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Chapter III
TRANSPORTATION ELEMENT
SUPPORT DOCUMENT

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Evaluation and Appraisal Amendments 2017

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Transportation Updates

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Since the 2008 Plan update, the Town has focused on improvements to its pedestrian and bicycle network. It has continued to enhance safety at key intersections and roadways frequently traveled by pedestrians. The Town installed crosswalks at major intersections along South Peninsula Drive and hand-held signal flags at existing crosswalks and beach access points on South Atlantic Avenue. In 2013, the Town completed the mapping of its own rights of way to determine available widths for potential mobility and utility improvements. In 2014, the Town also partnered with Volusia County to install a Rectangular Rapid Flash Beacon crosswalk signal on South Atlantic Avenue (a County-maintained facility) at a frequently-used crosswalk leading to a popular beachside restaurant. In 2015-2016, the Town also removed its non-ADA compliant bus stop benches and replaced them with ADA-compliant bus boarding pads at the five most heavily used stops. The Town has also partnered with a local developer to construct a new six-foot wide sidewalk on the north side of Inlet Harbor Road west of South Peninsula Drive (approximately 900 feet) and to replace the existing six-foot wide sidewalk on the west side of South Peninsula Drive, north of Inlet Harbor Road, with an eight-foot wide bike path (approximately 1,000 feet), both of which are scheduled to be finished in 2016.

The Town's bicycle-pedestrian network will soon be connected to the beachside bikepath network north of the Town's municipal boundary. Volusia County is currently finishing a significant bicycle-pedestrian improvement project, a one-mile extension of the eight-foot wide bikepath along South Atlantic Avenue between Marcelle Avenue and Major Street, which also includes drainage and safety improvements. Completion of this last remaining link will create an uninterrupted bicycle-pedestrian pathway from Ponce Inlet to Daytona Beach Shores, Port Orange, Daytona Beach, and beyond.

The Town has implemented new regulations since the last Plan update to increase the availability of bicycle parking and incentivize alternative transportation modes. In 2015, the Town amended its parking regulations to require bicycle parking for new developments and redevelopment, pursuant to Transportation Policy 1.7.9. The LUDC amendments also allow a reduction in minimum parking requirements for businesses that share parking facilities, that are located near a public transit stop, or that use shuttles to bring patrons to and from the establishment. Businesses may also now convert a portion of their standard parking stalls to accommodate motorcycles. These amendments were intended to make more efficient use of new and existing parking facilities and to encourage use of alternative transportation modes. The Town continues to implement the Transportation Element policies requiring traffic studies with new development; requiring development to construct sidewalks, bike paths, or pay into a sidewalk construction fund; and enforcing standards for access, safety, and aesthetics.

48 Lastly, the Town is also in the process of finalizing its Pedestrian-Bicycle Master Plan. This
 49 plan includes potential improvements to the existing network such as new linkages,
 50 completion of gaps, safety improvements, and repairs. The individual projects will be
 51 prioritized during the public hearing process, after which the Town intends to apply for
 52 feasibility, design, and construction grants through the River-to-Sea Transportation
 53 Planning Organization.

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 55 Concurrency and the Future Transportation Network

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 57 Pursuant to F.S. § 163.3180(1) and (5), the Town is retaining concurrency over its
 58 transportation system. The Town shall continue to utilize the level-of-service (LOS)
 59 standards currently adopted, and is not proposing any changes to those standards. The
 60 Town utilizes a LOS standard of “E” for the County-maintained portion of S. Atlantic
 61 Avenue (a collector roadway), and a LOS of “D” over all Town-maintained sub-collector and
 62 local roads.

63
 64 The 2008 Plan update indicated that all roadways in town at the time were operating well
 65 below their maximum daily capacity. On average, the volume-to-capacity (v/c) ratio
 66 amounted to only 23% of the traffic volume the roads were capable of handling. The daily
 67 traffic capacity and v/c ratios from the 2008 Plan are provided below for reference. The 2008
 68 traffic study counted all traffic on the roads at the time, regardless of trip origin or
 69 destination, and therefore included traffic generated locally and from visitors.

ROADWAY LEVEL OF SERVICE, 2008

Roadway		Adopted Standard		Volume-to-Capacity Ratio	Measured LOS
		LOS	Capacity ¹		
S. Atlantic Avenue	At North Town Limits	E	12,600	62% ²	D
	North of Harbour Village Boulevard	E	12,600	43%	D
	South of Harbour Village Boulevard	E	12,600	34%	C
	North of Inlet Harbor Road	E	12,600	22%	C
	North of Beach Street	E	12,600	18% ²	C
S. Peninsula Drive	At North Town Limits	D	8,000	26% ²	C
	North of Harbour Village Boulevard	D	8,000	31%	C
	South of Harbour Village Boulevard	D	8,000	28%	C
	North of Inlet Harbor Road	D	8,000	22%	C

	North of Beach Street	D	8,000	13% ²	C
	South of Beach Street	D	8,000	14%	C
	North of Lighthouse Drive	D	8,000	12% ²	C
	South of Sailfish	D	8,000	19%	C
Inlet Harbor Road	West of S. Peninsula	D	8,000	17% ²	C
	East of S. Peninsula	D	8,000	11%	C
Beach Street	West of S. Peninsula	D	8,000	11%	C
	East of S. Peninsula	D	8,000	13%	C
¹ Capacity determined by FDOT's Quality Level of Service Handbook					
² Weighted average of weekday and weekend rates, as available					

Source: Lassiter Transportation Group, Inc. report dated March, 2008

70 Single-family homes generate an average of 9.45 trips per day¹. If fully occupied, the 49
71 new single-family homes constructed since 2008 will have added 463 new trips per day.
72 These trips occur throughout the roadway network, but are concentrated on the two
73 primary thoroughfares, S. Atlantic Avenue and S. Peninsula Drive. By the end of the short-
74 term planning period, 425 additional daily trips will be added from the projected 45 new
75 single-family homes. At only 68% capacity, even the one roadway segment experiencing the
76 most traffic in town can accommodate more than 4,000 additional trips at its adopted LOS
77 standard. Accordingly, no capacity improvements are needed now or by the end of the short-
78 term planning period.

79
80 The 2008 Plan update anticipated that at build-out, when all remaining vacant properties
81 are built under their Future Land Use designation, such development could generate a
82 maximum of 5,444 new daily trips under a worst case assumption. Even with these new
83 trips, the town's roadway system was projected to operate within adopted levels of service
84 standards. However, just north of the Town limits, the 2008 update indicated that South
85 Atlantic Avenue would exceed its adopted LOS "E" threshold at build-out. This and the
86 road segments further north must continue to be evaluated given their importance to the
87 Town's evacuation during a natural disaster.

88 89 Proposed Transportation Policy Updates

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91 Policy 1.1.4: Will require development to be measured against the LOS standards in the
92 Plan and requires necessary capacity improvements to be in place concurrent with the
93 impacts of development, pursuant to F.S. §163.3180.

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95 Policy 1.1.6: Will require traffic studies for concurrency to utilize the TPO's uniform
96 traffic impact analysis methodology pursuant to F.S. § 163.3180(5)(g).

97
98 Policy 1.1.7: Will exempt public transit facilities from concurrency review, pursuant to
99 F.S. § 163.3180(5)(h).

¹ ITE *Trip Generation Manual*, 9th edition. Weighted average of weekday, Saturday, and Sunday trip generation rates.

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Policy 1.4.7: Will add long-term goal to raise at-grade sidewalks above the adjacent road grade to improve pedestrian safety.

Objective 1.7: Will elaborate to include a “walkable transportation mobility system.”

Policy 1.7.3: Will apply proportionate fair-share methodology to system improvements provided by private developments, pursuant to F.S. § 163.3180(5)(h) and Capital Improvements Element policies.

Policy 1.7.10: New policy encouraging new development except single- and two-family dwellings to provide bicycle/pedestrian access to public transit stops located within 500 feet and to utilize the Transit Development Design Guidelines of the local transit authority.