Annual Inspection Report

for the Fiscal Year ending June 30, 2019

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Executive Summary

As General Consultants to the Florida Department of Transportation (FDOT), Florida's Turnpike Enterprise (FTE) and in accordance with Section 5.13 of the Turnpike Enterprise Bond Resolution, ATKINS and HNTB are pleased to submit the FTE System Annual Inspection Report for the Fiscal Year ending June 30, 2019. The findings contained in this report are based upon the assessment of inspection data compiled for the roadway, facility, and structures components; coordination with the FTE Maintenance and Finance Offices; and ATKINS / HNTB's general knowledge of the condition of FTE's system facilities.

The results of this year's inspection confirm the success of the FTE's ongoing efforts to maintain aggressive and comprehensive Maintenance and Renewal and Replacement programs. The overall condition of the FTE System is good. The System's primary feature, its 498 centerline miles of roadway, reported no roadway items rated over 20% deficient, as shown in Tables 5 through 9. For this report, roadway elements reported as deficient are defined as any items rated as four or below in the Roadway Rating Procedure (RRP).

The FY 2019 annual inspection revealed several facilities (buildings) have minor deficiencies but are in good condition overall. Most of the deficiencies identified are cosmetic in nature and pose no structural concerns. Structures composed of bridges; large non-qualifying culverts (LNQCs); high mast light towers (HMLT); and overhead sign structures, are inspected on a biennial basis. The most recent inspection was conducted in FY's 2018-2019. Bridges, inspected in the biennial inspection of FY's 2018 & 2019, are reported in good condition. The LNQCs, HMLTs, and overhead sign structures inspected in the biennial inspection of FY's 2018 & 2019 are also included in this report.

The asset management / inspection team coordinated with FTE Finance Department on July 1, 2019. The FTE Finance department obtained the information which is shown in Table 19 - Program Commitments. For a detailed explanation of the funding amounts, please reference the footnotes at the bottom of Table 19. The FTE programmed $65.16 million for periodic and routine maintenance in FY 2019. These funds are being used for maintenance of all highway and structure assets, building routine maintenance, roof replacement/restoration, building renovation, toll plaza tunnel sealing, drainage improvements, and other safety related upgrades. As a part of its Renewal and Replacement Program, the FTE programmed $133.71 million in FY 2019 for roadway resurfacing; roadway, bridge, and facility construction; toll equipment enhancement; and bridge repair work.

In addition to the analysis of inspection results, this report presents the current status of the FTE System with respect to the FDOT's Maintenance Rating Program (MRP) and includes programmed maintenance funding level commitments through FY 2023. Also, based on the prioritization of specific deficiencies identified by the FTE Maintenance Office and coordination of funding related issues with the FTE Finance Office, recommendations are made for the initiation of conceptual studies and funding for several improvement projects.

The FTE's high commitment to system improvement and preservation is very apparent based on the emphasis placed on its Maintenance and Renewal and Replacement programs. This assures the bondholders protection of their investment.

Continually monitoring system conditions and ensuring that its facilities are maintained in top condition, the FTE is better able to provide for the safety and convenience of its patrons while also maintaining a secure investment for bondholders.

1. Introduction

1.1 General Description and Procedure of Inspection

The FTE's annual inspection is conducted based on three major categories: roadways, structures and buildings; some of which are accomplished through the services of independent consultants. The roadway inspection is divided into five general categories of roadway components, see Table 1. The structures inspection includes bridges, overhead sign structures, LNQCs and HMLTs; which is typically conducted in phases, beginning with bridges and ending with the HMLTs. The facility inspection is comprised of fourteen categories shown in Table 1. ATKINS and HNTB, the FTE's General Engineering Consultants, inspected all roadways and facilities. This report reflects the findings of the roadways and buildings inspections that were accomplished in FY 2019.

Table 1 2019 Inspection Categories

Roadway Components	Facility Components
Roadway	Architecture
Roadside	Building HVAC
Traffic Services	Domestic Plumbing
Drainage	Building Electrical
Vegetation - Aesthetics	Communications, Fire Alarm, Monitoring Devices
	Concrete Pavement & Sidewalks
Structure Components	Sewer / Septic Tanks, Lift Stations & Wells
Bridges	Islands
Large Non-Qualifying Culverts	Booths
High Mast Light Towers	Canopy
Overhead Sign Structures	Plaza Concrete Aprons
	Site Grounds
	Stand-By Power
	Structural

The FTE and ATKINS developed a Roadway Rating Procedure (RRP) based on Florida Department of Transportation's (FDOT's) Maintenance Rating Program (MRP) to assess the FTE's assets. The MRP uses a statistical sample of the system to determine an overall system rating based on a 100-point scale. The RRP includes all 46 of the original roadway elements required by the MRP, apart from six pavement features: cracking, potholes, rutting, stripping, depression and shoving. These six features are included during inspection of the ramps. The exclusion of the above six pavement features from the mainline pavement inspection RRP began in FY 2014 and these features are now reported in the State Pavement Condition Survey (PCS). The results are shown in Section 3, Summary of Findings, Subsection 3.2 Roadways.

All features in the RRP are rated on a ten-point scale rather than the "meets" or "fails to meet" standard used in the MRP. Roadway features located in construction zones are not rated in the inspection. Inspectors note the beginning and ending mileposts for each construction area and are recorded in the inspection database. See Appendix B, Sec A. Roadway Rating Procedures.

The MRP score, which generally supports the findings of the annual inspection, allows a comparison of FTE System roadway conditions to the statewide standard. The MRP and RRP ratings assigned by the FTE can be used to make general recommendations on system components needing improvement. A summary of the MRP, described in more detail, and the scores are included in the Roadway section of this report. The rating system utilized by FTE System is defined in detail in Section 2, FY 2019 Maintenance Inspection Results, Subsection 2.2, Roadways.

The structures inspection is conducted on a biennial basis by two independent Consultants which were both brought under contract with the FTE in August 2015, FY 2016. The same Consultants were awarded new contracts effective August 17, 2017, to August 16, 2019. This report reflects the findings of the overhead sign structures inspection and the HMLTs inspections.

Atkins developed an inspection procedure for the building facilities which incorporates the main components of a building and is graded on a 1 to 10 basis, with 1 being the worst, and 10 being the best. The rating system utilized by FTE System is defined in detail in Section 2, FY 2019 Maintenance Inspection Results, Subsection 2.4, Buildings.

All inspections are conducted in accordance with standard procedures developed by the Federal Highway Administration and/or FDOT and involve an extensive visual examination of all elements relative to the category of inspection. A detailed tabulation of the conditions observed on the date of the field inspection is prepared in the form of inspection worksheets.

Due to the time duration between field inspection activities and publication of this report, many of the deficiencies identified in this report may already have been corrected through ongoing maintenance and construction activities. These improvements are typically funded through the FTE's Maintenance Program, in periodic or routine maintenance contracts, or through the FTE's Renewal and Replacement Program. In an effort to protect the System and maintain public safety, serious conditions that demand immediate attention are reported via email and phone call to the appropriate office immediately upon their discovery in the field.

1.2 Description of Florida's Turnpike Enterprise System and Inspection Zones

For FY 2019, the FTE System is comprised of multi-lane, limited access toll facilities. Contributing 498 miles to Florida's Intrastate Highway System, these components include 700 bridges (as reported within the most recent FTE structures maintenance

data query), 122 toll plazas, 486 buildings, and eight service plazas. The System's mainline roadway segments summarization are in Table 2 below.

Table 2 Florida's Turnpike Enterprise System Components - FY 2019

Component	Length (miles)
Florida's Turnpike – SR 91	265
Homestead Extension of Florida's Turnpike (HEFT) – SR 821	47
Sawgrass Expressway – SR 869	23
Beachline West Expressway – SR 528	8
Beachline East Expressway – SR 528 & SR 407	22
Seminole Expressway – SR 417	18
Veterans Expressway – SR 568	15
Interstate 4 / Selmon Connector	1
Southern Connector Extension – SR 417	6
Polk Parkway – SR 570	25
Suncoast Parkway – SR 589 (includes Veterans Expressway Spur)	42
Western Beltway – SR 429	11
First Coast Expressway – SR 23[1]	15
Total	**498**

The FTE's annual inspection is conducted based on the location of System components within geographic zones. The roadway and structure inspections are based on four zones and the buildings inspection is based on nine zones. These zones were established to describe the main System components relative to the southern, central, and western regions of the state. The System components, or portions thereof, included in each of the inspection zones are described in Table 3 and illustrated in Appendix A.

[1] First Coast Expressway – Phase 1 from I-10 to Blanding Blvd was open to traffic in summer 2019. The 15 centerline miles were not inspected in 2019 but will be included in next year's report.

Table 3 Maintenance Inspection Zones - FY 2019	
Roadways and Structures	
ZONE I	Florida's Turnpike – Milepost 0X through 100 - SR 91
	Homestead Extension of Florida's Turnpike (HEFT) - SR 821
	Sawgrass Expressway - SR 869
ZONE II	Florida's Turnpike - Milepost 100 through 200 - SR 91
ZONE III	Florida's Turnpike - Milepost 200 through 309 - SR 91
	Beachline West Expressway - SR 528
	Beachline East Expressway - SR 528
	SR 407
	Florida's Turnpike Connection to East-West Expressway - SR 408
	Southern Connector Extension - SR 417
	Seminole Expressway - SR 417
	Western Beltway & Wekiva Parkway - SR 429
ZONE IV	Veterans Expressway - SR 568
	Polk Parkway - SR 570
	Suncoast Parkway - SR 589
Facilities and Communications	
HEFT	Homestead Extension of Florida's Turnpike (HEFT) - SR 821
Southern	Florida's Turnpike - Milepost 0X - MP 88, & Sawgrass Expressway – SR 91 & SR 869
Central	Florida's Turnpike - Milepost 88 through 236 - SR 91
Northern	Florida's Turnpike - Milepost 236 through 309 - SR 91
	Beachline West Expressway - SR 528
	Beachline East Expressway – SR 528
	Southern Connector Extension – SR 417
	Western Beltway – SR 429
Seminole	Seminole Expressway – SR 417
I-4 Crosstown Conn.	I-4 Connector. NB/SB Gantry Structure Building
Veterans	Veterans Expressway - SR 568
Polk	Polk Parkway - SR 570
Suncoast	Suncoast Parkway - SR 589

2. FY 2019 Maintenance Inspection

2.1 Introduction

The findings included in this report are based on an extensive evaluation of the roadway, structures and building inspection worksheets prepared by the inspection consultants. This report summarizes the data included in the worksheets, bridge inspection reports and Pavement Condition Survey (PCS); which reflect the condition of the features at the time of inspection. Complete listings of the elements typically inspected in each of the three major categories of facilities are included in Appendix B.

2.2 Roadways

Roadway inspection is divided into five general categories of elements: roadway, roadside, traffic services, drainage, and vegetation/aesthetics. The total quantities of the major elements with respect to each of the four maintenance zones are shown in Tables 5 through 9. The quantities shown include all major categories of FTE roadway facilities: mainline roadways, ramps and interchanges, and service plazas.

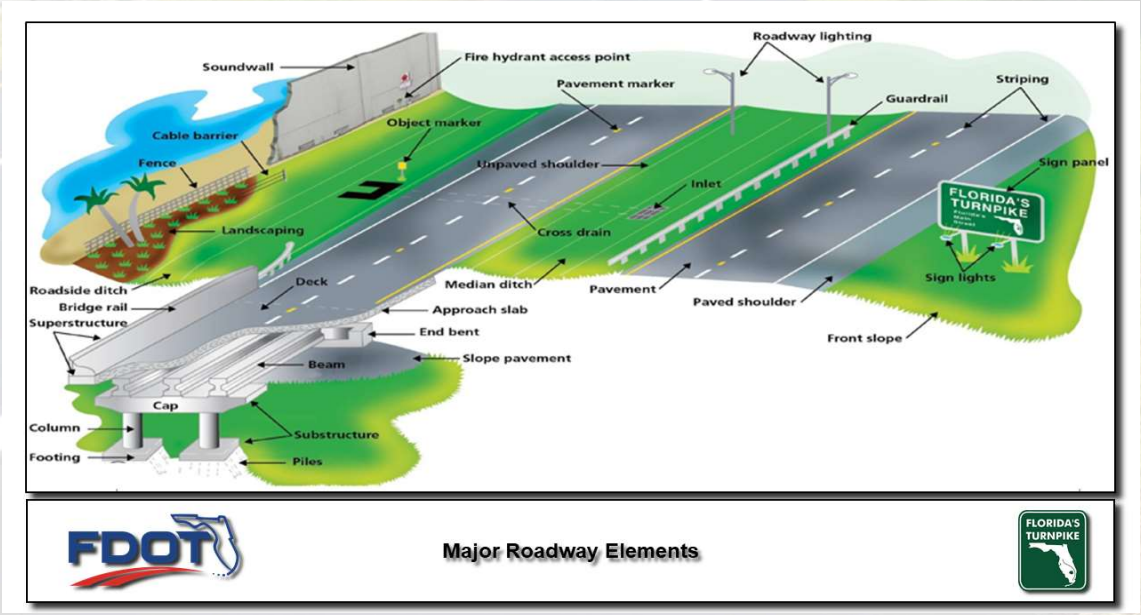


Figure 1 Major System Elements

The conditions of the roadway elements found in the RRP inspection for each of the maintenance zones are summarized in Tables 4 through 8. A sketch identifying the major elements of a typical roadway is included as Figure 1 above.

Each table contains only the elements listed in Appendix B that are present and inventoried in the particular zone. A rating of four or below on the field inspection worksheets indicates that the portion of the element is in less than fair (unsatisfactory) condition and is reported as deficient.

RRP ratings and descriptions of the numerical grading system are in Table 4.

Table 4 Turnpike Enterprise Roadway Inspection Rating Scale

Grade	Rating	Description
10	Excellent	No deficiencies noted. Feature is in like new condition
8-9	Good	No maintenance is necessary. Feature appearance and functionality/operability are good.
5-7	Degraded	Maintenance is required to protect public or system. Feature appearance and functionality/operability are below average.
2-4	Unsatisfactory	Immediate repair is required to protect public or system. Feature appearance and functionality/operability are substandard.
1	Emergency	Immediate maintenance is required to protect public or system. Feature appearance and functionality/operability are unacceptable.

Ratings for each of the roadway components are assigned based on visual inspection. Ratings, deficiencies and recommendations are entered into a database at the time inspections are conducted via laptop computers carried into the field. The database is maintained throughout the duration of the inspection process and Is utilized in the generation of each roadway report. Inspection results are separated by roadway/ramp segment and lane direction in the worksheets.

The FDOT MRP uses a different rating scale than the FTE RRP. FDOT Roadway and Roadside Procedure 850-000-015-j; 1.0 paragraph three states "Each District is to maintain a minimum annual maintenance rating of 80; and all elements (roadway, roadside, traffic services, drainage and vegetation/aesthetics) shall have a rating of 75 or above. All element characteristics shall meet the desired conditions of the MRP Handbook of at least 70". MRP ratings are based on a pass/fail standard, which develops a rating of 0 to 100, with 0 being worst and 100 being best. RRP deficiencies of 20 percent or more (rated 4 or below which are unsatisfactory) are emphasized in the tables to draw attention to elements that may affect the desired MRP rating of 90 for each RRP category. Each of these "deficient" elements are discussed in the Summary of Findings in Section 3. RRP inspection results reported in Tables 5 through 9, and the MRP Ratings detailed in Table 18, are derived from different inspection and reporting methods and are not interchangeable. However, the results of each should be comparable.

Table 5 Zone I - Condition of Roadway Elements (HEFT, Mainline 0-100, Sawgrass) - FY 2019				
Category	**Element**	**Quantity Inspected**	**Quantity Rated Four or Below**	**Percent Deficient**
Roadway	Pothole	185	0	0.00%
	Joint	307	0	0.00%
	Pavement Void	336	0	0.00%
	Edge Ravel	367	0	0.00%
	Rutting	200	0	0.00%
	Cracking	139	0	0.00%
	Depression	230	0	0.00%
	Stripping	113	0	0.00%
	Shoving	188	0	0.00%
	Paved Shoulder	359	0	0.00%
Roadside	Soil Shoulder	341	0	0.00%
	Front Slope	366	0	0.00%
	Sidewalk	24	0	0.00%
	Slope Protection	357	0	0.00%
	Fence	381	0	0.00%
Traffic Services	Pavement Marker	369	0	0.00%
	Striping	307	0	0.00%
	Pavement Symbol	369	0	0.00%
	Guardrail	366	1	0.27%
	Attenuator	334	0	0.00%
	Barrier Wall	254	0	0.00%
	Signs Less Than 30 SF	358	0	0.00%
	Signs Greater Than 30 SF	308	0	0.00%
	Regulatory Sign	372	0	0.00%
	Warning Sign	364	0	0.00%
	Object Marker	411	5	1.22%
	Sign Light	358	0	0.00%
	Highway Light	316	0	0.00%
Drainage	Cross Drain	353	0	0.00%
	Roadside Ditch	352	0	0.00%
	Median Ditch	354	0	0.00%
	Outfall Ditch	0	0	0.00%
	Curb Inlet	357	0	0.00%
	Rip Rap	345	0	0.00%
	Pond Lake Canal	363	0	0.00%
	Storm Drain	338	0	0.00%
	Other Inlet	355	0	0.00%
	Misc. Inlet	354	0	0.00%
	Side Drain	0	0	0.00%
	Roadway Sweep	343	0	0.00%
Vegetation/ Aesthetics	Roadway Mowing	366	0	0.00%
	Slope Mowing	366	0	0.00%
	Landscape	357	0	0.00%
	Tree Trim	361	0	0.00%
	Litter Removal	275	0	0.00%
	Turf Condition	342	0	0.00%

Table 6 Zone II - Condition of Roadway Elements (Mainline 100-200) - FY 2019

Category	Element	Quantity Inspected	Quantity Rated Four or Below	Percent Deficient
Roadway	Pothole	47	0	0.00%
	Joint	164	0	0.00%
	Pavement Void	180	0	0.00%
	Edge Ravel	183	2	1.09%
	Rutting	49	0	0.00%
	Cracking	56	0	0.00%
	Depression	49	0	0.00%
	Stripping	35	0	0.00%
	Shoving	44	0	0.00%
	Paved Shoulder	170	0	0.00%
Roadside	Soil Shoulder	180	0	0.00%
	Front Slope	180	0	0.00%
	Sidewalk	5	0	0.00%
	Slope Protection	178	0	0.00%
	Fence	177	0	0.00%
Traffic Services	Pavement Marker	183	0	0.00%
	Striping	53	0	0.00%
	Pavement Symbol	144	0	0.00%
	Guardrail	174	0	0.00%
	Attenuator	165	0	0.00%
	Barrier Wall	98	0	0.00%
	Signs Less Than 30 SF	176	0	0.00%
	Signs Greater Than 30 SF	165	0	0.00%
	Regulatory Sign	181	0	0.00%
	Warning Sign	173	0	0.00%
	Object Marker	225	2	0.89%
	Sign Light	154	0	0.00%
	Highway Light	142	0	0.00%
Drainage	Cross Drain	161	0	0.00%
	Roadside Ditch	170	1	0.59%
	Median Ditch	171	0	0.00%
	Outfall Ditch	0	0	0.00%
	Curb Inlet	180	0	0.00%
	Rip Rap	160	0	0.00%
	Pond Lake Canal	149	0	0.00%
	Storm Drain	179	0	0.00%
	Other Inlet	174	1	0.57%
	Misc. Inlet	180	0	0.00%
	Side Drain	2	0	0.00%
	Roadway Sweep	180	0	0.00%
Vegetation/ Aesthetics	Roadway Mowing	182	0	0.00%
	Slope Mowing	178	0	0.00%
	Landscape	183	0	0.00%
	Tree Trim	179	0	0.00%
	Litter Removal	138	0	0.00%
	Turf Condition	164	0	0.00%

Table 7 Zone III - Condition of Roadway Elements (Mainline 200-309, Beach Line E&W, SR407, SR408, SR 417e, SR 429) - FY 2019				
Category	**Element**	**Quantity Inspected**	**Quantity Rated Four or Below**	**Percent Deficient**
Roadway	Pothole	168	0	0.00%
	Joint	381	1	0.26%
	Pavement Void	378	0	0.00%
	Edge Ravel	382	4	1.05%
	Rutting	168	0	0.00%
	Cracking	178	10	5.62%
	Depression	373	0	0.00%
	Stripping	167	10	5.99%
	Shoving	170	2	1.18%
	Paved Shoulder	378	1	0.26%
Roadside	Soil Shoulder	377	24	6.37%
	Front Slope	376	15	3.99%
	Sidewalk	78	0	0.00%
	Slope Protection	366	1	0.27%
	Fence	371	10	2.70%
Traffic Services	Pavement Marker	385	0	0.00%
	Striping	382	5	1.31%
	Pavement Symbol	383	0	0.00%
	Guardrail	374	10	2.67%
	Attenuator	141	0	0.00%
	Barrier Wall	281	1	0.36%
	Signs Less Than 30 SF	388	16	4.12%
	Signs Greater Than 30 SF	377	5	1.33%
	Regulatory Sign	385	1	0.26%
	Warning Sign	383	0	0.00%
	Object Marker	371	6	1.62%
	Sign Light	364	3	0.82%
	Highway Light	372	15	4.03%
Drainage	Cross Drain	366	17	4.64%
	Roadside Ditch	371	0	0.00%
	Median Ditch	252	0	0.00%
	Outfall Ditch	14	0	0.00%
	Curb Inlet	280	0	0.00%
	Rip Rap	333	0	0.00%
	Pond Lake Canal	380	0	0.00%
	Storm Drain	383	4	1.04%
	Other Inlet	61	0	0.00%
	Misc. Inlet	306	2	0.65%
	Side Drain	23	3	13.04%
	Roadway Sweep	384	0	0.00%
Vegetation/ Aesthetics	Roadway Mowing	380	0	0.00%
	Slope Mowing	375	12	3.20%
	Landscape	349	0	0.00%
	Tree Trim	377	0	0.00%
	Litter Removal	379	2	0.53%
	Turf Condition	373	1	0.27%

Table 8 Zone IV - Condition of Roadway Elements (Veterans, Polk & Suncoast) - FY 2019				
Category	**Element**	**Quantity Inspected**	**Quantity Rated Four or Below**	**Percent Deficient**
Roadway	Pothole	171	0	0.00%
	Joint	275	0	0.00%
	Pavement Void	291	0	0.00%
	Edge Ravel	292	1	0.34%
	Rutting	172	0	0.00%
	Cracking	203	8	3.94%
	Depression	290	0	0.00%
	Stripping	175	6	3.43%
	Shoving	172	0	0.00%
	Paved Shoulder	295	4	1.36%
Roadside	Soil Shoulder	285	3	1.05%
	Front Slope	291	13	4.47%
	Sidewalk	82	0	0.00%
	Slope Protection	255	0	0.00%
	Fence	286	3	1.05%
Traffic Services	Pavement Marker	289	0	0.00%
	Striping	290	0	0.00%
	Pavement Symbol	290	0	0.00%
	Guardrail	283	1	0.35%
	Attenuator	150	0	0.00%
	Barrier Wall	195	0	0.00%
	Signs Less Than 30 SF	290	0	0.00%
	Signs Greater Than 30 SF	283	2	0.71%
	Regulatory Signs	290	2	0.69%
	Warning Signs	292	0	0.00%
	Object Marker	283	1	0.35%
	Sign Light	276	2	0.72%
	Highway Light	288	16	5.56%
Drainage	Cross Drain	289	1	0.35%
	Roadside Ditch	288	0	0.00%
	Median Ditch	208	0	0.00%
	Outfall Ditch	6	0	0.00%
	Curb Inlet	155	0	0.00%
	Rip Rap	229	0	0.00%
	Pond Lake Canal	286	1	0.35%
	Storm Drain	284	1	0.35%
	Other Inlet	103	0	0.00%
	Misc. Inlet	212	0	0.00%
	Side Drain	8	0	0.00%
	Roadway Sweep	292	0	0.00%
Vegetation/ Aesthetics	Roadway Mowing	292	0	0.00%
	Slope Mowing	287	3	1.05%
	Landscaping	252	0	0.00%
	Tree Trim	290	0	0.00%
	Litter Removal	289	0	0.00%
	Turf Condition	285	1	0.35%

Table 9 All Zones - Condition of Roadway Elements (HEFT, Mainline 0-100), Sawgrass - FY 2019				
Category	**Element**	**Quantity Inspected**	**Quantity Rated Four or Below**	**Percent Deficient**
Roadway	Pothole	571	0	0.00%
	Joint	1127	1	0.09%
	Pavement Void	1185	0	0.00%
	Edge Ravel	1224	7	0.57%
	Rutting	589	0	0.00%
	Cracking	576	18	3.13%
	Depression	942	0	0.00%
	Stripping	490	16	3.27%
	Shoving	574	2	0.35%
	Paved Shoulder	1202	5	0.42%
Roadside	Soil Shoulder	1183	27	2.28%
	Front Slope	1213	28	2.31%
	Sidewalk	189	0	0.00%
	Slope Protection	1156	1	0.09%
	Fence	1215	13	1.07%
Traffic Services	Pavement Marker	1226	0	0.00%
	Striping	1032	5	0.48%
	Pavement Symbol	1186	0	0.00%
	Guardrail	1197	12	1.00%
	Attenuator	790	0	0.00%
	Barrier Wall	828	1	0.12%
	Signs Less Than 30 SF	1212	16	1.32%
	Signs Greater Than 30 SF	1133	7	0.62%
	Regulatory Signs	1228	3	0.24%
	Warning Signs	1212	0	0.00%
	Object Marker	1290	14	1.09%
	Sign Light	1152	5	0.43%
	Highway Light	1118	31	2.77%
Drainage	Cross Drain	1169	18	1.54%
	Roadside Ditch	1181	1	0.08%
	Median Ditch	985	0	0.00%
	Outfall Ditch	20	0	0.00%
	Curb Inlet	972	0	0.00%
	Rip Rap	1067	0	0.00%
	Pond Lake Canal	1178	1	0.08%
	Storm Drain	1184	5	0.42%
	Other Inlet	693	1	0.14%
	Misc. Drain	1052	2	0.19%
	Side Drain	33	3	9.09%
	Roadway Sweep	1199	0	0.00%
Vegetation/ Aesthetics	Roadway Mowing	1220	0	0.00%
	Slope Mowing	1206	15	1.24%
	Landscape	1141	0	0.00%
	Tree Trim	1207	0	0.00%
	Litter Removal	1081	2	0.19%
	Turf Condition	1164	2	0.17%

2.3 Structures

The biennial structures inspection is based on four categories of major structures: bridges (including owned but not maintained), Large Non-Qualifying Culverts (LNQC's), High Mast Light Towers (HMLT's) and overhead sign structures. The System includes 2,278 individual structures. The total quantities of all structures with respect to each of the four maintenance zones are indicated in Table 10.

Table 10 Quantities of Major Structures - FY 2019

Category	Zone I	Zone II	Zone III	Zone IV	TOTALS
Bridges	234	79	228	159	**700**
Large Non-Qualifying Culverts	28	77	95	27	**227**
High Mast Light Towers	182	11	114	102	**409**
Overhead Sign Structures	441	41	236	224	**942**
Totals	**885**	**208**	**673**	**512**	**2,278**

2.3.1 Bridges

The Federal National Bridge Inspection (NBI) is performed in accordance with the National Bridge Inspection guidelines. Safety concerns prohibit the publishing of deficiencies related to the bridge inspection. Bond holders may contact the individual districts to obtain the latest reports detailing any deficiencies. It should be noted that the 2019 CAFR shows a bridge total of 763, which is the total number of bridges owned but not necessarily inspected. The FTE structures maintenance data query from July 1, 2019, showed a total of 700 bridges which FTE maintains and inspects.

2.3.2 Large Non-Qualifying Culverts (LNQCs)

A total of 227 Large Non-Qualifying Culverts (LNQCs) are inspected once every six years (1/3 per cycle) throughout the FTE System, by the independent structures consultant. The majority of LNCQs (172) are in Zones II and III of the four roadway and structure inspection zones.

2.3.3 High Mast Light Towers (HMLTs)

While the Federal National Bridge Inspection guidelines do not address HMLTs, the independent structures Consultant, at the direction of FDOT, uses the same ten-point scale of the NBI to rate the condition of HMLTs in the biennial inspection report.

The most current report indicates that of the 409 HMLTs currently in operation within the FTE System, 70 are rated 5 or being in "Fair Condition". The HMLT rating and corresponding rating scale are summarized and located in Appendix B.

2.3.4 Overhead Sign Structures

The independent structures Consultant noted that of 942 existing overhead sign structures 62 are rated 5 or as in "Fair Condition". Table 11 below summarizes the overhead sign structures inspected and those rated in fair condition by inspection zone for this reporting period.

The biennial inspection of the FTE's 942 overhead sign structures is based on the visual inspection of three individual sign elements, horizontal and vertical members, and structure foundations. These elements, along with the sign rating scale, are listed in Appendix B.

Table 11 Condition of Overhead Sign Structures - FY 2019

Zone	Number Inspected	Number Rated Fair (5) or Below	Percent Deficient
I	441	16	3.63%
II	41	1	2.44%
III	236	23	9.75%
IV	224	22	9.82%
TOTALS	**942**	**62**	**6.58%**

2.4 Buildings

The annual maintenance inspection of the FTE's building facilities is based on a condition assessment and inventory of 97 facility elements in fourteen general categories. As part of the inspection process, all relevant components for all buildings are visually inspected and ratings are assigned based on the conditions observed. A complete list of all the buildings, categories and subcomponents is included in Appendix B.

2.4.1 Building Types & Quantities

The building facilities inspection is based on five general building types: toll plaza administration buildings and canopies, combo buildings, all-electronic toll (AET) equipment buildings, communication tower buildings and miscellaneous use buildings. A total of 486 buildings are located within the nine maintenance inspection zones. The major characteristics of each building type are described in Table 12.

Table 12 Building Quantities - FY 2019

Category and Type	HEFT	Southern Coin	Central Ticket	Northern Coin	Seminole Expressway	I-4 Crosstown Conn.	Veterans	Polk	Suncoast	Totals
Mainline Toll Plazas / AET	10	5	3	1	2	0	4	5	2	32
Off-Line Ramp Plazas / AET	51	30	42	23	6	0	9	19	11	191
Other	35	41	59	60	22	1	24	7	14	263
Totals	**96**	**76**	**104**	**84**	**30**	**1**	**37**	**31**	**27**	**486**

2.4.1.1 Toll Plaza Administrative Buildings and Canopies

The toll plaza administration buildings and canopies are located either as part of a mainline toll plaza or off-line ramp toll plaza facility. The canopies typically extend from the administration buildings outward, over the tollbooths or toll collection equipment located between the travel lanes.

Figure 2 Major Toll Plaza Elements (Non-AET, Staffed)

The administration buildings may also be connected to the toll collection booths/equipment by means of an underground tunnel, which facilitates the transport of personnel, toll collection data, and supplies. A sketch identifying the major elements of Toll Plaza is included in Figure 2 above.

Some Toll Plaza Buildings have been replaced with All-Electronic Toll Plazas (AET) which consist of toll equipment buildings, generators, and fuel tanks. These are mainly on the HEFT section. Others can be found at Golden Glades, Sawgrass, Veterans, Southern Coin section, some off ramps, and "SunPass Only" lanes along the Turnpike Mainline, and elsewhere. AETs are currently under construction in various other areas of the System. See Figures 3 and 4 for examples.

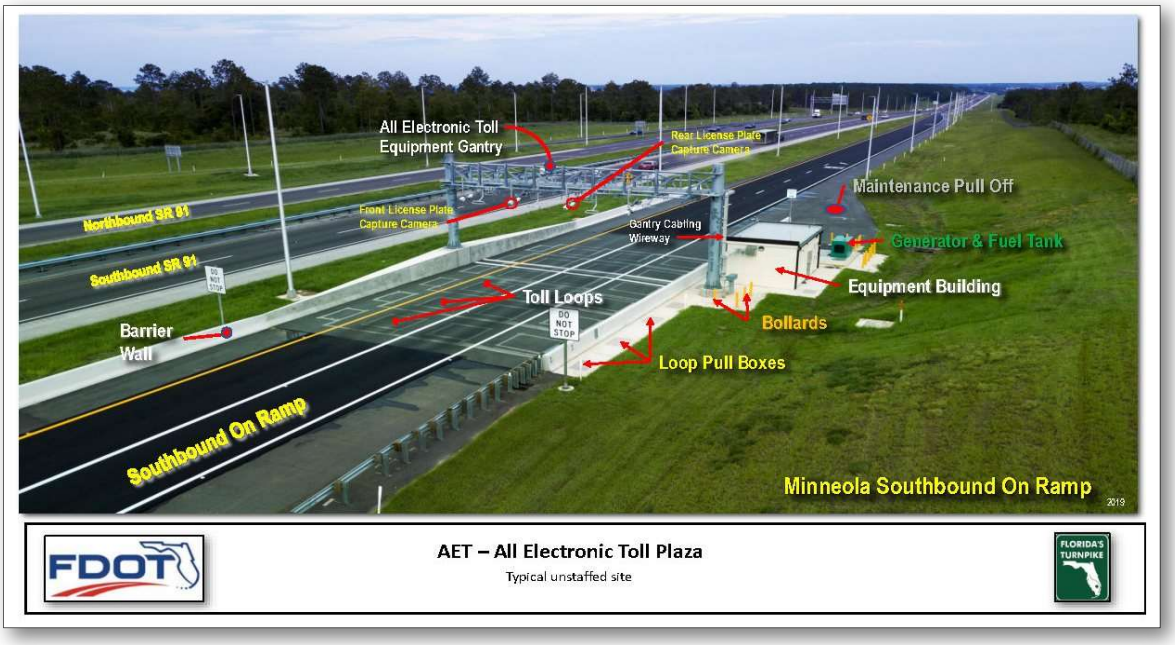


Figure 3 AET All-Electronic Toll Plaza (Unstaffed Site)

Figure 4 AET Lake Jessup Gantry Bldg.

2.4.1.2 Administration and Miscellaneous Buildings

The FTE's 42 administrative buildings are used by a variety of FDOT functional areas as well as other Florida agencies, including: the Florida Highway Patrol, Troop K, Troop L, MCCO (Motor Carrier Compliance Office); the FTE's Office of Toll Operations; FDOT Districts 4 and 6; and the FTE's Operations and Concession Management and Marketing Offices. See Figures 5 and 6 for examples.

Figure 5 Operations Building – Turkey Lake

Figure 6 OTO Building – Suncoast Parkway.

2.4.1.3 Communication Tower Buildings

The communication tower buildings: often constructed of concrete and block, are typically small structures. These structures house the electronic circuitry and equipment that support the microwave radio communications system, which is relied upon by the FTE Operations Offices. See Figures 7 and 8 for examples.

Figure 7 Communications Building – Jupiter

Figure 8 Communications Building – Delray Beach

2.4.1.4 Water/Wastewater Treatment Plants

The water/wastewater treatment plant provides water to and receives wastewater from the service plaza restaurant, common areas, and service station. The only water/wastewater plant on the FTE is at the Fort Drum Service plaza. In 2010, it was replaced with a new treatment plant and effluent pond under the Areas USA, Inc. contract and is operational.

2.4.1.5 Service Plaza Restaurants and Service Stations

The FTE recently renovated eight service plaza restaurant buildings, like the one shown in Figure 9. These restaurant buildings are leased to Areas USA, Inc., who operate and maintain these facilities. The completed refurbishing includes an expanded new lineup of restaurant choices for patrons traveling the Turnpike.

Figure 9 Turkey Lake Service Plaza

The Snapper Creek Service Plaza has two separate facilities that are maintained by the FTE and are currently being used for FDOT/FTE administrative construction / maintenance office spaces, FHP Troop K offices / operations, and for the SunPass Customer Service Center.

The facilities also include eight service stations that are leased to Areas USA, Inc., and operated by Florida Turnpike Enterprise Services (FTES). Renovation of all eight C-Stores was completed in 2017. Currently there are no annual inspections scheduled for any of the eight service plazas.

2.4.2 Inspection Rating Procedures for all Building Categories and Components

A condition evaluation and inventory of all 94 facility related elements is performed by inspectors during each site visit. Inspectors perform a room-by-room, floor-to-ceiling visual examination of all elements in each building on the FTE System.

All elements are inventoried and assigned a rating of 1-10 based on the existing condition at the time of the inspection. A detailed description of the facility rating scale is shown in Table 13.

Table 13 Building Inspection Rating Scale

Grade	Rating/Description
10	Excellent Condition - No action necessary
9	Very Good Condition - No deficiencies noted.
8	Good Condition - Some minor deficiencies noted, and minor maintenance may be required
7	Satisfactory Condition - Feature shows some minor deterioration, and maintenance is required
6	Fair Condition - Feature is sound but may have minor loss of function. Minor rehabilitation may be required
5	Degraded Condition - Feature exhibits partial function loss. Rehabilitation may be required.
4	Serious Condition - Loss of function has seriously affected this feature. Repair or rehabilitation is required immediately
3	Critical Condition - Advanced loss of function of this feature is present. Unless closely monitored, it may be necessary to stop the function until corrective action can be taken
2	Imminent Failure Condition - Feature is not functioning, but immediate corrective action may forestall the complete failure
1	Failed Condition - The feature is out of service and beyond corrective action

The following Table 14 summarizes the 14 facility categories, each with sub-items, of the inspections performed at all nine facility zones combined.

Table 14 Condition of Buildings - (All Zones) - FY 2019				
FTE On-System				
Category	**Item**	**Number Inspected**	**Number Rated Four or Below**	**Percent Deficient**
Architecture	Caulking	75	0	0.00%
	Ceiling	684	2	0.29%
	Ceilings and Ceiling Grids	686	1	0.15%
	Counters/Cabinets and Drawers	443	0	0.00%
	Doors / Frames (Interior and Exterior)	1844	14	0.76%
	Elevator	11	0	0.00%
	Elevator Certification	26	0	0.00%
	Flooring (Interior and Accessories)	1157	5	0.43%
	Handrail	100	6	6.00%
	Joint Sealants	568	4	0.70%
	Lockers	63	1	1.59%
	Paint - Interior and Exterior	1467	15	1.02%
	Restroom	180	0	0.00%
	Restroom Appurtenances	46	0	0.00%
	Shelves	141	3	2.13%
	Site Signs	84	0	0.00%
	Walls (Concrete Block, Brick, Stucco or EIFS)	576	7	1.22%
	Walls (Exterior)	375	8	2.13%
	Walls (Interior)	1264	9	0.71%
	Windows and Storefronts	461	17	3.69%
Building HVAC	Air Cooled Chiller and Piping	12	0	0.00%
	Air Handlers	705	2	0.28%
	Condensing Units	446	8	1.79%
	Ductwork and Insulation	531	0	0.00%
	Exhaust Fans	359	20	5.57%
	HVAC Control Systems	479	0	0.00%
	Package Unit	424	0	0.00%
	Supply and Outside Air FANS	49	0	0.00%
	Ventilation Outlets	1155	3	0.26%
Concrete Pavement & Sidewalks	Concrete Pavement	341	3	0.88%
	Sidewalk and Curb	32	0	0.00%
Domestic Plumbing Fixtures	Faucets / Sinks	372	3	0.81%
	Piping / Valves	325	4	1.23%
	Toilets / Urinals	190	0	0.00%
	Water Heater	102	0	0.00%

Table 14 - Cont. 2 Condition of Buildings - (All Zones) - FY 2019				
FTE On-System				
Category	**Item**	**Number Inspected**	**Number Rated Four or Below**	**Percent Deficient**
Building Electrical	Canopy lighting	102	0	0.00%
	Conduit	349	12	3.44%
	Grounding	217	6	2.76%
	Light Switches	113	0	0.00%
	Lighting (Exterior)	313	3	0.96%
	Lighting (Interior)	1521	12	0.79%
	Lightning Protection	93	0	0.00%
	Motor Control Center	11	0	0.00%
	Nose Flasher	352	0	0.00%
	Panelboards	492	6	1.22%
	Receptacle	1766	272	15.40%
	Sign Lighting	102	0	0.00%
	Site Lighting	29	1	3.45%
	Switchboards and Breakers	432	17	3.94%
	Toll Indicator	293	0	0.00%
	Transformers	47	1	2.13%
	TVSS (Transient Voltage Surge Suppressor)	351	0	0.00%
	Wiring	1602	33	2.06%
Communications, Fire Alarm and Monitoring Devices	CCTV (Close Circuit TV)	154	0	0.00%
	Fire Alarm	9	1	11.11%
	Fire Extinguisher	967	29	3.00%
	Fire Pump System	4	0	0.00%
	Intercom System	8	0	0.00%
	Security	293	0	0.00%
	Telephone System	546	9	1.65%
Sewer/Septic Tanks, Lift stations & Wells	Lift stations and Wells	47	1	2.13%
	Sewer/Septic Tanks	18	0	0.00%
Structural	Concrete (Precast/Cast-in Place)	29	2	6.90%
	Masonry	71	0	0.00%
	Steel Framing	57	0	0.00%

Table 14 - Cont. 3 Condition of Buildings - (All Zones) - FY 2019				
FTE On-System				
Category	**Item**	**Number Inspected**	**Number Rated Four or Below**	**Percent Deficient**
Island	ACM	93	2	2.15%
	Attenuator	258	3	1.16%
	Bollards	355	2	0.56%
	Island Concrete	310	3	0.97%
	Island Signs	295	3	1.02%
Booth	Ceiling	125	0	0.00%
	Counters/Cabinets and Drawers	114	0	0.00%
	Doors / Splash Door (Booth)	232	2	0.86%
	Flooring (Booth)	202	1	0.50%
	Toll Booth Windows/Glazing	215	0	0.00%
Canopy	Canopy Columns	154	0	0.00%
	Canopy Fascia	99	1	1.01%
	Canopy Underside	103	0	0.00%
	Sign Structure	159	0	0.00%
	Signs	452	8	1.77%
	Traffic Red / Green Lighting	109	1	0.92%
	Variable Message Signs	18	0	0.00%
Plaza Concrete Apron	Apron Sweep	157	0	0.00%
	Cracking	155	1	0.65%
	Joints	203	2	0.99%
	Pavement Voids	160	2	1.25%
	Striping	281	11	3.91%
Site Grounds	Landscape	15	0	0.00%
	Parking Area	9	0	0.00%
	Site Grounds	153	13	8.50%
	Turf Condition	13	0	0.00%
Stand-By Power	Fuel Line	148	0	0.00%
	Fuel Tank	252	37	14.68%
	Gauges	96	0	0.00%
	LP Tank	24	1	4.17%
	Stand-By Generator	337	2	0.59%
	UPS (Uninterrupted Power Supply)	424	0	0.00%

3. Summary of Findings

3.1 Introduction

The findings of the FY 2019 Annual Inspection of FTE System roadways, structures, and building facilities are outlined in the following paragraphs. The FDOT MRP ratings assigned to the various roadway elements are presented, along with a general description of the condition of the system's structures and building facilities.

The major deficiencies found in each of the three categories of inspection are identified, calling attention to those elements that were rated 20 percent or more in condition four or below. The inspection did not exclude deficient elements which may have had planned improvements underway. It should be noted that none of the deficiencies observed pose a safety concern to users of FTE System. The numbers of construction and maintenance contracts for each category that were either in effect or advertised during the fiscal year are summarized in the following tables to give some indication of work effort already in place. It should be noted that many of the contracts would likely extend over several fiscal years.

In addition, the inspection does not consider the criticality of the elements in relationship to each other. When reviewing deficiencies, one should remember that several considerations influence the desired level of service. These include safety, protection of private and public investment, comfort, economics, environmental impact, aesthetics, and money constraints. A pavement void, for example, would receive priority over litter removal because it may have an immediate impact on the safety of the patron. The standard procedures for rating system facilities are explained in Appendix B.

3.2 Roadways

The FTE and ATKINS developed an RRP based on the FDOT's MRP using the original 46 roadway elements from FDOT. The ratings and descriptions of the numerical grading system are based on a ten-point system and are an expanded version of the FDOT's MRP. RRP inspections of roadways are accomplished in one-mile increments in which each component is visually inspected and assigned a rating based on this ten-point scale, with exception of the mainline pavement, which is inspected using the Pavement Condition Survey (PCS) conducted by the State Materials office. The PCS uses a rating of 6.5 as the lowest passing value. Currently there are 59.38 lane miles reported deficient in the 2019 PCS cracking rating, of which 38.98 lane miles, or 65.64% of the above total, is located on SR 91 in Lake County.

Roadway improvement projects are scheduled for Lake County in FY 20 and FY 22 to address the above mentioned section. The first 17.67 miles are scheduled for FY 20 with the remaining 21.31 miles of improvement scheduled for FY 22.

Tablet computers are utilized during field inspections to enter inspection findings directly into a database for later compilation and reporting for each roadway. Inspection results are separated by roadway/ramp segment and lane direction. The results of these inspections are compared to the results of the FDOT's inspection and corresponding MRP rankings, in the following sections, and sub-sections.

The FDOT's MRP system is a computer-based system that randomly selects specific points along the roadway mainlines, called 'samples' that are 528 feet in length. A total of 270 sample areas are generated for FTE System. The MRP inspections are based on five major categories, comprised of 35 individual elements and are detailed in Appendix B. The RRP has a total of 46 elements and includes some elements the FTE considers important, such as barrier walls, sign lighting, etc. After the MRP inspection is completed the sample areas raw data is entered into the DOTNET computer system. A numerical score is generated for each group, each feature, and the element as a whole. According to state guidelines, Roadway and Roadside Procedure 850-000-015-j; 1.0 paragraph three, states "Each District is to maintain a minimum annual maintenance rating of 80; and all elements (roadway, roadside, traffic services, drainage and vegetation/aesthetics) shall have a rating of 75 or above; and the characteristics of each element shall meet the desired conditions of the MRP Handbook at least 70". Florida Transportation Commission (FTC) has set an MRP objective of 90 for transportation authorities including FTE, as further explained in Section 4.1 in this report. The MRP samples are located on the mainline roadway only, and ramp roadways are not included. The RRP only includes all ramp roadways for pavement inspection, as well as all roadside, traffic services, drainage, and vegetation/aesthetics for all roadways including the mainline and ramps. Mainline pavements are reviewed using the Pavement Condition Rating (PCR) system.

The results of this year's annual inspection indicate that the FTE's roadway facilities as being maintained in an overall excellent condition. According to the MRP, the roadway components received an overall rating of 94, which is well over the state's goal of 90. The overall RRP rating was 91 for all elements. The explanation for the difference between the MRP, RRP and PCR is that the MRP is only mainline roadways for selected points, whereas the RRP is as stated above. FY 2013 marked a change in the calculation of the State MRP resulting in a lowering of the overall ratings by two to three points. The results of the MRP, RRP, and PCS indicate that the FTE's aggressive and comprehensive Maintenance and Renewal and Replacement programs continue to be effective in exceeding established guidelines and procedures.

No major roadway deficiencies were identified by the FTE's annual inspection. Many of the minor deficiencies identified may already been addressed through the execution of several periodic or routine maintenance contracts or as part of renewal and replacement efforts. The MRP ratings and minor deficiencies for each of the five general categories of roadway elements are discussed in the following sections. A typical ramp section on the FTE System is shown in Figure 10.

Figure 10 Typical Ramp Section

3.2.1 Roadway

The roadway feature, which is comprised of all characteristics of the pavement, has achieved an MRP rating of 94, same as FY 2018, and is 19 points above the satisfactory grade of 75 set by the FDOT Maintenance Office. The RRP had an overall rating of 93.72 for this category on all ramp roadways, and the PCR for all roadway miles of mainline roadways was 99.03. There were no major deficiencies in any of the maintenance zones reported by the annual inspection. These positive ratings are indicative of the FTE's ongoing resurfacing efforts along several portions of the System, as well as an active preventive maintenance program. Table 15 represents construction and maintenance contracts in effect, or let, during FY 2019. There were no characteristics rated lower than 85 in the MRP.

Table 15 Number of Roadway Contracts in Effect or Advertised During FY 2019						
Type	Zone	Construction		Maintenance		Total Dollar Amount Roadway & Maintenance
		Total per Zone	No of Contracts	Total per Zone	No of Contracts	
Contracts in Effect or Advertised in Single Zones	Zone I	$1,201,973,102	18	$15,134,439	43	$1,217,107,541
	Zone II	$132,674,514	8	$21,515,527	5	$154,190,041
	Zone III	$571,429,460	17	$43,417,642	8	$614,847,102
	Zone IV	$410,935,969	7	$25,692,270	7	$436,628,239
Contracts in Effect or Advertised Across Multiple Zones	Zones I & II	$0	0	$307,878	2	$307,878
	Zones I & II & III	$107,102,000	1	$0	0	$107,102,000
	Zones I - IV	$0	0	$986,474	2	$986,474
	Zones II & III	$3,180,802	3	$0	0	$3,180,802
	Zones III & IV	$3,952,490	1	$3,756,070	2	$7,708,560
Totals	**All Zones**	**$2,431,248,337**	**55**	**$110,810,300**	**69**	**$2,542,058,637**

3.2.2 Roadside

The determination of an MRP rating for roadside features is generally based upon the consideration of all grading, shoulder, slopes, and other elements located outside of the paved travel way (Figure 1). The roadside category has achieved an MRP rating of 87 which remained unchanged from 2018. The overall RRP rating for Roadside was 85.76. There are no characteristics rated lower than 85 in the MRP. A typical paved and soil shoulder section on the FTE System is shown below in Figure 11.

Figure 11 Paved and Soil Shoulder

3.2.3 Traffic Services

The Traffic Services category rating is based on the condition of all features that guide, protect, and assist the patron while traveling the FTE's roadways, interchanges, and service areas. An MRP rating of 84 was achieved in this category, which is one-point lower than in FY 2018. The characteristics rated lower than 85 in the MRP were pavement symbol (76), guardrail (77), lighting (77), raised marker (80) and signs < 30 SF (82). The overall RRP rating for Traffic Services was 89.30. The annual inspection RRP indicates a well-maintained program with no characteristics being more than 2.77 percent deficient overall for 11 elements in this category. Typical overlane truss sign and typical guardrail examples on the FTE System are shown in Figures 12 and 13.

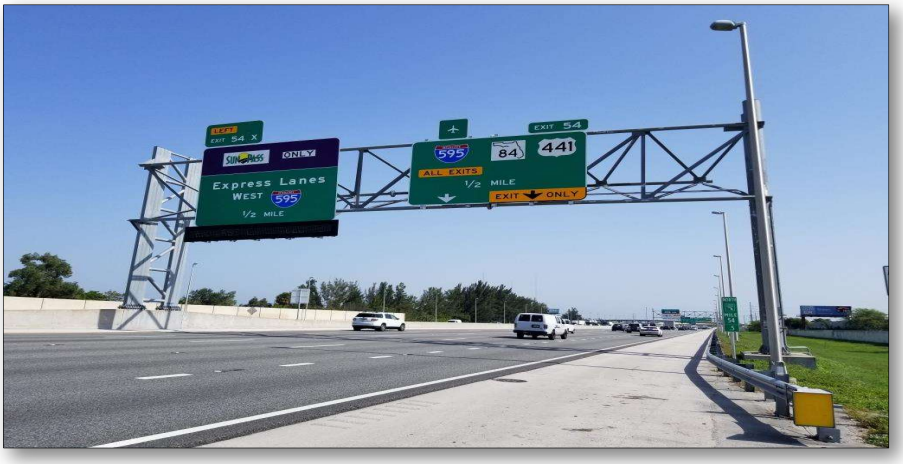


Figure 12 Overlane Truss Sign

Figure 13 Typical Guardrail

3.2.4 Drainage

Figure 14 Drainage Inlet

The rating for this category of roadway elements is based on the overall condition of all structures that collect, treat, and convey stormwater run-off. An MRP rating of 89 was achieved in this category, which is one-point lower than in FY 2018. The characteristics rated lower than 85 in the MRP were miscellaneous drainage (74) and side / cross drainage (83). The overall RRP rating for Drainage is 95.68. No major deficiencies were noted in this category. The annual inspection found that all eight elements inspected were less than five percent defective. Typical erosion control section on the FTE System is shown in Figure 14.

3.2.5 Vegetation/Aesthetics

Figure 15 Excellent landscaping

The MRP rating for the Vegetation/Aesthetics category is based on the overall condition of turf, landscape, trees, and their general appearance. According to its comprehensive Turf Management Plan, the FTE continually monitors the condition of vegetation and the need for mowing, trimming, re-landscaping, and litter removal. An MRP rating of 84 was reported in this category in the FY 2019 inspection, a decrease of five points from FY 2018. The overall RRP rating for Vegetation and Aesthetics was 96.15. The lowest rated items were turf condition rated at 77, litter removal rated at 80, and landscaping rated as 83 in the MRP spreadsheet, in contrast to a 98.50 rating in the RRP in this category.

3.3 Structures

The structures inspection for FY 2018 - 2019 is divided into two contracts. The north zone includes zones 3 and 4 and performed by Consor Engineers, LLC. Zones I and II are inspected by TranSystems Corporation Consultants. The biennial structures inspection consisted of bridges, overhead sign structures, LNQCs and HMLTs. The structures categories do not receive the standard MRP ratings as shown for the roadway categories, but rather use modified standards as reflected in Appendix B, Section B. Structures Rating Procedures

3.3.1 Bridges

During FY 2019, several bridge construction contracts were in effect or advertised. Bridge improvement contracts are included within the total cost of several roadway construction projects either in effect, advertised or completed during the fiscal year. A summary of bridge construction costs is shown in Table 16.

Table 16 Number of Bridge Contracts in Effect or Advertised During FY 2019

Type	Zone I	Zone II	Zone III	Zone IV	Totals
Construction	$147,609,311	$3,118,632	$97,238,372	$32,079,473	$280,045,788

The State Maintenance Office Bridge Inventory 2019 – Annual Report, which uses the National Bridge Inspection guidelines, reported five bridges in fair condition. FTE Maintenance directed a portion of its periodic and routine maintenance funding in FY 2019 to rehabilitation and repair projects.

Figure 16 Bridge over SR 91 - Florida Turnpike Enterprise

3.3.2 Overhead Sign Structures

Overhead sign structures are inspected separately from those signs in the traffic services element due to being suspended above the travel way by large support structures, such as the one pictured in Figure 17. These signs provide critical directional information, guiding the patron throughout FTE System. The Overhead sign structures inspection noted a 25.49% overall deficiency rating for the 2019 inspection period. All deficient notations were for the sign foundations. Overhead sign structures are shown by location in Table 11.

Figure 17 Typical Cantilever Sign - SR 570

3.3.3 High Mast Light Towers (HMLTs)

Similiar to overhead sign structures, HMLTs are included in the structure's inspection. These structures provide illumination for improved nighttime visibility at various locations along the FTE, such as interchanges, service plazas, and toll facilities.

3.3.4 Large Non-Qualifying Culverts (LNQCs)

An LNQC is a structure that does not meet the statutory definition of a bridge. LNQCs is defined as a circular, elliptical arch, or box type of culvert with a height greater than four (4) feet, or clear span of ten feet or greater, but less than 20 feet (see Figure 18 as an example). Like the other Structures, (Bridges, Signs, and High Mast Light Towers), LNQCs are included in the structure's inspection. The LNQCs are

Figure 18 Box Culvert

inspected once every six years. Each cycle is a two-year period with 1/3 of the total LNQCs inspected during the cycle. It takes three cycles for the entire LNQC inventory to be inspected. The LNQCs are in good condition with minor repairs ongoing as part of the routine maintenance contracts.

3.4 Buildings

The annual inspection of the FTE's facilities is based on a visual inspection and rating of the condition of 486 buildings (see below Figures 19 and 20 for examples). This is the only building-type inspection performed in the state. Overall 31,882 comments were made of building asset items inspected, of which, 636 were rated as being in condition four or below, for a deficiency rate of 1.99% percent. However, in many cases, these deficiencies represented an aesthetics problem and not structural or safety issues. Further, the FTE's facilities are more susceptible to deterioration due to time, weather, and other elements than are its roadways. The results of the overall inspection are reported in Table 14.

Figure 19 Turkey Lake Service Plaza Gas Station

Figure 20 Turnpike Headquarters – Turkey Lake

3.4.1 Buildings

The FTE's toll plaza administration buildings, canopies, and adjacent areas, which include parking and drainage areas, are generally in good condition. Below are several building elements reported with deficiency ratings at the high end of the scale (Table 14 "All Zones"), and a brief description about the rating.

- **Receptacle** (15.40%) – The majority of deficiencies reported for this element are GFI receptacles that are not functioning as intended and more focus is needed on maintenance of this element.

- **Fuel Tank** (14.68%) – This element refers to tanks supplying fuel to the stand-by generators. The majority of deficiencies reported for this element are missing tie-down straps and more focus is needed on completion of the program to assure all tanks are tied down.

Figure 21 Fuel tank Missing Tie Down Straps

- **Fire Alarm** (11.11%) – The single deficiency reported for this element is an improperly labeled circuit. The improper labeling did not affect the functionality of the equipment.

- **Site Grounds (8.50%) –** Deficiencies for this element include drainage related erosion, worn striping in the plaza parking areas, and overgrown or dying landscaping**.**

During FY 2019, five facility construction projects included the continued implementation of Open Road Tolling (ORT), Gantries and AET buildings. In addition, 38 facility routine maintenance contracts are in effect or advertised, as indicated in Table 17.

Table 17 Number of Facilities & Communication Contracts in Effect or Advertised During FY 2019

Category	No of Contracts	Activity	Cost
Construction			
Toll Plaza	1	AET Phase 5 TPK Mainline I-595 to S of Lantana Toll Plaza MP 54-88	$29,885,898.00
Lighting	1	Turkey Lake & Canoe Creek Service Plaza Lot Lighting Upgrade	$3,727,951.00
Misc. Const.	1	SunTrax Toll Facilities	$430,320.00
Misc. Const.	1	SunTrax Toll Facilities	$685,538.00
Overhead Signing	1	Turnpike Widening - Wrong Way Ramp Signing Upgrades	$159,417.00
5 Construction Contract Totals			**$34,889,124.00**
Maintenance			
Computer Services	1	Computer Aid Inc. (CAI) fiscal year 2019	$2,818,111.15
Electrical	1	Maintenance, Repair, Testing and Verification of Electrical Services	$338,438.85
Elevator	1	Elevator, Maintenance, Adjustment, Repair, and Replacement Services	$39,430.00
Gantries	1	Signature Gantries Fall Protection Systems- North Region (YEAR 4)	$37,487.20
General	9	Routine Facilities Maintenance, Emer Repair, Janitorial, Mowing & Security Services	$5,891,194.84
HVAC	4	Heating, Ventilation and Air-conditioning Equipment Maintenance, Repair	$354,406.24
Painting	1	Concrete, Waterproofing, Sealing, Paint & General Facilities Svc	$345,100.00
PCARD Services	10	PCARD Services	$572,499.00
Plumbing	1	Plumbing and Lift Stations	$181,835.00
Roofing	1	Roof Repair Services - North Region	$210,050.00
Standby Power	5	Generator, UPS & ATS Maintenance Services - North Region (YEAR 4)	$2,008,995.00
Telecommunication	1	Maintenance of Statewide Telecommunications Network (YEAR 1)	$277,872.00
Tollbooth	1	Tollbooth Repair Services - North Region	$92,500.00
Water Treatment	1	Maintenance of Water Treatment Systems	$21,884.78
38 Maintenance Contract Totals			**$13,186,804.06**
43 Construction & Maintenance Contracts - Facilities & Communications - Total			**$48,075,928**

4. Program Status, Commitments, and Recommendations

4.1 Maintenance Rating Program Status

The roadway MRP ratings recorded over the past five years are shown in Table 18. Overall, the average MRP rating of 85 for FY 2019 is two points lower than last year. FTE's MRP rating fell short of the objective of at least 90 per FTC's monitoring and oversight of transportation authorities in Florida. However, FTE did exceed the Department standard of an overall MRP rating of 80 or higher. The roadway and roadside category ratings remained unchanged from 2018 at 94 and 87 respectively. The traffic services and drainage ratings decreased one point from 2018 at 84 and 89 respectively, while the vegetation and aesthetics rating decreased five points to a rating of 84. Variations can be expected from year to year, as MRP ratings, by procedure, are considered accurate only within three percent.

Results from the annual inspection along with FTE's five-year work program demonstrates the commitment of FTE to maintain and preserve its system.

Table 18 Roadways MRP Rating Comparison - FY 2015 to FY 2019

Category	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Average
Roadway	96	92	93	94	94	94
Roadside	87	88	88	87	87	87
Traffic Services	89	87	85	85	84	86
Drainage	90	92	90	90	89	90
Vegetation/ Aesthetics	85	88	90	89	84	87
Overall Rating	**88**	**88**	**88**	**87**	**85**	**87**

4.2 Programmed Commitments

The condition of the FTE System is maintained at an optimal level due to the effective management of the FTE's Renewal and Replacement, Periodic, and Routine Maintenance programs. The funds committed to these programs are shown in Table 19. It should be noted that the figures shown represent amounts programmed for physical improvements only.

The total programmed commitments for FY 2019 represent a continued commitment to Renewal and Replacement, and Periodic Maintenance funds and an average commitment for Routine Maintenance funds over the five-year period of $70.397 million per year. Programmed commitments between FY 2019 and FY 2023 range from 16.91% to 23.20% of gross revenue, with the upper limit of this range occurring in FY 2019.

New construction and improvement projects are $133.71 million for renewal and replacement work (PKYR) in FY 2019, and include roadway resurfacing; bridge, roadway and facility construction; toll equipment enhancement; and bridge repair.

The $65.16 million programmed for periodic (PEMT) and routine maintenance (7X) work in FY 2019 includes maintenance of all highway assets, building maintenance, building renovation, building demolition, roof replacement, toll plaza tunnel sealing, drainage improvements, and safety upgrades.

Table 19 Program Commitments FY 2019 through 2023 ($ millions)

Fiscal Year	Renewal & Replacement Contracts[2]	Periodic Maintenance[3]	Routine Maintenance[4]	Total	Gross Revenue[5]	Percentage of Gross Revenue
2019	133.71	7.71	57.45	198.86	1,061.28	18.73%
2020	156.05	12.85	76.20	245.11	1,084.24	22.61%
2021	157.79	19.76	72.79	250.34	1,133.23	22.09%
2022	187.77	12.59	71.54	271.90	1,171.77	23.20%
2023	111.94	19.40	74.01	205.35	1,214.30	16.91%

[2] Renewal and Replacement data captures all projects/phases using PKYR funding, excluding those PKYR projects that are in the Periodic Maintenance category.

[3] Periodic Maintenance data captures all projects/phases using Item Group PEMT.

[4] Routine Maintenance data captures all phase 7x projects.

[5] Gross Revenue data was taken from the Traffic Engineer's Annual Report, Traffic Engineer's Annual Letter Report, Table 6 (Summary of Florida's Turnpike Enterprise System Toll and Concession Revenue Forecast ($000) FY 2019 through FY 2030).

4.3 Recommendations

While FTE System has been rated as being in an overall good condition, the deficiencies noted in this report must be addressed to extend this rating to be inclusive of all System components. Critical or emergency items found during the inspection are addressed at the time they are found. Other deficiencies confirmed during the annual inspection are forwarded to the appropriate parties to be addressed by means of existing maintenance contracts or for further evaluation for inclusion into existing or future projects. Deficiencies confirmed by the FY 2019 annual inspection were assigned a priority level. Priorities are assigned to ensure safety and continuity of toll revenue collection. Based on the coordination-of-funding-related issues with the FTE's maintenance, finance, and production offices, recommendations are made for addressing specific deficiencies.

Various Renewal and Replacement projects are currently programmed in the FTE Tentative Work Program. In addition, depending on the availability of funds, projects recommended in the annual updates of the FTE Transportation Operations and Toll Operations Tour Books will be considered. After these project needs are identified by the FTE Maintenance and Tolls Offices, FTE Transportation Development develops project scopes and conducts concept studies to evaluate and address the need in an effective and timely manner. The needs list is updated on an annual by the FTE Maintenance Office based on the status of the project funding and implementation from previous years. Table 20 shows the status of addressing the current Operations Needs list.

While it is recommended that funds are appropriated for the improvements identified in the FTE Tour Field Review, the requirements for other projects funded through the Renewal and Replacement Program should be evaluated with particular emphasis on the need to resurface the System mainline and ramp facilities. In addition to pavement resurfacing, the Renewal and Replacement Program includes other FTE System assets like bridges, buildings and communications facilities; toll equipment; and utilities. Given the magnitude to which these assets affect overall FTE System operations, a significant level of emphasis should continue to be placed on the FTE's Renewal and Replacement Program and related funding levels.

Enterprise Data Repository

In previous years, the Turnpike Enterprise Asset Management System (TEAMS) was used to assist in evaluating and identifying renewal and replacement needs for the Turnpike System per fiscal year. The functional component of this system was a comprehensive inventory of the FTE's assets; the condition of the assets that were based on the annual inspection condition ratings as reported in this document; and forecasting these condition values and identifying their respective replacement values which are programmed as renewal and replacement funds.

Per FTE Management's direction, TEAMS has been phased out, and a new system, the Enterprise Data Repository (EDR) has been developed and now serves as FTE's asset data repository. EDR was placed into production in September 2016. Historical asset data from TEAMS has been imported into EDR and is available to the users for query and reporting.

The EDR system allows FTE to track major infrastructure assets such as pavement, bridge paint conditions, ITS devices and signs. EDR supports the storage of historical asset condition data from inspections and forecasts the asset condition based on the established life expectancy curves. The system provides this information in tabular as well as GIS-based interfaces so that users can have ready access to the asset condition information.

The EDR system facilitates FTE project managers and engineers to develop renewal and replacement projects and track cost estimates. With this information, FTE management has access to more representative renewal and replacement budget forecasts and facilitates the "smoothing out" of the project expenditures across the forecasted years. Combined with routine inspections, the EDR asset data repository has provided FTE with the tools necessary to optimize project expense planning and optimize asset conditions while maximizing service to the FTE customers.

The system allows the FTE to evaluate each asset based on life expectancy and replacement value. With this information available, more accurate renewal and replacement forecasts are generated and the actual maintenance monies programmed are based on the annual condition assessment. When combined with routine inspections, a total asset management system is created, which has provided the FTE with the tools necessary to minimize expenses while maximizing service to the FTE patron, thus maximizing their overall bond rating.

Some of the deficiencies encountered at the time of the inspection may have already been resolved by the time this report is published. Others can generally be addressed through existing maintenance contracts and programmed projects. The results of the annual inspection can also be used to validate or confirm the need for some of the recommended projects. For other elements that continue to show deficiencies, it is suggested that the issues be further evaluated to determine if a new project needs to be created to address the situation. Being proactive will ensure that deficient items are addressed in a timely manner and that those items that are almost deficient are resolved before they become deficient. The results of the 2019 annual inspection confirm the FTE's commitment to maintain the quality and safety of the System and provide value to the bondholders' investment.

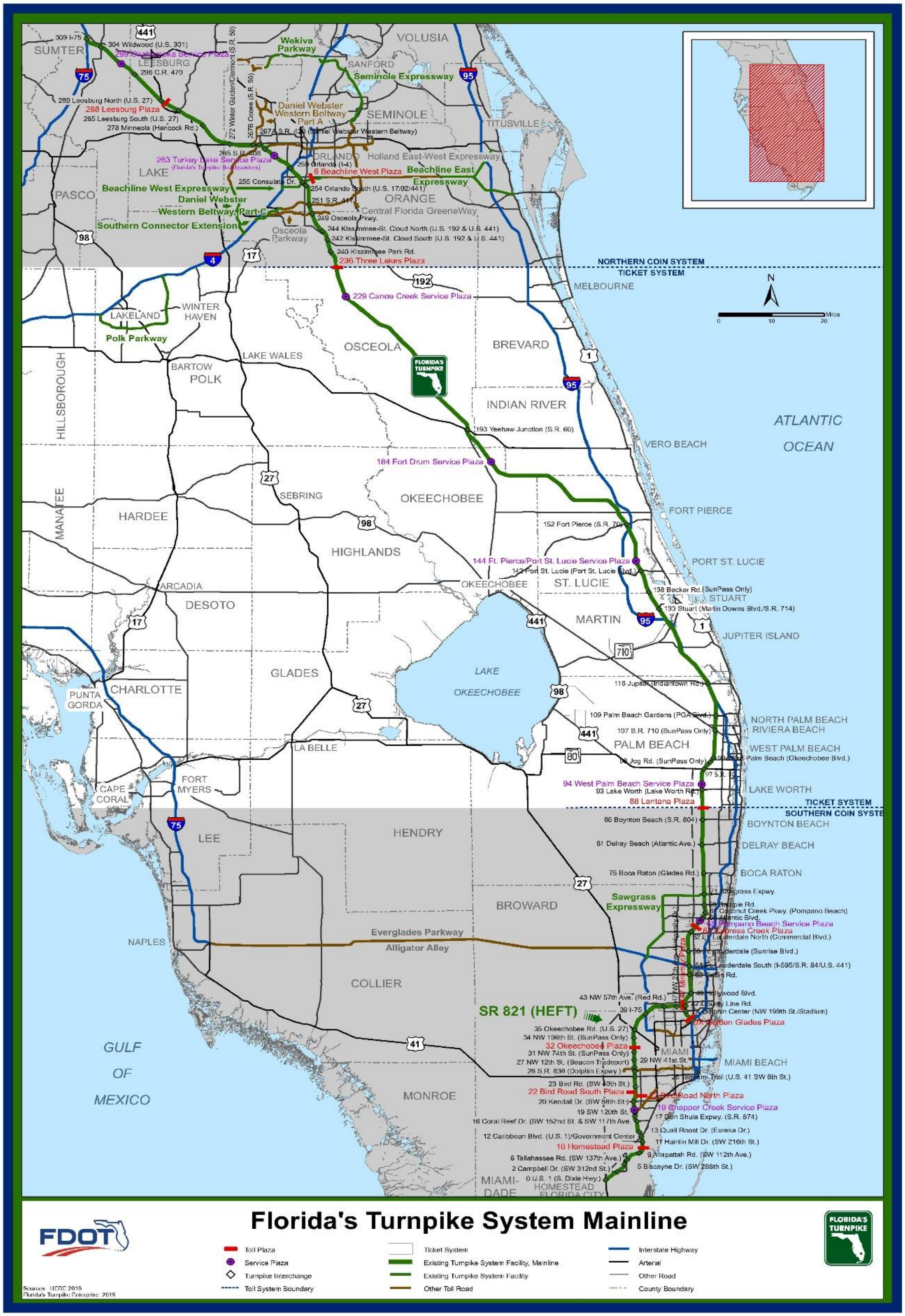
The results of the annual inspection can also be used to validate or confirm the need for some of the recommended projects. Recommended projects identified by the FY 2019 annual inspection are assigned a priority level. Table 20 provides a description of the projects mentioned above with funding source, current priority and current funding status.

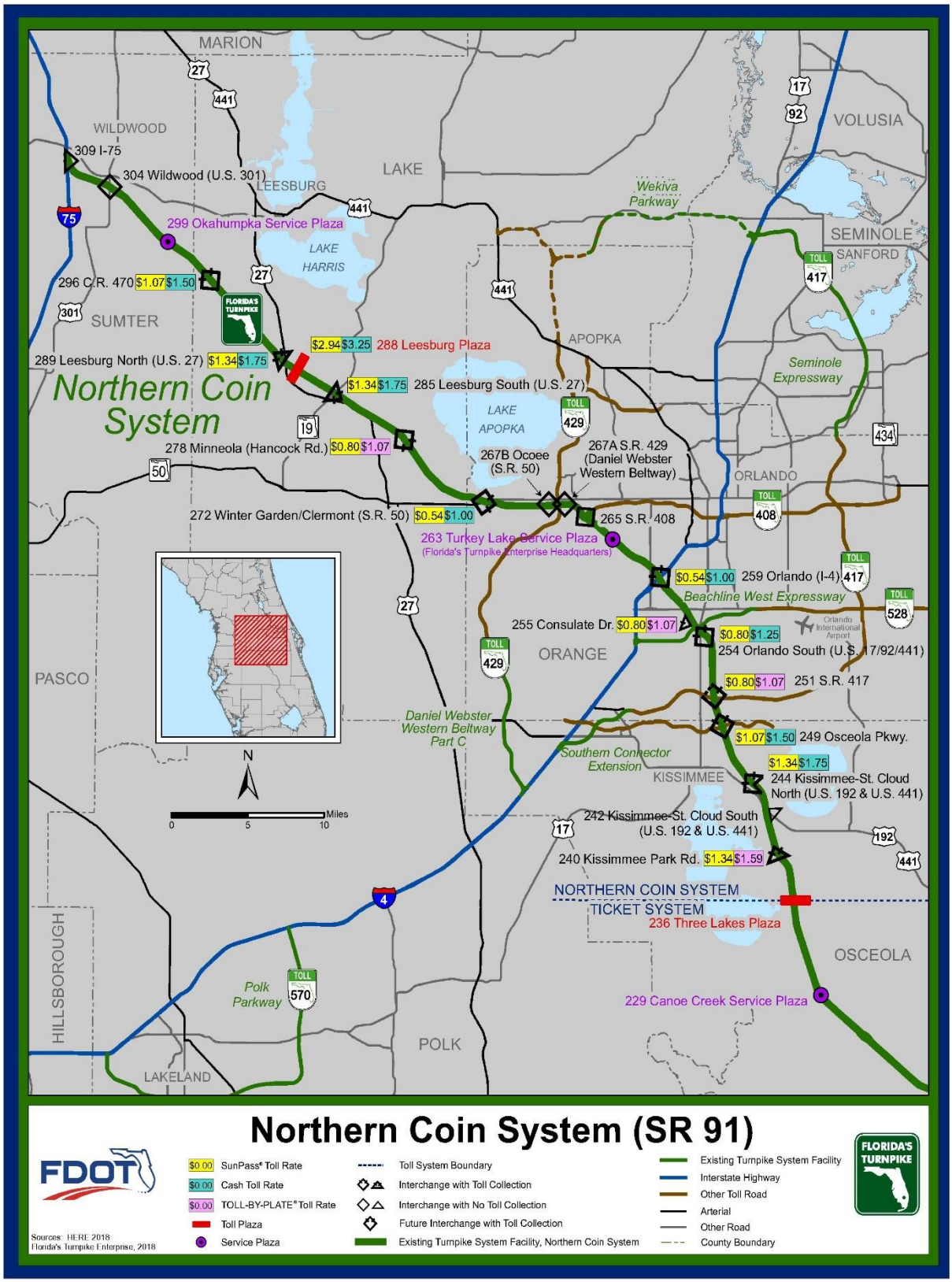
Table 20 Improvements, Current Funding Status, and Recommendations				
Highway Operations				
No.	**Description (2)**	**Funding Request Source (3)**	**Priority Level (4)**	**Current Funding Status and Recommendations (5)**
1	Wrong Way Driving Technology Expansion Program	PKYI	NEW-1	FPID 434968-2 & 439968-3 (Construction Funding in FY 2022)
2	First Coast Expressway Safety Enhancements	TBD	NEW-2	Being evaluated by GEC concept team
3	Rehabilitate Culverts in Lake County	PKYR	NEW-3	FPID 440295-1 (Construction Funding in FY 2023 and FPID 435786-1 Construction Funding in FY 2022)
5	Evaluation and Extension of Taper Merge Areas	TBD	NEW-5	Being evaluated by GEC concept team
7	Median Shoulder Improvements Zone 2	TBD	NEW-7	Being evaluated by GEC concept team
8	Shoulder Widening Zone 2	TBD	NEW-8	Being evaluated by GEC concept team
9	Palm Beach and Boynton Canal Embankment Stabilization	TBD	NF-1	FPID 437169-1 & 418214-1 (Construction Not Funded)
10	Pompano Beach TMC & Annex Renovations	TBD	NF-2	Studies complete; to confirm approach for design and construction
11	Snapper Creek Service Plaza Concept Study and Parking Improvement Project	PKYI	NF-3	FPID 442620-1 (Construction Funding in FY 2024)
12	Service Plaza Signing & Operational Improvements	PKYI	NF-4	FPID 443878-1 (Construction Funding in FY 2020 and 443878-2 Construction Funding in FY 2021)
13	Connected Vehicle – First Generation Deployment	TBD	NF-5	FPID 442627-1 (Construction Not Funded)
14	TSMO Enhancements Program Box	TBD	NF-6	FPID 442617-5/6 (Construction Not Funded)
15	Access Gates on Noise Walls	TBD	NF-7	FPID 435763-1 & 440293-1 (Construction Not Funded)
16	Express Lane Optimization and Enhancements	TBD	NF-8	Being evaluated by GEC concept team
17	Painting of Sign Structures on Suncoast Parkway	TBD	NF-9	Being evaluated by GEC concept team
18	Deck replacements on NB mainline bridge over Caribbean Blvd and on SB Frontage Rd/Ramp bridge over Canal C-1N	PKYI	FD-1	FPID 437211-1 (Construction Funding in FY 2023)

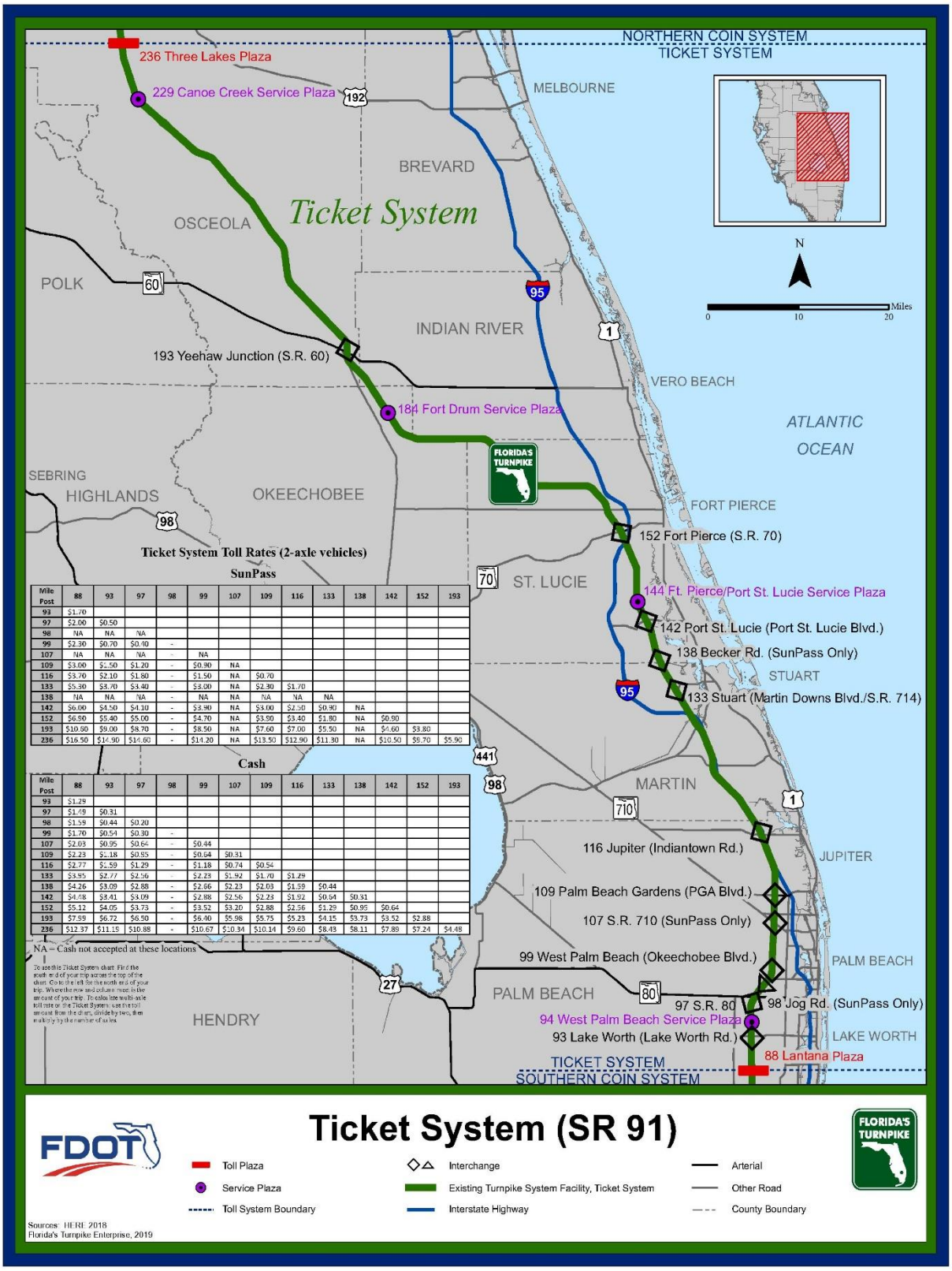
Table 20 2019 Improvements, Current Funding Status, and Recommendations				
Highway Operations				
No.	**Description (2)**	**Funding Request Source (3)**	**Priority Level (4)**	**Current Funding Status and Recommendations (5)**
19	Rehabilitation of Aging Prestressed Concrete Piles	PKYR	FD-2	FPID 442622-1 through 442622-5 Geographically Split into Multiple FPID's (Construction Funding in FY 2021)
20	Replacement of Space Frame Trusses	PKYI	FD-3A-B	FPID 3A-440859-1 (Construction Not Funded); 3B-431737-1 (Construction Funding in FY 2019)
21	Improve/Reconstruct SR 417, Seminole Expressway, Bridge Transition at Lake Mary Blvd and Sanford Avenue	PKYR	FD-4	FPID 440292-1 & 440292-22 (Construction Funding in FY 2022)
22	Drainage Issues – Atlantic & Oakland Park Blvd.	PKBD	FD-5	FPID 443955-1 & 443956-1 (Construction Funding in FY 2022)
23	Buried Foundation for Ancillary Structures	PKYR	FD - 6A-E	6A-440293-1/2 (Construction Funding in FY 2020); 6B-437991-1 (Construction Funding in FY 2019); 6C-441322-1 (Construction Funding in FY 2019); 6D-437155-1 (Construction Funding in FY 2023); 6E-437991-1 (Construction Funding in FY 2019)
24	Okeechobee County Culvert (91Q002) Rehabilitation	PKYR	FD-7	FPID 444003-1 (Construction Funding in FY 2020)
25	Three Lakes Toll Plaza Access	PKYI	FD-8	FPID 431737-1 (Construction Funding in FY 2019)
26	Yeehaw Junction Deceleration / Storage Remediation	PKYR	FD-9	FPID 440700-1/2 (Construction Funding in FY 2021)
27	Replace GREAT System and Hex-Foam Crash Cushions	PKYR	FD-10	FPID 442618-1 (Construction Funding in FY 2020)
28	Beachline East ITS Expansion Evaluation	TBD	FD-11	FPID 438030-1 (Construction Not Funded)
29	Power & Communications System Redundancy for ITS Infrastructure	TBD	FD-12	FPID 435605-9 (Construction Not Funded)
30	Microwave Towers Guyed Foundations	PKYR	FD-13	FPID 431987-1 (Construction Funding in FY 2020 & 2021)

APPENDIX A

Maps of System Components and Inspection Zones


Florida's Turnpike System Mainline
FDOT
FLORIDA'S TURNPIKE
Toll Plaza
Service Plaza
Turnpike Interchange
Toll System Boundary
Ticket System
Existing Turnpike System Facility, Mainline
Existing Turnpike System Facility
Other Toll Road
Interstate Highway
Arterial
Other Road
County Boundary
NORTHERN COIN SYSTEM
TICKET SYSTEM
SOUTHERN COIN SYSTEM
ATLANTIC OCEAN
GULF OF MEXICO
LAKE OKEECHOBEE
SR 821 (HEFT)
Wekiva Parkway
Seminole Expressway
Daniel Webster Western Beltway Part A
Holland East-West Expressway
Beachline East Expressway
Beachline West Expressway
Central Florida GreeneWay
Osceola Parkway
Southern Connector Extension
Polk Parkway
Sawgrass Expressway
Everglades Parkway
Alligator Alley
SUMTER
LAKE
PASCO
SEMINOLE
ORANGE
OSCEOLA
BREVARD
POLK
HILLSBOROUGH
INDIAN RIVER
MANATEE
HARDEE
OKEECHOBEE
HIGHLANDS
ST. LUCIE
DESOTO
MARTIN
CHARLOTTE
GLADES
PALM BEACH
LEE
HENDRY
BROWARD
COLLIER
MONROE
MIAMI-DADE
LEESBURG
SANFORD
TITUSVILLE
MELBOURNE
LAKELAND
WINTER HAVEN
LAKE WALES
BARTOW
VERO BEACH
SEBRING
FORT PIERCE
PORT ST. LUCIE
STUART
JUPITER ISLAND
ARCADIA
PUNTA GORDA
LA BELLE
FORT MYERS
CAPE CORAL
NAPLES
NORTH PALM BEACH
RIVIERA BEACH
WEST PALM BEACH
LAKE WORTH
BOYNTON BEACH
DELRAY BEACH
BOCA RATON
MIAMI
MIAMI BEACH
HOMESTEAD
299 Okahumpka Service Plaza
288 Leesburg Plaza
263 Turkey Lake Service Plaza
6 Beachline West Plaza
236 Three Lakes Plaza
229 Canoe Creek Service Plaza
193 Yeehaw Junction (S.R. 60)
184 Fort Drum Service Plaza
152 Fort Pierce (S.R. 70)
144 Ft. Pierce/Port St. Lucie Service Plaza
94 West Palm Beach Service Plaza
88 Lantana Plaza
32 Okeechobee Plaza
22 Bird Road South Plaza
19 Snapper Creek Service Plaza
10 Homestead Plaza
0 U.S. 1 (S. Dixie Hwy.)


MARION
WILDWOOD
309 I-75
304 Wildwood (U.S. 301)
LEESBURG
LAKE
299 Okahumpka Service Plaza
LAKE HARRIS
296 C.R. 470 $1.07 $1.50
SUMTER
289 Leesburg North (U.S. 27) $1.34 $1.75
$2.94 $3.25 288 Leesburg Plaza
$1.34 $1.75 285 Leesburg South (U.S. 27)
Northern Coin System
278 Minneola (Hancock Rd.) $0.80 $1.07
272 Winter Garden/Clermont (S.R. 50) $0.54 $1.00
263 Turkey Lake Service Plaza
(Florida's Turnpike Enterprise Headquarters)
LAKE APOPKA
APOPKA
267B Ocoee (S.R. 50)
267A S.R. 429 (Daniel Webster Western Beltway)
265 S.R. 408
ORLANDO
Wekiva Parkway
Seminole Expressway
SEMINOLE
SANFORD
VOLUSIA
$0.54 $1.00 259 Orlando (I-4)
Beachline West Expressway
255 Consulate Dr. $0.80 $1.07
$0.80 $1.25
254 Orlando South (U.S. 17/92/441)
$0.80 $1.07 251 S.R. 417
ORANGE
PASCO
Daniel Webster Western Beltway Part C
Southern Connector Extension
$1.07 $1.50 249 Osceola Pkwy.
$1.34 $1.75
244 Kissimmee-St. Cloud North (U.S. 192 & U.S. 441)
KISSIMMEE
242 Kissimmee-St. Cloud South (U.S. 192 & U.S. 441)
240 Kissimmee Park Rd. $1.34 $1.59
NORTHERN COIN SYSTEM
TICKET SYSTEM
236 Three Lakes Plaza
OSCEOLA
229 Canoe Creek Service Plaza
HILLSBOROUGH
Polk Parkway
POLK
LAKELAND
N
Miles
0 5 10
Northern Coin System (SR 91)
FDOT
$0.00 SunPass® Toll Rate
$0.00 Cash Toll Rate
$0.00 TOLL-BY-PLATE™ Toll Rate
Toll Plaza
Service Plaza
Toll System Boundary
Interchange with Toll Collection
Interchange with No Toll Collection
Future Interchange with Toll Collection
Existing Turnpike System Facility, Northern Coin System
Existing Turnpike System Facility
Interstate Highway
Other Toll Road
Arterial
Other Road
County Boundary
FLORIDA'S TURNPIKE
Sources: HERE 2018
Florida's Turnpike Enterprise, 2018



Ticket System Toll Rates (2-axle vehicles)

SunPass

Mile Post	88	93	97	98	99	107	109	116	133	138	142	152	193
93	$1.70												
97	$2.00	$0.50											
98	NA	NA	NA										
99	$2.30	$0.70	$0.40	-									
107	NA	NA	NA	-	NA								
109	$3.00	$1.50	$1.20	-	$0.90	NA							
116	$3.70	$2.10	$1.80	-	$1.50	NA	$0.70						
133	$5.30	$3.70	$3.40	-	$3.00	NA	$2.30	$1.70					
138	NA	NA	NA	-	NA	NA	NA	NA	NA				
142	$6.00	$4.50	$4.10	-	$3.90	NA	$3.00	$2.50	$0.90	NA			
152	$6.80	$5.40	$5.00	-	$4.70	NA	$3.90	$3.40	$1.80	NA	$0.90		
193	$10.80	$9.00	$8.70	-	$8.50	NA	$7.60	$7.00	$5.50	NA	$4.60	$3.80	
236	$16.50	$14.90	$14.60	-	$14.20	NA	$13.50	$12.90	$11.30	NA	$10.50	$9.70	$5.90

Cash

Mile Post	88	93	97	98	99	107	109	116	133	138	142	152	193
93	$1.29												
97	$1.49	$0.31											
98	$1.59	$0.44	$0.20										
99	$1.70	$0.54	$0.30	-									
107	$2.03	$0.95	$0.66	-	$0.44								
109	$2.23	$1.18	$0.95	-	$0.64	$0.31							
116	$2.77	$1.59	$1.29	-	$1.18	$0.74	$0.54						
133	$3.95	$2.77	$2.56	-	$2.23	$1.92	$1.70	$1.29					
138	$4.26	$3.09	$2.88	-	$2.66	$2.23	$2.03	$1.59	$0.44				
142	$4.48	$3.41	$3.09	-	$2.88	$2.56	$2.23	$1.92	$0.64	$0.31			
152	$5.12	$4.05	$3.73	-	$3.52	$3.20	$2.88	$2.56	$1.29	$0.95	$0.64		
193	$7.99	$6.72	$6.50	-	$6.40	$5.98	$5.75	$5.23	$4.15	$3.73	$3.52	$2.88	
236	$12.37	$11.19	$10.88	-	$10.67	$10.34	$10.14	$9.60	$8.43	$8.11	$7.89	$7.24	$4.48

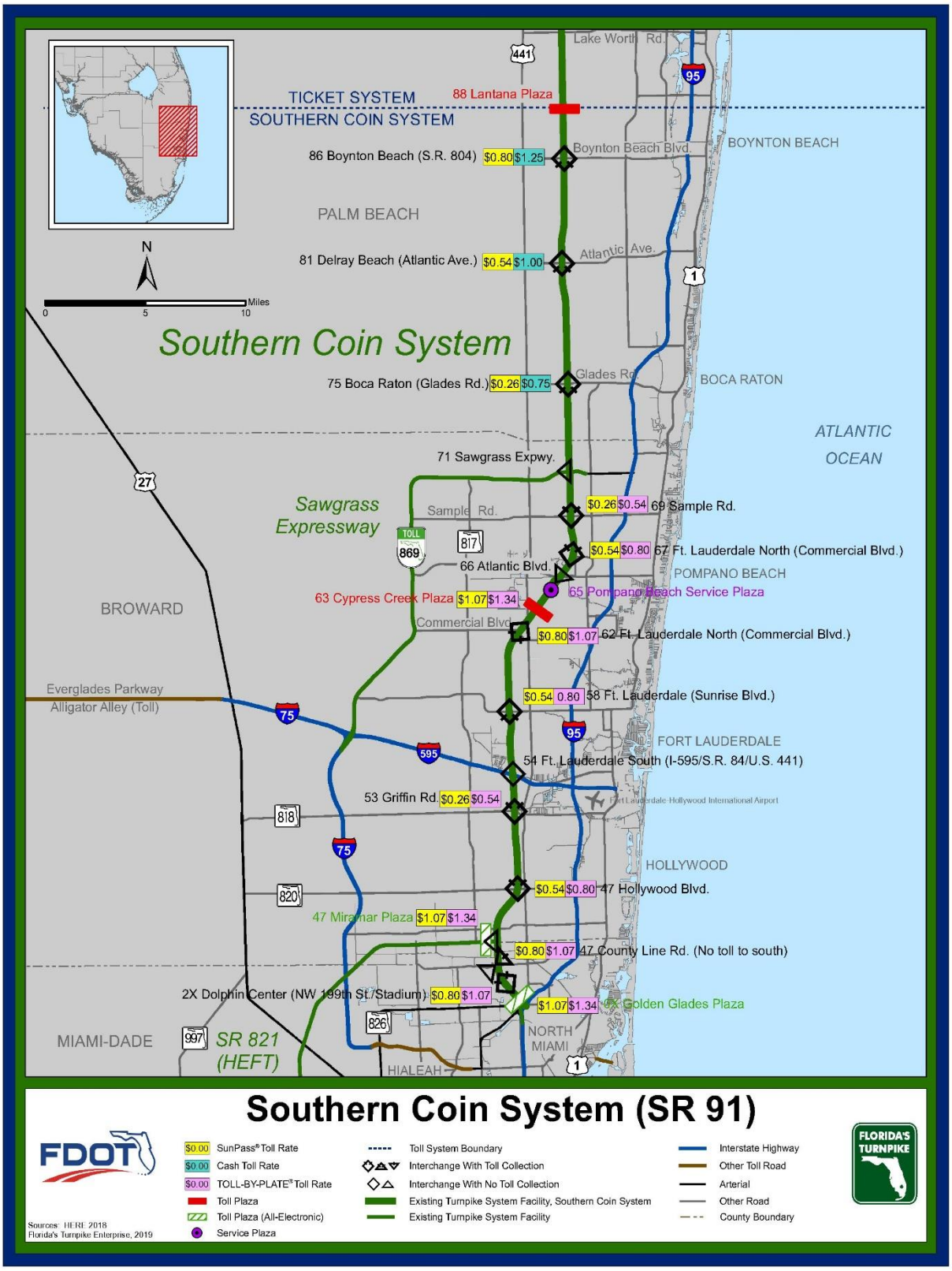
NA – Cash not accepted at these locations

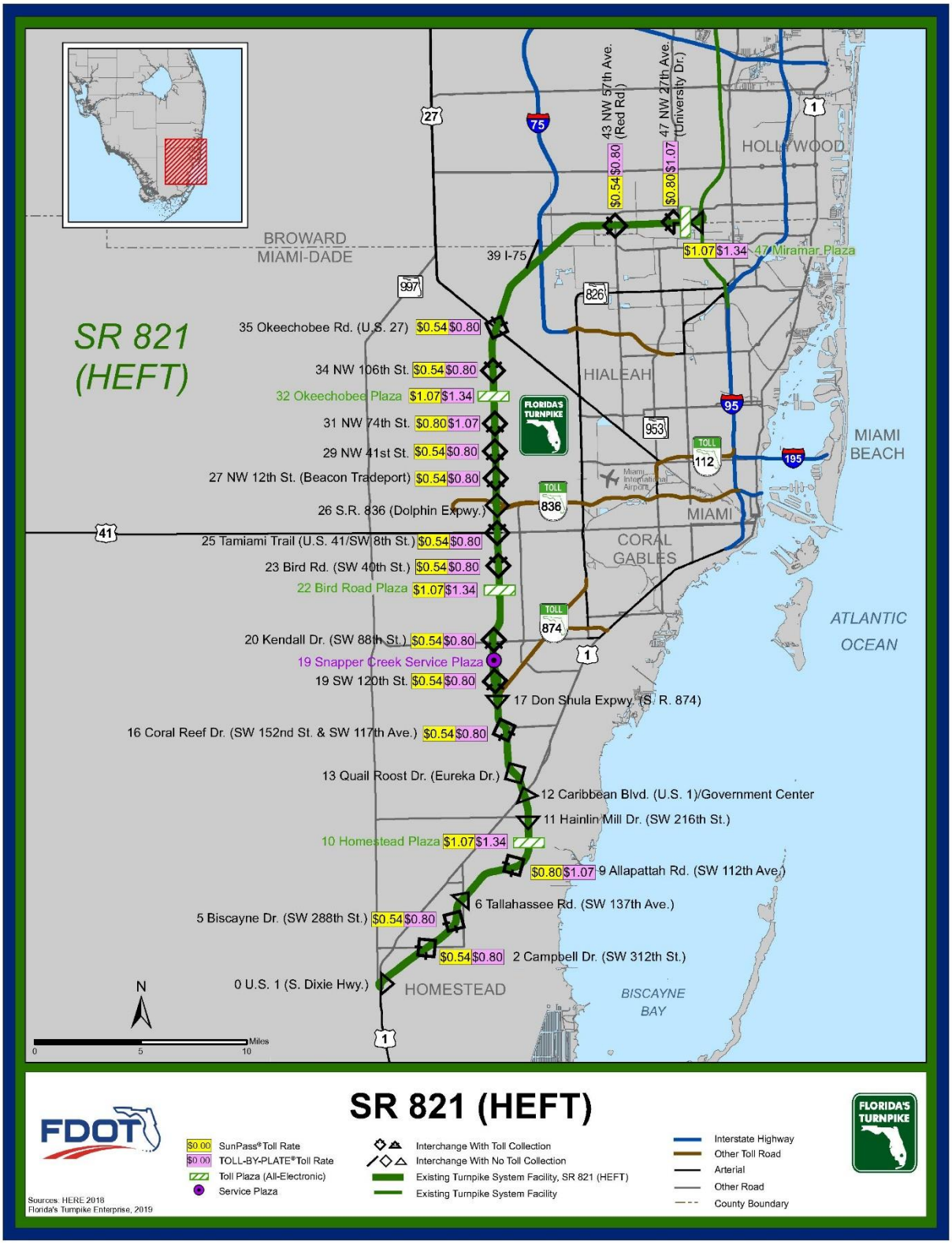
To use the Ticket System chart: Find the south end of your trip across the top of the chart. Go to the left for the north end of your trip. Where the row and column meet is the amount of your trip. To calculate multi-axle toll rate or the Ticket System use the toll amount from the chart, divide by two, then multiply by the number of axles

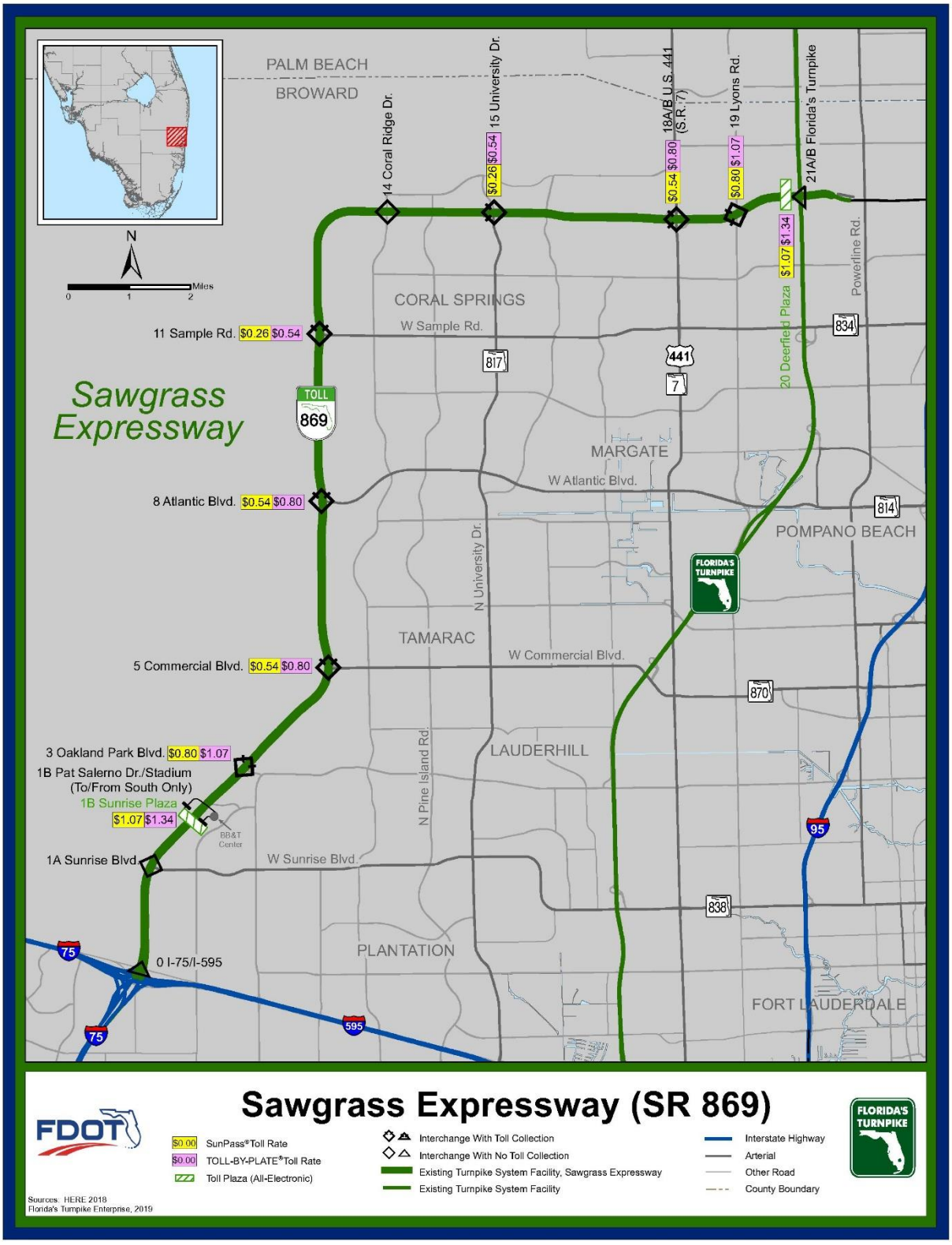
Ticket System (SR 91)

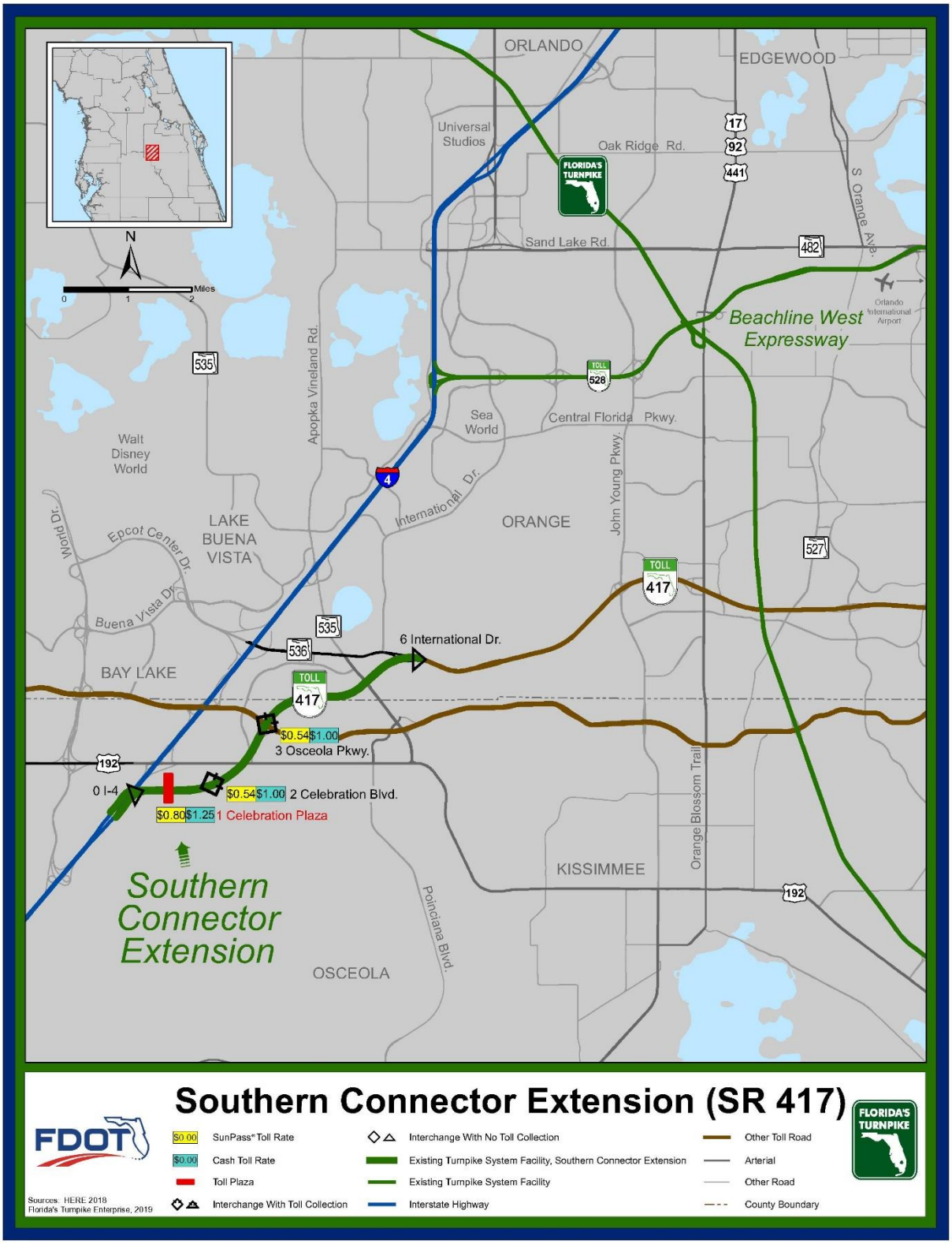
Toll Plaza
Service Plaza
Toll System Boundary
Interchange
Existing Turnpike System Facility, Ticket System
Interstate Highway
Arterial
Other Road
County Boundary

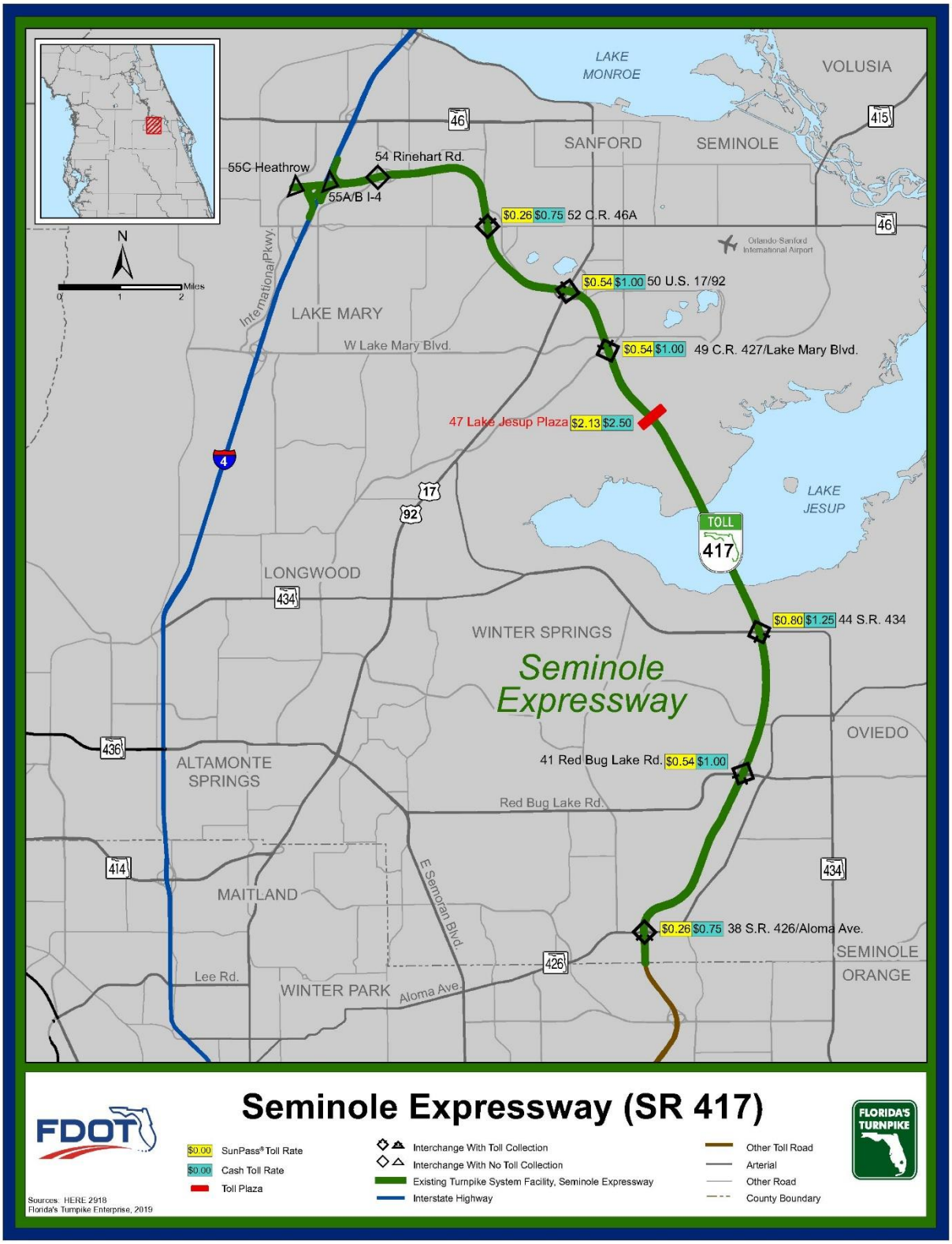
Sources: HERE 2018
Florida's Turnpike Enterprise, 2019

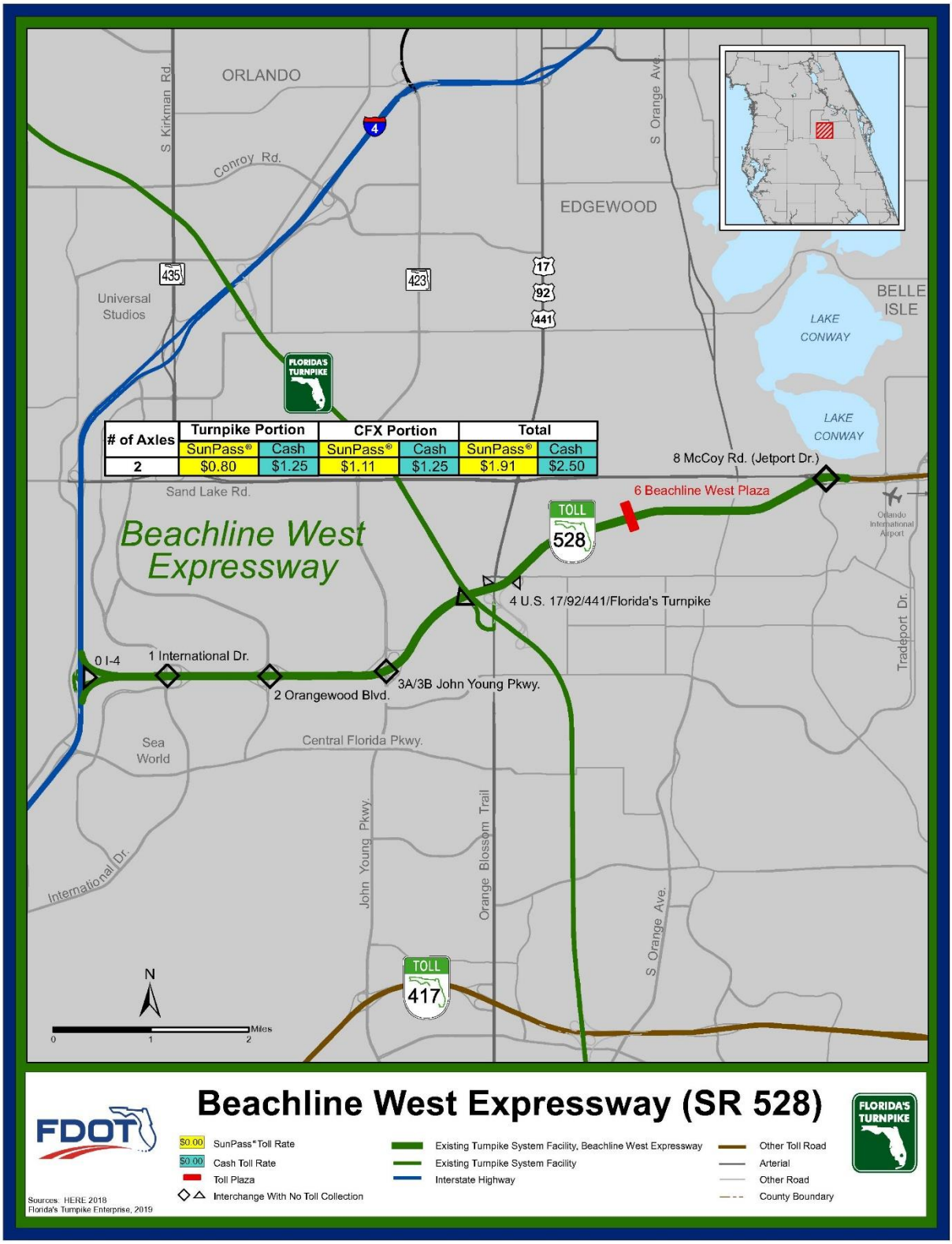

TICKET SYSTEM
SOUTHERN COIN SYSTEM
88 Lantana Plaza
86 Boynton Beach (S.R. 804) $0.80 $1.25
81 Delray Beach (Atlantic Ave.) $0.54 $1.00
75 Boca Raton (Glades Rd.) $0.26 $0.75
71 Sawgrass Expwy.
69 Sample Rd. $0.26 $0.54
67 Ft. Lauderdale North (Commercial Blvd.) $0.54 $0.80
66 Atlantic Blvd.
65 Pompano Beach Service Plaza
63 Cypress Creek Plaza $1.07 $1.34
62 Ft. Lauderdale North (Commercial Blvd.) $0.80 $1.07
58 Ft. Lauderdale (Sunrise Blvd.) $0.54 0.80
54 Ft. Lauderdale South (I-595/S.R. 84/U.S. 441)
53 Griffin Rd. $0.26 $0.54
47 Hollywood Blvd. $0.54 $0.80
47 Miramar Plaza $1.07 $1.34
47 County Line Rd. (No toll to south) $0.80 $1.07
2X Dolphin Center (NW 199th St./Stadium) $0.80 $1.07
2X Golden Glades Plaza $1.07 $1.34
Southern Coin System
Sawgrass Expressway
SR 821 (HEFT)
Everglades Parkway
Alligator Alley (Toll)
Lake Worth Rd.
Boynton Beach Blvd.
Atlantic Ave.
Glades Rd.
Sample Rd.
Commercial Blvd.
BOYNTON BEACH
PALM BEACH
BOCA RATON
ATLANTIC OCEAN
POMPANO BEACH
BROWARD
FORT LAUDERDALE
HOLLYWOOD
MIAMI-DADE
HIALEAH
NORTH MIAMI
Fort Lauderdale-Hollywood International Airport
N
0 5 10 Miles
Southern Coin System (SR 91)
FDOT
$0.00 SunPass® Toll Rate
$0.00 Cash Toll Rate
$0.00 TOLL-BY-PLATE® Toll Rate
Toll Plaza
Toll Plaza (All-Electronic)
Service Plaza
Toll System Boundary
Interchange With Toll Collection
Interchange With No Toll Collection
Existing Turnpike System Facility, Southern Coin System
Existing Turnpike System Facility
Interstate Highway
Other Toll Road
Arterial
Other Road
County Boundary
FLORIDA'S TURNPIKE
Sources: HERE 2018
Florida's Turnpike Enterprise, 2019

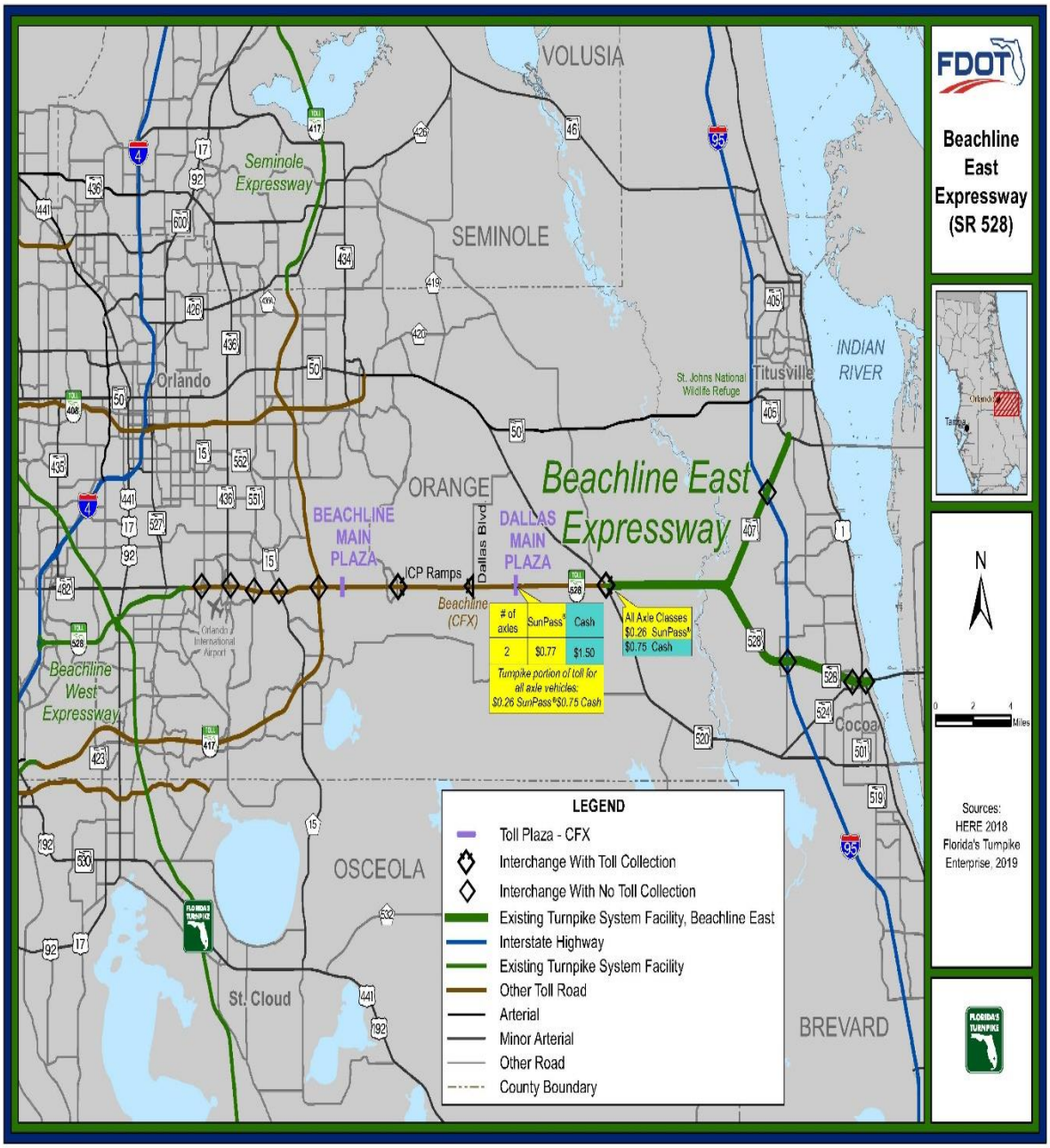

SR 821 (HEFT)
BROWARD
MIAMI-DADE
43 NW 57th Ave. (Red Rd.)
47 NW 27th Ave. (University Dr.)
$0.54 $0.80
$0.80 $1.07
$1.07 $1.34 47 Miramar Plaza
39 I-75
35 Okeechobee Rd. (U.S. 27) $0.54 $0.80
34 NW 106th St. $0.54 $0.80
32 Okeechobee Plaza $1.07 $1.34
31 NW 74th St. $0.80 $1.07
29 NW 41st St. $0.54 $0.80
27 NW 12th St. (Beacon Tradeport) $0.54 $0.80
26 S.R. 836 (Dolphin Expwy.)
25 Tamiami Trail (U.S. 41/SW 8th St.) $0.54 $0.80
23 Bird Rd. (SW 40th St.) $0.54 $0.80
22 Bird Road Plaza $1.07 $1.34
20 Kendall Dr. (SW 88th St.) $0.54 $0.80
19 Snapper Creek Service Plaza
19 SW 120th St. $0.54 $0.80
17 Don Shula Expwy. (S. R. 874)
16 Coral Reef Dr. (SW 152nd St. & SW 117th Ave.) $0.54 $0.80
13 Quail Roost Dr. (Eureka Dr.)
12 Caribbean Blvd. (U.S. 1)/Government Center
11 Hainlin Mill Dr. (SW 216th St.)
10 Homestead Plaza $1.07 $1.34
$0.80 $1.07 9 Allapattah Rd. (SW 112th Ave.)
6 Tallahassee Rd. (SW 137th Ave.)
5 Biscayne Dr. (SW 288th St.) $0.54 $0.80
$0.54 $0.80 2 Campbell Dr. (SW 312th St.)
0 U.S. 1 (S. Dixie Hwy.)
HOMESTEAD
HIALEAH
HOLLYWOOD
MIAMI BEACH
MIAMI
CORAL GABLES
ATLANTIC OCEAN
BISCAYNE BAY
Miami International Airport
FLORIDA'S TURNPIKE
TOLL 112
TOLL 836
TOLL 874
27
75
1
95
195
997
826
953
41
N
Miles
0
5
10
SR 821 (HEFT)
FDOT
$0.00 SunPass® Toll Rate
$0.00 TOLL-BY-PLATE® Toll Rate
Toll Plaza (All-Electronic)
Service Plaza
Interchange With Toll Collection
Interchange With No Toll Collection
Existing Turnpike System Facility, SR 821 (HEFT)
Existing Turnpike System Facility
Interstate Highway
Other Toll Road
Arterial
Other Road
County Boundary
Sources: HERE 2018
Florida's Turnpike Enterprise, 2019

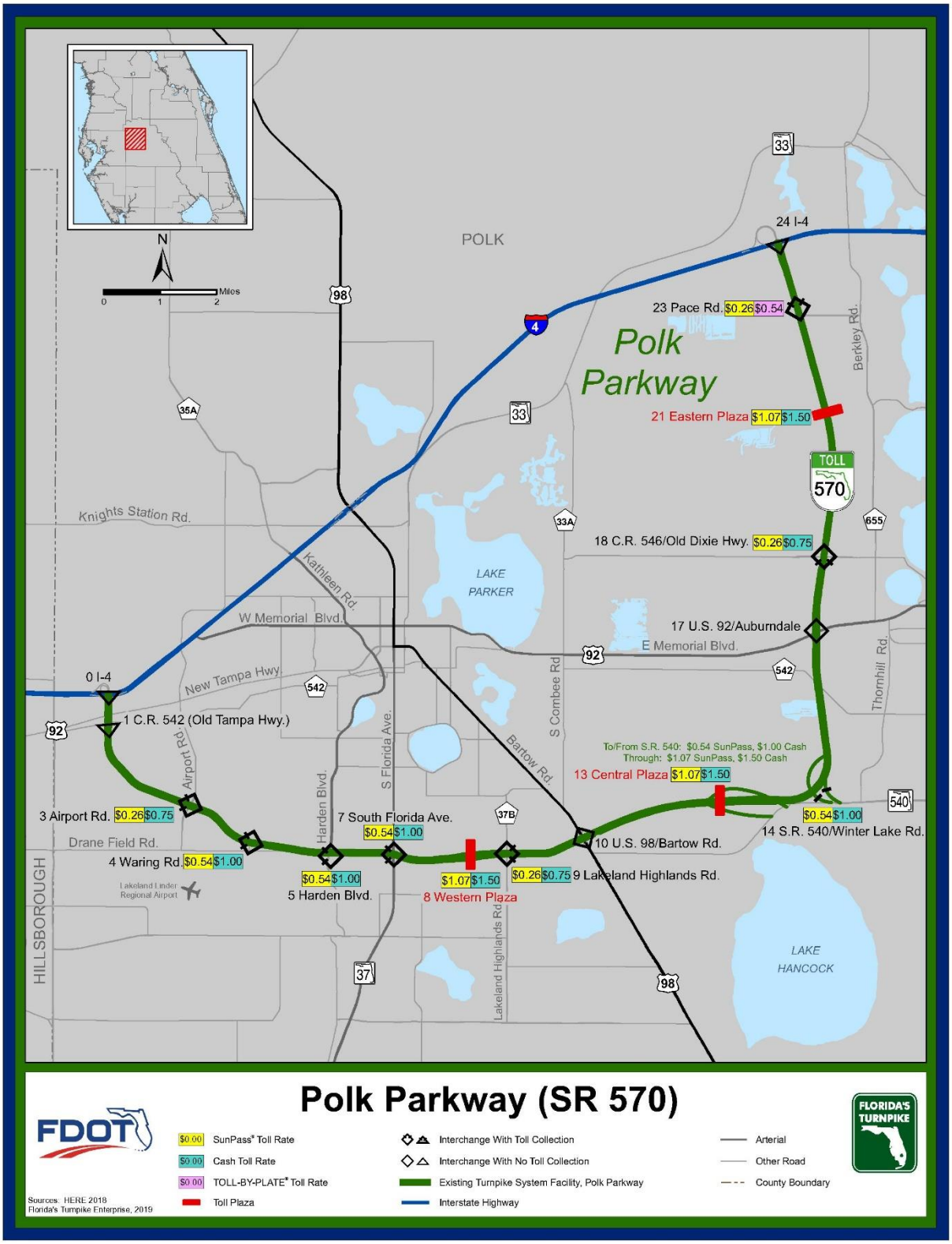

PALM BEACH
BROWARD
14 Coral Ridge Dr.
15 University Dr.
18A/B U.S. 441 (S.R. 7)
19 Lyons Rd.
21A/B Florida's Turnpike
$0.26 $0.54
$0.54 $0.80
$0.80 $1.07
$1.07 $1.34
20 Deerfield Plaza
Powerline Rd.
CORAL SPRINGS
W Sample Rd.
11 Sample Rd. $0.26 $0.54
Sawgrass Expressway
TOLL 869
817
441
7
834
MARGATE
W Atlantic Blvd.
8 Atlantic Blvd. $0.54 $0.80
814
POMPANO BEACH
N University Dr.
FLORIDA'S TURNPIKE
TAMARAC
W Commercial Blvd.
5 Commercial Blvd. $0.54 $0.80
870
3 Oakland Park Blvd. $0.80 $1.07
1B Pat Salerno Dr./Stadium (To/From South Only)
1B Sunrise Plaza $1.07 $1.34
BB&T Center
N Pine Island Rd.
LAUDERHILL
95
1A Sunrise Blvd.
W Sunrise Blvd.
838
75
0 I-75/I-595
PLANTATION
595
FORT LAUDERDALE
N
0 1 2 Miles
Sawgrass Expressway (SR 869)
FDOT
$0.00 SunPass® Toll Rate
$0.00 TOLL-BY-PLATE® Toll Rate
Toll Plaza (All-Electronic)
Interchange With Toll Collection
Interchange With No Toll Collection
Existing Turnpike System Facility, Sawgrass Expressway
Existing Turnpike System Facility
Interstate Highway
Arterial
Other Road
County Boundary
Sources: HERE 2018
Florida's Turnpike Enterprise, 2019

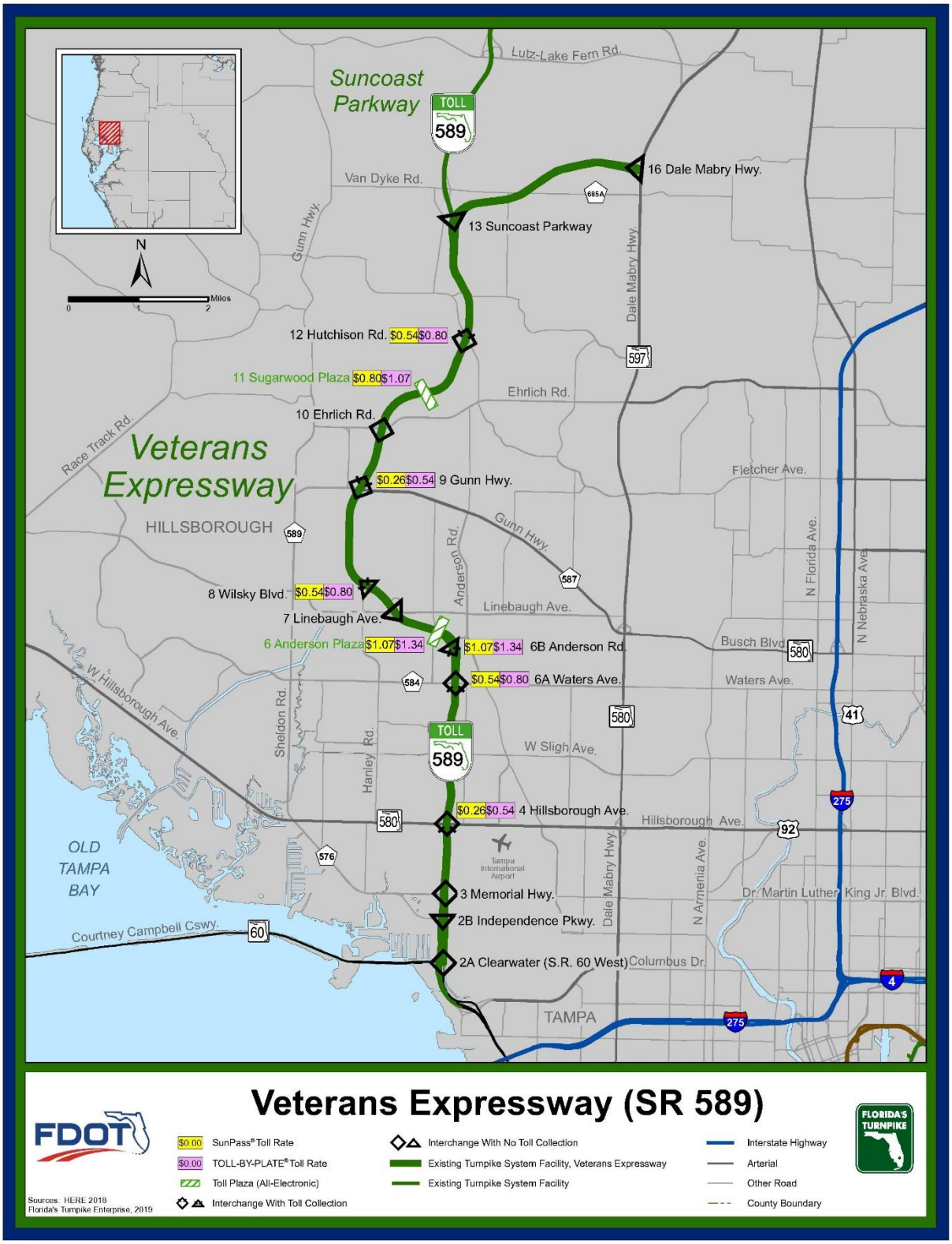

ORLANDO
EDGEWOOD
Universal Studios
Oak Ridge Rd.
FLORIDA'S TURNPIKE
17
92
441
S Orange Ave.
Sand Lake Rd.
482
N
Miles
0
1
2
Orlando International Airport
Beachline West Expressway
535
TOLL 528
Apopka Vineland Rd.
Sea World
Central Florida Pkwy.
Walt Disney World
4
International Dr.
John Young Pkwy.
LAKE BUENA VISTA
ORANGE
World Dr.
Epcot Center Dr.
527
TOLL 417
Buena Vista Dr.
535
536
6 International Dr.
BAY LAKE
TOLL 417
$0.54 $1.00
3 Osceola Pkwy.
192
0 I-4
$0.54 $1.00 2 Celebration Blvd.
$0.80 $1.25 1 Celebration Plaza
Southern Connector Extension
KISSIMMEE
Orange Blossom Trail
192
Poinciana Blvd.
OSCEOLA
Southern Connector Extension (SR 417)
FDOT
$0.00 SunPass® Toll Rate
$0.00 Cash Toll Rate
Toll Plaza
Interchange With Toll Collection
Interchange With No Toll Collection
Existing Turnpike System Facility, Southern Connector Extension
Existing Turnpike System Facility
Interstate Highway
Other Toll Road
Arterial
Other Road
County Boundary
Sources: HERE 2018
Florida's Turnpike Enterprise, 2019
FLORIDA'S TURNPIKE

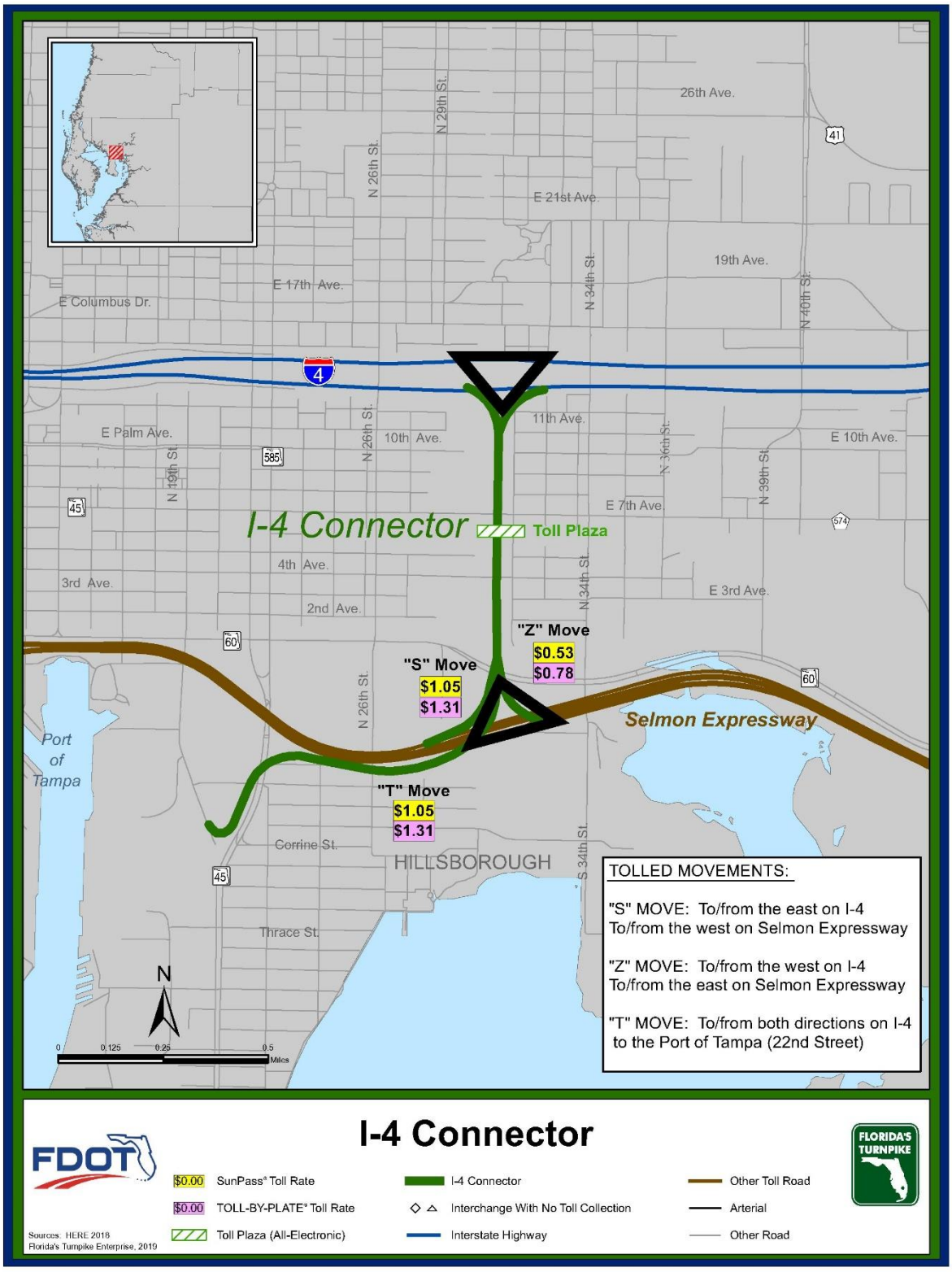

LAKE MONROE
VOLUSIA
SANFORD
SEMINOLE
46
415
55C Heathrow
54 Rinehart Rd.
55A/B I-4
$0.26 $0.75 52 C.R. 46A
Orlando Sanford International Airport
N
Miles
0 1 2
International Pkwy.
LAKE MARY
W Lake Mary Blvd.
$0.54 $1.00 50 U.S. 17/92
$0.54 $1.00 49 C.R. 427/Lake Mary Blvd.
47 Lake Jesup Plaza $2.13 $2.50
4
17
92
LAKE JESUP
TOLL
417
LONGWOOD
434
$0.80 $1.25 44 S.R. 434
WINTER SPRINGS
Seminole Expressway
OVIEDO
436
ALTAMONTE SPRINGS
41 Red Bug Lake Rd. $0.54 $1.00
Red Bug Lake Rd.
414
MAITLAND
E Semoran Blvd.
$0.26 $0.75 38 S.R. 426/Aloma Ave.
SEMINOLE
ORANGE
Lee Rd.
WINTER PARK
Aloma Ave.
426
Seminole Expressway (SR 417)
FDOT
$0.00 SunPass® Toll Rate
$0.00 Cash Toll Rate
Toll Plaza
Interchange With Toll Collection
Interchange With No Toll Collection
Existing Turnpike System Facility, Seminole Expressway
Interstate Highway
Other Toll Road
Arterial
Other Road
County Boundary
FLORIDA'S TURNPIKE
Sources: HERE 2918
Florida's Turnpike Enterprise, 2019

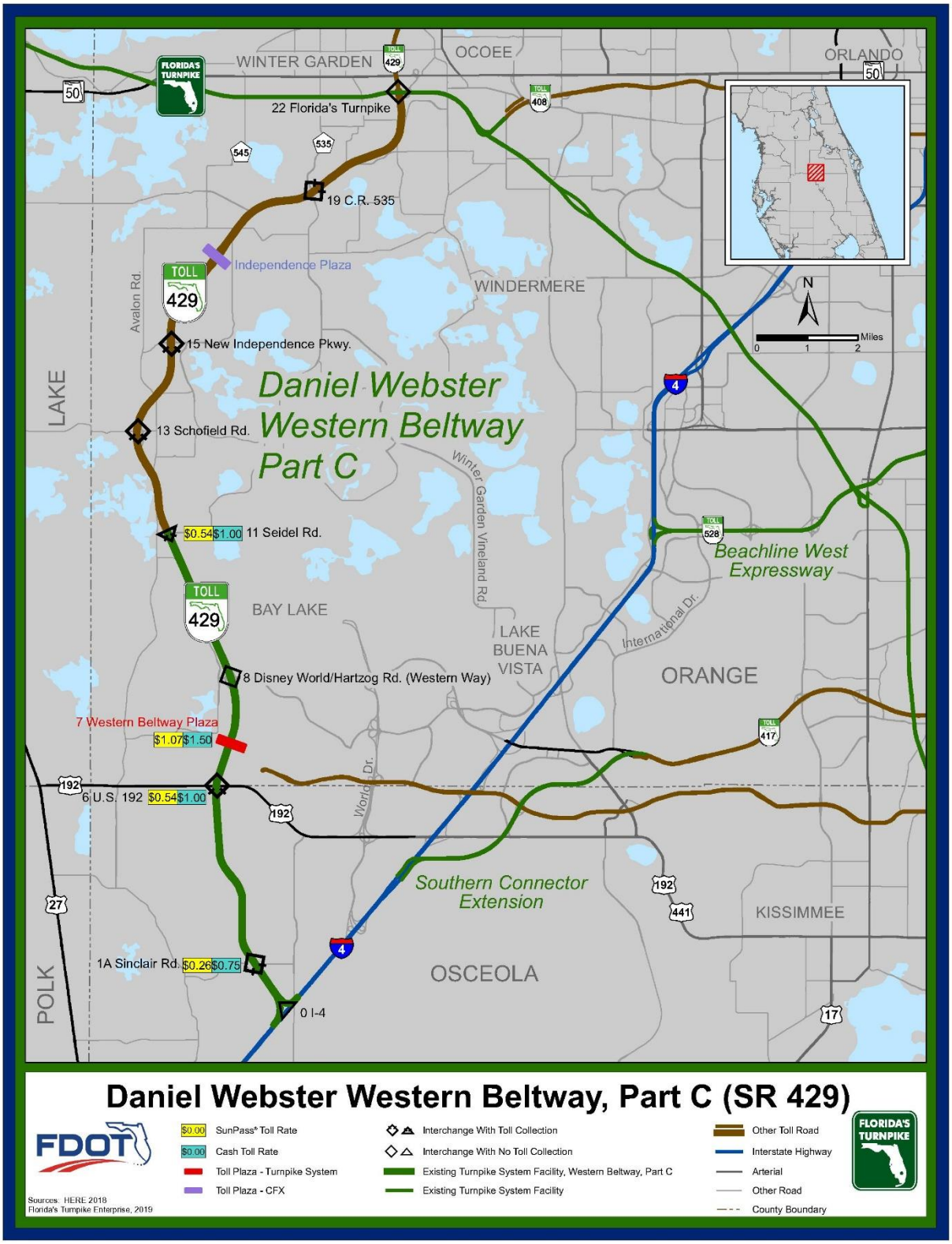

ORLANDO
S Kirkman Rd
Conroy Rd.
S Orange Ave.
EDGEWOOD
435
423
17
92
441
Universal Studios
BELLE ISLE
LAKE CONWAY
LAKE CONWAY
FLORIDA'S TURNPIKE
# of Axles
Turnpike Portion
CFX Portion
Total
SunPass®
Cash
SunPass®
Cash
SunPass®
Cash
2
$0.80
$1.25
$1.11
$1.25
$1.91
$2.50
8 McCoy Rd. (Jetport Dr.)
Sand Lake Rd.
6 Beachline West Plaza
Beachline West Expressway
TOLL
528
Orlando International Airport
4 U.S. 17/92/441/Florida's Turnpike
Tradeport Dr.
0 I-4
1 International Dr.
2 Orangewood Blvd.
3A/3B John Young Pkwy.
Sea World
Central Florida Pkwy.
International Dr.
John Young Pkwy.
Orange Blossom Trail
S Orange Ave.
TOLL
417
N
0
1
2
Miles
Beachline West Expressway (SR 528)
FDOT
$0.00 SunPass® Toll Rate
$0.00 Cash Toll Rate
Toll Plaza
Interchange With No Toll Collection
Existing Turnpike System Facility, Beachline West Expressway
Existing Turnpike System Facility
Interstate Highway
Other Toll Road
Arterial
Other Road
County Boundary
FLORIDA'S TURNPIKE
Sources: HERE 2018
Florida's Turnpike Enterprise, 2019

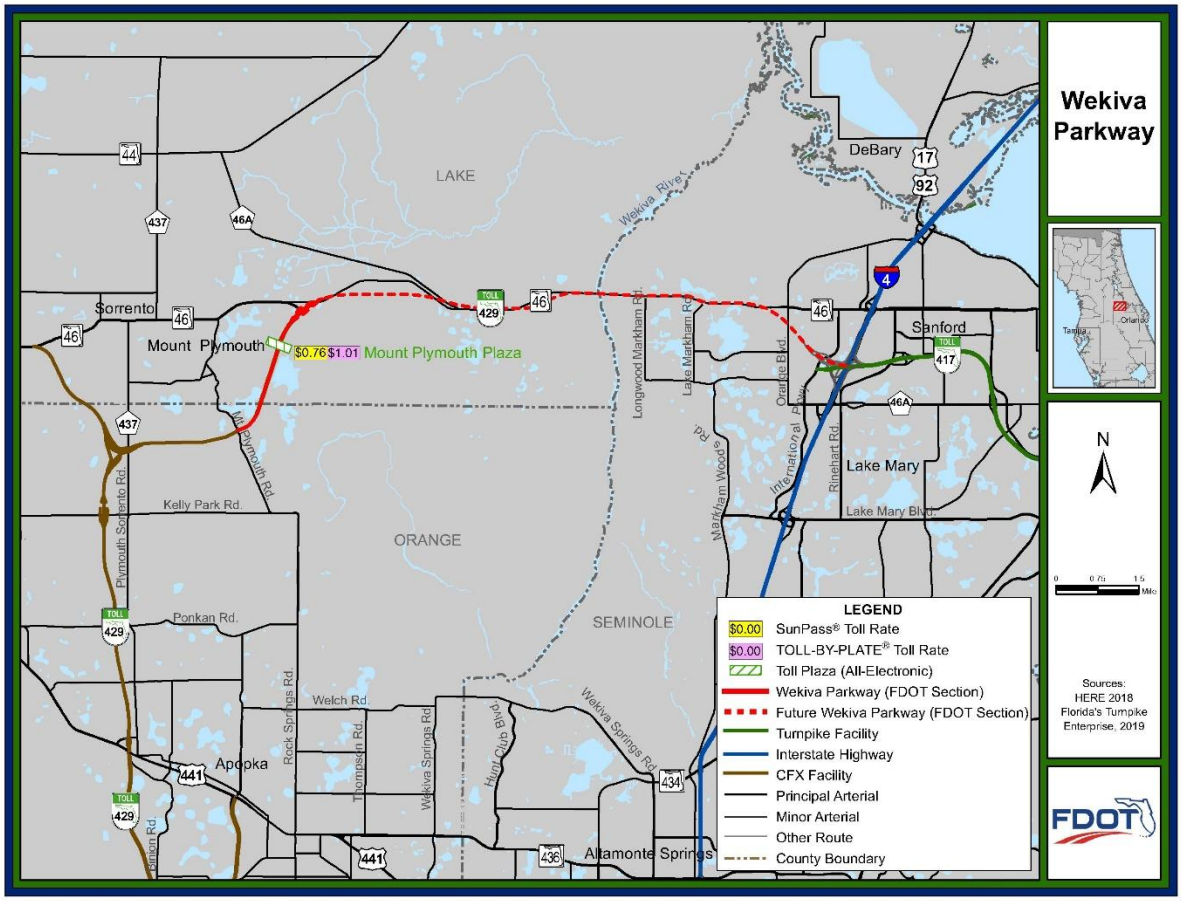

FDOT
Beachline East Expressway (SR 528)
VOLUSIA
SEMINOLE
ORANGE
OSCEOLA
BREVARD
Seminole Expressway
Beachline East Expressway
Beachline West Expressway
BEACHLINE MAIN PLAZA
DALLAS MAIN PLAZA
ICP Ramps
Dallas Blvd
Beachline (CFX)
Orlando
Titusville
Cocoa
St. Cloud
INDIAN RIVER
St. Johns National Wildlife Refuge
Orlando International Airport
# of axles | SunPass® | Cash
2 | $0.77 | $1.50
Turnpike portion of toll for all axle vehicles: $0.26 SunPass®/$0.75 Cash
All Axle Classes $0.26 SunPass® $0.75 Cash
LEGEND
Toll Plaza - CFX
Interchange With Toll Collection
Interchange With No Toll Collection
Existing Turnpike System Facility, Beachline East
Interstate Highway
Existing Turnpike System Facility
Other Toll Road
Arterial
Minor Arterial
Other Road
County Boundary
N
Miles
Sources: HERE 2018 Florida's Turnpike Enterprise, 2019

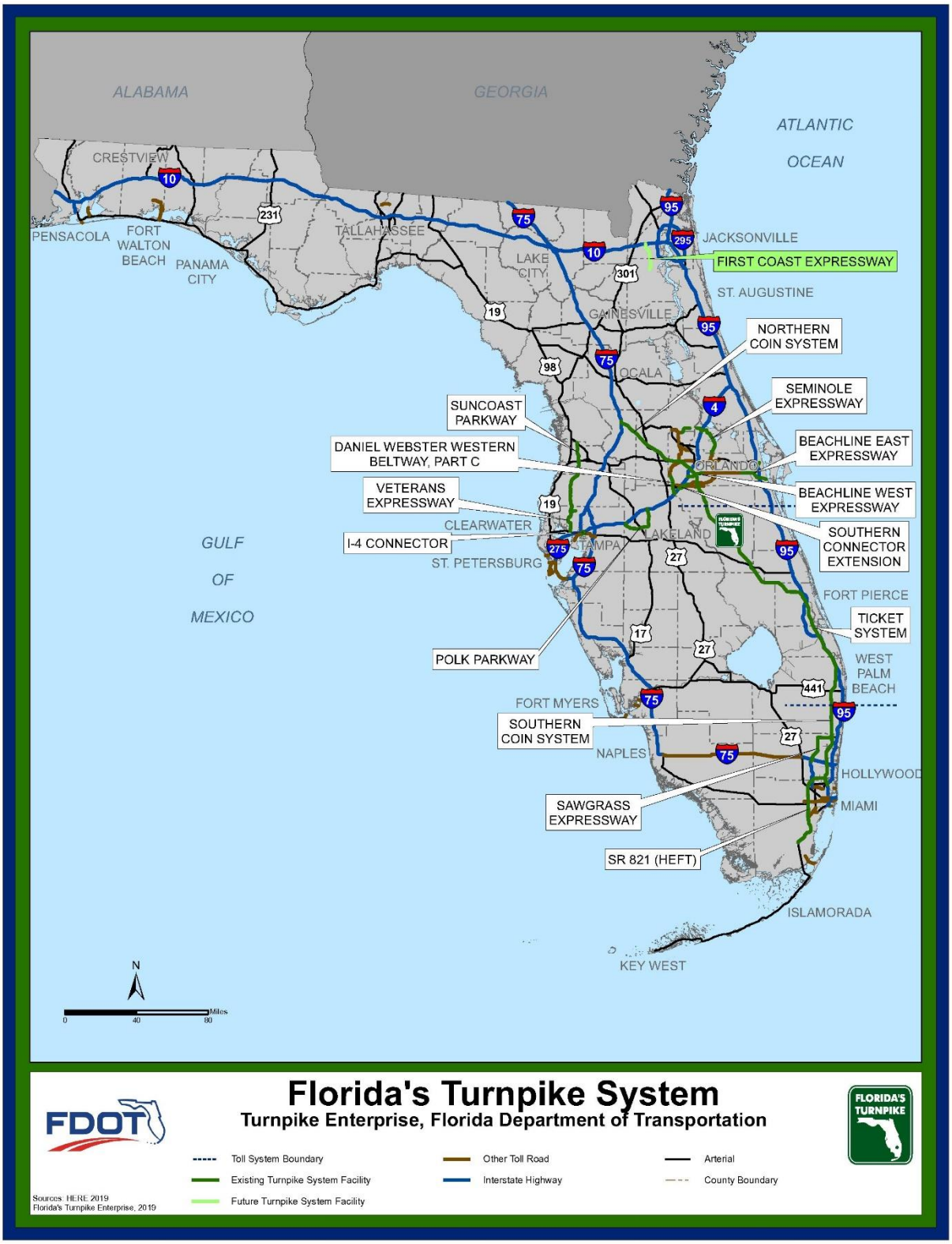

Polk Parkway
Polk Parkway (SR 570)
POLK
HILLSBOROUGH
LAKE PARKER
LAKE HANCOCK
N
Miles
0 1 2
24 I-4
23 Pace Rd. $0.26 $0.54
21 Eastern Plaza $1.07 $1.50
TOLL 570
18 C.R. 546/Old Dixie Hwy. $0.26 $0.75
17 U.S. 92/Auburndale
E Memorial Blvd.
To/From S.R. 540: $0.54 SunPass, $1.00 Cash
Through: $1.07 SunPass, $1.50 Cash
13 Central Plaza $1.07 $1.50
14 S.R. 540/Winter Lake Rd. $0.54 $1.00
10 U.S. 98/Bartow Rd.
9 Lakeland Highlands Rd. $0.26 $0.75
8 Western Plaza $1.07 $1.50
7 South Florida Ave. $0.54 $1.00
5 Harden Blvd. $0.54 $1.00
4 Waring Rd. $0.54 $1.00
3 Airport Rd. $0.26 $0.75
1 C.R. 542 (Old Tampa Hwy.)
0 I-4
W Memorial Blvd.
New Tampa Hwy
Knights Station Rd.
Kathleen Rd.
Airport Rd.
Harden Blvd.
S Florida Ave.
S Combee Rd
Bartow Rd.
Lakeland Highlands Rd.
Berkley Rd.
Thornhill Rd.
Drane Field Rd.
Lakeland Linder Regional Airport
FDOT
FLORIDA'S TURNPIKE
$0.00 SunPass® Toll Rate
$0.00 Cash Toll Rate
$0.00 TOLL-BY-PLATE® Toll Rate
Toll Plaza
Interchange With Toll Collection
Interchange With No Toll Collection
Existing Turnpike System Facility, Polk Parkway
Interstate Highway
Arterial
Other Road
County Boundary
Sources: HERE 2018
Florida's Turnpike Enterprise, 2019


Suncoast Parkway
TOLL 589
Lutz-Lake Fern Rd.
16 Dale Mabry Hwy.
Van Dyke Rd.
685A
13 Suncoast Parkway
Gunn Hwy.
Dale Mabry Hwy.
N
Miles
0 1 2
12 Hutchison Rd. $0.54 $0.80
597
11 Sugarwood Plaza $0.80 $1.07
Ehrlich Rd.
10 Ehrlich Rd.
Race Track Rd.
Veterans Expressway
$0.26 $0.54 9 Gunn Hwy.
Fletcher Ave.
HILLSBOROUGH
589
Gunn Hwy.
Anderson Rd.
587
N Florida Ave.
N Nebraska Ave.
8 Wilsky Blvd. $0.54 $0.80
7 Linebaugh Ave.
Linebaugh Ave.
6 Anderson Plaza $1.07 $1.34
$1.07 $1.34 6B Anderson Rd.
Busch Blvd
580
W Hillsborough Ave.
584
$0.54 $0.80 6A Waters Ave.
Waters Ave.
580
41
Sheldon Rd.
TOLL 589
Hanley Rd.
W Sligh Ave.
$0.26 $0.54 4 Hillsborough Ave.
580
Hillsborough Ave.
92
275
OLD TAMPA BAY
576
Tampa International Airport
3 Memorial Hwy.
Dale Mabry Hwy.
N Armenia Ave.
Dr. Martin Luther King Jr. Blvd.
2B Independence Pkwy.
Courtney Campbell Cswy.
60
2A Clearwater (S.R. 60 West)
Columbus Dr.
4
TAMPA
275
Veterans Expressway (SR 589)
FDOT
FLORIDA'S TURNPIKE
$0.00 SunPass® Toll Rate
$0.00 TOLL-BY-PLATE® Toll Rate
Toll Plaza (All-Electronic)
Interchange With Toll Collection
Interchange With No Toll Collection
Existing Turnpike System Facility, Veterans Expressway
Existing Turnpike System Facility
Interstate Highway
Arterial
Other Road
County Boundary
Sources: HERE 2018
Florida's Turnpike Enterprise, 2019


I-4 Connector
Toll Plaza
"Z" Move
$0.53
$0.78
"S" Move
$1.05
$1.31
"T" Move
$1.05
$1.31
Selmon Expressway
Port of Tampa
HILLSBOROUGH
TOLLED MOVEMENTS:
"S" MOVE: To/from the east on I-4
To/from the west on Selmon Expressway
"Z" MOVE: To/from the west on I-4
To/from the east on Selmon Expressway
"T" MOVE: To/from both directions on I-4
to the Port of Tampa (22nd Street)
26th Ave.
E 21st Ave.
19th Ave.
E 17th Ave.
E Columbus Dr.
E Palm Ave.
10th Ave.
11th Ave.
E 10th Ave.
E 7th Ave.
4th Ave.
3rd Ave.
2nd Ave.
E 3rd Ave.
Corrine St.
Thrace St.
N 29th St.
N 26th St.
N 34th St.
N 40th St.
N 19th St.
N 36th St.
N 39th St.
S 34th St.
0 0.125 0.25 0.5 Miles
I-4 Connector
$0.00 SunPass® Toll Rate
$0.00 TOLL-BY-PLATE® Toll Rate
Toll Plaza (All-Electronic)
I-4 Connector
Interchange With No Toll Collection
Interstate Highway
Other Toll Road
Arterial
Other Road
Sources: HERE 2018
Florida's Turnpike Enterprise, 2019


WINTER GARDEN
OCOEE
ORLANDO
22 Florida's Turnpike
19 C.R. 535
Independence Plaza
15 New Independence Pkwy.
13 Schofield Rd.
11 Seidel Rd.
$0.54 $1.00
8 Disney World/Hartzog Rd. (Western Way)
7 Western Beltway Plaza
$1.07 $1.50
6 U.S. 192 $0.54 $1.00
1A Sinclair Rd. $0.26 $0.75
0 I-4
Daniel Webster Western Beltway Part C
Beachline West Expressway
Southern Connector Extension
WINDERMERE
BAY LAKE
LAKE BUENA VISTA
ORANGE
KISSIMMEE
OSCEOLA
LAKE
POLK
Avalon Rd
Winter Garden Vineland Rd
International Dr.
World Dr.
N
Miles
0 1 2
Daniel Webster Western Beltway, Part C (SR 429)
FDOT
$0.00 SunPass® Toll Rate
$0.00 Cash Toll Rate
Toll Plaza - Turnpike System
Toll Plaza - CFX
Interchange With Toll Collection
Interchange With No Toll Collection
Existing Turnpike System Facility, Western Beltway, Part C
Existing Turnpike System Facility
Other Toll Road
Interstate Highway
Arterial
Other Road
County Boundary
FLORIDA'S TURNPIKE
Sources: HERE 2018
Florida's Turnpike Enterprise, 2019


Wekiva Parkway
LAKE
ORANGE
SEMINOLE
DeBary
Sanford
Lake Mary
Lake Mary Blvd
Sorrento
Mount Plymouth
$0.76 $1.01 Mount Plymouth Plaza
Kelly Park Rd.
Ponkan Rd.
Welch Rd.
Apopka
Altamonte Springs
Wekiva River
Longwood Markham Rd
Lake Markham Rd
Orange Blvd
International Pkwy
Rinehart Rd
Mt Plymouth Rd
Plymouth Sorrento Rd
Rock Springs Rd
Thompson Rd
Wekiva Springs Rd
Hunt Club Blvd
Binion Rd
LEGEND
$0.00 SunPass® Toll Rate
$0.00 TOLL-BY-PLATE® Toll Rate
Toll Plaza (All-Electronic)
Wekiva Parkway (FDOT Section)
Future Wekiva Parkway (FDOT Section)
Turnpike Facility
Interstate Highway
CFX Facility
Principal Arterial
Minor Arterial
Other Route
County Boundary
N
Sources:
HERE 2018
Florida's Turnpike Enterprise, 2019
FDOT


ALABAMA
GEORGIA
ATLANTIC OCEAN
GULF OF MEXICO
CRESTVIEW
PENSACOLA
FORT WALTON BEACH
PANAMA CITY
TALLAHASSEE
LAKE CITY
JACKSONVILLE
FIRST COAST EXPRESSWAY
ST. AUGUSTINE
GAINESVILLE
NORTHERN COIN SYSTEM
OCALA
SEMINOLE EXPRESSWAY
SUNCOAST PARKWAY
DANIEL WEBSTER WESTERN BELTWAY, PART C
BEACHLINE EAST EXPRESSWAY
ORLANDO
VETERANS EXPRESSWAY
BEACHLINE WEST EXPRESSWAY
CLEARWATER
I-4 CONNECTOR
TAMPA
LAKELAND
SOUTHERN CONNECTOR EXTENSION
ST. PETERSBURG
FORT PIERCE
TICKET SYSTEM
POLK PARKWAY
WEST PALM BEACH
FORT MYERS
SOUTHERN COIN SYSTEM
NAPLES
HOLLYWOOD
MIAMI
SAWGRASS EXPRESSWAY
SR 821 (HEFT)
ISLAMORADA
KEY WEST
N
0
40
80
Miles
Florida's Turnpike System
Turnpike Enterprise, Florida Department of Transportation
FDOT
FLORIDA'S TURNPIKE
Toll System Boundary
Existing Turnpike System Facility
Future Turnpike System Facility
Other Toll Road
Interstate Highway
Arterial
County Boundary
Sources: HERE 2019
Florida's Turnpike Enterprise, 2019

APPENDIX B

Inspection Rating Procedures for Roadways, Structures, and Buildings

A. Roadway Rating Procedures

Maintenance Rating Program

The Maintenance Rating Program (MRP) was developed by FDOT. The computer-based system randomly selects specific points along the roadway mainlines, called samples, that are 528 (1/10th mile) feet in length. A total of 180 samples areas are generated for the Turnpike system. The inspection is based on five major categories, comprised of 35 individual elements as per Table A-1 below:

Table A-1
35 MRP Roadway Components

Roadway	Traffic Services	Drainage
Flexible Pot Hole	Raised Pavement Marker	Side/Cross Drain
Flexible Edge Raveling	Striping	Roadside/Median Ditch
Flexible Shoving	Pavement Symbol	Outfall Ditch
Flexible Depression/Bump	Guardrail	Inlet
Flexible Paved Shoulder/ Turnout	Signs less than or equal to 30 SF	Misc. Drainage
Rigid Pothole	Signs greater than 30 SF	Roadway Sweep
Rigid Depression/Bump	Object Marker & Delineator	
Rigid Joint/Crack	Lighting	
Rigid Paved Shoulder/Crack		
Roadside	**Vegetation/Aesthetics**	
Shoulder Unpaved	Roadway Mowing	Curb / Sidewalk Edge
Front Slope	Slope Mowing	Litter Removal
Slope Pavement	Landscaping	Turf Condition
Sidewalk	Tree Trim	
Fence		

After the inspection of a sample area is completed, the raw data is entered into the DOTNET computer system. A numerical score is generated for each group, each feature, and the element as a whole. According to state guidelines, Roadway and Roadside Procedure 850-000-015-j; 1.0 paragraph three, states "Each District is to maintain a minimum annual maintenance rating of 80; and all elements (roadway, roadside, traffic services, drainage and vegetation/aesthetics) shall have a rating of 75 or above; and the characteristics of each element shall meet the desired conditions of the MRP Handbook at least 70. The Turnpike district under the executive direction of Nicola Liquori has established a maintenance rating goal of 90 overall for all five categories of elements.

The Turnpike Enterprise and ATKINS developed a Roadway Rating Procedure based on the original FDOT MRP using the original 46 elements shown in Table A-2. The ratings and descriptions of the numerical grading system are shown in Table A-3. This information is entered directly into a database located on laptop computers in the field for later compilation and reporting for each roadway. Inspection results are separated by roadway / ramp segment and lane direction.

Table A-2
46 RRP Roadway Components

Roadway		Roadside	Vegetation / Aesthetics
Pothole	Cracking	Soil Shoulder	Roadway Mowing
Joint	Depression	Front Slope	Slope Mowing
Pavement Void	Stripping	Sidewalk	Landscape
Edge Ravel	Shoving	Slope Protection	Tree Trim
Rutting	Paved Shoulder	Fence	Litter Removal
			Turf Condition
Drainage		**Traffic Services**	
Cross Drain	Pond Lake Canal	Pavement Marker	Signs Less Than 30 SF
Roadside Ditch	Storm Drain	Striping	Signs Greater Than 30 SF
Median Ditch	Other Inlet	Pavement Symbol	Warning Sign
Outfall Ditch	Misc. Inlet	Guardrail	Object Marker
Curb Inlet	Side Drain	Attenuator	Sign Light
Rip Rap	Roadway Sweep	Barrier Wall	Highway Light
		Regulatory Sign	

Table A-3
Roadway Inspection Rating Scale

Grade	Rating	Description
10	Excellent	No deficiencies noted. Feature is in like new condition
8-9	Adequate	No maintenance is necessary. Feature appearance and functionality / operability are good.
5-7	Degraded	Maintenance is required to protect public or system. Feature appearance and functionality / operability are below average.
2-4	Unsatisfactory	Repair Immediately to protect public or system. Feature appearance and functionality / operability are Substandard.
1	Emergency	Immediate maintenance is required to protect public or system. Feature appearance and functionality / operability are unacceptable.

B. Structures Rating Procedures

The structures inspection is performed on a biennial basis and is subdivided into four major categories: bridges, large non-qualifying culverts, overhead/cantilever signs, and weathering steel high mast light towers. The standard procedures utilized in rating the condition of each element included in each of the four categories are described below:

Bridge Rating Procedure:

The Bridge Inspection is performed in accordance with the National Bridge Inspection guidelines. Security concerns prohibit publishing detailed bridge reports outlining component deficiencies in this report. Bondholders may request bridge reports from the individual districts in where the bridges exist.

The biennial inspection is based on three main components, comprised of a total of 93 elements, and 117 sub elements, for fixed bridges only. A numerical score is generated for each component based on the rating scale shown in Table B-1.

Table B-1
Bridge Inspection Rating Scale, LNQCs

Grade	Rating	Description
9	Excellent	All elements are in excellent condition.
8	Very Good	There were no problems noted.
7	Good	Element has some minor problems. Minor maintenance may be needed.
6	Satisfactory	Element shows some minor deterioration. Maintenance may be needed.
5	Fair	Element is sound, but may have minor section loss. Minor rehabilitation may be needed.
4	Poor	Element exhibits advanced section loss. Major rehabilitation may be needed.
3	Serious	Element has loss of section that has seriously affected the structure. Repair of rehabilitation is required immediately.
2	Critical	Element shows advanced deterioration. It may be necessary to close the bridge until corrective action is taken.
1	Imminent Failure	Bridge is closed to traffic. Corrective action may permit light service.
0	Failed	Bridge is out of service and beyond corrective action.

Overhead/Cantilever Sign Rating Procedure:

The condition of overhead/cantilever signs is determined based on the biennial inspection of the three components listed in Table B-2 below. The standard rating scale is shown in Table B-3.

Table B-2
Overhead/Cantilever Sign Components

Overlane Sign Structure Foundation
Overlane Sign Structure Horizontal Member
Overlane Sign Structure Vertical Member

Table B-3
Overhead / Cantilever Signs Inspection Rating Scale

Grade	Rating	Description
8-10	Good to Excellent	Performs function with high degree or reliability and or effectiveness
5-7	Fair	Performs intended function with small reduction and or effectiveness
3-4	Poor	Performs intended function with significant reduction in reliability and or effectiveness. Repair or replacement may be required
1-2	Critical	Does not perform intended function in an acceptable level of reliability and or effectiveness. Repair or replacement is required

Weathering Steel High Mast Light Tower Rating Procedure:

The condition of high mast light towers is determined based on the biennial inspection of the two components listed in Table B-4 below. The standard rating scale is shown in Table B-5.

Table B-4
High Mast Light Tower Components

High Mast Light Pole Foundation	High Mast Light Poles

Table B-5
Weathering Steel High Mast Light Tower Inspection Rating Scale

Grade	Rating	Description
8-10	Good	Performs function with high degree or reliability and or effectiveness
5-7	Fair	Performs intended function with small reduction and or effectiveness
3-4	Marginal	Performs intended function with significant reduction in reliability and or effectiveness. Repair or replacement may be required
1-2	Inadequate	Does not perform intended function in an acceptable level of reliability and or effectiveness. Repair or replacement is required

C. Building Rating Procedures

The Annual Building Inspection is based on 14 categories and 97 subcomponents. The building type dictates the specific report form that is used in the field inspection. The general categories and their respective subcomponents are listed in Table C-1 below. The standard Building Inspection Rating Scale is shown in Table C-2.

Table C-1
Condition of Buildings - Turnpike Enterprise System (All Zones) - FY 2019

Category	Feature	
Architecture	Caulking	Lockers
	Ceiling	Paint - Interior and Exterior
	Ceilings and Ceiling Grids	Restroom
	Counters/Cabinets and Drawers	Restroom Appurtenances
	Doors / Frames (Interior and Exterior)	Shelves
	Elevator	Site Signs
	Elevator Certification	Walls (Concrete Block, Brick, Stucco or EIFS)
	Flooring (Interior and Accessories)	Walls (Exterior)
	Handrail	Walls (Interior)
	Joint Sealants	Windows and Storefronts
Building Electrical	Canopy lighting	Panelboards
	Conduit	Receptacle
	Grounding	Sign Lighting
	Light Switches	Site Lighting
	Lighting (Exterior)	Switchboards and Breakers
	Lighting (Interior)	Toll Indicator
	Lightning Protection	Transformers
	Motor Control Center	TVSS (Transient Voltage Surge Suppressor)
	Nose Flasher	Wiring
Building HVAC	Air Cooled Chiller and Piping	HVAC Control Systems
	Air Handlers	Package Unit
	Condensing Units	Supply and Outside Air FANS
	Ductwork and Insulation	Ventilation Outlets
	Exhaust Fans	
Communications, Fire Alarm and Monitoring Devices s	CCTV (Close Circuit TV)	Intercom System
	Fire Alarm	Security
	Fire Extinguisher	Telephone System
	Fire Pump System	
Domestic Plumbing Fixtures	Faucets / Sinks	Toilets / Urinals
	Piping / Valves	Water Heater
Structural	Concrete (Precast/Cast-in Place)	Steel Framing
	Masonry	

Table C-1 - Cont.
Condition of Buildings - Turnpike Enterprise System (All Zones) - FY 2019

Category	Feature	
Sewer/Septic Tanks, Lift stations & Wells	Lift stations and Wells	
	Sewer/Septic Tanks	
Concrete Pavement & Sidewalks	Concrete Pavement	
	Sidewalk and Curb	
Island	ACM	Island Concrete
	Attenuator	Island Signs
	Bollards	
Booth	Ceiling	Flooring (Booth)
	Counters/Cabinets and Drawers	Toll Booth Windows/Glazing
	Doors / Splash Door (Booth)	
Plaza Concrete Apron	Apron Sweep	Pavement Voids
	Cracking	Striping
	Joints	
Canopy	Canopy Columns	Signs
	Canopy Fascia	Traffic Red / Green Lighting
	Canopy Underside	Variable Message Signs
	Sign Structure	
Site Grounds	Landscape	Site Grounds
	Parking Area	Turf Condition
Stand-By Power	Fuel Line	LP Tank
	Fuel Tank	Stand-By Generator
	Gauges	UPS (Uninterrupted Power Supply)

Table C-2
Buildings Inspection Rating Scale

Grade	Rating/Description
10	Excellent Condition - No action necessary
9	Very Good Condition - No deficiencies noted.
8	Good Condition - Some minor deficiencies noted, and minor maintenance may be required
7	Satisfactory Condition - Feature shows some minor deterioration, and maintenance is required
6	Fair Condition - Feature is sound but may have minor loss of function. Minor rehabilitation may be required
5	Poor Condition - Feature exhibits advanced function loss. Major rehabilitation may be required.
4	Serious Condition - Loss of function has seriously affected this feature. Repair or rehabilitation is required immediately
3	Critical Condition - Advanced loss of function of this feature is present. Unless closely monitored, it may be necessary to stop the function until corrective action can be taken
2	Imminent Failure Condition - Feature is not functioning, but immediate corrective action may forestall the complete failure
	Failed Condition - The feature is out of service and beyond corrective action

APPENDIX C

Selected Photographs of Desired / Undesired Conditions

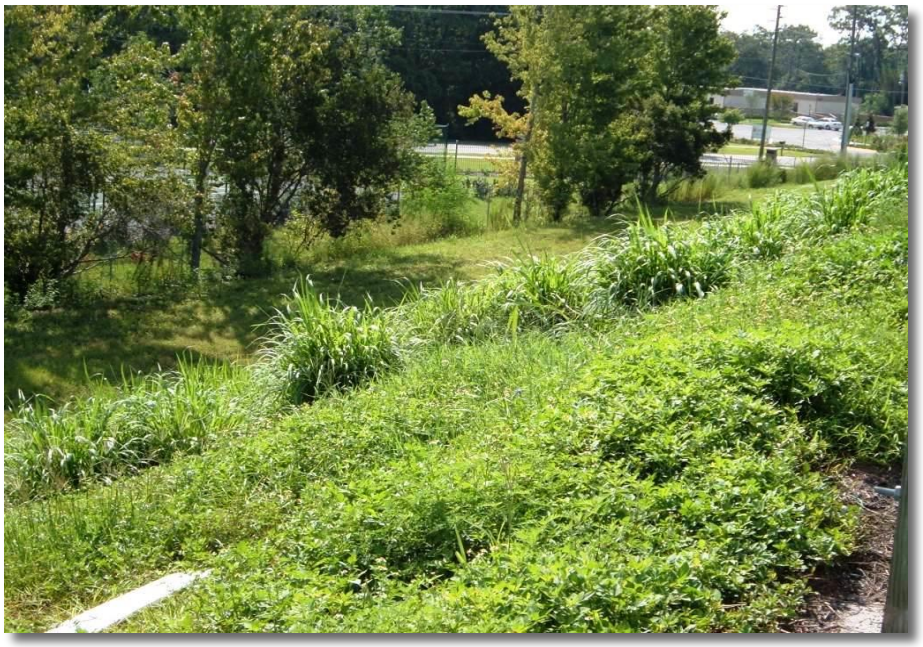
Desired Guardrail Asphalt Condition

Undesired Guardrail Asphalt Condition – Deterioration

Desired Travel Lane / Ramp Condition

Undesired Travel Lane / Ramp Condition – Deterioration

Desired Soil, Shoulder and Front Slope Condition



Undesired Soil, Shoulder and Front Slope Condition – Vegetation

Desired Sign Reflectivity Condition

Undesired Sign Reflectivity Condition – Material Cracked and Faded

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