# The Florida Rail System Plan: Investment Element



prepared for the Florida Department of Transportation

prepared by Cambridge Systematics, Inc.

With support from

Planning Innovations, Inc Quandel Consultants



CHARLIE CRIST GOVERNOR 605 Suwannee Street Tallahassee, FL 32399-0450 STEPHANIE C. KOPELOUSOS SECRETARY

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### Citizens of Florida:

I am pleased to submit to you the Investment Element of the 2010 Florida Rail System Plan. Unlike in past years, where the Florida Rail System Plan was more descriptive of the separate freight and passenger rail systems, this plan is more visionary, strategic, and policy-driven.

The plan was guided by a broad base of stakeholders, including the Rail Stakeholder Advisory Committee, members of the public and private sectors, modes of transportation, economic development and environmental interests, and citizen representatives. The Committee and others worked throughout the summer and fall of 2009 to develop an inventory of Florida's rail system needs and recommend priority investments that support the strategic goals, objectives, and policies of the Florida Rail System Plan.

The Florida Rail System Plan is comprised of a Policy Element and this document, the Investment Element. The Policy Element provides a broad policy framework for the investment of limited state resources in Florida's rail system. The Investment Element builds upon the framework of the Policy Element by identifying the needs of Florida's rail system, establishing priorities for the investment of state funds, and setting forth future action steps necessary to implement the plan.

Florida in the year 2030 will be shaped by the actions, decisions, and policy choices made today. The challenges of continuing population growth, a rapidly diversifying economy, improving our infrastructure, and preserving our exceptional natural environment, will require a creative and visionary approach to address the mobility needs of Florida's citizens, businesses, and visitors while fostering smarter and more sustainable patterns of growth for our future. Rail transportation will play a critical role in meeting those challenges.

Please join with the Florida Department of Transportation and all of our partners in delivering the promise of this plan.

Sincerely,

Stephanie C. Kopelousos

Secretary

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# **Executive Summary**

Florida's Rail System Plan is one of several key statewide modal planning efforts conducted by the Florida Department of Transportation (FDOT) consistent with the Florida Transportation Plan, including: the Strategic Intermodal System Strategic Plan; the Seaport System; the Aviation System Plan; and Transit 2020.

Rail planning also is closely connected to and supports Florida's economic, environmental, community, and statewide planning framework, including: Metropolitan Planning Organization Long-Range Transportation Plans; Regional Planning Council Strategic Regional Policy Plans; local government comprehensive plans; ongoing regional visioning efforts and community initiatives; transit agency and modal partner development plans; and other private and public rail and freight investment plans.

The Florida Rail System Plan serves as important input into the update of the Florida Transportation Plan. With the advent of the Strategic Intermodal System and additional funding provided by 2005 Growth Management legislation, the Florida Rail System Plan also provides an effective tool to identify capital improvements and prioritize funding needs to ensure the efficient movement of people and goods by rail. Together these long-range, strategic planning initiatives help shape and develop a future-oriented, integrated, and multimodal transportation system for the State of Florida.

The 2010 Florida Rail System Plan is an update to the 2006 Florida Freight and Passenger Rail Plan and is a key part of an evolving rail planning process in Florida. The 2010 Plan builds upon previous efforts, including the work of the Florida High-Speed Rail Authority and the 2006 Florida Intercity Passenger Rail Vision Plan. In recognition of the role of passenger and freight rail within Florida's overall transportation system, the Florida Rail System Plan is consistent with the 2025 Florida Transportation Plan. This statewide plan identifies goals, objectives, and strategies to guide transportation investment decisions in Florida over a 20-year period. The Plan also complies with Florida statutory requirements in 341.302(3) Florida Statutes and Federal requirements, including the Passenger Rail Investment and Improvement Act (PRIIA) of 2008 and the American Recovery and Reinvestment Act (ARRA) of 2009 to ensure state eligibility for certain rail funding programs.

The 2010 Florida Rail System Plan consists of two elements:

1. **The Policy Element –** The Policy Element establishes a vision for passenger and freight rail transportation in Florida and a framework of goals, policies, and strategies to guide future state rail investments and decisions. The Policy Element was adopted by the Secretary of Transportation in March 2009.

2. The Investment Element - This document, the Investment Element, builds upon the framework of the Policy Element by identifying the needs of Florida's rail system and establishing priorities for the investment of state funds using the goals, objectives, and strategies of the Policy Element as guidance. The Investment Element presents detailed information on the future needs of Florida's rail system and sets forth strategic priorities to meet those needs.

Through the summer and fall of 2009, stakeholders from around the state worked to develop a statewide inventory of rail needs and projects recommended for priority consideration in the development of the 2010 Florida Rail System Plan Investment Element. Chapter 1 of this plan includes an **Introduction** to the 2010 Florida Rail System Plan Investment Element and its relation to other statewide planning initiatives and Federal rail plan requirements.

Chapter 2, Current Freight Rail System and Services in Florida, provides an inventory of the operating and recently abandoned freight rail transportation system and services in the State and an analysis of the role of rail transportation within Florida's surface transportation system (traffic conditions, safety trends, etc.). The Florida rail system is comprised of 2,786 miles of track routes, which are owned by 15 operating line-haul railroads and terminal or switching companies, as well as 81 miles owned by the State of Florida. In 2008, Florida's railroads carried nearly 1.6 million carloads and approximately 83 million tons of freight. During that year, railroads handled freight equivalent to roughly 5 million heavy trucks.<sup>1</sup> In 2007, Florida's freight railroads paid \$364 million in wages – a 3.4 percent net increase from year 2006 receipts – to more than 5,600 workers.<sup>2</sup>

Chapter 3, Passenger Rail Services and Initiatives in Florida, describes the State's passenger rail system and includes a performance evaluation of passenger rail services operating in Florida, including possible improvements in those services and a description of the strategies to achieve those improvements. By 2035 estimates suggest that more than 25 million people will call Florida home, representing a 56 percent population increase between 2000 and 2035. Many urban and interregional highway corridors currently are or are expected to be heavily congested during peak periods by 2025, even after planned capacity improvements are made. Likewise, more than 30 percent of the State's airports are projected to be operating at more than 80 percent of capacity, the point at which additional capacity should be under construction. The intercity travel market is estimated to grow from just over 100 million trips in 2006 to nearly 200 million trips by 2020 and 320 million trips by 2040.

Chapter 4, **Rail Needs**, identifies rail infrastructure issues within the State that reflect consultation with relevant stakeholders. This Chapter includes an inventory of rail needs, including capital investments for track upgrades, new facilities, capacity expansion, safety improvements, and industrial access. The Chapter also reviews major passenger and

<sup>&</sup>lt;sup>1</sup> Based on an average payload factor of 17 tons per truck.

<sup>&</sup>lt;sup>2</sup> The total wage receipts do not include fringe benefits.

freight intermodal rail connection and facility needs within Florida, including at seaports. The 2010 Florida Rail Needs Assessment was developed based on input from a variety of stakeholders, including the various modal offices at FDOT, the FDOT district offices, freight and passenger railroads, metropolitan planning organizations, counties, regional planning organizations, ports, advocacy and interest groups, as well as private citizens.

The needs assessment identifies a total of 235 near-, medium-, medium-to-long-, and long-term capital improvement projects and other initiatives. The total cost for the projects where cost estimates are available is \$50.6 billion.<sup>3</sup> This includes 56 passenger-related projects estimated at \$47.4 billion, including \$13.7 billion for high-speed rail improvements, and 139 freight-specific projects valued at approximately \$3.2 billion for a variety of freight capacity improvements, including investments in new lines, bridge maintenance, track maintenance, line expansion, and improved access to/from key hubs and rail corridors, passing sidings, etc. This constitutes a significant departure from the more recent rail needs estimates identified in the 2006 Florida Rail Plan (\$1.16 billion). However, unlike the preceding rail plan, the 2010 Florida Rail System Plan includes a more comprehensive assessment of passenger service needs as well as longer-term needs for both freight and passenger rail.<sup>4</sup>

New passenger rail service (e.g., right-of-way purchase and track construction for new passenger rail lines, improvements to freight rail corridors to allow for addition of passenger service) accounts for the largest portion of needs – over \$46 billion accounting for almost 93 percent of the total. Requests for freight rail grade separations came in a distant second place – requests amounted to \$1.2 billion or 2.5 percent of the total – followed by \$842 million (1.7 percent) for capacity upgrades to handle existing and growing freight demand. The remaining categories accounted for a combined \$1.8 billion, representing the remaining 3.6 percent of requests.

Chapter 5, **Rail Needs Prioritization**, describes the approach for evaluating rail needs projects by goal and objective area using a combination of qualitative and quantitative indicators. To leverage limited available funding and maximize the potential benefits associated with future rail investments, FDOT evaluated the rail needs presented in Chapter 4 using multiple criteria and assigned each need a project priority classification based on its readiness for implementation, coordination with other plans and projects, and potential regional and/or statewide impact. FDOT will use this analysis and priority classification to guide its future investments and other decisions regarding freight and passenger rail projects.

With the expansion of the needs assessment for the 2010 Florida Rail System Plan update to include passenger rail projects as well as projects identified by a broader range of stakeholders, FDOT was required to develop a new approach to assess and prioritize potential rail investments. The rail needs prioritization methodology was developed,

<sup>&</sup>lt;sup>3</sup> Costs are estimated in Year 2009 dollars.

<sup>&</sup>lt;sup>4</sup> Near-term (1-5 years), Mid-term (6-10 years), Mid-to-long (11-20 years), Long-term (20+ years).

tested, and refined through multiple meetings with FDOT and other stakeholders. The selected prioritization criteria reflect the rail plan goals as well as current priorities for FDOT as it seeks to implement projects in a constrained fiscal environment where project coordination and positioning to take advantage of Federal and other funding sources is vital.

Of the 235 near-, medium-, medium-to-long-, and long-term capital improvement projects and other initiatives identified as rail needs, this prioritization effort identified 22 very high-priority projects estimated at \$4.9 billion and accounting for 9.7 percent of all rail needs.<sup>5</sup> These projects include \$3.5 billion for high-speed rail connecting Tampa and Orlando; \$615 million for Sunrail commuter rail service between Deland and Poinciana, \$143 million in infrastructure costs to restore Amtrak service on the Florida East Coast Railway, \$245 million for capacity upgrades to CSX facilities, and \$88.3 million to construct a four-lane overpass over Eller Drive at Port Everglades and a bridge over Dora Canal on the Florida Central Railroad. The remainder of rail needs have been classified as High-, Medium-High, Medium-, Medium-Low, or Low-priority projects.<sup>6</sup>

Chapter 6, Financing Florida's Rail System, discusses existing as well as potential and new funding opportunities to support investment in rail mobility and connectivity for both residents and freight and rail-dependent businesses. Florida has historically provided public support to privately held railroads when deemed to be in the best interest of the State. Funding support has included the acquisition of rail corridors, intercity passenger and commuter rail services, fixed guideway system development, rehabilitating rail facilities, improving rail-highway grade crossings, and increasing access to intermodal facilities. Today, state funds for rail projects are channeled through the FDOT Work Program. Half of these funds are received from traditional sources, including fuel tax receipts, vehicle registration, aviation, and rental car fees that are deposited into the State Transportation Trust Fund (STTF). Federal contributions - primarily from motor fuel taxes deposited in the Federal Highway Trust Fund - typically account for 15 to 20 percent of FDOT's Work Program funds. However, due to the additional \$1.37 billion in one-time Federal stimulus funding made available through ARRA, Federal-aid constitutes 36 percent of the FY 2010 to FY 2014 Work Plan. Additional sources include tolls and turnpike revenue (10 percent); right-of-way, fixed-guideway, and SIB bonds (4 percent); and local and other funds (3 percent). The anticipated five-year total funding for all rail projects in the State for the five-year FDOT Work Program from FY 2010-2014 is \$1.82 billion, or approximately 6 percent of the total \$36.21 billion Work Program.

<sup>&</sup>lt;sup>5</sup> It should be noted that a significant portion of the \$4.9 billion in very-high priority needs are currently scheduled for construction in the Department's Work Program.

<sup>&</sup>lt;sup>6</sup> It should be noted that these priority designations only reflect a perspective on potential state participation in rail projects. Various stakeholders may have higher or lower priorities for these projects that they will consider in determining their participation. Further, some projects ranked as lower priorities may increase in state priority as specific project information is refined or as other funds become available.

The 2010 Florida Rail System Plan Investment Element builds upon the goals, policies, and strategies of the Policy Element and presents an inventory of the State's existing rail system and current and future rail needs. Based on the recommendations of the Florida Rail Stakeholder Advisory Committee and recent developments in Federal rail policy, the Investment Element outlines priority investment areas for the State and provides a framework to guide future investments that will enhance rail service and provide a variety of benefits for Florida residents and businesses.

## 1.0 Introduction

### ■ 1.1 The Purpose and Role of the Florida Rail System Plan: Overview

The Florida Department of Transportation (FDOT) is responsible for developing the Florida Rail System Plan to set forth a vision for the future of passenger and freight rail transportation in Florida. According to Florida Statutes, the Rail System Plan must be updated every five years and include an identification of priorities, programs, and funding levels required to meet statewide needs for both passenger rail and freight rail service.<sup>7</sup>

The 2010 Florida Rail System Plan is an update to the 2006 Florida Freight and Passenger Rail Plan and is a key part of an evolving rail planning process in Florida. The 2010 Plan builds upon previous efforts, including the work of the Florida High-Speed Rail Authority and the 2006 Florida Intercity Passenger Rail Vision Plan. In recognition of the role of passenger and freight rail within Florida's overall transportation system, the Florida Rail System Plan is consistent with the 2025 Florida Transportation Plan. This statewide plan identifies goals, objectives, and strategies to guide transportation investment decisions in Florida over a 20-year period. The Plan also is compliant with Federal requirements, including the Passenger Rail Investment and Improvement Act (PRIIA) of 2008 and the American Recovery and Reinvestment Act (ARRA) of 2009 to ensure state eligibility for certain rail funding programs. Appendix A describes how and where minimum requirements under PRIIA are addressed in the 2010 Florida Rail System Plan. A brief overview on minimum requirements for funding eligibility under ARRA is included in Chapter 6 of this report.

The Florida Rail System Plan serves as important input into the update of the Florida Transportation Plan (the 2060 Florida Transportation Plan) scheduled to begin in 2010. Florida's Rail System Plan is one of several key statewide modal planning efforts conducted by FDOT in accordance with the Florida Transportation Plan, including the Strategic Intermodal System Strategic Plan; the Seaport System Plan and Seaport Mission Plan; the Aviation System Plan; and Transit 2020.

Rail planning also is closely connected to and supports Florida's economic, environmental, and community statewide planning framework, including: Metropolitan Planning

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<sup>&</sup>lt;sup>7</sup> The Florida Rail Plan is required by ss. 341.302(3), Florida Statutes. See Appendix D of this document for the text of this statute.

Organization Long-Range Transportation Plans; Regional Planning Council Strategic Regional Policy Plans; local government comprehensive plans, ongoing regional visioning efforts and community initiatives; transit agency and modal partner development plans; and other private and public rail and freight investment plans.

With the advent of the Strategic Intermodal System and additional funding provided by 2005 Growth Management legislation, the Rail Plan is an effective tool to identify the capital improvements and consensus priorities funding needs to ensure the efficient movement of people and goods by rail. Together these long-range, strategic planning initiatives will help shape and develop a future-oriented, integrated, and multimodal transportation system for the State of Florida.

### ■ 1.2 Elements of the 2010 Florida Rail System Plan

The 2010 Florida Rail System Plan is comprised of two elements; a *Policy Element* and an *Investment Element*.

### The Policy Element of the 2010 Florida Rail System Plan

The *Policy Element* which established a policy framework of goals, objectives, and strategies was led by a Rail Stakeholder Advisory Committee, a body with broad representation of a broad range of stakeholders involved in the planning and implementation of the Plan's goals, including representatives from private sector businesses and railroads, public regulatory agencies, complementary transportation modes, economic and environmental interests, as well as private citizens.<sup>8</sup> The committee worked through the summer and fall of 2008 to review trends, conditions, and issues that will influence the development of Florida's rail system in the future and developed consensus recommendations to the Secretary of Transportation on a policy framework that will guide state investments in Florida's rail system through the year 2030. The *Policy Element* was adopted by the Secretary of Transportation in March 2009.

The *Policy Element* documents the goals, objectives, and strategies which together form a policy framework for the investment of limited state resources in Florida's future rail system. This policy framework is organized around the following five goals:

• **Safety and Security:** FDOT should continue to identify and support rail and rail-highway safety improvements and coordinate with appropriate partners to identify and implement security and emergency response plans.

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<sup>&</sup>lt;sup>8</sup> Organizations represented on the Rail Stakeholder Advisory Committee can be found at the following web site: http://www.dot.state.fl.us/rail/PlanDevel/RSAC/RSACabout.shtm.

- Quality of Life and Environmental Stewardship: Rail and land use planning should be integrated at the state, regional, and local levels. Further, the environmental benefits of rail should be evaluated and transportation and environmental decisions should be integrated into the statewide, regional, and local planning processes.
- **Maintenance and Preservation:** Maintenance and preservation of rail infrastructure and service and modernization of the rail system should remain a high priority.
- Mobility and Economic Competitiveness: Investments in Florida's rail system should support and spur desired economic growth. Florida should invest in rail system capacity improvements to enhance the interstate and intrastate movement of people and goods when public benefit can be demonstrated, and capacity should be preserved for future needs, including the evaluation of all abandoned rail corridors for future rail use.
- Sustainable Investments: Public awareness of the need for state and regional investments in rail is an important component of Florida's goal to become increasingly competitive economically and its ability to keep pace with investments in both passenger and freight rail occurring elsewhere in the nation. Opportunities for funding rail projects should be aggressively pursued in cooperation with leaders at the local, regional, state, and national levels. Specifically:
  - The State should capitalize on opportunities at the local, regional, and state levels to capture Federal dollars for rail projects;
  - New and innovative revenue sources and financial tools to fund rail improvements should be identified;
  - Public-private partnerships should be considered when in the public interest; and
  - Funds should be made available to rapidly respond to opportunities.

### The Investment Element of the 2010 Florida Rail System Plan

This *Investment Element* of the Florida Rail System Plan builds upon the framework of the *Policy Element* by identifying the **needs** of Florida's rail system and establishing **priorities** for the investment of state funds using the goals, objectives, and strategies of the *Policy Element* as guidance. The *Investment Element* presents detailed information on the future needs of Florida's rail system and sets forth strategic priorities to meet those needs.

### ■ 1.3 Florida Rail System Plan Investment Element Outline

This report documents and analyzes the results and findings gathered during the Phase II – Investment Element of the Florida Rail System Plan. The remainder of this report is outlined as follows:

- Chapter 2 Current Freight Rail System and Services in Florida, provides an inventory of the existing operating and recently abandoned freight rail transportation system and services in the State and an analysis of the role of rail transportation within Florida's surface transportation system (traffic conditions, safety trends, etc.).
- Chapter 3 Passenger Rail Services and Initiatives in Florida, describes the State's passenger rail system and includes a performance evaluation of passenger rail services operating in Florida, including possible improvements in those services and a description of the strategies to achieve those improvements.
- Chapter 4 Rail Needs, identifies rail infrastructure issues within the State that reflects
  consultation with all relevant stakeholders. This Chapter includes an inventory of rail
  improvements, including capital investments for track upgrades, new facilities, capacity expansion, safety improvements, and industrial access. The Chapter also reviews
  and identifies major passenger and freight intermodal rail connections and facilities
  needs within Florida, including at seaports.
- **Chapter 5 -** Rail Needs Prioritization, describes the approach for evaluating rail needs projects by goal area and objective using a combination of qualitative and quantitative indicators.
- Chapter 6 Financing Florida's Rail System, discusses existing as well as potential and new funding opportunities to support investing in rail mobility and connectivity for both residents and freight and rail-dependent businesses.

# 2.0 Current Freight Rail System and Services in Florida

### ■ 2.1 Overview

The Florida rail system is comprised of 2,786 miles of mainline track, which are owned by 15 operating line-haul railroads and terminal or switching companies, as well as 81 miles owned by the State of Florida. Florida's rail system includes 2 Class I Railroads (CSX Transportation and Norfolk Southern Corporation), 1 Class II (Florida East Coast Railway), 11 Class III (Alabama and Gulf Coast Railway AN Railway, Bay Line Railroad, First Coast Railroad, Florida West Coast Railroad, Florida Central Railroad, Florida Midland Railroad, Florida Northern Railroad, Georgia and Florida Railway, Seminole Gulf Railway, and South Central Florida Express) and 1 railroad specializing in switching and terminals (Talleyrand Terminal).<sup>9</sup> The largest operator in the State is CSX Transportation, which owns more than 53 percent of the statewide track mileage.

In 2008, Florida's railroads carried nearly 1.6 million carloads – 19 percent less than in 2006 – and approximately 83 million tons of freight, representing a 25 million ton (23 percent) decrease from 2006.<sup>10</sup>

During that year, railroads handled freight equivalent to roughly 5.0 million heavy trucks.<sup>11</sup> Nonetheless, railroads continue to support thousands of jobs throughout the State and assist Florida's industries to remain competitive with international and domestic markets for fertilizer, construction rock, consumer goods, paper products, processed

<sup>&</sup>lt;sup>9</sup> U.S. Class I Railroads are line-haul freight railroads with 2007 operating revenue in excess of \$359.6 million (2006 operating revenues exceeding \$346.7 million). A Class II Railroad, also known as Regional Railroad, is a non-Class I line-haul railroad operating 350 or more miles of road and/or with revenues of at least \$40 million according to the Surface Transportation Board. A Class III Railroad, also known as a Local Railroad, is neither a Class I nor a Regional Railroad and is engaged in line-haul service according to the Surface Transportation Board. Finally, a Switching and Terminal Railroad is a non-Class I railroad engaged in switching and/or terminal services for other railroads. Source: American Association of Railroads, Railroad Service in Florida Fact Sheet, 2008.

 $<sup>^{10}</sup>$ The 2008 Carload Waybill Sample is the latest annual dataset available from the STB.

<sup>&</sup>lt;sup>11</sup>Based on an average payload factor of 17 tons per truck.

foods, and agricultural products. In 2007, Florida's freight railroads paid \$364 million<sup>12</sup> in wages – a 3.4 percent net increase from year 2006 receipts – to more than 5,600 workers.

This chapter describes the 15 Florida freight railroads, first by profiling each of the railroads and then by examining the traffic movements and trends across these railroads.

### ■ 2.2 Railroad Profiles

This section provides a one-page profile of each of the freight railroads operating in the State (Table 2.1). Each profile briefly describes the history, ownership, infrastructure, connections, and primary commodities for each railroad. A map is provided in each profile denoting line ownership (bold lines) and trackage rights (bold dashed lines) in relation to other railroads, urbanized areas, and principal highways.

**Table 2.1** Freight Railroads Operating in Florida 2009

Railroad Name	Abbreviation	Class I	Class II	Class III	Terminal/ Switching
Alabama and Gulf Coast	AGR			•	
AN Railway	AN			•	
Bay Line	BAYL			•	
CSX Transportation	CSXT	•			
First Coast	FCRD			•	
Florida Central	FCEN			•	
Florida East Coast	FEC		•		
Florida Midland	FMID			•	
Florida Northern	FNOR			•	
Florida West Coast Railroad	FWCR			•	
Georgia and Florida Railway	GFRR			•	
Norfolk Southern	NS	•			
Seminole Gulf	SGLR			•	
South Central Florida Express	SCXF			•	
Talleyrand Terminal	TTR				•

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<sup>&</sup>lt;sup>12</sup>The total wage receipts do not include fringe benefits.

Two Class I railroads operate in Florida: CSX Transportation (CSXT) and the Norfolk Southern Railroad (NS). These two railroads serve the Eastern United States and connect Florida to the national rail network. CSXT is the single largest operating railroad in Florida, with an extensive network covering the Florida Panhandle, Northern and Central Florida, and the Greater Miami area in South Florida. NS lacks an extensive Florida network with only 96 miles of track in the State, however they have a haulage agreement with FEC for the 350 mile line between Jacksonville and Miami. Both the Class I carriers, CSXT and NS, interchange with the Florida East Coast Railway (FEC), a Class II regional railroad that provides service to the heavily populated Atlantic Coast Corridor from Jacksonville to Miami.

Class III short line railroads serve much of the rest of the State and provide local service to several important ports and manufacturing clusters. The Alabama and Gulf Coast (AGR) railway, owned by RailAmerica, is a Class III railroad that serves various key population centers in the panhandle and connects with CSXT at Cantonment. Finally, the Talleyrand Terminal Railroad (TTR) is a switching railroad providing service at the Jacksonville Port Authority (JaxPort). Table 2.2 shows the total miles operated and owned by railroad in Florida.

**Table 2.2** Summary of Railroad Miles in Florida 2009

Railroad Name	Miles Operated in Florida	Miles Owned in Florida
Alabama and Gulf Coast	45	45
AN Railway	96	96
Bay Line	70	63
CSX Transportation <sup>a</sup>	1,651	1,508
First Coast <sup>b</sup>	32	22
Florida Central	94	66
Florida East Coast	386	371
Florida Midland	37	27
Florida Northern	114	103
Florida West Coast Railroad	3	3
Georgia and Florida Railway	45	50
Norfolk Southern	149	96
Seminole Gulf	103	115
South Central Florida Express	158	120
South Florida Rail Corridor	81	81
Talleyrand Terminal Railroad	2	10
Totalsc	3,066	2,786

Source: Association of American Railroads (AAR)

Notes: Miles are calculated as route miles and do not necessarily reflect total track mileage.

- <sup>a</sup> Includes 130 miles of trackage rights, 81 miles of which are on the South Florida Rail Corridor owned by FDOT.
- <sup>b</sup> Although the First Coast Railroad (FCRD) leases 32 miles from CSXT, the mileage is included with FCRD and subtracted from CSXT.
- <sup>c</sup> In 2004, the Florida West Coast Railroad applied to the Surface Transportation Board to abandon almost the whole line. FWC was allowed to abandon all but a short piece of track in Newberry (roughly three miles). The railroad consummated its abandonment in May 2010.

### Alabama and Gulf Coast Railway

The Alabama and Gulf Coast Railway (AGR) is a Class III railroad operating between Pensacola, Florida, and Columbus, Mississippi. AGR also serves Mobile, Alabama.

### Ownership and History

AGR is a wholly owned subsidiary of Jacksonville-based RailAmerica Corporation, a holding company with 40 short line railroads in the United States and Canada. AGR, based in Monroeville, Alabama,



Source: RailAmerica Corporation.

officially became part of RailAmerica in 2002. The railroad was formerly operated by States Rail, which acquired it from Burlington Northern Santa Fe (BNSF) in 1997.

### *Infrastructure and Connections*

AGR operates 44.6 miles in Florida, representing approximately 13 percent of 348 total route miles. AGR's Florida route traverses Escambia County from the state border at Atmore, Alabama, to Pensacola. A small portion of the Atmore-Pensacola route passes back into Baldwin County, Alabama, between Barrineau Park and Muscogee, Florida.

In Florida, AGR connects with CSXT at Cantonment. The railroad's other primary interchanges include: Canadian National (CN) Railway at Mobile, Alabama; Burlington Northern Santa Fe (BNSF) Railroad at Amory, Mississippi; Columbus and Greenville Railway (CAGY), Golden Triangle Railroad (GTRA), and Kansas City Southern (KCS) Railroad at Columbus, Mississippi; CSXT at Linden, Hybart, and Mobile, Alabama; TASD at Mobile, Alabama; MNBR at Linden, Alabama; and NS at Boilgee, Kimbrough, Mobile, and Demopolis, Alabama.

### Commodities and Markets

Annually, AGR handles approximately 16,000 carloads of freight in Florida. AGR handles over 61,000 carloads per year over its entire network. AGR primarily serves the paper production industry with service to four paper mills and a large paper consolidator, Oren International, in Pensacola. The principal commodities associated with the paper industry (both outbound and inbound) include woodchips, logs, chlorine, sodium chlorate, hydrogen peroxide, rolled and boxed paper, and kaolin clay. AGR also hauls aggregate rock for use by Escambia County for highway projects. AGR also serves the Pensacola Marine Shipyard Complex.

Seaports Served: Port of Pensacola.

### **AN Railway**

The AN Railway (AN) is a Class III railroad operating between Port St. Joe and Chattahoochee, Florida.

### Ownership and History

AN is operated by Genesee and Wyoming, Inc. (GWI), which owns and operates short line and regional freight railroads in the United States, Bolivia, Canada, Australia, and the Netherlands. GWI operates 62 railroads in nine regions with more than 6,000 miles of owned and leased track and approximately 3,000 additional miles under track access arrangements. GWI provides rail



Source: Rail Management Corporation.

service at 16 ports in North America and Europe and performs contract coal loading and railcar switching for industrial customers. AN is one of three GWI short lines in Florida – the others being the First Coast Railroad and the Bay Line Railroad (BAYL). BAYL also was acquired from Rail Management Corporation in 2005.

AN was originally chartered by the State of Florida in 1903 and was known at that time as the Apalachicola Northern Railroad. The first 30 miles of railroad commenced operation in 1907 after two years of construction through swampland between Apalachicola and Chattahoochee. Through a subsequent acquisition by DuPont in 1933, and the construction of a paper mill at Port St. Joe in 1937, the railroad's operations focused on paper shipment until the mill's closure in 1999. Rail Management Corporation acquired AN from the St. Joe Company in 2002.

### *Infrastructure and Connections*

AN operates approximately 96 total route miles, all in Florida. Port St. Joe is the railroad's base of operations and location of its locomotive shop. GWI's Southern Region primary offices are located in Jacksonville, Florida. AN's only connection is with CSXT at Chattahoochee, Florida.

### Commodities and Markets

AN serves various customers in the Florida Panhandle. AN's primary customers include three chemical companies, a scrap metal shipper, three forest products companies, and a barge-rail transload facility at Port St. Joe.

<u>Seaports Served</u>: Port St Joe.

### Bay Line Railroad, L.L.C.

The Bay Line Railroad, L.L.C. (BAYL) is a Class III railroad operating between Panama City and Dothan, Alabama.

### Ownership and History

BAYL currently is operated by GWI, which purchased all of the assets of the Rail Management Corporation on June 1, 2005. BAYL was purchased by Rail Management Corporation from Stone Container Corporation in January 1994. The railroad was formerly the Atlanta and St. Andrew's Bay Railway.



Source: Rail Management Corporation.

### *Infrastructure and Connections*

BAYL operates approximately 63 miles in Florida, representing 57 percent of the railroad's 110 route miles. Panama City is the primary base of operations for the railroad and the location of its principal offices, yard, and locomotive shop. BAYL also owns approximately 1,000 acres of land adjacent to the railroad. BAYL's other primary yard is at Dothan, Alabama.

BAYL's only Florida connection is with CSXT at Cottondale. The railroad's other primary connection is at Dothan, Alabama, where it interchanges with two Class I railroads (CSXT and NS) and two Class III railroads (CHAT and HS). BAYL also serves Port Panama City.

### Commodities and Markets

Annually, BAYL handles approximately 28,000 carloads of freight. The principal commodities carried by the railroad include paper products, lumber, chemicals, coal, stone, steel, and fertilizer. BAYL's largest customer is Smurfit-Stone Container in Panama City. BAYL's other principal customers include: Port Panama City, Berg Steel Pipe, Cargill Steel, Arizona Chemical, Whitaker Oil, and Conrad Yelvington Distributors.

Seaports Served: Port of Panama City.

### **CSX Transportation**

CSXT is a Class I railroad operating the most extensive rail network in Florida. CSXT provides the peninsula with its principal national rail connections and maintains its national headquarters at Jacksonville.

### Ownership and History

CSXT is a division of CSX Corporation. CSXT acquired most of its current Florida assets through a merger of the Chessie System Railway and Seaboard Coast Line Industries in 1982. CSXT currently operates in 23 states, the District of Columbia, and two Canadian provinces.



Source: CSX Transportation, Wikipedia.org.

### Infrastructure and Connections

CSXT owns 1,508 route miles in Florida and operates over an additional 81 miles owned by the FDOT (South Florida Rail Corridor) and 50 miles owned by the Georgia and Florida Railway (GFRR). CSXT's Florida route miles represent seven percent of the railroad's 21,000 national route miles. CSXT serves most of the State's major urban areas and provides national Class I network connections for many of Florida's short line railroads. CSXT's primary base of operations in Florida is Jacksonville with important yards throughout the State. Both of CSXT's major north-south lines, the "A Line" and the "S Line," terminate in central Florida. The names derive from former Atlantic Coast Line and Seaboard Air Line Railroad routes. CSXT provides vital connections to Florida's short line railroads, and in many cases are the only connection for the short line.

### Commodities and Markets

CSXT's principal Florida commodities include nonmetallic minerals, chemicals and allied products, coal, and miscellaneous mixed shipments (intermodal). Nonmetallic minerals include phosphates from Central Florida's Bone Valley and crushed construction rock. CSXT moves hundreds of thousands of imported and domestic automobiles annually to and from Florida. Its largest automobile facilities are located at Jacksonville (three facilities), Tampa, and Palm Center (Miami). CSXT also operates an expedited service that delivers fresh Tropicana Orange Juice from Bradenton and Fort Pierce (received at Jacksonville from FEC) to distribution centers in New Jersey, Ohio, and California.

<u>Seaports Served</u>: Port of Tampa, Port of Jacksonville.

### First Coast Railroad

The First Coast Railroad (FCRD) is a Class III railroad in Florida and Georgia, owned by Rail Link, a division of the GWI. GWI, based in Greenwich, CT operates over 63 short lines and terminal railroads.

### Ownership and History

FCRD began operations in April 2005, when it leased 22 miles of railroad from CSXT. The north-south line was formerly Seaboard Air Line's main line.



Source: Federal Railroad Administration.

### *Infrastructure and Connections*

FCRD's lines stretch east from Yulee to Fernandina Beach and north from Yulee to Seals, Georgia with a connection at Yulee to CSX to Jacksonville.

### Commodities and Markets

FCRD serves 10 customers. Its rail lines handle approximately 15,000 carloads annually, including pulp and paper, chemicals, and agricultural products. Most of the traffic is generated by three paper product customers. The railroad also serves the Port at Fernandina Beach. Freight cars are interchanged with CSXT.

Seaports Served: Port of Fernandina.

### Florida Central Railroad

The Florida Central Railroad (FCEN) is a Class III railroad serving industries in Lake and Orange Counties northwest of Orlando.

### Ownership and History

FCEN was formed in 1986 from several CSXT branch lines. It is one of three Florida short line railroads owned by Pinsly Railroad Company, a holding group with five short lines in Florida, Massachusetts, and Arkansas. The other Pinsly short lines in Florida are FMID and FNOR. All are based in Plymouth, Florida.

### *Infrastructure and Connections*

FCEN operates 66 miles of track in Florida, including 41 miles of main track between Orlando and Umatilla; 11 miles of branch line from Tavares to Sorrento; and 14 miles of branch line from Forest City to Winter

40 **FCEN** ODe Land Orange City **Jmatilla** Benson Jct Eustis Tavares Sorrento Sanford Mt Dora Lake Jen Zellwood Chase Plymouth Forest City ronto Ocoee Winter Garden Orlando TAFT

Source: Florida Central Railroad, Pinsly Railroad Company.

Garden. FCEN's principal Class I connection is at CSXT's Taft Yard. FCEN has trackage rights over 10 miles of CSXT through Orlando to access that connection at Taft Yard. In December 2004, the Surface Transportation Board (STB) granted permission for FCEN to abandon the Forest City Spur between Toronto and Forest City.

### Commodities and Markets

Annually, FCEN serves more than 65 customers in Orlando, Toronto, Plymouth, Zellwood, Tavares, Eustis, Umatilla, Mount Dora, Ocoee, and Winter Garden. The principal commodities carried by FCEN (and the other two Pinsly short lines in Florida) include food-related products, chemicals, lumber, stone, scrap metal, fly ash, fertilizer, citrus juices, pumice, and limestone. In 2003, Pinsly partnered with CSXT, with funding from FDOT, to construct a new rail spur to serve the Florida Auto Auction in Winter Garden. FCEN's rail service to the auction facility makes possible rail shipment of automobiles via CSXT's Taft Yard in Orlando to CSXT's national network.

### Florida East Coast Railway

The FEC is a Class II regional railroad operating between Jacksonville and Miami. FEC maintains the second largest railroad network in the State after CSXT and provides the only north-south mainline along the Atlantic Coast between West Palm Beach and Jacksonville.

### Ownership and History

FEC is headquartered at Jacksonville and is owned by RailAmerica. Founded in 1895 by Henry Flagler to serve rapid residential, agricultural, and tourism growth in South Florida, FEC's history is inextricably linked to the development of West Palm Beach, Miami, and Key West – the railroad's terminus from 1912 to 1935. FEC was acquired by Fortress Investment Group (parent corporation of RailAmerica) in 2008.

### Infrastructure and Connections

FEC operates 371 route miles, including 351 miles of mainline track between Jacksonville and Miami; 276 miles of branch, switching, and other secondary track; and 159 miles of yard track. FEC provides exclusive rail service to the Ports of Palm Beach,



Source: Florida East Coast Railway.

Everglades (Fort Lauderdale), Miami, and the Kennedy Space Center. The FEC's principal carload transfer yards are located at Fort Pierce, Cocoa, Pompano, Fort Lauderdale, and Miami, and its intermodal facilities are located at Jacksonville, Fort Lauderdale, Ft. Pierce, and Miami. These intermodal terminals had volumes exceeding 300,000 20-foot equivalent units in 2007. FEC also provides a drayage leg in its portfolio of services to intermodal customers. FEC's chief connection with CSXT and NS occurs at Bowden Yard in Jacksonville. FEC also connects with CSXT at West Palm Beach and with SCXF at Fort Pierce.

### Commodities and Markets

Annually, FEC moves approximately 30 million tons of freight, including 100,000 carloads of aggregate from its rock distribution centers in Miami, Fort Pierce, Cocoa, Daytona, St. Augustine, and Jacksonville, as well as 170,000 new automobiles from its Miami automobile facility. Other important commodities moved by the FEC include: lumber, cement, chemicals, paper products, food products (including orange juice and pulp), primary metal products, machinery, bulk freight, and farm products.

Seaports Served: Port of Palm Beach, Port Everglades, and Port of Miami.

### Florida Midland Railroad

The Florida Midland Railroad (FMID) is a Class III railroad serving customers in Polk County in Central Florida.

### Ownership and History

FMID was formed in 1987 from former CSXT branch lines. It is one of three Florida short line railroads owned by Pinsly Railroad Company, a holding company with five short lines in Florida, Massachusetts, and Arkansas. The other Pinsly short lines in Florida are FCEN and FNOR.

# Auburndale Auburndale Floritan Lake Wales Ft Meade Avon Park Sebring

### *Infrastructure and Connections*

FMID operates over 28 route miles consisting of two disconnected branch lines. The first line runs between Gordonville and Winter

Haven and the second runs between Frostproof and Lake Wales, both in Polk County. FMID's principal Class I

Source: Florida Midland Railroad, Pinsly Railroad Company.

connections, both with CSXT, are at Winter Haven, and West Lake Wales. FMID has trackage rights over approximately 10 miles of CSXT that connect the two branch lines. FMID is based in Plymouth, Florida.

### Commodities and Markets

FMID serves more than 25 customers in Winter Haven, Gordonville, Lake Wales, and Frostproof. The principal commodities carried by FMID (and the other two Pinsly short lines in Florida) include food-related products, chemicals, lumber, stone, building products, fertilizer, citrus juices, pumice, and limestone.

### Florida Northern Railroad

The Florida Northern Railroad (FNOR) is a Class III railroad serving customers in Alachua, Citrus, Levy, and Marion Counties of North Central Florida.

### Ownership and History

FNOR was formed in 1988 from CSXT's Ocala Subdivision. It is one of three Florida short line railroads owned by Pinsly Railroad Company, a holding group with five short lines in Florida, Massachusetts, and Arkansas. The other Pinsly short lines in Florida are FMID and FCEN.

### Infrastructure and Connections

Until 2005, FNOR operated 24.3 route miles between Lowell and Candler in Marion County. The railroad's only interchange was with CSXT at Ocala. In May of 2005, Pinsly acquired 76 miles of track from CSX

Kite High Springs **Waldo** Alachua Buda Hydro Haile Gainesville Newberr Edgar Hawthorne **FNOR** Williston Anthony Romeo imbrough **FNOR** Citronelle Red Level Jct Wildwood

Source: Florida Northern Railroad, Pinsly Railroad Company.

between High Springs and Red Level, Florida. This acquisition included an interchange at Newberry, Florida. From Ocala, FNOR also operates a 2.7-mile industrial track. FNOR is based in Plymouth, Florida.

### Commodities and Markets

On the Ocala Branch, FNOR serves more than 20 customers in Ocala, Kendrick, Lowell, Maricamp, Kimbrough, and Candler. The principal commodities carried by FNOR on this corridor include food-related products, chemicals, lumber, stone, scrap metal, fertilizer, and limestone.

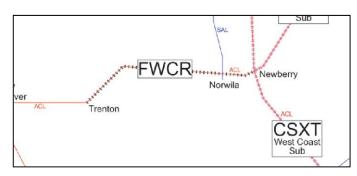
The railroad also operates the Newberry Branch which connects to CSX in Newberry running north to High Springs, where it serves plastic manufacturers, and south to the Crystal River Energy Complex in Red Level, just north of Crystal River. FNOR hauls coal for the Crystal River Power Plant, which serves as one of Pinsly's largest source of traffic in the State of Florida.

### Florida West Coast Railroad

The Florida West Coast Railroad (FWCR) was a Class III railroad running west from a CSX line between Newberry and Trenton.

### Ownership and History

FWCR was a 13-mile railroad owned by CSF Acquisition, Inc. which acquired it from CSX on December 13, 1987 as its first acquisition. The railroad used to



Source: Florida West Coast Railroad (www.wikipedia.com).

extend west to Cross City, with a branch south to Chiefland. All the lines were originally owned by the Atlantic Coast Line Railroad. On February 25, 2004, the company applied to the Surface Transportation Board (STB) to abandon most of its line. The case was decided in March 2004. FWCR was allowed to abandon all but a short piece of track in Newberry. On May 2010, FWCR consummated its abandonment of 10.3 miles of the line extending from milepost 734.0 in Trenton, Florida to milepost 723.7 in Newberry, Florida. The only remaining portion of the line is a small 2.7-mile stretch mostly within Newberry, from milepost 720.0 to 723.7.

In 2010, Newberry county filed a Notice of Interim Trail Use (NITU) for this track with the STB. If this proceeds, it would give the County ownership of the track. Negotiations in this case currently are underway.

### Georgia and Florida Railway

The Georgia and Florida Railway (GFRR) is a Class III railroad operating between Adel, Georgia, and Perry and Foley, Florida.

### Ownership and History

GFRR is one of several short line railroads owned by OmniTRAX, based in Denver, Colorado. GFRR was formerly owned by North American RailNet and operated as the Georgia and Florida RailNet. OmniTRAX purchased GFRR from North American RailNet on April 1, 2005. The railroad began operations in 1995 after acquiring the lines from NS in Georgia and Florida.



Source: Alberta Rail Net, Georgia Department of Transportation, Georgia Railroad Association, Georgia's Railroad History and Heritage (www.railga.com).

### *Infrastructure and Connections*

GFRR operates 50 miles in Florida, representing approximately 20 percent of 297 total system miles. Albany, Georgia is the primary base of operations for the railroad. GFRR's only Florida connection is with CSXT at Greenville. The railroad also connects Norfolk Southern with two other short line railroads in Georgia (Georgia Southwestern Railroad and Valdosta Railway). CSXT has trackage rights over the railroad.

### Commodities and Markets

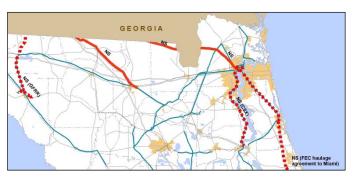
Annually, GFRR handles approximately 31,000 carloads of freight in Georgia and Florida. The principal commodities carried by the railroad include wood pulp, beer, agricultural products, and limestone and aggregates. Customers of the railroad include Proctor and Gamble (P&G), Miller Brewing, and Buckeye Technologies.

### Norfolk Southern

NS is a Class I railroad providing service to the Eastern United States through its connections in Northeast Florida.

### Ownership and History

NS is a publicly traded corporation based in Norfolk, Virginia. NS provides service to 22 eastern states, the District of Columbia, and the province of Ontario in Canada. The rail-



Source: Norfolk Southern Corporation.

road was formed in 1982 through the union of the Norfolk and Western Railway and the Southern Railway Company. Through this merger, the new corporation acquired Southern Railway's Florida assets.

### Infrastructure and Connections

NS operates over 149 route miles in Florida, representing less than one percent of the railroads' 21,500 total U.S. and Canadian route miles. NS owns two main lines in Florida, terminating at Jacksonville and Navair (near Lake City), respectively. The two lines join at Valdosta, Georgia and interchange with the NS' Interstate network at Macon, Georgia. Trackage rights agreements allow NS to operate over the approximately 53 miles of CSXT's "A Line" between Jacksonville and Palatka (where NS serves Georgia Pacific paper mill) and NS maintains a haulage agreement with FEC from Jacksonville to Miami. NS connects with the following railroads in Florida: CSXT near Lake City and at Jacksonville; FEC at Jacksonville; SCXF at Fort Pierce; TTR at Jacksonville; and GFRR near Adel, Georgia.

### Commodities and Markets

Nationally, NS's top commodity by tonnage is coal. In Florida, NS moves bulk commodities, food products, lumber, paper products, steel, and other products. Most of NS's major customers are located in the Jacksonville area and along the Atlantic Coast to Miami. NS also serves major customers in the vicinity of Lake City. NS operates three automobile distribution centers located at Jacksonville, Titusville, and Miami, and an intermodal container/trailer transload facility in Jacksonville and Titusville that receives port traffic via the Tallyrand Terminal Railroad (TTR).

Seaports Served: Port of Jacksonville.

### Seminole Gulf Railway

The Seminole Gulf Railway (SGLR) is a Class III railroad with two lines in Southwestern Florida: The Fort Myers Line between Arcadia and Vanderbilt Beach and the Sarasota Line between Oneco and Venice.

### Ownership and History

SGLR was formed in 1987 on two former CSXT branch lines. Before CSXT ownership, the Sarasota Line (Oneco-Venice) was operated by the Seaboard Air Line Railroad and the Fort Myers Line (Arcadia to North Naples, now terminating at Vanderbilt Beach) was operated by the Atlantic Coast Line Railroad. The first section of the railroad was constructed by the Florida Southern Railroad in 1886 between Arcadia



Source: Seminole Gulf Railway, Wikipedia.org.

and Punta Gorda. SGLR's headquarters are at Fort Myers and has a sister company, the Bay Colony Railroad based in Massachusetts.

### Infrastructure and Connections

SGLR operates on 115 route miles in Southwest Florida. The Fort Myers Line serves customers in De Soto, Charlotte, and Lee Counties and interchanges with CSXT at Arcadia. The Sarasota Line runs between Oneco and Venice and interchanges with CSXT at Oneco. The Sarasota Line serves customers in Manatee and Sarasota Counties. SGLR's primary yard and shop is located at Colonial Station in Fort Myers.

### Commodities and Markets

The railroad's primary commodities include building materials, newsprint, beer, LP gas, pulpwood, logs, and stone. In addition to its freight services, SGLR has operated excursion trains from Fort Myers since 1991.

### **South Central Florida Express**

SCXF is a Class III railroad serving the agricultural industries of South Central Florida. It is the largest private agricultural railroad in the United States.

### Ownership and History

SCXF is a "company railroad" owned and operated by the U.S. Sugar Corporation since 1994. Between 1990 and 1994, the railroad was operated by the Brandywine Valley Railroad, a subsidiary of Lukens Steel. The railroad currently owns a 98-mile section between



Source: www.railwayage.com/aug99/shortline\_awards.html, U.S. Sugar Corporation.

Sebring and Pahokee. Much of that section was owned previously by CSXT (before Brandywine) and was originally part of the Atlantic Coast Line Railroad. The railroad also owns a branch line running south of Lake Harbor and then turning east into the cane fields south of Belle Glade. The railroad's headquarters are at Clewiston, Florida.

### Infrastructure and Connections

SCXF operates on 171 route miles on both sides of Lake Okeechobee in South Florida. The line on the west side of Lake Okeechobee interchanges with CSXT at Sebring and, through a lease agreement, operates over 51 miles of FEC to the Atlantic Coast where it connects to the FEC main line at Fort Pierce. SCXF has haulage rights on the FEC to its Jacksonville interchanges with CSXT and NS. The railroad owns 14 locomotives and approximately 1,000 special purpose cane cars.

### Commodities and Markets

As its ownership implies, SCXF's principal purpose is to transport sugarcane. Since its purchase by its largest customer (U.S. Sugar) in 1994, traffic on the railroad has increased from 41,000 to more than 73,000 annual carloads between 1994 and 2003.<sup>13</sup> The railroad serves 26 customers and hauls cut cane, bulk raw sugar, packages and bulk-refined sugar, fertilizer, molasses, pulpwood logs, rolled paper, and farm equipment.

<sup>&</sup>lt;sup>13</sup>This is the latest data available on U.S. Sugar's web site http://www.ussugar.com/sugar/sugar\_railroad.html.

## Talleyrand Terminal Railroad

TTR is a short line railroad run by Rail Link, Inc., a subsidiary of GWI. It serves the Jacksonville Port Authority and tenants with over 10 miles of track. It has only one main line, running west from the port to an interchange with CSXT and NS northeast of downtown Jacksonville, Florida. Operations began on July 28, 1996. Rail Link service expanded to include operation of the rubber tire gantry cranes, transferring more than 23,000 oceangoing containers between truck and rail.

Seaports Served: Port of Jacksonville.

# ■ 2.3 Traffic Description<sup>14</sup>

#### **Historic Trends**

In 2008, Florida's freight railroads moved more than 83 million tons of freight. This figure represents a significant decrease from the 119 million tons transported in 2004, a fact that is in large part attributed to the economic recession affecting the nation towards the end of the decade. The total value of this cargo was approximately \$2.15 billion. As shown in Figure 2.1, the 2008 freight rail tonnage by direction includes nearly 36.0 million inbound tons, 12.8 million outbound tons, 33.6 million local tons, and 1.4 million through tons. In percentage terms, inbound traffic accounted for a 43.0 percent share (up from 38.9 percent in 2004) of the total rail tonnage, outbound traffic comprised 15.2 percent (up from 11.8 percent in 2004), local traffic contributed 40.1 percent (down from 47.7 percent in 2004), and through traffic accounted for 1.6 percent (down slightly from 1.7 percent in 2004).

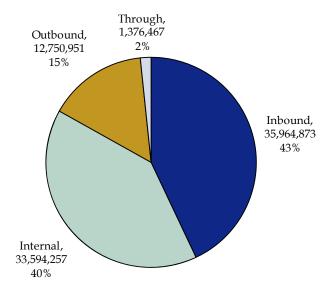
Florida's 2008 rail freight traffic was carried by approximately 835,000 carloads and 761,000 intermodal units (trailers and containers). Figure 2.2 illustrates the share of carload versus intermodal freight rail movements by direction, including outbound, inbound, internal, and through movements.

<sup>&</sup>lt;sup>14</sup>Summaries by weight, unit type, and direction that are found in this section are based upon the 2008 Surface Transportation Board Carload Waybill Sample. This is the most recent data available, published in March 2010.

<sup>&</sup>lt;sup>15</sup>The terminology used in this report refers to "inbound" as Interstate traffic terminating in Florida; "outbound" as Interstate traffic originating in Florida; "local" as Florida Intrastate traffic; and "through" as traffic neither originating nor terminating in Florida, but passing through the State. "Origins" include both *outbound and local* flows, while "terminations" include both *inbound and local* flows.

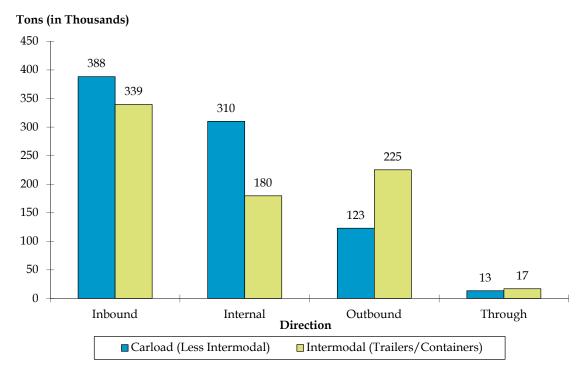
<sup>&</sup>lt;sup>16</sup>The carload total figures exclude cars that haul intermodal units.

Figure 2.1 Florida Freight Rail Tonnage by Direction 2008



Source: 2008 Surface Transportation Board Carload Waybill Sample.

Figure 2.2 Florida Rail Carload and Intermodal Movements by Direction 2008



Source: 2008 Surface Transportation Board Carload Waybill Sample.

In 2008, the greatest share of carload movements were inbound movements, accounting for 47 percent of all carloads. Internal carload moves comprised 37 percent of traffic, while outbound and through moves accounted for 15 percent and less than 2 percent of total carload movements, respectively.

Inbound movements also were the greatest share of intermodal movements in 2008, representing about 45 percent of the total. Outbound movements comprised another 30 percent; internal movements comprised 24 percent; and through movements comprised the remaining 2 percent.

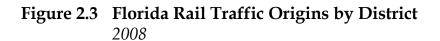
## Rail Traffic by Florida District

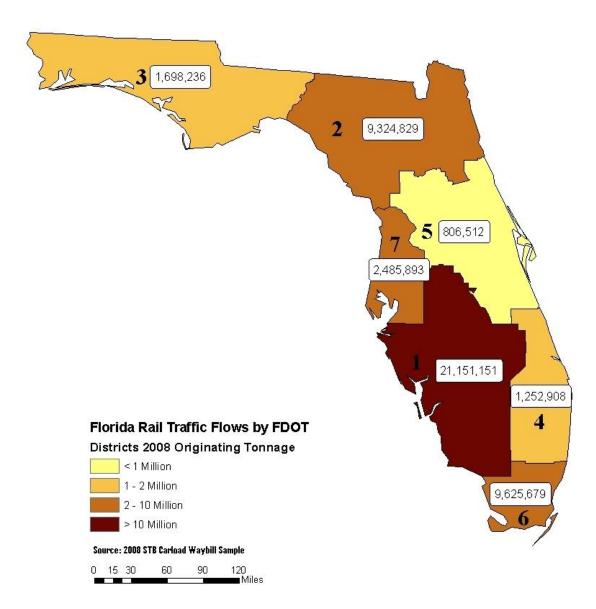
## **Traffic Originations**

Figure 2.3 depicts the 2008 geographic distribution of originating tonnage by each Florida District, while Figure 2.4 presents historical trends for these moves for the previous 18 years (between 1991 and 2008). Consistent with each year of reported data, Southwest Florida (District 1), which along with Lakeland includes Sarasota and Fort Myers, had the highest originating tonnage of all districts in 2008, with more than 21 million tons. Much of District 1's originating tonnage was attributable to the phosphate mining industry in Central Florida's Bone Valley. Meanwhile, the second-highest originating district was South Florida (District 6), which carried 9.6 million tons. District 6 rail traffic includes large quantities of rock used in construction. The third-ranked originating district was Northeast Florida (District 2), which carried 9.3 million tons, including traffic originating at JaxPort. The remaining originating districts were West Central Florida (District 7) with 2.5 million tons; Northwest Florida (District 3) with 1.7 million tons; Southeast Florida (District 4) with 1.3 million tons; and, finally, Central Florida (District 5) with 0.8 million tons.

The economic recession has played a role in the level of traffic originating and terminating in the State which is evidenced in data from the most recent period (2006-2008). Over these two years, the sum of originating traffic for all districts decreased by 25 percent, from 62 to 46 million tons. The impact, was felt primarily in Districts 6 and 1, which decreased by 9.8 and 4.4 million tons, respectively; these figures represent a drop of 50 percent for District 6 and 17 percent for District 1<sup>17</sup>. Three other districts (2, 5, and 7) also experienced decreases in traffic, albeit in much smaller scales, with a combined drop of 1.73 million tons, mostly accumulated in District 2. On the other hand, Districts 3 and 4 went through minor upswings, increasing by 130 and 20 thousand tons respectively, representing a 9 percent and 2 percent increase However, it should be noted that a significant portion of the growth in traffic for District 3 is due to post-Hurricane Katrina goods being re-routed to the Port of Panama City.

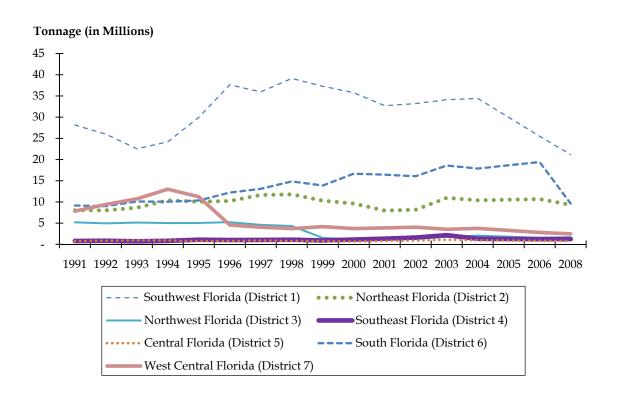
<sup>&</sup>lt;sup>17</sup> The drop in District 1 is primarily casued by reduction of rock trains in response to the slowdown in construction.





The historical trends in Figure 2.4 show that originating traffic in 2008 was lower than at any point over the previous 18 years. Traffic had been dropping slowly since 2003 until 2007/2008 at which point the decrease was more pronounced. It should be noted, however, that early indications from 2010 suggest that traffic is picking back up throughout the State, but it will take a couple of years to fully see and understand the impact that the recession has played in overall traffic.

**Figure 2.4 Florida Rail Traffic Origins by District** 1991-2008



Source: 1991-2008 Surface Transportation Board Carload Waybill Sample.

#### **Traffic Terminations**

Figure 2.5 depicts the 2008 geographic distribution of terminating tonnage by each Florida District. Northeast Florida (District 2) was the highest receiving District, with 19 million terminating tons in 2008. This is largely attributable to Jacksonville's extensive rail yards where many national rail trips terminate, and where cargo is transferred to trucks for local consumption, drayed to Florida peninsula destinations, or exported through JaxPort. West Central Florida (District 7), which includes Tampa and St. Petersburg, had the second highest terminating tonnage, with nearly 15 million tons in 2008, mostly attributable to the phosphate industry.

15 30

60

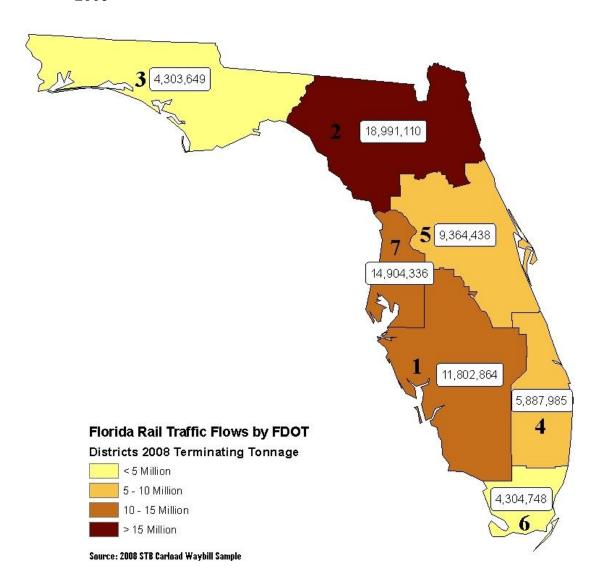
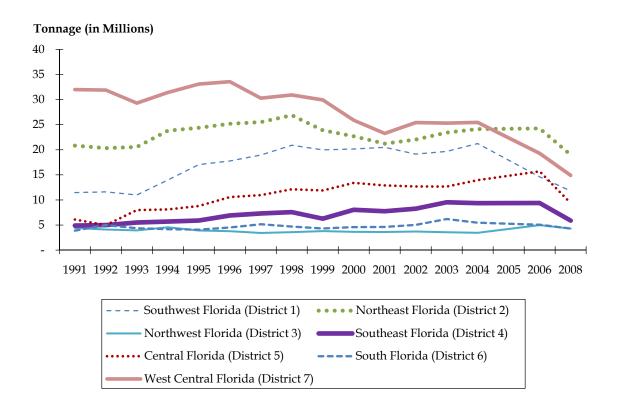


Figure 2.5 Florida Rail Traffic Terminations by District 2008

As was the case with originating tonnage, terminating tonnage statewide decreased by approximately 25 percent or 23.8 million tons over the most recent period (2006-2008). The most pronounced decreases were in District 5 (6.3 million tons representing a 40 percent decrease<sup>18</sup>), District 2 (5.3 million, -22 percent), and District 7 (4.4 million, -23 percent). All districts reported decreases in terminating traffic over this two-year period.

<sup>&</sup>lt;sup>18</sup> This drop is primarily casued by reduction of rock trains in response to the slowdown in construction.

Figure 2.6 Florida Rail Terminations by District 1991-2008



Source: 1991-2008 Surface Transportation Board Carload Waybill Sample.

## Internal Traffic

Internal traffic (entirely within Florida) accounted for over 33 million tons of freight being transported by 180 thousand intermodal units and 310 thousand bulk carloads. CSX is the primary driver of this traffic with over 21 million tons, followed by FEC with 10.5 million tons, and NS with 1.8 million. CSX moves mostly bulk traffic between Central Florida and the Tampa Bay area, while FEC's intermodal operations take place between Miami-Dade/Broward counties and Jacksonville (this accounts for over 80% of intermodal traffic).

# Rail Traffic by Commodity

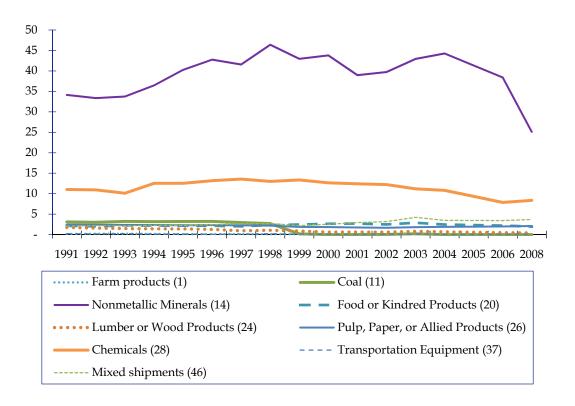
# Traffic Originations

Figures 2.7 and 2.8 illustrate historical trends for Florida rail originations and terminations by commodity from 1991 to 2008. In the latest reporting period (2006-2008), four of the nine most important Florida industry groups presented decreases in originating

(outbound and local) tonnage. Measured by absolute tonnage, the largest decreases correspond to nonmetallic minerals (decrease of 13.3 million tons) which represents roughly 85 percent of the overall statewide decrease in originating traffic. Food products (-270,000 tons), lumber/wood products (-60,000 tons), and farm products (-5,000 tons) also saw decreases in outgoing moves. On the other hand, chemicals, mixed shipments, pulp/paper products, and transportation equipment increased slightly by a combined 880,000 tons, representing a 6.5 percent increase. The amount of coal originating from Florida remained at zero tons.

Nonmetallic minerals are the highest tonnage commodity originating from Florida, but have experienced multiple periods of growth and decline since 1996, and as indicated above, have dropped off significantly over the last couple of years (down to its lowest volume in more than 18 years). The next highest tonnage group has historically been chemicals, which have reported a gradual decrease since 1997 with a small uptick in 2008. Coal reported a stable trend until 1998, with significant decreases following that period. The tonnage of remaining commodities were relatively stable throughout the 1996 to 2008 period.

Figure 2.7 Florida Rail Originations by Commodity 1991-2008

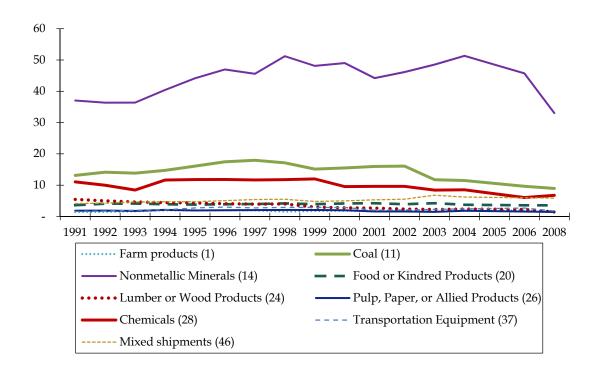


Source: 1991-2008 Surface Transportation Board Carload Waybill Sample.

Terminating (outbound and local) rail traffic in Florida also is declining. In the latest reporting period (2006-2008), eight of the nine most important Florida industry groups presented decreases in terminating tonnage. As was the case with originating shipments, nonmetallic minerals accounted for most of the decline, with 12.7 million fewer tons representing just over half of all decline in terminating traffic. Other commodities experiencing large downward trends were transportation equipment (940,000 tons), lumber/wood products (820,000 tons), coal (690,000 tons), and farm products (620,000 tons). Only chemicals experienced an increase in traffic, growing from 6.0 to 6.8 million tons over the two-year span, representing a 11 percent growth.

From a historical perspective (Figure 2.8), the highest tonnage commodity group is non-metallic minerals, which includes phosphates and construction aggregate. The nonmetallic minerals tonnage has dropped steadily since its last peak in 2004 and currently is at its lowest level in over 18 years, this is due in large part to a reduction in phosphate-related traffic in the State. The next highest tonnage group corresponds to coal shipments, which has declined since 2002 after a stable trend. Chemical products' tonnage, the third in the ranking, had declined since steadily since 1999 but experienced an uptick in 2008. Mixed shipments remained steady throughout the 1990s, increased between 1999 and 2003, and then stabilized again until 2008.

Figure 2.8 Florida Rail Terminations by Commodity 1991-2008



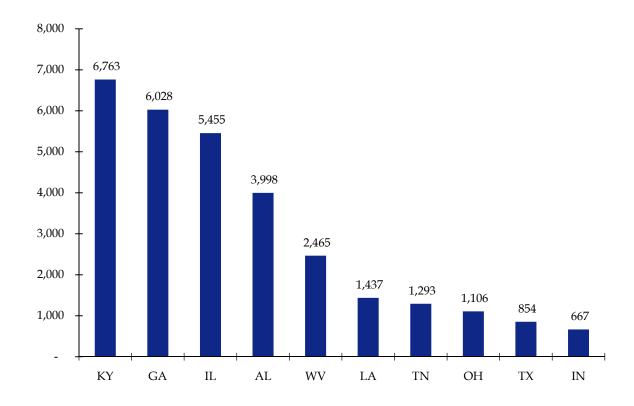
Source: 1991-2008 Surface Transportation Board Carload Waybill Sample.

## Rail Traffic by Trading Partner

#### **Inbound Traffic**

Figure 2.9 shows the top 10 states shipping freight to Florida in 2008 ranked by tonnage. These states accounted for 84 percent of the total inbound tonnage that Florida received in that year. Kentucky ranked first with 6.8 million tons destined for Florida, with coal (6.1 million tons), transportation equipment/finished motor vehicles (398,000 tons), and petroleum/coal products (41,000 tons) as the top three commodities transported. Georgia ranked second with a total of 6.0 million tons shipped to Florida. The top three commodities from Georgia were nonmetallic minerals (3.9 million tons), pulp/paper products (477,000 tons), and lumber or wood products (405,000 tons). Next was Illinois with 5.5 million tons, comprised largely of nonmetallic minerals (1.4 million tons), food products (920,000 tons), and chemicals (720,000 tons). The remaining seven states – Alabama, West Virginia, Louisiana, Tennessee, Ohio, Texas, and Indiana – shipped between 667,000 and 4.0 million tons to Florida.

Figure 2.9 Inbound Florida Rail Tonnage by Origin State 2008, Tons in Thousands

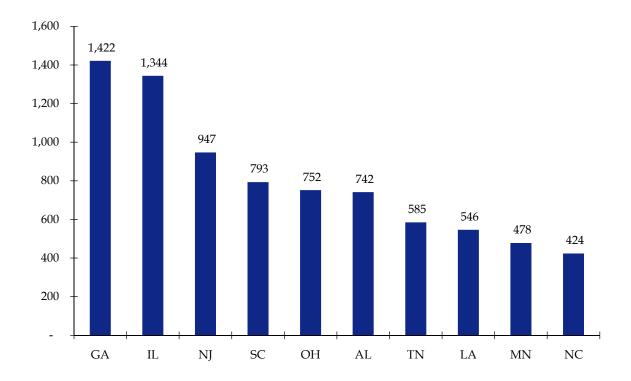


Source: 2008 Surface Transportation Board Carload Waybill Sample.

## **Outbound Traffic**

Figure 2.10 shows the top 10 states receiving freight from Florida in 2008 ranked by tonnage. As the top trading partner, Georgia received 1.4 million tons of good from Florida, with the top three moves involving pulp/paper products (388,000 tons), shipping containers (267,000 tons), and chemical products (242,000 tons). Illinois was the second highest recipient of Florida goods, with 1.3 million tons of freight consisting primarily of chemical products (618,000 tons), pulp/paper products (214,000 tons), and shipping containers (137,000 tons). The remaining eight states – New Jersey, South Carolina, Ohio, Alabama, Tennessee, Louisiana, Minnesota, and North Carolina – each received between 424,000 and 947,000 tons from Florida.

Figure 2.10 Outbound Florida Rail Tonnage by Termination State 2008, Tons in Thousands



Source: 2008 Surface Transportation Board Carload Waybill Sample.

### **Current and Near Future Trends**

As the current economy continues to hinder global trade activity, most transportation modes – including rail – will face challenges ranging from reduced demand for freight and import/export activities and rising costs. Nonetheless, the most recent statistics are showing that traffic is beginning to pick up from the bottom levels reached over the past

couple of years, but are still far from the peak reached between 2004-2007. The United States Department of Transportation's (U.S. DOT) Freight Transportation Services Index (TSI) for April 2010 increased to 98.1, representing a 4.8 percent increase year-over-year, but still over 11 percent lower than at the same time in 2006.

The Association of American Railroads (AAR) reported in June that monthly rail carloads for May 2010 were up 15.8 percent compared with last year, but still down 11.8 percent compared with May 2008. According to AAR's June Rail Time Indicators Report, intermodal traffic was up 18.9 percent last month compared with May 2009, and down 3.8 percent compared with May 2008. Seasonally adjusted data, which helps to measure month-to-month progress, showed carloads in May were down 1.1 percent from April 2010, while intermodal traffic was up 2.8 percent from April 2010.<sup>19</sup>

The national economic downturn has certainly impacted economic life and freight rail activity in Florida. Railroads operating in the State also have experienced a noticeable drop in volumes over the past few years. In 2008, Florida's railroads carried nearly 1.6 million carloads – 19 percent less carloads handled than in 2006 – and approximately 83 million tons of freight, representing a 25 million ton (23 percent) drop from 2006. Estimates for freight rail activities in Florida for years 2009 and 2010 currently are unavailable but are expected to illustrate further decline in freight demand largely due to the global and national recession.

However, the impacts of the global and national recessions on freight railroads are anticipated to be short-lived according to AAR, with demand for freight rail business in the United States growing by over 88 percent through 2035.

# ■ 2.4 Safety Record

The Federal Railroad Administration (FRA) collects data on three major types of safety incidents: train incidents, highway-rail grade crossing incidents, and other incidents.<sup>20</sup> Between 2004 and 2009, these three types of safety incidents accounted for 1,945 total railroad safety incidents in Florida, resulting in 263 fatalities and 1,233 nonfatal conditions. The following discussion and tables summarize the safety record of Florida's railroads (freight and passenger) for this period. The section is broken down into five subsections covering train incidents, highway-rail incidents, trespassers, other incidents, and Operation Lifesaver (an international nonprofit, continuing public education program

<sup>&</sup>lt;sup>19</sup>http://www.aar.org/NewsAndEvents/PressReleases/2010/06/060710-RailTimeIndicators.aspx.

<sup>&</sup>lt;sup>20</sup>Incident is a generic term referring to an entire list of reportable events including: fatalities, injuries, and illnesses; collisions, derailments, and similar incidents involving the operation of on-track equipment causing reportable damage above an established threshold; and impacts between railroad on-track equipment and highway users at crossings.

first established in 1972 to end collisions, deaths, and injuries at places where roadways cross train tracks, and along railroad rights-of-way).

**Table 2.3 Florida Railroad Safety Incidents** 2004-2009

		Incide	Casualties			
Year	Train Incidents	Highway-Rail Incidents	Other Incidents	Total	Fatalities	Nonfatal Injuries
2004	56	108	225	389	40	244
2005	62	103	227	392	51	227
2006	46	118	188	352	38	197
2007	46	90	205	341	54	243
2008	22	75	158	255	51	164
2009	14	50	152	216	29	158
Total	246	544	1,155	1,945	263	1,233

Source: Federal Railroad Administration Office of Safety Analysis.

#### **Discussion on Train Incidents**

Between 2004 and 2009, the FRA reported 246 train incidents in Florida, as shown in Table 2.3. The FRA defines a "train incident" as a safety-related event involving on-track rail equipment (both standing and moving), causing monetary damage to the rail equipment and track above \$6,700 in calendar years 2002 through 2005, above \$7,700 in calendar year 2006, or above \$8,200 in calendar year 2007-2009.<sup>21</sup> Train incidents typically include derailments and major rail collisions, but do not account for all highway-rail grade crossing incidents. However, some highway-rail crossing incidents may be classified under the "train incident" category when they inflict damages to train equipment and track in excess of the annual reporting threshold. Table 2.4 summarizes train incidents by major cause, type of incident, by cost of damages to rail equipment and track, and by the resulting casualties. In addition, Table 2.4 reports 36 highway-rail incidents exceeding the damage cost threshold for train incidents. In total, 282 train incidents (246 typical train incidents in addition to 36 highway-rail crossing incidents exceeding the cost threshold) were reported for the period 2004 to 2009.

<sup>&</sup>lt;sup>21</sup>Federal Railroad Administration Office of Safety Analysis.

**Table 2.4** Florida Train Incidents by Cause 2004-2009a

	Type of Incident						Damage to Rail Equipment and Track		Casualties	
Major Cause	Collision	Derailment	Highway- Rail Crossing	Other	Total	Percent Share	2008 Dollars (Thousands)	Percent of Total Damage	Killed	Nonfatal
Equipment	1	15	0	1	17	6%	\$1,066	5%	-	2
Highway-Rail	0	0	36	0	36	13%	\$3,582	16%	17	69
Human Error	23	52	0	20	95	34%	\$4,255	19%	2	11
Miscellaneous	2	21	0	12	35	12%	\$1,927	8%	-	1
Track	1	98	0	0	99	35%	\$11,872	52%	-	1
Total	27	186	36	33	282	100%	\$22,702	100%	19	84

Source: Federal Railroad Administration Office of Safety Analysis.

The leading cause of train incidents between 2004 and 2009 was defective track, accounting for 99 incidents (35 percent). The second leading factor was human error, accounting for 95 incidents (34 percent) and two fatalities. Other less prominent causation factors were highway-rail crossings, miscellaneous causes,<sup>22</sup> and equipment (mobile component); each causation factor accounted for 13 percent or less of total train incidents.

In terms of casualties, highway-rail incidents were associated with the largest number of fatalities and injuries during the 2004 to 2009 period, accounting for 17 fatalities and 69 injuries. The next significant cause of fatalities and injuries was human error, with 2 fatalities and 11 injuries. Equipment, track damage, and miscellaneous causes were only associated with 4 injuries over the six-year period.

Derailments accounted for 66 percent of incidents, followed by highway-rail crossings (13 percent), other types of incidents (12 percent), and collisions (10 percent). The data suggest that efforts to address human error, jointly with track improvements, could have a positive effect in increasing overall safety. Moreover, track improvements could significantly offset damage costs in high-cost incidents.

<sup>&</sup>lt;sup>a</sup> Period covers January 2004 to December 2009 and includes passenger and freight train incidents exceeding the \$6,700 reporting threshold for damages in calendar year 2004 to 2005, \$7,700 in 2006, or \$8,200 in 2007 to 2009.

b Highway-Rail incidents matching the operational definition of "train incident" are reported in this table.

<sup>&</sup>lt;sup>22</sup>According to FRA's Accident Reporting Guide, "miscellaneous causes" refer to causation factors that do not fit in the pre-established cause categories.

In 2008 dollars, damage to train equipment and tracks totaled \$22.7 million between 2004 and 2009. Track-related incidents were the most costly, estimated at nearly \$12 million (or 52 percent of the damage costs to train equipment and tracks). Figure 2.11 presents the number of train incidents and their damage costs for each year between 2004 and 2009. As illustrated, the number of train incidents taking place has reduced for three consecutive years, however, the cost of repair has not followed the same pattern. While costs decreased in 2008 from \$3.9 to \$2.2 million, they have jumped back to \$3.8 million in 2009. This may be a result of either more expensive crashes (in terms of the equipment being damaged) or an increase in repair costs.

\$5.71 70 \$6.00 60 \$5.00 \$3.8 50 \$3.77 \$4.00 40 \$3.00 \$2.3 \$2.2 30 \$2.00 20 62 64 54 54 27 21 \$1.00 10 2004 2005 2007 2008 2009 2006 Incidents Damage (millions)

Figure 2.11 Train Incidents and Damage Costs in Florida 2004-2009

Source: Federal Railroad Administration Office of Safety Analysis.

# **Discussion on Highway-Rail Incidents**

The second category of incidents covered by the FRA is highway-rail incidents, these are defined as "any impact between a rail and highway user (both motor vehicles and other users) of the crossing as a designated crossing site, including walkways, sidewalks, etc., associated with the crossing." As Table 2.5 shows, there were 544 of these incidents in Florida between 2004 and 2009. Out of these, 476 (or 88 percent) took place in public crossings, while the remaining 68 took place at private crossings.

In most of the incidents reported, a train struck a highway user – either a motor vehicle or a pedestrian, these accounted for 450 incidents representing 82 percent. The majority of these, 387, involved a collision with a motor vehicle. In addition, there were 94 incidents in which a train was struck by a motor vehicle. According to a U.S. Department of Transportation's report, 94 percent of all grade crossing incidents (involving motor vehicles) are caused by risky driver behavior. The remaining 6 percent resulted from vehicles stuck, stalled, or abandoned at crossings.<sup>23</sup>

During the six-year period from 2004 to 2009, there were 63 instances in which a train struck a pedestrian. These incidents were typically very severe when compared to train-motor vehicle incidents, with 65 percent of them resulting in a fatality, while an additional 16 percent resulted in an injury. In fact, while incidents with pedestrian accounted for only 11.6 percent of all incidents, they generated approximately 40 percent of the fatalities. In total, highway-rail incidents resulted in 101 fatalities and 208 injuries.

Table 2.5 Florida Highway-Rail Incidents by Highway User Type 2004-2009a

		Casualties	
Type and Highway User	Total Incidents	Killed	Nonfatal
Train Struck Highway User	450	92	174
Motor Vehicle	387	51	164
Pedestrian or Other	63	41	10
Train Struck by Highway User	94	9	34
(Consists Totally of Motor Vehicles)			
Total Figures	544	101	208

Source: Federal Railroad Administration Office of Safety Analysis.

# **Trespassing Incidents**

Between 2004 and 2009, the primary source of rail-related fatalities was trespassers, which accounted for 61 percent of all fatalities, representing 159 deaths or roughly 27 per year (see Table 2.6 and Figure 2.12). In fact, this was the leading cause of fatalities for each of the six years. In addition to these fatalities, 94 other injury incidents occurred to trespassers over this time period, for total of 253 trespasser-related incidents. Most often trespassers nationally are pedestrians who walk across or along railroad tracks as a shortcut from

<sup>&</sup>lt;sup>a</sup> Period covers January 2004 through December 2009.

<sup>&</sup>lt;sup>23</sup>U.S. DOT Audit of the Highway-Rail Crossing Program. http://www.oig.dot.gov/sites/dot/files/pdfdocs/mh2004065.pdf.

one place to another, or they are engaged in loitering, hunting, dog walking, bicycling, or riding on all terrain vehicles, snowmobiles, or even horseback.

This issue is not unique to Florida, according to the FRA, over 450 trespassing deaths have taken place each year over the last decade, the vast majority of which are preventable. Furthermore, since 1997, at the national level more people have been killed while trespassing than as a result of motor vehicle collisions with trains at highway-rail grade crossings. In Florida, the FRA works in partnership with the railroad industry, the state and local governments, and other organizations to sponsor, plan, and conduct educational outreach efforts at schools, workplaces, civic and community centers, and other venues to raise awareness about the inherent dangers and consequences of trespassing.<sup>24</sup> Addressing these issues is complicated by the fact that trespassers are not a single, consistent group.

#### **Other Incidents**

The fourth category of incidents reported by the FRA is "Other Incidents," which are defined as "any death, injury, or occupational illness of a railroad employee that is not the result of a 'train incident' or 'highway-rail incident." This last category covers mostly incidents within a rail yard to employees and contractors. As Table 2.6 illustrates, this category accounts for most of the railroad-related injuries that have taken place in Florida over the last six years. From 2004 to 2009, these incidents accounted for 921 injuries out of the 1,221 total reported in the State, approximately 75 percent. These injuries included a wide range of issues such as tripping/falling in the yard, hearing loss (from noise exposure), and being struck by equipment or debris. Only two incidents under this category resulted in fatalities over the six-year period.

<sup>&</sup>lt;sup>24</sup>FRA Railroad Trespassing Fact Sheet – http://www.fra.dot.gov/Downloads/pubaffairs/FRA%20Railroad%20Trespassing%20Fact%20Sheet%20December%202008.pdf.

**Table 2.6** Florida Injuries and Fatalities by Incident Type 2004-2009

	Year	Train Incidents	Highway-Rail Incidents	Trespassing	Other Incidents	Total
Fatalities	2004	1	19	20	0	40
rataiities	2005	0	17	33	1	51
	2006	0	10	28	0	38
	2007	0	20	33	1	54
	2008	0	25	26	0	51
	2009	0	10	19	0	29
	Subtotal	1	101	159	2	263
Injuries	2004	2	35	14	193	244
	2005	6	21	22	178	227
	2006	0	35	20	143	198
	2007	2	66	16	160	244
	2008	0	30	14	120	164
	2009	1	8	8	127	144
	Subtotal	11	195	94	921	1,221
	Total	12	296	253	923	1,484

Source: Federal Railroad Administration Office of Safety Analysis.

Other Train Train Incidents Incidents Highway-Incidents 0% 1% Rail 1% Incidents 16% Highway-Rail Incidents Tres-38% passing, 8% Trespassing 61% Other Incidents 75%

Figure 2.12 Florida Fatalities and Injuries by Incident Type 2004-2009

Source: Federal Railroad Administration Office of Safety Analysis.

# Operation Lifesaver, Inc.

## Background<sup>25</sup>

Operation Lifesaver started in Idaho in 1972 when the national average of collisions at highway-rail grade crossings exceeded 12,000 annually. A six-week public awareness campaign called "Operation Lifesaver" was sponsored by the office of Governor Cecil Andrus, the Idaho Peace Officers and Union Pacific railroad as a one-time, one-state initiative.

During the campaign's first year, Idaho's crossing-related fatalities dropped by 43 percent. The next year, the Operation Lifesaver campaign spread to Nebraska, where their collision rate was reduced by 26 percent. Kansas and Georgia experienced similar success the following year.

Between 1978 and 1986, while Operation Lifesaver operated under the auspices of the National Safety Council (NSC), all 49 continental states started independent Operation Lifesaver programs. In 1986, the national program was released from NSC and incorporated as a national, nonprofit, 501(c)(3) educational organization. The founding sponsors of Operation Lifesaver, Inc. (OLI) – the Railway Supply Institute, Amtrak and the

<sup>&</sup>lt;sup>25</sup>Operation Lifesaver, Inc - http://www.oli.org/about/History.htm.

Association of American Railroads - continue to serve on OLI's 11 member Board of Directors.

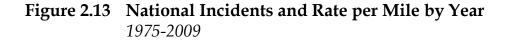
Today, Operation Lifesaver programs are active in 49 states and the District of Columbia nationwide. These programs are sponsored cooperatively by Federal, state, and local government agencies; highway safety organizations, and the nation's railroads.

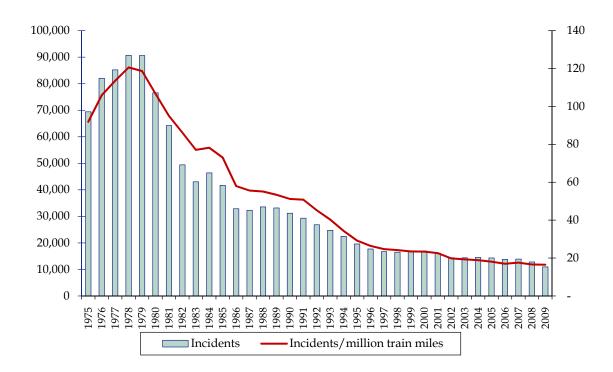
#### **Impact**

In 1975, around the time that OLI began, there were 69.4 thousand rail-related incidents in the United States which represented roughly 91.9 incidents per million train miles traveled. As Figure 2.13 illustrates, by 2009, these numbers had dropped to 10.9 thousand rail-related incidents, representing only 16.5 incidents per million miles traveled.

While it would not be reasonable to attribute OLI as the sole source for these improvements, they need to be recognized as one of the primary drivers for advancements in railroad safety. They have been able to achieve this through education at the local level, and by raising awareness of safety issues affecting railroads throughout the country.

The improvements have been felt in all three areas of incident reporting, with train incidents dropping from 7.7 to 1.9 thousand, highway-rail crossing incidents decreasing from 12.1 to 1.9 thousand, and other incidents falling from 49.5 thousand to 7.2 thousand over the 34-year period.





# 2.5 Positive Train Control Legislation

On October 16, 2008 Congress signed into law the Rail Safety Improvement Act (RSIA), which requires that Class I railroads carrying regular passenger service or certain hazardous materials implement a Positive Train Control (PTC) system. This section presents an overview of PTC technology, describes some of the key benefits and challenges, the existing federal requirements, schedule for implementation, and the current status of PTC deployment by Florida's railroads.

#### Overview

Positive Train Control (PTC) is a collision avoidance system designed to automatically stop or slow a train before an accident occurs. Specifically, PTC technologies are intended to prevent train-to-train collisions, derailments caused by excessive speed, unauthorized incursions by trains onto sections of track where repairs are being made, and movement of

a train through a track switch left in the wrong position.<sup>26</sup> For the Federal Railroad Administration (FRA), PTC systems are described as "integrated command, control, communications, and information systems for controlling train movements with safety, security, precision, and efficiency". These systems vary widely in complexity and sophistication based on the level of automation and functionality implemented, the system architecture utilized, the wayside system upon which they are based, and the degree of train control they are capable of assuming. If the PTC system is fully functional, the system must be able to precisely determine the location and speed of trains; warn train operators of potential problems; and take action if the operator does not respond to a warning. Consequently, the principal objective of deploying PTC technology is to enhance system safety by preventing collisions between trains.

#### **Benefits**

PTC technology is capable of evaluating real time train data for location and speed, monitoring and controlling system information, and exchanging instructions and messages with locomotives. As a result, in addition to the safety objectives mentioned above, other benefits are obtained with the implementation of fully functional, 100 percent reliable PTC systems:

- <u>Improved service reliability.</u> With effective meet/pass planning achievable due to accurate position information and possibly supplemented with sophisticated computer analysis, system velocity and reliability can increase using PTC.
- <u>Increased running times</u>. Through improved train control information and signaling, performance is improved and the spacing between trains is reduced, which ultimately reduces total running times.
- <u>Fuel savings.</u> An effective PTC system could reduce overall fuel consumption for a system by selecting optimal train velocity based on expected intersection times with other trains. In essence, it would reduce the amount of stop and go that locomotives would have to do.
- <u>Increased line capacity.<sup>27</sup></u> PTC systems have the potential to increase railroad capacity (reduce excess headway as compared with fixed block signaling) by means of its

<sup>&</sup>lt;sup>26</sup> Association of American Railroads, *Positive Train Control*, Policy and Economics Department, June 2010.

<sup>&</sup>lt;sup>27</sup> Zeta-Tech Associates, Quantifications of the Business Benefits of Positive Train Control, March 15, 2004.

moving block architecture, thus reducing train delays, increasing service reliability and allowing more trains to move over each rail line.<sup>28</sup>

- System life cycle cost reduction. PTC technology could also decrease train control
  system life cycle cost by reducing the amount of wayside vital equipment required
  (signals and track circuits).
- Improved efficiency. In addition, a PTC system in its most sophisticated form could enable many levels of automation like paperless track warrants and work orders for example, improving efficiency.<sup>29</sup>

It should be noted that the PTC systems currently being developed are an additional set of systems overlaid on current analogue train control systems, meaning they supplement rather than replace existing train control and dispatching systems. Railroads would need to invest beyond these basic PTC overlay systems into more robust fully-functional PTC systems to achieve the commercial and operational or non-safety benefits mentioned above, but these more advanced PTC systems are more expensive to implement and present much higher implementation risks. <sup>30</sup>

## Challenges

The two primary challenges to an effective/efficient PTC implementation by the railroads are the up-front costs required for equipment and training, and the development of a system that communicates perfectly across all major railroads in the country. These are discussed below.

#### Costs

The single largest challenge associated with PTC technology is the cost required to deploy such a system, even at its most basic level. The railroads have to invest in new equipment for the tracks, trains, and central control station. In fact, according to the FRA, railroads will have to spend up to \$13.2 billion (in 2010 dollars) to <u>install</u> and <u>maintain</u> PTC over the next 20 years.<sup>31</sup> As railroads are mandated to install PTC technology by December 31, 2015 (this is discussed in the next section), it will likely mean less available capital funds to invest in other infrastructure improvements and safety initiatives. This level of

<sup>&</sup>lt;sup>28</sup> The moving block concept allows a train to receive movement authority between any two locations, rather than being constrained to the fixed block boundaries of conventional signaling. (FRA, *The North American Joint Positive Train Control Project*, Research Results, April 2009.

<sup>&</sup>lt;sup>29</sup> Railway Age, PTC, is everyone on board?, May 2010. www.railwayage.com

<sup>&</sup>lt;sup>30</sup>To ensure PTC technology is fully functional and completely safe, much more development and testing of PTC technology is needed.

<sup>&</sup>lt;sup>31</sup> Association of American Railroads, *Positive Train Control*, Policy and Economics Department, June 2010.

investment is extraordinary when compared to the benefits, especially considering that only three percent of all train accidents in the country are related to train-controlled related issues.<sup>32</sup> Furethermore, the FRA's own economic analysis suggests that the costs of PTC implementation outweigh its benefits by a ratio of 15 to 1.<sup>33</sup>

FRA has established several programs for funding and financing the PTC systems implementation. The Railroad Rehabilitation and Improvement Financing (RRIF) Program is one of them but no railroads have approached FRA for funding of PTC projects using this program. Monies up to \$50 million annually from 2009 to 2013 from the Railroad Safety Technology grants to support PTC projects have been authorized, though money has not yet been appropriated. Tax incentives for rail revitalization that could be applied to the cost of installing PTC have been proposed by the AAR to help offset the huge costs associated with PTC implementation.<sup>34</sup> Funding will remain a key challenge as the 2015 deadline approaches.

#### Development of Universal and/or Compatible Systems

The PTC systems being developed must account for complex railroad operational factors; they need to be proven to be safe and reliable; and most importantly, they need to be interoperable so that passenger and commuter trains can utilize it in coordination with freight railroads. The system must work perfectly across the network of rail lines owned and operated by many different companies with their own equipment, procedures, and operation characteristics.<sup>35</sup>

Initially, each railroad has been developing their own system to meet their needs, however moving forward, commonality and uniformity among all rail carriers will be key to achieve interoperability. The challenge for the FRA and the railroads is to generate enough consensus and cooperation among private and public rail carriers in order to meet the December 31st, 2015 deadline (explained next).

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Railway Age, From the Editor, *The business of PTC is safety, Period*, May 2010. www.railwayage.com. PTC will not prevent accidents caused by broken rails or broken axles.

<sup>&</sup>lt;sup>33</sup> Federal Railroad Administration (FRA), Final Ruling, Positive Control Systems, January 12, 2010 http://www.fra.dot.gov/downloads/safety/PTC\_Final\_Rule\_20100112\_(FedReg)\_(final).pdf

<sup>&</sup>lt;sup>34</sup> Association of American Railroads, *Positive Train Control*, Policy and Economics Department, June 2010.

<sup>&</sup>lt;sup>35</sup> Association of American Railroads, *Implementing Positive Train Control*, http://www.aar.com/news/pdfs/Implementing\_%20PTC.pdf

#### **Federal PTC Mandate**

PTC systems were being voluntarily installed by various rail carriers prior to October 2008. However, the passage of the Rail Safety Improvement Act (RSIA) signed into law on October 16, 2008 requires the implementation of PTC systems by the end of 2015. FRA's final ruling on PTC implementation issued on January 12, 2010 requires PTC installation on:<sup>36</sup>

- o All main rail lines over which passenger (regularly scheduled intercity or commuter rail) trains operate,
- o All main rail lines of Class I freight carriers carrying any amount of poison-or toxic-by-inhalation (PIH or TIH) hazardous materials,<sup>37</sup> and
- o Any other lines as designated by the US Secretary of Transportation.

All regional (Class II) and short line (Class III) railroads are exempt from the PTC mandate regardless of tonnage or number of PIH/TIC cars handled unless they host regularly scheduled passenger trains. They are also exempt if Class II and Class III rail lines cross Class I PTC-equipped lines without exceeding 40 mph in any direction. However, if regional and short line railroads have rights over Class I lines that are required to have PTC installed, Class I railroads will most likely require their tenants to also install PTC systems.<sup>38</sup>

Currently, all affected railroads are committed to complying with the PTC mandate. Before April 16, 2010, all affected railroads submitted to FRA their PTC Implementation Plans (PTCIP) required by the RSIA since PTC systems need to be ready for testing and certification by late 2012. At the same time, they have been adapting their individual PTC systems to maximize interoperability among all freight railroads and passenger trains.<sup>39</sup>

<sup>&</sup>lt;sup>36</sup> One of FRA's function is to promulgate and enforce rail safety regulations including the PTC Final Rule:

http://www.fra.dot.gov/downloads/safety/PTC\_Final\_Rule\_20100112\_(FedReg)\_(final).pdf

<sup>&</sup>lt;sup>37</sup> FRA classifies, as a general rule, freight "main lines" as those track or route segments carrying five million or more gross tons of annual freight.

<sup>&</sup>lt;sup>38</sup> Railway Age, PTC, is everyone on board? What impact on Class II and III?, May 2010. www.railwayage.com

<sup>&</sup>lt;sup>39</sup> The Interoperable Train Control Working Committee under the auspices of the Association of American Railroads (AAR) have prompted the industry to coordinate PTC efforts and support interoperability.

## **Implications for Florida's Railroads**

Based on the FRA requirements described above for PTC installation, only CSX and NS will be required to implement PTC technology in their line given that they are both Class I and either carry regular passenger service (such as Tri-Rail traffic or Amtrak traffic on CSX's lines) or handle certain hazardous materials (both railroads). Depending on future passenger service plans, other railroads may be required to implement similar systems, these include the First Coast Railroad and the Florida East Coast Railroad. For future passenger services, it should be noted that the regulation allows for a waiver to the PTC requirement based on the number of passenger trains operated, allowing for each case to be decided on its own merit.

#### Class I and Passenger Railroads

CSX Transportation (CSXT), the largest Class I railroad operating in the state with over 1,600 route miles, carries both intercity and commuter rail passengers in its Florida system in addition to hazardous materials. Therefore, it must comply with the RSIA and implement PTC systems before the end of 2015. Amtrak, which provides regularly scheduled intercity rail traffic on a large percentage of CSXT's track segments, will also be required to equip its locomotives with a PTC system that is interoperable with CSXT's system, a vital overlay system called Vital Electronic Train Management System (V-ETMS). Amtrak's PTC Implementation Plan submitted to FRA in April 2010 confirms the passenger railroad intends to install V-ETMS on all of its mainline tracks in Florida and equip its diesel locomotive fleet with V-ETMS on-board PTC equipment to achieve interoperability with its host railroad in Florida, CSXT.

Florida's only operating commuter rail service, South Florida Regional Transportation Authority (SFRTA)'s Tri-Rail, operates between West Palm Beach and Miami on 71.2 miles of track owned by the Florida Department of Transportation and referred to as the South Florida Rail Corridor (SFRC). Currently this line is operated and maintained by CSXT, and as a result the SFRTA will also need to equip its locomotives with a PTC system that is interoperable with CSXT's PTC system (V-ETMS).<sup>42</sup> SFRTA's PTC implementation sequence for track and signal work for the SFRC (which is to be performed by CSXT) states that work will start in 2013 and be completed in 2014 with PTC rolling stock implementation expected to start with ten locomotives in 2013, 15 in 2014 and 14 in 2015 to

 $<sup>^{40}</sup>$  CSX Transportation, Positive Train Control Implementation Plan Version 1.0, submitted to FRA on April 2010.

<sup>&</sup>lt;sup>41</sup> Amtrak, PTC Implementation Plan, submitted to FRA on April 2010.

<sup>&</sup>lt;sup>42</sup> FDOT acquired the SFRC from CSXT in 1988, with CSXT providing dispatching for the SFRC and maintenance of its tracks and signals under the Operating and Maintenance Agreement Phase A (OMAPA) with FDOT. CSXT also manages the Corridor and controls train movement through its Operating Rules.

achieve complete rolling stock implementation by December 31, 2015.<sup>43</sup> New intercity and commuter services planned to come on-line in the coming years will need to implement PTC systems that are interoperable with their host railroad (CSXT). These include: SunRail or the Central Florida Commuter Rail in Orlando, Tampa Bay Area's long distance (commuter) rail plans and the Northeast Florida proposed commuter rail corridors plan to use CSX's main lines to provide passenger service in the future. In some locations, this also will require coordination with Class II and III carriers.

Norfolk Southern (NS) is the other Class I railroad operating close to 150 route miles in Florida. It carries hazardous materials in its Florida operation; therefore, it must also install PTC systems to comply with FRA's PTC mandate. NS' PTC Implementation Plan indicates it will install also a V-ETMS PTC system.<sup>44</sup>

#### High Speed Rail Corridors

Florida's high speed rail (HSR) plans to provide faster rail passenger service between Tampa, Orlando and Miami will require a new alignment for high speed passenger rail, thus not requiring the use of freight railroad main lines. The HSR corridor between Tampa and Orlando will run along the I-4 median and the HSR corridors being evaluated for service between Orlando and Miami include I-95 and Florida's Turnpike rights-of-way. Therefore, PTC implementation is not required when high speed passenger rail service operates in the state since freight lines will not be carrying high speed passenger trains.

# ■ 2.6 Abandonment History

Since 2004, six railroads – CSXT, Florida Central, Florida East Coast, Florida Midland, Florida West Coast, and Seminole Gulf – have petitioned the STB for permission to abandon portions or all of their railroad track in Florida. Since then, the STB has granted abandonment exemptions for a total of 42.78 miles, which includes two sections of CSX lines, one section of the Florida Central Railway, two sections of the Florida East Coast Railway, one section of the Florida West Coast Railroad, and one section of the Seminole Gulf Rail line.

One section of CSXT rail line and one section of Florida Midland rail line – a total of 4.66 miles – have been granted abandonment exemptions pending the railroads' compliance with conditions and completion of tasks identified by an Environmental Analysis. Roughly 15 of the miles that railroads have petitioned to abandon since 2004 are involved in negotiations for interim trail use/rail banking agreements or were granted an aban-

<sup>&</sup>lt;sup>43</sup> South Florida Regional Transportation Authority, PTC Implementation Plan, submitted to FRA on April 2010.

<sup>&</sup>lt;sup>44</sup> Norfolk Southern, PTC Implementation Plan v.1 (Redacted), submitted to FRA on April 2010.

donment exemption subject to the right-of-way being converted to trails or public use. Table 2.7 summarizes the status of rail abandonments in Florida.

Table 2.7 Railroad Abandonments since 2004

Railroad Name	Section	Status
CSX Transportation	Branch line in Pinellas County (1.85 miles)	Abandonment exemption granted by the STB in December 2005, subject to public/trail use (STB Docket AB_55_646x)
	West end of the Parrish Spur (0.66 miles in Manatee County)	Pending salvage activities identified in Environmental Assessment (STB Docket AB_55_672_X)
	Mills and Nebraska Lead (0.69 miles in Orange County)	Abandonment exemption granted by the STB in August 2007, subject to public/trail use. Permission to extend the time to exercise the abandonment authority through April 2010 granted (STB Docket AB_55_681X)
Florida Central	Forest City Spur (3.4 miles between Toronto and Forest City in Seminole and Orange Counties)	Abandonment exemption granted by the STB in December 2004 (STB Docket AB_319_3_X)
Florida East Coast	Portion of South Little River Branch Line (5.0 miles to the Miami-Dade County line)	Abandonment exemption granted by the STB in August 2005 (STB Docket AB_70_4_X)
	Titusville Branch (9.8 miles from Titusville to Aurantia, in Brevard County)	Abandonment exemption granted by the STB in August 2005 (STB Docket AB_70_5_X)
Florida Midland	Wildwood Branch (4.0 miles from Wildwood to Orange Home in Sumter County)	Pending conditions identified in Environmental Assessment (STB Docket AB_325_4_X)
Florida West Coast	Trenton to Newberry Line (13 miles in Alachua and Gilchrist Counties)	Abandonment exemption granted by the STB on May 2010 for a 10.3-mile portion of track between Newberry and Trenton. (STB Docket AB_347_3X)
Seminole Gulf	Portion of the Venice Branch (12.43 miles) between Sarasota and Venice	Abandonment exemption granted by the STB in April 2004, subject to public/trail use and environmental conditions (STB Docket AB_400_3X)
Abandonments	42.78 miles	
Abandonments not Consummated	3.39 miles	
Abandonments in Process	4.66 miles	
<b>Total Potential Abandonments</b>	50.83 miles	

# 3.0 Passenger Rail Services and Initiatives in Florida

## ■ 3.1 Overview

Although Florida's total population shrunk by about 60,000 residents in 2009 – a first in over three decades according to state demographers – and overall population growth rates have declined three points to approximately 2 percent annually due in large part to the nationwide recession and declining housing market, the State is expected to continue to attract retirees and residents looking for warmer weather and low costs of living. State demographers at the University of Florida predict that once the recession ends, Florida can expect to grow as much as 200,000 people per year – fewer than the 300,000 a year the State averaged during the past three decades, but enough to lead most other states in net growth. By 2035, more than 25 million people will call Florida home, representing a 56 percent increase between 2000 and 2035.<sup>45</sup> In absolute terms, Florida will add over 9 million people to its population between this time period.

Furthermore, although much of Florida's growth will be concentrated in urbanized areas, growth will occur across Florida's regions and urbanized area boundaries will expand across county lines. Florida's density per square mile was 344 according to the 2009 Census and was ranked the eighth densest state in the nation.

Population growth, and the associated transportation demand, will place additional pressure on all aspects of the State's transportation system. A growing population not only adds automobiles to roadways, but the increase in economic activity to support this population also will generate additional demands for freight movement. Florida's large tourism industry will further contribute to this demand, with the number of annual visitors to the State increasing to over 121 million by 2035, from 80 million in 2009. The expected growth in population and visitors over the long-term reinforces the value of investing in rail as part of a multimodal transportation strategy to more efficiently accommodate the mobility needs of future populations.

Many urban and interregional SIS highway corridors are currently or are expected to be heavily congested during peak periods by 2035, even after planned capacity improvements are made. Likewise, many of the State's airports are projected to be

<sup>&</sup>lt;sup>45</sup>U.S. Census Bureau, Bureau of Economic and Business Research at the University of Florida (October 2009 forecast to 2030), and Florida Transportation Plan (forecast extension beyond 2030).

operating at more than 80 percent of capacity, the point at which additional capacity should be under construction. The solution in the past, in Florida and throughout the United States, has been to add new roadways and more lanes on existing roads. This becomes much more difficult as construction costs continue to climb and increasing population densities increase property values and decrease available land. It should be noted that while construction costs and land prices have declined with the recession, they are expected to rise again as the economy recovers.

Given these considerations, expanding passenger rail and urban transit systems will be necessary in order to serve as viable options for the movement of people within and between areas. Northeastern states, with similar population densities and congestion problems as Florida, have recognized the importance of strong intercity and commuter rail services as a tool to aid in congestion relief and provide mobility. In fact, strategically implementing passenger rail services can aid the State in mitigating congestion, stabilizing highway construction and maintenance costs, and promoting development of compact livable communities.

In 2006, FDOT prepared the *Florida Intercity Passenger Rail Vision Plan*. According to the plan, by 2040, the intercity travel market would grow from just over 100 million trips in 2006 to nearly 200 million trips by 2020 and 320 million trips by 2040.<sup>46</sup> According to the *Vision Plan*, the largest numbers of estimated intercity trips are between central Florida and Tampa Bay (Orlando-Tampa); southeast Florida and central Florida (Miami-Orlando); and southeast Florida and the Tampa Bay region (Miami-Tampa). Additional significant travel is also anticipated between Jacksonville (northeast Florida) and Orlando (central Florida). Intercity travel in central and south Florida is especially important given the presence of the recreation and tourism industry there. This increase will add pressure to existing transportation facilities and would necessitate advanced management and operations as well as development of new infrastructure to manage the demand.

This section describes Florida's existing passenger rail network, including intercity, commuter, and local transit services. It also discusses future passenger rail service needs and presents planned service expansions and improvements, new lines and facilities, and future high-speed rail service. Finally, it covers recent legislative changes that have a direct impact on passenger rail transportation. This section contributes to the State Rail Plan requirements set forth by Public Law 110-432:

- Inventory of the existing overall rail transportation system, services, and facilities within the State and an analysis of the role of rail within the surface transportation system.
- Review of all rail lines within the State, including proposed high-speed rail corridors and significant rail line segments not currently in service.

<sup>&</sup>lt;sup>46</sup>Source: *Florida Intercity Passenger Rail Vision Plan*, Draft Executive Report, Florida Department of Transportation, August 2006.

- Statement of the State's passenger rail service objectives, including minimum service levels for rail transportation routes in the State.
- Review of major passenger and freight intermodal rail connections and facilities within the State, including seaports, and prioritized options to maximize service integration and efficiency between rail and other modes.
- Performance evaluation of passenger rail services operating in the State, including
  possible improvements in those services and a description of strategies to achieve
  those improvements.
- Compilation of studies and reports on high-speed rail corridor development within the State not included in a previous plan under this subchapter, and a plan for funding any recommended development of such corridors in the State.

# ■ 3.2 Current Passenger Rail Systems

This section discusses the various passenger rail systems currently operating in Florida. These include Amtrak, Tri-Rail, and local systems such as metro-rail, metromover, TECO, and the JTA Skyway. The section includes a description of network coverage, ridership, and economic impacts of the systems.

#### Amtrak<sup>47</sup>

The National Railroad Passenger Corporation (Amtrak) has provided intercity and long-distance service to Florida for almost 40 years. Originally created in 1970 as a for-profit government corporation with trackage rights over all freight railroads, Amtrak was converted to a private entity in 1997 in an effort to make the railroad more self-sufficient. Since 1997, Amtrak has continued to receive public funds through annual appropriations to continue operating, although the funding has been far below requested levels.

Amtrak operates a nationwide rail network, serving over 500 destinations in 46 states and three Canadian provinces on over 21,000 miles of routes, with more than 19,000 employees. It is the nation's only high-speed intercity passenger rail provider, operating nearly 60 percent of its trains at speeds in excess of 90 mph. In FY 2009 (October 2008 to September 2009), Amtrak transported over 27.1 million passengers, the second largest annual total in Amtrak history.

Amtrak owns approximately 730 miles, representing 3 percent of its national network. Most of the Amtrak-owned route mileage is located between Washington, D.C. and

<sup>&</sup>lt;sup>47</sup>http://www.amtrak.com.

Boston (Northeast Corridor) and between Philadelphia and Harrisburg, Pennsylvania. Amtrak does not own any mileage in Florida, but operates a maintenance facility in Hialeah. Amtrak's Southern Division, which is responsible for Amtrak's operations in the Southeastern United States, is headquartered in Jacksonville. Amtrak also has train and engine crew bases in Miami, Sanford, and Jacksonville, an on-board service crew base in Hialeah, and contractor-operated commissaries in Hialeah and Sanford.

#### Florida Route Descriptions

In Florida, Amtrak operates three distinct services, the *Auto Train, Silver Meteor*, and *Silver Star*<sup>48</sup>, and *Sunset Limited*, covering 21 stations throughout the State. At the end of FY 2009, Amtrak employed 750 Florida residents and total wages of Amtrak employees living in Florida totaled \$48.8 million. Amtrak operates in Florida over lines owned by CSXT Transportation (CSXT) as well as those owned by FDOT, known as the South Florida Rail Corridor. Amtrak's current Florida routes include:

- The *Auto Train* offers nonstop service between Lorton, Virginia (south of Washington, D.C.) and Sanford, Florida. The Auto Train operates daily, with afternoon departures in each direction. The entire trip takes approximately 17.5 hours overnight. It is the only combination auto/passenger train in the United States. Passengers ride in Superliner coaches and sleepers, while their vehicles are transported in auto carrier cars at the rear of the train. The Auto Train operates over CSXT's "A" Line from the Florida-Georgia border to its terminus in Sanford. This popular service would likely extend further north (e.g., New York/New Jersey) were it not for clearance restrictions of the multilevel auto carriers in Baltimore and Washington, D.C. During FY 2009, the Auto Train carried 232,995 passengers and 111,373 vehicles. Amtrak acquired new auto carrier cars in 2005 to replace the previously operated cars, which were up to 50 years old. The new auto carriers can carry 250 sedans or 120 minivans and sport utility vehicles (SUVs), an increase from the previous cars that could carry 187 sedans or 29 minivans and SUVs. The Auto Train has reached full capacity and the station in Sanford was damaged following the 2004 hurricanes. Amtrak's capital plan includes additional capital investments to overhaul Superliner cars and P-42 diesel locomotives used on the Auto Train, and \$2.5 million to repair hurricane damage, replace hydraulic ramps, and expand the passenger waiting area at the Sanford terminal.
- The Silver Star and the Silver Meteor offer service daily between New York City and Miami. Both services operate over mostly the same route within Florida, but follow different trajectories north of Savannah, Georgia, through the Carolinas. Together, the Silver Star and Silver Meteor provide Amtrak's Cross Florida Service. From the Florida-Georgia border, both routes operate over CSXT's "A" Line south to Auburndale. At Auburndale, the Silver Meteor continues southeast to West Palm Beach via CSXT and the South Florida Rail Corridor into Miami, and the Silver Star

<sup>&</sup>lt;sup>48</sup> The *Sunset Limited* Amtrak route from Sanford, FL to New Orleans was discontinued in 2005 after Hurrican Katrina damaged the tracks.

travels southwest to Tampa and then back to Auburndale where it retraces the Silver Meteor's aforementioned route to Miami. North of Florida, the Silver Star follows a route along the Appalachian Piedmont between Savannah, Georgia, and Raleigh, North Carolina, via Columbia, South Carolina. The Silver Meteor follows a route along the Atlantic Coastal Plain, serving Charleston, South Carolina and Fayetteville and Raleigh, North Carolina. From Raleigh, both routes operate over the same line to New York City. Both routes are subject to frequent delays due to freight congestion in areas of the Carolinas and Virginia. Most of the route within Florida does not suffer from delays. The two service routes had been at risk of potential elimination due to large losses in 2004 and 2005; however, in 2009 the lines have experienced increases in ontime performance and gains in riders despite a nationwide decline in Amtrak Silver Star ridership increased 5.8 percent - to 31,343 - in April 2009, compared to April 2008; while Amtrak ridership nationwide declined 2 percent during Approximately one in three Silver Star passengers board or the same period. disembark at Tampa's Union Station.49

- Within Florida, the Silver Star serves the following stations: Jacksonville, DeLand, Winter Park, Orlando, Kissimmee, Lakeland, Tampa, Winter Haven, Sebring, West Palm Beach, Deerfield Beach, Fort Lauderdale, Hollywood, and Miami. It also serves platforms without stations in Palatka, Okeechobee, and Delray Beach. The Silver Star travel time from Jacksonville to Miami is slightly longer than 11 hours. The total travel time between New York City and Miami is slightly longer than 31 hours.
- The Silver Meteor serves the same stations as the Silver Star, with the exception of Tampa and Lakeland. Because the Silver Meteor switches at Auburndale and does not stop in Tampa, it offers slightly faster service between Central and South Florida. The Silver Meteor carries passengers between Jacksonville and Miami in 9 hours. The total travel time between New York City and Miami is just under 28 hours.
- The *Sunset Limited* currently provides tri-weekly service between Los Angeles, California and New Orleans, Louisiana. The service formerly extended east of New Orleans over CSXT across the Florida Panhandle and over the CSXT "A" Line from Jacksonville to Orlando, but this portion of the *Sunset Limited* service has been suspended since August 27, 2005 due to extensive infrastructure damage in Louisiana, Mississippi, and Alabama caused by Hurricane Katrina. Although the damaged track has been repaired and CSXT has no objections to resuming passenger service, station reconstruction is expected to take much longer and a final decision has not been made concerning when Amtrak will reinstate service east of New Orleans. Prior to Hurricane Katrina, the *Sunset Limited* was one of Amtrak's least efficient routes, serving only 81,348 passengers in 2005 (compared to 92,246 in 2004). The route generated \$35.2 million in annual losses in 2005 (compared to \$29.3 million in 2004) while contributing revenues of only \$10.8 million, yielding a loss of \$433 for each

<sup>&</sup>lt;sup>49</sup>Ted Jackovics, *Silver Star Ridership* Increases, Tampa Tribune, June 23 2009.

passenger.<sup>50</sup> One of the studies Amtrak was required to develop under PRIIA was a plan for restoring passenger rail service between New Orleans and Sanford, including a projected timeline, projected costs, and any needed legislative changes required to do so. This feasibility study was submitted to Congress in July of 2009 and presented 3 preferred alternatives (from 12 submitted for analysis) for service restoration along with their capital and operational costs. These were:

- 1. Restoration of tri-weekly Sunset Limited service between Los Angeles, California and Orlando, Florida.
- 2. Extension of the daily City of New Orleans service, which currently operates between Chicago, Illinois and New Orleans, Louisiana, east from New Orleans to Orlando, Florida.
- 3. Implement daily stand-alone overnight service between New Orleans, Louisiana and Orlando, Florida.
  - Under each of the three proposed options service would be restored between New Orleans and Orlando, and the study assumed that all of the 19 stations between New Orleans and Orlando, including the 13 Suspended Service Stations, would be served by the restored service.
  - All three alternatives would result in an annual direct operating loss associated with restoring service. Option 1 would result in a \$4.8 million annual loss (56 percent farebox recovery), Option 2 would cost \$11.7 million per year (44 percent recovery), while Option 3 would cost \$18.4 million per year (23 percent recovery). Annual ridership is estimated at 53,300 for Option 1, 96,100 for Option 2, and 79,900 for Option 3.
  - The next step in the process is to have Federal and state policy-makers determine if passenger rail service should be restored between New Orleans and Orlando; and, if so, identify the preferred option for service restoration, and provide the additional funding for capital and ongoing operating costs that will be required to implement that option.
- With its **Thruway Motorcoach Services**, Amtrak serves many Florida counties that do not have direct passenger rail access. The Thruway service provides rail-bus connections for communities previously served by the Palmetto Service between Lakeland and Jacksonville. On October 31, 2004, Amtrak discontinued its Palmetto service to Florida. The Palmetto, which originates in New York City, previously terminated in Miami via Jacksonville, Orlando, and Tampa over CSXT's "S" Line. The Palmetto called on four stations between Lakeland and Jacksonville, including Ocala, Waldo, Wildwood, and Dade City. The Palmetto service now operates between New York City and Savannah, Georgia. Other Thruway bus services include: Orlando/Tampa to St. Petersburg and Fort Myers (via Lakeland, Bradenton, Sarasota, and Port

<sup>&</sup>lt;sup>50</sup>Ronald D. Utt, Springtime for Amtrak and America, The Heritage Foundation, May 2006.

Charlotte); DeLand to Daytona Beach; Orlando to Orlando hotels and attractions; and Miami to Key West (via Miami International Airport, Homestead, Key Largo, Islamorada, Marathon, and Key West).

Table 3.1 summarizes Florida's current Amtrak passenger rail service.

Table 3.1 Summary of Florida Amtrak Passenger Rail Service

Route	Frequency	Origin/Destination	Type of Service
Auto Train	Daily, each direction	Washington, D.C. (Lorton, Virginia) to Sanford, Florida	Conventional and personal auto transport
Silver Meteor	Daily, each direction	New York City to Miami	Conventional
Silver Star	Daily, each direction	New York City to Miami (via Tampa)	Conventional
Sunset Limited	Three times per week	Los Angeles to Orlando (via Jacksonville) <sup>a</sup>	Conventional

Source: Amtrak.

Amtrak currently provides passenger rail service to 18 stations in Florida. Rail service to 6 additional stations in Chipley, Crestview, Lake City, Madison, Pensacola, and Tallahassee along the *Sunset Limited* route was suspended on August 27, 2005. Figure 3.1 provides an overview of the four Amtrak routes in Florida, including all passenger rail stations. Figure 3.1 also shows those locations that are served by Amtrak's Thruway Motorcoach Services.

<sup>&</sup>lt;sup>a</sup> Service is currently suspended east of New Orleans. Evaluations for service restoration are currently underway (see page 3-5).

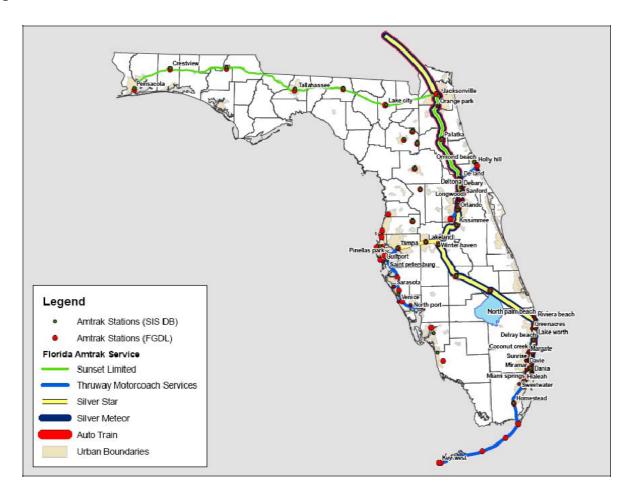


Figure 3.1 Amtrak Routes and Stations in Florida

Source: Amtrak, Florida Geographic Data Library (FGDA), and Strategic Intermodal System (SIS) Database (refers to Amtrak stations that are designated to SIS).

Note: The Sunset Limited route has not been in service since August 2005 due to damage caused by Hurricane Katrina. It is unclear at this point when service will be resumed.

#### Ridership

With 988,303 passengers in 2009, Florida is one of four states outside the Northeast Corridor with relatively high Amtrak ridership. Florida passengers represent approximately 3.6 percent of Amtrak ridership nationwide. Table 3.2 shows Florida in relation to the other high-ridership states for 2009. Although Amtrak carries nearly 1 million annual passengers in Florida, much of this travel is interstate trips. For example, the busiest station within Florida is the Sanford *Auto Train* station, with 232,955 total passengers in 2009. This service is exclusively for interstate passengers. After the Sanford *Auto Train* station, Orlando has the second highest ridership, with 145,775 passengers in 2009. Tampa, Miami, Jacksonville, and West Palm Beach all had more than 50,000 passengers in 2009 and eight other stations had ridership of at least 20,000.

**Table 3.2 Top Amtrak Ridership States** *Millions of Passengers* 

Rank	State	2009 Ridership	Rank	State	2009 Ridership
1	California	11.070	7	Maryland	1.789
2	New York	9.615	8	New Jersey	1.570
3	Pennsylvania	5.528	9	Connecticut	1.560
4	Illinois	4.398	10	Washington	1.232
5	District of Columbia	4.278	11	Virginia	1.025
6	Massachusetts	2.646	12	Florida	0.988

Source: Amtrak.

Note: Northeastern Corridor states are shaded.

As Table 3.3 indicates, from 2008 to 2009, overall ridership in Florida increased by 2.6 percent, from just over 963,000 to over 988,000. Fourteen out of the 18 stations in the State experienced increases in ridership between 2008 and 2009, with 11 of these serving more than 1,000 more passengers than the previous year. The average absolute increase in ridership at Florida stations was 1,401 passengers. The Tampa station experienced the greatest relative and absolute growth in ridership, adding 10,738 passengers (a 10.7 percent increase) over 2008. In addition to Tampa, 7 stations (Winter Haven, Delray Beach, Fort Lauderdale, Okeechobee, Deerfield Beach, and Jacksonville) experienced passenger growth over 5 percent.

**Table 3.3 Florida Amtrak Boardings and Alightings by Station** *Fiscal Years 2008 and 2009* 

Station	2009	2008	Percent Change	Net Change
Sanford (Auto Train Station)	232,955	234,839	-0.80%	-1,884
Orlando	145,775	147,491	-1.16%	-1,716
Tampa	110,857	100,119	10.73%	10,738
Miami	81,582	80,348	1.54%	1,234
Jacksonville	65,051	61,758	5.33%	3,293
West Palm Beach	54,119	52,249	3.58%	1,870
Fort Lauderdale	49,609	45,979	7.89%	3,630
Kissimmee	41,054	38,495	6.65%	2,559
Hollywood	34,532	33,372	3.48%	1,160
Winter Park	30,948	29,514	4.86%	1,434

Table 3.3 Florida Amtrak Ridership by Station (continued)

Fiscal Years 2008 and 2009

Station	2009	2008	Percent Change	Net Change
Deerfield Beach	27,506	26,044	5.61%	1,462
Deland	25,965	24,854	4.47%	1,111
Winter Haven	22,881	21,079	8.55%	1,802
Lakeland	22,212	24,179	-8.14%	-1,967
Sebring	16,982	17,945	-5.37%	-963
Palatka	12,522	12,082	3.64%	440
Delray Beach	10,232	9,448	8.30%	784
Okeechobee	3,521	3,297	6.79%	224
Total Florida Ridership	988,303	963,092	2.62%	25,211

Source: Amtrak.

Since 1980, Amtrak's Florida ridership has grown by about 58 percent, from 626,115. The railroad's peak Florida ridership occurred in 1992, with 1.2 million passengers.

# **Economic Impact**

In 2009, Amtrak employed 750 Florida residents, generating over \$48 million in wages. During 2009, Amtrak procured \$22.9 million in goods and services in Florida, with much of the money spent in Jacksonville (\$5.5 million), Lake Mary (\$4.6 million), St Petersburg (\$3.1 million), Tampa (\$2.0 million), Fort Lauderdale (\$2.0 million) and Boca Raton (\$1.4 million). Expenditures in Jacksonville are primarily due to the concentration of railroad equipment maintenance firms in the Jacksonville area. Amtrak's Hialeah maintenance facility performs light overhauls for Viewliner, Amfleet, and Heritage cars for Silver Service trains. Amtrak also operates a maintenance facility in Sanford (near Lake Mary), which services the Superliner cars of the *Auto Train*.

# Travel Times Compared to Automobiles and Airplanes

Of the more than 988,000 annual passengers on Amtrak in Florida, most of this travel was interstate trips. Florida intercity passenger rail travel is very low in comparison to intercity highway and airline travel. One of the principal reasons is the slower travel times. Table 3.4 provides a comparison of some transit times for autos, planes, and rail. All air travel times include one extra hour to allow for check-in and security, though no extra time was added for travel to and from the airport or train station. Averaged across these five markets, air travel is 1 hour and 30 minutes faster than autos, and autos are 2 hours and 23 minutes faster than rail.

Table 3.4 Comparison of Modal Travel Time for Select Florida Cities

	Highway Mileage <sup>a</sup>	Automobilea	Airplane <sup>b</sup>	Amtrak
Jacksonville-Tampa	197	3 hours, 28 minutes	4 hours, 10 minutes <sup>b</sup>	5 hours, 13 minutes
Jacksonville-Miami	344	5 hours, 15 minutes	2 hours, 20 minutes	9 hours, 7 minutes
Orlando-Miami	237	3 hours, 41 minutes	1 hour, 55 minutes	5 hours, 45 minutes
Tampa-Miami	281	4 hours, 20 minutes	1 hour, 59 minutes	5 hours, 45 minutes
Average		4 hours, 25 minutes	2 hours, 55 minutes	6 hours, 48 minutes

Source: Cambridge Systematics.

#### Notes:

- <sup>a</sup> Highway mileage and automobile times obtained from Google Maps (http://maps.google.com). No allowance is made for congestion.
- <sup>b</sup> Airplane times were obtained from Expedia.com, sorted by shortest time. One hour was added to all air travel times to allow for airport check-in and security. There were no direct flights between Jacksonville and Pensacola or Jacksonville and Tampa. The shortest trip time for each trip was 3 hours and 10 minutes, which includes a connection in Atlanta. Times allow for the time zone change.

Another issue reducing the competitiveness of current intercity passenger rail service in Florida is the low-frequency and off-peak travel times. In the markets listed, there are usually one or two rail departures per day. Jacksonville to Miami, for example, has two rail trips on an average weekday. One departs at 7:15 a.m. and the other at 9:48 a.m. Air, in contrast, offers four nonstop trips from Jacksonville to Miami departing at 6:30 a.m., 11:15 a.m., 4:40 p.m., and 6:05 p.m. on the same weekday.

To provide another contrast, New York City to Washington, D.C., and Jacksonville to Tampa are both approximately 225 miles apart. Business travelers in the New York-D.C. corridor can select from any of the hourly departures of the Acela Express Metroliner trains (two hours and 50 minutes travel time) or the regional trains that run between the Metroliner service (approximately 3.5 hours travel time). The flexibility of schedule and the time savings to the business traveler make passenger rail a competitive, viable option to air travel for New York-D.C. travel. The 5 hours and 13 minutes travel time in the Jacksonville-Tampa corridor make it difficult for a traveler to justify the lost opportunity costs from time that could have been used conducting business.

# **Commuter Services**

Florida's only commuter rail, Tri-Rail is operated by the South Florida Regional Transportation Authority (SFRTA) and covers a 72-mile-long corridor (142.2 directional route miles) between West Palm Beach and Miami. Tri-Rail has 18 stations along the

south Florida coast including 5 stations in Miami-Dade County, 7 in Broward County, and 6 in Palm Beach County. In 2008, Tri-Rail was ranked 11<sup>th</sup> among 22 commuter rail systems nationwide, with more than 4.3 million annual unlinked trips in southeast Florida. The total number of Tri-Rail passengers increased by 13.2 percent from 2007 numbers. This is the result of the growth in population in southeast Florida and growing traffic congestion, as well as an increased interest in alternative transportation options despite fuel prices decreases throughout 2008.

## History

Tri-Rail began operations on January 9, 1989 as a demonstration commuter rail project to alleviate highway congestion during the widening of I-95. Table 3.5 describes the timeline of Tri-Rail from 1985 to the first half of 2009.

**Table 3.5** Tri-Rail Timeline of Major Events

1984-1985	Final Planning Studies completed, allowing early organizers to take additional steps in preparing the region for commuter rail service.
1986	Tri-County Rail Organization (TCRO) formed through an interlocal agreement made between Dade, Broward, and Palm Beach Counties. The agreement authorizes TCRO to eventually manage regional commuter rail operations.
1989	Tri-County Commuter Rail Authority (Tri-Rail) created through Florida Statutes, replacing TCRO.
2003	Tri-Rail transformed into South Florida Regional Transportation Authority (SFRTA) through legislation signed by Governor Jeb Bush. SFRTA is empowered by the State to enhance the movement of people and goods to improve economic viability and quality of life in South Florida.
2006	The number of daily weekday trains is increased from 30 to 40.
2007	SFRTA completes its double-tracking project, including the New River bridge span in Fort Lauderdale. The number of weekday trains is increased from 40 to 50.
2008	Tri-Rail carries a record-breaking 4,303,509 passengers, representing a 26.3 percent increase over the 2007 total of 3,408,486 passengers.
July 2009	SFRTA is awarded approximately \$2.5 million in stimulus funds, as part of the American Recovery and Reinvestment Act of 2009. Categorized under Urbanized Area Formula Funds, this grant will allow for the SFRTA/Tri-Rail to purchase one new locomotive fully covered by Federal funds.
December 2009	The December 2009 Special Legislative Session on Rail – provided Tri-Rail with additional operating funding of \$13.3 million if the agency continues to operate as is or an additional \$15 million if the agency takes over maintenance and dispatching of the South Florida Rail Corridor from CSXT.

Source: Cambridge Systematics.

# **Current Operations**

Tri-Rail currently operates 25 daily round-trips on weekdays and 8 on weekends and major holidays. With the completion of the double-tracking project, service frequency has been increased to mostly hourly service with half hourly service during the peak hours, running from 4 am to midnight during the weekdays. All trips cover the entire 72-mile Tri-Rail route between the Mangonia Park (West Palm Beach area) and Miami Airport Stations. The map in Figure 3.2 shows the locations of commuter rail stations along the Tri-Rail line.

Figure 3.2 Tri-Rail Commuter Rail System Map



Source: Tri-Rail (South Florida Transportation Authority).

The corridor that Tri-Rail operates over is owned by FDOT, which acquired it from CSX Transportation in 1988 with CSXT retaining an exclusive perpetual freight easement. CSXT currently provides dispatching for the corridor and maintenance of its track and

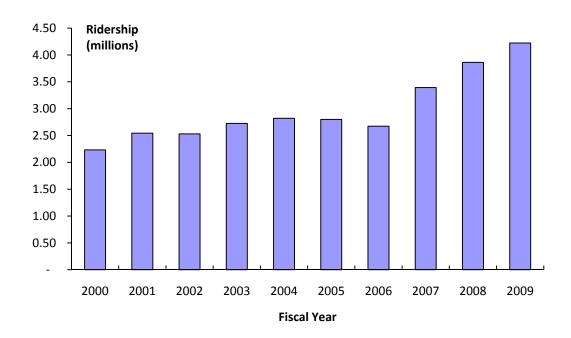
signals under the Operating and Mainntenance Agreement Phase A (OMAPA) with FDOT. SFRTA, Amtrak, and CSXT share the use of the corridor.

SFRTA is not a party to OMAPA; CSXT and FDOT are the signatories. SFRTA is FDOT's commuter rail service operator within SFRC. CSXT and FDOT have negotiated another agreement, which is titled South Florida Operating Management Agreement (SFOMA) that could, in the future replace OMAPA. SFOMA would turn over dispatch and maintenance of the corridor to FDOT. It would also give FDOT control over the operating rules used on the corridor. It is FDOT's intention to transfer those responsibilities to SFRTA. The terms of the transfer are still under discussion between SFRTA and FDOT.

## Ridership

Since 2006, when it showed the largest percentage of passenger growth of any system in the country, Tri-Rail has consistently been one of the nation's leaders for ridership growth in the commuter rail sector. Tri-Rail carried 4.22 million passengers in FY 2009, representing a 9.3 percent increase over the 2008 total. Ridership on Tri-Rail has grown steadily since its formation, with some slight upward and downward fluctuation from year to year. Ridership has increased significantly the past three years. The chart in Figure 3.3 illustrates recent Tri-Rail ridership trends.

**Figure 3.3 Annual Tri-Rail Ridership** *Unlinked Trips (in Millions)* 



Source: South Florida Regional Transportation Authority.

SFRTA's commuter operations are comparable to many other commuter rail operations around the country. For example, Dallas, San Jose, and Southern Connecticut each have one commuter line. Seattle and Northern Virginia both have service on two commuter lines. Table 3.6 compares general line characteristics for each of these commuter train operations. Dallas's system is by far the smallest, while Seattle's system is the newest.

**Table 3.6** Rail Line Characteristics for Selected Commuter Operations

Agency	Fixed Guideway Directional Route Miles	Vehicles Operated in Maximum Service	Beginning Date of Service	Service Runs	Time to Run Length of Service
South Florida Regional Transportation Authority (SFRTA)	142.2	34	1989	West Palm Beach to Miami	110 minutes
Trinity Railway Express (TRE)	29.0	21	1996	Dallas to Fort Worth	65 minutes
Virginia Railway Express (VRE)	161.5	75	1992	Manassas to D.C., Fredericksburg to D.C.	75 minutes 95 minutes
Altamont Commuter Express (ACE)	172.0	18	1998	Stockton to San Jose	130 minutes
Connecticut Department of Transportation (CDOT)	101.2	22	1990	New London to New Haven	50 minutes
Central Puget Sound Regional Transit Authority (ST)	146.9	35	2000 2003	Tacoma to Seattle, Everett to Seattle	60 minutes 60 minutes

Sources: 2007 National Transit Database, Agency web sites.

Table 3.7 shows complete data on performance measures for the sample of commuter train operations. Based on 2007 operating statistics, SFRTA operating expenses are second largest at \$43 million, and its fare revenues cover about 17 percent of total operating costs. Virginia Railway Express (VRE), which is a larger system, is the only agency with a larger operating cost, but the agency's farebox revenues cover a larger amount of operating costs – about 43 percent. None of the other agencies serve more than a small fraction of the revenue miles that SFRTA and VRE serve. Both agencies annually run excess of 1.7 million passenger-miles, while the next largest agency – Altamont Commuter Express (ACE) – offers only 780,000.

**Table 3.7** Rail Performance Measures for Selected Commuter Operations

Agency	Operating Expenses	Annual Passenger- Miles	Annual Vehicle Revenue Miles	Annual Unlinked Trips	Operating Expense Per Passenger- Mile	Operating Expense Per Annual Vehicle Revenue- Mile
South Florida Regional Transportation Authority (SFRTA)	\$43,306,781	107,980,836	2,558,956	3,408,486	\$0.40	\$16.92
Dallas Area Rapid Transit (DART)	\$20,919,797	16,530,552	552,623	1,476,088	\$1.27	\$37.86
Virginia Railway Express (VRE)	\$46,192,429	103,229,455	1,771,079	3,386,974	\$0.45	\$26.08
Altamont Commuter Express (ACE)	\$10,879,259	33,612,734	780,192	706,858	\$0.32	\$13.94
Connecticut Department of Transportation (CDOT)	\$10,917,972	9,086,541	588,755	466,406	\$1.20	\$18.54
Central Puget Sound Regional Transit Authority (ST)	\$24,631,997	52,987,255	737,582	2,156,652	\$0.46	\$33.40

Source: 2007 National Transit Database.

SFRTA also has the second highest cost-effectiveness and service efficiency in comparison to its counterparts. With operating expenses per passenger-mile of \$0.40, SFRTA was slightly less efficient than ACE, but performed significantly better than Dallas and Connecticut. SFRTA's operating expenses per vehicle revenue-mile were \$16.92, again slightly higher than ACE, but significantly lower than Dallas, VRE, and Seattle. Dallas had the highest operating expenses per passenger-mile and vehicle revenue-mile, at \$1.27 and \$37.86, respectively.

# Other Rail-Based Systems

In addition to Tri-Rail, which is a commuter railroad, there are several rail-based passenger transportation systems operating in the State of Florida. These include Miami's Metrorail and Metromover, the TECO Line Streetcar System in Tampa, and Jacksonville's Skyway system. A brief description of each of these systems, along with their corresponding route maps, is provided below.

- Metrorail, operated by the Miami-Dade Transit Agency, is an electrically powered, elevated, rapid-transit heavy rail system extending from Kendall through South Miami, Coral Gables, and downtown Miami; to the Civic Center/Jackson Memorial Hospital area; and to Brownsville, Liberty City, Hialeah, and Medley in northwest Miami-Dade, with connections to Broward and Palm Beach counties at the Tri-Rail/ Metrorail transfer station. Metrorail has 22 stations connecting a major portion of Miami-Dade County's businesses, cultural, and shopping centers (See Figure 3.4). Travel from one end of the 22.6-mile system to the other takes 47 minutes, with top speeds of 58 mph and average speeds of 31 mph. The Metrorail system, which first opened in May 1984, currently has 136 cars, with a capacity of 164 passengers per car. Metrorail averaged approximately 60,200 weekday boardings and 59,900 weekend boardings in January 2009. Total ridership in FY 2008 was over 18.5 million, a 5.9 percent increase from FY 2007 ridership figures.<sup>51</sup>
- Metromover, located in Miami, is the largest automated guideway in the United States. It is operated by the Miami-Dade Transit Agency, has more than 8.5 directional route miles, and serves 20 stations. This electrically powered, fully automated peoplemover system, which first opened in April 1986, currently operates free of charge and has 29 cars, with a capacity of 96 passengers per car. Metromover has a downtown inner loop and Omni/Brickell outer loop. These loops connect with Metrorail at Government Center and Brickell stations (see Figure 3.5). Weekday Metromover boardings for January 2009 averaged 25,500 and weekend boardings averaged 28,400. Total ridership in FY 2008 was over 8.8 million, a 2.5 percent increase from FY 2007.8

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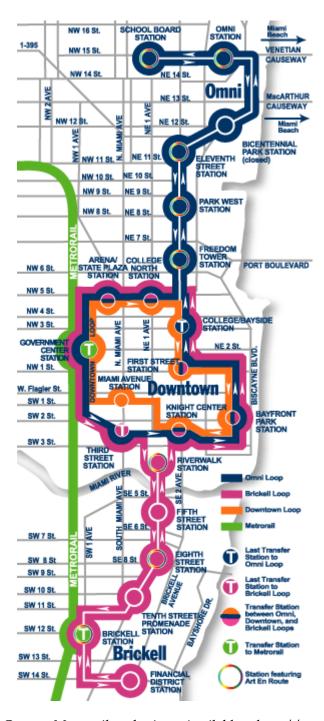
<sup>&</sup>lt;sup>51</sup>Miami-Dade County Metrorail web site. Available: http://www.co.miami-dade.fl.us/transit/metrorail.asp.

Figure 3.4 Metrorail System Map



Source Miami-Dade County Metrorail web site. Available: http://www.co.miamidade.fl.us/transit/metrorailstations.asp.

Figure 3.5 Metromover System Map



Source Miami-Dade County Metrorail web site. Available: http://www.co.miamidade.fl.us/transit/moverstations.asp.

• TECO Line Streetcar System (light rail), operated by the Hillsborough Area Regional Transit Authority (Tampa/Ybor City), offers 10 station stops along 4.6 directional route miles. The city used to have an electric streetcar system until 1946 following World War II. Streetcars returned to Tampa in 2002 with the opening of the heritage line; this phase of the TECO Line Streetcar System is a 2.4-mile section that connects the downtown, Channelside and Ybor City, improving transportation capacity, supporting Tampa's thriving cruise industry and transporting workers to and from their jobs (Figure 3.6).

Phase 3 Cadrecha Plaza Car Barn Streetcar System Union Station Port Authority (Amtrak) Greyhound **Bus Station** Phase 4 Phase 2 to Hyde Park York St Tampa Cumberland Ave Tribune Southern Transportation Household Finance Plaza Corporation

Figure 3.6 TECO Line Streetcar System Map

Source: Wikipedia.org.

- The next phase of the system will be a 0.3-mile extension that will run north on Franklin Street to Whiting Street and the Fort Brooke parking garage. It will connect the more than 35,000 people who work in the downtown area to almost every major downtown parking structure with an anticipated operating date of December 2010.
- JTA Skyway. The JTA Skyway is a people mover monorail system in Jacksonville. It is operated by the Jacksonville Transportation Authority. The course of its 2.5-mile track includes the Acosta Bridge, spanning the St. Johns River, which divides

downtown Jacksonville. Each train is automated by Automatic Train Control (ATC), can have two to six cars, and travels at up to 35 mph (56 km/h). The system serves eight stations in the region, as illustrated in Figure 3.7.

Figure 3.7 JTA Sykway System Map



Source: Wikipedia.org.

# ■ 3.3 Proposed Passenger Rail Systems

This section discusses various passenger rail systems that have been proposed in the State of Florida. These include Florida High-Speed Rail (primarily the Tampa-Orlando-Miami corridor), Florida Intercity Passenger Rail Service, the Jacksonville Regional Transportation Center, and various commuter rail services throughout the State. The section provides a background for each of these in addition to their current status and future outlook.

# **High-Speed Rail**

# Background<sup>52</sup>

High-speed rail (HSR) operates in the 120 to 200 mph range, or faster, and requires a minimum of Class VII or greater track. The primary advantage of high-speed rail is that it expands the 75- to 300-mile competitive range of intercity service, especially providing stronger alternatives to air travel at longer distances. The primary disadvantage of high-speed rail is the cost associated with new alignments, track upgrades, rolling stock, and highway-rail grade crossing separations. The Orlando-Tampa corridor, for example, already is heavily congested with freight trains and will require a new alignment for high-speed passenger rail. Safety reasons also prompt a higher degree of separation between high-speed passenger and freight trains as well as grade separations at crossings, either through dedicated track or temporally.

Florida has been evaluating high-speed rail since at least the mid-1970s, when the Florida Transit Corridor Study analyzed 150 mph trains operating between Daytona Beach and St. Petersburg. In the 1980s, Governor Bob Graham created the Florida High-Speed Rail Committee, which issued a report recommending public/private partnerships be formed to implement a high-speed rail network to meet Florida's mobility needs in the 21st century. In 1984, the Florida Legislature enacted the Florida High-Speed Rail Transportation Committee Act and, by 1986, a study was completed recommending a high-speed rail system connecting Miami, Orlando, and Tampa (see Figure 3.8). Proposals were received and reviewed, but eventually they were rejected by the State as too expensive. In 1992, the Florida Legislature passed the New High-Speed Rail Act, bringing FDOT into the efforts.

In 1995, FDOT announced a funding commitment of \$70 million per year for 30 years for high-speed rail. This led to a partnership with the Florida Overland Express (FOX), a consortium that proposed constructing 320 miles of new electrified, grade-separated, dedicated high-speed rail track linking Miami, Orlando, and Tampa at a total cost of \$6.1 billion. Top speeds would reach 200 mph, providing travel times of 1.5 hours between Orlando and Miami. The FOX consortium proposed debt financing with bonds fully repaid from system revenues and the \$70 million annual contribution from the State. In 1999 this effort was terminated along with FDOT's annual \$70 million funding commitment. The effort was replaced in 2000 by the more cost-effective *Florida Intercity Passenger Rail Service Vision Plan* prepared by Amtrak.

<sup>&</sup>lt;sup>52</sup>Background information obtained from: http://www.floridahighspeedrail.org/. In particular, the document *History of High-Speed Rail in Florida: Chronology of Events*, was used.

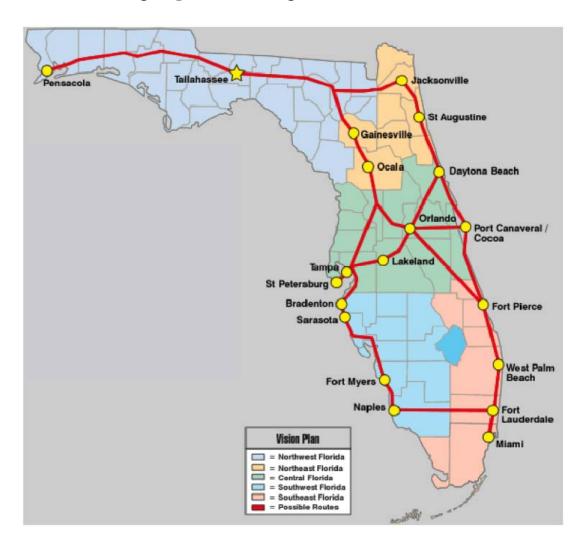


Figure 3.8 Florida High-Speed Rail Long-Term Vision Plan

# Florida High-Speed Rail from 2000 to Present

In November 2000, Florida voters approved an amendment to the State Constitution mandating the development of high-speed passenger transportation service linking Florida's five largest urban areas. This service would have speeds in excess of 120 mph and would operate on dedicated rails or guideways. This prompted the Florida Legislature to enact the Florida High-Speed Rail Authority Act, which created the ninemember Florida High-Speed Rail Authority.

The High-Speed Rail Authority created a vision for a high-speed rail network linking the major population centers in Florida and issued a request for proposals in October 2002 to design, build, operate, maintain, and finance an initial high-speed rail service between Tampa and Orlando. The cost estimate was \$2.4 billion. The route would begin near the Tampa Central Business District and travel parallel along I-4 into Orlando and on to the Orlando International Airport. A Phase I, Part 2 extension into St. Petersburg also was planned.

Growing concern over the costs of implementing a high-speed rail network led to efforts to repeal the amendment. In November 2004, Florida voters chose to overturn the original amendment, resulting in removal of the constitutional mandate. Although the amendment has been repealed, the Florida High-Speed Rail Authority decided it was in the best interest of the State of Florida to complete the Final EIS and to pursue a Record of Decision from the FRA for the initial Tampa-Orlando segment, completing and preserving the progress to date. Since 2004, the Authority has continued the preliminary design, engineering, and procurement process for the Florida high-speed rail corridor with funds previously earmarked by the U.S. Congress.

On April 16, 2009, the Obama Administration announced a new vision for developing high-speed intercity passenger rail in America. This vision, outlined in the administration's *High-Speed Rail Strategic Plan*, calls for collaboration between Federal Government, States, railroads, and other stakeholders to develop a national system of high-speed rail corridors. Eleven designated corridors, including the Tampa-Orlando-Miami high-speed rail corridor, are addressed in the plan (see Figures 3.9 and 3.10), which details the application requirements and procedures for obtaining a portion of \$8.0 billion in high-speed rail funding appropriated through the ARRA.

Furthermore, two more corridors, Jacksonville to Orlando and Mobile to Jacksonville, were designated as key passenger rail routes which could be next in receiving designation and funding for high-speed rail service. A Jacksonville to Orlando line would be next in priority after the Tampa-Orlando and Orlando-Miami lines have been completed.

Figure 3.9 Designated National High-Speed Rail Network

# VISION for HIGH-SPEED RAIL in AMERICA



Source: High-Speed Rail Strategic Plan.



Figure 3.10 Tampa-Orlando-Miami High-Speed Rail Corridor

Source: FDOT - <a href="http://www.floridahighspeedrail.org/">http://www.floridahighspeedrail.org/</a>.

# Tampa-Orlando Corridor

In January of 2010, Florida DOT received a \$1.25 billion award for the first phase of the aforementioned project. This investment will initiate the development of the Tampa to Orlando segment, with speeds reaching 168 mph and 16 round-trips per day on new track dedicated solely to high-speed rail. Trip time between the two cities on the new line will be less than one hour, compared to around 90 minutes by car. This project will create jobs and generate economic activity as 84 miles of track are constructed, stations are built or enhanced, and equipment is purchased. Completion of this phase is anticipated in 2015.<sup>53</sup>

<sup>&</sup>lt;sup>53</sup>http://www.whitehouse.gov/the-press-office/fact-sheet-high-speed-intercity-passenger-rail-program-tampa-orlando-miami.

Florida is planning five stations along this corridor (see Figure 3.11), and will have strong connections with existing road, bus, and transit systems. For example, plans at the Orlando International Airport (OIA) call for high-speed rail to stop at a new southern terminal, which it would share with a proposed extension of SunRail and a future light rail system. The International Drive (I-Drive) stop is located at the southern end of the I-Ride trolley route and is served by Lynx. The Tampa station is at the north end of the HART bus transit mall. Proposed light rail service in Tampa would run directly to the high-speed rail station. All stations will feature parking and rental car facilities and will have a full set of rail passenger services available. Each station also will have airconditioned waiting areas and convenience services for ticketed passengers.<sup>54</sup>

ORANGE COUNTY CONVENTION CENTER MULTI-MODAL STATION ORLANDO ORLANDO INTERNATIONAL AIRPORT WAIT DISNEY ORLANDO 41 AIRPORT MULTI-MODAL TAMPA TAMPA INTERNATIONAL LAKELAND/POLK COUNTY STATION DOWNTOWN MULTI-MODAL FLORIDA HIGH SPEED RAIL HNTB WilburSmith TAMPA-ORLANDO

Figure 3.11 Planned Stations along Tampa-Orlando Corridor

Source: FDOT - <a href="http://www.floridahighspeedrail.org/">http://www.floridahighspeedrail.org/</a>.

Moving forward, FDOT is responsible for building the project with oversight by the Federal Railroad Administration (FRA). The Federal government is the principal funding source for the project, and FRA is responsible for administering the \$1.25 billion award of ARRA funds and any other future Federal funding. It is expected that the FRA and FDOT

<sup>&</sup>lt;sup>54</sup>http://www.floridahighspeedrail.org/.

will develop a funding agreement for the balance of the project's capital costs as the project progresses.

The project received a Record of Decision from the FRA on May 7, 2010, which allows FDOT to proceed with right-of-way acquisition, design, and construction. U.S. Transportation Secretary Ray LaHood announced in Orlando on May 27, 2010 that Florida received \$66.7 million out of \$80 million in ARRA funds being made available nationwide. This money will fund FDOT's work program for 2010 that includes taking the project to 30 percent design, updating ridership projections and preparing for issuance of bid documents in early 2011.

Project construction (for this corridor) will likely occur in two phases. The first phase is a proposed Early Works Safety Project, which will involve elimination of I-4 median obstacles and construction of at-grade permanent safety barriers. This work is expected to begin in early 2011.

FDOT also is planning to bid out the main part of the project early next year. Private consortiums will be asked to submit bids to complete the design of the system, then build, operate, and maintain it. FDOT's goal is to secure construction bids and have the private sector cover operating costs. FDOT expects to select the private vendor in 2011. Construction is projected to start in 2012 and system operation is scheduled for 2015. These schedules are subject to approval by the FRA.

#### Orlando-Miami Corridor

The second phase of the project, the 230-mile Orlando to Miami line, is scheduled for completion in 2017 and is expected to operate at speeds up to 186 mph, reducing travel time between these two cities to approximately two hours, or roughly half as long as it takes to drive the same route. Ultimately, 20 round-trips per day between Orlando and Miami are planned. Although no Federal funds are currently available for this segment, significant planning activities are ongoing to prepare for this second phase of Florida's high-speed rail vision should funding be put in place for further high-speed rail development. These activities include cost evaluation and environmental impacts of various alignments along corridor. This planning work is expected to take approximately 30 months.

## **Anticipated Costs**

The total anticipated capital cost for infrastructure, right-of-way, and rolling stock for the Orlando-Tampa corridor is \$3.5 billion. Infrastructure and rolling stock for the Orlando-Miami corridor is estimated at \$8 billion. Right-of-way costs for this corridor have not yet been determined.

# Florida Intercity Passenger Rail Service

## Background

In response to continued economic and population growth in Florida and increasing pressure on the State's transportation network to provide mobility and transportation choices for residents and visitors, FDOT developed the 2006 Intercity Passenger Rail Vision Plan. The plan identifies potential higher-speed intercity rail corridors to assist in meeting Florida's growing mobility needs and calls for an incremental and phased approach to the implementation of a Statewide intercity passenger rail system. It was developed based on the financial and economic objectives of the U.S. DOT and FRA. The plan aims to:

- Develop an affordable Statewide intercity passenger rail system that will connect all major urban regions in the State that are not commonly served by air or rail;
- Use a combination of Florida East Coast (FEC) and CSXT rights-of-way with inland and coastal options as well as segments of highway corridors already owned by FDOT and other public and partner entities; and
- Develop a system that is eligible for Federal funding by meeting FRA's public-private partnership (P3), financial, and benefit/cost requirements.

# Potential Corridors for Florida Intercity Passenger Service

Based on future intercity travel market projections and the objectives listed above, the Florida Vision Plan evaluated two independent routes that connect Miami, Orlando, Tampa, and Jacksonville (see Figure 3.10). The first traveled along the coast (the Coastal Route) from Miami to Jacksonville with a westbound branch, connecting just North of Cocoa Beach, that linked Tampa and Orlando. The second option was the inland route which traveled from Miami to West Palm beach along the coast and then moved inland to Winter Haven (through Sebring); this track would connect to a Tampa-to-Jacksonville corridor moving through Orlando and Sanford. The plan was for either of these alternatives to be implemented over four phases, culminating in 2020 or 2025.

Recently, however, there have been new developments in the region that have altered the plan moving forward. These include the High-Speed Rail initiative discussed earlier, as well as Amtrak as well as efforts to restore Amtrak service on the Florida East Coast Railway from Jacksonville to Miami. FDOT is currently seeking Federal funding to develop this latter service under the FRA's High-Speed and Intercity Passenger Rail (HSIPR) program. The proposed service would provide twice daily round-trip service with interim stops in St. Augustine, Daytona Beach, Titusville, Cocoa, Melbourne, Vero Beach, Fort Pierce, and Stuart. The proposed service will follow the FEC rail line from Jacksonville to West Palm Beach, then crossover to the South Florida Rail Corridor (Tri-Rail) and follow that line down to Miami.

# Amtrak Gulf Coast Service55

On July, 2009 Amtrak published the Gulf Coast Service Plan, which highlighted three options for service restoration along the Gulf Coast, between New Orleans (LA) and Sanford (FL).

## **Background**

In 1993, Amtrak's Sunset Limited, which operated between Los Angeles and New Orleans, was extended east from New Orleans to Jacksonville, and initially to Miami, Florida. This created a new transcontinental Amtrak route and brought passenger rail service to the Gulf Coast Region between New Orleans and Jacksonville. In August 2005, Sunset Limited service east of New Orleans was suspended due to Hurricane Katrina, which caused massive damage to rail infrastructure on the portion of the train's route between New Orleans, Louisiana and Mobile, Alabama. The service remains suspended today because of the cost and challenges associated with restoring service to this route.

Amtrak's suspension halted intercity passenger rail service at thirteen stations, six of which were located in Florida. These are: Pensacola, Florida

- Crestview, Florida (Ft. Walton Beach);
- Chipley, Florida (Panama City);
- Tallahassee, Florida;
- Madison, Florida; and
- Lake City, Florida.

#### **Preferred Options for Service Restoration**

Amtrak initially evaluated 12 alternatives, described in more detail in Section IV of the report, for restoring service between New Orleans, and Florida. Of the 12 alternatives, three were selected as preferred options for evaluation in the study based upon projected ridership, revenue, operating costs, and operating loss.

The preferred options are:

- 1. Restore tri-weekly Sunset Limited service between Los Angeles and Orlando.
- 2. Extend the daily City of New Orleans service, which currently operates between Chicago and New Orleans, and east from New Orleans to Orlando.
- 3. Implement daily stand-alone overnight service between New Orleans and Orlando.

<sup>&</sup>lt;sup>55</sup> Amtrak Gulf Coast Service Plan – http://www.amtrak.com/

Table 3.8 below highlights some of the key metrics from the three options evaluated as part of the Service Plan Report. As illustrated, Option 1 results in annual operating losses of \$4.8 million with 53 thousand passengers and a farebox recovery ratio of 56%. While the annual ridership increases with the other two options, the increased operating costs would lead to annual losses of \$11.7 and \$18.4 million, for options 2 and 3 accordingly, with recovery ratios of 44% and 23%.

**Table 3.8** Amtrak Gulf Coast Service Options - Key Metrics

Projected Performance	Option 1	Option 2	Option 3
Capital/Mobilization Costs	\$32.70	\$57.6-\$96.6	\$57.6-\$96.6
Direct Operating Contribution/Loss	(\$4.80)	(\$11.70)	(\$18.40)
Farebox Recovery	56%	44%	23%
Annual Ridership	53,300	96,100	79,900

Note: Dollar figures are in millions

For Florida the main difference between the three options will be the frequency of the service and the markets that will be served outside of the State. The Florida-portion of the route would be the same under the three scenarios.

The next step for Amtrak is to identify the preferred option for service restoration and provide the additional funding for capital and ongoing operating costs that will be required to implement that option. Once these actions are taken, Amtrak will move quickly to initiate the steps required for service restoration, if such an option is chosen. It should be noted that the States are likely going to be absorbing the annual operating losses.

# Jacksonville Regional Transportation Center

A separate proposal, which supports the *Florida Intercity Passenger Rail Service Vision Plan* is the \$172.5 million refurbishing of the Jacksonville (Prime Osborn) Terminal into a multimodal regional transportation center. Once completed, the modernized Jacksonville Regional Transportation Center (JRTC) will serve the Jacksonville Transportation Authority (JTA) buses, the Skyway, Greyhound, Amtrak, and potential future commuter rail services. The JTC will also contain 2,200 parking spaces, over 30,000 square feet of retail space, and offices for the JTA. A regional Transportation Management Center, housed in the JRTC will manage all traffic operations throughout the region from a central site.

Most relevant to this Rail Plan is the proposal to relocate the current Amtrak station at Clifford Lane to the proposed JRTC (see Figure 3.12). This will require construction of track to connect the JRTC with the CSXT mainline (Amtrak's current route). Current designs will allow Amtrak trains to access and exit from the CSXT line with minimal delay and with minimal impact on freight service. Also part of the proposal is a connection to the Florida East Coast mainline, to facilitate possible passenger service over that route.

The project is planned to be implemented in phases. Schematic designs have been completed and Environmental Assessment draft documents have been approved by FHWA and FTA for all modes in the entire complex. FDOT is at 90 percent full design for the Phase 1 Module, and the JTA has started detail design for the Intercity Bus Terminal, with appraisals underway for the couple of private parcels needed. Construction was set to begin in 2009, but due to funding issues it had to be placed on hold. JTA is continuing to apply for Federal assistance for construction funding, and may obtain support from FDOT. Once funding starts flowing in, JTA will begin construction of the first phase.

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JRTC Site Plan — All Phases

Figure 3.12 Jacksonville Regional Transportation Center Site Plan



Source: Jacksonville Transportation Authority.

### Miami Intermodal Center (MIC)56

In the late 1980s, with Miami-Dade's county's population growing and moving westward, local officials foresaw the need to create transportation connectivity. At the same time, the area's vital aviation industry forecast the need to decongest roadways in and around Miami International Airport, the county's foremost economic generator. Local officials asked FDOT to marshal forces to link the community's disparate transportation services and to find a way to relieve MIA of the burdensome traffic that was clogging its access roadways and terminal ramps.

#### Planning, Design, and Construction

In 1995, FDOT's Major Investment Study (MIS)/Draft Environmental Impact Statement (DEIS) for the MIC was approved by the Federal Highway Administration (FHWA), and in 1998 a Record of Decision by USDOT was granted giving location and design concept approval.

FDOT continues to lead the design and construction of the MIC Program in partnership with the U.S. DOT, Miami-Dade County, the Miami-Dade Expressway Authority and the SFRTA. A consultant management group assists FDOT in the planning, design and implementation of the program. Highway and access roads have been completed. Construction on a Rental Car Center began in August 2007. The structure was topped off in September 2008 and is currently 95 percent completed.

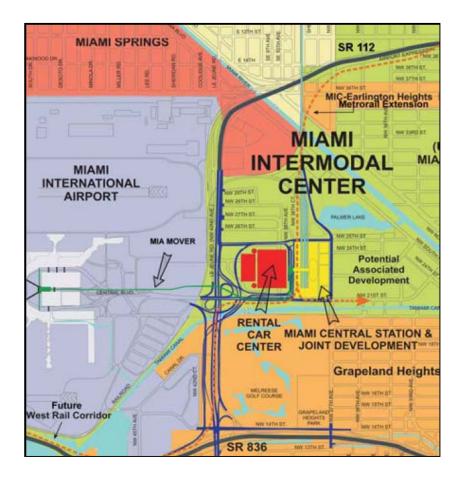
<sup>&</sup>lt;sup>56</sup>Miami Intermodal Center Program, http://www.micdot.com/index.html.

## **Project Overview**

The MIC Program includes the Rental Car Center, Miami Central Station, MIA Mover, access roads, and major highway improvements, all to be completed by 2012 (see Figure 3.13). FDOT is pursuing private and/or public sector Joint Development projects to enhance the MIC's economic viability. Miami-Dade Transit is developing the MIC-Earlington Heights Metrorail Extension (referred to as Airport Link) bringing Metrorail service to MIA via the Miami Central Station by 2012.

The MIC will become the county's main transportation hub and will link MIA with South Florida's business and tourist destinations. The Miami Central Station will enable safe and efficient transfers between rail systems, buses, taxis, automobiles, and bicycles. Traffic at the airport's terminals will be reduced by 30 percent when all rental car companies previously found at MIA and several operating off-airport shift operations to the Rental Car Center.

Figure 3.13 Miami Intermodal Center Overview



#### **Finance**

The U.S. DOT has designated the MIC Program as a Major Project under the Transportation Infrastructure Financing Innovation Act (TIFIA) of the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21). This has enabled the MIC Program to receive two loans, one for \$269 million and another for \$270 million. FDOT has repaid its initial \$15 million drawdown of the \$269 million loan and may now use that source to fund a portion of the Rental Car Center.

Funding for the MIC Program has been advanced through the TIFIA loans and an internal State Transportation Trust Fund (STTF) loan. Other major funding sources include various state and local sources and private sector fees and charges. The MIA Mover is being funded primarily by Miami-Dade County as its contribution to the program as specified in various agreements with the state and Federal government. FDOT has contributed \$100 million toward the MIA Mover's guideway, foundations, and stations located at the MIC and MIA. Joint Development will be privately funded by developers who lease MIC properties that have been set aside for that purpose.

#### Florida Commuter Rail Services

## South Florida Regional Transportation Authority

SFRTA has several expansion plans for Tri-Rail outlined in their Strategic Regional Transit Plan and Transit Development Plan. These include:

- South Florida East Coast Corridor Study;
- Jupiter Corridor;
- Expanded Passenger Service in Miami-Dade County;
- New Tri-Rail Station Analysis; and
- East-West Corridor Studies.

## South Florida East Coast Corridor Study

The South Florida East Coast Corridor (SFECC) study was developed in response to the need to support existing and future passenger travel needs in Palm Beach, Miami-Dade, and Broward counties. The study, led by FDOT District 4 in partnership with local and regional agencies, is investigating various alignments and transit technologies along the SFECC. Transit technologies under consideration include buses, commuter rail, light rail, and heavy rail. Right-of-way on streets and areas parallel to the SFECC will be evaluated for the alternative transit routes.

The proposed project would provide additional north-south mobility options for area residents, visitors, and employees in addition to expanding transportation options to support existing and potential growth. The study area covers an 85-mile stretch from the

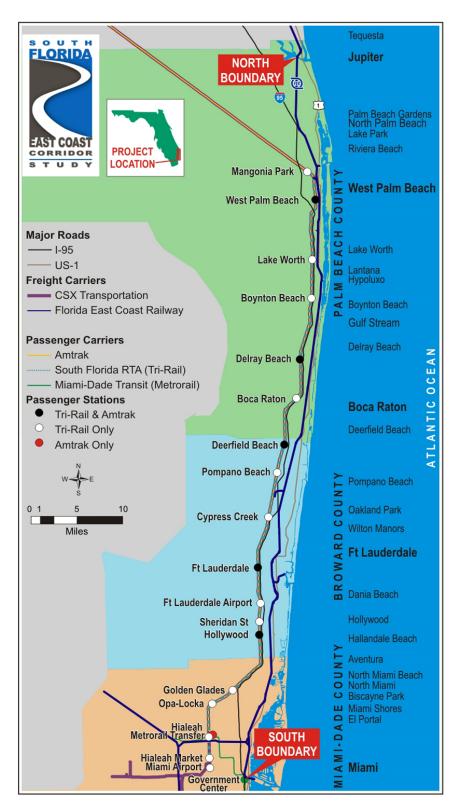
Town of Jupiter in Palm Beach County to the Central Business District (CBD) of the City of Miami (Figure 3.14).

### **Jupiter Corridor**

The Jupiter Corridor is a proposed 15.7-mile extension of Tri-Rail from West Palm Beach to Jupiter, Florida, along FEC right-of-way. The feasibility of commuter rail service on the Jupiter Corridor and a possible extension further north into Martin County will be evaluated as part of the South Florida East Coast Corridor Study.

SFRTA views this as an early phase of the South Florida East Coast Corridor with a total estimated cost of \$250 million. For the design build phase of this northern extension the associated capital improvements, including track and signal improvements, grade crossing safety improvement, station construction, acquisition of new rolling stock and the construction of a new maintenance layover are programmed in the SFRTA five-year capital plan. According to SFRTA, final capital cost estimates and funding sources will be developed through future corridor-specific studies. Funding could be drawn from a combination of FDOT rail and transit grants, including the Strategic Intermodal System (SIS), Transportation Regional Improvement Program (TRIP), Federal Transit Administration (FTA) New Starts and other FTA programs, Palm Beach STP, and private-sector sources.

Figure 3.14 South Florida East Coast Corridor Study Area



Source: South Florida East Coast Corridor Study web site. http://www.sfeccstudy.com.

The corridor could include a connection to the Miami Intermodal Center (MIC) located adjacent to the City of Hialeah. The project has the potential to serve and expand overall transit ridership in the southeast Florida region with connections to existing and proposed transit. This includes connecting with Metrorail, Metromover, and Metrobus services in the tri-county area.

The Phase 1 Alternatives Analysis began in September 2005 and focused on regional issues along the entire 85 miles of the corridor. In 2006, public involvement workshops were held in Broward County, Miami-Dade County, and Palm Beach County to present the alternatives developed regarding the corridor study. Results of the SFECC workshops were then presented to the MPO board for input and guidance. The Final Conceptual Alternatives Analysis is currently under review by the Federal Transit Administration.

In Phase 2, the study area was subdivided into three service segments and one corridorlength section for further analysis based on the forecasted travel patterns and market analysis. The sections are:

- **South Corridor Section -** Between a site near Miami-Dade Government Center and the Pompano Beach Tri-Rail Station via the FEC alignment;
- **Middle Corridor Section -** Between the Pompano Beach Station and the West Palm Beach Tri-Rail Station via the FEC alignment;
- **North Corridor Section -** Between the West Palm Beach Station and Jupiter via the FEC and I-95 alignments; and
- **South East Florida Corridor Section -** Extending the entire length of the corridor and incorporating the South, Middle, and North Sections.

Phase 2 will create a Master Plan for the entire corridor resulting in an overall Locally Preferred Alternative that defines modes and services on the entire FEC alignment. The Phase 2 study was expected to be completed in spring 2010.

#### **Expanded Passenger Service in Miami-Dade County**

SFRTA has identified a number of existing rail corridors in Miami-Dade County that could be utilized for passenger rail service. Tri-Rail extensions using FRA compliant commuter rail technology are envisioned in Downtown Miami (via the FEC railway) and to the West (using SFRC/CSX tracks, parallel to SR 386/Dolphin Expressway). Although commuter rail extensions to the South (using the CSX Kendall corridor and the FEC Ludlam corridor) have been proposed in the past, recent studies by the Miami-Dade MPO have recommended that these two southern corridors would be best served by light rail/streetcar or bus rapid transit due to their primarily residential character.

#### **New Tri-Rail Station Analysis**

Several new station locations have been proposed for additional evaluation and consideration for implementation along the existing Tri-Rail commuter rail line. The new

stations being evaluated include a station area that would serve the Palm Beach International Airport, a station that would serve the travel market between the existing Hollywood and Golden Glades Tri-Rail stations, and one in Boca Raton just south of Glades Road (to serve the Boca Town Center Mall area). These stations would potentially serve underutilized travel markets as well as improve the accessibility of the Tri-Rail system. Additionally, discussions have taken place among SFRTA, FDOT, and the Broward MPO to initiate analysis of a new Tri-Rail station at Oakland Park Boulevard.

Shuttle bus service would also be implemented at each of these stations in addition to existing local transit bus service. The proposed shuttle bus services for the Palm Beach International Airport station would operate at a 20-minute headway during the peak periods for the a.m. and p.m. and would include a service span that is similar to those Shuttle operations currently serving Miami International Airport and Fort Lauderdale-Hollywood International airport on both weekdays and weekends to provide adequate service coverage and service to meet the specific travel markets and activity center served. Proposed shuttle service for the station between Hollywood and Golden Glades is proposed to also operate on 20-minute headways during the a.m./p.m. peak periods.

#### **East-West Corridor Studies**

SFRTA is currently conducting studies of several potential corridors for expanded Tri-Rail service:

• Palm Beach County - An analysis performed for SFRTA's 2008 TDP Major Update illustrated a potential east-west travel market within Palm Beach County and recommended that SFRTA conduct a corridor study between Delray Beach Tri-Rail Station and Western Palm Beach County centered on Atlantic Boulevard. It was also recommended that SFRTA advance an East-West transit recommendation within Central Palm Beach County from the results of the Central Palm Beach Transportation Corridor Study.

Recently, however, east-west corridor priorities in Palm Beach County have changed. While the recommended Okeechobee Boulevard corridor in the Central Palm Beach Transportation Corridor Study remains a high priority for the SFRTA, PalmTran, and the Palm Beach MPO, the Atlantic Boulevard corridor was not pursued. Instead, SFRTA, FDOT, and the Palm Beach MPO have prioritized the Glades Road corridor for premium east-west transit. A new Tri-Rail station immediately south of Glades Road is being considered to complement this effort.

- **Broward County** The 2008 analysis performed for the TDP Major Update also illustrated a potential east-west travel market along two corridors in Broward County. The analysis recommended that SFRTA lead corridor analysis and evaluation efforts for:
  - The corridor between the South Florida Rail Corridor and Western Broward County centered on McNabb Road/Cypress Creek Road between Atlantic Boulevard and Oakland Park Boulevard; and

 The corridor between the South Florida Rail Corridor and Southwestern Broward County centered on Hollywood/Pines Boulevard between Sheridan Street and Pembroke Road.

However, the east-west corridor priorities in Broward County have also changed since the SFRTA 2008 TDP Major Update. The new Broward MPO 2035 Long Range Transportation Plan (LRTP) emphasizes Sample Road, Oakland Park Blvd, Broward Blvd, and Hollywood/Pines Blvd as premium east-west transit corridors. Since Oakland Park Blvd has emerged as a high priority corridor for Broward County Transit (BCT), Broward MPO, and FDOT, it is now being considered as the site of a future Tri-Rail station. This new station would result in all of the premium east-west corridors in Broward being directly connected to Tri-Rail stations.

#### Orlando

## SunRail (Central Florida Commuter Rail)

Rapid population growth in the Orlando Metropolitan Area (Orange, Osceola, and Seminole Counties) has also caused an increase in congestion throughout the region. In response, FDOT, in coordination with local funding partners in Orange, Osceola, Seminole, Volusia counties, and the City of Orlando, the Federal Transit Administration, metropolitan planning organizations (MPO) in the region, and other interested stakeholders, are advancing the commuter rail line SunRail (formerly referred to as the Central Florida Commuter Rail Transit project, with service expected to begin operation in 2013).

## **Background**

In August 2006, Governor Jeb Bush announced an agreement in principle between FDOT and CSXT that included the purchase of the 61 miles of tracks from the freight company and granted the State complete operations, maintenance, and dispatch controls of the South and Central Florida Rail Corridors. CSXT would retain easement for exclusive freight operations along the Central Florida Corridor from midnight to 5:00 a.m. The State will have 12 hours of exclusive daytime commuter passenger rail operations from 5:00 a.m. to 10:00 a.m. and from 3:00 p.m. to 10:00 p.m. During the remaining seven hours, both passenger and freight cars will use the tracks. CSXT will divert most of its through trains from the "A" Line that runs through Orlando to the "S" Line running from Jacksonville to Wildwood through Ocala.

In November 2007, the State agreed to pay \$432 million to CSXT to purchase the "A" Line from DeLand to Poinciana. In January 2009, the SunRail name and logo were publicly unveiled in Orlando. In February 2009, FDOT awarded professional services contracts to

Archer Western Contractors Ltd. and RailWorks Track Systems, Inc. to perform track and signal work and platform construction within the CSXT right-of-way.<sup>57</sup>

After some legislative difficulty addressing liability insurance provisions, Governor Crist called a special session in December 2009 that not only addressed these issues, but established a comprehensive framework for Florida's current and future passenger rail system. On December 8, the Florida Legislature approved the HB 1-B Bill which authorized FDOT to complete development of the SunRail corridor pending FTA full-funding grant agreement.

## Funding, Operations and Administration

In the summer of 2007 FDOT secured unanimous ratification of agreements for the governance, funding, operations and maintenance of SunRail from local funding. These agreements laid the framework for the operations and maintenance of SunRail, and secured the 25 percent local match funding commitment required to leverage up to 50 percent of the project's \$615 million capital costs from the Federal Transit Administration. In addition, the HB 1-B Bill provided a dedicated funding source for SFRTA-TriRail of at least \$13.3 million from the State Transportation Trust, to be funded by gas taxes, for operations and maintenance.<sup>58</sup> Among other provisions, the agreements call for FDOT to fully fund for the first seven years of the operations and maintenance deficit for SunRail, before local governments assume that responsibility in year 8 of operations.

The agreements also established the Central Florida Commuter Rail Commission, composed of an elected official from each of the five funding partners, that serves in an advisory capacity to FDOT prior to taking over the system. The Commission currently acts in an advisory capacity to FDOT during the construction and early operations of SunRail. Various amendments to the interlocal agreements were subsequently ratified by local funding partners and the Central Florida Commuter Rail Commission in the summer of 2010.

The 61-mile system will serve 17 stations, linking DeBary in Volusia County to Poinciana, south of Kissimmee in Osceola County, and will operate over existing rail freight tracks currently owned by CSXT (see Figure 3.15). The 31-mile first phase of SunRail will serve 12 stations, from DeBary to Orlando. Phase II will serve 5 additional stations, north to DeLand and south to Poinciana. Trains will operate at speeds up to 79 mph, and service is proposed to be offered at 30-minute peak-hour headways, with off-peak service times at approximately two-hour headways. New signals and double-tracking along much of the corridor ultimately will allow SunRail to provide 15-minute peak-hour service as passenger demand increases over time.

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<sup>&</sup>lt;sup>57</sup>FDOT Awards First SunRail Construction Contract. SunRail web site. Available: http://www.sunrail.com/documents.asp.

<sup>&</sup>lt;sup>58</sup>If SFRTA becomes responsible for maintaining and dispatching the South Florida Rail Corridor, \$15 million will be transferred annually from the State Transportation Trust Fund for operations, maintenance, and dispatch. Otherwise, \$13.3 million will be transferred annually.

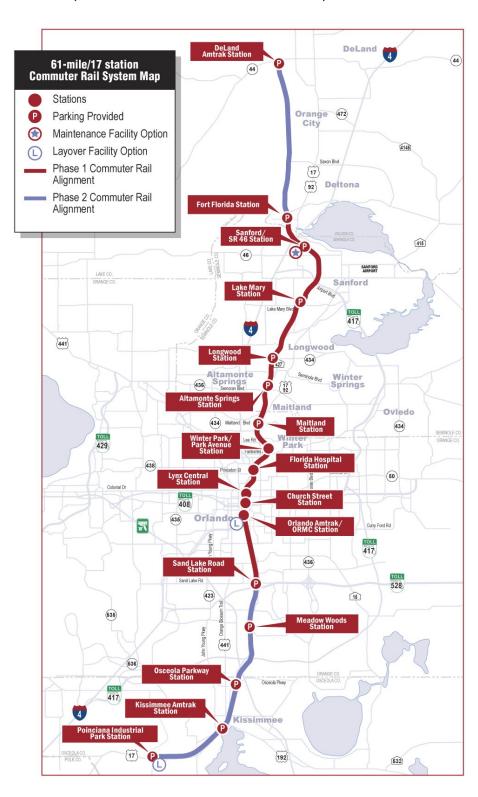


Figure 3.15 SunRail (Central Florida Commuter Rail)

Source: Sunrail web site. Available: http://www.sunrail.com/.

# Tampa

Over the past 30 years the population of the Tampa Bay area has more than doubled, employment has more than tripled, half of developable land has been built out, and the average commute time has more than doubled. By 2035 the area is expected to add another 1.8 million new residents and employment and congestion is expected to double again. To address these concerns, the Tampa Bay Area Regional Transportation Authority (TBARTA) was established by the Florida State Legislature in July 2007 and charged with implementing a Regional Transportation Master Plan for Citrus, Hernando, Hillsborough, Manatee, Pasco, Pinellas, and Sarasota Counties.

TBARTA's Long-Range Transportation Master Plan was adopted on May 22, 2009. The Mid-Term Regional Network for 2035 includes 116 miles of Short-Distance Rail (most likely light rail) investments. The Long-Term Regional Network for 2050 and beyond features 135 miles of Short-Distance Rail (most likely light rail) and 115 miles of Long-Distance Rail (heavy commuter rail) projects. Figure 3.16 illustrates the proposed Long-Term Regional Network. Projects will be prioritized and specific details will be developed through additional corridor-specific studies.



Figure 3.16 Proposed Tampa Bay Long-Term Regional Network

Source: TBARTA Regional Transportation Master Plan. http://www.tbarta.com/plan.

#### Miami

#### Metrorail

On June 16, 2007, Miami-Dade Transit (MDT) renamed the three planned Metrorail expansion projects the Orange Line. The Orange Line will extend the Metrorail system by 22 miles (see Figure 3.17) and be constructed in three phases:

- Phase 1 Miami Intermodal Center (MIC)/Earlington Heights Corridor The MIC/ Earlington Heights Corridor is a 2.4-mile extension of the Metrorail system from the existing Earlington Heights Station. The corridor will extend along State Road 112, to the MIC near Miami International Airport. The project includes one station at the MIC, with connections to TriRail, the Metrobus system, tour buses, taxi cab service, Greyhound, a future Amtrak station, an automated People Mover to MIA, and the airport rental car facility. Project design was completed on January 31, 2008. Right-of-way is being secured, and utilities relocation is underway. The Orange Line Phase 1 is expected to open for service in late 2011. The total cost of the MIC Earlington Heights Corridor is estimated at \$526 million, Funding sources for the Project are the half-cent sales tax from the People's Transportation Plan and \$100 million from the State of Florida.
- Phase 2 North Corridor The North Corridor is an elevated 9.2-mile, double-track, heavy-rail extension of the Miami-Dade Metrorail system. The extension will run from the existing guideway just north of the Martin Luther King Jr. station at NW 62<sup>nd</sup> Street to a new station at NW 215<sup>th</sup> Street just south of Florida's Turnpike near the Broward County line. The extension will serve several communities and key regional landmarks along the NW 27<sup>th</sup> Avenue corridor, Miami-Dade College, Dolphin Stadium, and Calder Race Course. Seven new stations will serve the extension at: NW 82<sup>nd</sup> Street, NW 119<sup>th</sup> Street at Miami-Dade College, Ali-Baba Avenue in Opa-Locka, NW 163<sup>rd</sup> Street and Bunche Park, NW 183<sup>rd</sup> Street and Miami Gardens, NW 199<sup>th</sup> Street at Dolphin Stadium, and NW 215<sup>th</sup> Street at Calder Race Course. Provisions will also be made to accommodate a future station at NW 103<sup>rd</sup> Street. The termination at NW 215<sup>th</sup> Street accommodates a future interface into Broward County. The total cost of the North Corridor is estimated at approximately \$1.5 billion in year of expenditure dollars. Phase 2 has been placed on hold indefinitely pending new funding sources.
- Phase 3 East-West Corridor The East-West Corridor will extend approximately 10.1 miles from the MIC to Florida International University. The project will include up to 10 Metrorail stations. Costs are anticipated to reach \$2.5 billion in year of expenditure dollars. The East-West Corridor has been placed on hold indefinitely pending new funding sources.

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Figure 3.17 Metrorail's Orange Line

Source: Miami-Dade Transit.

#### *Jacksonville*

To accommodate continued and rapid growth in Baker, Clay, Duval, Flagler, Nassau, Putnam, and St. Johns Counties, the Jacksonville Transportation Authority (JTA) completed an extensive feasibility study in September 2009 and determined the three preferred corridors- Southeast, Southwest, and North. These corridors are feasible and will be carried into the next phase of development. The study which determined commuter rail demand, preferred alignments, and possibilities for public-private partnerships to develop the system was conducted in partnership with the First Coast Metropolitan Planning Organization, Northeast Florida Regional Council, and FDOT. The next step is to conduct an Alternatives Analysis. Figure 3.18 illustrates the three corridors chosen in the study.

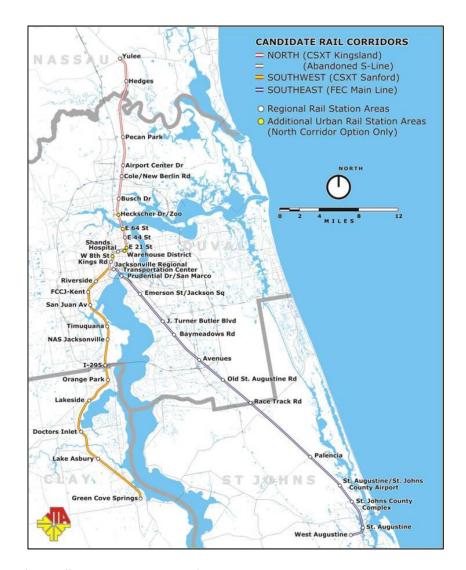


Figure 3.18 Jacksonville Potential Commuter Rail Corridors

Source: Jacksonville Transportation Authority.

# ■ 3.4 Legislative Changes Affecting Passenger Railroads

This section covers four recent legislative changes that have had, and will continue to have, a significant impact on passenger rail transportation in the United States and, in particular, in the State of Florida. These include the American Recovery and Reinvestment Act of 2009, the Passenger Rail Investment and Improvement Act of 2008, the Rail Safety Improvement Act of 2008, and the Florida State Legislation from December, 2009 Special Session.

# American Recovery and Reinvestment Act of 2009 (ARRA)

On February 13, 2009, Congress passed the American Recovery and Reinvestment Act (ARRA) at the urging of President Obama, who signed it into law four days later. The three main goals of the Recovery Act are to:

- Create new jobs and save existing ones;
- Spur economic activity and invest in long-term growth; and
- Foster unprecedented levels of accountability and transparency in government spending.

ARRA included unprecedented level of investment in passenger rail for the United States. The bill appropriated \$1.3 billion to Amtrak for capital investment, and requires that Amtrak allocate \$850 million to rebuild and modernize infrastructure and equipment. Not more than 60 percent of the \$850 million may be spent within the Northeast Corridor (NEC). In addition, ARRA appropriated \$450 million for security and life safety projects. An allocation of 0.05 percent of this funding may be retained by the FRA for oversight, and \$5 million is directly allocated to the Amtrak Inspector General. In addition to the capital funds for Amtrak, the law also makes available \$8 billion for state grant programs for high-speed and other rail service.

The High-Speed Rail and Intercity Passenger Rail (HSIPR) program is a long-term strategy to build an efficient, high-speed passenger rail network of 100 to 600 miles of intercity corridors, as one element of a modernized transportation system. In the near term, this strategy lays the foundation for that network by investing in intercity rail infrastructure, equipment and intermodal connections, beginning with an \$8 billion down payment provided under ARRA, and continuing with a high-speed rail grant program of \$1 billion per year (as called for in the President's Fiscal Year 2010 budget proposal).

The next two subsections describe requests for passenger rail funding from ARRA for projects in Florida. This includes requests made by FDOT and Amtrak.

#### FDOT's Requests for ARRA Funds

In response to this program FDOT submitted pre-application proposals in July 2009 to fund three corridors under the new Federal HSIPR program. These applications call for Federal funding support to implement the following services:

- Tampa-Orlando-Miami High-Speed Rail Program. FDOT's goal is to implement service along the:
  - Tampa-Orlando segment by 2015 (approved for funding in January, 2010); and
  - Orlando-Miami segment by 2017.
- Florida East Coast Amtrak Service from Jacksonville to Miami using the FEC and South Florida Rail Corridors (SFRC). FDOT's goal was to begin passenger service along this line by 2012.

- Central Florida Passenger Rail Corridor, including:
  - Sunrail commuter rail from Volusia to Osceola counties (approved during special session of Florida Legislation during the fall of 2009);
  - Future connections to Jacksonville; and
  - Integration with high-speed rail.

In January of 2010, Florida DOT received a \$1.25 billion award for the Tampa-Orlando segment of the High-Speed Rail Program. This was the sole award for FDOT from ARRA funds.

#### Amtrak's Requests for ARRA Funds

In addition to the aforementioned project applications, submitted by FDOT, Amtrak also prepared a list of projects that totaled almost \$20 billion, that would receive funding from ARRA. In order to distill this list, Amtrak began a process to analyze and reduce the project list to a manageable group of projects that were shovel-ready and could be successfully implemented. Amtrak developed several criteria for scoring and ranking projects, including likelihood of success, tangible value, economic stimulus benefits, and relation to Amtrak corporate goals. The selection criteria were developed by Amtrak executives to ensure that projects would be consistent with the intent of the ARRA and the goals of Amtrak.

A key goal for Amtrak is to reduce its state-of-good-repair backlog (currently estimated to be over \$5 billion), and make investments that are needed to return Amtrak assets to a state of good repair. Amtrak's 2008 Annual Report states that in addition to advancing infrastructure capital programs, Amtrak will use ARRA funds to return to service 100 cars that were sidelined and move forward with equipment procurement. Amtrak's active fleet was near capacity in FY 2008, and equipment procurement is a necessary component to any future plans.

Amtrak has identified 19 projects in Florida, with an estimated cost of \$49.2 million, to be funded through ARRA. Table 3.9 provides details on each of these projects.

Table 3.9 Amtrak ARRA Projects in Florida

Project Name	Estimate	PRJ Number
Non-NEC Wireless Access points for Field Operations in Jacksonville and Sanford.	\$210,000	PRJ29110026
Construction of Hialeah Maintenance Facility	\$25,000,000	PRJ29110037
Static Station Signage Program: platform kiosks in three Florida stations; general signage/rebranding at Orlando Station	\$58,000	PRJ29110081

Mobility First: Okeechobee, Florida includes agreements, host railroad negotiations, conceptual and final design, and financial and program management	\$14,000	PRJ29110113
Mobility First: New wheelchair lift in Sanford, Florida (Auto Train)	\$11,000	PRJ29110113
Mobility First: Tampa, Florida includes agreements, host railroad negotiations, conceptual and final design, and financial and program management	\$2,000	PRJ29110113
Mobility First: Winter Haven, Florida includes agreements, host railroad negotiations, conceptual and final design, and financial and program management	\$2,000	PRJ29110113
MOFE Hialeah - Roof Replacement	\$500,000	PRJ29116007
MOFE Sanford - Upgrade Exterior Lighting	\$500,000	PRJ29116007
MOFE Sanford - Coach Shop-480 Electrical Upgrade	\$500,000	PRJ29116007
Sanford Expand and Upgrade Welfare Facility to include T&E, Mechanical and Engineering Employees	\$1,000,000	PRJ29116007
Hialeah Trackside utility upgrades, substation renewal and electrical upgrades plus facility infrastructure upgrade	\$8,008,304	PRJ29116007
Miami Commissary - facility repairs, and install auxiliary generator	\$125,000	PRJ29116007
Okeechobee, Florida Station to receive a new ADA-compliant Shelter Station Building and 550-foot, 8-inch ATR concrete platform.	\$1,350,000	PRJ29116015
Jacksonville, Florida Station to receive a new ADA-compliant tactile edge on existing concrete platforms	\$100,000	PRJ29116015
Sanford (Auto Train), Florida Station to receive a new ADA-compliant tactile edge on existing concrete platforms	\$150,000	PRJ29116015
Winter Haven, Florida Station to receive a new ADA-compliant tactile edge on existing concrete platforms	\$100,000	PRJ29116015
Tampa Platform ADA and Canopy Restoration	\$1,600,000	PRJ29116015
Construction of Sanford, Florida Station	\$10,000,000	PRJ29116021
Total	\$49,230,304	

Source: Amtrak.

# Passenger Rail Investment and Improvement Act of 2008 (PRIIA)

In October 2008, Congress passed the Passenger Rail Investment and Improvement Act (PRIIA), which reauthorized Amtrak and established a new vision for passenger rail in the United States. PRIIA tasked Amtrak, the U.S. DOT, the FRA, state DOTs, and other stakeholders to improve service, operations, and facilities to strengthen the U.S. passenger rail network. PRIIA authorizes the appropriation of funds to the U.S. DOT for FY 2009 through FY 2013 to award grants to Amtrak or to states to cover operating costs, capital investments, improvements necessary to reduce congestion or facilitate ridership, and

repayment of long-term debt and capital leases. PRIIA also authorizes the Secretary of Transportation to negotiate to restructure Amtrak's debt.

#### To receive funding:

- Amtrak must implement a modern financial accounting and reporting system; and
- Amtrak's Board of Directors must submit a five-year financial plan addressing projected revenues and expenditures, projected ridership, estimated long-term and short-term debt, labor productivity statistics, anticipated security needs, and an annual budget to the Secretary of Transportation.

Amtrak is also required to conduct a number of studies to improve ADA accessibility and explore the feasibility of expanding or reinstating service along certain corridors including restoring service along the *Sunset Limited* route between New Orleans, Louisiana and Sanford/Orlando, Florida.

Furthermore, FRA and Amtrak must develop metrics and minimum standards for measuring the performance and service quality of intercity passenger train service, and Amtrak must develop and implement performance improvement plans for its long-distance passenger routes.

The law puts more control of corridor development in the hands of states and encourages enhanced private sector involvement. Amtrak is encouraged to increase operation of special passenger trains funded by, or in partnership with, private sector operators to minimize the need for Federal subsidies. For states, PRIIA established new guidelines for creating rail plans and requires Amtrak and the states to develop a nationwide standard methodology for establishing and allocating the operating and capital costs of providing intercity rail passenger service on designated high-speed rail corridors or other priority corridors. If a state selects an entity other than Amtrak to provide passenger rail services, the state may enter into an agreement with Amtrak to use Amtrak's facilities and equipment. The Alternative Passenger Rail Service Pilot Program, which FRA is instructed to develop under PRIIA, will also allow rail carriers that own infrastructure over which Amtrak operates to petition to be considered as a passenger rail service provider over the route in lieu of Amtrak for up to five years.

# Rail Safety Improvement Act of 2008 (RSIA)

On October 16, 2008, President Bush signed the Rail Safety Improvement Act of 2008 (the "Safety Act"). The Safety Act is the most comprehensive new railroad safety law in the past 30 years. It contains dozens of new mandates for freight railroads, commuter railroads, and Amtrak. The changes are centered around five concepts as described below:

- 1. Worker and Public Safety (mandates installation of positive train control, hours of service reform, rail passenger disaster family assistance, locomotive cab safety, training, medical attention, and emergency escape breathing apparatus);
- 2. Track Safety (concrete crossties and track inspection time);
- 3. **Grade Crossing Safety** (toll-free number to report grade crossing problems, sight distance regulations, accident and incident reporting, national crossing inventory, state action plan, and emergency grade crossing improvements);
- 4. **Enforcement** (penalties for violations, enforcement transparency, railroad radio monitoring, and inspector staffing); and
- 5. **Other Safety Highlights** (bridge safety, solid waste processing rail facilities, and tunnel information).

These changes will allow for safer operation of passenger railroads in the United States, which may lead to more extensive use of this mode throughout the country.

# Florida State Legislation from December, 2009 Special Session<sup>59</sup>

On December, 2009 Governor Crist signed House Bill 1B, which was passed during the special session held in the fall of that year. The bill establishes a comprehensive framework for Florida's current and future passenger rail system, which today includes SunRail, Tri-Rail and plans for high-speed rail. The primary components of House Bill 1B include the following:

- SunRail FDOT is working with the Federal government and Central Florida officials
  to develop and operate SunRail, a commuter rail transit project that will run along a
  61-mile stretch of existing rail freight tracks in Orange, Seminole, Volusia and Osceola
  counties. The legislation authorizes FDOT to complete the purchase of the Central
  Florida Rail Corridor once the Federal Transit Administration has established a fullfunding grant agreement.
- Tri-Rail The legislation also provides additional funding for Tri-Rail, which
  currently operates 50 trains daily from Palm Beach County to Miami-Dade County.
  The operator of the passenger line, SFRTA, announced in April 2009 that it was in
  danger of significant service reductions without additional resources.
- Florida Statewide Rail Commission and Florida Rail Enterprise The legislation
  creates the Florida Statewide Rail Commission to advise the FDOT and the Legislature
  on the development and operation of Florida's passenger rail systems. In addition, it

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<sup>&</sup>lt;sup>59</sup>The Florida Office of Economic Recovery - http://flarecovery.com/news/articles/governor-crist-signs-bill-expanding-passenger-rail-creating-jobs.

creates the Florida Rail Enterprise within FDOT to oversee all state-owned passenger rail systems. The legislation addresses liability risks associated with state-owned passenger rail corridors and requires FDOT to work with communities affected by increased freight rail traffic resulting from routing modifications.

# ■ 3.5 Passenger Rail Policy Direction and Priorities for Florida

This section presents a snapshot of passenger rail activity in Florida in the past, present, and moving forward. Passenger rail continues to evolve in the State, such as High-Speed Rail, intercity passenger, and commuter rail services throughout Florida. As communities continue to struggle with congestion, FDOT has intensified its investment in these services in order to diversify the type of passenger transportation alternatives available. The State has undertaken these investments using partnerships between FDOT, local governments, and U.S. DOT (including FRA and FTA). Some examples include the Tampa-Orlando high-speed rail corridor, Orlando's SunRail commuter system, and the State's proposed partnership with Amtrak for service on Florida's east coast.

Moving forward, the State of Florida continues to develop and refine its passenger rail program. As described above, there is commuter rail, intercity rail, and high-speed rail in place or under development in the State, all of which tie into the Strategic Intermodal System (SIS). Ongoing evolution of Florida's passenger rail system is illustrated by the following current initiatives:

- 1. Completion of Orlando-Tampa High-Speed Rail. Through partnership with the Federal Government, this will be the first high-speed corridor in the State, representing a significant step forward for HSR in the State. This phase of the program is expected to be completed by 2015.
- 2. Development of the SunRail commuter system. This will be the first commuter rail system in Orlando, which is one of the fastest growing regions in the State.
- 3. Completion of environmental and design work on the Orlando-Miami HSR with eventual construction (pending funding). This will complete the initial Tampa-Orlando-Miami corridor in the State, which will connect its two largest population centers.
- 4. Implementation of passenger service on the Florida's east coast. The State continues to work with the FEC and Amtrak to reestablish intercity passenger service along the Atlantic Coast. The State recently submitted an application to FRA for funding of this project under the High-Speed and Intercity Passenger Rail program.
- 5. Other commuter systems. There are significant investments planned for commuter systems within Florida's major metropolitan areas such as Jacksonville, Tampa, and South Florida. These will be predicated upon interlocal agreements and available funding.

It should be noted that advancement of these initiatives will be dependent on participation from the private sector. The State is not likely to have enough funding sources available to implement these projects by itself (this is particularly the case for high-speed rail projects), and will be using public-private partnerships to deliver.

# 4.0 Rail Needs

## ■ 4.1 Overview

A key element to a robust, efficient, and well-connected rail system in Florida is the identification of infrastructure issues and concerns facing railroads as well as railroad operators and users in the State. To that end, the FDOT developed an on-line rail survey questionnaire to seek input from a variety of stakeholders including the various modal offices at FDOT, the FDOT district offices, freight and passenger railroads, metropolitan planning organizations, counties, regional planning organizations, ports, advocacy and interest groups, as well as private citizens. The analysis in Section 4.0 is based on data provided directly by all respondents to the on-line survey as well as information provided by stakeholders during phone and/or face-to-face conversations and/or e-mail correspondence. After removing duplicates and combining similar needs (e.g., projects that impact the same corridor or station and will be implemented in the same time period), this needs assessment identifies a total of 243 near-, medium-, medium-to-long-, and long-term capital improvement projects and other initiatives. The total cost for the projects where costs estimates are available is \$47.8 billion.60 This includes 61 passengerrelated projects estimated at \$41.7 billion including \$13.7 billion for high-speed rail improvements and 182 freight-specific projects valued at approximately \$6.1 billion for a variety of freight capacity improvements including investments in new lines, bridge maintenance, track maintenance, line expansion, and improved access to/from key hubs and rail corridors, passing sidings, etc. Passenger and freight rail safety needs<sup>61</sup> were valued at approximately \$1.7 billion.

The remainder of Section 4.0: Rail Needs is outlined as follows:

- Purpose describes the purpose of gathering freight and passenger rail needs;
- Methodology discusses the methodology used for collecting rail needs;
- Rail Needs Overview describes rail investment needs by timeframe, geographic location, project type, railroad, and port; and
- **Detailed Needs Table** contains a comprehensive matrix of passenger and freight rail needs in Florida.

<sup>&</sup>lt;sup>60</sup>Costs are estimated in Year 2009 dollars.

<sup>&</sup>lt;sup>61</sup>Rail safety needs are included in the \$41.7 billion passenger and \$6.1 billion freight needs estimates. Rail safety needs include projects related to grade separation, rehabilitation and maintenance, and signal upgrades.

# ■ 4.2 Purpose

The primary purpose of the needs assessment is to develop a comprehensive list of necessary and desired freight and passenger rail improvements, allowing FDOT to gauge the condition of the system and assess potential public investment. Railroad needs, for the purposes of this rail plan, are restricted to capital needs and do not include operating expenses or subsidies. A need is a need regardless of whether it is privately or publicly funded or remains unfunded. Thus, the needs included in this assessment should be considered "unconstrained" needs with no consideration of funding commitments.

It is important to note that inclusion of a need in the Investment Element of the Florida Rail System Plan does not constitute a commitment on the part of the Florida Department of Transportation (FDOT) or the State of Florida to provide funding.

# ■ 4.3 Methodology

In past Florida Rail System Plan Updates, FDOT developed comprehensive interviews and conducted a series of in-person as well as phone and/or e-mail interviews to collect information on pressing rail needs in the State of Florida. Specifically, the freight railroads, FDOT Central and District offices, shippers, and the Florida ports were engaged in this effort.

In this update of the Florida Rail System Plan, FDOT implements three key changes to the process of identifying rail investment needs:

- 1. Expansion of the needs identification effort to include passenger rail projects.
- 2. Providing an opportunity to a broader range of stakeholders and interest groups to provide input to FDOTon their most pressing near-, medium-, medium-to-long-, and long-term rail needs. New stakeholders included counties, cities, metropolitan planning organizations, the Florida Departments of Community Affairs, and Environmental Protection, 1000 Friends of Florida, Florida Trucking Association, Enterprise Florida, the Tampa Bay Area Regional Transportation Authority (TBARTA), South Florida Regional Transportation Authority (Tri-Rail), Citizen Representation, etc.
- 3. Development of an on-line survey to identify key passenger and freight rail improvements needed in the State of Florida.

The on-line survey located at http://ags.camsys.com/fdotrailplan/survey/minimized the need for in-person and phone interviews. In addition, the survey allowed for a more dynamic approach to collecting rail needs; throughout the rail needs identification period,

users could choose to review, update, delete, and add new projects. The survey was also an environmentally friendly alternative<sup>62</sup> to collecting rail needs information and data. Once a user name was created, the process to complete the survey was generally intuitive and supported by an on-line help menu. The survey could be completed in six sequential steps. Step 1 – General Information was mandatory and had to be completed before users could proceed to Steps 2 through 6 (Table 4.1). Users were not expected to be able to fully complete Steps 2 through 6; however, detailed information and data, especially for short-term projects, on issues including funding, environmental screening, public support status, as well as mobility and economic benefits and/or impacts assisted FDOTto better evaluate projects and allocate scarce resources appropriately.

Table 4.1 Procedure for Completing the FDOT Rail Needs On-Line Survey

Step	Activity
Registration	To put information into the on-line survey/database, users must register, providing contact information and setting a login name. FDOT provides a common password for registered users.
1. General Information	In Step 1, users are <b>required</b> to provide general information on any proposed rail project including: project description, type, cost, and anticipated/proposed year of operation.
2. Funding Information	In Step 2, users are asked to provide information – if available – on the status of funding for any proposed project.
3. Planning Information	In Step 3, users are asked to provide information – if available – on the status of any environmental screening process, if applicable. Users are also asked to indicate if proposed project(s) are included in existing land use plans and state, regional, or local transportation improvement plans.
4. Public Support Information	In Step 4, users are asked to indicate if any of the proposed projects put forth have been vetted by all partners and interest groups and if public support has been gathered.
5 and 6. Anticipated Impacts I and II	In Steps 5 and 6, users are asked to quantify the impact(s) of proposed rail investments by providing information – if available – on train vehicle operating costs, train ridership, train ton-miles, average train speed, average travel time, total estimated number of jobs, market served, etc., before and after a proposed project is completed.

Source: Cambridge Systematics.

The needs identified in Section 4.0 are current through May 2010, and were assembled with the procedure outlined in Table 4.2.

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<sup>&</sup>lt;sup>62</sup>Less paper printing.

Table 4.2 Procedure for Identifying Freight and Passenger Rail Needs

Step	Activity
February 2009	Identify key rail stakeholders in the State of Florida.
March-April 2009	Develop a Rail Needs On-Line Survey.
Early May 2009	Present Rail Needs On-Line Survey to Rail Stakeholder Committee Members and FDOT for review.
Mid May 2009	Update Rail Needs On-Line Survey.
Late May 2009	Rail Needs On-Line Survey is now live. On-Line Survey link and direction sent to all stakeholders.
June 2009	First reminder sent to all rail stakeholders to complete Rail Needs On-Line Survey.
July 2009	Second reminder sent to all rail stakeholders to complete Rail Needs On-Line Survey.
August-September 2009	First round of follow up calls conducted with all stakeholders to gather more detailed information on the proposed list of rail needs.
October-November 2009	Second round of follow up calls conducted with all stakeholders to gather more detailed information on the proposed list of rail needs.
January-May 2010	Review of grade separation needs. Follow-up calls conducted with FDOT Districts to gather additional information on proposed needs.
March-May 2010	Review of projects eligible for new Federal rail programs, including High-Speed Rail and Jobs Bill grants.

Source: Cambridge Systematics.

# ■ 4.4 Rail Needs Overview

The needs assessment and review identified approximately \$47.8 billion in needs on the Florida rail system, which includes passenger service needs as well as longer-term needs for both freight and passenger rail. The unconstrained needs included in this assessment are divided into 14 categories based on the type of service (freight or passenger) and the type of project. Each need is assigned only one category designation based on the type of category that most closely fits the nature and intent of the need. There are projects that could be assigned to multiple categories, but in this needs assessment they are limited to a single category. Table 4.3 briefly defines each category type and amounts by category. New passenger rail service which includes right-of-way purchase and track construction for new passenger rail lines as well as improvements to freight rail corridors to allow for addition of passenger service accounted for the largest portion of needs -85.6 percent of total needs. Requests for freight rail grade separations came in a distant second place - requests amounted to \$2.8 billion or 5.9 percent of the total - followed by \$2.2 million (4.5 percent) for capacity upgrades to handle existing and growing freight demand.

**Table 4.3** Railroad Needs by Category Thousands of 2009 Dollars

Service Type	Category	Category Description	No. of Projects	Cost
	Capacity Upgrade	Projects that increase the capacity of the freight rail network, including double-track projects, sidings, crossovers, etc.	48	\$ 2,161,689
	Grade Separation	Grade crossing improvement projects, including safety and grade separation projects.	91	\$ 2,811,123
	New Line	Projects that extend existing freight rail lines or develop new freight lines and facilities.	9	\$ 750,400
Freight	Rehabilitation and Maintenance	Projects associated with line and structure maintenance, including bridge rehabilitation, tie replacement, and resurfacing.	16	\$ 132,418
	Rolling Stock	New freight rail cars and locomotives.	1	\$ 2,500
	Signal Upgrade	Projects that upgrade freight railroad signaling systems, leading to safer operations and enhanced system capacity.	9	\$ 59,191
	Track Upgrade	Projects that reconstruct sections of track, upgrade tracks to accommodate 286k railcars, etc.	8	\$ 139,492
	Capital Improvements	Projects that increase passenger rail capacity, including: double-track projects, yard or facility improvements, sidings, and signal improvements.	5	\$ 162,704
	Grade Separation	Grade separation improvement projects on passenger rail lines.	1	\$ 240,000
	New Service	Projects that extend existing passenger rail services and facilities or develop new passenger lines and services.	34	\$ 40,876,583
Passenger	Rehabilitation and Maintenance	Projects associated with line and structure maintenance, including bridge rehabilitation, tie replacement, and resurfacing.	1	\$ 250
	Rolling Stock	New passenger rail cars and locomotives.	2	\$ 132,168
	Signal Upgrade	Projects that upgrade passenger railroad signaling systems, leading to safer operations and enhanced system capacity.	1	\$ 2,700
	Station Improvements	Projects associated with building new or improving existing passenger rail and intermodal stations.	16	\$ 284,704
	Study	Projects that review feasibility of new service or extensions of extisting ones.	1	\$ 350
rand otal			243	\$ 47,756,272

Source: Cambridge Systematics.

Each of the unconstrained needs identified in the assessment is assigned to a timeframe based on when the identified service is estimated to begin operation or construction of the identified improvement is estimated to be completed. Stakeholders estimated short-term rail investment needs (to be considered for inclusion in FDOT's upcoming five-year Work Program) at \$5.9 billion or 12 percent of total improvement needs. This includes \$3.5 billion for high-speed rail service from Orlando to Tampa (Table 4.4).

Table 4.4 Railroad Needs by Timeframe

Thousands of 2009 Dollars

Timeframe	<b>Total Costs</b>	
Near-Term (1 to 5 years)	\$5,890,938	
Medium-Term (6 to 10 years)	\$21,485,010	
Medium- to Long-Term (11-20 years)	\$7,598,883	
Long-Term (More than 20 years)	\$12,414,841	
No timeframe provided	\$366,600	
Total	\$47,756,272	

Source: Cambridge Systematics.

Stakeholders identified a relatively balanced mix of passenger and freight rail projects. Twenty-five percent of the proposed improvement projects (61 projects) are anticipated to benefit passenger rail movements. Freight service needs accounted for 75 percent of all listings (182 projects). However, when cost becomes a factor (Table 4.5), passenger rail service needs were valued at \$41.7 billion or 87 percent of total needs costs, this compared to only \$6.1 billion for freight service needs (12.7 percent of total costs). The cost differential is largely driven by requests for new passenger rail service including over \$40 billion for high-speed, commuter, intercity, and light-rail (Table 4.6).

Table 4.5 Railroad Needs by Type of Service

Thousands of 2009 Dollars

Service Type	Total Costs
Passenger Rail Service	\$41,699,459
Freight Rail Service	\$6,056,813
Total	\$47,756,272

Source: Cambridge Systematics.

Overall, needs related to existing passenger and freight facilities and services total nearly \$6.2 billion, including improvements to CSX Transportation facilities (\$3.7 billion), the Florida East Coast (FEC) Railroad (\$991.8 million), and South Florida Rail Corridor (\$738.9 million). As illustrated in Table 4.6, the majority of needs identified though the assessment (\$41.7 billion) are related to new or expanded passenger services and freight lines. Investments in new freight and passenger rail service accounted for over 87 percent of the total identified rail needs dollars in the State. The majority of identified needs (34 projects) support passenger rail service (98.3 percent of total new rail service cost). Only eight new freight service needs were identified, including South Florida's U.S. 27 Rail Link estimated at \$400 million currently.

Some of the key new passenger rail service needs throughout the State include:<sup>63</sup>

- High-speed rail service from Orlando to Tampa and Orlando to Miami. The total cost to implement these projects is estimated at over \$13.7 billion;
- Lakeland freight rail relocation project in district 1 with a total cost of \$1.3 billion for the most expensive alternative. This project aims to relocate the CSX operated rail line along Lakeland in Polk County in order to address community concerns related to this service, and at the same time generate more capacity with the new alignment.
- Sunrail commuter rail service connecting Deland to Poinciana, estimated at \$615 million for construction;
- Amtrak passenger rail service on the FEC line connecting Jacksonville to Miami, estimated at \$373 million for infrastructure costs;
- Commuter rail service connecting Jupiter and downtown Miami via the more-than-80-mile Florida East Coast Railway corridor. The cost to implement this service is currently estimated at \$9.5 billion;
- Commuter rail service connecting the Tampa International Airport to the University of South Florida and downtown Tampa and costing over \$1.6 billion to build;
- Commuter rail service in Northeast Florida estimated at \$622 million (not including right-of-way costs);
- A feasibility study for a commuter rail service in Southwest Florida, connecting urban centers in Desoto, Charlotte, Lee, and Collier counties;
- Intercity passenger rail service connecting Sarasota and Bradenton to Tampa and Brooksville and Land O Lakes to Tampa and Lakeland and Plant City to Tampa; estimated at \$3.7 billion; and

<sup>&</sup>lt;sup>63</sup>A detailed list of all identified rail projects is included in Table 4.10.

 A \$2 billion light rail service connecting the Orange County Convention Center with Orlando International Airport and Lake Nona/Medical City with future extensions to Innovation Way, the University of Central Florida, Osceola NE District and Seminole Way.

**Table 4.6** Summary of Needs for New Freight and Passenger Rail Service *Thousands of 2009 Dollars* 

New Service <sup>a</sup>	Near-Term Investment	Medium- Term Investment	Medium- to Long-Term Investment	Long-Term Investment	Total
Freight	\$156,500	\$113,900	\$450,000		\$720,400
Commuter/Intercity Passenger Rail	\$1,296,378	\$6,381,438	\$5,883,610	\$9,674,536	\$23,235,962
High-Speed Rail	\$3,525,000	\$10,200,000	\$-		\$13,725,000
Light Rail		\$2,537,281	\$-	\$1,281,740	\$3,819,021
Total	\$4,977,878	\$19,232,619	\$6,333,610	\$10,956,276	\$41,500,383 <sup>b</sup>

Source: Cambridge Systematics.

Note: A blank cell does not necessarily indicate an absence of projects in this category. Project cost may not have been identified by the source(s).

# Summary by Railroad

The text below provides a high-level summary of proposed improvements along various passenger and freight rail lines in the State as identified by stakeholders. Detailed descriptions of the needs are contained in Table 4.10.

# **CSX Transportation**

Stakeholders identified 94 individual project needs along CSXT tracks<sup>64</sup> in Florida, totaling \$17.4 billion. These include:

<sup>&</sup>lt;sup>a</sup> Passenger rail service types were identified by stakeholders.

<sup>&</sup>lt;sup>b</sup> Some projects totaling \$96.6M do not have a specified term of investment as of writing, these are not included in Table 4.6

<sup>&</sup>lt;sup>64</sup>Related to CSX freight operations and/or passenger rail services operated on tracks owned by CSXT.

- A bundle of 12 grade separation and bridge construction projects to address potential bottlenecks and capacity constraints resulting from increased truck and rail traffic and highway-rail interference, particularly at the site of the proposed Intermodal Logistics Center (ILC) in Winter Haven.
- More than 17 station improvement projects to improve passenger access and mobility on CSX tracks providing passenger rail service.
- Over 27 capacity upgrade projects including building new sidings, extending existing tracks for better connectivity with other railroads including Florida East Coast (FEC) railroad and Tri-Rail, and the Lakeland track relocation project.
- More than 17 projects recommended for new freight rail service (e.g., Shands lead in District 7 and a second Baldwin track in District 2) or passenger rail service on CSX tracks (e.g., light rail passenger service connecting Clearwater to St. Petersburg via Largo and commuter rail service between Deland in Volusia County and Poinciana in Osceola County). Roughly 40 percent (\$349 million) of the State's rail capacity expansion needs will depend on CSX tracks.

## Florida East Coast (FEC) Railroad

Thirty two projects are listed under the FEC, most of which address freight service. However, the South Florida East Coast Corridor (currently listed under South Florida Rail Corridor/Tri-Rail) is geared specifically to improving passenger rail service in the State. Stakeholders identified more than \$4.6 billion in improvement needs along the FEC (including the SFECC) to bring passenger rail service back from Jacksonville to Miami including expanding Tri-Rail service to this corridor in south Florida - accounting for over 95 percent of the total \$10.1 billion needs along this corridor. This includes investing in improving or building between 85 to 100 miles of track, more than 60 stations in various locations including Vero Beach, Fort Pierce, and Stuart, and improving over 200 grade crossings. Other key projects include investments facility upgrades, line extension, and landside access to better serve rock mining customers along the Medley line, rehabilitate the Port of Miami rail line, and building crossovers to minimize delays at key highwayrail crossings. Stakeholders also recommended several bridge rehabilitation and tie and surface replacement improvements at several locations along the rail line. Other projects included investing in systemwide upgrades in the signaling system to an Advanced Transportation Controller system, from the Bowden Intermodal facility to both Jacksonville and Hialeah and relocating the ingress/egress point from the Bowden Yard to maximize ease of circulation and cargo transfers and reduce the potential for truck-train accidents.

# The South Florida Rail Corridor/Tri-Rail

A total of 27 projects were identified for the South Florida Rail Corridor totaling \$5.0billion, including most notably the \$3.5 billion SFECC project mentioned above, in

addition to over \$700 million for new and expanded passenger rail service projects in Miami-Dade County and Broward County. Other projects for Tri-Rail include various station and line upgrades and rehabilitation as well as three proposed new stations near Belvedere Road, Glades Road, and Ives Dairy Road.

# The Pinsly Railroads

Two Pinsly Railroad Company subsidiaries – the Florida Central, and Florida Midland Railroads – have 10 rehabilitation and maintenance, rolling stock, track and signal upgrades, and new passenger service projects proposed. Stakeholders identified three needs along the Florida Midland Railroad: two track rehabilitation and maintenance projects valued at \$16.3 million, and one signal upgrade project valued at \$7.5 million. One passenger service-related project was identified along the Florida Central Railroad; a new commuter rail service between Orlando and Eustis in Lake County valued at \$150 million. Other projects identified for the Florida Central Railroad include: investment in new environmentally friendly locomotives estimated at \$2.5 million, a track upgrade project between Plymouth and Tavares with a total estimated cost of \$13.1 million and three bridge repair, tie and resurfacing maintenance and rehabilitation projects for \$14.2 million.

#### Other Railroads

There are four other railroads in Florida with identified needs: the Alabama and Gulf Coast Railroad, Georgia and Florida Railway, Seminole Gulf Railroad, and South Central Florida Express.

The review of Florida rail system needs identified several maintenance projects on the Alabama and Gulf Coast Railroad. Stakeholders identified track rehabilitation needs over 43.5 miles of track in Escambia County. In addition, three rail bridges also in Escambia County were identified as needing either rebuilding or rehabilitation. Total estimated project costs for the Alabama and Gulf Coast Railroad are \$1.2 billion.

The Perry rail extension in Taylor County was the single identified rail need for the Georgia and Florida Railway (GFRR). This project includes approximately 25 miles of new track to be built and roughly 16 miles of existing GFRR track to be upgraded. The project is currently estimated at \$52 million.

Rail investment needs for both passenger and freight service amounted to over \$60.6 million for Seminole Gulf Railway. Stakeholders emphasized the need for significant investment in maintenance and repairs from tie and surface replacements to bridge rehabilitation to ensure the rail line can continue to serve existing and potentially new customers. Stakeholders also suggest exploring ways to expand both passenger and freight rail services on this line.

Needs identified along the South Central Florida Express include one freight line extension project valued at \$24.5 million, two track upgrade projects with an estimated cost of \$17.2 million, and a capacity upgrade estimated at \$13.6 million. Line upgrade and extension projects include upgrading bridge capability between Pierce and Sebring to handle 286,000-pound containers, building 5.8 miles of tracks to service new customers in the Clewiston area, and rehabilitating 21 miles of rail on the U.S. Sugar line.

**Summary of Needs by Railroad and Type** Thousands of 2009 Dollars Table 4.7

				Freight Rail	Rail								Passenger Rail					
	Capacity	Grade	New Line/	Rehab	Rehabilitation and	Rolling	Signal	Track	Ü	Capital	Grade	New Service/	Rehabilitation and	Rolling		Signal	Station	
Railroads	Upgrade	Separation	ROW	Main	Maintenance	Stock	Upgrade	Upgrade	Impro	Improvements	Separation	ROW/Study	Maintenance	Stock		Upgrade	Improvements	Total
Alabama and Gulf Coast	\$	<b>-</b>	<del>\$</del>	↔	6,327	÷	· <del>\$</del>	-	<del>\$</del>	t	÷	\$	\$	<del>\$</del>	۱	1	\$	- \$ 6,327
CSX Transportation	\$1,646,650	\$1,904,123	\$ 110,000	↔	1	<b>₩</b>	\$ 31,100	\$ 33,750	↔	1	<del>v</del>	\$ 13,653,496	€9	€		ı	\$ 26,582	2 \$17,405,701
Florida Central	- \$	· <del>S</del>	<del>s</del>	<del>9</del>	8,213	\$2,500	<del>8</del>	\$ 13,100	\$	1	<del>.</del>	\$ 150,000	\$	<del>9</del>	<del>8</del>	1	<del>\$</del>	- \$ 173,813
Florida East Coast	\$375,985	\$ 510,000	<del>S</del>	\$	59,578	· \$	\$ 28,091	\$ 18,129	\$	ı	<del>\$</del>	\$ 373,225	↔	\$	۱	ı	<del>\$</del>	- \$1,365,008
Florida Midland	\$	<del>√</del>	<del>S</del>	€	15,000	€	€	\$	↔	1	₩.	\$	€	\$	١	1	\$	- \$ 15,000
Georgia and Florida Railway	₩.	₩.	\$ 52,000	<del>9</del>	1	<del>⊘</del>	<del>s</del>	<del>-</del>	€-	1	<del>€</del>	∙ <del>9</del>	₩.	€	· ·	ı	₩.	- \$ 52,000
Seminole Gulf Railway	\$ 11,000	€	<del>S</del>	<del>\$</del>	•	<b>.</b>	٠ -	\$ 57,300	\$	1	€	\$ 350	\$	\$	-	1	\$	- \$ 68,650
South Florida Rail Corridor/ Tri-Rail	-	\$	<b>₩</b>	<del>\$</del>	1	- \$÷	₩.	- \$	\$	162,704	\$ 240,000	\$ 4,302,197	\$ 250	0 \$132,168	168 \$	2,700	\$ 201,122	2 \$ 5,041,141
South Central Florida Express	\$ 13,554	\$	\$ 24,500	<del>\$</del>	1	<del>.</del>	-	\$ 17,213	*	1	\$	\$	\$	\$	- 8	1	\$€.	- \$ 55,267
Total	\$2,047,189	\$2,414,123	\$ 186,500	<del>8</del>	89,118	\$2,500	\$ 59,191	\$139,492	<del>⊗</del>	162,704	\$ 240,000	\$ 18,479,268	\$ 250	0 \$132,168	3 891,	2,700	\$ 227,704	4 \$24,182,907
Source: Cambridge Systematics.	ge Systematics.																	

Cambridge Systematics.

Identified project costs impact goods and passenger movement at railroad hubs, stations, yards, and along mainline tracks, spurs, and sidings. A blank cell does not necessarily indicate an absence of projects in this category. Project cost may not have been identified by the source(s). Note:

# **Summary by Port**

Florida has 14 seaports, several of which have significant rail projects currently underway or scheduled to begin in the near future. The following discussion highlights some of the key rail needs at each port.

#### Port Canaveral

Port Canaveral, governed by the Canaveral Port Authority, is a cruise, cargo, and naval port in Brevard County. The port is one of the busiest cruise ports in the world with nearly 1.3 million multiday cruise passengers passing through during 2007. As a deepwater cargo port, it has a high volume of traffic. Over 3,000,000 short tons of bulk cargo moves through each year. Common cargo includes cement, petroleum, and aggregate. The port has conveyors and hoppers for loading products directly into trucks, and facilities for bulk containers. Currently, Port Canaveral does not have direct on-port access to rail. Port Canaveral currently has one new freight line rail project totaling \$50 million, which would extend a FEC line spur that currently terminates approximately six miles north of the Port on NASA property.

#### Port Everglades

Port Everglades is located within the municipalities of Fort Lauderdale, Hollywood, and Dania Beach, Florida, and is governed by the Broward County Board of County Commissioners. Port Everglades has three major projects involving rail – two capacity upgrade projects and a grade separation project. The total estimated expenditure for these projects is approximately \$147.5 million. The grade separation project includes the design and construction of a four-lane bridge overpass on Eller Drive for unrestricted movement to and from Port Everglades cruise and container terminals to I-595. The capacity upgrade projects include constructing a new Intermodal Container Transfer Facility (ICTF) yard that will facilitate the transfer of containers between rail and ship at the Port, and a project enabling cargo to be moved out of the Port via rail and providing direct access to the proposed ICTF and Aggregate Facility at the Port.

## **Jacksonville Port Authority**

The Port of Jacksonville, governed by the Jacksonville Port Authority (JaxPort), is located in northeastern Florida on the north Atlantic coast. JaxPort has multiple cargo terminals for intermodal container transport, automobiles, and refrigerated cargo.

JaxPort identified four rail project needs for a total cost of \$20 million. All three projects, submitted are for capacity upgrades along Blount Island and Dames Point.

The capacity upgrade needs include projects located at Blount Island, Dames Point, and the Tallyrand terminal. An addition of a switchyard to improve traffic condition is scheduled for Blount Island and Dames point. Line rehabilitation and maintenance was identified as a need for Blount Island.

#### Port of Miami

Governed by the Miami-Dade Board of County Commissioners, the Port of Miami serves markets in the Far East and Europe, as well as Central and South America. The 2009 needs assessment and review identified one project at the Port of Miami for a total cost of \$36.9 million. This project involves: engineering, designing, permitting, and constructing the rehabilitation tasks on the railroad bascule bridge between Biscayne Bay Boulevard and Port Boulevard to national standards; and upgrading and restoring a six-mile branch off of the FEC mainline that originally carried freight to and from the port and passengers to downtown Miami.

## Port of Palm Beach

The Port of Palm Beach District, located in Palm Beach County, is an independent special taxing district (an autonomous port) and a subdivision of the State of Florida. The Port of Palm Beach identified two rail projects needed to enhance operations:

- A line upgrade and extension project which consists of constructing rail switching track on the FEC right-of-way; and
- A landside access project which consists of building a rail track connecting the Hialeah rail yard to an Integrated Logistics Center in the vicinity of the south end of Lake Okeechobee, which will also be connected to the Port of Palm Beach.

The total cost for the two identified projects is estimated at \$103.7 million.

#### Port of Tampa

The Port of Tampa is operated by the Tampa Port Authority and is the largest of the Florida ports, as measured by tonnage. Bulk products handled include phosphate rock, fertilizer products, petroleum, coal, and general cargo. Inbound and outbound traffic closely reflect the port's ties with the nearby phosphate industry. The port also is one of the State's major cruise ports.

There are six rail needs identified at the port. These projects involve upgrading and extending rail track and services at the port, as well as two grade crossings. The on-port projects include the Hookers Point and Intermodal Container Terminal rail track extension, the CSX mainline to Port Redwing track extension, and the drop-off/pick-up tracks on the CSX mainline. The total cost for these six projects is \$90.6 million.

Table 4.8 Summary of Needs by Port and Type

Thousands of 2009 Dollars

			Freight Rail		
				Rehabilitation	
	Capacity	Grade		and	
Seaport	Upgrade	Separation	New Line	Maintenance	Total
Port Canaveral			\$50,000		\$50,000
Port Everglades	\$60,500	\$87,000			\$147,500
Port of Jacksonville	\$20,000				\$20,000
Port of Miami				\$36,900	\$36,900
Port of Palm Beach	\$3,700		\$100,000		\$103,700
Port of Tampa	\$30,300	\$40,000	\$13,900	\$6,400	\$90,600
Total	\$114,500	\$127,000	\$163,900	\$43,300	\$448,700

Source: Cambridge Systematics.

Note: Identified project costs impact goods and passenger movement to and from key seaport

and airport model hubs. A blank cell does not necessarily indicate an absence of projects in

this category. Project cost may not have been identified by the source(s).

## Moving Forward

There are several shifts in international trade that are anticipated to significantly shift trade flows. One key factor driving the shift will be the demand for additional capacity at East and Gulf Coast seaports – specifically, capacity to handle the new generation of mega-container vessels. Expansion of the Panama Canal will impact the flow of freight across the U.S. Some portion of the new generation of container vessels currently serving the West Coast will shift to the East and Gulf Coasts as of 2014. This will alter existing supply chains. In addition, Suez Canal routings will continue to become more competitive as Asian manufacturing centers shift.

Several of Florida's seaports are positioning themselves to compete for the opportunities created by these shifts (and growth) in traffic. This has included aggressive marketing activities as well as infrastructure improvements (waterside, terminal side, and land side) to make sure the necessary capacity is in place. Onport rail access is one of the key factors Florida's seaports are working to address in order to be competitive.

The level of success of Florida's seaports (which is in part dependent on reliable rail access) will impact Florida's railroads in several ways. The following three scenarios illustrate the potential impacts on Florida's railroad industry.

- 1. <u>Seaport(s) handles cargo to meet local demand.</u> This scenario assumes that Florida seaports do a better job of handling cargo for Florida's large consumption market that is, less Florida-destined cargo moves through non-Florida seaports. This could result in lower inbound traffic volumes for Florida railroads; freight currently getting hauled by rail from non-Florida seaports to Florida would shift to Florida seaports and likely be handled by trucks from the seaport(s) to the Florida destination.
- 2. <u>Seaport(s) handles cargo to serve Southeastern U.S.</u> This scenario assumes that Florida seaports successfully compete for hinterland markets that is, markets outside of Florida historically served by a non-Florida seaport. Depending on the location of the seaport, this scenario could present a boom for Florida Railroads, as shipments from the seaport(s) get transported North by rail to an inland port or distribution centers.
- 3. <u>Florida seaports do not attract a significant increase in traffic, instead</u> <u>Florida and non-Florida traffic is handled by ports in another southern state (e.g., Georgia, South Carolina).</u> This scenario assumes that Florida's seaports are not successful in competing for the increased traffic moving through the Panama . It reflects business as usual; growth opportunities for the rail industry would be in providing southbound service into Florida.

Moving forward, the progress and partnerships put in place by Florida's railroads and seaports should be monitored and supported by FDOT to maximize Florida's opportunities for growth. This directly relates to and supports the Trade and Logistics Study undertaken by the Florida Chamber Foundation, which lays out several strategies to growth Florida's role in international trade

# **Summary by District**

Table 4.9 contains a summary of needs by district and category. It is followed by a summary and a map of all of the identified freight and passenger rail needs for each of the seven FDOT Districts. Note that a "multiple" category was created under the District heading to account for projects that cross several district jurisdictions. This was necessary since project cost information by District is not available at this time.

#### District 1 - Southwestern and Central Florida

District 1 encompasses 12 counties in south central and southwestern Florida and includes the major metropolitan areas of Sarasota-Bradenton, Fort Meyers, and Naples. The combined freight and passenger railroad needs for this District are \$1.8 billion. Over 80

percent of the needs money comes from rail capacity upgrade projects, with a cost estimate of approximately \$1.5 billion. Most of this amount comes from the Lakeland freight rail relocation project in Polk County, which has an estimate cost of \$1.3 billion. Other needs in District 1 include freight grade separation projects (\$125 million) and new passenger rail service (\$116 million).

#### District 2 - North Central and Northeast Florida

District 2 spans the width of the peninsula from the "Big Bend" region along the north-western section of the Gulf Coast to the greater Jacksonville region on the State's Atlantic shore. Total rail needs in District 2 total \$1.3 billion, including major investments in new commuter and other passenger rail services (\$652 million), new freight lines and extensions (\$132 million), freight rail grade separations (\$352 million), and freight capacity upgrades (\$116.4 million).

#### District 3 - Florida's Panhandle

District 3 covers 16 counties of the Florida Panhandle and includes the Tallahassee, Panama City, and Pensacola metropolitan areas. The total freight rail needs for District 3 are approximately \$126.8 million. Approximately 67 percent of rail needs in this District (\$85M) are projects related to grade separations, track upgrades account for an additional 21% (\$26.5M), while the remaining \$15 million is allocated in capacity upgrades and rehabilitation and maintenance.

#### District 4 - Southeast Seaboard

District 4 is comprised of five densely populated counties on Florida's southeastern seaboard and is anchored by the Fort Lauderdale and West Palm Beach urbanized areas. Within District 4, there are \$2.4 billion in rail needs. Several major proposed projects totaling nearly \$9.5 billion are primarily associated with line capacity expansion on the FEC in Districts 4 and 6 to help establish passenger rail service and proposed light rail service in Central Broward County. There are also an additional \$117.5 million in needs for freight capacity upgrades, including \$110.5 million for improving landside access at the Port of Palm Beach and Port Everglades.

#### District 5 - Central and Eastern Florida

District 5 encompasses nine counties of central and eastern Florida. The District contains the Orlando, Daytona Beach, and Melbourne urbanized areas and has approximately \$2.9 billion in needed rail improvements. The single largest proposed projects are new passenger rail services estimated at over \$2.8 billion, including \$2 billion for light rail service connecting the Orange County Convention Center with Orlando International Airport and Lake Nona/Medical City with future extensions to Innovation Way, the

University of Central Florida, Osceola NE District and Seminole Way. There are also over \$109.6 million in freight line upgrade and extension projects along the CSX, Florida Central Railroad, and FEC line.

#### District 6 - South Florida and Miami-Dade

South Florida's Miami-Dade and Monroe Counties comprise District 6. This geographically diverse District includes the Florida Keys, the Everglades, and metropolitan Miami, where most rail activity is concentrated. The total estimated rail needs for the District are \$1.9 million, including more than \$1.1 billion in new and expanded passenger rail services.

# District 7 - Tampa Bay and West Central Florida

Five counties comprise District 7, which includes the Tampa-St. Petersburg-Clearwater urbanized area. Just over \$14 billion in needed rail improvements were identified; the greatest needs total for any single District, accounting for roughly 30 percent of all statewide investment needs. District 7's needs include \$13.3 billion for new passenger rail service projects including high-speed rail service from Orlando to Tampa and Orlando to Miami. Another \$1.7 billion is needed to connect Tampa International Airport to the CSX line.

# **Multiple Districts**

There are \$23.2 billion in projects spanning two or more districts. These are typically large corridor improvement proposals, such as the \$10 billion high-speed rail project from Miami to Orlando, or systematic upgrades, such as the \$28.1 million FEC systemwide signal systems update project. Multiple district projects are noted in the comprehensive table of needs (Table 4.10).

# ■ 4.5 Detailed Needs Table

Table 4.10 contains the detailed needs identified by freight stakeholders participating in the 2010 Florida Rail System Plan Update. The following table presents, in detail, every project identified through the process described in this report. The table is sorted by time-frame and then by estimated project cost (in 2009 dollars). **Projects shown in bold are partially or completely funded as of May 2010.** Each project is further identified by the following attributes:

- ID attribute as identified in the on-line rail survey;
- Railroad or port;

- Project name;
- Type of service (freight, passenger, or both);
- Source;
- Location;
- District(s);
- Project description;
- Category/type (maintenance and repair, grade crossings, etc.);
- Cost estimate (in current 2009 dollars); and
- Timeframe.

The information contained in the detailed needs table has been edited for length and clarity but otherwise represents the extent of information provided by the stakeholder participants in the needs identification process. Thus, some cells are blank and, for some needs, there is a lack of cost estimates and other information that may become available in the future. There also is a difference, by stakeholder, in the amount of detail provided; e.g., some railroads might have included milepost information as part of the location description while others made general references to counties.

Table 4.9Summary of Needs by District and TypeThousands of 2009 Dollars

		Total	\$ 1,832,005	\$ 1,325,447	\$ 126,827	\$ 2,420,887	\$ 2,877,051	\$ 1,899,171	\$ 14,116,600	\$ 23,158,284	\$ 47,756,272
	3	Station Improvements	-	22,000	1	142,776	1	41,925	1	43,003	284,704
			<del>\$</del>	<del>S</del>	\$	<del>\$</del>	\$	<del>\$</del>	\$	\$	<del>\$</del>
Passenger Rail	5	Signal Upgrade	· \$	<del>\$</del>	<del>\$</del>	\$ 2,700	<del>\$</del>	<del>\$</del>	<del>\$</del>	\$	\$ 2,700
		Kolling Stock	- \$	٠	٠	٠	٠	· \$	٠	250 132,168	132,168
	Rehabilitation	and Maintenance	-	1	1	1	1	1	1		3 250
Pas		KOW/ Study	\$ 116,000 \$	\$ 652,000 \$	÷ ÷	\$ 544,804 \$	\$ 2,765,000 \$	\$ 1,129,098 \$	\$13,303,879	\$22,366,152 \$	\$40,876,933 \$
	7	Grade Separation	-	- \$	- \$	\$ 240,000	- \$	- \$	- \$	- \$	\$ 240,000
	7.	Capital Improvements			· •	\$ 7,211	· •	\$ 61,739	· •	\$ 93,754	\$ 162,704
			\$ 00	۱				1			
	E	I rack Upgrade	\$ 7,300	<del>\$</del>	\$ 26,500	\$ 12,0	\$ 13,100	\$	\$ 7,250	\$ 73,342	\$139,492
		Signal Upgrade	\$ 17,500	\$ 8,226	٠	\$11,100 \$12,000	٠	٠	\$ 2,500	\$ 19,865	\$ 59,191
		Kolling Stock	- \$	· <del>\$</del>	٠	· <del>\$</del>	\$ 2,500	٠	· <del>\$</del>	٠	\$ 2,500
	Right	ot Way	\$30,000	۱ -	۱ +	- \$	۱ +	- \$÷	۱ -	- \$	\$30,000
Freight Rail	Rehabilitation	and Maintenance	16,255	7,787	6,327	1	6,958	60,491	6,400	28,200	132,418
Fre	<b>H</b>		\$	\$	\$	\$	\$	\$	\$	\$	₩
	New	Line/ Service	\$ 24,500	\$ 132,000	• <del>\$</del>	\$ 100,000	\$ 50,000	+	\$ 13,900	\$ 400,000	\$ 720,400
		Grade Separation	\$ 125,000	\$ 352,000	\$ 85,000	\$ 1,242,752	·	\$ 270,000	\$ 736,371		\$ 2,811,123
		Capacity Upgrade	\$ 1,495,450	\$ 116,434	000′6 \$	\$ 117,544	\$ 39,493	\$ 335,918	\$ 46,300	\$ 1,550	\$ 2,161,689
		District	1	2	3	4	Ŋ	9	7	Multiple	Total

Source: Cambridge Systematics.

Note: A blank cell does not necessarily indicate an absence of projects in this category. Project cost may not have been identified by the source(s).

# Table 4.10 Detailed Projects and Needs by Railroad

Timeframe	Near-term (1- 5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)	Near-term (1-5 years)	Near-term (1-5 years)
Estimate (\$1,000 of 2009 Dollars)	\$ 3,525,000	\$ 615,000	\$ 154,630	\$ 373,225	\$ 116,000	000′28 \$
FDOT District	5, 7, 2	rv	9	2,4,5,6	н	4
Location	Hillsborough, Polk, Osceola, and Orange Counties	Volusia, Seminole, Orange and Osceola Counties	Miami-Dade	Jacksonville to Miami	Collier to Hardee Counties, Collier to Sarasota Counties	Port Everglades
Project Type	New Service	New Service	New Service	New Service	New Service	Grade Separation
Freight or Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Freight
Agency Reporting Need	Hillsborough County MPO	Metroplan Orlando	South Florida Regional Transportation Authority	Jacksonville Transportation Authority	City of Bonita Springs	Port Everglades
Owner or Operator	New Passenger Rail Service	CSX Transportation	CSX Transportation	Florida East Coast Railway	CSX Transportation	Port Everglades
Description	Phase 1: A High-Speed Rail connecting Tampa and Orlando.	Passenger commuter rail operation on state-purchased CSX trackage between Deland, Florida in Volusia County and Poinciana, Florida in Osceola County, a distance of 61 miles. Private Sector has been involved gathering Orlando Chamber of Commerce (Note/Concern: This is for purchasing and constructing 61.5 miles, the cost is \$438 and \$615 million which is equal to approximately \$1.53 billion)	Phase I – Extension of Tri-Rail service 11.2 miles of CSX Corridor west from the Miami Intermodal Center (MIC) along SR 836, ending just west of Florida's Turnpike. Phase I assumes minimal double tracking and basic station amenities.	The State needs to work with Amtrak and FEC to bring passenger rail service back from Jacksonville to Miami. This corridor could lead the way for commuter rail service in Jacksonville and would reconnect Jacksonville to St. Augustine via the FEC line. Includes infrastructure cost only	Rehabilitate Passenger Rail for 95 miles along the CSX line from Old 41 on the Collier-Lee Co. border to Ona, Hardee Co. connecting with CSX line, currently used for freight to Lakeland. This CSX line, proposed for rehab/upgrade to passenger service, passes thru, Bonita Springs, Fort Myers, Punta Gorda, Arcadia, to Lakeland This line should act as a connector with another proposed project reconnecting passenger service between Collier Co. and Tampa, connecting in Punta Gorda with new 8-mile track from Fort Ogden to North Port [locate depot at mile marker 172 on I-75] thru to, Sarasota, picking up TBARTA rail in Sarasota to Tampa. The project between Collier and Hardee Co. is estimated at \$70 million. The project between Fort Ogden and Sarasota is estimated at \$46 million. All costs include construction of rail, depots, and bridges. All land is rail-banked except for 30-foot ROW of three-quarter-mile for purchase somewhere near mile markers 200-203 on I-75. Land purchase not included in estimate.	The project is to design and construct a four-lane bridge Overpass on Eller Drive for unrestricted movement to and from Port Everglades cruise and container terminals to the Interstate 595, as well as the widening, realignment, and construction of service roads parallel to the Overpass. The Overpass will enable the development of a grade separated crossing with access to Southport, providing direct connection to the proposed on-Port Intermodal Container Transfer Facility (ICTF) at Port Everglades.
Project Name	High-Speed Rail - Tampa to Orlando	Sunrail	CSX-Tri-Rail Dolphin Extension Phase I	Amtrak Service on the FEC Railroad	Passenger Railway in Southwest FL	FDOT Eller Drive Overpass
ID	207	131	203	80	307	104

Timeframe	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1- 5 years)
Tim	Near-te 5 years)	Near-ter 5 years)	Near-t 5 years	Near-t 5 years	Near-t 5 years
Cost Estimate (\$1,000 of 2009 Dollars)	8,000	\$ 67,350	\$ 57,000	\$ 52,000	\$ 39,423
FDOT District	7	7	7	2	vo
Location	Jacksonville	Baldwin/NE Florida	Jacksonville	Taylor and Madison	Miami-Dade County
Project Type	New Line	Capacity Upgrade	Station Improvements	New Line	Station Improvements
Freight or Passenger	Freight	Freight	Passenger	Freight	Passenger
Agency Reporting Need	CSX Transportation	CSX Transportation	JTA	Perry Pines, LLC	South Florida Regional Transportation Authority
Owner or Operator	CSX Transportation	CSX Transportation	JTA	Georgia and Florida Railway	South Florida Rail Corridor
Description	Build connection Callahan-Gross and upgrade Kingsland SD to establish new route for port access. (Construct Rail Bypass by reactivating abandoned railroad between Gross and Callahan Florida and upgrade Kingsland Subdivision rail and ties. Restoring the reliability and effectiveness of this rail route will improve the CSXI and CSXI's ability to serve the Port of Jacksonville. This route will educe truck traffic, related emissions, and reduce community impacts associated with the growth of the Jacksonville Port.)	CSX corridor improvements in the Baldwin area. Combination of projects 143, 145, 147, and 188. Improvements include: Extend West Storage Lead by 4,000 feet to provide a 12,000-foot lead; Build approximately 4.0 miles of second main at Baldwin, SE Baldwin-SE East Pass, build new 13 East Track in Baldwin Yard, and replace south departure yard turnouts (Jacksonville Terminal SD); Upgrade East Passing Track and extend East Pass Track north approximately 16,000 ft with universal crossover at SP 650.0; Upgrade siding and extend siding to create 5.1 miles second main track with universal crossover at SM 2.5. RH crossover at SM 0.4 and improved connection to SP Line.	Improvements at the Jacksonville Regional Transportation Center to accommodate the return of Amtrak service downtown.	The Perry rail extension includes approximately 25 miles of new track to be built and roughly 16 miles of existing GFRR (Georgia and Florida Railway) track to be upgraded. In 2008; the Strategic Aggregates Task Force convened as part of an act of the Florida Legislature and the group made one unanimous recommendation to the Governor; "provide rail service in Perry." Also, as noted in FDOT's Strategic Aggregate Study, Taylor County is one of only 6 defined regions in the State containing hard aggregate reserves. Upon construction of the rail extension, Perry industry would immediately have economically feasible access to over half of Florida's aggregate market. Florida Governor Charlie Crist's designation of Taylor County as one of Florida's Rural Areas of Critical Economic Concern (RACEC) frames the challenges facing Taylor County as it competes in today's ever changing economic landscape. The rail extension would bring significant economic opportunity to the region.	Provide new 1,000 space parking deck, new intermodal center with bus bays and facilities, new pedestrian bridge from intermodal center to Tri-Rail and improved circulation. Includes project 266, Addition of pedestrian overpass to connect Golden Glades Intermodal Center to business park west of CSX tracks.
Project Name	Jaxport/Springfield Bypass	Baldwin Area Improvements: West Storage, SE Jacksonville Pass, Fouraker Siding and Crossover	Jacksonville Regional Transportation Center	Taylor County Rail Extension	Golden Glades Intermodal Center Improvements
Ð	136	143	589	306	262

Timeframe	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1- 5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)
(\$1,000 of 2009 Dollars)	36,900	\$ 32,868	\$ 32,000	30000	\$ 28,848	\$ 26,582
FDOT District	9	9	4	7	9	1,2,4,5,6,7
Location	Railroad Bridge Between Biscayne Bay and Port Boulevards, Miami-Dade County	FDOT District 6, Medley area from RR MP 0.00 to MP 4.8 at NW 121 Way	Port Everglades	Downtown Jacksonville	Miami-Dade County	Deerfield Beach, Deland, Delray Beach, Fort Lauderdale, Jacksonville, Kissimmee, Lakeland, Miami, Okeechobee, Orlando, Palatka, Sanford, Sebring, Tampa, West Palm Beach,
Project Type	Rehabilitation and Maintenance	Capacity Upgrade	Capacity Upgrade	New Service	Capital Improvements	Station Improvements
Freight or Passenger	Freight	Freight	Freight	Passenger	Passenger	Passenger
Agency Reporting Need	Port of Miami, FDOT District 6	Florida East Coast Railway, FDOT District 6	Port Everglades	Jacksonville Transportation Authority	South Florida Regional Transportation Authority	Amtrak
Owner or Operator	Port of Miami	Florida East Coast Railway	Port Everglades	New Passenger Rail Service	South Florida Rail Corridor	CSX Transportation
Description	Engineer, design, permit and construct the rehabilitation tasks on the railroad bascule bridge between Biscayne Bay Boulevard and Port Boulevard to national standards to bring fully functional and efficient rail operations back to the Port of Miami, and construct approximately 1 mile of rail, associated rail switches, as well as two 2,500-foot on port loading tracks. Studies and inspections have identified weakened infrastructure that require attention prior to the railroad bascule bridge becoming fully operational. Revitalization of the bascule bridge and the addition of new on port loading tracks will provide efficient cargo-handling capacity at the Port of Miami and decrease overall transportation costs. (Part 2) Upgrade and restore a 6-mile branch off of FEC mainline that originally carried freight to and from the port and passengers to downtown Miami.	Build second mainline on 4.8-mile segment at southern end of rail servicing key rock mining customers. Install CTC (ready for PTC), improve motion detectors at grade crossing. Construct one new double-track bridge with universal crossover switches. (Pending approval for state funding) Second phase of improvements in the Medley area. Rehabilitate and implement double tracking along the FEC Medley Lead. The work to be performed includes extension of culverts, earthwork (includes clearing, filling and grading), construct and surface 25,344 feet of 141-pound track, rehabilitate 9 grade crossings (includes surface and signal), and relocate fiber optic cable.	Phase I of this project consist of construction of a new Intermodal Container Transfer facility (ICTF) yard that will facilitate the transfer of containers between rail and ship at Port Everglades.	Currently, there exists a 5-mile corridor of abandoned rail right-ofway within the heart of Jacksonville. This ROW could be the perfect opportunity to construct a relatively inexpensive rail project serving the core of urban Jacksonville. This possible line would also be connected to the Jacksonville Regional transportation Center as well as the commuter rail network that would eventually connect to the Jacksonville International Airport.	Construction of two additional tracks (with a center platform) would allow for Amtrak service at the MIC and/or passenger rail extensions to the west or south. (Cost estimate includes platforms, canopies, elevators, and escalators.)	Improvements for ADA-related station structures, platforms, pathways, and state of good repair where needed for Amtrak stations. Combination of projects 318-332, 334.
Project Name	Bascule Bridge/Rail Connection	Upgrade Medley Lead/ Doubletracking	Rail Storage Tracks for ICTF Facility-1	Urban S-Line	Additional Tracks at Miami Intermodal Center	Amtrak Station Improvements
11	276	237	125-	79	205	318

Near-term (1- 5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)
\$ 24,500	\$ 23,591	\$ 22,150	\$ 21,450	\$ 19,550	\$ 19,110	\$ 19,100	\$ 18,447	\$ 18,233	\$ 18,129	\$ 17,750	\$ 16,500	\$ 16,421	\$ 16,421	\$ 16,421
П	9	1	ις	1	2,4,5,6	1	4	4	2,4,6	П	1	4	4,6	4
Clewiston	FDOT District 6	Richloam	Wildwood	Ocala	FDOT Districts 2,4,5,6	Vitis	Broward County	Broward County	FDOT Districts 2,4,6	Auburndale	Carters	Palm Beach County	Miami-Dade and Broward Counties	Palm Beach County
New Line	Rehabilitation and Maintenance	Capacity Upgrade	Capacity Upgrade	Capacity Upgrade	Rehabilitation and Maintenance	Capacity Upgrade	Station Improvements	Station Improvements	Track Upgrade	Capacity Upgrade	Capacity Upgrade	Station Improvements	Station Improvements	Station Improvements
Freight	Freight	Freight	Freight	Freight	Freight	Freight	Passenger	Passenger	Freight	Freight	Freight	Passenger	Passenger	Passenger
South Central Florida Express	Florida East Coast Railway	CSX Transportation	CSX Transportation	CSX Transportation	Florida East Coast Railway	CSX Transportation	South Florida Regional Transportation Authority	South Florida Regional Transportation Authority	Florida East Coast Railway	CSX Transportation	CSX Transportation	South Florida Regional Transportation Authority	South Florida Regional Transportation Authority	South Florida Regional Transportation Authority
South Central Florida Express	Florida East Coast Railway	CSX Transportation	CSX Transportation	CSX Transportation	Florida East Coast Railway	CSX Transportation	South Florida Rail Corridor	South Florida Rail Corridor	Florida East Coast Railway	CSX Transportation	CSX Transportation	South Florida Rail Corridor	South Florida Rail Corridor	South Florida Rail Corridor
Build 5.8 miles of new rail line along with 2.4 miles of yard to service Southern Gardens as a new customer. Along with a cane elevator to transport cane from western side of Clewiston to U.S. Sugar Mill.	A maintenance and repair project that involves the Port of Miami in District 6.	Build 4.2 miles of second main track with Number 20 universal crossover at 5-783.6.	Upgrade existing main track and build second main track S-757.9-S-760.0 with Number 20 universal.	Build second main through Ocala by connecting and upgrading Singletary and Ocala sidings with universal crossover at S-734.5	Accelerate replacement of failing bolt and clip system and install elastic fasteners on 193 track miles.	Extend Vitis Siding north to AR 832.9, upgrade siding, and add universal crossover AR 835.2. Extend Vitis Siding south to AR 837.8 with RH Number 20 universal at AR 836.5 to access Yeoman SD. Combination of projects 168 and 169.	New parking deck along with pedestrian, bus circulation, shelter, and bike improvements. Note: also see project 270, Deerfield Beach Station Pedestrian Overpass, addition of pedestrian overpass for improved passenger access to Northbound and Southbound Tri-Rail platforms and planned parking deck.	New parking deck along with pedestrian, bus circulation, shelter, and bike improvements.	Upgrade rail section to industry norm. Eliminate all 112/115-pound1940 vintage rail from mainline track. Install 135-pound industry standard carbon continuously welded rail.	Extend McDonald Connection with universal crossovers at SX 821.5 and SX 822.6.	Extend Carters Siding at north and south to include Park Spur.	New Tri-Rail station, to be located in the vicinity of Southern Boulevard or Belvedere Road. Depending on station location, the facility may also include parking facilities to serve commuters from the western communities.	New Tri-Rail station and parking facilities in the vicinity of Ives Dairy Road and Hallandale Beach Road.	New Tri-Rail station near Glades Road, serving the Boca Town Center Mall area. Shuttle bus, pedestrian, and limited parking facilities would be included.
Citrus Rail Project	Port Lead Rehabilitation	Richloam Siding	Wildwood	Ocala Siding and Crossovers	Repair Bolt/Fastening System	Vitis North and South	Deerfield Beach Tri-Rail Station Improvements	Hollywood Tri-Rail Station Improvements	Upgrade and Replace Light Weight Rail	McDonald Connection	Carter Siding	New Tri-Rail Station at Palm Beach International	New Tri-Rail Station Near Broward/Miami-Dade	New Tri-Rail Station in Boca Raton
	Rail Project Build 5.8 miles of new rail line along with 2.4 miles of yard to South Central South Central Freight New Line Clewiston 1 \$ 24,500 Ne service Southern Gardens as a new customer. Along with a cane Florida Express Florida Express Florida Express elevator to transport cane from western side of Clewiston to U.S.  Sugar Mill.	Rail Project Build 5.8 miles of new rail line along with 2.4 miles of yard to service Southern Gardens as a new customer. Along with a cane elevator to transport cane from western side of Clewiston to U.S.  Sugar Mill.  A maintenance and repair project that involves the Port of Miami  in District 6.  Build 5.8 miles of new rail line along with 2.4 miles of yard to South Central  Florida Express  Florida Express  Florida East  Florida East  Florida East  Florida East  Freight  Rehabilitation  FDOT District 6  Maintenance  Maintenance	Rail Project Build 5.8 miles of new rail line along with 2.4 miles of yard to service Southern Gardens as a new customer. Along with a cane elevator to transport cane from western side of Clewiston to U.S.  Sugar Mill.  A maintenance and repair project that involves the Port of Miami  in District 6.  Build 4.2 miles of second main track with Number 20 universal CSX  Build 4.2 miles of second main track with Number 20 universal Transportation  Service South Central  Florida Express  Florida Express  Florida East  Florida East  Florida East  Freight  Maintenance  Transportation  Transportation  Transportation  Transportation  Transportation  Freight  Richloam  Transportation  Tran	Rail Project Build 5.8 miles of new rail line along with 2.4 miles of yard to service Southern Gardens as a new customer. Along with a cane elevator to transport cane from western side of Clewiston to U.S.  Sugar Mill.  A maintenance and repair project that involves the Port of Miami in District 6.  Build 4.2 miles of second main track with Number 20 universal  Build 4.2 miles of second main track and build second main track S-757.9- CSX  Code Railway  Code Ra	Rail Project Build 5.8 miles of new rail line along with 2.4 miles of yard to service Southern Gardens as a new customer. Along with a cane elevator to the Care Southern Gardens as a new customer. Along with a cane elevator to the Case Railway begard Mill.  and Rehabilitation A maintenance and repair project that involves the Port of Miami in District 6.  Build 4.2 miles of second main track with Number 20 universal.  Coast Railway	Rail Project Build 58 miles of new rail line along with 24 miles of yard to service couthern Gardens as a new customer. Along with a cane elevator to transport cane from western side of Clewiston to U.S.  Sugar Mill.  A maintenance and repair project that involves the Port of Miami in District 6.  A maintenance and repair project that involves the Port of Miami Coast Railway  am Siding  Build 42 miles of second main track with Number 20 universal.  Coast Railway  Reight  Coast Railway  Coast Rail	Rail Project Build & Smiles of new rail line along with 24 miles of yard to service South Central service Southern Gardens as a new categories are service Southern Gardens as a new categories and service Southern Gardens as a new categories and service Southern Gardens as a new categories of Cleviston to U.S.  Sugar Mill.  and Relabilitation In District of Cleviston track with Number 20 universal.  Build 4.2 miles of second main track with Number 20 universal.  Coast Railway Rehabilitation Root Railway Coast Railway Coast Railway Coast Railway Coast Railway Coast Railway Coast Railway Rehabilitation Root Railway Coast Railway Ra	Rail Poject Builds So miles of new rail line along with 24 miles of yeard to the residue of clevator to transport cane from western side of Clewiston to U.S.  and Rehabilitation  A maintenance and repair project that itwolves the Port of Miani  In District 6.  Build 4.2 miles of second main track with Number 20 universal.  Build 4.2 miles of second main track with Number 20 universal.  Build 4.2 miles of second main track with Number 20 universal.  Cast Railway  Cast Railwa	Rail Project Build Sa miles of wortail mine care as a new esternars. Along with a conserver at 5-7354.  An admittenance and repair project that involves the Port of Mismal Cass Railwoys and Salak and a new esternary. Along a crossover at 5-7354.  Transportation	Rail Poject Build Sector and reviewer and regain project that invested rail as a series settlered. Along with a case series southern Cardenas as a new settlemer. Along with a case series southern Cardenas as a new settlemer. Along with a case series southern Cardenas as a new settlemer. Along with a case series southern Cardenas as a new settlemer. Along with a case series southern Cardenas as a new settlemer. Along with a case series southern Cardenas as a new settlemer. Along with a case series southern Cardenas as a new settlemer. Along with a case series southern Cardenas as a new settlemer. Along with a case series southern Cardenas as a new settlemer. Along with a case series southern Cardenas and series and settlement. Cardenas and settlement. Cardenas settlement. Cardenas and s	Roth Propeet   Roth Roth Roth Same and register   Roth Roth Roth Roth Roth Roth Roth Roth	Rail Posject milet for the registration of the	Bould severe   Bould severe at Series of ever of the state of the st	Ball Station   Ball

Timeframe	Near-term (1- 5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)	Near-term (1-5 years)	Near-term (1- 5 years)	Near-term (1-5 years)	Near-term (1- 5 years)	Near-term (1-5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)
프 <sup>7</sup> 등	\$ 15,750	\$ 15,000	\$ 14,400	\$ 13,554	\$ 13,100	\$ 12,000	\$ 11,100	\$ 10,500	\$ 10,000	\$ 9,750	060'6 \$
FDOT District	1	<b>.</b>	2	4	ις	4	4	4	1	rc	2,5
Location	Lakeland	Hookers Point, Port of Tampa	Crawford	Pahokee	Orange and Lake Counties	South Bay	South Florida Rail Corridor from Miami to West Palm Beach	Port Everglades	A-Line beginning at the Vitis Sub going SE thru Kathleen, Lakeland, Auburndale, Sebring and Okeechobee	Anthony	FDOT Districts 2,5
Project Type	Capacity Upgrade	Capacity Upgrade	Capacity Upgrade	Capacity Upgrade	Track Upgrade	Track Upgrade	Signal Upgrade	Capacity Upgrade	Signal Upgrade	Capacity Upgrade	Rehabilitation and Maintenance
Freight or Passenger	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight
Agency Reporting Need	CSX Transportation	Tampa Port Authority	CSX Transportation	South Central Florida Express	Lake Sumter MPO, Florida Central Railroad	South Central Florida Express	SFRTA	Port Everglades	FDOT District 1	CSX Transportation	Florida East Coast Railway
Owner or Operator	CSX Transportation	Tampa Port Authority	CSX Transportation	South Central Florida Express	Florida Central Railroad	South Central Florida Express	CSX Tot SFRTA	Port Everglades	CSX Transportation	CSX Transportation	Florida East Coast Railway
Description	Build 9,000 ft siding at Lakeland Junction with crossover.	Ethanol Terminal/ Rail yard expansion with East-West Connecting Loop	Upgrade and extend siding to 4.4. Miles second main track with universal crossover SM 13.1.	Rehab 21 miles of 85-pound rail to 136-pound CWR rail. Including 17 new Number 10 turnouts and 25,000 new main track ties. Note: This project is looking to receive eligibility for any funding available. With this track rehabilitation, the potential to attract customers would increase as higher cargo volumes could be moved. This project will occur in an economically depressed area and the potential new traffic could stimulate economic development in this region. This project is estimated to remove 375 trucks a day from the Mining facility.	Production ready continuous weld of track from Plymouth (Orange County) to Eustis (Lake County), approximately 12 miles. Project Numbers 107 and 11 are different alternatives for the same project as 68. Number 68 will be funded in the work program.	Rehab 17 miles of 85-pound rail to 136-pound CWR rail. Including 4 new Number 10 turnouts and 10,000 new main track ties. Note: This project is looking to receive eligibility for any funding available. With this track rehabilitation, the potential to attract customers would increase as higher cargo volumes could be moved. This project will occur in an economically depressed area and the potential new traffic could stimulate economic development in this region.	Install new PTC signal system ready for over 141 miles of mainline track from Miami to West Palm Beach, including a control center in Jacksonville or Pompano Beach. This includes \$3.6 for wayside signal equipment on the SFRC and \$7.5 for the control center.	The project will enable cargo to be moved out of the Port via rail and will provide direct access to the proposed Intermodal Container Transfer Facility (ICTF) and Aggregate Facility at Port Everglades. The project consists of the initial rail spur from the Eller drive Overpass to Southport to serve both the proposed ICTF and the Aggregate Facility. It also includes the storage tracks, signalization, and switches associated with the ICTF.	Replacement of antiquated railroad signals (25-30+) years on this Amtrak Line. Most are nearing the Federal Standards of the 30-year mark and are in need of replacement. Also this would take in the S-Line from Auburndale east to Lake Alfred, Haines City, and Davenport towards Orlando.	Build new 11,400-foot clear passing siding.	Rehabilitate 3 bridges at mile posts 12.99, 36.64, and 126.06. Engineering and permitting completed 1 year in advance of work.
	Lakeland Junction Siding	Ethanol Terminal/ Rail yard expansion with East-West Connecting Loop	Crawford Siding	Bryant Rail Project	Florida Central Railroad	Cane Block Project	Positive Train Control System (PTC) on the South Florida Rail Corridor	Intermodal Rail Spur and Storage Tacks	"A/S" Line Amtrak Signal Program	Anthony Siding	Mainline Bridge Fastening System

Timeframe	Near-term (1-5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)
Estimate (\$1,000 of 2009 Dollars)	7 0000	7,787	7,523	7,150	6,950	6,327	0000'9	5,362	5,250	5,213	5,000	5,000	4,404
EST (\$1,0 2C Dol	€	€	<del>\$</del>	€	<del>90</del>	<del>60</del>	€-	\$	<del>so</del>	€	\$	\$	<del>60</del>
FDOT District	1	2	4	4	2	rs .		2	П	1, 5	2	2	4
Location	Off Alico Road in Lee County	FDOT District 2	Broward County	Palm Beach County	Starke	Escambia County	Hookers Point	Jacksonville	Highland	Sebring to Fort Pierce	Dames Point Marine Terminal	Blount Island Marine Terminal	Palm Beach County
Project Type	Capacity Upgrade	Rehabilitation and Maintenance	New Service	Station Improvements	Capacity Upgrade	Rehabilitation and Maintenance	Capacity Upgrade	Signal Upgrade	Capacity Upgrade	Track Upgrade	Capacity Upgrade	Capacity Upgrade	Station Improvements
Freight or Passenger	Freight	Freight	Passenger	Passenger	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Passenger
Agency Reporting Need	Lee County MPO	Florida East Coast Railway	South Florida Regional Transportation Authority	South Florida Regional Transportation Authority	CSX Transportation	Alabama and Gulf Coast Railway	Tampa Port Authority	Florida East Coast Railway	CSX Transportation	South Central Florida Express	Jacksonville Port Authority	JaxPort	South Florida Regional Transportation Authority
Owner or Operator	Private Developer and Seminole Gulf Railway	Florida East Coast Railway	South Florida Rail Corridor	South Florida Rail Corridor	CSX Transportation	Alabama and Gulf Coast Railway	Tampa Port Authority	Florida East Coast Railway	CSX Transportation	South Central Florida Express	Jacksonville Port Authority	JaxPort	South Florida Rail Corridor
Description	A rail intermodal yard in the vicinity of SW Florida International Airport and off Alico Road for transloading and storing petroleum products such as gasoline, diesel fuel, and aviation kerosene type jet fuel (Jet A Fuel) transported by rail. The project will also include the delivery of jet fuel to the airport fuel farm from the rail yard to the airport fuel farm by pipeline. Project includes site development, environmental assessment, design, and construction.	Rehabilitate critical bridge. Replace ties on both tracks, make steel repairs, paint the entire steel structure, and replace miter joints. Upgrade existing grade crossings.	Reconstruct station to relocate east platform south to match west platform. Upgrade entire station to provide improved facilities such as new canopies and pedestrian features.	New parking deck with about 385 spaces, along with pedestrian, bus circulation, shelter, and bike improvements.	Build new Number 20 universal crossover.	Rebuild bridge No. (Number 890.0, Number 893.7 and Number 394.1- 672 feet total) at 4M. Repairs to 21 timber Bridges @ \$725K. Upgrade the timber bridges on this route for 286 at a cost of \$1.2M.	This project provides for additional storage tracks at Hookers Point.  The project would extend the rail line to the Intermodal Container  Terminal and South Hookers Point and connect the east and west side running tracks at the south end of Hookers Point. There will also be addition of Wye track at Cargill – Construct a south-facing connection from the main running track to the existing southerly side track within the Cargill plant.	To interface with PTC provide a safe working system.	Upgrade universal crossover to Number 20 universal crossover.	Upgrade all our bridges to handle 286 traffic. Note: This project is looking to receive eligibility for any funding available. With this upgrade, the potential to attract customers would increase as higher cargo volumes could be moved. This potential new traffic could open the area to economic development.	Addition of rail switch yard adjacent to existing CSX-rail facility	Add an additional track and switch yard to serve automobile processors on Blount Island Marine Terminal.	Surface parking lot expansion on existing SFRTA ROW, along with pedestrian, bus circulation, shelter, and bike improvements.
Project Name	Rail Intermodal Yard	Jacksonville Bridge Rehabilitation	Pompano Beach Tri-Rail Station Improvements	Delray Beach Tri-Rail Station Improvements	Starke Crossovers	Florida Upgrade-Bridges	Hooker Point Rail Expansion	New Dispatch System	Highland Crossover Upgrade	286 Bridge Upgrade	Dames Point Switch Yard	Blount Island Track and Yard Addition	Boynton Beach Tri-Rail Station Improvements
Π	289	222	311	249	153	246	224	244	149	69	133	290	251

Timeframe	Near-term (1- 5 years)	Near-term (1-5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)	Near-term (1-5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)	Near-term (1- 5 years)
Estimate (\$1,000 of 2009 Dollars)	4,250	3,700	3,250	3,000	3,000	2,864	2,700	2,502	2,500	1,550
	<del>\$</del>	<del>49</del>	<del>ss</del>	€	€	\$	<del>\$</del>	€	€	<del>90</del>
FDOT District	2	4	സ	സ	11	2	4	9	rv	1,5
Location	Jacksonville	Port of Palm Beach/FEC ROW	Orlando	Ocala	Lee County	FDOT District 2	On train equipment for entire SFRC	Miami-Dade County	Orlando Area	Central Florida
Project Type	Capacity Upgrade	Capacity Upgrade	Capacity Upgrade	Rehabilitation and Maintenance	Capacity Upgrade	Signal Upgrade	Signal Upgrade	Station Improvements	Rolling Stock	Capacity Upgrade
Freight or Passenger	Freight	Freight	Freight	Freight	Freight	Freight	Passenger	Passenger	Freight	Freight
Agency Reporting Need	CSX Transportation	Port of Palm Beach	CSX Transportation	Florida Central Railroad	Lee County MPO	Florida East Coast Railway	SFRTA	South Florida Regional Transportation Authority	Florida Central Railroad	CSX Transportation
Owner or Operator	CSX Transportation	Port of Palm Beach	CSX Transportation	Florida Central Railroad	Seminole Gulf Railway	Florida East Coast Railway	SFRTA	South Florida Rail Corridor	Florida Central Railroad	CSX Transportation
Description	Install Universal crossovers at Amtrak Station. Improve reliability of Amtrak operations and mitigate freight/passenger conflicts.	The project consists of the construction of rail switching track in the Florida East Coast Railroad right-of-way located in Riviera Beach, Florida. The project will improve the railroad switching operation at the Port of Palm Beach District and also reduce the traffic delay impereyemergency response times on Blue Heron Boulevard and 13th Street in Riviera Beach, Florida. The Port's rail operation personnel will build and place the train south of SR 710 on this proposed switching track within Florida East Coast Railroad's right-of-way and adjacent to the Port's property. Depending on the number of rail cars, the Florida East Coast Railroad should have to hook up only once before proceeding north bound up the east coast of Florida. The vehicular traffic delay impact on Blue Heron Boulevard will be reduced considerably.	Install power switch to Stanton Spur (OUC).	Tie and surface 30 miles of track to maintain a marginal 286,000-pound capacity Without this rehabilitation the competitiveness of the FNOR customers will fall into jeopardy and will be forced regardless of the rates to add more trucks to this growing community.	Design and construct an intermodal transfer terminal that will facilitate centralized rail car-truck transloading, including both trailer on flat car/container on flat car (TOFC/COFC) and non containerized "team track" operations. An intermodal terminal will boost the local economy. The site is located close to the intersection of Hanson Street and Veronica Shoemaker Parkway. Alternative locations are also available which would require site acquisition and development costs, and may require environmental assessments.	Install new signal system ready for PTC over 5.4 miles of mainline track from Bowden Yard to the Jacksonville Bridge and upgrade crossovers to powered universal turnouts.	Install new PTC equipment to locomotives and cab cars.	Surface parking lot expansion along with pedestrian, bus circulation, shelter, and bike improvements.	Replace two 1950 generation locomotives used for interchange every day with CSX through the metropolitan area of Orlando with two Genset Green Locomotives. Will assist metro Orlando by retaining environmental compliance.	Build northern connection at south entrance to CF Industries to create a wye with power switches.
Project Name	Jacksonville Amtrak Crossovers	Port of Palm Beach Railroad Switching Project	Stanton Spur Power Switch	Tie and Surface FNOR Ocala	Lee County Intermodal Transfer Terminal	Track and Signal Improvements from Bowden	On train Positive Train Control System (PTC) for Tri-Rail commuter rail service	Opalocka Tri-Rail Station Improvements	Green Locomotives	Central/CF Industries

Timeframe	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1- 5 years)	Near-term (1-5 years)	Near-term (1- 5 years)	Mid-term (6-10 years)	Mid-term (6-10 years)
Estimate (\$1,000 of 2009 Dollars)	\$ 1,500	\$ 1,305	\$ 1,255	\$ 753	\$ 400	320	\$ 250	N/A	N/A
FDOT District	īΣ	īΣ	1	rv	rv	1,7	4,6	7	3
Location	Newberry-High Springs	Tavares	Lake Wales to Frostproof	Orlando	Orlando	Hillsborough, Polk, DeSoto, Charlotte, Lee, and Collier Counties	Southeast Florida	Jacksonville	Escambia
Project Type	Rehabilitation and Maintenance	Rehabilitation and Maintenance	Rehabilitation and Maintenance	Rehabilitation and Maintenance	Rehabilitation and Maintenance	Study	Rehabilitation and Maintenance	Capacity Upgrade	Rehabilitation and Maintenance
Freight or Passenger	Freight	Freight	Freight	Freight	Freight	Passenger	Passenger	Freight	Freight
Agency Reporting Need	Florida Central Railroad	Florida Central Railroad	Florida Central Railroad	Florida Central Railroad	Florida Central Railroad	Lee County MPO	FDOT District 4	CSX Transportation	Alabama and Gulf Coast Railwav
Owner or Operator	Florida Central Railroad	Florida Central Railroad	Florida Central Railroad	Florida Central Railroad	Florida Central Railroad	Seminole Gulf Railway or New Passenger Rail Service	South Florida Rail Corridor	CSX Transportation	Alabama and Gulf Cost Railwav
Description	Retain 15 miles of rail service to High Springs. One of the largest employers using plastic needs rail service and is struggling in this economy. If the rail service leaves the plant will shut down permanently and the furloughed employees cannot return. This project is in an economically distressed area.	Needed now to continue rail service. This bridge is also contained in the Tavares Freight Village project. It would be completed within 6 months of the grant. This project is located within an economically distressed area, and this project will help preserve the existing industry. This project will also preserve existing ROW/rights for future potential commuter rail.	Tie and surface 12.5 miles of a marginal line suffering from the local economy which was thriving on the housing market Lowes Lumber distribution and Ferguson plumbing located at the end of the line because there was railroad service there. That generated many jobs in the rural community that could not be replaced. Accordingly the railroad helps the business stay there and the residents employed	Tie and Surface a 10-mile line serving the town of Winter Garden.  This is the end of the line but has great potential as it is adjacent to the Turnpike and Orange County Expressway with many acres of industrial land. It also handles orange juice, plastics, and fertilizer. It will also preserve a right-of-way for future passenger use.	Tie surface and switch rebuild. This industrial park serves Frito Lay, Winn Dixie Coke Miller Beer and various other warehouses safety and dependability in these close quarters require good track structure. This project is needed to maintain existing service.	The project will consist of studies to evaluate the feasibility of investing in new passenger rail service in SW Florida, with significant reliance upon connection to Amtrak services from either Tampa (as envisioned in the Florida Inter-City Passenger Rail Vision Plan) or Lakeland, or both, connecting key urban centers in SW Florida including Sarasota, Venice, Punta Gorda, Fort Myers, Bonita Springs and Naples, using the CSX/SGLR and I-75 right-of-way. The project would include evaluating the SGLR right-of-way from Arcadia to Naples and its possible purchase from CSX.	Asbestos abatement on rail infrastructure along the South Florida Rail Corridor (SFRC).	Upgrade track and signals on joint CSX/FEC interlocking. (Signal and track upgrades within the CSXT/FEC shared facility at Beaver Street top mitigate conflicts, expedite train movements, and improve fluidity. Project would also benefit Amtrak operations when/if service to/from Miami over the FEC were to commence.)	Rehabilitate 43.5 miles of Main Line in Florida and Rehabilitate 4 yard tracks in Pensacola, Florida.
Project Name	Tie and Surface FNOR Newberry	Dora Canal Bridge	Frostproof Tie and Surface	Winter Garden Line	Silver Star Branch Orlando	Lee Collier Intercity and Freight Rail Feasibility Study	South Florida Rail Corridor Asbestos Abatement	Beaver Street Interlocking	Florida Upgrade

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Timeframe	(6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)
Cost Estimate (\$1,000 of 2009 Dollars)	######################################	\$ 4,261,649	\$ 2,000,000	\$ 1,646,690	\$ 1,297,400	\$ 473,099	\$ 321,575	\$ 294,800	\$ 215,706
FDOT District	4, 5, 6	7	വ		1	9	4	9	4
Location	Orlando to Miami (and MCO to Port Canaveral)	Pinellas, Hillsborough, and Pasco Counties	Orange County Convention Center to Lake Non/Medical City	Hillsborough County	Polk County	Miami-Dade County	Broward County	District 6	Broward County
Project Type	New Service	New Service	New Service	New Service	Capacity Upgrade	New Service	New Service	Capacity Upgrade	New Service
Freight or Passenger	Passenger	Passenger	Passenger	Passenger	Freight	Passenger	Passenger	Freight	Passenger
Agency Reporting Need	FDOT Central Office (Port Canaveral)	Tampa Bay Regional Transportation Authority	Metroplan Orlando	Hillsborough County MPO	FDOT District 1	South Florida Regional Transportation Authority	South Florida Regional Transportation Authority	Florida East Coast Railway	South Florida Regional Transportation Authority, FDOT District 4
Owner or Operator	New Passenger Rail Service	CSX Transportation	New Passenger Rail Service	New Passenger Rail Service	CSX Transportation	South Florida Rail Corridor	South Florida Regional Transportation Authority	Florida East Coast Railway	FDOT Central Broward East- West Transit Study
Description	Phase 2 A High-Speed Rail connecting Orlando and Miami. Project may also include a light rail or elevated light rail (monorail) component. Cost for High-Speed Rail element is \$10 billion. Cost for monorail component is \$200 million. As described under project Numbers 72 and 73, right-of-way is potentially available for light rail/monorail service depending upon the alignment. The monorail option results in a minimal project "footprint" and offers reasonable travel speeds and project cost and could be compatible with existing Central Florida monorail systems. More than just a "port to port" connection, the line could provide a sustainable, efficient passenger connection between the Space Coast and the entire Orlando metropolitan area, including heavy tourist populations via light rail and/or additional spurs to the downtown area and attraction lodging. Note: Does not include tourism traffic.	Bruce B. Downs from Wesley Chapel to USF, CSX corridor area (near Nebraska Avenue) from USF to Tampa CBD, I-275 from Tampa to Westshore, Howard Frankland, Gateway, St. Petersburg CBD	Light Rail serving Orange County Convention Center, Orlando International Airport and Lake Nona/Medical City with future extensions to Innovation Way, the University of Central Florida, Osceola NE District and Seminole Way.	Short-distance rail projects involving 12.9 miles of track connecting Downtown Tampa to USF and 8.3 miles of track connecting Downtown Tampa to Airport (terminating north of Airport at Hillsborough Avenue). Combination of project numbers 208 and 210.	Relocation of freight lines along Lakeland to accommodate more traffic and alleviate impact on surrounding ommunity.	Transitway in the median of Kendall Drive for both BRT and Diesel LRT vehicles, terminating at Dadeland North. BRT extends west on Kendall Drive, DLRT service proceeds SW on the CSX corridor.	Streetcar/BRT in-street between SR 7 and downtown Fort Lauderdale. Project connects existing north/south transit service in the SR 7 and Tri-Rail corridors and planned express bus service on I-95 to downtown employment center.	Relocating the Hialeah Yard to the Medley "area"	New E/W fixed guideway operated in curb lanes of Griffin Road. Phase I connects the South Florida Education Center with the existing Fort Lauderdale-Hollywood Airport Station at Dania Beach Tri-Rail Station. Phase II connects the Fort Lauderdale-Hollywood International Airport with the existing Fort Lauderdale/Hollywood Airport Station at Dania Beach Tri-Rail Station. Combination of project numbers 271 and 272.
Project Name	High-Speed Rail: Orlando to Miami (and Central Florida Monorail)	St. Petersburg-Wesley Chapel	East-West Corridor	Short-Distance Rail Investments – Downtown Tampa to USF and Airport	Lakeland Freight Rail Relocation	Kendall Area Diesel LRT/BRT Hybrid	Broward Boulevard Fixed Guideway – SR 7 to Downtown	Relocation Hialeah Yard to Medley	Broward E/W Fixed Guideway – Phase I and II
ID	277	86	295	208	604	264	269	236	271

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Timeframe	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)
Cost Estimate (\$1,000 of 2009 Dollars)	\$ 100,000	\$ 93,754	\$ 68,852	\$ 48,240	\$ 47,000	\$ 45,000	\$ 32,891	\$ 26,500	\$ 22,221	\$ 22,000	\$ 21,635	\$ 20,000
FDOT District	4	4,6	4,6	7	2	7	9	ю	1	7	4	2
Location	South Florida	Miami-Dade, Broward, and Palm Beach Counties	Miami-Dade to Palm Beach	U.S. 41, south of SR 676, Palm River	Duval County	Putnam County	Miami-Dade County	Tallahassee	SR 50, just east of 301, Hernando County	Causeway Blvd. at CSX Railroad Tracks east of US 41- Off Port of Tampa	Palm Beach County	Bradford County
Project Type	New Line	Capital Improvements	Rolling Stock	Grade Separation	Grade Separation	Grade Separation	Capital Improvements	Track Upgrade	Grade Separation	Grade Separation	Station Improvements	Grade Separation
Freight or Passenger	Freight	Passenger	Passenger	Freight	Freight	Freight	Passenger	Freight	Freight	Freight	Passenger	Freight
Agency Reporting Need	Port of Palm Beach	South Florida Regional Transportation Authority	South Florida Regional Transportation Authority	FDOT District 7	District 2	District 2	South Florida Regional Transportation Authority,	CSX Transportation	FDOT District 7	Tampa Port Authority	South Florida Regional Transportation Authority	District 2
Owner or Operator	Port of Palm Beach	South Florida Rail Corridor	South Florida Rail Corridor	CSX Transportation	CSX Transportation	CSX Transportation	South Florida Rail Corridor	CSX Transportation	CSX Transportation	Tampa Port Authority	South Florida Rail Corridor	CSX Transportation
Description	The project consists of the construction of a rail track connecting the Hialeah rail yard to the Intermodal Logistics Center in the vicinity of the south end of Lake Okeechobee. The rail could remove truck and rail traffic from the congested east coast corridors to the center of the State. The goal of this project is to move freight off the congested coastal areas. It should be noted that to date only \$350k have been funded.	Capital SFRC improvements including new sidings, interlockings, and signal enhancements to increase corridor capacity, which allow additional trains at reduced headways.	10 new passenger rail cars are sought in the next 5-10 years. 10 locomotives are sought in the next 3-10 years. Combination of midterm elements of projects 192 and 193.	Build bridge over railroad track. U.S. 41 is a major north/south route with a high percentage of truck traffic. Crossing is at the edge of a major rail yard with high amount of switching operations. Because of the all the switching operations and the location of the switches (just west of the roadway) the traffic is impacted by most of their operations. Frequently during peak periods this results in a 2-mile traffic backup.	Implement grade crossing improvements at SR 200 (U.S. 301)/Baldwin Crossing 620652-F on the CSX S-line in Duval County.	Implement grade crossing improvements at SR 15 (Reid Street)/Palatka Crossing 620968-R on the CSX A-line and Amtrak line in Putnam County.	Construct new double track and new bridge across the Miami River. Project limits from north of MIC to south of Hialeah Market Station.	Upgrade track and TCS for speed MPH (Florida portion only).	Build bridge over railroad. SR 50 is a major east/west route that crosses the State. Railroad has 24 plus train movements per day. During emergency on I-4 this route acts as reliever for traffic going from I-75 to Orlando area.	Projected traffic volumes on Causeway Blvd. during the peak hours will be severely impacted by train traffic at the crossing. A significant volume of Port truck trips will be delayed. Causeway Blvd. is an important "gateway" corridor between I-75 and Port facilities.	Expanded parking along with pedestrian, bus circulation, shelter, and bike improvements.	Implement grade crossing improvements at SE 144th Street (Mullins Grade)/Starke Crossing 627514-R on the CSX S-line in Bradford County.
Project Name	SR 27/Intermodal Logistics Center Rail Project	Decrease Tri-Rail Headways to 15 Minutes Peak	New Rolling Stock	U.S. 41/Rockport, NGCN: 624802A	SR 200 (U.S. 301)/Baldwin Crossing	SR 15 (Reid Street)/Palatka Crossing	Miami River Intermodal Center Capacity Improvement	Bainbridge Sub	SR 50 Ridge Manor, NGCN: 625307P	Crossing: Causeway Blvd. at CSX Railraod Tracks east of US 41	Magnolia Park Tri-Rail Station Improvements	SE 144th Street (Mullins Grade)/Starke Crossing
Ü	128	194	192	106	505	503	201	182	93	602	256	500

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Timeframe	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)
Estimate (\$1,000 of 2009 Dollars)	18,000	18,000	17,688	16,587	15,000	11,523	10,500	10,000	8,100	7,500
	<del>\$</del>	<del>⇔</del>	\$	\$	<del>\$</del>	€	<del>s</del>	<del>\$</del>	↔	€
FDOT District	4		2, 4, 5, 6	4	1	4	_	7	7	1
Location	Port Everglades	US 41 at CSX Railroad Tracks south of Causeway Blvd- Off Port of Tampa	FDOT Districts 2,4,5,6	Palm Beach County	Lake Wales to Frostproof	Palm Beach County	Tampa	Approximately 1 mile north of BIMT	Port Redwig, Port of Tampa	Rail corridor from Bartow Airbase, Winter Haven, Lake Wales, and Frostproof
Project Type	Capacity Upgrade	Grade Separation	Signal Upgrade	Station Improvements	Rehabilitation and Maintenance	Station Improvements	Capacity Upgrade	Capacity Upgrade	New Service	Signal Upgrade
Freight or Passenger	Freight	Freight	Freight	Passenger	Freight	Passenger	Freight	Freight	Freight	Freight
Agency Reporting Need	Port Everglades	Tampa Port Authority	Florida East Coast Railway	South Florida Regional Transportation Authority	FDOT District 1	South Florida Regional Transportation Authority	CSX Transportation	Jacksonville Port Authority	Tampa Port Authority	FDOT District 1
Owner or Operator	Port Everglades	Tampa Port Authority	Florida East Coast Railway	South Florida Rail Corridor	Florida Midland Railroad	South Florida Rail Corridor	CSX Transportation	Jacksonville Port Authority	Tampa Port Authority	CSX Transportation
Description	Phase II of this project consists of rail storage tracks and marshalling yard adjacent to container storage yards and berths to provide near-dock access to rail from Southport, the main container terminal area of Port Everglades.	US 41 is a critical corridor providing access to and between Port terminals from Big Bend to Inner Harbor. As traffic volumes (Port and background) increase over the next 10 years, the delays to travel along the US 41 corridor caused by trains at this at-grade crossing will significantly reduce the access provided by US 41 to the Port terminals	Install new signal system (CTC) ready for PTC from Bowden Yard to Hialeah.	Construction of a new intermodal facility, at either the existing Tri-Rail station or proposed new Boca Raton station near Glades Road.	This track is a freight line and travels at approximately 10-20 mph to deliver goods to Frostproof. Increase of train speed (which has been the Florida Midlands goal) would require track rehabilitation.	New parking deck with over 500 spaces, along with pedestrian, bus circulation, shelter, and bike improvements.	Tampa connection to A-Line.	An addition of a switchyard to improve traffic (container, automobile, heavy-lift, etc.) to and from Blount Island.	10,000 ft of Mainline Rail construction & 2,500 ft. extension to existing siding with cross-over track to improve rail access and US 41 traffic movement	With the increase of freight delivery these rail corridors are in need of replacement/ upgrade of railroad signals which are fast approaching the (25-30+) years old Federal limitations.
Project Name	Rail Storage Tracks for ICTF Facility-2	Crossing: US 41 at CSX Railroad Tracks south of Causeway Blvd.	Install Signal Control Point Upgrades	Boca Raton Intermodal Center	Florida Midland – Rail Track Improvements	Boca Raton Tri-Rail Station Improvements	Tampa Connection	Blount Island-North JAXPORT Switchyard	10,000 ft of Mainline Rail construction & 2,500 ft. extension to existing siding with cross-over track to improve rail access and US 41 traffic movement	Florida Midland- Railroad Crossing Signal Upgrade
ID	125- 2	603	242	259	299	255	179	135	601	300

Timeframe	(6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)
	7,300 Mid (6-11	7,250 Mid (6-11	7,211 Mid (6-10	6,250 Mid (6-1)	Mid 5,800 (6-10	5,500 Mid (6-10	5,300 Mid (6-10	5,043 Mid (6-1)	4,500 Mid (6-1)	3,750 Mid (6-1)	3,750 Mid (6-1)	3,750 Mid (6-1)
Estimate (\$1,000 of 2009 Dollars)	<del>⊈</del>	<del>so</del>	€	<del>\$</del>	€		€	<del>S</del>	<del>\$</del>	<del>99</del>	<del>99</del>	€
FDOT District	⊷	7	4.	3	7	7	_	ιC	9	9	1	1
Location	Lee County	Brooksville, FL	Palm Beach County	Havana	Hookers Point, Port of Tampa	Welcome Road	Pendola Point & Port Sutton, Port of Tampa	FDOT District 5	Dyer	Hialeah	Fort Meade	Polk County
Project Type	Track Upgrade	Track Upgrade	Capital Improvements	Capacity Upgrade	New Service	Capacity Upgrade	Rehabilitation and Maintenance	Capacity Upgrade	Capacity Upgrade	Capacity Upgrade	Capacity Upgrade	Capacity Upgrade
Freight or Passenger	Freight	Freight	Passenger	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight
Agency Reporting Need	Lee County MPO	CSX Transportation	South Florida Regional Transportation Authority	CSX Transportation	Tampa Port Authority	CSX Transportation	Tampa Port Authority	Florida East Coast Railway	CSX Transportation	CSX Transportation	CSX Transportation	CSX Transportation
Owner or Operator	Seminole Gulf Railway	CSX Transportation	South Florida Rail Corridor	CSX Transportation	Tampa Port Authority	CSX Transportation	Tampa Port Authority	Florida East Coast Railway	CSX Transportation	CSX Transportation	CSX Transportation	CSX Transportation
Description	The Phase 1 project will renew sections of the SGLR railroad Bridge that spans the Caloosahatchee River. The project will replace fully depreciated sections and make structural improvements; replace fully depreciated pilings and other structural members, paint main drawbridge span. The project will also upgrade SGLR track structure between Colonial Boulevard and Hanson Street and between Cranford Street and Lee County line, a total distance of 14 miles. Improvements to this section includes installing new 115-pound continuous welded rail, longlife crossties and related tie plates, track fastening systems and installing new ballast. The project also includes rehabilitating SGLR track structure between Alico Road and Colonial Boulevard, a distance of 8 miles. Improvements to this section includes installing 100-pound rail that will be removed to install 115-pound mentioned previously, installing long-life crossties and related tie plates, associated materials and ballast. Also in coordination with Charlotte and DeSoto County, expand the improvements to include replacement of Shell Bridge in Charlotte County and installation of 42 more miles of 115-pound rail in these two counties.	Reconstruct Shands Lead: 3.5 miles track.	Tri-Rail Layover Facility and Light Maintenance in Northern Palm Beach County to serve expanded service and longer train needs. Improves efficient operation and on-time performance.	Build 10,000-foot siding. (Bainbridge SD)	Rail extension to South Hookers Point	Build siding with radio remote control switches and install 2 radio remote control switches to eliminate 10 mph speed restriction at Edison.	Rail access improvements	Relocate North Pineda turnout north to MP 178.8 and construct two additional miles of track.	Improve connection between CSXT and FEC at Mission Spur (Miami area).	Build CSXT-FEC connection known as Iris Connection.	Extend siding to 8,000'.	Build power interlocking to include both legs of the wye and diamond.
Project Name	Seminole Gulf Infrastructure Improvements - Phase I	Shands Lead	New Tri-Rail Layover Facility in Northern Palm Beach	Havana Siding	Rail extension to South Hookers Point	Welcome/Edison Siding	Rail access improvements	Pineda Turnout	Mission Spur (Dyer)	Hialeah/Iris Connection	South Fort Meade	Agrock Wye
П	287	335	260	185	595	180	599	220	157	164	181	183

Timeframe	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)
Estimate (\$1,000 of 2009 Dollars)	3,600	3,500	3,484	2,885	2,750	2,177	2,000	2,000	1,700	1,500	1,100	1,000
	€	<del>v</del>	€9	<del>\$</del>	<del>\$</del>	\$	\$	\$	\$	€	€9	<del>\$</del>
FDOT District	7	1	2	4	3	2, 4, 5, 6	7	7	7	L		2
Location	Big Bend/Port Redwing Terminals and Port Redwing Terminal to CSX mainline	Bradley	Bowden Yard, Jacksonville	Palm Beach County	Tallahassee	FDOT Districts 2,4,5,6	Hookers Point, Port of Tampa	Hookers Point, Port of Tampa	Hookers Point, Port of Tampa	A-Line from Tampa to Plant City	Hookers Point, Port of Tampa	S-Line from Vitis Junction north to Lacoochee
Project Type	Capacity Upgrade	Capacity Upgrade	Capacity Upgrade	Station Improvements	Capacity Upgrade	Signal Upgrade	Capacity Upgrade	Capacity Upgrade	Capacity Upgrade	Signal Upgrade	Rehabilitation and Maintenance	Signal Upgrade
Freight or Passenger	Freight	Freight	Freight	Passenger	Freight	Freight	Freight	Freight	Freight	Freight	Frei oht	Freight
Agency Reporting Need	Tampa Port Authority	CSX Transportation	Florida East Coast Railway	South Florida Regional Transportation Authority	CSX Transportation	Florida East Coast Railway	Tampa Port Authority	Tampa Port Authority	Tampa Port Authority	FDOT District 7	Tampa Port Authority	FDOT District 7
Owner or Operator	Tampa Port Authority	CSX Transportation	Florida East Coast Railway	South Florida Rail Corridor	CSX Transportation	Florida East Coast Railway	Tampa Port Authority	Tampa Port Authority	Tampa Port Authority	CSX Transportation	Tampa Port Authority	CSX Transportation
Description	Add drop-off and pick-up tracks near CSX mainline, and add runaround track on the CSX mainline. Construct a connecting track from the CSX mainline to the Port Redwing site.	Extend current siding one-half-mile, with radio remote control switches; plus two additional radio remote control switches and grading work. (Improve capacity, train velocity, and transportation capabilities of Central Florida network.)	Relocate the ingress/egress point for the Bowden Yard approximately 420 feet to the north of the existing point along U.S. 1 near Gordon Street. The new configuration should maximize the ease of circulation and cargo transfers and reduce the potential for truck-train accidents. A reconfigured circulation pattern will keep trucks on the north and west boundaries of the yard and off of U.S. 1. Move crossovers and extend the lead track so that traffic in the main yard does not get congested. Project will expand the capacity of the Bowden Intermodal Facility and improve the connectivity of the FEC with CSX and NS. The project will improve throughput capacity and reduce the number of trucks that backup onto Phillips Highway. Combination of projects 217 and 235.	Surface parking lot expansion along with pedestrian, bus circulation, shelter, and bike improvements.	Increase 20 mph speed to 40 mph.	Install new motion detectors at 3,331 grade crossings	Additional railcar storage capacity near scrap metal terminals	Additional rail storage capacity near existing CF industries terminal	Additional railcar storage capacity near Cargill plant	This Line is used for freight and passenger (Amtrak) and has a high potential for commuter and intercity. Upgrade/replace antiquated highway railroad crossing signals that are 35 plus years old. Train traffic is expected to increase. This is a direct route between Tampa and the CSX ILC.	Railroad crossing replacements/improvements to multiple locations on Hookers Point	This Line is currently used for freight but has a potential for commuter and intercity. Train traffic is expected to increase due to moving trains off of the A-Line. This is the main route to the CSX ILC. Upgrade/replace antiquated highway railroad crossing signals that are 35 plus years old.
Project Name	Port Redwing Rail Improvements	Bradley Tack/Siding	Bowden Intermodal Improvements	Lake Worth Tri-Rail Station Improvements	Tallahassee Speed	Install Motion Detectors at Grade Crossings	Additional railcar storage capacity near scrap metal terminals	Additional rail storage capacity near existing CF industries terminal	Additional railcar storage capacity near Cargill plant	Roadway Crossing Signal Upgrade	Railroad crossing replacements/improvements to multiple locations on Hookers	Railroad Crossing Signal Upgrade
ID	229	139	235	254	186	243	296	597	298	119	009	122

Timeframe	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	(11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)
Cost Estimate (\$1,000 of 2009 Dollars)	TBD	TBD	\$ 3,500,000	\$ 1,260,241	\$ 622,000	\$ 501,369
FDOT District	ιC	יט	4,6	r	24	9
Location	District 5	District 5	Miami-Dade, Broward, Palm Beach, From Pompano Beach to West Palm Beach, From Miami-Dade County to Pompano Beach, Miami-Dade County, Palm Beach County, St. Lucie	Northern and Central Pinellas County	NE Florida Region	Miami-Dade
Project Type	Grade Separation	Grade Separation	New Service	New Service	New Service	New Service
Freight or Passenger	Freight	Freight	Passenger	Passenger	Passenger	Passenger
Agency Reporting Need	District 5	District 5	FDOT District 4, South Florida Regional Transportation Authority, St. Lucie TPO	Tampa Bay Regional Transportation Authority	Jacksonville Transportation Authority, North Florida TPO	South Florida Regional Transportation Authority
Owner or Operator	TBD	TBD	South Florida Commuter Rail	CSX Transportation	New Passenger Rail Service	CSX Transportation
Description	Implement grade crossing improvements at West Granada Avenue (SR 40) Crossing 272865E	Implement grade crossing improvements at West Colonial Drive (SR 50) Crossing 622181A	Commuter rail between Jupiter and downtown Miami in a shared freight (Florida East Coast Railway) corridor. Approximately 85-100 miles of rail corridor, 60 stations, 200+ grade crossings. Study is in the alternatives analysis phase to define a locally preferred system alternative in spring 2010. Project is Federalized. Next phase is to develop a Draft EIS for one or more proposed actions in the corridor. Finance plan will be developed and vetted with public and local governments. New passenger rail service on the FEC Corridor, from the Pompano Crossover north to downtown West Palm Beach. New Passenger rail service from Miami-Dade (near 71st) using FEC into Broward County, terminating at SFRC/Tri-Rail Pompano Station. Provides system interconnection between FEC and SFRC passenger services. 10-mile extension of mainline Tri-Rail service to downtown Miami using FEC from 72nd SFRC/Iris to Government Center. New passenger rail service utilizing the FEC Spur/Ludlam Trail corridor, connecting the Miami Intermodal Center (MIC) to Dadeland North. Extension of Tri-Rail service from West Palm Beach to Jupiter, including construction of a connection between the SFRC and FEC Railway, use of the FEC corridor for approximately 14 miles, and construction of maintenance and layover facility. Passenger Rail Station-Town Center Typology for Fort Pierce Town Center Station.  SFECC, New FEC Passenger Rail Service-Phase IV, New FEC Passenger Rail Service - Phase II, MIC to Dadeland Passenger Rail Service on FEC Spur, New FEC Passenger Tail Service - Phase I, Fort Pierce Town Center Station	CSX corridor with following legs: from Clearwater CBD to Ulmerton area, along Ulmerton area from CSX to Gateway; and from Largo (South of Ulmerton) to St. Petersburg CBD. Major activity centers including major employment centers are proposed to be connected by this service. Combination of projects 83 and 84. Duplicated by projects 312, 129, 294 and 309.	The Jacksonville Transportation Authority has just completed a Feasibility Study for commuter rail in northeast Florida. The study identified three main lines. One line (north corridor) runs from Downtown Jacksonville north to Yulee in Nassau County. The second line round from Downtown Jacksonville to St. Augustine in St. Johns County. The third line runs from Downtown Jacksonville to Green Cove Springs in Clay County. The total three corridor system is 91 miles. Capital costs were estimated at \$622 million, not including any ROW costs. The long-term plans call for extensions to Baker, Putham, and Flagler counties. Projects 71 and 283 are duplicates/alternatives for 78.	Extension of Tri-Rail service 11.2 miles of CSX Corridor west from the Miami Intermodal Center (MIC) along SR 836, ending just west of Florida's Turnpike, Phase II provides upgraded stations and additional double tracking necessary to implement reduced headways.
Project Name	West Granada Avenue (SR 40) Crossing	West Colonial Drive (SR 50) Crossing	Service-Phases I-IV Service-Phases I-IV	CSX Corridor: Clearwater- Gateway, Largo-St. Petersburg CBD	Jacksonville Commuter Rail	CSX-Tri-Rail Dolphin Extension Phase II
9	557	564	95	83	28	204

Timeframe	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)
Cost Estimate (\$1,000 of 2009 Dollars)	\$ 400,000	\$ 240,000	\$ 90,360	000'06 \$	\$ 63,316	000'09 \$	000'09 \$	\$ 22,000
FDOT District	4,6	4	L	7	4,6	1	2	1
Location	NW Miami-Dade to South Bay	Broward Boulevard to Palm Beach County Line	Park Road, at U.S. 92, Plant City	U.S. 41/50th Street south of I-4, Tampa	Miami-Dade to Palm Beach	Overpass located E of Bella Vista Street (Number 622867)	Nassau County	DR 60, W of Lake Wales
Project Type	New Line	Grade Separation	Grade Separation	Grade Separation	Rolling Stock	Capacity Upgrade	Grade Separation	Grade Separation
Freight or Passenger	Freight	Passenger	Freight	Freight	Passenger	Freight	Freight	Freight
Agency Reporting Need	FDOT District 4	FDOT District 4	FDOT District 7	FDOT District 7	South Florida Regional Transportation Authority	FDOT District 1	District 2	FDOT District 1
Owner or Operator	New Freight Rail Service	South Florida Rail Corridor	CSX Transportation	CSX Transportation	South Florida Rail Corridor	CSX Transportation	CSX Transportation	CSX Transportation
Description	Feasibility study for this study completed. Given the inability of key experts to eliminate alternatives or select the best alternative based on the analyses completed to date, a more microscopic evaluation of feasibility is recommended. A more technically detailed evaluation should be undertaken to determine the feasibility of a rail corridor along U.S. 27 based on the key considerations identified as part of Phase 1. Subsequent feasibility analysis should include an evaluation of the following: 1) current and future freight and passenger service demand; 2) Impacts upon the roadway network due to the new rail corridor; 3) Right-of-way needs; 4) Community, social, physical, and natural impacts; 5) Environmental impacts and compliance with CERP; 6) Order of magnitude costs, including construction, maintenance, and operating costs; and 7) Funding options.	Grade separation improvements at several crossings along the South Florida Rail Corridor (SFRC) between Broward Boulevard and the Palm Beach County Line	Park Road is a County Road with connections to U.S. 92 and Interstate 4. Park Road will be one-half of the bypass around Plant City and has a high percentage of truck traffic. Park Road cross's the CSX. A-Line. This line has a 79mph for Amtrak. This portion of the Line is a backup route to the CSX ILC and has a high potential for Commuter Rail or Inter City Rail service. Both Rail and vehicle traffic will continue to increase.	Build bridge over railroad tracks. U.S. 41 is a major north/south route with a high percentage of truck traffic. Railroad has 3 tracks, 2 tracks are used for switching operations. Mainline track carries Amtrak. This line has a high potential for commuter rail and/or Inter City Rail service.	16 new passenger rail cars and 6 locomotives are sought in 10-25 years. Combination of mid- to long-term elements of projects 192 and 193.	Future potential for use of median corridor on I-4 to accommodate High-speed passenger service, would impact CSX RR Bridge @ Kathleen (Number 622867), which has some constraint issues.	Implement grade crossing improvements at SR 200 (A1A)/Yulee Crossing 620822-X on the CSX U.S. 17 N main line in Nassau County.	Due to increased rail traffic flowing to the A/S-Line and the increased roadway traffic volume anticipated from the Winter Haven ILC to an already high-volume roadway, a Highway Overpass will
Project Name	South Florida U.S. 27 Rail Link	SFRC Rail/Arterial Grade Separations	Park Road, NGCN: 6243139	U.S. 41/50th Street, NGCN: 624368C	Replacement and New Locomotives	Kathleen Road – Railroad Overpass	SR 200 (A1A)/Yulee Crossing	SR 60, W Lake Wales

Timeframe	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)
Cost Estimate (\$1,000 of 2009 Dollars)	\$ 50,000	50,000	50,000	20,000	\$ 45,000	\$ 40,000	\$ 37,520
FDOT District	rv en	2 \$	2 \$	1,7 2	3	1 8	4
Location	Cape Canaveral Air Force Station	Clay County	Clay County	Lee County 1.	District 3	Crossing Number 624525 located at the Nichols Rail Switching Yard	SR 676, just east of U.S. 41, Palm River
Project Type	New Line	Grade Separation	Grade Separation	Track Upgrade	Grade Separation	Grade Separation	Grade Separation
Freight or Passenger	Freight	Freight	Freight	Freight	Freight	Freight	Freight
Agency Reporting Need	Port Canaveral	District 2	District 2	Lee County MPO	District 5	FDOT District 1	FDOT District 7
Owner or Operator	Port Canaveral	CSX Transportation	CSX Transportation	Seminole Gulf Railway	CSX	CSX Transportation	CSX Transportation
Description	An extension/expansion of an existing rail line spur that currently terminates approximately 6 miles north of Port Canaveral. The proposed extension/expansion connects to the main FEC line on the mainland via existing spurs and a rail bridge that serve both Kennedy Space Center and the USAF CCAFS. The project has been proposed in the past and the USAF was not in support due to security concerns. That was before 9/11 and the post 9/11 seaport security environment is much more secure and it would not be difficult to secure a rail corridor between Port Canaveral and the FEC mainline via KSC and the CCAFS. This situation is similar to the California situation with rail lines running through Vandenberg Air Force Station, except the rail utilization at CCAFS would NOT include passengers. Note: Anticipated impacts are likely to change dependent on the cargo volume, there is a potential for higher volume.	Implement grade crossing improvements at CR 28 (Wells Road)/Orange Park Crossing 620901-J on the CSX A-line and Amtrak line in Clay County.	Implement grade crossing improvements at SR 224 (Kingsley Ave)/Orange Park Crossing 620903-X on the CSX A-line and Amtrak line in Clay County.	Phase 2 is a project to continue upgrading and expanding the rail infrastructure in Lee County by appropriate investments in track maintenance and capacity upgrades, track and crossing signals and railroad crossings in addition to building additional tracks to connect the railroad to key markets in Manatee, Glades, Hendry, Charlotte, Collier and Lee. Furthermore this project will look into investing in new rail technology such as double-stacking, rail cars, etc., and expanding rail capacity through double tracking, passing sidings etc., which could be needed in response to the proposed Winter Haven Intermodal Logistics Center. Proposed Phase 1 and 2 improvements will facilitate in the future investment of a permanent Amtrak services connecting Lakeland, Arcadia, Punta Gorda, Fort Myers, Bonita Springs and Naples. It may also result in the investment of intercity rail services connecting Tampa and Bradenton to all the urban centers in SW Florida including Sarasota, Venice, Punta Gorda, Fort Myers, Bonita Springs and Naples as described in the Florida Inter City Passenger Rail "Vision Plan".	Implement grade crossing improvements at Nine Mile Road (SR 10) Crossing 339696K	Based on existing roadway traffic volume and current rail traffic volume, both of which are expected to increase in the future, this location will meet the requirements of an overpass instead of atgrade crossing.	Build bridge over railroad. SR 676 is a major east/west route with a high percentage of truck traffic. This is a truck route leaving the Port of Tampa. Traffic volumes will continue to increase. Rail traffic is 30 plus per day and is expected to increase.
ID Project Name		501 CR 28 (Wells Road)/Orange Park Crossing	502 SR 224 (Kingsley Ave)/Orange Park Crossing	291 Seminole Gulf Infrastructure Improvements - Phase 2	515 Nine Mile Road (SR 10) Crossing	297 SR 60, W of Mulberry	109 SR 676/Causeway BI., NGCN: 624815B

Timeframe	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years
(\$1,000 of 2009 Dollars)	\$ 30,000	000′0ε \$	000′0ε \$	000′0ε \$	000'08 \$	\$ 30,000	\$ 30,000	\$ 30,000	\$ 23,900	\$ 22,953	\$ 19,856	\$ 18,298	020'6 \$	TBD	TBD	TBD	TBD	TBD	TBD
FDOT District	1	4	4	4	4	4	4	4	4	4	4	4	4	5	rv	ιC	ιC	rv	ις
Location	From SR 72, Sarasota to Manatee County line	District 4	District 4	District 4	District 4	District 4	District 4	District 4	District 4	District 4	District 4	District 4	Palm Beach	District 5	District 5	District 5	District 5	District 5	District 5
Project Type	Right-of-way	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Station Improvements	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation
Freight or Passenger	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Passenger	Freight	Freight	Freight	Freight	Freight	Freight
Agency Reporting Need	FDOT District 1	District 5	District 5	District 5	District 5	District 5	District 5	District 5	District 5	District 5	District 5	District 5	South Florida Regional Transportation Authority	District 5	District 5	District 5	District 5	District 5	District 5
Owner or Operator	CSX Transportation	FEC	CSX	CSX	CSX	CSX	CSX	CSX	CSX	CSX	CSX	CSX	South Florida Rail Corridor	TBD	TBD	TBD	TBD	TBD	TBD
Description	This rail corridor is currently being under utilized by the current rail company and has been in negotiations for sell with Sarasota County. An agreement could not be reached by both parties on the estimated value of this property and has now been dropped. This corridor has the potential for future transportation usage (rail passenger, transit, etc).	Implement grade crossing improvements at Indiantown Road (SR 706) Crossing 272377B	Implement grade crossing improvements at Okeechobee Boulevard (SR 704) Crossing 628126V	Implement grade crossing improvements at Forest Hill Boulevard (SR 882) Crossing 628139W	Implement grade crossing improvements at Atlantic Avenue (SR 806) Crossing 628155F	Implement grade crossing improvements at SE Yamato Road (SR 794) Crossing 628163X	Implement grade crossing improvements at Commercial Boulevard (SR 870) Crossing 628186E	Implement grade crossing improvements at Hollywood Boulevard (SR 820) Crossing 628281A	Implement grade crossing improvements at NW 36th Street/Sample R (SR 834) Crossing 628168G	Implement grade crossing improvements at NW 62nd/Cypress C Crossing 628183J	Implement grade crossing improvements at Copans Road Crossing 628169N	Implement grade crossing improvements at Atlantic Boulevard (SR 814) Crossing 628177F	New parking deck.	Implement grade crossing improvements at West Lake Mary B. (CR 4220) Crossing 622065L	Implement grade crossing improvements at SR 434 (SR 434) Crossing 622073D	Implement grade crossing improvements at SR 436/Altamonte (SR 436) Crossing 622080N	Implement grade crossing improvements at East Maitland Avenue (CR 427) Crossing 622145E	Implement grade crossing improvements at West Lyman Avenue Crossing 622162V	Implement grade crossing improvements at South Orlando Avenue
Project Name	Rail Corridor Preservation	Indiantown Road (SR 706) Crossing	Okeechobee Boulevard (SR 704) Crossing	Forest Hill Boulevard (SR 882) Crossing	Atlantic Avenue (SR 806) Crossing	SE Yamato Road (SR 794) Crossing	Commercial Boulevard (SR 870) Crossing	Hollywood Boulevard (SR 820) Crossing	NW 36th Street/Sample R (SR 834) Crossing	NW 62nd/Cypress C Crossing	Copans Road Crossing	Atlantic Boulevard (SR 814) Crossing	West Palm Beach Tri-Rail Station Improvements	West Lake Mary B. (CR 4220) Crossing	SR 434 (SR 434) Crossing	SR 436/Altamonte (SR 436) Crossing	East Maitland Avenue (CR 427) Crossing	West Lyman Avenue Crossing	South Orlando Avenue (SR 15)

Owner or Agency Freight or FDOT Operator Reporting Need Passenger Project Type Location District D TBD District 7 Freight Grade Separation District 7 7	Timeframe	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years
Owner or Agency Freight or Operator Reporting Need Passenger Project Type Location  TBD District 7 Freight Grade Separation District 7	Dollars)	18D	TBD	TBD	TBD	TBD	TBD	N/A	\$ 3,740,548	\$ 1,736,199	\$ 930,429	\$ 880,610	\$ 788,050	\$ 687,800	\$ 612,620	\$ 404,970
Owner or Agency Freight or Operator Reporting Need Passenger Project Type TBD District 7 Freight Grade Separation District 7	District	,	7	7	7	7	7	9	1,7	_	1,7	7	_	7	7	7
Owner or Agency Freight or Operator Reporting Need Passenger TBD District 7 Freight	Location	District /	District 7	District 7	District 7	District 7	District 7	Miami-Dade County	Manatee, Hillsborough, Hernando, Pasco, and Sarasota Counties	Pinellas and Hillsborough Counties	Polk and Hillsborough Counties	Clearwater, Safety Harbor, and Oldsmar	Hillsborough County	Hillsborough County	Hillsborough County	Hillsborough County
Owner or Agency Operator Reporting Need TBD District 7	Project Type	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Capital Improvements	New Service	New Service	New Service	New Service	New Service	New Service	New Service	New Service
Owner or Operator TBD	Passenger	Freight	Freight	Freight	Freight	Freight	Freight	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger
TBI	Reporting Need	District /	District 7	District 7	District 7	District 7	District 7	South Florida Regional Transportation Authority	Tampa Bay Regional Transportation Authority	Tampa Bay Regional Transportation Authority	Tampa Bay Regional Transportation Authority	Pinellas County MPO	Tampa Bay Regional Transportation Authority	Hillsborough County MPO	Hillsborough County MPO	Tampa Bay Regional Transportation Authority
Description Implement grade crossing improvements at CR 54 (CR 54) Crossing 622845L	Operator	16D	TBD	TBD	TBD	TBD	TBD	CSX Transportation and South Florida Rail Corridor	CSX Transportation	Tampa international Airport	CSX Transportation	CSX Transportation	CSX Transportation	New Passenger Rail Service	New Passenger Rail Service	CSX Transportation
	Description	Implement grade crossing improvements at CK 54 (CK 54) Crossing 622845L	Implement grade crossing improvements at CR 54 (CR 54) Crossing 622851P	Implement grade crossing improvements at Alexander Street (CR 39A) Crossing 624326R	Implement grade crossing improvements at Parsons Avenue Crossing 624456M	Implement grade crossing improvements at SR 599/50th Street (SR 599) Crossing 624466T	Implement grade crossing improvements at Hillsborough Avenue (SR 600) Crossing 626902L	Various yard improvements including additional track, support equipment, and maintenance facilities for FDOT, Amtrak, and CSX and SFRTA.	CSX corridor near U.S. 41 with the following legs: from Bradenton near 15th Street east to Sarasota CBD, from Bradenton CBD to Tampa CBD (including 25.7 miles of track connecting to Sun City Center), and Tampa CBD to Brooksville CBD (including 15 miles connecting to Land O Lakes). Combination of projects 89, 90, and 92. Bradenton to Tampa leg is duplicated by project 233.	CSX corridor from Clearwater, through North Pinellas, north of Old Tampa Bay to CSX corridor near Anderson and Linebaugh ("T" Junction), south through Tampa International Airport to I-275 near Westshore Boulevard	CSX corridor near SR 574/U.S. 92 from Lakeland CBD to Tampa CBD involving 22.5 miles of track connecting Lakeland to Tampa and Plant City.	The proposed light rail will connect Clearwater CBD to Oldsmar via Safety Harbor. The alignment is planned on existing CSX rail corridor. This project will connect employment centers to residential centers.	CSX corridor parallel to Busch Boulevard from Anderson/Linebaugh "T" Junction to north-south CSX Corridor near Nebraska. Involving 7.5 miles of track along Busch Boulevard and Linebaugh Avenue going west from Airport to Oldsmar and 5.0 miles of track going east, from Airport Spur to Downtown-USF Rail Line	A short-distance rail project involving 13.5 miles of track connecting USF to Wesley Chapel.	A short-distance rail project involving 9.2 miles of track connecting Downtown Tampa to Brandon.	CSX corridor near Cross-Town Expressway, from Tampa CBD to Gandy Boulevard includes 5.0 miles of track connecting Downtown Tampa to South Tampa.
$\sim$	a)	_	CR 54 (CR 54) Crossing	Alexander Street (CR 39A) Crossing	Parsons Avenue Crossing	SR 599/50th Street (SR 599) Crossing	Hillsborough Avenue (SR 600) Crossing	CSX/Tri-Rail - Hialeah Yard Improvements	CSX Corridor: Sarasota- Bradenton, Bradenton-Tampa, Tampa-Brooksville	Clearwater/North Pinellas to Westshore and TIA	Lakeland-Tampa	Clearwater Oldsmar Comector	Linebaugh/Busch – North Tampa Corridor East/West	Short-Distance Rail - USF to Wesley Chapel	Short-Distance Rail - Downtown Tampa to Brandon	Tampa – South Tampa

Timeframe	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years
Estimate (\$1,000 of 2009 Dollars)	\$ 401,130	\$ 260,000	\$ 233,920	\$ 150,000	\$ 130,000	\$ 99,630	\$ 93,870	000'06 \$	000'06 \$	000'08 \$	\$ 40,000	062'68 \$	\$ 34,530	30,000	\$ 30,000
FDOT District	2	7	2	ι <b>υ</b>	7		7	4	4	2	8	4	2	1 8	4
Location	Gateway to Tampa	Hillsborough County	Hillsborough County	Orange and Lake Counties	Hillsborough County	SR 60/Adamo Drive, east of U.S. 41, Tampa	SR 60, west of Dover Road, Brandon,	Faulkenburg Road @ CR 574, Mango	Faulkenburg Road, just north of SR 60, Brandon	Duval County	District 3	FDOT District 4	SR 60, east of SR 39, Plant City	District 1	District 4
Project Type	New Service	New Service	New Service	New Service	New Service	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Capacity Upgrade	Grade Separation	Grade Separation	Grade Separation
Freight or Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight
Agency Reporting Need	Pinellas County MPO	Hillsborough County MPO	Hillsborough County MPO	Metroplan Orlando, Florida Central Railroad	Hillsborough County MPO	District 7	District 7	District 7	District 7	District 2	District 5	Florida East Coast Railway	District 7	District 5	District 5
Owner or Operator	New Passenger Rail Service	New Passenger Rail Service	New Passenger Rail Service	Florida Central Railroad	New Passenger Rail Service	CSX Transportation	CSX Transportation	CSX Transportation	CSX Transportation	CSX Transportation	CSX	Florida East Coast Railway	CSX Transportation	CSX	FEC
Description	The planned project will connect Pinellas County to Hillsborough county via I-275 and light rail is proposed to be operated. This would be a major connector between the two counties.	This project involves construction of rail maintenance facilities. Project cost is not final as ROW cost has not been determined.	A short-distance rail project involving 3.4 miles of track connecting the Airport to Carrollwood (from Hillsborough Avenue to Linebaugh Avenue)	Passenger commuter rail operation on Florida Central Railroad trackage between Orlando CBD and Eustis, FL (Lake County)	This project involves construction of rail maintenance facilities. Project cost is not final as ROW cost has not been determined.	Build bridge over railroad. SR 60 is a major east/west route. High traffic volume between Brandon and Tampa. Traffic volume will continue to increase. Railroad has 30 plus train movements per day. High potential for commuter trains.	Build bridge over railroad tracks. SR 60 is major east/west corridor. Traffic volumes will continue to increase. Railroad has 12 to 18 trains per day. Project would require frontage roads for local use.	Faulkenburg Road is a County Road with connections to SR 60 and SR 574. Faulkenburg Road has a high percentage of truck traffic. Park Road cross's the CSX A-Line. This line is a high-speed for Amtrak. This line has a high potential for Commuter Rail or Inter City Rail service. Both Rail and vehicle traffic will continue to increase.	Faulkenburg Road is a County Road with connections to SR 60 and SR 574. Faulkenburg Road has a high percentage of truck traffic. Park Road cross's the CSX S-Line. This line 30 plus trains per day. This line has a high potential for Commuter Rail or Inter City Rail service. Both Rail and vehicle traffic will continue to increase.	Implement grade crossing improvements at SR 104 (Busch Drive)/Jacksonville Crossing 620834-S on the CSX U.S. 17 N line in Duval County.	Implement grade crossing improvements at S Main Street (SR 85) Crossing 339800C	A-line upgrade and extension project that involves double track from Gifford to Indrio.	Build bridge over railroad tracks. SR 60 is a major east/west corridor. Traffic volumes will continue to increase. Train traffic is expected to increase as well.	Implement grade crossing improvements at Magnolia Avenue Crossing 625388S and 625389Y.	Implement grade crossing improvements at Northlake Boulevard (CR 809) Crossing 272386A
Project Name	Pinellas Hillsborough Connector	Short-Distance Rail: Rail Maintenance Facilities	Short-Distance Rail - Airport to Carrollwood	NW Corridor (Orange Blossom Trail)	Long-Distance Rail – Rail Maintenance Facilities	SR 60/Adamo Drive, NGCN: 624820X	SR 60/ Brandon Boulevard, NGCN: 624551H	Faulkenburg Road, NGCN: 624359D	Faulkenburg Road, NGCN: 624462R	SR 104 (Busch Drive)/ Jacksonville Crossing	S Main Street (SR 85) Crossing	Double Track Gifford to Indrio	SR 60/Hopewell, NGCN: 624572H	Magnolia Avenue Crossing	Northlake Boulevard (CR 809)

Project Name	Cost Estimate (\$1,000 of FDOT 2009 Togetion District Dollars) Timeframe	4 \$ 30,000 Ma	District 4 \$ 30,000 More than 20 years	District 4 \$ 30,000 More than 20 years	District 4 \$ 30,000 More than 20 years	District 4 \$ 30,000 More than 20 years	District 4 \$ 30,000 More than 20 years	District 4 \$ 30,000 More than 20 years	District 4 \$ 30,000 More than 20 years	District 4 \$ 30,000 More than 20 years	District 4 \$ 30,000 More than 20 years	District 4 \$ 30,000 More than 20 years	District 4 \$ 30,000 More than 20 years	District 4 \$ 30,000 More than 20 years	District 4 \$ 30,000 More than 20 years	District 4 \$ 30,000 More than 20 years	District 4 \$ 30,000 More than 20 years	District 4 \$ 30,000 More than 20 years	District 4 \$ 30,000 More than 20 years	District 4 \$ 30,000 More than 20 years	District 4 \$ 30,000 More than 20 years	
Poliect Name  Implement grade crossing improvements at Relevator Road Crossing FC  Lossing Crossing Crossing improvements at Worklergit Road (RS 794)  Related Trossing Crossing grade crossing improvements at Variato Road (SR 894)  Crossing 2724371  Implement grade crossing improvements at Variato Road (SR 794)  Relevand CRossing Crossing Crossing improvements at Variato Road (SR 794)  Relevand CRossing Crossing Crossing improvements at Variato Road (SR 894)  Crossing 272495  Relevand GR 884)  Relevand GR 885)  Relvand GR 885)  R	Project Tyne																					
Project Name  Read Crossing  Implement grade crossing improvements at Behveder Read Crossing  FEC  Toesing 2724571  Implement grade crossing improvements at Linton Readers (SR 784)  Crossing 2724975  The Crossing Crossing 2724975  The Crossin	Freight or Passonger	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	
Project Name  Road Crossing  Road Crossing  Road Crossing  Road Crossing  Tipplement grade crossing improvements at Bebrodere Road Crossing  Tipplement grade crossing improvements at Lanton Boulevard  Crossing 272494R  Implement grade crossing improvements at Lanton Boulevard  Road (SR 794) Crossing  Crossing 272500  Torssing 2	Agency Remorting Need	District 5	District 5	District 5	ict	District 5	District 5	District 5	District 5	ict	District 5	District 5	District 5	District 5	District 5	District 5	District 5	District 5	District 5	District 5	District 5	
Project Name Road Crossing at Road Crossing ullevard Crossing Park (SR 794) Crossing and (SR 834) Crossing oulevard (SR 814) and (SR 834) Crossing and (SR 834) and (SR 834) and (SR 841) ark Boulevard (SR 816) ark Boulevard (SR 816) ark Boulevard (SR 838) ark Boulevard (SR 838) and (SR 808) Crossing and (SR 808) Crossing and Crossing and Crossing are Eboulevard (CR 809A) are Boulevard (CR 809A) are Boulevard (CR 809A) are Boulevard (CR 800 Crossing	Owner or	FEC	FEC	FEC	FEC	FEC	FEC	FEC	FEC	FEC	FEC	FEC	FEC	FEC	FEC	FEC	CSX	CSX	CSX	CSX	CSX	
Project Name  Belvedere Road Crossing  Woolbright Road Crossing  Linton Boulevard Crossing  Palmetto Park (SR 811) Crossing  Crossing  Commercial Boulevard (SR 816)  Crossing  Crossing  Oakland Park Boulevard (SR 84)  Crossing  W Broward Boulevard (SR 84)  Crossing  Sunrise Boulevard (SR 838)  Crossing  W Broward Boulevard (SR 838)  Crossing  W Broward Boulevard (SR 838)  Crossing  W Broward Boulevard (SR 838)  Crossing  Miramar Parkway (SR 838)  Crossing  Miramar Parkway (SR 858)  Crossing  Miramar Parkway (SR 858)  Crossing  Oaklades Road (SR 808) Crossing  McNab Road Crossing  North Lake Boulevard (CR 809A)  Crossing  Palm Beach Lake Boulevard  Crossing  Palm Beach Lake Boulevard  Crossing	Decription	Implement grade crossing improvements at Belvedere Road Crossing 272437H	Implement grade crossing improvements at Woolbright Road Crossing 272484R	Implement grade crossing improvements at Linton Boulevard Crossing 2724975	Implement grade crossing improvements at Yamato Road (SR 794) Crossing 272500X	Implement grade crossing improvements at Palmetto Park (SR 811) Crossing 272509J	Implement grade crossing improvements at Hillsboro Boulevard (SR 810) Crossing 272512S	Implement grade crossing improvements at Sample Road (SR 834) Crossing 272517B	Implement grade crossing improvements at Atlantic Boulevard (SR 814) Crossing 272533K	Implement grade crossing improvements at Commercial Boulevard (SR 870) Crossing 272537M	Implement grade crossing improvements at Oakland Park Boulevard (SR 816) Crossing 272544X	Implement grade crossing improvements at Sunrise Boulevard (SR 838) Crossing 272549G	Implement grade crossing improvements at W Broward Boulevard (SR 842) Crossing 2725565	Implement grade crossing improvements at SW 24th Street/SR 84 (SR 84) Crossing 272567E	Implement grade crossing improvements at Miramar Parkway (SR 858) Crossing 272592M	Implement grade crossing improvements at Glades Road (SR 808) Crossing 272910W	Implement grade crossing improvements at McNab Road Crossing 621437X	Implement grade crossing improvements at NW $33^{\rm rd}$ Street Crossing $621538J$	Implement grade crossing improvements at North Lake Boulevard (CR 809A) Crossing 628096F	Implement grade crossing improvements at Palm Beach Lake Boulevard Crossing 628118D	Implement grade crossing improvements at Belvedere Road Crossing 628135U	
	Project Name	Belvedere Road Crossing	Woolbright Road Crossing	Linton Boulevard Crossing	Yamato Road (SR 794) Crossing	Palmetto Park (SR 811) Crossing	Hillsboro Boulevard (SR 810) Crossing	Sample Road (SR 834) Crossing	Atlantic Boulevard (SR 814) Crossing	Commercial Boulevard (SR 870) Crossing	Oakland Park Boulevard (SR 816) Crossing	Sunrise Boulevard (SR 838) Crossing	W Broward Boulevard (SR 842) Crossing	SW 24th Street/SR 84 (SR 84) Crossing	Miramar Parkway (SR 858) Crossing	Glades Road (SR 808) Crossing	McNab Road Crossing	NW 33 <sup>rd</sup> Street Crossing	North Lake Boulevard (CR 809A) Crossing	Palm Beach Lake Boulevard Crossing	Belvedere Road Crossing	

Timeframe	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	than 20														
Tin	Me						More than years	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Cost Estimate (\$1,000 of 2009 Dollars)	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 20,745	TBD	TBD	TBD	009′96 \$	\$ 30,000	\$ 30,000	\$ 30,000	000′0€ \$	\$ 30,000	\$ 30,000	000′0€ \$	\$ 30,000	000′0€ \$	TBD
FDOT District	4	4	4	4	4	4	4	9	9	9	2, 3, 5	9	9	9	9	9	9	9	9	9	2, 5
Location	District 4	District 4	District 4	District 4	District 4	District 4	District 4	District 6	District 6	District 6	Districts 2, 3, 5	District 6	District 6	District 6	District 6	District 6	District 6	District 6	District 6	District 6	Jacksonville to Orlando
Project Type	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	New Service	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	New Service
Freight or Passenger	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Passenger	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Passenger
Agency Reporting Need	District 5	District 5	District 5	District 5	District 5	District 5	District 5	District 5	District 5	District 5		District 6	District 6	District 6	District 6	District 6	District 6	District 6	District 6	District 6	JTA
Owner or Operator	CSX	CSX	CSX	CSX	CSX	CSX	CSX	TBD	TBD	TBD		TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
Description	Implement grade crossing improvements at Palmetto Park (CR 798) Crossing 628165L	Implement grade crossing improvements at Oakland Park Boulevard (SR 816) Crossing 628191B	Implement grade crossing improvements at New Griffin Road (SR 818) Crossing 628272B	Implement grade crossing improvements at Stirling Road (SR 848) Crossing 628274P	Implement grade crossing improvements at Pembroke Road (SR 824) Crossing 628282G	Implement grade crossing improvements at Hallandale Beach (SR 858) Crossing 628290Y	Implement grade crossing improvements at Hillsboro Boulevard (SR 810) Crossing 628167A	Implement grade crossing improvements at E $8^{\rm th}$ Avenue (SR 953) Crossing 272736P	Implement grade crossing improvements at Palm Avenue Crossing 272742T	Implement grade crossing improvements at Okeechobee Road (SR 25) Crossing 272752Y	Restoration of the Sunset Limited Amtrak service from Sanford, FL to New Orleans.	Implement grade crossing improvements at NE 203th Street Crossing 272596P	Implement grade crossing improvements at Miami Gardens Drive (SR 860) Crossing 272598D	Implement grade crossing improvements at NE 163 <sup>rd</sup> Street (SR 826) Crossing 272604E	Implement grade crossing improvements at NE 125th Street (SR 922) Crossing 272612W	Implement grade crossing improvements at NW 27th Avenue (SR 9) Crossing 272717K	Implement grade crossing improvements at NW 72nd Avenue Crossing 272756B	Implement grade crossing improvements at NW 72nd Avenue Crossing 272757H	Implement grade crossing improvements at NW 22nd Avenue Crossing 628320N	Implement grade crossing improvements at NW 27th Avenue (SR 817) Crossing 628321V	High speed rail link from Jacksonville to Orlando
Project Name	Palmetto Park (CR 798) Crossing	Oakland Park Boulevard (SR 816) Crossing	New Griffin Road (SR 818) Crossing	Stirling Road (SR 848) Crossing	Pembroke Road (SR 824) Crossing	Hallandale Beach (SR 858) Crossing	Hillsboro Boulevard (SR 810) Crossing	E 8th Avenue (SR 953) Crossing	Palm Avenue Crossing	Okeechobee Road (SR 25) Crossing	Gulf Coast Service	NE 203th Street Crossing	Miami Gardens Drive (SR 860) Crossing	NE 163 <sup>rd</sup> Street (SR 826) Crossing	NE 125th Street (SR 922) Crossing	NW 27th Avenue (SR 9) Crossing	NW 72nd Avenue Crossing	NW 72nd Avenue Crossing	NW 22nd Avenue Crossing	NW 27th Avenue (SR 817) Crossing	High Speed Rail: Jacksonville to Orlando
9	l	551 (	552 ]	553	555 ]	556	545	570	571	572 (	586 (	565	566	567	568	269 I	573 ]	574	575 ]	576	592

Timeframe	TBD
Cost Estimate (\$1,000 of 2009 Dollars)	TBD
FDOT District	2
Location	Jacksonville
Project Type	New Service
Freight or Passenger	Passenger
Agency Reporting Need	JTA
Owner or Operator	JTA
Description	A feasibility study has been funded to determine the appropriate corridor from Jacksonville to Macon for the Southeast High Speed Rail Corridor. This is Florida's connection to any national HSR network
Project Name	593 Southeast High Speed Rail
OI OI	593

Note: Projects shown in **bold** are partially or completely funded as of May 2010.

## 5.0 Rail Needs Prioritization

## ■ 5.1 Overview

Strategic investment in freight and passenger rail infrastructure and services can produce a wide variety of benefits for Florida's railroads, ports, businesses, and residents. In addition to increasing the efficiency and safety of rail transport, well-planned and coordinated rail investment can help Florida to achieve its goals of mitigating congestion, providing mobility options, reducing transportation-related emissions, and supporting economic development. To leverage limited available funding and maximize the potential benefits associated with future rail investments, FDOT evaluated the rail needs presented in Section 4.0 using multiple of criteria and assigned each need a project priority classification based on its readiness for implementation, coordination with other plans and projects, and potential regional and/or statewide impact. FDOT will use this analysis and priority classification to guide its future investments and other decisions regarding freight and passenger rail projects.

The analysis in Section 5.0 is based on data provided directly by stakeholders and on-line survey respondents (as discussed in Section 4.0), as well as information gathered through review of state, metropolitan, and local jurisdictions' transportation plans, Transportation Improvement Programs, and other documents. Of the 243 near-, medium-, medium-to-long-, and long-term capital improvement projects and other initiatives identified as rail needs, this prioritization effort identified 24 projects estimated at \$4.8 billion<sup>65</sup> as "Very High" priorities for FDOT.

The remainder of Section 5.0: Rail Needs Prioritization is outlined as follows:

- Purpose describes the purpose of prioritizing freight and passenger rail investments;
- Methodology discusses the methodology used for prioritizing rail needs;
- Priority Rail Needs Overview describes prioritized rail investment needs by timeframe, geographic location, project type, railroad, and port; and
- **Detailed Prioritized Needs Table** contains a comprehensive matrix of prioritized passenger and freight rail needs in Florida.

5-1

<sup>&</sup>lt;sup>65</sup>Costs are estimated in Year 2009 dollars.

## ■ 5.2 Purpose

The primary purpose of the rail needs prioritization effort is to rank each of the necessary and desired freight and passenger rail improvements listed in Section 4.0 based on their eligibility for state and Federal funding, level of planning and coordination, and ability to be implemented a near to medium-term timeframe. This process will assist FDOT to:

- Identify projects that can be quickly implemented with limited additional support;
- Select projects that should be recommended for Federal funding opportunities; and
- Assess areas where near-term needs may require additional support (e.g., planning coordination, funding assistance) in order to be successfully implemented on schedule.

Railroad needs, for the purposes of this rail plan, are restricted to capital needs identified through the needs assessment described in Section 4.0. It is important to note that inclusion of a need in the Investment Element of the Florida Rail System Plan does not constitute a commitment on the part of the Florida Department of Transportation (FDOT) or the State of Florida to provide funding. Similarly, the project priorities assigned to needs in this section do not constitute a level of commitment on the part of FDOT or the State of Florida to provide funding. Project priorities shown in this section reflect only the State's investment priority. Other agencies or private interests may hold these projects in higher priority for providing their funding. Also, many projects shown may currently have a lower priority because of a lack of information or detail on the project. In this case, the projects may increase in priority in future plans as details are made known.

## ■ 5.3 Methodology

In past Florida Rail System Plan Updates, FDOT assessed the public benefits associated with select rail investments using a Freight Rail Investment Calculator developed for FDOT. This software calculates the benefit/cost ratio for each rail project, considering factors such as avoided highway maintenance costs, shipper logistics costs, new or retained jobs, safety improvements, and environmental quality improvements. The Freight Rail Investment Calculator formed one component of the overall decision process of how public funds should best be invested to spur economic growth and enhance freight and passenger mobility in Florida.

With the expansion of the needs assessment for the 2010 Florida Rail System Plan update to include passenger rail projects as well as projects identified by a broader range of stakeholders, FDOT was required to develop a new approach to assess and prioritize potential rail investments. The procedure used to identify specific project prioritization criteria and the overall project prioritization approach is outlined in Table 5.1.

Table 5.1 Procedure for Developing Rail Needs Prioritization Criteria

Step	Activity
February 2009	Identify key rail stakeholders in the State of Florida.
March-May 2009	Develop Rail Needs On-Line Survey with input from FDOT and Rail Stakeholder Advisory Committee Members.
May-July 2009	Gather specific rail needs from stakeholders using the On-Line Survey and follow-up e-mails.
Early July 2009	Develop series of potential rail performance measures based on Goals and Objectives set forth by stakeholders in the Policy Element of the Florida Rail Plan. Develop methodology to quantify and monetize benefits from investing in rail needs.
Mid July 2009	Rail Stakeholder Advisory Committee meeting to refine list of performance measures. Receive stakeholder feedback on proposed project prioritization process.
August-November 2009	Conduct two rounds of follow-up calls with all stakeholders to gather detailed information to develop and evaluate proposed performance measures for all proposed rail needs.
December 2009	Select key project prioritization criteria from list of proposed performance measures based on stakeholder feedback, ability to support with data, apply Statewide, and reflection of new Federal rail funding criteria and priorities (e.g., shovel-readiness).
January-February 2010	Review of local and state planning documents and follow-up with FDOT Districts and other project stakeholders to update data for selected project prioritization criteria.
March 2010	Refine project prioritization approach with input from FDOT.
May 2010	Develop final prioritized rail needs list.

Source: Cambridge Systematics.

The rail needs prioritization methodology presented in this section was developed, tested, and refined through multiple meetings with FDOT and other stakeholders. First, a comprehensive list of potential quantitative and qualitative performance measures that could be used to assess each proposed rail need's performance in relation to the rail plan's five goals was developed. With input from FDOT and the Rail Stakeholder Advisory Committee, this list was refined into a series of quantifiable and nonquantifiable measures of the benefits resulting from investment in rail needs, shown in Table 5.2. A detailed methodology for calculating each proposed rail performance measure was developed and is included in Appendix B.

Table 5.2 Proposed FDOT Rail Performance Measures by Goal

Goal	Performance Measures
Safety and Security	Crash reduction from auto/truck diversion
	Reduced exposure to grade crossings
	Use of Intelligent Transportation Management technologies
Quality of Life and	Change in auto/truck fuel consumption and CO <sub>2</sub> emissions
Environmental	Noise reduction
Stewardship	Status of environmental screening process
	<ul> <li>Project included in land use plans, State Transportation Plan, LRTP, or County/Municipal Improvement Plan</li> </ul>
Maintenance and	Train capacity increase
Preservation	<ul> <li>Consistent with asset management approach</li> </ul>
	<ul> <li>Support modernized rail system management and operation technologies</li> </ul>
Mobility and	Auto/Truck VMT reduction
Economic Competitiveness	<ul> <li>Reduced travel time and vehicle operating costs</li> </ul>
Competitiveness	Increase in passenger rail ridership
	Increase in freight ton-miles
	GDP growth
	<ul> <li>Jobs created as a result of the project</li> </ul>
Sustainable	Project underwent public review
Investments	Support from stakeholders
	Status of application for funding
	Eligible for state or Federal funding
	<ul> <li>Non-Federal state/Federal funding available and programmed for project</li> </ul>
	Supports underserved areas
	Project of Statewide significance

Source: Cambridge Systematics.

Over several months, follow-up calls were conducted with stakeholders to gather the additional detailed data on proposed rail projects required to evaluate each of the proposed performance measures for all 243 projects identified through the rail needs assessment. The results of these efforts are shown in Table 5.3. Projects are sorted by timeframe and estimated cost (in 2009 dollars). **Projects shown in bold are partially or fully funded as of May 2010.** Criteria that are not applicable to specific projects or for which data is not available are marked as "-." The detailed project information shown in Table 5.3 is current through November 2009, and was self-reported by the agency reporting the rail need through the on-line needs assessment survey or through follow-up calls.

Table 5.3 Detailed Project Prioritization Criteria

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	Cost Estimate (\$1,000 of 2009 Dollars)	\$32	\$30	\$28	\$26	\$24	\$23	\$22	\$21	\$15	\$15	\$15	\$18	\$18	\$18
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177	McDonald Connection	Freight	Capacity Upgrade	Near-term (1-5 years)	\$17,750	T	Г	L	M	L	T L	Г	Γ	L M	M	M		Μ	M	Γ	M	M	L	Γ	ТГГ		Г Н	H H		Γ	T
173	Carter Siding	Freight	Capacity Upgrade	Near-term (1-5 years)	\$16,500	T	П	L	M	L M	l L	Γ	Γ	L	M	M	L	Μ	M	Γ	Н	M	IJ	L	L	Н	L H	H H	Н	Γ	Г
253	New Tri-Rail Station at Palm Beach International	Passenger	Station Improvements	Near-term (1-5 years)	\$16,421	M	1	T T		T T	Γ	Г	Г	M	M	T	M	M	Г	M	Г	M	L	Н	1 Т	ر	T T	, T	Γ	Γ	T
248	New Tri-Rail Station Near Broward/Miami-Dade	Passenger	Station Improvements	Near-term (1-5 years)	\$16,421	M	T	T	,	T T	i i	Γ	T	M	M M	L	$\mathbb{N}$	M	T	M	T	$\boxtimes$	L	Н	T T	ال		r	П	J	IJ
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172	Lakeland Junction Siding	Freight	Capacity Upgrade	Near-term (1-5 years)	\$15,750	Г	L	L	M	L M	1 L	×	Н	L M	M M	M	LI LI	$\mathbb{M}$	×	L	Н	$\mathbb{N}$	1	T	Н	Н	T T	, r	Γ	Γ	T
594	Ethanol Terminal/ Rail yard expansion with East-West Connecting Loop	l t Freight	Capacity Upgrade	Near-term (1-5 years)	\$15,000	1				1	1			1	'	ı	1	1				ι	1				'	1	1	t	1
178	Crawford Siding	Freight	Capacity Upgrade	Near-term (1-5 years)	\$14,400	T	T	L	M	T T	Γ	M	M	L M	M	L	Τ	M	M	Г	M	T	Γ	L	H F	Н	L I	H	Н	Γ	T
70	Bryant Rail Project	Freight	Capacity Upgrade	Near-term (1-5 years)	\$13,554	J	Н	M	Н	L	1 L	Ţ	Γ	L M	И Н	×	L	Н	×	L	L	IJ	L	L	T T	ار	1		Γ	Γ	IJ
89	Florida Central Railroad	Freight	Track Upgrade	Near-term (1-5 years)	\$13,100	Г	M	L	M	L H	I M	Γ	Γ	M	И Н	Н	L	Н	Н	L	Н	Н	$\Gamma$	M	L N	M	L H	H	Н	Γ	1
26	Cane Block Project	Freight	Track Upgrade	Near-term (1-5 years)	\$12,000	T	T	L L		L L	Μ	Γ	Γ	L M	M	T	L	М	Н	L	M	M	L	M	L F	Н	L H	H H	Н	Н	L
108	Intermodal Rail Spur and Storage Tacks	Freight	Capacity Upgrade	Near-term (1-5 years)	\$10,500	Ţ	Н	П Н		T T	M	Г	Г	L M	M	L	T	Μ	Г	Г	Г	T	M	Н	Т	ر.	- T	, T	Γ	Γ	T
298	"A/S" Line Amtrak Signal Program	Freight	Signal Upgrade	Near-term (1-5 years)	\$10,000	T	Γ	L I	Н	L L	L	L	M	L H	I L	Γ	Π	T	Γ	L	L	L	L	L	H F	Н	1 T	H	Γ	Γ	M
158	Anthony Siding	Freight	Capacity Upgrade	Near-term (1-5 years)	\$9,750	T	T	L	M	L L	M	L	Γ	L M	M	Ţ	IJ	М	M	L	L	L	1	L	L F	Н	T I	н н	Н	Н	Γ
239	Mainline Bridge Fastening System	Freight	Rehabilitation and Maintenance	Near-term (1-5 years)	060′6\$	7	M	T 1		T H	1	L	T	L	M M	1	7	N	Н	7	Н	н		T		H	L	Н	H	H	Σ

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Preight or Project Name   Preight or Project Type   Timeframe   Rail Intermodal Yard   Freight   Upgrade   (1-5 years)   Rehabilitation   Near-term   Salaton Improvements   Passenger   Maintenance   (1-5 years)   Pompano Boach Tri-Rail Station   Preight   Opgrade   (1-5 years)   Maintenance   Maintenance   (1-5 years)   Maintenance   Maintenance   (1-5 years)   Maintenance		Cos Estim (\$1,000 200 Dolla	<b>3</b> \$	2	\$2	25	<b>3</b> \$	*	\$6	\$	\$	\$	\$	\$€	\$	₹	₩
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Rail Intermodal Yard Freight or Passenger Rail Intermodal Yard Freight Jacksonville Bridge Rehabilitation Pompano Beach Tri-Rail Station Improvements Passenger Delray Beach Tri-Rail Station Improvements Passenger Delray Beach Tri-Rail Station Improvements Freight Florida Upgrade-Bridges Freight Hooker Point Rail Expansion Freight Hooker Point Rail Expansion Freight New Dispatch System Freight Dames Point Switch Yard Freight Dames Point Switch Yard Freight Blount Island Track and Yard Addition Freight Blount Island Track and Freight Blount Island Track and Station Improvements Passenger Jacksonville Amtrak Crossovers Freight Freight Crossovers Freight Freight Crossovers Freight Freight		oject. Ĉ	pacity grade	habilit 1 intena	w Serv	tion prover	pacity grade	habilit 1 intena	pacity grade	nal grade	pacity grade	ıck grade	pacity grade	pacity grade	tion prover	pacity grade	pacity grade
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Safety and Security	egniseo1)													
ty and	Accident Cost from Exposure to Grade	T	L	M	Γ	Γ	Γ	Γ	L	L	M	Ĺ	L	T
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	Cost Estimate (\$1,000 of 2009 Dollars)	\$3,250	\$3,000	\$3,000	\$2,864	\$2,502	\$2,500	\$1,550	\$1,500	\$1,305	\$1,255	\$77	840	\$33
	Timeframe	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)
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	Fr			Fr		Pa	Fr	Fr	Fr	Ŗ		Fr		
	စ ၊	Stanton Spur Power Switch	Tie and Surface FNOR Ocala	dal	Track and Signal Improvements from Bowden	ation		es	)R		Frostproof Tie and Surface		Silver Star Branch Orlando	Lee Collier Intercity and Freight Rail Feasibility Study
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		anton	e and	Lee County Intermodal Transfer Terminal	Track and Signal Improvements fr	Opalocka Tri-Rail Station Improvements	Green Locomotives	Central/CF Industries	Tie and Surface FNOR Newberry	Dora Canal Bridge	ostprc	Winter Garden Line	lver St	Lee Collier Intercity and Freight Rail Feasibility S
1	a a	175	120	288	241	263	75	176	118	113	121	117	114	284

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	Cost Estimate (\$1,000 of 2009 Dollars)	\$250	ŊA	N/A	\$10,200,000	\$4,261,649	\$2,000,000	\$1,646,690	\$1,297,400	\$473,099	\$321,575	\$294,800	\$215,706	\$100,000
	Es (\$1				\$10	\$4	\$2	\$1	\$1	93	93	93	47	<del>97</del>
	Timeframe	Near-term (1-5 years)	term yrs)	term yrs)	term yrs)	term yrs)	term yrs)	term yrs)	term yrs)	term yrs)	term yrs)	term yrs)	term yrs)	term yrs)
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	oject Type	Rehabilitation and Maintenance	Capacity Upgrade	Rehabilitation and Maintenance	w Service	w Service	w Service	w Service	Capacity Upgrade	w Service	w Service	Capacity Upgrade	w Service	New Line
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	Freight or Passenger	Passenger	Freight	Freight	Passenger	Passenger	Passenger	Passenger	Freight	Passenger	Passenger	Freight	Passenger	Freight
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	in the state of th	South Florida Rail Corridor Asbestos Abatement	Beaver Street Interlocking		High-Speed Rail: Orlando to Miami (and Central Florida Monorail)	sley	Į.	Short-Distance Rail Investments - Downtown Tampa to USF and Airport	Rail	el	Broward Boulevard Fixed Guideway – SR 7 to Downtown	Relocation Hialeah Yard to Medley	Broward E/W Fixed Guideway - Phase I and II	SR 27/Intermodal Logistics Center Rail Project
	Project Name	South Florida Rail Co Asbestos Abatement	et Inte	grade	1 Rail: I Centr	St. Petersburg-Wesley Chapel	East-West Corridor	Short-Distance Rail Investments - Dow Tampa to USF and	Lakeland Freight Rail Relocation	Kendall Area Diesel LRT/BRT Hybrid	Broward Boulevard Guideway – SR 7 to Downtown	Hialea	Broward E/W Fixed Guideway – Phase I	SR 27/Intermodal L Center Rail Project
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Capital   Mid-term   Separation   G-10 yrs   G-10 yrs   Separation   G-10 yrs   G-10 yrs   Separation   G-10 yrs   G-10 yrs   G-10 yrs   G-10 yrs   G-10 yrs   G-10 yrs   G-		nal Yecurity Plan	T	L	L	1	1	L	L	L	1	Т	1	L	1	Г
Cost   Estimate   Cost   Estimate   Cost   Estimate   Cost   (\$1,000 of 2009)	curity	Use of Infelligent Transportation Management Technologies	T	T	Н	1		Τ	Τ	Т	1	T	1	T		L
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Figure 1 Project Type Timeframe Diger Project Type Timeframe Diger Improvements (6-10 yrs)  Grade Mid-term (6-10 yrs)			Н	Н	M	1	1	Н	Ν	Т	ı	Н	1	T		Г
or Project Type  Capital  Grade Separation		Cost Estimate (\$1,000 of 2009 Dollars)	\$93,754	\$68,852	\$48,240	\$47,000	\$45,000	\$32,891	\$26,500	\$22,221	\$22,000	\$21,635	\$20,000	\$18,000	\$18,000	\$17,688
		Timeframe	Mid-term (6-10 yrs)	Mid-term (6-10 yrs)	Mid-term (6-10 yrs)	Mid-term (6-10 yrs)	Mid-term (6-10 yrs)	Mid-term (6-10 yrs)	Mid-term (6-10 yrs)	Mid-term (6-10 yrs)	Mid-term (6-10 yrs)	Mid-term (6-10 yrs)	Mid-term (6-10 yrs)	Mid-term (6-10 yrs)	Mid-term (6-10 yrs)	Mid-term (6-10 yrs)
eight or ssenger eight		Project Type	Capital Improvements	Rolling Stock	Grade Separation	Grade Separation	Grade Separation	Capital Improvements	Track Upgrade	Grade Separation	Grade Separation	Station Improvements	Grade Separation	Capacity Upgrade	Grade Separation	Signal Upgrade
		Freight or Passenger	Passenger	Passenger	Freight	Freight	Freight	Passenger	Freight	Freight	Freight	Passenger	Freight	Freight	Freight	Freight
Project Name  Decrease Tri-Rail Headways to 15 Minutes Peak  New Rolling Stock U.S. 41/Rockport, NGCN: 624802A SR 200 (U.S. 301)/Baldwin Crossing Miami River Intermodal Center Capacity Improvement Miami River Intermodal Center Capacity Improvement SR 50 Ridge Manor, NGCN: 625307P Crossing: Causeway Blvd. at CSX Railraod Tracks east of US 41 Magnolia Park Tri-Rail Station Improvements SE 144th Street (Mullins Grade)/Starke Crossing Crossing: US 41 at CSX Railroad Tracks south of Causeway Blvd.		Project Name	Decrease Tri-Rail Headways to 15 Minutes Peak	New Rolling Stock	U.S. 41/Rockport, NGCN: 624802A	SR 200 (U.S. 301)/Baldwin Crossing	SR 15 (Reid Street)/Palatka Crossing	Miami River Intermodal Center Capacity Improvement	Bainbridge Sub	SR 50 Ridge Manor, NGCN: 625307P	Crossing: Causeway Blvd. at CSX Railraod Tracks east of US 41	Magnolia Park Tri-Rail Station Improvements	SE 144th Street (Mullins Grade)/Starke Crossing	Rail Storage Tracks for ICTF Facility-2	Crossing: US 41 at CSX Railroad Tracks south of Causeway Blvd.	Install Signal Control Point Upgrades
104 192 192 192 106 503 602 603 603		Ð														242

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Funding	Eligible for Federal Funding	Γ	Г		T	Н	1	H	Г	Н	Γ	Т	1	
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	by Relevant Partners													
	Supported/Endorsed	Γ	Г	1	Γ	Γ	•	H	Г	Н	Γ	Γ	ı	
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Safety and Security	Accident Cost from Exposure to Grade Crossings	Γ	T	Г	Γ	Γ		T	1	Γ	Γ	Н	1	
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	t t t t t t t t t t t t t t t t t t t	\$16,587	\$15,000	\$11,523	\$10,500	\$10,000	88,100	\$7,500	87,300	\$7,250	\$7,211	\$6,250	\$5,800	
	Cost Estimate (\$1,000 of 2009 Dollars)	\$16,	\$15,	\$11,	\$10,	\$10,	88	\$7,	,78	\$7,	\$7,	\$6,	\$5,	
	Timeframe	erm yrs)	erm yrs)	erm yrs)	erm yrs)	erm yrs)	erm yrs)	erm yrs)	erm yrs)	erm yrs)	erm yrs)	erm yrs)	erm yrs)	
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	ject Type	ر vemer	ilitatic	ر vemer	ity de	ity de	Service	de	de	de	l vemer	ity de	Service	
	Projec	Station Improvements	Rehabilitation and Maintenance	Station Improvements	Capacity Upgrade	Capacity Upgrade	New Sa	Signal Upgrade	Track Upgrade	Track Upgrade	Capital Improvements	Capacity Upgrade	New So	
			I a			ו								
	Freight or	Passenger	Freight	Passenger	Freight	Freight	Freight	Freight	Freight	Freight	Passenger	Freight	Freight	
	Fr	Pa		Pa	Fre	Fre			Fre	Fre	Pa	Fre		
			Florida Midland - Rail Track Improvements	ıtion			10,000 ft of Mainline Rail construction & 2,500 ft. extension to existing siding with cross-over track to improve rail access and US 41 traffic movement	oad 1e	I		lm		South	
	ame	nodal	- Rail	ail Sta	uo	rth iyard	ainline I 2,500 sting sid track ess and	Railr Jpgrae	Phase		over ern Pa		to	
	Project Name	Boca Raton Intermodal Center	lland · nts	Boca Raton Tri-Rail Station Improvements	Tampa Connection	Blount Island-North JAXPORT Switchyard	10,000 ft of Mainl construction & 2 extension to existin with cross-over timprove rail access 41 traffic movement	Florida Midland- Railroad Crossing Signal Upgrade	Seminole Gulf Infrastructure Improvements - Phase I	p	New Tri-Rail Layover Facility in Northern Palm Beach	ling	usion int	
	Proj	Raton	Florida Midlan Improvements	Boca Raton Tri Improvements	a Con	ıt İslaı ORT S	10,000 ft of construction extension to with cross-timprove rail 41 traffic mox	la Mid ing Sig	Seminole Gulf Infrastructure Improvements	Shands Lead	Tri-Re ty in N	Havana Siding	Rail extension Hookers Point	
		Boca Rá Center	Florid	Boca   Impre	Tamp	Blour JAXP(	10,000 constructions with impro	Florid	Semin Infras Impro	Shane	New T Facilit Beach	Наvал	Rail Hooke	
	Q	259	299	255	179	135	601	300	287	335	260	185	595	12
I	(I)	13	25	21	1.	1.	)9	) <u>(</u>	7	8	26	18	25	5-12

							Safety and Security	1 Security			Quality of Life and Environment	ELife and		Maintenanc	ээс		Aobility a	Mobility and Economic Competitiveness	nic Comp	etitiveı	ıess				Fun	Funding		
ED COL	Project Name	Freight or Passenger	Project Type	Timeframe	Cost Estimate (\$1,000 of 2009 Dollars)	Vehicle Accident Costs from Auto Diversion	Vehicle Accident Cost from Truck Diversion Accident Cost from Franceure to Grade	Accident Cost from Exposure to Grade Crossings Use of Intelligent Transportation	eaigolondog TaemegeneM Mas Security Plan	onoissim∃ 2O2 ni 9gnsd⊃	Encourages Noise Reduction Status of Environmental	Screening Process Consultation with other Plans	GOT\tisnerT estomor9	bns inamaganaM naaboM siroqqu2 Operation Technologies	Reduces Maintenance Cost Train Capacity Improvement	ləvsтТ oʻtuA ni noʻi'subəЯ	Reduction in Vehicle/Train Time or stange Or TMV The Third of the Thir	Peduction in Truck VMT or Increase in Rail Capacity Increase in Passenger	Rail Ridership	Increase in Freight Ton-Miles Mumber of Jobs Created	Change in Fuel Consumption	Supports Intermodal/ Multimodal Connectivity	Underwent Public Review	Supported/Endorsed by Relevant Partners Status of Application for Funding	Eligible for Federal Funding	Eligible for State Funding	Established Federal/ Local Funding Match	Sanpports Underserved Areas Statewide Significance
180 We	Welcome/Edison Siding	Freight	Capacity Upgrade	Mid-term (6-10 yrs)	\$5,500	T	Н	I	Τ	Γ	M	Γ	L M	A M	Γ	L	M	Γ	Τ	Γ	$\bowtie$	L	T T	1	IJ	T	Γ	T T
599 Ra	Rail access improvements	Freight	Rehabilitation and Maintenance	Mid-term (6-10 yrs)	\$5,300			'	,	1			1			'			,	'	,	1	1	'	,	1		1
220 Pir	Pineda Turnout	Freight	Capacity Upgrade	Mid-term (6-10 yrs)	\$5,043	Т	L L	M	Γ	M	L H	Н	L M	И Н	M	L 1	H M	1 L	Н	M	Γ	L	НН	I L	Н	Н	Н	T
157 Mi	Mission Spur (Dyer)	Freight	Capacity Upgrade	Mid-term (6-10 yrs)	\$4,500	T I	M L	Г	Γ	Г	M L	M	L M	И Н	Н	L ]	Н	1 L	M	M	Γ	L	н н	M I	Н	Н	Н	ГГ
164 <b>Hi</b>	Hialeah/Iris Connection	Freight	Capacity Upgrade	Mid-term (6-10 yrs)	\$3,750	Г	M L	Т	Т	T	M L	M	L M	И Н	Н	L 1	Н М	M L	M	M	L	L	н н	[ T	Н	Н	Н	T T
181 So	South Fort Meade	Freight	Capacity Upgrade	Mid-term (6-10 yrs)	\$3,750	M	Н	1	L	Γ	M L	Г	L M	A M	L	M	M L	M	T	L	$\boxtimes$	L	ГГ	1	T	T		T T
183 Ag	Agrock Wye	Freight	Capacity Upgrade	Mid-term (6-10 yrs)	\$3,750	M	Н	T	L	Г	M L	Г	L M	A M	Γ	M	M L	M	T	Γ	$\boxtimes$	L	ТТ	1	T	T		T T
Po 229 Im	Port Redwing Rail Improvements	Freight	Capacity Upgrade	Mid-term (6-10 yrs)	\$3,600	1	L L	T	T	L	L H	Γ	L	M	M	L	M	1 L	Н	Σ	ļ	L	L H	l L	H	Н	H	H L
139 Br	Bradley Tack/Siding	Freight	Capacity Upgrade	Mid-term (6-10 yrs)	\$3,500	1	T T	Н	IJ	M	T T	M	L M	$\Lambda$ M	M	L	M	A L	M	M	Γ	L	н н	I L	H	Н	Н	ТТ
Bo 235 Im	Bowden Intermodal Improvements	Freight	Capacity Upgrade	Mid-term (6-10 yrs)	\$3,484	Г	T T	M	Γ	M	T T	Γ	L M	A M	M	L	M	T I	M	$\mathbb{Z}$	L	L	L M	I	L	T	٦	L L
La 254 Im	Lake Worth Tri-Rail Station Improvements	Passenger	Station Improvements	Mid-term (6-10 yrs)	\$2,885	L)	M	Ļ	L	Ħ	L L	M	н	H	Ļ	Z		Σ	L	Ħ	IJ	Н	НН		H	Ħ	H	LI.
186 Ta	Tallahassee Speed	Freight	Capacity Upgrade	Mid-term (6-10 yrs)	\$2,750	1	M	T	IJ	Г	T T	Г	L H	1 T	M	L	M	1 L	M	L	Γ	L	T T	1	Τ	T	٦	1
Ins 243 Gr	Install Motion Detectors at Grade Crossings	Freight	Signal Upgrade	Mid-term (6-10 yrs)	\$2,177	7	L L	Τ	Γ	M	Н Г	M	L M	И Н	M	L	H	M L	M	M	Ţ	L	НН		H	Н	Н	M L
Ac cap 596 ter	Additional railcar storage capacity near scrap metal terminals	Freight	Capacity Upgrade	Mid-term (6-10 yrs)	\$2,000				1	1			1	'	1	·		'		1	1	ı	1	1	ı	1		
Aca cap 597 inc	Additional rail storage capacity near existing CF industries terminal	Freight	Capacity Upgrade	Mid-term (6-10 yrs)	\$2,000				•	,			1	,	1	·		,	1	1	1	1	1	1	1	1		1

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nomi	Increase in Passenger Kail Kidership	1	Г	1	Г	1	1	$\mathbb{X}$	$\boxtimes$	$\mathbb{Z}$	$\Sigma$	L
Mobility and Economic Competitiveness	Reduction in Truck VMT or Increase in Rail Capacity	1	M	1	M	ı	1	T	L	T	L	Г
[obilit	Reduction in Vehicle/Train Time or VMT Operating Costs		H		I				1			
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Safety and Security	Accident Cost from Exposure to Grade Crossings	1	Μ	1	M	1	1	T	-J	L	Г	l l
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	Cost Estimate (\$1,000 of 2009 Dollars)	\$1,700	\$1,500	\$1,100	\$1,000	TBD	TBD	\$3,500,000	\$1,260,241	\$622,000	\$501,369	\$400,000
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	Timeframe	Mid-term (6-10 yrs)	Mid-term (6-10 yrs)	Mid-term (6-10 yrs)	Mid-term (6-10 yrs)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)
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	Project Type	Capacity Upgrade	Signal Upgrade	Rehabilitatio and Maintenance	Signal Upgrade	Grade Separation	Grade Separation	New Se	New Se	New Se	New Se	New Li
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	Freight or Passenger	Freight	Freight	Freight	Freight	Freight	Freight	Passenger	Passenger	Passenger	Passenger	Freight
		ge										
	ar I	r storage ill plant	Signal	crossing 'improvements locations on	ignal	nue	e (SR 5	Passen s I-IV	ırwate	uter Ra	j.	27 Rail
	Project Name	railca Cargi	ssing	/impr loca	ssing 5	a Avei ing	ıl Driv	· FEC 1	r: Cleć 'go- ¿CBD	Comm	Dolph ase II	a U.S. ?
	Proje	onal y near	7ay Cr. 1e	road acements, multiple skers Poin	ıd Cro 1e	Franad	Colonia 18	', New rrvice-	orrido ay, Laı rrsburg	aville (	ri-Rail ion Ph	Florida
		Additional railcar stora capacity near Cargill plant	Roadway Crossing Signal Upgrade	Railroad crossing replacements/improvements to multiple locations on Hookers Point	Railroad Crossing Signal Upgrade	West Granada Avenue (SR 40) Crossing	West Colonial Drive (SR 50) Crossing	SFECC, New FEC Passenger Rail Service-Phases I-IV	CSX Corridor: Clearwater- Gateway, Largo- St. Petersburg CBD	Jacksonville Commuter Rail	CSX-Tri-Rail Dolphin Extension Phase II	South Florida U.S. Link
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and E	Reduction in Truck VMT or Increase in Rail Capacity	T	T	н	T	$\mathbb{X}$	No effect	$\boxtimes$	$\mathbb{X}$	No effect	No effect	
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	Reduction in Auto Travel	1	Μ	T	Н	1	Н	L	L	Ħ	H	1
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pu	Consultation with other Plans	T	M	M	H	1	١	7	7			'
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tality of Life a	Status of Environmental	Ţ	L	<sub>1</sub>	T	L	Ţ	L	니	J	J	1
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	Cost Estimate (\$1,000 of 2009 Dollars)	\$240,000	996'360	290,000	\$63,316	\$60,000	\$60,000	\$55,000	\$50,000	\$50,000	\$50,000	\$50,000
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	Project Type	Grade Separation	Grade Separation	Grade Separation	Rolling Stock	Capacity Upgrade	Grade Separation	Grade Separation	New Line	Grade Separation	Grade Separation	Track Upgrade
			Grad Sepa	Gri		$C_{a_j}$	Gre	Ser	Ne	Grad Sepa	Gr	Tre Up
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		<u>e</u>	139	ä		<del></del>				nge	ing	
	ne	SFRC Rail/Arterial Grade Separations	Park Road, NGCN: 6243139	U.S. 41/50th Street, NGCN: 624368C	New	Kathleen Road – Railroad Overpass	ě	es	eral	CR 28 (Wells Road)/Orange Park Crossing	SR 224 (Kingsley Ave)/Orange Park Crossing	Seminole Gulf Infrastructure Improvements - Phase 2
	Project Name	rterial	[GCN;	Street,	t and I	ıd - Rê	)/Yule	e Wal	<u>Zanave</u>	Road,	sley 2 Park	alf e tts – Pl
	Projec	sail/A ions	oad, N	/50th.	ement otives	en Roa	(A1A) 1g	W Lak	Port C	Wells rossing	(King: <u>)range</u>	ole Gı ructur remen
		SFRC Rail/1 Separations	ark Rc	7.S. 41, 243680	Replacement and New Locomotives	Kathleen F Overpass	SR 200 (A1A)/Yulee Crossing	SR 60, W Lake Wales	FEC to Port Canaveral	CR 28 (Wells R Park Crossing	SR 224 (Kingsley Ave)/Orange Pa	Seminole Gulf Infrastructure Improvements
	Ð	130	110	100	193	279	504	280	73	501	502	291

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ssa	Change in Fuel Consumption	1	L	7	$\Sigma$	1	1	ı	1	ı	1	ı	
itiven	Number of Jobs Created	1	L	$\boxtimes$	L	ı		1	1	1	•	1	
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obility	Accurement of Senters Train Time of TMV												
M	Reduction in Auto Travel Reduction in Vehicle/Train Time or	1	H	I	M	'	1	1	1	'	'	'	
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ice	Reduces Maintenance Cost	1	M	Σ	M	'	1	1	1	'	1	1	
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e and	Consultation with other Plans	1	L L	L L	T	1	1	ı	1	1	1	1	
nality of Life a	Status of Environmental Screening Process		1		1								
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and Se	Accident Cost from Exposure to Grade Crossings	1	T	1	T	1	1	1	1	1		1	
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	Cost Estimate (\$1,000 of 2009 Dollars)	\$45,000	\$40,000	\$37,520	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	
	C. Estin (\$1,0	\$5	\$5	<del>\$</del>	<b>₩</b>	₩	<b>≆</b>	<b>₩</b>	₩	≆	<b>\$</b> €	\$€	
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	Freight or Passenger	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	
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		_			ion	(90,			(9)	<sub>14</sub> )			
	ame	Nine Mile Road (SR 10) Crossing	erry	y Bl.,	Rail Corridor Preservation	Indiantown Road (SR 706) Crossing	levard ;	vard	Atlantic Avenue (SR 806) Crossing	SE Yamato Road (SR 794) Crossing	levard	evard	
	Project Name	Road (	SR 60, W of Mulberry	SR 676/Causeway Bl., NGCN: 624815B	or Pre	ı Roac	Okeechobee Boulevard (SR 704) Crossing	Forest Hill Boulevard (SR 882) Crossing	venue	Road	Commercial Boulevard (SR 870) Crossing	Hollywood Boulevard (SR 820) Crossing	
	Pro	Mile l sing	), W of	76/Ca N: 62	Corrid	ıntowı sing	chobe 04) Cr	3t Hill 82) Cr	ıtic Av sing	amato sing	mercia 70) Cr	,wood 20) Cr	
		Nine Mile Crossing	SR 60	SR 65 NGC	Rail (	Indiantow Crossing	Okee (SR 7	Fores (SR 8	Atlantic A Crossing	SE Yama Crossing	Com. (SR 8	Holly (SR 8	
	Ð	515	297	109	282	517	538	540	541	543	550	554	
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Quality of Life and Environment	Consultation with other Plans	1	1	1	1	Γ	1	1	1	1	1	1	1	1	1	1
y of L	Status of Environmental Screening Process	1	1	1	ı	Γ	1	1		1	1		1	1	1	1
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urity	Use of Intelligent Transportation	1	1	1	1	Γ	1	1	1	1	1		1	1	1	1
nd Sec	Accident Cost from Exposure to Grade Crossings					ل		,								
Safety and Security	from Truck Diversion	·	'l	Ì	·		·	,	, i		,			`	·	
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	Vehicle Accident Costs from Auto Diversion					7										
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	Cost Estimate (\$1,000 of 2009 Dollars)	\$23,900	\$22,953	\$19,856	\$18,298	\$9,070	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
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	Timeframe	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	Mid-to-long (11-20 years)	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years
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	lect Type	ď	Ë	ď	Ę	Station Improvements	ri.	ц	ti.	Ħ	Ħ	Ħ	Ħ	Ę	Ħ	ä
	oject Č	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Station Improver	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation
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		ple R	-	50	Atlantic Boulevard (SR 814) Crossing	-Rail	West Lake Mary B. (CR 4220) Crossing	sing	SR 436/Altamonte (SR 436) Crossing	e Ie	,	ne	gu	ng	(39A)	ssing
	Name	/Sam ng	ress C	rossir	ard (5	ch Tri ement	y B. (6	Cros	nte (S	Avenu ng	venue	Aven g	Crossi	Crossi	et (CR	e Cros
	Project Name	Street	/Cyp	oad C	loulev	n Beac Iprove	e Mar	R 434)	Jtamo	land 1 Crossi	nan A	lando	2 54) C	3 54) C	r Stre	venu
	딥	NW 36th Street/Sample R (SR 834) Crossing	NW 62nd/Cypress C Crossing	Copans Road Crossing	Atlantic B Crossing	West Palm Beach Tri-Rail Station Improvements	West Lake Crossing	SR 434 (SR 434) Crossing	SR 436/A	East Maitland Avenue (CR 427) Crossing	West Lyman Avenue Crossing	South Orlando Avenue (SR 15) Crossing	CR 54 (CR 54) Crossing	CR 54 (CR 54) Crossing	Alexander Street (CR 39A) Crossing	Parsons Avenue Crossing
		NW (SR	NW Cro	Cop	Atla Cro	Wes	Wes Cros	SR 4	SR 4 Cros	Easi (CR	Wes Cros	Sou (SR	CR	CR.	Ale: Cro	Pars
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suess	Number of Jobs Created	1	1	L	M	M	I H	H ]	I H	H	H	L	H	H	H
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Mobility and Economic Competitiveness	TMV AzurT ni nottoub9A	1	'	Г		J	L	Γ	Γ	Γ	IJ	L	L	Т	IJ
Mobil	Reduction in Vehicle/Train Time or SAMT Operating Costs	1	,	M	1	T	M	Γ	M	M	T	L	Γ	T	Σ
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ınce	Reduces Maintenance Cost			Н					7		,	,			
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iality of Life a Environment	Status of Environmental Screening Process	1	-	L	Г	L L	L	Γ	Γ	M	Ţ	T	L	Т	H
Quality of Life and Environment	Encourages Noise Reduction	1	1	M	L	J	M	Γ	M	Г		Г	r	Г	Ţ
	Change in CO2 Emissions	1	1	Г	L	I.	$\mathbb{Z}$	Н	M	M	Н	Г	Н	Н	$\mathbb{Z}$
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ty	Use of Intelligent Transportation Management Technologies						н		I	н					H
Safety and Security	Crossings	1	-	Г	L	1	H	1	H	H	ı	1	Г	T	H
and 5	Accident Cost from Exposure to Grade	ı	1	Г	П	IJ	Γ	Γ	Γ	Γ	Ĺ	Γ	Γ	T	J
Safety	Vehicle Accident Cost from Truck Diversion		_	r	L	Ţ	L	Γ	Γ	L		r	L	$\Gamma$	T
	Costs from Auto Diversion	,							. 7						
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	Cost Estimate (\$1,000 of 2009 Dollars)	TBD	TBD	N/A	\$3,740,548	\$1,736,199	\$930,429	\$880,610	\$788,050	\$687,800	\$612,620	\$404,970	\$401,130	\$260,000	\$233,920
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	lect Type	Grade Separation	Grade Separation	Capital Improvements	Service	Service	Service	Service	Service	Service	Service	Service	Service	Service	Service
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	ht or nger	ıt	ıt	nger	nger	nger	nger	nger	nger	nger	nger	nger	nger	nger	nger
	Freight or Passenger	Freight	Freight	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger
	16	SR 599/50th Street (SR 599) Crossing	ne	CSX/Tri-Rail – Hialeah Yard Improvements	CSX Corridor: Sarasota- Bradenton, Bradenton- Tampa, Tampa-Brooksville	Clearwater/North Pinellas to Westshore and TIA		H	Linebaugh/Busch - North Tampa Corridor East/West	Short-Distance Rail – USF to Wesley Chapel	- ¢	ра	gh	. Rail ies	Short-Distance Rail - Airport to Carrollwood
	Project Name	Street (	Hillsborough Avenue (SR 600) Crossing	. – Hiai ts	CSX Corridor: Sarasota- Bradenton, Bradenton- Tampa, Tampa-Brooksvi	Clearwater/North Pir to Westshore and TIA	npa	Clearwater Oldsmar Connector	usch – dor Eas	e Rail el		Tampa – South Tampa	Pinellas Hillsborough Connector	Short-Distance Rail: Rail Maintenance Facilities	se Rail od
	Projec	/50th 9	rough ) Cros	ri-Rail ement	rridor ton, Bı Tamp	ater/N shore	ıd-Tan	ater O tor	1gh/B Corric	)istanc Chape	Jistanc own T. n	-Sout	s Hills tor	istanc	)istanc ollwoc
		SR 599/5 Crossing	Hillsbo 3R 600	CSX/Tri-Rail - Improvements	SX Cc raden! ampa,	Jearw. West	Lakeland-Tampa	Clearwate: Connector	inebar ampa	Short-Distance Wesley Chapel	Short-Distance Rail Downtown Tampa Brandon	ampa	Pinellas Hi Connector	hort-E fainter	Short-Distance to Carrollwood
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	<b>a</b>	581	585	265	68	85	91	316	98	209	216	88	315	305	211

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Funding	Eligible for State Funding	Γ	Н	Н	Н	Н	Н	Н	1	Н	Н	1	1	1	1	1	•
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တ္	Change in Fuel Consumption	M	Н	Γ	T	Γ	Γ	M	1	L	Н	1	1		ı	1	1
ivenes	Number of Jobs Created	Γ	Н	M	L	Τ	M	Н	1	M	Γ	1	1			1	
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conom	Increase in Passenger	M	Н	Τ	Т	Г	Γ	No effect	ı	Г	Τ	ı	1	1	1	ı	1
and E	Reduction in Truck VMT or Increase in Rail Capacity	Γ	Γ	M	M	T	M	No effect	1	M	M	1					
Mobility and Economic Competitiveness	estating Costs																
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	Train Capacity Improvement Reduction in Auto Travel	M	H ,	A L	A L	Γ	1 L	H	1	1 L	, L	1	'	'	'	1	
9	Reduces Maintenance Cost	L	L	M	M	Τ	M	1	1	M	L	1	1	1	1	1	- 1
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fe and ent	Consultation with other Plans	Г	Γ	M	Γ	Γ	Γ	Γ	1	Γ	Г	1	1			1	
Quality of Life and Environment	Status of Environmental Screening Process	Γ	L	Г	T	M	Г	T		r	Г		1				
Quality Env	Encourages Noise Reduction	Γ	Γ	M	M	Γ	M	1	1	M	L	1	1			,	
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	Has Security Plan	L	L	Г	L	Γ	Г	1	1	Г	L	1	1	1	1	1	1
urity	Use of Intelligent Transportation Management Technologies	Γ	Γ	L	Г	L	Γ	1	-	Н	Γ	-	1	1	1	1	
Safety and Security	Accident Cost from Exposure to Grade Crossings	Г	L	Г	. 1	. 1	. 1			. 1	Г						
fety an	from Truck Diversion		I	1	Т	1		,	,			,	'	'	'	[	'
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	Cost Estimate (\$1,000 of 2009 Dollars)	\$150,000	\$130,000	\$99,630	\$93,870	\$90,000	\$90,000	\$80,000	\$40,000	\$39,790	\$34,530	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
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	Project Type	New Service	New Service	e ation	e ation	e ation	e ation	e ation	e ation	city ade	e ation	e ation	e ation	e ation	e ation	e ation	e ation
	Projé	New 5	New 5	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Capacity Upgrade	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation
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	Freight or Passenger	Passenger	Passenger	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight
		əgı	- Rail ies	.e'	SR 60/Brandon Boulevard, NGCN: 624551H	Faulkenburg Road, NGCN: 624359D	Faulkenburg Road, NGCN: 624462R	e)/	2)	rd to	IGCN:	Magnolia Avenue Crossing	p:	ssing	Woolbright Road Crossing	Linton Boulevard Crossing	94)
	Project Name	NW Corridor (Orange Blossom Trail)	Long-Distance Rail - Rail Maintenance Facilities	o Driv 20X	on Bou	Road,	Road,	SR 104 (Busch Drive)/ Jacksonville Crossing	S Main Street (SR 85) Crossing	Double Track Gifford to Indrio	SR 60/Hopewell, NGCN: 624572H	enue C	Northlake Boulevard (CR 809) Crossing	ad Crc	oad C	vard C	Yamato Road (SR 794) Crossing
	Proje	orrido. m Trai	Distanc mance	'Adam I: 6248	SR 60/Brandon B NGCN: 624551H	inburg D	inburg R	(Busci	ı Streel ng	e Track	'Hope' 'H	lia Av	Northlake Boulev (CR 809) Crossing	ere Ro	right F	Boule	o Roac ng
		NW C. Blosso	Long-Distance Rail - R Maintenance Facilities	SR 60/Adamo Drive, NGCN: 624820X	SR 60/ NGCN	Faulkenl 624359D	Faulkenk 624462R	SR 104 Iackson	S Main St Crossing	Double Indrio	SR 60/H 624572H	Magno	Northl (CR 80	Belvedere Road Crossing	Woolb	Linton	Yamato R Crossing
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Project Name	Freight or Passenger	Project Type	Timeframe	Cost Estimate (\$1,000 of 2009 Dollars)	Vehicle Accident Costs from Auto Diversion Vehicle Accident Cost	from Truck Diversion Accident Cost from Exposure to Grade Crossings	- Use of Intelligent Transportation Management Technologies	Has Security Plan Change in CO2 Emissions	Encourages Noise Reduction Status of Environmental	Consultation with other Plans	Tomorfe Transity (TOD)  An analysis Modern Management and bne freemengens of the properties of the pro	Reduces Maintenance Cost	Train Capacity Improvement Reduction in Auto Travel	Meduction in Yehicle/Train Time or Taves  Reduction in Vehicle/Train Time or TMV	Reduction in Truck VMT or Increase in Rail Capacity	Increase in Passenger Rail Ridership	lncrease in Freight Ton-Miles Mumber of Jobs Created	Change in Fuel Consumption	Supports Intermodal/ Multimodal Connectivity	Underwent Public Review	Supported/Endorsed by Relevant Partners	Snibnu Trof notisity A to sufets	Eligible for Federal Funding Eligible for State Funding	Established Federal/ Local Funding Match	Santh boursersbard Areas	93159 Significance
Palmetto Park (SR 811) Crossing	Freight	Grade Separatio	More than 20 years	\$30,000	1		1	1	1	'	1	-	1	1	-	-	-	1	1	-	-	-	1	1	ı	
Hillsboro Boulevard (SR 810) Crossing	Freight	Grade Separation	More than 20 years	\$30,000	1	'	'	1	1	'	1	1	1	1	-	-	-	1	1	1	-	-	1	1	1	
Sample Road (SR 834) Crossing	Freight	Grade Separation	More than 20 years	\$30,000	,	,	'	ı	1	,	,	1	1	t	1	1	1	1	1	1		1	1	ı	1	
Atlantic Boulevard (SR 814) Crossing	Freight	Grade Separation	More than 20 years	\$30,000	·	'	'	1	1	'		1	1	1	1	1	1	1	1	1		1	•	1		
Commercial Boulevard (SR 870) Crossing	Freight	Grade Separation	More than 20 years	\$30,000	,	1	1	,	1	1	1	1	1			,	'	1	1	ı		'	1	1	,	
Oakland Park Boulevard (SR 816) Crossing	Freight	Grade Separation	More than 20 years	\$30,000		,				'	1	-	1				1	1		1	1	1	ı	,	1	
Sunrise Boulevard (SR 838) Crossing	Freight	Grade Separation	More than 20 years	\$30,000	1		'	1	1	'	1	-	1		-	-	-	1		1	_	-	-	ı	t	
W Broward Boulevard (SR 842) Crossing	Freight	Grade Separation	More than 20 years	\$30,000	,		1	ı	1	,		1	1	1	,	1	1	ı	1	1	1	'	'	ı	1	
SW 24th Street/SR 84 (SR 84) Crossing	Freight	Grade Separation	More than 20 years	\$30,000	,			ı	1	'		1	1	ı	,	1	1	ı	1	1	,	'	1	ı	1	
Miramar Parkway (SR 858) Crossing	Freight	Grade Separation	More than 20 years	\$30,000	·	'	'	1	1	'		1	1	1	1	1	1	1	1	1		1	•	1		
Glades Road (SR 808) Crossing	Freight	Grade Separation	More than 20 years	\$30,000	,	1	'	1	1	'	1	-	1	1		1	1	1	1	ı		'	'	1		
McNab Road Crossing	Freight	Grade Separation	More than 20 years	\$30,000	,	1	1	1	1	1	1		1	1		1	1	1	1	1	1	'	'	1	1	.]
NW 33rd Street Crossing	Freight	Grade Separation	More than 20 years	\$30,000	1	1	1	1	1	1	1		1	1			'	1	1		1		1	1		.]
North Lake Boulevard (CR 809A) Crossing	Freight	Grade Separation	More than 20 years	\$30,000	1	1	1		1	1	1		1	1			,	1	1	,	1		1	,	1	
Palm Beach Lake Boulevard Crossing	Freight	Grade Separation	More than 20 years	\$30,000	,	,	'	1	1	'	,	1	1	1		1	1	1	1	ı	1	1	1	ı	1	
Belvedere Road Crossing	Freight	Grade Separation	More than 20 years	\$30,000	,		1	1	1	'		1	1	1	,	1	1	ı	1	1	ı	1	'	ı	1	
Linton Boulevard (SR 782) Crossing	Freight	Grade Separation	More than 20 years	\$30,000	,	1	1	1	1	1	1		1	1		1	1	1	1			'	'	1	,	.]

	Statewide Significance			I		Ī	I	I	I	I	Ī	I						I
	Supports Underserved Areas	1	1	'	'	'	'	'	'	'	1	'	'	'	1	-	'	1
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gui	Eligible for State Funding	1												1	1		,	
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	by Relevant Partners	•	'	'	'	'	'	'	'	'	'	'	'	'	•	-	'	'
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	Underwent Public Review	1	1	1	1		1	1	1	1	1	1	1	1	1	-	,	1
	Multimodal Connectivity																	
	Supports Intermodal/	1	1	1	1	•	1	1	ı	1	1	1	1	1	1	1	1	1
ness	Change in Fuel Consumption	1	1	1	1	1	1	1	1	1	1	1	'	1	1	-	1	1
titive	Number of Jobs Created	,	1	1	1	1	1	1	1	1	1	1	1	1	1	-	1	1
mpei	esliM-noT freight Ton-Miles																	
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conor	Increase in Passenger		1	1	١ .	,	1	1	'	١	1	1	•	1	1	1		
and E	Reduction in Truck VMT or Increase in Rail Capacity																	
Mobility and Economic Competitiveness	VMT Operating Costs	'	']	']	'		']		'	'	'	'	'	'	'	'	'	'
Mob	Reduction in Vehicle/Train Time or	1	1	1	1		1	1	ı	1	1	1		1	1	-		
	levart otuk ni noitsubeA	1	1	1	1		1		1	1	1		,	1	1	-	,	
	Train Capacity Improvement	1	1	1	1	1	1	1	1	1	1	1		1	1	-		1
ınce	Reduces Maintenance Cost																	
Maintena	esigolondəsT noits19qO	'	'	'	'	'	'	'	1	1	'	'	'	'	'	-	'	'
Mai	Supports Modern Management and	1	1		,				ı	1	1	1		1	1			
	Tomorf	_	1	1	1		1	-	-	1	1	1	-	_	_	-	-	1
and nt	Consultation with other Plans	-	1	1		1	1	1	ı	1	1	ı			1	1		
Quality of Life and Environment	Screening Process																	
ality c Envir	Status of Environmental	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	1	1
Qu.	Encourages Moise Reduction	1	1	1	1	1	1	1	ı	1	1	1	1	1	1	1	1	1
	Change in CO2 Emissions	1	1	1	1	1	1	1	1	1	ı	1	1	1	1	-	1	1
	Has Security Plan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ity	Use of Infelligent Transportation Management Technologies		,								,							
Secur	Sgnissor	·	·	,	·	•	,	Ì		Ì	·	·	·	·	·	·	·	
and	Accident Cost from Exposure to Grade	1	1	1	1	•	1	1	ı	1	1	ı	1	1	1	-	1	1
Safety and Security	Vehicle Accident Cost from Truck Diversion																	
3,	Costs from Auto Diversion	'	'	'	'	'	'	'	'	'	'	'	'	'	'	•	'	'
	Vehicle Accident	1	1	ı	1	1	ı	ı	ı	ı	1	1	ı	1	-	1	-	1
	st nate 10 of 19 ars)	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$20,745	TBD	TBD	TBD	TBD	TBD	TBD	TBD	\$96,600	\$30,000	\$30,000
	Cost Estimate (\$1,000 of 2009 Dollars)	\$3(	\$30	\$3(	\$3(	\$3(	\$3(	\$20								89	\$3(	\$3
	Timeframe	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	than ars	More than 20 years										
	Time	More tha 20 years	More tha 20 years	More 20 ye	More 20 ye	More tha 20 years	More than 20 years	More 20 ye	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	e.												4					
	Project Type	tion	tion	tion	tion	tion	tion	tion	tion	tion	tion	Signal Ugrade	New Service	de	New Service	New Service	tion	tion
	Proje	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	ignal	Jew S	Signal Upgrade	Jew S	Jew S	Grade Separation	Grade Separation
			S	S	S	S	S	S	S	S	S							S
	Freight or	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Passenger	Passenger	Passenger	Passenger	Passenger	Freight	Freight
	Fre	Fre	Fre	Fre	Fre	Fre	Fre	Fre	Fre	Fre	Fre	Pas	Pas	Pas	Pas	Pas	Fre	Fre
			<b>.</b>	(8)			(8)	(810)			<u>(c</u>	Rail:	Rail:	ail	ail		٢٥	
	me	(862	levard	(SR 81	48)	R 824)	SR 85	d (SR	953)	sing	(SR 25	ando	ando	eed R	eed R		ossing	ive
	Project Name	k (CR	c Boul sing	Road	(SR 8	ad (S.	each (	ılevaı	; (SR 5	Cros	Road	peed o Ork	peed o Ork	zh Spe	zh Spe	rvice	et Cr	ns Dr sing
	Projec	o Par. g	d Park	riffin ] g	Road g	ke Rc g	tale B g	ro Bot g	venut g	venue	obee ] g	S ville t	S ville t	st Hig	st Hig	ast Se	h Stre	Sarde ) Cros
		Palmetto Park (CR 798) Crossing	Oakland Park Boulevard (SR 816) Crossing	New Griffin Road (SR 818) Crossing	Stirling Road (SR 848) Crossing	Pembroke Road (SR 824) Crossing	Hallandale Beach (SR 858) Crossing	Hillsboro Boulevard (SR 810) Crossing	E 8th Avenue (SR 953) Crossing	Palm Avenue Crossing	Okeechobee Road (SR 25) Crossing	High Speed Jacksonville to Orlando	High Speed Jacksonville to Orlando	Southeast High Speed Rail	Southeast High Speed Rail	Gulf Coast Service	NE 203th Street Crossing	Miami Gardens Drive (SR 860) Crossing
	ID	544	551	552	553	555	556	545	570	571	572	592	592	593	593	586	565	566

1 1		ı				ĺ	I	I
	 Statewide Significance	1	1	ı	1	1	1	1
	Supports Underserved Areas	1	1	1	1	1	1	1
	Established Federal/ Local Funding Match							
gu	Eligible for State Funding							
Funding	Eligible for Federal Funding		·	'	Ċ		·	Ï
	Status of Application for Funding	'	'	'	'	'	'	'
	by Relevant Partners	'	1	•	•	'	'	'
	Supported/Endorsed		1	1		1	1	,
	Underwent Public Review	-	1	-	1	ı	1	t
	Supports Intermodal/ Multimodal Connectivity							
	Change in Fuel Consumption	'	1	1	1	1	'	'
seus	Number of Jobs Created	'	1	1	1	1	1	'
etitive		1	1	1	1	'	1	'
ombe	lncrease in Freight Ton-Miles	1	1	1	1	1	1	,
nomic (	Increase in Passenger Kail Ridership	1	1	-	1	1	1	1
and Eco	Reduction in Truck VMT or Increase in Rail Capacity		1		1			
Mobility and Economic Competitiveness	Reduction in Vehicle/Train Time or VMT Operating Costs		·		,	·	·	
<b>N</b>	Reduction in Auto Travel	'	1	'	'	'	'	`
	Train Capacity Improvement	'	1	-	1	1	'	'
eo	Reduces Maintenance Cost	1	1	1	1	1	'	1
enanc	taga angenotaicM annihasi	1	1	1	ı	1	1	1
Maintenan	Supports Modern Management and Operation Technologies							
	TOT\tisnsT sətomor¶							
puı	Consultation with other Plans	'		,	'	'	'	[]
Quality of Life and Environment	Screening Process	'	1	'	'	'	'	'
ity of iviror	Status of Environmental		1	1		1	1	,
Qual Er	Encourages Noise Reduction		1	1	1	1	1	1
	Change in CO2 Emissions	-	1	-	1	1	1	1
	Has Security Plan	-	-	-	-	-	1	1
rity	Use of Intelligent Transportation Management Technologies	1	-	-	-	1	1	1
Safety and Security	Accident Cost from Exposure to Grade Crossings	1	-	1	-	1	1	
fety a	from Truck Diversion							
Saf	teo2 taebicoA eloideV	1	1	1	1	1	1	ı
	Vehicle Accident Costs from Auto Diversion	1	1	1	1	ı	ı	1
	Cost Estimate (\$1,000 of 2009 Dollars)	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
	Timeframe	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	Project Type	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation
				S. G.	S. G.	S. G.		S
	Freight or Passenger	Freight	Freight	Freight	Freight	Freight	Freight	Freight
	Project Name	NE 163rd Street (SR 826) Crossing	NE 125th Street (SR 922) Crossing	NW 27th Avenue (SR 9) Crossing	NW 72nd Avenue Crossing	NW 72nd Avenue Crossing	NW 22nd Avenue Crossing	NW 27th Avenue (SR 817) Crossing
	Œ	567	568	569	573	574	575	576

Source: Cambridge Systematics.

Note: Analysis based on data and input provided by respondents to web-based Florida Rail Needs Assessment. Last updated October 2009. Projects shown in **bold** are partially or completely funded.

Based on the results of these data collection efforts and additional feedback from FDOT, the list of potential rail performance measures was further refined and a key set of rail need prioritization criteria was selected based on:

- Availability and reliability of data for the measure;
- Ability to apply the measure to diverse projects Statewide; and
- Reflection of new Federal rail funding criteria and program priorities (e.g., shovel-readiness).

The selected prioritization criteria, shown in Table 5.4, reflect the rail plan goals as well as current priorities for FDOT as it seeks to implement projects in a constrained fiscal environment where project coordination and positioning to take advantage of Federal and other funding sources is vital.

The procedure for prioritizing projects using the identified prioritization criteria involved four steps:

- 1. Establish each project's current funding status (e.g., fully funded, partially funded, currently unfunded) by reviewing needs assessment survey responses, the Five-Year Work Program, STIP, and local TIPs;
- 2. Identify current funding sources for funded projects and future potential Federal and state funding sources for partially funded or unfunded projects;
- 3. Rank/score each of the criteria listed in Table 5.2 based on a review of needs assessment survey responses, project web sites (if applicable), local planning documents, and follow-up calls to stakeholders; and
- 4. Calculate overall project priority rank/score based on the methodology shown in Table 5.4.

**Table 5.4** Criteria Used for Prioritizing FDOT Rail Needs Projects

Criteria	Ranking (Score)	Definition
Funding Status	High (3)	Project is currently funded or partially funded.
	Medium (2)	Project is not currently funded, but is eligible for funding from one or more sources.
	Low (1)	Project is not currently funded and no potential/eligible funding sources have been identified.
Coordination Status	High (3)	Project has consulted with multiple plans (e.g., Florida Transportation Plan, local comprehensive plans), agencies, and stakeholders; and has received public support.
	Medium (2)	Project has consulted with one or more plans or agencies and/or has received some public support.
	Low (1)	No evidence of coordination with other plans and/or agencies and no evidence of public support.
State and/or	High (3)	Project is of statewide significance.
Regional Significance	Medium (2)	Project is of regional significance.
	Low (1)	Project is not of statewide or regional significance.
Environmental Review Status	High (3)	All environmental review for the project has been completed, or environmental review is not necessary.
(criteria considered only as a component of	Medium (2)	Required environmental review for the project is currently underway.
shovel readiness)	Low (1)	Environmental review of the project has not yet been undertaken or information about the environmental review status of the project is not available.
Design Completeness and Right-of-Way	High (3)	Right-of-way for the project has been acquired and design is complete.
Acquisition (criteria considered	Medium (2)	Negotiations are underway to acquire right-of-way for the project and/or project design is underway.
only as a component of shovel-readiness)	Low (1)	Right-of-way has not yet been acquired for the project, design has not yet been initiated, and/or information about the status of project design and right-of-way is not available.
Eligibility for Federal	High (3)	Project is eligible for Federal monies.
Grants	Medium (2)	Project is potentially eligible for Federal funding.
(criteria considered only as a component of shovel-readiness)	Low (1)	Project is not eligible for Federal funding or proof of eligibility for Federal grants is not available.

Table 5.4 Criteria Used for Prioritizing FDOT Rail Needs Projects (continued)

	D 1'	
Criteria	Ranking (Score)	Definition
Included in TIP	High (3)	Project is currently included in the STIP.
and/or STIP	Medium (2)	Project is currently included in a local TIP.
(criteria considered only as a component of shovel-readiness)	Low (1)	Project is not currently included in the STIP or a local TIP, or information about the project's status is not available.
Shovel Readiness	High (3)	Average score/ranking for Environmental Review Status, Design Completeness and Right-of-Way Acquisition, Eligibility for Federal Grants, and Included in TRIP and/or STIP criteria of 2.5 or greater.
	Medium (2)	Average score/ranking for Environmental Review Status, Design Completeness and Right-of-Way Acquisition, Eligibility for Federal Grants, and Included in TRIP and/or STIP criteria of 1.5 to 2.4.
	Low (1)	Average score/ranking for Environmental Review Status, Design Completeness and Right-of-Way Acquisition, Eligibility for Federal Grants, and Included in TRIP and/or STIP criteria of 1.4 or less.
Overall Project Priority	Very High	Average score/ranking of Funding Status, Coordination Status, State or Regional Significance, and Shovel Readiness criteria of 2.5 or greater.
	High	Average score/ranking of Funding Status, Coordination Status, State or Regional Significance, and Shovel Readiness criteria of 2.0 to 2.4.
	Medium- High	Average score/ranking of Funding Status, Coordination Status, State or Regional Significance, and Shovel Readiness criteria of 1.6 to 1.9.
	Medium	Average score/ranking of Funding Status, Coordination Status, State or Regional Significance, and Shovel Readiness criteria of 1.5.
	Low- Medium	Average score/ranking of Funding Status, Coordination Status, State or Regional Significance, and Shovel Readiness criteria of 1.1 to 1.4.
	Low	Average score/ranking of Funding Status, Coordination Status, State or Regional Significance, and Shovel Readiness criteria of 1.0.

Source: Cambridge Systematics.

## ■ 5.4 Priority Rail Needs Overview

The needs assessment and review identified \$47.8 billion in unconstrained passenger and freight needs on the Florida rail system. Using the prioritization methodology described in Section 5.3, each need was assigned a ranking of very high, high, medium-high, medium, or low-medium priority based on its funding status, coordination level, state or regional significance, and shovel-readiness.

Table 5.5 shows the number of projects and total estimated cost of needs in each priority category. Twenty-four very high-priority projects estimated for nearly \$4.8 billion account for 10.5 percent of needs. These projects include \$3.5 billion for high-speed rail connecting Tampa and Orlando; \$615 million for Sunrail commuter rail service between Deland and Poinciana, \$373 million for infrastructure investments to restore Amtrak service on the Florida East Coast Railway, \$245 million for capacity upgrades to CSX facilities, and \$87 million for a four-lane overpass over Eller Drive at Port Everglades.

**Table 5.5** Railroad Needs by Priority
Thousands of 2009 Dollars

Priority	No. of Projects	Cost
Very High	24	\$4,992,498
High	37	\$14,815,349
Medium-High	55	\$21,110,615
Medium	60	\$4,967,870
Low-Medium	49	\$1,599,940
To Be Determined	18	\$270,000
Total	243	\$47,756,272

Source: Cambridge Systematics.

From a project cost perspective, a larger percentage of passenger needs are identified as very high or high-priority projects than freight needs (Table 5.6). Over 45 percent of passenger needs (in terms of dollars) are identified as very high or high-priority needs, compared to only 14 percent of freight needs. The majority of the passenger needs (49 percent) are identified as medium-high projects. The majority of freight needs (50.3 percent) are identified as medium priority projects. The priority differential is largely driven by current Federal policy and funding support for high-speed and other passenger rail services, which has motivated a large number of requests for new commuter, intercity, and light rail services.

Table 5.6 Railroad Priorities by Type of Service

Thousands of 2009 Dollars

Priority	Freight	Passenger	<b>Total Costs</b>
Very High	\$344,405	\$4,648,093	\$4,992,498
High	\$473,423	\$14,341,926	\$14,815,349
Medium-High	\$774,190	\$20,336,425	\$21,110,615
Medium	\$3,043,670	\$1,924,200	\$4,967,870
Low-Medium	\$1,151,125	\$448,815	\$1,599,940
To Be Determined	\$270,000		\$270,000
Total	\$6,056,813	\$41,699,459	\$47,756,272

Source: Cambridge Systematics.

Note: A blank cell does not necessarily indicate an absence of projects in this category. Project cost may not have been identified by the source(s).

As illustrated in Table 5.7, the majority of needs identified though the assessment (\$41.6 billion) are related to new or expanded passenger services and freight lines. Investments in high-speed rail, such the new line from Orlando the Miami, account for 73 projects percent of needs identified as very high to high-priority new or expanded service. The eight new freight service needs in the State were all identified as high to medium priority.

Table 5.7 Summary of Priorities for New Freight and Passenger Rail Service Thousands of 2009 Dollars

Priority	Freight	Commuter Rail	High-Speed Rail	Intercity	Light Rail	Total
Very High		\$988,225	\$3,525,000			\$4,513,225
High	\$204,500	\$3,500,000	\$10,200,000		\$537,281	\$14,441,781
Medium-High	\$52,000	\$3,435,311		\$13,218,686	\$3,281,740	\$19,987,737
Medium	\$463,900	\$1,800,340				\$2,264,240
Low-Medium		\$390,000				\$390,000
Total	\$720,400	\$10,113,876	\$13,725,000	\$13,218,686	\$3,819,021	\$41,596,583

Source: Cambridge Systematics.

Note: A blank cell does not necessarily indicate an absence of projects in this category. Project cost may not have been identified by the source(s).

Each of the unconstrained needs identified in the assessment is assigned to a timeframe based on when the identified service is estimated to begin operation or construction of the identified improvement is estimated to be completed (Table 5.8). Of the nearly \$5 billion in very high-priority needs, 97 percent (\$4.8 billion) are identified as short-term rail investment needs (to be considered for inclusion in FDOT's upcoming 5-year Work Program) and the remainder – 3 percent (\$146 million) – are identified as medium or medium-long term (6- to 20-year) needs, a small portion (\$13.8 million does not have an identified timeframe as of this writing). The majority (74.1 percent) of high-priority projects, on the other hand, are identified as medium-term (6- to 10-year) needs. This includes \$10.2 billion for high-speed rail connecting Orlando to Miami.

**Table 5.8 Railroad Priorities by Timeframe** *Thousands of 2009 Dollars* 

Priority	Near-Term (1 to 5 Years)	Medium- Term (6 to 10 Years)	Medium-to- Long-Term (11 to 20 Years)	Long-Term (More Than 20 Years)	TBD	Total
Very High	\$4,846,530	\$68,852	\$63,316		\$13,800	\$4,992,498
High	\$332,891	\$10,982,458	\$3,500,000			\$14,815,349
Medium-High	\$394,957	\$8,633,882	\$2,923,610	\$9,061,566	\$96,600	\$21,110,615
Medium	\$300,260	\$1,750,073	\$885,007	\$2,032,530		\$4,967,870
Low-Medium	\$2,500	\$49,745	\$226,950	\$1,320,745		\$1,599,940
To Be Determined					\$270,000	\$270,000
Total	\$5,877,138	\$21,485,010	\$7,598,883	\$12,414,841	\$380,400	\$47,756,272

Source: Cambridge Systematics.

Note: A blank cell does not necessarily indicate an absence of projects in this category. Project cost may not have been identified by the source(s).

Table 5.9 shows a summary of priorities by project type. Capacity upgrades are the highest priority need for freight rail in the State. New service is the highest priority need for passenger rail, followed by rolling stock investments.

Table 5.9 Summary of Priorities by Project Type

Thousands of 2009 Dollars

		*7		3.6.11		Low-		
	Project Type	Very High	High	Medium High	Medium	Medium	TBD	Total
	Capacity Upgrade	\$245,000	\$108,450	\$44,154	\$1,704,085	\$60,000		\$2,161,689
	Grade Separation	\$87,000	\$47,000	\$494,630	\$853,868	\$1,058,625	\$270,000	\$2,811,123
	New Line		\$204,500	\$52,000	\$450,000			\$706,500
::	New Service				\$13,900			\$13,900
Freight Rail	Rehabilitation and Maintenance	\$1,305	\$28,091	\$81,205	\$21,817			\$132,418
占	Right-of-Way					\$30,000		\$30,000
	Rolling Stock					\$2,500		\$2,500
	Signal Upgrade	\$11,100	\$20,403	\$27,688				\$59,191
	Track Upgrade		\$64,979	\$74,513				\$139,492
	Capital Improvements		\$28,848	\$133,856				\$162,704
	Grade Separation			\$240,000				\$240,000
Ξ	New Service	\$4,513,225	\$14,237,281	\$19,935,737	\$1,800,340	\$390,000	\$0	\$40,876,583
Passenger Rail	Rehabilitation and Maintenance			\$250				\$250
asse	Rolling Stock	\$132,168						\$132,168
H	Signal Upgrade	\$2,700						\$2,700
	Station		\$75,447	\$26,582	\$123,860	\$58,815	\$0	\$284,704
	Improvements Study		\$350					\$350
Total		\$4,992,498	\$14,815,349	\$21,110,615	\$4,967,870	\$1,599,940	\$270,000	\$47,756,272

Source: Cambridge Systematics.

Note: A blank cell does not necessarily indicate an absence of projects in this category. Project cost may not have been identified by the source(s).

# Summary by Railroad

Table 5.10 provides a high-level summary of the priority rankings of proposed improvements along various rail lines in the State. Detailed descriptions of the needs are contained in Table 5.14. Very high-priority projects for CSXT include capacity upgrades and improvements in the Baldwin area, estimated at \$67.4 million, and 14 smaller capacity

upgrade projects throughout the State, estimated at \$177.7 million. Very high-priority improvements on the Florida East Coast Railway involve improvements to reinstate Amtrak passenger rail service between Jacksonville and Miami. On the South Florida Rail Corridor, very high-priority needs include purchasing 26 new passenger rail cars and 16 new locomotives over the next five to 25 years.

Table 5.10 Summary of Priorities by Railroad

Thousands of 2009 Dollars

Railroads	Very High	High	Medium- High	Medium	Low- Medium	Total
Alabama and Gulf Coast				\$6,327		\$6,327
CSX Transportation	\$871,100	\$1,075,000	\$13,453,708	\$899,868	\$668,625	\$16,968,301
Florida Central	\$1,305	\$17,600	\$2,408	\$150,000	\$2,500	\$173,813
Florida East Coast	\$143,000	\$52,123	\$44,585	\$385,075	\$510,000	\$1,134,783
Florida Midland			\$15,000			\$15,000
Georgia and Florida Railway			\$52,000			\$52,000
Seminole Gulf Railway		\$350	\$68,300			\$68,650
South Florida Rail Corridor/Tri-Rail	\$132,168	\$3,763,001	\$854,728	\$1,421,260	\$58,815	\$6,229,972
South Central Florida Express		\$24,500	\$30,767			\$55,267
Total	\$1,147,573	\$4,932,574	\$14,521,496	\$2,862,530	\$1,239,940	\$24,704,113

Source: Cambridge Systematics.

Note: A blank cell does not necessarily indicate an absence of projects in this category. Project cost may not have been identified by the source(s).

#### Summary by Port

Table 5.11 provides a high-level summary of the priority rankings of proposed improvements at various seaports in the State. Detailed descriptions of the needs are contained in Table 5.14. Very high-priority needs at Port Everglades include a four-lane Eller Drive Overpass which will increase safety and promote efficient freight movement, estimated at \$87.0 million. High-priority needs at the Port of Palm Beach include rail switching improvements, estimated at \$3.7 million, and construction of track connecting Hialeah rail yard to the Intermodal Logistics Center, estimated at \$100 million.

Table 5.11 Summary of Priorities by Port

Thousands of 2009 Dollars

Port	Very High	High	Medium- High	Medium	Low- Medium	Total
Port Canaveral				\$50,000		\$50,000
Port Everglades	\$87,000	\$60,500			\$87,000	\$147,500
Port of Jacksonville			\$10,000	\$10,000		\$20,000
Port of Miami			\$36,900			\$36,900
Port of Palm Beach		\$103,700				\$103,700
Port of Tampa			\$9,600	\$81,000		\$90,600
Total	\$87,000	\$164,200	\$56,500	\$141,000	\$0	\$448,700

Source: Cambridge Systematics.

Note: A blank cell does not necessarily indicate an absence of projects in this category. Project cost may not

have been identified by the source(s).

#### **Summary by District**

Table 5.12 contains a summary of priority rankings by district. Note that a "multiple" category was created under the District heading to account for projects that cross several district jurisdictions. This was necessary since project cost information by District is not available at this time.

**Table 5.12 Summary of Priorities by District** 

Thousands of 2009 Dollars

District	Very High	High	Medium- High	Medium	Low- Medium	TBD	Total
1	\$116,050	\$45,500	\$42,055	\$1,508,400	\$120,000		\$1,832,005
2	\$92,950	\$192,226	\$1,026,787	\$13,484			\$1,325,447
3		\$35,500		\$51,327	\$40,000		\$126,827
4	\$100,800	\$719,928	\$280,288	\$400,311	\$919,560		\$2,420,887
5	\$650,755	\$17,600	\$2,001,153	\$205,043	\$2,500		\$2,877,051
6		\$60,689	\$1,198,889	\$369,593		\$270,000	\$1,899,171
7		\$23,250	\$11,581,269	\$1,994,201	\$517,880		\$14,116,600
Multiple	\$4,031,943	\$13,720,656	\$4,980,174	\$425,511			\$23,158,284
Total	\$4,992,498	\$14,815,349	\$21,110,615	\$4,967,870	\$1,599,940	\$270,000	\$47,756,272

Source: Cambridge Systematics.

Note: A blank cell does not necessarily indicate an absence of projects in this category. Project cost may not

have been identified by the source(s).

### ■ 5.5 Detailed Prioritized Needs Table

Table 5.13 contains the project needs identified by stakeholders participating in the 2010 Florida Rail System Plan Update, prioritized based on the criteria described in Section 5.3. The table presents, in detail, every project identified through the process described in Section 4.0. The table is sorted by project priority and then by timeframe. **Projects that are fully or partially funded as of May 2010 are shown in bold.** Each project is further identified by the following attributes:

- ID attribute as identified in the on-line rail survey;
- Project name;
- Project description;
- Owner or operator;
- Freight or passenger rail;
- Project type (maintenance and repair, grade crossings, etc.);
- Location;
- Timeframe;
- Cost estimate (in current 2009 dollars);
- Work program status;
- Current or potential funding sources;
- Overall project priority; and
- Project prioritization criteria:
  - o Funding status;
  - o Coordination level;
  - o State or regional significance;
  - o Shovel readiness;66
  - o Environmental review status;
  - o Eligibility for federal grants;
  - o Design completeness and right-of-way acquisition; and
  - o Inclusion in the STIP or TIP.

<sup>&</sup>lt;sup>66</sup>Shovel readiness is based on the average of Environmental Review Status, Eligibility for Federal Grants, Design Completeness and Right-of-Way, and Inclusion in STIP or TIP scores.

Each project is color coded based on the timeframe it is estimated to begin operation in and the project's overall project priority ranking. The color schemes used are illustrated in Table 5.13.

Table 5.13 Project Timeframe and Priority Color Coding Scheme

Timeframe
Near-term (1-5 years)
Mid-term (6-10 years)
Mid-to-long (11-20 years)
More than 20 years
Project Priority
Very High = Average Score of Over 2.5 to 3.0
High = Average Score of Over 2.0 to 2.5
Medium-High = Average Score of Over 1.5 to 2.0
Medium = Average Score of 1.5
Low-Medium = Average Score of over 1.0 to Less Than 1.5

Source: Cambridge Systematics.

Table 5.14 Detailed Projects Needs by Priority

	ysw-10-112id bns ni noisulonl AIT 10 AITS	High			High	High
	rederal Grants Design Completeness	th Med	th High		th High	w High
Final Prioritization Criteria	Review Status Eligibility for	High High	High High		High High	High Low
oritizatio	Shovel Readiness Environmental	High Hi			High Hi	High His
Final Pri	State or Regional Significance Iowod2	High H		High F	Med H	High H
	Coordination Level	High 1		High 1	High	High 1
	gnibnu <sup>7</sup> sufst2	High		Med	High	High
	Project Priority <sup>a</sup>	Very High	Very High	Very High	Very High	Very High
	Potential Funding Source(s)	HSIPR - New Tiger Grant Funds	FTA grant, State New Starts, SIS, Growth Management (GM), and other state and local resources as well	HSIPR - New Tiger Grant Funds, Amtrak ARRA Grant	EDO, IRSST, RSTICTF	CSX, SIS
	Work Program Status	411253-3 \$3.55M in FY2010-2011 including \$1.25M in HSIPR grant money	428343-1 (ROW) \$150M in 2011, 412994- 4 \$219.42M in FY2010-2012, see also 423446- 2, 423446-3, 412994-8, 423446-9,	Currently unfunded	403984-1 (ROW) \$66M in 2010-2013	CFFCP
	Cost Estimate (\$1,000 of 2009 Dollars)	\$3,525,000	\$615,000	\$373,225	887,000	\$67,350
	Timeframe	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)
	Location	Hillsborough, Polk, Osceola, and Orange Counties	Volusia, Seminole, Orange and Osceola Counties	Jacksonville to Miami	Port Everglades	Baldwin/NE Florida
	Project Type	_	New Service	New Service	Grade Separation	Capacity Upgrade
	Freight or Passenger				Freight	Freight
	Owner or Operator	New Passenger Rail Service	CSX Transportation		Port Everglades	CSX Transportation
	Description	Phase 1: A High-Speed Rail connecting Tampa and Orlando.	Passenger commuter rail operation on State-purchased CSX trackage between Deland, Florida in Volusia County and Poinciana, Florida in Osceola County, a distance of 61 miles. Private Sector has been involved gathering Orlando Chamber of Commerce (Note/Concern: This is for purchasing and constructing 61.5 miles, the cost is \$438 and \$615 million which is equal to approximately \$1.53 billion)	The State needs to work with Amtrak and FEC to bring passenger rail service back from Jacksonville to Miami. This corridor could lead the way for commuter rail service in Jacksonville and would reconnect Jacksonville to St. Augustine via the FEC line.	The project is to design and construct a four-lane bridge Overpass on Eller Drive for unrestricted movement to and from Port Everglades cruise and container terminals to the Interstate 595, as well as the widening, realignment, and construction of service roads parallel to the Overpass. The Overpass will enable the development of at-grade rail crossing access to Southport, providing direct connection to the proposed on-Port Intermodal Container Transfer Facility (ICTF) at Port Everglades.	CSX corridor improvements in the Baldwin area. Combination of projects 143, 145, 147, and 188. Improvements include: Extend West Storage Lead by 4,000 feet to provide a 12,000 feet lead; Build approximately 4,0 miles of second main at Baldwin, SE Baldwin-SE East Pass, build new 13 East Track in Baldwin Yard, and replace south departure yard turnouts (Jacksonville Terminal SD); Upgrade East Passing Track and extend
	Project Name	High-Speed Rail - Tampa to 07 Orlando	1 Sunrail	Amtrak Service on the FEC Railroad	4 FDOT Eller Drive Overpass	Baldwin Area Improvements: West Storage, SE Jacksonville Pass, Fouraker Siding and
	П	207	131	80	104	143

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Very High High Med High High High High High	Tiger grants, Transportation Enhancements	Amending WP to include \$1,305 ASAP	Near-term (1-5 years)	Tavares	Rehabilitation and Maintenance	Freight	Florida Central Railroad	Needed now to continue rail service. This bridge is also contained in the Tavares Freight Village project. It would be completed within 6 months of the grant. This project is located within an	113 Dora Canal Bridge
Very High High High High High High High	CSX	\$1,550 CFFCP	Near-term (1-5 years)	Central Florida	Capacity Upgrade	Freight	CSX Transportation	Build northern connection at south entrance to CF Industries to create a wye with power switches.	176 Central/CF Industries
Very High High High High High High High High	CSX	\$3,250 CFFCP	Near-term (1-5 years)	Orlando	Capacity Upgrade	Freight	CSX Transportation	Install power switch to Stanton Spur (OUC).	175 Stanton Spur Power Switch
Very High High High High High High High	CSX	\$4,250 CFFCP	Near-term (1-5 years)	Jacksonville	Capacity Upgrade	Freight	CSX Transportation		Jacksonville Amtrak 150 Crossovers
High High Low	CSX	\$5,250 CFFCP	Near-term (1-5 years)	Highland	Capacity Upgrade	Freight	CSX Transportation	Upgrade universal crossover to number 20 universal crossover.	Highland Crossover 149 Upgrade
Very High High High High High Low High High	CSX	\$6,950 CFFCP	Near-term (1-5 years)	Starke	Capacity Upgrade	Freight	CSX Transportation	Build new number 20 universal crossover.	153 Starke Crossovers
Very High High High High High High High High	CSX	\$9,750 CFFCP	Near-term (1-5 years)	Anthony	Capacity Upgrade	Freight	CSX Transportation	Build new 11,400-foot clear passing siding.	158 Anthony Siding
High High Low High	CSX	\$14,400 CFFCP	Near-term (1-5 years)	Crawford	Capacity Upgrade	Freight	CSX Transportation	Upgrade and extend siding to 4.4. Miles second main track with universal crossover SM 13.1.	178 Crawford Siding
Very High High High High High Low High High	CSX	\$15,750 CFFCP	Near-term (1-5 years)	Lakeland	Capacity Upgrade	Freight	CSX Transportation		172 Lakeland Junction Siding
Very High High High High High High High High	CSX	\$16,500 CFFCP	Near-term (1-5 years)	Carters	Capacity Upgrade	Freight	CSX Transportation	Extend Carters Siding at north and south to include Park Spur.	173 Carter Siding
Very High High High High High High High High	CSX	\$17,750 CFFCP	Near-term (1-5 years)	Auburndale	Capacity Upgrade	Freight	CSX Transportation	Extend McDonald Connection with universal crossovers at SX 821.5 and SX 822.6.	177 McDonald Connection
High High High High Low High	CSX, SIS Ven	\$19,100 CFFCP	Near-term (1-5 years)	Vitis	Capacity Upgrade	Freight	CSX Transportation	Extend Vitis Siding north to AR 832.9, upgrade siding, and add universal crossover AR 835.2. Extend Vitis Siding south to AR 837.8 with RH number 20 universal at AR 836.5 to access Yeoman SD. Combination of projects 168 and 169.	168 Vitis North and South
High High High High Low High	CSX	\$19,550 CFFCP	Near-term (1-5 years)	Ocala	Capacity Upgrade	Freight	CSX Transportation	Build second main through Ocala by connecting and upgrading Singletary and Ocala sidings with universal crossover at S 734.5	Ocala Siding and 174 Crossovers
High High High High Low High		\$21,450 CFFCP	Near-term (1-5 years)	Wildwood	Capacity Upgrade	Freight	CSX Transportation		162 Wildwood
Very High High High High High High High	CSX	\$22,150 CFFCP	Near-term (1-5 years)	Richloam	Capacity Upgrade	Freight	CSX Transportation	Build 4.2 miles of second main track with number 20 universal crossover at S 783.6.	171 Richloam Siding
								East Pass Track north approximately 16,000 ft with universal crossover at SP 650.0; Upgrade siding and extend siding to create 5.1 miles second main track with universal crossover at SM 2.5. RH crossover at SM 0.4 and improved connection to SP Line.	
Project Funding Status Coordination Level Significance Shovel Readiness Review Status Heligibility for Federal Grants Design Completeness and Right-of-way and Right-of-way Inclusion in STIP Status	Potential Funding Source(s)	Cost Estimate (\$1,000 of Work Program Dollars) Status	Timeframe	Location	Project Type	Freight or Passenger	Owner or Operator	Description	ID Project Name
Final Prioritization Criteria									

Final Prioritization Criteria	Funding Status Coordination Level Significance Significance Readiness Eligibility for Federal Grants Aceign Completeness and Right-of-way and Right-of-way Inclusion in STIP or TIP		High Med Med Low High Med Low	High High Med Med	High Low Med High Med High Med High	Med High Med Med High Med Low	High Med Med Low High Med High	Low Med High High Med High	Med Low High High Med Med Low Low Low Low Low Low Low
	Project Priorityª		H Ri	High	High	High	High	High	High High
	Potential Funding Source(s)		50% funded by CSX, 50% potentially through the New Jobs	TBD	TIGER Grants, SIS	ARRA Amtrak Grant, SIS	ARRA Congestion Grant	FSTED	TRIP, SIS
	Work Program Status		CSX committed to fund with Jaxport 50/50	TBD	FM 4283651 \$12 M in FY 13	Currently unfunded	428370-1 \$18.375M in 2013 Tentative WP	418211-1 \$23,018 in FY2010	418305-1 \$1,780,830 in 2009, \$319,074 in 2010 Currently
	Cost Estimate (\$1,000 of 2009 Dollars)		000′08\$	\$57,000	\$32,000	\$28,848	\$24,500	\$23,591	\$18,447 \$18,129
	Timeframe		Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years) Near-term
	Location		Jacksonville	Jacksonville	Port Everglades	Miami-Dade County	Clewiston	FDOT District 6	Broward County FDOT Districts
	Project Type		New Line	Station Improvements	Capacity Upgrade	Capital Improvements	New Line	Rehabilitation and Maintenance	Station Improvements Track
	Freight or		Freight	Passenger	Freight	Passenger	Freight	Freight	Passenger Freight
	Owner or Operator		CSX Transportation	JTA	Port Everglades	South Florida Rail Corridor	South Central Florida Express	Florida East Coast Railway	South Florida Rail Corridor Florida East
	Description	economically distressed area, and this project will help preserve the existing industry. This project will also preserve existing ROW/rights for future potential commuter rail.	Build connection Callahan-Gross and upgrade Kingsland SD to establish new route for port access. (Construct Rail Bypass by reactivating abandoned railroad between Gross and Callahan Florida and upgrade Kingsland Subdivision rail and ties. Restoring the reliability and effectiveness of this rail route will improve the CSXI and CSXT's ability to serve the Port of Jacksonville. This route will educe truck traffic, related emissions, and reduce community impacts associated with the growth of the Jacksonville Port.)	Improvements at the Jacksonville Regional Transportation Center to accommodate the return of Amtrak service downtown.	Phase I of this project consist of construction of a new Intermodal Container Transfer facility (ICTF) yard that will facilitate the transfer of containers between rail and ship at Port Everglades.	Construction of two additional tracks (with a center platform) would allow for Amtrak service at the MIC and/or passenger rail extensions to the west or south. (Cost estimate includes platforms, canopies, elevators, and escalators.)	Build 5.8 miles of new rail line along with 2.4 miles of yard to service Southern Gardens as a new customer. Along with a cane elevator to transport cane from western side of Clewiston to U.S. Sugar Mill.	A maintenance and repair project that involves the Port of Miami in District 6.	New parking deck along with pedestrian, bus circulation, shelter, and bike improvements. Note: also see project 270, Deerfield Beach Station Pedestrian Overpass, addition of pedestrian overpass for improved passenger access to Northbound and Southbound Tri Rail platforms and planned parking deck. Upgrade rail section to industry norm.
	ID Project Name		136 Jaxport/Springfield Bypass	Jacksonville Regional 589 Transportation Center	125- Rail Storage Tracks for 1 ICTF Facility-1	Additional Tracks at Miami 205 Intermodal Center	314 Citrus Rail Project	221 Port Lead Rehabilitation	Deerfield Beach Tri Rail 267 Station Improvements 240 Upgrade and Replace Light

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Final Prioritization Criteria	Funding Coordination Level State or Regional Significance Eligibility for Federal Grants Acets Tederal Grants Tederal Grants Tederal Grants Tederal Grants Tederal Grants		High Med Med High High Low High High	High Med Med Low High Low Low	Med High Med High Med High	High High High High	High Med Med High High Low Low
	Project Priority <sup>a</sup>		High	High	High	High	High
	Potential Funding Source(s)		SIS, TRIP	ARRA Congestion Grant, EDO, IRSST, RSTICTF	ARRA Amtrak Grant	Railroad Safety Technology Grant	New Jobs Bill, SIS
	Work Program	unfunded	418741-2 \$13.8M in 2011 00 Tentative WP	420358-1 \$5.248M in FY 00 12	Currently 00 unfunded		420349-1 \$45,962 in 2010 Suggested for \$3.7M in first phase of Jobs 00 Bill
	Cost Estimate (\$1,000 of 2009 Dollars)		\$13,100	\$10,500	\$10,000	\$5,362	\$3,700
	Timeframe	(1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)
	Location	2,4,6	Orange and Lake Counties	Port Everglades	A Line beginning at the Vitis Sub going SE thru Kathleen, Lakeland, Auburndale, Sebring and Okeechobee	Jacksonville	Port of Palm Beach/FEC ROW
	Project Type	Upgrade	Track Upgrade	Capacity Upgrade	Signal Upgrade	Signal Upgrade	Capacity Upgrade
	Freight or Passenger		Freight	Freight	Freight	Freight	Freight
	Owner or Operator	Coast Railway	Florida Central Railroad	Port Everglades		Florida East Coast Railway	Port of Palm Beach
	Description	Eliminate all 112/115-pound 1940 vintage rail from mainline track. Install 135-pound industry standard carbon continuously welded rail.	Production ready continuous weld of track from Plymouth (Orange County) to Eustis (Lake County), approximately 12 miles. Project numbers 107 and 11 are different alternatives for the same project as 68. Number 68 will be funded in the work program.	The project will enable cargo to be moved out of the Port via rail and will provide direct access to the proposed Intermodal Container Transfer Facility (ICTF) and Aggregate Facility at Port Everglades. The project consists of the initial rail spur from the Eller drive Overpass to Southport to serve both the proposed ICTF and the Aggregate Facility. It also includes the storage tracks associated with the Aggregate Facility.	Replacement of antiquated railroad signals (25 30+) years on this Amtrak Line. Most are nearing the Federal Standards of the 30-year mark and are in need of replacement. Also this would take in the S Line from Auburndale east to Lake Alfred, Haines City, and Davenport towards Orlando.	To interface with PTC provide a safe working system.	The project consists of the construction of rail switching track in the Florida East Coast Railroad right-of-way located in Riviera Beach, Florida. The project will improve the railroad switching operation at the Port of Palm Beach District and also response times on Blue Heron Boulevard and 13th Street in Riviera Beach, Florida. The Port's rail operation personnel will build and place the train south of SR 710 on this proposed switching track within Florida East Coast Railroad's right-of-way and adjacent to the Port's property.  Depending on the number of rail cars, the Florida East Coast Railroad should have to hook up only once before proceeding north bound up the east coast of Florida. The vehicular traffic delay impact on Blue
	ID Project Name	Weight Rail	68 Florida Central Railroad	Intermodal Rail Spur and 108 Storage Tacks	A/S Line Amtrak Signal 298 Program	244 New Dispatch System	Port of Palm Beach Railroad 126 Switching Project

	ni noisulənl AIT 10 AITS		Low	Low	Low		Med	Low
	Design Completeness and Right-of-way		High		High			
ritoria	Eligibility for Federal Grants		High		High			Low
Einal Prioritization Criteria	Environmental Review Status		High	High	High		Low	Low
1 Priorit	Shovel Seadiness		High	High	High	Po N	Med	Low
Ë	State or Regional Significance		Med	Med	Med	Med	Med	Med
	Coordination Level		Med	Med	Med	Med	Med	High
	Funding Status		Med	Med	Med	New York	Med	Low
	Project Priorityª		High	High	High	H. A.	Medium- High	Medium- High
	Potential Funding Source(s)		Tiger grants	Railroad Safety Technology Grant	Tiger grants	TRIP, MPO PL., CIGP	FTA Urban Circulator, ARRA Congestion Grant	TRIP
	Work Program Status		Currently	Currently	Currently	Partially funded	Currently	Currently
	Cost Estimate (\$1,000 of 2009 Dollars)		000′£\$	\$2,864	\$1,500	83.50	\$154,630	\$52,000
	Timeframe		Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term	Near-term (1-5 years)	Near-term (1-5 years)
	Location		Ocala	FDOT District 2	Newberry- High Springs	Hillsoborough, Polk, DeSoto, Charlotte, Lee, and Collier	Miami-Dade	Taylor and Madison
	Project Type		Rehabilitation and Maintenance	Signal Upgrade	Rehabilitation and Maintenance	April	New Service	New Line
	Freight or Passenger		Freight	Freight	Freight	Passenoer	Passenger	Freight
	Owner or Operator		Florida Central Railroad	Florida East Coast Railway	Florida Central Railroad	Seminole Gulf Railway or New Passenger Rail Service	CSX Transportation	Georgia and Florida Railway
	Description	Heron Boulevard will be reduced considerably.	Tie and surface 30 miles of track to maintain a marginal 286,000-pound capacity Without this rehabilitation the competitiveness of the FNOR customers will fall into jeopardy and will be forced regardless of the rates to add more trucks to this growing community.	Install new signal system ready for PTC over 5.4 miles of mainline track from Bowden Yard to the Jacksonville Bridge and upgrade crossovers to powered universal turnouts.	Retain 15 miles of rail service to High Springs. One of the largest employers using plastic needs rail service and is struggling in this economy. If the rail service leaves the plant will shut down permanently and the furloughed employees cannot return. This project is in an economically distressed area.	The project will consist of studies to evaluate the feasibility of investing in new passenger rail service in SW Florida, with significant reliance upon connection to Amtrak services from either Tampa (as envisioned in the Florida Inter-City Passenger Rail Vision Plan) or Lakeland, or both, connecting key urban centers in SW Florida including Sarasota, Venice, Punta Gorda, Fort Myers, Bonita Springs and Naples, using the CSX/SGLR and 175 right-of-way. The project would include evaluating the SGLR right-of-way from Arcadia to Naples and its possible purchase from CSX	Phase I - Extension of Tri Rail service 11.2 miles of CSX Corridor west from the Miami Intermodal Center (MIC) along SR 836, ending just west of Florida's Turnpike. Phase I assumes minimal double tracking and basic station amenities.	The Perry rail extension includes approximately 25 miles of new track to be built and roughly 16 miles of existing GFRR (Georgia and Florida Railway) track to be upgraded. In 2008; the Strategic Aggregates Task Force convened as part of an act of the Florida Legislature and the group made one unanimous
	ID Project Name		120 Tie and Surface FNOR Ocala	Track and Signal 241 Improvements from Bowden	Tie and Surface FNOR	Lee Collier Intercity and		Taylor County Rail 306 Extension

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Final Prioritization Criteria	Funding Status Coordination Level State or Regional Significance Meview Status Eligibility for Federal Grants and Right-of-way and Right-of-way Inclusion in Status		Med Low Med Med Low High Low Low	Med Med Med High High Med Low	Med Low High Med Med High Med Low
	Project Priority₃		Medium-	Medium- High	Medium- High
	Potential Funding Source(s)		SIS, Tiger grants, Transportation Enhancements	FTA Urban Circulator Grants	ARRA Amtrak grant
	Work Program Status		Currently 0 unfunded		Currently 2 unfunded
	Cost Estimate (\$1,000 of 2009 Dollars)		006'98\$	000′0ε\$	\$26,582
	Timeframe		Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)
	Location		Railroad Bridge Between Biscayne Bay and Port Boulev ards, Miami-Dade County	Downtown Jacksonville	Deerfield Beach, Deland,
	Project Type		Rehabilitation and Maintenance	New Service	Station Improvements
	Freight or Passenger		Freight 1	Passenger	Passenger
	Owner or Operator		Port of Miami	New Passenger Rail Service	CSX Transportation
	Description	recommendation to the Governor, "provide rail service in Perry." Also, as noted in FDOT's Strategic Aggregate Study, Taylor County is one of only 6 defined regions in the State containing hard aggregate reserves. Upon construction of the rail extension, Perry industry would immediately have economically feasible access to over half of Florida's aggregate market. Florida Governor Charlie Crist's designation of Taylor County as one of Florida's Rural Areas of Critical Economic Concern (RACEC) frames the challenges facing Taylor County as it competes in today's ever changing economic landscape. The rail extension would bring significant economic opportunity to the region.	Engineer, design, permit and construct the rehabilitation tasks on the railroad bascule bridge between Biscayne Bay Boulevard and Port Boulevard to national standards to bring fully functional and efficient rail operations back to the Port of Miami, and construct approximately 1 mile of rail, associated rail switches, as well as two 2,500-foot on port loading tracks. Studies and inspections have identified weakened infrastructure that require attention prior to the railroad bascule bridge becoming fully operational. Revitalization of the bascule bridge and the addition of new on port loading tracks will provide efficient cargohandling capacity at the Port of Miami and decrease overall transportation costs. (Part 2) Upgrade and restore a 6 mile branch off of FEC mainline that originally carried freight to and from the port and passengers to downtown Miami.	Currently, there exists a 5-mile corridor of abandoned rail right-of-way within the heart of Jacksonville. This ROW could be the perfect opportunity to construct a relatively inexpensive rail project serving the core of urban Jacksonville. This possible line would also be connected to the Jacksonville Regional transportation Center as well as the commuter rail network that would eventually connect to the Jacksonville International Airport.	Improvements for ADA-related station structures, platforms, pathways, and state
	ID Project Name		Bascule Bridge/Rail 276 Connection	79 Urban S-Line	Amtrak Station 318 Improvements

	ni noisulənl qıT <sub>10</sub> qıT2		Low	Low	Low	Low
	Design Completeness and Right-of-way		High	Low	Low	Low
riteria	Eligibility for Federal Grants		Low	High	High	Low
Final Prioritization Criteria	Environmental Review Status		High	Low	Low	Low
l Prioriti	Shovel Readiness		Med	Med	Med	Low
Fina	State or Regional Significance		High	Med	Med	Low
	Coordination Level		Low	Low	Low	Low
	gnibnu <sup>7</sup> sutst2		Low	Med	Med	Med
	Project Priority₃		Medium- High	Medium- High	Medium-High	Medium- High
	Potential Funding Source(s)		TRIP, local	ARRA Congestion grant, SIS	TRIP	State Intermodal Grant Program
	Work Program Status		Currently	Currently	Currently	
	Cost Estimate (\$1,000 of 2009 Dollars)		\$19,110	\$13,554	\$12,000	88,000
	Timeframe		Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)
	Location	Delray Beach, Fort Lauderdale, Jacksonville, Kissimmee, Lakeland, Miami, Okeechobee, Orlando, Palatka, Sanford, Sebring, Tampa, West Palm Beach, Winter Park	FDOT Districts 2,4,5,6	Pahokee	South Bay	Off Alico Road in Lee County
	Project Type		Rehabilitation and Maintenance	Capacity Upgrade	Track Upgrade	Capacity Upgrade
	Freight or Passenger		Freight	Freight	Freight	Freight
	Owner or Operator		Florida East Coast Railway	South Central Florida Express	South Central Florida Express	Private Developer and Seminole Gulf Railway
	Description	of good repair where needed for Amtrak stations. Combination of projects 318-332, 334.	Accelerate replacement of failing bolt and clip system and install elastic fasteners on 193 track miles.	Rehab 21 miles of 85-pound rail to 136-pound CWR rail. Including 17 new number 10 turnouts and 25,000 new main track ties. Note: This project is looking to receive eligibility for any funding available. With this track rehabilitation, the potential to attract customers would increase as higher cargo volumes could be moved. This project will occur in an economically depressed area and the potential new traffic could stimulate economic development in this region. This project is estimated to remove 375 trucks a day from the Mining facility.	Rehab 17 miles of 85-pound rail to 136-pound CWR rail. Including 4 new number 10 turnouts and 10,000 new main track ties. Note: This project is looking to receive eligibility for any funding available. With this track rehabilitation, the potential to attract customers would increase as higher cargo volumes could be moved. This project will occur in an economically depressed area and the potential new traffic could stimulate economic development in this region.	A rail intermodal yard in the vicinity of SW Florida International Airport and off Alico Road for transloading and storing petroleum products such as gasoline, diesel fuel, and aviation kerosene type jet fuel (Jet A Fuel) transportated by rail. The project will also include the delivery of jet fuel
	ID Project Name		Repair Bolt/Fastening 238 System	70 Bryant Rail Project	76 Cane Block Project	289 Rail Intermodal Yard

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Final Prioritization Criteria	Funding Status Coordination Level State or Regional Significance Meview Status Federal Grants Federal Grants and Right-of-way and Right-of-way and Status		Med Low High Med Low High Med Low	Med Med Low Med Med Low Low	Med Med High Med	Med	Med Med Med Med Low Med Low	Low Med High Med Med Low Med	Med Low Med Med Low High Low Low
	Project Priorityª		Medium- High	Medium- High	Medium- High	Medium- High	Medium- High	Medium- High	Medium- High
	Potential Funding Source(s)		New Jobs Bill	TRIP, SIS	New Jobs Bill	New Jobs Bill	SIS, FSTED	TBD	TIGER Grants, SIS
	Work Program Status		Suggested for \$7.48M in first phase of Jobs Bill funding	Currently unfunded	Suggested for \$5.65M in first phase of Jobs Bill funding	Suggested for Jobs Bill funding	Currently unfunded	TBD	Currently
	Cost Estimate (\$1,000 of 2009 Dollars)		282'2\$	\$7,523	000′9\$	\$5,213	000′5\$	85,000	000′£\$
	Timeframe		Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)
	Location		FDOT District 2	Broward County	Hookers Point	Sebring to Fort Pierce	Dames Point Marine Terminal	Blount Island Marine Terminal	Lee County
	Project Type		Rehabilitation and Maintenance	New Service	Capacity Upgrade	Track Upgrade	Capacity Upgrade	Capacity Upgrade	Capacity Upgrade
	Freight or Passenger		Freight	Passenger	Freight	Freight	Freight	Freight	Freight
	Owner or Operator		Florida East Coast Railway	South Florida Rail Corridor	Tampa Port Authority	South Central Florida Express	Jacksonville Port Authority	JaxPort	Seminole Gulf Railway
	Description	from the rail yard to the airport fuel farm by pipeline. Project includes site development, environmental assessment, design, and construction.	Rehabilitate critical bridge. Replace ties on both tracks, make steel repairs, paint the entire steel structure, and replace miter joints. Upgrade existing grade crossings.	Reconstruct station to relocate east platform south to match west platform. Upgrade entire station to provide improved facilities such as new canopies and pedestrian features.			Addition of rail switch yard adjacent to existing CSX-rail facility	Add an additional track and switch yard to serve automobile processors on Blount Island Marine Terminal.	Design and construct an intermodal transfer terminal that will facilitate centralized rail car-truck transloading, including both trailer on flat car/container on flat car (TOFC/COFC) and noncontainerized "team track" operations. An intermodal terminal will boost the local economy. The site is located close to the intersection of Hanson Street and Veronica Shoemaker Parkway. Alternative locations are also available which would require site acquisition and development costs, and may require environmental assessments. I
	ID Project Name		Jacksonville Bridge 222 Rehabilitation	Pompano Beach Tri Rail 311 Station Improvements	224 Hooker Point Rail Expansion	69 286 Bridge Upgrade	133 Dames Point Switch Yard	Blount Island Track and 590 Yard Addition	Lee County Intermodal 288 Transfer Terminal

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	Design Completeness and Right-of-way	High	High	High	High	Low
Iteria	Eligibility for Federal Grants	High	High	High	Low	Med
Final Prioritization Criteria	Environmental Review Status	High	High	High	Low	Low
Prioritiz	ləvod2 Readiness	High	High	High	Med	Low
Final	State or Regional Significance	Low	Low	Low	Med	Med
	Coordination Level	Low	Med	Med	Low	Low
	gnibnu <sup>7</sup> sutst2	Med	Med	Med	Med	Med
	Project Priority <sup>a</sup>	Medium- High	Medium- High	Medium- High	Medium- High	Medium
	Potential Funding Source(s)	Tiger grants	Tiger grants	Tiger grants	State Primary Funds (DS) or Funds for Public Transportation Office Projects (DL)	SIS, TRIP, FTA New Starts
	Work Program Status	Currently	Currently	Currently unfunded	Currently unfunded	Currently
	Cost Estimate (\$1,000 of 2009 Dollars)	\$1,255	\$753	\$400	\$250	\$116,000
	Timeframe	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)
	Location	Lake Wales to Frostproof	Orlando	Orlando	Southeast Florida	Collier to Hardee Counties, Collier to Sarasota Counties
	Project Type	Rehabilitation and Maintenance	Rehabilitation and Maintenance	Rehabilitation and Maintenance	Rehabilitation and Maintenance	New Service
	Freight or Passenger	Freight	Freight	Freight	Passenger	Passenger
	Owner or Operator	Florida Central Railroad	Florida Central Railroad	Florida Central Railroad	South Florida Rail Corridor	CSX
	Description	Tie and surface 12.5 miles of a marginal line suffering from the local economy which was thriving on the housing market Lowes Lumber distribution and Ferguson plumbing located at the end of the line because there was railroad service there. That generated many jobs in the rural community that could not be replaced. Accordingly the railroad helps the business stay there and the residents employed.	Tie and Surface a 10-mile line serving the town of Winter Garden. This is the end of the line but has great potential as it is adjacent to the Turnpike and Orange County Expressway with many acres of industrial land. It also handles orange juice, plastics, and fertilizer. It will also preserve a right-of-way for future passenger use.	Tie surface and switch rebuild. This industrial park serves Frito Lay, Winn Dixie Coke Miller Beer and various other warehouses safety and dependability in these close quarters require good track structure. This project is needed to maintain existing service.	Asbestos abatement on rail infrastructure along the South Florida Rail Corridor (SFRC).	Rehabilitate Passenger Rail for 95 miles along the CSX line from Old 41 on the Collier -Lee Co. border to Ona, Hardee Co. connecting with CSX line, currently used for freight to Lakeland. This CSX line, proposed for rehab/upgrade to passenger service, passes thru; Bonita Springs, Fort Myers, Punta Gorda, Arcadia, to Lakeland This line should act as a connector with another proposed project reconnecting passenger service between Collier Co. and Tampa, connecting in Punta Gorda with new 8-mile track from Fort Ogden to North Port [locate depot at mile marker 172 on I 75] thru to, Sarasota, picking up TBARTA rail in Sarasota to Tampa. The project between Collier and Hardee Co. is estimated at \$70 million. The project between Fort Ogden and Sarasota is estimated at \$46 million. All costs include construction of rail, depots, and bridges.
	ID Project Name	121 Frostproof Tie and Surface	117 Winter Garden Line	114 Silver Star Branch Orlando	South Florida Rail Corridor 127 Asbestos Abatement	Passenger Railway in 307 Southwest Florida

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ID Project	Project Name	Description	Owner or Operator	Freight or Passenger	Project Type	Location	Timeframe	Cost Estimate (\$1,000 of 2009 W Dollars)	Work Program Status	Potential Funding Source(s)	Project Priority₃	Funding Status Goordination	Level	ləvof2 seanibe9X	Environmental Review Status	Eligibility for Federal Grants Design Completeness	nn Kight-of-way ni moisulon TTP or TIP
		All land is rail-banked except for 30-foot ROW of three-quarter-mile for purchase somewhere near mile markers 200- 203 on I 75. Land purchase not included in estimate.															
Golden Glades Intermodal 262 Center Improvements	es Intermodal	Provide new 1,000 space parking deck, new intermodal center with bus bays and facilities, new pedestrian bridge from intermodal center to Tri Rail and improved circulation. Includes project 266, Addition of pedestrian overpass to connect Golden Glades Intermodal Center to business park west of CSX tracks.	South Florida Rail Corridor	Passenger	Station Improvements	Miami-Dade County	Near-term (1-5 years)	Ct. \$39,423 un	Currently	TRIP, SIS	Medium	Med Low	w Low	Med	Low	Med Ma	Med Low
Upgrade Medley	Aley stracking	Build second mainline on 4.8-mile segment at southern end of rail servicing key rock mining customers. Install CTC (ready for PTC), improve motion detectors at grade crossing. Construct one new double-track bridge with universal crossover switches. (Pending approval for state funding) Second phase of improvements in the Medley area. Rehabilitate and implement double tracking along the FEC Medley Lead. The work to be performed includes extension of culverts, earthwork (includes clearing, filling and grading), construct and surface 25344 feet of 141-pound track, rehabilitate 9 grade crossings (includes surface and signal), and relocate fiber optic cable.	Elorida East Coast Railway	Freight	Capacity Upgrade	FDOT District 6, Medley area from RR MP 0.00 to MP 4.8 at NW 121 Wav	Near-term (1-5 vears)	\$32.868 um	Currently	SIS	Medium	Med Low	w Med	low	Low	MOT MOT	wo Tow
	ri Rail Station ts	New parking deck along with pedestrian, bus circulation, shelter, and bike improvements.	South Florida Rail Corridor	Passenger	Station Improvements	Broward County	Near-term (1-5 years)		Currently unfunded	TRIP, SIS	Medium			Med			
New Tri Rail Statio 253 Beach International	New Tri Rail Station at Palm Beach International	New Tri Rail station, to be located in the vicinity of Southern Boulevard or Belvedere Road. Depending on station location, the facility may also include parking facilities to serve commuters from the western communities.	South Florida Rail Corridor	Passenger	Station Improvements	Palm Beach County	Near-term (1-5 years)	Ct. \$16,421 un	Currently unfunded	TRIP, FTA Urban Circulator Grant	Medium			Med		Med Me	Med Low
New Tri Rail Station Near 248 Broward/Miami-Dade	Station Near ami-Dade	New Tri Rail station and parking facilities in the vicinity of Ives Dairy Road and Hallandale Beach Road.	South Florida Rail Corridor	Passenger	Station Improvements	Miami-Dade and Broward Counties	Near-term (1-5 years)	Cr. \$16,421 un	Currently unfunded	TRIP, FTA Urban Circulator Grant	Medium	Med Low	w Low	Med	Low	Med Me	Med Low
New Tri Rail S 257 Raton	New Tri Rail Station in Boca Raton	New Tri Rail station near Glades Road, serving the Boca Town Center Mall area. Shuttle bus, pedestrian, and limited parking facilities would be included.	South Florida Rail Corridor	Passenger	Station Improvements	Palm Beach County	Near-term (1-5 years)	Cı. \$16,421 un	Currently unfunded	TRIP, FTA Urban Circulator Grant, SIS	Medium			Med		Med Me	Med Low
Ethanol Terminal / Rail ya expansion with East-West 594 Connecting Loop Mainline Bridge Fastening 239 System	Ethanol Terminal / Rail yard expansion with East-West Connecting Loop Mainline Bridge Fastening System	Ethanol Terminal / Rail yard expansion with East-West Connecting Loop Rehabilitate 3 bridges at mile posts 12.99, 36.64, and 126.06. Engineering and	Tampa Port Authority Florida East Coast Railway	Freight Freight	Capacity Upgrade Rehabilitation and	Hookers Point, Port of Tampa FDOT Districts 2,5	Near-term (1-5 years) Near-term (1-5 years)	\$15,000 TE Cı \$9,090 un	TBD Currently unfunded	TBD TRIP, local	Medium	Med Med Low Low	ed Med w Med	Med		Med Ma Low Hi	Med High High Low
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Criteria	Review Status Eligibility for		Med	Low	Med	, Med	h Med	h Med	h Low	
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	3 guipun j		Med	Low	Med		Low	gh High	High	
	Project Priority <sup>a</sup>		Medium	Medium	Medium	Medium	Low- Medium	Very High	High	<del>,</del>
	Potential Funding Source(s)		TRIP, SIS	TRIP, local	TRIP, SIS	TRIP	CMAQ	ARRA Congestion Grant	CSX	HSIPR - New Tiger Grant Funds, SIS, possible public/private partnership funding for monorail
	Work Program Status		Currently unfunded	Currently	Currently unfunded	Currently unfunded	Currently	236855-1 \$7.74M 2006- 2012	HP	Currently
	Cost Estimate (\$1,000 of 2009 Dollars)	,	\$7,150	\$6,327	\$4,404	\$2,502	\$2,500	298/893	Y/N	
	Timeframe		Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Near-term (1-5 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term
	Location		Palm Beach County	Escambia County	Palm Beach County	Miami-Dade County	Orlando Area	Miami-Dade to Palm Beach	Jacksonville	Orlando to Miami (and MCO to Port
	Project Type	Maintenance	Station Improvements	Rehabilitation and Maintenance	Station Improvements	Station Improvements	Rolling Stock	Rolling Stock	Capacity Upgrade	
	Freight or Passenger		Passenger	Freight	Passenger	Passenger	Freight	Passenger		
	Owner or Operator	4	South Florida Rail Corridor	Alabama and Gulf Coast Railway	South Florida Rail Corridor	South Florida Rail Corridor	Florida Central Railroad	South Florida Rail Corridor	CSX Transportation	New Passenger
	Description	permitting completed 1 year in advance of work.	New parking deck with about 385 spaces, along with pedestrian, bus circulation, shelter, and bike improvements.	Rebuild bridge No. (number 890.0, number 893.7 and number 394.1 672 feet total) at 4M. Repairs to 21 timber Bridges at \$725,000. Upgrade the timber bridges on this route for 286 at a cost of \$1.2M.	Surface parking lot expansion on existing SFRTA ROW, along with pedestrian, bus circulation, shelter, and bike improvements.	Surface parking lot expansion along with pedestrian, bus circulation, shelter, and bike improvements.	Replace two 1950 generation locomotives used for interchange every day with CSX through the metropolitan area of Orlando with two Genset Green Locomotives. Will assist metro Orlando by retaining environmental compliance.	10 new passenger rail cars are sought in the next 5-10 years. 10 locomotives are sought in the next 3-10 years. Combination of mid-term elements of projects 192 and 193.	Upgrade track and signals on joint CSX/FEC interlocking. (Signal and track upgrades within the CSXT/FEC shared facility at Beaver Street top mitigate conflicts, expedite train movements, and improve fluidity. Project would also benefit Amtrak operations when/if service to/from Miami over the FEC were to commence.)	Phase 2 A High-Speed Rail connecting Orlando and Miam. Project may also include a light rail or elevated light rail (monorail) component. Cost for High-Speed Rail element is \$10 billion. Cost for monorail component is \$200 million. As described under project ID numbers 72 and 73, right-of-way is potentially available for light rail/monorail service depending upon the alignment. The monorail option results in a minimal project "footprint" and offers reasonable travel speeds and project cost and could be compatible with existing
	ID Project Name		Delray Beach Tri Rail Station 249 Improvements	246 Florida Upgrade-Bridges	Boynton Beach Tri Rail 251 Station Improvements	Opalocka Tri Rail Station 263 Improvements	75 Green Locomotives	192 New Rolling Stock	189 Beaver Street Interlocking	High-Speed Rail: Orlando to Miami (and Central Florida

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Ð	Project Name	Description	Owner or Operator	Freight or Passenger	Project Type	Location	Timeframe	Cost Estimate (\$1,000 of 2009 Work Program Dollars) Status	m Potential Funding Source(s)	Project Priority <sup>a</sup>	Finding Status Goordination	Level State or Regional Significance	Shovel Readiness Environmental	Review Status Eligibility for	reaeral Grants Design Completeness	ysw-10-112 dis ni noieulonI TIT 20 TITS
		than just a "port to port" connection, the line could provide a sustainable, efficient passenger connection between the Space Coast and the entire Orlando metropolitan area, including heavy tourist populations via light rail and/or additional spurs to the downtown area and attraction lodging. Note: Does not include tourism traffic.														
Br. Gu 269 Do	Broward Boulevard Fixed Guideway-SR 7 to Downtown	Streetcar/BRT in-street between SR 7 and downtown Fort Lauderdale. Project connects existing N/S transit service in the SR 7 and Tri Rail corridors and planned express bus service on I 95 to downtown employment center.	South Florida Regional Transportation Authority	Passenger	New Service	Broward County	Mid-term (6-10 years)	Currently \$321,575 unfunded	FTA Urban Circulator (up to \$25M), New Starts, ARRA Congestion Grant	High	Med High	h Med	Med M	Med High	h Low	Med
Brc 271 Gu	Broward E/W Fixed Guideway-Phase I and II	New E/W fixed guideway operated in curb lanes of Griffin Road. Phase I connects the South Florida Education Center with the existing Fort Lauderdale-Hollywood Airport Station at Dania Beach Tri Rail Station. Phase II connects the Fort Lauderdale-Hollywood International Airport with the existing Fort Lauderdale/Hollywood Airport Station at Dania Beach Tri Rail Station. Combination of project numbers 271 and 272.	South Florida Rail Corridor	Passenger	New Service	Broward County	Mid-term (6-10 years)	Currently \$215,706 unfunded	FTA New Starts, ARRA Congestion Grant	High	Med High	h Med	Med M	Med High	h Low	Med
SR 128 Ce	SR 27/Intermodal Logistics Center Rail Project	The project consists of the construction of a rail track connecting the Hialeah rail yard to the Intermodal Logistics Center in the vicinity of the south end of Lake Okeechobee. The rail could remove truck and rail traffic from the congested east coast corridors to the center of the State. The goal of this project is to move freight off the congested coastal areas.	Port of Palm Beach	Freight	New Line	South Florida	Mid-term (6-10 years)	427031-1 \$350,000 for \$100,000 study in 2010	ARRA Congestion Grant	High	High Med	d Med	Med Lo	Low High	th Low	High
SR 505 Cr	SR 200 (U.S. 301)/Baldwin Crossing	Implement grade crossing improvements at SR 200 (U.S. 301)/Baldwin Crossing 620652-F on the CSX S-line in Duval County.	CSX Transportation CSX	Freight	Grade Separation Track	Duval County	Mid-term (6-10 years)	Currently \$47,000 unfunded	SIS, Other Sources	High	Med High	th High	Med Lo	Low High	h Low	Low
182 Ba	Bainbridge Sub	portion only).  Phase II of this project consists of rail	Transportation	Freight	Upgrade	Tallahassee	(6-10 years)	\$26,500 FIP	CSX	High	High Med	d High	Med H	High Low	v Low	High
125- Ra 2 IC	Rail Storage Tracks for ICTF Facility-2	storage tracks and marshalling yard adjacent to container storage yards and berths to provide near-dock access to rail from Southport, the main container terminal area of Port Everglades.	Port Everglades	Freight	Capacity Upgrade	Port Everglades	Mid-term (6-10 years)	420358-1 \$18,000 \$1.35M in 2011	.1 TIGER Grants, SIS	High	High Low	v Med	High M	Med High	th Med	High
179 Ta	Tampa Connection	Tampa connection to A-Line.	CSX Transportation	Freight	Capacity Upgrade	Tampa	Mid-term (6-10 years)	\$10,500 FIP	CSX	High	High Med	d High	Med H	High Low	v Low	High
335 Sh	Shands Lead	Reconstruct Shands Lead: 3.5 miles track.	CSX Transportation	Freight	Track Upgrade	Brooksville, Florida	Mid-term (6-10 years)		CSX	High				igh Low	v Low	
185 Ha	Havana Siding	Build 10,000-foot siding (Bainbridge SD).	CSX	Freight	Capacity	Havana	Mid-term	\$6,250 FIP	CSX	High	High Med	d High	Med H	High Low	v Low	High
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		Owner or	Freight or				<b>4</b>	Work Program	Potential Funding	Project	Znibni suts noitsnibroc	79el ate or Regional	gnificance lavor sasintass	lsinemnonivi sutsites Weive	gibility for deral Grants	esign Completeness d Right-of-way	ni noisula TIT 10 HI
ID Project Name	Description	Operator Transportation	Passenger	Project Type Upgrade	Location	limeframe (6-10 years)	Dollars)	Status	Source(s)	Prioritya	1S	PT	IS		ъ	тe	
180 Welcome/Edison Siding	Build siding with radio remote control switches and install 2 radio remote control switches to eliminate 10 mph speed restriction at Edison.	CSX Transportation	Freight	Capacity Upgrade	Welcome Road	Mid-term (6-10 years)	\$5,500 F	FIP	CSX	High	High Med	ed High	n Med	High	Low	Low E	High
		CSX Transportation	Freight	Capacity Upgrade	Dyer	Mid-term (6-10 years)		FIP	CSX	High				High			High
164 Hialeah/Iris Connection	Build CSXT-FEC connection known as Iris Connection.	CSX Transportation	Freight	Capacity Upgrade	Hialeah	Mid-term (6-10 years)	\$3,750 F	FIP	CSX	High	High Med		ı Med	High		Low E	High
181 South Fort Meade	Extend siding to 8,000 feet.	CSX Transportation	Freight	Capacity Upgrade	Fort Meade	Mid-term (6-10 years)	\$3,750 F	FIP	CSX	High	High Med		ı Med	High			High
183 Agrock Wye	Build power interlocking to include both legs of the wye and diamond.	CSX Transportation	Freight	Capacity Upgrade	Polk County	Mid-term (6-10 years)	\$3,750 F	FIP	CSX	High	High Med	ed High	n Med	High	Low	Low E	High
139 Bradley Tack/Siding	Extend current siding one-half-mile, with radio remote control switches; plus two additional radio remote control switches and grading work. (Improve capacity, train velocity, and transportation canabilities of Central Florida network.)	CSX Transportation	Frei 9ht	Capacity Unorade	Bradlev	Mid-term (6-10 vears)	83.500 H	d I	XSO	Hish	High Med	ed High	Med	High	I wo I	H wo.I	High
	Increase 20 mph speed to 40 mph.	CSX Transportation	Freight	Capacity Upgrade	Tallahassee	Mid-term (6-10 years)		FIP	CSX	High				High			High
		Florida East		Signal	FDOT Districts	Mid-term		Currently	Railroad Safety	1 ::				;			
243 Grade Crossings	crossings.	Coast Railway	Freight	Upgrade	2,4,5,6	(6-10 years)	\$2,177 u	unfunded	Technology Grant	High	Med Med	ed High	ı High	High	High	High L	Low
St. Petersburg-Wesley 98 Chapel	Bruce B. Downs from Wesley Chapel to USF, CSX corridor area (near Nebraska Avenue) from USF to Tampa CBD, I 275 from Tampa to Westshore, Howard Frankland, Gateway, St. Petersburg CBD.	CSX Transportation	Passenger	New Service	Pinellas, Hillsborough, and Pasco Counties	Mid-term (6-10 years)	C \$4,261,649 u	Currently	FTA grant, State New Starts, ARRA Congestion Money	Medium- High	Med Med	pa Wed	Med	Med	High I	Low L	Low
295 East-West Corridor	Light Rail serving Orange County Convention Center, Orlando International Airport and Lake Nona/Medical City with future extensions to Innovation Way, theUniversity of Central Florida, Osceola NE District and Seminole Way.	New Passenger Rail Service	Passenger	New Service	Orange County Convention Center to Lake Nona/ Medical City	Mid-term (6-10 years)	S2,000,000 v	Currently	FTA Grant, State, New Starts, SIS	Medium- High	Med Hi	High High	Med	Med		Low L	Low
Short-Distance Rail Investments - Downtown 208 Tampa to USF and Airport		New Passenger Rail Service	Passenger	New Service	Hillsborough County	Mid-term (6-10 years)	31,646,690	Currently	FTA, State New Starts, ARRA Congestion Money	Medium- High	Med Med	paq Med	Med	Med	Med I	Low L	Low
Kendall Area Diesel 264 LRT/BRT Hybrid	Transitway in the median of Kendall Drive for both BRT and Diesel LRT vehicles, terminating at Dadeland North. BRT extends west on Kendall Drive, DLRT service proceeds SW on the CSX corridor.	South Florida Rail Corridor	Passenger	New Service	Miami-Dade County	Mid-term (6-10 years)	E \$473,099	Phase I is in WP 422529-1	FTA New Starts	Medium- High	Med Med	ed Low	Med	Low	Med	Med N	Med
Decrease Tri Rail Headways 194 to 15 Minutes Peak	Capital SFRC improvements including new sidings, interlockings, and signal enhancements to increase corridor capacity, ays which allow additional trains at reduced headways.	South Florida Rail Corridor	Passenger	Capital Improvements	Miami-Dade, Broward, and Palm Beach Counties	Mid-term (6-10 years)	s c c ii ii a a	some SFRC capital improvements are included in WP	ARRA Congestion Grant, TRIP	Medium- High	Med Low	w Med	Med	Low	High	Low L	Low

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	Design Completeness and Right-of-way	Low	Low	Low	High	Med	High	Low
iteria	Eligibility for Federal Grants	High	High	Med	High	High	High	High
Final Prioritization Criteria	Environmental Review Status	Low	Med	Med	High	High	High	Low
Prioritiz	Shovel Readiness	Med	Med	Med	High	Med	High	Med
Fina	State or Regional Significance	High	Med	High	Low	Low	Low	Med
	Coordination Level	Low	Med	High	Low	Med	Low	Low
	gnibnu <sup>7</sup> sutst2	Low	Med	Med	Med	Med	Med	Med
	Project Priority <sup>2</sup>	Medium- High	Medium- High	Medium- High	Medium- High	Medium- High	Medium- High	Medium- High
	Potential Funding Source(s)	SIS, Other Sources	ARRA Congestion Grant, SIS	SIS, Other Sources	Railroad Safety Technology Grant	Tiger grants	Railroad Safety Technology Grant	SIS, TRIP
	Work Program Status	Currently unfunded	Currently	Currently unfunded	Currently unfunded	Currently		Suggested \$7.3M for repairs to Caloosahatchee Br and Alico- Colonial in Jobs Bill funding
	Cost Estimate (\$1,000 of 2009 Dollars)	\$45,000	\$32,891	\$20,000	\$17,688	\$15,000	\$7,500	\$7,300
	Timeframe	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)
	Location	Putnam County	Miami-Dade County	Bradford County	FDOT Districts 2,4,5,6	Lake Wales to Frostproof	Rail corridor from Bartow Airbase, Winter Haven, Lake Wales, and Frostproof	Lee County
	Project Type	Grade Separation	Capital Improvements	Grade Separation	Signal Upgrade	Rehabilitation and Maintenance	Signal Upgrade	Track Upgrade
	Freight or Passenger	Freight	Passenger	Freight	Freight	Freight	Freight	Freight
	Owner or Operator	CSX Transportation	South Florida Rail Corridor		Florida East Coast Railway		CSX Transportation	Seminole Gulf Railway
	Description	Implement grade crossing improvements at SR 15 (Reid Street)/Palatka Crossing 620968-R on the CSX A-line and Amtrak line in Putnam County.	Construct new double track and new bridge across the Miami River. Project limits from north of MIC to south of Hialeah Market Station.	Implement grade crossing improvements at SE 144th Street (Mullins Grade)/Starke Crossing 627514-R on the CSX S-line in Bradford County.	Install new signal system (CTC) ready for PTC from Bowden Yard to Hialeah.	This track is a freight line and travels at approximately 10-20 mph to deliver goods to Frostproof. Increase of train speed (which has been the Florida Midlands goal) would require track rehabilitation.	With the increase of freight delivery these rail corridors are in need of replacement/upgrade of railroad signals which are fast approaching the (25 30+) years old Federal limitations.	The Phase 1 project will renew sections of the SGLR railroad Bridge that spans the Caloosahatchee River. The project will replace fully depreciated sections and make structural improvements, replace fully depreciated pilings and other structural members, paint main drawbridge span. The project will also upgrade SGLR track structure between Colonial Boulevard and Hanson Street and between Cranford Street and Lee County line, a total distance of 14 miles. Improvements to this section includes installing new 115-pound continuous welded rail, long-life crossties and related tie plates, track fastening systems and installing new ballast. The project also includes rehabilitating SGLR track structure between Alico Road and Colonial Boulevard, a distance of 8 miles. Improvements to this section includes installing 100-pound rail that will be removed to install 115-pound mentioned previously, installing long-life crossties and related tie plates, associated materials and ballast. Also in coordination with Charlotte and DeSoto County, expand the
	ID Project Name	SR 15 (Reid Street)/Palatka 503 Crossing	Southern SFRC Mainline 201 Double Track	SE 144th Street (Mullins 500 Grade)/Starke Crossing	Install Signal Control Point 242 Upgrades	Florida Midland- Rail Track 299 Improvements	Florida Midland-Railroad 300 Crossing Signal Upgrade	Seminole Gulf Infrastructure 287 Improvements - Phase I
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	Federal Grants Design Completeness and Right-of-way		th Low	th Low	th High		th Low	th Low	th Low
	Review Status Eligibility for		ed High	High High	High High	High High	ed High	w High	ed High w High
	Readiness Environmental		Med Med	Med Hi	High Hi	High Hi	Low Med	Med Low	Med Med Med Low
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	Coordination Level		Med N	Med N	Low L	Low L	Med E	Low L	Low L
	Enibnu <sup>T</sup> Status		Med	Med	Med I	Med I	Low	Med I	Med I
	Project Priority₃		Medium- High	Medium- High	Medium- High	Medium- High	Medium	Medium	Medium
	Potential Funding Source(s)		FTA Urban Circulator/Intermodal grant, SIS	New Jobs Bill	ARRA Amtrak Grant	ARRA Congestion Grant	TBD	New Jobs Bill	ARRA Congestion Grant, New Jobs Bill, SIS ARRA Congestion Grant
	Work Program Status		Currently 1 unfunded	Suggested for \$5.8M in Jobs D Bill funding	Currently	Currently ) unfunded		Suggested \$24M for a first phase in Jobs 0 Bill	Alternate project suggestion for first phase of Jobs Bill Currently unfunded
	Cost Estimate (\$1,000 of 2009 Dollars)		\$7,211	009′£\$	\$1,500	\$1,000	\$1,297,400	\$294,800	\$48,240
	Timeframe		Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years) Mid-term (6-10 years)
	Location		Palm Beach County	Big Bend/Port Redwing Terminals and Port Redwing Terminal to CSX mainline	A-Line from Tampa to Plant City	S-Line from Vitis Junction north to Lacoochee	Polk County	District 6	U.S. 41, south of SR 676, Palm River SR 50, just east of 301,
	Project Type		Capital Improvements	Capacity Upgrade	Signal Upgrade	Signal Upgrade	Capacity Upgrade	Capacity Upgrade	Grade Separation Grade Separation
	Freight or Passenger		Passenger	Freight	Freight	Freight	Freight	Freight	Freight
	Owner or Operator		South Florida Rail Corridor	Tampa Port Authority	CSX Transportation	CSX Transportation	CSX Transportation	Florida East Coast Railway	CSX Transportation CSX Transportation
	Description	improvements to include replacement of Shell Bridge in Charlotte County and installation of 42 more miles of 115-pound rail in these two counties.	Tri Rail Layover Facility and Light Maintenance in Northern Palm Beach County to serve expanded service and longer train needs. Improves efficient operation and on-time performance.	Add drop-off and pick-up tracks near CSX mainline, and add run-around track on the CSX mainline. Construct a connecting track from the CSX mainline to the Port Redwing site.	This Line is used for freight and passenger (Amtrak) and has a high potential for commuter and intercity. Upgrade/replace antiquated highway railroad crossing signals that are 35 plus years old. Train traffic is expected to increase. This is a direct route between Tampa and the CSX ILC.	This Line is currently used for freight but has a potential for commuter and intercity. Train traffic is expected to increase due to moving trains off of the A-Line. This is the main route to the CSX ILC. Upgrade/replace antiquated highway railroad crossing signals that are 35 plus years old.	Relocation of freight lines along Lakeland to accommodate more traffic and alleviate impact on surrounding ommunity.	Relocating the Hialeah Yard to the Medley "area."	Build bridge over railroad track. U.S. 41 is a major north/south route with a high percentage of truck traffic. Crossing is at the edge of a major rail yard with high amount of switching operations. Because of the all the switching operations and the location of the switches (just west of the roadway) the traffic is impacted by most of their operations. Frequently during peak periods this results in a 2 mile traffic backup.  Build bridge over railroad. SR 50 is a major east/west route that crosses the State.
	ID Project Name		New Tri Rail Layover Facility in Northern Palm 260 Beach	Port Redwing Rail 229 Improvements	Roadway Crossing Signal 119 Upgrade	Railroad Crossing Signal	Lakeland Freight Rail Relocation 604	Relocation Hialeah Yard to 236 Medley	U.S. 41/Rockport, NGCN: 106 624802A SR 50 Ridge Manor, NGCN: 93 625307P

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Ī	Inclusion in TIP or TIP	1	Med	Med	Low	High	High	High	Low	Low
	Design Completeness and Right-of-way		Low	Low	Low	Med	Med	Med	Low	Low
riteria	Eligibility for Federal Grants		High	High	Low	Med	Med	Med	Low	High
Final Prioritization Criteria	Environmental Review Status		Low	Low	Low	Med	Med	Med	High	Low
Prioriti	Shovel Readiness		Med	Med	Low	Med	High	Med	Med	Med
Fina	State or Regional Significance		High	High	Med	Med	Med	Med	Low	Low
	Coordination Level		Med	Med	Low	Med	Med	Med	Med	Low
	Finiband Status		Med	Med	Med	Med	Med	Med	Low	Med
	Project Priority3		Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium
	Potential Funding Source(s)		TBD	TBD	SIS, FSTED	TBD	TBD	TBD	TRIP	ARRA Congestion Grant
	Work Program Status		TBD	TBD	Currently unfunded	TBD	TBD	TBD	Currently unfunded	Currently
	Cost Estimate (\$1,000 of 2009 Dollars)		\$22,000	\$18,000	\$10,000	\$8,100	008′5\$	\$5,300	\$5,043	\$3,484
	Timeframe		Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)
	Location	Hernando County	1. Causeway Blvd. at CSX Railroad Tracks east of US 41 Off Port of Tampa	US 41 at CSX Railroad Tracks south of Causeway Blvd Off Port of Tampa	Approx. 1 mile north of BIMT	Port Redwig, Port of Tampa	Hookers Point, Port of Tampa	Pendola Point & Port Sutton, Port of Tampa	FDOT District 5	Bowden Yard, Jacksonville
	Project Type		Grade Separation	Grade Separation	Capacity Upgrade	New Service	New Service	Rehabilitation and Maintenance	Capacity Upgrade	Capacity Upgrade
	Freight or Passenger		Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight
	Owner or Operator	4	Tampa Port Authority	Tampa Port Authority	Jacksonville Port Authority	Tampa Port Authority	Tampa Port Authority	Tampa Port Authority	Florida East Coast Railway	Florida East Coast Railway
	Description	Railroad has 24 plus train movements per day. During emergency on I 4 this route acts as reliever for traffic going from I 75 to Orlando area.	Projected traffic volumes on Causeway Blvd. during the peak hours will be severely impacted by train traffic at the crossing. A significant volume of Port truck trips will be delayed. Causeway Blvd. is an important "gateway" corridor between I-75 and Port facilities.	US 41 is a critical corridor providing access to and between Port terminals from Big Bend to Inner Harbor. As traffic volumes (Port and background) increase over the next 10 years, the delays to travel along the US 41 corridor caused by trains at this atgrade crossing will significantly reduce the access provided by US 41 to the Port terminals	An addition of a switchyard to improve traffic (container, automobile, heavy-lift, etc.) to and from Blount Island.	10,000 ft of Mainline Rail construction & 2,500 ft. extension to existing siding with cross-over track to improve rail access and US 41 traffic movement	Rail extension to South Hookers Point	Rail access improvements	Relocate North Pineda turnout north to MP 178.8 and construct two additional miles of track.	Relocate the ingress/egress point for the Bowden Yard approximately 420 feet to the north of the existing point along U.S. 1 near Gordon Street. The new configuration should maximize the ease of circulation and cargo transfers and reduce the potential for truck-train accidents. A reconfigured circulation pattern will keep trucks on the north and west boundaries of the yard and off of U.S. 1. Move crossovers and extend the lead track so that traffic in the main yard does not get congested. Project will expand the capacity of the Bowden Intermodal Facility and improve
	Project Name		Crossing: Causeway Blvd. at CSX Railroad Tracks east of US 41	Crossing: US 41 at CSX Railroad Tracks south of Causeway Blvd	Blount Island-North JAXPORT Switchyard	10,000 ft of Mainline Rail construction & 2,500 ft. extension to existing siding with cross-over track to improve rail access and US 41 traffic movement	Rail extension to South Hookers Point	Rail access improvements		
	Э		602	603	135	601	595	599	220	235

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	Design Completeness and Right-of-way		Med	Med Med	Med	Med	Med	Low	Low	Low	High	Med
riteria	Eligibility for Federal Grants		Med	Med Med	Med	Med	Low	Med	Med	Med	Med	High
Final Prioritization Criteria	Environmental Review Status		Low	Med Med	Med	Med	Low	Low	Low	Low	High	Med
Prioriti	Shovel Seadiness		Med	Med Med	Med	Med	Low	Low	Low	Low	High	Med
Final	State or Regional Significance		Low	Med Med	Med	Med	Low	Low	Low	Low	Med	Мед
	Coordination Level		Low	Med Med	Med	Med	Low	Low	Low	Low	High	High
	Bnibnu <sup>T</sup> sufaft		Med	Med Med	Med	Med	Med	Med	Med	Med	High	High
	Project Priority <sup>a</sup>		Medium	Medium Medium	Medium	Medium	Low- Medium	Low- Medium	Low- Medium	Low- Medium	Very High	High
	Potential Funding Source(s)		TRIP, SIS	TBD TBD	TBD	TBD	TRIP, local	TRIP, SIS	FTA Urban Circulator grant, SIS	TRIP, SIS	ARRA Congestion Grant	HSIPR - New Tiger Grant Funds, SIS
	Work Program Status	Altrovan		TBD	TB	TBD	Currently unfunded		Currently			408427-2 \$3M in 2010, \$1.5M annually 2011- 2014
	Cost Estimate (\$1,000 of 2009 Dollars)		\$2,885	\$2,000	\$1,700	\$1,100	N/A	\$21,635	\$16,587	\$11,523	\$63,316	93,500,000
	Timeframe	Mid bom	(6-10 years) Mid-term	(6-10 years) Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-term (6-10 years)	Mid-to- long (11-20 yrs)	Mid-to- long (11-20 yrs)
	Location	Dolm Roach	County Hookers Point,	Port of Tampa Hookers Point, Port of Tampa	Hookers Point, Port of Tampa	Hookers Point, Port of Tampa	Escambia	Palm Beach County	Palm Beach County	Palm Beach County	Miami-Dade to Palm Beach	Miami-Dade, Broward, Palm Beach, From Pompano Beach to West Palm Beach, From Miami- Dade County to Pompano Beach, Miami- Dade County, Palm Beach
	Project Type	Chation	Improvements Capacity	Upgrade Capacity Upgrade	Capacity Upgrade	Rehabilitation and Maintenance	Rehabilitation and Maintenance	Station Improvements	Station Improvements	Station Improvements	Rolling Stock	
	Freight or Passenger		Passenger	Freight Freight	Freight	Freight	Freight	Passenger	Passenger	Passenger	Passenger	Passenger
	Owner or Operator	Courth Elowida	Rail Corridor Tampa Port	Authority Tampa Port Authority	Tampa Port Authority	Tampa Port Authority	Alabama and Gulf Cost Railway	South Florida Rail Corridor	South Florida Rail Corridor	South Florida Rail Corridor	South Florida Rail Corridor	South Florida Commuter Rail
	Description	the connectivity of the FEC with CSX and NS. The project will improve throughput capacity and reduce the number of trucks that backup onto Phillips Highway.  Combination of projects 217 and 235.  Surface parking lot expansion along with prodoctions but of projects and polytoms and	petestrant, ous circulation, sitelier, and bike improvements.  Additional railcar storage capacity near	scrap metal terminals Additional rail storage capacity near existing CF industries terminal	Additional railcar storage capacity near Cargill plant	Railroad crossing replacements/improvements to multiple locations on Hookers Point	Rehabilitate 43.5 miles of Main Line in Florida and Rehabilitate 4 yard tracks in Pensacola, Florida.	Expanded parking along with pedestrian, bus circulation, shelter, and bike improvements.	Construction of a new intermodal facility, at either the existing Tri Rail station or proposed new Boca Raton station near Glades Road.	New parking deck with over 500 spaces, along with pedestrian, bus circulation, shelter, and bike improvements.	16 new passenger rail cars and 6 locomotives are sought in 10-25 years. Combination of mid- to long-term elements of projects 192 and 193.	Commuter rail between Jupiter and downtown Miami in a shared freight (Florida East Coast Railway) corridor. Approximately 85-100 miles of rail corridor, 60 stations, 200+ grade crossings. Study is in the alternatives analysis phase to define a locally preferred system alternative in Spring 2010. Project is Federalized. Next phase is to develop a Draft EIS for one or more proposed actions in the corridor. Finance plan will be developed and vetted with public and local governments. New passenger rail service on the FEC Corridor, from the
	Project Name	La La Worth Tri Pail Chation		terminals Additional rail storage capacity near existing CF industries terminal		Railroad crossing replacements/improvements to multiple locations on Hookers Point	5 Florida Upgrade			Boca Raton Tri Rail Station Jinprovements	Replacement and New Locomotives	
	Ð		254	596	598	009	245	256	259	255	193	95

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Final Prioritization Criteria	Funding Status Coordination Level State or Regional State or Regional State or Regional State Readiness Eligibility for Federal Grants Acetimes and Right-of-way and Right-of-way Inclusion in STIP or TIP		Med Med Med Med Med Low Low	Med Med Med Med High Med Low Med Med Med Low High Low Low
	Project Priorityª		Medium- High	Medium- High Medium- High
	Potential Funding Source(s)		ARRA Congestion Grant	TRIP, FTA New Starts FTA New Starts, ARRA Congestion
	Work Program Status		Currently 1 unfunded	Currently 0 unfunded Currently 9 unfunded
	Cost Estimate (\$1,000 of 2009 Dollars)		\$1,260,241	\$622,000
	Timeframe		Mid-to- long (11-20 yrs)	Mid-to- long (11-20 yrs) Mid-to- long
		Lucie	Northern and Central Pinellas County	NE Florida Region Miami-Dade
	Project Type		New Service	New Service New Service
	Freight or Passenger		Passenger	Passenger
	Owner or Operator		CSX Transportation	New Passenger Rail Service CSX Transportation
	Description	Pompano Crossover north to downtown West Palm Beach. New Passenger rail service from Miami-Dade (near 71st) using FEC into Broward County, terminating at SFRC/Tri Rail Pompano Station. Provides system interconnection between FEC and SFRC/Tris Rail Pompano Station. Provides system interconnection between FEC and SFRC/Iris to Government Rail service to downtown Miami using FEC from 72nd SFRC/Iris to Government Center. New passenger rail service utilizing the FEC Spur/Ludlam Trail corridor, connecting the Miami Intermodal Center (MIC) to Dadeland North. Extension of Tri Rail service from West Palm Beach to Jupiter, including construction of a connection between the SFRC and FEC Railway, use of the FEC corridor for approximately 14 miles, and construction of maintenance and layover facility. Passenger Rail Station-Town Center Station.	CSX corridor with following legs: from Clearwater CBD to Ulmerton area, along Ulmerton area from CSX to Gateway; and from Largo (South of Ulmerton) to St. Petersburg CBD. Major activity centers including major employment centers are proposed to be connected by this service. Combination of projects 83 and 84. Duplicated by projects 312, 129, 294 and 309.	The Jacksonville Transportation Authority has just completed a Feasibility Study for commuter rail in northeast Florida. The study identified three main lines. One line (north corridor) runs from Downtown Jacksonville north to Yulee in Nassau County. The second line round from Downtown Jacksonville to St. Augustine in St. Johns County. The third line runs from Downtown Jacksonville to Green Cove Springs in Clay County. The total three corridor system is 91 miles. Capital costs were estimated at \$622 million, not including any ROW costs. The long term plans call for extensions to Baker, Putham, and Flagler counties. Projects 71 and 283 are duplicates/alternatives for 78.  Extension of Tri Rail service 11.2 miles of CSX Corridor west from the Miami
	ID Project Name		CSX Corridor: Clearwater- Gateway, Largo-St. 83 Petersburg CBD	78 Jacksonville Commuter Rail CSX-Tri Rail Dolphin 204 Extension Phase II

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	Design Completeness and Kight-of-way		Low	Low	Low	Low	Low	TBD
riteria	Eligibility for Federal Grants		High	High	High	High	High	TBD
Final Prioritization Criteria	Environmental Review Status		Low	Low	Low	Low	Low	TBD
1 Prioriti	Shovel Readiness		Med	Med	Med	Med	Med	TBD
Fina	State or Regional Significance		Med	Med	High	High	High	TBD
	Coordination Level		Med	Med	Low	Low	Low	TBD
	Funding Status		Med	Med	Low	Low	Low	TBD
	Project Priority3		Medium- High	Medium- High	Medium- High	Medium- High	Medium- High	Medium- High
	Potential Funding Source(s)	Grant	SIS, State Primary Funds (DS), or Public Transportation Office Funds	ARRA Congestion Grant, New Jobs Bill or Amtrak Grants	SIS, Other Sources	SIS, Other Sources	SIS, Other Sources	SIS, TRIP
	Work Program Status		Currently	Alternate project suggestion for first phase of Jobs Bill funding	Currently unfunded	Currently unfunded	Currently unfunded	
	Cost Estimate (\$1,000 of 2009 Dollars)		\$240,000	000′06\$	000′09\$	\$50,000	\$50,000	\$50,000
	Timeframe	(11-20 yrs)	Mid-to- long (11-20 yrs)	Mid-to- long (11-20 yrs)	Mid-to- long (11-20 yrs)	Mid-to- long (11-20 yrs)	Mid-to- long (11-20 yrs)	Mid-to-long (11-20 yrs)
	Location		Broward Boulevard to Palm Beach County Line	U.S. 41/50th Street south of 14, Tampa	Nassau County	Clay County	Clay County	Lee County
	Project Type		Grade Separation		Grade Separation	Grade Separation	Grade Separation	Track Upgrade
	Freight or Passenger		Passenger				Freight	Freight
	Owner or Operator		South Florida Rail Corridor	CSX Transportation	CSX Transportation	CSX Transportation	CSX Transportation	Seminole Gulf Railway
	Description	Intermodal Center (MIC) along SR 836, ending just west of Florida's Turnpike, Phase II provides upgraded stations and additional double tracking necessary to implement reduced headways.	Grade separation improvements at several crossings along the South Florida Rail Corridor (SFRC) between Broward Boulevard and the Palm Beach County Line.	Build bridge over railroad tracks. U.S. 41 is a major north/south route with a high percentage of truck traffic. Railroad has 3 tracks, 2 tracks are used for switching operations. Mainline track carries Amtrak. This line has a high potential for commuter rail and/or Inter City Rail service.	Implement grade crossing improvements at SR 200 (A1A)/Yulee Crossing 620822-X on the CSX U.S. 17 N main line in Nassau County.	Implement grade crossing improvements at CR 28 (Wells Road)/Orange Park Crossing 620901-J on the CSX A-line and Amtrak line in Clay County.	Implement grade crossing improvements at SR 224 (Kingsley Avenue)/Orange Park Crossing 620903-X on the CSX A-line and Amtrak line in Clay County.	Phase 2 is a project to continue upgrading and expanding the rail infrastructure in Lee County by appropriate investments in track maintenance and capacity upgrades, track and crossing signals and railroad crossings in addition to building additional tracks to connect the railroad to key markets in Manatee, Glades, Hendry, Charlotte, Collier and Lee. Furthermore this project will look into investing in new rail technology such as doublestacking, rail cars, etc., and expanding rail capacity through double tracking, passing sidings etc., which could be needed in response to the proposed Winter Haven Intermodal Logistics Center. Proposed Phase 1 and 2 improvements will facilitate in the future investment of a permanent Amtrak services connecting Lakeland, Arcadia, Punta Gorda, Fort Myers, Bonita Springs and Naples. It may also result in the investment of intercity rail services connecting Tampa and Bradenton to all
	ID Project Name		SFRC Rail/Arterial Grade 130 Separations	U.S. 41/50th Street, NGCN: 100 624368C	SR 200 (A1A)/Yulee 504 Crossing	CR 28 (Wells Road)/Orange 501 Park Crossing	SR 224 (Kingsley Avenue)/Orange Park 502 Crossing	Seminole Gulf Infrastructure 291 Improvements -Phase 2

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	Design Completeness and Right-of-way		Low	Low	Low	Low	Low
iteria	Eligibility for Federal Grants		Med	Med	High	High	Med
Final Prioritization Criteria	Environmental Review Status		Low	Low	Low	Low	Low
Prioritiz	Shovel Seadiness		Med	Med	Wed	Med	Low
Fina	State or Regional Significance		High	High	Wed	Med	Med
	Coordination Level		Low	Low	Low	Low	Low
	Finiband Status		Low	Low	Low	Low	Med
	Project Priority <sup>a</sup>		Medium	Medium	Medium	Medium	Medium
	Potential Funding Source(s)		ARRA/ Congestion Grant	ARRA/ Congestion Grant	ARRA Congestion Grant	ARRA Congestion Grant	Tiger grants, TRIP
	Work Program		Currently unfunded	Currently unfunded	Currently	Currently unfunded	Currently
	Cost Estimate (\$1,000 of 2009 Dollars)		TBD	TBD	\$400,000	\$55,000	000'02\$
	Timeframe		Mid-to- long (11-20 yrs)	Mid-to- long (11-20 yrs)	Mid-to- long (11-20 vrs)	Mid-to- long (11-20 yrs)	Mid-to- long (11-20 yrs)
	Location		District 5	District 5	NW Miami- Dade to South Bav	SR 60, W of Lake Wales	Cape Canaveral Air Force Station
	Project Type		Grade Separation	Grade Separation	New Line	Grade Separation	New Line
	Freight or Passenger		Freight	Freight	Freight	Freight	Freight
	Owner or Operator		TBD	TBD	New Freight Rail Service	CSX Transportation	Port Canaveral
	Description	the urban centers in SW Florida including Sarasota, Venice, Punta Gorda, Fort Myers, Bonita Springs and Naples as described in the Florida Inter City Passenger Rail "Vision Plan".	Implement grade crossing improvements at West Granada Avenue (SR 40) Crossing 272865E.	Implement grade crossing improvements at West Colonial Drive (SR 50) Crossing 622181A.	Feasibility study for this study completed. Given the inability of key experts to eliminate alternatives or select the best alternative based on the analyses completed to date, a more microscopic evaluation of feasibility is recommended. A more technically detailed evaluation should be undertaken to determine the feasibility of a rail corridor along U.S. 27 based on the key considerations identified as part of Phase 1. Subsequent feasibility analysis should include an evaluation of the following: 1) current and future freight and passenger service demand; 2) Impacts upon the roadway network due to the new rail corridor; 3) Right-of-way needs; 4) Community, social, physical, and natural impacts; 5) Environmental impacts and compliance with CERP; 6) Order of magnitude costs, including construction, maintenance, and operating costs; and 7) Funding options.	Due to increased rail traffic flowing to the A/S Line and the increased roadway traffic volume anticipated from the Winter Haven ILC to an already high-volume roadway, a Highway Overpass will need to be assessed.	An extension/expansion of an existing rail line spur that currently terminates approximately 6 miles north of Port Canaveral. The proposed extension/expansion connects to the main FEC line on the mainland via existing spurs and a rail bridge that serve both Kennedy Space Center and the USAF CCAFS. The project has been proposed in the past and the USAF was not in support due to security concerns. That was before 9/11 and the post 9/11 seaport security
	Project Name		West Granada Avenue (SR 40) Crossing	West Colonial Drive (SR 50) Crossing	South Florida U.S. 27 Rail		FEC to Port Canaveral
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	Federal Grants Design Completeness and Right-of-way		d Low		d Low			d Low	d Low	d Low			d Low	
Final Prioritization Criteria	Review Status Eligibility for		w Med	w High	w Med	w Med	w Med	w Med	w Med	w Med			w Med	w Med
oritizatio	Readiness Environmental		Low Low	Med Low	Med Low	Med Low		Med Low	Med Low	Med Low	Med Low		Med Low	Med Low
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	Project Priority²		Medium	Medium	Medium		Medium	Medium	Medium	Medium			Medium	Medium
	Potential Funding Source(s)		ARRA Congestion Grant	ARRA Congestion Grant	ARRA Congestion Grant	ARRA Congestion Grant	ARRA Congestion Grant	ARRA Congestion Grant	ARRA Congestion Grant	ARRA Congestion Grant	ARRA Congestion Grant	ARRA Congestion Grant	ARRA Congestion Grant	ARRA Congestion Grant
	Work Program Status		Currently unfunded	Currently unfunded	Currently unfunded	Currently unfunded	Currently unfunded	Currently unfunded	Currently unfunded	Currently unfunded	Currently unfunded	Currently unfunded	Currently unfunded	Currently unfunded
	Cost Estimate (\$1,000 of 2009 Dollars)		\$45,000	\$40,000	000′0£\$	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$23,900	\$22,953	\$19,856
	Timeframe		Mid-to- long (11-20 yrs)	Mid-to- long (11-20 yrs)	Mid-to- long (11-20 yrs)	Mid-to- long (11-20 yrs)	Mid-to- long (11-20 yrs)	Mid-to- long (11-20 yrs)	Mid-to- long (11-20 yrs)	Mid-to- long (11-20 yrs)	Mid-to- long (11-20 yrs)	Mid-to- long (11-20 yrs)	Mid-to- long (11-20 yrs)	Mid-to- long (11-20 yrs)
	Location		District 3	Crossing number 624525 located at the Nichols Rail Switching Yard	District 4	District 4	District 4	District 4	District 4	District 4	District 4	District 4	District 4	District 4
	Project Type		Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation
	Freight or Passenger		Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight
	Owner or Operator		CSX	CSX Transportation	FEC	CSX	CSX	CSX	CSX	CSX	CSX	CSX	CSX	CSX
	Description	environment is much more secure and it would not be difficult to secure a rail corridor between Port Canaveral and the FEC mainline via KSC and the CCAFS. This situation is similar to the California situation with rail lines running through Vandenberg Air Force Station, except the rail utilization at CCAFS would NOT include passengers. Note: Anticipated impacts are likely to change dependent on the cargo volume, there is a potential for higher volume.	Implement grade crossing improvements at Nine Mile Road (SR 10) Crossing 339696K.	Based on existing roadway traffic volume and current rail traffic volume, both of which are expected to increase in the future, this location will meet the requirements of an overpass instead of atgrade crossing.	Implement grade crossing improvements at Indiantown Road (SR 706) Crossing 272377B.	Implement grade crossing improvements at Okeechobee Boulevard (SR 704) Crossing 628126V.	Implement grade crossing improvements at Forest Hill Boulevard (SR 882) Crossing 628139W.	Implement grade crossing improvements at Atlantic Avenue (SR 806) Crossing 628155F.	Implement grade crossing improvements at SE Yamato Road (SR 794) Crossing 628163X.	Implement grade crossing improvements at Commercial Boulevard (SR 870) Crossing 628186E.	Implement grade crossing improvements at Hollywood Boulevard (SR 820) Crossing 628281A.	Implement grade crossing improvements at NW 36th Street/Sample Road (SR 834) Crossing 628168G.	Implement grade crossing improvements at NW 62nd/Cypress C Crossing 628183J.	Implement grade crossing improvements at Copans Road Crossing 628169N.
	ID Project Name		Nine Mile Road (SR 10) 515 Crossing	297 SR 60, W of Mulberry	Indiantown Road (SR 706) 517 Crossing	Okeechobee Boulevard (SR 538 704) Crossing	Forest Hill Boulevard (SR 540 882) Crossing	Atlantic Avenue (SR 806) 541 Crossing	SE Yamato Road (SR 794) 543 Crossing	Commercial Boulevard (SR 550 870) Crossing	Hollywood Boulevard (SR 554 820) Crossing	NW 36th Street/Sample 546 Road (SR 834) Crossing	NW 62nd/Cypress C 549 Crossing	547 Copans Road Crossing

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Final Prioritization Criteria	Significance Shovel Readiness Review Status Federal Grants and Right-of-way Arclusion in STIP or TIP	h Med Low Med Low Lo	Med Low High Low	Med Low High Low	w Med Low High Low Low	Low	w Low Low Med Low Low	Med Low High Low	
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	ng Project Priorityª		Low- Medium			Low- Medium	Low- Medium		Medium-
	Potential Funding Source(s)	ARRA Congestion Grant	ARRA Congestion Grant	ARRA Congestion Grant	ARRA Congestion Grant	Transportation Enhancements	TRIP, SIS	ARRA Congestion Grant	ARRA Congestion
	Work Program Status	Curr		Currently		Currently unfunded	Currently unfunded		Currently
	Cost Estimate (\$1,000 of 2009 Dollars)	\$18,298	098'06\$	000′09\$	\$37,520	000′0£\$	020′6\$	\$3,740,548	
	Timeframe	Mid-to- long (11-20 yrs)	Mid-to- long (11-20 yrs)	Mid-to- long (11-20 yrs)	Mid-to- long (11-20 yrs)	Mid-to- long (11-20 yrs)	Mid-to- long (11-20 yrs)	More than 20 years	More than
	Location	District 4	Park Road, at U.S. 92, Plant City	Overpass located E of Bella Vista Street (number 622867)	SR 676, just east of U.S. 41, Palm River	From SR 72, Sarasota to Manatee County line	Palm Beach	Manatee, Hillsborough, Hernando, Pasco, and Sarasota Counties	Pinellas and Hillsborough
	Project Type	O S	Grade Separation	Capacity Upgrade	Grade Separation	Right-of-way	Station Improvements		
	Freight or Passenger	Freight			Freight	Freight	Passenger		
	Owner or Operator	CSX	CSX Transportation	CSX Transportation	CSX Transportation	CSX Transportation	South Florida Rail Corridor		Tampa international
	Description	Implement grade crossing improvements at Atlantic Boulevard (SR 814) Crossing 628177F.	Park Road is a County Road with connections to U.S. 92 and Interstate 4. Park Road will be one-half of the bypass around Plant City and has a high percentage of truck traffic. Park Road crosses the CSX A-Line. This line has a 79mph for Amtrak. This portion of the Line is a backup route to the CSX ILC and has a high potential for Commuter Rail or Inter City Rail service. Both Rail and vehicle traffic will continue to increase.	Future potential for use of median corridor on 14 to accommodate High-speed passenger service, would impact CSX RR Bridge at Kathleen (number 622867), which has some constraint issues.	Build bridge over railroad. SR 676 is a major east/west route with a high percentage of truck traffic. This is a truck route leaving the Port of Tampa. Traffic volumes will continue to increase. Rail traffic is 30 plus per day and is expected to increase.	This rail corridor is currently being under utilized by the current rail company and has been in negotiations for sell with Sarasota County. An agreement could not be reached by both parties on the estimated value of this property and has now been dropped. This corridor has the potential for future transportation usage (rail passenger, transit, etc).	New parking deck.	CSX corridor near U.S. 41 with the following legs: from Bradenton near 15th Street E to Sarasota CBD, from Bradenton CBD to Tampa CBD (including 25.7 miles of track connecting to Sun City Center), and Tampa CBD to Brooksville CBD (including 15 miles connecting to Land O Lakes). Combination of projects 89, 90, and 92. Bradenton to Tampa leg is duplicated by project 233.	CSX corridor from Clearwater, through North Pinellas, north of Old Tampa Bay to
	ID Project Name	Atlantic Boulevard (SR 814) 548 Crossing	110 Park Road, NGCN: 6243139	Kathleen Road - Railroad 279 Overpass	SR 676/Causeway 109 Boulevard, NGCN: 624815B	282 Rail Corridor Preservation	West Palm Beach Tri Rail 258 Station Improvements		Clearwater/North Pinellas

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	Coordination Level		High	Med	Med	Med	Med	Med	Low	Med	Low	Low
	Znibnu <sup>A</sup> su1s12		Med	Med	Med	Med	Med	Med	Low	Low	Med	Med
	Project Priority <sup>a</sup>		Medium- High	Medium- High	Medium- High	Medium- High	Medium- High	Medium- High	Medium- High	Medium	Medium	Medium
	Potential Funding Source(s)		ARRA Congestion Grant	New Starts, TRIP	ARRA Congestion Grant	ARRA Congestion Grant	New Starts, TRIP	ARRA Congestion Grant	SIS	TRIP	FTA and State New Starts	FTA and State New Starts
	ork Program Status		Currently unfunded	Currently unfunded		, -				Currently unfunded		
	Cost Estimate (\$1,000 of 2009 Wo Dollars)		Cu \$930,429 un	Cu \$880,610 un	Cu \$788,050 un	Cu \$404,970 um	Cu \$401,130 un:	Cu \$99,630 um	Cu \$80,000 um	Cu N/A un	Cu \$687,800 um	
	Timeframe		More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than 20 years	More than
	Location		Polk and Hillsborough Counties	Clearwater, Safety Harbor, and Oldsmar	Hillsborough County	Hillsborough County	Gateway to Tampa	SR 60/Adamo Drive, east of U.S. 41, Tampa	Duval County	Miami-Dade County	Hillsborough County	Hillsborough
	Project Type		New Service	New Service	New Service	New Service	New Service	Grade Separation	Grade Separation	Capital Improvements	New Service	New Service
	Freight or Passenger		Passenger	Passenger	Passenger	Passenger	Passenger	Freight	Freight	Passenger	Passenger	Passenger
	Owner or Operator		CSX Transportation	CSX Transportation	CSX Transportation	CSX Transportation	New Passenger Rail Service	CSX Transportation	CSX Transportation	CSX Transportation and South Florida Rail Corridor	New Passenger Rail Service	New Passenger Rail Service
	Description	Linebaugh ("T" Junction), south through Tampa International Airport to I 275 near Westshore Boulevard.	CSX corridor near SR 574/U.S. 92 from Lakeland CBD to Tampa CBD involving 22.5 miles of track connecting Lakeland to Tampa and Plant City.	The proposed light rail will connect Clearwater CBD to Oldsmar via Safety Harbor. The alignment is planned on existing CSX rail corridor. This project will connect employment centers to residential centers.	CSX corridor parallel to Busch Boulevard from Anderson/Linebaugh "T" Junction to north-south CSX Corridor near Nebraska. Involving 7.5 miles of track along Busch Boulevard and Linebaugh Avenue going west from Airport to Oldsmar and 5.0 miles of track going east, from Airport Spur to Downtown-USF Rail Line.	CSX corridor near Cross-town Expressway, from Tampa CBD to Gandy Boulevard includes 5.0 miles of track connecting Downtown Tampa to South Tampa.	The planned project will connect Pinellas County to Hillsborough county via I 275 and light rail is proposed to be operated. This would be a major connector between the two counties.	Build bridge over railroad. SR 60 is a major east/west route. High traffic volume between Brandon and Tampa. Traffic volume will continue to increase. Railroad has 30 plus train movements per day. High potential for commuter trains.	Implement grade crossing improvements at SR 104 (Busch Drive)/Jacksonville Crossing 620834-S on the CSX U.S. 17 N line in Duval County.	Various yard improvements including additional track, support equipment, and maintenance facilities for FDOT, Amtrak, and CSX and SFRTA.	A short-distance rail project involving 13.5 miles of track connecting USF to Wesley Chapel.	A short-distance rail project involving 9.2 miles of track connecting Downtown Tamna to Brandon
	ID Project Name		91 Lakeland-Tampa	Clearwater Oldsmar 316 Connector	Linebaugh/Busch-North 86 Tampa Corridor East/West	88 Tampa-South Tampa	Pinellas Hillsborough 315 Connector	SR 60/Adamo Drive, 101 NGCN: 624820X	SR 104 (Busch 506 Drive)/Jacksonville Crossing	CSX/Tri Rail - Hialeah Yard 265 Improvements	Short-Distance Rail - USF to 209 Wesley Chapel	Short-Distance Rail - Downtown Tampa to 216 Brandon

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Statisticate that office the statistic control for the statistic con	Address of the control of the cont	Ð	Project Name	Description	Owner or Operator	Freight or Passenger	Project Type	Location	Timeframe	Cost Estimate (\$1,000 of 2009 Dollars)	Work Program Status	Potential Funding Source(s)	Project Priorityª	sutate	Level	Seadiness Readiness	Estramoniva Review Status	Federal Grants	ysw-10-11giAl bna ni noisulonl TIT 10 qITS
Number   Control (Control (C	Product Crime   Product Crim	211		A short-distance rail project involving 3.4 miles of track connecting the Airport to Carrollwood (from Hillsborough Avenue to Linebaugh Avenue).	New Passenger Rail Service	Passenger	New Service	Hillsborough County	More than 20 years	\$233,920	Currently unfunded	FTA and State New Starts	Medium						v Low
Signature   Control   Co	Build Michael   Build Michae	296		Passenger commuter rail operation on Florida Central Railroad trackage between Orlando CBD and Eustis, Florida (Lake County).	Florida Central Railroad	Passenger	New Service	Orange and Lake Counties	More than 20 years	\$150,000	Currently unfunded	ARRA Congestion Grant or New Jobs Bill	Medium						
Publisher & Publ	Handerbring Road ACCY: The following Road ACCY	94		Build bridge over railroad tracks. SR 60 is major east/west corridor. Traffic volumes will continue to increase. Railroad has 12 to 18 trains per day. Project would require frontage roads for local use.	CSX Transportation	Freight	Grade Separation	SR 60, west of Dover Road, Brandon,	More than 20 years		Currently	ARRA Congestion Grant	Medium						v Low
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Deuble Track Gifford to Inchore double track Gifford	Double Track Cifford to International reads and extension project that Indian Board custom project that Indian Board crossing improvements at IBD Freight Set 44 (SR 43) Crossing R4 45 (SA 43) Crossing Improvements at Crossing improvements at Crossing Inprovements at More than Note than Note than Note than Note than Inplement grade crossing improvements at Crossing Inplement grade crossing improvements at Crossing Inplement grade crossing improvements at Crossing Inplement grade crossing improvements at Crossing Inplement grade crossing improvements at Crossing Inplement grade crossing improvements at Crossing Inplement grade crossing improvements at Crossing Inplement grade crossing improvements at Crossing Inplement grade crossing improvements at Crossing Inplement grade crossing improvements at TBD Freight Separation District 5 20 years  Alternative Alternative GR 436) Crossing Inplement grade crossing improvements at TBD Freight Separation District 5 20 years  Alternative Alternative GR 436) Crossing Inplement grade crossing improvements at TBD Freight Separation District 5 20 years  Alternative Alternative GR 436) Crossing Inplement grade crossing improvements at TBD Freight Separation District 5 20 years  Alternative Alternative GR 436) Crossing Inplement grade crossing improvements at TBD Freight Separation District 5 20 years  Alternative GR 436) Crossing Inplement grade crossing improvements at TBD Freight Separation District 5 20 years  Alternative GR 436) Crossing Inplement grade crossing improvements at TBD Freight Grade Grade Grade Grant District 5 20 years  Alternative GR 436) Crossing Inplement grade crossing improvements at TBD Freight Grade Grade Grade Grant Grade Grant Grant Grade Grant Grant Grade Grant Grade Grant Grade Grant Grade Grade Grade Grant Grade Grade Grant Grade Grade Grade Grade Grade Grade Grant Grade G	115		Faulkenburg Road is a County Road with connections to SR 60 and SR 574. Faulkenburg Road has a high percentage of truck traffic. Park Road crosses the CSX 5-Line. This line 30 plus trains per day. This line has a high potential for Commuter Rail or Inter City Rail service. Both Rail and vehicle traffic will continue to increase.	CSX Transportation	Freight	Grade Separation	Faulkenburg Road, just north of SR 60, Brandon	More than 20 years		Currently	ARRA Congestion Grant	Medium						
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West Lake Mary B. (CR 420) [Implement grade crossing improvements at Crossing More than RSA (Sassing More than RSA) [Implement grade crossing improvements at Crossing and Avenue (CR 424) Crossing mayovements at TBD Freight Separation District 5 [Implement grade crossing improvements at TBD Freight Separation District 5 [Implement grade crossing improvements at TBD Freight Separation District 5 [Implement grade crossing improvements at TBD RSA (Sassing More than RSA) (Songestion More than RSA) (Congestion RSA)	West Lake Mary B. (CR 4200)         Implement grade crossing improvements at Crossing         Freight         Grade         Grade         More than TBD         Implement grade crossing improvements at Crossing         Freight         Separation of Crossing         District 5         20 years         TBD         unfunded of Grant of Crossing         ARRA/ Congestion of Crant	66		Build bridge over railroad tracks. SR 60 is a major east/west corridor. Traffic volumes will continue to increase. Train traffic is expected to increase as well.	CSX Transportation	Freight	Grade Separation	SR 60, east of SR 39, Plant City	More than 20 years		Currently unfunded	ARRA Congestion Grant	Medium						v Low
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		563		Implement grade crossing improvements at	TBD	Freight	Grade	District 5	More than 20 years	TBD	Currently	ARRA/ Congestion	Low-						v Low

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	Location		Hillsborough County	Hillsborough County	District 3	District 1	District 4	District 4	District 4	District 4	District 4	District 4	District 4	District 4	District 4	District 4	District 4	District 4	District 4	District 4	District 4
	Project Type	Separation	New Service	New Service	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade
	Freight or Passenger		Passenger	Passenger	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight
	Owner or Operator		New Passenger Rail Service	New Passenger Rail Service	CSX	CSX	FEC	FEC	FEC	FEC	FEC	FEC	FEC	FEC	FEC	FEC	FEC	FEC	FEC	FEC	FEC
	Description	South Orlando Avenue (SR 15) Crossing 622169T.	This project involves construction of rail maintenance facilities. Project cost is not final as ROW cost has not been determined.	This project involves construction of rail maintenance facilities. Project cost is not final as ROW cost has not been determined.	Implement grade crossing improvements at S Main Street (SR 85) Crossing 339800C.	Implement grade crossing improvements at Magnolia Avenue Crossing 6253885 and 625389Y.	Implement grade crossing improvements at Northlake Boulevard (CR 809) Crossing 272386A.	Implement grade crossing improvements at Belvedere Road Crossing 272437H.	Implement grade crossing improvements at Woolbright Road Crossing 272484R.	Implement grade crossing improvements at Linton Boulevard Crossing 2724975.	Implement grade crossing improvements at Yamato Road (SR 794) Crossing 272500X.	Implement grade crossing improvements at Palmetto Park (SR 811) Crossing 272509J.		Implement grade crossing improvements at Sample Road (SR 834) Crossing 272517B.	Implement grade crossing improvements at Atlantic Boulevard (SR 814) Crossing 272533K.	Implement grade crossing improvements at Commercial Boulevard (SR 870) Crossing 272537M.		Implement grade crossing improvements at Surrise Boulevard (SR 838) Crossing 272549G.	Implement grade crossing improvements at W Broward Boulevard (SR 842) Crossing 272556S.		Implement grade crossing improvements at FEC
	ID Project Name	15) Crossing	Short-Distance Rail - Rail 305 Maintenance Facilities		S Main Street (SR 85) 516 Crossing	509 Magnolia Avenue Crossing	Northlake Boulevard (CR 518 809) Crossing	519 Belvedere Road Crossing	520 Woolbright Road Crossing	521 Linton Boulevard Crossing	Yamato Road (SR 794) 522 Crossing	Palmetto Park (SR 811) 523 Crossing	Hillsboro Boulevard (SR 810) 524 Crossing	Sample Road (SR 834) 525 Crossing	Atlantic Boulevard (SR 814) 526 Crossing	Commercial Boulevard (SR 527 870) Crossing			W Broward Boulevard (SR 530 842) Crossing		532 Miramar Parkway (SR 858)

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Crossing	Description  Miramar Parkway (SR 858) Crossing 272592M.	itor rassenger	Froject 1ype Separation	госацоп	20 years	Donars) Status unfunded	Source(s) Grant	Medium	T O S	S	E	E.
Glades Road (SR 808) 533 Crossing	Implement grade crossing improvements at Glades Road (SR 808) Crossing 272910W. FEC	Freight	Grade Separation	District 4	More than 20 years	Currently \$30,000 unfunded	ARRA Congestion Grant	Low- Medium	Low Low	Med Med	Low Med	ed Low Low
McNab Road Crossing	Implement grade crossing improvements at McNab Road Crossing 621437X.	Freight	Grade Separation	District 4	More than 20 years	\$30,000 unfunded	ARRA Congestion Grant	Low- Medium	Low	Low Med	Low Med	Low
gu	Implement grade crossing improvements at NW 33rd Street Crossing 621538J. CSX	Freight	Grade Separation	District 4	More than 20 years	Currently \$30,000 unfunded	ARRA Congestion Grant	Low- Medium	Low	Low Med	Low Med	Low
North Lake Boulevard (CR 809A) Crossing	Implement grade crossing improvements at North Lake Boulevard (CR 809A) Crossing 628096F.	Freight	Grade Separation	District 4	More than 20 years		ARRA Congestion Grant	Low- Medium		Low Med	Low Med	Low
æ Boulevard	Implement grade crossing improvements at Palm Beach Lake Boulevard Crossing 628118D.	Freight	Grade Separation	District 4	More than 20 years	Currently \$30,000 unfunded	ARRA Congestion Grant	Low- Medium	Low Low I	Low Med	Low Med	ed Low Low
539 Belvedere Road Crossing	Implement grade crossing improvements at Belvedere Road Crossing 628135U.	Freight	Grade Separation	District 4	More than 20 years	Currently \$30,000 unfunded	ARRA Congestion Grant	Low- Medium		Low Med	Low Med	ed Low Low
	Implement grade crossing improvements at Linton Boulevard (SR 782) Crossing 628160C.	Freight	Grade Separation	District 4	More than 20 years	Currently \$30,000 unfunded	ARRA Congestion Grant	Low- Medium	Low	Med Med	Low Med	Low
Park (CR 798)	Implement grade crossing improvements at Palmetto Park (CR 798) Crossing 628165L. CSX	Freight	Grade Separation	District 4	More than 20 years	Currently \$30,000 unfunded	ARRA Congestion Grant	Low- Medium	Low	Low Med	Low Med	Low
Park Boulevard (SR	Implement grade crossing improvements at Oakland Park Boulevard (SR 816) Crossing 628191B.	Freight	Grade Separation	District 4	More than 20 years	Currently \$30,000 unfunded	ARRA Congestion Grant	Low- Medium	Low	Med Med	Low Med	Low
818)	Implement grade crossing improvements at New Griffin Road (SR 818) Crossing 628272B.	Freight	Grade Separation	District 4	More than 20 years	Currently \$30,000 unfunded	ARRA Congestion Grant	Low- Medium	Low Low	Med Med	Low Med	ed Low Low
Stirling Road (SR 848) Crossing	Implement grade crossing improvements at Stirling Road (SR 848) Crossing 628274P. CSX	Freight	Grade Separation	District 4	More than 20 years	Currently \$30,000 unfunded	ARRA Congestion Grant	Low- Medium		Med Med	Low Med	Low
Pembroke Road (SR 824) 555 Crossing	Implement grade crossing improvements at Pembroke Road (SR 824) Crossing 628282G. CSX	Freight	Grade Separation	District 4	More than 20 years	Currently \$30,000 unfunded	ARRA Congestion Grant	Low- Medium	Low	Med Med	Low Med	Low
Hallandale Beach (SR 858) 556 Crossing	Implement grade crossing improvements at Hallandale Beach (SR 858) Crossing 628290Y.	Freight	Grade Separation	District 4	More than 20 years	Currently \$30,000 unfunded	ARRA Congestion Grant	Low- Medium		Med Med	Low Med	Low
Hillsboro Boulevard (SR 810) 545 Crossing	Implement grade crossing improvements at Hillsboro Boulevard (SR 810) Crossing 628167A. CSX	Freight	Grade Separation	District 4	More than 20 years	Currently \$20,745 unfunded	ARRA Congestion Grant	Low- Medium	Low Low	Med Med	Low Med	ed Low Low
577 CR 54 (CR 54) Crossing	Implement grade crossing improvements at CR 54 (CR 54) Crossing 622845L. TBD	Freight	Grade Separation	District 7	More than 20 years	TBD TBD	_	TBD	TBD TBD 1	TBD TBD	TBD TBD	D TBD TBD
	Implement grade crossing improvements at CR 54 (CR 54) Crossing 622851P.	Freight	Grade Separation	District 7	More than 20 years	TBD TBD	ARRA/ Congestion Grants	TBD	TBD TBD T	TBD TBD	TBD TBD	D TBD TBD
Alexander Street (CR 39A) 579 Crossing	Implement grade crossing improvements at Alexander Street (CR 39A) Crossing 624326R.	Freight	Grade Separation	District 7	More than 20 years	TBD TBD	ARRA/ Congestion Grants	TBD	TBD TBD	TBD TBD	TBD TBD	D TBD TBD
Avenue Crossing	Implement grade crossing improvements at Parsons Avenue Crossing 624456M. TBD	Freight	Grade Separation	District 7	More than 20 years	TBD TBD	ARRA/ Congestion Grants	TBD	TBD TBD 1	TBD TBD	TBD TBD	D TBD TBD
SR 599/50th Street (SR 599) Crossing	nents at 3	Freight	Grade Separation	District 7	More than 20 years	TBD TBD	ARRA/ Congestion Grants	TBD	TBD			TBD
ugh Avenue (SR	Implement grade crossing improvements at TBD	Freight	Grade	District 7	More than	TBD TBD	ARRA/ Congestion	TBD	TBD TBD 1	TBD TBD	TBD TBD	D TBD TBD

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ia	Eligibility for Federal Grants Design Completeness		Low Med	Low Med	Med Med	High Low		TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD	TBD TBD
Final Prioritization Criteria	Environmental Review Status Higibility for		High L	High Lo	High M	Low H	Low H	TBD T	TBD T	TBD T	TBD T	TBD T	TBD T	TBD T	TBD T	TBD T	TBD T	TBD T	TBD T
rioritizat	Shovel Readiness		High	High I	High	Low I		TBD 1	TBD 1	TBD 1	TBD 1	TBD 1	TBD 1	TBD 1	TBD 1	TBD 1	TBD 1	TBD 1	TBD 1
Final P	State or Regional Significance		High	High [	High	Med	Med	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	Coordination Level		High	High	Med	Med	Med	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	gnibnu <sup>7</sup> sufete		High	High	Low	Tow	Low	ΩՁL	ΠBD	ΠBD	TBD	TBD	TBD	ΩΩL	TBD	TBD	TBD	TBD	ТВD
	Project Priority <sup>a</sup>	Ī	Very High	Very High	Medium- High	Medium	Medium	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	Potential Funding Source(s)	Grants	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	Work Program Status		TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	Cost Estimate (\$1,000 of 2009 Dollars)		\$11,100	\$2,700	\$96,600	TBD	TBD	TBD	TBD	TBD	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
	Timeframe	20 years	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	Location		South Florida Rail Corridor from Miami to West Palm Beach	On train equipment for entire SFRC	Districts 2, 3, 5	Jacksonville to Orlando	Jacksonville	District 6	District 6	District 6	District 6	District 6	District 6	District 6	District 6	District 6	District 6	District 6	District 6
	Project Type	Separation	Signal Upgrade	Signal Upgrade	New Service	New Service	New Service	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation	Grade Separation
	Freight or Passenger		Freight	Passenger	Passenger	Passenger	Passenger	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight
	Owner or Operator		CSXT or SFRTA	SFRTA			JTA	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	Description	Hillsborough Avenue (SR 600) Crossing 626902L.	Install new PTC signal system ready for over 141 miles of mainline track from Miami to West Palm Beach, including a control center in Jacksonville or Pompano Beach. This includes \$3.6 for wayside signal equipment on the SFRC and \$7.5 for the control center.	Install new PTC equipment to locomotives and cab cars.	Restoration of the Sunset Limited Amtrak service from Sanford, FL to New Orleans.	High speed rail link from Jacksonville to Orlando	A feasibility study has been funded to determine the appropriate corridor from Jacksonville to Macon for the Southeast High Speed Rail Corridor. This is Florida's connection to any national HSR network	Implement grade crossing improvements at E 8th Avenue (SR 953) Crossing 272736P.	Implement grade crossing improvements at Palm Avenue Crossing 272742T.	Implement grade crossing improvements at Okeechobee Road (SR 25) Crossing 272752Y.	Implement grade crossing improvements at NE 203th Street Crossing 272596P.	Implement grade crossing improvements at Miami Gardens Drive (SR 860) Crossing 272598D.	Implement grade crossing improvements at NE 163rd Street (SR 826) Crossing 272604E.	Implement grade crossing improvements at NE 125th Street (SR 922) Crossing 272612W.	Implement grade crossing improvements at NW 27th Avenue (SR 9) Crossing 272717K.	Implement grade crossing improvements at NW 72nd Avenue Crossing 272756B.	Implement grade crossing improvements at NW 72nd Avenue Crossing 272757H.	Implement grade crossing improvements at NW 22nd Avenue Crossing 628320N.	Implement grade crossing improvements at NW 27th Avenue (SR 817) Crossing 628321V.
	ID Project Name	600) Crossing	Positive Train Control System (PTC) on the South 592 Florida Rail Corridor	On train Positive Train Control System (PTC) for Tri-Rail commuter rail 593 service.	586 Gulf Coast Service	High Speed Rail: 592 Jacksonville to Orlando	593 Southeast High Speed Rail	E 8th Avenue (SR 953) 570 Crossing	571 Palm Avenue Crossing	Okeechobee Road (SR 25) 572 Crossing	565 NE 203th Street Crossing	Miami Gardens Drive (SR 566 860) Crossing	NE 163rd Street (SR 826) 567 Crossing	NE 125th Street (SR 922) 568 Crossing	NW 27th Avenue (SR 9) 569 Crossing	573 NW 72nd Avenue Crossing	574 NW 72nd Avenue Crossing	575 NW 22nd Avenue Crossing	NW 27th Avenue (SR 817) 576 Crossing

# 6.0 Financing Florida's Rail System

# ■ 6.1 Overview

Strong productivity gains in Florida's economy and increases in personal mobility depend upon an efficient transportation network. Florida's growing population and economy rely on an efficient and reliable multimodal transportation network to serve the high demand for personal travel and the delivery of consumer goods, construction materials, and industrial supplies. Florida's rail system and its ability to connect to the State's overall transportation system play a vital role in accommodating the growth in people and goods movement, and in supporting the national and state economy. Florida is well positioned to meet these growing needs and challenges. Over the past five years, the State has taken significant steps to support multimodal passenger and freight transportation including passage of the 2005 Growth Management Bill (Chapter Law 2005-290), establishing the Transportation Regional Incentive Program, and creating additional state funding for priority transportation infrastructure projects, including Florida New Starts Program (NSTP) and Small County Outreach Program (SCOP). The State also has developed an innovative multimodal approach to high-priority transportation assets known as the Florida Strategic Intermodal System (SIS). The SIS includes a statewide, interconnected transportation system, including freight and passenger rail corridors and terminals that are key to enhancing Florida's economic competitiveness. The SIS includes transportation hubs, corridors, and connectors which meet a set of criteria developed to identify those transportation facilities and services that are critical to Florida's economic development.

Federal policies and programs also have illustrated a growing commitment to rail and multimodal transportation investments. The Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), enacted in August 2005, made modest advances towards creating a national rail policy and funding framework. More recent legislation, including the Passenger Rail Investment and Improvement Act (PRIIA) of 2008, the American Recovery and Reinvestment Act (ARRA) of 2009, and the Obama Administration's High-Speed Rail Initiative have placed additional emphasis on rail as a key component of the national transportation network and as a means to stimulate economic recovery.

One particular example of the growing commitment to rail and multimodal investment comes from PRIIA, which directed the Administrator of the Federal Railroad Administration (FRA) to develop a Preliminary National Rail Plan (PNRP) to address the rail needs of the Nation. The PRIIA also directed FRA to provide assistance to States in developing their state rail plans in order to ensure that the Federal, long-range National Rail Plan is consistent with approved state rail plans. Subsequent to PRIIA, ARRA sets the framework for the development of true high-speed rail in the United States. The

Preliminary Plan, therefore, serves as an important first step in an ongoing rail planning and investment process.

SAFETEA-LU expired on September 30, 2009 and was subsequently extended several times, most recently in March 2010 with an extension through December 2010. It is unclear at this point what reauthorization might look like, since neither the Administration nor Congress has released substantive information on the subject yet. Nevertheless, reauthorization does present great opportunities for new and/or expanded funding for rail transportation. Recent transportation policy discussions have emphasized the need for a national rail policy to ensure that there is adequate investment to address critical rail chokepoints and add capacity in certain locations.

In developing a State Rail System Plan, Florida has developed a policy and planning framework necessary to put forward projects that represent the highest priority for the investment of state funds in the short and long term. This section identifies existing and emerging national, state, and local funding opportunities for improvements to Florida's rail system and fulfils State Rail Plan requirements adopted in PRIIA and set forth by Public Law 110-432:

"Statement of public financing issues for rail projects and service in the state, including a list of current and prospective public capital and operating funding resources, public subsidies, state taxation, and other financial policies relating to rail infrastructure development."

# **Federal Funding Sources for Transportation**

Federal funding for transportation is derived from highway excise taxes on motor fuel and truck-related taxes on truck tires, sales of trucks and trailers, and heavy vehicle use. Tax revenues are deposited into either the Highway Account or the Mass Transit Account of the Federal Highway Trust Fund (HTF) and then distributed to the states. The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) then administer and distribute funds – available for rail-related projects – from the Highway and the Mass Transit Account, respectively, to each state through a system of formula grants and discretionary allocations. Table 6.1 provides further detail on tax rates and the account distribution of these tax revenues.

Table 6.1 Overview of Federal Highway User Taxes

		Dist	ribution of Tax (	Cents per Gallon	)
	Tax Rate	Highway	Trust Fund		
User Fee	(Cents per Gallon)	Highway Account	Mass Transit	Underground Storage Tanks	General Fund
Gasoline	18.40	15.44	2.86	0.1	_
Diesel and Kerosene Fuel	24.40	21.44	2.86	0.1	-
Alternative Fuelsa					
Liquefied Petroleum Gas	24.30	21.44	2.86	-	-
Liquefied Natural Gas	24.30	21.44	2.86	-	-
Other Special Fuels <sup>b</sup>	18.40	15.44	2.86	0.1	4.3
Compressed Natural Gasc	18.30	15.43	2.86	-	-

#### Other Taxes (All Proceeds to Highway Account)

Tires <sup>d</sup>	Tax is imposed on tires sold by manufacturers, producers, or importers at the rate of \$.0945 (\$.04725 in the case of a bias ply or super single tire) for each 10 pounds of the maximum rated load capacity over 3,500 pounds.
Truck and Trailer sales	12 percent of retailer's sales price for tractors and trucks over 33,000 pounds gross vehicle weight (GVW) and trailers over 26,000 pounds GVW. The tax applies to parts and accessories sold in connection with the vehicle sale.
Heavy Vehicle Use	Annual tax: Trucks 55,000-75,000 pounds GVW, \$100 plus \$22 for each 1,000 pounds (or fraction thereof) in excess of 55,000 pounds Trucks over 75,000 pounds; GVW, \$550.

Source: Office of Highway Policy Information, Federal Highway Administration.

- a. Alternative fuels include benzol, benzene, naphtha, casing head and natural gasoline, or other liquid used as a fuel in a motor vehicle except diesel, kerosene, gas oil, fuel oil, or any product taxable under the gasoline tax provisions. Beginning October 1, 2006, LPG and LNG are taxed based on their energy content relative to gasoline.
- b. Only small amounts of revenue are collected by Internal Revenue Service for taxes on neat alcohol and some other miscellaneous sources.
- c. 18.3 cents per energy equivalent to a gallon of gasoline.
- d. Section 1401 of the Taxpayer Relief Act of 1997 replaced a mechanism by which the fair market value of tires exceeding 40 pounds was deducted from the fair market value of a truck and replaced it with a credit for the excise tax paid. This provision was effective January 1, 1998.

# **State Funding Sources for Transportation**

In general, transportation in Florida is financed through a combination of fuel taxes and motor vehicle-related taxes and fees. With the exception of proceeds from these taxes and fees that are diverted by law to other uses, revenues generated from these sources are deposited into the State Transportation Trust Fund (STTF) used by FDOT for transportation purposes. The following is a description of major taxes and fees authorized by Florida Constitution and State law.

#### **State Tax Sources for State Use:**

- State Fuel Sales Tax The State Fuel Sales Tax is levied on highway fuels (not including alternative fuels) and nonhighway diesel fuels (levied on intrastate railroads, commercial vessels, construction equipment etc.) the State's share of the highway fuel sales tax currently is 12.0 cents per gallon tax is adjusted annually with fluctuations in the Consumer Price Index. The nonhighway fuel sales tax currently is set at 6 percent of the fuel's retail sales price, or at the highway fuel sales tax rate of 12.0 cents per gallon.
- State Comprehensive Enhanced Transportation System (SCETS) Tax The SCETS Tax has a rate in each county equal to two-thirds of all local option fuel taxes. For example, in counties where 6 cents of Local Option Gas Tax is levied, the SCETS Tax will equal four cents (i.e.,  $2/3 \times 6 = 4$ ). While the proceeds of the SCETS Tax are not shared directly with local governments, they must be spent in the respective FDOT District, and to the extent feasible, in the county in which they were collected. Like the fuel sales tax, the tax is adjusted with fluctuations in the Consumer Price Index. Currently, the SCETS Tax rate ranges between 5.5 and 6.6 cents per gallon.
- Aviation Fuel Tax Florida imposes 6.9 cents per gallon tax on aviation fuel. This fuel is used in aircraft, and also includes aviation gasoline and aviation turbine fuels and kerosene. The revenues generated from this tax are limited to aviation projects only. The funds are deposited into the Fuel Tax Collection Trust Fund, and then distributed to the State Transportation Trust Fund after an 8 percent General Revenue surcharge is transferred to the State's General Revenue Fund.
- **Fuel Use Tax and Fee -** The Fuel Use Tax is imposed by every state in the nation (via the International Fuel Tax Agreement) on heavy vehicles engaged in interstate operations. The tax is based on fuel consumed rather than fuel purchased in a state. The tax is comprised of an annual decal fee of \$4.00 plus a use tax based on the number of gallons consumed times the prevailing statewide fuel tax rate.
- **Motor Vehicle License Tax** The Motor Vehicle License Tax is an annual tax for operating motor vehicles, mopeds, motorized bicycles, and mobile homes.<sup>67</sup> These taxes vary according to weight and type of each vehicle. These revenues are deposited into the State Transportation Trust Fund and the General Revenue Fund.
- **Initial Registration Fee** A one-time fee of \$225 is charged for first-time registration of newly purchased vehicles. Of the proceeds of this fee, 44.44 percent are deposited to the State Transportation Trust Fund and the remaining 55.55 percent are deposited to the General Revenue Fund.
- **Title Fee -** A fee is charged to all motor vehicles when issuing a certificate of title. The fee ranges from \$49 to \$70 depending on the type of title transaction. A portion of this

<sup>&</sup>lt;sup>67</sup>Mobile home license fees go to local governments.

fee (\$21) is transferred into the State Transportation Trust Fund, while the remainder goes to the State's General Revenue Fund as provided by statute.

- Rental Car Surcharge A \$2.00 per day surcharge exists throughout Florida on car
  rentals. Eighty percent of these proceeds are deposited into the State Transportation
  Fund. The remainder of the proceeds is distributed to the State's General Revenue
  Fund (as a service charge), the Tourism Promotional Trust Fund, and the International
  Promotion Trust Fund.
- State Documentary Stamp Tax The 2005 legislature enacted growth management legislation to address needed infrastructure in Florida. This legislation broadened the distribution of revenues from the documentary stamp tax on documents such as deeds, stocks and bonds, mortgages, etc. The State Transportation Trust Fund receives a percentage of the collections from this tax, not to exceed \$541.75 million annually.

**State Tax Sources for Local Use:** as indicated above 12.0 cents of the State Fuel Sales Tax is distributed to FDOT. The remaining four cents of the tax are distributed to local governments as follows:

- Constitutional Fuel Tax Set at two cents per gallon, this tax is distributed to counties based on a constitutional formula. The county distribution factor is calculated using population, area, and total tax collections. The priority for the proceeds of the Constitutional Gas Tax is to meet the debt service requirements, if any, on local bond issues. Any remaining resources are credited to the counties' transportation trust fund.
- County Fuel Tax Set at one cent per gallon, this tax is distributed by the same formula as the Constitutional Gas Tax. Counties may use the revenues from this tax for transportation-related expenses.
- Municipal Fuel Tax Set at one cent per gallon, revenues from this tax are transferred into the Revenue Sharing Trust Fund for Municipalities where they are joined with other nontransportation revenues. These revenues may be may be used for transportation-related expenditures within incorporated areas and are distributed to municipalities by statutory criteria.

**Local Tax Sources**: State law authorizes local governments to enact the following local option taxes for transportation purposes:

- **Ninth-Cent Fuel Tax -** Originally called the "9th Cent" tax when the State's fuel taxes totaled 8 cents, this tax may be levied in any county by an extraordinary vote (majority plus one) of its Board of County Commissioners. The tax proceeds can be shared with cities within the county by agreement. Fifty-one counties currently levy this tax.
- Charter County Transit System Surtax Prior to 2009, this tax which can be levied at a rate of up to one percent of taxable transactions above \$5,000, could only be levied by nine counties by countywide referendum. Legislation enacted in 2009 (HB 1205) changes the name of the surtax to "Charter County Transportation System Surtax" expands eligibility to all charter counties.

• Local Option Fuel Tax - Counties are authorized to levy a fuel tax of up to 11 cents per gallon of gasoline (but not diesel, which is standard in every county at 6 cents per gallon). The tax proceeds must be shared with municipalities.

**Table 6.2 Summary of State Taxes** 

State Tax Source	Rate
Fuel Sales Tax – State Share	12.0 cents per gallon
Local Government Taxes - Local Governments Share:	
Constitutional Tax	2.0 cents per gallon
County Tax	1.0 cent per gallon
Municipality Tax	1.0 cent per gallon
SCETS Tax	5.5 to 6.6 cents per gallon
Other Fuel Taxes/Fees	
Aviation Fuel Tax	6.9 cents per gallon
Motor Vehicle License Tax	Varies
Title Fee	\$21.00 per title
Rental Car Surcharge	\$2.00 per day
Coastal Protection Tax	0.048 cents per gallon
Water Quality Tax	0.12 cents per gallon
Inland Protection Tax	1.9 cents per gallon
Agricultural Inspection Fee	0.125 cents per gallon

Source: Florida Legislative Committee on Intergovernmental Relations.

# ■ 6.2 Federal Rail Programs

Currently, Federal funding for freight and passenger rail is available through a variety of programs that allocate funds based on formula or on a discretionary basis. These Federal programs can be grouped into two categories:

• **Federal Grants** - Grants are direct Federal investments in a state's transportation system that do not need to be repaid. Federal grant programs generally cover a significant portion of a project's cost, but often require a funding match (i.e., 80/20) or in kind contribution from the applicant. This includes the Highway-Rail Grade Crossing Grants and the Capital Grant Program for Rail Line Relocation and Improvement.

• Federal Rail Loans and Tax Credits - Tax credits and loans are forms of nondirect Federal assistance. Tax credits alleviate a portion of a non-Federal organization's tax responsibilities. Like grants, tax credits do not need to be repaid. The use of tax credits on projects that incorporate a public-private partnership arrangement are particularly important as they are a key way to leverage funds. Loans are funds that are borrowed by a state or other non-Federal organization that must be repaid over a fixed period of time. Examples of such tax credits and loans include State Infrastructure Banks (SIB) and Transportation Infrastructure Finance and Innovation Act (TIFIA) loans.

With the recent enactment of two key pieces of Federal legislation – the American Recovery and Reinvestment Act (ARRA) of 2009 and the Passenger Rail Infrastructure Investment Act (PRIIA) of 2008 – an unprecedented amount of Federal grant money has become available to fund transportation projects. The Florida rail planning process will also build the institutional capability to compete for future funds available through ongoing PRIIA appropriations and other potential sources, including any dedicated freight or intermodal funding made available in the forthcoming surface transportation bill. The challenge for Florida in responding to these newly available sources is its potential to expeditiously and comprehensively identify projects and their benefits to effectively compete for funding.

Florida's total apportionment of Federal transportation funds in the Federal fiscal year (FFY) 2009 is estimated at \$1.88 billion. Of this amount, \$1.37 billion is stimulus funding made available through ARRA. The remainder of this funding, or approximately \$510 million, is made up of grants apportioned to the states by legislative formulas, allocated by the discretion of the FHWA, or by direct congressional earmarking.<sup>68</sup> Florida's total five-year transportation program (including funding from all Federal, state, and local sources) in Florida's FY 2011-2015 Work Program is \$36.24 billion. Federal-aid accounts for 34 percent, \$12.48 billion, of the five-year Work Plan.<sup>69</sup> The anticipated five-year total funding for all rail projects in the State is \$1.74 billion. Although SAFETEA-LU created several new programs such as the Capital Grant Program for Rail Line Relocation and Improvement and the Highway-Rail Grade Crossing Program that allow funding of rail projects and new provisions for the Transportation Infrastructure Finance and Innovation Act (TIFIA) have created increased funding flexibility, funding sources for rail projects remain constrained. Some stakeholders do not favor opening the Highway Trust Fund for investment in rail projects due to concerns that this will exacerbate the current shortfall in highway investments. Another challenge to obtaining Federal funds for rail is the predominance of project earmarks in current rail funding programs. For example, Congress earmarked much of the funds for the National Corridor Infrastructure Improvement Program, the Projects of National and Regional Significance Program, and the Freight Intermodal Distribution Pilot Grant Program for projects located outside of Florida. To help address this issue, U.S. DOT recently released guidance for evaluating,

 $<sup>^{68}\</sup>mbox{FDOT}.~2009\mbox{-}2012$  State Transportation Improvement Program.

<sup>&</sup>lt;sup>69</sup>FDOT. 2011-2015 Adopted Work Program.

rating, and selecting projects under the Projects of National and Regional Significance Program.

## **Federal Grants**

Federal grant programs provide direct investment into state transportation systems. These programs frequently cover 80 to 90 percent of total project costs, with the remaining percentage the responsibility of the state or other non-Federal organization. Table 6.3 provides a summary and overview of existing Federal rail grant sources. Some of these programs currently are utilized by FDOT, while others may be potential funding sources.

Table 6.3 Federal Grant Sources

Program	Code	Funding Use	Funding Allocation	Status
ARRA Discretionary Multimodal Projects	American Recovery and Reinvestment Act of 2009	Projects in TIP/STIP that create or preserve jobs. Preference given to quick-start activities.	Federal share is up to 100%	Appropriated nationally
High-Speed Intercity Passenger Rail Program	Passenger Rail Investment and Improvement Act of 2008 Section 501, 301 American Recovery and Reinvestment Act of 2009	New service, trackage rights, grade crossings, and environmental mitigation for 100- to 600-mile rail corridors with service expected to reach 110 mph.	Federal share is up to 100%. For the current solicitation, there is a 20% match requirement	Appropriated nationally
TIGER Phase I and II	Transportation Investment Generating Economic Recovery American Recovery and Reinvestment Act of 2009	Grants awarded on a competitive basis for capital investments in surface transportation projects that will have a significant impact on the nation, a metropolitan area, or a region.	Federal Share Phase I – 100% Phase II – Up to 100%	Phases I and II appropriated nationally. Phase I grants awarded Phase II grants to be awarded through 2010
Next Generation High- Speed Rail Program	ISTEA Section 1036, 1010 High-speed rail research, Swift Rail Development Act of development, and technology (targeted at priority high-spee corridors).	High-speed rail research, development, and technology (targeted at priority high-speed corridors).	Federal share is 80%	Authorized, subject to annual appropriations
Railroad Safety Technology Grants	Passenger Rail Investment and Improvement Act of 2008 Section 105	Projects that increase railroad safety and public awareness of railroad safety.	Federal share is 80%	Not yet appropriated from FY 2010 through FY 2013
State Grant Program for Rail Projects	Passenger Rail Investment and Improvement Act of 2008, Section 301, 302	tment Capital costs to provide new or ct of 2008, improved intercity passenger rail.	Federal share is 80%	Authorized, subject to annual appropriations
Capital Grant Program SAFI for rail line relocation and 9003 improvement Projects	SAFETEA-LU Section 9002, 9003	Rail line relocation and improvement projects that foster economic development.	Federal share is 90%, not Not yet appropriated to exceed \$20 million	t Not yet appropriated

Table 6.3 Federal Grant Sources (continued)

Program	Code	Funding Use	Funding Allocation	Status
Highway Railroad Grade Crossing Program	Highway Railroad Grade SAFETEA-LU Section 1103 Crossing Program	Improvement of highway-railroad crossings.	Federal share is 90% (100 % for certain project types)	Appropriated nationally from FY 2006 to FY 2009
Congestion Mitigation and Air Quality	SAFETEA-LU Section 1101, 1103, 1808	Projects that improve/mitigate congestion.	Formula-based. Federal share is 80 to 100% (based on project type and sliding-scale)	Appropriated nationally from FY 2006 to FY 2009
Projects of National and Regional Significance Program	SAFETEA-LU Section 1301	Projects of national significance (rail, Federal share is 80% highway or projects eligible under 23 USC).	Federal share is 80%	Appropriated nationally from FY 2006 to FY 2009
Freight Intermodal Distribution Pilot Program	SAFETEA-LU Section 1306	Development of intermodal freight transportation.	Up to \$1 million per project per year	To be appropriated nationally from the Highway Trust Fund
Transportation Enhancements Program	SAFETEA-LU Section 1122	Restoration of historic rail facilities (trestles, tunnels, bridges, depots) and acquisition and preservation of abandoned rail right-of-ways.	Federal share is 80%	10% set-aside from Surface Transportation Program
New Starts Program	SAFETEA-LU Section 5309	Fixed-guideway transit projects, including new systems and extensions to existing systems.	Formula-based	Appropriated nationally for FY 2009
New Small Starts	SAFETEA-LU Section 1309	Transit capital investments less than \$250 million, requiring less than \$75 million in New Starts funds.	Formula-based	Appropriated nationally for FY 2009

Table 6.3 Federal Grant Sources (continued)

Program	Code	Funding Use	Funding Allocation	Status
Fixed Guideway Modernization	SAFETEA-LU Section 5307, 5309	Modernization, rehabilitation or creation of new fixed-guideway transit systems.	Formula-based. Federal Appropriated share is 80% nationally for I	Appropriated nationally for FY 2009
Economic Development Administration Funds	Economic Development Public Works and Economic Administration Funds Development Act of 1965	Construction and rehabilitation Application and projects that promote job creation or selection process retention in rural/industrial regions.	Application and selection process	Appropriated nationally for FY 2009
Community Facilities Program		Community facilities in rural regions.	Application and selection process	

Source: Federal Highway Administration, Economic Development Administration. Information compiled by Cambridge Systematics, Inc.

# American Recovery and Reinvestment Act of 200970

ARRA was passed by Congress on February 13, 2009 and includes significant new funding for transportation. The goal of the legislation is to save and create jobs and promote economic development through targeted Federal spending. ARRA contains \$275 billion in tax cuts and \$550 billion in targeted direct investment. It provides \$311 billion in appropriations, including \$120 billion in direct investments in infrastructure and science programs.<sup>71</sup> "Modernizing roads, bridges, transit and waterways" is one focus area for investment, which includes \$27.5 billion for highway construction \$8.4 billion for transit and rail to reduce traffic congestion and gas consumption, \$1.5 billion for competitive grants to state and local governments for surface transportation infrastructure, through the Transportation Investment Generating Economic Recovery Grants (TIGER, as well as \$600 million from TIGER II being awarded in 2010) and \$9.3 billion for investments in rail transportation (including Amtrak, high-speed rail, and intercity rail). A portion of these funds are specifically for rail projects, including:

- New Construction \$1 billion for Capital Investment Grants for new commuter rail or
  other light rail systems to increase public use of mass transit and to speed project
  delivery of those projects already under construction.
- **Upgrades and Repair -** \$2 billion to modernize existing transit systems, including renovations to stations, security systems, computers, equipment, structures, signals, and communications. Funds will be distributed through the existing formula.
- Transit Capital Assistance \$6 billion to purchase buses and equipment needed to increase public transportation and improve intermodal and transit facilities.
- Amtrak and Intercity Passenger Rail Construction Grants \$1.1 billion to improve the speed and capacity of intercity passenger rail service.<sup>72</sup>
- **High-Speed Rail** \$8 billion to develop 10 high-speed rail corridors, 100 to 600 miles in length, that will provide service at speeds that reach 110 miles per hour (mph).

In general, for a project to receive ARRA funding, it must meet Federal requirements for Federal transportation aid and be included in an approved metropolitan Transportation Improvement Program (TIP) or Statewide Transportation Improvement Program (STIP). This requirement however is not applicable for rail projects. Projects eligible for funding

<sup>&</sup>lt;sup>70</sup>Recovery.gov.

<sup>&</sup>lt;sup>71</sup> U.S. House of Representatives Committee on Appropriations. American Recovery and Reinvestment Conference Report. Available at: http://appropriations.house.gov/pdf/ PressSummary02-12-09.pdf.

<sup>&</sup>lt;sup>72</sup>U.S. House of Representatives Committee on Appropriations. American Recovery and Reinvestment Conference Agreement. Available at: http://appropriations.house.gov/pdf/Press Summary02-13-09.pdf.

include preliminary engineering, right-of-way acquisition, intelligent transportation systems (ITS), traffic signalization and signage, creation of new service, acquisition of trackage rights, and environmental mitigation. Federal funds are available for up to 100 percent of project costs. Funding priority is generally given to projects that are "shovel-ready" and:

- Have been deferred by the State;
- Are tied to concurrency where development is being held up;
- Have the potential to generate revenues and jobs;
- Are geographically balanced;
- Provide congestion relief;
- Are located in economically distressed areas; and
- Can be completed in three years.

These funding priority requirements are however not necessarily applicable to rail projects. For example, the High-Speed Rail program allows funding for projects that are expected to be completed over several years (above the three years threshold) and need not be "shovel ready." Nonetheless, rail projects should be coordinated with the relevant metropolitan planning organization (MPO) and FDOT. Rail transit projects must be coordinated with the relevant transit operating agency, MPO, and/or state DOT. FDOT has been working with cities, counties, MPOs, and other potential transportation project partners throughout the State to develop a list of projects for ARRA funding. According to the Florida Office of Economic Recovery, "preliminary estimates for transportation funding in Florida are \$70 million for airport projects, \$1.35 billion for highway and bridge projects, and \$316 million for transit grants. Other transportation funding will be distributed on a national discretionary basis for other modes of transportation, including rail and seaport investments." The 2009-2012 Florida STIP included \$1.37 billion in Federal stimulus funding made available through ARRA.

Some of the Federal funding made available through ARRA has been passed directly to local governments in Florida. Local Florida governments have received \$5.41 million for capital projects to modernize or improve existing fixed guideway transit facilities (rail and bus rapid transit). Rural governments (non-urbanized areas with populations under 50,000) have received \$20.33 million in FTA non-urbanized area formula grants for capital purchases through ARRA. Urban governments (over 50,000 population) have received \$290.46 million in FTA urbanized area formula grants.

<sup>&</sup>lt;sup>73</sup>Florida Office of Economic Recovery. State and Local Projects. Available at: http://flarecovery.com/about/state-and-local-projects/infrastructure FDOT.

## Passenger Rail Infrastructure Investment (PRIIA) Act of 2008

Each state must develop a State Rail Plan that complies with the Passenger Rail Infrastructure Investment Act of 2008 (PRIIA) requirements (listed in Appendix A) to be eligible for Federal funding for rail improvements, and Intercity Passenger Rail Service Corridor Capital Assistance grants authorized in PRIIA.

Going forward, Florida could benefit from identifying rail projects that may be eligible for additional discretionary transportation funding made available through ARRA in the future.

# High-Speed Rail Programs

Florida has a long history of high-speed rail planning and funding. The 1984 Florida High-Speed Rail Transportation Commission Act, 1992 High-Speed Rail Act, and 2000 constitutional amendment on high-speed rail (repealed in 2004) have charged multiple commissions with implementing high-speed rail in Florida, unfortunately, securing state funding for high-speed rail has been difficult and contentious. FDOT's funding commitment of \$70 million per-year for high-speed rail was implemented in 1995 and subsequently terminated in 1999.

In November 2000, Florida voters approved an amendment to the State Constitution mandating the development of high-speed passenger transportation service linking Florida's five largest urban areas. This service would have speeds in excess of 120 mph and would operate on dedicated rails or guideways. This prompted the Florida Legislature to enact the Florida High-Speed Rail Authority Act, which created the ninemember Florida High-Speed Rail Authority.

The High-Speed Rail Authority created a vision for a high-speed rail network linking the major population centers in Florida and issued a request for proposals in October 2002 to design, build, operate, maintain, and finance an initial high-speed rail service between Tampa and Orlando. The cost estimate was \$2.4 billion. The route would begin near the Tampa Central Business District and travel parallel along I 4 into Orlando and on to the Orlando International Airport. A Phase I, Part 2 extension into St. Petersburg also was planned.

Growing concern over the costs of implementing a high-speed rail network led to efforts to repeal the amendment. In November 2004, Florida voters chose to overturn the original amendment, resulting in removal of the constitutional mandate. Although the amendment had been repealed, the Florida High-Speed Rail Authority decided it was in the best interest of the State of Florida to complete the Final EIS and to pursue a Record of Decision from the FRA for the initial Tampa-Orlando segment, completing and preserving the progress to date. Since 2004, the Authority has continued the preliminary design, engineering, and procurement process for the Florida high-speed rail corridor with funds previously earmarked by the U.S. Congress.

## Next Generation High-Speed Rail

Federal funds for high-speed rail in Florida were originally authorized by Section 1010 of the Intermodal Surface Transportation Efficiency Act (ISTEA), enacted in December 1991. Under Section 1010, the Secretary of Transportation was directed to designate five "Next Generation" high-speed rail corridors to receive \$30 million for the elimination of highway/rail grade crossings. The Florida corridor linking Miami, Orlando, and Tampa was selected as one of the five corridors to receive this funding.

Separately, Section 1036 of ISTEA authorized \$50 million for demonstration of new high-speed ground transportation technologies, and \$25 million for research and development. Section 1107 authorized \$97.5 million for land and right-of-way acquisition and guideway construction for a 13.5-mile magnetic levitation, or maglev, line between the Orlando Airport and the International Drive complex near Disney World. ISTEA also amended the Railroad Revitalization and Regulatory Reform Act of 1976 to authorize up to \$1 billion in government-guaranteed loans to finance construction of high-speed rail systems; however, these funds were never appropriated.

The Swift Rail Development Act, which was enacted into law in November 1994, authorized \$184 million for FY 1995 through FY 1997 for "Next Generation" corridor planning and technology improvements. The Transportation Equity Act for the 21st Century (TEA-21), enacted in June 1998, provided additional funding for high-speed rail development and added six new lines to the list of priority high-speed corridors. In the 2003 and 2004 DOT Appropriations Bills, \$3.85 million and \$5 million respectively were earmarked for planning the Florida high-speed rail corridor.

#### ARRA and the High-Speed Intercity Passenger Rail Program

On April 16, 2009, the Obama Administration announced a new vision for developing high-speed intercity passenger rail in America. This vision, outlined in the administration's High-Speed Rail Strategic Plan, calls for collaboration between Federal government, states, railroads, and other stakeholders to develop a national system of high-speed rail corridors. Eleven designated corridors, including the Tampa-Orlando-Miami high-speed rail corridor, are addressed in the plan (see Figures 3.9 and 3.10), which details the application requirements and procedures for obtaining a portion of the \$8.0 billion appropriated through the ARRA and the Department of Transportation Appropriations Acts of 2008 and 2009 (FY 2008/2009 DOT Appropriations Acts) for high-speed rail.

In July 2009, FDOT submitted a pre-application for ARRA funding seeking \$2.5 billion in stimulus monies to implement the Orlando-Tampa rail project and \$30 million for the National Environmental Policy Act (NEPA)/Preliminary Engineering (PE) work for the Orlando-Miami Rail segment.

#### Phase I: Orlando-Tampa

In January 2010, Florida DOT received a \$1.25 billion award for the first phase of the abovementioned project. This investment will initiate the development of the Tampa to

Orlando segment, with speeds reaching 168 mph and 16 round trips per day on new track dedicated solely to high-speed rail. Trip time between the two cities on the new line will be less than one hour, compared to around 90 minutes by car. This project will create jobs and generate economic activity as 84 miles of track are constructed, stations are built or enhanced, and equipment is purchased. Completion of this phase is anticipated in 2015.<sup>74</sup>

Moving forward, FDOT is responsible for building the project with oversight by the Federal Railroad Administration (FRA). The Federal government is the principle funding source for the project, and FRA is responsible for administering the \$1.25 billion award of ARRA funds and any other future Federal funding. It is expected that the FRA and FDOT will develop a funding agreement for the balance of the project's capital costs as the project progresses.

#### Phase II: Orlando-Miami

The second phase of the project, the 230-mile Orlando to Miami line, which, pending funding, has been scheduled for completion in 2017. This line expected to operate at speeds up to 186 mph, reducing travel time between these two cities to approximately two hours, or roughly half as long as it takes to drive the same route. Ultimately, 20 round-trips per day between Orlando and Miami are planned. Although it is likely no ARRA funding will be available for this segment, significant planning activities are ongoing to prepare for this second phase of Florida's high-speed rail vision.<sup>9</sup>

The Intercity Passenger Rail Service Corridor Capital Assistance Program – Authorized under Section 301 of the Passenger Rail Investment and Improvement Act of 2008 (PRIIA), states may apply for grants for capital improvements to benefit all types of Intercity Passenger Rail service, including high-speed service. Amtrak may participate through a cooperative agreement with a state(s). To be eligible for funding under this program, proposed projects must meet a number of requirements (e.g., inclusion in a State Rail Plan).

**High-Speed Rail Corridor Development Program -** This program is authorized under Section 501 of PRIIA. Although similar in structure, criteria, and conditions to Section 301, eligibility for this program is restricted to projects intended to develop Federally designated High-Speed Rail corridors for Intercity Passenger Rail services that may reasonably be expected to reach speeds of at least 110 mph. Applicant eligibility under Section 501 is broadened from Section 301 to include Amtrak.

The Congestion Grants Program – Authorized under Section 302 of PRIIA, this program authorizes grants to states or to Amtrak (in cooperation with states) for facilities, infrastructure, and equipment for high-priority rail corridor projects to reduce congestion or facilitate ridership growth on intercity passenger rail.

<sup>&</sup>lt;sup>74</sup>http://www.whitehouse.gov/the-press-office/fact-sheet-high-speed-intercity-passenger-rail-program-tampa-orlando-miami.

High-Speed Intercity Passenger Rail Program grants will be awarded competitively based on economic performance, expected ridership and other factors related to quality of life, environmental stewardship, and reduced dependence on energy and foreign oil. Priority will be given to projects that:

- Deliver transportation, economic recovery and other public benefits, including energy independence, environmental quality, and livable communities;
- Ensure project success through effective project management, financial planning and stakeholder commitments; and
- Emphasize a balanced approach to project types, locations, innovation, and timing.

## Highway Railroad Grade Crossing Program

Funds for the Highway Railroad Grade Crossing program are authorized under Section 1103 of SAFETEA-LU. Commonly known as the Section 130 Program (due to a citation in a 1970s Federal highway bill), this was originally the Rail-Highway Crossing Program from the 1973 Highway Safety Act. Funds can be used to further rail projects that improve safety at public grade crossings. At least half of the Section 130 funds must be used for installation of protective devices at grade crossings. These include:

- Standard signs and pavement markings;
- Active warning devices;
- Track circuit improvements and interconnections with highway traffic signals;
- Crossing illumination;
- Crossing surface improvements; and
- General site improvement.

The remainder of the funding can be used for construction projects, such as grade separations, sight-distance improvements, geometric improvements, and closing of grade crossings. There are 5,166 at-grade crossings in Florida, which present both safety and mobility challenges. FDOT determines the relative hazard of crossings statewide using a Safety Index, which is based on a combination of specific conditions that occur at each crossing. Those crossings with the lowest Safety Index values are ranked highest in priority for installation of warning devices such as flashing lights or gates. Grade-separated structures may be recommended for extremely hazardous crossings with low-index values and high incident rates and high train/vehicular volumes, or other engineering considerations. Annually, each grade crossing is assigned a statewide priority number based on the Safety Index and project prioritization occurs on that basis. Key rail personnel representing each FDOT District, local government agencies, and

<sup>&</sup>lt;sup>75</sup>http://safetydata.fra.dot.gov/.

railroads are consulted for their expertise and input on crossings in their respective Districts.

Under previous Federal transportation authorizations over the past 15 years, the total dollar amounts were between \$140 and \$155 million per year. SAFETEA-LU increased Section 130 program funding to \$220 million per year for FY 2006 to FY 2009. A new provision also was added allowing states to use up to two thirds of the funds apportioned to their state under this program for compilation and analysis of data in meeting their reporting requirements. Federal funds are available up to 90 percent, with the remaining 10 percent matched by the state when the crossing is on a state-maintained road or by local authorities if a municipal street is affected. For certain types of projects the Federal share may be 100 percent.

In FY 2009, Florida received \$8.6 million in Federal funds for eliminating hazards relating to railway-highway crossings. In FY 2006 Florida received \$7.5 million, and the amount apportioned to Florida for this program has gradually increased since. In total, Florida has received a total of \$30.0 million through this program between FY 2005 to FY 2009.76 Section 207 of PRIIA authorizes \$1.5 million for each fiscal year from 2010 through 2013 to continue the program.

#### Operation Lifesaver

Operation Lifesaver, Inc. is a nationwide, nonprofit public awareness program dedicated to ending collisions, fatalities, and injuries at highway-railroad grade crossings and on railroad property. Operation Lifesaver promotes the three Es:

- **Education -** Through increased public awareness of the dangers of grade crossings to vehicles and pedestrians.
- **Enforcement** Of traffic laws related to crossing signs and signals.
- **Engineering** Through encouragement of continued engineering research and innovation to improve safety.

SAFETEA-LU set aside \$560,000 for Operation Lifesaver in fiscal year 2005 and from FY 2006 through FY 2009 Operation Lifesaver received a separate authorization of \$560,000 annually. Section 206 of PRIIA authorizes \$2 million in each year for FY 2010 and FY 2011 and \$1.5 million in each year for FY 2012 and FY 2013 for grants to Operation Lifesaver and other public education and railroad safety awareness programs. These grants may be provided to states, based on the greatest safety benefit, for up to \$250,000.

<sup>&</sup>lt;sup>76</sup>FHWA. SAFETEA-LU Funding Tables. Available at: http://www.fhwa.dot.gov/safetealu/fundtables.htm.

## Railroad Safety Technology Grants

PRIIA, Public Law 112-432 authorizes appropriation of \$1.65 billion for the nation's rail safety program for FY 2009 through FY 2013. Section 105 of the bill requires the implementation of "interoperable" positive train control systems for Class I freight and passenger rail carriers by December 31, 2015 and authorizes \$250 million in Railroad Safety Technology Grants to help operators implement the technology. The grants provide up to 80 percent of total project costs, with priority given to projects that benefit both freight and passenger rail or advance positive train control technology.

### State Grants for Rail Projects

#### Capital Assistance to States-Intercity Passenger Rail Service

In the FY 2008 DOT Appropriations Act, Congress established a new pilot program for joint Federal-state intercity passenger rail capital investment, known as Capital Assistance to States-Intercity Passenger Rail Service. Under this program, \$30 million in Federal funding is available to states on a competitive basis to fund up to 50 percent of the capital cost of improving intercity passenger rail service, and up to 10 percent of the \$30 million is available for rail corridor planning grants.

## **State Capital Grant**

PRIIA, Public Law 112-432 reauthorizes Amtrak and provides a total of \$13.06 billion over five years to encourage the development of new and improved intercity passenger rail service. The bill authorizes \$1.9 billion for a new State Capital Grant program to assist states in covering capital costs of facilities and equipment necessary to provide new or improved passenger rail service. The Federal share for these grants is 80 percent. Grants are awarded on a competitive basis based on economic performance, expected ridership and other factors. Commuter rail projects are not eligible for grants under this program. In March 2009, \$90 million was appropriated for the program as part of the FY 2009 DOT Appropriations Act.

#### Capital Grant Program for Rail Line Relocation and Improvement Projects

The Capital Grant Program for Rail Line Relocation and Improvement projects was created under Section 9002 of SAFETEA-LU to fund local rail line relocation and improvement projects. States are eligible to receive grant funds from this program for:

- Rail line improvement projects that mitigate the impacts of rail traffic on safety, motor vehicle traffic flow, community quality of life, and/or economic development; and
- Rail line relocation projects involving a lateral or vertical relocation of any portion of the rail line.

Section 9002 authorizes appropriation of \$350 million per year for FY 2006 through FY 2009. At least 50 percent of the grant funds awarded under this program in a fiscal year must be provided as grant awards not exceeding \$20 million each. The Federal share

for these grants is up to 90 percent; however, funds have not been appropriated for this program.

## Congestion Mitigation and Air Quality

The Congestion Mitigation and Air Quality (CMAQ) program was created in 1991 by ISTEA to provide funding for transportation projects that improve air quality and help achieve compliance with national air quality standards set forth in the Clean Air Act. Funding is available for areas that do not meet national air quality standards (nonattainment areas), and areas that formerly exceeded air quality standards, but are now in compliance (maintenance areas). CMAQ funds are eligible for use on a variety of freight and passenger rail projects, including:

- Priority control systems;
- Intermodal facilities;
- Rail track rehabilitation;
- New rail sidings and passenger rail facilities, vehicles, equipment; and
- Operating expenses (new or expanded service).

CMAQ funds may also be used for construction activities that benefit private companies, if it can be shown that the project will improve air quality by removing trucks from the road. For example, CMAQ funding has been used to cover part of the operating costs of Amtrak's *Downeaster* service between Boston and Portland, Maine.

Under SAFETEA-LU, the CMAQ program provided \$8.6 billion to state DOTs, MPOs and transit agencies between 2005 and 2009. The Federal share for CMAQ funds is generally 80 percent, subject to a sliding-scale, with Interstate projects eligible for a 90 percent share. Certain activities, including priority control systems for transit vehicles and traffic control signalization, receive a Federal share of 100 percent. Funding is distributed to individual states based on the population in nonattainment areas and the severity of ozone and carbon monoxide problems. Florida's annual allocation of CMAQ funds has increased steadily over the life of the program. Between FY 2005 and FY 2009, Florida was apportioned approximately \$42.5 million in CMAQ funds; the state's annual apportionment in FY 2009 was approximately \$8.8 million.<sup>77</sup>

Federal CMAQ funds are apportioned annually to each state according to the severity of its ozone and CO problem. Each state is guaranteed a minimum apportionment of 0.5 percent of the year's total program funding, regardless of whether the state has any nonattainment or maintenance areas. These "flexible" or minimum apportionment funds can be used anywhere in the state for any projects eligible for either CMAQ or the Surface Transportation Program (STP). Florida does not currently contain any nonattainment or

<sup>&</sup>lt;sup>77</sup>FHWA. Estimated Highway Apportionments Tables – 2005-2009. Available at: http://www.fhwa.dot.gov/safetealu/fundtables.htm.

maintenance areas, meaning it has a greater amount of flexibility to utilize these funds for a wider variety of transportation projects, including freight and passenger rail improvements.

#### Projects of National and Regional Significance

Projects of National and Regional Significance (PNRS) was created by Section 1301 of SAFETEA-LU to provide grant funds for high-cost projects of national or regional significance. Projects eligible for funding under this program include any surface transportation project authorized under Title 23, including freight rail projects. Eligible project activities include development phase activities, right-of-way acquisition, construction, rehabilitation, environmental mitigation, equipment and operational improvements. Projects must have a total eligible project cost greater than or equal to \$500 million, or 75 percent of the total Federal highway funds apportioned to the state in the most recent fiscal year. Federal share for this program is generally 80 percent of total project cost.

Funds are allocated to projects through a competitive evaluation process based on the ability of projects to generate national economic benefits, reduce congestion, improve transportation safety and produce other benefits. SAFETEA-LU authorized \$1.6 billion for this program from FY 2006 to FY 2009, almost all of which was earmarked for projects outside of Florida.

As a state with great potential for passenger rail ridership growth, Florida is home to multiple potential projects of national and regional significance. To secure future PNRS funding the state must proactively position larger rail infrastructure projects for consideration and make a strong case for funding. Given the prevalence of designations in the first round of PNRS allocations, obtaining funding through this program in the future will require strong planning and leadership.

#### Freight Intermodal Distribution Pilot Grant Program

The Freight Intermodal Distribution Pilot Grant program was created under Section 1306 of SAFETEA-LU to facilitate and support the development of intermodal freight transportation initiatives that reduce congestion and enhance safety. The grants provide capital funds to address freight distribution and infrastructure needs at intermodal freight facilities and inland ports. This is a pilot program, and Congress specified grant funds from this \$30 million program for six projects, all located outside Florida. Each project was to receive \$1 million annually for the five years from FY 2005 through FY 2009. FDOT may consider positioning several projects for future funding through this program.

#### Transportation Enhancement Program

The purpose of the Transportation Enhancement program (TEP) is to strengthen the cultural, aesthetic and environmental aspects of the nation's intermodal transportation system. TEP funds are made available through an annual 10 percent set-aside from the

Surface Transportation Program after covering administrative costs. The TEP provides Federal-cost reimbursement for up to 80 percent of surface transportation projects that fall within one of 12 eligible categories, including rehabilitation of historic transportation facilities (rail trestles, tunnels, bridges, depots) and acquisition and preservation of abandoned rail right-of-ways. Funds are awarded based on a competitive application process and are allocated based on an equity formula.

Under SAFETEA-LU, Florida was apportioned \$245.8 million in Enhancement funds for FY 2005 through FY 2009.<sup>78</sup> Over the life of the program (FY 1992 to FY 2009), Florida has received \$637.2 million in Enhancement funds.

#### New Starts and Small Starts Programs

The New Starts program was continued under Section 5309 of SAFETEA-LU, which provides funds for new fixed-guideway transit projects, including new systems and extensions to existing systems. Rail transit projects eligible for funding under New Starts include heavy-rail transit systems, light-rail transit systems, automated guideway transit systems, and commuter rail. Projects eligible for New Starts funding are specified in the SAFETEA-LU authorization. Section 1309 of SAFETEA-LU also created a Small Starts program for smaller projects with a total cost of less than \$250 million and a Federal New Starts share of less than \$75 million. Congress designated \$6.58 billion in New Starts funding from FY 2006 through FY 2009. The Small Starts program is funded from FY 2007 to FY 2009 for \$600 million.

The Central Florida Commuter Rail Transit received \$13.8 million in New Starts funding in FY 2008, \$12.9 million in FY 2009 (through the Omnibus Appropriations Act) and is recommended for a full funding grant agreement with \$40 million in the FY 2010 President's Budget.<sup>79</sup> In order to position additional projects for New Starts funding, Florida can track the guidelines for selection for projects and position potential urban passenger rail projects for consideration during future funding cycles. This is especially important since funding priority is given to projects that are farthest along the project development "pipeline." FTA recently issued updated guidance for advancing projects along the pipeline for New Starts funding, including recommended planning, project development, and evaluation and budgeting processes.

#### Fixed-Guideway Modernization

The Fixed-Guideway Modernization program, also referred to as the Rail Modernization program, remains unchanged under Section 5309 of SAFETEA-LU, and provides funds for the modernization and rehabilitation of fixed-guideway transit systems. All types of rail

<sup>&</sup>lt;sup>78</sup>FHWA. Transportation Enhancement Activities Apportionments for FY 1992-2009. Available at: http://www.fhwa.dot.gov/environment/te/apportionments.htm.

<sup>&</sup>lt;sup>79</sup>FTA. Proposed Allocation of Funds for Fiscal Year 2010. Available at: http://www.fta.dot.gov/publications/reports/reports\_to\_congress/publications\_9672.html.

transit projects are eligible for funding from this program, with funds apportioned to projects based on a formula contained in the authorizing legislation.

SAFETEA-LU authorized \$6.1 billion from FY 2006 through FY 2009 for this program. All funds available through this program are designated and subsequently not available for new applicants. Should the Fixed-Guideway Modernization program be funded in the next surface transportation bill, it may be a potential funding source for Florida rail transit projects. Some fixed-guideway funds appropriated through ARRA have been allocated by FTA directly to local governments in Florida. Local Florida governments have received \$5.41 million for capital projects to modernize or improve existing fixed guideway transit facilities (rail and bus rapid transit). In addition, rural governments (nonurbanized areas with populations under 50,000) have received \$20.33 million in FTA nonurbanized area formula grants for capital purchases through ARRA. Up to 10 percent of ARRA urbanized and nonurbanized funds may be spent on operating expenses. Urban governments (over 50,000 population) have received \$290.46 million in FTA urbanized area formula grants.

#### **Economic Development Administration Funds**

The U.S. Department of Commerce's Economic Development Administration (EDA) provides grants for economic development projects in economically distressed industrial areas. The EDA Public Works and Economic Development investments support construction or rehabilitation of public infrastructure and facilities necessary to generate or retain private sector jobs and investments and to promote regional competitiveness. Eligible projects must be located within an EDA-designated redevelopment area or economic development center. Freight-related projects eligible for funding through this program include: industrial access roads, port development, and expansion and railroad spurs and sidings.

Evidence of the economic distress that the project is intended to alleviate is required from grantees. The program provides grant assistance of up to 50 percent of a project cost; however, it can provide up to 80 percent of cost for projects located in severely depressed areas. During FY 2007 (the most recent year for which EDA grant data has been compiled), over \$158 million was appropriated for the Public Works and Economic Development Assistance grant program. Florida received 13 EDA grants totaling \$3.2 million. Florida's Gulf Coast region received over \$1.5 million for public works activities in Panama City; the City of Marianna and Jackson County received approximately \$1.1 million for economic development planning and implementation activities. None of the funds received to date tackled issues specific to rail.

<sup>&</sup>lt;sup>80</sup>EDA. Economic Development Administration Fiscal Year 2007 Annual Report. Available at: http://www.eda.gov/PDF/2007AnnualReport.pdf.

#### **Community Facilities Program**

The U.S. Department of Agriculture's Community Facilities program provides three programs for funding the construction, enlargement, extension or improvement of community facilities in rural areas and towns with a population of 20,000 or less. The three programs are:

- Direct Community Facility Loans;
- Community Facility Loan Guarantees; and
- Community Facility Grant Program.

Grant assistance is available for up to 75 percent of total project cost. Rail-related community facilities eligible for funding from this program include rail spurs serving industrial parks and other railroad infrastructure serving industrial areas such as yards, sidings and mainline tracks.

In total, Florida received \$111.3 million in Community Facilities loans, loan guarantees, and grants from FY 2001 through FY 2008. In FY 2008, the Community Facilities program provided the State \$76.8 million in direct loans, \$29.2 million in loan guarantees and \$5.3 million in grants. The average loan, loan guarantee, and grant amounts nationwide are estimated to be \$442,000, \$860,000, and \$32,000 respectively.<sup>81</sup>

#### Federal Rail Loans Guarantees and Tax Credits

The programs described in this section include both loans and credit enhancement programs. In the case of loans, a project sponsor borrows funds directly from a state DOT or the Federal government under the condition that the funds will be repaid. Credit enhancement involves a state DOT or the Federal government making financial guarantees or other types of assistance that improve the credit of underlying debt obligations. Credit enhancement has the effect of lowering interest costs and improving the marketability of bond issues. An example of this is a loan guarantee through the Transportation Infrastructure Finance and Innovation Act (TIFIA) program. This type of credit enhancement helps to reduce the risk to investors and, thus, allows the project sponsor to borrow at lower interest rates. SAFETEA-LU created or substantially changed several loan and credit programs that can be used to finance freight rail. Table 6.4 provides detail on the existing loan and credit programs that can be used to finance rail projects.

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<sup>&</sup>lt;sup>81</sup>USDA. USDA Rural Development 2008 Progress Report. Available at: http://www.rurdev.usda.gov/rd/pubs/progress/2008\_RD\_ProgressReport.pdf.

## **Build America Bond Program**

ARRA created the new Build America Bond program, which authorizes state and local governments to issue taxable bonds in 2009 and 2010 to finance any capital expenditures for which tax-exempt governmental bonds could have otherwise been issued. It allows states to receive a new direct Federal subsidy payment from the Treasury Department for a portion of their borrowing costs. This new program is intended to assist state and local governments in financing capital projects at lower borrowing costs and to stimulate the economy and create jobs. <sup>82</sup>

Two types of Build America Bonds were created:83

- Tax Credits. These provide a Federal subsidy through Federal tax credits to investors in the bonds in an amount equal to 35 percent of the total coupon interest payable by the issuer on taxable governmental bonds (net of the tax credit), which represents a Federal subsidy to the state or local governmental issuer equal to approximately 25 percent of the total return to the investor (including the coupon interest paid by the issuer and the tax credit).
- **Direct Payment.** These bonds provide a Federal subsidy through a refundable tax credit paid to state or local governmental issuers by the Treasury Department and the Internal Revenue Service ("IRS") in an amount equal to 35 percent 2 of the total coupon interest payable to investors in these taxable bonds. The level of the 35 percent Federal interest subsidy on Direct Payment bonds is deeper than the corresponding approximately 25 percent Federal interest subsidy on Tax Credit bonds.

<sup>82</sup> IRS, 2009 - http://www.irs.gov/newsroom/article/0,,id=206037,00.html.

<sup>83</sup> IRS, 2009 - http://www.irs.gov/pub/irs-drop/n-09-26.pdf.

Table 6.4 Federal Loans and Tax Credits

Program	Code	Type of Projects Funded	Type of Funding
Build America Bonds	American Recovery and Reinvestment Act of 2009	Any capital expenditures for which a state or local government otherwise could issue tax-exempt governmental bonds	Direct Federal subsidy payments for a portion of the borrowing costs to issue taxable bonds
Railroad Rehabilitation and Improvement Financing program	SAFETEA-LU Section 9003(f)(2)	Acquisition, improvement or rehabilitation of freight and passenger rail facilities, also refinancing existing debt	Direct loans and loan guarantees to public and private entities
TIFIA	23 USC 181-189	Large surface	Loans and guarantees,
	SAFETEA-LU Section 1609	transportation projects of national significance	contingent Federal loans
State Infrastructure Banks	National Highway System Designation Act Section 350 SAFETEA-LU	Transportation projects	Subordinate loans, interest rate buydowns on third-party loans, loan guarantees and
	Section 1602		line of credit
Railroad Track Maintenance Credit	Internal Revenue Code Section 45G	Track maintenance on any Class II or Class III track	Tax credit equal to 50% of the maintenance and rehabilitation expenditures
Private Activity Bonds	SAFETEA-LU Section 1143	Surface transportation projects	National capacity of liability \$15 billion

# Railroad Rehabilitation and Improvement Financing Program

The Railroad Rehabilitation and Improvement Financing program (RRIF) was originally created under Section 7203 of TEA-21. Section 9003 of SAFETEA-LU amended the program and increased funding for RRIF tenfold, from \$3.5 billion to \$35 billion between FY 2000 and FY 2006. Up to \$7 billion of these funds are reserved for projects benefiting freight railroads that are not Class I carriers. Additionally, SAFETEA-LU eased the requirements for securing RRIF loan to make these funds available to a broader range of rail projects. Furthermore, the interest rates for these loans

The Federal Railroad Administration (FRA) administers the RRIF program, which provides financial assistance in the form of direct loans and/or loan guarantees to eligible recipients, including railroads, state and local governments, government-sponsored authorities and corporations, joint ventures that include at least one railroad and limited option freight shippers who intend to construct a new rail connection. The following types of rail projects are eligible:

- Acquisition, improvement or rehabilitation of freight (intermodal or carload) and passenger rail equipment and facilities, including tracks, yards, bridges, etc.;
- Refinancing of outstanding debt incurred in the acquisition, improvement, or rehabilitation of freight and passenger rail equipment and facilities; and
- Development of new freight and passenger rail facilities.

Direct loans from RRIF can be used to finance up to 100 percent of the total project cost, while loan guarantees can be made for up to 80 percent of the cost of a loan, for terms up to 35 years and interest rates equal to the rate of Treasury securities of a similar term. The program requires applicants to cover the subsidy costs through payment of a "credit risk premium" equal to a fraction of the loan amount calculated based on the financial viability of the applicant and the value of the collateral provided to secure the debt. The RRIF program does not provide financial assistance for rail operating expenses.

Twenty-six loans, totaling \$1.023 billion, have been issued since FY 2002. The smallest and largest loans approved respectively were \$2.1 million for Mount Hood Railroad, Oregon and \$233 million for the Dakota, Minnesota, and Eastern Railroad. A wide variety of projects (including bridge improvement or rehabilitation) are eligible for funding under the RRIF, making it a valuable potential source of future funding for Florida rail projects. RRIF set-asides for non-Class I carriers make the program especially well-suited to funding improvements to Florida's short-line facilities.

## Transportation Infrastructure Finance and Innovation Act

TIFIA's strategic goal is to leverage limited Federal resources and stimulate private capital investment by providing credit assistance (up to one-third of the project cost) for major transportation investments of national or regional significance. The program has a minimum project cost threshold for eligibility, which is the lower of \$50 million, or 33 percent of a state's annual Federal-aid apportionment for highway projects. Federal credit assistance from this program cannot exceed 33 percent of the total project cost, with an interest rate equal to the rate on U.S. Treasury securities of similar maturity on the day of loan closing. Under SAFETEA-LU, eligible TIFIA projects were expanded to include:

- Public and/or private freight rail facilities that provide benefits to highway users;
- Intermodal freight transfer facilities;
- Access to freight facilities and service improvements, including capital investments for Intelligent Transportation Systems; and
- Port terminals, but only when related to surface transportation infrastructure modifications to facilitate intermodal interchange, transfer and access into and out of the port.

TIFIA offers three distinct types of financial assistance: secured (direct) Federal loans to project sponsors; loan guarantees by the Federal government to institutional investors, and standby lines of credit in the form of contingent Federal loans. SAFETEA-LU authorized \$122 million per year to pay the subsidy costs of supporting Federal credit under

TIFIA. There is no limit on the amount of credit assistance that can be provided to borrowers in a given fiscal year. Repayment of TIFIA loans must come from tolls, user fees, or other dedicated revenue sources. As of August 2010, TIFIA assistance amounted to \$7.9 billion, leveraging \$29.8 billion of investment in 23 transportation projects.<sup>84</sup> Florida has used TIFIA assistance for three projects:

- **Miami Intermodal Center -** Up to \$439 million in TIFIA commitments were provided under two separate obligations:
  - FDOT Program Elements loan: \$269 million; to be repaid from fuel tax revenues.
  - Rental Car Facility loan: up to \$170 million, amended to \$270 million; to be repaid from fees levied on rental car users.
- I-595 Corridor Roadway Improvements A \$603 million loan assisted in the reconstruction, operation, and maintenance of the I-595 mainline, express lanes, and all associated improvements to adjacent crossroads, frontage roads, and ramps from the I-75/Sawgrass Expressway interchange to the I-595/I-95 interchange.
- Port of Miami Tunnel A \$341 million TIFIA loan was used to cover approximately 32 percent of the project's costs. The project will improve access to/from the Port of Miami, serving as a dedicated roadway connector linking the Port (located on an island in Biscayne Bay) with the MacArthur Causeway (State Road A1A which connects Miami to Miami Beach) and I-395 on the mainland.

## State Infrastructure Banks

Florida's State Infrastructure Bank (SIB) is a revolving loan and credit enhancement program consisting of two separate accounts. The Federally funded account is capitalized by Federal money matched with state money as required by law and the state-funded account is capitalized by state money and bond proceeds.

The SIB can provide loans and other assistance to public and private entities carrying out or proposing to carry out projects eligible for assistance under state and Federal law. SIB participation from the Federally funded account is limited to projects which meet all Federal requirements pursuant to the Safe, Accountable, Flexible, Efficient Transportation Act: A Legacy for Users (SAFETEA-LU) and applicable Federal guidelines. SIB participation from the state-funded account is limited to a transportation facility project that is on the State Highway System or that provides for increased mobility on the state's transportation system in accordance with Section 339.55, Florida Statutes or provides for intermodal connectivity with airports, seaports, rail facilities, transportation terminals, and other intermodal options for increased accessibility and movement of people, cargo, and freight.

<sup>&</sup>lt;sup>84</sup>U.S. DOT. Transportation Infrastructure Finance and Innovation Act: Approved Projects. Available at: http://tifia.fhwa.dot.gov/projects/approved.cfm.

The SIB can leverage funds through loans, and credit enhancement assistance to improve project feasibility. The SIB cannot provide assistance in the form of a grant. The amount of any loan or other assistance may be subordinated to other debt financing for a project with an investment grade rating of "BBB" or higher. Loans from the SIB may bear interest at or below market interest rates, as determined by FDOT.

Florida has one of the most active SIB programs in the country. As of June 30, 2010, the Federally funded account has been capitalized with \$152.5 million, including interest and the State-funded account has been capitalized with \$471.4 million, including interest. Since its establishment, Florida's SIB has provided SIB assistance totaling \$1.1 billion leveraging \$8.3 billion in total project costs.

#### Railroad Track Maintenance Credit

The Railroad Track Maintenance Credit authorized under Section 45G of the Internal Revenue Code provides tax credits to qualified taxpayers for expenditures on railroad track maintenance on railroad tracks owned or leased by a Class II or a Class III railroad. The amount of tax credit provided equals 50 percent of the qualified railroad track maintenance and rehabilitation expenditures. Qualified railroad track expenditures include all expenditures towards maintenance and rehabilitation of railroad track, including roadbed, bridges, and related track structures.

Eligible taxpayers qualifying for this credit include any Class II or Class III railroad, and any person transporting property on a Class II or Class III railroad facility, or furnishing railroad-related property or services to a Class II or a Class III railroad on miles of track assigned to such person by the railroad. The maximum credit allowed under this program is \$3,500 per mile of railroad track owned, leased, or assigned to an eligible taxpayer. This credit program was made available in 2004 for a 3-year period from December 31, 2004 to December 31, 2007. For eligible taxpayers not having enough taxable income to make full utilization of the credit, the credits can be carried forward for a 20-year period.

## Private Activity Bonds

Title XI Section 11143 of SAFETEA-LU amended Section 142(a) of the IRS Code to allow the use of Private Activity Bonds (PAB) for highway and freight transfer facilities. PABs, also known as tax-exempt facility bonds, are qualified bonds, meaning that interest on the bonds is not subject to reporting for Federal-income tax purposes in the gross income of recipients. Furthermore, interest paid on Private Activity Bonds issued in 2009 or 2010 are exempt from Alternative Minimum Tax. With this qualified status and the resulting tax benefit to investors, exempt facility bonds can be offered at lower interest rates, reducing the cost of financing projects for the bond issuer. PABs reflect a desire to increase private sector investment in transportation infrastructure. Providing private developers and operators with access to tax-exempt interest rates lowers the cost of capital significantly, enhancing investment prospects. State and local governments are allowed to issue tax-exempt bonds to finance highway and freight transfer facility projects sponsored by the private sector.

SAFETEA-LU also created a new type of exempt facility eligible to be financed with taxexempt bonds, the qualified highway or surface freight transfer facility. The new type of exempt facility bonds finance certain projects for surface transportation, international bridges or tunnels, or facilities to transfer freight for truck to rail or rail to truck, provided the projector facility receives Federal assistance. SAFETEA-LU includes a cap of \$15 billion on PABs and directs the Secretary of Transportation to allocate this amount among qualified facilities.

### **Upcoming Transportation Reauthorization Bill**

Federal surface transportation spending is dictated by authorizing legislation, which sets the blueprint for Federal transportation programs for a four- to six-year period of time. It establishes the maximum amount of funding that will be spent in specific program areas and provides the foundation for annual appropriation bills, which provide funding for surface transportation programs. The Safe, Accountable, Flexible, Efficient Transportation Equity Act - A Legacy for Users (SAFETEA-LU) is the current legislation that authorizes the Federal transportation program. It was passed in 2005 and focuses on: improving safety; reducing traffic congestion; improving efficiency in freight movement; increasing intermodal connectivity; and protecting the environment. Funding under SAFETEA-LU was heavily earmarked and/or designated for regions with specific issues (e.g., rural, nonattainment). SAFETEA-LU was scheduled to expire on September 30, 2009. Congress has passed numerous extensions to SAFETEA-LU and legislation is now scheduled to expire on December 31, 2010. There is no clear schedule for reauthorization at this time. The U.S. House of Representatives has been/remains prepared to act on reauthorization, while the U.S. Senate and White House prefer to take up legislation in 2011. Extensions are common in the reauthorization process. Prior to the passage of SAFETEA-LU, the transportation authorization legislation was extended 12 times prior for a total of 20 months.

Key issues anticipated to drive the next authorization include: congestion; safety; infrastructure preservation; livability; sustainability; and funding mechanisms. Key themes are likely to include: increased funding; freight and economic development; performance measurement; consolidation of Federal programs; and high-speed rail. While the current authorization process is on hold, bipartisan leadership of the House Transportation and Infrastructure Committee has released a proposed framework for reauthorization. With no better information available, this proposal provides insight into the types of programs that may be included in the future legislation. It contains numerous freight and rail elements, including a Freight Improvement Program; a Projects of National Significance Program; a Rail Transportation program; and a Highway-Rail Crossings Improvement Program.

The Freight Improvement Program would provide formula-grant funding to:

"Improve the operations of the existing freight transportation system;

- Add physical capacity to the freight transportation system in places where investment makes economic sense;
- Strengthen the ability of rural communities to access national and international trade markets; and
- Support regional economic development."85

As part of this Program, states would be required to convene a freight advisory committee(s); develop a state freight plan; and monitor freight performance metrics and report this information to the United States Department of Transportation (U.S. DOT). States also would be able to identify secondary freight routes, which also would qualify for funding under the Freight Improvement Program. Projects funded under the Freight Improvement Program would need to be located on the National Highway System; the National Network, or a designated secondary freight route and would need to be consistent with the state's freight plan. A percentage of a state's funds also could be used to support: establishment of a Freight Advisory Committee; freight-related transportation planning; identification of secondary freight routes; and environmental restoration and pollution abatement.

Under the Projects of National Significance Program, U.S. DOT would be given authority to provide grants and/or other financial assistance to projects of national significance. National significance would be determined by the project's ability to generate national economic and mobility benefits, improve economic productivity by facilitating international trade, relieve congestion, and improve transportation safety by facilitating passenger and freight movement. Projects would represent significant investments: \$500,000,000; or 75 percent of state's apportioned funds. To be eligible for assistance under this program, U.S. DOT would be required to determine, based on information provided by the applicant, that the project could not be readily and efficiently carried out without Federal support and participation. Other financial assistance could include: loans, loan guarantees, lines of credit, private activity bonds, and tax credit bonds. Strong non-Federal commitment/alternate funding sources would be required.

The rail-related elements of the House's reauthorization proposal include the following provisions:

**High-Speed Rail Corridor Planning –** U.S. DOT would be authorized to provide funding to states in support of their planning activities for a high-speed rail corridor. Eligible planning activities would include:

"Environmental assessments;

<sup>&</sup>lt;sup>85</sup>House Reauthorization Proposal, Section 1105(a).

<sup>&</sup>lt;sup>86</sup>House Reauthorization Proposal, Section 1206(a).

- Feasibility studies, including studies on commercial technology improvements or applications;
- Economic analyses, including ridership, revenue, and operating expense forecasting;
- Assessing community economic impacts, including development opportunities at and surrounding rail stations;
- Operational planning;
- Route selection analyses;
- Preliminary engineering and design;
- Identification of specific improvements to a corridor, including electrification, line straightening and other right-of-way improvements, bridge rehabilitation and replacement, highway-rail grade crossing improvements or separations, use of advanced locomotives and rolling stock, ticketing, coordination with other modes of transportation, parking, and other means of passenger access, track, signal, station, and other capital work, and use of intermodal terminals;
- Preparation of financing plans and prospectuses; and
- Creation of public/private partnerships."87

**High-Speed Rail Technology Research –** U.S. DOT would be authorized to provide grants in research and development of high-speed rail technology;

**High-Speed Rail Corridor Development -** U.S. DOT would be authorized to provide grants to "finance capital projects that improve, or lead to development of, high-speed rail service in corridors." Projects funded under this section would need to be consistent with a state's rail plan.

**Capital Grants for Class II and Class III Railroads –** U.S. DOT would be authorized to provide up to \$50,000,000 in grants to Class II and Class III railroads per year.

**Railroad Rehabilitation and Improvement Financing -** U.S. DOT would be authorized to reduce the interest rate on financing to install a positive train control system.

**Highway-Rail Crossings –** U.S. DOT would be authorized to provide funding to support improved safety at rail crossings through the deployment of protective devices, as well as public education and outreach programs.

While the future authorization is unknown at this time, it is clear that congressional leadership will likely consider a significant expansion of freight-specific programs. Florida must ensure that its transportation program is prepared and positioned to maximize the opportunities this new authorization may provide. The Rail System Plan, along with the

<sup>&</sup>lt;sup>87</sup>House Reauthorization Proposal, Section 6001.

<sup>&</sup>lt;sup>88</sup>House Reauthorization Proposal, Section 6001.

other modal plans, the Strategic Intermodal System Plan, and Florida's Transportation Plan should provide Florida with the necessary planning and programmatic infrastructure to qualify for any new freight funding program. In addition, FDOT has an established pattern of effectively engaging stakeholders in advisory committees to guide development of these plans and programs. To address possible discretionary programs for project of national significance, FDOT will need to continue working with its private sector and regional partners to identify and build support for eligible projects. FDOT will need to monitor and participate as appropriate in new authorization activities over the next 12 to 18 months.

# ■ 6.3 State Rail Programs

This section presents an overview of the current level of state funding dedicated to advancing freight and passenger rail projects in Florida. A description of legislation and investment policies and their implications for rail transportation are outlined in the sections below.

Like many states, Florida has historically provided public support to privately held railroads when deemed to be in the best interest of the State. Funding support has included the acquisition of rail corridors, intercity passenger and commuter rail services, fixed guideway system development, rehabilitating rail facilities, improving rail-highway grade crossings, and increasing access to intermodal facilities. From 1978 through 1995, Florida actively participated in the Local Rail Freight Assistance Program (LRFA) by financing nearly \$12 million in rail rehabilitation projects and by maintaining the Florida Rail Plan, which was necessary for obtaining Federal funding matches. Additionally, the State supported the Fast Track Economic Growth Transportation Initiative of 1999 and its replacement program – the Transportation Outreach Program (TOP) – which dedicated a minimum of \$60 million annually for transportation projects of high priority. During the first five years of Fast Track and TOP, freight rail received about eight percent of the total available funding.

Today, state funds for rail projects are channeled through the FDOT Work Program. Half of these funds, \$16.43 billion, are received from traditional sources, including fuel tax receipts, vehicle registration, aviation, and rental car fees that are deposited into the State Transportation Trust Fund (STTF). Federal contributions – primarily from motor fuel taxes deposited in the Federal Highway Trust Fund – typically account for 15 to 20 percent of FDOT's Work Program funds. However, due to the additional \$1.37 billion in one-time Federal stimulus funding made available through ARRA, Federal-aid constitutes 36 percent of the FY 2010 to FY 2014 Work Plan.

According to the FDOT Work Program, public transportation rail projects are anticipated to receive approximately \$963 million between FY 2010 and FY 2014. Over the same time period \$741 million are programmed for rail capacity projects on the SIS. The anticipated five-year total funding for all rail projects in the State is \$1.82 billion, or approximately

6 percent of the total \$36.21 billion Work Program. This represents a significant increase in state resources dedicated to rail projects, which may be attributed to:

- One-time Federal stimulus funds made available through ARRA for high-speed rail
  and transportation infrastructure projects that can be completed within the next three
  years;
- Anticipated funding for construction and operation of the Central Florida Commuter Rail project (anticipated to receive approximately \$587 million between FY 2010 and FY 2014); and
- Additional funding provided through the SIS program.

The majority of state funds are expected to advance passenger (public transportation and transit) rail projects, which in many cases provide benefits for freight rail services as well. The remainder of state funds will be dedicated to freight projects and studies, including rail improvements at Florida's seaports and access improvements at intermodal facilities. Table 6.5 demonstrates the level of funding estimated by FDOT to be available for rail projects between FY 2011 and FY 2015.

Table 6.5Florida Rail Work Program Funds (FY 2011-15)Year of Expenditure

	Category	2011	2012	2013	2014	2015	TOTAL
Freight	Capacity	233,324,255	29,654,884	27,645,950	534,285	20,000,000	\$311,159,374
	Grade Separation	5,149,207	26,160,000	1	1	ı	\$31,309,207
	Maintenance/Rehab	1,820,000	•	1	•	1	\$1,820,000
	Signal Maintenance	551,872	708,000	708,000	708,000	708,000	\$3,383,872
	Crossing Safety	8,792,869	3,570,065	7,545,870	7,693,706	7,844,498	\$35,447,008
	SUBTOTAL	\$249,638,203	\$60,092,949	\$35,899,820	\$8,935,991	\$28,552,498	\$383,119,461
Passenger	Commuter	337,476,047	85,166,369	171,048,461	141,298,854	148,210,663	\$883,200,394
	High Speed	131,604,626	1	1	1	000000009	\$191,604,626
	Intercity	104	1,700,150	293,640	187,246	3,062,003	\$5,243,143
	Service Development	5,800,000	104,827,709	6,050,001	106,050,000	24,004,525	\$246,732,235
	SUBTOTAL	\$474,880,777	\$191,694,228	\$177,392,102	\$247,536,100	\$235,277,191	\$1,326,780,398
Other	Staffing	3,605,981	2,878,666	2,777,783	2,812,294	2,707,158	\$14,781,882
	Planning	1,318,289	2,658,332	2,705,255	2,967,564	3,002,758	\$12,652,198
	SUBTOTAL	\$4,924,270	\$5,536,998	\$5,483,038	\$5,779,858	\$5,709,916	\$27,434,080
	TOTALS	\$729,443,250	\$257,324,175	\$218,774,960	\$262,251,949	\$269,539,605	\$1,737,333,939

Source: FDOT Work Program. Totals may not add up due to rounding.

Florida state legislation has created several programs that influence the amount and type of funding available for rail transportation improvements in the State, including the 2005 Growth Management Bill, the SIS, and the Transportation Regional Incentive program. A description of these programs and their implications for rail corridors and facilities are described below.

### Florida Growth Management Legislation

In July 2005, the Florida enacted an Act Relating to Infrastructure Planning and Funding. The bill provided additional funds from documentary stamp tax revenues for transportation, water, and school infrastructure when certain planning standards are adopted.

The following statewide programs receive recurring funding from Documentary Stamp Tax proceeds:

- SIS;
- Small County Outreach Program (SCOP);
- Transportation Regional Incentive Program (TRIP); and
- "New Starts Transit" Program.

With respect to funding from the growth management legislation provided to SIS projects, FDOT adopted the following policies to influence the selection of project priorities for programming. Projects should:

- Be identified as needed projects and priorities of the state and local governments, combined with priorities of modal partners;
- Be consistent with adopted local government comprehensive plans;
- Be identified as a backlogged facility;
- Support mobility within a designated infill area, redevelopment and revitalization area, or multimodal district; and
- Provide improved alternatives for moving goods.

## Strategic Intermodal System

Florida's SIS was established in 2003 by the Florida Legislature to enhance economic competitiveness by focusing state resources on the transportation facilities designated as critical to Florida's economy and quality of life. The SIS is a statewide network of high-priority transportation corridors and facilities, including the State's largest and most significant freight rail terminals, passenger rail and intercity bus terminals, and rail corridors. The SIS Strategic Plan, which provides policy direction for implementing the SIS, was adopted in January 2005 and currently is being updated.

The Leadership Committee responsible for updating the SIS Strategic Plan is recommending to continue to include a Finance Strategy element aimed at implementing an investment policy that allocates 75 percent of state new discretionary transportation capacity funding to the SIS by 2015 (up from 66 percent today). Capacity and operational improvements to SIS/Emerging SIS corridors and connectors are eligible for funding, with an emphasis on reducing bottlenecks and improving access to transportation hubs. At SIS and Emerging SIS hubs, the emphasis is on improving the functionality, not the size, of the hub. State funding will be available for projects that streamline movement of interregional, interstate, and international passengers and goods as well as provide substantial public benefit, such as ground transportation and terminal connections between hubs and the SIS connectors. The Finance Strategy suggests dedicating about \$2 billion per year for SIS and Emerging SIS improvement projects, including \$100 million per year targeted specifically for the SIS.

SIS funds are allocated as part of the development process of FDOT's Work Program. FDOT developed funding eligibility guidelines for SIS hub, corridor, and connector projects. Of the \$1.56 billion dedicated to fund rail projects in the FY 2011 to FY 2015 Work Program, 70 percent, are expected to be funded through the SIS program. The vast majority of SIS rail funds (87 percent) are slated for public transortation rail projects, with the remainder set to support freight rail projects and studies.

#### **Transportation Regional Incentive Program**

The TRIP was created in 2005. Whereas the SIS was initiated in response to international and interstate travel demand, the TRIP was developed to meet increasing demand for intraregional travel. Through TRIP, state matching funds are made available to local governments to help pay for critical projects that benefit regional travel and commerce. Regional transportation areas are defined by law as:

- Two or more contiguous MPOs;
- One or more MPOs or counties;
- Multicounty regional transportation authority;
- Two or more contiguous counties not members of an MPO; and
- MPOs comprised of three or more counties.

The law authorizes FDOT to pay up to 50 percent of project costs. To be eligible for funding through the TRIP, local governments must demonstrate that selected projects are included in their capital improvement programs, are consistent with the SIS, support facilities that serve national, statewide, or regional functions, and have commitments of local, regional, or private matching funds.

# ■ 6.4 Florida New Starts Program

Another strategic transportation policy initiative created in 2005 is the Florida New Starts Transit Program (NSTP). The primary purpose of the NSTP is to provide funding support to position Florida transit projects competitively relative to other projects nationally and to capture Federal transit funding for expensive projects. NSTP provides transit agencies with up to a 50 percent match of the non-Federal share of project costs for transit fixed-guideway (rail transit and bus rapid transit) projects and facilities that qualify under the FTA New Starts Program. This program also allows a 50 percent match of local funds towards projects funded with state and local funds only. NSTP considerations in transit project funding decision-making include:

- Compliance with Federal and state policies and guidelines;
- Coordination with regional projects and programs;
- Consistency with local, regional, and state plans and programs;
- Local financial and land use and growth management policy commitments;
- Potential to leverage Federal transit discretionary funding; and
- Location on dedicated right-of-way.

The NSTP is intended to enhance transit investment decision-making by incorporating relevant state and Federal policy, program guidelines, and project development requirements into a comprehensible and easy to implement program. The program encourages a greater consideration of policy coordination and project technical merits into the State transit project funding allocation decision-making process.

## **Status of State Funding Today**

For many years revenue growth from traditional state transportation funding source was robust and secure due to Florida's robust and growing economy and a shift towards large vehicles for travel. Starting in 2006, at the beginning of the economic slowdown that hit the nation and the State, actual revenue receipts have not kept with statewide forecasts. The growth rate of future revenues has tempered in recent Revenue Estimating Conferences (REC) as the growth in motor fuel consumption has dropped compared to previous years. Fuel consumption and related motor fuel tax revenues are likely to continue to decline with the increasing popularity of smaller size and/or hybrid cars and the advancement of other more energy efficient automobile technologies. Since motor fuel tax is a major source for Federal, state, and local transportation funds in Florida. It is imperative the State discusses this issue further and identifies funding sources to augment and ultimately replace the motor fuel tax.

# ■ 6.5 Other Funding Sources

#### **Local Government Revenues**

Revenues generated by local government also are used to supplement traditional state and Federal funding sources for transportation. In fact, a number of counties and municipalities throughout the country have successfully funded the creation, operation, and expansion of local passenger rail and transit services through dedicated local tax revenues. For example, Mecklenburg County in North Carolina implemented a half-cent sales surtax in 1998 to fund local public transportation projects. The tax was approved by referendum with a 58 percent favorable vote and reaffirmed by a 70 percent favorable vote in 2008. In the first 8 years after being passed, the tax generated over \$396 million. By 2011, the tax is projected to generate over \$85 million annually, making the goal of implementing 21 miles of light rail and 25 miles of commuter rail outlined in the city's 2030 transit plan a realistic possibility.

Locally generated tax revenues are not widely used for rail projects in Florida; however, no legislation exists that would prevent these sources from being used to finance freight and passenger rail investments. Currently, Florida jurisdictions have the option of levying a number of taxes to support transportation, which include:

- **Fuel Taxes** As identified earlier in this Chapter, local jurisdictions have a number of tax opportunities, which can be exercised optionally by counties to fund transportation improvements.
- Convention and Tourist Development Taxes Taxable sales reported by transient rental facilities (tourist food and beverage taxes) include the statewide \$2 per day surcharge on car rentals. Seventy-five percent of these proceeds are deposited into the State Transportation Fund.
- Impact Fees Florida's Impact Fee Ordinances require developers to pay counties, municipalities, special districts, and school districts for the cost of additional infrastructure that result from new development or new expansion of an existing development. Impact fees must: be a one-time charge, be earmarked for capital outlay only, and represent a proportional share of the cost of the new facility needed to serve the new development. Impact fees are commonly implemented across local governments in Florida.
- Ad Valorem According to Florida Statues, local governments may levy Ad Valorem
  tax based on the assessed value of property. Proceeds are often vested in road
  improvement and resurfacing projects. These taxes are commonly implemented
  across local governments in Florida, and are sometimes dedicated to transportation.
  Ad Valorem taxes are subject to the following limitations:
  - Ten mills for county purposes;

- Ten mills for municipal purposes;
- Ten mills for school purposes;
- A millage fixed by law for a county furnishing municipal services; and
- A millage authorized by law and approved by voters for special districts (e.g., the municipal services taxing units discussed above).

### **Public-Private Partnerships**

Another source of funding for freight rail projects is railroad companies. In 2006, U.S. Class I railroads invested more than \$8.3 billion to lay new track, buy new equipment, and improve infrastructure. This represents a 21 percent increase from 2005 and constitutes a record level of investment. Much of this money went toward maintenance of existing facilities, but a significant portion also was dedicated to double-tracking and siding construction to expand capacity along high-density routes.

Public-private partnerships, such as the Alameda Corridor in southern California, and multistate coalitions, such as the I-95 Corridor Coalition's Southeast Rail Operations Study, study present models for how states, private freight railroads, and private shippers can work together to improve rail operations and infrastructure. Initiatives spearheaded by the private sector, such as CSX Transportation's National Gateway and Norfolk Southern's Crescent Corridor, present an opportunity for states to partner with the private sector in order to leverage rail funding, address choke points in the rail network and, and promote economic development in targeted areas. Similarly, recent funding increases for Amtrak and stimulus dollars made available through ARRA provide opportunities for states to partner with the private sector in order to improve intercity passenger rail service.

# ■ 6.6 Findings

Over the past several years the amount of funding dedicated to passenger and freight rail in Florida has increased dramatically. This increase is due to additional one-time grant funding made available through the American Recovery and Reinvestment Act, significant funding earmarked for the development of the Central Florida Commuter Rail, the Obama Administration's High-Speed Intercity Passenger Rail Program and changes in state transportation policy (i.e., creation of the Strategic Intermodal System) that place additional emphasis on funding priority rail corridors. Going forward, many opportunities exist for Florida to pursue additional funds through the ARRA Discretionary Grant program and existing programs that may be expanded or changed as part of the next surface transportation bill or SAFETEA-LU reauthorization. The upcoming Surface Transportation reauthorization bill will likely place additional emphasis on multimodal transportation solutions and preserve or enhance Federal rail funding programs. As a result, Florida must continue to proactively identify and position rail projects for funding through these and other Federal programs.

At the state level, Florida has made significant progress towards increasing investment in passenger and freight rail. The Florida New Starts program develops and positions rail transit projects for future Federal funding, the TRIP supports rail projects that serve regional transportation needs, and the Strategic Intermodal System provides dedicated funds to develop and maintain rail infrastructure on critical interstate and international routes. Local government funding also presents an opportunity for the State to explore to fund rail projects in the future. For example, several local option fuel taxes exist in Florida that could be levied by local governments to support rail transit or commuter rail projects. This approach has been successfully utilized by jurisdictions in several states, most notably North Carolina.

# Appendix A

# ■ A.1 Compliance with the Passenger Rail Investment and Improvement Act (PRIIA) of 2008

The Florida Rail System Plan, consisting of both the Policy Element and the Investment Element, will be consistent with Federal law as amended by PRIIA in 2008. The Table below describes how and where minimum requirements under PRIIA are addressed in the 2010 Florida Rail System Plan.

Table A.1 How and Where Minimum Requirements Are Addressed in the 2010 Florida Rail System Plan

Each state rail plan shall, at a minimum, con	tain the following:	Location in the Florida Rail System Plan
An inventory of the existing overall rail transportation system and rail services, and facilities within the State and an analysis of the role of rail transportation within the State's surface transportation system.		Investment Element – Chapters 2 and 3
A review of all rail lines within the State, including proposed high-speed rail corridors and significant rail line segments currently not in service.		Investment Element - Chapter 3 and Policy Element - Chapter 2
A statement of the State's passenger rail service objectives, including minimum service levels, for rail transportation routes in the State.		Investment Element - Chapter 3 and Policy Element - Chapter 3
A general analysis of rail's transportation, economic, and environmental impacts in the State, including congestion mitigation, trade and economic development, air quality, landuse, energy-use, and community impacts.		Policy Element – Chapter 2
A long-range rail investment program for current and future freight and passenger infrastructure in the State.		Investment Element – Chapter 4

Table A.1 How and Where Minimum Requirements Are Addressed in the 2010 Florida Rail System Plan (continued)

Each state rail plan shall, at a minimum, con	atain the following:	Location in the Florida Rail System Plan
A statement of public financing issues for rail projects and service in the State, including a list of current and prospective public capital and operating funding resources, public subsidies, state taxation, and other financial policies relating to rail infrastructure development.		Investment Element – Chapter 6
An identification of rail infrastructure issues within the State that reflects consultation with all relevant stakeholders.		Investment Element - Chapters 2, 3, and 4 and Policy Element Chapter 1
A review of major passenger and freight intermodal rail connections and facilities within the State, including seaports, and prioritized options to maximize service integration and efficiency between rail and other modes of transportation within the State.		Investment Element – Chapter 4
A review of publicly funded projects within the State to improve rail transportation safety and security, including all major projects funded under section 130 of title 23.		Investment Element – Chapter 4
A performance evaluation of passenger rail services operating in the State, including possible improvements in those services, and a description of strategies to achieve those improvements.		Investment Element – Chapter 5
A compilation of studies and reports on high-speed rail corridor development within the State not included in a previous plan under this subchapter, and a plan for funding any recommended development of such corridors in the State.		Investment Element – Chapters 3 and 4

Table A.1 How and Where Minimum Requirements Are Addressed in the 2010 Florida Rail System Plan (continued)

Each state rail plan shall, at a minimum, cor	ntain the following:	Location in the Florida Rail System Plan
A statement that the State is in compliance with the requirements of section 22102 which states that: "A state is eligible to receive financial assistance under this chapter only when the state complies with	The state has an adequate plan for rail transportation in the state and a suitable process for updating, revising, and modifying the plan.	Policy Element – Chapters 2 and 3 and Investment Element – Chapters 3 and 4
regulations the Secretary of Transportation prescribes under this chapter and the Secretary decides that:	The state plan is administered or coordinated by a designated state authority and provides for a fair distribution of resources.	Policy Element – Chapter 2
	<ul> <li>a. is authorized to develop, promote, supervise, and support safe, adequate, and efficient rail transportation;</li> <li>b. employs or will employ sufficient qualified and trained personnel;</li> <li>c. maintains or will maintain adequate programs of investigation, research, promotion, and development with opportunity for public participation; and</li> <li>d. is designated and directed to take all practicable steps (by itself or with other state authorities) to improve rail transportation safety and reduce energy use and pollution related to transportation.</li> </ul>	Policy Element - Chapter 2
	The state has ensured that it maintains or will maintain adequate procedures for financial control, accounting, and performance evaluation for the proper use of assistance provided by the United States Government."	Policy Element – Chapter 3 and Investment Element – Chapter 5
A long-range rail investment program included in a state rail plan shall, at a minimum, include the following matters:	A list of any rail capital projects expected to be undertaken or supported in whole or in part by the state.	Policy Element – Chapter 4
	A detailed funding plan for those projects.	Policy Element - Chapters 4, 5, and 6

Table A.1 How and Where Minimum Requirements Are Addressed in the 2010 Florida Rail System Plan (continued)

Each state rail plan shall, at a minimum, con	ntain the following:	Location in the Florida Rail System Plan
	Project List Content – The list of rail capital projects shall contain:  a. a description of the anticipated public and private benefits of each such project; and  b. a statement of the correlation between:  1. public funding contributions for the projects; and  2. the public benefits.	Policy Element – Chapter 4
	Considerations For Project List – In preparing the list of freight and intercity passenger rail capital projects, a state rail transportation authority should take into consideration the following matters:  a. contributions made by non-Federal and nonstate sources through user fees, matching funds, or other private capital involvement;  b. rail capacity and congestion effects; c. effects on highway, aviation, and maritime capacity, congestion, or safety; d. regional balance; e. environmental impact; f. economic and employment impacts; and g. projected ridership and other service measures for passenger rail projects.	Policy Element – Chapters 4 and 5

# Appendix B

# ■ B.1 Approach to Calculating Florida Rail Plan Performance Measures

Appendix B summarizes FDOT's original approach to calculating a set of performance measures for passenger and freight rail projects being considered for inclusion in the 2010 Florida Rail System Plan.

### Background

FDOT is developing the Florida Rail System Plan that details a set of rail projects FDOT expects to fund, and when these are planned to occur. Projects can occur in one of five time periods:

- 1 to 5 years (these projects already are established);
- 6 to 10 years;
- 10 to 20 years;
- more than 20 years; or
- not recommended for state funding.

FDOT funds a variety of different types of rail improvement projects. Generally speaking, these include passenger-rail, grade-crossing, and freight-capacity improvements. In determining what projects to fund in each period, FDOT seeks to establish how well the projects support the five basic goals that have been established for the rail system plan:

- Safety and Security;
- Quality of Life and Environmental Stewardship;
- Maintenance and Preservation;
- Mobility and Economic Competitiveness; and
- Sustainable Investments.

Performing these projects is expected to generate direct transportation benefits (e.g., reduced travel time and operating costs), economic development benefits (e.g., jobs), and a variety of other benefits, some of which may be difficult to quantify precisely (e.g., promoting responsible land use). A set of key quantitative and qualitative performance measures have been established for each of the goals listed above that will

assist FDOT in prioritizing the candidate rail projects. Given details on each project, and projections of the key performance measures, FDOT will determine which projects to include in the Florida Rail System Plan.

The analytical approach used for calculating quantitative performance measures relies largely on work performed previously for FDOT. Previously, FDOT used the Freight Rail Improvement Calculator (FRIC) for quantifying benefits for certain types of freight rail improvements. This tool does not calculate the full range of measures required for the present effort, but does have models that can be utilized for calculating certain measures for certain project types.

Further, FDOT has developed an approach for calculating the macroeconomic benefits of its work program, and elements of this approach can be utilized for calculating measures related to rail investments. The macroeconomic benefits calculation approach FDOT uses relies on models from the Federal Highway Administration (FHWA) Highway Economic Requirements System (HERS), run with Florida data, to quantity benefits of changes to the highway system. Also as part of this effort, REMI models have been used to calculate statewide economic development benefits given a set of direct transportation benefits. To the extent that rail projects may have the effect of removing auto and/or truck traffic from the road network, the approach used in calculating macroeconomic benefits can be used for helping calculate measures related to rail projects.

#### **Rail Plan Performance Measures**

Table B.1 details the performance measures being calculated for each candidate project considered for inclusion in the Florida Rail System Plan. The table lists the performance measures for each of the five categories listed above; the units of measure; whether the measure is calculated for passenger rail, grade crossing and/or freight capacity projects; and additional notes. Note that a number of the measures are quantified with a yes/no or other categorical value and will be populated for each project manually. Where a measure has a quantitative value, this will be calculated using the approach described in the next section. Further, a number of measures related to freight improvements cannot be calculated for freight quiet zone projects, as noted in the table.

Table B.1 Florida Rail System Plan Performance Measures

				late for P	•	_
Goal Area	Indicator	Units	Pass.	Grade Cross	Frt.	Notes
Safety and Security	Crash Reduction from Auto/ Truck Diversion	\$	Y	N	Y	Auto diversion for passenger, trucks for freight, not calculated for quiet zones
	Reduced Exposure to Grade Crossings	minutes	N	Y	N	
	Use of Intelligent Transportation Management Technologies	Yes/No	Y	Y	Y	Not calculated for quiet zones
Quality of Life and	Change in Auto/Truck Fuel Consumption	Gallons of Fuel	Y	N	Y	Not calculated for quiet zones
Environmental Stewardship	Change in Auto/Truck C0 <sub>2</sub>	Tons of CO <sub>2</sub>	Y	N	Y	Not calculated for quiet zones
	Encourages Noise Reduction	Yes/No	N	N	Y	Relevant for freight quiet zones only
	Status of Environmental Screening Process	Categorical	Y	Y	Y	
	Project Included in Land-use Plans	Yes/No	Y	Y	Y	
	Project Included in State Transportation Plan	Yes/No	Y	Y	Y	
	Project Included in LRTP	Yes/No	Y	Y	Y	
	Project Included in County/ Municipal Improvement Plan	Yes/No	Y	Y	Y	
Maintenance and Preservation	Train Capacity Increase	Percent	N	N	Y	Calculated for rehab, 286,000 upgrade, accessibility only
	Consistent with Asset Management Approach	Yes/No	Y	Y	Y	Calculated for work on existing assets only
	Support Modernized Rail System Management and Operation Technologies	Yes/No	Y	Y	Y	

Table B.1 Florida Rail System Plan Performance Measures (continued)

				late for F ype? (Y/I		<u>-</u>
Goal Area	Indicator	Units	Pass.	Grade Cross	Frt.	Notes
Mobility and Economic Competitiveness	Auto VMT Reduction	VMT	Y	N	Y	Not calculated for quiet zones
-	Truck VMT Reduction	VMT	Y	N	Y	Not calculated for quiet zones
	Reduced Travel Time Cost	\$	Y	N	Y	Not calculated for quiet zones
	Reduced Vehicle Operating Cost	\$	Y	N	Y	Not calculated for quiet zones
	Increase in Passenger Rail Ridership	Passengers	Y	N	N	Specified by project nominee
	Increase in Freight Ton-Miles	Net Ton-Miles	N	Y	Y	Specified by project nominee
	GDP Growth	\$	Y	Y	Y	
	Jobs Created as a Result of the Project	Total Number of Jobs	Y	Y	Y	Specified by project nominee
Sustainable Investment	Project Underwent Public Review	Yes/No	Y	Y	Y	
	Support from Stakeholders	Categorical	Y	Y	Y	
	Status of Application for Funding	Categorical	Y	Y	Y	
	Eligible for Federal Funding	Yes/No	Y	Y	Y	
	Eligible for State Funding	Yes/No	Y	Y	Y	
	Non-Federal State/Federal Funding Available and Programmed for Project	Yes/No	Y	Y	Y	
	Supports Underserved Areas	Yes/No	Y	Y	Y	
	Project of Statewide Significance	Yes/No	Y	Y	Y	

# **Analytical Approach**

Below is a summary of the approach recommended for calculating the quantitative measures identified in Table B1, organized by performance measure. The performance measures are listed in the same order as presented in Table B1, with the exception of auto and truck VMT reduction, which are discussed first as these measures are in turn used to calculate other measures. Note that unless otherwise specified all costs are in 2006 dollars.

#### Auto Vehicle Miles Traveled (VMT) Reduction

For passenger rail projects, the reduction is auto VMT is calculated as follows:

AUTOKVMTD = 365 \* (TRAINRIDERSAFTER - TRAINRIDERSBEFORE)/AVGVEHOCC \* AVGPASSENGERTRIPLEN/1,000

where:

AUTOKVMTD = annual VMT reduction for autos (thousands of miles)

TRAINRIDERSAFTER = daily train ridership after the project

TRAINRIDERSBEFORE = daily train ridership before the project

AVGVEHOCC = average vehicle occupancy for autos, 1.46 based on the value used for the prior FDOT analysis

AVGPASSENGERTRIPLEN = average passenger trip length in miles

Note that auto trips are assumed to be the same length as passenger rail trips. In practice, the auto trip that a rail trip replaces may be either shorter or longer than the corresponding auto trip, but the rail trip length is used as the based-available estimate of the auto trip length.

#### Truck VMT Reduction

For freight rail projects, the reduction in truck VMT is calculated as follows:

TRUCKKVMTD = (TRAINTONMILESAFTER - TRAINTONMILESBEFORE)/ AVGTONSPERTRUCK

where:

TRUCKKVMTD = annual VMT reduction for autos (thousands of miles)

TRAINTONMILESAFTER = thousands of net ton-miles per year shipped by rail after the project

TRAINTONMILESBEFORE = thousands for net ton-miles per year shipped by rail before the project

AVGTONSPERTRUCK = average net tons per truck, 20 based on FRIC defaults

As in the case of autos, truck trip lengths are assumed to be the same length as corresponding train trips.

### Crash Reduction from Auto/Truck Diversion

Passenger and freight rail projects that result in diversion of autos and trucks from the road network are expected to reduce vehicle crashes. To calculate this reduction, the reduction in vehicle miles traveled (VMT) is calculated as described above, and this is

Investment Element of the 2010 Florida Rail System Plan Appendix

multiplied by a unit crash cost in dollars per 1,000 VMT calculated from HERS for the FDOT Macroeconomic Analysis described previously.

The crash-cost reduction resulting from the auto VMT reduction is calculated as:

ABENFAUTOSAFETY = AUTOKVMTD \* CRCOST

where:

ABENFAUTOSAFETY = annual crash-cost reduction for autos (\$) CRCOST = cost of crashes per 1,000 VMT, \$157 based on the prior FDOT analysis

Likewise, the crash-cost reduction resulting from truck VMT reduction is:

ABENFTRUCKSAFETY = TRUCKVMTD \* CRCOST

where:

ABENFTRUCKSAFETY = the annual crash-cost reduction for trucks in dollars

#### **Reduced Exposure to Grade Crossings**

The model previously developed for FRIC has been used for modeling the reduced exposure to grade crossings, which is a proxy for safety and travel-time benefits. The reduced exposure is calculated as follows:

DBENFCROSSINGTIME = (AADT/1,440) \* (CROSSMINB<sup>2</sup> \* TRAINSB - CROSSMINA<sup>2</sup> \* TRAINSA)/4 \* NUMCROSS

where:

DBENFCROSSINGTIME = Daily reduction in grade crossing waiting time in vehicle minutes
AADT = average annual daily traffic per grade crossing
CROSSMINB = average time at crossing before project
TRAINSB = daily trains before project
CROSSMINA = average time at crossing after project
TRAINSA = daily trains after project
NUMCROSS = number of grade crossings impacted

## **Change in Fuel Consumption**

The Environmental Protection Agency (EPA) model Motor Vehicle Emissions Simulator (MOVES) has been run for Florida to determine average gasoline-equivalent miles per gallon for Florida autos (MPGAUTO) and trucks (MPGTRUCK). Based on these constants, the change in fuel consumption may be estimated as follows:

AFUELSAVINGS = AUTOKVMTD/MPGAUTO + TRUCKKVMTD/MPGTRUCK

where:

AFUELSAVINGS = annual fuel savings in thousands of gallons of fuel

Note this is the savings in fuel resulting from auto and truck diversions, but does not account for any increases in fuel consumption from increased train travel.

#### Change in Carbon Dioxide (CO<sub>2</sub>)

The savings in CO<sub>2</sub> generation corresponding to the fuel savings may be calculated using the constant value of 8,788 grams of CO<sub>2</sub> per gallon of gasoline (or 9.687 tons of CO<sub>2</sub> for every 1,000 gallons of gasoline) specified by EPA (http://www.epa.gov/otaq/climate/420f05004.htm). This is calculated as follows:

ACO2SAVINGS = AFUELSAVINGS \* CO2PG

where:

ACO2SAVINGS = annual  $C0_2$  savings in tons of  $C0_2$  C02PG = tons of  $C0_2$  per 1,000 gallons of fuel

## **Train Capacity Increase**

Projects that upgrade a line to support heavier 286,000 pound (286K) cars (versus the typical limit of 263,000 pounds), or that increase clearances to allow intermodal containers to be double-stacked have the effect of increasing train capacity. The train capacity increase is assumed to be 10 percent for 286K upgrades and 65 percent for double-stack improvements. Other train capacity improvements should be user-specified in terms of the percent increase in net train capacity.

#### **Reduced Travel-Time Cost**

Passenger and freight rail projects that either speed up existing rail traffic and/or result in diversion of autos and trucks from the road network are expected to reduce travel time. To calculate this reduction, the savings from reduction in existing trips is added to the reduction in vehicle miles traveled (VMT) calculated as described above, multiplied by a unit value of time in dollars per 1,000 VMT calculated from HERS for the FDOT Macroeconomic Analysis described previously.

The travel-time savings for passenger travel is calculated as:

ABENFPASSTT = 365 \* (TRAINRIDERSBEFORE \* (TRAINTIMEBEFORE – TRAINTIMEAFTER) \* VOTPERSONAL + (TRAINRIDERSAFTER –

TRAINRIDERSBEFORE)) \* (TTCOSTAUTO \* AVGPASSTRIPLEN/ (1,000 \* AVGVEHOCC) – TRAINTIMEAFTER\* VOTPERSONAL)

where:

ABENFPASSTT = annual passenger travel-time benefit (\$)
TRAINTIMEBEFORE = average time per train trip in hours before project
TRAINTIMEAFTER = average time per train trip in hours after project
VOTPERSONAL = personal value of time in, \$11.77/hour based on the previous FDOT analysis

TTCOSTAUTO = auto travel-time cost per 1,000 VMT, \$490 calculated based on the previous FDOT analysis

For rail, the inventory cost for rail freight has been estimated based on prior analyses performed by Cambridge Systematics. The value of time for truck is that used for the prior FDOT analysis, and includes driver time and inventory costs. The travel-time savings for freight is calculated as:

ABENFFREIGHTTT = 1,000 \* TRAINTONMILESBEFORE/AVGTRUCKTRIPLEN \* (TRAINTIMEBEFORE - TRAINTIMEAFTER) \* VOTRAILFREIGHT + (TRAINTONMILESAFTER - TRAINTONMILESBEFORE) \* TTCOSTTRUCK/AVGTONSPERTRUCK - 1,000\* (TRAINTONMILESAFTER - TRAINTONMILESBEFORE)/AVGTRUCKTRIPLEN \* TRAINTIMEAFTER \* VOTRAILFREIGHT

where:

ABENFFREIGHTTT = annual freight travel-time benefit (\$)
AVGTRUCKTRIPLEN = average truck trip length in miles
VOTRAILFREIGHT = freight inventory cost, \$0.39/ton-hour based on the previous analyses
TTCOSTTRUCK = truck travel-time cost per 1,000 VMT, \$690 calculated based on the previous FDOT analysis

## Reduced Vehicle Operating Cost

In the case of operating costs, no reductions are predicted for existing passengers or freight. However, diversions of autos and trucks from the road network result in operating cost reductions calculated using the approach from the previous FDOT analysis. These savings are partially offset by increased rail operating costs. For rail, an average operating cost of \$0.36 per passenger-mile was calculated based on statistics published by the American Public Transit Association (APTA). Also, an average cost of \$0.046 per ton-mile was calculated through waybill analysis.

The reduced vehicle operating cost for passenger travel is:

ABENFAUTOOP = AUTOKVMTD \* OPCOSTAUTO – 365 \* (TRAINRIDERSAFTER – TRAINRIDERSBEFORE) \* AVGPASSTRIPPLEN \* OCPASS

where:

ABENAUTOOP = annual operating cost benefit for passenger travel (\$) OPCOSTAUTO = auto operating cost per 1,000 VMT, \$326 based on the prior FDOT analysis

OCPASS = average operating cost per passenger per mile

The reduced vehicle operating cost for freight is:

ABENFTRUCKOP = TRUCKKVMTD \* OPCOSTTRUCK - 1,000 \* (TRAINTONMILESAFTER - TRAINTONMILESBEFORE) \* OCFREIGHT

where:

ABENFTRUCKOP = annual operating cost benefit for freight travel (\$) OPCOSTTRUCK = truck operating cost per 1,000 VMT, \$1,161 based on the prior FDOT analysis

OCFREIGHT = average cost per ton-mile of freight

#### **Gross Domestic Product (GDP) Growth**

Future GDP growth can projected as a result of savings in business-related travel within Florida. Based on the results of the prior FDOT analysis, each dollar of business-related savings in travel time, operating, or safety costs is projected to generate approximately \$2.40 in GDP growth. Using this multiplier, GDP growth can be calculated as follows:

ABENFGDP = GDPMULT \* (ECOFRACAUTO \* ECOFRACAUTOFL \* (ABENFPASSTT + ABENFAUTOOP + ECOFRACSAFETY \* ABENFAUTOSAFETY) + ECOFRACTRUCKFL \* (ABENFTRUCKTT + ABENFTRUCKOP + ECOFRACSAFETY \* ABENFTRUCKSAFETY))

where:

ABENFGDP = annual GDP growth attributable to the project

GDPMULT = GDP multiplier, \$2.40 based on the prior FDOT analysis

ECOFRACAUTO = fraction of auto travel related to business, 0.119 based on the prior FDOT analysis

ECOFRACAUTOFL = fraction of auto/passenger benefits internal to Florida, 0.9963 based on the prior FDOT analysis

ECOFRACSAFETY = fraction of safety benefits related to business, 0.3450 based on the prior FDOT analysis

ECOFRACTRUCKFL = fraction of truck/freight benefits internal to Florida, 0.9185 based on the prior FDOT analysis

# Appendix C

# C.1 Glossary and Acronym Guide to Commonly Used Terms

**AAR -** Association of American Railroads. An association of private rail carriers founded to promote cooperation among the rail carriers; headquartered in Washington, D.C.

**AASHTO** - American Association of State Highway and Transportation Officials. AASHTO is a nonprofit, nonpartisan association representing highway and transportation departments in the 50 states, the District of Columbia, and Puerto Rico. It represents all five transportation modes: air, highways, public transportation, rail, and water. Its primary goal is to foster the development, operation, and maintenance of an integrated national transportation system.

**Abandonment –** Elimination of a line segment from a rail network. Abandonments must be approved by the Surface Transportation Board (STB).

AGR - Alabama and Gulf Coast Railway. A Class III railroad with operations in Florida.

**"A"** Line - A former Atlantic Coast Line, which along with the "S" Line forms CSX Transportation's major north-south lines terminating in central Florida. Between Jacksonville and central Florida, the "A Line" is the eastern CSXT line, passing through Pecan, Seville, Orange City, Sanford, and Orlando, etc.

**Amtrak -** National Railroad Passenger Corporation. The U.S. operator of intercity passenger rail service. Amtrak has provided intercity and long-distance services to Florida for more than 35 years.

**AN -** AN Railway. A Class III railroad with operations in Florida.

**APTA –** American Public Transportation Association. An international organization that has been representing the transit industry since 1882. APTA members include bus, rapid transit, and commuter rail systems; and the organizations responsible for planning, designing, constructing, financing, and operating transit systems.

**BAYL** - Bayline Railroad. A Class III railroad with operations in Florida.

**Branch Line -** A secondary line of a railway, typically stub-ended and designed to provide service to a customer.

**Carbon credit -** A voucher that represents reductions in carbon dioxide and other greenhouse gases to companies that reduce emissions for sell or trade to companies that cannot reduce their own. A sustainability tool that aims to regulate carbon dioxide emissions and help reduce global pollution.

**Commercial motor vehicle -** Any self-propelled or towed vehicle used on the public highways in commerce to transport passengers or cargo, if the vehicle has a gross vehicle weight of 10,000 pounds or more; or is designed to transport more than 15 passengers, including the driver; or is used to transport hazardous materials as defined by law.

**Common carrier -** Railroads, trucking companies and other freight companies that transport people, goods, or services to the general public without discrimination under license or authority provided by a regulatory body. A major issue for railroads is the obligation to provide transportation or service on reasonable request for hazardous materials.

**Container -** A large, weatherproof box designed for shipping freight in bulk by rail, truck, or steamship. Standard lengths include 20, 40, 48, and 53 feet.

**Containerized Cargo -** Cargo that is practical to transport in a container, and results in a more economical shipment than other forms of unitization.

**Crossing Signal -** A safety sign that indicates when and when not to cross a railroad, usually at a highway-rail crossing. When the crossing signal is activated, it generally means a train is coming on the track and signals to motorists and pedestrians to not cross the tracks.

**CSXT -** CSX Transportation. A Class I railroad, and one of the four largest railroads in the U.S. (along with BNSF, NS, and UP). CSXT, headquartered in Jacksonville, is the largest railroad operating in Florida.

**Deficiency -** A constraint in the transportation system which decreases the efficiency of the system. Deficiencies can include congestion; geometric limitations such as speed, height, or width restrictions; or facility conditions that restrict use or operations.

**Dray -** A local move of a trailer or container by truck, especially between a rail yard or port and a customer.

**Economically distressed areas -** An area of the state characterized by factors such as low per-capita income, low per-capita taxable values, high unemployment, high underemployment, low weekly earned wages compared to the state average, low housing values compared to the state average, high percentages of the population receiving public assistance, high poverty levels compared to the state average, and a lack of year-round stable employment opportunities.

**EIS -** Environmental Impact Statement.

**EPA** - Environmental Protection Agency.

**ETDM -** Efficient Transportation Decision-Making. A Florida Department of Transportation initiative to improve and streamline the environmental review and permitting process by involving resource protection agencies and concerned communities from the first step of planning. Agency interaction continues throughout the life of the project, leading to better quality decisions and an improved linkage of transportation decisions with social, land use and ecosystem preservation decisions.

**FCEN -** Florida Central Railroad. A Class III railroad with operations in Florida.

**FCRD** - First Coast Railroad. A Class III railroad with operations in Florida.

**FDOT or Florida DOT -** Florida Department of Transportation.

**FEC -** Florida East Coast Railway. A Class II railroad operating entirely within the State of Florida.

**FEU –** Forty-Foot Equivalent Units. This is a common measure for containerized freight movements, though TEU (20-foot equivalent units) is the standard measure.

**Federal Highway-Rail Grade Crossing Program (Section 130) -** Provides funds for road-rail grade crossing safety improvement and education.

FHWA - Federal Highway Administration.

**FMID -** Florida Midland Railroad. A Class III railroad with operations in Florida.

**FNOR** - Florida Northern Railroad. A Class III railroad with operations in Florida.

**FRA -** Federal Railroad Administration. The FRA is a division within the U.S. Department of Transportation (DOT) which is responsible for conducting and monitoring research regarding freight and passenger rail operations, and enforcing Federal programs for railroad safety. The FRA is generally responsible for administering all Federal programs related to rail transportation.

**FRA Track Classes** - Federal Railroad Administration Track Classes. The FRA limits operating speeds on track, based on physical condition.

**Freight -** Any commodity being transported.

**Freight Villages -** Large logistics centers forming a central point for all rail shipments (intermodal, auto, general merchandise) and act as facilitators to attract manufacturing businesses wishing to relocate to lower logistics costs; they also create secondary jobs in warehouses, distribution centers, manufacturing, packaging plants, and other value-added businesses. Same as an integrated logistics center (ILC).

FTA - Federal Transit Administration.

**FWCR** - Florida West Coast Railroad. It was a Class III railroad with operations in Florida. In June of 2004, the STB granted the FWCR approval to abandon all service, this abandonment was consummated on May of 2010, and the line is no longer operational.

FY - Fiscal Year.

**Genset locomotive -** An environmentally friendly locomotive that was built to help reduce locomotive emissions by combining several small modules called a generator set, or genset, to replace the conventional diesel engine. The locomotive is powered by ultra low-emissions, off-road diesel engines that are EPA tier III certified to reduce nitrous oxide and particulate emissions. These engines are easily replaceable and work in combinations of one or more gensets to produce the required horsepower levels to run the locomotive.

**GFRR** - Georgia and Florida Railway. A Class III railroad with operations in Florida.

**GPS -** Global Positioning Systems. Use of satellites and advanced communications technology to accurately locate and track items on the globe. Can be used by drivers, transit operators, and trucking companies to locate vehicles and provide alternative routes.

**Grade Crossing -** The point at which a roadway intersects and crosses a rail line. The crossing can be at-grade or grade-separated.

**GSP** - Gross State Product. The total value of all products and services produced in a state.

**Headway -** The time interval between consecutive vehicles passing a given point. Generally used to define transit service. Used in the following context: "Peak-period transit buses and trains generally run on five-minute headways."

**Intermodal -** Carriage by more than a single mode with a transfer(s) between modes to complete a trip or a freight movement. For freight and goods movement, the definition refers to transfers between all freight modes, including ships, rail, truck, and barge, etc., taken as a system for moving freight.

**Intermodal System -** The transportation network consisting of public and private infrastructure for moving people and goods using various combinations of transportation modes.

**Interstate –** Traffic originating in one state and terminating in another. Foreign and domestic port (import and export) traffic also is considered to be interstate in nature.

**Intrastate -** Traffic originating and terminating in a single state. This traffic also is referred to as local.

**Intrastate Carrier -** A carrier operating solely within the boundaries of a single state, e.g., the Florida East Coast Railway (FEC).

**ITS -** Intelligent Transportation Systems. Using technology to integrated advanced information, electronic communications, and other technologies to address transportation problems and improve the efficiency of the transportation system.

**Local Traffic –** Freight or passenger movements both originating and terminating in a region. If the region is defined as a state, local traffic represents intrastate traffic.

**Long-Range Component** – The long range part of the Florida Transportation Plan, updated at least every 5 years, or more often as needed, to reflect changes in the issues, goals, and long-range objectives for the ensuing 20 years.

**Long-Range Goal** – A long-term (20 to 25 years) end toward which programs and activities are ultimately directed.

**Long-Range Objective –** A long-term (20 to 25 years) general end which is achievable and marks progress toward a goal.

**LRFA** - Local Rail Freight Assistance Program. A Federal program designed to provide assistance (funding) for light-density rail lines.

**LRT** - Light Rail Transit.

LRV - Light Rail Vehicle.

**LTL** - Less-Than-Truckload. The quantity of freight which is less than required for application of a trailer-load rate. LTL carriers, such as Yellow Freight, will combine shipments from multiple customers into a single truck.

**Main Line -** Two definitions apply. The first is a designation made by each railroad of its own track, generally signifying a line over which through trains pass with relatively high frequency. A main line generally has heavier weight rail, more sophisticated signaling systems, and better maintenance than branch lines. The second is a designation of the through track between any two points, even on a branch line, as distinguished from sidetracks, pass tracks, or spurs.

**Maintenance -** Actions taken to preserve the state's transportation infrastructure investment (e.g., resurfacing pavements of roadways and airport runways, repairing and replacing bridges, and continuing existing transit routes and frequency) to eliminate deficiencies and to extend/achieve the expected life of facilities before, for example, reconstruction is needed.

**MPO** - Metropolitan Planning Organization (MPO). An organization made up of local elected and appointed officials responsible for coordinating transportation planning in a metropolitan area of at least 50,000 people.

**Mobility -** The degree to which the demand for the movement of people and goods can be satisfied. Mobility is measured in Florida by the quantity, quality, accessibility, and utilization of transportation facilities and services.

**Mode -** Any one of the following means of moving people or goods: aviation, bicycle, highway, paratransit, pedestrian, pipeline, rail (commuter, intercity passenger, and freight), transit, space, and water.

**Mobility** – The ability of people to complete desired trips, or for goods to be moved from place to place.

**Modal Share -** The percentage of freight or passengers moved by a particular type (mode) of transportation.

**Mode Shift -** The change in mode by an individual person or freight shipment. A person may shift modes when the relative cost in terms of time, money, and convenience between modes changes. For example: if transit fares were reduced, people who once drove alone to work may decide to take the bus instead. Mode shifts also can occur between air, truck, rail, and water movement of freight.

**Multimodal Transportation -** More than one mode to serve transportation needs in a given area.

**Need -** A demand for a mobility improvement which has been identified based on accepted and adopted standards and other assumptions (e.g., land use), and documented in a formal long-range or master plan.

**NS –** Norfolk Southern Railroad. A Class I railroad, and one of the four largest railroads in the U.S. (along with BNSF, CSXT, and UP). NS, headquartered in Roanoke, Virginia, offers service to Jacksonville and northern locations in Florida.

**Operating Revenue -** All revenue generated through the operation of transportation services.

**Operation Lifesaver -** Operation Lifesaver is a national, nonprofit education and awareness program dedicated to ending tragic collisions, fatalities, and injuries at highway-rail grade crossings and on railroad rights-of-way.

**Originating Traffic -** Includes both outbound and local traffic in Florida.

**Outbound Traffic -** Traffic originating in one region which terminates in another region. Typically used in this report to represent interstate traffic originating in Florida.

**Peak Hour -** The hour of the day during which the volume is higher than at any other hour during the day.

**Peak Period -** The time period having the highest volume of traffic in a day. For example, the peak period for urban highways is generally between 6:00 a.m. and 9:00 a.m.

**Positive Train Control System -** The term "positive train control system" means a system designed to prevent train-to-train collisions, overspeed derailments, incursions into established work zone limits, and the movement of a train through a switch left in the

wrong position. The main concept in Positive Train Control (as defined for North American Class I freight railroads) is that the train receives information about its location and where it is allowed to safely travel. Equipment on board the train then enforces this, preventing unsafe movement. Positive Train Control will work in either dark or signaled territory. The core objectives of PTC are to keep trains from hitting trains; to keep trains from overspeeding; and to keep trains from endangering workers in work zones.

**PPP -** Public-Private Partnership. Public agencies and private industry working together to solve transportation problems.

**Preservation -** Actions taken to protect existing natural and human environments, investments, and mobility options.

**Rail** – A rolled steel shape, commonly a Tee-section designed to be laid end-to-end in two parallel lines on cross ties or other suitable supports to form a track for railway rolling stock.

**Rail Yard -** A system of tracks within limits provided for switching cars, making up trains, storing cars, and other purposes.

**Region -** An area of distinctive communities, cities, and counties where residents share: a geographic identity and are socially, economically, and culturally interdependent; a capacity for planning and function; and a capacity to create competitive advantage.

**Rights-of-Way (ROW)** - A strip of land for which an entity has a right to build, operate, and maintain a linear facility such as a road, railroad, or pipeline.

**RRIF** - Railroad Rehabilitation and Improvement Financing Program. The program provides direct loans and loan guarantees to state and local governments, government sponsored authorities and corporations, railroads, and joint ventures which include at least one railroad. Eligible projects include: 1) acquisition, improvement, or rehabilitation of intermodal or rail equipment or facilities (including tracks, components of tracks, bridges, yards, buildings, and shops); 2) refinancing outstanding debt incurred for these purposes; or 3) development or establishment of new intermodal or railroad facilities. Funding for this program was greatly expanded under SAFETEA-LU, and the program was improved by eliminating some of the onerous restrictions.

**SAFETEA-LU -** Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users was signed into law on August 10, 2005. It authorizes the Federal surface transportation programs for highways, highway safety, and transit for the five-year period 2005 to 2009.

**Safety Management System -** A systematic process with a goal of reducing the number and severity of traffic crashes by ensuring all opportunities to improve highway safety are identified, considered, implemented as appropriate, and evaluated in all phases of highway planning, design, construction, maintenance, and operation; and by providing information for selecting and implementing effective highway safety strategies and projects.

**Safety Program –** Includes projects designed to improve vehicle and pedestrian safety on the city, county, and state highway systems. The safety program is divided into three subprograms: rail-highway crossings, highway safety, and traffic safety grants.

**SCFE -** South Central Florida Express. A Class III railroad with operations in Florida.

**SEROps -** Southeast Rail Operations Study. SEROps is the joint product of four states (North Carolina, South Carolina, Georgia, and Florida), the I-95 Corridor Coalition, and key regional rail stakeholders (e.g., MPOs, railroads, economic development agencies, ports, and others) and allow them to help guide the direction and focus of the study. The objective was to complete the rail picture in the southeast region by identifying and describing key rail issues, activities, and initiatives, as well as the trends and issues affecting freight movements and needs for freight and passenger rail transportation in the southeastern states.

**Stakeholders -** Individuals and groups with an interest in the outcomes of policy decisions and actions.

**SFRC -** South Florida Rail Corridor. An operating rail corridor owned by FDOT. It extends from north of West Palm Beach to Miami. Maintenance and corridor operations are performed by CSX Transportation (CSXT) under contract to the FDOT. Tri-Rail, Amtrak, and CSXT freight all operate on this Corridor.

**SFRTA -** South Florida Regional Transportation Authority.

**SGLR** - Seminole Gulf Railway. A Class III railroad with operations in Florida.

**Short-Range Objectives –** One or more statements, for each long-range objective, of the specific, measurable, intermediate ends which are achievable and mark progress toward a goal. Specific objectives may be associated with more than one goal and/or long-range objective.

**SIB** - State Infrastructure Bank. A SIB is a revolving fund mechanism for financing a wide variety of highway and transit projects through loans and credit enhancement. SIBs are designed to complement traditional Federal-aid highway and transit grants by providing states increased flexibility for financing infrastructure investments.

**Side-Track** – A short track extending alongside and often connecting at both ends with main track.

SIS - Strategic Intermodal System. The transportation system comprised of facilities and services of statewide and interregional significance, including appropriate components of all modes. Established in 2003 by the Florida Legislature, the SIS is a statewide network of high-priority transportation facilities, including the State's largest and most significant commercial service airports, spaceport, deepwater seaports, freight rail terminals, passenger rail and intercity bus terminals, rail corridors, waterways, and highways. The SIS will be used for: targeting expenditures to help the State's economic competitiveness, including increased corridor emphasis in planning and funding projects; applying

innovative policies and technologies, including Intelligent Transportation Systems (ITS); clarifying the State's roles and responsibilities on and off this system; and providing input to the next update of the Florida Transportation Plan.

"S" Line - Along with the "A" Line, this is CSXT's major north-south line, which terminates in central Florida. It is the former Seaboard Air Line route, which is the western route between Jacksonville and Orlando/Tampa.

**Smart Growth -** Although there are many variations on the exact definition, the concept is used to identify a set of policies governing transportation and land use planning which provides benefits to communities and preserves the natural environment. Such policies are often intended to create land use patterns which are compact, transit-oriented, walkable, bicycle-friendly, and include mixed-use development with a range of housing choices.

**SmartWay**<sup>SM</sup> **program -** In 2004, EPA launched SmartWay<sup>SM</sup>, an innovative brand that represents environmentally cleaner, more fuel efficient transportation options. In its simplest form, the SmartWay brand identifies products and services that reduce transportation-related emissions. The SmartWay<sup>SM</sup> brand is a partnership among government, business, and consumers aimed at protecting the environment, reducing fuel consumption, and improving air quality for future generations.

**SOV** - Single Occupancy Vehicle. An automobile in which only the driver is transported.

**State Highway System -** A network of approximately 12,000 miles of highways owned and maintained by the state or state-created authorities. Major elements include the Interstate, Florida's Turnpike, and other toll facilities operated by transportation authorities and arterial highways.

**Station -** A place designated by name in a railroad timetable.

STB - Surface Transportation Board. The STB is an economic regulatory agency charged by Congress with the fundamental missions of resolving railroad rate and service disputes and reviewing proposed railroad mergers. The STB is divisionally independent, although it is administratively affiliated with the U.S. Department of Transportation (DOT). It was created in the Interstate Commerce Commission Termination Act of 1995 and is the successor agency to the Interstate Commerce Commission (ICC). The agency has jurisdiction over railroad rate and service issues, and rail restructuring transactions (mergers, line sales, line construction, and line abandonments); certain trucking company, moving van, and noncontiguous ocean shipping company rate matters; certain intercity passenger bus company structure, financial, and operational matters; and rates and services of certain pipelines not regulated by the Federal Energy Regulatory Commission.

**Strategic Issues -** Critical challenges or fundamental policy concerns which affect the nature of a public condition. Strategic issues serve to identify the most significant opportunities and/or threats/problems that the agency must address in the next five years to help the agency succeed or prevent the agency from failing in its mission.

**Sustainability -** Meeting the needs of the present without compromising the ability to meet the needs of the future.

**TDM** - Travel Demand Management.

**TEA-21 -** The Transportation Equity Act for the 21st Century. Enacted June 9, 1998, as Public Law 105-178. TEA-21 authorizes the Federal surface transportation programs for highways, highway safety, and transit for the six-year period 1998 to 2003.

**Terminal** – An assemblage of facilities provided by a railway at a terminus or at an intermediate point for the handling of passengers or freight and the receiving, classifying, assembling, and dispatching of trains.

**Terminating Traffic -** Includes both inbound and local traffic in Florida.

**TEU -** Twenty-Foot-Equivalent Unit. The 8-foot by 8-foot by 20-foot intermodal container is used as a basic measure in many statistics.

**Through Traffic -** Represents traffic neither originating nor terminating in Florida, but passing through the State. This also is referred to as overhead traffic.

**Tie –** The transverse member of the track structure to which the rails are spiked or otherwise fastened to provide proper gage and to cushion, distribute, and transmit the stresses of traffic through the ballast to the roadbed.

TIFIA - The Transportation Infrastructure Finance and Innovation Act of 1998. Established a new Federal credit program (referenced as the TIFIA program) under which the U.S. Department of Transportation (DOT) may provide three forms of credit assistance (secured (direct) loans, loan guarantees, and standby lines of credit) for surface transportation projects of national or regional significance. The program's fundamental goal is to leverage Federal funds by attracting substantial private and other non-Federal coinvestment in critical improvements to the nation's surface transportation system. In all cases, the DOT uses a merit-based system to award credit assistance to project sponsors, who may include state DOTs, transit operators, special authorities, local governments, and private entities.

**Timetable –** The authority for the movement of regular trains subject to the rules. It may contain classified schedules and includes special instructions.

**Track -** An assembly of rails, ties, and fastenings over which cars, locomotives, and trains are moved. Types of tracks are as follows:

- **Bad Order** A track on which bad order cars are placed either for light running repairs or for subsequent movement to repair tracks.
- **Classification** One of the body tracks in a classification yard, or a track used for classification purposes.

- **Crossover -** Two turnouts with track between, connecting two nearby and usually parallel tracks.
- **Interchange -** A track on which cars are delivered or received, as between railways.
- **Passing** A track auxiliary to the main track for meeting or passing trains. Same as a "siding."
- **Side** A track auxiliary to the main track for purposes other than for meeting and passing trains.
- **Spur -** A stub track diverging from a main or other track.
- **Station** A track upon which trains are placed to receive or discharge passengers, baggage, mail, and express.
- **Storage** One of the body tracks in storage yards or one of the tracks used for storing equipment.
- **Team -** A track on which cars are placed for transfer of freight between cars and highway vehicles.

**Track Capacity –** The number of cars which can stand in the clear on a track. Track capacity can be defined in several ways, but essentially it is the number of trains which can traverse a rail line before significant delays or safety issues arise.

**Track Signal -** A sign which indicates the control and movement of the train to the operator and to the public outside the train.

**Trackage Rights -** An arrangement by which one railroad may operates its trains over the tracks of another railroad. In overhead trackage rights, the tenant railroad may not directly serve the track owner's customers.

**Train -** A series of linked railroad cars connected to one or more locomotives that transport people or goods. Types of trains are listed below:

- Extra Train A freight train which does not operate regularly but only when required to move cars in excess of the normal flow of traffic.
- Intermodal Train A train which handles only trailer on a flat car (TOFC) or container on a flat car (COFC) traffic.
- **Switch Runs** Trains operating in terminal areas or in road territory for short distances (normally shorter than 100 miles), and place and pull cars from industries along the line. Switch runs also are referred to as "locals" by some railroads.

- Through Freight Trains operating between terminals which may be several hundred or thousands of miles apart and do little or no picking up and setting off of cars en route.
- Unit Train A train handling a large volume of one commodity. Typically those
  trains handle coal, ore, and potash, etc., which originates at one point and is hauled to
  one destination.

**Transit -** Mass transportation by bus, rail, or other conveyance providing general or special services to the public on a regular and continuing basis. It does not include school buses, charter, or sightseeing services.

**Transit-Oriented Design -** A set of urban design principles that attempts to provide communities with an alternative to low-density suburban sprawl and automobile-dependent land use patterns by aligning transit investments with development; creating livable mixed-use, denser, and walkable "transit villages." (Source: Accessing Transit: Design Handbook for Florida Bus Passenger Facilities, 2008.)

**Transit-Oriented Development -** A pattern of dense, diverse, pedestrian-friendly land uses near transit nodes which, under the right conditions, translates into higher patronage. (Source: National Highway Institute: Transportation and Land Use Participant Workbook NHI 151043.)

Transportation Corridor - Any land area designated by the state, a county, or a municipality which is between two geographic points, and is used or suitable for the movement of people and goods by one or more modes of transportation, including areas necessary for management of access and securing applicable approvals and permits. Transportation corridors shall contain, but are not limited to, the following: a) existing publicly owned rights-of-way; b) all property or property interests necessary for future transportation facilities, including rights of access, air, view, and light, whether public or private, for the purpose of securing and utilizing future transportation rights-of-way; including but not limited to, any lands reasonably necessary now or in the future for securing applicable approvals and permits, borrow pits, drainage ditches, water retention areas, rest areas, replacement access for landowners whose access could be impaired due to the construction of a future facility, and replacement rights-of-way for relocation of rail and utility facilities.

**Transportation Expenses -** The expenses directly associated with the operations of a railroad. They generally include the cost of crews, fuel, and other related items.

**Travel Price -** The travel cost per mile for a particular mode. For example, the average cost for automobile travel on a per-mile basis which includes the cost of operating, maintaining, and insuring the vehicle.

**TRIP -** Transportation Regional Incentive Program. The state program that provides matching state funds to improve regionally significant transportation facilities in partnership with regional transportation areas.

**TTR -** Tallyrand Terminal Railroad. A terminal and switching railroad with operations in Florida.

**Vision -** A description of the future physical appearance and qualities of a community or region.

**VMT -** Vehicle Miles of Travel. The total number of miles traveled for a mode during a given time period.

**Work Program -** The five-year listing of all transportation projects planned for each fiscal year by FDOT, as adjusted for the legislatively approved budget for the first year of the program.

# Appendix D

#### ■ D.1 The 2009 Florida Statutes<sup>89</sup>

1341.302 Rail program, duties, and responsibilities of the department. The department, in conjunction with other governmental entities, including the rail enterprise and the private sector, shall develop and implement a rail program of statewide application designed to ensure the proper maintenance, safety, revitalization, and expansion of the rail system to assure its continued and increased availability to respond to statewide mobility needs. Within the resources provided pursuant to Chapter 216, and as authorized under Federal law, the department shall:

- 1. Provide the overall leadership, coordination, and financial and technical assistance necessary to assure the effective responses of the State's rail system to current and anticipated mobility needs.
- 2. Promote and facilitate the implementation of advanced rail systems, including high-speed rail and magnetic levitation systems.
- 3. Develop and periodically update the rail system plan, on the basis of an analysis of statewide transportation needs.
  - a. The plan may contain detailed regional components, consistent with regional transportation plans, as needed to ensure connectivity within the State's regions, and it shall be consistent with the Florida Transportation Plan developed pursuant to s. 339.155. The rail system plan shall include an identification of priorities, programs, and funding levels required to meet statewide and regional needs. The rail system plan shall be developed in a manner that will assure the maximum use of existing facilities, and the optimum integration and coordination of the various modes of transportation, public and private, in the most cost-effective manner possible. The rail system plan shall be updated no later than January 1, 2011, and at least every five years thereafter, and include plans for both passenger rail service and freight rail service, accompanied by a report to the Legislature regarding the status of the plan.

<sup>89</sup> Florida Legislature – http://www.leg.state.fl.us/Statutes/ index.cfm?App\_mode=Display\_Statute&Search\_String=&URL=Ch0341/SEC302.HTM&Title=->2007->Ch0341->Section%20302#0341.302

- b. In recognition of the department's role in the enhancement of the State's rail system to improve freight and passenger mobility, the department shall:
  - 1. Work closely with all affected communities along an impacted freight rail corridor to identify and address anticipated impacts associated with an increase in freight rail traffic due to implementation of passenger rail.
  - 2. In coordination with the affected local governments and CSX Transportation, Inc., finalize all viable alternatives from the department's Rail Traffic Evaluation Study to identify and develop an alternative route for through freight rail traffic moving through Central Florida, including the counties of Polk and Hillsborough, which would address, to the extent practicable, the effects of commuter rail.
  - 3. Provide technical assistance to a coalition of local governments in Central Florida, including the counties of Brevard, Citrus, Hernando, Hillsborough, Lake, Marion, Orange, Osceola, Pasco, Pinellas, Polk, Manatee, Sarasota, Seminole, Sumter, and Volusia; and the municipalities within those counties to develop a regional rail system plan that addresses passenger and freight opportunities in the region; is consistent with the Florida Rail System Plan and incorporates appropriate elements of the Tampa Bay Area Regional Authority Master Plan; the Metroplan Orlando Regional Transit System Concept Plan, including the SunRail project; and the Florida Department of Transportation Alternate Rail Traffic Evaluation.
- 4. As part of the work program of the department, formulate a specific program of projects and financing to respond to identified railroad needs.
- 5. Provide technical and financial assistance to units of local government to address identified rail transportation needs.
- 6. Secure and administer Federal grants, loans, and apportionments for rail projects within this state when necessary to further the statewide program.
- 7. Develop and administer state standards concerning the safety and performance of rail systems, hazardous material handling, and operations. Such standards shall be developed jointly with representatives of affected rail systems, with full consideration given to nationwide industry norms, and shall define the minimum acceptable standards for safety and performance.
- 8. Conduct, at a minimum, inspections of track and rolling stock; train signals and related equipment; hazardous materials transportation, including the loading, unloading, and labeling of hazardous materials at shippers', receivers', and transfer points; and train operating practices to determine adherence to state and Federal standards. Department personnel may enforce any safety regulation issued under the Federal Government's preemptive authority over interstate commerce.

- 9. Assess penalties, in accordance with the applicable Federal regulations, for the failure to adhere to the state standards.
- 10. Administer rail operating and construction programs, which programs shall include the regulation of maximum train operating speeds, the opening and closing of public grade crossings, the construction and rehabilitation of public grade crossings, and the installation of traffic control devices at public grade crossings; the administering of the programs by the department, including participation in the cost of the programs.
- 11. Coordinate and facilitate the relocation of railroads from congested urban areas to nonurban areas when relocation has been determined feasible and desirable from the standpoint of safety, operational efficiency, and economics.
- 12. Implement a program of branch line continuance projects when an analysis of the industrial and economic potential of the line indicates that public involvement is required to preserve essential rail service and facilities.
- 13. Provide new rail service and equipment when:
  - a. Pursuant to the transportation planning process, a public need has been determined to exist;
  - b. The cost of providing such service does not exceed the sum of revenues from fares charged to users, services purchased by other public agencies, local fund participation, and specific legislative appropriation for this purpose; and
  - c. Service cannot be reasonably provided by other governmental or privately owned rail systems.
    - The department may own, lease, and otherwise encumber facilities, equipment, and appurtenances thereto, as necessary to provide new rail services; or the department may provide such service by contracts with privately owned service providers.
- 14. Furnish required emergency rail transportation service if no other private or public rail transportation operation is available to supply the required service and such service is clearly in the best interest of the people in the communities being served. Such emergency service may be furnished through contractual arrangement, actual operation of state-owned equipment and facilities, or any other means determined appropriate by the secretary.
- 15. Assist in the development and implementation of marketing programs for rail services and of information systems directed toward assisting rail systems users.
- 16. Conduct research into innovative or potentially effective rail technologies and methods and maintain expertise in state-of-the-art rail developments.

- 17. In conjunction with the acquisition, ownership, construction, operation, maintenance, and management of a rail corridor, have the authority to:
  - a. Assume the obligation by contract to forever protect, defend, indemnify, and hold harmless the freight rail operator, or its successors, from whom the department has acquired a real property interest in the rail corridor, and that freight rail operator's officers, agents, and employees, from and against any liability, cost, and expense; including, but not limited to, commuter rail passengers and rail corridor invitees in the rail corridor, regardless of whether the loss, damage, destruction, injury, or death giving rise to any such liability, cost, or expense is caused in whole or in part; and to whatever nature or degree, by the fault, failure, negligence, misconduct, nonfeasance, or misfeasance of such freight rail operator, its successors, or its officers, agents, and employees, or any other person or persons whomsoever, provided that such assumption of liability of the department by contract shall not in any instance exceed the following parameters of allocation of risk:
    - 1. The department may be solely responsible for any loss, injury, or damage to commuter rail passengers, rail corridor invitees, or trespassers, regardless of circumstances or cause, subject to subparagraphs 2, 3, 4, 5, and 6.
    - 2. In the event of a limited-covered accident, the authority of the department to protect, defend, and indemnify the freight operator for all liability, cost, and expense, including punitive or exemplary damages, in excess of the deductible or self-insurance retention fund established under paragraph b) and actually in force at the time of the limited covered accident exists only if the freight operator agrees, with respect to the limited covered accident, to protect, defend, and indemnify the department for the amount of the deductible or self-insurance retention fund established under paragraph b) and actually in force at the time of the limited covered accident.
    - 3. When only one train is involved in an incident, the department may be solely responsible for any loss, injury, or damage if the train is a department train or other train pursuant to subparagraph 4, but only if when an incident occurs with only a freight train involved, including incidents with trespassers or at grade crossings, the freight rail operator is solely responsible for any loss, injury, or damage, except for commuter rail passengers and rail corridor invitees.
    - 4. For the purposes of this subsection, any train involved in an incident that is neither the department's train nor the freight rail operator's train, hereinafter referred to in this subsection as an "other train," may be treated as a department train, solely for purposes of any allocation of liability between the department and the freight rail operator only, but only if the department and the freight rail operator share responsibility equally as to third parties outside the rail corridor who incur loss, injury, or damage as a result of any incident involving both a department train and a freight rail

operator train, and the allocation as between the department and the freight rail operator, regardless of whether the other train is treated as a department train, shall remain one-half each as to third parties outside the rail corridor who incur loss, injury, or damage as a result of the incident. The involvement of any other train shall not alter the sharing of equal responsibility as to third parties outside the rail corridor who incur loss, injury, or damage as a result of the incident.

#### 5. When more than one train is involved in an incident:

- a. If only a department train and freight rail operator's train, or only another train as described in subparagraph 4 and a freight rail operator's train, are involved in an incident, the department may be responsible for its property and all of its people, all commuter rail passengers and rail corridor invitees, but only if the freight rail operator is responsible for its property and all of its people, and the department and the freight rail operator each share one-half responsibility as to trespassers or third parties outside the rail corridor who incur loss, injury, or damage as a result of the incident.
- b. If a department train, a freight rail operator train, and any other train are involved in an incident, the allocation of liability between the department and the freight rail operator, regardless of whether the other train is treated as a department train, shall remain one-half each as to third parties outside the rail corridor who incur loss, injury, or damage as a result of the incident; the involvement of any other train shall not alter the sharing of equal responsibility as to third parties outside the rail corridor who incur loss, injury, or damage as a result of the incident; and, if the owner, operator, or insurer of the other train makes any payment to injured third parties outside the rail corridor who incur loss, injury, or damage as a result of the incident, the allocation of credit between the department and the freight rail operator as to such payment shall not in any case reduce the freight rail operator's third-party-sharing allocation of one-half under this paragraph to less than one-third of the total third party liability.
- 6. Any such contractual duty to protect, defend, indemnify, and hold harmless such a freight rail operator shall expressly include a specific cap on the amount of the contractual duty, which amount shall not exceed \$200 million without prior legislative approval, and the department to purchase liability insurance and establish a self-insurance retention fund in the amount of the specific cap established under this subparagraph, provided that:
  - a. No such contractual duty shall in any case be effective nor otherwise extend the department's liability in scope and effect beyond the contractual liability insurance and self-insurance retention fund required pursuant to this paragraph; and

- b. The freight rail operator's compensation to the department for future use of the department's rail corridor shall include a monetary contribution to the cost of such liability coverage for the sole benefit of the freight rail operator.
- b. Purchase liability insurance, which amount shall not exceed \$200 million, and establish a self-insurance retention fund for the purpose of paying the deductible limit established in the insurance policies it may obtain, including coverage for the department, any freight rail operator as described in paragraph (a), commuter rail service providers, governmental entities, or any ancillary development, which self-insurance retention fund or deductible shall not exceed \$10 million. The insured shall pay a reasonable monetary contribution to the cost of such liability coverage for the sole benefit of the insured. Such insurance and self-insurance retention fund may provide coverage for all damages, including, but not limited to, compensatory, special, and exemplary, and be maintained to provide an adequate fund to cover claims and liabilities for loss, injury, or damage arising out of or connected with the ownership, operation, maintenance, and management of a rail corridor.
- c. Incur expenses for the purchase of advertisements, marketing, and promotional items.

Neither the assumption by contract to protect, defend, indemnify, and hold harmless; the purchase of insurance; nor the establishment of a self-insurance retention fund shall be deemed to be a waiver of any defense of sovereign immunity for torts nor deemed to increase the limits of the department's or the governmental entity's liability for torts as provided in s. 768.28. requirements of s. 287.022(1) shall not apply to the purchase of any insurance under this subsection. The provisions of this subsection shall apply and insure fully as to any other governmental entity providing commuter rail service and constructing, operating, maintaining, or managing a rail corridor on publicly owned right-of-way under contract by the governmental entity with the department or a governmental entity designated by the department. Notwithstanding any law to the contrary, procurement for the construction, operation, maintenance, and management of any rail corridor described in this subsection, whether by the department, a governmental entity under contract with the department, or a governmental entity designated by the department, shall be pursuant to s. 287.057 and shall include, but not be limited to, criteria for the consideration of qualifications, technical aspects of the proposal, and price. Further, any such contract for design-build shall be procured pursuant to the criteria in s. 337.11(7).

18. Exercise such other functions, powers, and duties in connection with the rail system plan as are necessary to develop a safe, efficient, and effective statewide transportation system.

**History.** s. 2, ch. 84-333; s. 18, ch. 89-301; s. 72, ch. 92-152; s. 53, ch. 93-164; s. 58, ch. 95-257; s. 35, ch. 99-385; s. 6, ch. 2009-271.

**Note.** Section 7, ch. 2009-271, provides that "[t]he Department of Transportation may complete an escrowed closing on the pending Central Florida Rail Corridor acquisition; however, the drawdown of such escrowed closing shall not occur unless and until final Federal Transit Administration full-funding grant agreement approval is obtained for the proposed Central Florida Commuter Rail Transit Project Initial Operating Segment."