

NOVEMBER 2023

Chapter 1

The Role of Rail in Statewide Transportation



CONTENTS

Cha	pter 1	The Role of Rail in Statewide Transportation	. 1
1.1	Florid	a's Goals for a Multimodal Transportation System	. 2
1.2	Rail's	Role Within Florida's Transportation System	. 3
	1.2.1	Freight Rail	. 3
	1.2.2	Passenger Rail	. 4
1.3	Instit	utional Governance Structure of Florida's Rail Program	. 5
	1.3.1	Florida Department of Transportation Rail Functions	. 5
		Authority to Establish a Rail Program and Provide Planning	. 5
		Freight & Rail Office	. 6
		Public Transit Office	. 6
		Systems Implementation Office	. 6
		SD-FAST Office, Office of Work Program	. 6
		District Offices	. 6
		Florida Rail Enterprise	. 7
	1.3.2	Regional and Local Organizations	. 8
		Regional Planning Councils.	. 8
		Metropolitan Planning Organizations	. 9
		Economic Development Agencies	11
1.4	State	Funding for Rail	11
	1.4.1	Florida Rail Enterprise	11
	1.4.2	State Regional and Urban Rail Transit Funding	12
	1.4.3	New Starts Transit Program	12
	1.4.4	Strategic Intermodal System Program	13
	1.4.5	FDOT Rail Bridge Program	13
1.5	Sumn	nary of Florida's Freight and Passenger Rail Services, Initiatives, and Plans	13
	1.5.1	Existing Services	13
	1.5.2	Freight Rail Initiatives	14
		Freight Rail Projects with Recent Federal Funding Awards	14



Freight Mobility and Trade Plan	15
1.5.3 Passenger Rail Initiatives	16
Florida Passenger Rail Strategy	16
Brightline Intercity Passenger Rail Extensions	16
Passenger Rail Safety	16
Passenger Rail Projects with Federal Funding Assistance	17
FIGURES	
Figure 1-1 Florida Transportation Plan	2
Figure 1-2 Florida Rail Leading Commodities by tonnage (a), units (b), value (c)	4
Figure 1-3 Florida Intercity and Commuter Rail Ridership	5
Figure 1-4 Florida DOT Districts	7
Figure 1-5 Florida Regional Planning Councils	9
Figure 1-6 Florida Metropolitan Planning Organizations	10
TABLES	
Table 1-1 Florida Rail Enterprise Funding Level, FY12-FY22	12
Table 1-2 New Starts Transit Program Funding Level, FY12-FY22	12
Table 1-3 Strategic Intermodal System Program Rail Funding Level, FY12-FY22	13



Chapter 1 The Role of Rail in Statewide Transportation

The Florida Department of Transportation (FDOT) developed the Rail System Plan to guide the state's rail freight and passenger transportation planning activities and project development plans. This plan:

- Complies with Section 341.302(3), Florida Statutes, which requires an identification of priorities, programs, and funding levels required to meet statewide and regional goals.
- Meets the requirements embodied in the Federal Passenger Rail Investment and Improvement Act (PRIIA), as amended by the Fixing America's Surface Transportation Act (FAST Act) of 2015, and in the Federal Railroad Administration's (FRA) State Rail Plan Guidance.
- Describes the state's existing rail network, its challenges and opportunities, and rail related economic and socio-environmental impacts of each rail mode.
- Includes Florida's Rail Vision and Supporting Goals, along with both proposed publicly sponsored short and long-range capital improvements and policy recommendations to achieve the Vision and Goals.
- Updates Florida's rail service and investment program, which enables listed projects to be eligible for Federal funding.

This chapter describes the current and proposed future role of rail in Florida's multimodal transportation system and how the state is organized to provide political, legal, and financial support for rail system development.



1.1 Florida's Goals for a Multimodal Transportation System

The Florida Transportation Plan (FTP), updated in 2020, is the overarching plan guiding Florida's transportation future. It is a collaborative effort of state, regional, and local transportation partners in the public and private sectors. The plan's seven interrelated goals for Florida's transportation future are seen in Figure 1-1.

Figure 1-1 | Florida Transportation Plan



Freight and passenger rail will play a significant role in accomplishing the plan's goals and objectives related to environment, economy, and mobility. The FTP Policy Element describes strategies to guide transportation partners statewide in accomplishing the plan's goals.

Key strategies for freight and passenger rail include the following:

- Continue to improve intermodal connections, particularly between Strategic Intermodal System (SIS) rail and highway corridors and major airports, spaceports, seaports, and rail terminals.
- Increase Florida's supply chain efficiency by expanding the capacity of major seaports, air cargo hubs, and truck and rail corridors and developing intermodal logistics centers.



- Adapt and accommodate emerging logistics technologies at seaports, air cargo facilities, intermodal logistics centers, rail corridors and terminals, and heavy truck corridors.
- Transform passenger terminals into mobility hubs with a wide range of modal options and first/last mile connections for Florida's residents and visitors.
- Improve connectivity from major highway and rail corridors to population and economic activity centers, including Florida's 23 major military installations.
- Improve connectivity among local transit systems, between regional and local transit systems, and between transit systems and other modes to support more convenient and efficient trips, including across county lines and between rural and urban areas.

1.2 Rail's Role Within Florida's Transportation System

Florida's rail network, which encompasses 2,738 mainline miles and 3,858 total track-miles, supports the state's economy and mobility. Rail transportation has been vital to Florida's growth and development and continues to expand its role as a mode. Rail transportation provides the ability to move people and goods within the state as well as to and from other regions of North America and, through links with seaports and airports, around the world.

1.2.1 Freight Rail

Most of Florida's rail mileage is owned by freight railroads. The freight rail network provides interstate and intrastate transportation of goods, as well as intermodal connections for water and highway transfers, allowing the state's businesses to reach markets across the world. The network allows Florida's businesses and industries to provide transportation alternatives and cost structures for its customers, resulting in lower transportation costs. In addition, rail services reduce environmental impacts such as highway damage and congestion, energy consumption, and generation of pollutants. In 2018, Florida's freight railroads carried 80.1 million tons (13% of total freight) of freight that originated in or terminated in the state of Florida; these shipments had a total cargo value of \$115.97 billion (equating to \$1,449/ton) and were transported in 1.78 million units (i.e., rail cars). The leading commodities by tonnage, units, and value are shown in Figure 1-2.



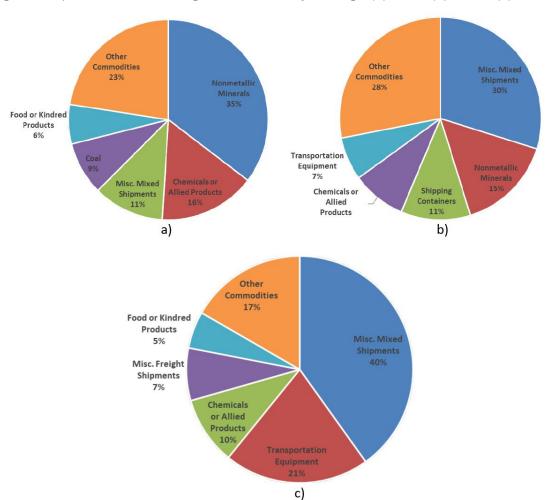


Figure 1-2 | Florida Rail Leading Commodities by tonnage (a), units (b), value (c)

Source: IHS Markit, 2018

1.2.2 Passenger Rail

Florida's passenger rail system plays an increasingly important role in addressing the mobility needs of a growing state. It moves large numbers of people while also reducing roadway congestion and pollution, providing safer travel options, and promoting economic development. The rail network continues to expand its intercity passenger and regional commuter rail services through improvements in Amtrak and Brightline Trains Florida (Brightline) intercity operations as well as Tri-Rail and SunRail commuter rail operations. These passenger services increase efficient access to the state's airports, contribute to tourism, and provide access to employment. As per FDOT Sourcebook in 2019, Amtrak, SunRail, and Tri-Rail trains in Florida, had the highest combined ridership (7.8 million passengers) on Florida's passenger and commuter rail services in more than 15 years. The onset of the COVID-19 pandemic, however, was associated with a 45 percent drop in ridership in 2020, when only 4.3 million people rode Amtrak, SunRail, and Tri-Rail. Figure 1-3 shows the five year progression of intercity and commuter rail ridership in the state.



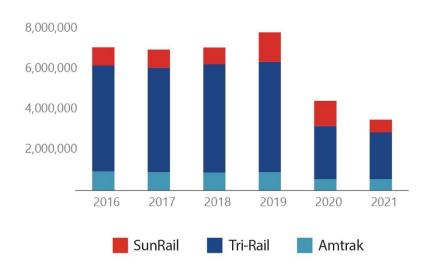


Figure 1-3 | Florida Intercity and Commuter Rail Ridership

Source: FDOT Sourcebook, 2021 and FDOT, 2022

Urban rail transit systems play an important role in moving people within the state's heavily populated metropolitan centers and provide important first-mile/last-mile mobility options when connected with intercity and regional systems at multimodal transfer centers. Four urban rail transit systems, located in Miami, Tampa, and Jacksonville, shuttle travelers within metropolitan areas on tracks physically separated from the national rail network.

1.3 Institutional Governance Structure of Florida's Rail Program

Florida's public sector rail activities, conducted by both state and local agencies, include planning, project development and programming, design and construction, and safety and security. This section describes the structure of state and agency activities.

1.3.1 Florida Department of Transportation Rail Functions

FDOT's continuing mission is to provide a safe transportation system that ensures the mobility of people and goods, enhances economic prosperity, and preserves the quality of Florida's environment and communities. FDOT's vision is to serve the people of Florida by providing a transportation network that is well planned, supports economic growth, and has the goal of being congestion- and fatality-free.

Authority to Establish a Rail Program and Provide Planning

Section 341.302 of the Florida Statutes authorizes FDOT to develop and update the Florida Rail System Plan. The statute states: "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." FDOT is in compliance with 49 U.S. Code – Section



22102, which stipulates eligibility requirements for a long-established FRA rail freight grant assistance program pertaining to state planning and administration.

FDOT is the designated State Rail Transportation Authority (SRTA) and State Rail Plan Approval Authority (SRPAA) for Florida. Rail functions within FDOT are conducted by the Office of Modal Development, which includes the Aviation Office, the Spaceport Office, the Freight & Rail Office (FRO), the Seaport Office, and the Public Transit Office.

Freight & Rail Office

FDOT's FRO has a dual focus. It handles most the Department's rail-related responsibilities (including the development and implementation of the Rail System Plan) as well as a portion of the Department's Commercial Motor Vehicle tasks (primarily setting policy guidance regarding asset management, safety, and truck mobility).

Aside from the development of FDOT's rail policy, the rail functions of the FRO office include technical support to FDOT's executive leadership, districts, and to Florida's Strategic Intermodal System (SIS) Program, as well as the development and management of rail projects and rail research.

The FRO also serves as FDOT's liaison with the private rail industry, the Federal Railroad Administration (FRA), and Amtrak, helping the Department respond to major incidents and addressing freight and passenger rail interoperability issues. The FRO office also represents the Department on the American Association of State Highway and Transportation Officials' (AASHTO) Council on Rail Transportation (CORT).

Public Transit Office

FDOT's Public Transit Office is the primary source for securing and allocating federal and state funds across Florida's many transit and commuter rail operations through the Federal Transit Administration (FTA) and other providers. This office also guides commuter rail and urban rail transit development and operations and oversees the Federal transit fixed-guideway system safety and oversight program.

Systems Implementation Office

FDOT's Systems Implementation Office manages the state's Strategic Intermodal System Program, the primary source of state funds for freight rail improvement projects.

SD-FAST Office, Office of Work Program

These offices provide financial and administrative services in support of state-funded rail investments.

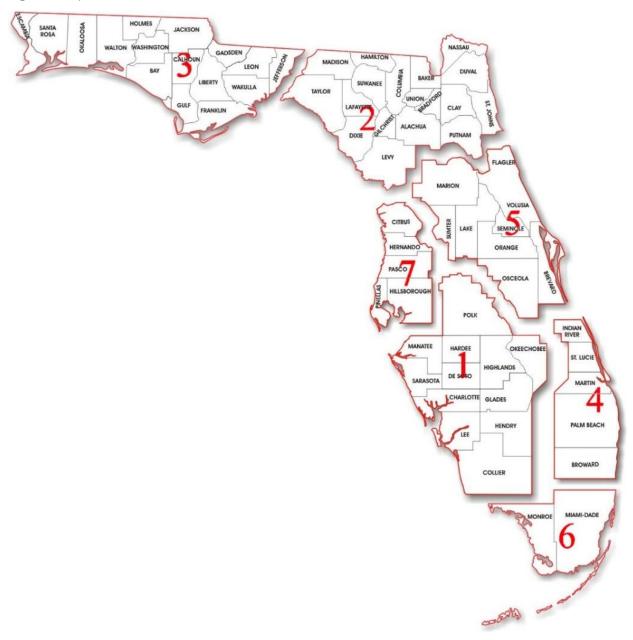
District Offices

Rail functions are carried out in both FDOT's Central Office in Tallahassee and district offices throughout the state. Federal functions are maintained at the Central Office while local functions are carried out by the district rail and freight staff located in each district. The DFCs and DRCs work closely with the FRO office to manage project implementation and program oversight regarding safety and funding. This includes coordination with FRA and freight railroads and



coordinating with FTA, regional systems, and urban rail transit systems. The geographic boundaries of FDOT's seven districts are shown in Figure 1-4.

Figure 1-4 | Florida DOT Districts



Source: FDOT, 2023

Florida Rail Enterprise

The Florida Legislature created the Florida Rail Enterprise (FRE) within the Department of Transportation in 2009 to oversee all state-owned passenger rail systems. The FRE has the authority to plan, construct, maintain, repair, and operate a high-speed rail system; acquire rail corridors; and coordinate the development and operation of publicly-funded passenger rail



systems in the state. The Department has prioritized the following responsibilities for FRE to carry out:

- Central Florida Rail Corridor (SunRail) and South Florida Rail Corridor (Tri-Rail) statutory and contractual commitments while ensuring system safety
- State of good repair investments and additional safety enhancements
- Mitigation of freight train diversion due to passenger service development with emphasis on safety related improvements
- New passenger rail initiatives consistent with statutory requirements including safety, maintenance, and funding eligibility

Any proposed rail enterprise projects or improvements are developed in accordance with the Florida Transportation Plan. In addition, FDOT's Strategic Development Financial & Administrative Services Team (SD-FAST) Office coordinates with the Office of Work Program to ensure financial and administrative services support for the rail investments.

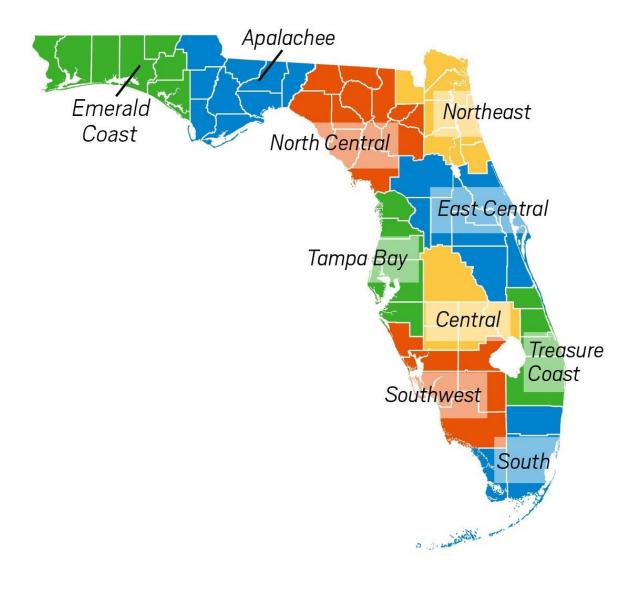
1.3.2 Regional and Local Organizations

Regional Planning Councils

Florida Statute Section 186.512 instituted Florida's ten Regional Planning Councils (RPCs) to meet regional needs and provide a collaborative framework for state and federal initiatives. These multi-purpose organizations assist in planning for and coordinating intergovernmental solutions for responsible growth, provide technical assistance to local governments, and meet the needs of communities across the regions they serve. The geographic boundaries of the RPCs are shown in Figure 1-5.



Figure 1-5 | Florida Regional Planning Councils



Source: Florida Regional Planning Council, 2022¹

Metropolitan Planning Organizations

Florida's 27 Metropolitan Planning Organizations (MPOs) represent the state's urbanized areas with populations greater than 50,000. FDOT's FRO relies on the input and expertise of the MPOs' local government and transportation officials to ensure that transportation policy, programming, and funding is beneficial to Florida communities. The geographic boundaries of Florida's MPOs are shown in Figure 1-6.

¹ FLORIDA REGIONAL PLANNING COUNCILS | arpc



C

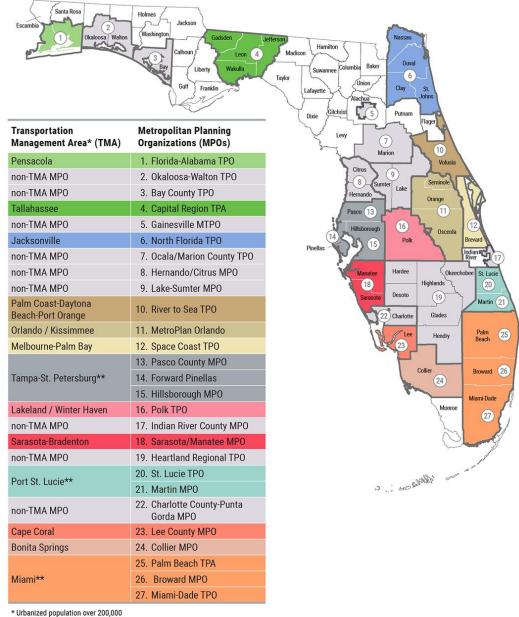


Figure 1-6 | Florida Metropolitan Planning Organizations

Source: FDOT Metropolitan Planning Support, 2022²

MPOs are required to create and update Long Range Transportation Plans (LRTPs) and Transportation Improvement Programs (TIPs) as 5–10-year outlooks of potential projects. These plans guide funding needs and evolve with the needs of the districts. Rail-focused projects range from freight movement to passenger safety with a focus on multimodal and

² Metropolitan Planning Support (fdot.gov)



^{**} Tampa-St. Petersburg, Port St. Lucie and Miami TMA's contain multiple MPOs

safety solutions. These plans are developed cooperatively with local stakeholders such as district staff, local businesses, and government. This helps ensure that these plans meet the area needs.

Economic Development Agencies

Economic development is a key driver of FDOT efforts. Partnerships have been developed with organizations across the state that specialize in business recruitment and retention, including economic development agencies and authorities, chambers of commerce, alliances, development councils, corporations, and associations at the regional, county, or local level of government. These agencies provide incentives such as tax exemptions or training to appeal to a variety of business interests to support Florida's economic growth and high-wage job opportunities. In addition, Florida's Department of Economic Opportunity promotes economic development by administering state and federal programs and providing services to assist businesses in expanding or transporting goods to, from, and through Florida.

Though their scope is more expansive than transportation (or railroad operations in particular), their interests align with the economic production brought by investments in rail. While, these agencies do not generally work directly with freight railroad operators, they do work with railroad industrial development departments and have a vested interest in the level of rail services and rail assistance programs available to supplement their incentives.

1.4 State Funding for Rail

Public funding for rail planning, construction, and operations comes from multiple federal, state, and local sources. Florida Statute Section 341.302 provides FDOT with the authority to secure and administer federal grants, loans, and apportionments for rail projects within the state when necessary to further the statewide rail program.

There are two primary sources of state funding for passenger rail in Florida: Florida Rail Enterprise (FRE)³, administered by the Freight & Rail Office (FRO), and New Starts Transit Program (NSTP), administered by the Public Transit Office. Passenger rail is also supported by programs like the Strategic Intermodal System, Statewide Public Transportation funds, and District Dedicated Revenues.

1.4.1 Florida Rail Enterprise

Florida Statute 341.303 authorizes FDOT to utilize FRE to direct passenger rail funding and coordinate publicly funded passenger rail operations in Florida. FRE is authorized to utilize the first \$60 million of the funds in the Transportation Regional Incentive Program (TRIP) annually, as established in Florida Statute 339.2819.⁴ These funds can be spent on:

⁴ https://oppaga.fl.gov/ProgramSummary/BackPageDetail?programNumber=6108&backPageNumber=01



³ http://www.leg.state.fl.us/statutes/index.cfm?App mode=Display Statute&URL=0300-0399/0341/Sections/0341.303.html

- Up to 100 percent of the net operating costs of any eligible intercity or commuter rail system for up to seven years, beginning from the open-to-service date;
- Up to 50 percent of the non-federal share of the costs of any eligible passenger rail capital improvement project; and/or
- Up to 100 percent of planning and development costs related to the provision of a passenger rail system, including, but not limited to, preliminary engineering, revenue studies, environmental impact studies, financial advisory services, engineering design, and other appropriate professional services.
- Projects necessary to identify or address anticipated impacts of increased freight rail traffic resulting from the implementation of passenger rail systems as provided in s. 341.302(3)(b).

Over the last 10-years the FRE has directed \$2.24 billion towards passenger and commuter rail projects and operations in the state. Table 1-1 shows the level of funding provided by FRE between 2012 and 2022.

Table 1-1 | Florida Rail Enterprise Funding Level, FY12-FY22

2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
\$267M	\$110M	\$128.5M	\$169.4M	\$362.9M	\$130.5M	\$222.8M	\$163.4M	\$175.8M	\$247.7M	\$259.9M	\$2,237.9M

Source: FDOT Work Program

1.4.2 State Regional and Urban Rail Transit Funding

Chapter 341 of the Florida Statutes⁵ limits the amount of funding that FDOT can provide to support capital and operating costs of regional and urban rail transit projects. Though exceptions to these limitations exist, the general rule for transit capital funding requires at least one dollar of local funds in the project for every state dollar requested. As a result, local government agency sponsors must find additional funding sources for transit projects to be completed.

1.4.3 New Starts Transit Program

Florida's New Starts Transit Program (NSTP) provides capital funding for new rail transit projects. NSTP funds require a match of local dollars, which together can be used as the required non-federal share of a project seeking Federal Transit Administration Capital Investment Grant (CIG) program funding. Florida statutes limit the funds for fixed-guideway projects not approved for federal funding to no more than 12.5 percent of the costs for final design, right-of-way acquisition, and construction.⁶ Over the last 10 years the NSTP has provided over \$300 million towards new transit projects. Table 1-2 shows the level of NSTP funding between 2012 and 2022.

Table 1-2 | New Starts Transit Program Funding Level, FY12-FY22

2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
\$34M	\$10.3M	\$20.6M	\$6.4M	\$70.2M	\$5M	\$5.7M	\$0.1M	\$119.8M	\$12.3M	\$20.9M	\$305.3M

Source: FDOT Work Program

⁶ Chapter 341.051-5(a) - 2019 Florida Statutes - The Florida Senate (flsenate.gov)



⁵ Chapter 341.051 - 2019 Florida Statutes - The Florida Senate (flsenate.gov)

1.4.4 Strategic Intermodal System Program

On the freight rail side, state funding primarily comes from Strategic Intermodal System Program (SIS)⁷ investments, managed by the FRO. Over the last 10-years the SIS has invested over \$270 million in freight rail capacity projects. Table 1-3 shows the level of SIS funding between 2012 and 2022.

Table 1-3 | Strategic Intermodal System Program Rail Funding Level, FY12-FY22

2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
\$29.4M	\$8.5M	\$24.7M	\$41.6M	\$3.2M	\$12.4M	\$38.1M	\$38.5M	\$20.7M	\$38.5M	\$16.3M	\$271.9M

Source: FDOT Work Program

1.4.5 FDOT Rail Bridge Program

A developing program, the goal of the FDOT Rail Bridge Program is to protect and preserve the state's infrastructure investment and to clearly establish FDOT's criteria for the identification, inspection, maintenance, design, and construction for FDOT's rail bridges. The program is in the process of establishing a statewide Rail Bridge Management Plan that will comply with Part 237 of the Code of Federal Regulations.

Commencing in fiscal year 2024, a designated and funded budget of about \$20 million over 5 years will ensure the effectiveness of the FDOT Rail Bridge Program to execute the inspection, maintenance, repair, replacement, and construction of FDOT's rail bridges.

1.5 Summary of Florida's Freight and Passenger Rail Services, Initiatives, and Plans

This section summaries Florida rail services, initiatives, and plans which are further described in chapters 2 through 5.

1.5.1 Existing Services

Florida's 3857.55-mile rail network is a vital asset supporting the state's economy and mobility.

- Florida's freight rail system is operated by two Class I railroads (CSX Transportation and Norfolk Southern Railway), one Class II railroad (Florida East Coast Railway), and multiple Class III railroads that are further categorized as switching and terminal railroads or short lines. Roughly 60 percent of the rail mileage in the state is owned by CSX and FEC. Norfolk Southern, the short line railroads, and the state of Florida own the remaining miles in the state.
- Intercity passenger trains use freight railroad tracks to carry travelers both within Florida and north along the eastern seaboard. Amtrak primarily operates over CSX trackage but also operates over state-owned trackage between DeLand, Orlando and Poinciana, and between Mangonia Park and Miami. Brightline, the nation's only private intercity passenger railroad, operates a corridor between Miami and Orlando that serves Miami-Dade, Broward, Palm Beach, and Orange counties and uses a combination of FEC trackage and Brightline-built trackage. The extension of its intercity passenger service from West Palm Beach to Orlando began operating on September 22, 2023. It includes a segment of track between Cocoa and Orlando that will permit

⁷ https://www.fdot.gov/planning/sis



-

speeds of up to 125 mph, making it Florida's fastest rail line. Brightline is now actively planning a further extension from Orlando International Airport west to Tampa, with two planned intermediate stops serving the Orange County Convention Center and the major theme parks in Central Florida, as well as a new station in PortMiami.

- In the Orlando and Miami urbanized areas, FDOT owns rail corridors where significant investments have been made to add and improve regional commuter rail service on lines also used by intercity passenger and freight trains. Tri-Rail, managed by the South Florida Regional Transportation Authority (SFRTA), links Miami, Fort Lauderdale, and West Palm Beach. SunRail serves Central Florida with a route that runs between DeBary and Kissimmee. An extension to DeLand is currently under way and an extension to Orlando International Airport and International Drive area of Orange County is being studied.
- Four urban rail transit systems, located in Miami, Tampa, and Jacksonville, shuttle travelers across metropolitan regions on tracks completely separated from the national rail network.
 - Metrorail, operated by the Miami-Dade Department of Transportation and Public Works, is a heavy rail rapid transit system that links Palmetto with downtown Miami, the University of Miami, Dadeland Mall, and the Miami International Airport, and connects with both Tri-Rail and Brightline. Miami also has a 4.4-mile Metromover Automated People Mover (APM) network in its downtown.
 - In Tampa, the TECO Line Streetcar is a heritage streetcar line run by the Hillsborough Area Regional Transportation Authority (HART), and connects downtown Tampa, the Channel District, and the historic Ybor City district. It is owned by the city of Tampa and managed by Tampa Historic Streetcar, Inc.
 - The Jacksonville Transportation Authority (JTA) operates the Jacksonville Skyway, an elevated driverless monorail system that glides above the St. Johns River and the streets of Downtown Jacksonville on a 2.5-mile route.

1.5.2 Freight Rail Initiatives

Freight Rail Projects with Recent Federal Funding Awards

FDOT, other agencies and the private sector in Florida have been the recipients of multiple federal funding awards for projects that will enhance freight rail transportation in Florida. The following projects that have received federal funding awards since FY 2019 will benefit freight rail transportation in the state:

- Rail Crossing Improvements and Dynamic Envelope Markings. FDOT was awarded \$2.3 million in FY 2020 Consolidated Rail Infrastructure and Safety Improvements (CRISI) program funding to improve safety and reduce maintenance costs at 13 grade crossings in rural parts of St. Lucie and Palm Beach counties. Under the project, FDOT is designing and constructing dynamic envelope pavement markings, "Do Not Stop On Tracks" signs, and repaving crossings owned by CSX and South Central Florida Express. The project is intended to reduce the likelihood of drivers stopping on or too close to railroad tracks, and to increase the lifespan of the crossing.
- Port of Palm Beach On-Dock Rail Facility Development. The Port of Palm Beach was awarded \$13.2 million in FY 2020 Port Infrastructure Development Program (PIDP) funding to



construct an on-dock intermodal container transfer facility to improve container throughput and speed the transfer of containerized cargo between vessels and railcars.

- Northeast Florida Rural Railyard Project. The Florida Gulf & Atlantic Railroad was awarded \$7.8 million in FY 2019 CRISI program funding to design and build a 72-acre rail yard in Baker County that will include space for a new transload facility as well as a new staging yard that will eliminate the need to haul freight cars an additional 125 miles west to Tallahassee prior to interchange with CSX.
- Florida Panhandle Rural Capacity Expansion Project. The Florida Gulf & Atlantic Railroad was awarded \$8.3 million in FY 2021 CRISI program funding to replace approximately 70,000 ties, install approximately 14,300 new ties, rehabilitate 11 sidings, and make repairs to 60 grade crossings between Jacksonville and Pensacola, Florida. These project elements will improve the track structure, which will increase the line capacity in order to serve growing demand.
- Florida Panhandle Rail Resiliency and Connectivity Project. The Florida Gulf & Atlantic Railroad was awarded \$23,198,945 in FY 2022 CRISI grant program funding to develop, design, and construct several bridge upgrades and track improvements along a 100-mile segment of the railroad's main line through the Florida panhandle. The improvements will increase operating capacity and reduce safety risks on a rail line that is constantly impacted by severe hurricanes.8
- Port Manatee Railroad Track Rehabilitation Projects. Manatee County Port Authority was awarded two FY 2019 CRISI grants with a combined total of approximately \$908,000 to replace and upgrade track within Port Manatee in Palmetto.
- Southwest Florida Rail Corridor Enhancement for Growth Project. Seminole Gulf Railway was awarded \$9,600,000 in FY 2022 CRISI grant program funding to develop, design, and construct track improvements along an estimated 12-mile segment of railroad. The project will enable the railroad to improve operations and reliability and meet existing and anticipated demand by increasing travel speeds and load carrying capacity, as well as substantially reduce maintenance costs and track defects.⁹

Freight Mobility and Trade Plan

In April 2020, FDOT released an updated Freight Mobility and Trade Plan (FMTP) that inventories the freight transportation facilities critical to the state's economic growth, identifies specific freight-oriented objectives designed to assist the state in meeting the overarching transportation goals outlined in the Florida Transportation Plan, and guides multimodal freight investments in the state. Specific recommendations for future investments related to freight and multimodal transportation outlined in the FMTP include:

- Prioritize rail-highway grade separation needs and implement select projects, depending on funding availability.
- Develop a contingency plan to support private sector freight mobility continuance of operations and to support disaster relief logistics operations.
- Improve the convenience and efficiency of connecting between multiple freight modes.

⁹ https://railroads.dot.gov/sites/fra.dot.gov/files/2023-09/FY%202022%20CRISI%20Program%20Selections%20-%20Project%20Summaries PDFa.pdf



⁸ https://railroads.dot.gov/sites/fra.dot.gov/files/2023-09/FY%202022%20CRISI%20Program%20Selections%20-%20Project%20Summaries PDFa.pdf

- Support projects that improve the efficiency of goods movement throughout the state.
- Consider freight needs in the development of multimodal and multi-use corridors.

1.5.3 Passenger Rail Initiatives

Florida Passenger Rail Strategy

In 2021, FDOT developed a statewide vision and strategy for the future development and operation of intercity passenger service, commuter rail, and rail transit. Florida's geographic profile and the proximity between major urban areas are ideally suited for providing efficient and effective intercity and regional passenger rail service in multimodal corridors. FDOT's vision for passenger rail capitalizes on Florida's geography and development patterns by establishing a well-connected passenger rail system in corridors linking major population centers. The system will enhance statewide mobility, improve transportation system reliability, provide safer and cleaner travel options, and promote economic development. FDOT's vision includes:

- Intercity passenger trains as a key element of multimodal corridors connecting major population centers
- Commuter trains providing regional mobility
- Urban rail transit systems rapidly moving people within heavily populated metropolitan centers

FDOT intends to carry out its passenger rail strategy in conjunction with public and private partners to systematically enhance the statewide passenger rail system to assure its continued and increased availability to meet current and future statewide mobility needs, while ensuring proper maintenance and safety.

Brightline Intercity Passenger Rail Extensions

Brightline Trains Florida (Brightline), the only private intercity passenger rail service in the U.S., launched in 2018 on a 67-mile route with three stations in Miami, Fort Lauderdale, and West Palm Beach. In December 2022, Brightline began service at two new stations: Aventura and Boca Raton. Brightline has plans for building a new station in PortMiami. A route extension from South Florida to the Orlando International Airport's South Terminal became operational on September 22, 2023. Brightline is now actively planning a further extension from Orlando International Airport west to Tampa, with two planned intermediate stops serving the Orange County Convention Center and the major theme parks in Central Florida.

Brightline's passenger rail operation is part of a real estate vision to redevelop neighborhoods as transportation hubs with modern stations, food halls, office space, retail, residential, and commercial space.

Passenger Rail Safety

Safety is the highest priority for passenger rail in the state. As such, FDOT has looked to develop and implement solutions that reduce trespassing in Florida. In 2018, FDOT submitted for and was awarded a CRISI grant to explore strategies for reducing railway trespassing. The project launched a pilot program to aid partnerships among local law enforcement agencies to combat trespassing in Volusia, Seminole, Orange, and Osceola Counties. The grant funding went toward:



- Identifying critical locations on the Central Florida Rail Corridor (CFRC) with a high frequency of trespassing
- Determining trespassing contributing factors
- Developing and implementing a blended approach of validating trespassers
- Preparing enforcement and education trespassing countermeasure strategies and tools
- Developing a program to share and train local law-enforcement and local governments on implementing a response strategy
- Developing a model for building effective problem-solving partnerships with local law-enforcement, community stakeholders and local governments, and
- Identifying funding opportunities for local law-enforcement and community stakeholders to respond to trespassing issues.

A report was produced in 2020 that outlines the work that was done for the project and provides findings and recommendations for future progress in this arena. These recommendations are included in Florida's Highway-Rail Grade Crossing State Action plan.

Passenger Rail Projects with Federal Funding Assistance

FDOT and other agencies in Florida have been the recipient of multiple federal funding awards for projects that will enhance passenger and commuter rail transportation in Florida. The following projects that have received federal funding awards since FY 2019 will benefit passenger and/or commuter rail transportation in the state.

- A. Philip Randolph Regional Multimodal Transportation Hub and Complete Streets Connectivity. The City of Palatka was awarded \$8.2 million in FY 2021 Rebuilding American Infrastructure with Sustainability and Equity (RAISE) to improve multimodal connectivity at the Amtrak intercity passenger rail station in Palatka. The \$8.2 million project will lengthen the passenger loading platform to accommodate a baggage area, adjust the platform height to meet ADA requirements and allow bicycles to be loaded and unloaded at the station (adding safety improvements to the station area), and constructing Complete Streets improvements, including roadway resurfacing, installation of new ADA-compliant sidewalks, and constructing curb and gutter designating bike lanes.¹⁰
- Florida East Coast Corridor Trespassing and Intrusion Mitigation Project. FDOT, in partnership with Brightline, received \$25 million in RAISE grant funding in 2022 to enhance safety along the Florida East Coast Corridor (Miami-Dade, Broward, Palm Beach, Martin, St. Lucie, and Brevard Counties). This investment will benefit this corridor by constructing supplemental safety measures at 328 roadway-railroad grade crossings and installing 33 miles of pedestrian protection features. Planned safety improvements included as part of this grant are rail dynamic envelopes, delineators, raised pavement markers, edge striping, fencing and additional safety signage.¹¹
- CFRC/SunRail Phase 2 South Capacity Improvements. FDOT was awarded \$5.6 million in FY 2020 CRISI program funding for an \$11.3 million project to eliminate a railroad chokepoint and reduce train delays by constructing the final 1.7-mile segment of second main track on the 61.3-mile state-owned Central Florida Rail Corridor in Kissimmee between Control Point NE

¹¹ RAISE 2022 FACT SHEETS (transportation.gov)



1/

¹⁰ RAISE/BUILD/TIGER 2009-2022 Awarded Projects | US Department of Transportation

Kissimmee (MP 806.2) near Donegan Avenue and CP Middle Kissimmee (MP 807.9) near Neptune Road. The corridor is used by SunRail commuter trains, Amtrak intercity passenger trains, and freight trains operated by CSX and Florida Central Railroad.¹²

- Boca Raton Passenger Rail Station. The City of Boca Raton was awarded nearly \$16.4 million in FY 2020 CRISI program funding to construct an intercity passenger rail station and parking garage. The station will be located on the existing Brightline passenger rail corridor between Miami and West Palm Beach.
- Onsite Signal Safety Improvements (OSSI). The Southern Florida Regional Transportation Authority (SFRTA) received a \$12.9 million in Commuter Authority Rail Safety Improvement (CARSI) program grant funding to modernize 25 rail crossings on its Tri-Rail commuter rail line in Broward, Miami-Dade, and Palm Beach counties. The project will upgrade LED lights and update signal houses, gate mechanisms, cantilevers, and light assemblies. The rail line is located in an area where vehicular traffic has increased and where train traffic is expected to increase over the next several years as well.¹³
- Tampa to Orlando High-Speed Intercity Passenger Rail Project. Brightline was awarded \$15,875,000 in FY 2021 CRISI program funding to advance preliminary engineering activities to support Phase III of the Brightline system, a 67-mile extension from Orlando to Tampa mostly within the right-of-way of I-4 in Central Florida. The full buildout of the Phase III Extension would provide an alternative for travelers on an overburdened state highway system and is projected to reduce the number of vehicle miles traveled along I-4.¹⁴
- Trespassing Identification and Classification System Project. Brightline and the technology company Wi-Tronix were jointly awarded \$1,648,000 in FY 2022 CRISI grant program funding to develop a software that uses AI (artificial intelligence) to collect real-time data of trespassing locations and trespassing activity along the Brightline/FEC Railway corridor. Data will be collected by locomotive front-end cameras and will be used to develop and train an AI model to identify unsafe behaviors around the corridor. The information will enable Brightline to more accurately identify areas for additional community outreach, law enforcement presence, or engineering projects.¹⁵
- Central Florida Rail Corridor Crossings and Trespassing Safety Improvements Project. FDOT was awarded \$6,928,241 in FY 2022 CRISI grant program funding for final design and construction of safety improvements and trespassing prevention improvements at approximately 110 highway-rail grade crossings along the Central Florida Rail Corridor, which is used by SunRail, Amtrak, CSX, and Florida Central Railroad trains. Safety improvements may include items such as pavement markings, signage, surface replacement, and installing traffic signal equipment (pre-emption, pre-signals, and queue-cutter related, etc.). The project will also mitigate pedestrian trespassing to channel trespassers to the grade crossing or pedestrian crossings. ¹⁶

¹⁶ https://railroads.dot.gov/sites/fra.dot.gov/files/2023-09/FY%202022%20CRISI%20Program%20Selections%20-%20Project%20Summaries PDFa.pdf



¹² FRA's Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program FY20 Project Recipients | FRA (dot.gov)

¹³ USDOT Announces \$59 Million in Grant Awards to Improve Safety at Highway-Railway Crossings in Four States | FHWA

¹⁴ Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program: FY2021 Selections | FRA (dot.gov)

¹⁵ https://www.gobrightline.com/press-room/2023/brightline-receives-usdot-crisi-grant-award

A Comprehensive Approach to Promoting Railroading Careers and Developing the Current Rail Industry Workforce. The University of South Florida was awarded \$17,073,949 in FY 2022 CRISI grant program funding for rail industry workforce development activities, including but not limited to, targeted outreach to elementary and secondary education students, internship programs for future railroaders and rail researchers, delivery of training, and workforce development programs that include emerging technologies training. The project will help improve the ability of the future workforce to meet existing and anticipated demand, while addressing current challenges such as an aging workforce and critical skill gaps. A combination of funding from ENSCO, Inc., Colorado State University-Pueblo, Michigan Technological University, Oregon State University, San Jose State University Research foundation, University of Hawaii, University of Nebraska-Lincoln, and the University of South Florida will contribute the 23 percent non-Federal match.¹⁷

¹⁷ https://railroads.dot.gov/sites/fra.dot.gov/files/2023-09/FY%202022%20CRISI%20Program%20Selections%20-%20Project%20Summaries PDFa.pdf



