

CHAPTER 2 TRANSPORTATION ELEMENT

SUMMARY

A City cannot continue to grow and develop if its citizens cannot reasonably access community facilities and commercial areas. A system of adequate and functional streets and pedestrian walkways and/or trails is of the highest importance to a City's growth and development. In fact, "Enhanced Traffic Circulation" is one of the 12 Community Building Blocks that the citizens selected to implement the 2020 Vision. Thus, the City street system is critical to the City in many ways.

The Transportation Element, along with the Future Land Use Element, is the cornerstone upon which the other Elements of the Comprehensive Plan are built. The Transportation Element takes an all-inclusive approach to the development and maintenance of the City's transportation system by setting mobility standards and thresholds for future development and redevelopment: Some of the standards/thresholds that are established in the Plan include:

- Levels of Service (LOS) The establishment of standards for how well streets handle traffic during the peak daylight hours.
- **Transportation Concurrency** How much development the existing transportation can support while maintaining the adopted LOS. Concurrency also triggers improvements that must be made or funded by development projects within the City when the proposed development impacts on the standards established in the Plan.
- Street Classification The classification of streets in the City as interstate highways, arterial roads, collector roads and local roads, as defined in Section 334.03, Florida Statutes.
- Future Street Improvements Using modeling techniques, the Plan estimates when improvements to collector and arterial streets will be needed, how many lanes will be needed to accommodate expected traffic, and where new streets should be constructed. This includes the identification of those streets that are "Constrained" (cannot be widened as a result of functional or policy issues) and the need to address right-of-way needs.
- **Access Management** The number and type of driveways that that may be constructed on particular types or classifications of streets.
- **Interconnectivity Standards** The minimum standards for interconnectivity between adjacent land uses for vehicles or pedestrians.
- **Street Maintenance** How the City will ensure that the street system and its related drainage systems will be maintained.
- **Safety** The need for regular bridge inspections, lighting, signage, street striping, speed control and calming and establishment of emergency evacuation routes.





The Transportation Element addresses other issues that will ensure an adequate transportation system exists for current and future generations. The Plan includes the development of short-range and long-range transportation planning tools such as a dynamic traffic model, a 5-year Capital Improvement Plan, a Long Range Transportation Improvement Plan, identification of future streets and connections, corridor and traffic operations studies, congestion mitigation and traffic calming, and intergovernmental and regional planning efforts. The Plan proposes to study the current transportation impact fees to determine their adequacy and make recommendations for future improvement.

The Plan includes the identification of future interstate access, of future east-west and north-south connections, identification of right-of-way (ROW) needed and the amount of ROW needed for future expansion of the City street systems as defined in Section 334.03(3), Florida Statutes. It also focuses on encouraging industrial development by encouraging the development and making available all modes of transportation including air and rail systems for the transport of freight. The Plan proposes to study the future need for passenger transit and passenger rail service. Lastly, the Plan discusses the requirements and standards for bicycle lanes and pedestrian paths including the development of a system of City-wide trails and paths that interconnect all neighborhoods, parks, commercial areas, and community institutions.

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GOAL 2.1: STREET NETWORK LOS

Expand and maintain the City street system that provides safe accessibility and mobility to all residents, businesses, and visitors and maintains an acceptable level of service.

<u>FINDING</u>: The City is served by a system of streets that include local, collector, arterial and interstate roads. This system of roads provides access and mobility to the City's residents and is a key factor in the further development of the City. Without adequate roadways to accommodate expected growth or plans for expanding, improving or extending roadways, the City cannot provide adequate levels of service (LOS) in the future. (LOS is the method used by Florida Department of Transportation (FDOT), the Department of Economic Opportunity, and generally accepted engineering and planning practices and principles to measure the capacity of roads.)

The City must:

- Adopt LOS standards for its street system;
- Plan for future road capacity expansion to ensure that adequate levels of service are maintained as development continues; and
- Ensure that new development pays its fair share of the cost of maintaining an adequate LOS by developing a functional concurrency management system.

Objective 2.1.1 – Adopting and Maintaining an Acceptable LOS

Develop a LOS standard for all roads and take appropriate measures to improve the LOS on any currently failing road segment.

- **Policy 2.1.1.1** The City adopts a peak-hour level of service (LOS) of D for all collector roadways, arterials and highways An LOS D is characterized by generally free-flowing conditions with measurable congestion during certain peak-hour periods and at other times of the day that may last for short periods of time.
- **Policy 2.1.1.2** The City shall continue to conduct biennial (every two years) traffic counts of roads within the City street system and shall project traffic growth each year for the 12 months succeeding the study period.
- **Policy 2.1.1.3** The City adopts an LOS consistent with the requirements of the Florida Interstate Highway System (FIHS) and Strategic Inter-modal System (SIS) for all Federal or State highways within the City.





Objective 2.1.2 – Concurrency Management System (CMS)

Continue to enforce, and update as necessary, the City's Concurrency Management System to ensure that functional transportation facilities and services are available to the public concurrent with new development.

Policy 2.1.2.1 - The City shall continue to enforce, and update as necessary, the concurrency review management regulations in the LDC to require developers to mitigate for the impact of project traffic on roadways. The following provisions are included in the LDC:

- A. The regulations require that a concurrency evaluation be conducted as part of the analysis for any proposed rezoning. The issuance of a Concurrency Certificate is a condition of platting/replatting or site plan approval. Concurrency Certificates will be valid for a maximum period as determined in the land development code.
- B. The following developments shall be exempt from concurrency: 1) parks; 2) drainage; 3) solid waste; 4) mass transit; 5) Multi-Use Developments of Regional Impact (DRI) as defined in Section 163.3180(12)(a) F.S.; 6) construction within any existing subdivision or PUD/MPD whose development has been vested for concurrency; 7) renovations to existing structures that do not increase the impact on infrastructure; and 8) single-family and two-family residential dwelling units in approved subdivisions where a Certificate of Concurrency has been issued.
- C. Standards and guidelines for concurrency analysis of development site impacts on the roadway system and impacted intersections.
- D. Update and publish an official City traffic table showing estimated traffic on roadway segments for the current year, acceptable LOS on the roadways, reserve traffic and available capacity.
- E. All non-exempt developments including those determined to be de minimis, as defined in the LDC, are required to obtain a Concurrency Certificate. (A de minimis impact is an impact that would not affect more than 1 percent of the maximum volume at the adopted level of service of the affected transportation facility as determined by the local government. No impact will be de minimis if the sum of existing roadway volumes and the projected volumes from approved projects on a transportation facility exceed 110 percent of the maximum volume at the adopted level of service of the affected transportation facility; provided however, that an impact of a single family home on an existing platted lot will constitute a de minimis impact on all roadways regardless of the level of the deficiency of the roadway.)
- F. Where the development impact on a road segment or intersection causes the roadway or intersection to fail, developers are required to make the necessary road improvements. Developers who fund road improvements may receive impact fee credits for funded road improvements consistent with State law. In no case may the credits exceed the actual amount spent on the improvements. Impact fee credits are





parcel specific and may not be applied to other projects or transferred to a parcel other than the parcel that is the subject of the development approval.

- G. As provided for in Section 163.3180(5)(h)(a), F.S., an applicant for a Development-of-Regional Impact Development Order, development agreement, rezoning, or other land use development permit may satisfy the transportation concurrency requirements of the local comprehensive plan, the local government's concurrency management system, and s. 380.06, when applicable, if:
 - (1) The applicant in good faith offers to enter into a binding agreement to pay for or construct its proportionate share of required improvements in a manner consistent with this subsection.
 - (2) The proportionate-share contribution or construction is sufficient to accomplish one or more mobility improvements that will benefit a regionally significant transportation facility. A local government may accept contributions from multiple applicants for a planned improvement if it maintains contributions in a separate account designated for that purpose.

Objective 2.1.3 - Transportation Modeling and Traffic Analysis Zones

In cooperation with Flagler County and FDOT, biennially (every two years) review and revise the Traffic Analysis Zones (TAZs) and the Florida Standard Urban Model (FSUTMS) so as to provide the tools needed to manage growth and related traffic within the City and to ensure consistency of road projects and the CIE with any approved amendments to the FLUM.

- **Policy 2.1.3.1** The City shall revise and update the City's Traffic Analysis Zones (TAZs) to be consistent with current and future development in the City.
- **Policy 2.1.3.2** The City shall revise and update the TAZs within the City to be consistent with current and proposed DRI developments. DRIs shall be assigned their own TAZs so as to track traffic and provide estimates of growth that are specific to these large developments.
- **Policy 2.1.3.3** The City TAZs shall be revised so that they adequately estimate travel and demand for services and are usable for future land use planning.
- **Policy 2.1.3.4** The City shall develop the capability within the City and coordinate with Flagler County and FDOT to update and run the FSUTMS modeling system.

Objective 2.1.4 - Transportation Improvements





The City has developed Short-Range (5 years) and Long-Range (25 years) Transportation Plans that identify current and future transportation deficiencies and identifies improvements in the roadway network based on the adopted FLUM. Develop strategies, including corridor studies, to address and identify deficiencies..

Policy 2.1.4.1 – The Transportation Plan shall address the short- and long-range needs of City residents for streets, public transit, pedestrian and bicycle facilities, including potential funding sources and assigns responsibility for future construction.

Policy 2.1.4.2 – The City shall solicit funding from FDOT and other appropriate sources to help develop the Transportation Plan.

Policy 2.1.4.3 – The Transportation Plan includes a verification of the following 2015 and 2035 deficiencies in Tables 2.4 and 2.5, respectively in *Chapter 2* of the *Data and Analysis and the recommended strategies to maintain the adopted LOS*.

2015 Roadway Improvements

The following improvements are recommended to maintain the adopted LOS standard on the City's roadway network in 2015:

- Belle Terre Parkway from Pine Lakes Parkway (S) to Cypress Point Parkway Six-Lane
- Old Kings Road from the Palm Coast City limits (S) to Oak Trails Boulevard Four-lane
- Palm Coast Parkway from US 1 to Pine lakes Parkway Intersection Improvements

2035 Roadway Improvements

The following roadways are anticipated to be deficient in 2035 and improvements may be required to maintain the adopted LOS standard on the City's roadway network:

- Belle Terre Parkway from US 1 to SR 100
- Belle Terre Parkway from SR 100 to Royal Palms Parkway
- Belle Terre Parkway from White View Parkway to Pine Lakes Parkway (S)
- Matanzas Woods Parkway Westerly Extension from US 1
- Old King's Road from Palm Coast City Limit (S) to Palm Coast Parkway
- Old King's Road from Farragut Drive to Farmsworth Drive
- Palm Coast Parkway from US 1 to Pine Lakes Parkway
- Palm Coast Parkway (EB) from Pine Lakes Parkway to Belle Terre Parkway
- Palm Coast Parkway (WB) from Pine lakes Parkway to Belle Terre Parkway
- Palm Coast Parkway from Cypress Point Parkway to I-95 East Ramps
- Seminole Woods Parkway from US 1 to Sesame Boulevard
- SR 100 from Seminole Woods Parkway to John Anderson
- Town Center Boulevard from Central Avenue to Old Kings Road





US 1 from Matanzas Woods Parkway to White View Parkway

A range of mitigation measures will be applied to address these projected deficiencies including but not limited to intersection improvements, multi-modal transportation alternatives or roadway widening, as appropriate. The City shall monitor the LOS on the City's road network to ensure improvements are scheduled in advance of their need.

Policy 2.1.4.4 – The Transportation Plan shall recommend roadway improvements throughout the City, estimate the cost of the improvements, identify potential funding for the project, and develop time frames for construction as candidate projects for the CIP.

Policy 2.1.4.5 – Based on the Transportation Plan, the City has identified the arterial and collector roadways within its jurisdiction that have of the potential to fail in 2015 and 2035. Using this information, corridor studies on roadways determined to fail within the next 25 years shall be scheduled, as needed. These corridor studies shall focus on methods to improve projected LOS on the roadways through the use of Intelligent Transportation Systems (ITS), transit, intersection improvements, travel incentives/disincentives, construction options, or mitigation methods considered appropriate to reduce travel demand.

Policy 2.1.4.6 – The City shall conduct corridor studies, as needed, and adopt the studies' findings for each of the following roadways:

- A. Florida Park Drive
- B. Old Kings Road
- C. Belle Terre Parkway
- D. White View Parkway
- E. Pine Lakes Parkway
- F. Rymfire Drive

Policy 2.1.4.7 – As part of all corridor studies, the City shall assess the need for turn lanes at local and collector/arterial intersections. Where the need for turn lanes is identified, the City shall include the improvements in the City's CIP.

Policy 2.1.4.8 – The City shall identify transit alternatives and parking strategies for the City that will reduce the rate of growth in traffic congestion by 5% and assist in meeting the City's future transportation needs.

Policy 2.1.4.9 - Continue to enforce highway and roadway access management standards in the LDC for all arterials and major collectors in the City.





- **Policy 2.1.4.10** The City shall participate in regional transportation decision-making though coordination with FDOT, Flagler County, Volusia MPO, and St. Johns County and participate in appropriate planning events, committees, and boards.
- **Policy 2.1.4.11** The City shall coordinate with FDOT, Flagler County and the Volusia MPO and surrounding counties and jurisdictions to ensure that Emergency Evacuation Routes are appropriate and functional, and ensure that emergency personnel are informed of the routes and roadway characteristics.
- **Policy 2.1.4.12** Continue to enforce standards for roadway construction, reconstruction and widening in the LDC to include typical cross-sections for arterials, collectors and local roadways that include pedestrian and bicycle facilities.
- **Policy 2.1.4.13** To the maximum extent feasible and in accordance with the provisions of Florida Law, the City will develop methods to protect future rights-of-way identified by the City, FDOT and Flagler County from encroachment by development. (See also related Policy 2.1.5.6.)
- **Policy 2.1.4.14** The City's review of proposed FLUM amendments includes a transportation impact analysis to ensure consistency with the transportation provisions of Chapter 1 (Land Use), Chapter 2 (Transportation), Chapter 6 (Evacuation) and Chapter 8 (Capital Improvements) of the Comprehensive Plan and the City's Five year/Twenty-five year (short range/long range) Transportation Plan (as provided for in **Objective 2.1.4**).

Objective 2.1.5 – New East-West Connectors

Develop new routes to provide for additional east-west (E-W) connections crossing I-95 consistent with Table 2.5 in *Chapter 2* of the *Data and Analysis*.

- **Policy 2.1.5.1** Based on the 2035 Transportation Plan, the City shall identify target dates for the construction of those E-W connections not currently committed.
- **Policy 2.1.5.2** The City shall support Flagler County's efforts to construct an interchange at the existing Matanzas Woods Parkway overpass over Interstate 95.
- **Policy 2.1.5.3** The City shall seek funding and target construction of the two-lane extension of White View Parkway over Interstate 95 to Old Kings Road as determined by a corridor study.
- **Policy 2.1.5.4** The City shall conduct a corridor study to determine the need for an E-W connection at the southern boundary of the Flagler County Airport connecting Citation Parkway. The needs determination shall include both traffic and safety (evacuation) issues as well as consider a location for a new fire station where growth demands it.





- **Policy 2.1.5.5** A minimum of two (2) years prior to their construction dates, the City shall conduct appropriate engineering studies to identify the specific routes of the proposed E-W connections, develop the general section designs, identify the ROW needed for construction of the connections and estimate the costs of construction or ensure that another appropriate entity accomplishes said activities.
- **Policy 2.1.5.6** Through its development review process and in accordance with the requirements of Florida Law, the City shall encourage developers and landowners to protect future road ROW from development.
- **Policy 2.1.5.7** The City shall, through its Concurrency Review System, intergovernmental coordination, and working with the Flagler County Legislative Delegation, research funding opportunities for future E-W roadway connections.

Objective 2.1.6 – Construct New Interstate 95 Interchange Access

To facilitiate traffic flow and provide needed evacuation corridors, the City shall encourage FDOT and/or developers to construct two new interchanges to Interstate 95, where appropriate.

- **Policy 2.1.6.1** The City is continuing to pursue additional Interstate 95 interchanges using the FDOT District 5 Model (CFRPM).
- **Policy 2.1.6.2** The City shall lobby for funding to construct the additional interchanges and encourage the Flagler County Legislative Delegation to support those projects.
- **Policy 2.1.6.3** The City shall, through pipelining and other means, use DRI mitigation funds when appropriate to plan for and construct Interstate 95 interchanges.





Objective 2.1.7 - Facilitate the Use of Alternatives to the Interstate 95 FIHS facility for Local Travel

To reduce traffic on Interstate 95 the City shall continue its program to expand the City's north-south parallel reliever roadways to I-95. Funding assistance shall be solicited from FDOT and private developer interests where appropriate.

- **Policy 2.1.7.1** The City shall seek funding for a corridor study on Palm Harbor Parkway.
- **Policy 2.1.7.2** The City will continue the construction of additional lanes for Old Kings Road from SR-100 to Forest Grove Drive.
- **Policy 2.1.7.3** The City will complete the construction of two additional lanes for Belle Terre Parkway from Bellaire Drive to Matanzas Woods Parkway by 2010.
- **Policy 2.1.7.4** The City shall request that FDOT provide I-95 signage both north and south of the City to encourage interstate travelers to exit the FIHS system and utilize local roadways for their local north-south travel needs.

Objective 2.1.8 - Rail, Multi-modal and Airport Facilities

To the extent feasible, support the development of safe, convenient and energy efficient rail and airport facilities and provide opportunities for the creation of a multi-modal system that interconnects all transportation modes, provides new modes for passenger transportation, and encourages industrial and commercial development in the City through improved freight facilities.

- **Policy 2.1.8.1** The City shall support Flagler County's efforts to improve the Flagler County Airport and improve its capabilities in accommodating jet aircraft.
- **Policy 2.1.8.2** The City shall support Flagler County's efforts to develop a Flagler County Airport Economic Development Plan and provide input to promote the City's interests in the development of inter-modal and economic opportunities around the Airport.
- **Policy 2.1.8.3** To encourage the use of the City's inter-modal resources, the City shall encourage, through land use designations and other methods, industrial development within the areas of the City that are adjacent to the Airport property and along the Florida East Coast Rail Line.
- **Policy 2.1.8.4** Through the development review process, the City shall discourage residential development immediately adjacent to its active rail corridor by establishing buffering requirements and noise pollution standards in the LDC.





Policy 2.1.8.5 - Through coordination with appropriate State agencies, the Flagler County Legislative Delegation, Flagler County, the City of Bunnell, and DRI developers, the City shall work toward the development of a passenger rail station on the State's Florida East Coast (FEC) rail corridor within the Palm Coast Park DRI or in another suitable location.

Objective 2.1.9 – Transportation Impact Fees

Continue to implement the City's Transportation Impact Fee Ordinance to ensure that fees accurately reflect the impacts of new development on the transportation network, and to ensure that fees are being used to the maximum extent possible to improve the City's transportation system.

Policy 2.1.9.1 – The City shall periodically review the City's Transportation Impact Fee Ordinance to ensure that the current impact fees are sufficient to cover the cost of improvements.

Policy 2.1.9.2 - The City shall periodically evaluate advantages and disadvantages regarding the collection and expenditure of impact fees for road improvements and projects.

Objective 2.1.10 - Development of Transportation Alternatives

Working with Flagler County, the City will identify transit alternatives for the City that will encourage energy efficient land use patterns to serve current and future land uses and population needs, reduce congestion and vehicle miles travelled and meet its future transportation needs.

Policy 2.1.10.1 – Within five (5) years of adoption, the City will coordinate with Flagler County in the development of a Mass Transit Development Plan which assesses the need for a Mass Transit program that includes fixed route/deviated route bus services, paratransit services, ride share, and van pooling. **Map 2.1A** shows the current destinations and pickup points for Flagler County's paratransit vehicles.

Policy 2.1.10.2 – In coordination with Flagler County, the City will assist with the development of a Mass Transit Development Plan to address the following issues and topics:

- A. Need/demand for services and public support;
- B. Projected utilization and passenger patronage;
- C. Organization, administration and management of a program;
- D. Route development and design;
- E. Technology and capital needs;
- F. Estimated planning, capital and operating costs;
- G. Methods of funding services:
- H. Encourage transit use and ride sharing; and





I. Reduce the use of single-occupant vehicles.

Policy 2.1.10.3 – The City shall implement programs to provide a safe, convenient, and energy efficient multimodal transportation system, thereby reducing vehicle miles traveled and greenhouse gas emissions.

Objective 2.1.11 – Reduce Commuting Demand on the Strategic Intermodal System

Support the development of strategic mixed-use centers and provide opportunities for employment growth to maintain jobs within the City.

Policy 2.1.11.1 Emphasize employment growth in the City along major arterials and in strategic mixed-use centers.

Policy 2.1.11.2 Provide opportunities for transit service by concentrating employment opportunities within strategic mixed-use centers.

Policy 2.1.11.3 Provide opportunities for trip-chaining (combining several trips in one outing) within strategic mixed-use centers, thereby reducing vehicle miles traveled and greenhouse gas emissions.





GOAL 2.2: INCREASED INTERCONNECTIVITY

Reduce traffic on collector and arterial roadways by increasing interconnectivity between existing and proposed residential communities, residential and commercial development and adjacent commercial development.

FINDING: Several of the City's arterial roadways are currently operating at an LOS D. Other arterials and collector roadways will accumulate significant traffic if the current rate of development continues. One strategy that can be used to reduce traffic on City collectors and arterials is to increase opportunities for persons taking short trips to utilize local road connections, sidewalks or multi-use paths. This strategy shall include, but not be limited to, opportunities for pedestrians and bicyclists to meet their needs for travel between neighborhoods, to community recreational facilities, educational and institutional facilities, civic facilities and commercial facilities.

Objective 2.2.1 – Vehicle Interconnectivity

Continue to enforce standards for requiring commercial and residential connectivity.

Policy 2.2.1.1 – The City shall enforce regulations in the LDC requiring commercial development to provide roadway connections to adjacent commercial development and to provide for future connections, where feasible.

Policy 2.2.1.2 – Each new residential subdivision and all new residential developments of more than 50 dwelling units, or which use as access a street that is 2,500 feet or more in length shall provide a minimum of two external connections at least one of which connects to a public collector or arterial roadway, but both being directly connected to a public road. An exception to the requirement that the project must access a collector or arterial roadway may be granted if it is determined by competent traffic analysis that the additional traffic will not exceed the capacity of surrounding local streets at build-out of the surrounding area. This policy shall not apply to residential development that has been approved or for which an application has been submitted and accepted by the City prior to September 25, 2007.

Policy 2.2.1.3 – The City shall continue to promote the construction of roadway connections between residential and institutional and commercial development to promote the use of bicycles and walking.

Policy 2.2.1.4 – The City may promote the construction of roadway connections between residential communities, where feasible.





Objective 2.2.2 – Pedestrian and Bicycle Plan

Enforce standards that encourage and/or require establishment of sidewalk connections or multiuse paths between new residential and commercial development.

- **Policy 2.2.2.1** Through the development review process, the City shall ensure that developers construct connections that link residential areas, recreational facilities, and commercial developments to reduce traffic on collector and arterial roadways.
- **Policy 2.2.2.2** The City shall continue to update its Pedestrian and Bicycle Plan consistent with the Transportation Map Series in *Chapter 2* of the *Data and Analysis* that, at a minimum:
 - A. Identifies and prioritizes those areas in need of sidewalks, multi-use paths and bicycle facilities;
 - B. Evaluates the need for sidewalks on local streets in existing neighborhoods;
 - C. Identifies potential funding for construction;
 - D. Sets standards and develops projects for the City's 5-year CIP;
 - E. Develops a system of sidewalks and multi-use paths that interconnects trails, schools, parks, neighborhoods, shopping centers, collectors and arterials; and
 - F. Recommends annual CIP funding levels for sidewalk and bicycle facilities.
- **Policy 2.2.2.3** The City's Pedestrian and Bicycle Plan shall prioritize arterial and collector roadway segments within the City that should be improved to include bicycle lanes and encourage bicycle facilities to be added during roadway construction/improvement to provide alternate modes of transportation.
- **Policy 2.2.2.4** The City shall continue to enforce requirements for bicycle and pedestrian interconnectivity between residential developments and between residential and adjacent commercial developments as a means of reducing traffic on collector and arterial roadways.
- **Policy 2.2.2.5** The City shall continue to enforce requirements for pedestrian and bicycle interconnectivity for all new commercial development and to specifically require that development shall make provisions for future interconnectivity when abutting undeveloped properties.
- **Policy 2.2.2.6** The City shall identify funding opportunities for the construction of sidewalks along arterial, collector, and local streets.
- **Policy 2.2.2.7** The City shall continue to enforce requirements that all new subdivisions construct sidewalks and/or multi-use paths within the development and sidewalks on collector and arterial roads.



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Policy 2.2.2.8 – The City shall explore strategies and funding to encourage the construction of sidewalks and/or multi-use paths in existing subdivisions. This may include, but shall not be limited to, property-owner funded sidewalk improvements in subdivisions through the use of special assessments, creation of Municipal Service Taxing Units, Tax Increment Financing, or grants.



GOAL 2.3: MULTI-USE TRAILS SYSTEM

<u>Develop And Maintain A Citywide System Of Greenway Trails That Combine Pedestrian And Bicycle Opportunities.</u>

<u>FINDING</u>: The establishment of trails can enhance the City's greenways and provide recreational activities in passive parks and green space. These multi-use trails can provide recreational opportunities for all segments of the City's population including children, teens, adults, seniors and where feasible, the handicapped community. The City also has unique and interesting natural features and historic sites that can provide passive recreational opportunities. A well-designed trail system that connects passive and active recreational activities will enhance the City's image and provide unique recreation.

Objective 2.3.1 - Trails

Continue to expand and maintain the system of linear trails connecting the City to internal and adjacent lands and water and expand the system of trails that together with the City's sidewalk system provides access for recreation and serves as an alternative mode of transportation.

- **Policy 2.3.1.1** The City shall identify the locations of future multi-use and nature trails consistent with the general locations and hubs identified in **Map 2.10** of the Transportation Map Series.
- **Policy 2.3.1.2** The City shall utilize its greenway system wherever possible to place trails in natural settings.
- **Policy 2.3.1.3** The City may provide connections from the proposed rails-to-trails to City and County parks, to significant natural and man-made features, water bodies, conservation areas and eco-systems including, but not limited to, the Intracoastal Waterway, Doughnut Lake, Graham Swamp, and Princess Place Preserve.
- **Policy 2.3.1.4** The City shall continue to expand and develop the City's trail system utilizing the trail concepts identified in **Map 2.10**, so that together with the City's sidewalk system it provides a pedestrian/bicycle route that rings the City and connects all neighborhoods, parks and public facilities.
- **Policy 2.3.1.5** The City shall continue to update the trail component of the Multi-Use Trails System Plan showing the interconnections and inter-relationships between all non-motorized modes of travel.



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- **Policy 2.3.1.6** The City shall work with Flagler County, State agencies, and developers to complete the portion of the Lehigh Trail located within the City.
- **Policy 2.3.1.7** The City shall evaluate the need for and the feasibility of developing pathways and/or allowing the use of existing or planned pedestrian trails, for non-polluting, electric-powered golf carts and other personal mobility vehicles.
- **Policy 2.3.1.8** The City shall seek funding opportunities through the FDEP, State Office of Greenways and Trails, the Trust for Public Lands, FDOT, and other appropriate sources to plan, design and fund the construction of the City trails system.
- **Policy 2.3.1.9** The City shall continue to enforce the LDC to require all new residential and commercial development that adjoin the proposed trail system, to provide pedestrian and bicycle links to the trails when consistent with the requirements of Florida Law. The City shall encourage the owners of undeveloped properties to make provisions for future interconnectivity for those sections of the City trail system planned, but not yet developed.



GOAL 2.4: STREET MAINTENANCE AND IMPROVEMENT SYSTEM

Ensure that all streets and related drainage facilities within the City are adequate and properly maintained to meet transportation needs and provide safe travel for residents and visitors.

FINDING: When the City was developed by ITT in the 1970's, no phasing of the development was included in the development plans in accordance with agreements reached between ITT and the Federal Government. As a result, the entire road network was built by ITT including drainage and infrastructure. At present, many of the platted lots on those roads have still not been developed although the roads have aged and engineering standards have changed over time. Additionally, the street system was designed as a rural road system with drainage swales in rights-of-way and no curbing, sidewalks or paved shoulders. Because of the large street network that was developed within a short span of time and the age of the system, the City is faced with a City street system where a significant portion of the roads and related drainage facilities are in need of repair and rehabilitation. As the City makes improvements to the road and drainage system, it must develop a strategy that maintains the integrity of existing structures, identifies insufficiencies, schedules, and monitors improvements.

Objective: 2.4.1 – Roadway Maintenance and Related Drainage

Protect the integrity of existing streets and street drainage structures.

- **Policy 2.4.1.1** The City shall periodically revise and refine the City's street maintenance program to identify those road segments in need of repair.
- **Policy 2.4.1.2** The City shall prioritize road and drainage segments in need of repair and develop a schedule for temporary and permanent repair.
- **Policy 2.4.1.3** The City shall annually update its Pavement Management Plan that includes a resurfacing schedule for the City's roads.
- **Policy 2.4.1.4** The City shall identify methods to improve road shoulders as a measure to prevent road deterioration.
- **Policy 2.4.1.5** The City shall identify and eliminate valley gutters from the streets along arterial and collector roads and where local roads and collectors intersect, where appropriate.
- **Policy 2.4.1.6** The City shall explore sources of funding to fund construction of paved shoulders and bicycle lanes on the City street system.





- **Policy 2.4.1.7** The City shall identify problem drainage areas in the City and develop strategies for correcting the problems, including, but not limited to, comprehensively addressing the road drainage issues in the City's Stormwater Master Plan.
- **Policy 2.4.1.8** The City shall continue to enforce regulations to provide for protection of the road drainage system and penalties for builders and developers who damage the drainage system by ignoring regulations or through neglect.
- **Policy 2.4.1.9** The City shall continue to enforce the LDC requirement that all new road construction or improvements are designed and constructed as urban curb and gutter designs, modified urban sections, or swale systems or other appropriate typical sections.
- **Policy 2.4.1.10** The City shall continue to evaluate the swale system on the City street system and update the inventory of needed repairs and a schedule to complete necessary repairs.

Objective 2.4.2 – Bridges

Ensure that all bridges within the City are safe and properly maintained.

- **Policy 2.4.2.1** The City shall work with FDOT to conduct biennial bridge inspections.
- **Policy 2.4.2.2** The City shall ensure that pavement maintenance and related repairs on or around the City's bridges receive the highest priority.
- **Policy 2.4.2.3** –Through intergovernmental coordination, the City shall identify funding for needed bridge repairs.
- **Policy 2.4.2.4-** The City shall continue to implement the Bridge Maintenance Program to evaluate and ensure the safety of City bridges.

Objective 2.4.3 – Roadway Safety

Ensure that all roadways in the City are safe for all roadway users.

- **Policy 2.4.3.1** The City shall review roadway signage requirements for consistency with FDOT standards and ensure consistency with the LDC.
- **Policy 2.4.3.2** The City shall enforce LDC standards for safe signage on the City street system.





- **Policy 2.4.3.3** The City shall conduct a sign survey annually of all traffic signs in the City street system, identify signage in need of repair or replacement, formulate a potential schedule for the work, and include an assessment of the need for directional signage.
- **Policy 2.4.3.4** The City shall continue to enforce regulations for signage and road-striping standards.
- **Policy 2.4.3.5** As conditions warrant, the City shall conduct speed zone studies that include all collector and arterial roads.
- **Policy 2.4.3.6** The City shall continue to coordinate with the Flagler County Sheriff's Office to refine traffic accident reporting to include, but not be limited to, the identification of dangerous intersections and road segments. The City shall continue to identify ways to decrease accident rates on dangerous roadways and at intersections by means of improved signalization by conducting warrant studies or through the implementation of traffic calming.
- **Policy 2.4.3.7** –The City shall continue to inventory and update all guardrails and safety-related structures and budget for needed improvements in the CIP.

Objective 2.4.4 – Evacuation of Residents

Develop the capability to evacuate all residents of the City in the event of a threat of natural or man-made disaster.

- **Policy 2.4.4.1** The City shall continue to participate with the Northeast Florida Regional Council (NEFRC) in order to refine and improve evacuation plans, and to identify primary roadways to serve in an emergency.
- **Policy 2.4.4.2** The City shall continually update its procedures and training for Public Works Department employees detailing road closures, traffic routing, and signage in the event of a natural or man-made disaster.
- **Policy 2.4.4.3** The City shall follow its provisions for removal of obstacles to free traffic flow in the event of a natural disaster that include the ability to remove fallen trees and disabled vehicles quickly on any of the evacuation routes.
- **Policy 2.4.4.4** All new subdivisions and all new residential developments shall require a minimum of two (2) means of ingress/egress to arterial or collector roads for all new subdivisions and all new residential developments to be used for access and egress in the event of an emergency consistent with and subject to the exception stated in Policy 2.2.1.2. (*Ordinance* #2007-20, $\S 1(b)$, 10/2/07)



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Policy 2.4.4.5 – Within fifteen (15) years of Plan adoption, the City shall pursue the development of one additional roadway connection for ingress/egress to an arterial roadway for the following neighborhoods that have limited access.

- A. Cypress Knoll
- B. Matanzas Woods
- C. Indian Trails East