

Nassau County 2030 Comprehensive Plan Transportation Element

Background Data and Analysis

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I. Introduction

The Transportation Element provides an assessment of the capability of the existing transportation system to serve current and future demand. Existing levels of service are determined and existing roadway deficiencies are identified. Facility improvements and new roadway facilities are recommended. Alternative modes of transportation such as public transportation, pedestrian and bicycle systems will be analyzed and recommendations for improvements are made in the goals, objectives and policies. This information will provide local officials with a tool for developing a transportation system that will adequately meet the current and future needs of the community.

This Transportation Element replaces the Traffic Circulation Element that was adopted as part of the 2010 Comprehensive Plan in 2002. Sec. 163.3177(6)(j), F.S., now requires that a local government which has all or part of its jurisdiction included within the urbanized area of a Metropolitan Planning Organization (MPO) must prepare a Transportation Element. A portion of Nassau County is within the North Florida Transportation Planning Organization (TPO). The North Florida TPO boundary is depicted on Map T-1. The policies of the Transportation Element must be consistent with the TPO's adopted Long Range Transportation Plan (LRTP).

The change to a Transportation Element is more than cosmetic; it represents a shift from sole consideration of the automobile speed, congestion and safety to providing additional transportation options in a more integrated transportation system that provides alternatives to single occupancy automobile travel. This is often referred to as multi-modal planning. It considers various modes of transportation (walking, cycling, car and truck, waterborne and airport) and connections among modes so that each can fill its optimal role in an overall system.

Land use and transportation systems are highly interdependent; changes in one often have a direct effect on the other. Improvement to the roadway network can serve as an impetus to intensification of the development of adjacent land uses, which in turn can cause the need for further improvements. The Transportation Element should plan for a transportation system that emphasizes the accessibility to goods and services and supports the Future Land Use Element. It should encourage the development of compact, pedestrian-oriented urban areas, promote energy efficient development patterns, reduce vehicle miles traveled and protect air quality.

II. Recommendations Incorporated from the 2008 EAR & Vision 2032 Final Report

Efficient Development Patterns

- When development impacts are shown to reduce safety or the level of service beyond acceptable standards, implement capacity and safety improvements as a condition of new development approval. (*Vision 2032, IGM Issue 2: Multi-Modal Transportation*)
- Using land development regulations encourage an effective mix of business and family entertainment uses in close proximity to residential areas, with buffers and other features, sufficient to ensure no impact to the peace and enjoyment of residents in their homes. (*Vision 2032, QOL Issue 5: Culture and the Arts*)
- Accommodate new development in a more compact growth pattern with more land use diversity, where there is improved interrelationship of living, working, shopping, education and recreational activities, where there are expanded travel choices, and where the vitality and revitalization of older neighborhoods and commercial areas can be sustained. (*EAR, Issue 1: Update the future land use plan*)
- Define bonuses and other incentives for adoption into the Land Development Regulations provide incentives such as density bonuses and extension of time limits for certificates of concurrency to promote construction of master planned and mixed use development. (*EAR, Issue 1: Update the future land use plan*)
- Define bonuses and other incentives for adoption into the Land Development Regulations to provide density bonus incentives to direct commercial and multi-family into "cluster" development patterns, thereby, eliminating or reducing strip or ribbon development, which follows major County or state roads. (*EAR, Issue 1: Update the future land use plan*)
- Create incentives to encourage mixed-use developments that promote internal capture of generated trips, an interconnected roadway network, a pedestrian-friendly environment, and potential transit opportunities. (*EAR, Issue 2: Strengthen of long-range transportation planning efforts*)

Future Transportation Map

- Create a Future Transportation Map. Designate a regional system of arterial and collector roadways, identifying existing segments and proposed expansions, linkages, multi-modal systems and other alternative transportation options. The Future Transportation Map will provide a means to coordinate land use decision making; protect necessary rights-of-way from premature or incompatible development; and achieving a safe and efficient mobility system that presents viable options to the single-passenger automobile. (*EAR, Issue 2: Strengthen of long-range transportation planning efforts*)
- Review SR 200/A1A Access Management Overlay requirements for effectiveness, include FDOT comments in this analysis. Remove overlay or revise requirements as appropriate. (*EAR, Issue 2: Strengthen of long-range transportation planning efforts*)

Alternative Corridors

- Promote the use of interconnected street networks or alternative routes that connect existing roads in order to distribute traffic and maintain the rural character of existing two-lane roads. *(Vision 2032, IGM Issue 2: Multi-Modal Transportation)*
- Continue coordination with North Florida TPO, FDOT and other local agencies to identify potential alternative transportation corridors. *(EAR, Issue 2: Strengthen of long-range transportation planning efforts)*
- Coordinate with FDOT, North Florida TPO, and other agencies to institute a plan for protection and acquisition of rights-of-way to ensure continuity of the roadway network and to protect the existing and future roadway network from development and other encroachments as required by Traffic Circulation Objective 2.03. Identify potential corridors for acquisition. Provide map of potential corridors in Plan. *(EAR, Issue 2: Strengthen of long-range transportation planning efforts)*

Multi-Modal Transportation

- Designate a regional multi-modal transportation entity to be responsible for the coordination of all modes of regionally significant surface transportation planning activities. *(Vision 2032, IGM Issue 2: Multi-Modal Transportation)*
- Designate transit corridors for future public transportation service. These corridors may be designated for greater use density and intensity. *(Vision 2032, IGM Issue 2: Multi-Modal Transportation)*
- Maintain a database of unused street and railroad rights-of-way for possible utilization as pedestrian trails, bicycle routes, and shuttle service. *(Vision 2032, IGM Issue 2: Multi-Modal Transportation)*
- Continue support and involvement in North Florida TPO long-range planning activities and support policies that will specifically direct revenues to fund transit and other alternative transportation improvements. *(EAR, Issue 2: Strengthen of long-range transportation planning efforts)*
- Coordinate roadway improvements with adjacent counties and the expansion of ports, airports and rail lines. *(EAR, Issue 2: Strengthen of long-range transportation planning efforts)*
- Investigate options for assisting private, public, or non/profit organizations implement transportation operations that will serve as alternatives to the Florida Intrastate Highway System. *(EAR, Issue 2: Strengthen of long-range transportation planning efforts)*
- Develop a long-range Bicycle/Pedestrian Master Plan for Amelia Island. *(EAR, Issue 2: Strengthen of long-range transportation planning efforts)*
- Encourage a county-wide bicycle route network as part of a Recreation Master Plan (EAR, Issue 2: Strengthen of long-range transportation planning efforts)

III. Existing Conditions

Existing Planning and Regulatory Framework

Federal

The *United States Department of Transportation* (USDOT) administers the nation's transportation policy. The agencies within USDOT include the Federal Highway Administration (FHWA), the National Highway Traffic Safety Administration (NHTSA) and the Urban Mass Transit Administration (UMTA). The FHWA reviews and approves federally funded highway projects. These projects include primary, secondary and urban system aid, the federal bridge replacement program and the maintenance and widening of federal facilities. Federal highway facilities are operated and maintained by the Florida Department of Transportation (FDOT) as part of the State Highway System. Federal Highway facilities in Nassau County include Interstate 95, U.S. Highway 17, and U.S. Highway 301. The NHTSA shares responsibility with the FHWA for highway safety programs including highway design, construction and maintenance practices.

The Transportation Efficiency Act of 1991 represented landmark Federal legislation, which changed the transportation planning philosophy of the nation. SAFETEA-LU, the successor to the ISTEA legislation, incorporates the same philosophies as its predecessor. These changes figure prominently in a number of arenas: planning for mobility, public participation, management systems, and planning factors.

SAFETEA-LU requires that all components of transportation be planned as one system. In theory, local governments, through the TPO 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/pedestrian facilities.

While the SAFETEA-LU legislation does not regulate development of local comprehensive plans directly, the LRTP is regulated by SAFETEA-LU. Consistency between the TPO LRTP and the local comprehensive plan is required by SAFETEA-LU.

State and Regional

The *Florida Department of Transportation* (FDOT) is responsible for the planning, construction, maintenance and access to the state highway system, as well as the State Rail Plan and the Florida Aviation System Plan. The state highway system is established by Florida Statutes, and consists of all State and Federally designated roadways.

FDOT is decentralized in accordance with legislative mandates. Each of the districts is managed by a District Secretary. The districts vary in organizational structure, but in general each has major divisions for Administration, Planning, Production and Operations. District Two, in Northeast Florida, is home to more than 1.7 million residents. Its 18 counties, including Nassau County, cover nearly 12,000 square miles (see Map T-2). Travelers on the state highway system log more than 40.6 million miles daily. Two major transit authorities, assisted by the FDOT, operate in the district. The area is served by two deep-water ports, three major rail lines, and 144 public and private airports. The District headquarters is located in Lake City (Columbia County) and the District also maintains the Jacksonville Urban Office.

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 County Commission, the Five-Year Work Program, which establishes priorities and funding for specific transportation improvement projects. Project priorities are

established by the County Commission for all State roadways within the Nassau County boundaries.

FDOT establishes minimum Level of Service (LOS) standards for Strategic Intermodal System (SIS) facilities and participates in Development of Regional Impact (DRI) and other large-scale development reviews.

The *North Florida Transportation Planning Organization* (TPO) develops plans and programs to guide the region's transportation planning process including the Long Range Transportation Plan (LRTP) and the Transportation Improvement Program (TIP). Ch. 163, Florida Statutes requires the schedule of capital improvements (SCI) and transportation elements of local comprehensive plan to be consistent with the adopted LRTP.

The TPO also conducts studies and provides a regional forum for identifying and addressing transportation issues. In addition to these planning and programming tasks, the TPO addresses immediate needs by overseeing the delivery of services to the transportation disadvantaged and providing direct services to commuters and employers.

The *Jacksonville Transportation Authority* (JTA) is an independent authority that is charged with providing high quality regional transit services and roadway infrastructure connecting Northeast Florida. Working closely with the Florida Department of Transportation and the City of Jacksonville, JTA develops and implements construction plans to improve traffic flow in the region. JTA manages construction projects on state- and locally-owned roadways (those projects, however, are not maintained by JTA).

Although JTA is not presently involved in any projects in Nassau County, planning has recently begun for a northern extension of the First Coast Outer Beltway. The proposed northern Beltway will loop north of Interstate 10 and Jacksonville International Airport to continue on into Nassau County and connect with Interstate 95, completing a toll road that will eventually encircle Jacksonville. The northern Beltway could generate more economic development in the area by allowing greater access to northern Duval and Nassau Counties. JTA has also undertaken an extensive study that will examine and determine the feasibility of using commuter rail as a transit option here in Northeast Florida. The study includes two possible stations in Nassau County in the Yulee and Hedges areas.

Local

Nassau County is responsible for the maintenance of the County roadway system, which consist of minor and major collector roads and local roads. The County's Road and Bridge Department has primary responsibility for roadway maintenance and the Engineering Services Department for roadway design and development.

Roadway Functional Classification

Roadways are formally categorized by the Florida Department of Transportation (FDOT) through a statewide, cooperative process with county and local jurisdictions. This ongoing process, known as Functional Classification, is used primarily to assign governmental responsibility for maintenance and roadway improvement funding. In recent times, a host of additional FDOT policy definitions have also been linked to the State's functional classification system.

According to the FDOT functional classification system, roadways within urban areas are ranked in hierarchical order as follows: State Principal Arterial, State Minor Arterial, County Minor Arterials, County Urban Collectors and County (or local unincorporated area) Urban Collectors. Maps T-3 and T-4 show the existing County road network and number of lanes; T-5 defines the existing functional classification of the Nassau County roadway network.

Arterial roadways can be broadly defined as those facilities which carry relatively heavy volumes of traffic for activities such as shopping, employment and the movement of goods and services. Arterial roadways provide for regional movement; for travel to destinations outside the County; or for non-locally-oriented traffic to travel through Nassau County to other destinations within the region. Collector facilities serve an intermediate function to collect/distribute traffic between regional arterial facilities and local roadways. Local streets, in turn, serve as site-specific terminal routes for each end of a trip. Specific definitions for each classification are detailed below:

Principal Arterial - A major highway designed for the movement of large volumes of traffic over relatively long distances. This type of facility carries the major portion of trips through the urban areas of the county, as well as many trips not destined or originating within the county. This facility class does not exclude access to property, though its primary function is to facilitate longer distance movement. Access to adjacent properties should thus be controlled to the maximum extent possible.

Minor Arterial - Similar in function to a major arterial, this facility class is designed to carry moderate volumes of traffic between urban areas and to connect with the principal arterial system. A main function is to provide an intermediate connection between the major arterial system and streets within the local area. This facility allows more access to adjacent properties than the previous types of facilities.

Major Collector - Roadways which serve the internal traffic movement within a given geographic sub-area and connect the sub-area to the arterial system. This type of facility is not intended to serve long, through trips, but mainly short to moderate length trips. Collector roadways carry a moderate volume of traffic at moderate speeds. Property access is an appropriate function of this facility, provided it does not inhibit local traffic movement.

Minor Collector - Similar in function to that of a major collector, a minor collector is intended to serve a smaller geographic area. It often connects to major collectors and arterial roadways. Property access is generally a significant function of this facility.

Local - A roadway or street having the primary purpose of providing access to adjacent property. Mobility is a secondary function. Average speeds and volumes are low; trips are usually of short duration with a purpose of connecting with a higher order facility. A local road should not carry through traffic. The trip being served should originate or be destined for the immediate surrounding area.

Florida Intrastate Highway System (FIHS)

The Florida Intrastate Highway System (FIHS), created in 1990 by the Florida Legislature, is composed of interconnected limited access and controlled access facilities. It is a statewide transportation network that provides for high-speed and high-volume traffic movements within the state. The Florida Intrastate Highway System (FIHS) includes:

- Interstate highways
- Florida's Turnpike System
- Selected urban expressways

- Existing major interregional and intercity arterial highways to be upgraded to higher controlled access standards
- New limited access facilities.

The system also accommodates High-Occupancy Vehicles (HOVs), express bus transit and, in some corridors, passenger rail service. The primary function of the system is to serve interstate and regional commerce and long-distance trips.

Strategic Intermodal System (SIS)

State legislation enacted in 2004 created a Strategic Intermodal System (SIS). The SIS is a statewide network of high-priority transportation facilities, including the State's largest and most significant commercial service airports, spaceport, deepwater seaports, freight rail terminals, passenger rail and intercity bus terminals, rail corridors, waterways and highways. These facilities are the workhorses of Florida's transportation system, carrying more than 99 percent of all commercial air passengers and cargo, virtually all waterborne freight and cruise passengers, almost all rail freight, 89 percent of all interregional rail and bus passengers and more than 70 percent of all truck traffic and 55 percent of total traffic on the State Highway System.

Rule 9J-5.019, FAC, requires the FDOT level of service standard to be applied to SIS/FIHS roads and requires the establishment of strategies to facilitate local traffic use of alternatives to the SIS/FIHS. Table T-1 lists those County roadways on the Strategic Intermodal System; Map T-6 shows all of the County's SIS facilities, as well as SIS Connectors.

Table T-1 Strategic Intermodal System Facilities, Nassau County

Facility Name	SIS Designation	Facility Sub-type	Mode
Atlantic Intracoastal Waterway, Fernandina to St. Johns River	SIS	Waterway	Water
CSX A Line	SIS	Rail Corridor - Freight/Pass	Rail
CSX SM Line	SIS	Rail Corridor - Freight	Rail
CSX SP Line	SIS	Rail Corridor - Freight/Pass	Rail
I-10 (entire length)	SIS	Highway	Highway
I-95 (entire length)	SIS	Highway	Highway
Norfolk Southern	SIS	Rail Corridor - Freight	Rail
On-dock CSX rail from seaport property to CSX and Norfolk Southern lines in Jacksonville	SIS	Connector - Freight/Passenger	Rail
Port of Fernandina	EMERGING SIS	Seaport	Water
Port of Fernandina channels and turning basins connecting to Atlantic Intracoastal Waterway	SIS	Connector - Freight/Passenger	Water
Port of Fernandina To I95	SIS	Connector - Freight	Highway
U.S. 1 from I-295 to the Georgia State Line	SIS	Highway	Highway
SR A1A From Lime Street to Fletcher Ave.	EMERGING SIS	Highway	Highway
U.S. 301/SR A1A from SR 326 to I-95	SIS	Highway	Highway

Source FDOT

Transportation Level of Service (LOS)

Florida law requires transportation level of service standards to be adopted for roads and public transit facilities. Roadway level of service standards have long been used in systems planning and traffic operations. The roadway level of service (LOS) standard is a qualitative assessment of the road user's perception of the quality of flow of traffic. The LOS standards are represented by letters A through F, with A representing the most favorable conditions and F representing the least favorable. The LOS is measured by dividing the number of vehicle trips (i.e., volume) on the facility by the capacity of that facility. The six levels of service as described by the Transportation Research Board's *Highway Capacity Manual*. They are:

LOS A - This represents a condition of free flow. Individual users are virtually unaffected by the presence of others in the traffic stream. Traffic volumes are low and speeds are high, and drivers have complete freedom in selecting their speeds and may change lanes at will. The motorists experience a high level of driving comfort. Stopped delays at signalized intersections are minimal.

LOS B - With this level of service, operating speeds are beginning to be restricted somewhat by traffic conditions, although drivers still have reasonable freedom in choosing their speeds and travel lanes. Flow is stable and average operating speeds are only slightly lower. The general level of motorist comfort is still high.

LOS C - Traffic flow is still stable at this level of service, but most drivers are restricted in their choice of speeds and maneuverability. Traffic conditions are still tolerable for most drivers and operating speeds are not unsatisfactory. Traffic flows are such that small increases in flow will result in a substantial deterioration in service. Motorists will experience an increase in tension due to the increased attention needed for safe operation.

LOS D - This level of service represents high traffic volumes. Although speeds may still be maintained, delays may begin to occur frequently due to high traffic volumes. Drivers have little freedom to choose their own speeds or lanes of operation, and their comfort and convenience are low. Small increases in traffic flow will generally cause operational problems at this level.

LOS E - This level of service describes a roadway that is operating near or at capacity. Speeds are low and there are virtually no gaps in the traffic stream. There is very little driver independence with regard to speed choice and lane choice. Small increases in volume or minor disturbances within the traffic stream will cause a breakdown in traffic flow.

LOS F - This describes a forced flow situation. Vehicle density is beyond the optimum for maximum volume; therefore, traffic volume has dropped below that of level of service E. Frequent and prolonged stoppages may occur, and average travel speeds are very low, as is driver comfort. Vehicles may progress at reasonable speeds for several hundred feet or more, and then be required to stop in a cyclic fashion. It is to the point at which arrival flow exceeds discharge flow that causes a queue to form.

The adopted LOS for County and State arterial and collector roads are described in Table T-2 below. Local roads will be maintained at LOS D.

Table T-2 Transportation Level of Service (LOS) Standards

Road Classification	Minimum LOS for Rural Segments	Minimum LOS for Segments that are in Areas Transitioning to Urban or Areas over 5000 not in Urbanized Areas
Freeways		
I-95 (SIS)	B	C
I-10 (SIS)	B	C
Principal Arterials	C	D
US 1 (SIS)	B	C
SR 15	C	D
US 90	C	D
US 301/SR 200 from S. Co. line to I-95 (SIS)	B	C
US 17	C	D
SR 200 (non intrastate portion)	C	D
US 301 (non intrastate portion)	C	D
Minor Arterials	D	D
Collectors (Major and Minor)	D	D

Source FDOT; Nassau County Growth Management Dept.

LOS standards for roadways on the Strategic Intermodal System (SIS) are set by FDOT. The Strategic Intermodal System (SIS), described above, is a statewide system of modal facilities of the greatest economic importance to Florida. Rule 9J-5.0055(2) (c), FAC, requires local governments to adopt the LOS standards established by the Florida Department of Transportation by rule for facilities on the Strategic Intermodal System. The County also adopts the FDOT Level of Service Standard for SIS Connectors as shown in the FDOT Level of Service Manual. The LOS for SIS roadway facilities in Nassau County in 2008 is depicted in Maps T-7 and T-8.

Table T-3 Level of Service (LOS) Standards for SIS Facilities

	SIS And FHHS Facilities		TRIP Funded Facilities & Other State Roads	
	Limited Access Highway	Controlled Access	Other Multilane	Two-Lane
	(Freeway)	Highway		
Rural Areas	B	B1	B	C
Transitioning Urbanized Areas, Urban Areas, or Communities	C	C	C	C
Urbanized Areas Under 500,000	C(D)	C	D	D
Urbanized Areas Over 500,000	D(E)	D	D	D
Roadways Parallel to Exclusive Transit Facilities	E	E	E	E
Inside TCMA's	D(E)	E	--	--
Inside TCEAs and MMTDs	--	--	--	--

Source FDOT, 2010

The boundaries between levels of service are quantitatively described by volume of traffic. The actual numerical value corresponding to the upper boundary of each level of service (service volume) depends on the roadway's functional classification, engineering characteristics, traffic characteristics and control characteristics. Typically, roadways are said to reach capacity when traffic volume is equivalent to the service volume at the boundary between LOS E and LOS F. Capacity does not mean the highest number of vehicles that can physically occupy a road (jam density), but the greatest volume at which traffic is still flowing in a reasonably predictable and stable manner.

Roadway level of service standards define the maximum traffic volume a particular roadway should carry. Level of service standards are established, in part, to ensure that adequate facility capacity will be provided for future development and for purposes of issuing development orders and permits. Levels of service standards are set for each individual facility or facility type and not on a system-wide basis.

Table T-4 on the following pages depicts the, number of lanes, functional classification, and maximum service volumes for all segments of the County road network.

Table T-4 Nassau County Road Network

ID#	Road name	Segment	Lanes	Class	Maj/Min	Urban/Rural	LOS	MAX PK	AADT
1	S.R.200/S.R.A1A	Amelia Island Parkway to Sadler Road	4	Arterial	Minor	Trans/Urban	D	4200	30,854
2	S. 8th Street	Sadler Road to Lime Street	4	Arterial	Minor	Trans/Urban	D	3950	21,500
3	S. 8th Street	Lime Street to Atlantic Avenue	2	Arterial	Minor	Trans/Urban	C	1860	10,500
4	Atlantic Avenue (S.R.A1A)	8th Street to 14th Street	2	Arterial	Minor	Trans/Urban	C	1260	5,300
6	Atlantic Avenue (S.R.A1A)	14th Street to Fletcher Avenue	2	Arterial	Minor	Trans/Urban	C	1260	6,800
8	Fletcher Avenue (S.R.A1A)	Atlantic Avenue to Sadler Road	2	Arterial	Minor	Trans/Urban	C	1260	3,900
10	Fletcher Avenue (S.R.A1A)	Sadler Road to Simmons Road	2	Arterial	Minor	Trans/Urban	C	1260	6,500
11	Fletcher Avenue (S.R.A1A)	Simmons Road to Amelia Island Parkway	2	Arterial	Minor	Trans/Urban	C	1260	8,000
12	Fletcher Avenue (S.R.A1A)	Amelia Island Parkway to Buccaneer Trail (S.R.105A)	2	Arterial	Minor	Trans/Urban	D	1490	5,700
14	14th Street	Pogy Place to Atlantic Avenue	2	Collector	Major	Trans/Urban	D	720	3,646
15	14th Street	Atlantic Avenue to Hickory Street	2	Collector	Major	Trans/Urban	D	1130	9,960
16	14th Street	Hickory Street to Jasmine Street	2	Collector	Major	Trans/Urban	D	1750	12,131
16A	14th Street	Jasmine Street to Lime Street	2	Collector	Major	Trans/Urban	D	2010	15,881
17	14th Street	Lime Street to Sadler Road	4	Collector	Major	Trans/Urban	D	2810	17,696
18	14th Street	Sadler Road to Amelia Island Parkway	2	Collector	Major	Trans/Urban	D	1300	8,654
19	Amelia Island Parkway	S.R.200/S.R.A1A to 14th Street Extension	2	Collector	Major	Trans/Urban	D	1870	8,775
20	Amelia Island Parkway	14th Street Extension to Buccaneer Trail (C-105A)	2	Collector	Major	Trans/Urban	D	1660	13,310
21	Amelia Island Parkway	Buccaneer Trail (C-105A) to Fletcher Avenue	2	Collector	Major	Trans/Urban	D	1300	5,194
22	Amelia Island Parkway	Fletcher Avenue to Scott Road	2	Collector	Major	Trans/Urban	D	1300	5,362
22A	Amelia Island Parkway	Scott Road to S.R.A1A/Julia Street	2	Collector	Major	Trans/Urban	D	1300	2,986
23	Buccaneer Trail (C-105A)	Gerbing Road/South Fletcher Avenue to Canopy Drive	2	Collector	Minor	Trans/Urban	D	720	8,041
23A	Buccaneer Trail (C-105A)	Canopy Drive to Amelia Island Parkway	2	Collector	Minor	Trans/Urban	D	1300	8,100
24	Amelia Road	Amelia Island Parkway to S.R.200	2	Collector	Minor	Trans/Urban	D	720	1,716
26	First Coast Highway (S.R.A1A)	Gerbing RD./S. Fletcher AV. to Amelia Island Pkwy./Julia ST.	2	Arterial	Minor	Trans/Urban	D	1910	12,000
27	First Coast Highway (S.R.A1A)	Amelia Island Parkway/Julia Street to Beach Lagoon Road	2	Arterial	Minor	Trans/Urban	D	1490	9,643
28	First Coast Highway (S.R.A1A)	Beach Lagoon Road to Nassau Sound	2	Arterial	Minor	Trans/Urban	D	1490	3,500
29	Sadler Road	8th Street to 14th Street	4	Collector	Major	Trans/Urban	D	2810	19,218
30	Sadler Road	14th Street to Fletcher Avenue	4	Collector	Major	Trans/Urban	D	2810	10,119
31	Lime Street	8th Street to 14th Street	2	Collector	Minor	Trans/Urban	D	720	2,528
32	Lime Street	14th Street to Citrona Drive	2	Collector	Minor	Trans/Urban	D	720	3,160
33	Citrona Drive	Atlantic Avenue to Jasmine Street	2	Collector	Minor	Trans/Urban	D	720	4,360
34	Citrona Drive	Jasmine Street to Sadler Road	2	Collector	Minor	Trans/Urban	D	900	6,975

ID#	Road name	Segment	Lanes	Class	Maj/Min	Urban/Rural	LOS	MAX PK	AADT
35	Will Hardee Road	Sadler Road to Simmons Road	2	Collector	Minor	Trans/Urban	D	900	2,245
36	Simmons Road	Amelia Road to Will Hardee Road	2	Collector	Minor	Trans/Urban	D	720	3,023
37	Simmons Road	Will Hardee Road to Fletcher Avenue	2	Collector	Minor	Trans/Urban	D	720	2,855
38	Jasmine Street	14th Street to Citrona Drive	2	Collector	Minor	Trans/Urban	D	720	3,313
39	T. J. Courson Road	8th Street (S.R.200) to 14th Street	2	Collector	Minor	Trans/Urban	D	900	5,306
40	I-95	Duval County Line to S.R.200/S.R.A1A	6	Freeway		Trans/Urban	C	8110	63,500
41	I-95	S.R.200/S.R.A1A to U.S. 17	6	Freeway		Trans/Urban	C	8110	43,500
42	I-95	U.S. 17 to Georgia State Line	6	Freeway		Trans/Urban	C	8110	58,700
43	S.R.200/S.R.A1A	Griffin Road to Edwards Road	4	Arterial	Principal	Trans/Urban	C	4190	9,100
43A	S.R.200/S.R.A1A	Edwards Road to I-95	4	Arterial	Principal	Trans/Urban	C	4190	9,100
44	S.R.200/S.R.A1A	I-95 eastbound off ramp to 35 MPH	4	Arterial	Minor	Trans/Urban	C	4360	18,333
44A	S.R.200/S.R.A1A	35 MPH to U.s. 17	4	Arterial	Minor	Trans/Urban	C	4360	18,333
45	S.R.200/S.R.A1A	U.S. 17 to Miner Road	4	Arterial	Minor	Trans/Urban	D	5370	39,000
45A	S.R.200/S.R.A1A	Miner Road to Chester Road	4	Arterial	Minor	Trans/Urban	D	5370	36,695
46	S.R.200/S.R.A1A	Chester Road to Blackrock Road	4	Arterial	Minor	Trans/Urban	D	5370	38,973
47	S.R.200/S.R.A1A	Blackrock Road to Old Nassauville Road	4	Arterial	Minor	Trans/Urban	D	4580	39,117
48	S.R.200/S.R.A1A	Old Nassauville Road to Amelia Island Parkway	4	Arterial	Minor	Trans/Urban	D	5090	43,000
49	C.R.200A (Pages Dairy Road)	U.S.17 to Chester Road	2	Collector	Minor	Rural	D	1300	4,431
50	C.R.107N. (Blackrock Road)	Chester Road to S.R.200/S.R.A1A	2	Collector	Minor	Trans/Urban	D	900	3,374
51	C.R.107S.	S.R.200/S.R.A1A to Amelia Concourse	2	Collector	Minor	Trans/Urban	D	1490	8,283
51A	C.R.107S.	Amelia Concourse to Santa Juana Road	2	Collector	Minor	Rural	D	1490	6,808
51B	Roses Bluff Road	Chester Road West	2	Collector	Minor	Trans/Urban	D	900	1,850
52	Chester Road	S.R.200/S.R.A1A to Pages Dairy Road (C.R.200A)	2	Collector	Minor	Trans/Urban	D	1680	9,854
53	Chester Road	Pages Dairy Road to Blackrock Road	2	Collector	Minor	Trans/Urban	D	1560	7,191
53A	Amelia Concourse	S.R.200/S.R.A1A to C.R.107S.	4	Collector	Major	Trans/Urban	D	2810	2,924
54	Barnwell Road	S.R.200/S.R.A1A to Oyster Bay Drive	2	Collector	Minor	Trans/Urban	D	900	3,695
54A	Miner Road	Haddock Road to S.R.200/S.R.A1A	2	Collector	Minor	Trans/Urban	D	900	7,070
55	U.S.17 (S.R.5)	Duval County Line to Harts Road	2	Arterial	Principal	Trans/Urban	D	1930	9,434
56	U.S.17 (S.R.5)	Harts Road to S.R.200/S.R.A1A	2	Arterial	Principal	Trans/Urban	D	1930	11,900
57	U.S.17 (S.R.5)	S.R.200/S.R.A1A to Pages Dairy Road	4	Arterial	Principal	Trans/Urban	D	3290	13,400
58	U.S.17 (S.R.5)	Pages Dairy Road to C.R.108	2	Arterial	Principal	Trans/Urban	D	1960	9,346
59	U.S.17 (S.R.5)	C.R.108 to I-95	2	Arterial	Minor	Trans/Urban	C	1440	12,900
60	U.S.17 (S.R.5)	I-95 to Georgia State Line	2	Arterial	Principal	Trans/Urban	C	740	3,400
60A	Harts Road	S.R.200/S.R.A1A to U.S.17	2	Collector	Minor	Trans/Urban	D	900	1,444
60B	Harts Road	U.S.17 to Haddock Road	2	Collector	Minor	Trans/Urban	D	900	4,009
61	C.R.108	Middle Road (C.R.121A) to U.S.17 (S.R.5)	2	Collector	Major	Rural	D	1190	2,886
62	William Burgess Boulevard	S.R.200/S.R.A1A to Harts Road	2	Collector	Minor	Trans/Urban	D	1300	1,192

ID#	Road name	Segment	Lanes	Class	Maj/Min	Urban/Rural	LOS	MAX PK	AADT
63	U.S.1/U.S.23/U.S.301(S.R.15)	Mussell White Road to C.R.108	4	Arterial	Principal	Rural	C	4000	12,400
64	U.S.1/U.S.23/U.S.301(S.R.15)	C.R.108 to C.R.121	4	Arterial	Principal	Rural	C	4000	12,150
65	U.S.1/U.S.23/U.S.301(S.R.15)	C.R.121 to Georgia State Line	4	Arterial	Principal	Rural	C	4000	12,150
66	C.R.121	C.R.108/C.R.121 Split to Bay Road (C.R.115)	2	Collector	Major	Rural	D	1190	396
67	C.R.121	C.R.115 (Bay Road) to Andrews Road	2	Collector	Major	Rural	D	1190	718
68	C.R.121	Andrews Road to U.S.1/U.S.301	2	Collector	Major	Rural	D	1190	1,127
69	C.R.115 (Bay Road)	C.R.121 to C.R.108	2	Collector	Minor	Rural	D	1190	1,449
70	Kings Ferry Rd. (C.R.115A)	C.R.108 to Kings Ferry Road	2	Collector	Minor	Rural	D	1190	1,011
71	C.R.108	C.R.121 to C.R.115 (Bay Road)	2	Collector	Major	Rural	D	1190	1,006
71A	C.R.108	Kings Ferry Road (C.R.115A) to Middle Road	2	Collector	Major	Rural	D	1190	2,438
72	Middle Road (C.R.121A)	Kings Ferry Road (C.R.115A) to C.R.108	2	Collector	Minor	Rural	D	1190	442
73	Middle Road (C.R.121A)	C.R.108 to Griffin Road	2	Collector	Minor	Rural	D	1190	475
74	Lessie Road	C.R.108 to Middle Road (C.R.121A)	2	Collector	Minor	Rural	D	1190	382
75	C.R.115 (Old Dixie Highway)	U.S.1/U.S.23/U.S.301 to Henry Smith Road	2	Collector	Minor	Rural	D	1190	1,122
76	Andrews Road	C.R.121 to U.S.1/U.S.23/U.S.301	2	Collector	Minor	Trans/Urban	D	1190	837
76A	Lake Hampton Road	U.S.1 to Murree Road	2	Collector	Minor	Rural	D	1190	667
77	U.S.1/U.S.23/S.R.15	Duval County Line to Ratliff Road	4	Arterial	Principal	Trans/Urban	C	4000	18,600
78	U.S.1/U.S.23/S.R.15	Ratliff Road to S.R.115 (Lem Turner Road)	4	Arterial	Principal	Trans/Urban	C	4000	17,500
79	U.S.1/U.S.23/U.S.301/S.R.15	S.R.115 (Lem Turner Road) to Old Dixie Highway	4	Arterial	Principal	Trans/Urban	C	4000	18,700
80	U.S.1/U.S.23/U.S.301/S.R.15	C.R.115 to Mussell White Road	4	Arterial	Principal	Trans/Urban	C	4000	13,900
81A	Griffin Road East	A1A to Bridge	2	Collector	Minor	Rural	D	900	628
81B	Griffin Road West	Bridge to Musselwhite Road	2	Collector	Minor	Rural	D	900	628
82	S.R.200/U.S.301	Duval County Line to C.R.119	2	Arterial	Principal	Trans/Urban	C	1130	4,562
83	S.R.200/U.S.301	C.R.119 to Crawford Road	2	Arterial	Principal	Trans/Urban	C	1130	4,200
84	S.R.200/U.S.301	Crawford Road to Kingbird Drive	2	Arterial	Principal	Trans/Urban	C	1130	5,400
85	S.R.200/U.S.301	Kingbird Drive to U.S.1/U.S.23	4	Arterial	Principal	Trans/Urban	C	3150	7,000
86	S.R.200/S.R.A1A	U.S.1/U.S.23 to Evelyn Street	4	Arterial	Principal	Trans/Urban	C	3150	14,100
87	S.R.200/S.R.A1A	Evelyn Street to Griffin Road	2	Arterial	Principal	Trans/Urban	C	1230	8,300
88	S.R.115 (Lem Turner Road)	Duval County Line to Church Road	2	Arterial	Minor	Trans/Urban	D	1490	8,177
89	S.R.115 (Lem Turner Road)	Church Road to U.S.1/U.S.23	2	Arterial	Minor	Trans/Urban	D	1490	8,500
90	C.R.121	Duval County Line to C.R.119	2	Collector	Major	Rural	D	1190	1,485
91	C.R.121	C.R.119 to C.R.2 (Crawford Road)	2	Collector	Major	Rural	D	1190	1,289
92	C.R.121	C.R.2 (Crawford Road) to C.R.108 (River Road)	2	Collector	Major	Rural	D	1190	1,954
93	C.R.121	C.R.108 (River Road) to C.R.108/C.R.121 Split	2	Collector	Major	Rural	D	1190	1,609
94	C.R.119	U.S.301 to C.R.121	2	Collector	Minor	Rural	D	1190	1,723
95	C.R.108 (River Road)	C.R.121 to U.S.1	2	Collector	Major	Rural	D	1100	2,988
96	Ford Road	U.S.301 to Duval County Line	2	Collector	Minor	Trans/Urban	D	1100	1,350

ID#	Road name	Segment	Lanes	Class	Maj/Min	Urban/Rural	LOS	MAX PK	AADT
97	Ratliff Road	Thomas Creek Road to U.S.1	2	Collector	Minor	Trans/Urban	D	1100	1,427
98	C.R.2	C.R.121 to Georgia State Line	2	Collector	Major	Rural	D	1100	2,253
99	Crawford Road	U.S.301 to C.R.121	2	Collector	Major	Rural	D	1100	321
100	8th Street	Alachua Street to Port	2	Arterial	Minor	Trans/Urban	C	670	6,100
101	8th Street	Atlantic to Alachua Street	2	Arterial	Minor	Trans/Urban	C	670	6,459
102	Alachua Street	Front Street to 8th Street	2	Collector	Minor	Trans/Urban	C	670	1,604
103	Centre Street	Front Street to 8th Street	2	Collector	Major	Trans/Urban	C	670	5,838
104	Ash Street	Front Street to 8th Street	2	Collector	Minor	Trans/Urban	C	670	2,218
105	N. Fletcher	1st Street North	2	Collector	Minor	Trans/Urban	C	670	1,486
106	N. Fletcher	Atlantic Avenue to 1st Street	2	Collector	Minor	Trans/Urban	C	670	1,579
107	Beech Street	14th Street to Citrona Drive	2	Collector	Minor	Trans/Urban	C	670	2,239
108	Beech Street	8th Street to 14th Street	2	Collector	Minor	Trans/Urban	C	670	1,229
109	Gum Street	3rd Street to 8th Street	2	Collector	Minor	Trans/Urban	C	670	2,027
110	3rd Street	Gum Street to Ash Street	2	Collector	Minor	Trans/Urban	C	670	961
111	Jasmine Street	Citrona Drive to S. Fletcher Avenue	2	Collector	Minor	Trans/Urban	C	670	2,390
112	Via Del Rey	Parkway to S. Fletcher Avenue	2	Collector	Minor	Trans/Urban	C	670	717
114	1st Avenue	Simmons Road to Sadler Road	2	Collector	Minor	Trans/Urban	C	670	1,634
115	Tarpon Avenue	Atlantic Avenue to Dolphin Street	2	Collector	Minor	Trans/Urban	C	670	4,570
116	Tarpon Avenue	North of Dolphin Street	2	Collector	Minor	Trans/Urban	C	670	2,377
117	US 90	Baker County Line to Duval County Line	2	Collector	Minor	Trans/Urban	D	1340	4,000
118	I-10	Baker County Line to Duval County Line	4	Freeway		Rural	B	3670	25,000

Backlogged and Constrained Facilities

Backlogged Facilities

A roadway facility shall be classified as backlogged when the adopted LOS is exceeded by the existing trips, plus additional projected background trips from any source other than the development project under review that are forecast by established traffic standards, including traffic modeling, consistent with the University of Florida Bureau of Economic and Business Research medium population projections. As stated by DCA and FDOT, "...The definition requires use of existing traffic plus additional projected background trips to assess whether the adopted level of service standard for a facility is met. The change in statute also provides guidance for forecasting future growth and the treatment of phased developments. The assessment of level of service as applied to the calculation of proportionate share mitigation is consistent with the methodology currently used and recommended by the Departments of Community Affairs and Transportation."

It should be noted that "backlog" is not included in developer's share; conversely, "backlog" is included in the local share.

In order to address backlogged facilities, the County is currently working with FDOT to create a long-range transportation concurrency system in 2011 that will be designed to correct existing level of service deficiencies for roadways during a 10-15 year planning period (see below). The purpose of this is to establish a longer term Schedule of Capital Improvements that will allow the collection of proportionate fair share and a greater ability to undertake long-term improvements.

Constrained Facilities

A constrained facility is a roadway facility or project that does not have sufficient financial resources committed to fully complete by the five year planning horizon. Typically these roads cannot be added to due to physical or environmental conditions or policy. Facilities identified as constrained in Nassau County include the following:

- CR 105A (Buccaneer Trail) from Shannon Road to Gerbing Road
- State Road 105/A1A from Sadler Road to George Crady Bridge
- Amelia Island Parkway from Julia Street to CR105A (Buccaneer Trail).
- Scott Road from State Road 200/A1A to Amelia Island Parkway.
- Any road designated as Scenic/Canopy Roads by the Board of County Commissioners (see below).

Canopy Roads

The County has designated the following roads depicted on Map T-9 and T-10 as Canopy roads. The Board of County Commissioners may designate roads or portion of roads as scenic/canopy roads by ordinance, based upon criteria specified in the Land Development Code, including: historic significance; scenic criteria (including tree canopy); ecological significance; length and current width; land use map designation; zoning of the property within the area; and traffic information.

Public Safety and Accident Incidences

Public safety touches everyone's life on a daily basis. Our sense of community is rooted in our quality of life and the feeling of safety and security we experience everyday. Enhanced safety on an area's roadway network enhances the protection of life and property. Accident incidences are an indicator demonstrating the effectiveness of, and need for, safety-enhancing measures such as access management standards, intersection and interchange improvements, bike lanes, sidewalks and signalization. Table T-5 shows the number of vehicular crashes and the percent change from the previous year for 2005 to 2008. Map T-11 indicates the high incident locations in Nassau County.

Table T-5 Nassau County Traffic Accidents, 2005 – 2008

	2005	2006	2007	2008
State Roads	351	333	381	368
All Other Roads	197	208	236	221
Total Incidents	548	541	617	589
Percent change per year		-1.3%	14.0%	-4.5%
Percent Change (2005-2008)				7.5%

Evacuation Routes

Evacuation routes, as defined by the Statewide Regional Evacuation Study Program (SRESP), includes roadways designated by county emergency management officials, in coordination with FDOT and NEFRPC as official regional evacuation routes; roadways and roadway segments identified by the SRESP as routes used to interconnect county designated evacuations routes; or routes used to interconnect evacuation routes between study regions. This includes major highways that are part of the regional and statewide network including primary (interstates and turnpikes), secondary (major arterials), and certain local roadways (Minor arterials) which provide significant evacuation transportation capacity to move vulnerable populations to "points of safety". Map T-12 indicates designated evacuation routes in Nassau County and the surrounding region.

Unpaved Roads

According to the Nassau County Road and Bridge Department, the County currently maintains 404 miles of unpaved roads.

Unpaved roads, usually surfaced with dirt or gravel, generally carry local traffic between rural lands and villages, and provide connecting links between paved collector roads. Unpaved roads are common across the County landscape. A familiar sight in rural communities, unpaved roads have the advantage of lower construction costs than paved roads, require less equipment and skilled operators, and generate lower speeds than their paved counterparts.

However, like paved roadways, unpaved dirt and gravel roads require regular maintenance to keep them passable and safe. Population growth can add to the problem by increasing the number of cars using unpaved roads, as well as solid-waste collection trucks and school buses, which accelerates degradation of the roadway condition. Erosion from unpaved roads and road related projects could contribute to polluted runoff, or non-point source pollution. This non-point

source pollution is a major contributor to water quality problems throughout the County. Using inexpensive routine and preventative maintenance practices can improve overall water quality while potentially reducing the cost of maintaining unpaved roads. Good planning and site design is critical to managing unpaved roadways and reducing non-point source pollution.

Transit/Public Transportation Services

The only available public transit in Nassau County is under the Transportation Disadvantaged Program (see below). 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. The Nassau County Board of County Commissioners designated the Nassau County Council on Aging (NCCOA) as the Community Transportation Coordinator (CTC) for Nassau County. The NCCOA has served in this capacity since that time and is the sole source provider of TD services in the County.

County programs serving the transportation disadvantaged within the Northeast Florida region served between approximately 2 percent and 19 percent of passengers in 2007. The actual percentage of the transportation disadvantaged population served in 2007, by county, is contained in Table T-6.

Table T-6 Population of Transportation Disadvantaged Served in 2007

Baker	Clay	Duval	Flagler	Nassau	Putnam	St. Johns
5.85%	4.92%	2.26%	15.48%	10.15%	19.29%	9.46%

Source NEFRC, 2007

Nassau County completed a Transit Study in the year 2000. The study considered transit options for four planning districts countywide focused around the Planning Districts (i.e.: Amelia Island, Yulee, Hilliard, and Callahan. The Study included identification of major generators and potential service centers. Maps T-14 through T-18 are excerpts from this Transit Study. The County will continue to support transit options and coordinate future efforts of the JTA and the North Florida TPO with reference to this and other regional transit studies such as the JTA Commuter Rail Feasibility Study.

The provision of public transit is important for a number of reasons. Public transit facilitates the mobility of elderly and low income individuals, reduces traffic congestion, lowers levels of air and noise pollution, and increases connectivity between communities. For all of these reasons, the County will continue to work with other municipal and regional governments in the area toward the development of a regional transit system.

Bicycle and Pedestrian Facilities

The provision of acceptable mobility involves several aspects. Adding new facilities to improve, bicycle and pedestrian mobility is yet another aspect of providing an acceptable transportation network. Map T-18 and Map T-19 illustrate existing, proposed and planned bicycle facilities. Table T-7 lists the five-year bicyclist and pedestrian injuries and fatalities history.

Table T-7 Five Year Bicyclist and Pedestrian History

	2002	2003	2004	2005	2006
Bicyclist Fatalities	0	0	1	0	0
Bicyclist Injuries	9	4	6	10	6
Pedestrian Fatalities	1	2	1	2	3
Pedestrian Injuries	18	11	18	14	21

Source BEBR, 2009

Aviation, Port, and Rail Facilities

Airport Facilities

The nearest airport to Nassau County which schedules commercial airline services is in Jacksonville International Airport. Two general aviation airports are active in Nassau County (see Map T-20) The Fernandina Beach Municipal Airport is a city-owned public use airport located south of the central business district of Fernandina Beach. It is designated as a reliever airport for Jacksonville International Airport. Initially this airport was developed as a training facility during World War II; the airport was transferred to the City in 1946 and designated as general aviation reliever airport for Jacksonville International Airport. Covering approximately 602 acres, the airport has three paved runways. The Hilliard Airpark is a small privately-owned general aviation facility located in Hilliard with one runway.

Port Facilities

The Port of Fernandina is a natural deep water port situated on the west side of Amelia Island about 2.2 miles from the mouth of the Amelia River (see Map T-20). It provides terminal service to pulp and paper producers located throughout Florida and the Southeast; and also supports a number of independent container lines serving Latin America and the Caribbean. The berth consists of one 1,200 linear foot marginal wharf. Draft alongside the berth is maintained at a depth of 36 feet mean low water (MLW). All berths can handle container or conventional cargo working vessels. The adjoining marshaling area can accommodate 3,200 TEU including 50 electrical hookups for refrigerated containers. A chassis depot is located near the port with parking for 500 chassis.

The Ocean Highway and Port Authority of Nassau County serves as the governing body for the Port of Fernandina., and are responsible for preparing the Port Facilities Element and a Port Master Plan for the City of Fernandina Beach Comprehensive Plan.

Rail Facilities

The railway network within Nassau County consist of railway lines, signals, and terminals. It includes tracks and associated facilities owned and operated by CSX, Norfolk Southern and short-line operator First Coast Railroad (FCRD), which provides rail service to the Port of

Fernandina (see above). The FCRD interchanges with CSX lines in Yulee. Map T-21 indicates the rail lines within the County as well as facility names.

Changes in Transportation Concurrency

Florida's 1985 Growth Management Act required that certain types of public facilities and services, including transportation, needed to serve new development be available with its impact. Concurrency is the growth management concept intended to ensure that the necessary public facilities are available concurrent with the impacts of development. Over time, transportation concurrency has been adjusted through the creation of transportation concurrency exception areas (TCEA), long-term transportation concurrency management systems (LTCMS), transportation concurrency management areas (TCMA), multi-modal transportation districts (MMTD), and other special exceptions.

Legislation passed in SB 360 (2005) marked some of the most significant changes in Florida's growth management laws since 1985. The most important amendments are those that shift the focus of school and transportation concurrency from facility capacity to "proportionate fair share mitigation." By contrast, the 2005 legislation mandates that development permits cannot be denied if the developer pays its "fair-share contribution" of the cost to mitigate development impacts. At the same time, the 2005 legislation introduces broader criteria for determining financial feasibility, allowing local governments the flexibility to rely on developer contributions and other revenue sources "reasonably anticipated" to be available up to ten years into the future. Financial feasibility requires that committed funding sources be available to finance capital improvements for the first three years of the capital improvements schedule. For years 4 and 5, the definition allows reliance on "committed or planned funding sources." The new definition also provides that the requirement to achieve and maintain level of service (LOS) standards shall not apply if the local government uses the proportionate share process.

Another SB 360 (2009) also will have far reaching impacts on the present transportation concurrency system. Jurisdictions classified as Dense Urban Land Areas (DULA) with may be designated as a Transportation Concurrency Exception Area. Transportation Concurrency Exception Areas (TCEAs) allow exceptions to the transportation concurrency requirement in specifically defined urban areas. The exceptions apply to all land uses and development within the TCEA. However, local governments must implement mobility strategies to support and fund transportation alternatives and specifically consider the impacts of the exception areas on the Florida Intrastate Highway System (FIHS) and the Strategic Intermodal System (SIS).

The City of Fernandina Beach is defined a DULA community (i.e.: a municipality with a population of 5,000 or more, with at least 1,000 persons per square mile) within Nassau County. As the City of Fernandina Beach implements mobility strategies to support and fund transportation alternatives, Nassau County will support and coordinate activities related to transit, bicycle and pedestrian connections, or other related activities.

The County also recognizes the 2009 Draft Mobility Fee Study prepared by the State and its potential implications to the current County concurrency management system and methodology. Changes and/or revisions to the County concurrency management system may be made as the State publishes additional guidance.

IV. Analysis of Need

Nassau County retained the services of the Northeast Florida Regional Council (NEFRC) to conduct the transportation analysis of the EAR-based amendments. This analysis will demonstrate whether the LOS standards will be achieved and maintained for transportation facilities in the short and long-term planning horizons. This analysis will include impact to roadways based on the maximum potential development of proposed amendments to the 2030 Future Land Use Map. The analysis will address the following:

- (1) the number of vehicle trips generated by the additional projected population;
- (2) the impact of the vehicle trips on the projected operating level of service of roadways for the short- (2015) and long-term (2030) planning timeframe;
- (3) the need for road improvements to maintain the adopted level of service standards for roadways;
- (4) coordination of any needed road improvements with the Transportation and Capital Improvements Elements; and
- (5) coordination of road improvements with the Florida Department of Transportation.

Regional Planning Model

Transportation analysis is performed with the assistance of computerized travel demand models that provide information on current and future transportation system operations. The transportation model used by NEFRC for the analysis is the Northeast Regional Planning Model (NERPM). The NERPM includes all of Nassau, Duval, Clay and St. Johns counties which coincide with North Florida TPO boundary. The transportation modeling and planning community in Florida relies heavily on travel survey data to develop, calibrate, and validate travel demand forecasting models, to evaluate alternatives, assess impacts of policies and multimodal plans, and quantify travel demand by purpose, time, location, and mode. The North Florida TPO and the Florida Department of Transportation (FDOT) District Two has spent considerable resources over the past 10-15 years collecting detailed travel survey data to serve as a basis for developing accurate travel demand forecasting models. The computer model uses the socioeconomic data files (ZDATA) as the basis for estimating traffic volumes on the County roadway network.

Traffic Analysis Zones (TAZs)

The various levels of data are organized in the model by traffic analysis zones (TAZs). TAZs are geographic boundaries most commonly designed for a conventional transportation planning model. The size of the zones varies; the spatial extent of the zones typically varies based on census block information, natural areas and roadway boundaries. The TAZs include the socioeconomic data and generally includes the number of automobiles per household, employment, population and other data sets. The computer model uses the socioeconomic data files (ZDATA) as the basis for estimating traffic volumes on the County roadway network. Map T-22 depicts the Traffic Analysis Zones (TAZs) boundaries and the TAZ numbers for Nassau County.

Long Range Transportation Plan (LRTP)

The North Florida Transportation Planning Organization (TPO) develops regional transportation plans and programs to accommodate mobility needs within the region. Every five years, the North

Florida TPO (Transportation Planning Organization) updates the Long Range Transportation Plan (LRTP). This Plan has a 20- to 25-year time horizon and addresses road, transit, freight, bike and pedestrian needs. The 2035 LRTP includes all of Clay, Duval, St. Johns and Nassau Counties. Sec. 163.3177 Florida Statutes requires the County's adopted Schedule of Capital Improvements (SCI) to include transportation improvements included in the adopted Transportation Improvement Program (TIP) (see below) to the extent that such improvements are relied upon to ensure concurrency and financial feasibility. The SCI must also be coordinated with the adopted LRTP.

The 2035 LRTP was a comprehensive analysis of all the elements that affect transportation now and in the future. The Plan provides a guide for the future through the Needs Assessment. The 2035 LRTP 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 Northeast Regional Planning Model (NERPM).

The 2035 Needs Plan consists of the projects identified which are necessary to maintain transportation mobility for the next 25 years. It represents all of the capacity improvement projects necessary for Nassau County to meet vehicle travel and congestion needs in the year 2035. The 2035 Needs Plan from the LRTP was not constrained by the affordability of the system. It instead focused 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 TPO 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 year 2035. Projects identified in the 2035 Needs Plan within Nassau County are listed in Table T-8 and shown on Map T-23.

Table T-8 2035 LRTP Needs Plan, Nassau County

ID	Corridor	From	To	County	Project Description
Roadway Projects					
36	East Nassau Connector	I-95	Chester Rd	Nassau	New 4 Lane Road
51	I-10	CR 125 (Baker County)	US 301	Duval / Nassau / Baker	Widen to 6 Lanes
56	I-10 Parallel Corridor	SR 121 (Baker County)	US 301	Nassau / Baker	New 4 Lane Road
70	I-95@ East Nassau Connector	-	-	Nassau	New Interchange
74	Lem Turner Rd (SR 115)	I-295	New Kings Rd (US 1 / 23)	Duval / Nassau	Widen to 4 Lanes
78	Main St (US 17)	Pecan Park Rd	SR 200 / A1A	Duval / Nassau	Widen to 4 Lanes
88	Northern Outer Beltway*	I-10	I-95	Duval / Nassau	New 4 Lane Expressway
112	SR 200 / A1A	I-95	East of CR 107	Nassau	Widen to 6 Lanes
135	US 301 / SR 200	North of Baldwin	South of Callahan	Nassau	Widen to 4 Lanes
141	Chester Rd	SR 200 / A1A	East Nassau Connector	Nassau	Widen to 4 Lanes

Transit Projects					
G	Commuter Rail North	Downtown Jacksonville	Yulee	Duval / Nassau	Limited Service (CSX)
H	Commuter Rail North Ext.	Yulee	Fernandina Beach	Nassau	Limited Service (CSX)

Source: North Florida TPO

* North Florida TPO and JTA are jointly conducting a feasibility study for the Northern Outer Beltway to examine if and when this facility may be needed

Since funding is not available for all projects in the unconstrained Needs Plan, candidate projects were prioritized to determine which would be recommended for inclusion in the Cost Feasible Plan. Development of the Cost Feasible Plan included the development of costs for all projects listed in the Needs Plan; scoring of the projects based on the adopted evaluation criteria; and then ranking projects by categories to identify prioritized projects. Project categorization is on the basis of available revenue sources. A draft Cost Feasible Plan was developed by allocating funds to fully or partially finance prioritized transportation projects. The draft Cost Feasible Plan was then amended to ensure a reasonable level of geographic equity in the LRTP, based on input from the LRTP Steering Committee and the public. Projects identified in the 2035 Cost Feasible Plan within Nassau County are listed in Table T-9 and shown on Map T-24.

Table T-9 2035 LRTP Cost Feasible Plan, Nassau County

ID	Corridor	From	To	County	Project Description	Length mi.	Total Cost*
Roadway Projects							
112	SR 200 / A1A	I-95	East of CR 107	Nassau	Widen to 6 Lanes	9.3	\$142.7
135	US 301 / SR 200	North of Baldwin	South of Callahan	Nassau	Widen to 4 Lanes	18.3	\$258.7
141	Chester Rd	SR 200 / A1A	East Nassau Connector	Nassau	Widen to 4 Lanes	2.1	\$20.9
Transit Projects							
G	Commuter Rail North	Downtown Jacksonville	Yulee (construct to River City / JIA)	Duval / Nassau	Study & Construction of Limited Service (CSX)	24	\$125

Source: North Florida TPO

* in millions, 2009 dollars

Transportation Improvement Program (TIP)

The North Florida TPO Transportation Improvement Program (TIP) is developed annually and is the short range transportation plan for the TPO. As mentioned previously All local government projects (non-federally funded) that are included in the TIP must be part of a local government's adopted capital improvement program. Nassau County projects in the currently adopted TIP are included in Appendix B.

Impact of Amendments to the 2030 Future Land Use Map

As part of the County's 2010 EAR-based amendments (Series 10-2ER), the proposed 2030 Future Land Use Map (FLUM) contains four (4) amendments to the 2010 FLUM. These are shown graphically in Map FL-7 and described in detail in the background data and analysis of the

Future Land Use Element. Their maximum development potentials are described in detail in Table T-10 below:

Table T-10 Development Potential of Proposed Amendments (Series 10-2ER)

Amendment	Acres		Existing Development Potential	Proposed Development Potential	Net Increase or (Decrease)
1. ENCPA	22,675 ac	Residential	6,949 DU	24,000 DU	17,051 DU
		Non-Residential	0 sq. ft.	11,000,000 sq. ft.	11,000,000 sq. ft.
2. Longleaf Mitigation Bank	3,029 ac	Residential	504 DU	0 DU	(504) DU
		Non-Residential	0 sq. ft.	0 sq. ft.	0 sq. ft.
3. Martins Island	110 ac	Residential	110 DU	0 DU	(110) DU
		Non-Residential	0 sq. ft.	0 sq. ft.	0 sq. ft.
4. Liberty Development	10 ac	Residential	100 DU	20 DU	(80) DU
		Non-Residential	0 sq. ft.	0 sq. ft.	0 sq. ft.
Total	25,824 ac	Residential	7,663 DU	24,020 DU	16,357 DU
		Non-Residential	0 sq. ft.	11,000,000 sq. ft.	11,000,000 sq. ft.

Source: Nassau County Growth Management Dept.

Impact Analysis Methodology

The purpose of this analysis is to evaluate the impacts of each of the 2030 FLUM amendments on facilities and services. The purpose of this analysis is not to conduct a concurrency review, per se. Rather, it provides the County with an analysis of how the adopted level of service standards would be affected by the proposed amendments for planning purposes. Facility needs are dealt with more completely during the site plan review process that incorporates a concurrency review of each of the cited public facilities.

For the purpose of evaluating comprehensive plan amendments development is presumed to have the maximum impact. "Maximum impact assumed" is a convention used by reviewing agencies to quantify impact associated with categories of land use. For residential FLUM designations, the property acreage is multiplied by the maximum permitted density. For non-residential designations the size of the property in acres is multiplied by 43,560 with that product in turn multiplied by the maximum floor area ratio. For all designations, if a property owner voluntarily commits to a proposed number of dwelling units and/or a floor area ratio through a policy adopted in the comprehensive plan ordinance, then the proposed number of dwelling units or floor area ratio may be used in place of the maximums.

Three of the four the amendments listed in Table T-10 above result in density reductions that will result in relatively minor impact reduction. As a result, this impact analysis will focus on the first amendment, the proposed Multi-Use designation known as the East Nassau Community Planning Area (ENCPA).

The ENCPA maximum development program established in Future Land Use Element Policy FL.13.10 will form the basis of the analysis - 24,000 dwelling units and 11,000,000 square feet of non-residential. A five-year and long term planning horizon will be examined following the development schedule shown in Table T-11 below. The first increment of development runs through 2015 with build out assumed by the long term planning horizon ending 2030.

Table T-11 ENCPA Phased Development Program*

Phase 1 (Current-2015) Dev. Program by LU	Land Use Type						
	Dwelling Units		Square Feet				Rooms
	SF	MF	Shopping Ctr.	Gen. Office	Office Park	Gen Light Ind.	Resort Hotel
Regional Center				40,000			
Regional Center-TOD							
Employment Center					225,000	525,000	
Village Center							
Village Center-TOD							
Resort Development							400
Neighborhood Center			20,000				
Res. Neighborhood	1,200						
TOTALS	1,200	0	20,000	40,000	225,000	525,000	400

Phase 2-Buildout (2016-2030) Dev. Program by LU	Land Use Type						
	Dwelling Units		Square Feet				Rooms
	SF	MF	Shopping Ctr.	Gen. Office	Office Park	Gen Light Ind.	Resort Hotel
Regional Center		5,696	1,200,000	180,000	225,000	200,000	
Regional Center-TOD		1,460		80,000	75,000		
Employment Center		1,077			2,352,000	4,788,000	
Village Center	438	1,753	650,000				
Village Center-TOD			150,000				
Resort Development	1,513	1,512	50,000				
Neighborhood Center			140,000				
Res. Neighborhood	8,868						
TOTALS	10,819	11,981	2,190,000	260,000	2,352,000	4,988,000	0

Overall ENCPA (at Buildout) Dev. Program by LU	Land Use Type						
	Dwelling Units		Square Feet				Rooms
	SF	MF	Shopping Ctr.	Gen. Office	Office Park	Gen Light Ind.	Resort Hotel
Regional Center		5,696	1,200,000	220,000	225,000	200,000	
Regional Center-TOD		1,460		80,000	75,000		
Employment Center		1,077			2,277,000	5,313,000	
Village Center	438	1,753	650,000				
Village Center-TOD			150,000				
Resort Development	1,513	1,512	50,000				400
Neighborhood Center			160,000				
Res. Neighborhood	10,058						
TOTALS	12,019	11,981	2,210,000	300,000	2,577,000	5,513,000	400

*The quantities indicated by land use category in this table are estimates for the purpose of quantifying public facility elements. Final units and square footage shall be subject to the DRI requirement for the ENCPA and shall not exceed 24,000 residential units and 11,000,000 square feet of nonresidential. It has been assumed that the Resort Hotel will consist of 400,000 sq. ft. Source: VHB MillerSellen

A methodology meeting was held on June 15, 2010 with Staff of NEFRC, Nassau County, Florida Department of Transportation District 2, and VHB Miller Sellen in attendance. The approaches and parameters agreed to at that meeting were incorporated into the traffic analysis (see Appendix J). Trip generation was based on data from, Trip Generation, 8th Edition of the Institute of Transportation Engineers (ITE). Distribution of project trips was based on 2015 and 2030 NERPM (version 4), as maintained by the North Florida Transportation Planning Organization (TPO). A five-mile study area was selected for the ENCPA amendment site and TAZ analyses of existing conditions, 2015 conditions and 2030 conditions were performed using the Northeast Florida Regional Model with the Nassau County data set updated to reflect the proposed EAR-based amendments. The existing roadway conditions and background traffic projections are included in Table T-12.

FDOT growth rates were used to reflect background conditions. For impacts attributed to the ENCPA, the analysis was run using the existing roadway and lane configuration, a conservative 5% internal capture rate, and no modal split. It should be noted that for the ENCPA, the modeling conducted for this analysis is not a substitute for future DRI analysis that will address existing backlogs and test improvements to the existing transportation network. For the ENCPA, a comparison will be made between the 2015 Phase I traffic generation and the existing FLUM potential. If links went over capacity in the 2015 or 2030 model run, the necessary and desired improvements needed to maintain the adopted LOS were identified. A summary of the analysis is included below. For a detailed discussion of data sources, methodology and results of this transportation analysis please refer to Appendix J.

Table T-12 Transportation Analysis: Existing Road Network *

*links highlighted in red are projected not to meet LOS in 2015 or 2030 w/o impacts of proposed amendments

Nassau County Link ID Ref	Roadway	From/To	Lanes	Facility Type	System Status	Miles	MIN LOS STD		Max Service Volume	2007	2008	2009	LOS	Growth Rate	BACKGROUND TRAFFIC PROJECTIONS							
							2010	LOS							2015	LOS	2025	LOS	2030	LOS		
40	I-95	Duval County Line to S.R.200/S.R.A1A	6-D	Freeway Transition	SIG	3.03	AADT	C	86,600	60,500	59,500	67,000	C	3.6%	68,900	C	80,800	C	104,600	E	116,500	F
							Peak Hr	C	8,140		6,658	6,030	C		6,201	C	7,272	C	9,414	D	10,485	E
41	I-95	S.R.200/S.R.A1A to U.S. 17/SR 5	6-D	Freeway Transition	SIG	6.64	AADT	C	86,600	48,000	45,500	49,500	B	VAR	49,500	B	52,000	B	60,800	B	66,200	C
							Peak Hr	C	8,140		4,455	4,455	B	1.90%	4,455	B	4,680	B	5,472	B	5,897	B
42	I-95	U.S. 17/SR 5 to Georgia State Line	6-D	Freeway Transition	SIG	2.56	AADT	C	86,600	57,940	54,003	56,261	B	1.3%	59,700	B	63,700	B	71,600	C	75,800	C
							Peak Hr	C	8,140		5,063	5,063	B		5,373	B	5,733	B	6,444	C	6,799	C
43/43A	S.R.200/S.R.A1A	Griffen Road to I-95	4-D	Highway Transition	SIG	5.33	AADT	C	45,400	9,400	9,000	9,100	B	2.0%	9,700	B	10,700	B	12,600	B	13,600	B
							Peak Hr	C	4,400		819	819	B		873	B	963	B	1,134	B	1,220	B
44	S.R.200/S.R.A1A	I-95 to Old Yulee Road	4-D	Highway Transition	SIG CONN	2.38	AADT	C	45,400	18,178	17,240	17,536	B	1.4%	18,500	B	19,800	B	22,200	B	23,400	B
							Peak Hr	C	4,400		1,578	1,578	B		1,665	B	1,782	B	1,998	B	2,106	B
44A	S.R.200/S.R.A1A	Old Yulee to U.S. 17	4-D	Arterial 1 Urbanized	SIG CONN	0.65	AADT	D	36,700	1,817	17,240	17,536	B	1.4%	18,500	B	19,800	B	22,200	B	23,400	B
							Peak Hr	D	3,560		1,578	1,578	B		1,665	B	1,782	B	1,998	B	2,106	B
45/45A,45B	S.R.200/S.R.A1A	U.S. 17 to Blackrock Road	4-D	Arterial 1 Urbanized	SIG CONN	4.38	AADT	D	36,700	38,000	38,500	37,000	F	2.7%	39,100	F	44,200	F	54,500	F	59,700	F
							Peak Hr	D	3,560		3,330	3,330	C		3,519	D	3,978	F	4,905	F	5,369	F
47/46	S.R. 200/A1A	Old Nassauville Road to Amelia Island Parkway	4-D	Highway Urbanized	SIG CONN	3.8	AADT	D	64,300	39,000	40,000	40,500	C	2.5%	4,300	C	48,600	C	59,300	D	64,700	D
							Peak Hr	D	6,040		3,645	3,645	C		3,897	C	4,374	C	5,337	D	5,819	D
49	C.R.200A (Pages Dairy Road)	U.S. 17 to Chester Road	2-U	Collector Urbanized	COUNTY	3.9	AADT	D	14,850		3,336	3,004	B	2.5%	3,079	B	3,484	B	4,459	B	5,045	B
							Peak Hr	D	1,440		288	288	B		295	B	334	B	428	B	484	B
50	C.R.107N. (Blackrock Road)	Chester Road to S.R.200/S.R.A1A	2-U	Collector Urbanized	COUNTY	5.13	AADT	D	14,850	3,374	26,685	2,700	B	2.5%	2,768	B	3,131	B	4,008	B	4,535	B
							Peak Hr	D	1,440		269	269	B		265	B	300	B	384	B	435	B
51	C.R. 107S. (Old Nassauville Road)	S.R.200/S.R.A1A to Amelia Concourse	2-U	Collector Transition	COUNTY	1.91	AADT	D	13,600	8,283	8,969	6,403	B	2.5%	6,563	B	7,426	B	9,505	C	10,754	C
							Peak Hr	D	1,332		615	615	B		630	B	713	B	913	C	1,033	C
51A	C.R. 107S. (Old Nassauville Road)	Amelia Concourse to Santa Juana Road	2-U	Collector Transition	COUNTY	1.75	AADT	D	13,600	6,608	7,205	6,730	B	2.5%	6,899	B	7,805	B	9,991	C	11,304	C
							Peak Hr	D	1,332		646	646	B		662	B	749	B	959	C	1,085	C
51B	Roses Bluff Road	Chester Road West	2-U	Collector Transition	COUNTY	1.17	AADT	D	13,600		1,685	1,597	B	2.5%	1,637	B	1,852	B	2,371	B	2,682	B
							Peak Hr	D	1,332		153	153	B		157	B	177	B	227	B	257	B
52	Chester Road	S.R.200/S.R.A1A to Pages Dairy Road (C.R.200A)	2-U	Collector Transition	COUNTY	0.46	AADT	D	13,600	7,191	7,081	7,931	B	2.5%	8,129	C	9,198	C	11,774	C	13,321	D
							Peak Hr	D	1,332		761	761	B		780	C	883	C	1,130	C	1,278	D
53	Chester Road	Pages Dairy Road to Blackrock Road	2-U	Collector Transition	COUNTY	3.27	AADT	D	13,600	9,854	8,603	6,637	B	2.5%	6,803	B	7,697	B	9,853	C	11,147	C
							Peak Hr	D	1,332		559	559	B		572	B	647	B	828	C	937	C
53A	Amelia Concourse	S.R.200/S.R.A1A to C.R.107S. (Nassauville Road)	4-D	Collector Transition	COUNTY	-	AADT	D	30,420		2,924	7,211	B	2.5%	7,391	B	8,363	C	10,705	C	12,111	C
							Peak Hr	D	2,952		692	692	B		709	B	803	C	1,027	C	1,162	C
54	Barnwell Road	S.R.200/S.R.A1A to Oyster Bay Drive	2-U	Collector Urbanized	COUNTY	2.25	AADT	D	14,850		3,251	3,251	B	2.5%	3,332	B	3,770	B	4,825	B	5,460	B
							Peak Hr	D	1,440		679	679	B		696	B	787	B	1,008	C	1,140	C
54A	Miner Road	Haddock Road to S.R.200/S.R.A1A	2-U	Collector Urbanized	COUNTY	2.57	AADT	D	14,850	7,070	7,070	7,070	B	2.5%	7,247	B	8,199	B	10,495	C	11,875	C
							Peak Hr	D	1,440		679	679	B		696	B	787	B	1,008	C	1,140	C
55	U.S. 17 (S.R.5)	Duval County Line to Harts Road	2-U	Highway Transition	SHS	1.45	AADT	D	21,100		11,800	10,800	C	2.5%	11,900	C	13,400	C	16,400	D	17,900	D
							Peak Hr	D	2,040		972	972	C		1,071	C	1,206	C	1,476	D	1,611	D
56	U.S. 17 (S.R.5)	Sowell Road to S.R.200/S.R.A1A	4-D	Arterial 1 Urbanized	SHS	0.11	AADT	D	36,700	10,800	11,800	10,800	B	2.5%	11,900	B	13,400	B	16,400	B	17,900	B
							Peak Hr	D	3,560		972	972	B		1,071	B	1,206	B	1,476	B	1,611	B
57	U.S. 17 (S.R.5)	S.R.200/S.R.A1A to Pages Dairy Road	4-D	Arterial 1 Urbanized	SHS	0.23	AADT	D	36,700	10,800	11,750	10,800	B	1.5%	11,800	B	12,700	B	14,600	B	15,600	B
							Peak Hr	D	3,560		972	972	B		1,062	B	1,143	B	1,314	B	1,400	B
58	U.S. 17 (S.R.5)	Pages Dairy Road to Goodbread Road	2-U	Arterial 1 Urbanized	SHS	0.45	AADT	D	16,500	10,800	11,700	10,800	C	1.0%	11,700	C	12,300	C	13,500	C	14,100	C
							Peak Hr	D	1,600		972	972	C		1,053	C	1,107	C	1,215	C	1,269	C
59	U.S. 17 (S.R.5)	Goodbread Road to I-95	2-U	Highway Transition	SHS	6.24	AADT	D	21,100	10,800	11,700	10,800	C	1.0%	11,700	C	12,300	C	13,500	C	14,100	C
							Peak Hr	D	2,040		972	972	C		1,053	C	1,107	C	1,215	C	1,269	C
60	U.S. 17 (S.R.5)	I-95 to Georgia State Line	2-U	Highway Transition	SHS	2.41	AADT	D	21,100	3,400	3,400	3,000	B	1.0%	3,300	B	3,500	B	3,800	B	3,950	B
							Peak Hr	D	2,040		270	270	B		297	B	315	B	342	B	355	B
60A/60B	Harts Road	U.S. 17 to Haddock Road	2-U	Highway Urbanized	SHS	2.49	AADT	D	22,200		11,800	10,800	C	2.5%	11,900	C	13,400	C	16,400	D	17,900	D
							Peak Hr	D	2,080		972	972	C		1,071	C	1,206	C	1,476	D	1,611	D
62	William Burgess Boulevard	S.R.200/S.R.A1A to Harts Road	2-U	Collector Urbanized	COUNTY	2.42	AADT	D	14,850		1,551	1,163	B	2.5%	1,152	B	1,349	B	1,726	B	1,953	B
							Peak Hr	D	1,440		112	112	B		115	B	130	B	166	B	188	B

Table T-13 Transportation 2015 Level of Service Analysis *

*links highlighted in red do not meet the LOS standards in 2015 w/proposed amendments

Nassau County Link ID Ref	Roadway	From/To	LOS STD		Max Service Volume	Background 2015 TRIPS		Project Trip Distribution %	Project Trips	Project Trips % of Maximum Service Volume	2015 Total Trips	LOS 2015 Total Trips	Total Trips % of Max. Service Volume	Trips Remaining	LOS Table Volumes			
			AADT	C		2015	LOS								B	C	D	E
			Peak Hr	C		Peak Hr	C								Peak Hr	C	Peak Hr	C
40	I-95	Duval County Line to S.R.200/S.R.A1A	AADT	C	86,800	80,800	C	19.43%	4209	4.9%	85,009	C	98%	1,591	83,900	86,800	103,300	113,700
			Peak Hr	C	8,140	7,272	C	19.43%	460	5.7%	7,732	C	95%	408	6,000	8,140	9,710	10,690
41	I-95	S.R.200/S.R.A1A to U.S.17/SR 5	AADT	C	86,800	52,000	B	22.70%	4918	5.7%	56,918	B	66%	29,682	63,900	86,800	103,300	113,700
			Peak Hr	C	8,140	4,680	B	22.70%	538	6.6%	5,218	B	64%	2,922	6,000	8,140	9,710	10,690
42	I-95	U.S.17/SR 5 to Georgia State Line	AADT	C	86,800	63,700	B	1.20%	260	0.3%	63,960	C	74%	22,640	63,900	86,800	103,300	113,700
			Peak Hr	C	8,140	5,733	B	1.20%	28	0.3%	5,761	B	71%	2,379	6,000	8,140	9,710	10,690
43/43A	S.R.200/S.R.A1A	Griffen Road to I-95	AADT	C	45,400	10,700	B	5.00%	1083	2.4%	11,783	B	26%	33,617	31,400	45,400	58,800	66,600
			Peak Hr	C	4,400	963	B	5.00%	119	2.7%	1,082	B	25%	3,319	3,040	4,400	5,700	6,460
44	S.R.200/S.R.A1A	I-95 to Old Yulee Road	AADT	C	45,400	19,800	B	20.00%	4333	9.5%	24,133	B	53%	21,267	31,400	45,400	58,800	66,600
			Peak Hr	C	4,400	1,782	B	20.00%	474	10.8%	2,256	B	51%	2,144	3,040	4,400	5,700	6,460
44A	S.R.200/S.R.A1A	Old Yulee to U.S. 17	AADT	D	36,700	19,800	B	31.00%	6716	18.3%	26,516	B	72%	10,184	29,300	35,500	36,700	-
			Peak Hr	D	3,560	1,782	B	31.00%	735	20.6%	2,517	B	71%	1,043	2,840	3,440	3,560	-
45/45A/45B	S.R.200/S.R.A1A	U.S.17 to Blackrock Road	AADT	D	36,700	44,200	F	4.60%	996	2.7%	45,196	F	123%	-8,496	29,300	35,500	36,700	-
			Peak Hr	D	3,560	3,978	F	4.60%	109	3.1%	4,087	F	115%	-527	2,840	3,440	3,560	-
47/48	S.R. 200/A1A	Old Nassauville Road to Amelia Island Parkway	AADT	D	64,300	48,600	C	5.80%	1256	2.0%	49,856	D	78%	14,444	34,300	49,600	64,300	72,800
			Peak Hr	D	6,040	4,374	C	5.80%	137	2.3%	4,511	C	75%	1,529	3,220	4,660	6,040	6,840
49	C.R.200A (Pages Dairy Road)	U.S.17 to Chester Road	AADT	D	14,850	3,484	B	5.00%	1083	7.3%	4,567	B	31%	10,283	8,640	13,860	14,850	-
			Peak Hr	D	1,440	334	B	5.00%	119	8.2%	452	B	31%	988	837	1,350	1,440	-
50	C.R.107N. (Blackrock Road)	Chester Road to S.R.200/S.R.A1A	AADT	D	14,850	3,131	B	0.30%	65	0.4%	3,196	B	22%	11,654	8,640	13,860	14,850	-
			Peak Hr	D	1,440	300	B	0.30%	7	0.5%	307	B	21%	1,133	837	1,350	1,440	-
51	C.R.107S. (Old Nassauville Road)	S.R.200/S.R.A1A to Amelia Concourse	AADT	D	13,600	7,426	B	0.10%	22	0.2%	7,447	B	55%	6,153	8,010	12,690	13,600	-
			Peak Hr	D	1,332	713	B	0.10%	2	0.2%	716	B	54%	616	774	1,233	1,332	-
51A	C.R.107S. (Old Nassauville Road)	Amelia Concourse to Santa Juana Road	AADT	D	13,600	7,605	B	0.10%	22	0.2%	7,826	B	58%	5,774	8,010	12,690	13,600	-
			Peak Hr	D	1,332	749	B	0.10%	2	0.2%	752	B	56%	580	774	1,233	1,332	-
51B	Roses Bluff Road	Chester Road West	AADT	D	13,600	1,852	B	0.00%	0	0.0%	1,852	B	14%	11,748	8,010	12,690	13,600	-
			Peak Hr	D	1,332	177	B	0.00%	0	0.0%	177	B	13%	1,155	774	1,233	1,332	-
52	Chester Road	S.R.200/S.R.A1A to Pages Dairy Road (C.R.200A)	AADT	D	13,600	9,198	C	1.20%	260	1.9%	9,457	C	70%	4,143	8,010	12,690	13,600	-
			Peak Hr	D	1,332	883	C	1.20%	28	2.1%	911	C	68%	421	774	1,233	1,332	-
53	Chester Road	Pages Dairy Road to Blackrock Road	AADT	D	13,600	7,697	B	0.50%	108	0.8%	7,805	B	57%	5,796	8,010	12,690	13,600	-
			Peak Hr	D	1,332	647	B	0.50%	12	0.9%	659	B	49%	673	774	1,233	1,332	-
53A	Amelia Concourse	S.R.200/S.R.A1A to C.R.107S. (Nassauville Road)	AADT	D	30,420	8,363	C	0.20%	43	0.1%	8,406	B	28%	22,014	24,210	28,890	30,420	-
			Peak Hr	D	2,952	803	C	0.20%	5	0.2%	807	B	27%	2,145	2,340	2,799	2,952	-
54	Barnwell Road	S.R.200/S.R.A1A to Oyster Bay Drive	AADT	D	14,850	3,770	B	0.40%	87	0.6%	3,857	B	26%	10,993	8,640	13,860	14,850	-
			Peak Hr	D	1,440	787	B	0.40%	9	0.7%	797	B	55%	643	837	1,350	1,440	-
54A	Miner Road	Haddock Road to S.R.200/S.R.A1A	AADT	D	14,850	8,199	B	0.00%	0	0.0%	8,199	B	55%	6,651	8,640	13,860	14,850	-
			Peak Hr	D	1,440	787	B	0.00%	0	0.0%	787	B	55%	653	837	1,350	1,440	-
55	U.S.17 (S.R.5)	Duval County Line to Harts Road	AADT	D	21,100	13,400	C	8.00%	1733	8.2%	15,133	D	72%	5,967	8,000	15,100	21,100	26,800
			Peak Hr	D	2,040	1,206	C	8.00%	190	9.3%	1,396	C	68%	644	770	1,460	2,040	2,590
56	U.S.17 (S.R.5)	Sowell Road to S.R.200/S.R.A1A	AADT	D	36,700	13,400	B	6.00%	1300	3.5%	14,700	B	40%	22,000	29,300	35,500	36,700	-
			Peak Hr	D	3,560	1,206	B	6.00%	142	4.0%	1,348	B	38%	2,212	2,840	3,440	3,560	-
57	U.S.17 (S.R.5)	S.R.200/S.R.A1A to Pages Dairy Road	AADT	D	36,700	12,700	B	17.00%	3683	10.0%	16,383	B	45%	20,317	29,300	35,500	36,700	-
			Peak Hr	D	3,560	1,143	B	17.00%	403	11.3%	1,546	B	43%	2,014	2,840	3,440	3,560	-
58	U.S.17 (S.R.5)	Pages Dairy Road to Goodbread Road	AADT	D	16,500	12,300	C	16.00%	3466	21.0%	15,766	F	96%	734	8,640	13,860	14,850	-
			Peak Hr	D	1,600	1,107	C	16.00%	379	23.7%	1,486	F	93%	114	837	1,350	1,440	-
59	U.S.17 (S.R.5)	Goodbread Road to I-95	AADT	D	21,100	12,300	C	25.80%	5589	26.5%	17,889	D	85%	3,211	8,000	15,100	21,100	26,800
			Peak Hr	D	2,040	1,107	C	25.80%	611	30.0%	1,718	D	84%	322	770	1,460	2,040	2,590
60	U.S.17 (S.R.5)	I-95 to Georgia State Line	AADT	D	21,100	3,500	B	1.30%	282	1.3%	3,782	B	18%	17,318	8,000	15,100	21,100	26,800
			Peak Hr	D	2,040	315	B	1.30%	31	1.5%	346	B	17%	1,694	770	1,460	2,040	2,590
60A/60B	Harts Road	U.S.17 to Haddock Road	AADT	D	22,200	13,400	C	1.80%	390	1.6%	13,790	C	62%	8,410	7,800	15,600	22,200	27,900
			Peak Hr	D	2,080	1,206	C	1.80%	43	2.1%	1,249	C	60%	831	730	1,460	2,080	2,620
62	William Burgess Boulevard	S.R.200/S.R.A1A to Harts Road	AADT	D	14,850	1,349	B	1.80%	390	2.6%	1,739	B	12%	13,111	8,640	13,860	14,850	-
			Peak Hr	D	1,440	130	B	1.80%	43	3.0%	173	B	12%	1,267	837	1,350	1,440	-

Table T-14 Transportation 2015 Level of Service Analysis *

*links highlighted in red do not meet the LOS standards in 2030 w/proposed amendments

Nassau County Link ID Ref	Roadway	From/To	LOS STD		Max Service Volume	Background 2030 TRIPS		Project Trip Distribution %	Project Trips	Project Trips % of Maximum Service Volume	2030 Total Trips	LOS 2030	Total Trips % of Max. Service Volume	Trips Remaining	LOS Table Volumes			
						2030	LOS								B	C	D	E
						AADT	Peak Hr								AADT	Peak Hr	AADT	Peak Hr
40	I-95	Duval County Line to S.R.200/S.R.A1A	AADT	C	86,600	116,500	F	21.50%	67790	78.3%	184,290	F	213%	-97,690	63,900	86,600	103,300	113,700
			Peak Hr	C	8,140	10,485	E	21.50%	7745	95.1%	18,230	F	224%	-10,090	6,000	8,140	9,710	10,690
41	I-95	S.R.200/S.R.A1A to U.S. 17/SR 5	AADT	C	86,600	65,200	C	21.00%	66213	76.5%	131,413	F	152%	-44,813	63,900	86,600	103,300	113,700
			Peak Hr	C	8,140	5,897	B	21.00%	7565	92.9%	13,462	F	165%	-5,322	6,000	8,140	9,710	10,690
42	I-95	U.S. 17/SR 5 to Georgia State Line	AADT	C	86,600	75,600	C	1.96%	6180	7.1%	81,780	C	94%	4,820	63,900	86,600	103,300	113,700
			Peak Hr	C	8,140	6,799	C	1.96%	706	8.7%	7,505	C	92%	635	6,000	8,140	9,710	10,690
43/43A	S.R.200/S.R.A1A	Griffen Road to I-95	AADT	C	45,400	13,600	B	5.20%	16396	36.1%	29,996	B	66%	15,404	31,400	45,400	58,800	66,600
			Peak Hr	C	4,400	1,220	B	5.20%	1873	42.6%	3,093	C	70%	1,307	3,040	4,400	5,700	6,460
44	S.R.200/S.R.A1A	I-95 to Old Yulee Road	AADT	C	45,400	23,400	B	32.30%	101843	224.3%	125,243	F	276%	-79,843	31,400	45,400	58,800	66,600
			Peak Hr	C	4,400	2,106	B	32.30%	11635	264.4%	13,741	F	312%	-9,341	3,040	4,400	5,700	6,460
44A	S.R.200/S.R.A1A	Old Yulee to U.S. 17	AADT	D	36,700	23,400	B	19.30%	60853	165.8%	84,253	F	230%	-47,553	29,300	35,500	36,700	-
			Peak Hr	D	3,560	2,106	B	19.30%	6952	195.3%	9,058	F	254%	-5,498	2,840	3,440	3,560	-
45/45A/46	S.R.200/S.R.A1A	U.S. 17 to Blackrock Road	AADT	D	36,700	69,700	F	15.60%	49187	134.0%	108,887	F	297%	-72,187	29,300	35,500	36,700	-
			Peak Hr	D	3,560	5,369	F	15.60%	5619	157.8%	10,968	F	309%	-7,428	2,840	3,440	3,560	-
47/48	S.R. 200/A1A	Old Nassauville Road to Amelia Island Parkway	AADT	D	64,300	64,700	F	5.80%	18288	28.4%	82,988	F	129%	-18,688	34,300	49,600	64,300	72,800
			Peak Hr	D	6,040	5,819	D	5.80%	2089	34.6%	7,908	F	131%	-1,868	3,220	4,660	6,040	6,840
49	C.R.200A (Pages Dairy Road)	U.S.17 to Chester Road	AADT	D	14,850	5,045	B	4.70%	14819	99.8%	19,865	F	134%	-5,015	8,640	13,860	14,850	-
			Peak Hr	D	1,440	484	B	4.70%	1693	117.6%	2,177	F	151%	-737	837	1,350	1,440	-
50	C.R.107N. (Blackrock Road)	Chester Road to S.R.200/S.R.A1A	AADT	D	14,850	4,535	B	0.80%	2522	17.0%	7,057	B	48%	7,793	8,640	13,860	14,850	-
			Peak Hr	D	1,440	435	B	0.80%	268	20.0%	723	B	50%	717	837	1,350	1,440	-
51	C.R.107S. (Old Nassauville Road)	S.R.200/S.R.A1A to Amelia Concourse	AADT	D	13,600	10,754	C	0.03%	95	0.7%	10,849	C	80%	2,751	8,010	12,690	13,680	-
			Peak Hr	D	1,332	1,033	C	0.03%	11	0.8%	1,044	C	78%	268	774	1,233	1,332	-
51A	C.R.107S. (Old Nassauville Road)	Amelia Concourse to Santa Juana Road	AADT	D	13,600	11,304	C	0.02%	63	0.5%	11,367	C	84%	2,233	8,010	12,690	13,680	-
			Peak Hr	D	1,332	1,085	C	0.02%	7	0.5%	1,092	C	82%	240	774	1,233	1,332	-
51B	Roses Bluff Road	Chester Road West	AADT	D	13,600	2,682	B	0.00%	0	0.0%	2,682	B	20%	10,918	8,010	12,690	13,680	-
			Peak Hr	D	1,332	257	B	0.00%	0	0.0%	257	B	19%	1,075	774	1,233	1,332	-
52	Chester Road	S.R.200/S.R.A1A to Pages Dairy Road (C.R.200A)	AADT	D	13,600	13,321	D	6.40%	20179	148.4%	33,500	F	246%	-19,900	8,010	12,690	13,680	-
			Peak Hr	D	1,332	1,278	D	6.40%	2305	173.1%	3,584	F	269%	-2,252	774	1,233	1,332	-
53	Chester Road	Pages Dairy Road to Blackrock Road	AADT	D	13,600	11,147	C	9.90%	31215	229.5%	42,362	F	311%	-28,762	8,010	12,690	13,680	-
			Peak Hr	D	1,332	937	C	9.90%	3566	267.7%	4,503	F	338%	-3,171	774	1,233	1,332	-
53A	Amelia Concourse	S.R.200/S.R.A1A to C.R.107S. (Nassauville Road)	AADT	D	30,420	12,111	C	1.60%	5045	16.6%	17,156	B	56%	13,264	24,210	28,890	30,420	-
			Peak Hr	D	2,952	1,162	C	1.60%	576	19.5%	1,739	B	59%	1,213	2,340	2,799	2,952	-
54	Barnwell Road	S.R.200/S.R.A1A to Oyster Bay Drive	AADT	D	14,850	5,460	B	0.45%	1419	9.6%	6,879	B	46%	7,971	8,640	13,860	14,850	-
			Peak Hr	D	1,440	1,140	B	0.45%	162	11.3%	1,303	C	90%	137	837	1,350	1,440	-
54A	Miner Road	Haddock Road to S.R.200/S.R.A1A	AADT	D	14,850	11,875	C	0.04%	126	0.8%	12,001	C	81%	2,849	8,640	13,860	14,850	-
			Peak Hr	D	1,440	1,140	C	0.04%	14	1.0%	1,155	C	80%	285	837	1,350	1,440	-
55	U.S.17 (S.R.5)	Duval County Line to Harts Road	AADT	D	21,100	17,900	D	13.70%	43196	204.7%	81,096	F	290%	-39,996	8,000	15,100	21,100	26,800
			Peak Hr	D	2,040	1,611	D	13.70%	4935	241.9%	6,546	F	321%	-4,506	770	1,460	2,040	2,590
56	U.S.17 (S.R.5)	Sowell Road to S.R.200/S.R.A1A	AADT	D	36,700	17,900	B	7.40%	23332	63.6%	41,232	F	112%	-4,532	29,300	35,500	36,700	-
			Peak Hr	D	3,560	1,611	B	7.40%	2666	74.9%	4,277	F	120%	-717	2,840	3,440	3,560	-
57	U.S.17 (S.R.5)	S.R.200/S.R.A1A to Pages Dairy Road	AADT	D	36,700	15,600	B	22.40%	70628	192.4%	86,228	F	235%	-49,528	29,300	35,500	36,700	-
			Peak Hr	D	3,560	1,400	B	22.40%	8069	228.7%	9,469	F	266%	-5,909	2,840	3,440	3,560	-
58	U.S.17 (S.R.5)	Pages Dairy Road to Goodbread Road	AADT	D	16,500	14,100	D	25.00%	78826	477.7%	92,926	F	563%	-76,426	8,640	13,860	14,850	-
			Peak Hr	D	1,600	1,269	C	25.00%	9006	562.8%	10,275	F	642%	-8,675	837	1,350	1,440	-
59	U.S.17 (S.R.5)	Goodbread Road to I-95	AADT	D	21,100	14,100	C	37.90%	119500	566.3%	133,600	F	633%	-112,500	8,000	15,100	21,100	26,800
			Peak Hr	D	2,040	1,269	C	37.90%	13652	669.2%	14,921	F	731%	-12,881	770	1,460	2,040	2,590
60	U.S.17 (S.R.5)	I-95 to Georgia State Line	AADT	D	21,100	3,950	B	40.00%	126121	597.7%	130,071	F	615%	-108,971	8,000	15,100	21,100	26,800
			Peak Hr	D	2,040	356	B	40.00%	14409	706.3%	14,765	F	724%	-12,725	770	1,460	2,040	2,590
60A/60B	Harts Road	U.S.17 to Haddock Road	AADT	D	22,200	17,900	D	35.00%	110356	497.1%	128,256	F	578%	-106,056	7,800	15,600	22,200	27,900
			Peak Hr	D	2,080	1,611	D	35.00%	12608	606.1%	14,219	F	684%	-12,139	730	1,460	2,080	2,620
62	William Burgess Boulevard	S.R.200/S.R.A1A to Harts Road	AADT	D	14,850	1,953	B	3.20%	10090	67.9%	12,043	C	81%	2,807	8,640	13,860	14,850	-
			Peak Hr	D	1,440	188	B	3.20%	1153	80.0%	1,341	C	93%	99	837	1,350	1,440	-

Short-term (2015) Transportation Improvements

The 2015 future year analysis of roadway segments is shown in Table T-13. The analysis shows that by 2015 - with or without the EAR-based amendments - S.R. 200/A1A between U.S. Highway 17 and Blackrock Road (Links 45,45A,46) is projected to not meet the adopted level of service (LOS) standard. As a matter of fact, the proposed EAR-based amendments have the effect of reducing, from a modeling standpoint, the impact to S.R. 200/A1A through 2015. Nassau County will address the improvement of these segments of S.R. 200/A1A to meet the projected LOS failure by the year 2015 through a long term concurrency management system. All right-of-way acquisition for the needed improvements is included in FDOT's 2011-2016 Five-Year Capital Improvement Program. The adoption of a long term concurrency management system can enable the County to work with FDOT to collect proportionate fair share funds toward the construction of a 6 - lane facility within the impacted segment.

Pursuant to Transportation Element Policy T.01.02, the County will develop and adopt a long term concurrency management system in coordination with the Florida Department of Transportation by December 31, 2011. The long term concurrency management system will include addressing designated districts, areas or facilities where significant backlog exists, the cost of eliminating the backlog, identification of tax, proportionate fair share or other revenue-raising efforts, and the inclusion of FDOT in review and approval of methodology for projects impacting S.R. 200/A1A.

Long Range (2030) Transportation Improvements

The 2030 future analysis of roadway segments is shown in Table T-14. As explained above, this transportation analysis was based upon the 2030 NEFRPM transportation model. The methodology incorporated multiple worse case scenarios including a 5% internal capture; complete build out by the planning horizon year, 2030; no multi-modal split; and the assignment of all resulting traffic to the existing lane configuration. Consequently, the analysis resulted in the following list of improvements needed to support the goals, objectives and policies of the 2030 Future Land Use Element.

Pursuant to Policy T.02.05, the list of transportation improvements shown in Tables T-15 -17 above shall be included as long term unfunded needs in the Nassau County Capital Improvements Element (CIE) and shall be considered by the County when it adopts annual updates to the Schedule of Capital Improvements. These lists of improvements shall also be considered in any transportation analysis prepared by an applicant for DRI approval as required for any development within the East Nassau Community Planning Area (ENCPA). These improvements are shown graphically in the Future Transportation Map Series as FTMS-11, and also in this background data and analysis as Map T-26.

Table T-15 Long Term Transportation Needs: Improvements to Existing Roadway Segments

Link ID#	Road Segment	From	To
40	I-95	Duval County Line	SR 200/ A1A
41	I-95	SR 200/ A1A	U.S. 17/SR 5
44	SR 200/A1A	I-95	Yulee Rd
45/45A/46	SR 200/A1A	U.S. 17/SR 5	Blackrock Road
47/48	SR 200/A1A	Old Nassauville Rd	Amelia Island Parkway
49	Pages Dairy Road	U.S. 17/SR 5	Chester Road
52	Chester Road	SR 200/ A1A	Pages Dairy Road
53	Chester Road	Pages Dairy Road	Blackrock Road
54A	Miner Road	Haddock Road	SR 200/A1A
55	U.S. 17/SR 5	Duval County Line	Harts Road
57	U.S. 17/SR 5	SR 200/A1A	Pages Dairy Road
58	U.S. 17/SR 5	Pages Dairy Road	Goodbread Road
59	U.S. 17/SR 5	Goodbread Road	I-95
60	U.S. 17/SR 5	I-95	State Line

In order to accommodate future projected growth and implement portions of the Vision 2032 Final Report, the EAR-based amendments provide a mix of land uses to increase internal capture rates; encourage alternative modes of transportation; and the creation of new parallel transportation corridors. New Roadway Segments and transportation improvements to be tested include:

Table T- 16 Long Term Transportation Needs: New Roadway Segments w/in Urban Development Area

Road Segment	From	To
CR 108 Extension	Chester Road	U.S. 17
East Nassau Connector	CR 108	East Frontage Road
East Nassau Connector	East Frontage Road	I-95 (New Interchange)
East Frontage Rd	U.S. 17	SR 200/A1A

Table T-17 Long Term Transportation Needs: Long Range Transit Improvements

Station	From	To
Town Center	Regional Center TOD @ U.S. 17	Duval County line*

* Coordinate with Duval County and JTA for extension to Jacksonville International Airport

New Transportation Corridors

The dependency upon A1A/S.R. 200 as the County' sole east-west corridor for access to Jacksonville and surrounding areas has resulted in constrained and backlogged facilities, corresponding levels of service reduction, increased commute times, and a perception of no relief in sight. A1A/S.R. 200 also serves as the primary hurricane evacuation route for Amelia Island and the eastern portions of the mainland. The 2035 LRTP make clear that there is a major need for additional roadway facilities which are intended to alleviate existing network deficiencies, improve east-west connectivity, maintain acceptable hurricane evacuation times, and encourage local economic development to reduce the need to commute outside the County for work.

Multi-Modal Transportation Options

An extremely small percentage of people in Nassau County use alternative modes of transportation other than the automobile, as would be expected for a community at this stage of development. A focus of the TPO's LRTP and the policies of this Element is to evaluate transportation facilities as they exist today, and to begin planning to update and integrate transportation facilities as elements of a multi-modal transportation system.

Multi-modal 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 TPO'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 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.

Transportation Demand /System Management (TDM)/ TSM)

There are certain cases in which the widening of a road may prove infeasible because of right-of way 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/TSM strategies could include access management, intersection and signalization improvements, and Intelligent Transportation Systems (ITS) projects.

Transportation system management includes 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 inter-modal facilities. These management systems will result in the preservation of existing facilities, lower life-cycle costs, lower overall costs to the community, and more effective use of limited transportation dollars.

V. Energy and Transportation

Florida is now focused on the negative impacts of vehicle emissions, with policies reflecting a growing concern about climate change. As a result, greenhouse gas reduction strategies are becoming an important part of the transportation and land use discussion. Planning strategies to address greenhouse gas emissions include:

- Encouraging transit use
- Encouraging carpooling
- Encouraging "trip chaining" (combining several errands in one outing)
- Using energy-efficient land use planning
- Increasing a focus on bicycle/pedestrian planning
- Devising other strategies to reduce vehicle miles traveled

Executive Orders of the Governor

On July 13, 2007, Governor Crist signed several executive orders to guide Florida's energy policy into the future, establishing the Department of Environmental Protection as the lead state agency to address Florida climate change. Transportation policies will play an increasing role in the discussion. Governor Crist directed the adoption of maximum emission levels of greenhouse gases for electric utilities. The standard will require a reduction of emissions to 2000 levels by 2017, to 1990 levels by 2025, and by 80 percent of 1990 levels by 2050. Florida will also adopt the California motor vehicle emission standards, pending approval of the U.S. Environmental Protection Agency waiver. The standard is a 22-percent reduction in vehicle emissions by 2012 and a 30-percent reduction by 2016. Florida will also require energy-efficient consumer appliances to increase efficiency by 15 percent of current standards. Governor Crist also requested that the Public Service Commission adopt a 20 percent Renewable Portfolio Standard by 2020, with a strong focus on solar and wind energy.

Legislative Action

Enacted by the 2008 Legislature, the HB 697 legislation incorporates consideration of greenhouse gases and energy efficiency into local comprehensive plans by amending Section 163.3177, Florida Statutes, as follows:

(6)(a) - [Future Land Use Element] is expanded to include: ". . . the discouragement of urban sprawl; energy efficient land use patterns accounting for existing and future electric power generation and transmission systems; greenhouse gas reduction strategies; . . ."

(6)(b) - [Traffic Circulation Element] is expanded to include: "The traffic circulation element shall incorporate transportation strategies to address reduction in greenhouse gas emissions from the transportation sector."

(6)(d) - [Conservation Element] is expanded to include: ". . . including factors that affect energy conservation."

(h) - [Housing Element] is expanded to include: "Energy efficiency in the design and construction of new housing" and "Use of renewable energy resources."

(6)(j) - [Transportation Element] is expanded to include: "The incorporation of transportation strategies to address reduction in greenhouse gas emissions from the transportation sector."

Nassau County Measures and Actions

The County has a significant amount of rural areas and very few urban areas, and to some extent these dynamics bring different values to the citizens of the County. Nassau County has been very

involved and has supported several initiatives to address the balance between statutory requirements and the various locales and the values these dynamics bring. The concept of energy efficiency and green house gas reduction is a new concept to the County. With little data pertinent to the County, this is a process that requires the County to embark on coordination efforts with landowners, developers and other agencies to begin establishing the data and analyses. Recognizing these issues is the starting point for the County.

Counties that are dependent on neighboring counties for work are Baker, Clay and Nassau. These same counties have historically been coined bedroom communities to Duval County (see Map T-25). The Bureau of Economic and Business Research (BEBR) reports vehicle tag numbers indicate more cars per person. The average vehicles per household are 1.9. In 1980 that number was .96 vehicles per person, and in 1990 that number was 1.12 vehicles per person. Below is a summary of passenger car tags by county in 2007-2008.

Table T-18 Passenger Car Tags, Northeast Florida Region, 2007-8

Baker	12,626
Clay	113,112
Duval	504,967
Flagler	58,662
Nassau	42,036
Putnam	36,064
St. Johns	113,253

Source Florida Statistical Abstract, 2009

Nassau County has explored the renewable energy programs already in existence in the northeast Florida region. The County may begin to seek alternative fuel sources such as the St. Johns County Bio-fuel program. Potential action by the County would include the feasibility of participating in a bio-fuel program.

The County has aggressively encouraged water conservation. As the County addresses new developments, there is close coordination with the Building Permit department, Planning department, developers, landowners and other agencies to maximize the number of new construction projects which practice energy efficient techniques.

Effective greenhouse gas emissions reduction measures are not County specific and they are not best implemented by a project by project approach. The County is part of the North Florida TPO and a portion of the County is included in the Northeast Regional Planning Model (NERPM). The NERPM provides only regional carbon emission data and does not include the emissions for the entire County. The County will continue to encourage efficient land use patterns from a transportation perspective, additional density in proximity to jobs, mixed use developments and alternative modes of transportation where feasible. The results of such measures are expected to be both qualitative and quantitative during the short term planning horizon.

Air Quality Data

The County will acquire best available data from the Department of Environmental Protection (DEP) related to Air Quality. The data included in this section includes the Air Quality Index (AQI) and 2002 Carbon Monoxide, Nitrogen Oxides and Sulfur Dioxides.

Table T-19 Air Quality Index (AQI), Nassau County 2005-2007

AQI Descriptor	No./ Percent of Days					
	2005	%	2006	%	2007	%
Good	355	97.3	362	99.2	365	100.0
Moderate	8	2.2	3	0.8	0	0.0
Unhealthy for Sensitive Groups	1	0.3	0	0.0	0	0.0
Unhealthy	1	0.3	0	0.0	0	0.0
Very Unhealthy	0	0.0	0	0.0	0	0.0

Monitored Pollutants: PM10 and Sulfur Dioxide
 Source: DEP, Div. of Air Resource Mgmt.

Table T-20 Carbon Monoxide Emissions, Nassau County, 2002(Tons Per Year)

	CO Point Source Emissions	CO Nonpoint+Mobile Source Emissions
02-Fuel Comb. Industrial	3,264	28.2
03-Fuel Comb. Other	0	599
07-Other Industrial Processes	827	6.50
10-Waste Disposal & Recycling	0	497
11-Highway Vehicles	0	21,645
12-Off-Highway	0	6,164
14-Miscellaneous	0	23,568
	4,090	52,507

Source: DEP, Div. of Air Resource Mgmt.

Table T-21 Nitrogen Oxides Emissions, Nassau County, 2002(Tons Per Year)

	NOx Point Source Emissions	NOx Nonpoint+Mobile Source Emissions
02-Fuel Comb. Industrial	2,263	59.4
03-Fuel Comb. Other	0	27.0
07-Other Industrial Processes	1,527	0
10-Waste Disposal & Recycling	0	23.4
11-Highway Vehicles	0	3,047
12-Off-Highway	0	2,059
14-Miscellaneous	0	219
	3,790	5,434

Source: DEP, Div. of Air Resource Mgmt.

Table T-22 Sulfur Dioxide Emissions, Nassau County, 2002(Tons Per Year)

	SO2 Point Source Emissions	SO2 Nonpoint+Mobile Source Emissions
02-Fuel Comb. Industrial	3,827	68.9
03-Fuel Comb. Other	0	28.7
07-Other Industrial Processes	1,212	0
10-Waste Disposal & Recycling	0	2.74
11-Highway Vehicles	0	134
12-Off-Highway	0	301
14-Miscellaneous	0	376
	5,038	911

Source: DEP, Div. of Air Resource Mgmt.