

Transportation
FOUNDATION DOCUMENT

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4-1 INTRODUCTION

Transportation is one of the most important components of a community's infrastructure. Not only does the transportation system connect land uses within the county; it also connects the county to other areas in the state, country and world.

The Transportation System itself consists of several elements: the roadway or traffic circulation system, the transit system, the bicycle/pedestrian system and the air/water port system. Each is just part of an overall, coordinated transportation system. In Santa Rosa County, as in most areas, the traffic circulation system is the most visible component. The transportation system is important not only because it provides for travel within and through the county, but also because it provides direct access to land parcels. For this reason, the relationship between land use and transportation is important. While transportation facilities are necessary to accommodate growth and development, the land use pattern also affects the transportation system.

By building roads and providing access to undeveloped areas, the development potential of an area increases. Also, land use changes can affect the transportation system. The location and intensity of land uses can determine the number, length and routing of trips as well as the modal split. To be effective, transportation and land use plans must be coordinated with one another. This element reflects land use and transportation coordination.

Santa Rosa County originally adopted the Traffic Circulation Element with its Comprehensive Plan in 1990. Section 163.3177(6)(j), Florida Statutes, (F.S.), now requires that any unit of local government with all or part of its boundary within an urbanized area must adopt a Transportation Element, which shall be prepared and adopted in lieu of the Traffic Circulation Element. The Transportation Element shall combine the Traffic Circulation Element, Mass Transit Element, and Ports, Aviation, and Related Facilities Element.

With a few notable exceptions, the transportation is sufficient to access existing land uses and provide mobility for the majority of residents in Santa Rosa County. The US98 corridor is a major issue for Santa Rosa County and, in fact, for all the counties in northwest Florida from Escambia County east to Gulf County. This facility is a major regional connection, but in Santa Rosa County is the only corridor for east west travel for local trips as well. The County recognizes that land use decisions have made as much of an impact on the current situation on US98 as have transportation decisions. This understanding led to the development of the South End Special Area Plan, a sector plan for the entire peninsula. This plan, currently underway, will analyze existing conditions, trends and build-out scenarios and compare them to the needs of the transportation system. Alternatives for consideration include capacity expansion, alternative routes, land use changes and density changes.

As *Map 4-1* (Appendix A) illustrates, south Santa Rosa County is within the census-defined urbanized area and is part of the Pensacola Urbanized Area Metropolitan Florida-Alabama Transportation Planning Organization (MTPO). Thus, the Comprehensive Plan contains an integrated Transportation Element. The MPO serves as the lead agency for regional transportation planning. Much of the information in the Element was derived from MTPO plans.

A. Organization of the Element

This element is divided into four sections: the Introduction, Terms and Concepts, Existing Regulatory Framework, and Data and Analysis. The Introduction provides an overview of the county's transportation systems. Terms and Concepts define the terms used throughout most of this document. The Existing Regulatory Framework describes the current federal, state, regional and county regulations. The Data and Analysis Section discusses the county's transportation resources - Roads, Mass Transit and Alternative Transportation Modes, and the Air/Water Port System. The Transportation Element is designed to recognize the complementary nature of the components and the need for a comprehensive analysis to address the overall mobility needs of Santa Rosa County citizens.

B. Relationship to Other Elements of the Comprehensive Plan

The Transportation Element is closely related to many of the other Comprehensive Plan Elements. A key relationship exists between this Element and the *Future Land Use Element*, which provides an overall blueprint for the future growth patterns within the County. Land use decisions will determine transportation demands and those areas where investments in transportation improvements are necessary.

The *Recreation Element* determines the location and types of recreational facilities for which access is necessary, as well as addressing conversions of abandoned transportation facilities to active recreational trails, and the establishment of an overall system of bikeways and pedestrian trails.

The *Infrastructure Element* addresses public water and sewer, stormwater and solid waste, thereby helping to shape development trends within the planning horizon and influencing the analysis of transportation demand and facility need.

The *Conservation/Coastal Element* identifies all County natural resources in need of management and conservation, due to their function or characteristics. This includes management of transportation services for the purposes of both conservation and hazard mitigation.

The *Intergovernmental Coordination Element* provides opportunities to improve the County's collaboration and coordination with other agencies, such as the Florida Department of Transportation, the Pensacola Urbanized Area Metropolitan Planning Organization, as well as neighboring Counties and jurisdictions, in transportation planning and provision of transportation services in the region.

The *Capital Improvements Element* reflects the plan for transportation capital outlay, which should support the Goals, Objectives, and Policies of this Element.

4-2 TERMS AND CONCEPTS

Functional Classification

Functional classification is defined in Rule 9J-5, F.A.C., as the assignment of roads into categories according to the character of service they provide in relation to the total road network. Basic functional categories are defined below, as per Rule 9J-5, F.A.C.

Freeway - a multilane divided highway having a minimum of two lanes for exclusive use of traffic in each direction and full control of ingress and egress; this includes all fully controlled limited access principal arterials.

Arterial Road - A road providing service that is relatively continuous and of high traffic volume, long average trip length, high operating speed, and high mobility importance. In addition, every U.S.

numbered highway is an arterial road. Arterial roadways are further classified as rural or urban, and principal or minor.

Principal Arterial - Roads that generally serve the major centers of activity of an urban area, the highest traffic volume corridors, and the longest trip purpose and carry a high proportion of the total urban area travel on a minimum of mileage. The routes are integrated, both internally and between major rural connections.

Minor Arterial - Roads that generally interconnect with, and augment urban principal arterial roads and provide service to trips of shorter length and a lower level of travel mobility. These roads place more emphasis on land access than do principal arterials.

Collector Roads - These are roads maintained by the County and provide service that is of relatively moderate average traffic volume, moderately average trip length, and moderate operating speed. These roads collect and distribute traffic between local roads or arterial roads and serve as linkages between land access and mobility needs. Collector roads can be subdivided into major or minor collectors, which is a reflection of their length, the types of roads they connect, traffic volume, and design standards.

Urbanized Area

The urbanized area is an important factor in determining the functional classification of a roadway, as well as determining the area within the County to be part of the Metropolitan Transportation Planning Organization. The existing urbanized area is defined as "the current area consisting of an incorporated place and adjacent densely settled surrounding area that together have a minimum population of 50,000." These areas are initially established by the U.S. Bureau of Census with the decennial census and for transportation purposes adjusted slightly by the MTPO, in consultation with FDOT and the Federal Highway Administration. Areas may be adjusted to reflect future urbanizing areas, which are areas expected to have a population density of at least 1,000 persons per square mile.

Level of Service Standards

Level of service, as used in transportation planning and engineering, is a qualitative measure describing operational conditions within a traffic stream and their perception by motorists. The qualitative descriptions are equated to quantitative measures for the purposes of planning and engineering analyses. Factors which affect the qualitative measures include vehicle density, average travel speed, volume to capacity ratio, average stopped delay, etc.

Level of Service A: represents excellent free flow conditions. Motorists can maneuver and select desired speeds virtually unaffected by others.

Level of Service B: represents good stable flow conditions. Motorists' ability to maneuver becomes slightly restricted by the presence of other users, but speed selection is relatively unaffected.

Level of Service C: represents acceptable stable flow conditions. Motorists' ability to maneuver and select speeds become significantly affected by the presence of other users in the traffic stream.

Level of Service D: represents high-density, but stable, flow. Motorists' maneuvering ability and speed are severely restricted by the traffic stream.

Level of Service E: represents near-capacity, generally unstable, flow. All speeds are low and maneuvering is very difficult. Small increases in traffic volume or minor problems within the traffic stream will cause conditions to deteriorate to LOS F.

Level of Service F: represents forced flow, stop and go conditions. At intersections, those conditions create long queues requiring motorists to wait through two or more signal cycles. Volume exceeds capacity at intersections and other conflict locations.

4-3 EXISTING REGULATORY FRAMEWORK

A. Federal

The *Federal Highway Administration (FHWA)* is the agency responsible for developing regulations, policies, and guidelines to achieve safety, access, economic development, and other goals relating to comprehensive transportation systems in the United States. The FHWA provides federal funds to states for transportation programs.

B. State

The *Florida Department of Transportation (FDOT)* is the agency responsible for the planning, design, construction, and maintenance of the state highway system. The state highway system is established by Florida Statutes, and consists of all State and Federally designated roadways. The FDOT has adopted The Florida Transportation Plan, which is part of the State Comprehensive Plan and guides major transportation planning for state facilities. Every year, the FDOT develops, with the cooperation of the ~~MTPO~~, the Five-Year Work Program, which establishes priorities and funding for specific transportation improvement projects. Project priorities are established by the County Commission for improvements within the area outside of the urbanized area, generally north of Whiting Field. The ~~Pensacola Urbanized Area Metropolitan~~ Florida-Alabama Transportation Planning Organization (~~MTPO~~) establishes priorities for roadway improvements within the urbanized area of the County (generally south of Whiting Field).

C. Regional

The *West Florida Regional Planning Council (WFRPC)* is one of eleven Florida planning councils. In 1993, the State Legislature recognized RPCs as Florida's only multipurpose regional entities that are in position to plan for and coordinate intergovernmental solutions to growth-related problems on greater-than-local issues. The WFRPC is comprised of elected officials and governor appointees from the seven counties in Northwest Florida: Escambia, Santa Rosa, Okaloosa, Walton, Bay, Holmes and Washington. The WFRPC is an advocate for the collective interests of this seven-county jurisdiction, providing a wide variety of services, including technical and administrative assistance. The WFRPC's role in transportation planning includes the review and coordination of each municipalities' transportation and traffic circulation element, technical assistance for traffic impact analysis, and coordinating technical forums and land use decisions in determining solutions to transportation problems.

The 1962 Federal Aid Highway Act mandated that all urbanized areas over 50,000 in population establish a continuing, cooperative, and comprehensive planning process in order to be eligible to receive Federal planning and construction funds. An interlocal agreement between the Cities of Pensacola, Milton and Gulf Breeze, Santa Rosa and Escambia County and FDOT formally established the Pensacola Urbanized Metropolitan Planning Organization (MPO), which became the Florida-Alabama Transportation Planning Organization in 2004. The responsibilities of the ~~MTPO~~, as outlined in Sec. 339.175(9)(a), F.S., include "responsibility for transportation related air, noise, and water quality planning within the urbanized area." Included in the responsibilities are the development of an annual transportation improvement program and a long-range transportation plan. ~~MTPO~~ membership consists of the Santa Rosa County and Escambia

County Commissions (five members each), five Pensacola City Council members, one Gulf Breeze representative and one Milton representative.

D. Local

Decisions related to transportation planning, design and construction on county roadways and regulation of development on land abutting or affecting transportation corridors are made solely by the Santa Rosa County Board of County Commissioners. For example, the County enacted special access management regulations to control how development accesses major transportation corridors.

4-4 DATA AND ANALYSIS

A. Population Characteristics Affecting Transportation

The 2000 Census showed a population of 117,743 for Santa Rosa County. Santa Rosa County encompasses 1,021 square miles or 653,514 acres. In terms of population density, Santa Rosa County is considered a low-density community, with an overall density of 115 persons per square mile or 0.18 person per acre. However, these densities are misleading since a large part of the county is within either Eglin Air Force Base or Blackwater River State Forest and, thus, cannot be developed. In addition, these densities do not recognize that the northern section of Santa Rosa County is largely agricultural. Population densities in the more heavily developed central and southern portions of the county are much higher:

- Milton Vicinity – average 781 persons per square mile
- West and South of Milton – average 468 persons per square mile
- South End Pensinsula, Gulf Breeze to Navarre – average 1,112 persons per square mile

Although Santa Rosa County is not an extremely affluent county - 24.1% of households have an annual income under \$15,000 - there is a high degree of access to private automobile transportation. Forty-five percent of the households in the county have two or more vehicles available. Only 4.8% of households have no vehicles available.

The overwhelming majority of residents, 81.7%, drive alone to work, only 13% carpool and only 3.4% walk or work at home. As would be expected in a county with few transit options, less than 1% of residents took public transportation to work. Average vehicle occupancy is 1.5 persons per vehicle.

The average travel time to work in Santa Rosa County is 22.5 minutes. This is somewhat comparable to the national average of 22.4 minutes, but is higher than the statewide average of 21.35 minutes.

B. Santa Rosa County Transportation System Description

Santa Rosa County is a coastal county located in northwest Florida. The Gulf of Mexico forms the entire southern boundary of the County and the Escambia River and Escambia Bay form the western border. The Alabama State Line forms the northern border and the eastern border is the Okaloosa County Line. As is the case with most coastal counties, the more heavily urbanized areas are concentrated near the coast of the Gulf of Mexico in the southern portion of the county. Growth in this area is concentrated along the US 98 corridor. Another population center exists between Pace and Milton on the US 90 corridor.

The CSX Railroad also traverses Santa Rosa County in an east-west orientation providing rail freight service. General aviation facilities are available at Peter Prince Field. Transportation disadvantaged services are provided countywide by the community transportation coordinator, **COMSIS Mobility Services**. There are no commercial port facilities within the County, but the region is served by the Port of Pensacola, just to the west in neighboring Escambia County. The major transportation facilities within Santa Rosa County are illustrated in **Map 4-2** (Appendix A) and accompanying **Table 4-1** beginning on the following page.

B.1 Roads and Highways

The major interstate and interregional highways, Interstate 10, US98 and US90, traverse Santa Rosa County in an east-west direction. Each of the highways provides connections to all areas in the immediate region, the state and points as far west as Los Angeles, CA. SR4 also provides for east-west travel in and through the rural north end of Santa Rosa County.

The major east-west arterials in Santa Rosa County are complemented by a number of north-south arterials, which are oriented between the heavily urbanized south end along US98 and the urbanized US90 corridor. These north-south roadways include SR281 (Avalon Boulevard), SR89 and SR87. SR281 and SR87 are the only two major arterials that provide direct access to the south end of the county. CR191 (Garcon Point Road) also provides access from the community of Bagdad, I-10 and points along Blackwater Bay to the south end via the SR281 Garcon Point Toll Bridge. SR89, SR87, CR197 (Chumuckla Highway) and CR191 (Munson Highway) provide access to the north end of the county and points north of the Alabama State Line.

In the immediate vicinity of Milton and Pace, the Santa Rosa County roadway network contains several roadways that provide connections between these roads and residential/commercial area within the US90 corridor. However, the roadway network in the south end of the county - along US98 - is characterized by few interconnecting local roads. Almost all of the traffic generated by residential and commercial land uses in the corridor is funneled directly onto US 98.

B.2 Mass Transit

Mass transit in the County is limited to an express bus route on the US90 corridor operated by Escambia County Area Transit. Transit for special users such as the transportation disadvantaged and schoolchildren is available countywide.

B.3 Rail Facilities

CSX operates a major rail line traversing the county in an east-west direction, basically paralleling US90 much of the way. There is a rail siding from the major line to a major industrial area near the Floridatown community in the west central part of the County.

B.4 Aviation Facilities

General aviation facilities, including charter services, are available at the County owned Peter Prince Field (formerly the Milton "T" airport). The nearest commercial airline services are available at the Pensacola Regional Airport in neighboring Escambia County.

B.5 Non-motorized Transportation Modes

The mild climate in Santa Rosa County encourages almost year-round participation in non-motorized transportation modes, such as jogging, walking, and bicycling. There are two major multi-use trails in the County, the Blackwater Heritage Trail in the Milton area and the newly constructed bikepath in the Gulf Islands National Seashore along US98 in the south end of the County. A second bike route in the south end is being identified and appropriately signed by the MTPO's Bicycle/Pedestrian Advisory Committee. This bike route uses existing collector and local roadways off of US98 to traverse a long stretch of the peninsula from Gondolier Boulevard to the terminus of Soundside Drive. Santa Rosa County residents also have access to the multi-use trail on Santa Rosa Island near Pensacola Beach. The County fully supports and encourages linking existing facilities and constructing new ones in order to create a contiguous bike/ped system. As a result, the County supports FDOT's policy to build sidewalks and bicycle lanes as part of all new construction and capacity expansion. Santa Rosa County also encourages FDOT to include construction of these facilities in smaller projects like resurfacing and intersection projects when feasible. The County also requires that all new developments and construction of new local and county roadways provide for non-motorized/ labor-intensive transportation facilities.

With active participation of pedestrians and bicyclists, a large incidence of accidents involving automobiles could occur, if proper accommodation of bicyclists and pedestrians is not provided. The MTPO has developed a Bicycle/Pedestrian Plan and has earmarked 1% of major project funds for bicycle/pedestrian improvements. Santa Rosa County has also established a bicycle/pedestrian advisory committee to report to the County Commission.

B.6 Major Traffic Generators

Major traffic generators in the county include the cities of Milton and Gulf Breeze as well as two major tourist destinations in the communities of Pensacola Beach (in Escambia County) and Navarre Beach. NAS Whiting Field, a major military training base, is also one of Santa Rosa County's major traffic generators. Gulf Breeze and Milton and other central Santa Rosa communities generate traffic during the traditional daily peak hour time frames. Resulting congestion is normally recurring and predictable. In general, traffic flows west from Gulf Breeze and Pace into employment centers in Escambia County during the morning peak hours and back to the east in the evening. In Navarre, traffic actually travels out of the urbanized area into Fort Walton Beach to Hurlburt Field and surrounding industrial employers. The City of Milton and NAS Whiting Field, north of the City, are the major employment centers in central Santa Rosa County.

All of the major traffic generators and attractors are served by major transportation routes. During peak season there is some delay at the Navarre Beach Bridge Toll Plaza. ~~Over the years there have been many proposals for eliminating this delay, including moving the toll plaza to the southern base of the bridge.~~ However, the solution must be integrated with plans for US98 congestion mitigation, which might occur with a by-pass facility being proposed north of US98. Mobility for the elderly and transportation disadvantaged remains a major transportation issue for Santa Rosa County due to the lack of transit options. The transportation-disadvantaged program is a pillar of the transportation system.

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C. Level of Service Criteria

Level of service, as used in transportation planning and engineering, is a qualitative measure describing operational conditions within a traffic stream and their perception by motorists. The qualitative descriptions are equated to quantitative measures for the purposes of planning and engineering analyses. Factors

which affect the qualitative measures include vehicle density, average travel speed, volume to capacity ratio, average stopped delay, etc.

Level of Service A:

- Uninterrupted flow
- No restriction on maneuverability
- Little or no delay

Level of Service C:

- Speed and maneuverability restricted by higher traffic volumes
- Satisfactory operating speed for urban conditions
- Delay at signals

Level of Service E:

- Lower operating speeds
- Volumes at or near capacity
- Major delays and stoppages

Level of Service B:

- Stable flow conditions
- Operating speed begins to be restricted

Level of Service D:

- Low speeds
- Major delays at signals
- Little freedom to maneuver

Level of Service F:

- Low speeds
- Stoppages for long periods because of downstream congestion

In the original Traffic Circulation Element, level of service standards were adopted which were consistent with the level of service standards adopted by FDOT for roadways on the State Highway System. **This 2000 update to the element alters some of these LOS standards (see Table 3-3).** However, the LOS standard for all facilities on the **Florida Intrastate Highway System (FIHS)** must conform to the state standard as required by law.

FIHS facilities in Santa Rosa County are:

- I-10: Escambia County line to Okaloosa County line
- SR87: US98 to US90

FDOT has placed special emphasis on maintaining an acceptable level of service for roadways on the Florida Intrastate System. The **Florida Intrastate Highway System (FIHS)** comprises a statewide network of limited and controlled access highways. The **FIHS** was established in 1990 as defined in Section 338.001, Florida Statutes, as "a statewide system of limited access facilities and controlled access facilities...that allow for high-speed and high-volume traffic movements within the State." In Santa Rosa County, I-10 and SR87 are the only roadways designated as segments of the FIHS. In order to preserve these facilities' role on the **FIHS**, FDOT adopted LOS B as the standard for intrastate roadways in rural areas of the State. However, rural two-lane roadway segments are permitted to maintain a LOS C standard until they are upgraded to four-lane or six-lane facilities, at which time the minimum service standard must be raised to LOS B. The minimum service standard for **FIHS** roadway segments in areas defined as transitioning, urban area, or community, is LOS C. **May need to update this to the SIS rather than FIHS.**

Table 4-2, on the following page, shows the FDOT State Adopted Level of Service Standards for roads on the state highway system. These standards must be adopted by Santa Rosa County for roadways on the FIHS, but can be modified for all other state and county roadways. In Santa Rosa County, statewide level of service standards for specific roadway segments are modified from those listed above where conditions dictate more appropriate standards. **Table 4-3**, on the following page identifies these roadway segments.

Table 4-2**Statewide Minimum Level of Service Standards for the State Highway System**

	Rural Area	Transitioning, Urban Area, or Community	Urbanized Area
Florida Intrastate Highway System			
Limited Access Highway	B	C	C
Controlled Access Highway	B	C	C
Other State Roads			
Multi-Lane	B	C	D
Two-Lane	C	C	D

Table 4-3**Roadway Segments With Modified LOS Standards**

Roadway	Segment Limits	Adopted Standard	LOS
SR87N	SR10 to SR89	E	
SR87N	SR89 to Whiting Field Entrance	D	
SR89N	Hamilton Bridge Road to SR87	E	
SR89N	Alabama State Line to Pollard Road	D	
SR89N	Pollard Road to Shell Road	D	
SR89N	Shell Road to SR87	D	
SR399	SR30 (US98) to Fort Pickens Road	E	

D. Inventory Of Existing Roadway System

As specified in the original Traffic Circulation Element, planning activities related to the roadway network in the County are generally governed by a classification system with three primary elements: jurisdiction, environment, and function. Jurisdiction defines the agency responsible for construction and maintenance of the roadway. There are two agencies having jurisdictional responsibility for major roadways in Santa Rosa County, FDOT and the County. Function defines the traffic movement/land access function that the roadway serves.

Functional classification recognizes that roadways serve two primary functions, traffic movement and property access. These two functions, however, do not complement each other. A roadway that has many property access points and intersections with other roadways does not provide for smooth and safe traffic movement. The arterial roads, both principal and minor, are designed and maintained to serve the traffic movement function. Principal arterials provide for interstate and statewide travel, while minor arterials provide for inter-county mobility and routes between urban centers within counties. Principal arterials include all interstate system freeways, most U.S. numbered routes, and some state routes. Minor arterials include most state numbered routes that are not principal arterials.

Collector roadways serve a balance of both the traffic movement and land access functions. Collectors, as the name implies, collect traffic from local streets and residential, commercial or industrial areas and channel it into the arterial roadways. The roadways that serve the traffic movement function, principal arterials, minor arterials, and collectors, are collectively referred to as “major” roads. They carry the majority of the vehicle miles of travel within the County. All other roads comprise the local road network. Since the primary function of local roads and streets is to provide access to property, they are not considered in planning for traffic circulation. Therefore, the analysis and attached tables include only roadway segments that comprise the major roadway network.

Santa Rosa County works to preserve the traffic movement function of important arterials by controlling the amount of land access. This is accomplished by instituting access management standards that control connection spacing and on-site circulation, including shared driveways and cross-connections. The County's access management standards work in concert with FDOT's standards to ensure that major arterials continue to serve the traffic movement function.

Environment describes the general land use character of the property surrounding the road, including population density and types of commercial uses. Level of service standards and service volumes are dependant upon the characteristic of the area in which the roadway is located. For establishing level of service standards and analyzing operating conditions, roadways within the County have been divided into urban, urbanized, transitioning into urban area, and rural developed and undeveloped categories, depending upon the environment in which the roadway is located. Table 3-1 shows area type and functional classification for all roadways in Santa Rosa County on the major road network.

Map 4-3 (Appendix A) illustrates the LOS area types for the entire urbanized area. Urbanized areas are defined by the Federal Highway Administration (FHWA) and encompass the entire Census Urbanized Area as well as a surrounding geographic area as agreed upon by Santa Rosa County, FDOT, FHWA, and the MPO. This area includes the Milton, Pace, Gulf Breeze and Navarre areas of the County.

The transitioning urbanized area is the area outside of the urbanized area that is expected to be included within the urbanized area within the next twenty years. Transitioning urbanized areas are those areas of the County contiguous to the existing urbanized area that are anticipated to contain 1,000 people per square mile within the twenty year time-frame. Upon receipt of the 2000 Census data, extension of the urbanized area to include a greater portion of Santa Rosa County may be recommended to the FHWA.

For purposes of capacity analysis, the rural area of the County has been divided into a rural undeveloped area and rural developed area. While level of service standards are uniform for roadways within the rural area, standard service volumes are different for rural developed areas versus rural undeveloped areas.

D.1 Constrained and Backlogged Roadway Segments

Constrained roadways are those roads that will not be expanded by the addition of two or more lanes due to physical, environmental or policy constraints. Physical constraints primarily occur when intensive land use development is immediately adjacent to roads, thus making expansion costs prohibitive. Environmental and policy constraints primarily occur when decisions are made not to expand a road based on environmental, historical, archaeological, aesthetic or social impact considerations. There are no constrained roadway segments in Santa Rosa County.

A backlogged roadway is a facility that is operating below the minimum Level of Service standard, but is not programmed for a construction improvement in the first three years of the FDOT work program or in the five year schedule of the County's capital improvement program. A backlogged facility cannot be a designated constrained facility. US98 from the Escambia County Line to Fairpoint Drive, which is within the City of Gulf Breeze, is the only backlogged roadway segment in Santa Rosa County.

E. Analysis Of Existing Roadway Deficiencies

Existing deficiencies within the Santa Rosa County major roadway network have been assessed with respect to traffic operating conditions. This analysis addresses the deficiencies based on FDOT generalized level of service standards. For purposes of this analysis, other broad areas of possible deficiencies, such as physical conditions and safety conditions, are not specifically analyzed other than in the broader context of the generalized FDOT volumes.

Existing traffic volumes and level of service for each roadway segment on the Santa Rosa County major roadway network is shown in **Table 4-1** (page 4.7). Link identification numbers for each roadway on the network are shown on the map in **Map 4-4** (Appendix A). The analysis compares existing traffic volumes at each roadway segment to the applicable FDOT generalized volume for the adopted level of service standard described above. Roadways operating at a deficient level of service, according to the AADT counts and the FDOT generalized tables, are highlighted in Table 4-1 and listed below in **Table 4-4**.

Table 4-4

Roadways Presently Operating Below the Adopted Level of Service Using Annual Average Daily Traffic Counts and Generalized LOS Analysis Tables

Roadway Segment	Segment Limits	Adopted LOS Standard	Existing Operating Level of Service
US90 (SR10)	SR281 (Avalon Boulevard) to Parkmore Plaza Road	D	F
US98 (SR30)	East End of the Naval Live Oaks Reserve to College Parkway	D	F
SR281 (Avalon Boulevard)	I-10 (SR8) to Mulat Road	D	E
SR281 (Avalon Boulevard)	I-10 (SR8) to US90	D	F

For purposes of concurrency management, Santa Rosa County uses Peak Hour Peak Direction traffic counts and more sophisticated methodology, like ARTPLAN for determining operating level of service. Santa Rosa County uses these more sophisticated analytical techniques for all roadways that have reach 85% of AADT capacity according the generalized tables. This analysis illustrated that most of these roadways are currently operating at an acceptable level of service. In addition, County staff has made specific recommendations for improvements to US98, US90, SR281 and Woodbine Road that, when implemented, will result in increased capacity. Projects include:

- US98
 - ◆ Short Term Improvements that will allow the county to maintain an acceptable level of service through at least 2005:
 - Re-time signals at US98 and Gondolier Boulevard, Oriole Beach Road, College Parkway and Wal-Mart

- Replace loop sensors at Gondolier and Oriole Beach
 - Improve pavement at Gondolier and College Parkway
 - Change signal phasing at Wal-Mart signal
 - Re-striping College Parkway, adding skip lines in the intersection and making minor widening and access modifications to the northbound approach
- ◆ Long Term Improvements:
 - Dual northbound left turn lanes at Gondolier Boulevard
 - Service roads in selected areas
 - Selective 6-laning of certain sections
 - Interconnection among existing and planned subdivisions
 - Commercial nodes off of US98
 - The South End Special Area Plan is expected to produce more long term alternatives
- US90
 - ◆ Short Term Improvements
 - Prohibit left turns at Willing Street and increase the green time for the southbound phase
 - ◆ Long term Improvements
 - The MPO is leading an effort to reach consensus regarding capacity alternatives
- SR281 Avalon Boulevard
 - ◆ Long Term Improvements
 - Construct Da-Lisa Road connection, an east-west corridor between SR281 and CR191 that will reduce traffic volumes on SR281
 - Four lane SR281 from I-10 to US90
- Woodbine Road
 - ◆ Short Term Improvements
 - Construct eastbound dual left turn lanes on US90 (includes County improvements to Woodbine to accept two lanes of turning traffic)
 - ◆ Long Term Improvements
 - Conduct a PD&E study to determine if four-laning Chumuckla Highway, a parallel facility with more Right-of-Way, is more beneficial than four-laning Woodbine.

In conjunction with the MPO, the County is working to mitigate deficiencies projected after 2005. SR281 Avalon Boulevard has been a high-ranking MPO priority for four-laning for several years. Santa Rosa County requested and the MPO voted to move Avalon Boulevard ahead of US98 in the priority list, making it the first capacity priority on the major project list. Right of Way acquisition for the four-laning of Avalon Boulevard is funded in FY 2005/2006 of the FDOT work program.

The MPO has completed a Corridor Management Study for US98, which County staff is revisiting in order to prioritize capacity enhancing projects. Santa Rosa County is implementing several projects, such as signal retiming, that will increase capacity on this roadway. US98 is also part of a recently designated Special Planning Area. The sector plan that results from this process will further address congestion on US98 and outline methods for enhancing traffic flow and maintaining acceptable levels of service.

The MPO is also funding and conducting a Corridor Management Study for US90 in Santa Rosa County. In addition, the County is working with the MPO and FDOT to negotiate an agreement with the City of Milton for a capacity enhancement on the two lane section of US90 through Milton.

F. Analysis Of Future Roadway Deficiencies

Future traffic operating conditions have been analyzed to determine where traffic congestion will develop if no improvements are made to the roadway network. Roadway deficiencies identified in the analysis are based on traffic growth projections, land use patterns and population.

Traffic volume projections for major roadways in Santa Rosa County were developed based on historical growth rates for each roadway segment. The volume projections have been developed for three time frames. A 2005 projection is important to help identify the short term needs, which will aid in identifying those projects to be included in the Capital Improvements Element. A 2010 projection is used for identifying intermediate improvements which will comprise the future traffic circulation system. Finally, a 2020 projection is used to identify long term needs.

F.1 Projected Future Traffic Operating Deficiencies

Table 4-5, on the following page, shows future operating conditions for Santa Rosa County roadways in 2005, 2010 and 2020. The analysis includes improvement projects to be completed by the horizon year. Roadways projected to be operating below the adopted level of service standard are shown in *Table 4-5* below and illustrated in *Maps 4-5, 4-6 and 4-7* in Appendix A.

In general, traffic operating conditions on roadways in the county are expected to be good in 2005, but there are areas of the County that are projected to experience operating deficiencies based on historic traffic growth rates. As illustrated in *Table 3-5*, most of the deficiencies are expected on SR281, US90, US98 and Woodbine Road. Prior discussion under the Analysis of Existing Roadway Deficiencies explains how the County is addressing these deficiencies. SR281 is in Stage II of the MPO's Long Range Plan, thus it should be a four-lane facility by 2010. The discussion below describes planned roadway improvements that will mitigate congestion on the deficient segments of roadway.

F.2 Roadway Improvements

The roadway improvements outlined in this section, and illustrated in *Maps 4-8, 4-9 and 4-10* in the Future Land Use Map Series, reflect the above deficiency analysis and projects from the MPO's Long Range Transportation Plan (LRTP). Both short-term and long-term capital improvements are outlined, but only those in the first five years will appear in the Capital Improvements Element, the MPO's Transportation Improvement Program and FDOT's Work Program. Only those projects in the first three years of the five year work program can be used for concurrency purposes.

In the new update to the MPO's LRTP extensive use will be made of the Urban Land Use Allocation Model (ULAM). Santa Rosa County will provide the MPO with GIS-based land use data to populate the model. The output from ULAM will create the ZDATA1 and ZDATA2 inputs to the FSUTMS Pensacola Urban model. As a result, the projected LOS and transportation system needs will be based on actual land use data and not on historical growth trends. Santa Rosa County is also working to build a countywide transportation model that will be based on the FDOT District 3 regional FSUTMS model. This will allow the county to make future transportation decisions based on land use data.

A brief description of the roadway improvements begins on page 4.25:

Table 4-5
Projected Operating Deficiencies

Roadway Segment	Segment Limits	Adopted LOS Standard	2005 Level of Service	2010 Level of Service	2020 Operating Level Of Service
SR8 (I-10)	Escambia County Line to SR281 Avalon Boulevard	C	<i>C- not deficient</i>	D	F
US90 (SR10)	Santa Rosa County Line to Woodbine Road	D	F	F	F
US90 (SR10)	Woodbine Road to East Spencer Field Road	D	F	F	F
US90 (SR10)	East Spencer Field Road to SR281	D	<i>C- not deficient</i>	<i>D- not deficient</i>	F
US90 (SR10)	SR281 to Parkmore Plaza Road	D	F	<i>C - not deficient</i>	F
US90 (SR10)	Parkmore Plaza Road to SR87 (Stewart Street)	D	<i>D- not deficient</i>	F	F
US90 (SR10)	SR87 (Stewart Street) to CR89 Ward Basin Road	D	E	F	F
US90 (SR10)	CR89 Ward Basin Road to Airport Road	D	<i>C- not deficient</i>	<i>D- not deficient</i>	F
US98 (SR30)	East End of Naval Live Oaks to College Parkway	D	F	F	F
US98 (SR30)	College Parkway to CR191B Soundside Dr.	D	F	F	F
US98 (SR30)	CR191B Soundside Drive to Sunrise Drive	D	<i>C- not deficient</i>	F	F
US98 (SR30)	Sunrise Drive to Navarre School Road	D	<i>C- not deficient</i>	F	F
US98 (SR30)	Navarre School Road to Panhandle Trail	D	F	F	F
US98 (SR30)	Panhandle Trail to Okaloosa County Line	D	F	F	F
SR281 (Avalon Blvd)	I-10 (SR8) to Mulat Road	D	F	<i>B- not deficient</i>	<i>B- not deficient</i>
SR281 (Avalon Blvd)	Mulat Road to US90	D	F	<i>B- not deficient</i>	<i>B- not deficient</i>
CR197A (Woodbine Road)	US90 to Guernsey Road	D	F	F	F
CR197A (Woodbine Road)	Guernsey Road to CR197	D	<i>C- not deficient</i>	<i>C- not deficient</i>	F

2005 Horizon Year: (Map4-8, FLUM Series)

- SR87S (four lane from US98 to Eglin Air Force Base Boundary)- Four laning this segment will provide additional capacity in the rapidly growing Holley-Navarre area. The southern half of the segment (US98 to Five Forks Road) is scheduled for construction in FY2001/02 in the FDOT 5-year work program. The northern segment (Five Forks Road to the AFB boundary) is scheduled for 2003/04.
- SR87S (four lane from Hickory Hammock Road to US90)- This improvement will enhance travel connections between the two large population centers in Santa Rosa County, the US90 and US98 corridor. The project is scheduled for construction in 2003/04 FDOT 5-year work program.

2010 Horizon Year: (Map4-9, FLUM Series)

- SR87S (four lane from Eglin AFB boundary to Hickory Hammock Road) Construction of this project will complete the four laning of this critical link between south and north Santa Rosa County. This is a Stage II project in the MPO's Long Range Plan.
- SR281 *Avalon Boulevard* (four lane from I-10 to US90)- This roadway is another critical link on the County's roadway network. It is also a Stage II project in the MPO's Long Range Plan.
- US90 (six lane from SR281 Avalon Blvd to SR89 Dogwood Drive)- This project, which is also in Stage II of the MPO's LRTP, will facilitate travel on a highly developed section of the US90 corridor.
- 2020 Horizon Year: (Map 4-10, FLUM Series)
- I-10 (six lane from the Escambia County Line to CR191 Garcon Point Road)- This Stage III project of the LRTP will alleviate congestion on a section of the FHHS traveled heavily by both through traffic and commuters.

Potential Future Projects Not Cost Feasible with Existing Revenue Sources: (Map 4-11, FLUM Series)

The financial resources section of the MPO's LRTP identified alternative sources of revenue, like impact fees and Local Option Gas Taxes, which could be enacted by local governments to fund projects that previously were not cost feasible. MPO staff developed a list of projects that could be funded with this revenue should the County choose to enact alternative revenue sources. These potential improvements are illustrated in Figure 8-3 and described below.

- *I-10*- 6 lane from CR191 Garcon Point Road to the Okaloosa County Line
- *US98/ Navarre By-pass*- Construct a by-pass north of US98 in Navarre from west of SR87 to the Okaloosa County Line. In recent months, there has been discussion of connection the proposed Navarre by-pass to a western gate access road into Hurlburt Field. This would reduce congestion on US98 in the am and pm peak hours in Santa Rosa County and significantly reduce delays at the Hurlburt Main Gate in Okaloosa County.
- *US90*- 6-lane from Escambia County Line to SR281 Avalon Blvd
- *US90*- 6-lane from SR89 Dogwood Drive to SR87 Stewart Street
- *US90*- 4-lane from Canal Street to SR87S
- *SR87*- Construct an extension of SR87 from US90 south to CR191
- *SR87S*- Construct an extension of SR87 from US90 north to Munson Road

- *SR87S*- Construct an extension of SR87 from Munson Road to SR87/SR89
- *CR399*- 4-lane from Edgewood Drive to SR87
- *CR184A Berryhill Road*- 4-lane from west Spencer Field road to SR89 Dogwood Drive
- *CR197A Woodbine Road*- 4-lane from US90 to CR197 Chumuckla Highway
- *West Spencer Field Road*- Construct an extension of West Spencer Field Road from the North end of Spencer Road to CR191 Willard Norris Road
- *Pine Blossom Road*- Construct an extension of Pine Blossom Road from SR281 Avalon Blvd to SR87/SR89

F.3 Transportation Demand Strategies

In addition to physical improvements to increase roadway capacity, traffic operation improvements and transportation demand management can be important strategies for alleviating transportation deficiencies. Transportation Demand Management (TDM) are strategies designed to reduce peak-hour demands on the roadway network. Implementation of TDM strategies, such as carpools, vanpools, subscription bus service, parking management, work hour management and innovative legal and legislative approaches can reduce the number of cars on the roadway by increasing occupancy per vehicle and shifting travel hours, thus reducing the need for high cost capacity improvements. The County annually identifies appropriate actions to ease peak hour congestion as part of the concurrency monitoring system. These actions can include TDM measures.

It is incumbent upon the private sector to actively participate in TDM strategies in order to ensure success. The private sector is often involved through Transportation Management Associations (TMAs). TMAs are private non-profit organizations covering a distinct geographical area, such as Central Business District (CBD), a suburban office park, or some other regional activity center. Member dues are the most common method for funding TMAs, however, a variety of other funding mechanisms exist for funding TMAs.

TDM techniques can be commonly divided into three different categories. The TDM techniques that can be implemented in order to help alleviate capacity problems are:

- promote alternatives to the automobile, encouraging persons to switch voluntarily to other modes of travel, such as transit and bicycles:
 - park-and-ride service
 - shuttle systems
 - pedestrian systems
 - employer transit subsidies
 - bicycling
- encourage more efficient use of automobiles and roads through ridesharing and alternative work hours:
 - HOV lanes
 - ridesharing
 - alternative work hours
 - truck traffic restrictions

- discourage the use of automobiles by making their use more costly or more difficult:
 - parking management
 - automobile restrictions

Since TDM measures are designed to reduce vehicle demand on the system by increasing vehicle occupancy, they are viewed as demand-side strategies. However, supply-side strategies such as Traffic Systems Management (TSM) can also be alternative means to achieving LOS standards. TSM strategies include left- and right-turn lanes, intersection widening, and improved signing and pavement markings. Traffic signal improvements are also a relatively low-cost TSM strategy that can improve the capacity of the County's roadway system. Traffic signal improvement strategies include traffic signal coordination, continuous optimization of timing plans, and implementation of computer-based traffic control systems to incorporate a closed-loop signal system. Operation of the closed-loop system would result in significant benefits in terms of reduced delay and fewer stops at traffic signals. While the cost of TSM measures varies, the benefits generally exceed the costs.

Several TSM strategies have been identified to increase capacity on US98 in south Santa Rosa County. The BCC has committed to fund these projects, which should allow the County to meet the LOS standard on US98 for the next five years without any major capital improvements. Santa Rosa County and private businesses within the County also continue to work with the West Florida Commuter Services Program, staffed by the West Florida Regional Planning Council. This agency works directly with major employers to institute programs like ridesharing. Agency staff run a GIS-based program that will match employees in the same geographic areas for ridesharing purposes. The program also markets TDM strategies to the public at large.

F.4 Land Use and Transportation Interaction

The types of land use significantly affect travel patterns in Santa Rosa County. Since many areas in Santa Rosa County are bedroom communities for employment centers in Escambia County and southern Okaloosa County, future growth and travel patterns are dependent on those centers. Low density residential and strip commercial development have led to transportation problems along the entire US98 corridor. The County is now undertaking a major sector plan to review growth trends and to develop solutions based on both land use and transportation for the south end.

The Future Land Use element indicates that the Avalon Boulevard corridor and the Pace area near Woodbine Road and Chumuckla Highway are expected to be high growth areas. The Avalon Boulevard corridor expects growth in commercial, low-density residential and medium-density residential. This projected growth pressure is the main catalyst behind the planned four-laning of Avalon Boulevard. In anticipation of continued residential growth, the County will be conducting a PD&E or feasibility study to determine whether to four-lane Woodbine Road or Chumuckla Highway. Although Woodbine currently has higher traffic volumes, Chumuckla is poised for more growth, has fewer right-of-way constraints and provides better connectivity between the communities of Chumuckla and Allentown and the more urbanized Pace and Milton areas. General County plans also include moving some commercial core areas off of principle arterials to create commercial nodes within communities. This is the vision for the five-points area at the intersection of Chumuckla Highway and Woodbine Road. This is a major impetus for the PD&E study.

Providing for more industrial development is also a key element of the County's comprehensive plan. Maintaining access to these intermodal facilities is an important function of the Transportation Element. The SR87S/US90 area is a high-growth area for industrial development. Thus, the Transportation Element supports four-laning US90 and maintaining good access at the I-10/SR87S interchange.

F.5 Intermodal Needs

Most of the intermodal facilities in Santa Rosa County are freight-related. Although Peter Prince Field could be considered an intermodal terminal, most of the activity at the airport is recreational. There is some military and freight related traffic now and the new Airport Master Plan may indicate that more can be sustained in the future. Currently access to this terminal and the two industrial parks in the area, on US90 and SR87S, is not threatened. However, the Comprehensive Plan does support four-laning US90 east of Milton to ensure adequate access in the future.

None of the intermodal facilities are projected to be deficient within the planning horizon. The economic development element deals with availability deficiencies in commercial and industrial land. None of the park and ride lots are threatened.

G. Coastal Evacuation

During a hurricane evacuation for Northwest Florida, a significant number of vehicles have to be moved on the roadway network in a relatively short period of time. With limited sheltering available in the region for a major hurricane in the coastal counties, most evacuees will go to inland counties and beyond to seek shelter.

Over 400 clearance time runs were accomplished for the region based on differing intensity of hurricanes, evacuation area assumptions, rapidity of evacuees' response and differing tourist seasons. Clearance times generally fall below 24 hours for all of the Year 2000 scenarios. It is possible that by the Year 2005 some worst case scenarios will be greater than 24 hours. Clearance times reflect the effects of adjacent county traffic impacts and in that regard assumes that consistent evacuation decisions will be made and coordinated between adjacent jurisdictions and the State of Florida EOC. Refer to Table 6-18 for clearance times. With the addition of the new Garcon Point Bridge, it is expected that these clearance times will improve slightly.

As mentioned above, evacuation clearance times calculated for Northwest Florida are generally 24 hours or less. However, there will be storms with unusual meteorological characteristics and/or late behavioral response (i.e. Hurricane Opal) where it is possible that only 18 or even 12 hours are available for evacuation movements. This could impact the number of evacuees who are able to make their desired evacuation movement.

For the Northwest Florida region, this would primarily be a problem for Escambia, Okaloosa and Bay Counties where clearance times exceed 12 hours. For Santa Rosa and Walton Counties, evacuation movements can work within a 12-hour time frame as long as evacuees are warned of traffic conditions for long out of county movements (i.e. I-10 eastbound, I-65 northbound) and are encouraged to stay in their respective county.

Clearance times in Santa Rosa County have basically remained constant, with only a few increases of a half hour. This has occurred despite increases in both population and employment. The construction of the Garcon Point Bridge has helped to keep clearance times low and the eventual four-laning of SR87 from US98 to US90 will ensure safe evacuation times for the coastal population.

Source: U.S. Army Corps of Engineers, The Northwest Florida Hurricane Evacuation Study, July 1999.

H. Mass Transit

H.1 Existing Transit Services

Transit services in Santa Rosa County are limited to the following: transportation disadvantaged services provided by COMSIS Mobility Services, an express bus route from Milton funded by a WAGES/TD grant, through the Pace area to an ECAT mini-transfer point at West Florida Hospital in Escambia County and an express bus route from downtown Pensacola to Pensacola Beach along US98 with several stops in the City of Gulf Breeze. A second express route from the Navarre area to trip attractors in Gulf Breeze and Pensacola has been proposed, but not funded.

The express route service from Milton runs along a portion of SR87 and along US90, connecting to a mini-transfer point in Escambia County. Headways along this route average 4 hours, concentrating on peak hour travel. The route utilizes existing park-and-ride lots in the US90 corridor. These lots have adequate capacity to serve riders and carpooling commuters well into the future. Ridership steadily increased from June through September 2000 to 36 trips per month, but began to drop off in October and November 2000. Although low ridership was expected in the first few months of the service, numbers have been lower than anticipated. MPO staff attributes low response rates to the fact that riders are asked to contact the CTC for reservations even though the service is not reservation dependent. The MPO's Transit Development Plan, which was updated in 1999, recommends continued extension of express bus service along the US90 corridor. In addition, it supported the aforementioned Navarre-Gulf Breeze-Pensacola express route. The MPO is in the process of developing an update to the 1999 TDP and staff expects transit options in Santa Rosa County to be a major part of that study.

H.2 Transportation Disadvantaged

Overview

The Transportation Disadvantaged (TD) program was created by the Florida Legislature in 1979 to provide transportation services for persons who are unable to transport themselves because of physical or mental disability, income status, age, or because they may be children-at-risk. These transportation disadvantaged persons are dependent upon others to obtain access to health care, employment, education, shopping, social activities or other life-sustaining activities. In 1989, the legislature amended Chapter 427, Florida Statutes, and Rule 41-2, Florida Administrative Code, which govern the Transportation Disadvantaged (TD) program and created the Commission for the Transportation Disadvantaged (CTD). The CTD is comprised of representatives from various state agencies and other stakeholders in the TD program from around Florida. The CTD and its staff oversee the allocation of monies from the Transportation Disadvantaged Trust Fund (TDTF) which are used to operate the program and to provide trips for TD persons around the state. The CTD also conducts quality assurance monitoring and provides technical assistance to the local TD programs.

The TD program operates in each of Florida's 67 counties and its mission is to promote the delivery of transportation services to the TD population in a manner that is cost effective, efficient, and reduces fragmentation and duplication of services. There are several organizations and individuals at the local level that play a role in accomplishing this mission and they include: 1) local Community Transportation Coordinators (CTCs) who arrange, and in some cases, provide the transportation services for the TD population; 2) Local Coordinating Boards (LCBs) which provide advice and direction to the CTCs and also set local priorities for the provision of TD services; 3) Designated Official Planning Agencies (DOPAs), which recommend each local CTC to the Commission, conduct planning studies related to service delivery,

appoint LCB members, and serve as staff support to the LCBs, and; 4) government and non-profit agencies that purchase the transportation services from the CTCs for their respective clients.

Community Transportation Coordinator (CTC)

In June 1999, the Santa Rosa Council on Aging, which had been coordinating service since 1983, invoked the 30-day cancellation notice included in its CTC contract. On July 1, 1999, COMSIS Mobility Services Inc., d.b.a. ATC_{Paratransit} became the coordinator in Santa Rosa County.

Local Coordinating Board (LCB)

The Local Coordinating Board in Santa Rosa County is comprised of a cross-section of individuals who have a stake in the local TD program. Members on the LCB are designated by the DOPA and include representatives from the following areas:

- The Santa Rosa County Board of County Commissioners
- Florida Department of Transportation
- Community Action
- Florida Department of Children & Family Services
- Florida Department of Labor & Employment Security
- Florida Department of Elder Affairs
- Florida Agency for Health Care Administration
- Santa Rosa District Schools
- Early Childhood Services
- 1 Economically disadvantaged member of the community
- 1 Elderly member of the community
- Persons with Disabilities;
- 1 Citizen advocate- system user
- 1 Citizen advocate- non-user
- Private Transportation Industry
- Mass Transit Agency

Designated Official Planning Agency (DOPA)

The West Florida Regional Planning Council (WFRPC) serves as the DOPA for the TD program in Santa Rosa County. The functions of the WFRPC include preparing the County's Transportation Disadvantaged Service Plan (TDSP), conducting an Annual Evaluation of the CTC, recommending the selection of the CTC to the CTD, and providing staff support for the LCB. Funding for these functions is provided through annual planning grant monies generated by the TDTF and distributed by the CTD.

Purchasing Agencies

COMSIS Mobility Services signs contracts with most of the County's human service agencies to provide transportation for their clients. The staff takes requests for service, which are made by either the clients themselves or by the client's sponsor. Subsequently, each individual agency is billed at the end of the month for services rendered. Additionally, COMSIS Mobility Services files grant applications and other required reports as necessary for acquisition of funding from these agencies.

Transportation Disadvantaged Service Plan (TDSP)

Pursuant to Chapter 427, F.S., the CTD requires that a TDSP be developed for each county participating in the TD program. This plan covers a three (3) year period and is updated annually. The TDSP consists of four (4) sections covering service demographics & demand, service delivery, quality assurance & standards, and cost allocation & rate structures. The Santa Rosa County TDSP is updated by the WFRPC and reviewed by the LCB.

Overview of TD Services

The TD services currently provided in Santa Rosa County are primarily demand-responsive in nature; however, a flexible route with deviation is being developed and will be instituted by the end of 1999. Service is available 24 hours a day, 7 days a week by advanced registration. Service is available to clients of sponsoring agencies, non-sponsored transportation disadvantaged clients and to the general public at a mileage rate. Fares for trips vary depending upon the type of service required

H.3 Trends And Future Transit Needs

Public Transit Services

The utility of public transportation is limited in Santa Rosa County by the prevalence of low-density development and the area's topography. The rural north end is entirely unsuitable for transit because it is agriculturally oriented and, thus, extremely low-density. Although the south end (the peninsula) of the county has higher densities, it is separated from the population centers in Pace and Milton by East Bay, Blackwater Bay and the undeveloped Eglin Reservation. This topography coupled with the predominance of low-density residential development and strip commercial along major thoroughfares limits the possibilities for transit.

The County is in the process of developing a sector plan for the south end, which will address the prevalence of the low-density residential and strip commercial land uses that stifle transit. County staff foresees the development of sector plans for several other areas in the County that would also deal with these types of land use issues. The development of commercial nodes and concentration of residential development around these nodes could increase the chances of transit playing a larger role in Santa Rosa County; however, it is unlikely, due to the area's topography, that a county-wide transit system would ever be feasible.

Transportation Disadvantaged Population

The transportation disadvantaged population includes only those persons who are transportation disadvantaged according to eligibility guidelines in Chapter 427, Florida Statutes. Chapter 427, Florida Statutes, defines transportation disadvantaged 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 other life-sustaining activities, or children who are handicapped or high-risk or at-risk as defined in s. 411.202." The potential transportation disadvantaged population includes all persons who are elderly, disabled or low-income.

Forecasts of TD Population

In 1996, the Center for Urban Transportation Research (CUTR) at the University of South Florida updated its population and demand forecasts for the Statewide Transportation Disadvantaged Plan. These forecasts are used in determining these populations and demands in Santa Rosa County. CUTR's first step in forecasting the potential transportation disadvantaged population and present transportation disadvantaged population was to forecast the number of persons who are elderly, disabled or low-income. Next, CUTR allocated each member of each of these groups to a particular market segment to avoid double and triple counting. Finally, to forecast demand, CUTR added the market segments together.

Elderly Population

Forecasts of total population and of elderly population (ie: persons age 60 and older) are based on county-level data from the Bureau of Economic and Business Research (BEBR) at the University of Florida. BEBR provided estimates or forecasts of population by age for the years 1995, 2000, 2005 and 2010. CUTR developed population forecasts for intermediate years under the assumption that the rate of population growth would remain constant within the five-year periods.

Disabled Population

CUTR used county-level data from the 1990 Census and national data from Current Estimates from the National Health Interview Survey, 1990 (NHIS) to develop estimates of the percentage of the 1990 population who were disabled in the 0 to 59 and the 60 and older age groups. CUTR used these percentages to forecast the number of persons who are disabled in each year of the study period.

The 1990 Census provides data on the number of persons reporting a "mobility limitation" and/or a "self-care limitation". The 1990 Census defined "mobility limitation" as a health condition that had lasted for six or more months and which made it difficult to go outside the home alone. The 1990 Census defined "self-care limitation" as a health condition which had lasted for six or more months and which made it difficult to take care of personal needs, such as dressing, bathing, or getting around inside the home. For both definitions, "health condition" referred to both physical and mental conditions.

CUTR adjusted the county-level 1990 Census data using the national NHIS data as control totals. CUTR adjusted the 1990 Census data for each county so that the total number of persons in Florida who are disabled would match the national NHIS data.

Low Income Population

CUTR used county-level data from the 1990 Census to develop estimates of the percentage of the 1990 population who were low-income (i.e.: who lived in families with an income below the federal poverty level) in the 0 to 59 and the 60 and older age groups. To estimate the number of low-income persons in each year of the study period, CUTR assumed that the percentage of low-income persons in each county would remain unchanged.

High-Risk and At-Risk Children Populations

According to the Florida Department of Children and Family Services (DCFS), 28 percent of Florida's children under the age of 5 are "high-risk" or "at-risk". The Center for Urban and Transportation Research has stated that because most of these children are disabled and/or are members of low income families, they are already included in the population forecasts of disabled and low-income persons.

Needs Assessment

Table 4-6 show population estimates for Potential Transportation Disadvantaged individuals and current Transportation Disadvantaged individuals in Santa Rosa County. From this set of data, forecasts for total demand and unmet demand for trips are generated. These forecasts for Santa Rosa County are outlined in **Table 4-7**, on the following page.

Table 4-6

**Forecasts of Santa Rosa County's Transportation Disadvantaged Population
1997/1998 – 2002/2003**

Potential TDP	97/98	98/99	99/00	00/01	01/02	02/03
Disabled, Non-Elderly, Low-Income	820	840	862	884	901	917
Disabled, Non-Elderly, Non-Low-Income	4912	5037	5164	5299	5397	5497
Disabled, Elderly, Low-Income	750	784	819	858	893	931
Disabled, Elderly, Non-Low-Income	4890	5111	5342	5590	5824	6067
Non-Disabled, Elderly, Low-Income	1311	1370	1432	1498	1561	1626
Non-Disabled, Elderly, Non-Low-Income	8543	8929	9332	9767	10,175	10,600
Non-Disabled, Non-Elderly, Low-Income	11,599	11,893	12,194	12,513	12,744	12,980
TOTAL POPULATION	32,825	33,964	35,145	36,409	37,495	36,618

Existing TDP	97/98	98/99	99/00	00/01	01/02	02/03
Transportation Disabled, Non-Elderly, Low-Income	298	306	313	322	327	334
Transportation Disabled, Non-Elderly, Non-Low-Income	1786	1831	1878	1926	1963	1998
Transportation Disabled, Elderly, Low-Income	548	573	599	627	653	680
Transportation Disabled, Elderly, Non-Low-Income	3573	3735	3903	4085	4255	4434
Non-Transportation Disabled, Low-Income, No Auto	2641	2710	2782	2856	2913	2969
TOTAL POPULATION	8846	9155	9475	9816	10,111	10,415

Source: CUTR Florida Statewide Transportation Disadvantaged Plan, Population & Demand Forecasts 1996 - 2015, July 1996.

Table 4-7
Transportation Disadvantaged Demand Estimates
1997/1998-2002/2003

TRIPS	97/98	98/99	99/00	00/01	01/02	02/03
Total Coordinated	66,713	68,928	71,217	73,581	76,023	78,547
Total Non-Coordinated	22,529	23,227	24,050	24,848	25,674	26,526
Total Supply	89,242	92,205	95,267	98,429	101,697	105,073
Total Demand	190,354	196,895	203,664	210,805	217,359	224,119
Total Unmet Demand	101,112	104,690	108,397	112,397	112,376	119,046

Source: CUTR Florida Statewide Transportation Disadvantaged Plan, Population & Demand Forecasts 1996 - 2015, July 1996.

Table 4-8 provides some of the statistics available from annual operating reports and the annual TDSP update submitted to the Commission for the Transportation Disadvantaged.

Table 4-8
Santa Rosa County CTC
Annual Operating Report Statistics

Performance Measure	97/98	98/99
Total Number of Passenger Trips	63,490	66,713
Total Number of Vehicle Miles	396,845	471,987
Operating expense per passenger trip	\$8.40	\$9.84
Operating expense per vehicle mile	\$1.34	\$1.39

Source: Santa Rosa County TDSP, 1999 Update

I. Deepwater Ports

There are no public shallow or deep water ports in Santa Rosa County. However, the Port of Pensacola in neighboring Escambia County is one of the State's fourteen deep water ports. This port serves business and industry throughout the region. Most freight related traffic travels on the FIHS system or other major arterials, none of which are threatened by congestion problems.

Since the Port of Pensacola and the pass to the Gulf of Mexico are both to the west of Santa Rosa County, the County's roadway system has little impact on waterborne Port traffic. The Navarre Beach Bridge does cross the Intracoastal Waterway, but it does not affect any normal waterborne traffic in this channel.

All waterways in Santa Rosa County are used predominantly for recreational boating and fishing. There are numerous marinas, wet and dry slips and boat ramps to serve County residents. Three main estuarine rivers drain the Santa Rosa County area and are used for the bulk of the County's recreational boating and fishing activities. These rivers are: 1) The Blackwater River 2) The Yellow River and 3) The Escambia River. There are several other smaller rivers, including the Coldwater and Juniper Creeks, that are used recreationally and support commercial canoe liveries.

J. Aviation Facilities

Peter Prince field is the only public airport located within Santa Rosa County. Most air travel service is provided to Santa Rosa County residents by the Pensacola Regional Airport to the west or the Okaloosa County Regional Airport to the east. **Map 4-2 (Appendix A)** illustrates the location of Peter Prince Field three miles east-northeast of Milton and adjacent to the Santa Rosa County Industrial Park. It is accessed directly from US90, a 4-lane divided highway via a short, two-lane paved segment of roadway. The airport is also easily accessible from I-10 via SR87. The airport is comprised of approximately 224 acres, with an additional 10.61 acres in Runway Protection Zones (RPZ) under partial control.

Peter Prince Field is owned and operated by Santa Rosa County. It has been in use as an "aircraft land facility" since the early 1930's. The Airport is used primarily as a general aviation airport. It provides users with general aviation aircraft basing and training facilities, as well as charter, banner towing, and other aviation-related services. It offers general aviation services to the City of Milton and Santa Rosa County.

J.1 Existing Aviation Facilities

In 1993, the airfield system at Peter Prince Field consisted of one runway, 18-36. It is 3,700 feet by 75 feet and is oriented north-south. A second grass landing strip was in use in 1993 just west of runway 18-36, but the master plan recommended discontinuing use of the strip due to inadequate clearance for runway protection zones. Runway 18-36 is served by a full length, 25 foot wide parallel taxiway 325 feet to the east of the runway. Both the runway and taxiway are designed for 30,000 pounds single gear.

Public access aprons with 22 tiedown positions are located adjacent to the fixed base operator (FBO) facilities. A second apron with 21 additional tiedown positions is located adjacent to the parallel taxiway (east side). Santa Rosa County owns and operates six six-unit two two-unit "twin" hangars.

Runway 18-36 is equipped with medium intensity runway edge lights (MIRL). In 1993, the taxiways and access/entrance/exit taxiways were scheduled for installation of medium intensity taxiway lights. A rotating beacon is located south of the FBO hangar. A segmented circle, collocated with a lighted wind cone is between Runway 18-36 and Taxiway A in line with the southern access taxiway from the FBO hangar.

Peter Prince Field shares airspace with Naval Air Station Whiting Field (NAS Whiting). The airport is within the Pensacola Approach/ Departure Control Zone and NAS Whiting Airport RADAR Service Area (ARSA). Approach/ Departure control for the NAS Whiting ARSA and Peter Prince Field is handled by Pensacola Approach control. There is no air traffic control tower at Peter Prince Field. Approaches to Peter Prince are visual only.

The FBO, Blackwater Aviation, owns and operates a combination office and an aircraft maintenance hangar. The Civil Air Patrol also owns and occupies a small office and meeting facility on FBO leased property. The FBO offers the following services:

- Aerial photography
- Airframe maintenance
- Powerplant maintenance

- Sales and installation of avionics
- Fuel sales
- Aircraft sales
- Aircraft rentals
- Flight instruction
- Flight shop, sales of maps, accessories etc...
- Aircraft painting

Other airport tenants offer the following services:

- Aerial photography
- Banner towing

A small public parking lot, 50 feet by 150 feet, can accommodate 15-20 vehicles.

Land Use Considerations

When the 1993 Master Plan was completed no land use conflicts existed around Peter Prince Airport. However, the analysis projected that by 1997, land use conflicts would arise between the existing residential property to the west and planned runway 2-20 as a result of noise sensitivity. The plan recommended that this property be acquired by the airport. Since these properties have not been acquired, these conflicts would still exist. However, runway 2-20 has not been built due to objection from officials at NAS Whiting Field regarding air space. The 2000 update to the Master Plan should include new recommendations for mitigating these conflicts. In addition, the County is now beginning a Joint Land Use Study through the Department of Defense, that will identify land use conflicts and delineate clear zones around the airports and airfields in the County.

J.2 Aviation Projections

Based Aircraft and Aircraft Operations

In 1991, there were 58 based aircraft at Peter Prince Field. By 2010 there could be as many as 120 based aircraft at the airport. As the number of aircraft increases, the total operations are expected to increase as well. The 1993 Master Plan indicates that airport operations could increase from approximately 30,000 per year to nearly 70,000 per year. Military operations are expected to remain constant at 50 per year.

Peak Hour Activity

Peak Hour activity indicates an airport's ability to accommodate demand and represents the high level of activity which can be expected to occur with reasonable frequency. The Federal Aviation Administration defines "peak-hour operations" as the total number of aircraft operations expected to occur at an airport, averaged for two adjacent peak hours of a typical peak time or the busiest hour of record. Peak hour estimates are used to assist in determining specific airport facility requirements. Peak hour activity was anticipated to increase by about 70% between 1991 and 2010. However, the highest peak period forecast will not exceed the capacity of the airport.

J.3 Future Airport Needs

Future airport needs will be determined in the upcoming update to the 1993 Airport Master Plan. The Transportation Element and the Foundation Document support the findings of the Master Plan Update. The last approved master plan for the Airport was completed in 1993. Santa Rosa County is now has updating the master plan. The Transportation Element supports all findings of the new master plan. Analysis in this Foundation Document is based on information from the 1993 Master Plan and the most recent information from the working papers produced for the update to the Master Plan.

K. Railroad Facilities

K.1 Existing Rail Facilities

One rail line, CSX, runs east-west through Santa Rosa County. There is a rail siding for an industrial area south of US90 in the Floridatown area. The main rail line is a major line used by CSX to transport freight from its hub in Jacksonville to another hub in New Orleans. Many goods that travel on rail through Santa Rosa County from Jacksonville are bound to points on the Pacific Coast, Midwest and Mexico through rail lines converging in New Orleans. Some goods are also shipped via water through New Orleans to Ports as distant as Southeast Asia. Similarly, goods headed westbound from New Orleans and points north and west are often bound for ships at the Port of Jacksonville. Obviously, the CSX line should remain active well into the future. There are no passenger rail terminals in Santa Rosa County.

K.2 Future Rail Needs And Current Plans

Since the CSX rail line has such strategic implications for goods movement nationwide and internationally, it is expected to remain active. Other than considering the rail corridor in land use and transportation planning initiatives, no future needs are predicted.

