

**CHAPTER 2**  
**TRANSPORTATION ELEMENT**

## CHAPTER 2

### TRANSPORTATION ELEMENT

#### A. INTRODUCTION

The purpose of the Transportation Element is to establish policies to guide the delivery of multi-modal transportation services, including performance standards, future expansions, and plan coordination. The element coordinates local transportation planning with the long range transportation plan of the Volusia Transportation Planning Organization ("TPO") and the mobility strategies of local municipalities. The multimodal system is intended to provide a choice of modes such as convenient pedestrian paths, bicycle facility networks, and connections to transit, rather than focus solely on building new roads. From the county's perspective, the transportation system should work in conjunction with the local municipalities to provide a county-wide mobility network, with consideration given to both transportation policies and land use development policies. The transportation network is identified to maintain adequate service levels to the public based on estimates of future development and population growth.

Chapter 163, Part II of the Florida Statutes requires that a local government that has all or part of its jurisdiction included within the urbanized area of the Volusia TPO, prepare and adopt a transportation element consistent with the provisions of the Chapter. This element addresses Traffic Circulation, Mass Transit, Ports, Aviation and Related Facilities, along with recreational traffic such as scenic roadways and trails. Since 2011, the mandate for transportation concurrency has been delegated to the local government level and made optional. The Volusia County Council has chosen to retain transportation concurrency.

The Transportation Element is an important part of the policy framework and implementation of other Comprehensive Plan elements. The intrinsic relationship between the use of land and the need for access to the property makes the transportation system one of the primary factors in projecting future growth and development in Volusia County. The need to coordinate local decisions on the appropriate use of land with the infrastructure necessary for access and development requires common goals and objectives. The element is consistent with the plans and programs of the TPO, the Florida Transportation Plan, and the Florida Department of Transportation ("FDOT") work program.

#### B. THOROUGHFARE ROADWAY SYSTEM

The Thoroughfare Roadway System depicted in Figure 2-1 is based on the functional classification criteria established by the Federal Highway Administration. The Thoroughfare Roadway System is generally defined as:

- Arterial Roads are those roads that serve longer trip lengths and major travel purposes to or through urban areas; and
- Collector Roads are those roads that serve moderate trip lengths and minor travel purposes, provide access to the Arterial Road system, and connect concentrated land uses.

All other roads are considered local roads which serve to facilitate travel between home, work, entertainment, shopping, and connect to the nearest road on the Thoroughfare Roadway System (Arterials and Collectors). Volusia County Council approved roadway design standards in 2002 that consider the full spectrum of users' needs, including sidewalks, landscaping, bike lanes, and consideration of rural versus urban sections. The county continues to update its standards to be consistent with FDOT policies.

The Thoroughfare Roadway System was analyzed and evaluated looking at the future number of through lanes (Figure 2-3) and Level of Service (Figure 2-4) of these roadways. Figures 2-1, 2-2, and 2-3 show the planned future roadway system of Volusia County and how it is expected to operate. Level of service standards are defined for the Volusia County roadway system. The County's adopted Thoroughfare Road Map is the basis for the preservation of roadway rights-of-way within the County. This map is a long-range planning tool, which identifies the network of roadways required to meet future traffic demands. The Thoroughfare Road Map serves as the premise for future roadway system expansions, but it is not entirely cost-feasible at this time. The map should be interpreted as a map of roadways that the Volusia County Council previously adopted. The network will be incrementally improved based on demonstrated need and financial resource availability. It is important to note that not all roadways on the Thoroughfare Roadway System map are County-owned. The Thoroughfare Roadway System also includes roads that are maintained by FDOT. Roadways not owned by the County are not eligible for impact fee-based improvements or credits.

### C. THOROUGHFARE OVERLAY ZONE

Commercial development typically tends to expand along arterial transportation corridors as growth increases within the vicinity of and along roadway corridors. Auto-dependent development leads to an increase in vehicular traffic, eventually compromising the corridor's ability to function at the adopted Level of Service ("LOS") standard. Congestion then intensifies until further development activity is halted or the roadway capacity is increased to accommodate additional vehicles and/or transportation modes. Eventually, conflicts result between the corridor's function and its ability to move high volumes of people and traffic through an area.

Unplanned, haphazard commercial growth also changes the public's image of the transportation corridor. What was once considered an attractive tree-lined corridor gradually and often rapidly begins to exhibit characteristics of uncontrolled strip commercial development. Once this pattern has been initiated, it is difficult to establish alternative types of development (e.g., pedestrian oriented mixed use) along these corridors. It is for these reasons that the County has applied additional regulations for its arterial transportation corridors so that they can continue to operate at their adopted LOS, do not become overdeveloped with significant amounts of auto-dependent strip commercial development, maintain safe, controlled access with adequate separation, and accommodate a variety of travel modes and users.

The objectives of the regulations are to maintain traffic flow, facilitate transportation mobility alternatives, establish a high standard of quality for development, and create a more attractive streetscape. These objectives were best achieved by establishing design standards for these corridors, including access management, landscape buffers, maintenance of natural vegetation, maintenance of natural vegetation, sidewalks, and aesthetically pleasing building and sign regulations.

The standards were incorporated into the County Zoning Ordinance as an overlay zone on several arterials (State Road 40, US 92, State Road 44, US 17, US 17-92, State Road 15A, and West Volusia Beltway). The overlay zone has been applied to the County Zoning maps and includes the additional requirements along these arterial roads in addition to those of the underlying zoning classification.

#### D. PUBLIC TRANSPORTATION

Public transportation is a necessary service provided as a cost-effective alternative to the automobile. In Volusia County, public transportation is provided by VOTRAN through fixed route and flex route service, paratransit services as required under the Americans with Disabilities Act (“ADA”), peak-hour connecting bus service to the DeBary SunRail Station, and a commuter van pool program. VOTRAN also functions as the Community Transportation Coordinator (“CTC”), providing services under the Transportation Disadvantaged Program, rural trips, and agency-sponsored trips.

As a recipient of State Public Transit Block Grant Funds, FDOT requires a major update of the system’s Transit Development Plan (“TDP”) every five years to ensure that the provision of public transportation is consistent with the mobility needs of the local communities. The latest update is intended to provide a 10-year plan for transit and mobility needs that incorporates cost and revenue projections, community transit goals, objectives, and policies. As required by state law, the plan also specifically addresses potential enhancements to productivity and performance that would increase fare box recovery.

The TDP includes goals, objectives, and initiatives, many of which are ongoing and operational or capital-related. Important planning recommendations include: (1) continue to pursue additional funding; (2) coordinate with local agencies to ensure that all bus stops are ADA accessible; (3) review and strengthen policies that maximize pedestrian safety and access to transit stops; (4) coordinate with local agencies concerning opportunities to improve connectivity of public transportation to other modes of transportation, including rail service; and (5) improve local knowledge of the benefits of transit-friendly land uses and land use patterns consistent with the Transit Development Design Guidelines. These recommendations are significant since VOTRAN operates countywide among sixteen (16) municipalities, making intergovernmental coordination vital to the success of public transportation.

#### E. PORTS AND AVIATION

The Daytona Beach International Airport and the Ponce de Leon Inlet & Port District are aviation/port facilities managed by Volusia County government. A description of each follows.

##### *Ponce de Leon Port Authority*

The County of Volusia-Ponce de Leon Inlet & Port District is a special taxing district on the eastern half of the county that functions primarily as the “Local Sponsor” for the Federal channel project at Ponce de Leon Inlet. In this capacity, the Port District provides locally derived ad valorem tax revenue to the U.S. Army Corps of Engineers in support of channel works aimed at maintaining the Inlet channel as a safe navigable access from the Atlantic Ocean to the Intracoastal Waterway.

The Inlet & Port District supports implementation of the Ponce de Leon Inlet Management Plan. The inlet management plan, formally approved and adopted by the State of Florida, provides inlet

channel management guidance as related to the littoral system of beaches and rivers in the vicinity of Ponce de Leon Inlet. The Inlet & Port District also provides support for a variety of coastal zone management efforts throughout east Volusia County including beach erosion control, estuarine habitat restoration, artificial reef construction, public waterway channel dredging, derelict vessel removal, coastal land acquisition and coastal and waterway park facility development.

#### *Daytona Beach International Airport*

Daytona Beach International Airport (“DAB”) is not only a major transportation hub in Volusia County, but it is also a significant economic asset. Since 2017, the entire county-owned airport property has been placed under a uniform future land use designation and zoning classification in order to plan for and facilitate future airport improvements and related economic development. These entitlements, in conjunction with the DAB Master Plan, help to guide capital improvement programming for facilities, property development, and transportation needs. The airport property presents a tremendous opportunity given its size, accessibility, and location to accommodate future economic development related to aeronautical uses. It is anticipated that future development of this nature would be able to work synergistically with the existing DAB facilities and aviation-related businesses, as well as with the technological infrastructure and expertise at Embry-Riddle Aeronautical University. The County is in the process of updating DAB. The Master Plan, as required by the Federal Aviation Authority (“FAA”), contains projections on the number of passengers expected to use the terminal over time, expansion of airport facilities needed to meet demand, evaluation of existing facilities, property management, an environmental impact assessment, and other information required by state and federal regulations. The adopted Master Plan offers the opportunity to capitalize on and maintain the airport as an important economic asset for the County into the future, as outlined in the Volusia County Dynamic Master Plan.

The continued improvement and development of DAB and its property is governed by policies in the Transportation Element, Future Land Use Element, and Intergovernmental Coordination Element. The location of the Airport within the City of Daytona Beach makes intergovernmental cooperation crucial. The County and the City have entered into an interlocal agreement and memorandum of understanding that together govern permitting authority, infrastructure responsibility, levels of service, development standards, and mitigation of impacts to adjacent properties.

#### F. RAIL

FDOT, in cooperation with local governments in Orange, Seminole, Volusia and Osceola counties and the federal government, developed a commuter rail transit system called SunRail to run along a 61-mile stretch of existing rail freight tracks in the four-county area. Phase 1 currently operates along a 31-mile segment serving twelve stations, linking DeBary to Orlando. Phase 2 extends the line south to Poinciana. A new station in DeLand is planned but not currently funded. The proposed DeLand stop will provide transit access to most of west Volusia County, as well as Lake County. In addition, the area immediately surrounding the station provides a unique opportunity for transit-oriented development. Volusia County has updated its Comprehensive Plan to include the SunRail Activity Center as a Future Land Use Designation.

#### G. FREIGHT MOVEMENT

In 2015, FDOT completed the Florida Transportation Plan, which places a high priority on

connecting Florida regions to one another in a variety of ways—highway, rail, water, and air. The dependability of the transportation system is important to Florida’s economy and residents. Traffic congestion negatively affects freight activity and the state’s economic competitiveness. Ultimately, the goal is to increase the efficiency of the transportation system for freight moving to, through, and from Florida. Truck routes are an important component of GPS navigation services utilized by the freight industry to find the most efficient path between factories, distribution points, and destinations.

Volusia County emphasizes the need to maintain a healthy transportation system to move people and goods. Because today’s economy is so dependent on trucks for delivery of goods, services and other vital functions, it is important to develop a safe and efficient means for trucks to share the roads with personal vehicles. The Volusia County Freight Movement Goods Study was completed in 2008 to develop a truck route map, a model ordinance, and recommendation for time-of-day restrictions for certain vehicles. The study was coordinated with the trucking industry, TPO, Volusia county cities, and FDOT. Truck route designation criteria were developed based on roadway characteristics. The completed draft truck route map consists of most state and county thoroughfares (with the exception of those that have characteristics resembling local roads) and some city thoroughfares.

The County truck route map has not officially been adopted, although it has been requested by Google and other on-line navigation services. To fully adopt the truck route map, it must first be coordinated with the cities for consistency with local restrictions on delivery vehicles and routes. An ordinance and/or interlocal agreement between Volusia County and the cities is needed to implement the routes and any route restrictions. A comprehensive county-wide truck route network will further the County’s broad goal of “Economic and Financial Vitality,” as stated in the Dynamic Master Plan.

#### H. BICYCLE AND PEDESTRIAN

Volusia County recognizes the importance of providing pedestrian and bicycle facilities as a means of expanding the travel opportunities for residents who, either by choice or by circumstance, do not use an automobile. Volusia County supports the intent of federal and state programs that help support an integrated, intermodal transportation system. Volusia County continues to build sidewalks and trails in needed areas through its sidewalk construction program. Additionally, the County utilizes FDOT design standards on the Thoroughfare Road System. Volusia County continues to promote the safe use of bicycle facilities by educating users about Florida traffic laws. Safety, promotion, education, and injury prevention goals are emphasized through involvement in the Volusia County Community-Wide Traffic Safety Teams, the Volusia County Crossing Guard Committee, and the Volusia TPO Bicycle and Pedestrian Committee (“BPAC”). These organizations cultivate partnerships that assist with community outreach, public awareness, and safety programs.

BPAC focuses on providing improvements for pedestrians and bicyclists such as building sidewalks, bike lanes and paths, installing safe pedestrian crossings, addressing ADA issues and addressing safety issues through coordinated planning efforts. The committee prioritizes bicycle and pedestrian projects based on approved criteria and continues to research and identify additional funding sources and opportunities. Volusia County continues to implement programs to meet the intent of this objective.

## I. TRAILS AND SCENIC CORRIDORS

There is an ongoing commitment within the Volusia County community to work together in the development of a cohesive network of sidewalks, paths and trails. The County allocates funds for the construction of trails in the County's Trails Master Plan. The Trails Master Plan envisions a network of trails and bicycle/pedestrian facilities that cover 271 "showcase" miles linking conservation areas, neighborhoods, parks, schools, and downtowns. Bicycle and pedestrian facilities provide expanded recreational opportunities for residents and visitors alike.

Volusia County's first multi-use trail opened in August 2000. The River-to-Sea Trail located in Gemini Springs Park, which connects to DeBary Mansion, is the first of many trails that will eventually extend throughout Volusia County and to adjacent Seminole, Brevard and Flagler Counties. In 2006, the Lake Monroe Trail opened and connected trails in Gemini Springs Park to Lake Monroe Park. Officials continue to work diligently to fund and construct the Cross-Florida Trail, a multi-use trail that was started in 2007. When complete, the Volusia County portion of the Cross-Florida Trail will traverse more than fifty miles from Enterprise to Edgewater and then to Titusville along an abandoned rail corridor that was purchased by the State of Florida.

The natural and manmade environments of Volusia County provide a diversity of visual opportunities which are incorporated into a Scenic Corridors program. Figure 2-8 depicts several roadways that the county, state or federal government has designated as Scenic Corridors. The County has been actively participating with byway groups through the Florida Scenic Highways Program for six designated scenic highways: Florida Black Bear Scenic Byway, River of Lakes Heritage Corridor, Ormond Scenic Loop & Trail, Heritage Crossroads: Miles of History, the Indian River Lagoon National Scenic Byway, and Halifax Heritage Byway – An American Tapestry. The county also participates in byway meetings for those organizations who are working to achieve their byway designation through FDOT. The grassroots efforts continue to work in partnership with local governments to acquire state designation in order to showcase outstanding cultural, historical, archeological, recreational, natural and scenic resources.

## J. GOALS, OBJECTIVES, AND POLICIES

### GOAL:

- 2.1 Volusia County shall provide a safe, convenient, and coordinated multimodal transportation system to serve current and future land uses and population needs. The multimodal transportation system will discourage urban sprawl and encourage energy efficient land use patterns.

### OBJECTIVE:

- 2.1.1 Volusia County shall implement programs to provide a safe, convenient, and energy efficient multimodal transportation system, thereby reducing vehicle miles traveled and greenhouse gas emissions.

### POLICIES:

- 2.1.1.1 Volusia County has adopted the Federal Functional Classification criteria to classify all roads within Volusia County. In addition, the County recognizes FDOT

context-based classification system linking transportation needs and adjacent land use patterns for its transportation system.

- 2.1.1.2 Volusia County has designated a county-wide network of thoroughfare system corridors and shall continue to annually monitor and analyze for LOS issues. Before the designation of new thoroughfares in non-urban areas or communities with local plans, a study will be conducted that demonstrates a need for the new thoroughfares related to existing or projected traffic demands, assesses impacts to environmental resources, and analyzes land use trends. Urban and Non-Urban areas are defined by the latest approved TPO and FDOT Urban and Transitioning Area Boundaries maps.
- 2.1.1.3 Volusia County shall coordinate and cooperate with FDOT to enhance the State thoroughfare system's capacity.
- 2.1.1.4 Volusia County shall continue to provide alternatives for local traffic to the Florida Intrastate Highway System and Strategic Intermodal System ("SIS") to protect its interregional and intrastate functions.
- 2.1.1.5 Volusia County shall coordinate major transportation system improvements with the Volusia TPO and with all appropriate Volusia County municipalities.
- 2.1.1.6 Volusia County shall look for opportunities to add multimodal terminals and access to multimodal facilities in its assessment of future transportation needs.
- 2.1.1.7 Volusia County shall coordinate with FDOT, the TPO, MetroPlan Orlando, VOTRAN, LYNX, and other agencies to support SunRail, state-wide high speed rail, and other potential passenger rail systems in Volusia County.
- 2.1.1.8 Volusia County shall work with cities to assist planning and building city thoroughfares in high growth areas to provide residents with travel options and to move traffic more efficiently while not over-burdening county thoroughfares.
- 2.1.1.9 The County's policies will consider the mobility needs of people of all ages and abilities, including children, teenagers, adults, senior citizens, and persons with disabilities.
- 2.1.1.10 All new construction and rehabilitation of roadways on the County Thoroughfare Network will be planned, designed, constructed, and maintained to benefit all users, with consideration given to land use context, right-of-way availability, and costs.
- 2.1.1.11. Volusia County shall continue to monitor the surface conditions of the Thoroughfare Roadway System to provide a safe driving environment, and to maintain those conditions in an acceptable manner.
- 2.1.1.12 Volusia County shall continue to analyze crash data for arterial and collector thoroughfares in order to identify and implement safety improvements. Additionally, safety issues on local streets, arterials, and collector roads shall continue to be reviewed through engineering studies.



- 2.1.1.13 Volusia County shall require development proposals to limit connections and access points of driveways and roads to the County Thoroughfare Roadway System. Access to thoroughfares shall be managed in a manner that reduces stop and go traffic, protects public investments in roadway capacity, and enhances safety.
- 2.1.1.14 Developers desiring new county thoroughfares must provide conceptual land use and infrastructure plans that show the regional significance of the proposed thoroughfare. In addition, they need to demonstrate the development's local roadway system and mix of land uses that would alleviate any local trip impacts to the proposed thoroughfare.
- 2.1.1.15 Volusia County shall require applicants for development proposals to incorporate adopted transportation plans of FDOT, the TPO, Volusia County, and all affected municipalities.
- 2.1.1.16 Volusia County shall continue to utilize strategies that promote carpooling, ridesharing, and other methods of reducing the reliance on single-occupant vehicles. For example, the County shall support designated bike-sharing and car-sharing programs, as well as curb pick-up and drop-off locations on county roads for on-demand ride-sharing vehicles.
- 2.1.1.17 The County shall amend its regulations to allow the use of low-speed electric vehicles only on local streets where appropriate, as authorized pursuant to Chapter 316, Florida Statutes and Chapter 118, Volusia County Code of Ordinances.
- 2.1.1.18 Volusia County supports the use of electric vehicle charging stations pursuant to Chapters 366 and 377, Florida Statutes.
- 2.1.1.19 Volusia County shall continue to work with the Volusia TPO and VOTRAN to establish transportation system management strategies as appropriate to improve system efficiency and enhance public safety.
- 2.1.1.20 Volusia County shall work with the Volusia TPO, VOTRAN, and area employers to encourage the development of transportation demand management programs (e.g., telecommuting, compressed work weeks, flex work schedules, etc.) to modify peak hour travel demand and to reduce the number of vehicle miles traveled per capita within the community and region.
- 2.1.1.21 Volusia County shall work with the Volusia TPO and VOTRAN to develop numerical indicators against which the achievement of the mobility goals of the community can be measured, such as: modal split, annual transit trips per capita, or an automobile occupancy rate.
- 2.1.1.22 Volusia County shall continue to utilize the Beach Driving Safety Plan, based on the Beach Safety Study, which maximizes safety while driving and parking on the beach.
- 2.1.1.23 Volusia County shall continue to work with the City of Daytona Beach to implement the Ocean Center/Peabody Auditorium Transportation Parking Plan.

- 2.1.1.24 Volusia County shall research traffic calming techniques and explore their feasibility.
- 2.1.1.25 Volusia County shall participate in safety education programs to include all types of roadway users on the road.
- 2.1.1.26 Volusia County shall continue to work with FDOT, the TPO, and local jurisdictions to establish a designated truck route network that maximizes the efficiency of goods movement and minimizes delay. The network shall be coordinated with the municipalities for consistency with local restrictions on delivery vehicles.

OBJECTIVE:

- 2.1.2 Volusia County shall coordinate the transportation system with the Future Land Use Element to ensure compatibility between land use and the thoroughfare system necessary to support it. The County shall strive to create a context-based classification system that specifically requires transportation design to consider local land development patterns and built form.

POLICIES:

- 2.1.2.1 The Transportation, Future Land Use, and Capital Improvements Elements shall be coordinated to ensure compatibility between land uses, the transportation network and individual County Thoroughfare projects.
- 2.1.2.2 Volusia County shall continue to maintain and update its land use regulations to provide for continued improvement of the Thoroughfare Roadway System.
- 2.1.2.3 The Transportation Element shall be coordinated with the Future Land Use Element to ensure that future high intensity areas are served by a variety of public and developer-funded multi-modal transportation options.
- 2.1.2.4 For proposed land use changes, the existing and proposed design of the Thoroughfare Roadway System shall be considered in addition to its functional classifications, LOS standards and the mobility plans of local governments to evaluate the impacts that a land use change would have on the operation of the Thoroughfare Roadway System.
- 2.1.2.5 Volusia County shall maintain an inventory of state, county, city, and developer-maintained thoroughfares in order to assess the impacts of development on the Thoroughfare Roadway System. All proposed developments shall be evaluated using the TPO's latest adopted Transportation Impact Analysis ("TIA") Guidelines.
- 2.1.2.6 Volusia County shall provide for the separation of local traffic from through traffic through its use of road hierarchies, limited-access drives, internal drives, and cross access connectors to facilitate efficient and safe vehicular movement.
- 2.1.2.7 Frontage roads and cross-access connectors shall be considered with development proposals, as determined by the County's zoning and land development regulations.

- 2.1.2.8 Residential neighborhoods shall be buffered from the impacts of high traffic volumes on the Thoroughfare Roadway System, but they should provide convenient pedestrian shortcuts to nearby transit stops, adjacent neighborhoods, and appropriate non-residential locations.
- 2.1.2.9 Volusia County shall encourage new developments to provide through-streets (collectors) and shorter blocks, and provide easements for pedestrians and bicyclists to access public transportation. The use of dead-end streets, loop streets, and oversized blocks should be discouraged in urban and suburban areas.
- 2.1.2.10 Volusia County shall continue to monitor development in and around the Daytona Beach International Airport for incompatible land uses.
- 2.1.2.11 Volusia County shall continue to coordinate land use decisions affecting access to the airport with FDOT, the FAA, the military services, the Continuing Florida Aviation Systems Plan, TPO, and the City of Daytona Beach.
- 2.1.2.12 Volusia County shall amend its land development regulations when appropriate to allow for the creation of walkable urban and suburban environments, such as mixed use town centers and transit-oriented developments.
- 2.1.2.13 Volusia County shall encourage street designs to incorporate elements such as lighting, appropriate street and sidewalk widths, and intersection dimensions to allow for pedestrian, bicycle, landscaping, street furniture, and multi-modal vehicular use.

#### OBJECTIVE:

- 2.1.3 Volusia County shall continue to employ measures for the acquisition, preservation, and protection of the existing and future Thoroughfare Road System rights-of-way.

#### POLICIES:

- 2.1.3.1 Volusia County shall review and update as necessary, the 2025 Thoroughfare Roadway System Map (Figure 2-1) to protect rights-of-way needed for transportation improvements. The 2035 Thoroughfare Roadway System Map, and subsequent amendments to the 2035 Thoroughfare Roadway System Map, shall not be in effect until a subsequent analysis of the amendment on the Volusia County Thoroughfare Road Impact Fee has been completed and, if needed, an ordinance amending the Volusia County Thoroughfare Road Impact Fee based on that analysis is approved and in effect.
- 2.1.3.2 Volusia County will maintain land use regulations designed to protect existing and future rights-of-way necessary for the Thoroughfare Roadway System.
- 2.1.3.3 Volusia County shall require applicants for new development proposals adjacent to Thoroughfare Roadway System roads slated for construction within the County's Five Year Road Program to dedicate the right-of-way necessary for future transportation system improvements at the time of development approval as determined in the County's land development regulations.

- 2.1.3.4 Volusia County shall utilize a Needs List to identify planned future thoroughfares that are not financially feasible during the currently adopted Volusia County comprehensive planning horizon. The current needs list includes : 1-4 Frontage Road (Summit Ave to SR 372), Madeline Ave Extension (Tomoka Farms Road to Williamson Blvd), LPGA Blvd Extension (US 92 to Tomoka Farms Road), the Westside Connector (Minnesota Ave-Hamilton Ave to SR 44), and Martin Luther King Jr. Blvd/Veterans Memorial Highway Intersection Realignment.
- 2.1.3.5 Local governments and landowners are encouraged to secure needed right of way for roads on the Future Needs List. Volusia County will provide transportation impact fee credits for said right of way for these projects, subject to approval of the alignment by the County Engineer. Upon the County Engineer's approval, if said road is designed and constructed to thoroughfare roadway standards, the road may be eligible for impact fee credits.
- 2.1.3.6 Volusia County shall look for opportunities to move Future Needs List improvements to the Thoroughfare Roadway Map by partnering with local governments and landowners that have secured right of way.

OBJECTIVE:

- 2.1.4 Volusia County shall coordinate the County's transportation system with FDOT, the TPO, and all appropriate Volusia County municipalities to provide a coordinated system of arterials, collectors, local streets, public transportation, and air service.

POLICIES:

- 2.1.4.1 Volusia County shall coordinate with applicable local governments and regional and state agencies to implement transportation, land use, parking and other provisions of the Transportation Element.
- 2.1.4.2 Volusia County shall coordinate the transportation system with the plans and programs of the TPO, the Florida Transportation Plan, FDOT's adopted work program, and the Scenic Highway and Byway programs.
- 2.1.4.3 Volusia County shall coordinate with the cities and the TPO to maintain the capability to evacuate the coastal population before an impending natural disaster, consistent with the Coastal Management Element.
- 2.1.4.4 Volusia County will maintain representation on the TPO Technical Coordinating Committee, the Citizen's Advisory Committee, Bicycle and Pedestrian Advisory Committee, and Transportation Improvement Plan Subcommittee.
- 2.1.4.5 Volusia County shall coordinate all major transportation system improvements with the TPO, the Central Florida MPO Alliance, FDOT, East Central Florida Regional Planning Council ("ECFRPC"), St. Johns River Water Management District ("SJRWMD"), U.S. Army Corps of Engineers, FAA, VOTRAN, Volusia County municipalities, and all other affected agencies in Volusia County.

- 2.1.4.6 Volusia County shall consult with FDOT when proposed plan amendments affect facilities on the SIS.
- 2.1.4.7 The Volusia County Five-Year Road Program shall be developed considering acceptable LOS methodology, modeling, intergovernmental coordination, public-private partnership projects, local jurisdiction mobility plans, and support for job creation and economic development opportunities in furtherance of the Dynamic Master Plan.
- 2.1.4.8 Volusia County shall continue to involve the citizens and those affected agencies within Volusia County in the development and implementation of its Five Year Road Program.
- 2.1.4.9 Volusia County will assist federal, regional, state, and local agencies to plan for a multi-modal transportation network in support of commuter rail.

OBJECTIVE:

- 2.1.5 Volusia County shall coordinate with and assist the Volusia TPO, VOTRAN, and the Daytona Beach International Airport to provide efficient public transportation services based upon existing and proposed major trip generators and attractors, safe and convenient public transportation terminals, land uses, passenger amenities, and accommodation of the special needs of the transportation disadvantaged.

POLICIES:

- 2.1.5.1 Volusia County shall continue to work to develop a coordinated and consistent policy with the Future Land Use Element to encourage land uses which promote public transportation in designated public transportation corridors.
- 2.1.5.2 Volusia County shall continue to work to develop opportunities to address intermodal terminals and access to aviation, rail, and seaport facilities.
- 2.1.5.3 Volusia County shall work to include VOTRAN's Transit Development Design Guidelines and establish land use, site, and building design guidelines for development in exclusive public transportation corridors to assure the accessibility of new development to public transportation.
- 2.1.5.4 Volusia County shall coordinate with the TPO, VOTRAN, and all affected local municipalities to provide passenger amenities along existing and future transit corridors, as identified in the VOTRAN Transit Development Plan.
- 2.1.5.5 Volusia County shall coordinate with the TPO to ensure that the provision of public transportation is considered as part of major construction projects.
- 2.1.5.6 Volusia County shall coordinate with the TPO, VOTRAN, and all affected local municipalities to establish financing programs for current and future transit as identified in the VOTRAN Transit Development Plan.

- 2.1.5.7 Volusia County shall coordinate with the TPO and VOTRAN on all roadway and public transportation needs of Daytona Beach International Airport and other related public transportation facilities. Volusia County will continue to work with VOTRAN in providing public transportation service for passengers to and from the DAB.
- 2.1.5.8 Volusia County shall coordinate and cooperate with the TPO, VOTRAN, and the Orange and Seminole County's public transportation provider (LYNX) to provide public transportation services between Volusia, Seminole, and Orange Counties.
- 2.1.5.9 Volusia County shall coordinate with the TPO and VOTRAN to ensure the transportation disadvantage population is adequately served.
- 2.1.5.10 Volusia County shall work cooperatively with the TPO and VOTRAN in their efforts at developing efficient and effective public transportation and other commuter assistance programs.
- 2.1.5.11 The County will plan to provide convenient access between the SunRail Activity Center and downtown DeLand via Votran.
- 2.1.5.12 New office and job center developments are encouraged to provide amenities such as transit pass program, bus and train schedules, bike lockers and racks, shower and changing rooms, car pool parking, pick up and drop off lanes, weather-protected pedestrian routes, and a direct connection to the roadway sidewalk.

OBJECTIVE:

- 2.1.6 Volusia County shall coordinate with the TPO and other related agencies to evaluate and consider levels of service (LOS) on the thoroughfare system when developing the Five-Year Road Program and the TPO Long Range Transportation Plan ("LRTP").

POLICIES:

- 2.1.6.1 Volusia County shall evaluate the transportation system LOS based on a professionally acceptable methodology.
- 2.1.6.2 Volusia County shall utilize the most recent capacity tables developed by FDOT as a guide in the determination of the local system capacity to be used for all future updates and amendments of the comprehensive plan.
- 2.1.6.3 Volusia County shall set peak hour LOS "D" standard for urbanized areas and LOS "C" standard for those areas outside urbanized areas for all Florida State Highway System roads.
- 2.1.6.4 Volusia County shall maintain the following LOS standards for County maintained thoroughfares as shown on the Thoroughfare Roadway System Map:

County Maintained Thoroughfares Minimum Level of Service Standards					
Roadway Type	Rural Areas	Transitioning Areas	All Urbanized Areas	InsideTCMAs/TCEAs <sup>1</sup> , Transportation Deficiency Areas, and Multi-Modal Transportation Districts	Constrained
Arterials	C (B) <sup>2</sup>	E (D)	E (D)	Refer to Local Jurisdictional Comprehensive Plan	Maintain
Collectors	C (B)	E (D)	E (D)	Refer to Local Jurisdictional Comprehensive Plan	Maintain

<sup>1</sup>Transportation Concurrency Management and Exception Areas

<sup>2</sup>Level of service standards inside of parentheses apply to County maintained Transportation Regional Incentive Program (TRIP) funded Thoroughfare Roadways consistent with FDOT standards.

2.1.6.5 Volusia County shall coordinate any changes in its adopted LOS standards with FDOT, the TPO, and local jurisdictions.

2.1.6.6 Volusia County shall coordinate with FDOT and local jurisdictions seeking LOS variances on the constrained facilities listed below:

State Constrained Facilities			
Roadway Name	From	To	Constraints
SR 40 (Granada Blvd.)	I-95	SR A1A (Ocean Shore Blvd./S. Atlantic Ave.)	P, PO
SR A1A (Ocean Shore Blvd.)	Flagler County Line	SR 40 (Granada Blvd.)	PO
SR A1A (Atlantic Ave.)	SR 40 (Granada Blvd.)	Atlantic Avenue (CR 4075)	P, PO
SR 5A (Nova Road)	SR 400 (Beville Road)	Brentwood Drive	PO
US 17/92	Plymouth Avenue	Beresford Avenue	P, PO
SR 44	Woodward Ave.	Gasline Road	P, PO
SR 5A (Nova Road)	Dunlawton Avenue	US 1	<u>P</u>
US 1	Dunlawton Avenue	Rose Bay Bridge	<u>P</u>
Dunlawton Ave/SR A1A	Spruce Creek Road	Peninsula Avenue	<u>P</u>

P (Physical): constraints based on a physical lack of room, owing to intensive land use development or natural barriers immediately adjacent to the roadway)

PO (Policy): constraints based on environmental, historical, archaeological, aesthetic or social impact considerations

2.1.6.7 Volusia County shall coordinate with FDOT, the TPO, municipalities of Volusia County, and ECFRPC to identify the following County thoroughfares as constrained:

County Constrained Facilities			
Roadway Name	From	To	Constraints
Amelia Avenue	Plymouth Avenue	Ohio Avenue	PO
Dirksen/DeBary/Doyle	Deltona Blvd.	Providence Blvd.	PO
CR 4139/ Summit Avenue/Lakeview Drive/Cassadaga Road	Lake Helen northern city limits	Cassadaga Road and I-4	PO
Enterprise-Osteen Road	Green Springs Road	SR 415	PO
Grand Avenue	Spencer Street	Plymouth Avenue	PO
Highbridge Road	Walter Boardman Lane	SR A1A	P, PO
John Anderson Drive	Highbridge Road	Halifax Drive	PO
John Anderson Highway	Flagler County Line	Walter Boardman Lane	PO
Kicklighter Road	CR 4139	Prevatt Avenue	PO
Lakeshore Drive	Main Street	Green Springs Road	PO
Main Street	DeBary Avenue	Lakeshore Drive	PO
Old Dixie Highway	Flagler County Line/I-95	Tomoka River Bridge	PO
Saxon Drive (NSB)	3rd Avenue/SR A1A	NSB south City Limits	P, PO
Walter Boardman Lane	Old Dixie Highway	John Anderson Highway	P, PO
Williamson Blvd (Port Orange)	Taylor Road	Airport Road	PO
Taylor Branch Road	Dunlawton Avenue	Yorktown Blvd	P
Spruce Creek Road	Taylor Road	Nova Road/SR 5A	P
Taylor Road (Port Orange)	Clyde Morris Blvd	Spruce Creek Road	P, PO

P = Physical

PO = Policy

2.1.6.8 For those roadway and public transportation facilities that indicate a lower LOS than the adopted standard which are not scheduled in either the FDOT or Volusia County 5-Year Work programs, Volusia County shall require the developer to provide credible evidence that the roadway is operating at an acceptable LOS and that the proposed use would not lower the LOS below the acceptable standard. If this cannot be done, the developer shall mitigate the adverse impacts of the project in a manner that is satisfactory to the County and the affected municipality or municipalities.

2.1.6.9 Volusia County recognizes that establishing constrained corridors is essential to promote alternative modes and to preserve community character and the built environment. On County roads designated as Constrained Facilities, Volusia County shall maintain the existing road but shall not schedule improvements to increase the number of through lanes. At the time a County Constrained Facility



reaches its minimum acceptable LOS standard, the County may not allow further development that cannot provide acceptable mitigation measures to the adverse transportation impacts of the proposed development. Acceptable measures may include TSM improvements such as the addition of turn lanes, bike lanes, sidewalks, accessory transit amenities, and exclusive transit lanes, where appropriate.

- 2.1.6.10 Volusia County shall require the developer of property in the unincorporated County which impacts constrained thoroughfares to prepare a Transportation Impact Analysis consistent with the most recent methodology contained in the TPO TIA Guidelines, as adopted by Volusia County Council.
- 2.1.6.11 Volusia County recognizes the Transportation Concurrency Exception Area ("TCEA") and the Transportation Concurrency Management Area ("TCMA") established within the municipalities as depicted on the Thoroughfare Roadway System Map (Figure 2-1). The County further recognizes any Transportation Deficiency Areas established by municipalities pursuant to Chapter 163.3812, Florida Statutes.
- 2.1.6.12 For those State and/or County thoroughfares on which another local government wishes to establish LOS standards higher than that established by Volusia County, the County shall accept and respect that higher standard provided that the local government demonstrates in its Capital Improvements Program the ability to maintain the applicable thoroughfares at that higher standard using their own revenue sources, or unless such municipalities are able to program these improvements to meet these higher service levels with the approval of the Volusia County Council.
- 2.1.6.13 Volusia County has approved an LOS standard of "C" for all County roads in the Hontoon Island Study Area as identified in the Future Land Use Element.
- 2.1.6.14 For the purpose of determining concurrency, Volusia County shall include all capacity-related transportation improvements which are fully funded for construction in the FDOT Five- Year Work Program, in the most recently adopted TPO Transportation Improvement Program, and in the Volusia County Five-Year Schedule of Capital Improvements, and shall consider the planned capacity as existing in the concurrency analysis.
- 2.1.6.15 Volusia County, in conjunction with the TPO, shall develop a methodology to track development in both the incorporated and unincorporated areas of Volusia County. The information will be used to determine whether areawide LOS are being maintained for the County transportation system.
- 2.1.6.16 Volusia County shall explore opportunities to complement the application of transportation concurrency with the following tools and techniques: 1) adoption of long-term strategies to facilitate development patterns that support multimodal solutions, including urban design and appropriate land use mixes; 2) Adoption of an area-wide LOS not dependent on any single road segment function; 3) Exempting or discounting impacts of locally-desired development such as development in urban areas, redevelopment, job creation, and mixed use on the

transportation system; 4) Assigning secondary priority to vehicle mobility and primary priority to ensuring a safe, comfortable, and attractive pedestrian environment with convenient transit connections; and 5) Reducing impact fees or local access fees to promote development within urban areas, multimodal transportation districts, and a balance of mixed use development in certain areas or districts, or for affordable and workforce housing.

OBJECTIVE:

2.1.7 Volusia County shall ensure that current and future transportation system needs are financed in an effective, efficient, and equitable manner.

POLICIES:

- 2.1.7.1 Volusia County shall continue to finance transportation system improvements necessitated by new development through the use of impact fees, proportionate share contributions, mobility fees, and/or public-private partnership ventures.
- 2.1.7.2 Volusia County shall regularly evaluate its transportation impact fee schedule by monitoring the cost of developing its transportation system to meet the demand attributable to new development.
- 2.1.7.3 Volusia County shall pursue and support alternative and innovative methods of financing transportation system improvements to meet the County's transportation needs, as encouraged by Section 163.3180(5), Florida Statutes.
- 2.1.7.4 All thoroughfares represented on the Volusia County 2025 Thoroughfare Roadway System Map may be eligible for improvements as provided for in the Transportation Impact Fee Ordinance. For those thoroughfares on the 2025 Thoroughfare Roadway System Map which are city and state-maintained, the use of county impact fees is not permitted.
- 2.1.7.5 Volusia County shall allocate transportation funds on projects that attract above-average wage jobs and support designated economic development areas as a means to stimulate, diversify, and strengthen its economy, as identified in the Dynamic Master Plan.
- 2.1.7.6 Volusia County shall evaluate and prioritize transportation improvement projects based on the criteria in the Capital Improvements Element.

OBJECTIVE:

2.1.8 Volusia County shall support the continued development and improvement of Daytona Beach International Airport ("DAB") as recommended in the latest Airport Master Plan.

POLICIES:

- 2.1.8.1 Volusia County shall fund land and facility improvements for DAB necessary to accommodate forecasted aviation demand in the Airport Master Plan and future updates.

- 2.1.8.2 The Volusia County Growth & Resource Management Department will continue to receive notices of development projects at the Daytona Beach International Airport and comment on them for consistency with the Volusia County Comprehensive Plan.
- 2.1.8.3 Volusia County shall continue to coordinate land use decisions affecting access to DAB with FDOT, the FAA, the military services, the Continuing Florida Aviation Systems Plan, the TPO, and the City of Daytona Beach.
- 2.1.8.4 Volusia County shall support recommendations in the Continuing Florida Aviation Systems Plan that are consistent with the Volusia County Comprehensive Plan.
- 2.1.8.5 Volusia County shall follow and implement the recommendations contained in the Environmental Overview and Airport Drainage Plan sections of the Airport Master Plan, which conform to FAA Order 5050.4A.

OBJECTIVE:

- 2.1.9 Volusia County shall consider the need for future traffic operation measures in the design of all major transportation system improvements.

POLICIES:

- 2.1.9.1 Volusia County shall continue to maintain an inventory of all signalized intersections and geometries for which it has responsibility.
- 2.1.9.2 Volusia County shall assist FDOT on an Active Arterial Management Program for state roads to help reduce congestion associated with incidents and special events.
- 2.1.9.3 Volusia County shall seek to optimize the effectiveness of improved signal timing in the design of all major transportation system improvements.
- 2.1.9.4 Volusia County shall consider the effectiveness of intersection improvements as an interim solution to existing transportation system deficiencies.
- 2.1.9.5 Volusia County may implement, where appropriate and beneficial, Intelligent Transportation Systems (“ITS”), such as computerized signal systems, travel information resources, traffic monitoring devices, real-time transit dispatching, and incident management programs to improve safety and reduce delay, optimize the capacity of the transportation system, and achieve greater operating efficiency.
- 2.1.9.6 Volusia County shall implement traffic calming techniques, where appropriate and feasible, to slow vehicular traffic and increase pedestrian safety. Such techniques may include roundabouts, narrow traffic lanes, curb extensions or bulb-outs, on street parking or bicycle lanes, pedestrian refuge medians, changes in pavement material, texture, and/or color, raised pedestrian crossings, and horizontal deflections or chicanes, or other industry approved measures.

OBJECTIVE:

2.1.10 The County will continue to coordinate with FDOT and municipalities to construct safe and convenient bicycle and pedestrian facilities throughout Volusia County.

POLICIES:

- 2.1.10.1 Volusia County shall use the Volusia Trails Plan as a guide to supplement the transportation network with interconnected, non-motorized recreational traffic corridors.
- 2.1.10.2 Volusia County shall develop pedestrian and bicycle ways to connect major activity centers and other special trip generators with public uses such as schools, libraries, parks, and intermodal transit nodes where feasible.
- 2.1.10.3 Volusia County shall follow FDOT bicycle-compatible design standards for all new and reconstructed collector and arterial roads.
- 2.1.10.4 Volusia County shall include sidewalks in county road designs consistent with the requirements of the Land Development Code.
- 2.1.10.5 Volusia County shall integrate bicycle and pedestrian features into transit planning (i.e., bicycle racks on buses, secure bicycle storage lockers, etc.).
- 2.1.10.6 Volusia County shall coordinate bicycle and pedestrian improvements with the TPO Bicycle and Pedestrian Advisory Committee and shall work to support the implementation of the TPO Bicycle/Pedestrian Plan
- 2.1.10.7 Volusia County shall continue to employ land use and other strategies to promote the use of bicycles and walking, such as road retrofits and use of the multi-modal TIA guidelines, especially within corridors served by transit to promote transit ridership.
- 2.1.10.8 Volusia County shall continue to coordinate with the TPO to develop and update the Countywide Bicycle and Pedestrian Plan.
- 2.1.10.9 Pursuant to Section 163.3180(5)(f), Florida Statutes, Volusia County shall explore opportunities to prioritize pedestrian access, mobility, and convenience over vehicular access in urban core areas where appropriate.
- 2.1.10.10 Volusia County will continue to look for opportunities to complete connections between existing and proposed bicycle and pedestrian facilities.
- 2.1.10.11 Working with FDOT and the municipalities, Volusia County will continue closing the gaps in crosswalks along the major thoroughfare network, at intersections, and at designated pedestrian crossings.

GOAL:

- 2.2 The Volusia County multimodal transportation system shall minimize adverse effects on the environment, including loss or destruction of scenic views and natural vegetation.

OBJECTIVE:

- 2.2.1 Where possible, development of the Volusia County transportation system shall be directed away from areas which are naturally incapable of the service capacity to accommodate growth in an environmentally acceptable manner.

POLICIES:

- 2.2.1.1 Where possible, Volusia County shall direct major transportation system improvements away from environmentally sensitive areas.
- 2.2.1.2 Volusia County shall evaluate the potential environmental impacts of major transportation system improvements.
- 2.2.1.3 Volusia County shall coordinate its transportation system with the Conservation Element of the Comprehensive Plan to ensure that environmentally sensitive areas are protected from transportation system impacts.
- 2.2.1.4 Volusia County shall follow the recommendations contained in the latest adopted version of the Ponce de Leon Inlet Management Plan.
- 2.2.1.5 Volusia County shall maintain a beach parking plan incorporated into the Volusia County Beach Management Plan to protect natural beach resources and provide public beach access.

GOAL:

- 2.3 Volusia County shall support the designation and management of a system of Scenic Corridors which reflect the varying aesthetic qualities of the County.

OBJECTIVE:

- 2.3.1 Volusia County shall continue to maintain its program for the designation of aesthetically significant corridors.

POLICIES:

- 2.3.1.1 Volusia County shall continue to utilize established procedures and criteria from federal, state or local authorities for designating Scenic Corridors.
- 2.3.1.2 Volusia County may not designate a new Scenic Corridor which traverses an incorporated area unless the governing body of the appropriate municipality has entered into an interlocal agreement with the County to preserve the scenic value of the roadway corridor.

- 2.3.1.3 Wherever historical sites, parks, recreational, and other public uses exist along a Scenic Corridor, consideration shall be given to connections to these sites.
- 2.3.1.4 Volusia County shall promote and protect scenic views by recognizing and participating in voluntary community based scenic highway initiatives through state and federal scenic highways programs.

OBJECTIVE:

- 2.3.2 Volusia County will continue to maintain a program for the management of County designated Scenic Corridors.

POLICIES:

- 2.3.2.1 The County's land development regulations may include standards designed to ensure preservation of the scenic value of designated corridors. Such standards may include, but are not necessarily limited to, identification of permissible adjacent land uses, location and heights of structures, establishment of scenic easements, landscaping requirements, access controls, signage, and the placement of utilities.
- 2.3.2.2 After a Scenic Corridor has been designated, a management plan for each corridor should be prepared by the managing entity. The plan should, at a minimum, analyze existing conditions and provide guidelines for managing the vegetation within the public right-of-way, establish speed limits along the designated route, consider the potential for multiple-use bicycle and pedestrian facilities, design and placement of information and directional signs, and needed roadway improvements.
- 2.3.2.3 Should the Volusia County Council find that the scenic value of a designated corridor outweighs the benefits of increased vehicular capacity or other considerations, exceptions to minimum LOS standards and roadway design standards may be considered on county-managed roadways.
- 2.3.2.4 Volusia County shall hold a public hearing prior to the construction or reconstruction, except for routine maintenance, of any designated Scenic Corridor under county management.

OBJECTIVE:

- 2.3.3 Volusia County will cooperate with volunteer byway organizations and the FDOT in the management of federal and state-designated scenic highways located in Volusia County.

POLICIES:

- 2.3.3.1 Volusia County recognizes the boundaries of designated scenic highways in Figure 2-8 of the transportation map series.
- 2.3.3.2 Volusia County will adopt by reference the Corridor Vision of the following designated scenic highways: (1) the Ormond Scenic Loop and Trail; (2) Florida

Black Bear National Scenic Byway; (3) River of Lakes Heritage Corridor; (4) Heritage Crossroads: Miles of History Heritage Highway; (5) Indian River Lagoon National Scenic Byway, and (6) Halifax Heritage Byway – An American Tapestry.

- 2.3.3.3 Infrastructure and utility structures, such as cellular communications, water, sewer, and energy transmission should be designed and located to minimize adverse visual impacts upon the scenic qualities of designated scenic highways. Utilities should be located underground to the maximum extent possible in an effort to minimize visual impacts along the corridors.
- 2.3.3.4 The County shall coordinate with FDOT, affected municipalities, and volunteer groups in the preparation of Master Plans for designated scenic highways to provide for safe bicycle and pedestrian circulation, traffic calming and aesthetic improvements.
- 2.3.3.5 Volusia County shall cooperate with FDOT, byways organizations, and affected municipalities in the development of interpretive/educational signage along designated scenic highways.

K. TRANSPORTATION ELEMENT MAP SERIES

The Transportation Map Series as referenced herein is contained in Appendix 1, Maps and Figures.

- Figure 2-1: Thoroughfare Roadway System 2035 Map
- Figure 2-2: Roadway Number of Lanes 2035 Map
- Figure 2-3: Roadway Level of Service Standard 2035 Map
- Figure 2-4: Designated Evacuation Routes 2035 Map
- Figure 2-5: Scenic Corridors 2035 Map
- Figure 2-6: Farmton Local Plan – Spine Transportation Network