cobb Rd. - SR 50 to US 98,
- County Line Rd. - US 19 to US 41,
- Deltona Blvd. - Spring Hill Drive to Forest Oaks Blvd., and
- Spring Hill Drive - US 19 to Pinehurst Dr.

Bicycle facilities on all of these roadways, with the exception of SR 50 in downtown Brooksville, consist of a paved shoulder. For SR 50 in downtown Brooksville, the existing bicycle facility consists of a wide curb lane. In addition to these roadways, the Withlacoochee State Trail, a rail-to-trail corridor, provides bicyclists with a designated travel facility, along with the Suncoast Trail, a 42-mile, multi-use, paved trail that parallels the Suncoast Parkway and extends through three counties. The existing bicycle facilities are illustrated in Figure III-12, Existing Bicycle Facilities.

Bicycle and Pedestrian Safety

The Hernando County Bicycle/Pedestrian Advisory Committee (BPAC), considers the safety applications and procedures in all its project applications through the enhancement process. The safety of pedestrians is normally addressed through the provision of sidewalks along the local and collector roads in the county. Bicycle safety is normally addressed through the provision of bike lanes where applicable and/or bike routes (with appropriate signage) along these roads as well.

While mobility and connectivity remain important issues in the development of these enhancement projects, the safety of cyclists and pedestrians is paramount in the location, design, and construction of these projects. As crash data reflects the incidents of bike/ped crashes are located throughout the county, any facility improvements for these modes will help to reduce these crashes as well. Incorporated into this facility analysis are the engineering, enforcement, education and EMS elements that are constant forces in the enhancement process.

The Hernando County MPO planning process will continue to provide for the consideration of projects and strategies that increase the safety of the overall transportation system for pedestrians, bicyclists, transit, freight and motor vehicle users. These strategies will incorporate, to the maximum extent possible, the priorities, objectives, countermeasures, and projects, as contained in the Strategic Highway Safety Plan.

Bicycle Crash Data

The number and location of bicycle accidents were also reviewed. A total of 77 bicycle accidents occurred over the 3-Year time period from January 2000 to December 2003 with the majority along the US 19 and SR 50 corridors. Of the 77 accidents, 4 accidents involved fatalities. The most common causes of all bicycle accidents were “traveling along road with traffic” and “crossing at an intersection.” As identified in the bicycle accident reports, many of these accidents occurred in the Spring Hill area, particularly on sections of Spring Hill Drive, Northcliffe Boulevard, Deltona Boulevard, and Mariner Boulevard.

Bicycle Corridors

Future corridors are determined based on the location of potential bicycle trip generators and attractors as described earlier in the Comprehensive Bicycle Plan. These generators/attractors have generally been divided into the following seven category types:

- Attractions
- Commercial/Commercial Recreation
- Employment Centers
- Government/Non-Commercial
- Supermarkets/Mini-Marts
- Recreation/Open Space, and
- Elementary, Middle & Upper Level Schools.

As described earlier in the Comprehensive Bicycle Plan, each corridor consists of a one-mile radius around the center of the generator/attractor. The two main areas of future bicycle corridors are located in the City of Brooksville and the Spring Hill area. However, the expansion of bicycle facilities throughout the county will be required in order to provide added connectivity and mobility corridors as the county grows. Additional bicycle corridors that will be analyzed include; power line and drainage easements, both public and private, as providing alternative travel corridors and linkages to existing corridors.

Pedestrian Data

The location of existing pedestrian facilities was reviewed. Based on field data obtained by MPO staff, existing/planned pedestrian facilities are located on several major roads within the County. These roads include:

- SR 50A - Darby Lane to US 41
- US 41 - Benton Ave. to Oliver St.
- Darby Lane - SR 50A to Candlelight Blvd.
- Howell Ave. - Fort Dade Ave. to North Ave.
- Elgin-Powell Rd. - Mariner Blvd. to Barclay Rd.
- Linden Drive - County Line Rd. to Spring Hill Drive
- Mariner Blvd. - Spring Hill Drive to Augustine Rd. and Elgin Blvd. to SR 50
- Spring Hill Drive - US 19 to Barclay Rd.
- Northcliffe Blvd. - US 19 to Mariner Blvd.
- Forest Oaks Blvd. - US 19 to Deltona Blvd.
- Landover Blvd. - Elgin-Powell Rd. to Northcliffe Blvd.
- Deltona Blvd. - Elgin Ave. to Spring Hill Drive
- Sunshine Grove Rd. - SR 50 to Ken Austin Parkway

Pedestrian facilities on these roadways consist of sidewalks on one or both sides of the road. In addition to these roadways, both the Withlacoochee State Trail, and the Suncoast Trail, provides pedestrians with a

designated walking facility. The existing pedestrian facilities are illustrated in Figure III-13, Existing Pedestrian Facilities.

Pedestrian Crash Data

The number and location of pedestrian accidents were also reviewed. A total of 170 pedestrian accidents occurred over a 3-Year time period from January 2000 to December 2003. Of the 170 accidents, the majority were along US 19 and SR 50 corridors with 15 accidents involving fatalities. The most common causes of all pedestrian accidents were “standing or playing in the road” and “walking along road in traffic.” As identified in the pedestrian accidents reports, many accidents occurred in the Spring Hill area, on sections of Spring Hill Drive, Mariner Boulevard, and U.S. 19.

Pedestrian Corridors

The last item reviewed was future pedestrian corridors. Future corridors were determined based on the location of potential pedestrian trip generators and attractors as described in the Comprehensive Pedestrian Plan. These generators/attractors were identical to ones described earlier for bicycle corridors. Based on information in the Comprehensive Plan, each pedestrian corridor consists of a one-half mile radius around the center of the generator/attractor.

Americans with Disabilities Act (ADA) Considerations

Additionally, the ADA assists in the independent mobility of people who cannot drive, through the provision of special accommodations. Specifically regarding the Pedestrian Element, two curb ramps should be constructed on each street corner. One curb ramp should be constructed at each side of marked mid-block crossings. Or, as an alternative treatment, the crosswalk area should be raised to curb height. When pedestrian demand signals are used, independent call poles should be appropriately placed at the top of each ramps on all signalized intersections. All corners should have adequate sight triangles and sufficient depth for controller box, signal pole and other hardware to be located out of the walk zone. Audio/tactile pedestrian signal systems should be used in areas with large elderly and disabled populations. Minimum walk speeds, sidewalk cross slopes, grades, drainage inlets and minimum widths should be considered in constructing new and retrofitting existing walkways.

Integration of Bicycle and Pedestrian Facilities into the Transportation Plan

The first system alternative considered will use enhanced right-of-way cross sections which include bicycle and pedestrian facilities on all new roadways that are built within the County. If these roadways are not financially or policy feasible, then issues such as accessibility to schools, neighborhoods, and commercial areas may be used to determine which roads should be built with bicycle and pedestrian facilities.

Conclusion

Bicycle and pedestrian modes of travel are a vital link in a *multi-modal*, intermodal transportation system. Hernando County’s Long-Range Plan seeks to integrate bicycle and pedestrian facilities into the transportation

system by applying input from the Technical Advisory Committee, Citizens Advisory Committee, Bicycle/Pedestrian Advisory Committee, MPO staff, MPO Board, Hernando County School System, local jurisdictions, and the general public through the Plan Development Process. This input is used to develop, update, and apply prioritization strategies for bicycle and pedestrian facilities during the testing of system alternatives.

Review of Long Range Projects

The LRTP contains maps depicting existing and planned bicycle and pedestrian facilities for Hernando County. For bicycles, there are two main types of facilities identified in the Plan: (a) on road facilities in the form of paved shoulders and delineated bicycle lanes, and (b) separate multi-use trail facilities in the form of the Withlacoochee Trail and the Suncoast Trail. Additional off-road cycling as well as hiking trails exist in the Croom Tract of the Withlacoochee State Forest.

As the area surrounding the Suncoast Trail corridor develops, this trail could also serve limited demand for non-vehicular transportation within the Spring Hill area.

To serve pedestrians, the Plan provides for an extensive expansion of sidewalks within the Spring Hill and Brooksville areas. Also, the recreation trails mentioned above will be utilized by pedestrian/hikers.

Maps depicting the long range bicycle and pedestrian system can be found in Chapter V.

Bicycle/Pedestrian Measures of Effectiveness

As with other modes, both the bicycle and pedestrian improvement plans were assessed using the MOEs derived from the MPO's *Goals and Objectives*. Again, both the 2025 Cost Affordable Plan recommendations as well as the 2015 Interim Plan were measured.

Essentially, this analysis demonstrated a significant increase in the number and percentage of corridors being served by alternative modes.

Long Range Bicycle/Pedestrian Funding

It is estimated that the existing/planned and future bicycle/pedestrian projects will cost \$6.4 million by 2025. This figure includes both the Five-Year Work Program of funded projects, as well as those projects extending out to 2025 that remain unfunded at this time. A list of these projects can be found in Chapter V.

DEVELOPMENT OF THE 2025 COST AFFORDABLE TRANSPORTATION PLAN

Overview

As shown earlier in Figure III-I, the 2025 LRTP Schedule, the MPO utilized a structured iterative process for determining the Cost Affordable Highway and Transit Plans. As with the Needs Plan, future travel demand was forecast using the Regional Planning Model developed through the ongoing Regional Transportation

Analysis. Again, the Technical Review Team and the West Central Florida Chair's Coordinating Committee (CCC), was used for review of inter-county and regional issues associated with the Cost Affordable Plan.

Determination of Available Revenues

One of the initial tasks in developing a Cost Affordable Long Range Transportation Plan was to review County and State Revenue Projections. This task entailed the review of historical and projected revenues for capital and maintenance. Once compiled, this analysis was used to determine the amount of revenues available to fund recommended long range and interim projects. Additional revenues required to maintain adequate travel conditions would be identified during development of the Cost Affordable Plan, if necessary.

2025 Cost Affordable Highway Plan

The Endorsed 2025 Highway Needs Plan represented projects required to maintain an adequate level of highway mobility over the next 25 years. However, the estimated cost of these needs must be balanced against "reasonably available" revenues to yield a Cost Affordable Plan.

In August 2004, the Technical Advisory Committee extensively reviewed a list of projects initially proposed to be included in the Cost Affordable Plan. The Committee was also presented with alternative scenarios for funding the plan using different forms of Federal, State and County revenues.

The following actions related to system costs and revenue issues were approved by the MPO Board:

- ❑ **Projects on the Florida Intrastate Highway System (FIHS)** - The statewide highway system carries high volumes of through traffic. To protect the integrity of the FIHS, funding levels and priorities are established directly by FDOT. Based upon the Cost Affordable FIHS Plan adopted by the State in 2004, projects funded for improvement in Hernando County consist of I-75 and portions of SR 50.
- ❑ **Additional Projects on the State Highway System** - FDOT and MPO staffs held repeated discussions to reconcile estimated costs with Federal and State revenues. Much of the discussion focused on refinement of project cost estimates, re-prioritizing several candidate projects, and phasing other planned improvements in order to lower overall costs. The Draft 2025 Cost Affordable Highway Plan was the product of this discussion.
- ❑ **Projects on the County Road System** - The MPO approved an "enhanced revenue scenario" that would permit funding of most County facilities on the 2025 Highway Needs Plan (in addition to projects currently in the Transportation Improvement Program).

The funding plan approved by the MPO entailed several phased increases of transportation impact fees and a \$0.25 local option sales tax measure.

Congestion/Mobility Management System Plan

Congestion/Mobility Management

The Congestion/Mobility Management System Plan for the Long Range Transportation Plan was designed to identify critical current issues and to select improvements in the 2015 Interim Plan which can be planned and/or implemented over the next five to ten years. The purpose of these improvements is to improve the overall effectiveness and efficiency of the transportation system, and includes specific high priority improvements identified in the 2015 Interim Plan, as well as operational improvements aimed toward reducing congestion until a Plan solution can be implemented. These actions also incorporated technical analysis and public input from the MPO's Congestion/Mobility Management System in which congested areas within Hernando County are identified.

Development of the Congestion/Mobility Management Plan included public involvement and participation through CAC meetings and the Consensus Based Workshop held by the MPO. Additionally, the TSOC will continue to be extensively involved with the technical aspects of setting short-range plan strategies. Results from the MPO's highly successful annual Citizens Transportation Survey was also reviewed for direction on short-range needs and priorities.

In that the Congestion/Mobility Management Plan involves actions which may be scheduled over the next five years, the Plan will be used to formulate County and local government capital improvement programs which will be facilitated by the TAC and TSOC. If needed, additional follow-up meetings will be scheduled with involved local governments. Projects included in the Congestion/Mobility Management System Plan can be found in the map and table in Chapter V.

Congestion Management Process

The new federal act, SAFETEA-LU, requires the development of a Congestion Management Process (CMP) to provide information on the performance of the transportation system and to identify alternative strategies to alleviate congestion and enhance the mobility of persons and goods. The information developed at part of this process is used in the prioritization of projects and decision-making process to identify strategies for reducing demand and improving the operation of the system.

Updated in 2005, the MPO's C/MMS serves as the CMP as stipulated by SAFETEA-LU. Future updates of the LRTP will document the continuing activities of the C/MMS and resulting improvements aimed at reducing congestion and improving mobility.

LRTP ADOPTION PROCESS AND FOLLOW-UP

The Long Range Transportation Plan adoption process included a series of public hearings and workshops as shown in Table III-5. The LRTP public hearing commenced a 30-day public comment period to allow the public to review and provide additional input concerning the Plan. Comments received during this review period were documented for consideration in the preparation of the final LRTP. Additionally, after this time period, a presentation was made to the MPO Board summarizing the LRTP and discussing the significant comments received from the public.

SEE TABLE III-5 ON FOLLOWING PAGE

**Table III-5
PROJECT MILESTONES FOR REVIEW AND ADOPTION OF THE
2025 MULTI-MODAL TRANSPORTATION PLAN UPDATE**

Committee/Public Involvement Activity	Date
MPO Meeting - Endorsement of the 2025 Policy Constrained Highway and Mass Transit Needs Plans.	June 3, 2004
TAC Meeting - Review modifications to the 2025 Needs Plan, and initial review of estimated plan costs and available revenues.	July 19, 2004
Consensus Building Workshop - Review of Cost Affordable Plan funding strategies and potential revenue sources.	August 19, 2004
TAC and CAC Meetings - Review results of the Consensus Building Workshop. Review and make recommendations re: the final draft 2025 Cost Affordable Highway and Mass Transit Plans and associated funding strategies; review of short range element and congestion/mobility management strategies.	September 13 & 16, 2004
MPO Meeting - Initial review of issues related to costs and revenues for the 2025 Cost Affordable Long Range Plan and the 2015 Interim Plan; MPO to provide direction for network revisions and funding strategies; MPO approval of dates for the second round of Public Workshops.	October 7, 2004
Public Workshops on the draft 2025 Cost Affordable Plan, 2015 Interim Plan, proposed revenues, and congestion/mobility management strategies.	October 18 and 19, 2004
First MPO Public Hearing on the 2025 Cost Affordable Plan, 2015 Interim Cost Affordable Plan, the Long Range and Interim Year Revenue Plans, and the Congestion Management Plan. Presentation of draft 2025 Long Range and 2015 Interim Cost Affordable Plans for highway and mass transit. Review of draft revenue plan. Accept public comment and close hearing to allow 30 day comment period as required under federal regulations.	November 4, 2004
Community (Environmental Justice) Workshop - Meeting with minority and low income groups regarding impact of the LRTP on the community.	November 18, 2004
TAC and CAC Meetings - Review and make recommendations re: adoption of the Updated 2025 Cost Affordable Highway and Mass Transit Plans and associated funding strategies.	November 30, 2004
Second MPO Public Hearing - reconvene hearing following 30 day comment period. Adoption of the 2025 Multi-Modal Long Range Transportation Plan Update (MPO Resolution #04-08)	December 9, 2004