

III. ~~TRAFFIC CIRCULATION~~TRANSPORTATION ELEMENT

PURPOSE

The purpose of the ~~Traffic Circulation~~Transportation Element of the *City of New Smyrna Beach Comprehensive Plan* is to guide the City in developing a safe and efficient transportation system, based on the City's Future Land Use Plans, and consistent with the community goals and objectives as stated herein. Secondly, this element will help to ensure consistency among the transportation plans of New Smyrna Beach, Volusia County, and the State of Florida.

This element of the *City of New Smyrna Beach Comprehensive Plan* identifies a ~~traffic circulation~~transportation system that is both technically sound and consistent with identified community goals and objectives. The remainder of this chapter consists of five (5) basic sections. The first section outlines the process and criteria used in developing a local transportation plan. The second section provides an inventory and analysis of the existing transportation system, and identifies the current deficiencies. The third section identifies roadway conditions that are expected to occur in the near future based on historical traffic growth and expected land development. Section four (4) outlines the community's goals and objectives for the local transportation system, setting forth the guidelines by which to plan future transportation improvements.

STANDARDS

Transportation planning decisions must be closely coordinated with land use decisions. The improvement of existing roads, and the construction of new facilities, acts to change overall travel patterns, which may affect immediate individual land use decisions, and may influence entire land use patterns. Therefore, the ~~Traffic Circulation~~Transportation Element must be closely coordinated with development of the Future Land Use Element, reflecting the access and travel needs of any proposed new or revised land uses.

TRANSPORTATION PLANNING PROCESS

The methods used to develop the ~~Traffic Circulation~~Transportation Element of the *City of New Smyrna Beach Comprehensive Plan* are part of a transportation planning process that should be a continuous effort. A general outline of this overall planning process is described by the following steps:

- a. Research previous transportation planning and analysis efforts;
- b. Identify and evaluate the current status of the transportation system;
- c. Identify community goals and objectives regarding transportation;
- d. Identify constraints imposed on the transportation system;
- e. Determine current and future transportation improvement needs;
- f. Propose alternative solutions;
- g. Evaluate and choose alternative solutions;
- h. Prepare a detailed implementation and funding plan;
- i. Implement the transportation plan; and
- j. Systematically review and update the transportation plan.

Steps "a" through "h" are embodied in the ~~Traffic Circulation~~Transportation Element of the *Comprehensive Plan*, while steps "i" and "j" need to be standard policy of the City in order to implement an effective transportation planning process. This process needs to be ongoing and continuously recycling through the entire planning process in order to reflect constantly changing community needs.

TRANSPORTATION SYSTEMS PLANNING PRINCIPLES

In preparing alternative potential transportation systems to serve projected travel demand, a number of general items should be considered. The broad categories of factors influencing local transportation planning include:

- existing facilities

Comprehensive Plan

City of New Smyrna Beach, Florida

- current and future land uses being served
- local terrain
- financing
- travel characteristics of the local population
- travel patterns dictated by the character of the areas around the local planning area

In designing the actual transportation system, it is important to maintain flexibility both by providing alternative routes and travel modes, and by allowing for additions and modifications to the system. The following principles should be kept in mind while preparing the transportation plan:

- Provide many alternative travel paths, while keeping traffic conflicts to a minimum;
- Maintain system continuity, providing smooth and logical traffic flow patterns;
- Reflect land use access requirements;
- Consider ~~mass transit~~ public transit services, bicycle travel, and pedestrian safety;
- Pay special attention to freeways and interchanges;
- Consider one-way street systems;
- Provide for traffic signal coordination;
- Provide for future modification and expansions; and
- Ensure environmental compatibility.

GOALS AND OBJECTIVES AS STANDARDS

The adopted community goals and objectives for the City of New Smyrna Beach, developed by the City and presented later in this element, act as local standards and criteria in the development of the New Smyrna Beach Transportation Plan. In particular, the objectives and policies present locally acceptable levels-of-service, right-of-way requirements, access provisions, and landscaping recommendations.

The subsequent analyses are based on generally accepted transportation analysis procedures and planning techniques. In addition, meetings were held with local staff and citizens to invite their opinions and comment. Specific criteria and definitions are presented in more detail in the portions of this element to which they are relevant. The final transportation plan is the result of a synthesis of the identified transportation-related needs and desires of the community of New Smyrna Beach.

EXISTING SYSTEM AND TRAFFIC CONDITIONS

The first step in evaluating where the City wants to go with its ~~traffic circulation~~ transportation system is to determine where they are currently, thereby establishing a starting point for future planning.

This portion of the ~~Traffic Circulation~~ Transportation Element for the New Smyrna Beach area consists essentially of an inventory and analysis of the existing roadway system. For convenience, definitions of traffic-related terms are provided prior to the presentation of technical data. The information that this report is based on was obtained from local and state agencies.

DEFINITIONS

In presenting the analysis and projections of existing and future traffic conditions in the New Smyrna Beach area, a number of technical terms and criteria specific to transportation planning are used. The following definitions apply to the methodology and procedures used in preparing the ~~Transportation~~ Element of the *City of New Smyrna Beach Comprehensive Plan*.

ROADWAY FUNCTIONAL CLASSIFICATION

Roads are classified into various categories based on the land use environment they are located in, and the travel purposes they serve. The functional classifications shown in Table III-21 (presented later in this section) were derived from ~~information provided by the Volusia County Transportation Planning Organization (TPO), 2000-2010 Federal Functional Classification and Urban Boundary map dated July 18, 2005 and the Florida Department of Transportation, using Florida Department of Transportation (FDOT) standard roadway classification.~~ General categories of land use environment that roads may be located in are Rural, and Urban, and Residential; and the general categories of travel service are Limited and

Controlled Access Highway, Arterial, and Collector functions. The terms are defined in the following paragraphs.

- Rural Highways-- A class of roadway facility that generally serves low-density rural and suburban areas, where the distances between signals are two (2) miles or greater. These facilities lack full access control, and usually have some development fronting directly on the highway. Vehicles enter and leave the highway at unsignalized intersections, or at parking facilities and driveways.
- Urban Highways-- A class of roadway facility that generally serves higher density urban and suburban areas, where the signalized intersection spacing is two (2) miles or less. These facilities generally have many more access points than rural highways, with a great deal of development fronting directly on the highway. With more frequent turning movements to and from urban highways, and quite often the presence of roadside parking, these facilities have a much lower capacity than rural highways.

Facilities serving primarily residential and commercial areas are generally classified as urban in character. Although there is much less direct access to land abutting these highways, there tend to be more frequent intersection control devices and higher turning movement volumes at roadway intersections.

- Limited and Controlled Access Highways - Freeways and expressways represent the highest class of these highways. Such Highways are designed to carry high volumes of traffic at high speeds and levels-of-service as is practicable. Access is strictly limited to interchanges, which are carefully located and designed for maximum safety. Longer distance trips, including goods movement, use such facilities. Other highways are also designed to carry longer distance traffic between important activity and population centers, but these highways are designed with some measure of access control through limits on driveway locations and spacing of intersections.
- Arterial Roads - Primarily provide traffic movement services, serving longer distance trips and traffic traveling through a given area. Vehicles on these facilities generally operate at higher speeds; and there is not a great deal of direct access to abutting properties. Turning movements to and from these facilities occur primarily at roadway intersections.
- Collector Roads - Provide both land access and traffic circulation service within residential, commercial, and industrial areas. Their primary function is to move traffic from local roads and streets to the arterial highway system, while providing some direct access to abutting property. While not dominated by signalized intersection traffic controls, these facilities do tend to have more frequent intersection controls, such as stop and yield signs.
- Local Roads - These roads provide for direct access to abutting land and for local traffic movements.

LEVELS-OF-SERVICE

The quality of traffic operation on a roadway facility is measured in terms of levels-of-service (LOS). These levels-of-service are related to the operating characteristics of a facility and the amounts of traffic that can be accommodated. The various levels-of-service are defined by the 1985 *Highway Capacity Manual*, as follows:

- LOS "A" - Represents free flow. Individual users are virtually unaffected by the presence of others in the traffic stream. Freedom to select desired speeds and to maneuver within the traffic stream is extremely high. The general level of comfort and convenience provided to the motorist is excellent.
- LOS "B" - In the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver within the traffic stream from LOS "A." The level of comfort and convenience provided is somewhat less than at LOS "A."

Comprehensive Plan

City of New Smyrna Beach, Florida

because the presence of others in the traffic stream begins to affect individual behavior.

- LOS “C” - In the range of stable flow, but marks the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream. The selection of speed is now affected by the presence of others, and maneuvering within the traffic stream requires substantial vigilance on the part of the user. The general level of comfort and convenience declines noticeably at this level. This LOS is generally selected for design of new facilities.
- LOS “D” - Represents high-density, but stable flow. Speed and freedom to maneuver are severely restricted, and the driver experiences a generally poor level of comfort and convenience. Small increases in traffic flow will generally cause operational problems at this level.
- LOS “E” - Represents operating conditions at or near the capacity level. All speeds are reduced to a low, but relatively uniform value. Freedom to maneuver within the traffic stream is extremely difficult, and it is generally accomplished by forcing a vehicle to “give way” to accommodate such maneuvers. Comfort and convenience are extremely poor, and driver frustration is generally high. Operations at this level are usually unstable, because small increases in flow or minor perturbations within the traffic stream will cause breakdowns.
- LOS “F” - Used to define forced or breakdown flow. This condition exists wherever the amount of traffic approaching a point exceeds the amount, which can traverse the point. Queues form behind such locations. Operations within the queue are characterized by stop-and-go waves, and they are extremely unstable.

These levels-of-service are related to facility type and traffic volume in Table III-1, the Florida Department of Transportation (FDOT) 2009 Quality/Level of Service Handbook.

INVENTORY

Table III-1 provides a summary of the road system shown on Map III-1, listed by jurisdiction. Each road is broken up into segments that are continuous in character.

Map III-1 has been prepared to present the inventory of existing facilities-road system, including collector roads, arterial roads, and limited and controlled access facilities and a summary of the traffic conditions existing peak hour, peak direction levels-of-service in the New Smyrna Beach planning area for the (year 1989-2009). This map summarizes the facility functional classification, and current operating conditions of the major thoroughfares under consideration, freight rail lines, and intermodal terminals.

Table III-2 provides a summary of the facilities classifications shown on Map III-1, listed by jurisdiction. Each road is broken up into segments that are continuous in character.

Map III-2 illustrates the 2010 public transit system, including public transit routes, public transit terminals and transfer stations, and public transit trip generators and attractors.

Map III-3 identifies the significant bicycle and pedestrian ways.

Map III-4 displays the New Smyrna Beach Municipal Airport, including clear zones.

Map III-5 denotes the designated local and regional transportation facilities critical to the evacuation of the coastal population prior to an impending natural disaster.

EXISTING ROADWAY CONDITIONS

The New Smyrna Beach planning area contains essentially two (2) separate study areas: (1) a peninsula of land along the beachside of the Indian River and (2) the mainland areas that front on the Indian River. These two (2) areas are connected by State Road 44 (North Causeway) and State Road A1A (South Causeway (Lytle Avenue Bridge)).

LOCAL TRAFFIC CHARACTERISTICS

Comprehensive Plan

City of New Smyrna Beach, Florida

The New Smyrna Beach roadway network must be able to support the demands for local traffic circulation and land access, as in other medium-sized communities. However, the network must also be able to support inter-city traffic between Daytona Beach and Titusville, and a large daily influx of beach-bound traffic.

Existing traffic conditions are summarized on Map III-1 and Table III-32.

Depending upon the locally acceptable levels-of-service, as indicated in the goals and objectives portion of this element, these facilities may need to be improved.

Table III 1 Generalized Daily Level-of-Service Maximum Volumes for Florida's Urban/Unurbanized (5,000+) Areas, 1988

TWO WAY ARTERIALS						(after corresponding two-way arterial volume indicated percent)				
Group A (0.0 to 0.75 signalized intersection per mile)						Lanes	Median	Left Turn Bays	Adjustment	
Lanes/	Level of Service					Factor				
Divided	A	B	C	D	E	2	Divided	Yes	5%	
2 Undivided	13,700	15,000	15,800	16,500	17,400	2	Undivided	No	15%	
4 Divided	29,800	31,900	33,000	34,900	36,700	Multi	Undivided	Yes	5%	
6 Divided	45,400	48,100	49,700	52,400	55,200	Multi	Undivided	No	20%	
Group B (0.76 to 1.5 signalized intersections per mile)										
Lanes/	Level of Service									
Divided	A	B	C	D	E					
2 Undivided	9,000	13,700	14,500	15,300	16,100					
4 Divided	20,000	29,700	31,000	32,500	34,000					
6 Divided	30,600	45,100	46,700	48,900	51,200					
Group C (1.6 to 2.5 signalized intersections per mile)										
Lanes/	Level of Service									
Divided	A	B	C	D	E					
2 Undivided		10,200	13,500	14,800	15,700					
4 Divided		29,800	29,500	31,700	33,400					
6 Divided		35,100	45,000	47,900	50,300					
Group D (2.6 to 3.5 signalized intersections per mile)										
Lanes/	Level of Service									
Divided	A	B	C	D	E					
2 Undivided			9,200	13,700	15,400					
4 Divided			20,100	30,200	33,200					
6 Divided			30,700	46,300	50,200					
Group E (3.6 to 4.5 signalized intersections per mile)										
Lanes/	Level of Service									
Divided	A	B	C	D	E					
2 Undivided				12,300	14,600					
4 Divided				26,300	32,100					
6 Divided				39,500	48,800					
Group F (more than 4.5 signalized intersections per mile and not within primary city central business district of urbanized area over 500,000)										
Lanes/	Level of Service									
Divided	A	B	C	D	E					
2 Undivided					10,300	14,600				
4 Divided					22,800	32,100				
6 Divided					39,500	48,800				
Group G (more than 4.5 signalized intersections per mile and not within primary city central business district 500,000)										
Lanes/	Level of Service									
Divided	A	B	C	D	E					
2 Undivided					13,100	15,400				
4 Divided					29,300	33,700				
6 Divided					45,200	51,200				

DIVIDED/UNDIVIDED ADJUSTMENTS

Comprehensive Plan

City of New Smyrna Beach, Florida

FREEWAYS

Group 1 (within urbanized area over 500,000 and leading to or within 5 miles of primary city central business District)

Lanes	Level of Service				
	A	B	C	D	E
4	27,800	42,800	61,100	73,800	79,300
6	41,700	64,300	91,600	110,700	119,000
8	55,500	85,700	122,200	147,600	158,700
10	69,400	107,100	152,700	184,500	198,400

Group 2 (within urbanized area over 50,000 and not in Group 1)

Lanes	Level of Service				
	A	B	C	D	E
4	21,400	33,000	47,100	56,900	61,100
6	32,100	49,500	70,600	85,300	91,700
8	42,800	66,000	94,200	113,700	122,300
10	53,500	82,500	117,700	142,200	152,900

Group 3 (within non-urbanized areas)

Lanes	Level of Service				
	A	B	C	D	E
4	17,100	26,300	37,600	45,400	48,800
6	25,600	39,500	56,300	68,000	73,200
8	34,100	52,700	75,100	90,700	97,500

ONE WAY ARTERIALS

Group D (less than 3.6 signalized intersections per mile)

Lanes	Level of Service				
	A ⁺	B	C	D	E
2		9,800	14,800	16,900	18,000
3		14,900	22,700	25,600	27,200
4		19,900	30,800	34,300	36,300

Group E (3.6 to 4.5 signalized intersections per mile)

Lanes	Level of Service				
	A ⁺	B ⁺	C	D	E
2					
3					
4					

Note: ⁺ - Cannot be achieved

Source: Florida Department of Transportation, 1988

2	13,300	16,200	17,600
3	20,300	24,800	26,600
4	227,100	33,300	35,600

Group F (more than 4.5 signalized intersections per mile and not within primary city central business district of urbanized area over 500,000)

Lanes	Level of Service		
	C	D	E
2			
3			
4			

Lanes	Level of Service				
	A	B ⁺	C	D	E
2			10,900	15,600	17,700
3			116,600	23,900	26,800
4			22,400	32,400	35,900

Lanes	Level of Service				
	A	B ⁺	C	D	E
2					
3					
4					

Group G (more than 4.5 signalized intersections per mile and within primary city central business district of urbanized area over 500,000)

Lanes	Level of Service				
	A	B ⁺	C	D	E
2					
3					
4					

Lanes	Level of Service				
	A	B ⁺	C	D	E
2			13,300	17,200	18,300
3			20,400	26,200	27,700
4			27,600	35,200	37,100

TWO WAY COLLECTORS AND LOCAL STREETS

(signalized intersection analysis)

Lanes	Level of Service				
	A1	B1	C	D	E
2			7,700	11,600	12,900
3			16,200	24,300	26,400
4			124,900	37,200	40,100

Table III-21 Roadway Right-of-Way and Functional Classification in Planning Area, 1998-2010

Street/Roadway	From-To Segment	Current Number of Lanes	Existing ROW ¹ (feet)	Future ROW ² (feet)	Functional Classification ²²
State Highway System					
Interstate 95 / State Road 9	State Road 421 (Dunlawton Avenue) to State Road 44	4	350	400	Urban Interstate
Interstate 95 / State Road 9	State Road 44 to South City Limits	4	350	400	Urban Interstate
US Highway 1 / State Road 5 (North Dixie Freeway)	North City Limits to Industrial Park Drive Avenue	4	150 ft-128	Existing	Urban Principal Arterial
US Highway 1 / State Road 5 (North Dixie Freeway)	Industrial Park Drive Avenue to County Road 4093 (Turnbull Bay Road)	4	100-ft-	75-ft-Existing	Urban Principal Arterial
US Highway 1 / State Road 5 (North Dixie Freeway)	County Road 4093 (Turnbull Bay Road) to County Road 4089 (Wayne Avenue)	4	100	Existing	Urban Principal Arterial
US Highway 1 / State Road 5 (North Dixie Freeway)	County Road 4089 (Wayne Avenue) to Business 44 (Canal Street)	4	100-ft-	75-ft-Existing	Urban Principal Arterial
US Highway 1 / State Road 5 (South Dixie Freeway)	Business 44 (Canal Street) to State Road 44 (Lytle Avenue)	4	100-ft-	75-ft-Existing	Urban Principal Arterial
US Highway 1 / State Road 5 (South Dixie Freeway)	State Road 44 (Lytle Avenue) to 10th Street / South City Limits	4	100-ft-	75-ft-Existing	Urban Principal Arterial
State Road A1A (Lytle Avenue) / South Causeway	South Riverside Drive / State Road 44 (Live Oak Street) to South Peninsula Avenue	4	200-ft-	Existing	Urban Principal Arterial
State Road 44 A1A (East 3rd Avenue)	South Peninsula Avenue to County Road 4133 (Saxon Drive)	4	100-ft-	Existing	Urban Principal Arterial
State Road 44 A1A (East 3rd Avenue)	County Road 4133 (Saxon Drive) to East 7th Avenue	4	100-ft-	Existing	Urban Principal Arterial
State Road 44	West City Limits to Airport Road	4	100-195 ft-300	Existing	Minor Urban Principal Arterial
State Road 44	Airport Road to Williamson Boulevard	4	300	Existing	Urban Principal Arterial
State Road 44	Williamson Boulevard to Interstate 95 / State Road 9	4	300	Existing	Urban Principal Arterial
State Road 44	Interstate 95 / State Road 9 to Sugar Mill Drive	4	200	Existing	Urban Principal Arterial
State Road 44	Sugar Mill Drive to Business 44 (Canal Street)	4	200	Existing	Urban Principal Arterial
State Road 44	Business 44 (Canal Street) to South Myrtle Avenue	4	100-ft-	Existing	Minor Urban Principal Arterial
State Road A1A (Lytle Avenue) / South Causeway	South Myrtle Avenue to US Highway 1 / State Road 5 (South Dixie Freeway)	4	200-ft-	Existing	Urban Principal Arterial
State Road A1A (Lytle Avenue) / South Causeway	US Highway 1 / State Road 5 (South Dixie Freeway) to South Riverside Drive / State Road 44 (Live Oak Street)	4	100-113 ft-	Existing	Urban Principal Arterial
State Road 44 (North Causeway)	State Road 44 (North Riverside Drive) to Barracuda Boulevard	2	200-ft-	Existing	Urban Minor Arterial
State Road 44 (North Causeway)	Barracuda Boulevard to East End of Bridge	2	200	Existing	Urban Minor Arterial
Business 44 (Canal Street)	State Road 44 to County Road 4118 (Pioneer Trail)	2	60 ft-100	Existing	Urban Minor Arterial
Business 44 (Canal Street)	County Road 4118 (Pioneer Trail) to US Highway 1 / State Road 5 (Dixie Freeway)	2	70	Existing	Urban Minor Arterial
County Highway System Roads					
County Road A1A (South Atlantic Avenue)	East 6th Avenue to East 27th Avenue	4	100-ft-	Existing	Minor Urban Principal Arterial
County Road A1A (South Atlantic Avenue)	East 27th Avenue to South City Limits	4	100-ft-	Existing	Minor Urban Principal Arterial
County Road 4089 (Enterprise Avenue)	County Road 4118 (Pioneer Trail) to County Road 4089 (Halleck Street)	2	100	Existing	Urban Collector
County Road 4089 (Halleck Street)	County Road 4089 (Enterprise Avenue) to County Road 4089 (Wayne Avenue)	2	50	Existing	Urban Collector
County Road 4089 (Wayne Avenue)	County Road 4089 (Halleck Street) to US Highway 1 / State Road 5 (North Dixie Freeway)	2	60	Existing	Urban Collector
County Road 4093 (Turnbull Bay Road)	County Road 4118 (Pioneer Trail) to Williams Road	2	80 ft-50	Existing	Urban Collector
County Road 4093 (Turnbull Bay Road)	Williams Road to United Drive	2	50	Existing	Urban Collector
County Road 4093 (Turnbull Bay Road)	United Drive to Industrial Park Avenue	2	100-ft-	Existing	Urban Collector
County Road 4093 (Turnbull Bay Road)	Industrial Park Avenue to Fairgreen Avenue	2	60	Existing	Urban Collector
County Road 4093 (Turnbull Bay Road)	Fairgreen Avenue to US Highway 1 / State Road 5 (North Dixie Freeway)	2	60 ft-	60 ft-Existing	Urban Collector
County Road 4118 (Pioneer Trail)	Airport Road to Williamson Boulevard	2	66	120	Urban Collector
County Road 4118 (Pioneer Trail)	Williamson Boulevard to County Road 4093 (Turnbull Bay Road)	2	66	120	Urban Collector
County Road 4118 (Pioneer Trail)	County Road 4093 (Turnbull Bay Road) to Sugar Mill Drive	2	66	100	Urban Collector
County Road 4118 (Pioneer Trail)	Sugar Mill Drive to Williams Road	2	66	100	Urban Collector
County Road 4118 (Pioneer Trail)	Williams Road to Enterprise Avenue	2	66	100	Urban Collector
County Road 4118 (Pioneer Trail)	Enterprise Avenue to Jungle Road	2	90	Existing	Urban Collector
County Road 4118 (Pioneer Trail)	Jungle Road to Business 44 (Canal Street)	2	60	80	Urban Collector
County Road 4133 (Saxon Drive)	State Road A1A (East 3rd Avenue) to East 9th Avenue	2	Prescriptive-ft-	80 ft-Existing	Urban Collector
County Road 4133 (Saxon Drive)	East 9th Avenue to East 27th Avenue	2	75-ft-	80 ft-Existing	Urban Collector
County Road 4133 (Saxon Drive)	East 27th Avenue to South City Limits	2	Prescriptive-ft-	80 ft-Existing	Urban Collector
County Road 4137 (Mission Drive)	County Road 4137 (Old Mission Road) to County Road 4137 (Old Mission Road) / Mission Drive	2	40	Existing	Urban Collector
County Road 4137 (Old Mission Road)	State Road 44 to County Road 4137 (Mission Drive)	2	N/A-30	N/A-66	Urban Collector Local
County Road 4137 (Old Mission Road)	County Road 4137 (Mission Drive) to Josephine Street	4	100	Existing	Urban Collector
County Road 4137 (Old Mission Road)	Josephine Street to County Road 4136 (West Park Avenue)	2	70	100	Urban Collector
North Airport Road	County Road 4118 (Pioneer Trail) to Luna Bella Lane	2	100	Existing	Urban Local
North Airport Road	Luna Bella Lane to State Road 44	2	100	Existing	Urban Local
North Glencoe Road	County Road 4118 (Pioneer Trail) to State Road 44	2	30	Existing	Urban Local
South Glencoe Road	State Road 44 to Paige Avenue	2	60	Existing	Urban Local
South Glencoe Road / Taylor Road	Paige Avenue to County Road 4137 (Old Mission Road)	2	60	Existing	Urban Local
Josephine Street	County Road 4137 (Old Mission Road) to Tatum Boulevard	2	60	120	Urban Collector
Mission Drive	State Road 44 to County Road 4137 (Old Mission Road / Mission Drive)	24	N/A-80	40 ft-Existing	Urban Collector
Sugar Mill Drive	County Road 4118 (Pioneer Trail) to State Road 44	2	100	Existing	Urban Local
Tenth Street / Josephine Street	US 1 - Old Mission Road	2	60 ft-	50 ft-	Collector
Williams Road	County Road 4093 (Turnbull Bay Road) to Mooneyham Drive	2	100	Existing	Urban Local
Williams Road	Mooneyham Drive to County Road 4118 (Pioneer Trail)	2	60	Existing	Urban Local
North Williamson Boulevard Extension	County Road 4118 (Pioneer Trail) to East-West Connector "A"	0	0	130	Future Roadway
North Williamson Boulevard Extension	East-West Connector "A" to State Road 44	0	0	130	Future Roadway
South Williamson Boulevard Extension	State Road 44 to East-West Connector "B"	0	0	130	Future Roadway
South Williamson Boulevard Extension	East-West Connector "B" to East-West Connector "C"	0	0	130	Future Roadway
South Williamson Boulevard Extension	East-West Connector "C" to State Road 442 (Indian River Boulevard) Extension	0	0	130	Future Roadway
City Streets System					
Business 44 (Canal Street)	US Highway 1 / State Road 5 (Dixie Freeway) to State Road 44 (Live Oak Street)	2	70	Existing	Urban Collector
State Road 44 (Live Oak Street)	State Road 44 (Lytle Avenue) to Business 44 (Canal Street)	2	60	Existing	Urban Local
State Road 44 (Canal Street)	State Road 44 (Live Oak Street) to State Road 44 (North Riverside Drive)	2	70	Existing	Urban Collector
State Road 44 (South North Riverside Drive)	State Road 44 (North Causeway) to State Road 44 (Canal Street)	2	60 ft-	Existing	Urban Collector
Conrad Drive	US Highway 1 / State Road 5A (South Dixie Freeway) to Sunset Drive	2	60	Existing	Urban Collector
Faulkner Street	Tanglewood Avenue to Wayne Avenue	2	60	Existing	Urban Collector
Faulkner Street	Wayne Avenue to State Road 44 (Canal Street)	2	40	Existing	Urban Collector
Flagler Avenue	East End of Bridge to Peninsula Avenue	23	40-45 ft-	Existing	Urban Minor Arterial
Flagler Avenue	Peninsula Avenue to Ocean Atlantic Avenue	2	40	Existing	Urban Minor Arterial
Industrial Park Drive (Columbia Street) Avenue	County Road 4093 (Turnbull Bay Road) to US Highway 1 / State Road 5 (North Dixie Freeway)	2	50 ft-100	Existing	Collector Urban Local
South Atlantic Avenue	Flagler Avenue to Oakwood Avenue	23	30 ft-75	40 ft-Existing	Urban Collector
South Atlantic Avenue	Oakwood Avenue to Maralyn Avenue	23	75-ft-	Existing	Urban Collector
South Atlantic Avenue	Maralyn Avenue to 4th Avenue	23	Varies 75	40 ft-Existing	Urban Collector
South Atlantic Avenue	4th Avenue to State Road A1A	23	75 ft-100	Existing	Urban Collector
North Myrtle Avenue	Washington Street to Business 44 (Canal Street)	2	30	40	Urban Local
South Myrtle Avenue	Business 44 (Canal Street) to State Road 44 (Lytle Avenue)	2	60	Existing	Urban Local
South Myrtle Street Avenue	State Road 44 (Lytle Avenue) to Field Street	2	60 ft-	40 ft-Existing	Collector Urban Local
South Myrtle Street Avenue	Field Street to Joel Street	2	30-ft-	40 ft-60	Collector Urban Local
South Myrtle Street Avenue	Joel Street to West 7th Street	2	40 ft-	40 ft-Existing	Collector Urban Local
South Myrtle Street Avenue	West 7th Street to 10th Street	2	50-ft-	40 ft-Existing	Collector Urban Local
North Peninsula Avenue	US Coast Guard Reservation Station to Sapphire Road	2	50-ft-	Existing	Urban Collector
North Peninsula Avenue	Sapphire Road to Due East Street	2	60-ft-	Existing	Urban Collector
North Peninsula Avenue	Due East Street to Flagler Avenue	2	50-ft-	30 ft-Existing	Urban Collector
South Peninsula Avenue	Flagler Avenue to Oakwood Avenue	2	50-ft-	40 ft-Existing	Urban Collector
South Peninsula Avenue	Oakwood Avenue to State Road A1A (South Causeway) / East 3rd Avenue	2	75-ft-	40 ft-Existing	Urban Collector
Pioneer Trail	Interstate 95 - SR44	2	N/A	80 ft-	Collector
North Riverside Drive	Wayne Avenue to State Road 44 (North Causeway) / Washington Street	2	60 ft-100	Existing	Urban Collector
South Riverside Drive	State Road 44 (Canal Street) to Lytle Avenue	43	125-60 ft-100	Existing	Urban Minor Arterial
South Riverside Drive	Lytle Avenue to 5th Street	2	70 ft-100	Existing	Urban Collector
South Riverside Drive	5th Street to South City Limits	2	60 ft-	Existing	Urban Collector
6th Street	US Highway 1 / State Road 5A (South Dixie Freeway) to South Riverside Drive	2	60	Existing	Urban Collector
Sunset Drive	County Road 4093 (Turnbull Bay Road) to Conrad Drive	2	60	Existing	Urban Collector
10th Street	West City Limits to South Myrtle Street Avenue	4	60 ft-120	50 ft-Existing	Urban Collector
10th Street	South Myrtle Street Avenue to US Highway 1 / State Road 5 (South Dixie Freeway)	2	100 ft-50	Existing 225	Urban Collector
East 26th Avenue	County Road A1A (South Atlantic Avenue) to County Road 4133 (Saxon Drive)	2	50	Existing	Urban Collector
Washington Avenue Street	West City Limits to Milford Place	2	60-ft-	40-ft-	Collector Urban Local
Washington Avenue Street	Milford Place to North Myrtle Avenue	2	40 ft-30	40-ft-	Collector Urban Local
Washington Avenue Street	North Myrtle Avenue to US Highway 1 / State Road 5 (North Orange Street / Dixie Freeway)	2	30-ft-	40-ft-	Minor Arterial Urban Local
Washington Avenue Street	US Highway 1 / State Road 5 (North Orange Street / Dixie Freeway) to Sams Avenue	2	40 ft-30	30-ft-	Minor Arterial Urban Collector
Washington Avenue Street	Sams Avenue to State Road 44 (North Riverside Drive)	2	35-ft-	30-ft-	Minor Arterial Urban Collector
County Road 4089 (Wayne Avenue)	Halleck Street - US 1 / SR 5	2	60 ft-	Existing	Collector
Wayne Avenue	US Highway 1 / State Road 5 (North Dixie Freeway) to North Riverside Drive	2	60 ft-65	Existing	Urban Collector

Notes: N/A = Not Available

¹ New Smyrna Beach Plat Sheets; Daniel W. Cory, Florida Registered Surveyor #2027

² Glattig Lopez Kercher Anglin, Inc.

²² State Federal Functional Classification

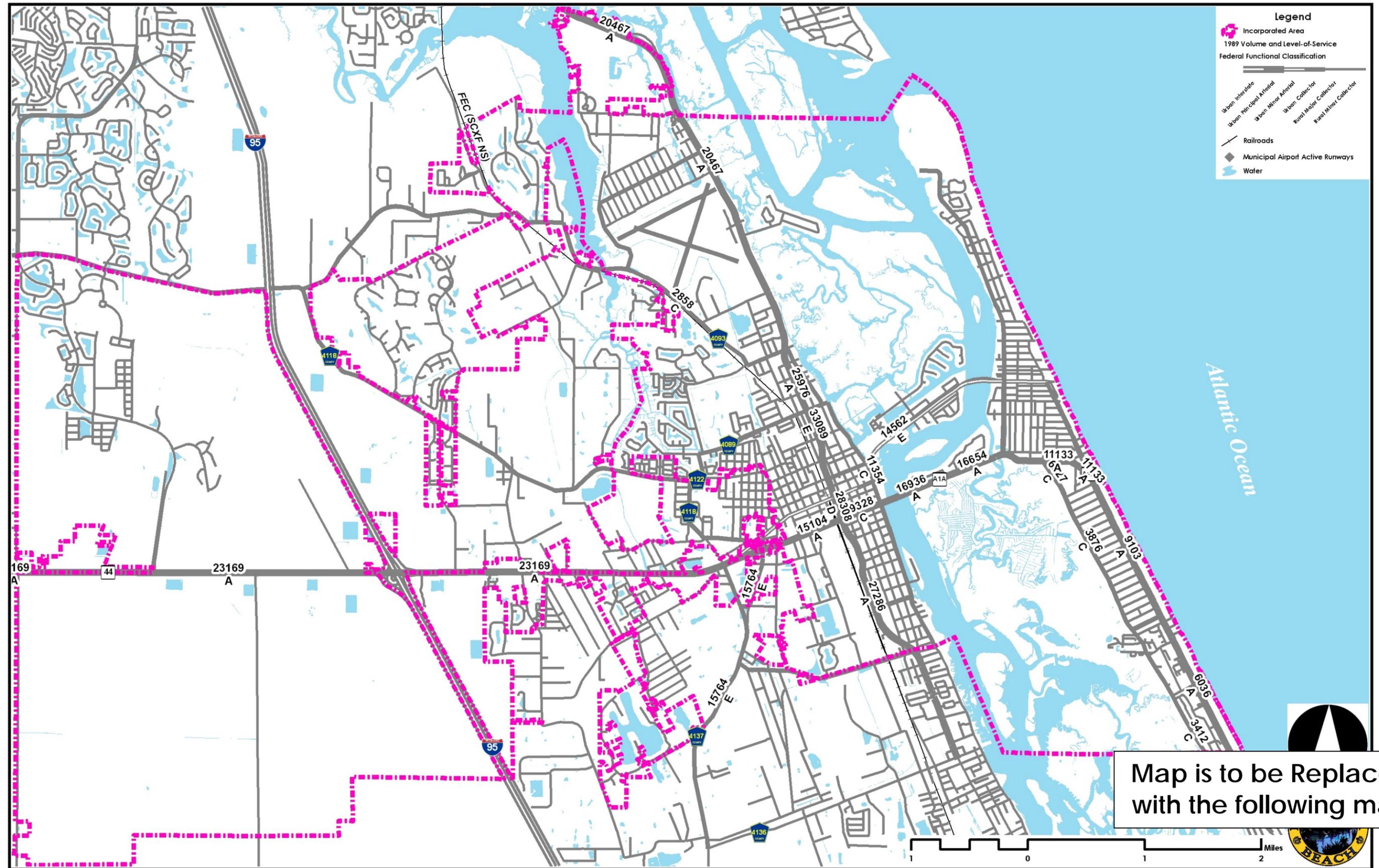
Sources: Volusia Transportation Planning Organization (TPO) 2000-2010 Federal Functional Classification and Urban Boundary map, July 18, 2005 Florida Department of Transportation and Glattig Lopez Kercher Anglin, Inc.

Table III-32 Existing Traffic Conditions, 1994-2009

Street/Roadway	From To Segment	Current Number of Lanes	Acceptable Level-of-Service	AADT	Peak Hour Volume	Level-of-Service	Facility Type by Group
State Highway System							
Interstate 95 / State Road 9	State Road 421 (Dunlawton Avenue) to State Road 44	4	C	37,432	3,597	C	
Interstate 95 / State Road 9	State Road 44 to South City Limits	4	C	32,000	3,075	B	
US Highway 1 / State Road 5 (North Dixie Freeway)	North City Limits to Industrial Park Drive Avenue	4	D	22,500	2,042	B B	ART(A)
US Highway 1 / State Road 5 (North Dixie Freeway)	Industrial Park Drive Avenue to County Road 4093 (Turnbull Bay Road)	4	D	28,000	1,133	C	ART(A)
US Highway 1 / State Road 5 (North Dixie Freeway)	County Road 4093 (Turnbull Bay Road) to County Road 4089 (Wayne Avenue)	4	D	28,000	2,540	E D	ART(A)
US Highway 1 / State Road 5 (North Dixie Freeway)	County Road 4089 (Wayne Avenue) to Business 44 (Canal Street) / Bus 44	4	D	31,000	2,540	E D	ART(D)
US Highway 1 / State Road 5 (North Dixie Freeway)	Business 44 (Canal Street) / Bus 44 to State Road A1A / Lytle Avenue	4	D	27,000	2,638	E D	ART(D)
US Highway 1 / State Road 5 (South Dixie Freeway)	State Road A1A / Lytle Avenue to 10th Street / South City Limits	4	D	26,500	2,638	E D	ART(A)
State Road A1A / Lytle Avenue / South Causeway	South Riverside Drive / State Road 44 (Live Oak Street) to South Peninsula Avenue	4	D	22,500	2,931	B B	ART(A)
State Road 44 / A1A / East Third Avenue	South Peninsula Avenue to County Road 4133 (Saxon Drive)	4	ED	25,500	2,540	B D	ART(B)
State Road 44 / A1A / East Third Avenue	County Road 4133 (Saxon Drive) to East 26th Avenue	4	ED	12,500	1,788	B B	ART(B)
State Road 44	West City Limits to Airport Road	4	D	25,500	1,778	B/C B	ART(A)
State Road 44	Airport Road to Williamson Boulevard	4	D	25,500	1,778	B/C B	ART(A)
State Road 44	Williamson Boulevard to Interstate 95 / State Road 9	4	D	25,500	1,837	B/C B	ART(A)
State Road 44	Interstate 95 / State Road 9 to Sugar Mill Drive	4	D	25,500	2,491	B/C C	ART(A)
State Road 44	Sugar Mill Drive to Business 44 (Canal Street)	4	D	25,500	2,491	B/C C	ART(A)
State Road 44	Business 44 (Canal Street) to South Myrtle Avenue	4	D	14,400	2,149	B C	ART(A)
State Road A1A / Lytle Avenue / South Causeway	South Myrtle Avenue to US Highway 1 / State Road 5 (South Dixie Freeway)	4	D	14,400	2,149	B B	ART(A)
State Road A1A / Lytle Avenue / South Causeway	US Highway 1 / State Road 5 (South Dixie Freeway) to South Riverside Drive / State Road 44 (Live Oak Street)	4	D	18,500	2,149	B B	ART(A)
State Road 44 (North Causeway)	State Road 44 (North Riverside Drive) to Barracuda Boulevard	2	D	9,200	899	C	
State Road 44 (North Causeway)	Barracuda Boulevard to East End of Bridge	2	ED	11,800	920	B C	ART(C)
Business 44 (Canal Street)	State Road 44 to County Road 4118 (Pioneer Trail)	2	D	24,100	1,192	B/C D	ART(A)
Business 44 (Canal Street)	County Road 4118 (Pioneer Trail) to US Highway 1 / State Road 5 (Dixie Freeway)	2	D	24,100	1,221	B/C D	ART(A)
County Highway System Roads							
County Road A1A (South Atlantic Avenue)	East 6th Avenue to East 27th Avenue	4	E	7,862	1,863	B C	ART(A)
County Road A1A (South Atlantic Avenue)	East 27th Avenue to South City Limits	4	E	9,469	882	B C	ART(A)
County Road 4089 (Enterprise Avenue)	County Road 4118 (Pioneer Trail) to County Road 4089 (Halleck Street)	2	E	6,970	681	C	
County Road 4089 (Halleck Street)	County Road 4089 (Enterprise Avenue) to County Road 4089 (Wayne Avenue)	2	E	5,940	580	C	
County Road 4089 (Wayne Avenue)	County Road 4089 (Halleck Street) to US Highway 1 / State Road 5 (North Dixie Freeway)	2	E	6,200	606	D	
County Road 4093 (Turnbull Bay Road)	County Road 4118 (Pioneer Trail) to Williams Road	2	E	2,090	204	B	
County Road 4093 (Turnbull Bay Road)	Williams Road to United Drive	2	E	3,889	340	A B	EOL
County Road 4093 (Turnbull Bay Road)	United Drive to Industrial Park Avenue	2	E	3,889	4,030	A B	EOL
County Road 4093 (Turnbull Bay Road)	Industrial Park Avenue to Fairgreen Avenue	2	E	3,889	3,460	A B	EOL
County Road 4093 (Turnbull Bay Road)	Fairgreen Avenue to US Highway 1 / State Road 5 (North Dixie Freeway)	2	E	3,889	4,790	A C	EOL
County Road 4118 (Pioneer Trail)	Airport Road to Williamson Boulevard	2	E	2,700	264	B	
County Road 4118 (Pioneer Trail)	Williamson Boulevard to County Road 4093 (Turnbull Bay Road)	2	E	2,700	264	B	
County Road 4118 (Pioneer Trail)	County Road 4093 (Turnbull Bay Road) to Sugar Mill Drive	2	E	2,050	200	A	
County Road 4118 (Pioneer Trail)	Sugar Mill Drive to Williams Road	2	E	2,680	262	B	
County Road 4118 (Pioneer Trail)	Williams Road to Enterprise Avenue	2	E	3,900	381	B	
County Road 4118 (Pioneer Trail)	Enterprise Avenue to Jungle Road	2	E	9,410	919	A	
County Road 4118 (Pioneer Trail)	Jungle Road to Business 44 (Canal Street)	2	E	2,080	203	C	
County Road 4133 (Saxon Drive)	State Road A1A (East Third Avenue) to East 916th Avenue	2	E	5,083	562	C	EOL
County Road 4133 (Saxon Drive)	East 916th Avenue to East 27th Avenue	2	E	3,053	3160	E B	EOL
County Road 4133 (Saxon Drive)	East 27th Avenue to South City Limits	2	E	2,797	2,860	E B	EOL
County Road 4137 (Mission Drive)	County Road 4137 (Old Mission Road) to County Road 4137 (Old Mission Road) / Mission Drive	2	E	800	78	A	
County Road 4137 (Old Mission Road)	State Road 44 to County Road 4137 (Mission Drive)	2	E	738	72	A	
County Road 4137 (Old Mission Road)	County Road 4137 (Mission Drive) to Josephine Street	4	E	13,630	1,332	C	
County Road 4137 (Old Mission Road)	Josephine Street to County Road 4136 (West Park Avenue)	2	E	8,040	786	D	
North Glencoe Road	County Road 4118 (Pioneer Trail) to State Road 44	2	E	1,240	121	A	
South Glencoe Road	State Road 44 to Paige Avenue	2	E	3,640	356	B	
South Glencoe Road / Taylor Road	Paige Avenue to County Road 4137 (Old Mission Road)	2	E	1,330	130	A	
Josephine Street	County Road 4137 (Old Mission Road) to Tatum Boulevard	2	E	6,370	622	D	
Mission Drive	State Road 44 to County Road 4137 (Old Mission Road) / Mission Drive	24	E	15,200	1,485	C	
Sugar Mill Drive	County Road 4118 (Pioneer Trail) to State Road 44	2	E	2,760	270	B	
Williams Road	County Road 4093 (Turnbull Bay Road) to Mooneyham Drive	2	E	1,270	124	A	
Williams Road	Mooneyham Drive to County Road 4118 (Pioneer Trail)	2	E	1,430	140	A	
City Streets System							
Business 44 (Canal Street)	US Highway 1 / State Road 5 (Dixie Freeway) to State Road 44 (Live Oak Street)	2	E	8,900	870	C	
State Road 44 (Canal Street)	State Road 44 (Live Oak Street) to State Road 44 (North Riverside Drive)	2	E	3,870	378	C	
State Road 44 (South North Riverside Drive)	State Road 44 (North Causeway) to State Road 44 (Canal Street)	2	E	3,870	378	B	
Flagler Avenue	East End of Bridge to Peninsula Avenue	23	E	7,960	778	D	
Flagler Avenue	Peninsula Avenue to Ocean Atlantic Avenue	2	E	4,500	440	B	
South Atlantic Avenue	Flagler Avenue to Oakwood Avenue	23	E	3,760	367	B	
South Atlantic Avenue	Oakwood Avenue to Maralyn Avenue	23	E	3,760	367	B	
South Atlantic Avenue	Maralyn Avenue to First Avenue	23	E	3,760	367	B	
South Atlantic Avenue	First Avenue to State Road A1A	23	E	3,760	367	B	
South Riverside Drive	State Road 44 (Canal Street) to Lytle Avenue	43	E	3,870	378	B	
10th Street	West City Limits to South Myrtle Street Avenue	4	E	6,860	670	B	
10th Street	South Myrtle Street Avenue to US Highway 1 / State Road 5 (South Dixie Freeway)	2	E	6,920	676	B	

Sources: Florida Department of Transportation and Volusia County Traffic Engineering

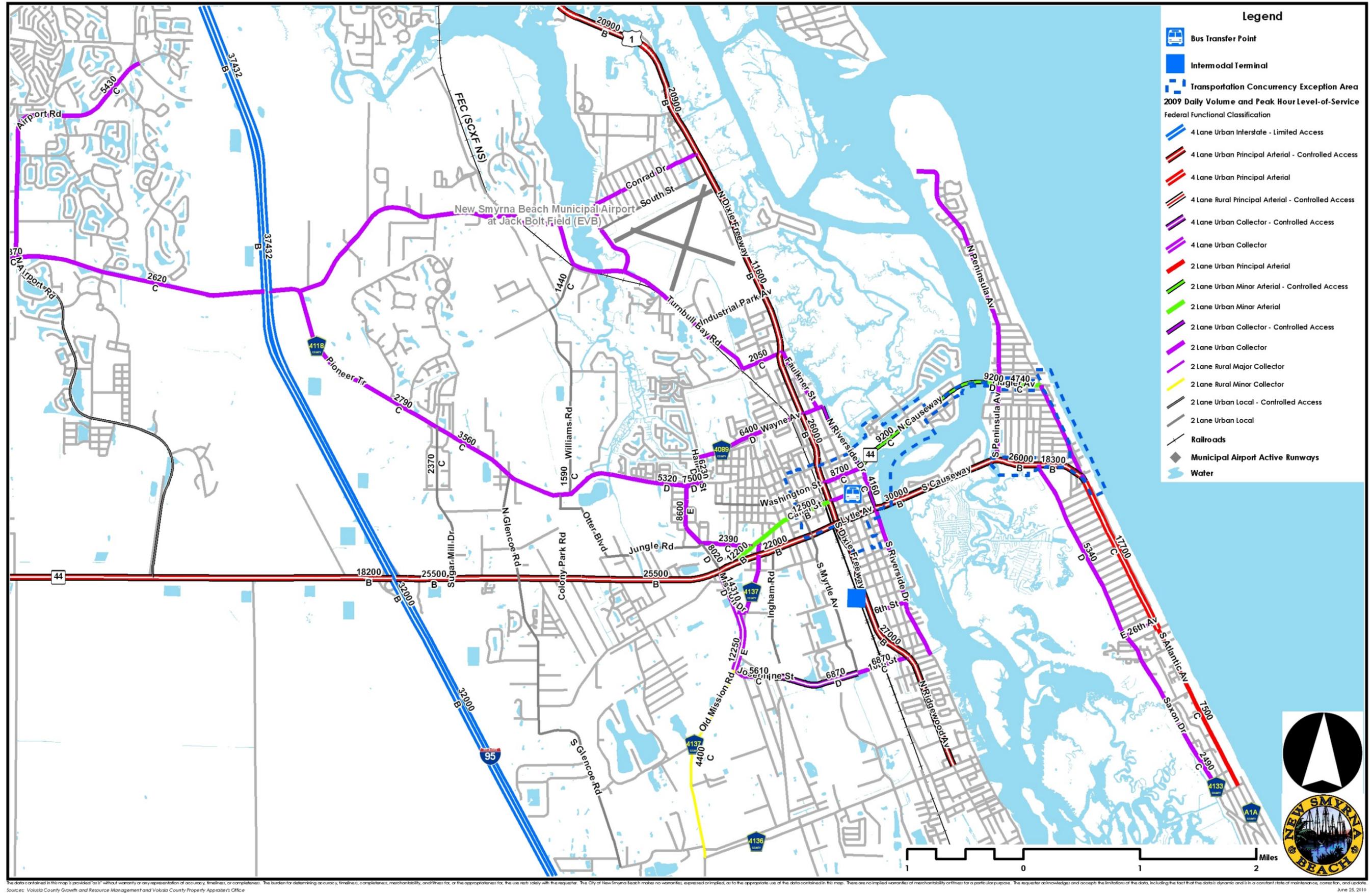
Map III-1 Year 1989-2009 Existing Plus Committed Traffic Conditions



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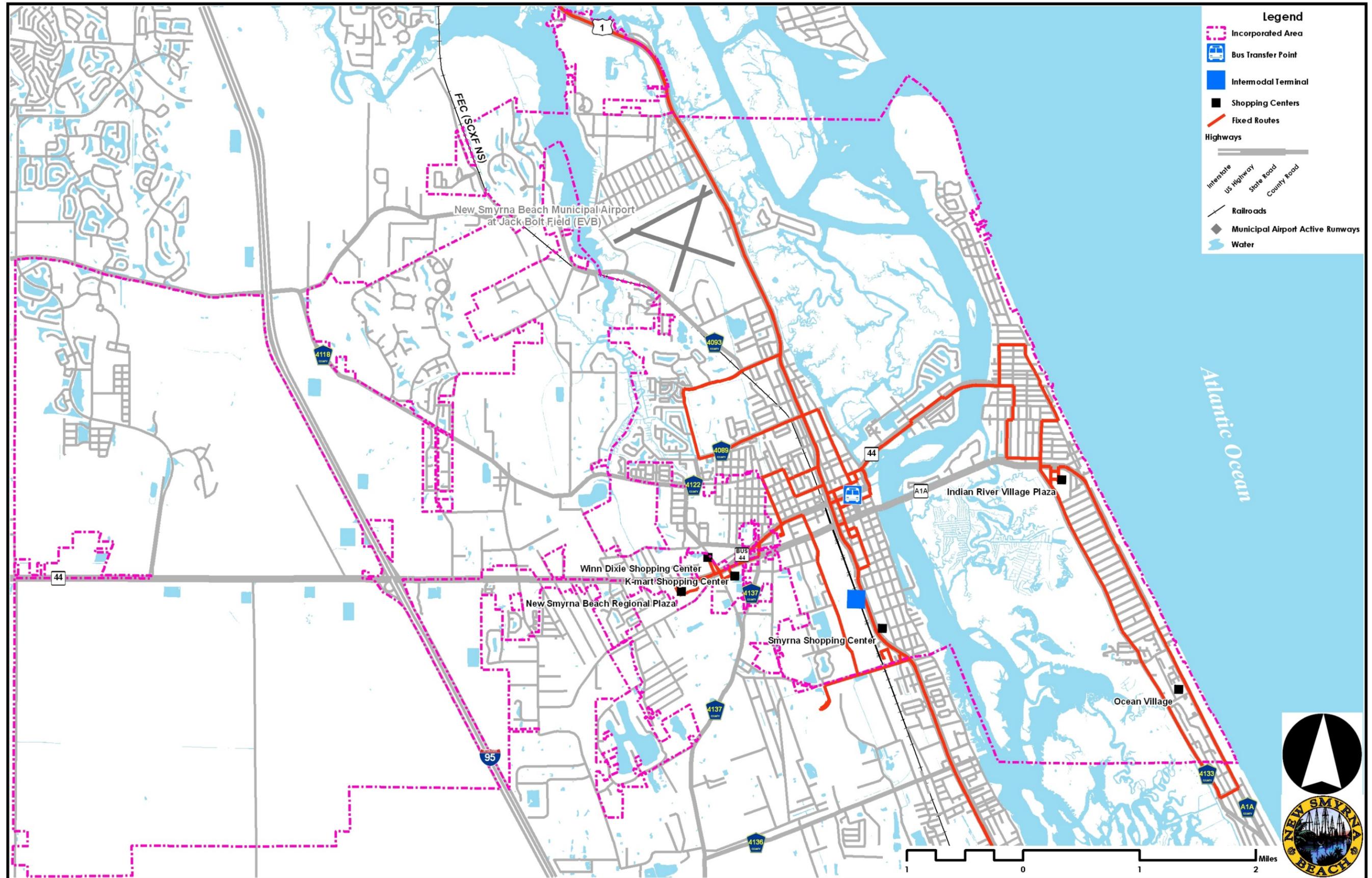
Comprehensive Plan

City of New Smyrna Beach, Florida



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Map III-2 Year 2010 Public Transit System

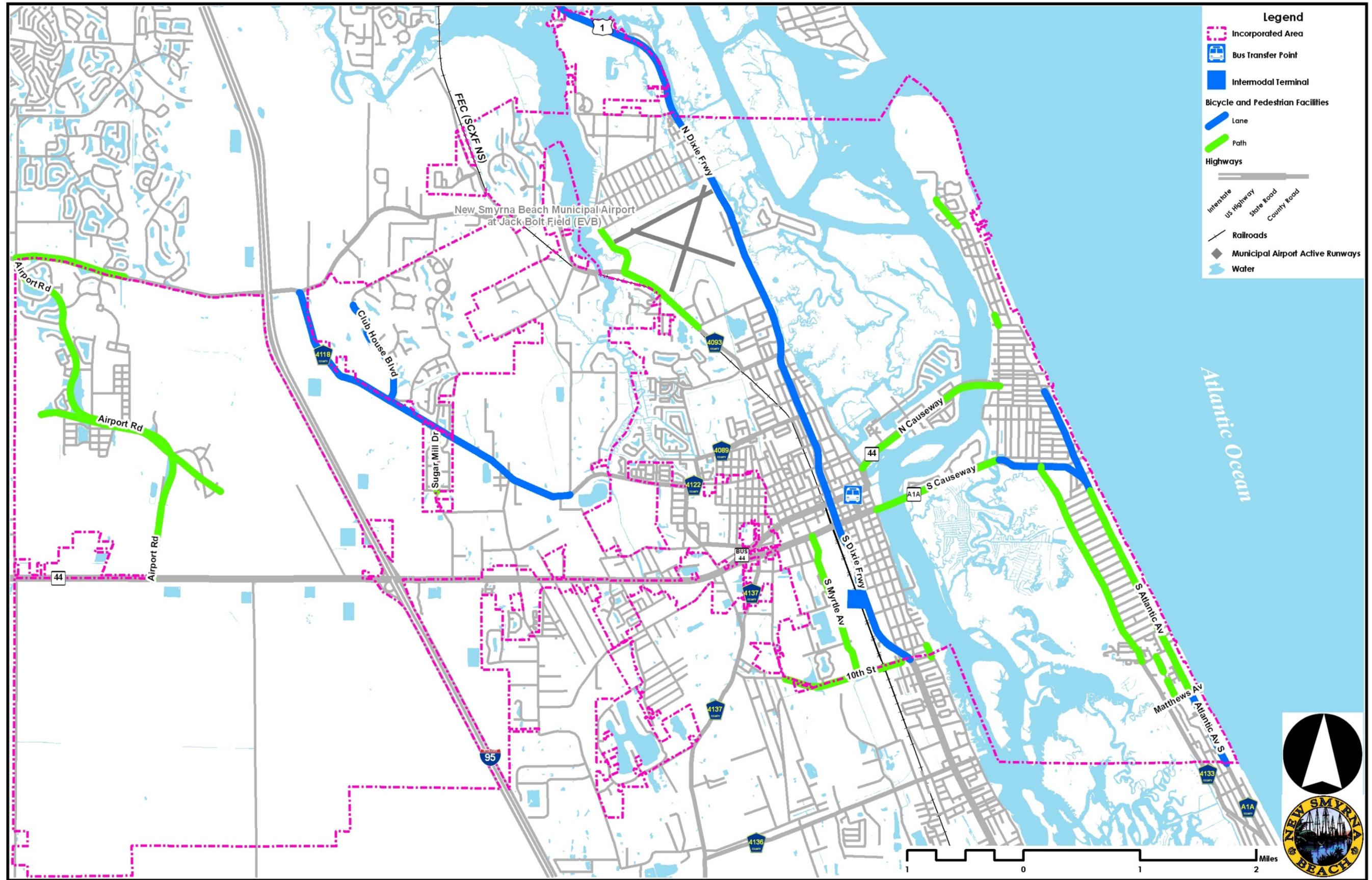


Legend

- Incorporated Area
- Bus Transfer Point
- Intermodal Terminal
- Shopping Centers
- Fixed Routes
- Highways
 - Interstate
 - US Highway
 - State Road
 - County Road
- Railroads
- Municipal Airport Active Runways
- Water

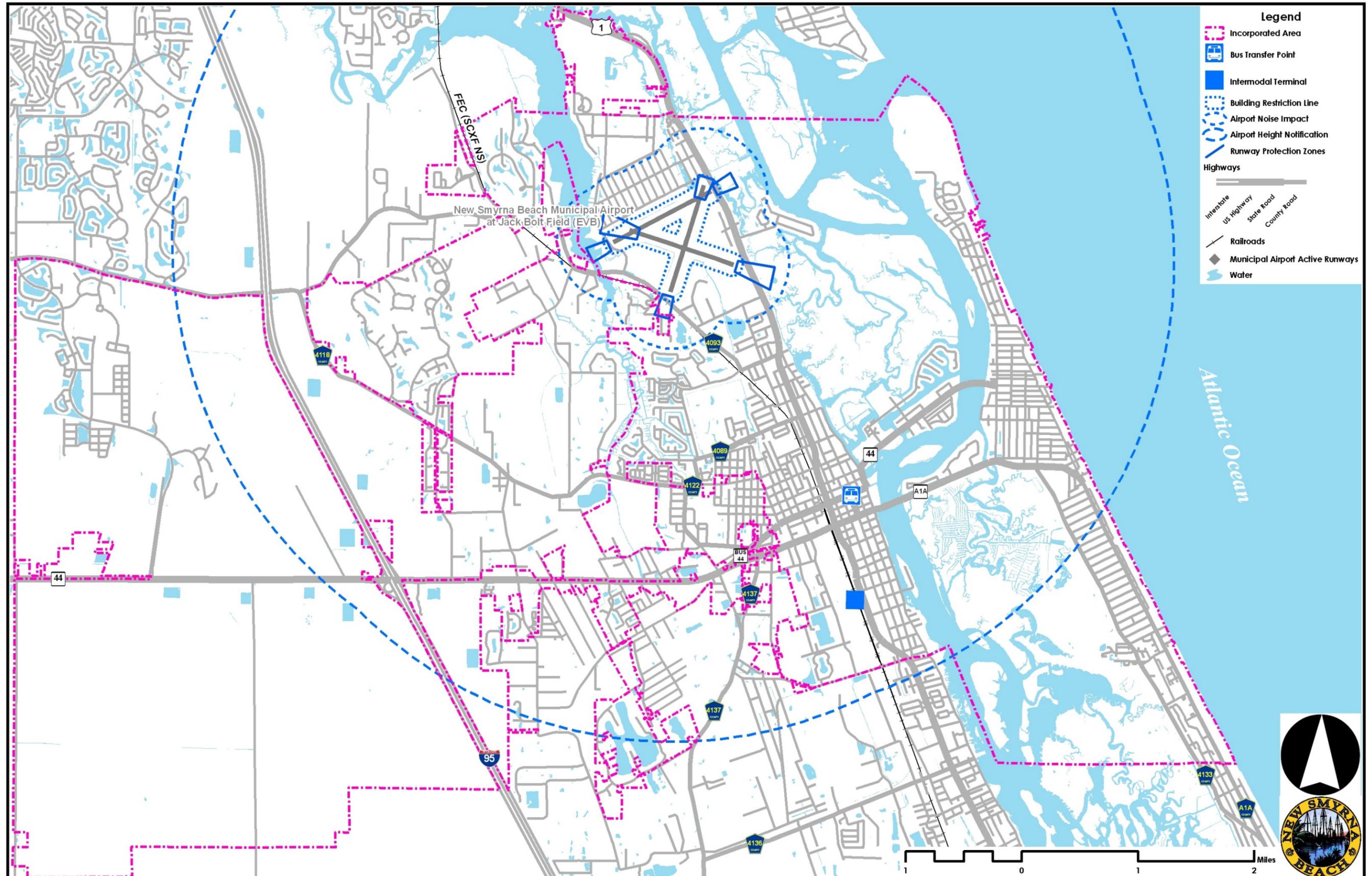
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Map III-3 Year 2010 Bicycle and Pedestrian Ways



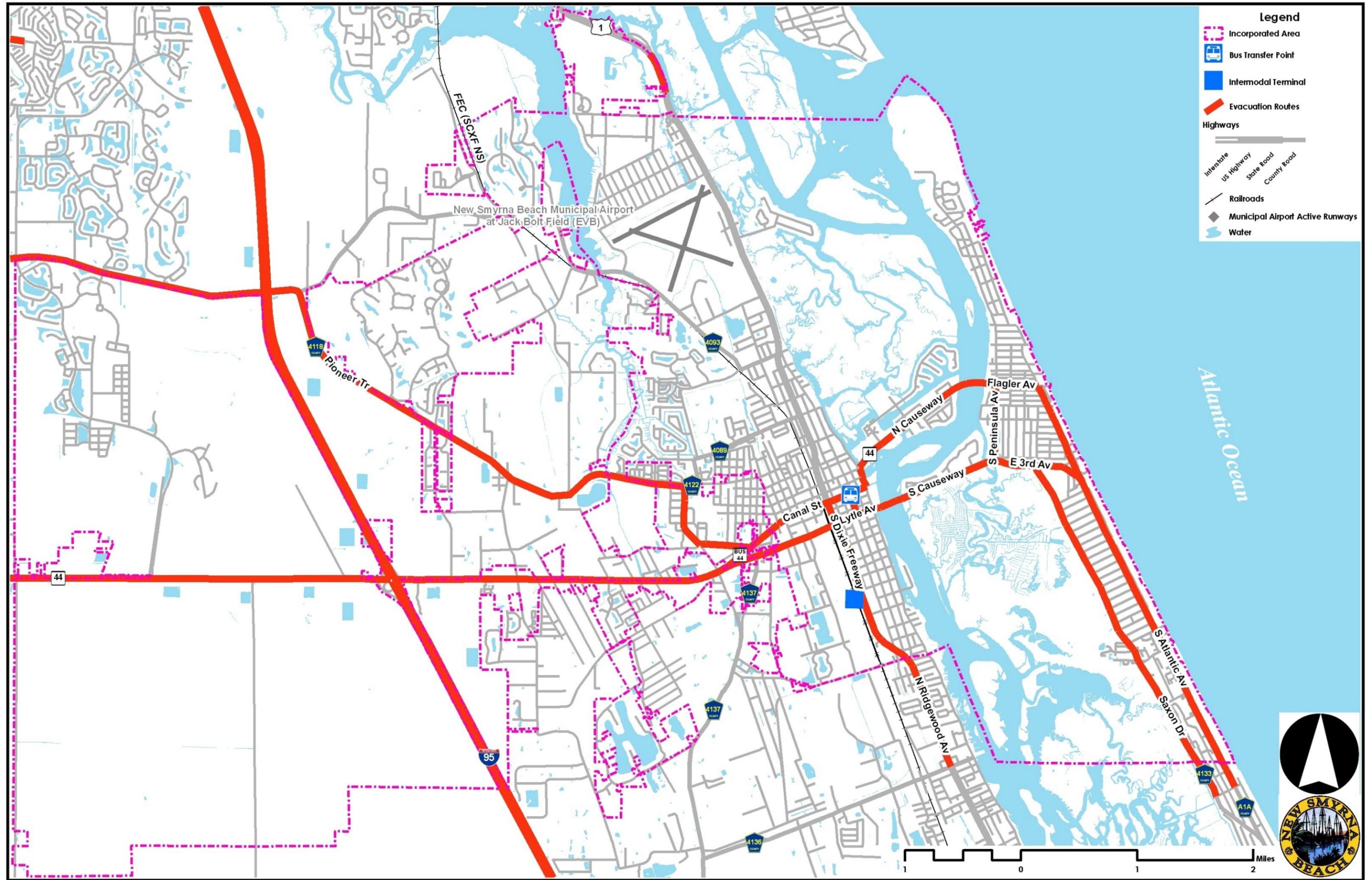
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Map III-4 Year 2010 New Smyrna Beach Municipal Airport Clear Zones



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Map III-5 Year 2010 Evacuation Routes



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TRAFFIC ACCIDENT-CRASH DATA

~~No t~~Traffic accident-crash data was is available from the local law enforcement agencies. To promote and implement transportation system improvements for all modes that minimize the occurrence of potential crashes that might result in the loss of health, life, and property, transportation plans should be developed with a priority consideration to transportation system improvements that prevent crashes, injuries, and minimize losses with the following actions:

- Properly maintain the various types of transportation facilities, including streets, intersections, buses, sidewalks, multi-use trails, transfer facilities, intermodal terminals, etc.
- Upgrade the street system to minimum width standards based on an overall system plan.
- Focus on high crash areas for transportation improvements.
- Minimize motor vehicle, truck, bus, train, bicycle, and pedestrian conflicts.

CURRENT ROADWAY DEFICIENCIES

No facilities in the New Smyrna Beach planning area currently carry volumes that are higher than the maximum level-of-service "~~D~~" services volumes established for these facilities.

ROADWAYS WITH SPECIAL CHARACTERISTICS

~~There exists s~~Some roadways exist within the New Smyrna Beach City limits that the City considers roadways with special characteristics:

- Canal Street: Canal Street is a physically constrained facility due to the unavailability of right-of-way ROW.
- Flagler Avenue: Flagler Avenue is a physically constrained facility due to the unavailability of right-of-way ROW.
- Riverside Avenue Drive: Riverside Avenue Drive has been designated as a scenic drive from Wayne Avenue south to the south City limits.
- Faulkner Street: Faulkner Street has been designated as a historic drive from Tanglewood Avenue to Canal Street.
- Washington Street: Washington Street has been designated as a historic drive from US Highway 1 to Riverside Drive.
- Saxon Drive: Saxon Drive has been designated as a scenic drive from East 3rd Avenue south to the south City limits.
- North Causeway: The North Causeway is a backlogged facility. Improvement of this facility is programmed as part of Florida Department of Transportation (FDOT) Transportation Improvement Program (TIP) for preliminary engineering and right of way acquisition, but no construction funding is available as of today.
- State Road 44 (Lytle Avenue): State Road 44 (Lytle Avenue) is a physically constrained facility due to the unavailability of right-of-way from US Highway 1 to Live Oak Street.
- State Road A1A (South Causeway / East 3rd / South Atlantic Avenues): State Road A1A is a physically constrained facility due to the unavailability of right-of-way from Live Oak Street to the south City limit.

The City shall monitor traffic volumes and operating conditions on designated constrained, scenic, or historic facilities and, at the time the level-of-service on a constrained, scenic, or historic facility falls below the minimum acceptable level-of-service for that facility, the City may not allow further significant development of the facility unless acceptable, mitigative measures to the adverse traffic impact of the development are provided.

On City roads designated as constrained, scenic, or historic facilities, New Smyrna Beach shall not schedule improvements to increase the number of through lanes. On state or county maintained highways and roads designated as constrained, scenic, or historic facilities, the City shall coordinate with the FDOT and Volusia County to not schedule improvements to increase the number of through lanes.

FUTURE TRAFFIC CONDITIONS

In developing a transportation plan to meet the future needs of the City, it is necessary to determine where, and to what extent, deficiencies in the transportation system will exist. This portion of the ~~Traffic Circulation~~Transportation Element presents the results of an analysis of expected future traffic conditions under the assumption that no further improvements are made to the system other than those currently programmed. These results will be used in subsequent sections to identify potential roadway improvements. Table XIII-46 in the Capital Improvements Element (presented later in this section) summarizes the five (5) year ~~Transportation-programmed roadway improvements Program~~ for New Smyrna Beach planning area.

FUTURE TRAVEL DEMANDS

The basic premise involved in projecting future roadway traffic conditions is that there is a stable relationship between travel demand (as indicated by traffic volumes) and socioeconomic activities in an urban area. The best indicators of socioeconomic activity in an area are population and employment. As the population and employment increase in a given urban area, the demand upon the local transportation facilities should increase accordingly. This method of deriving traffic projections from population and employment projections is usually conducted for an entire urban area by use of a computer-based traffic simulation model.

New Smyrna Beach is located within an urban Metropolitan Area Planning Boundary comprised of the entire coastal area of Volusia County and a portion of Flagler County. The Volusia county-TPO currently maintains an extensive computer-based transportation planning process, in which the City actively participates. This computer model combines the Volusia Coastal Area Transportation Study developed by Volusia County and the West Volusia County Study developed by FDOT, which contains traffic projections for Volusia County through the year 2010. These countywide projections have been used extensively in projecting traffic volumes for the New Smyrna Beach area. However, in 2006, the Cities of New Smyrna Beach, Port Orange, Edgewater, and Volusia County (Study Partners) agreed to partner and complete a regional transportation study, identifying deficiencies and developing a "fair-share" funding program. The City of New Smyrna Beach was the lead entity. The planning area of this travel demand forecasting model was bounded to the north by State Road 400, east to the Atlantic Ocean, south to Ariel Road and west to State Road and County Road 415. Ghyabi & Associates, Inc. was ~~been~~ contracted to work closely with the Study Partners, the Volusia TPO, and the FDOT to complete the Southeast Volusia Regional Transportation Study. Since time constraints prevented the creation of a 2005 base year model for calibration and validation for the Southeast Volusia Regional Transportation Study, the Central Florida Regional Planning Model (CFRPM) version 4.02 with a base year of 2000 was utilized. However, actual changes in socio-economic data within each Transportation Analysis Zone (TAZ) from 2000 to 2005 were reflected in the forecasted data by tracking building permits within each TAZ. Additionally, to confirm the validity of the projected socio-economic data for each TAZ (Zdata), the Study Partners reviewed the Zdata for 2015 for the planning area. In 2010, the Volusia TPO created Zdata for the 2035 Long Range Transportation Plan. This Zdata is shown in Table III-3.

Once the Zdata was submitted for use, it was the input into the Trip Generation programs. Trip Distribution is reflected in a mathematical equation, the "gravity model," that links trip productions and trip attractions together based on the relative attractiveness of each TAZ as well as the accessibility provided by the Travel Demand Network. The number of trips produced is dependant on the population and number of dwelling units in each TAZ. The attractiveness of the destination TAZs is related to the activities taking place in each TAZ, such as the amount of employment and school enrollment. Trip Assignment determines the most likely routes through the Travel Demand Network that will be taken by a traveler going from an origin to a destination. The output of the traffic assignment process is a loaded network, meaning all links in the network have been assigned volumes of traffic. Thus, any link can be examined to determine the total number of vehicles traversing it in a 24-hour period.

Impacts on the capacity of the road system were measured by the amount of travel likely in the years 2015 and 2035 on the existing plus committed (E+C) Travel Demand Network using the forecasted Zdata.

The E+C Travel Demand Network consisted of the existing transportation infrastructure plus all roadway projects that are committed to be built within the next five (5) years. The committed projects are programmed transportation improvements obtained from capital improvement elements, the TPO Transportation Improvement Plan (TIP), and the FDOT Work Program. This analysis produced volume to capacity (V/C) ratios mapped thematically to display the congested areas that assisted in planning for future transportation projects. Utilizing the travel demand software, analyses were performed to identify existing and potential future congested roadway segments. Transportation improvement alternatives were suggested in an effort to alleviate congestion on the Travel Demand Network. The size, scope, and timing of roadway projects are then proposed based on these findings.

Because the ~~Volusia County Model 7~~ data projections of dwelling units ~~is~~ are virtually equivalent to that projected in the Future Land Use Element, the ~~Model~~ projected traffic volumes are used directly as the basis for projecting ~~1995~~2015 and ~~2010~~2035 traffic volumes in the New Smyrna Beach planning area. However, the ~~Model 1995 and 2010~~2015 traffic volumes have been modified slightly to reflect a somewhat different geographic distribution of dwelling units and trip attractions in the Future Land Use ~~Element Plan~~ than the distribution used in the 2035 M model. The resulting traffic volumes are presented in Map III-~~26~~ (1995-2015 Volumes) Map III-~~37~~ (2010-2035 Volumes).

FUTURE TRAFFIC CONDITIONS

As used in this context, the term “future traffic conditions” refers to those traffic conditions expected to exist during the horizon year on the ~~currently programmed and planned~~ roadway system. This roadway network, as shown in Maps III-~~26~~ and III-~~37~~ (see previous two pages), reflects ~~only~~ the existing roads plus ~~these~~ new roads and improvements to existing roads, ~~in currently funded and programmed and planned roadway improvements programs. These programmed improvements to the roadway system in the New Smyrna Beach area were, as currently included in state or local roadway plans or programs, are summarized in Table III 4 adopted in 2009.~~ Maps III-~~26~~ and III-~~37~~ also present the long-range traffic volume projections (as derived from land use projections for the years ~~1995-2015 and 2010-2035~~); and the corresponding peak hour, peak direction level-of-service expected throughout the New Smyrna Beach planning area. These levels-of-service were determined using the ~~criteria previously outlined in Table III 21 facility type functional classification Florida Department of Transportation (FDOT) 2009 Quality/Level of Service Handbook.~~

Tables III-~~54~~ and III-~~65~~ show the future traffic projections for the years ~~1995-2015 and 2010-2035~~. These tables show the acceptable level-of-service for these thoroughfare roadways.

REGIONAL DEMAND

Future traffic demands for New Smyrna Beach and Volusia County have been based upon population and employment projections. Like many other coastal communities, New Smyrna Beach also has an extremely high influx of non-city trips passing through the community destined for the beaches. The planning for this population segment rests with the inland areas, such as Orange and Seminole Counties. New Smyrna Beach is basically at the mercy of growth and travel demands for beach access from the inland areas of the state. This is evidenced by the fact that over ~~52,000~~40,000 trips per day are projected for the North and South Causeways in ~~2010~~2015. Regardless of the controls placed upon growth within the City by the City, outside demands will continue to use a disproportionate share of major road capacity.

The City will be undertaking several initiatives to address the capacity of roads within the community. Two (2) programs include a regular traffic counting program and travel time studies on major State roads.

The traffic counting program will be implemented in cooperation with Volusia County and the FDOT. This will develop a database in order that the City can anticipate future capacity improvements required on the City street network.

The travel time studies will look at the operating level-of-service for roadway corridors versus specific links as a determinant of system capacity. This will also be done in conjunction with Volusia County and the FDOT.

Comprehensive Plan

City of New Smyrna Beach, Florida

Table III-43 ~~Programmed Roadway Improvements, 1996-2001~~ 2035 Long Range Transportation Plan
Transportation Analysis Zone Data (Zdata), 2010

Improvements	Limits	Responsible Agency	Funding Source	Estimated Cost (\$1,000)	Schedule Completion	Source
US 1 Corridor Improvement Study	State Road 442 - Interstate 95	FDOI	State and Federal	850	1997	IPP
Bridge Rehabilitation	New Smyrna Beach	FDOI	State and Federal	151	1998	IPP
SR A1A Bridge Rehabilitation	New Smyrna Beach	FDOI	State and Federal	131	1998	IPP
Pioneer Trail Widening	Sugar Mill Drive - Williams Road	VC	Local Highway	1,120	1998	IPP
Atlantic Avenue Widening	6th Avenue - Flagler Avenue	VC	Local Highway	600	1999	IPP
Old Mission Road Widening	Park Avenue - Josephine Street	VC	Local Highway	1,400	1999	IPP
US 1 Sidewalk	Industrial Park Drive - Art Center Avenue	FDOI	State and Federal	209	2000	IPP
South Atlantic Avenue Bike Path	3rd Avenue - Flagler Avenue	FDOI	State and Federal	1,655	2000	IPP
Pioneer Trail Widening	Turnbull Bay Road - Sugar Mill Drive	VC	Local Highway	600	2000	IPP

TAZ	2005											2035												
	Single-Family Units	Single-Family Population	Multi-Family Units	Multi-Family Population	Total Population	Hotel-Motel Units	Hotel-Motel Population	Industrial Employment	Commercial Employment	Service Employment	Total Employment	School Enrollment	Single-Family Units	Single-Family Population	Multi-Family Units	Multi-Family Population	Total Population	Hotel-Motel Units	Hotel-Motel Population	Industrial Employment	Commercial Employment	Service Employment	Total Employment	School Enrollment
2201	23	47	43	73	120	0	0	1	5	11	18	0	23	47	43	73	120	0	0	1	6	12	19	0
2429	76	170	2	4	174	0	0	11	0	3	14	0	489	1,017	2	4	1,021	0	0	11	0	3	14	0
2430	118	266	77	159	424	0	0	6	1	13	20	0	648	1,446	195	370	1,816	0	0	6	66	275	347	0
2431	0	0	0	0	0	0	0	0	0	0	0	0	333	588	20	28	616	0	0	0	0	0	0	0
2432	0	0	0	0	0	0	0	40	8	0	49	0	510	1,092	13	18	1,110	0	0	40	8	0	48	0
2433	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2434	0	0	0	0	0	0	0	0	0	0	0	0	482	779	0	0	779	0	0	0	0	0	0	0
2435	0	0	0	0	0	0	0	0	0	0	0	0	144	299	0	0	299	0	0	0	0	0	0	0
2436	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2437	0	0	0	0	0	0	0	0	4	13	17	0	0	0	0	0	0	0	0	33	291	324	0	
2438	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2439	2	4	0	0	4	0	0	0	0	0	0	0	2	4	0	0	4	0	0	0	0	0	0	0
2440	0	0	0	0	0	0	0	0	0	0	0	0	225	476	20	28	504	0	0	0	0	0	0	0
2441	0	0	0	0	0	0	0	0	0	0	0	0	115	286	403	868	1,154	0	0	0	65	262	327	0
2442	0	0	0	0	0	0	0	0	0	0	0	0	428	771	0	0	771	0	0	0	0	0	0	0
2443	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2444	0	0	0	0	0	0	0	0	0	0	0	0	0	0	274	472	472	0	0	0	68	284	352	0
2445	0	1	0	0	1	0	0	0	0	0	0	0	1	2	0	0	2	0	0	0	0	0	0	0
2446	0	0	0	0	0	0	0	0	0	0	0	0	93	182	0	0	182	0	0	0	0	0	0	0
2447	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2448	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2449	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2450	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2451	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2452	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2453	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2454	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2455	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2456	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2469	2	4	0	0	4	0	0	1	0	0	1	0	24	50	0	0	50	0	0	1	0	0	1	0
2470	121	255	34	67	321	0	0	0	0	21	22	0	135	285	34	67	352	0	0	11	0	21	33	0
2471	12	26	28	57	83	0	0	2	0	1	2	0	12	26	28	57	83	0	0	2	0	1	2	0
2472	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2473	261	763	110	254	1,017	50	161	4	5	132	142	0	261	763	110	254	1,017	50	161	4	6	133	141	0
2474	3	5	0	0	5	0	0	1	0	0	1	0	7	14	0	0	14	0	0	1	0	0	1	0
2475	4	9	0	0	9	0	0	15	5	33	53	0	4	9	0	0	9	0	0	61	5	33	99	0
2476	745	1,573	82	163	1,736	0	0	15	16	41	72	0	745	1,573	82	163	1,736	0	0	15	18	41	74	0
2477	0	0	0	0	0	0	0	111	72	259	442	0	0	0	0	0	0	0	142	72	259	473	0	
2478	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2479	136	287	0	0	287	0	0	9	58	0	67	0	136	287	0	0	287	0	0	9	58	67	283	0
2480	0	1	0	0	1	0	0	0	0	0	0	0	0	184	0	0	184	0	0	0	4	16	20	0
2481	3	5	0	0	5	0	0	0	0	0	0	0	162	322	0	0	322	0	0	0	0	3	3	0
2482	576	1,197	0	0	1,197	0	0	16	2	97	115	0	696	1,445	0	0	1,445	0	0	16	17	97	129	0
2483	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2484	13	28	0	0	28	0	0	2	0	1	3	0	62	129	0	0	129	0	0	2	0	1	3	76
2485	2	4	0	0	4	0	0	0	0	0	0	0	2	4	0	0	4	0	0	0	0	0	0	0
2486	15	27	0	0	27	0	0	2	0	1	3	0	15	27	0	0	27	0	0	2	0	1	3	0
2487	727	1,312	246	357	1,669	0	0	23	3	76	103	0	727	1,312	246	357	1,669	0	0	23	3	76	102	0
2488	222	402	41	62	464	0	0	15	8	6	29	0	222	402	41	62	464	0	0	17	8	6	31	0
2489	54	109	0	0	109	0	0	3	6	9	18	0	54	109	0	0	109	0	0	3	6	9	18	0
2490	256	514	0	0	514	38	81	127	44	64	235	0	256	514	0	0	514	38	81	131	44	64	239	0
2491	84	168	9	11	179	31	66	26	80	138	245	213	84	168	9	11	179	31	66	29	80	138	247	0
2492	109	221	3	4	225	50	106	27	224	109	360	0	109	221	3	4	225	50	106	27	224	109	360	0
2493	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2494	147	306	428	591	897	0	0	15	43	143	200	0	218	454	428	591	1,045	0	0	15	50	166	231	0
2495	57	102	8	11	113	0	0	3	3	6	11	0	57	102	8	11	113	0	0	3	3	6	12	0
2496	324	580	72	99	679	823	1,749	15	65	77	157	0	324	580	72	99	679	823	1,749	15	68	77	160	0
2497	5	8	157	217	225	6	12	2	30	6	37	0	15	26	157	217	244	6	12	2	30	6	38	0
2498	10	20	0	0	20	0	0	1	0	6	7	0	10	20	0	0	20	0	0	1	3	6	10	0
2499	6	11	0	0	11	0	0	2	0	0	2	0	6	11	0	0	11	0	0	2	8	0	11	0
2500	19	38	0	0	38	0	0	1	1	2	4	0	119	244	0	0	244	0	0	1	48	2	51	0
2501	175	318	6	9	327	0	0	0	1	2	3	0	175	318	6	9	327	0	0	0	1	2	3	0
2502	90	184	1	2	186	0	0	21	122	29	171	0	90	184	1	2	186	0	0	21	130	29	180	0
2503	45	86	2	4	92	0	0	6	6	4	17	0	45	86	2	4	92	0	0	6	7	4	18	0
2504	323	657	43	106	763	0	0	12	8	78	98	373	323	657	43	106	763	0	0	12	14	81	108	497
2505	78	176	24	33	209	0	0	14	8	37	59	0	78	176	24	33	209	0	0	14	8	38	60	0
2506	19	43	0	0	43	0	0	6	4	19	71	95	19	43	14	25	68	0	0	6	19	95	120	0
2507	40	69	2	3	72	0	0	37	34	67	138	0	40	69	2	3	72	0	0	37	50	67	154	0
2508	1	2	0	0	2	0	0	2	2	4	7	0	1	2	0	0	2	0	0	2	2	4	8	0
2509	200	346	58	93	439	12	26	43	31	210	284	0	200	346	58	93	439	12	26	43	31	211	285	0
2510	21	36	6	10	46	6	13	72	112	1,189	1,372	0	21	36	6	10	46	6	13	72	112	1,207	1,39	

Comprehensive Plan

City of New Smyrna Beach, Florida

Table III-54 Future Traffic Conditions, 1995-2015

Street/Roadway	From-To Segment	Current Number of Lanes	Acceptable Level-of-Service	Peak Hour LOS Capacity	AADT	Peak Hour Volume	Level-of-Service	
State Highway System								
Interstate 95 / State Road 9	State Road 421 (Dunlawton Avenue) to State Road 44	4	C	5,350	50,705	4,873	C	
Interstate 95 / State Road 9	State Road 44 to South City Limits	4	C	5,350	41,970	4,033	C	
US Highway 1 / State Road 5 (North Dixie Freeway)	North City Limits to Industrial Park Drive Avenue	4	D	5,870	-27,000	42,002	A C	
US Highway 1 / State Road 5 (North Dixie Freeway)	Industrial Park Drive Avenue to County Road 4093 (Turnbull Bay Road)	4	D	3,390	-33,100	39,120	D E	
US Highway 1 / State Road 5 (North Dixie Freeway)	County Road 4093 (Turnbull Bay Road) to County Road 4089 (Wayne Avenue)	4	D	3,390	-33,100	35,194	D E	
US Highway 1 / State Road 5 (North Dixie Freeway)	County Road 4089 (Wayne Avenue) to Business 44 (Canal Street)	4	D	3,390	-33,700	35,194	E	
US Highway 1 / State Road 5 (South Dixie Freeway)	Business 44 (Canal Street) to State Road 44 (Lytle Avenue)	4	D	3,390	-30,900	35,194	E	
US Highway 1 / State Road 5 (South Dixie Freeway)	State Road 44 (Lytle Avenue) to 10th Street / South City Limits	4	D	3,390	-29,300	35,273	A E	
State Road A1A (Lytle Avenue) / South Causeway	South Riverside Drive to State Road 44 (Live Oak Street) to South Peninsula Avenue	4	FD	5,870	-24,900	30,679	C C	
State Road 44 A1A (East 4th Avenue)	South Peninsula Avenue to County Road 4133 (Saxon Drive)	4	FD	3,390	-23,600	24,772	B C	
State Road 44 A1A (East 4th Avenue)	County Road 4133 (Saxon Drive) to East 7th Avenue	4	FD	3,221	-16,200	13,853	B	
State Road 44	West City Limits to Airport Road	4	D	4,190	-20,000	22,460	B	
State Road 44	Airport Road to Williamson Boulevard	4	D	4,190	-20,000	28,065	2,742	B
State Road 44	Williamson Boulevard to Interstate 95 / State Road 9	4	D	4,190	-20,000	28,065	2,742	B C
State Road 44	Interstate 95 / State Road 9 to Sugar Mill Drive	4	D	4,190	-20,000	37,548	3,668	B C
State Road 44	Sugar Mill Drive to Business 44 (Canal Street)	4	D	4,190	-20,000	37,548	3,668	B C
State Road 44	Business 44 (Canal Street) to South Myrtle Avenue	4	D	3,390	-17,500	26,002	2,540	A C
State Road A1A (Lytle Avenue) / South Causeway	South Myrtle Avenue to US Highway 1 / State Road 5 (South Dixie Freeway)	4	D	5,870	-19,800	30,679	2,997	A C
State Road A1A (Lytle Avenue) / South Causeway	US Highway 1 / State Road 5 (South Dixie Freeway) to South Riverside Drive	4	FD	5,870	-19,800	30,679	2,997	A C
State Road 44 (North Causeway)	State Road 44 (North Riverside Drive) to Barracuda Boulevard	2	FD	1,560	-15,600	9,985	976	E C
State Road 44 (North Causeway)	Barracuda Boulevard to East End of Bridge	2	FD	1,560	-11,300	9,985	976	C
Business 44 (Canal Street)	State Road 44 to County Road 4118 (Pioneer Trail)	2	D	2,391	-11,360	16,640	1,430	D C
Business 44 (Canal Street)	County Road 4118 (Pioneer Trail) to US Highway 1 / State Road 5 (Dixie Freeway)	2	D	2,391	-11,360	16,048	1,568	D C
County Highway System Roads								
County Road A1A (South Atlantic Avenue)	East 6th Avenue to East 27th Avenue	4	E	3,120	-19,600	22,121	2,161	A D
County Road A1A (South Atlantic Avenue)	East 27th Avenue to South City Limits	2	E	1,480	-12,600	10,472	1,023	A D
County Road 4089 (Enterprise Avenue)	County Road 4118 (Pioneer Trail) to County Road 4089 (Halleck Street)	2	E	1,200	9,955	973	E	
County Road 4089 (Halleck Street)	County Road 4089 (Enterprise Avenue) to County Road 4089 (Wayne Avenue)	2	E	960	8,943	874	E	
County Road 4089 (Wayne Avenue)	County Road 4089 (Halleck Street) to US Highway 1 / State Road 5 (North Dixie Freeway)	2	E	960	7,544	737	D	
County Road 4093 (Turnbull Bay Road)	County Road 4118 (Pioneer Trail) to Williams Road	2	E	960	4,308	421	C	
County Road 4093 (Turnbull Bay Road)	Williams Road to United Drive	2	E	960	-2,000	4,693	459	C
County Road 4093 (Turnbull Bay Road)	United Drive to Industrial Park Avenue	2	E	960	-2,000	4,693	459	C
County Road 4093 (Turnbull Bay Road)	Industrial Park Avenue to Fairgreen Avenue	2	E	960	-2,000	4,458	436	C
County Road 4093 (Turnbull Bay Road)	Fairgreen Avenue to US Highway 1 / State Road 5 (North Dixie Freeway)	2	E	960	-2,000	6,275	613	D
County Road 4118 (Pioneer Trail)	Airport Road to Williamson Boulevard	2	E	960	5,905	577	C	
County Road 4118 (Pioneer Trail)	Williamson Boulevard to County Road 4093 (Turnbull Bay Road)	2	E	960	5,905	577	D	
County Road 4118 (Pioneer Trail)	County Road 4093 (Turnbull Bay Road) to Sugar Mill Drive	2	E	960	3,985	389	C	
County Road 4118 (Pioneer Trail)	Sugar Mill Drive to Williams Road	2	E	960	5,791	566	C	
County Road 4118 (Pioneer Trail)	Williams Road to Enterprise Avenue	2	E	960	4,623	452	C	
County Road 4118 (Pioneer Trail)	Enterprise Avenue to Jungle Road	2	E	960	10,170	994	B	
County Road 4118 (Pioneer Trail)	Jungle Road to Business 44 (Canal Street)	2	E	960	3,587	350	C	
County Road 4133 (Saxon Drive)	State Road A1A (East 4th Avenue) to East 16th Avenue	2	E	960	-7,000	6,573	642	C D
County Road 4133 (Saxon Drive)	East 16th Avenue to East 27th Avenue	2	E	960	-4,300	2,932	286	E B
County Road 4133 (Saxon Drive)	East 27th Avenue to South City Limits	2	E	960	-4,300	2,932	286	E B
County Road 4137 (Mission Drive)	County Road 4137 (Old Mission Road) to County Road 4137 (Old Mission Road) / Mission Drive	4	E	2,400	15,191	1,484	D	
County Road 4137 (Old Mission Road)	State Road 44 to County Road 4137 (Mission Drive)	2	E	1,200	3,031	296	B	
County Road 4137 (Old Mission Road)	County Road 4137 (Mission Drive) to Josephine Street	2	E	1,200	2,534	248	B	
County Road 4137 (Old Mission Road)	Josephine Street to County Road 4136 (West Park Avenue)	2	E	1,200	8,805	860	D	
North Airport Road	County Road 4118 (Pioneer Trail) to Luna Bella Lane	2	E	1,480	6,193	605	C	
North Airport Road	Luna Bella Lane to State Road 44	2	E	1,480	10,083	985	D	
North Glencoe Road	County Road 4118 (Pioneer Trail) to State Road 44	2	E	960	1,379	135	A	
South Glencoe Road	State Road 44 to Paige Avenue	2	E	960	4,600	449	C	
South Glencoe Road / Taylor Road	Paige Avenue to County Road 4137 (Old Mission Road)	2	E	960	1,322	129	A	
Josephine Street	County Road 4137 (Old Mission Road) to Tatum Boulevard	4	E	1,800	7,769	759	C	
Mission Drive	State Road 44 to County Road 4137 (Old Mission Road) / Mission Drive	4	E	2,400	22,980	2,245	E	
Sugar Mill Drive	County Road 4118 (Pioneer Trail) to State Road 44	2	E	960	4,182	409	C	
Tenth Street / Josephine Street	US 1 - Old Mission Road							
Williams Road	County Road 4093 (Turnbull Bay Road) to Mooneyham Drive	2	E	960	1,852	181	A	
Williams Road	Mooneyham Drive to County Road 4118 (Pioneer Trail)	2	E	960	2,087	204	B	
South Williamson Boulevard Extension	East-West Connector "B" to East-West Connector "C"	2	E	1,480	987	96	A	
South Williamson Boulevard Extension	East-West Connector "C" to State Road 442 (Indian River Boulevard) Extension	2	E	1,480	19,122	1,868	F	
City Streets System								
Business 44 (Canal Street)	US Highway 1 / State Road 5 (Dixie Freeway) to State Road 44 (Live Oak Street)	2	E	1,560	-8,200	9,985	976	A C
State Road 44 (Live Oak Street)	State Road 44 (Lytle Avenue) to Business 44 (Canal Street)	2	E	960	3,626	354	B	
State Road 44 (Canal Street)	State Road 44 (Live Oak Street) to State Road 44 (North Riverside Drive)	2	E	960	-8,200	5,120	500	A D
State Road 44 (South North Riverside Drive)	State Road 44 (North Causeway) to State Road 44 (Canal Street)	42	E	1,200	-12,500	5,120	500	A C
Conrad Drive	US Highway 1 / State Road 5A (South Dixie Freeway) to Sunset Drive	2	E	N/A	N/A	N/A	N/A	
Faulkner Street	Tanglewood Avenue to Wayne Avenue	2	E	N/A	N/A	N/A	N/A	
Faulkner Street	Wayne Avenue to State Road 44 (Canal Street)	2	E	N/A	N/A	N/A	N/A	
Flagler Avenue	East End of Bridge to Peninsula Avenue	2	E	1,184	9,806	958	E	
Flagler Avenue	Peninsula Avenue to Ocean Atlantic Avenue	2	E	1,184	7,996	781	D	
Industrial Park Drive (Columbia Street) Avenue	County Road 4093 (Turnbull Bay Road) to US Highway 1 / State Road 5 (North Dixie Freeway)	2	E	960	-3,100	3,199	313	C B
South Atlantic Avenue	Flagler Avenue to Oakwood Avenue	2	E	960	-5,000	N/A	N/A	C B
South Atlantic Avenue	Oakwood Avenue to Maralyn Avenue	2	E	960	-5,000	N/A	N/A	C B
South Atlantic Avenue	Maralyn Avenue to 4th Avenue	2	E	960	-5,000	N/A	N/A	C B
South Atlantic Avenue	4th Avenue to State Road A1A	2	E	960	-5,000	N/A	N/A	C B
North Myrtle Avenue	Washington Street to Business 44 (Canal Street)	2	E	1,480	N/A	N/A	N/A	
South Myrtle Avenue	Business 44 (Canal Street) to State Road 44 (Lytle Avenue)	2	E	1,480	262	26	A	
South Myrtle Street Avenue	State Road 44 (Lytle Avenue) to Field Street	2	E	1,480	3,380	330	N/A B	
South Myrtle Street Avenue	Field Street to Joel Street	2	E	1,480	3,380	330	N/A B	
South Myrtle Street Avenue	Joel Street to West Seventh Street	2	E	1,480	1,898	185	N/A A	
South Myrtle Street Avenue	West Seventh Street to 10th Street	2	E	1,480	1,898	185	N/A A	
North Peninsula Avenue	US Coast Guard Reservation Station to Sapphire Road	2	E	960	2,911	284	B	
North Peninsula Avenue	Sapphire Road to Due East Street	2	E	960	2,911	284	B	
North Peninsula Avenue	Due East Street to Flagler Avenue	2	E	960	2,727	266	B	
South Peninsula Avenue	Flagler Avenue to Oakwood Avenue	2	E	960	-7,700	1,148	112	C A
South Peninsula Avenue	Oakwood Avenue to State Road A1A (South Causeway) / East 4th Avenue	2	E	960	-7,700	1,148	112	C A
North Riverside Drive	Wayne Avenue to State Road 44 (North Causeway) / Washington Street	2	E	1,200	4,197	410	B	
South Riverside Drive	State Road 44 (Canal Street) to Lytle Avenue	42	E	1,200	-6,200	5,120	500	C
South Riverside Drive	Lytle Avenue to 6th Street	2	E	1,200	N/A	N/A	N/A	
South Riverside Drive	6th Street to South City Limits	2	E	1,200	N/A	N/A	N/A	
6th Street	US Highway 1 / State Road 5A (South Dixie Freeway) to South Riverside Drive	2	E	N/A	N/A	N/A	N/A	
Sunset Drive	County Road 4093 (Turnbull Bay Road) to Conrad Drive	2	E	N/A	N/A	N/A	N/A	
10th Street	West City Limits to South Myrtle Street Avenue	4	E	960	7,596	742	D	
10th Street	South Myrtle Street Avenue to US Highway 1 / State Road 5 (South Dixie Freeway)	4	E	1,800	8,177	799	C	
East 26th Avenue	County Road A1A (South Atlantic Avenue) to County Road 4133 (Saxon Drive)	2	E	N/A	N/A	N/A	N/A	
Washington Avenue Street	West City Limits to Milford Place	2	E	960	N/A	N/A	N/A	
Washington Avenue Street	Milford Place to North Myrtle Avenue	2	E	960	N/A	N/A	N/A	
Washington Avenue Street	North Myrtle Avenue to US Highway 1 / State Road 5 (North Orange Street Dixie Freeway)	2	E	1,480	N/A	N/A	N/A	
Washington Avenue Street	US Highway 1 / State Road 5 (North Orange Street Dixie Freeway) to Sams Avenue	2	E	1,480	9,670	945	D	
Washington Avenue Street	Sams Avenue to State Road 44 (North Riverside Drive)	2	E	1,480	10,194	996	D	
Wayne Avenue	US Highway 1 / State Road 5 (North Dixie Freeway) to North Riverside Drive	2	E	960	4,276	418	C	
Williams Road (Colony Park Road)	State Road 44 to County Road 4118 (Pioneer Trail)	2	E	960	3,006	294	B	
East-West Connector "B"	South Airport Road Extension to South Williamson Road Extension	2	E	1,200	1,187	116	A	

Notes: N/A = Not Available

Future volumes were not available due to the fact that these streets are not part of the Existing County Model Network and the unavailability of historical count data. An effort will be made to add these streets to the County Network and to establish a monitoring program for future years.

Sources: Florida Department of Transportation, Volusia County Traffic Engineering, and Glattig Lopez Kercher Anglin, Inc. Southeast Volusia Regional Transportation Study, 2008

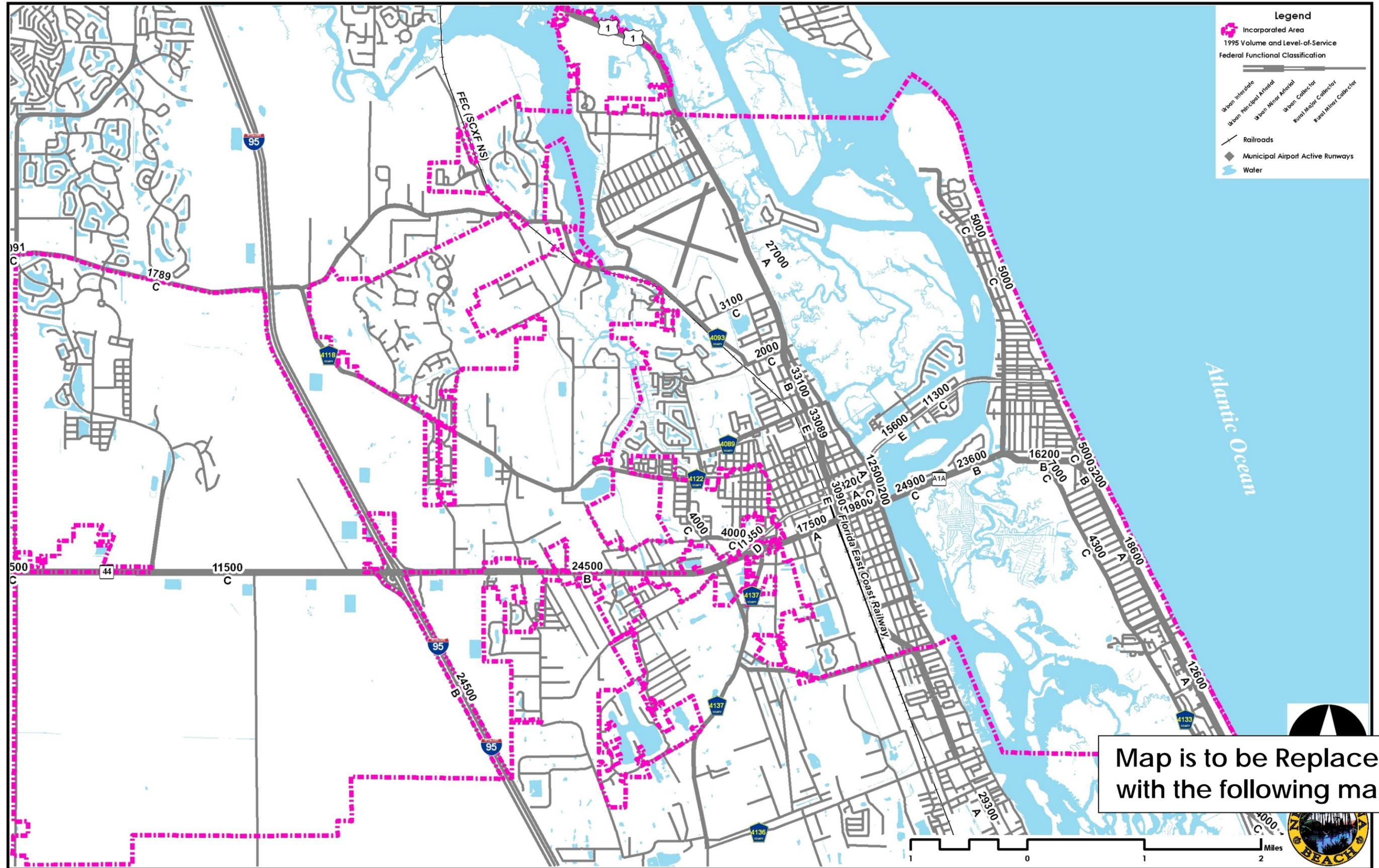
Table III-65 Future Traffic Conditions, 2010-2035

Street/Roadway	From-To Segment	Current Number of Lanes	Acceptable Level-of-Service	Peak Hour LOS Capacity	AA DT	Peak Hour Volume	Level-of-Service
State Highway System							
Interstate 95 / State Road 9	State Road 421 (Dunlawton Avenue) to State Road 44	4	C	5,350	93,835	9,018	F
Interstate 95 / State Road 9	State Road 44 to South City Limits	4	C	5,350	90,309	8,679	F
US Highway 1 / State Road 5 (North Dixie Freeway)	North City Limits to Industrial Park Drive Avenue	4	ED	5,870	42,000	6,824	F
US Highway 1 / State Road 5 (North Dixie Freeway)	Industrial Park Drive Avenue to County Road 4093 (Turnbull Bay Road)	4	D	3,390	49,500	6,293	F
US Highway 1 / State Road 5 (North Dixie Freeway)	County Road 4093 (Turnbull Bay Road) to County Road 4089 (Wayne Avenue)	4	D	3,390	49,500	4,385	F
US Highway 1 / State Road 5 (North Dixie Freeway)	County Road 4089 (Wayne Avenue) to Business 44 (Canal Street)	4	D	3,390	49,500	4,385	F
US Highway 1 / State Road 5 (South Dixie Freeway)	Business 44 (Canal Street) to State Road 44 (Lytle Avenue)	4	D	3,390	49,500	3,659	F
US Highway 1 / State Road 5 (South Dixie Freeway)	State Road 44 (Lytle Avenue) to 10th Street / South City Limits	4	D	3,390	49,500	3,659	F
State Road A1A (Lytle Avenue) / South Causeway	South Riverside Drive / State Road 44 (Live Oak Street) to South Peninsula Avenue	4	D	5,870	37,100	4,003	F
State Road 44 (Lytle Avenue) / East 3rd Avenue	South Peninsula Avenue to County Road 4133 (Saxon Drive)	4	ED	3,390	33,900	3,315	F
State Road 44 (Lytle Avenue) / East 3rd Avenue	County Road 4133 (Saxon Drive) to East 7th Avenue	4	ED	3,221	23,000	2,100	B
State Road 44	West City Limits to Airport Road	4	D	6,280	31,000	3,638	B
State Road 44	Airport Road to Williamson Boulevard	4	D	6,280	31,000	4,148	B
State Road 44	Williamson Boulevard to Interstate 95 / State Road 9	4	D	6,280	31,000	4,579	B
State Road 44	Interstate 95 / State Road 9 to Sugar Mill Drive	4	D	6,280	31,000	4,368	F
State Road 44	Sugar Mill Drive to Business 44 (Canal Street)	4	D	6,280	31,000	3,817	F
State Road 44	Business 44 (Canal Street) to South Myrtle Avenue	4	D	3,390	26,200	2,037	A
State Road A1A (Lytle Avenue) / South Causeway	South Myrtle Avenue to US Highway 1 / State Road 5 (South Dixie Freeway)	4	D	5,870	25,200	2,602	A
State Road A1A (Lytle Avenue) / South Causeway	US Highway 1 / State Road 5 (South Dixie Freeway) to South Riverside Drive / State Road 44 (Live Oak Street)	4	D	5,870	21,100	2,602	B
State Road 44 (North Causeway)	State Road 44 (North Riverside Drive) to Barracuda Boulevard	2	ED	1,560	21,493	946	F
State Road 44 (North Causeway)	Barracuda Boulevard to East End of Bridge	2	ED	1,560	15,500	946	C
Business 44 (Canal Street)	State Road 44 to County Road 4118 (Pioneer Trail)	2	D	2,391	13,400	771	B
Business 44 (Canal Street)	County Road 4118 (Pioneer Trail) to US Highway 1 / State Road 5 (Dixie Freeway)	2	D	2,391	13,400	1,025	B
County Highway System Roads							
County Road A1A (South Atlantic Avenue)	East 6th Avenue to East 27th Avenue	4	E	3,120	25,100	1,877	A
County Road A1A (South Atlantic Avenue)	East 27th Avenue to South City Limits	2	E	1,480	13,600	682	A
County Road 4089 (Enterprise Avenue)	County Road 4118 (Pioneer Trail) to County Road 4089 (Halleck Street)	2	E	1,200	0	0	
County Road 4089 (Halleck Street)	County Road 4089 (Enterprise Avenue) to County Road 4089 (Wayne Avenue)	2	E	960	13,658	1,334	E
County Road 4089 (Wayne Avenue)	County Road 4089 (Halleck Street) to US Highway 1 / State Road 5 (North Dixie Freeway)	2	E	960	2,794	273	C
County Road 4093 (Turnbull Bay Road)	County Road 4118 (Pioneer Trail) to Williams Road	2	E	960	6,315	617	D
County Road 4093 (Turnbull Bay Road)	Williams Road to United Drive	2	E	960	4,300	932	E
County Road 4093 (Turnbull Bay Road)	United Drive to Industrial Park Avenue	2	E	960	4,300	913	E
County Road 4093 (Turnbull Bay Road)	Industrial Park Avenue to Fairgreen Avenue	2	E	960	4,300	1,875	F
County Road 4093 (Turnbull Bay Road)	Fairgreen Avenue to US Highway 1 / State Road 5 (North Dixie Freeway)	2	E	960	4,300	1,875	C
County Road 4118 (Pioneer Trail)	Airport Road to Williamson Boulevard	2	E	1,350	15,017	1,467	F
County Road 4118 (Pioneer Trail)	Williamson Boulevard to County Road 4093 (Turnbull Bay Road)	2	E	1,350	13,280	1,297	E
County Road 4118 (Pioneer Trail)	County Road 4093 (Turnbull Bay Road) to Sugar Mill Drive	2	E	1,350	12,523	1,223	E
County Road 4118 (Pioneer Trail)	Sugar Mill Drive to Williams Road	2	E	1,350	11,718	1,145	E
County Road 4118 (Pioneer Trail)	Williams Road to Enterprise Avenue	2	E	1,350	9,402	919	D
County Road 4118 (Pioneer Trail)	Enterprise Avenue to Jungle Road	2	E	1,350	11,881	1,161	E
County Road 4118 (Pioneer Trail)	Jungle Road to Business 44 (Canal Street)	2	E	1,350	164	16	E
County Road 4133 (Saxon Drive)	State Road A1A (East 3rd Avenue) to East 21st Avenue	2	E	960	8,000	10,911	C
County Road 4133 (Saxon Drive)	East 21st Avenue to East 27th Avenue	2	E	960	5,000	10,911	C
County Road 4133 (Saxon Drive)	East 27th Avenue to South City Limits	2	E	960	5,000	10,911	C
County Road 4137 (Mission Drive)	County Road 4137 (Old Mission Road) to County Road 4137 (Old Mission Road) / Mission Drive	4	E	1,200	5,778	565	D
County Road 4137 (Old Mission Road)	State Road 44 to County Road 4137 (Mission Drive)	2	E	1,200	5,038	492	D
County Road 4137 (Old Mission Road)	County Road 4137 (Mission Drive) to Josephine Street	2	E	2,400	27,000	2,638	F
County Road 4137 (Old Mission Road)	Josephine Street to County Road 4136 (West Park Avenue)	2	E	1,200	14,646	1,431	F
North Airport Road	County Road 4118 (Pioneer Trail) to Luna Bella Lane	2	E	1,480	2,454	240	C
North Airport Road	Luna Bella Lane to State Road 44	2	E	1,480	1,688	165	C
North Glencoe Road	County Road 4118 (Pioneer Trail) to State Road 44	2	E	960	3,694	361	D
South Glencoe Road	State Road 44 to Paige Avenue	2	E	960	7,342	717	D
South Glencoe Road / Taylor Road	Paige Avenue to County Road 4137 (Old Mission Road)	2	E	960	6,948	679	D
Josephine Street	County Road 4137 (Old Mission Road) to Tatum Boulevard	4	E	1,800	11,271	1,101	D
Mission Drive	State Road 44 to County Road 4137 (Old Mission Road) / Mission Drive	4	E	2,400	22,817	2,229	E
Sugar Mill Drive	County Road 4118 (Pioneer Trail) to State Road 44	2	E	960	11,495	1,123	F
Williams Road	County Road 4093 (Turnbull Bay Road) to Mooneyham Drive	2	E	960	5,268	515	D
Williams Road	Mooneyham Drive to County Road 4118 (Pioneer Trail)	2	E	960	5,561	543	D
North Williamson Boulevard Extension	County Road 4118 (Pioneer Trail) to East-West Connector "A"	2	E	1,480	0	0	
North Williamson Boulevard Extension	East-West Connector "A" to State Road 44	2	E	1,480	0	0	
South Williamson Boulevard Extension	State Road 44 to East-West Connector "B"	4	E	2,964	0	0	
South Williamson Boulevard Extension	East-West Connector "B" to East-West Connector "C"	2	E	1,480	0	0	
South Williamson Boulevard Extension	East-West Connector "C" to State Road 442 (Indian River Boulevard) Extension	2	E	1,480	0	0	
City Streets System							
Business 44 (Canal Street)	US Highway 1 / State Road 5 (Dixie Freeway) to State Road 44 (Live Oak Street)	2	DE	1,560	9,500	4,239	A
State Road 44 (Live Oak Street)	State Road 44 (Lytle Avenue) to Business 44 (Canal Street)	2	E	960	0	0	
State Road 44 (Canal Street)	State Road 44 (Live Oak Street) to State Road 44 (North Riverside Drive)	2	DE	1,200	9,500	2,641	A
State Road 44 (South North Riverside Drive)	State Road 44 (North Causeway) to State Road 44 (Canal Street)	42	E	1,200	20,453	14,495	A
Conrad Drive	US Highway 1 / State Road 5A (South Dixie Freeway) to Sunset Drive	2	E	0	0	0	
Faulkner Street	Tanglewood Avenue to Wayne Avenue	2	E	0	0	0	
Faulkner Street	Wayne Avenue to State Road 44 (Canal Street)	2	E	0	0	0	
Flagler Avenue	East End of Bridge to Peninsula Avenue	2	E	1,184	6,714	656	C
Flagler Avenue	Peninsula Avenue to Ocean Atlantic Avenue	2	E	1,184	7,377	721	D
Industrial Park Drive (Columbia Street) Avenue	County Road 4093 (Turnbull Bay Road) to US Highway 1 / State Road 5 (North Dixie Freeway)	2	E	960	6,700	0	C
South Atlantic Avenue	Flagler Avenue to Oakwood Avenue	2	E	1,554	7,300	3,798	C
South Atlantic Avenue	Oakwood Avenue to Maralyn Avenue	2	E	1,554	7,300	3,798	C
South Atlantic Avenue	Maralyn Avenue to 4th Street	2	E	1,554	7,300	3,798	C
South Atlantic Avenue	4th Street to State Road A1A	2	E	1,554	7,300	3,798	C
North Myrtle Avenue	Washington Street to Business 44 (Canal Street)	2	E	1,480	5,863	572,815	C
South Myrtle Avenue	Business 44 (Canal Street) to State Road 44 (Lytle Avenue)	2	E	1,480	4,869	476	C
South Myrtle Street Avenue	State Road 44 (Lytle Avenue) to Field Street	2	E	1,480	4,174	408	N/A
South Myrtle Street Avenue	Field Street to Joel Street	2	E	1,480	4,174	408	N/A
South Myrtle Street Avenue	Joel Street to West 7th Street	2	E	1,480	3,761	367	N/A
South Myrtle Street Avenue	West 7th Street to 10th Street	2	E	1,480	3,761	367	N/A
North Peninsula Avenue	US Coast Guard Reservation Station to Sapphire Road	2	E	960	3,673	359	C
North Peninsula Avenue	Sapphire Road to Due East Street	2	E	960	3,577	349	C
North Peninsula Avenue	Due East Street to Flagler Avenue	2	E	960	3,779	369	D
South Peninsula Avenue	Flagler Avenue to Oakwood Avenue	2	E	960	11,200	8,279	C
South Peninsula Avenue	Oakwood Avenue to State Road A1A (South Causeway) / East 3rd Avenue	2	E	960	11,200	11,950	C
Pioneer Trail							
North Riverside Drive	Wayne Avenue to State Road 44 (North Causeway) / Washington Street	2	E	1,200	14,766	1,443	F
South Riverside Drive	State Road 44 (Canal Street) to Lytle Avenue	42	E	1,200	19,100	1,378	F
South Riverside Drive	Lytle Avenue to 6th Street	2	E	1,200	11,294	1103,4238	E
South Riverside Drive	6th Street to South City Limits	2	E	1,200	11,584	1131,7568	E
6th Street	US Highway 1 / State Road 5A (South Dixie Freeway) to South Riverside Drive	2	E	0	0	0	
Sunset Drive	County Road 4093 (Turnbull Bay Road) to Conrad Drive	2	E	0	0	0	
10th Street	West City Limits to South Myrtle Street Avenue	4	E	1,800	10,149	922	D
10th Street	South Myrtle Street Avenue to US Highway 1 / State Road 5 (South Dixie Freeway)	4	E	1,800	10,843	1,059	D
East 26th Avenue	County Road A1A (South Atlantic Avenue) to County Road 4133 (Saxon Drive)	2	E	0	0	0	
Washington Avenue Street	West City Limits to Milford Place	2	E	960	N/A	#VALUE!	N/A
Washington Avenue Street	Milford Place to North Myrtle Avenue	2	E	960	N/A	#VALUE!	N/A
Washington Avenue Street	North Myrtle Avenue to US Highway 1 / State Road 5 (North Dixie Freeway)	2	E	1,480	N/A	#VALUE!	N/A
Washington Avenue Street	US Highway 1 / State Road 5 (North Dixie Freeway) to Sams Avenue	2	E	1,480	N/A	#VALUE!	N/A
Washington Avenue Street	Sams Avenue to State Road 44 (North Riverside Drive)	2	E	1,480	N/A	#VALUE!	N/A
Wayne Avenue	US Highway 1 / State Road 5 (North Dixie Freeway) to North Riverside Drive	2	E	960	13,717	1,340	E
Williams Road (Colony Park Road)	State Road 44 to County Road 4118 (Pioneer Trail)	2	E	960	0	0	
East-West Connector "A"	North Airport Road to North Williamson Road Extension	2	E	0	0	0	
East-West Connector "B"	South Airport Road Extension to South Williamson Road Extension	2	E	1,200	0	0	

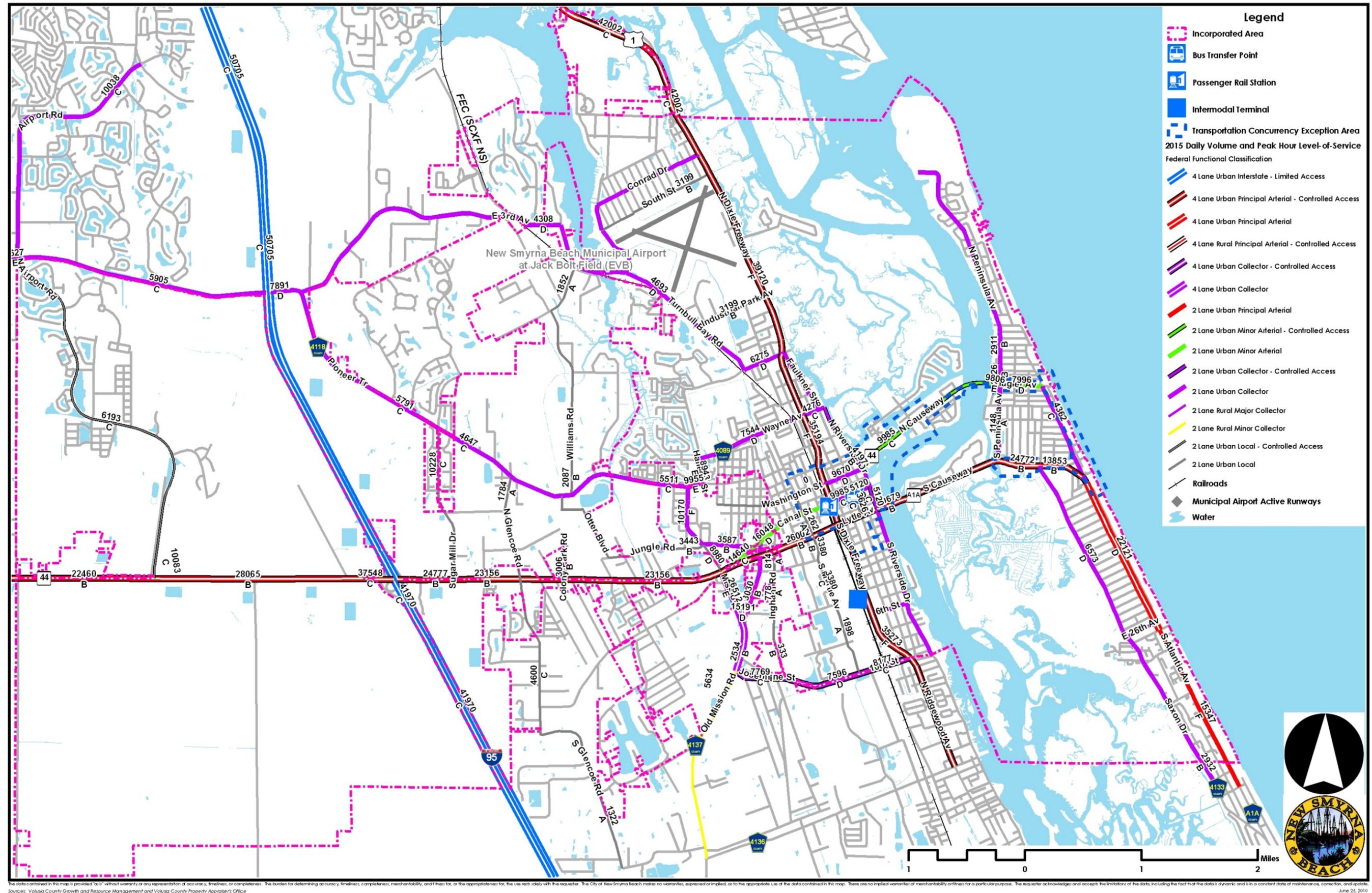
Notes: N/A = Not Available

Future volumes were not available due to the fact that these streets are not part of the Existing County Model Network and the unavailability of historical count data. An effort will be made to add these streets to the County Network and to establish a monitoring program for future years.

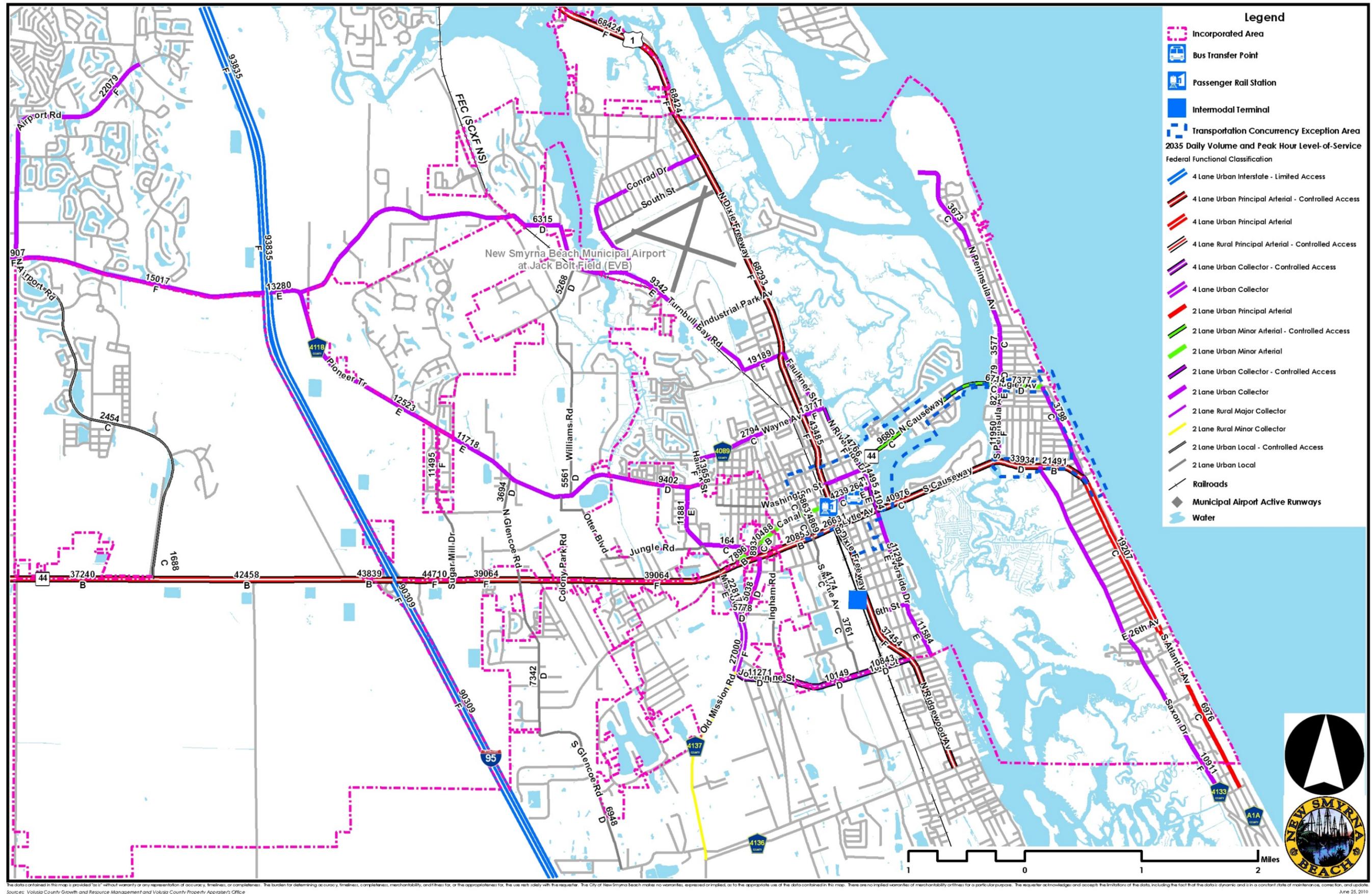
Sources: Florida Department of Transportation, Volusia County Traffic Engineering, Glattling Lopez Kercher Anglin, Inc., and Evaluation of Appropriate Densities for Multi-Family and Hotel Uses, Adley Associates, Inc., 1986 Volusia Transportation Planning Organization 2035 Long Range Transportation Plan, 2010



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GOALS, OBJECTIVES, AND POLICIES

MOBILITY / EFFICIENCY GOAL:

To provide for the development of a comprehensive transportation system for the movement of people and goods ~~which that~~ safely, conveniently, and efficiently serves the travel needs in the New Smyrna Beach area, while protecting established neighborhoods, environmentally sensitive areas, and archaeologically / historically significant sites. This goal will be met by initiating the objectives and policies stated herein, ~~which will be more specifically defined in future Comprehensive Plan updates as local needs (and the City's ability to meet those needs) become better established.~~

OBJECTIVE:

1. ~~Upon adoption of the Comprehensive Plan, To guide the City in developing the future transportation system, the Traffic Circulation~~Transportation Element shall establish the preferred transportation plan within the City and the New Smyrna Beach planning area that will guide the City in developing the future transportation system.

POLICIES:

- ~~a. Both the long range and short range elements of the Transportation Plan will be updated at established periodic intervals. The short range element will be updated yearly in conjunction with the Volusia County Five Year Transportation Improvement Program; and the long range element will be updated at least at five year intervals.~~
- a. Alleviate traffic congestion and reduce travel time between geographical areas within the New Smyrna Beach planning area. The projected traffic circulation system demand through the year 2035 will be met by undertaking the projects listed in Future Traffic Conditions Tables III-4 and III-5.
- b. Preserve corridors for future transportation system development.
 - ~~i. Designate a corridor alignment for a two lane collector road with a minimum 80-foot right of way as an extension of Airport Road from Pioneer Trail to State Road 44.~~
 - i. Designate a corridor alignment for a two (2) lane collector road with a minimum 80' to 110'-130' right-of-way approximately parallel to Interstate 95 along the present power line corridor extending from Pioneer Trail to State Road 44 south City limit.
 - ~~d.ii. Recommend to Volusia County and the Volusia County Metropolitan Transportation Planning Organization (MTPO) that County Road 4118 (Pioneer Trail) / Wallace Road be designated-planned as a four (4) lane facility from Airport Road to State Road 44. Alternate routes along this alignment may be considered so long as the impacts to the traffic network are equivalent.~~
 - e.iii. Designate corridor alignments connecting the Airport Road extension south of State Road 44 to an extension of the other proposed collector to create a potential network that could be expanded over Interstate 95 to connect to Park Avenue in Edgewater. Suggest this alignment for consideration as part of the MTPO long-range plan updates.
 - f.iv. Require all development within the Southeast Volusia Activity Center to access State Road 44 via a network of service roads.
- ~~b. Request FDOT and Volusia County to reevaluate the Transitional Area designation given to the following road segments and reclassify these segments as Urban Area:~~

_____	Road Name	_____	From	_____	To
_____	State Road 44	_____	Samsula	_____	Road
_____	Interstate 95	_____		_____	

Comprehensive Plan

City of New Smyrna Beach, Florida

Pioneer Trail — Samsula Road — Turnbull
Bay Road)

Turnbull Bay Road — Pioneer Trail) — US
Highway 1 (North Dixie Highway)

- c. Promote the use of alternative modes of transportation to reduce congestion and vehicle miles traveled (VMT) caused by single occupant vehicle (SOV) usage.
 - i. Work with the Volusia TPO to establish numerical indicators against which the achievement of the mobility goals of the community can be measured, such as modal split and automobile occupancy rates;
 - ii. Develop a safe usable pedestrian circulation system by providing sidewalks along all major streets adjacent to schools, between school sites and selected major streets, between school sites and parks or recreational areas, and add sidewalks, where necessary, to connect or complete either existing or proposed sidewalks in a manner that provides a complete pedestrian circulation system;
 - iii. Develop a safe bicycle and pedestrian transportation system with access to and within regional and community parks, all major public and private facilities, public transit, beach and river access areas, and other recreational facilities. Such provision should include bicycle parking at these locations, as well as at public, commercial, and service buildings, which is accessible;
 - iv. Include the construction of bicycle and pedestrian ways in conjunction with the construction, reconstruction, or changes in any state facilities, and assure that all transportation improvements address the needs of bicyclists and pedestrians and where bikeways and sidewalks are needed;
 - v. Incorporate public transit, bicycle, and pedestrian considerations in the review of all site plans and plats;
 - vi. Promote developments designed to encourage nonmotorized trips by providing efficient, convenient, and safe bicycle and pedestrian facilities;
 - vii. Increase information to the public regarding available transportation choices;
 - viii. Utilize Intelligent Transportation System technology applications to meet transportation system demands;
 - ix. Encourage the use of public transit; and
 - x. Create bicycle and pedestrian facilities, including multi-use trails and greenways, which tie the street system with greenway systems and major activity centers. Consider off-roadway travel corridors, such as drainage canal, railroad, and utility right-of-way property, as potential corridors.
- d. Continue to monitor and support the work of the Amtrak® / Florida East Coast Railway Corridor Project to re-establish intercity passenger rail service from New York to Florida's east coast communities with the objective of additional services in the corridor between Jacksonville and Miami, Florida.
- e. Pursue Amtrak® for a commitment of a stop on the proposed re-establishment of intercity passenger rail service on the Florida East Coast Railway.
- f. Maximize the useful life of existing facilities of the transportation system.

OBJECTIVE:

- 2. ~~By 1996, New Smyrna Beach shall~~ To implement programs to ensure that the long-range Transportation Plan supports, and is consistent with, the current and Future Land Use Plans of New Smyrna Beach.

Comprehensive Plan

City of New Smyrna Beach, Florida

POLICIES:

- a. ~~The New Smyrna Beach Coordinate the~~ Future Land Use Plan and Transportation Plan ~~will be coordinated~~ to encourage the location of high traffic-generating development adjacent to the arterial and collector network.
- b. ~~The New Smyrna Beach Coordinate the~~ Future Land Use Plan and Transportation Plan ~~will be coordinated~~ to minimize the disruptions of commercial and residential neighborhoods. Toward this end, the City has established a policy of not widening several roadways that are designated as constrained, scenic, or historic facilities.
- c. Coordinate the Right-of-way needs ~~will be coordinated~~ with the Future Land Use Plan ~~and, as identified~~ as part of the long-range Transportation Plan.
- d. Building setbacks and landscaping criteria will be considered in the location of new transportation facilities and the improvement of existing ones.
- e. The roadway network on the beachside of the Indian River will be planned and constructed in such a way as to encourage the preservation of the existing beach area community, and to discourage development of high-intensity land uses. Toward this end, the City has established a policy of not widening roadway facilities on the beach side of the river north of East Third 3rd Avenue.

OBJECTIVE:

3. ~~Upon adoption, New Smyrna Beach will~~ To implement a Transportation Plan, which is consistent with county and state transportation plans, to the extent required by law.

POLICIES:

- a. ~~New Smyrna Beach will c~~ Coordinate the planning and programming of local transportation improvements with Volusia County, FDOT, Volusia TPO, and the Volusia Council of Governments (VCOG).
- b. ~~Adopt the~~ FDOT Five (5) Year Work Program and Volusia County Five (5) Year Work Road Program ~~will be adopted~~ as part of the short-range element of the New Smyrna Beach Transportation Plan.
- c. Update both the long-range and short-range elements of the Transportation Plan at established periodic intervals. The short-range element will be updated yearly in conjunction with the Volusia TPO Year Transportation Improvement Program (TIP); and the long-range element will be updated at least at five (5) year intervals.
- ~~e.d. New Smyrna Beach will a~~ Actively participate in the Volusia County ~~Area Transportation Study~~ TPO process, and with the Volusia Council of Governments ~~Intergovernmental Coordinating Committee (ICC).~~
- ~~d.e. Provide A~~ all affected agencies ~~will be provided~~ with copies of the New Smyrna Beach Transportation Plan.
- ~~e.f. Keep on file C~~ copies of the current plans of any agencies affecting transportation within the New Smyrna Beach planning area ~~will be kept on file~~ within the City Planning and Zoning Department.
- ~~f.g. Request R~~ reviews ~~will be requested~~ from other agencies, which may be affected by new development proposals.

OBJECTIVE:

4. To maintain and create transportation facilities that operate in a safe and efficient manner while maintaining an aesthetically pleasing character.

POLICIES:

- a. Specific design and planning criteria for transportation facilities should meet or exceed those criteria published on the federal, state, and local level. These include the Florida

Comprehensive Plan

City of New Smyrna Beach, Florida

Department of Transportation *Manual of Uniform Minimum Standards for Design, Construction and Maintenance of Streets and Highways*; and the American Association of State Highway and Transportation Engineers *Policy on Geometric Design of Highways and Streets, 5th Edition, 1984/2002*.

- b. The minimum acceptable roadway operating conditions during peak hour will be LOS "C" on the Florida Interstate Highway System, LOS "D" on freeways and principal arterial roadways, other state highways, and LOS "E" on minor arterials, collectors, local roadways, and all facilities located within a central business district. The central business districts shall be defined as follows:

Mainland: That area designated as Mixed Use on the Future Land Use Map including roads adjacent to areas designated as Mixed Use.

Beachside: The area bounded by an east west extension of Florida Street on the north and Jessamine Street on the south and the Indian River and Atlantic Ocean as west and east boundaries, respectively.

- c. ~~New Smyrna Beach shall coordinate with the~~ FDOT, the Volusia MPO, Volusia County, and the East Central Florida Regional Planning Council to designate the following facilities as constrained, ~~or scenic, or historic~~:

Road Name	From	To
Canal Street	US Highway 1	Riverside Drive
Flagler Avenue	Peninsula Avenue	Atlantic Avenue
Riverside Drive	Wayne Avenue	South City Limit
Faulkner Street	Tanglewood Avenue	Canal Street
Washington Street	US Highway 1	Riverside Drive
Saxon Drive	East 3 rd Avenue	South City Limit
State Road 44 (Lytle Avenue)	US Highway 1	Riverside Drive <u>Live Oak Street</u>
State Road A1A (South Causeway)	Riverside Drive	Saxon Drive
State Road A1A	<u>South Causeway / East 3rd Third / South Atlantic Avenues</u>	Saxon Drive <u>Live Oak Street</u> South City Limit

- d. On City roads designated as constrained, ~~or scenic, or historic~~ facilities, New Smyrna Beach shall not schedule improvements to increase the number of through lanes. The City shall monitor traffic volumes and operating conditions on designated constrained, ~~or scenic, or historic~~ facilities and at the time the level-of-service on a constrained, ~~or scenic, or historic~~ facility falls below the minimum acceptable level-of-service for that facility, the City may not allow further significant development of the facility unless acceptable, mitigative measures to the adverse traffic impact of the development are provided.

~~For those constrained facilities operating at or below the minimum acceptable level of service in 1991, New Smyrna Beach will negotiate with the FDOT to allow development along those facilities which will not increase peak hour traffic volumes by more than 20 percent of the 1991 traffic count unless acceptable mitigative measures to the adverse traffic impact of the development are provided. Until such time as an agreement is reached with the FDOT, the City will not allow additional development which exceeds the acceptable level of service.~~

- e. ~~New Smyrna Beach shall coordinate with the~~ FDOT, the Volusia MPO, and Volusia County, and the East Central Florida Regional Planning Council to designate the following thoroughfares as backlogged. New Smyrna Beach will also negotiate with

Comprehensive Plan

City of New Smyrna Beach, Florida

~~the FDOT to allow development to occur along the following thoroughfares which will not increase peak-hour traffic volumes by more than 20 percent above 1991 traffic counts unless acceptable mitigative measures are provided which will result in acceptable operating levels of service along these corridors. Until such time as an agreement is reached with the FDOT, the City will not allow additional development which exceeds the acceptable level of service, not schedule improvements to increase the number of through lanes on state or county maintained highways and roads designated as constrained, scenic, or historic.~~

_____	Road Name	From	To
_____	US Highway 1	Wayne Avenue	Lytle Avenue
_____	North Causeway	Riverside Drive	North Peninsula Avenue

~~f.e. Special efforts will be made to w~~Work with the state and Volusia eCounty to develop access management plans that maximize roadway capacity and safety by minimizing~~by minimizing~~ median and curb cuts to effectively manage access to US Highway 1, State Road A1A, State Road 44, and County Road A1A, Saxon Drive, and Lytle Avenue, as dictated by adjacent land uses.

~~g.f. The City will actively p~~Pursue improving the capacity of the existing traffic signal control systems, and maximizing the capacity of any new signal control systems, through the use of traffic signal interconnection and/or coordination where appropriate. Other Transportation System Management (TSM) techniques will be explored to improve the capacity of congested roadways.

~~h.g. Prior to 1994, New Smyrna Beach shall~~ Continue to coordinate with the Volusia MTPo to develop a bicycle facilities plan.

~~h.h. Enforce B~~Building and landscape setbacks ~~will be enforced~~ to preserve rights-of-way for needed roadway expansion.

~~j.i. Observe E~~Effective street signing procedures ~~will be observed~~, in accordance with criteria outlined in the *Manual of Uniform Traffic Control Devices*.

~~k.j. The City will m~~Monitor ~~accident-crash~~ data for major arterial thoroughfares.

~~h.k. Use S~~state grants, transportation impact fees, proportionate share agreements, and special assessments, ~~will be used~~ when available, to upgrade deficient facilities.

~~m.l. Prior to 1993, New Smyrna Beach shall d~~Develop regulations for the safe and efficient movement of pedestrians within all new development proposals and the redevelopment of sites.

~~n.m. By October 1991, New Smyrna Beach~~Establish a regular traffic counting program on the City major roadways, in cooperation with Volusia County and the FDOT, ~~shall establish a regular traffic counting program on the City major roadways~~. This shall include those streets designated as constrained, or scenic, or historic. The purpose of this program will be to adequately monitor traffic conditions so that the City can anticipate future capacity improvements required on the City street network.

~~e.n. By October 1991, New Smyrna Beach will w~~Work with Volusia County and the FDOT to establish a traffic operating conditions monitoring program for the major state roads running through the City (US Highway 1, State Road A1A, and State Road 44). This program will include travel time studies to determine actual peak-period operating levels-of-service. The purpose of these studies will be to accurately determine operating levels-of-service on these roadways; in addition, these studies will attempt to determine how much of the traffic volume increases on these state roadways is attributable to new development activity approved within the City of New Smyrna Beach.

Comprehensive Plan

City of New Smyrna Beach, Florida

- ~~o. The City hereby implement the adopted a long-term transportation concurrency management system that shall be implemented to maintain adopted levels-of-service, on backlogged roadway facilities. Backlogged facilities are defined as roadway links that are forecast to operate below the adopted level of service standard during the pending five (5) year planning period, and are scheduled in the 10-year capital improvements program to be improved by the responsible jurisdiction under the uniform classification system so that the adopted level of service standard will be met within the 10-year planning period (Ord. 70-05).~~
- p. Establish a Transportation Concurrency Exception Area (TCEA) coterminous with the Community Redevelopment Agency area to promote urban infill and redevelopment where opportunities for expansion or addition of new transportation corridors are limited. Development/redevelopment projects within the TCEA shall address their transportation impacts and mitigation through alternative methods, which will be examined and considered instead of the typical roadway capacity projects, consistent with the following strategies:
- i. Prepare a plan by November 1, 2012, to support and fund mobility within the TCEA consistant with §163.3180(5)(a), Florida Statutes;
 - ii. Mitigating measure(s) shall advance the goals of adopted area or subject matter plans, such as community redevelopment agency master plans, neighborhood plans, corridor plans, bicycle and pedestrian plans, or transit development plans;
 - iii. Potential alternative mitigating measure(s) may include but not be limited to the following: operational and/or capital enhancements for Votran, participation in a transit pass program for employees, van pooling, or ride sharing programs, pedestrian improvements, bus shelter / stop improvements, bicycle improvements, lighting improvements, connectivity improvements, roadway/Intersection Improvements, streetscape improvements, enhancements to a traffic management system, creating parallel travel ways connecting adjacent development, financial contributions to implement actions consistent with this policy, and any other measures which increase mobility options and intermodal connections as may be approved by the City; and
 - iv. Any development or redevelopment project within the TCEA that impacts roadway segments or intersections outside the TCEA shall be subject to concurrency requirements for those impacts outside the TCEA.

OBJECTIVE:

5. To minimize the public sector capital outlay in the construction of new transportation facilities and the improvement of existing facilities.

POLICIES:

- a. Reserve and/or acquire Rights-of-way required for future roadway widenings or new construction will be reserved and/or acquired as early as reasonably possible; and require the donation-dedication of the necessary right-of-way will be encouraged in the development approval process.
- ~~b. The City will a~~ Adopt and enforce ordinances requiring new development to provide needed rights-of-way, and develop an acquisition and funding program for rights-of-way to be acquired by the City.
- c. Require N new development ~~will be required~~ to provide facilities and/or pay its fair share toward transportation improvements.
- d. Require D developers ~~will be required~~ to provide paved roads, lighting, street trees, and sidewalks within all new developments.
- e. Monitor N new development patterns ~~will be monitored~~, and revise the Transportation

Comprehensive Plan

City of New Smyrna Beach, Florida

Plan ~~revised~~ in a timely manner, as necessary. This may entail revising the schedule, and/or the content, of the improvement program at irregular intervals.

- f. Accept maintenance responsibility for any roads only with a concurrent shift in adequate maintenance revenues.

ENVIRONMENT GOAL:

Preserve and enhance the City of New Smyrna Beach's unique and natural environmental features by protecting the integrity of air, land, water, energy, cultural, and aesthetic resources.

OBJECTIVE:

- 1. To protect and preserve the character of the existing New Smyrna Beach central business districts and beachside areas, areas of historic and archaeological significance, and environmentally sensitive areas, while providing for safe traffic circulation.

POLICIES:

- a. Several City and state roadways have been designated constrained, and/or scenic, or historic facilities and will not be widened as provided in Policy 4.c.
- b. Consider Pedestrian and bike-bicycle travel and safety considerations will be considered in conjunction with vehicle operating efficiency.
- c. Vigorouslly discourage Rroadway construction that impacts areas of historic-historic, archaeological, and/or natural significance will be vigorously discouraged.
- d. Require Mmitigation measures for roadway construction, which has a negative impact on historically, archaeologically, and/or environmentally sensitive areas, such as noise and water runoff, will be required.
- e. Initiate and support projects, programs, and services that conserve energy and reduce greenhouse gases.
 - i. Examine the Land Development Regulations to identify inconsistencies with the Smart Growth Principles and determine if separated land uses, low-density, large setbacks, parking regulations, and street design standards should be changed to reduce greenhouse gases;
 - ii. Require a bicycle parking ratio based on the number of automobile parking spaces for new and redevelopment projects; and
 - iii. Provide parking reductions for compact vehicles and motorcycle/scooter parking.
- f. Undertake and promote energy conservation programs in transportation.
- g. New or reconstructed roadways shall be designed to prevent and control soil erosion, minimize clearing and grubbing operations, minimize stormwater runoff, and avoid unnecessary changes in drainage patterns.
- h. Encourage pedestrian and transit orientated land development designs that accommodate pedestrians, bicycles, and public transit by providing the community with travel alternatives other than the automobile.
 - i. Reduce large front yard setbacks;
 - ii. Provide pedestrian and bicycle facilities, including sidewalks, multi-use trails, bicycle racks or lockers;
 - iii. Accommodate public transit with route extensions, bus stops and shelters, turnarounds, and taller overhangs; and
 - iv. Place parking to the side or rear of building.

SAFETY GOAL:

Promote and implement transportation system improvements for all modes that minimize the occurrence

of potential crashes that might result in the loss of health, life, and property.

OBJECTIVE:

1. Develop a Transportation Plan that gives priority consideration to transportation system improvements that prevent crashes, injuries, and minimize losses.

POLICIES:

- a. Properly maintain the various types of transportation facilities, including streets, intersections, buses, sidewalks, multi-use trails, transfer facilities, intermodal terminals, etc.
- b. Upgrade the street system to minimum width standards based on an overall system plan.
- c. Focus on high crash areas for transportation improvements.
- d. Minimize conflicts between and within roadways, public transit, rail, bicycle, and pedestrian facilities.

OBJECTIVE:

- 7-2. To Maintain an adopted by 1995 a roadway plan and evacuation routes, which provide for safe and efficient evacuation of the population in emergency situations.

POLICY:

An emergency evacuation plan consistent with state and local guidelines will be ~~developed and adopted~~ and maintained by the City of New Smyrna Beach.

ECONOMIC DEVELOPMENT GOAL:

Promote the balanced and sustained economic growth through the efficient movement of goods and people in a safe, energy efficient, and environmentally sound manner.

OBJECTIVE:

1. To give priority consideration to transportation projects and systems that facilitate local job creation and retention.

POLICIES:

- a. Promote efficient land-use patterns, appropriate commercial and industrial development locations, and redevelopment opportunities.
- b. Address truck accessibility and maneuverability to and within commercial and industrial areas.
- c. Collaborate on the *Volusia County Truck & Freight Study* and participate on the Goods Movement Advisory Committee (GMAC)
- d. Give consideration of the true costs and benefits of providing the transportation facilities necessary to move goods.

ACCESSIBILITY GOAL:

Develop a transportation system that is reliable and accessible to all potential users.

OBJECTIVE:

1. To create a physical environment that supports access to ~~mass~~ public transit.

POLICIES:

- a. Improve accessibility to bus stops through the extension of sidewalks and the removal of architectural barriers in both new development and reconstruction projects.
- b. Improve the amenities available at bus stops through provision of benches, landscaping, shade trees, and shelters. Locations for improvements shall be coordinated with Votran.

Comprehensive Plan

City of New Smyrna Beach, Florida

- c. Assist Votran in ~~developing~~ improving ~~a~~ the transfer site in the Canal Street ~~area~~ central business district.
- d. Within existing and potential transit corridors, geometric design of intersections and driveways to major activity centers will be adequate to service standard transit vehicles.
- e. Assist Votran in identifying options for park-and-ride lots supporting express bus service.
- f. Work with Votran to establish bus service in higher-density areas and encourage higher-density development and redevelopment in support of ~~mass~~ public transit.
- g. Work with the Volusia MTPo to establish numerical indicators against which the achievement of the accessibility goals of the community can be measured, such as modal split and annual transit trips per capita.
- h. Consider the needs and requirements of system users, specifically transportation disadvantaged persons.
- i. Follow the Votran Transit Development Design Guidelines for bus stops, bus shelters, new developments, and redevelopment of sites.

OBJECTIVE:

- ~~9-2.~~ To ~~§~~ support the provision of ~~mass~~ public transit service and its coordination with other modes of transportation.

POLICIES:

- a. Continue to support transit service at the policy and technical levels of the ~~M~~ I ~~P~~ O.
- b. Assist Votran in the distribution of schedules and literature about transit services by making this information available at the various City facilities.
- ~~e.~~ Assist Votran in generating public involvement by hosting meetings, assisting in surveys and other similar efforts.