

Florida's Turnpike Enterprise

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Annual Inspection Report

for the Fiscal Year ending June 30, 2022



Facilities



Roadways



Structures

SR 589 NB MP 62.66





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List of Acronyms and Abbreviations

| | |
|-------|---|
| AET |All-Electronic Toll |
| EDR | Enterprise Data Repository |
| FDOT |Florida Department of Transportation |
| FTE |Florida's Turnpike Enterprise |
| FY | Fiscal Year |
| HMLT |High Mast Light Tower |
| LNQC | Large Non-Qualifying Culverts |
| MRP |Maintenance Rating Program |
| NBI |National Bridge Inspection |
| PCS | Pavement Condition Survey |
| RRP |Roadway Rating Procedure |
| TEAMS | Turnpike Enterprise Asset Management System |



Executive Summary

As General Engineering Consultants to the Florida Department of Transportation, 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 annual independent inspection asset condition report of the FTE System for the fiscal year (FY) ending June 30, 2022.

This year's inspection results confirm the success of FTE's ongoing, aggressive, and comprehensive maintenance efforts. The overall condition of the FTE system is good. The system's primary feature, 509 centerline miles of roadway is comprised of 40 characteristics. Overall, no roadway characteristic was found greater than 3 percent unsatisfactory, as shown on Table 13. For this report, roadway characteristics reported as unsatisfactory are defined as rated four (4) or below in the Roadway Rating Procedure (RRP), as described in Table 4.

The FY 2022 annual inspection revealed that majority of buildings were determined to be in overall good condition; however, there were some with unsatisfactory characteristics. Most of these unsatisfactory characteristics are cosmetic in nature and none pose structural concerns. Structures are inspected on a biennial basis by two (2) separate independent engineering consultants contracted to Florida Department of Transportation (FDOT). The most recent inspection was conducted in FY 2021-2022. Bridges were reported in good condition. Other structures inspected during the biennial inspection are included in this report.

FTE programmed \$70.32 million for periodic and routine maintenance in FY 2022. These funds are used for maintenance of all highway and structure assets, routine building maintenance, roof replacement/restoration, building renovation, toll plaza tunnel sealing, drainage improvements and safety related upgrades. As a part of its Renewal and Replacement Program, FTE programmed \$84.55 million in FY 2022 for roadway resurfacing; roadway, bridge, and facility construction; toll equipment enhancement; and bridge repair work.

This report presents an analysis of inspection findings, the current status of the FTE system with respect to the RRP and the programmed maintenance funding level commitments through FY 2026. Based on prioritization of specific unsatisfactory characteristics identified by FTE's Maintenance Office and coordination of funding-related issues with FTE's Finance Office, recommendations are made for the initiation of conceptual studies and funding for several improvement projects. FTE's commitment to system improvement and preservation is apparent based on the emphasis placed on its Maintenance and Renewal and Replacement programs. By continually monitoring system conditions and ensuring that its facilities are maintained in good condition, FTE is better able to provide for the safety and convenience of its customers while also maintaining a secure investment for bondholders.



1. Introduction

1.1. Purpose

FTE is required by Section 5.13 of the Turnpike Enterprise Bond Resolution and Statement 34 of the Governmental Accounting Standards Board (GASB) to perform an independent review of the overall condition of all bonded assets. FTE's General Engineering Consultants, Atkins and HNTB, perform a comprehensive annual inspection of all roadways (not including mainline pavement) and facilities. Updates of the inspection findings are provided to FTE's Facilities and Roadway Maintenance departments every 30-business days during the inspection cycle.

1.2. General Description and Inspection Procedure

The FTE system is comprised of multi-lane, limited-access toll facilities. Components of the system included in the FY 2022 inspection cycle are 509 centerline miles, 304 buildings at 260 facility locations and 731 bridges. Bridge inspection reports are not disclosed in this report based on FDOT policy regarding disclosure of structure details. The system's mainline roadway segments are summarized in Table 1.

Table 1: FTE System Segments

| Segment | Length (centerline miles) |
|--|---------------------------------|
| Florida's Turnpike – SR 91 & SR 408 to SR 91 Ramps | 265 |
| Florida's Turnpike - 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 589 | 15 |
| I-4 Connector (ramps) | 1 |
| Southern Connector Extension – SR 417 | 6 |
| Polk Parkway – SR 570 | 25 |
| Suncoast Parkway – SR 589 (includes Veterans Expressway Spur SR 568) | 53 |
| Western Beltway – SR 429 (1 mi ramp not included) | 11 |
| First Coast Expressway – SR 23 | 15 |
| Total | 509 |

**1.2.1. FTE Inspection Zones**

Geographic zones were established by the Consultant team to describe the primary FTE system components relative to all regions of the state. The roadway and structure inspections are based on five zones and the building inspections are based on 10 zones. The system components, or portions thereof, included in each of the inspection zones are described in Table 2 and illustrated in Appendix A: Maps of System Components and Inspection Zones.

Table 2: Maintenance Inspection Zones

| Roadways and Structures | |
|--|--|
| Zone I | Florida's Turnpike – Milepost 0X through 100 - SR 91 |
| | Florida's Turnpike - 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 |
| | Challenger Memorial Parkway - SR 407 |
| | Florida's Turnpike Connection to East-West Expressway - SR 408 |
| | Southern Connector Extension - SR 417 |
| | Seminole Expressway - SR 417 |
| Zone IV | Western Beltway - SR 429 |
| | Veterans Expressway - SR 589 Spur SR 569 |
| | Polk Parkway - SR 570 |
| Zone V | Suncoast Parkway - SR 589 |
| | First Coast Expressway – SR 23 |
| Building - Facilities and Communications | |
| Florida's Turnpike - SR 821 | Florida's Turnpike - SR 821 |
| Florida's Turnpike - South | Florida's Turnpike - Milepost 0X - MP 88 |
| | Sawgrass Expressway – SR 869 |
| Florida's Turnpike - Central | Florida's Turnpike - Milepost 88 through 236 - SR 91 |
| Florida's Turnpike - North | Florida's Turnpike - Milepost 236 through 309 - SR 91 |
| | Beachline West Expressway - SR 528 |
| | Beachline East Expressway – SR 528 |
| | Southern Connector Extension – SR 417 |
| Seminole | Western Beltway – SR 429 |
| | Seminole Expressway – SR 417 |
| I-4 Crosstown Conn. | I-4 Connector. NB/SB Gantry Structure |
| Veterans | Veterans Expressway - SR 568 |
| Polk | Polk Parkway - SR 570 |
| Suncoast | Suncoast Parkway - SR 589 |
| First Coast | First Coast Expressway – SR 23 |



1.2.2. Inspection Categories

To efficiently inspect the FTE system, all assets have been placed into three major categories: roadways, buildings, and structures. The Atkins – HNTB team inspects roadways and buildings on an annual basis while structures are inspected on a biennial basis by a separate group of consultants (see Section 1.2.3.3).

Table 3 summarizes the three inspection categories by listing the five general elements for roadways, the 14 general elements for buildings and the four general elements for structures.

Table 3: 2022 Inspection Categories and Elements

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



1.2.3. Roadway Rating Procedure (RRP)

FTE and Atkins developed an RRP to assess FTE's assets. The RRP was developed based on the principles of the Maintenance Rating Program (MRP) Handbook, State Materials Office and FDOT Standard Index criteria as the baseline criteria for the roadway inspections. The RRP is not intended to mimic or compare itself to the MRP process. The RRP is to be an independent assessment. The RRP uses a 10-point rating scale with percentage of characteristics rated "4 or below" as presented on Tables 8 thru 13.

The RRP expands on the 35 MRP characteristics to include concrete barrier, riprap, and rutting, stripping, cracking in asphalt ramp pavement locations. Based on the RRP procedure, mainline roadway elements are visually inspected and documented in one-mile increments. On and off ramps are visually inspected and documented for their entire length. The FTE facilities as documented in this annual inspection report, and ramps are all assigned a rating based on the RRP ten-point scale.

RRP mainline inspections include all characteristics outside of the travel way such as paved and unpaved shoulders, fencing, guardrail, etc. RRP ramp inspections include all paved portions of ramps in addition to the same elements included with the mainline inspections.

Mainline travel way pavement is inspected by the State Materials Office (SMO) and these results are published annually in the Pavement Condition Survey (PCS). Beginning and ending mileposts of active construction zones are recorded during inspections and the roadway characteristics for these areas are not inspected or used in developing ratings in this report."

For efficiency, GPS-enabled tablets are utilized to enter ratings and recommendations into an Atkins-developed database as the field inspections are performed. The database is maintained throughout the duration of the inspection process and utilized to generate each roadway report. Inspection results are identified in the worksheets by roadway/ramp segment and lane direction.

RRP ratings may be used by FTE in formulating general recommendations for system repair and improvement.

**1.2.3.1. Roadway Rating Procedure Inspection Rating Scales**

The following tables provide a description of ratings used by the RRP.

Table 4: Roadway Inspection Rating Scale

| Grade | Rating | Description |
|-------|----------------|---|
| 10 | Excellent | Characteristic appearance and functionality/operability are in like-new condition. |
| 9-8 | Good | Characteristic appearance and functionality/operability are in acceptable condition or above average condition. |
| 7-5 | Degraded | Characteristic appearance and functionality/operability are below average. |
| 4-2 | Unsatisfactory | Characteristic appearance and functionality/operability are unsatisfactory. |
| 1 | Emergency | Characteristic appearance and functionality/operability are far below average, and immediate attention appears necessary to protect public or system asset. |

Table 5: Building Inspection Rating Scale

| Grade | Rating | Description |
|-------|------------------|--|
| 10 | Excellent | No action necessary |
| 9 | Very Good | No unsatisfactory characteristics noted |
| 8 | Good | Some minor unsatisfactory characteristics noted; minor maintenance may be required |
| 7 | Satisfactory | Characteristic shows some minor deterioration; maintenance may be required |
| 6 | Fair | Characteristic is sound but may have minor loss of function; minor rehabilitation may be required |
| 5 | Degraded | Characteristic shows partial function loss; rehabilitation may be required |
| 4 | Serious | Loss of function has seriously affected this Characteristic; repair or rehabilitation is required soon to maintain functionality |
| 3 | Critical | Advanced loss of function is present, and it may be necessary to stop the function until corrective action can be taken |
| 2 | Imminent Failure | Characteristic is not functioning; immediate corrective action may forestall the complete failure |
| 1 | Failed | The Characteristic is out of service and beyond corrective action |



Structures, unlike roadways and buildings, are rated using modified federal and state standards as reflected in Appendix B: Inspection Rating Procedures for Roadways, Buildings and Structures, Section B - Structures Rating Procedure.

1.2.4. Inspection Procedure

All inspections are conducted according to standard procedures developed by the Federal Highway Administration (FHWA) 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 developed from the inspection database.

Due to the time duration between field inspection activities and publication of this report, certain characteristics identified in this report as requiring remedial action may have already been corrected through ongoing maintenance and construction activities. Repairs and improvements are typically funded through FTE's Maintenance Program, periodic or routine maintenance contracts or through FTE's Renewal and Replacement Program. Serious conditions that demand immediate attention (characteristics rated as a "1") are reported by the inspection team via email and phone call to the appropriate FTE office immediately upon their discovery in the field.

1.2.4.1. Roadway Inspection

The inspection team performs a visual inspection of 40 characteristics within the ROW limits. Mainline pavement is not included as part of the inspection of roadway characteristics as that inspection data is secured from the SMO. However, the ramp pavement is inspected, and all other 40 characteristics are inspected along each of the ramps throughout the system. A sample of the characteristics included are illustrated below in Figure 1.

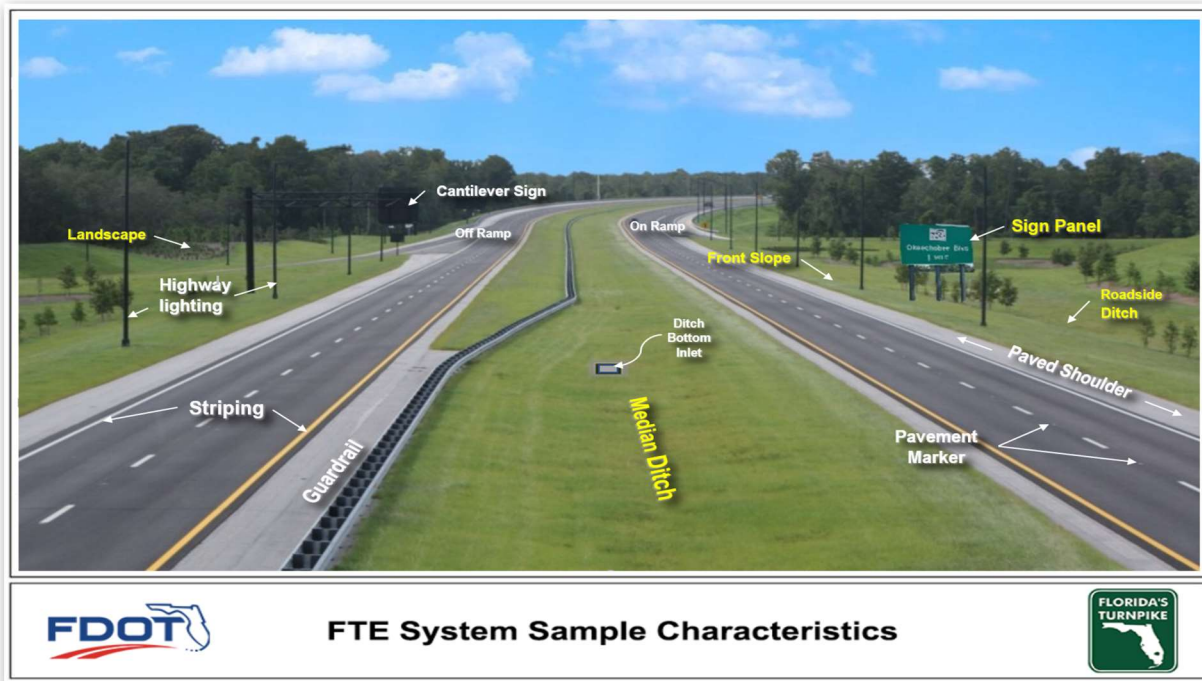


Figure 1: FTE System Sample Characteristics

1.2.4.2. Building Inspection

The annual maintenance inspection of FTE's building facilities is based on a condition assessment and inventory of 99 facility characteristics in 14 general elements. As part of the inspection process, all relevant characteristics are visually inspected, and ratings are assigned based on the conditions observed. A complete list of all buildings, elements and characteristics is included in Appendix B: Inspection Rating Procedures for Roadways, Buildings and Structures.

The building facilities inspection is based on five general building types:

1. Toll plaza administration buildings and canopies
2. Combination buildings
3. All-Electronic Toll (AET) equipment buildings
4. Communication tower buildings
5. Miscellaneous-use buildings

A total of 297 buildings located within ten maintenance inspection zones were inspected during the FY 2022 inspection.

Table 6 shows the number of each building type by inspections zone.

**Table 6: Building Quantities**

| Building | Inspection Zones | | | | | | | | | | |
|---------------------------|-----------------------------|----------------------------|------------------------------|----------------------------|---------------------|---------------------|----------|------|----------|------------------------|--------|
| Type | Florida's Turnpike - SR 821 | Florida's Turnpike - South | Florida's Turnpike - Central | Florida's Turnpike - North | Seminole Expressway | I-4 Crosstown Conn. | Veterans | Polk | Suncoast | First Coast Expressway | Totals |
| Admin Bldgs | 19 | 13 | 15 | 21 | 2 | 0 | 1 | 4 | 4 | 7 | 86 |
| AET / Equip / Combo Bldgs | 27 | 35 | 8 | 27 | 14 | 1 | 12 | 16 | 12 | 0 | 152 |
| Communcation Bldgs | 2 | 3 | 3 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| Other Bldgs | 7 | 12 | 13 | 4 | 1 | 0 | 1 | 4 | 2 | 0 | 44 |
| Totals | 55 | 63 | 39 | 59 | 17 | 1 | 14 | 24 | 18 | 7 | 297 |

The inspection team performed room-by-room inventories and floor-to-ceiling visual condition evaluations for all 99 facility characteristics in every building within the FTE system.

1.2.4.3. Structure Inspection

The biennial structures inspection is based on four elements of major structures:

1. Bridges (including owned but not maintained)
2. Large non-qualifying culverts (LNQC)
3. High mast light towers (HMLT)
4. Overhead sign structures

The FTE system includes 2,448 individual structures. Table 7 shows the total quantities of all structures with respect to each of the five maintenance zones.

Table 7: Major Structure Quantities

| Category | Zone I | Zone II | Zone III | Zone IV | Zone V | Totals |
|-------------------------------|------------|------------|------------|------------|-----------|--------------|
| Bridges | 238 | 102 | 205 | 172 | 15 | 732 |
| Large Non-Qualifying Culverts | 29 | 97 | 75 | 27 | 14 | 242 |
| High Mast Light Towers | 175 | 22 | 74 | 102 | 0 | 373 |
| Overhead Sign Structures | 525 | 52 | 266 | 222 | 36 | 1,101 |
| Totals | 967 | 273 | 620 | 523 | 65 | 2,448 |



The structures inspection for FY 2021 - 2022 was divided into two contracts. Zones 1 and 2 are performed by TranSystems Corporation Consultants; Zones 3, 4 and 5 are performed by Consor Engineers, LLC.

1.3. Information Sharing

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 on a per-fiscal-year basis. TEAMS has been replaced by the Enterprise Data Repository (EDR) system and historical TEAMS data has been incorporated into the current EDR platform.

The initial EDR module for pavement data is operational with additional modules being made available in the near future. FTE's SharePoint system is a secondary platform where the raw inspection data is stored, and where 30-business day work periods of unsatisfactory rating reports are deposited for both roadway maintenance and facilities. This new system will allow password-access to data by bondholders⁷

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2. Rating Procedure Findings

The findings included in this report are based on an extensive evaluation of the roadway, building and structures inspection worksheets prepared by a team of independent engineering consultants. This report summarizes the data included in the inspection worksheets, bridge inspection reports and PCS, which reflect the condition of the characteristics at the time of inspection. Complete listings of characteristics typically inspected in each of the three major categories of facilities are included in Appendix B: Inspection Rating Procedures for Roadways, Buildings and Structures.

2.1. Roadways

Roadway characteristic conditions found during the RRP inspection for each of the maintenance zones are summarized in Tables 8 through 13. Each table contains only characteristics listed in Appendix B: Inspection Rating Procedures for Roadways, Buildings and Structures. A rating of four or below on the field inspection worksheets indicates that the portion of the characteristic is in less than fair (unsatisfactory) condition.

Each unsatisfactory characteristic is discussed in Section 3 Inspection Results. RRP inspection results reported in Tables 8 through 13 are derived from the Atkins - HNTB Roadway Rating Procedure.



**Table 8: Condition of Roadway Characteristics – Zone I
(Turnpike Mainline (SR 91) - MP 0X-100, SR 821, SR 869)**

| Element | Characteristic | Quantity Inspected | Units | Quantity Rated Four or Below | Percent Rated Four or Below |
|---------------------------|--------------------------|--------------------|------------|------------------------------|-----------------------------|
| Roadway | Pothole | 81 | Ramp Miles | 0 | 0.00% |
| | Joint | 1,037 | Each | 2 | 0.19% |
| | Pavement Void | 81 | Ramp Miles | 0 | 0.00% |
| | Edge Ravel | 295 | Miles | 0 | 0.14% |
| | Rutting | 81 | Ramp Miles | 0 | 0.00% |
| | Cracking | 81 | Ramp Miles | 6 | 7.36% |
| | Depression | 295 | Miles | 0 | 0.00% |
| | Stripping | 81 | Ramp Miles | 0 | 0.00% |
| | Shoving | 81 | Ramp Miles | 0 | 0.00% |
| | Paved Shoulder | 827 | Miles | 2 | 0.24% |
| Roadside | Soil Shoulder | 295 | Miles | 5 | 1.70% |
| | Front Slope | 295 | Miles | 0 | 0.00% |
| | Sidewalk | 0 | SF | 0 | 0.00% |
| | Slope Protection | 124,315 | SY | 8 | 0.01% |
| | Fence | 202 | Miles | 0 | 0.00% |
| Traffic Services | Pavement Marker | 154,227 | Each | 0 | 0.00% |
| | Striping | 1,340 | Miles | 1 | 0.09% |
| | Pavement Symbol | 357,612 | SF | 0 | 0.00% |
| | Guardrail | 229 | Miles | 8 | 3.49% |
| | Attenuator | 190 | Each | 0 | 0.00% |
| | Barrier Wall | 147 | Miles | 0 | 0.00% |
| | Signs Less Than 30 SF | 3,793 | Each | 2 | 0.05% |
| | Signs Greater Than 30 SF | 554 | Each | 1 | 0.18% |
| | Object Marker | 8,920 | Each | 118 | 1.32% |
| | Sign Light | 8,250 | Each | 0 | 0.00% |
| | Highway Light | 7,499 | Each | 3 | 0.04% |
| Drainage | Cross Drain | 139,963 | Each | 0 | 0.00% |
| | Roadside Ditch | 11 | Miles | 0 | 0.00% |
| | Median Ditch | 1 | Miles | 0 | 0.00% |
| | Outfall Ditch | 14,860 | Feet | 0 | 0.00% |
| | Curb Inlet | 3,753 | Each | 4 | 0.11% |
| | Rip Rap | 8,250 | SY | 0 | 0.00% |
| | Misc. Inlet | 195 | Each | 0 | 0.00% |
| | Roadway Sweep | 295 | Miles | 0 | 0.00% |
| Vegetation/ Aesthetics | Roadway Mowing | 2,530 | Acres | 0 | 0.00% |
| | Slope Mowing | 443 | Acres | 0 | 0.00% |
| | Landscape | 21 | Acres | 0 | 0.00% |
| | Tree Trim | 295 | Miles | 0 | 0.05% |
| | Litter Removal | 295 | Miles | 1 | 0.34% |
| | Turf Condition | 295 | Miles | 0 | 0.00% |



Table 9: Condition of Roadway Characteristics – Zone II
(Turnpike Mainline (SR 91) - MP 100-200)

| Element | Characteristic | Quantity Inspected | Units | Quantity Rated Four or Below | Percent Rated Four or Below |
|---------------------------|--------------------------|--------------------|------------|------------------------------|-----------------------------|
| Roadway | Pothole | 15 | Ramp Miles | 0 | 0.00% |
| | Joint | 526 | Each | 0 | 0.00% |
| | Pavement Void | 15 | Ramp Miles | 0 | 0.00% |
| | Edge Ravel | 218 | Miles | 0 | 0.00% |
| | Rutting | 15 | Ramp Miles | 0 | 0.00% |
| | Cracking | 15 | Ramp Miles | 0 | 0.00% |
| | Depression | 218 | Miles | 0 | 0.00% |
| | Stripping | 15 | Ramp Miles | 0 | 0.00% |
| | Shoving | 15 | Ramp Miles | 0 | 0.00% |
| | Paved Shoulder | 566 | Miles | 0 | 0.00% |
| Roadside | Soil Shoulder | 218 | Miles | 7 | 3.21% |
| | Front Slope | 218 | Miles | 0 | 0.00% |
| | Sidewalk | 0 | SF | 0 | 0.00% |
| | Slope Protection | 12,041 | SY | 0 | 0.00% |
| | Fence | 188 | Miles | 0 | 0.01% |
| Traffic Services | Pavement Marker | 43,515 | Each | 0 | 0.00% |
| | Striping | 660 | Miles | 0 | 0.00% |
| | Pavement Symbol | 103,557 | SF | 0 | 0.00% |
| | Guardrail | 189 | Miles | 13 | 6.81% |
| | Attenuator | 126 | Each | 0 | 0.00% |
| | Barrier Wall | 55 | Miles | 0 | 0.00% |
| | Signs Less Than 30 SF | 1,536 | Each | 0 | 0.00% |
| | Signs Greater Than 30 SF | 232 | Each | 1 | 0.43% |
| | Object Marker | 6,027 | Each | 108 | 1.79% |
| | Sign Light | 996 | Each | 0 | 0.00% |
| | Highway Light | 882 | Each | 0 | 0.00% |
| Drainage | Cross Drain | 28,565 | Each | 0 | 0.00% |
| | Roadside Ditch | 1 | Miles | 0 | 0.00% |
| | Median Ditch | 0 | Miles | 0 | 0.00% |
| | Outfall Ditch | 9,893 | Feet | 0 | 0.00% |
| | Curb Inlet | 788 | Each | 0 | 0.00% |
| | Rip Rap | 996 | SY | 0 | 0.00% |
| | Misc. Inlet | 47 | Each | 0 | 0.00% |
| | Roadway Sweep | 218 | Miles | 0 | 0.00% |
| Vegetation/ Aesthetics | Roadway Mowing | 1,714 | Acres | 0 | 0.00% |
| | Slope Mowing | 165 | Acres | 0 | 0.00% |
| | Landscape | 18 | Acres | 0 | 0.00% |
| | Tree Trim | 218 | Miles | 0 | 0.00% |
| | Litter Removal | 218 | Miles | 0 | 0.00% |
| | Turf Condition | 218 | Miles | 0 | 0.00% |



Table 10: Condition of Roadway Characteristics – Zone III
(Turnpike Mainline - MP 200-309, Beachline E&W, SR 407, SR 408, SR 417, SR 429)

| Element | Characteristic | Quantity Inspected | Units | Quantity Rated Four or Below | Percent Rated Four or Below |
|-----------------------------------|-------------------------|--------------------|------------|------------------------------|-----------------------------|
| Roadway | Pothole | 65 | Ramp Miles | 0 | 0.00% |
| | Joint | 943 | Each | 0 | 0.00% |
| | Pavement Void | 65 | Ramp Miles | 0 | 0.00% |
| | Edge Ravel | 408 | Miles | 1 | 0.24% |
| | Rutting | 65 | Ramp Miles | 0 | 0.00% |
| | Cracking | 65 | Ramp Miles | 0 | 0.00% |
| | Depression | 408 | Miles | 0 | 0.00% |
| | Stripping | 408 | Ramp Miles | 0 | 0.00% |
| | Shoving | 408 | Ramp Miles | 0 | 0.00% |
| | Paved Shoulder | 1,076 | Miles | 0 | 0.00% |
| Roadside | Soil Shoulder | 408 | Miles | 8 | 1.96% |
| | Front Slope | 408 | Miles | 3 | 0.73% |
| | Sidewalk | 0 | SF | 0 | 0.00% |
| | Slope Protection | 52,243 | SY | 0 | 0.00% |
| | Fence | 339 | Miles | 7 | 2.07% |
| Traffic Services | Pavement Marker | 112,940 | Each | 0 | 0.00% |
| | Striping | 1,306 | Miles | 6 | 0.46% |
| | Pavement Symbol | 337,824 | SF | 0 | 0.00% |
| | Guardrail | 376 | Miles | 0 | 0.00% |
| | Attenuator | 206 | Each | 0 | 0.00% |
| | Barrier Wall | 64 | Miles | 0 | 0.00% |
| | Signs Less Than 30 SF | 3,366 | Each | 3 | 0.09% |
| | Signs Greater Than 30SF | 603 | Each | 1 | 0.17% |
| | Object Marker | 9,861 | Each | 125 | 1.27% |
| | Sign Light | 5,708 | Each | 0 | 0.00% |
| | Highway Light | 5,245 | Each | 7 | 0.13% |
| Drainage | Cross Drain | 162,462 | Each | 0 | 0.00% |
| | Roadside Ditch | 18 | Miles | 0 | 0.00% |
| | Median Ditch | 12 | Miles | 0 | 0.00% |
| | Outfall Ditch | 25,387 | Feet | 0 | 0.00% |
| | Curb Inlet | 3,259 | Each | 1 | 0.03% |
| | Rip Rap | 5,708 | SY | 0 | 0.00% |
| | Misc. Inlet | 228 | Each | 1 | 0.44% |
| | Roadway Sweep | 408 | Miles | 0 | 0.00% |
| Vegetation/ Aesthetics | Roadway Mowing | 2,963 | Acres | 0 | 0.00% |
| | Slope Mowing | 502 | Acres | 2 | 0.40% |
| | Landscape | 97 | Acres | 0 | 0.00% |
| | Tree Trim | 408 | Miles | 4 | 0.98% |
| | Litter Removal | 408 | Miles | 0 | 0.00% |
| | Turf Condition | 408 | Miles | 0 | 0.00% |



**Table 11: Condition of Roadway Characteristics – Zone IV
(Veterans, Polk & Suncoast)**

| Element | Characteristic | Quantity Inspected | Units | Quantity Rated Four or Below | Percent Rated Four or Below |
|-----------------------------------|--------------------------|--------------------|------------|------------------------------|-----------------------------|
| Roadway | Pothole | 42 | Ramp Miles | 0 | 0.00% |
| | Joint | 642 | Each | 1 | 0.16% |
| | Pavement Void | 42 | Ramp Miles | 0 | 0.00% |
| | Edge Ravel | 235 | Miles | 2 | 0.85% |
| | Rutting | 42 | Ramp Miles | 1 | 2.37% |
| | Cracking | 42 | Ramp Miles | 0 | 0.00% |
| | Depression | 235 | Miles | 0 | 0.00% |
| | Stripping | 235 | Ramp Miles | 0 | 0.00% |
| | Shoving | 235 | Ramp Miles | 0 | 0.00% |
| | Paved Shoulder | 552 | Miles | 2 | 0.36% |
| Roadside | Soil Shoulder | 235 | Miles | 2 | 0.85% |
| | Front Slope | 235 | Miles | 11 | 4.68% |
| | Sidewalk | 1 | SF | 0 | 0.00% |
| | Slope Protection | 23,590 | SY | 0 | 0.00% |
| | Fence | 185 | Miles | 8 | 4.32% |
| Traffic Services | Pavement Marker | 77,497 | Each | 0 | 0.00% |
| | Striping | 607 | Miles | 1 | 0.16% |
| | Pavement Symbol | 353,757 | SF | 0 | 0.00% |
| | Guardrail | 99 | Miles | 1 | 1.01% |
| | Attenuator | 107 | Each | 0 | 0.00% |
| | Barrier Wall | 42 | Miles | 2 | 4.78% |
| | Signs Less Than 30 SF | 2,074 | Each | 2 | 0.10% |
| | Signs Greater Than 30 SF | 327 | Each | 0 | 0.00% |
| | Object Marker | 21,878 | Each | 69 | 0.32% |
| | Sign Light | 4,809 | Each | 0 | 0.00% |
| | Highway Light | 3,907 | Each | 2 | 0.05% |
| Drainage | Cross Drain | 157,271 | Each | 1 | 0.00% |
| | Roadside Ditch | 7 | Miles | 0 | 0.00% |
| | Median Ditch | 1 | Miles | 0 | 0.00% |
| | Outfall Ditch | 11,878 | Feet | 0 | 0.00% |
| | Curb Inlet | 1,676 | Each | 0 | 0.00% |
| | Rip Rap | 4,809 | SY | 0 | 0.00% |
| | Misc. Inlet | 88 | Each | 0 | 0.00% |
| | Roadway Sweep | 235 | Miles | 1 | 0.43% |
| Vegetation/ Aesthetics | Roadway Mowing | 1,886 | Acres | 1 | 0.05% |
| | Slope Mowing | 335 | Acres | 6 | 1.79% |
| | Landscaping | 29 | Acres | 0 | 0.00% |
| | Tree Trim | 235 | Miles | 18 | 7.65% |
| | Litter Removal | 235 | Miles | 4 | 1.70% |
| | Turf Condition | 235 | Miles | 0 | 0.00% |



**Table 12: Condition of Roadway Characteristics – Zone V
(First Coast Expressway)**

| Element | Characteristic | Quantity Inspected | Units | Quantity Rated Four or Below | Percent Rated Four or Below |
|---------------------------|--------------------------|--------------------|------------|------------------------------|-----------------------------|
| Roadway | Pothole | 8 | Ramp Miles | 0 | 0.00% |
| | Joint | 52 | Each | 0 | 0.00% |
| | Pavement Void | 8 | Ramp Miles | 0 | 0.00% |
| | Edge Ravel | 37 | Miles | 0 | 0.00% |
| | Rutting | 8 | Ramp Miles | 0 | 0.00% |
| | Cracking | 8 | Ramp Miles | 0 | 0.00% |
| | Depression | 37 | Miles | 0 | 0.00% |
| | Stripping | 37 | Ramp Miles | 0 | 0.00% |
| | Shoving | 37 | Ramp Miles | 0 | 0.00% |
| | Paved Shoulder | 102 | Miles | 0 | 0.00% |
| Roadside | Soil Shoulder | 37 | Miles | 0 | 0.00% |
| | Front Slope | 37 | Miles | 0 | 0.00% |
| | Sidewalk | 0 | SF | 0 | 0.00% |
| | Slope Protection | 0 | SY | 0 | 0.00% |
| | Fence | 31 | Miles | 0 | 0.18% |
| Traffic Services | Pavement Marker | 10,011 | Each | 0 | 0.00% |
| | Striping | 110 | Miles | 0 | 0.00% |
| | Pavement Symbol | 35,781 | SF | 0 | 0.00% |
| | Guardrail | 7 | Miles | 0 | 0.00% |
| | Attenuator | 0 | Each | 0 | 0.00% |
| | Barrier Wall | 1 | Miles | 0 | 0.00% |
| | Signs Less Than 30 SF | 316 | Each | 0 | 0.00% |
| | Signs Greater Than 30 SF | 65 | Each | 0 | 0.00% |
| | Object Marker | 1,016 | Each | 6 | 0.59% |
| | Sign Light | 830 | Each | 0 | 0.00% |
| | Highway Light | 893 | Each | 0 | 0.00% |
| Drainage | Cross Drain | 24,641 | Each | 0 | 0.00% |
| | Roadside Ditch | 0 | Miles | 0 | 0.00% |
| | Median Ditch | 0 | Miles | 0 | 0.00% |
| | Outfall Ditch | 3,643 | Feet | 0 | 0.00% |
| | Curb Inlet | 129 | Each | 0 | 0.00% |
| | Rip Rap | 830 | SY | 0 | 0.00% |
| | Misc. Inlet | 18 | Each | 0 | 0.00% |
| | Roadway Sweep | 37 | Miles | 0 | 0.00% |
| Vegetation/ Aesthetics | Roadway Mowing | 439 | Acres | 0 | 0.00% |
| | Slope Mowing | 62 | Acres | 0 | 0.00% |
| | Landscaping | 0 | Acres | 0 | 0.00% |
| | Tree Trim | 37 | Miles | 0 | 0.00% |
| | Litter Removal | 37 | Miles | 0 | 0.00% |
| | Turf Condition | 37 | Miles | 0 | 0.00% |



Table 13: Condition of Roadway Characteristics – Summary of All Zones

| Element | Characteristic | Quantity Inspected | Units | Quantity Rated Four or Below | Percent Rated Four or below |
|---------------------------|--------------------------|--------------------|------------|------------------------------|-----------------------------|
| Roadway | Pothole | 211 | Ramp Miles | 0 | 0.00% |
| | Joint | 3,200 | Each | 3 | 0.09% |
| | Pavement Void | 211 | Ramp Miles | 0 | 0.00% |
| | Edge Ravel | 1,193 | Miles | 3 | 0.28% |
| | Rutting | 211 | Ramp Miles | 1 | 0.47% |
| | Cracking | 211 | Ramp Miles | 6 | 2.84% |
| | Depression | 1,193 | Miles | 0 | 0.00% |
| | Stripping | 1,193 | Ramp Miles | 0 | 0.00% |
| | Shoving | 1,193 | Ramp Miles | 0 | 0.00% |
| | Paved Shoulder | 3,123 | Miles | 4 | 0.13% |
| Roadside | Soil Shoulder | 1,193 | Miles | 22 | 1.84% |
| | Front Slope | 1,193 | Miles | 14 | 1.17% |
| | Sidewalk | 1 | SF | 0 | 0.00% |
| | Slope Protection | 212,189 | SY | 8 | 0.00% |
| | Fence | 945 | Miles | 15 | 1.60% |
| Traffic Services | Pavement Marker | 398,190 | Each | 0 | 0.00% |
| | Striping | 4,024 | Miles | 8 | 0.21% |
| | Pavement Symbol | 1,188,531 | SF | 0 | 0.00% |
| | Guardrail | 900 | Miles | 22 | 2.43% |
| | Attenuator | 629 | Each | 0 | 0.00% |
| | Barrier Wall | 309 | Miles | 2 | 0.65% |
| | Signs Less Than 30 SF | 11,085 | Each | 7 | 0.06% |
| | Signs Greater Than 30 SF | 1,781 | Each | 3 | 0.17% |
| | Object Marker | 47,702 | Each | 426 | 0.89% |
| | Sign Light | 20,593 | Each | 0 | 0.00% |
| | Highway Light | 18,425 | Each | 12 | 0.07% |
| Drainage | Cross Drain | 512,902 | Each | 1 | 0.00% |
| | Roadside Ditch | 38 | Miles | 0 | 0.00% |
| | Median Ditch | 15 | Miles | 0 | 1.19% |
| | Outfall Ditch | 65,661 | Feet | 0 | 0.00% |
| | Curb Inlet | 9,605 | Each | 5 | 0.05% |
| | Rip Rap | 20,593 | SY | 0 | 0.00% |
| | Misc. Drain | 576 | Each | 1 | 0.17% |
| | Roadway Sweep | 1,193 | Miles | 1 | 0.08% |
| Vegetation/ Aesthetics | Roadway Mowing | 9,532 | Acres | 1 | 0.01% |
| | Slope Mowing | 1,506 | Acres | 8 | 0.53% |
| | Landscape | 166 | Acres | 0 | 0.00% |
| | Tree Trim | 1,193 | Miles | 22 | 1.86% |
| | Litter Removal | 1,193 | Miles | 5 | 0.42% |
| | Turf Condition | 1,193 | Miles | 0 | 0.00% |

2.2. Buildings

2.2.1. Toll Plaza Mainline and Ramp Facilities

Toll plaza administration buildings and canopies are located either as part of a mainline toll plaza or 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.

Mainline plazas are typically connected to the toll collection booths/equipment by an underground tunnel, which facilitates transport of personnel, toll collection data and supplies. Figure 2 identifies the major elements of a toll plaza.



Figure 2: Major Toll Plaza Elements (Non-AET)

Several major toll plaza buildings as pictured in Figure 2 above have been or are scheduled for replacement with AET plazas, which consist of toll equipment buildings, generators, fuel tanks and overhead gantry structures (accessible and non-accessible). These are mainly on the Turnpike Mainline section. Table AET plazas are currently under construction in other areas of the FTE system. Figure 3 provides a sketch of a typical AET plaza.

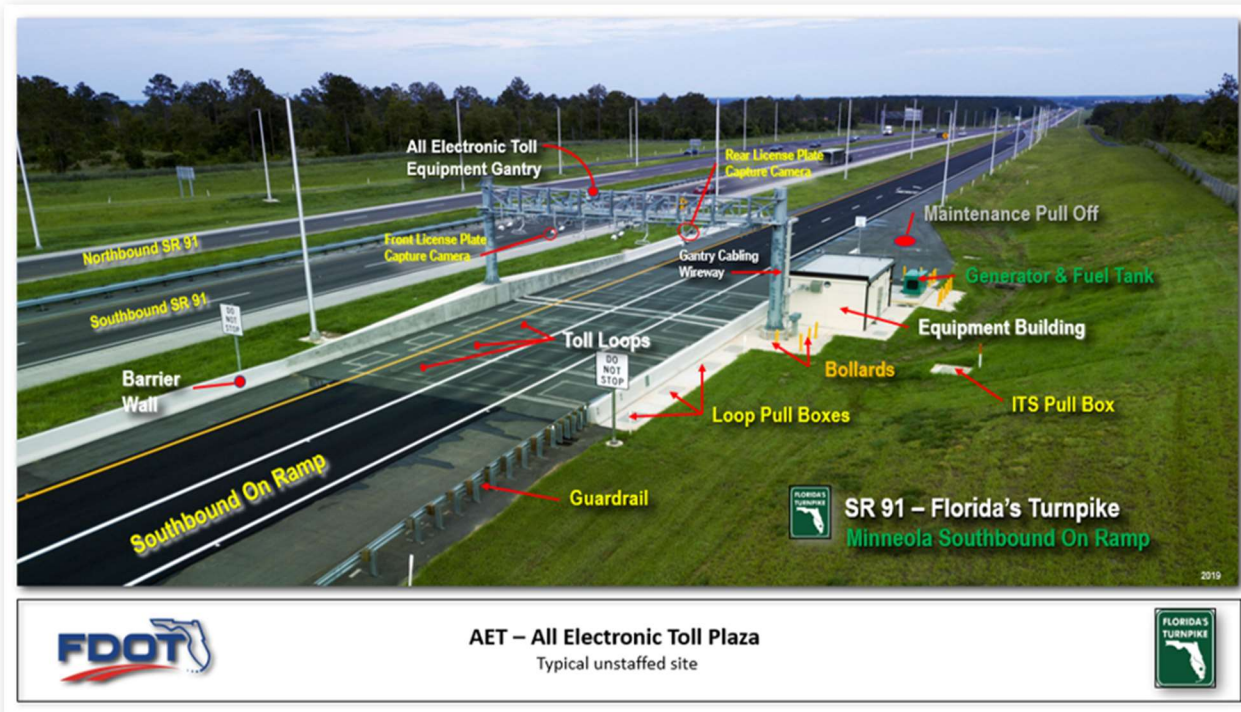


Figure 3: Typical Unstaffed AET

2.2.2. Administration and Miscellaneous Buildings

FTE's administrative buildings are used by a variety of FDOT functional areas and other Florida agencies, including: the Florida Highway Patrol Troops K and L, Motor Carrier Compliance Office, FDOT Districts 4 and 6, FTE's Office of Toll Operations and FTE's Operations and Concession Management and Marketing Offices. See Figure 4 and Figure 5 for examples.



Figure 4: Fort Pierce Florida Highway Patrol Post – SR 91



Figure 5: Turkey Lake Florida Highway Patrol Building – SR 91

2.2.3. Communication Tower Buildings

FTE communication tower buildings are typically small structures constructed of concrete and block. These structures house the electronic circuitry and equipment that supports the microwave radio communications system, which is relied upon by the FTE Operations Offices. Figure 6 provides an exterior example; Figure 7 is an interior example.



Figure 6: Communications Building Exterior – Canoe Creek

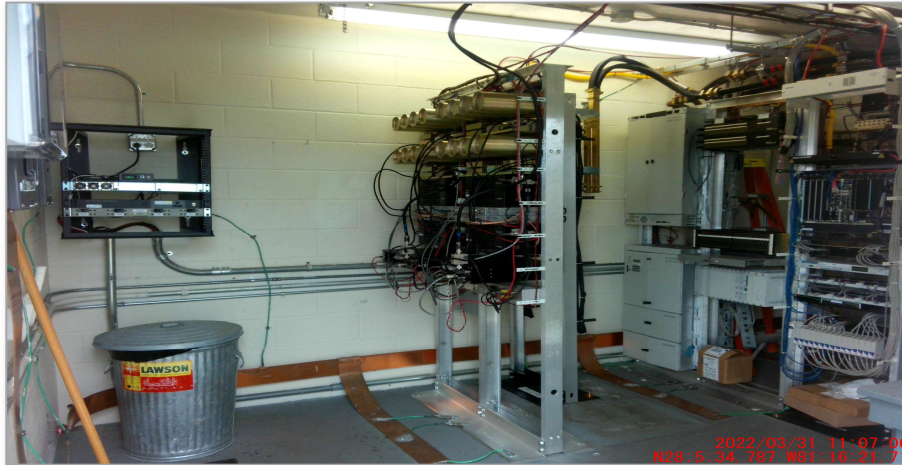


Figure 7: Communications Building Interior – Leesburg US-27

2.2.4. Water/Wastewater Treatment Plants

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

2.2.5. Service Plaza Restaurants and Service Stations

There are 8 service plazas located throughout the Turnpike system. Each plaza location is accompanied by a service station (Convenience (C)-Store). The plazas are operated and maintained by Areas USA through a concessions contract with FTE. Figure 8 shows a typical service plaza restaurant building.



Figure 8: Turkey Lake Service Plaza



The Snapper Creek Service Plaza has two separate facilities that are maintained by 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 initial inspection of service plazas began in late 2021 and reoccur biennially. The results of the inspection are disclosed in the Service Plaza Inspections Report delivered to FTE in early 2022.

Table 14 summarizes findings of the FTE on-system inspections performed at all 10 facility zones combined for the 14 facility elements, broken down by their respective characteristics.

Table 14: Condition of Buildings – All Zones

| Element | Characteristics | Number Inspected | Number Rated Four or Below | Percent Rated Four or Below |
|----------------------------|---|------------------|----------------------------|-----------------------------|
| Architecture | Caulking | 46 | 0 | 0.00% |
| | Ceiling | 514 | 1 | 0.19% |
| | Ceilings and Ceiling Grids | 576 | 2 | 0.35% |
| | Counters/Cabinets and Drawers | 259 | 0 | 0.00% |
| | Doors / Frames (Interior and Exterior) | 1,626 | 8 | 0.49% |
| | Elevator | 12 | 0 | 0.00% |
| | Elevator Certification | 23 | 0 | 0.00% |
| | Flooring (Interior and Accessories) | 1,002 | 8 | 0.80% |
| | Handrail | 81 | 1 | 1.23% |
| | Joint Sealants | 538 | 0 | 0.00% |
| | Lockers | 48 | 0 | 0.00% |
| | Paint - Interior and Exterior | 1,386 | 3 | 0.22% |
| | Restroom Appurtenances | 141 | 0 | 0.00% |
| | Roof Drain | 40 | 0 | 0.00% |
| | Shelves | 105 | 0 | 0.00% |
| | Site Signs | 245 | 0 | 0.00% |
| | Walls (Concrete Block, Brick, Stucco or EIFS) | 553 | 1 | 0.18% |
| | Walls (Exterior) | 275 | 2 | 0.73% |
| | Walls (Interior) | 1,093 | 3 | 0.27% |
| | Windows and Storefronts | 407 | 1 | 0.25% |
| Domestic Plumbing Fixtures | Faucets / Sinks | 288 | 0 | 0.00% |
| | Piping / Valves | 246 | 0 | 0.00% |
| | Toilets / Urinals | 152 | 0 | 0.00% |
| | Water Heater | 76 | 0 | 0.00% |



| Element | Characteristics | Number Inspected | Number Rated Four or Below | Percent Rated Four or Below |
|---|---|------------------|----------------------------|-----------------------------|
| Building Electrical | Canopy lighting | 79 | 0 | 0.00% |
| | Conduits / Junction Box | 301 | 0 | 0.00% |
| | Grounding | 299 | 0 | 0.00% |
| | Light Switches | 132 | 0 | 0.00% |
| | Lighting (Exterior) | 326 | 0 | 0.00% |
| | Lighting (Interior) | 1,246 | 2 | 0.16% |
| | Lightning Protection | 184 | 0 | 0.00% |
| | Motor Control Center | 12 | 0 | 0.00% |
| | Nose Flasher | 249 | 0 | 0.00% |
| | Panelboards | 460 | 0 | 0.00% |
| | Receptacle | 1,524 | 29 | 1.90% |
| | Sign Lighting | 78 | 0 | 0.00% |
| | Site Lighting | 30 | 0 | 0.00% |
| | Switchboards and Breakers | 438 | 5 | 1.14% |
| | Toll Indicator | 172 | 0 | 0.00% |
| | Traffic Red / Green Lighting | 82 | 0 | 0.00% |
| | Transformers | 42 | 0 | 0.00% |
| | TVSS (Transient Voltage Surge Suppressor) | 372 | 0 | 0.00% |
| | Wiring | 1,317 | 5 | 0.38% |
| Building HVAC | Air Cooled Chiller and Piping | 13 | 0 | 0.00% |
| | Air Handlers | 371 | 0 | 0.00% |
| | Condensing Units | 389 | 0 | 0.00% |
| | Ductwork and Insulation | 507 | 1 | 0.20% |
| | Exhaust Fans | 297 | 0 | 0.00% |
| | HVAC Control Systems | 345 | 0 | 0.00% |
| | Package Unit | 301 | 0 | 0.00% |
| | Supply and Outside Air FANS | 51 | 0 | 0.00% |
| | Ventilation Outlets | 966 | 1 | 0.10% |
| Structural | Concrete (Precast/Cast-in Place) | 112 | 0 | 0.00% |
| | Masonry | 74 | 1 | 1.35% |
| | Steel Framing | 64 | 0 | 0.00% |
| Sewer/Septic Tanks, Lift stations & Wells | Lift stations and Wells | 34 | 0 | 0.00% |
| | Sewer/Septic Tanks | 16 | 0 | 0.00% |
| Site Grounds | Landscape | 20 | 0 | 0.00% |
| | Parking Area | 8 | 0 | 0.00% |
| | Site Grounds | 170 | 1 | 0.59% |
| | Turf Condition | 32 | 0 | 0.00% |



| Element | Characteristics | Number Inspected | Number Rated Four or Below | Percent Rated Four or Below |
|---|---------------------------------------|------------------|----------------------------|-----------------------------|
| Canopy | Canopy Columns | 153 | 0 | 0.00% |
| | Canopy Fascia | 87 | 0 | 0.00% |
| | Canopy Signs | 207 | 0 | 0.00% |
| | Canopy Underside | 75 | 1 | 1.33% |
| | Sign Structure | 175 | 0 | 0.00% |
| | Variable Message Signs | 20 | 0 | 0.00% |
| | Gantry | 106 | 0 | 0.00% |
| | Gantry Columns | 106 | 0 | 0.00% |
| Communications, Fire Alarm and Monitoring Devices | CCTV (Close Circuit TV) | 150 | 0 | 0.00% |
| | Fire Alarm | 20 | 0 | 0.00% |
| | Fire Extinguisher | 865 | 2 | 0.23% |
| | Fire Pump System | 3 | 0 | 0.00% |
| | Intercom System | 3 | 0 | 0.00% |
| | Security | 283 | 0 | 0.00% |
| | Telephone System | 388 | 0 | 0.00% |
| Concrete Pavement & Sidewalks | Concrete Pavement | 367 | 0 | 0.00% |
| | Sidewalk and Curb | 111 | 1 | 0.90% |
| Booth | Booth Ceiling | 124 | 0 | 0.00% |
| | Counters/Cabinets and Drawers (Booth) | 124 | 0 | 0.00% |
| | Doors / Splash Door (Booth) | 124 | 0 | 0.00% |
| | Flooring (Booth) | 124 | 2 | 1.61% |
| | Toll Booth Windows/Glazing | 124 | 1 | 0.81% |
| Island | ACM | 66 | 0 | 0.00% |
| | Attenuator | 208 | 0 | 0.00% |
| | Bollards | 332 | 0 | 0.00% |
| | Island Concrete | 193 | 0 | 0.00% |
| | Island Signs | 179 | 0 | 0.00% |
| Plaza Concrete Apron | Apron Sweep | 161 | 0 | 0.00% |
| | Cracking | 161 | 0 | 0.00% |
| | Joints | 161 | 0 | 0.00% |
| | Pavement Voids | 161 | 0 | 0.00% |
| | Striping | 161 | 1 | 0.62% |
| Stand-By Power | Fuel Line | 153 | 0 | 0.00% |
| | Fuel Tank | 153 | 16 | 10.46% |
| | Gauges | 127 | 0 | 0.00% |
| | LP Tank | 22 | 1 | 4.55% |
| | Stand-By Generator | 244 | 3 | 1.23% |
| | UPS (Uninterrupted Power Supply) | 246 | 0 | 0.00% |



2.3. Structures

2.3.1. Bridges

The Federal National Bridge Inspection (NBI) is performed in accordance with the National Bridge Inspection guidelines. Safety concerns prohibit publishing details related to the bridge inspection. Bondholders may contact individual FDOT Maintenance Districts to request the latest reports detailing any concerns. It should be noted that the 2022 Comprehensive Annual Financial Report shows a total of 731 bridges, which is the total number of bridges owned but not necessarily inspected by FTE. FTE structures maintenance data query from July 1, 2022, indicates a total of 731 bridges maintained and inspected by FTE and noted that four are rated as five or in “Fair Condition”.

2.3.2. Large Non-Qualifying Culverts (LNQC)

An independent structures consultant inspects all LNQCs once every six years (1/3 of the total per cycle) throughout the FTE system and noted that of 242 existing culvert structures, 9 are rated as five or in “Fair Condition”. The majority of LNQC (172) are in Zones II and III of the five roadway and structure inspection zones.

2.3.3. High Mast Light Towers (HMLT)

The Federal NBI guidelines do not address HMLTs; however, at the direction of FDOT, an independent structures consultant 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 373 HMLTs currently in operation within the FTE system, 53 are rated as five, or in “Fair Condition”. The HMLT rating and corresponding rating scale are summarized in Appendix B: Inspection Rating Procedures for Roadways, Buildings and Structures.

2.3.4. Overhead Sign Structures

The independent structures consultant noted that of 1,101 existing overhead sign structures, 63 are rated as five or in “Fair Condition”. Table 15 summarizes the overhead sign structures inspected and those rated in fair condition by inspection zone for this reporting period.

Table 15: Condition of Overhead Sign Structures

| Zone | Number Inspected | Number Rated Five or Below | Percent Rated Five or Below |
|---------------|------------------|----------------------------|-----------------------------|
| I | 525 | 28 | 5.33% |
| II | 52 | 2 | 3.85% |
| III | 266 | 25 | 9.40% |
| IV | 222 | 8 | 3.60% |
| V | 36 | 0 | 0.00% |
| TOTALS | 1,101 | 63 | 5.72% |




The biennial inspection of the FTE's overhead sign structures is based on a visual inspection of three individual sign characteristics, horizontal and vertical members, and structure foundations. These characteristics, along with the sign rating scale, are listed in Appendix B: Inspection Rating Procedures for Roadways, Buildings and Structures.



3. Inspection Results

Element characteristics rated four or below (equal to or greater than 20 percent) in each of the three categories are identified in this report. As mentioned previously, it is possible that repairs/improvements have addressed some of the items identified as below standard in this report due to the lag-time between inspections and issuance of the report. The numbers of construction and maintenance contracts for each category that were either in effect or advertised during the fiscal year are summarized in Tables 16 – 18 to give some indication of the work effort already in-place. Many of the contracts listed on Tables 16 – 18 will likely extend over several fiscal years.



NONE OF THE DEFICIENCIES
OBSERVED BY THE
INSPECTION TEAMS, POSE A
SAFETY CONCERN TO FTE
CUSTOMERS.

The determinations provided in this report do not consider the criticality of characteristics in relationship to each other. When reviewing below standard characteristics, several considerations influence the desired level of service. These include safety, protection of private and public investment, comfort, economics, environmental impact, aesthetics, and funding constraints. A pavement void, for example, would receive priority over litter removal because it may have an immediate impact on the driving experience of the customer. Standard procedures for rating system facilities are explained in Appendix B: Inspection Rating Procedures for Roadways, Buildings and Structures.


3.1. Roadways

No major roadway characteristics were identified by FTE's annual inspection team as being unsatisfactory. However, according to the 2022 PCS Pavement Cracking rating, there are currently 110.85 lane miles reported deficient, of which 65.75 lane miles, or 59.31 percent, are located on SR 91 in Broward County.



Roadway improvement projects are scheduled for Broward County in FY 2023 and 2024 to address the Broward County section. The first 36.21 miles are scheduled for FY 2023 with the remaining 29.54 miles of improvement scheduled for FY 2024.

The overall RRP rating was 95.39 for all elements combined across the system. The RRP results indicate that FTE's aggressive and comprehensive Maintenance and Renewal and Replacement programs continue to be effective.



THE RESULTS OF THIS
YEAR'S ANNUAL INSPECTION
INDICATE THAT FTE'S
ROADWAY FACILITIES ARE
MAINTAINED IN AN OVERALL
GOOD CONDITION.

3.1.1. Roadway

The roadway element, which is comprised of all characteristics of the pavement, has achieved an RRP overall rating of 94.62 on all ramp sections. no major below standard characteristics were identified in any of the maintenance zones reported by the annual inspection. These positive ratings are indicative of FTE's ongoing pavement resurfacing efforts along several portions of the system and an active preventive maintenance program. Table 16 represents construction and maintenance contracts in effect or let during FY 2022.

Table 16: Roadway Contracts in Effect or Advertised During FY 2022

| Type | Zone | Construction | | Maintenance | | Total Roadway & Maintenance Dollars |
|---|-------------------|-----------------|------------------|----------------|------------------|-------------------------------------|
| | | Total per Zone | No. of Contracts | Total per Zone | No. of Contracts | |
| Contracts in Effect or Advertised in Single Zones | Zone I | \$1,163,373,631 | 15 | \$26,030,876 | 53 | \$1,189,404,507 |
| | Zone II | \$83,577,416 | 4 | \$25,177,805 | 7 | \$108,755,221 |
| | Zone III | \$581,766,101 | 14 | \$61,690,796 | 10 | \$643,456,896 |
| | Zone IV | \$399,538,999 | 9 | \$29,624,216 | 9 | \$429,163,215 |
| | Zone V | \$0 | 0 | \$20,697,685 | 5 | \$20,697,685 |
| Contracts in Effect or Advertised Across Multiple Zones | Zones I & II | \$7,377,355 | 2 | \$1,311,762 | 7 | \$8,689,117 |
| | Zones I & III | \$3,179,902 | 1 | \$0 | 0 | \$3,179,902 |
| | Zones II & III | \$7,559,000 | 1 | \$375,200 | 3 | \$7,934,200 |
| | Zones I, II & III | \$106,952,365 | 1 | \$0 | 0 | \$106,952,365 |
| | Zones I, II & IV | \$0 | 0 | \$2,589,651 | 1 | \$2,589,651 |
| | Zones I, III & IV | \$5,565,378 | | \$0 | 0 | \$5,565,378 |
| | Zones III & IV | \$0 | 0 | \$4,841,095 | 1 | \$4,841,095 |
| | Zones III, IV & V | \$0 | 0 | \$41,956 | 1 | \$41,956 |
| Totals | All Zones | \$2,358,890,147 | 47 | \$172,381,042 | 97 | \$2,531,271,189 |

3.1.2. Roadside

The determination of an RRP rating for roadside characteristics is generally based upon the consideration of all fencing, shoulder, slopes, and other characteristics located outside of the paved travel way (Figure 1). The overall RRP rating for Roadside for this FY is 94.83 with no major below standard characteristics of more than 1.84 percent noted for the five characteristics of this element on FY 2022. Figure 9 shows a typical paved and soil shoulder section on FTE's system.



Figure 9: Typical Paved and Soil Shoulder Section

3.1.3. Traffic Services

The Traffic Services element rating is based on the condition of all characteristics that guide, protect, and assist the customer while traveling FTE's roadways, interchanges, and service areas. The overall RRP rating for Traffic Services is 93.51 for FY 2022. with no major below standard characteristics of more than 1.93 percent noted for the 11 characteristics of this element on FY 2022. Zone one has the characteristic of Guardrail with 5.92 percent and Zone one has the characteristic of Object Markers with 4.09 percent. Typical Guardrail example on the FTE system is shown in Figure 10.



Figure 10: Typical Guardrail

3.1.4. Drainage

The rating for this element is based on the overall condition of all structures that collect, treat and convey stormwater run-off. The RRP rating for drainage is 98.96 for FY 2022. Overall, no below standard ratings of more than 0.17 percent were noted for the eight characteristics of this element in FY 2022. **Error! Reference source not found.** shows a typical median ditch on the FTE system.



Figure 11: Typical Median Ditch

3.1.5. Vegetation – Aesthetics

According to its comprehensive Turf Management Plan, FTE continually monitors the condition of vegetation and the need for mowing, trimming, re-landscaping, and litter removal. The overall RRP rating for Vegetation and Aesthetics is 95.05 for FY 2022. Overall, no below standard ratings of more than 1.86 percent were noted for the six characteristics of this element in FY 2022. Figure 12 shows an example of landscape in FTE's system.



Figure 12: Typical Landscape

3.2. Buildings

Overall, 27,942 comments were made of building elements inspected, of which, 103 were rated as being in condition four or below, for a below standard characteristic rating of less than 1 percent. The majority of reported four or below ratings were not structural or safety related concerns.

FTE toll plaza administration buildings, canopies, and adjacent areas, which include parking and drainage areas, are generally in good condition. The following bullet points lists several building characteristics reported with ratings at the high end of the scale and a brief description about the rating (See Table 14: Condition of Buildings – All Zones).

- **Fuel Tank** (10.46 percent) – This characteristic refers to tanks supplying fuel to the stand-by generators. Most of the unsatisfactory ratings reported for this characteristic are missing tie-down straps and ID tags; more focus is needed on completion of the program to assure all tanks are tied down.



- **Receptacle** (1.90 percent) – The majority of unsatisfactory ratings reported for this characteristic were ground fault interrupt (GFI) receptacles that were not functioning as intended; more focus is needed on maintenance of this characteristic.
- **LP Tank** (4.55 percent) – The unsatisfactory ratings reported for this characteristic are missing tie-down straps.
- **Switchboards and Breakers** (1.14 percent) - The majority of unsatisfactory ratings reported for this characteristic are labeling / incorrect directory, incomplete or missing in panels, and the clip-forced switches.
- **Flooring – Booth** (1.61 percent) – Unsatisfactory ratings for this characteristic included corroded supports and water intrusion.

During FY 2022, 28 facility construction projects included the continued implementation of open road tolling, gantries and AET buildings. In addition, 19 facility routine maintenance contracts are in effect or advertised as indicated in [Error! Reference source not found.](#)

Table 17: Facilities & Communication Contracts in Effect or Advertised During FY 2022

| Category | No of Contracts | Activity | Cost |
|--|-----------------|--|--------------------|
| Maintenance | | | |
| Electrical | 1 | Maintenance, Repair, Testing and Verification of Electrical Services | \$427,625 |
| Elevator | 1 | Elevator Maintenance Services | \$53,080 |
| General | 4 | Routine Facilities Maintenance, Emer. Repair, Janitorial, Mowing & Security Services | \$326,461 |
| HVAC | 1 | Heating, Ventilation and Air Conditioning Equipment, Repair | \$135,700 |
| Painting | 1 | Concrete, Waterproofing, Sealing, Paint & General Facilities Svc | \$341,000 |
| Pcard Services | Multiple | Pcard Services | \$309,620 |
| Plumbing | 1 | Plumbing and Lift Stations | \$180,340 |
| Roofing | 1 | Roof Replacement, Building Management System & Equipment Controllers | \$218,850 |
| Standby Power | 2 | Generator, UPS & ATS Maintenance Services | \$929,990 |
| Telecommunication | 1 | Maintenance of Statewide Telecommunications Network | \$290,568 |
| Tollbooth | 1 | Tollbooth Repair Services | \$87,750 |
| Water Treatment | 2 | Maintenance of Water Treatment Services | \$28,185 |
| All Services | 1 | Performance-Based Contract - South Region | \$3,044,200 |
| Pressure Cleaning | 1 | Pressure Cleaning Services | \$147,011 |
| All Services | 1 | Performance-Based Contract - West Coast & Off-System (Prorated) | \$1,000,000 |
| 19 Maintenance Contracts - Totals | | | \$7,520,380 |



| Category | No of Contracts | Activity | Cost |
|--|-----------------|--|------------------------|
| Construction | | | |
| New Road Construction | 1 | Suncoast Parkway 2 | \$134,599,795 |
| Interchange Improvement | 1 | Turnpike Mainline at I-4: MP 259 to Direct Connect Ramps (D/B) | \$84,939,000 |
| Add Lanes and Reconstruction | 1 | Widen TPK (SR91) Boynton Beach Blvd. - Lake Worth | \$167,808,460 |
| Resurfacing | 1 | Resurface TPK Mainline in Martin Cnty, MP 117 - 138 | \$33,928,239 |
| Toll Plaza | 1 | All Electronic Tolling (AET) Phase 8 Ticket Sys. MP 88-236 | \$106,952,365 |
| Add Lanes and Reconstruction | 1 | Widen Turnpike (SR 821) NW 106 St to I-75 (MP 34 - 39) | \$368,767,091 |
| Flexible Pavement Reconstruction | 1 | Reconstruct Mainline MP 138.13 to MP 153.23 | \$31,832,323 |
| Add Lanes and Reconstruction | 1 | Widen HEFT from SR 836 to NW 106th St. (MP 26-34) | \$244,979,349 |
| Add Lanes and Reconstruction | 1 | Widen Polk Parkway from MP 18 to MP 22 (D/B) | \$61,180,000 |
| Miscellaneous Construction | 1 | Suntrax Connected/Auto Vehicle Testing Facility | \$139,979,406 |
| Resurfacing | 1 | Resurface Turnpike Mainline MP 260.2 to MP 265.3 | \$18,857,000 |
| Dynamic Message Sign | 1 | DMS Signs at Service Plazas (MP 185.5 - MP 301) | \$7,559,000 |
| Toll Plaza | 1 | All Electronic Tolling (AET) - Polk Pkwy (MP 0 - MP 18) | \$31,637,485 |
| Resurfacing | 1 | Resurface Turnpike Mainline (MP 190.5 - MP 198.5) | \$16,707,654 |
| Flexible Pavement Reconstruction | 1 | Reconstruct TPK Mainline Sumter Cnty (MP 297.9 - 308.9) | \$11,716,022 |
| Add Lanes and Reconstruction | 1 | Widen TPK SR 50 Clermont to Orange, Orange to Minneola | \$162,313,833 |
| Overhead Signing | 1 | Beachline East (SR 528) Signs Replacement MP 30 - 46 | \$1,690,165 |
| Resurfacing | 1 | Resurface TPK ML & Intchg, Safety & Improve, Orange Cty | \$21,999,573 |
| Other ITS | 1 | Wrong Way Detection Technology Implementation (D/B) | \$5,495,495 |
| ITS Communication System | 1 | Connected Vehicle Deployment SR 91 MP 255-267, SR 528 MP 0-8 | \$3,696,363 |
| Resurfacing | 1 | Resurface Western Beltway (SR 429) (MP 1 - MP 5.5) | \$18,831,743 |
| Resurfacing | 1 | Resurface Seminole Expressway (MP 44.5 - MP 49.9) | \$13,350,942 |
| Add Lanes and Reconstruction | 1 | Add NB Lane Off Ramp Sample Rd / TPK Interchange | \$1,975,221 |
| Resurfacing | 1 | Resurface SR 91 & SR 821/SR 91 Ramps in Broward County | \$4,166,000 |
| Other ITS | 1 | Wrong Way Detection Technology Implementation (D/B) | \$10,781,928 |
| Resurfacing | 1 | Resurface TPK in Palm Beach County (MP 39.02 - MP 44.56) | \$12,517,000 |
| Interchange Improvement | 1 | SR 54 Operational Ramp Improvements | \$6,695,054 |
| Resurfacing | 1 | Resurface Suncoast (SR 589) in Hernando Cty (MP 112.2 - 117.8) | \$4,276,308 |
| 28 Construction Contracts - Totals | | | \$1,729,232,814 |
| 47 Construction & Maintenance Contracts – Facilities & Communications – Total | | | \$1,736,753,194 |

3.3. Structures

3.3.1. Bridges

During FY 2022, 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 was provided by the FTE Estimates Manager and is shown in Table 18.

Table 18: Bridge Contracts in Effect or Advertised During FY 2022

| Location | Construction Cost |
|-------------|-------------------|
| Zone I | \$144,199,192.00 |
| Zone II | \$2,747,683.00 |
| Zone III | \$82,942,512.00 |
| Zone IV | \$24,671,603.00 |
| Zone V | \$0.00 |
| Zone I & II | \$3,574,190.00 |
| Totals | \$258,135,180.00 |

The State Maintenance Office Bridge Inventory 2022 – Annual Report, which uses the NBI guidelines, reported four bridges in fair condition. FTE Maintenance directed a portion of its Periodic and Routine Maintenance funding in FY 2022 to rehabilitation and repair projects. Figure 13 shows an example of a bridge on the FTE system.



Figure 13: Bridge over Florida's Turnpike

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, but the sign panel condition (retro-reflectivity, peeling, etc.) is documented in the RRP inspection. These signs provide critical directional information, guiding the customer throughout the FTE system. The overhead sign structures inspection reported no structures in poor condition. Figure 14 shows an example of a span sign in the FTE system.



Figure 14: Typical Overhead Sign Structure

3.3.3. High Mast Light Towers

Similar 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 turnpike systems, such as interchanges, service plazas and toll facilities. The HMLTs inspection noted no structures in poor condition for the 2022 inspection period.

3.3.4. Large Non-Qualifying Culverts

An LNQC is a structure that does not meet the statutory definition of a bridge. LNQCs are defined as a circular, elliptical arch or box type of culvert with a height greater than four feet, or clear span of ten feet or greater, but less than 20 feet.

LNQCs are 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. The LNQCs inspection noted no structures in poor condition for the 2022 inspection period. Figure 15 shows an example of a culvert in the FTE system.



Figure 15: Typical Culvert



4. Commitments and Recommendations

4.1. Commitments

Analysis of data collected during the 2022 asset evaluation cycle indicates that FTE's Renewal and Replacement, Periodic, and Routine Maintenance programs are effective at maintaining the system at an optimal level. Programmed funding for physical improvements committed to these programs are indicated in Table 19.

Table 19: FY 2022 through 2026 Program Commitments (\$M)

| Fiscal Year | Renewal & Replacement Contracts ^[1] | Periodic Maintenance ^[2] | Routine Maintenance ^[3] | Total | Gross Revenue ^[4] | Percentage of Gross Revenue |
|-------------|--|-------------------------------------|------------------------------------|----------|------------------------------|-----------------------------|
| 2022 | \$84.55 | \$5.26 | \$65.06 | \$154.87 | \$1,099.80 | 14.08% |
| 2023 | \$124.45 | \$17.47 | \$70.75 | \$212.67 | \$1,110.51 | 19.15% |
| 2024 | \$116.62 | \$20.17 | \$82.58 | \$219.37 | \$1,167.58 | 18.79% |
| 2025 | \$109.13 | \$7.22 | \$71.73 | \$188.08 | \$1,199.27 | 15.68% |
| 2026 | \$78.33 | \$7.22 | \$74.17 | \$159.72 | \$1,230.20 | 12.98% |

¹ Renewal and Replacement data captures all projects/phases using PKYR funding, excluding those PKYR projects that are in the Periodic Maintenance category.

² Periodic Maintenance data captures all projects/phases using Item Group PEMT.

³ Routine Maintenance data captures all phase 72 projects.

⁴ 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 2023 through FY 2033).

The 16.14 percent 5-year average of gross revenue allocated to maintaining the system is evidence of FTE's commitment to protect the system's assets and bondholder's investments. Programmed commitments between FY 2022 and FY 2026 range from 12.98 to 19.15 percent of gross revenue with the upper limit of this range occurring in FY 2023.

New construction and improvement projects are valued at \$84.55 million for renewal and replacement work (PKYR) in FY 2022, and include roadway resurfacing; bridge, roadway, and facility construction; toll equipment enhancement; and bridge repair.

The amount of \$70.32 million programmed for periodic (PEMT) and routine maintenance (Phase 72) work in FY 2022 includes maintenance of all highway assets, building maintenance, building renovation, building demolition, roof replacement, toll plaza tunnel sealing, drainage improvements and safety upgrades.



4.2. Recommendations

The 2022 annual inspection and asset analysis clearly indicates that the system is in an overall - GOOD condition. To maintain the excellent level of service provided to the system's customers well into the future, the Atkins – HNTB team recommends:

- Unsatisfactory ratings noted in the FY 2022 report should be addressed as resources allow.
- Critical or emergency items identified during all annual inspections should continue to be addressed at the time they are discovered.
- Future annual inspection characteristics reported below standard should be reviewed by the appropriate FTE personnel on a 30-business day schedule to determine priority levels for possible inclusion into existing maintenance or future construction projects.
- Continued review of consultant-recommended below-standard characteristics correction options and coordination of funding-related issues with FTE's Maintenance, Finance and Production Offices.
- Characteristics that continue to be reported with higher-than-average unsatisfactory ratings should be evaluated to determine if creation of a new projects may resolve the issues. Being proactive will ensure that unsatisfactory characteristics are addressed promptly and that items that are approaching this condition are resolved before they become unsatisfactory.
- **Error! Reference source not found.** provides a description of current projects with funding source, priority, and current funding status.

Table 20: Improvements, Current Funding Status, and Recommendations – Highway Operations


| Priority Level | Description | Funding Source | OPS ID # | Current Funding Status and Recommendations |
|----------------|--|----------------|------------|---|
| 1 | SR 407 Safety Enhancements | PKYI | OPS2022-4 | FPID - 452109-1 |
| 2 | First Coast Expressway Safety Enhancements | PKYI | OPS2019-2 | FPID - 449711-1 (Design is funded, Construction is not Funded) |
| 3 | Improve Bridge Approaches 930215 | PKYI | OPS2021-9 | FPID - 452111-1 |
| 4 | SR 407 ITS Improvements | PKYI | OPS2022-5 | FPID - 452109-1 |
| 5 | CCTV Ramp Deployments | PKYI | OPS2022-14 | FPID - 452086-1,-2 |
| 6 | CCTV Gap Project | | OPS2021-6 | FPID - TBD Varies |
| 7 | LED Lighting retrofit | PKYI | OPS2022-1 | FPID - 452228-1,-2,-3 |
| 8 | Post-Construction Repair Issues | | OPS2022-15 | FPID - TBD |
| 9 | TSM&O Intersection Improvements at 112th Ave | | OPS2022-9 | FPID - TBD |
| 10 | SR 528 – Exit 8 EB Ramp Turning Radius | | OPS2022-6 | FPID - TBD |



| Priority Level | Description | Funding Source | OPS ID # | Current Funding Status and Recommendations |
|----------------|--|----------------|------------|---|
| 11 | Increase Right Turn Curve Radius | PKYI | OPS2022-16 | FPID - 452090-1 (Design funded 2024, Construction funded 2025) |
| 12 | Fort Drum & Fort Pierce Parking LotSigning Improvements | | OPS2022-3 | FPID - TBD |
| 13 | Atlantic Avenue Overhead Signage | PKYI | OPS2022-8 | FPID - 452089-1 (Design funded 2024, Construction funded 2025) |
| 14 | Improve Access for Bridge 870930 | PKYR | OPS2021-3 | FPID - 450975-1 (Design funded 2024, Construction funded 2025) |
| 15 | Washout | | OPS2022-2 | FPID - TBD |
| 16 | Signing and Pavement Marking Review for Suncoast Trail - Arterial Crossings | | OPS2021-10 | FPID - 449391-1 |
| 17 | Demolition of Boca Raton Toll Plaza | PKYR | OPS2022-17 | FPID - 452108-1 (Design is not funded, Construction funded 2024) |
| 18 | Canopy Demolition at Spring Hill and Oak Hammock | | OPS2022-18 | FPID - 452107-1 (Design is not funded, Construction is not funded) |
| 19 | Extend the Service Life of Box Culvert Structures | PKYI | OPS2022-7 | FPID - 452085-1 (Design funded 2025, Construction is not funded) |
| 20 | Emergency Response Access Locations | PKYI | OPS2015-1 | FPID's - 449175-3 (ERAL) (Design funded 2023, Construction funded 2024) 449175-4 (Veterans ESS) (Design funded 2023, Construction funded 2025) 449175-1 (ESS Systemwide Design) (Design is not funded, Construction is not funded) |
| 21 | Median Shoulder Improvements | | OPS2019-7 | FPID - 449466-1 (Design is not funded, Construction is not funded) |
| 22 | SCADA for the ITS Generators for South Region | | OPS2022-10 | FPID - TBD |
| 23 | Generator Replacement | | OPS2022-11 | FPID - TBD |
| 24 | Consolidate Sunrise Blvd. Microwave Tower Site into the Central Office Shelter | | OPS2022-19 | FPID - TBD |
| 25 | DC Power System Upgrades at all FTE Tower Sites | | OPS2022-20 | FPID - TBD |
| 26 | Paved Shoulder Cracks at Barrier and MSE Walls | | OPS2021-4 | FPID - TBD |
| 27 | Connected Vehicle (Long-TermEvolution) at SunTrax | | OPS2021-5 | FPID - 449420-2 (Design is not funded, Construction is not funded) |
| 28 | Emergency Back-up Generators | | OPS2020-8 | FPID - 449420-1 (Design is not funded, Construction is not funded) |
| 29 | Arterial DMS Installations | | OPS2021-7 | FPID - Varies |
| 30 | Sawgrass Expressway DirectionalSignage | PKYI | OPS2021-11 | FPID - 443612-1 (Design funded 2020, Construction funded 2023) |
| 31 | Pompano Beach TMC & AnnexRenovations | | OPS2018-1 | FPID - TBD |
| 32 | TSM&O: Integrated Corridor Management and Detour Routing | | OPS2022-12 | FPID - TBD |
| 33 | TSM&O: Active Freeway Management | | OPS2022-13 | FPID - TBD |
| 34 | Buried Foundation for Ancillary Structures - Sawgrass | PKYI/PKBD | OPS2017-1 | FPID - 437155-5 (Design funded 2023, 2024 & 2025, Construction funded 2026) |
| 35 | Access Gates on Noise Walls | | OPS2010-1 | FPID - TBD |



While it is recommended that funds are appropriated for improvements identified in the annual inspection, 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 such as 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 FTE's Renewal and Replacement Program and related funding levels.



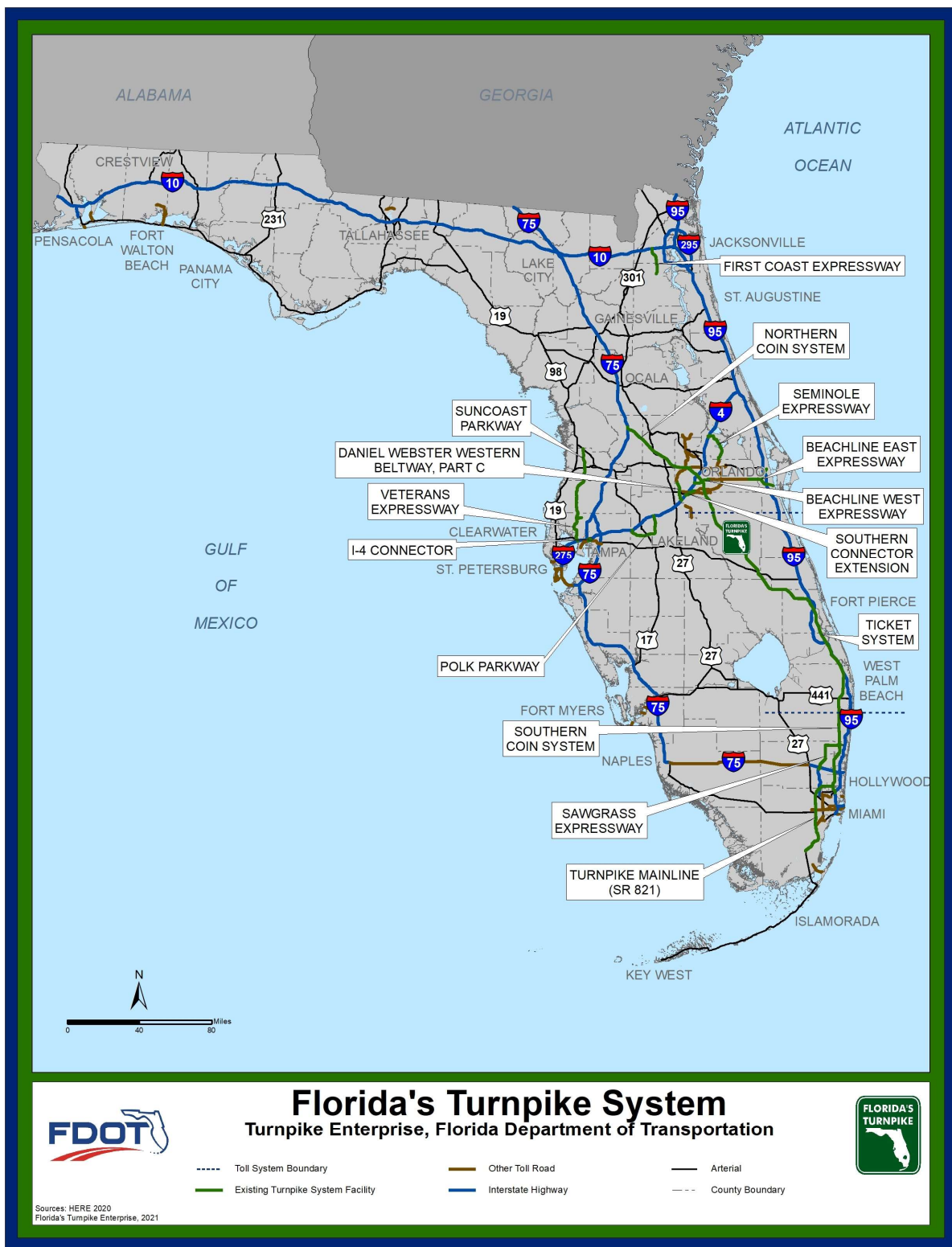
THE RESULTS OF THE 2022
ANNUAL INSPECTION CONFIRM
FTE'S COMMITMENT TO
MAINTAIN THE QUALITY AND
SAFETY OF THE SYSTEM AND
PROVIDE VALUE TO THE
BONDHOLDERS' INVESTMENT.

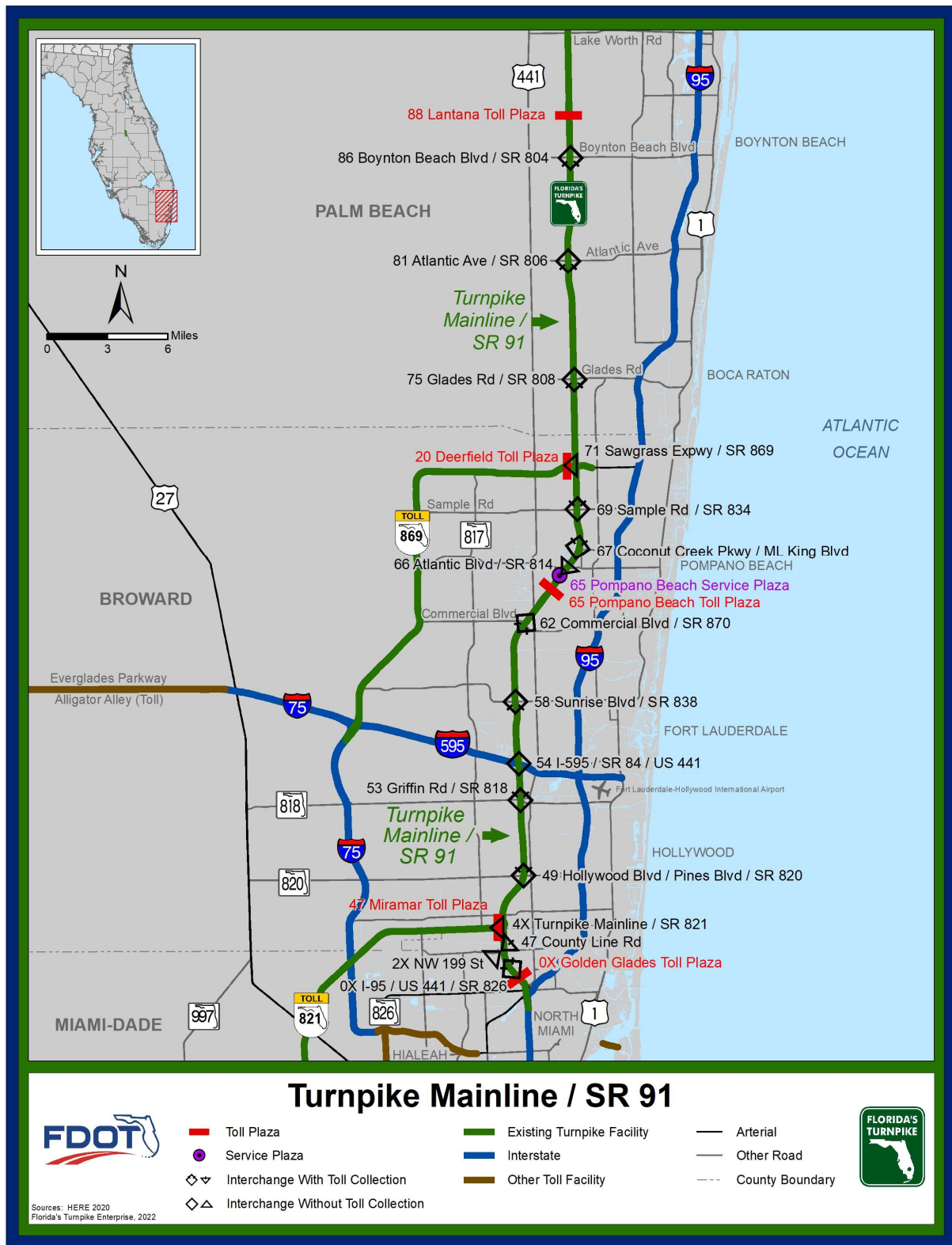


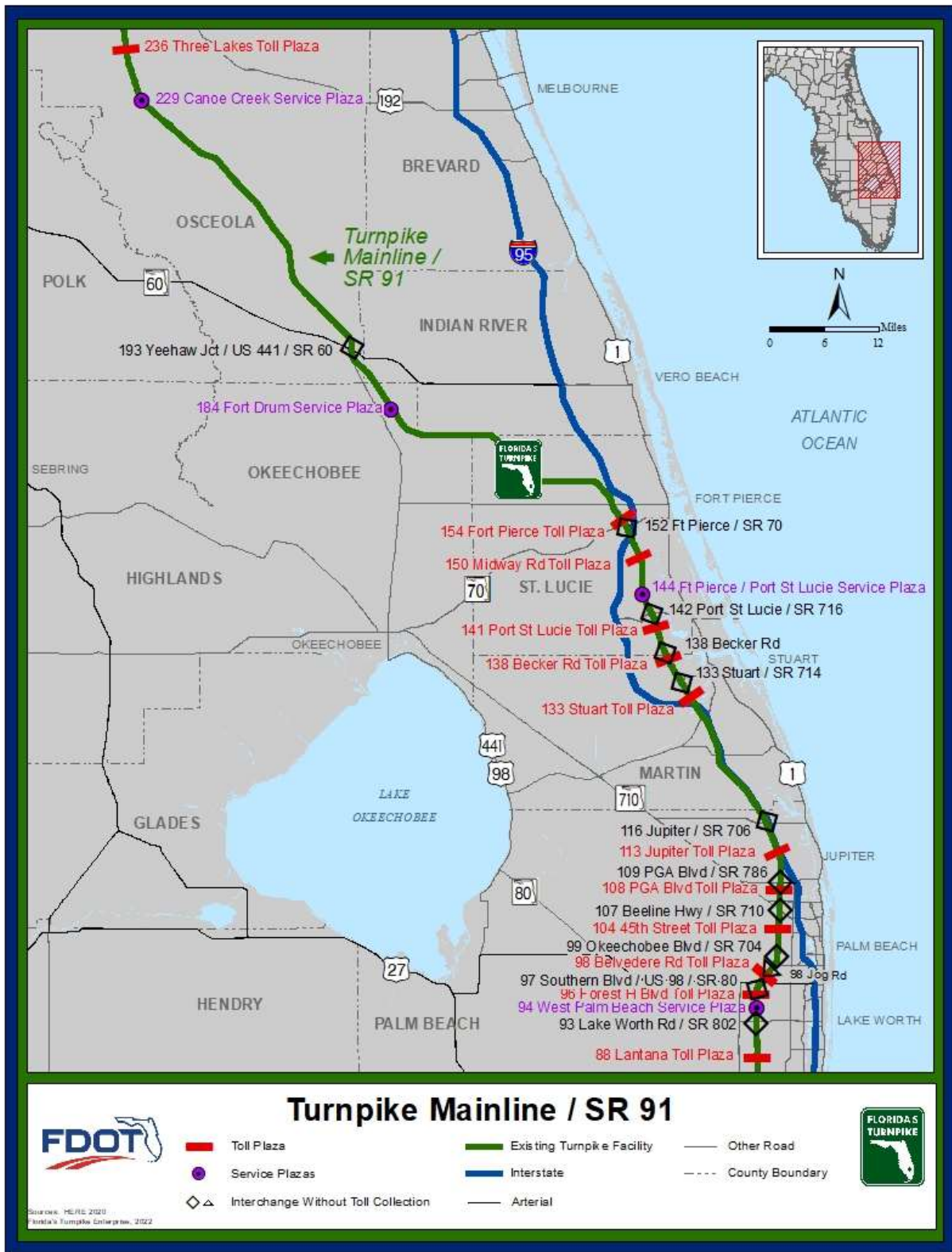
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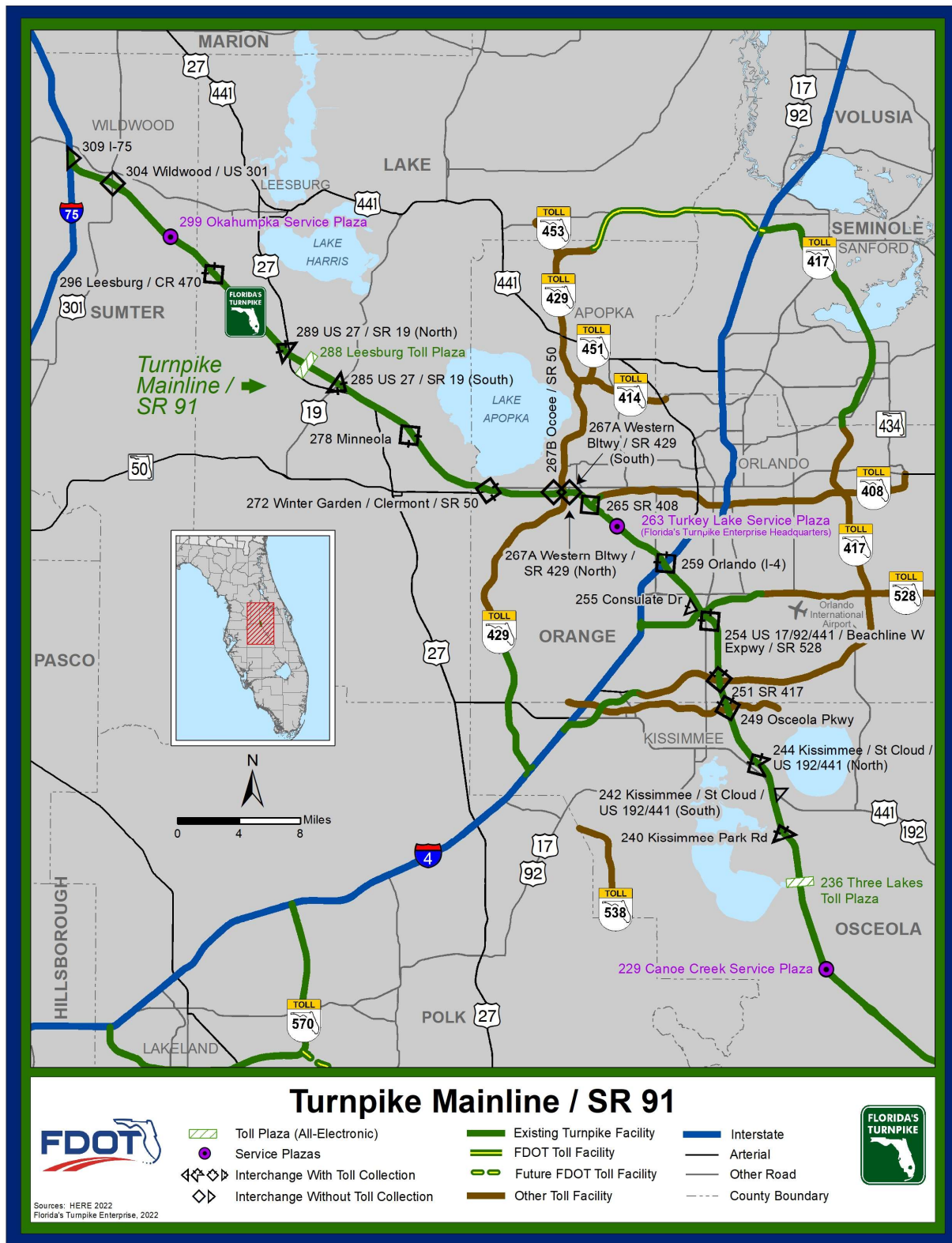


Appendix A: Maps of System Components and Inspection Zones

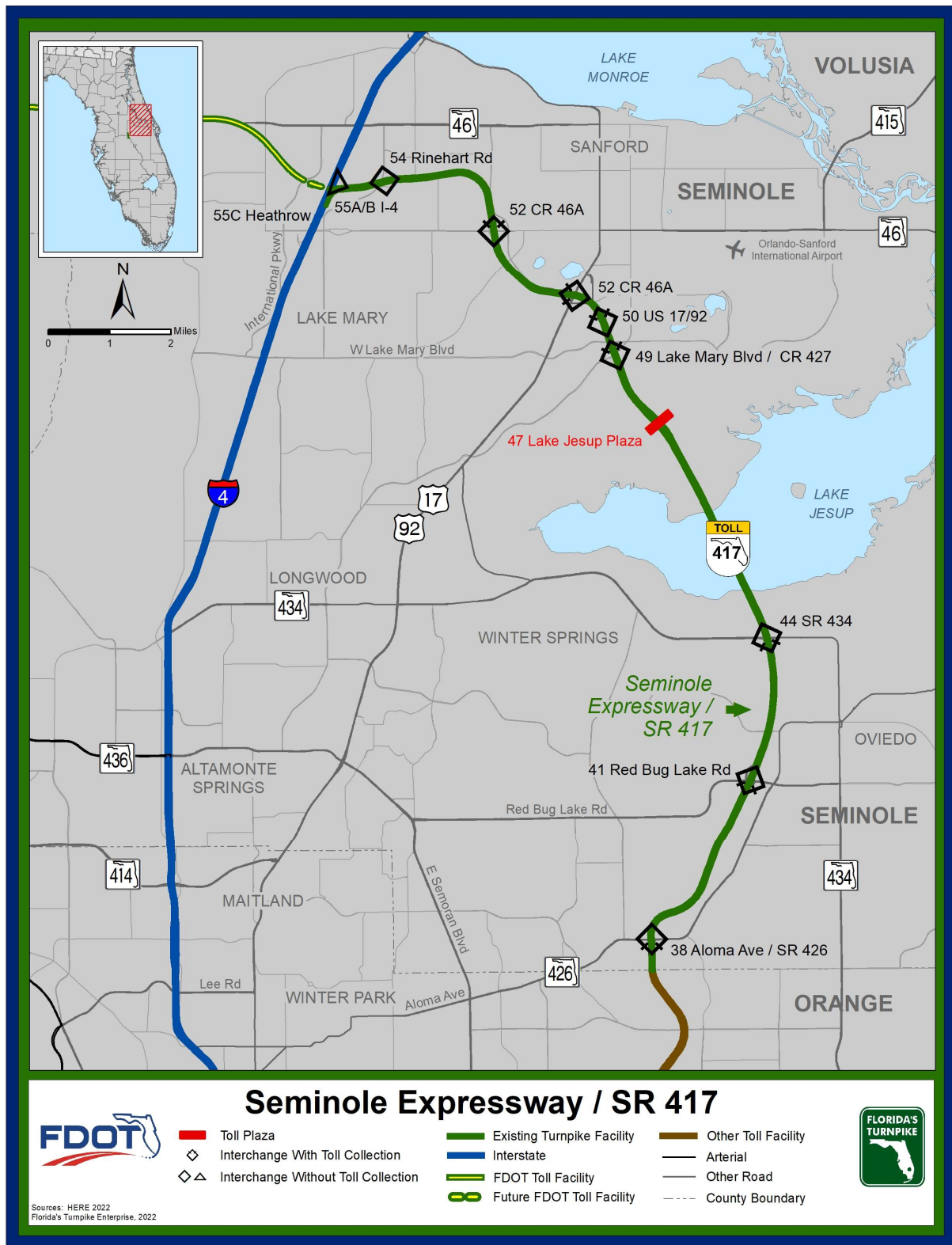








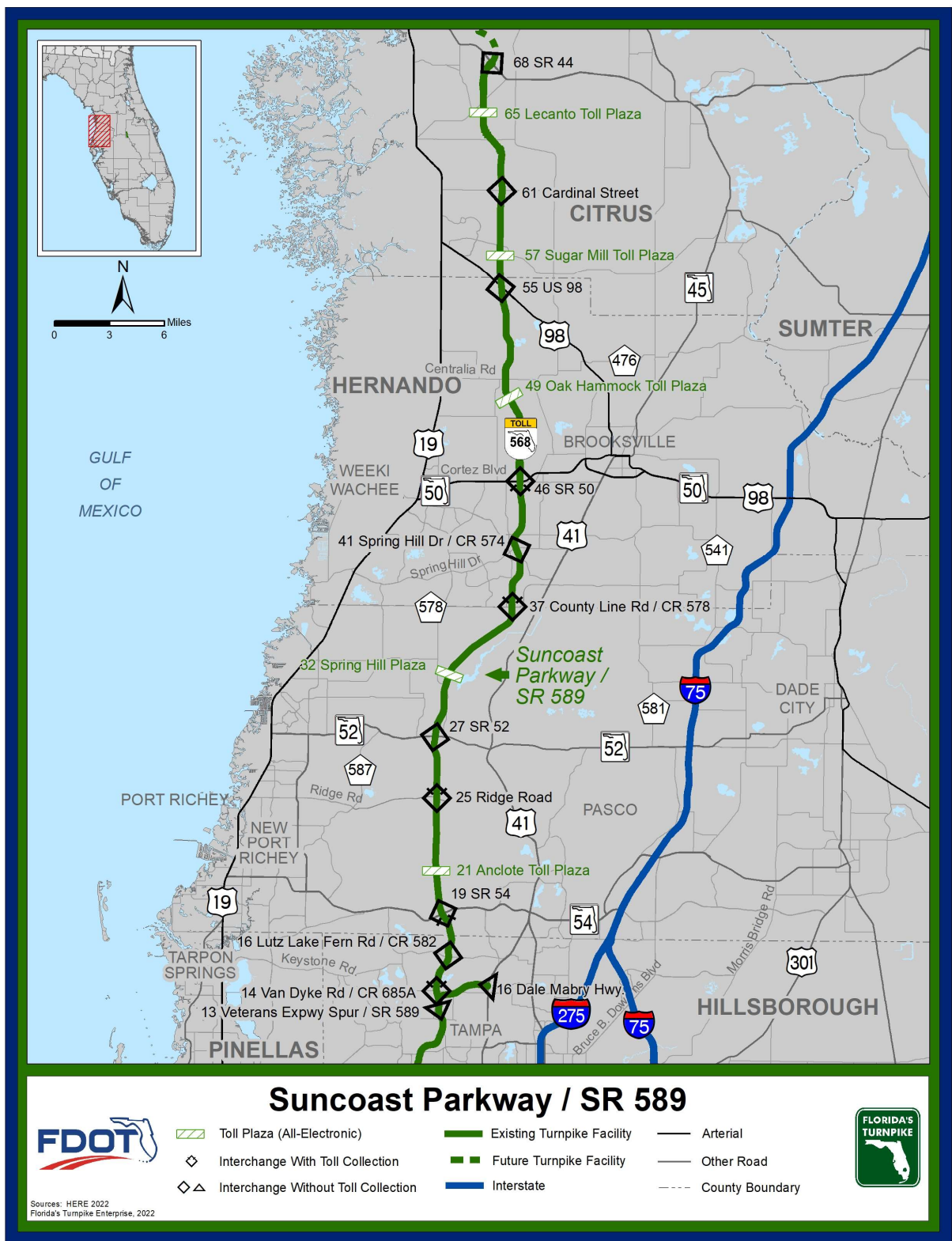




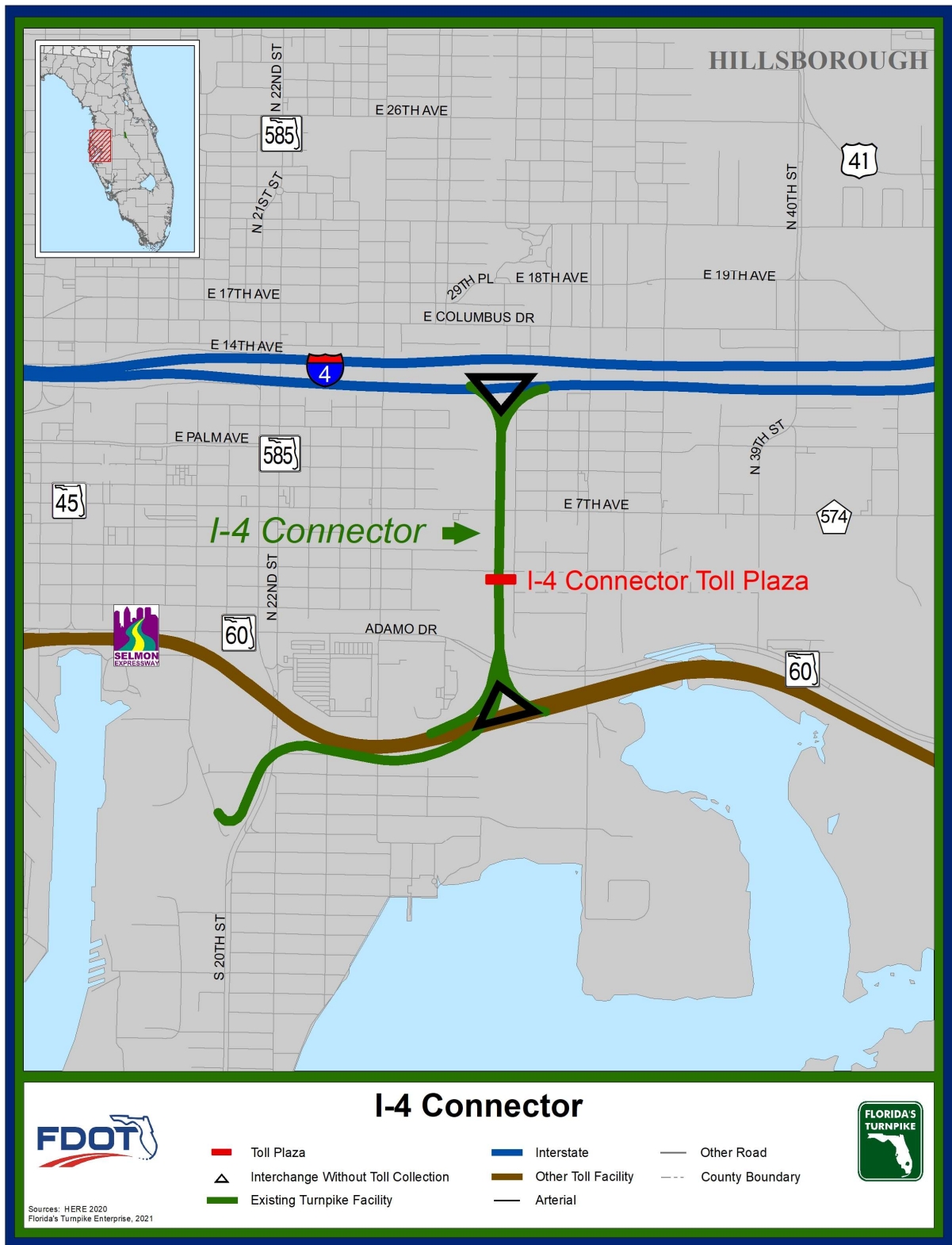














Appendix B: Inspection Rating Procedures for Roadways, Buildings and Structures

A. Roadway Rating Procedure

The Roadway Rating Procedure developed by FTE and Atkins is shown in Table 21. The ratings and descriptions of the numerical grading system are shown in Table 4 in Section 1.2.3.1. This information is entered directly into a database on a GPS enabled tablets in the field for later compilation and reporting for each roadway. Inspection results are identified by roadway / ramp segment and lane direction.

Table 21: RRP Roadway Elements and Characteristics

| 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 | Misc. Inlet | Pavement Marker | Signs Less Than 30 SF |
| Roadside Ditch | Roadway Sweep | Striping | Signs Greater Than 30 SF |
| Median Ditch | | Pavement Symbol | Object Marker |
| Outfall Ditch | | Guardrail | Sign Light |
| Curb Inlet | | Attenuator | Highway Light |
| Rip Rap | | Barrier Wall | |

B. Structures Rating Procedures

The structures inspection is performed on a biennial basis and is subdivided into four major elements: bridges, large non-qualifying culverts, overhead sign structures, and high mast light towers.

Bridge Rating Procedure

Security concerns prohibit publishing detailed bridge reports outlining component deficiencies in this report. Bondholders may request bridge reports from the individual FDOT Maintenance Districts where the bridges are located.



The biennial inspection for fixed bridges is based on three main components comprised of a total of 93 characteristics and 117 sub-characteristics. A numerical score is generated for each characteristic based on the rating scale shown in Table 22.

Table 22: Bridge Inspection Rating Scale

| 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 or 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 Sign Structures Rating Procedure

The condition of overhead sign structures is determined based on the biennial inspection of three characteristics:

1. Overlane Sign Structure Foundation
2. Overlane Sign Structure Horizontal Member
3. Overlane Sign Structure Vertical Member

The standard rating scale is shown in Table 23.

Table 23: Overhead Sign Structures Inspection Rating Scale

| Grade | Rating | Description |
|-------|-----------|--|
| 8-9 | Excellent | Performs function with high degree or reliability and or effectiveness |
| 6-7 | Good | Performs intended function with small reduction and or effectiveness |
| 5 | Fair | Performs intended function with significant reduction in reliability and or effectiveness. Repair or replacement may be required |
| 4-0 | Poor | Does not perform intended function in an acceptable level of reliability and or effectiveness. Repair or replacement is required |

High Mast Light Tower Rating Procedure

The condition of high mast light towers is determined based on the biennial inspection of two characteristics:

1. High Mast Light Pole Foundation
2. High Mast Light Poles

The standard rating scale is shown in Table 24.

Table 24: High Mast Light Tower Inspection Rating Scale

| Grade | Rating | Description |
|-------|-----------|--|
| 8-9 | Excellent | Performs function with high degree or reliability and or effectiveness |
| 6-7 | Good | Performs intended function with small reduction and or effectiveness |
| 5 | Fair | Performs intended function with significant reduction in reliability and or effectiveness. Repair or replacement may be required |
| 4-0 | Poor | Does not perform intended function in an acceptable level of reliability and or effectiveness. Repair or replacement is required |



Building Rating Procedures

The annual building inspection is based on 14 elements and 97 characteristics. The building type dictates the specific report form that is used in field inspection. The general elements and their respective characteristics are listed in Table 25. The standard Building Inspection Rating Scale is shown in Table 5 in Section 1.2.3.1.

Table 25: Building Elements and Characteristics - FTE System (All Zones)

| Element | Characteristics | |
|---|--|---|
| 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 | CCTV (Close Circuit TV) | Intercom System |
| | Fire Alarm | Security |
| | Fire Extinguisher | Telephone System |
| | Fire Pump System | |



| Element | Characteristics | |
|---|----------------------------------|----------------------------------|
| Domestic Plumbing Fixtures | Faucets / Sinks | Toilets / Urinals |
| | Piping / Valves | Water Heater |
| Structural | Concrete (Precast/Cast-in Place) | Steel Framing |
| | Masonry | |
| 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) |

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



Undesired Sign Reflectivity Condition – Material Cracked and Faded