TRANSPORTATION DATA AND ANALYSIS

INTRODUCTION

The data and analysis component of the Transportation element provides supporting materials to develop a multimodal system built around the existing street and highway system, which will feature public transportation elements and enhanced pedestrian/bicycle facilities. The plan continues to assess the needs for current and future transportation systems, establish policy guidelines for use by staff and decision-makers at all levels of government, and set standards for the provision of public facilities. The Metropolitan Planning Organization (MPO) and its member governments including Charlotte County, the City of Punta Gorda, and the Charlotte County Airport Authority assisted in the development of this plan.

In the planning process, the development of the Long Range Transportation Plan (LRTP) included a significant public participation process; technical analysis through transportation modeling and geographic information systems (GIS); project selection criteria developed from the public process and State and Federal regulations; and transportation plans and regulations from local, State and Federal government. Public involvement continues to be an important building block for the Charlotte County-Punta Gorda Metropolitan Planning Organization's planning process. The process continues to include complete information; timely public notice; full access to key decisions; and early and continuing involvement of the public through the MPO Board, Board of County Commissioners, City Council, Airport Authority, Bicycle/Pedestrian Advisory Committee, Citizen Advisory Committee, Technical Advisory Committee, and a number of other citizen groups and committees.

Public participation continues to yield a variety of results, depending on the technique or methodology used. However, a pattern of issues and concerns has developed through the data obtained from various surveys, meetings, advisory committees, and public hearings. Usually topping the list were hurricane evacuation, maintenance of sidewalks and bikeways, public transportation, and traffic signalization improvements.

RELATIONSHIP TO 2050 PLAN

The Transportation element is closely related to several elements of the Charlotte 2050 Plan; however the strongest relationship is with the Future Land Use element. The traffic model from the LRTP, on which the Transportation element is based, was developed from the Future Land Use Map. A discussion of population projections can be found in the FLU Data and Analysis.

Relationship of State, Metropolitan, and Local Transportation Plans

Figure TRA-1 illustrates the relationship among the State and local transportation plans and programs. The LRTP is based on community priorities, Federal and State regulations, the Florida Transportation Plan (FTP), system plans (e.g., the Transit Development Plan and bicycle/pedestrian plans), area plans (e.g., corridor studies), and local comprehensive plan transportation and land use elements. The LRTP is used to develop MPO Transportation Improvement Program (TIP) priorities, system and area plans. The TIP priorities are used to develop the Tentative State Work Program, the TIP, and the Adopted State Work Program. The Adopted State Work Program includes funding commitments for construction of Federal and State transportation projects. The MPO Board has authority over the LRTP and the TIP. The FDOT has authority over the FTP and the State Work Program.

The Comprehensive Plan's transportation, land use, and capital improvements elements are developed concurrently. The County and City Capital Improvements Programs (CIP) are based, in part, on the Capital Improvements element (CIE). The CIP's include funding commitments for construction of City and County transportation projects. The Federal/State and City/County transportation projects are coordinated through the TIP. The Board of County Commissioners and the City Council have authority over the Comprehensive Plan elements and the CIP's.

In the Natural Resources and Coastal Management elements, hurricane evacuation issues are addressed with regard to natural disasters and evacuations. The effectiveness of the hurricane evacuation routes is dependent on a well-developed road network. A severe weather event is one of the project selection criteria for transportation facilities. Other project selection criteria include wildlife crossings, improvement of water quality, and/or improvement of environmental integrity in some manner. Alternatives which avoid negative impacts to environmental, preservation, reservation, and conservation areas are preferred over those that do not.

While developing regional corridors, intergovernmental coordination is important to providing cooperation and coordination between both local and regional agencies when dealing with transportation issues; the objectives and policies associated with the process are included in the Intergovernmental Coordination element.



Figure TRA-1: Relationship to State, Metropolitan and Local Transportation Plans

Source: Charlotte County Growth Management Department

Finally, projects identified in the Transportation element are included in the Capital Improvements element and these projects are reviewed annually from both planning and construction views.

LEGISLATION

Legislation and programs influencing transportation plans include State and local regulations; the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU); and the relationship of State, regional, metropolitan, and local plans.

FEDERAL LEGISLATION

The Transportation Efficiency Act of 1991 represented landmark Federal legislation, which changed the transportation planning philosophy of the nation. The Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), the successor to the Intermodal Surface Transportation Efficiency Act (ISTEA) legislation, incorporates the same philosophies as its predecessor. These changes figure prominently in a number of arenas:

planning for mobility, public participation, and management systems, and planning factors. These factors are discussed in a separate section under the analysis. The details of the legislation can be found at SAFETEA-LU.

SAFETEA-LU requires that all components of transportation be planned as one system. In theory, local governments, through the MPO process, now have more influence on the projects to be federally and State funded and can shift funding from highway projects to other transportation modes, such as transit and bicycle and pedestrian facilities.

Public participation continues to play a key role in the transportation planning process. The manner in which public participation was incorporated into the process is outlined in each element of the Comprehensive Plan and in greater detail in the upcoming 2035 Long Range Transportation Plan (LRTP) update, which is not a part of this Plan adoption.

Transportation management systems include data collection and analysis systems to address issues that are critical to the capital improvement programming process. These issues include highway pavement and bridge condition, safety, review of alternative methods to address congestion problems, public transportation, and intermodal facilities. These management systems will result in the preservation of existing facilities, lower life-cycle costs, and lower overall costs to the community, and more effective use of limited transportation dollars.

While the SAFETEA-LU legislation does not regulate development of local comprehensive plans directly, the LRTP is regulated by SAFETEA-LU. Consistency between the MPO LRTP and the local comprehensive plan is required by SAFETEA-LU and creating a link between the two plans will help regulate development and the associated improvements in the County.

STATE AND LOCAL REGULATIONS

There are many State and local regulations and programs governing land use and development impacts that relate to transportation needs in Charlotte County. Some of these include aviation land use, commercial vehicles, highway access management, and bicycle and pedestrian issues.

Aviation land uses are addressed through the establishment of an overlay district and its supporting regulations. Development of the airport is guided by the State in the Florida Aviation System Plan. The plan predicts an increase in airport service from general aviation to commercial that will provide passenger and air cargo service. The plan recommends consideration of the potential capacity of existing land use. Additionally, the FDOT authorized the Piper Road study, which focused on enhanced airport access and security. Charlotte County Code regulates airport land use in Section 3.9-65 (Airport Zones).

Charlotte County provides regulation for operating large trucks and commercial vehicles on roadways and bridges through Sections 2-4-23.1 and 2.4-25, in conjunction with FDOT regulations.

Highway access management provides a mechanism to assist in planning and managing growth along the key corridors. Florida Administrative Code (F.A.C.) 14-97 regulates this issue through the FDOT Highway Access Management Guide. Chapter 3-6, Article IV, of the Charlotte County Code governs highway access. The purpose is to minimize conflict, insure consistency with the Comprehensive Plan, and provide standards. Traffic impact statements and traffic control plans (Sections 3-7-88 and 89) are required to determine the impact a development may have on the road system. Minimum requirements for transportation facility concurrency are detailed in Section 3-5-331 (3). Planned Development (PD) districts are governed in Section 3-9-49 (d). Design criteria are provided for the location of PDs to insure that the proposed transportation facilities meet the adopted service levels. The City of Punta Gorda governs highway access management in their City Ordinance 26-10 (5).

Bicycle and pedestrian issues are governed in Charlotte County through the Subdivision Regulations. Section 3-7-85 details provisions for bicycle paths, lanes, sidewalks, and pedestrian ways.

EXISTING CONDITIONS

The release of 2000 Census data shows that Port Charlotte and Punta Gorda are now part of the North Port-Punta Gorda Urbanized Area (formally known as the Punta Gorda UA), while Englewood and Boca Grande are now part of the Sarasota-Bradenton UA. The population of the North Port-Punta Gorda UA is 122,421 people, of which 97,918 live in Charlotte County. The Sarasota-Bradenton UA has a population of 559,229, of which 29,825 live in Charlotte County. Charlotte and Sarasota share populations, particularly along the Gulf Coast, where the community of Englewood is split between the two counties.

Two independent districts, the Englewood Water District and Englewood Fire Control District, provide service in both Charlotte and Sarasota County. It is unlikely that Lee County, which is to the south of Charlotte County, will overlap County boundaries at any point in the near future. The northern portions of Cape Coral have not been subdivided into platted lands. Physically, the State's acquisition of the Charlotte Flatwoods/Yucca Pen properties, as an addition to the Babcock-Webb Wildlife Management Area, provides a barrier to the linking of Charlotte and Lee County suburbs.

Further east in the East County area, a similar scenario exists if the future land use remains Agriculture, Resource Conservation, and Preserve. This situation could change, however, with the designation of a New Town in the East County area, such as has been requested by the Babcock Florida Company, to allow development of slightly less than 20,000 acres of land located north of S.R. 78 in Lee County and east of S.R. 31 in Charlotte County. Such an approval could open the door for a future Charlotte/Lee urbanized area. Future land use designations in East

County will remain "Agriculture", "Resource Conservation", and "Preservation" for at least the next planning period.

INVENTORY

The inventory of existing facilities and conditions provides basic data to evaluate the existing transportation system. The MPO developed the inventory with the cooperation of Charlotte County, the City of Punta Gorda, Charlotte County Airport Authority (CCAA), Charlotte County Transportation Disadvantaged Local Coordinating Board (LCB), and Florida Department of Transportation (FDOT). This section documents the existing roadway functional class along with the level of service of each functional classified roadway in the County.

Functional Classification System

The Federal Functional Classification System, updated in 2005, represents the major road network for the County. Roads are classified as interstate (freeway), principal arterial, minor arterial, major rural or urban collector, minor rural collector roadways, and local/residential streets. Principal and minor arterials can provide a connecting link between urban areas, serve as hurricane evacuation routes, connect to regional commerce centers, provide access to airports or major public facilities, or interconnect to other major thoroughfares. Major collector roads include access to minor public facilities, interconnection of minor thoroughfares, or access to concentrated lands. Minor collector roads provide access to diffused land uses. The only distinction between major and minor collector roads is in rural areas, where land uses can be diffused. All other roads are considered to be local roads. Future Transportation Map (FTRAM) Series Map #1 depicts the current Roadway Functional Classification of the roadways in the County.

Interstate 75

Interstate 75 is approximately 22 miles in length in Charlotte County (5 percent of the classified roads), extending from Lee County line in the South to the City of North Port (Sarasota County) in the North. There are five exits in Charlotte County (two north of the Peace River and three south of the River). Currently I-75 is a four lane highway with two lanes in each direction and the laneage information in depicted in FTRAM Series Map #2. The I-75 Multimodal Master Plan identifies additional improvements, including HOV lanes. I-75 is part of the National Highway System, the Florida Intrastate Highway System (FIHS) and Florida's Strategic Intermodal System (FSIS). The level of service on I-75 is set by the State. Current existing LOS information is documented in TRA Data and Analysis Appendix A (Source: Charlotte County Growth Management Department) and displayed in the FTRAM Series Map #3.

Principal Arterials

U.S. 41 and 17 are the two principal arterials in the County, equaling about 41 miles (about 10 percent of the classified system). U.S. 17 is a part of the Florida Intrastate Highway System

(FIHS) and Florida's Strategic Intermodal System (FSIS) running from 1-75 North to the Desoto County line. FTRAM Series Map #1 depicts these roadways.

Minor Arterials

There are fifteen minor arterials in Charlotte County that spread across the County, serving hurricane evacuation needs along with the traffic needs given below. FTRAM Series Map #1 depicts these roadways.

- Harborview Road (C.R. 776/Edgwater Drive/Flamingo Boulevard)
- Jones Loop Road Extension
- Midway Boulevard
- Piper Road
- Veterans Boulevard
- Winchester Boulevard
- C.R. 765 (Burnt Store Road)
- C.R. 765A (Taylor Road, from U.S. 41 to Jones Loop Road)
- C.R. 769 (Kings Highway)
- C.R. 762 (Tuckers Grade)
- C.R. 771 (Gasparilla Road)
- C.R. 775 (Placida Road)
- S.R. 31
- S.R. 776

Collector Roads

The County manages an extensive system of collector roads. Of the 425 miles of roadway classified in Charlotte County, 52 percent are urban or major rural collectors (222 miles), and 13 percent are minor rural collectors (54 miles). FTRAM Series Map #1 depicts these roadways.

Local/Residential Roads

In addition to the classified system, there are over 2,000 miles of local/residential roads in the County. Charlotte County roads which are classified under this system correspond to 1.64 percent of all such roads within the State. FTRAM Series Map #1 depicts these roadways.

Number of Lanes

Of the 457 centerline miles of classified roadways in Charlotte County, there are approximately 1,111 lane miles. There are more than 364 miles of two-lane undivided roadways. These roadways constitute 80 percent of the total miles. Of the remaining 93 miles, there are 3 miles of two-lane divided roads, 6 miles of two-lane one-way roads, 3 miles of three-lane one-way roads, 22 miles of four-lane freeway, 49 miles of four-lane divided roads, and 8 miles of six-lane divided roads. FTRAM Series Map #2 depicts the roadway laneage information on the functionally classified roadways in the County.

Sidewalks and Bikeways

Sidewalks and bikeways are increasingly referenced during any public discussion of transportation. The public support enjoyed by these traditional alternatives to the automobile is evidenced by the passage of two local option sales tax initiatives, in 1998, 2002 and 2008, in which sidewalks figured prominently. In addition to providing an alternative to automobiles, pedestrian and bike safety is one of the primary reasons for public support of these facilities. In the months leading up to the November 2008 vote to extend the Penny Sales Tax revenue for six years, the public very clearly expressed its desire to see sidewalks and bikeways installed along roads that serve schools, in areas which would enhance neighborhoods, and to provide pedestrian access to amenities such as parks.

As identified in the earlier Transportation element, certain transportation enhancement projects were programmed for funding and have been completed. These projects include sidewalks on Harbor Boulevard, Peachland Boulevard, Pioneer Trail Phases 1 and 2, Harborwalk Phases 1 and 2, and the construction of the Bayshore Linear Trail. In addition, the Penny Sales Tax revenue generated funding for additional projects that serve neighborhoods and schools. The County's Capital Improvements Program (CIP) provided funding for eight additional sidewalk projects, and FDOT is funding (or providing partial funding) for five more, including a major project on U.S. 41, from the Peace River Bridge going north. FTRAM Series Map #6, 7 & 8 depicts current sidewalk coverage in the County.

City of Punta Gorda Alternative Transportation Capital Improvement Program: The program includes improvements to both existing and proposed sidewalks. The plan includes an implementation schedule. City developed a series of draft plans in conjunction with the Bicycle/Pedestrian Advisory Committee (BPAC), but it has not adopted a bicycle/pedestrian Master Plan.

Sidewalks and bikeways in the upcoming 2035 LRTP: Sidewalks and bikeways are also identified as congestion management strategies. In addition to the Comprehensive Plan, there are a number of ordinances and resolutions by the County and City which address bicycle/pedestrian policies. Municipal Service Benefit Units/Taxing Units (MSBU/TU's) were created by the County to address infrastructure needs, which include bicycle and pedestrian facilities. Funding for construction of sidewalks and bikeways continues to be available through local and private sources. Most Federal and State funding for these facilities has dissolved, at least for the time being. Staff will continue to pursue Federal and State funding sources through the MPO process, but they are extremely limited and very complicated to obtain, but still MPO is pursuing these revenue sources to fund additional improvements.

The Board of County Commissioners has made a strong commitment to incorporate bicycle infrastructure wherever the opportunity presents itself as part of new or improved transportation projects. These are provided as separate facilities (Cape Haze Pioneer Trail), designated on-street bicycle lanes (Placida Road/Pine Street), space provided for undesignated bicycle lanes (Veterans Boulevard), and shared bicycle/pedestrian facilities (San Casa Boulevard, Airport

Road, Taylor Road, Beach Road, and most new sidewalk installations). The use of bicycles as an alternate mode of transportation has become more popular in the United States and Charlotte County in recent years. Increasing numbers of people have found this to be an acceptable form of commuting during pleasant weather conditions, particularly as more bicycle facilities have been created. Of course, in Charlotte County, most bicyclists ride for recreation.

County initiated the development of a Bicycle Pedestrian Master Plan, which will be adopted as a part of the upcoming 2035 LRTP (which is not a part of this adoption) before the end of December 2010.

Intermodal Facilities

Because of the low-density, suburban development pattern which emphasizes private automobiles, intermodal facilities are not well developed in the County. However, some individual components are in place, including the Charlotte County Airport (which is connected to both I-75 and U.S. 17), the Amtrak Station (Kings Highway only), and Kings Highway and Jones Loop Road Greyhound bus stations. The locations of Charlotte County's intermodal transportation facilities are illustrated on FTRAM Series Map #4.

Against the backdrop of the County's lack of through roads, strip commercial development, and platted land problem, Charlotte County's best opportunity for future intermodal transportation facilities is through development of initiatives such as the Airport Commerce Park and Murdock Village. By locating a mix of industrial, commercial, and multifamily residential uses near the County Airport, I-75, U.S. 41, U.S. 17, and a railroad, the Airport Commerce Park can integrate three major forms of transportation: air, rail, and road. By providing a mix of commercial, residential, civic, and recreational opportunities in the urban center of unincorporated Charlotte County, the Murdock Village initiative provides a concentration of destination-type uses, amenable to mass transit. The pedestrian scale, at which Murdock Village will be developed, along with the mix of uses, will help eliminate the need for trips to U.S. 41 which would inevitably result if the area included within this initiative were developed according to its existing plats.

Public Transportation

Public transit systems generally include both transit and paratransit components. Transit is operated on fixed route with fixed schedules, while paratransit modes have routes and schedules that change with the desires of individual users. Paratransit is a flexible transportation service that is demand-responsive, designed to carry passengers from their origins to specific destinations (often door-to-door) by immediate request or by prior reservation.

In Charlotte County, the general mass public transit system is the County-operated paratransit system, Dial-a-Ride. Services started on January 2, 2001. Greyhound bus service is also offered in the County. There are no public transit terminals, transfer stations, or designated transit rights-of-way in the County.

The County also has a Transportation Disadvantaged paratransit services called the Sunshine Ride. The Statewide Transportation Disadvantaged Program (Chapter 427, Florida Statutes) defines transportation disadvantaged (TD) persons as:

"... those persons who because of physical or mental disability, income status, or age are unable to transport themselves or to purchase transportation and are, therefore, dependent upon others to obtain access to health care, employment, education, shopping, social activities, or children who are handicapped or high-risk or at risk as defined in s. 411.202".

Florida's coordinated TD system serves two population groups. The first group includes all those who are elderly, disabled, or low income. This group, referred to as the Potential TD Population (also referred to as "TD Category I"), is eligible for trips purchased by social service agencies. The Potential TD Population is considered roughly analogous to the transit dependent market. For Charlotte County, the TD Category I group is very large, because of the high percentage of people age 60 and over. Of course, many in Category I are not transportation disadvantaged.

The second population group (a subset of the first) includes people who are transportation disadvantaged according to the eligibility guidelines in Chapter 427 Florida Statutes (i.e., those persons from the Potential TD Population who are unable to transport themselves or to purchase transportation, and children who are "high-risk" or "at-risk"). These persons, referred to as the TD Population (also referred to as "TD Category II"), are eligible for trips purchased through the State TD Trust Fund, as well as for trips purchased by social service agencies.

By State law, the Florida Commission for the Transportation Disadvantaged (CTD) is charged with the responsibility to accomplish the coordination of transportation services for the transportation disadvantaged. To ensure coordination of these services, the Commission contracts with local community transportation coordinators to provide TD transportation services within each County.

The Charlotte County Transit Division (CCTD) is the designated Community Transportation Coordinator (CTC) for Charlotte County and provides coordinated transportation services to non-sponsored clients and to clients sponsored by other agencies. The Charlotte County Transit Division currently maintains an inventory of 22 vehicles. Existing public transportation services are available through two primary sources:

- Service coordinated by the Charlotte County Transit Division and
- Service that is provided outside of the coordinated program.

Coordinated Service: The Charlotte County Transit Division provides and coordinates sharedride, door-to-door paratransit service for persons who are transportation disadvantaged in the County. Service is offered on an advanced-reservation basis, generally for subscription (standing order) trips or on a demand-response (random) basis.

In addition to providing service itself, CCTD also coordinates services conducted by other transportation operators, including the Charlotte County Veterans Council, Charlotte County Community Mental Health, Christian City (Grove City Manor), Boys and Girls Clubs, Charlotte County Council On Aging, Cooper Street Recreation Center, Port Charlotte Cultural Center, and the Charlotte County School Board (Head Start Program). Two private, for-profit companies, Ambitrans Medical Transportation, and Astor Cab, are also under contract, providing service within the coordinated system.

In FY 2007, these services totaled 77,131 one-way passenger trips, with the majority of the trips being for medical, nutritional, and educational/training purposes. These trips were provided for clients of the above-mentioned programs and for persons who qualify under the State-prescribed guidelines for TD eligibility.

Non-Coordinated Service: Other transportation services are provided by public and private agencies, as well as volunteer organizations which are not part of the CTC's coordinated system (non-coordinated operators). The Charlotte County TDP identifies eight non-coordinated agencies and a dozen taxicab and limousine services.

Airport Facilities

An "airport facility" can be identified as any area of land or water improved, maintained, or operated by a governmental agency for the landing and takeoff of aircraft; privately owned paved runways of 4,000 or more feet in length; and any appurtenant area which is used for airport buildings, other airport facilities, or right-of-way. Under this definition, one general aviation airport, several private airports, and two hospital heliports exist in Charlotte County (FTRAM Series Map #4, Intermodal Facilities). Both heliports are in urban areas; the Charlotte County Airport is in an infill area.

The Charlotte County Airport is located three miles southeast of the City of Punta Gorda. The airport was constructed by the U.S. Army Corps of Engineers during World War II for use as a training field. It is now owned and operated by the Charlotte County Airport Authority (CCAA). The CCA funds are currently generated from airport/industrial park revenues. The Charlotte County Airport Master Plan was developed by Airport Authority in March 2008 and conditionally approved by Federal Aviation Administration on October 6, 2009. This element provides a detailed inventory of existing facilities, forecasts aviation demands over the next 20 years, evaluates airfield capacity and alternatives, recommends a land use Master Plan for the Airport, and identifies the needed aviation facilities and priority action programs for the future development of the Airport.

The Civil Airport Imaginary Surfaces (clear zones) are used to establish the height controls for airspace protection and to provide safety buffers between aircraft arriving and departing an

airport's terminal airspace and objects on the ground. These surfaces apply to existing, instrument-flight operating procedures created to permit operation of the airport 24 hours per day in virtually all weather conditions. FTRAM Series Map #5, Airport Imaginary Surfaces, illustrates the imaginary surface locations (clear zones) around the Charlotte County Airport. Imaginary airport surfaces can be used to create runway overflight zones for compatible land use controls and public safety.

The Airport's operational airspace is a reserved area of imaginary surfaces in the vicinity of the Airport and should be kept clear of obstructions. Tall structures that penetrate this airspace reduce airport capacity and aviation safety, because aircraft flight procedures must be modified to avoid the structure. The location of future tall structures must be carefully planned and coordinated to comply with Florida Statues and aviation safety requirements and to minimize additional impacts on aviation capacity and safety.

Areas within the exposure level contours can be used to identify incompatible uses for possible mitigation actions and to establish land use controls (as referenced in TRA Policy 1.3.3) to limit future incompatible development. The noise contour maps for base year 1990 and projections for 2006 were developed in the Airport Master Plan developed in March 2008 (conditionally approved by the Federal Aviation Administration on October 6, 2009.

Future land uses which are affected by noise levels of at least 65 Ldn (Ldn is a measure of noise relative to the time of day) include industrial, agricultural and a very small area of mobile home residential just outside Airport property.

The Airport has identified several initiatives as necessary to serve general aviation demands in the near term, including rehabilitation of airfield pavements and relocation of Runway 15/33. The Airport Master Plan developed in March 2008 (conditionally approved by the Federal Aviation Administration on October 6, 2009) supports an industrial park less than a mile away that is 100 percent occupied. The industrial park area is not developed to capacity, as 250 acres remain for development. The Airport plans to continue serving flight training, recreational users, and business users and would like to extend the runway to 8,500 feet, add an ILS and control tower, and construct a commercial airline terminal building.

The Airport Commerce Park is located at the Charlotte County Airport, with sites offered from 1 to 150 acres, industrial zoning, and a foreign trade zone. The Airport Commerce Park is located minutes from I-75, U.S. 41, and U.S. 17.

Rail Lines and Terminals

The Florida Southern Railroad began construction of the line from Arcadia to Punta Gorda in 1885, with the first train arriving in Punta Gorda on July 24, 1886. The line was originally built as a 3' narrow gauge but was widened to standard gauge (4'8½') in 1892.

At the time, the port at Punta Gorda had more cargo shipments than the port at Tampa. The rail lines on the Charlotte Harbor and Northern served a second port at Boca Grande. However, the lines in the western part of the County have been abandoned. These abandoned railroad rights-of-way have been mostly acquired by the County and are being used as transportation corridors. The right-of-way adjacent to S.R. 776 was used for the S.R. 776 road widening. The right-of-way parallel to C.R. 771 was used for the Cape Haze Pioneer Trail.

The remaining functional rail line is owned by CSX, as shown in FTRAM Series Map #4, Intermodal Facilities. However, Seminole Gulf Railways entered into a 60-year lease of the underlying real estate in 1987. In addition, Seminole Gulf owns the track, road bed, bridges, and platform at the Punta Gorda Depot. This 90-mile line extends from Naples to Arcadia and ties into the CSX system. The line currently supports rail freight and rail excursions. Currently, Seminole Gulf operates six trains per week through the County.

Port Facilities

The County has no designated port facilities.

Public Parking Facilities

Currently Charlotte County does not own or operate parking garages or any park-and-ride facilities, nor do any private parking garages exist within the County limits. Certainly, providing sufficient pedestrian and bicycle access and integrating those modes with existing and future transit would benefit the community. Unfortunately, the two truck stops utilized by intercity bus services have a very limited number of parking spaces. The biggest challenge may be to provide safe, well-lit shelters for users on the midnight work shift change. Locations could be determined from a survey of workers, students, and parents conducted by the major employers and affected schools. It is recommended that the MPO assist the County Transit Division, major employers, and affected schools with developing a consistent survey form for their use. If the results of such a survey indicate needs and locations, local governments should approach those shopping center owners about designating a minimum number of parking spaces for park-and-ride purposes.

Hurricane Evacuation

Roadways which serve day-to-day traffic circulation needs also assist in hurricane evacuation, especially early in the evacuation process. As a hurricane approaches landfall, one by one, roadways may become impassible. There are a variety of factors that need to be assessed prior to the implementation of any hurricane evacuation. Population, vehicles, and route conditions must be considered when creating a hurricane evacuation plan. (Map 2.5, Hurricane Evacuation Routes/Landfalling Storm Surge)

Affected Population: The population of Charlotte County is particularly vulnerable because of Charlotte Harbor (the second largest estuary in Florida, with an area of 270 square miles and a 4,500 square mile basin), the Peace River, and the Myakka River. Due to the historic platting and growth, most of the County's development, encompassing all but the most eastern portions of Charlotte County, lies within the Coastal Planning Area. Most of Charlotte County is designated as a Coastal Area in accordance with 9J-5 FAC rules. Within the Coastal Planning Area lies the Coastal High Hazard Area (CHHA). As of 2009, there were approximately 159,127 people residing in Charlotte County year round, so hurricane evacuation is a major factor which is considered both pre- and post-development.

The County's population increases by approximately 22 percent during the winter months, due to the return of winter residents or "snowbirds." Seasonal population must be considered during the planning stages of Emergency Management, since the increase in population results in a corresponding increase in evacuation times. Fortunately, the County's seasonal population increase (November – May) does not coincide with hurricane season (June – October).

Vehicles: As the County's population grows, so too grows the number of vehicles the County's road network will have to handle during an evacuation. As storm intensity increases, the number of vehicles to be evacuated increases as well. According to the 2001 HES, approximately 75 percent of the vehicles registered in Charlotte County would be utilized during evacuation.

The floodplains associated with these major bodies of water encompass much of the County's urbanized area, as development has historically occurred in proximity to the coast and rivers. Two rivers separate the geographical regions of Charlotte County into West, Mid-, and South County.

The Southwest Florida Regional Planning Council's (SWFRPC) Hurricane Evacuation Study 2001 identifies Charlotte County as the County most vulnerable to the impacts from hurricanes and tropical storms. This is particularly true of the Cape Haze Peninsula (the West County area), which is (as illustrated in FLUM Series Map #14, Hurricane Evacuation Routes and Landfalling Storm Surge) entirely within the Tropical Storm and Category I, II, and III Hurricane Vulnerability Zones and yet hosts more than one-third of the County's lot inventory (approximately 50,000 lots). In addition, lands adjacent to the Harbor and two rivers are also influenced by storm surge. FLUM Series Map #14 identifies land areas subject to storm surge, based on a model developed by the National Hurricane Center. Charlotte County has many low-lying, poorly-draining areas that are subject to periodic flooding, which can result not only from tropical weather, but also from prolonged periods of heavy rains which may inundate the soils and overwhelm natural and manmade drainage systems. The classified road network is shown on FLUM Series Map #14 to illustrate those roads which may be impacted, depending on the severity of the storm.

The SWFRPC prepared an update of the Hurricane Evacuation Study (HES) in 2001 to refine and improve the 1995 plan. A revision of the SLOSH (Sea, Lake, and Overland Surges from Hurricanes) model in 1990 generated new data for the location of the storm surge lines by

hurricane category. The current SLOSH model analyzed 727 separate storms for their potential impact on Southwest Florida, including Charlotte County. The results of the simulations are summarized in five flood categories and discussed in the HES 2001. A zone for each category depicts the maximum extent of the flooding resulting from all of the storms of that category

As the 1995 HES suggested, arterial roadways form the backbone of any hurricane evacuation effort. The development of Charlotte County through a platted lands design leaves limited options for evacuation from the coastal border. Identification of the routes and an assessment of the capacities of the roadway system are the components of evacuation route selection. Roadway conditions, such as low elevation and the ability to accommodate rainfall flooding, become Charlotte County's limiting factors in roadway capacities.

Routes: Charlotte County was platted for development according to a 1950's vintage pattern, which emphasized winding streets and few through roads. This has left Charlotte County with a road system that provides few options for evacuees, who must leave areas from the coast and areas in which most of these subdivisions were platted. This situation is exacerbated by the County's geography, which divides it into three geographic regions separated by two major rivers and a harbor, making the road system reliant on bridges over water. Since roads are the foundation of an evacuation plan, the County must maintain a adopted level of service for roads. However, it must be realized from the onset that neither the County nor the State can build the number of roads necessary to evacuate the population during a worst case scenario storm event. Early warning and prompt evacuation are essential.

Throughout Charlotte County, evacuation routes tie into the State-wide transportation network, which affects the capability for hurricane evacuation. The County's evacuation problem is greatest in the West County Planning Area, which includes all of the subdivisions platted on the Cape Haze Peninsula and the County's barrier islands. Transportation in the West County Planning Area is based on three major roads: State Road 776 and County Roads 771 and 775. S.R. 776 plays a critical role in West County evacuation in that both C.R. 771 and C.R. 775 connect with it, and evacuees must travel at least a portion of S.R. 776 to get out of harm's way. Evacuation north along S.R. 776, through Sarasota County, tends to follow the coast, and so, in itself, S.R. 776 is not a good alternative. However, moving east, then north, S.R. 776 connects to Interstate 75 at Exit 170 and on to Kings Highway, which moves inland. However, this route entails crossing the Myakka River Bridge, which could become a choke point in an evacuation. Fortunately, this bridge was recently expanded to four lanes, which reduces its choke potential.

The County's other two primary evacuation routes are U.S. 41 and Interstate 75. These roads also serve as primary evacuation routes for other counties. The number of vehicles exiting other counties will increase the number of vehicles calculated for Charlotte County. The County has reviewed alternate routes, such as U.S. 17 and C.R. 74, for Charlotte County evacuees to use to complete a successful evacuation plan.

Capacities: After assessing the roadway system by identifying the acceptable routes, the next step is the assessment of roadway capacities. The capacities of the local roadways are based on the characteristics defined by the Charlotte County MPO, in coordination with FDOT. Interstate and rural highway capacities are developed from FDOT's Florida Level of Service Tables and Standards Handbook. Using the Highway Capacity Manual, directional split ratios are adjusted and applied to the identified evacuation routes. These directional splits are provided to address the time of day in which an evacuation may take place--50/50 being the lowest and representing road capacities during the middle of a workweek day, 70/30 being an intermediate capacity during a weekend day, and 90/10 being a quick capacity which might occur after 9:00 p.m.

Conditions: The condition of the evacuation route is a major component of ensuring safe and timely evacuation. Many of the County's routes are located within low-lying areas which can flood from rainfall or tidal surge, making evacuation hazardous or impossible. Rainfall flooding may pose a greater hazard to evacuation efforts than early shoreline flooding or early winds.

In part to address hurricane evacuation concerns, and in part to maintain good traffic flow overall, the MPO has identified several areas for improvements. Charlotte County has programmed funds to address bridge replacements or modifications in areas that frequently flood, as previously recommended in the Transportation element. For example, Aqui Esta Drive, an urban roadway that a large population center in Punta Gorda would have to utilize to access U.S. 41, has been identified for improvements in the MPO's Transportation Improvement Plan. The proposed improvements include raising the road's elevation and replacing or modifying a substandard bridge that is subject to flooding. The location of the bridges will be mapped based on criteria in the upcoming 2035 LRTP (which is not a part of this adoption), which require critical bridges to be either replaced or repaired.

Improvements are done for the Mid-County area. Concurrent with the adoption of the earlier Comprehensive Plan, and as discussed in its Transportation element, FDOT funded a signalization program, known as ATMS, to improve traffic flow along U.S. 41. The system is in place now and is providing computer control and monitoring of traffic flows, as well as traffic signal timing for efficient evacuation. The project improved evacuation times and routes for residents in Mid-County. The earlier Comprehensive Plan identified a number of LOS problems with the County's network. This update addresses current conditions in terms of the FDOT-updated Q/LOS standards effective September 1, 2009.

S.R. 776 (U.S. 41 to Sarasota County Line): At the time the earlier Comprehensive Plan was adopted, this facility was identified as needing improvement to avoid failure. This problem has been corrected through the year 2020 by expanding S.R. 776 to four lanes throughout its length and, in some cases, to six lanes. The addition of bikeways and sidewalks, included as part of the expansion, will also help conserve the Q/LOS of this road. The linking of the disjunctive segments of the access roads paralleling S.R. 776, which is currently underway, will further enhance the function of S.R. 776, particularly in regard to local business trips.

Placida Road/C.R. 775 (S.R. 776 to Rotonda Boulevard West): Also identified in the earlier Comprehensive Plan as a road in danger of failing, Placida Road has been expanded to four lanes (divided and with a fifth lane in sections) from Rotonda Boulevard north to the Sarasota County line (Pine Street). These improvements are projected to keep this road at an acceptable Q/LOS for the foreseeable future. From Rotonda Boulevard south to its intersection with the Boca Grande Causeway to Gasparilla Island, it is anticipated that widening could be programmed by 2030, as development continues to take place in this area. The roadway is currently satisfactory for the demand.

U.S. 41/Tamiami Trail: This facility is one of the most critical transportation corridors from Lee County to the City of North Port and Sarasota County, serving as the primary thoroughfare through the City of Punta Gorda and some of the most developed portions of the County. According to FDOT policy, the provision of six travel lanes is the maximum number that will be constructed, therefore other measures must be explored in order to maintain acceptable operation. FDOT is currently in the final stage of the design of a comprehensive upgrade of signals along the U.S. 41 corridor and throughout the County that will optimize traffic flow. The County and MPO staffs have identified the need for geometric improvements at a number of intersections in the corridor and have proposed to FDOT that a comprehensive analysis be conducted to begin this program. Also, the County has requested that FDOT's FY 2008 work program include a PD&E study for the widening of the last four-lane segment (North County) of the roadway between Enterprise Drive and Sumter Boulevard in the City of North Port.

In addition, to provide alternative parallel capacity, the County has begun the design and purchase of right-of-way and mitigation land for the first phase of improvements to the Flamingo Boulevard/Edgewater Drive Corridor, from U.S. 41 near the Peace River to S.R. 776 at Toledo Blade near North Port. This improvement is intended to serve as a bypass to U.S. 41, particularly for travelers who wish to pass through Mid-County on their way to West County and northern destinations, and vice versa. The County has acquired approximately 80 percent of the required right-of-way and 100 percent of the land for mitigating the anticipated impacts from this expansion on the Florida scrub jay. This scrub jay mitigation is being funded in part by a grant from the Florida Communities Trust, which is a program funded by Florida Forever legislation and administered by the Florida Department of Community Affairs.

Veterans Boulevard: This is also an important corridor serving Mid-County, connecting from Kings Highway at I-75 to the Murdock area. Though illustrated on many of General Development Corporation's early plat drawings, Veterans Boulevard was not constructed until 1996, when it was completed by Charlotte County. Prior to the construction of Veterans Boulevard, Peachland Boulevard functioned at a LOS D. The widening of the remaining portions of Veterans Boulevard to four divided lanes was completed in Spring 2006.

U.S. 17: This corridor serves as an evacuation route for local residents. U.S. 17 has been widened along its entire length in Charlotte County. In addition to improving evacuation conditions

in the South County area, this project will provide regional benefits, notably to Lee County evacuees as well.

This roadway serves as a major corridor, connecting the City of Punta Gorda and portions of South County with I-75, DeSoto County, and the interior of the State. A substantial percentage of the traffic is commercial, particularly freight, citrus, and produce trucks. This commercial use has intensified with the completion of the regional Wal-Mart Distribution Facility on U.S. 17 in DeSoto County, just north of the County line. With the designation of the land around the County Airport as a Commerce Park and completion of the Piper Road connection to U.S. 17 at Regent Road, U.S. 17 will continue to carry higher volumes of traffic. The last phase of the four-land widening of U.S. 17 to the DeSoto County line was completed by FDOT in 2005.

ROADWAY LEVEL OF SERVICE (LOS)

Level of service is a measure of traffic flow and congestion, and is defined in the Highway Capacity Manual as: "a qualitative measure describing operational conditions within a traffic stream; generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety." When considering LOS, it is important to understand the different analysis types and what is to be achieved. Maintaining acceptable LOS for transportation facilities is critical, not only in times of emergency, but also for the daily functioning of the County. In addition to concerns regarding the multimodal performance of roadways and the function of business, the degree of safety and congestion directly affects quality of life. FTRAM Series Map #3 depicts the LOS on the functionally classified roadways in the County.

The 1994 Highway Capacity Manual (HCM), published by the Transportation Research Board, defines measures for roadway levels of service. For arterial and collector roads, the measurement of effectiveness is average speed. The measure of effectiveness for freeways is density.

Charlotte County's Board of County Commissioners sets roadway LOS for all its roadways except for Strategic Intermodal System (SIS), Florida Intrastate Highway System (FIHS) and Transportation Regional Incentive Program (TRIP)-funded roadways. As of 2009, roadway levels of service on roadways in which the State sets the standard are as follows:

SIS Roadways		
I-75	Level of Service C	County line to County line
U.S. 17	Level of Service C	I-75 north to S.R. 764
U.S. 17	Level of Service B	S.R. 764 to DeSoto County Line
FIHS Roadways		
I-75	Level of Service C	County line to County line

TRIP Roadways

Burnt	Store
Burnt	Store

Level of Service D Level of Service C

Notre Dame N Notre Dame S to Lee County line

Current Conditions

Concurrency monitoring is very important in maintaining adequate levels of service. To monitor the LOS of the County's road network a Concurrency Monitoring System has been established, which includes a computer program to track changes in the LOS. This program utilizes data from the County Public Works Division and the MPO and is administered by Growth Management. Road segments are monitored twice a year at six-month intervals, which results in each segment being examined both in-season and out-of-season, to account for tourist traffic. LOS may vary from count to count. Currently, all roadways meet level of service requirements. Growth Management personnel use the computer program when reviewing individual development proposals, as well as rezoning, land use, and special exception requests. The number of trips generated by the proposed development, land use, or rezoning are calculated using the most current trip generation estimates from the Institute of Transportation Engineers (ITE) Trip Generation Manual. The resulting figures are then added to the existing traffic counts to determine whether the new development will cause the affected roadway segments to fall below the acceptable LOS.

U.S. 41: Review of State Generalized LOS Tables had indicated that U.S. 41 was over capacity along several segments over the 5 year planning window; however, operationally, roadway traffic volumes have not been perceived as a great concern. Kimley-Horn was hired to perform an operational analysis of the roadway, and this analysis revealed that Charlotte County citizens' driving needs and preferences did not fit the State's theoretical model. Instead, traffic was more dispersed throughout the day, resulting in lower peak traffic volumes than might normally be expected. The likely cause of this variation was the higher than average age of Charlotte County's population: retirees are not rushing to jobs during peak periods to the same extent that other counties experience on their road system. Kimley-Horn's study demonstrated that the County has capacity through the 5 year planning period. They also provided a catalog of intersection improvements which will help the efficiency of that roadway.

I-75: The State FDOT identified that I-75 was failing concurrency from Tucker's Grade south to the Lee County line. The road was at level of service "B" for this portion of roadway. The operating level of service is already "C." The State 5 year projected level of service was a "D", based upon general 10 year trending. Charlotte County does not have jurisdiction over this roadway, and the State does not intend to upgrade the roadway until after 2030. This is the only segment of I-75 set at "B." The County sought a waiver to change the level of service from a "B" to "C" and a reevaluation of levels of service trending, based upon economic conditions over the 5 year planning period. The State evaluated the reasonableness of level of service change and looked at the reality of development and population trends in the area. It also looked at the segments to the north and south and found that it was appropriate to change the segment termini. FDOT

agreed to change the segment LOS to a "C," and future growth projections to a "C." The result is that I-75 is not failing over the 5 year window in Charlotte County.

Cochran Boulevard: Cochran Boulevard traverses what has become an urban center of unincorporated Charlotte County, and serves major facilities including Port Charlotte High School, Charlotte Vo-Tech, the Town Center Mall (via a connection to Murdock Circle), the School Board Administrative Center, and the County Administrative Center (again via a connection to Murdock Circle). Because there are few alternative routes, Cochran Boulevard will continue to be a major collector. Facilities for this area and traffic volumes can be expected to continue to increase. Roadway and pedestrian/bicycle improvements to the Cochran Boulevard/Lakeview Boulevard intersection were completed in 2006. This roadway is currently operating at acceptable level of service.

Toledo Blade Boulevard: The County and MPO just completed the widening from U.S. 41 the North Port City limits. City of North Port did the widening from City limits to I-75. This road is currently operating at acceptable level of service.

Edgewater Drive/Flamingo Boulevard: The County has initiated a comprehensive project for the extension and widening of Edgewater Drive and portions of Flamingo Boulevard, as a by-pass to U.S. 41. When completed, these improvements will correct the current LOS problems with the Edgewater segment identified above and will also provide some relief to U.S. 41. The FDOT and County transportation model results that are being used in the LRTP shows significant improvement to U.S. 41. This road is currently operating at acceptable level of service.

S.R. 776: S.R. 776 is the only major east-west arterial serving the Cape Haze Peninsula in West County. Traveling east, S.R. 776 turns northward at roughly the intersection with C.R. 771. This heavily-traveled corridor provides the only crossing of the Myakka River between West and Mid-County. Even though S.R. 776 is currently operating at an acceptable level of service, due to its recent widening, the 2030 LRTP shows that the LOS is expected to fail along most segments by 2020. The recent improvements to the Myakka River Bridge expanded the eastbound lanes to allow re-striping to three lanes in the future, as the need arises. The existing westbound bridge can only accommodate two travel lanes. Minor interim improvements, such as the addition of turn lanes and reconfiguration of intersections, will improve the operation of this major facility in the short term. As S.R. 776 is the primary evacuation route and the only route to connect Englewood/Cape Haze to other portions of Charlotte County, the widening of the roadway could become critical before the year 2030 planning horizon. The significance of S.R. 776 as an evacuation route is recognized in the Natural Resources and Coastal Planning portions of the Comprehensive Plan and is discussed in the Hurricane Evacuation sections. State analysis shows that the roadway meets level of service requirements through at least 2014.

Roadways of Special Emphasis

U.S. 41, S.R. 776 and I-75 are roads over which the State has jurisdiction. C.R. 771 is a County responsibility. LOS for these roadways indicate acceptable levels of service through the planning

period, but the mix of poor economic conditions, sporadic growth and traffic from intra-County and inter-County sources makes it important that these roadways receive ongoing scrutiny to ensure that concurrency is maintained. The main planning issues for these roadways are discussed in the following text and a number of policies were added to the Goals, Objectives and Policies section of this element to address these planning needs.

MAINTENANCE RESPONSIBILITY

The State, County, and City governments all have road maintenance responsibility in the County. Maintenance has several different levels: minor repair (mending potholes, etc.), resurfacing/rehabilitation, and reconstruction. Resurfacing and drainage improvements are the most common form of maintenance of classified roads. FDOT, through funding from the Federal Highway Administration (FHWA), maintains I-75, U.S. 41, and U.S. 17. The Federal Government can also provide funding for the resurfacing of State and classified local roads. FDOT also maintains S.R. 776 and S.R. 31. State road maintenance funds cannot be used on local roads. Over the past 30 years, County Roads 775, 771, 39, 74, 776, 765, 769, 764 (Washington Loop), and 762 (Tuckers Grade) were arbitrarily transferred from State maintenance responsibility to County. The County and City share responsibility for the public roads not maintained by the State. The City maintains local public roads within the City limits through its general fund. The County maintains arterial and collector roads, which it has accepted for maintenance through the Road and Bridge Program, through funding from gas tax revenues. Maintenance responsibilities are shown on FTRAM Series Map #9, Maintenance Responsibilities.

FUTURE CONDITIONS

This section is intended to supplement the preceding sections by considering the inventory of the components of the transportation system, identifying major issues and approaches, addressing system needs and deficiencies, developing a multimodal approach, and coordinating the transportation system with growth and land use. The upcoming 2035 LRTP, which is not a part of this adoption, will be a comprehensive analysis of all the elements that affect transportation now and in the future. The LRTP provides a guide for the future through the Needs Assessment. The upcoming 2035 LRTP (which is not a part of this adoption) Needs Assessment draws on needs identified in the previous Year 2030 LRTP, as well as additional needs brought forward by State and local agencies. Needs were also suggested by the TAC, CAC, and the public. These transportation needs were analyzed and augmented by developing alternatives that simulated future traffic conditions, using the Sarasota/Manatee/Charlotte Regional Planning Model (SMC-RPM).

The development of Needs Plan from the 2035 LRTP, which is not a part of this adoption, will not be constrained by the affordability of the system. It instead focuses on necessary facility changes that would result in improved mobility and generally benefit the community, taking into account

policy constraints. However, Federal regulations require the MPO to ensure that the LRTP is cost feasible. The anticipated financial resources must be sufficient to cover all of the projected capital, operating, and maintenance costs of the total transportation system, including both existing and planned facilities and services through the planning year.

Since funding is not available for all projects in the unconstrained Needs Plan, candidate projects will be prioritized to determine which would be recommended for inclusion in the Cost Feasible Plan. The overall mix of projects between modes was derived from the Needs Plan and trends in spending, but individual projects will be generally classified and prioritized within each funding source. Balancing the projects contained in the Needs Plan assessment against the projected available revenues is an iterative process.

MPO member agencies, including FDOT, Charlotte County, and the City of Punta Gorda, will provide revenue projections through the year 2035 to use in the development of the upcoming 2035 LRTP, which is not a part of this adoption. The revenues generally come from existing sources, estimated for the year 2035 based on current trends. Revenues through 2010/2015 are already committed and are part of the local agencies' Capital Improvement Programs (CIP) and the MPO Transportation Improvement Program (TIP). Therefore, this analysis identifies funding for transportation improvements from 2016-2035. Some revenues have restrictions as to type or jurisdiction of facilities on which the funds may be spent. Other revenues may only be spent on certain roads, such as the Florida SIS.

ROADWAY NETWORK

Using the existing and committed (E+C) highway network, model runs were performed using the regional model to forecast traffic volumes and conditions for the years 2035 thru 2050, assuming no improvements to the road network other than those in the E+C network. The results provided an estimate of where congestion can be expected and how severe that congestion will be. The standard used for calculating road performance was volume-to-capacity (V/C) ratio. V/C ratio is a measure of the amount of traffic a roadway is actually carrying in proportion to the amount of traffic it was designed to carry. Thus, a V/C ratio of 1.2 represents a road that is carrying the theoretical maximum amount of traffic possible to operate acceptably. For the purposes of this evaluation, roads were considered to be congested if they had a year 2035 V/C ratio of 1.2 or greater.

Analysis of the model runs indicated that much of the existing or expected congestion lies on the major north-south corridors, such as I-75, U.S. 41, C.R. 776/EI Jobean Road, and Burnt Store Road. However, east-west roads connecting these north-south corridors will also see their share of capacity deficiencies. These roads can be expected to see significant congestion by 2030, if capacity improvements are not made.

One of the most important elements in the development of the Transportation Plan was to identify those projects necessary to relieve existing congestion or congestion forecasted by the Regional

Planning Model. Several road widening projects were incorporated into the Transportation Plan as possible means of relieving congestion on those roads. These projects included a number of roadway expansion projects: Burnt Store Road, Edgewater Drive, Flamingo Boulevard, Gulfstream Boulevard, C.R. 776/Harborview Road, C.R. 768/ North Jones Loop Road, Liddy Street, Piper Road, Raintree Boulevard, C.R. 39/Toledo Blade Boulevard, Tuckers Grade, U.S. 17, U.S. 41, S.R. 776/EI Jobean Road, I-75, S.R. 776/South McCall Road, C.R. 775/Placida Road, and S.R. 771/Gasparilla Road. FTRAM Series Map #1 may change with the anticipated 2035 Functional Roadway Classification changes and the future maintenance of these roads is expected to remain with current jurisdictions (FTRAM Series Map #9, Maintenance Responsibilities), except that Charlotte County expects the City of Punta Gorda to propose future annexations. Roads in such annexed areas will become the City's responsibility.

In addition to the widening of these existing roads, several new roads or extensions of existing roads will be included in the Transportation Needs Plan. These projects are designed to provide parallel relief to existing congested roads or to improve the connectivity of the road network. Among these projects are the extensions of C.R. 765/Burnt Store Road, I-75 Frontage Road (Luther Road), Gulfstream Boulevard, Harbor Boulevard, North Toledo Blade Boulevard, Raintree Boulevard Connector, Tuckers Grade, N/S Roadway, Sulstone Road, Westchester Boulevard, and Biscayne Drive. The upcoming 2035 LRTP, which is not a part of this adoption, will have a table with needs plan roadways be the end of Year 2010.

A new interchange is also included in the Needs Plan for the Raintree Boulevard area at I-75 in Sarasota County. Although this project is not within Charlotte County, the need was identified, and coordination with the Sarasota/Manatee MPO was conducted to study the regional transportation needs. Also, a new interchange is being proposed in the Lee County, south of Tuckers Grade Road. The purpose of these interchange projects is to improve access to I-75 and make better use of the existing road network within Charlotte and neighboring Counties.

This E+C transportation network includes all existing facilities, plus those capacity improvement projects funded and committed by the end of the year 2015. The major roadway capacity improvements for all State, County, and City roads were included. The highway network was tested by loading it with vehicle trips forecast for 2035. This test showed how the transportation system would perform in 2035, if no additional capacity improvements were made beyond what is already programmed or committed. It also provided a benchmark for comparison with other 2035 alternative transportation networks or systems.

The Needs Plan represents all of the capacity improvement projects necessary for Charlotte County to meet vehicle travel and congestion needs in the year 2035. The Needs Plan is also a "blueprint" that identifies the capacity projects that will be required for Charlotte County.

The key to effectively planning future road improvements is to understand the County's travel patterns. This means understanding where people live, work, and shop; where they are coming from and where they are going. To understand these issues, the County will continue to

participate with the MPO on the various studies undertaken to identify current and future population concentrations, their likely destinations, the demand for public transit, and other aspects of developing a transportation system that will function as the County continues to grow. Such studies will indicate where improvements will have the greatest benefit, where the County can help shape future origins and destinations through the provision of infrastructure, and where Comprehensive Plan amendments (such as Babcock Ranch, Murdock Village, and the Airport Commerce Park) can help create more self-sufficient patterns of development for the future.

When compared to the average Florida resident, Charlotte County residents are more likely to be older, with almost half the County's population (48.8 percent) composed of persons age 55 or older. Household income and vehicle availability data suggest that the population is middle class, with lower percentages in the County than in the State at the opposite ends of the income and vehicle availability scales. Although the majority of workers in the County drive alone, when compared to statewide figures Charlotte County workers closely match the carpool/vanpool use profile.

FUTURE ROADWAY LEVEL OF SERVICE (LOS)

Level of service is a measure of traffic flow and congestion, and is defined in the Highway Capacity Manual as: "a qualitative measure describing operational conditions within a traffic stream; generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety." When considering LOS, it is important to understand the different analysis types and what is to be achieved. Maintaining acceptable LOS for transportation facilities is critical, not only in times of emergency, but also for the daily functioning of the County. In addition to concerns regarding the multimodal performance of roadways and the function of business, the degree of safety and congestion directly affects quality of life.

Charlotte County's Board of County Commissioners sets roadway LOS for all its roadways except for Strategic Intermodal System (SIS), Florida Intrastate Highway System (FIHS) and Transportation Regional Incentive Program (TRIP)-funded roadways. Assuming that the existing functional classification of roadways (as shown in FTRAM Series Map #1) holds good in the Year 2014, expected roadway levels of service (for future years from 2010 to 2050) on all functionally classified roadways are shown in the table included in TRA Data and Analysis Appendix A.

Roadway Concurrency

Concurrency monitoring is very important in maintaining adequate levels of service. To monitor the LOS of the County's road network, the 2050 Plan established a Concurrency Monitoring System, which includes a computer program to track changes in the LOS. This program utilizes data from the County Public Works Division and the MPO and is administered by Growth Management. Road segments are monitored twice a year at six-month intervals, which results in each segment being examined both in-season and out-of-season, to account for tourist traffic. LOS may vary from count to count. Currently, all roadways meet level of service requirements and with the growth rates (based on model predictions and historic trends), 2014 LOS values were calculated to check whether any roadway links fail concurrency. TRA Data and Analysis Appendix A shows the expected LOS values for various future scenarios along with the needs information on all functionally classified roadways in the County. Per the analysis, there will not be any roadway concurrency failures thru the Year 2014.

Alternatives Solutions for Congestion Management

There are certain cases in which the widening of a road may prove infeasible because of right-ofway restrictions, impacts on adjacent land use, or community concerns. In those situations, Transportation Demand Management (TDM), Transportation System Management (TSM) projects were proposed as alternatives to road widening. TDM and TSM strategies could include access management, intersection and signalization improvements, and Intelligent Transportation Systems (ITS) projects. Proposed candidate roadways for TDM and TSM strategies included U.S. 41 north and U.S. 41 south of the Peace River Bridge. For those roads on which both road widening and TDM and TSM were proposed, the TDM and TSM project would be an option to replace the widening project.

Traffic Safety

County staff monitors all accidents using the Small Computer Accident Records System (SCARS), which is reported quarterly to law enforcement agencies and County and City personnel. The purpose is to support traffic engineering programs and to enhance enforcement measures to improve public safety. In 2005, there were 4,072 reported accidents in the County, which represents a decrease of 6.6 percent from the 2004 statistics. While personal injuries in these accidents increased by 6.9 percent, the number of fatalities declined from 37 to 20. Many of the crashes occurred at or near intersections where there are turning movements and other vehicular conflicts. The staff maintains a record of the locations with the highest number and most severe crashes. Intersections along U.S. 41 appear most frequently on this list. This roadway is the responsibility of FDOT and, through the MPO work program County staff has asked that the State focus on a number of locations for improvements to reduce conflicts and, ultimately, the number of crashes. The County has made a number of improvements at problem intersections on County-maintained roadways and has programmed changes in the coming years thru 2014.

Hurricane Evacuation

Hurricane evacuation has consistently been a community priority through the development of the Transportation element of this Plan. Hurricane evacuation for people with special transportation needs will be implemented by the Office of Emergency Management. The evacuation program, called the "Special Needs Program," was established in response to Florida State law requirements. Recruitment for evacuation transportation is advertised in the news media, in brochures, and by announcements during hurricane awareness seminars. Emergency Management requests that people who need, or know someone who needs, evacuation transportation for this program is voluntary and does not require a reference through a social service agency.

Congestion Management

The MPO documented its Congestion Management System for Charlotte County on August 12, 1996. The document included a discussion of public participation, FDOT Congestion Management System Work Plan, objectives and policies, performance measures, data collection, strategies, congested corridors, unfunded projects, project selection criteria, and evaluation procedures. The upcoming 2035 LRTP, which is not a part of this adoption, includes a development of new congestion management system which will help the County to manage congestion more effectively in the future. This revised system will be in place by the end of 2010.

Performance measures included mode split, passenger transit trips per capita, and roadway LOS. Vehicle occupancy was addressed by including driving alone and car pooling/vanpooling as one of the mode splits. Congestion Management Strategies and progress for each were documented in Table TRA-1.

The Transportation element includes transportation project selection criteria. The criteria were based on the six management systems, citizen, and State priorities. Criteria which address congestion directly include congestion management (including ITS, HOV, etc.), safety (reducing congestion resulting from incidents), alternative modes (sidewalks and transit), and promotion of infill development (urban service area strategy). These criteria make up about half the total possible score. Other criteria such as improving the Florida Intrastate Highway System, hurricane evacuation, traffic circulation, and freight movement also have congestion management implications.

Table TRA-1: Potential Congestion Management Strategies			
Highway Strategies	Congestion or Mobility Benefits or Impacts		
 Convert signalized intersections into grade separated intersections 	Increases capacity and improves mobility		
Add High Occupancy Vehicle Lanes	 Improves travel times, increases vehicle occupancy, reduces vehicle trips 		
Roadway widening	Increases capacity and reduces congestion		
ITS or TSM Strategies	Congestion or Mobility Benefits or Impacts		
Traffic Signal Coordination	Reduce number of stopsImprove travel time		
Highway Information Systems	Reduce travel times and delaySome peak-period travel shifts		
Access Management Strategies	Congestion or Mobility Benefits or Impacts		
Driveway/Median Control	 Improve mobility Increase efficiency Improve travel times for through traffic 		
Turn Lanes and new or Relocated Driveways and Exit Ramps	 Increase efficiency Improve travel times and reduce delay Improve mobility and safety 		
Multimodal Strategies	Congestion or Mobility Benefits or Impacts		
New Sidewalks and Designated Bicycle Lanes on Local Streets	Increase mobility and		
Improved Safety of Existing Bicycle and Pedestrian Facilities	Increase non-motorized mode sharesReduce incidents		
Park-and-Ride Lots	Increase mobility		
Design Guidelines for Streetscape Enhancements	Increase pedestrian mode sharesDiscourage motor vehicle use for short trips		
Land Use Strategies	Congestion or Mobility Benefits or Impacts		
Mixed-Use Development	Increase pedestrian useDecrease SOV trips		
	Decrease in VMT		
TDM Strategies	Decrease in VMT Congestion or Mobility Benefits or Impacts		
	Congestion or Mobility Benefits or Impacts Reduce peak-period VMT Improved travel time for participants		
TDM Strategies	Congestion or Mobility Benefits or Impacts Reduce peak-period VMT		

Source: Growth Management Department, December 2009.

Land Use Forecasts

Socioeconomic data, such as population and employment information, are a vital component of travel demand forecasting models used for transportation planning. The County and the MPO participate in the development and maintenance of this information for Charlotte County. This model input data is historically updated on a five-year cycle, thus requiring a periodic update to the input data, including base year and forecast socioeconomic data.

The entire socioeconomic data development process was supported by a series of interactive review workshops, conducted by the consultant with the members of the review team (County, City, and MPO staff). During these workshops, control totals, approved development, and zoneby-zone data forecasts were reviewed and adjusted as needed. These review workshops resolved forecast issues that could not be addressed by the forecast tool, thus requiring manual intervention that greatly enhanced the validity of the data forecasts.

The key focus of these review workshops was to identify the approved developments and other areas with a high potential for growth. The development totals and timing are intended to be the best representation of future growth. The actual timing of the anticipated future growth may vary from the assumptions in this study (i.e., growth in 20 years as opposed to 15 years), but the road network improvements required to accommodate this growth will be a necessity in either case.

The methodology used to identify the locations of employment growth, resulting from redevelopment, was based on the analysis that could be completed within the scope of services, using the best available data at the time the forecasts were developed. This necessitated the use of existing, readily available data. The opportunity exists for a more refined consideration of redevelopment growth in the future, should the resources become available.

Babcock Charlotte

Of course, the sudden appearance of the proposed Babcock Charlotte development has had a significant effect on the County's Comprehensive Plan and, ultimately, the LRTP. The Babcock Charlotte proposal and analysis were now included as part of the transportation modeling, the LRTP update process will shows the resulting needs because of this development. Also, the staffs of Lee and Charlotte Counties, as well as the respective MPO's, worked closely with the traffic consultant for Babcock Charlotte development in preparing the development agreement at each phase of the development.

Several of the salient items in the agreement include:

- Preparation of a comprehensive transportation analysis, using a blended model for Charlotte and Lee Counties
- Confirmation of a minimum percentage (22 percent) for internal capture of trips (down from their projected 52 percent capture)

- Confirmation that the project will fund a comprehensive roadway improvement program (widening of S.R. 31 to four and six lanes and Bermont Road to four lanes)
- Commitment to dedicate a 250' minimum right-of-way to the County along S.R. 31 for future transportation uses
- Commitment to make the development a successful, multi-modal transportation community (buses, trolleys, pedestrian/bike facilities, etc.)

Murdock Village

The Murdock Village Community Redevelopment Area (MVCRA) consists of approximately 1,200 gross acres of land within the unincorporated area of Charlotte County. The County has assembled approximately 870 acres of property within the Redevelopment Area. The MVCRA is comprised of approximately 3,000 platted lots that were part of the General Development Corporation's subdivisions from the 1960's. Although substantially platted, the area was only sparsely developed.

The Murdock Village Community Redevelopment Area was identified as a key site for redevelopment, due to the "Findings of Necessity" Report prepared by the County in 2003 that determined the area was "blighted" within the meaning of the Community Redevelopment Act.

As stated in the Murdock Village Community Redevelopment Plan, the vision is to create a mixeduse, high-tech, energy-efficient and environmentally-friendly community that embodies several fundamental concepts. These concepts include the development of a vibrant and attractive gathering place for the entire community in the form of a Town Center; "five-minute walk" access to parks, facilities and services; pedestrian-friendly street access network; and interior greenway and blueway open space linkages that integrate the Community Redevelopment Area (CRA) with existing County and community resources.

The redevelopment of Murdock Village is expected to occur according to the Murdock Village CRP, as provided for in Chapter 163, F.S. The Board of County Commissioners has approved Ordinance 2005-020, which established the Murdock Village Trust Fund, to allow for the collection of tax increment revenues that can be used for a variety of activities associated with the redevelopment. The Murdock Village Mixed-Use Redevelopment District land use designation was adopted by the Board of County Commissioners in January, 2005, and further articulates the vision for Murdock Village by establishing densities and intensities. In addition, the County has received a Binding Letter of Interpretation of Vested Rights (BLIVR) from the Florida Department of Community Affairs that determined the following uses were vested: 2,744 single family; 538 multi-family; and 3,023,882 square feet of commercial. This anticipates that at least 2.17 million square feet of commercial; 2,744 single family; and 538 multi-family units will be available to the selected developer, subject to site plan approval.

From a transportation standpoint, the project is designed to be a true multi-modal development, with convenient pedestrian/bike facilities interconnecting the various land uses. The roadways

and "centers" are designed to accommodate transit vehicles as the phases of the project develop. As indicated in an earlier section, the two major arterials serving Murdock Village (Toledo Blade Boulevard and Flamingo Boulevard) will be improved and enhanced as key transportation facilities for the Village and this area of Mid-County.

Multimodal Transportation

Multimodal transportation is defined as having or involving several travel modes, including automobile, truck, freight, public transit, bicycle, pedestrian, terminals, car/vanpools, and High Occupancy Vehicle (HOV) lanes. Another term used in transportation planning is inter-modal, which is defined as a transportation system interconnecting, and including, different modes of transportation. An example would be a transit station that accommodates auto passenger drop-off and pick-up, as well as bike and pedestrian connections. Federal transportation legislation requires that MPO's develop a LRTP that is multi-modal, with inter-modal connections.

As communities begin the transition from rural to urban, the elements of the transportation system begin to change also, and people begin using more urban modes of travel rather than solely the automobile. While continued improvements and enhancements to the roadway network can provide short-term relief to safety and congestion problems, other modes must be explored and developed to provide travel choices for the long term. Highways alone will never be capable of satisfying all the transportation needs of the public. It is doubtful that contemporary American society's dependence on and infatuation with the automobile will significantly decline in the foreseeable future. However, long-term rising fuel costs and lengthy commutes may make alternative transportation modes more appealing and, particularly in urban areas, timely alternatives to the single-occupant vehicle must be pursued to encourage the use of alternative travel modes to reduce dependence on the automobile. Ultimately, a successful transportation system must offer options to the public. It must be multi-modal in design.

Bicycle and Pedestrian Facilities

The use of bicycles as an alternate mode of transportation has become more popular in the United States and Charlotte County in recent years. Increasing numbers of people have found this to be an acceptable form of commuting during pleasant weather conditions, particularly as more bicycle facilities have been created. Of course, most bicyclists in Charlotte County ride for recreation. Sidewalk facilities in the County are concentrated in the areas around Punta Gorda and Port Charlotte. The 1998 referendum allowed for the construction of 30 miles of sidewalk and bicycle facilities in the region. The 1998, 2002 and 2008 referendums allowed funding for sidewalk projects through the year 2014. The MPO maintains a list of sidewalk needs for the City and County, which it received from various sources, including residents, the School Administration, Board of County Commissioners, a number of citizen committees, the City of Punta Gorda, and Charlotte County.

The MPO LRTP identifies projects for both the bicycle and pedestrian projects in the Cost Feasible Plan, based on the policy that all future road projects, except on limited access roads, will include bikeways and sidewalks. Other bicycle and pedestrian projects were selected for funding through an iterative scoring and public involvement process and are exclusively retrofits to existing facilities.

Generally, pedestrian improvement corridors will be selected at a future date, using criteria as follows:

- serves a school (School Administration)
- serves a park (Parks & Recreation)
- provides enhanced pedestrian/bicycle safety
- provides linkage and connections within a community
- serves a census-designated urbanized area
- population density around a sidewalk
- road segment is classified.

Safety improvement and public awareness programs are also included in the Cost Feasible Plan. A more detailed description of the project prioritization processes for bicycle and pedestrian projects will be available in the upcoming Bicycle Pedestrian Master Plan.

Public Transportation

An extremely small percentage of people in Charlotte County use alternative modes of transportation other than the automobile, as would be expected for a community at this stage of development. Optimistically, this is less than half of a percent of all trips. The predominant focus of this plan is two-fold: to evaluate transportation facilities as they exist today, and to begin planning to update and integrate the current coordinated and non-coordinated transit operations as elements of a multi-modal transportation system. This will help to plan for future fixed route transit system.

For the purposes of the Comprehensive Plan and the upcoming 2035 LRTP, which is not a part of this adoption, public transportation is defined as any form of transportation in which a person pays another party for transportation in a vehicle. Charlotte County Transit is the public transportation provider for Charlotte County. It currently operates three distinct public transportation programs: Transportation Disadvantaged ("Sunshine Ride"), Dial-A-Ride, and Medicaid non-emergency transportation.

The Transportation Disadvantaged (TD) program started in 1989 under the auspices of the Florida Commission for Transportation Disadvantaged. TD serves residents with physical disabilities, those aged 60 and older, children at risk, qualified low-income residents, and those living in rural areas. These riders make reservations at least 24 hours in advance for trips for life-sustaining activities such as congregate dining, medical appointments, and grocery stores. Service is provided by approximately 26 County vehicles and by contracted local cab companies. The CCT also provides vans to several non-profit organizations that use their own drivers.

In 2001, the CCTD began operating the Dial-a-Ride service, which is open to any member of the public, and thus it is termed "general mass paratransit". The service area includes all the urbanized portions of Charlotte County, excluding the bridgeless barrier islands. Its service mission is to provide high-quality, low-cost, door-to-door paratransit service to the residents of Charlotte County. Operating on a reservation-only basis, the service is available Monday through Friday, between the hours of 7:00 a.m. and 6:00 p.m., and Saturday, 9:00 a.m. to 6:00 p.m. Many other vendors provide charter, shuttle bus, "trolley," and taxi services to Charlotte County residents, as well as scheduled inter-city service as described under Inter-modal Facilities.

In 2009, Charlotte County updated its Transit Development Plan (TDP), as required by FDOT, to maintain eligibility for State Block Grant funding. The updated TDP suggested the partial conversion of current paratransit service into fixed route service. Specific objectives of the updated TDP include:

- Identify existing local transit services and resources;
- Evaluate existing transit resources;
- Evaluate transit policies on public transportation;
- Develop transit alternatives consistent with need;
- Develop an implementation plan;
- Determine future transit needs;
- Develop a future cost-feasible transit plan; and
- Define unmet transit needs.

Using year 2000 U.S. Census information, the TDP found that the key transit-dependent population was located along the U.S. 41 Corridor, from Murdock through eastern Punta Gorda. The corridor is a prime candidate for locating a regularly-scheduled fixed route. Route deviation service is also a very important element that should also be explored, as the most transit-dependent residents represent over 12 percent of the total County population. A variety of needs, options, and recommendations comprise five general categories:

- A variety of funding enhancements;
- Expanding Dial-a-Ride service hours and days;
- Adding new transit services, including shuttle service along the U.S. 41 Corridor, regularlyscheduled service from North Port to Murdock and Port Charlotte, express bus service to Fort Myers and Arcadia, and connections to inter-city bus service locations;
- Capital Improvement Projects, including bus replacements and additions; improved maintenance facilities; and utilizing technology to computerized reservations, scheduling, and fare collection where possible; and
- Strategic initiatives, including operating efficiencies and changes, and marketing and outreach programs.

Dial-a-Ride System Improvements

The advance reservation Dial-a-Ride service operates Monday through Friday, between the hours of 7:00 a.m. and 6:00 p.m., and Saturday, 9:00 a.m. to 6:00 p.m. As previously detailed, system ridership has steadily increased since service was first introduced in January 2001. However, with the increased popularity, there is limited passenger capacity at specific times of the operating day, resulting in an ever-increasing rate of trip denials. Additionally, the limited hours and days of service constrain the travel opportunities for those residents who rely on the Dial-A-Ride system as their primary means of mobility. Some of the specific actions to pursue include:

As the Dial-a-Ride system's popularity continues to increase, the number of buses and operators available to provide service has remained at 12 buses since service inception. Five additional buses will be added to the base service in alternate years, or as demand dictates.

Expand the Dial-a-Ride Service to evening hours: The lack of evening service precludes access to many evening events and social opportunities. Additionally, the limited hours preclude the system's use by many residents who attend school or work in the evenings, especially individuals who work in the commercial and food service industries. Extending the Dial-a-Ride service beyond 6:00 p.m. to 9:00 or 10:00 p.m. would require the addition of two to four buses and operators. It is recommended that three buses initially be provided to extend the Dial-A-Ride service hours until 10:00 p.m., with additional buses added in subsequent years to meet demand.

Carpool and Vanpool

By sharing a ride with one or more people, Charlotte County commuters could save money on gas and parking, because passengers share these expenses with fellow carpool members. Carpoolers can choose to ride with others as few or as many times per week as desired, giving them the flexibility of driving their own car for pre-arranged meetings or appointments. Once signed up for a rideshare program, commuters are provided with a personalized computer match list of people who live and work nearby. After the commuter receives tips on how to form a carpool, it is up to him/her to follow through.

If a commuter's trip is lengthy (e.g., more than ten miles one way), a vanpool should be considered. For example, the Sarasota Manatee Commuter Assistance Program suggests a vanpool for a group of 8 to 12 employees to ride together to work. A contractor provides a van to one member of the group, who volunteers to drive participants to and from work, picking them up from either their residences or a common pick-up area, such as a park-and-ride lot. Each passenger pays a low, monthly fare that covers the cost of maintenance, insurance, and gas. Vanpooling is set up on a month-to-month basis, so there's no long-term commitment. Users are urged to try it for a month and see if vanpooling is for them.

Charlotte County Airports

According to a report from the Continuing Florida Aviation System Planning Process (CFASPP), dated April 2005, Charlotte County is actively looking to increase the level of general aviation activity. The Airport Authority's vision for the future includes incorporating commercial activity, extending the runway, and constructing a control tower.

The Airport, which completed an updated Master Plan in March 2008 (conditionally approved by the Federal Aviation Administration on October 6, 2009), has identified several initiatives as necessary to serve general aviation demands in the near term, including rehabilitation of airfield pavements and the relocation of Runway 15/33. It would like to extend the runway to 8,500 feet; add an ILS and a control tower; and construct a commercial airline terminal building. The Airport plans to continue serving flight training, recreational users, and business users.

The Airport supports an industrial park that is less than a mile away. Although the industrial park is currently 100 percent occupied, the area is not developed to capacity, as 250 acres remain available for development.

The Enterprise Charlotte Airport Park is located at the Charlotte County Airport, with sites offered from 1 to 150 acres and features industrial and foreign trade zoning. This commerce park is located minutes from I-75, U.S. 41, and U.S. 17.

The Charlotte Airport area has the potential to add a significant number of jobs to the Charlotte County economy. Hurricane Charley caused extensive damage to the Airport and surrounding property. With repairs and improvements, the Airport, the adjoining industrial park, Edison Community College, and the Charlotte County Public Safety Complex will contribute to the region's overall economic recovery and security.

Development of the Airport and its industrial park will drive the economy, not only of Charlotte County but southern DeSoto County as well. However, the level of success for the industrial park is contingent on the County's development approach, infrastructure improvements, and the extension of utility services.

A significant improvement and realignment for Piper Road, the main access roadway, is currently being designed to enhance the ground transportation connection to this facility. The project is partially funded through a multi-year grant from the FDOT inter-modal access program. It is estimated to be a \$30 million project.

Trucking Facilities

The movement of commercial freight into and out of Charlotte County is extremely important to businesses, as well as residents. Charlotte County freight origins and destinations were extracted from the year 2000 FDOT Transearch commodity database. The highest volume freight carriers are private companies, such as supermarkets and lumber companies, followed by for-hire trucks and air cargo.

Commodity transportation is dominated by the clay/concrete/glass category. A number of sand and rock mines exist in the County. The freight movement within the County is greater than freight movement into/out of Charlotte County. For freight that originates in Charlotte County, the major

receiving counties are Dade, Broward, Duval, and Hillsborough. The top exporting counties to Charlotte County are Dade, Duval, Hillsborough, and Polk.

Projected 2035 Industrial Land Use and Intermodal Facilities

The year 2035 projected industrial employment areas are concentrated in a few key areas within Charlotte County. The projected industrial growth is focused on the following areas:

- U.S. 41 south of the Sarasota County
- U.S. 41 north of the Peace River
- I-75 and U.S. 41 south of the Peace River (Airport area)
- S.R. 765 (Burnt Store Road) north of the Lee County line
- Eastern portion of Charlotte County

Most of these areas are served by U.S. 41 and I-75. The areas showing industrial growth in the eastern part of Charlotte County, with the new industrial warehouse sites (Wal-Mart, Home Depot, etc.) on U.S. 17 in DeSoto County, will place demand on U.S. 17, S.R. 31 and S.R. 74.

In addition, special attention should be given to the U.S. 17 Corridor, from the DeSoto County line to I-75. The presence of a new Wal-Mart distribution center, and another possible distribution center just inside the DeSoto County line, make this segment of highway important for truck freight movements. Other corridors that will need to be monitored in the future include U.S. 41 and I-75. These highways will remain important truck routes in the region. As industrial development continues to grow, modifications and improvements to these routes will be necessary in order to facilitate efficient truck traffic flow. Also, with the current vision for the Charlotte County Airport (including the proposed Publix distribution center on Piper Road, which is anticipated to employ 300 to 500 people), careful planning of development in and around the Airport is very important. Careful planning now will help to eliminate future hurdles in Airport growth and development.