FLORIDA RAIL System plan

NOVEMBER 2023



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THE ROLE OF RAIL IN STATEWIDE TRANSPORTATION

HISTORY OF RAIL IN FLORIDA



Florida Railway & Navigation Co. steam engine



Visitors arriving in Florida



Robert Blanchette, President of TGV of Florida, Inc., presents his bullet train proposal to the Florida High Speed Rail Transportation Commission



Brightline train arriving at station

1836

The first steam-powered railroad line in the state began operation

1880

EARLY 1900S

Florida's developing industrial centers, luxury

sectors, and growing

communities were

connected by train

FDOT purchased the South Florida Rail Corridor from CSX

Transportation; Tri-Rail began commuter rail

operations in southeast

1988 - 1989

Florida

2014

2018

Palm Beach

SunRail began

the Orlando area

commuter service in

Brightline began service

between Miami, Fort Lauderdale, and West

destinations, agricultural

With state support and the Internal Improvement Act of 1855, Florida's railroad network grew to more than 500 miles of track

1845

Florida became a state; Railroad developers began piecemeal projects to link east and west Florida

1880 - 1912

Rail mileage in Florida increased fourfold; Henry Plant linked central and west Florida to the rest of the country, and Henry Flagler built a railroad from Jacksonville south along Florida's east coast, eventually reaching Key West

MID (900S

Construction of the National System of Interstate and Defense Highways after World War II made the automobile the preferred choice for personal travel and increased the trucking industry's share of freight transportation

2009

Florida Rail Enterprise was established under the authority of FDOT to coordinate the development and operation of publicly funded passenger rail systems in the state

2016

The widened Panama Canal expanded shipments of containerized freight through Florida seaports and onto trains to reach interior U.S. markets



Overseas extension bridge to Key West



Diesel-electric locomotives replaced steam in the '40s



Double-stacked containers of cargo move by rail between Florida and markets across North America



Cargo ship crossing Panama Canal

VISION & STATUTORY AUTHORITY



RAIL VISION



Florida's rail vision is to provide safe, equitable, and reliable mobility solutions for people and freight. An integrated and resilient rail system will enhance transportation options and modal connections, promote sustainable communities, and strengthen Florida's economy.

STATUTORY AUTHORITY

SECTION 341.302, FLORIDA STATUTES

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.



PASSENGER RAIL INVESTMENT AND IMPROVEMENT ACT OF 2008

Places funding responsibility with states for subsidizing Amtrak passenger trains on routes of 750 miles or less; Authorizes Federal appropriations for Amtrak longdistance trains (routes of more than 750 miles); Mandates establishment of passenger train performance standards.

Florida Trar	nsportation Plan Goals	State Rail Plan Objectives
	Safety and Security for Residents, Visitors, and Businesses	 Reduce incidents, accidents, and fatalities Improve rail system security Enhance the rail system to better respond to emergencies Support Florida's Highway-Rail Grade Crossing State Action Plan initiatives to improve safety at grade crossings
	Agile, Resilient, and Quality Transportation Infrastructure	 Preserve and maintain rail assets in a state of good repair Modernize the rail system when public benefit can be demonstrated Increase the resilience of infrastructure
	Connected, Efficient, and Reliable Mobility for People and Freight	 Improve rail system connectivity Increase the reliability and efficiency of people and freight trips Eliminate rail bottlenecks where possible Meet customer expectations for infrastructure quality and service
	Transportation Choices that Improve Accessibility and Equity	 Achieve broad public support for investments in the rail system Maximize the use of state and federal funding programs Identify new and alternative revenue sources and financial tools Increase alternatives to single occupancy vehicles Increase access to jobs, education, health, and other services for all residents
	Transportation Solutions that Strengthen Florida's Economy	 Invest in rail capacity improvements to enhance the interstate and intrastate movement of passengers and freight when public benefit can be demonstrated Invest in rail improvement projects that support job creation and economic development
	Transportation Systems that Enhance Florida's Communities	 Support responsible land use strategies Support job creation and economic development
	Transportation Solutions that Enhance Florida's Environment	 Support responsible environmental stewardship Reduce transportation's impact on water, critical lands, and habitats Decrease transportation-related air quality pollutants and greenhouse gas emissions

RAIL'S ROLE IN THE STATE

Florida's rail systems move people and freight while reducing roadway congestion, providing safer travel options, improving air quality, and promoting economic development.

INCOME

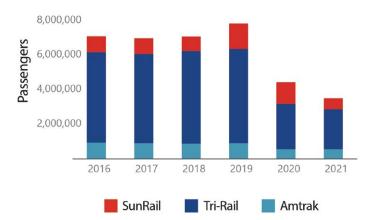
\$56.8 EARNED

FREIGHT

In 2018, Florida's freight railroads carried

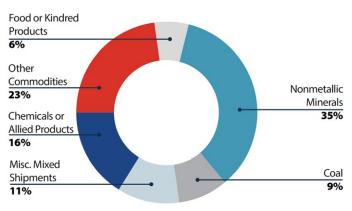
MILLION TONS OF FREIGHT

that originated in or terminated in the state of Florida.



FLORIDA PASSENGER RAIL RIDERSHIP

FLORIDA RAIL COMMODITIES BY **TONNAGE IN 2018**



Source: IHS Markit, 2018

PASSENGER

In 2019, Florida had over

MILLION RAIL PASSENGERS

(not including Brightline or rail transit systems)

Florida's passenger rail system plays an increasingly important role in addressing the mobility needs of a growing state.

ECONOMIC VALUE-ADDED/

GROSS STATE PRODUCT

\$83.8

Source: FDOT Sourcebook, 2021

RAIL RELATED IMPACTS STATEWIDE EMPLOYMENT



Source: Based on IMPLAN® v6 and WAYBILL data, 2018



FDOT RAIL FUNCTIONS

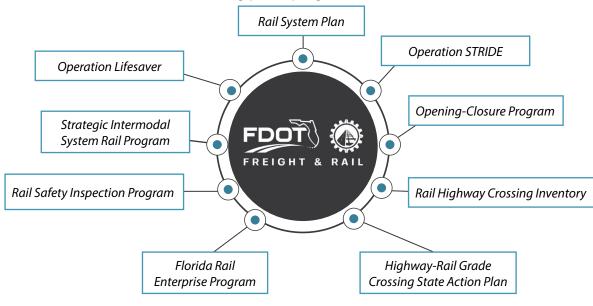
Rail functions within FDOT are conducted primarily by the Freight & Rail Office (FRO), with support and collaboration from the Modal Development team.

FDOT is a decentralized agency. The Central Office is primarily dedicated to policy/procedure/ plan development, quality assurance, and technical assistance.



Local rail functions are carried out by District rail staff. A team of six State Rail Inspectors also work to inspect track, locomotives, equipment, and highway-rail grade crossing warning devices, as well as to confirm railroads and shippers are operating within federal and state standards.

FRO's rail functions include the following plans, programs, inventories, and initiatives.



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STATE FUNDING FOR RAIL

There are two primary sources of state funding for passenger rail in Florida: Florida Rail Enterprise, administered by the FRO, and New Starts Transit Program, administered by the Public Transit Office. State funding for freight rail comes primarily from Strategic Intermodal System (SIS) program investments, managed by FDOT's Systems Implementation Office.

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, 2022

\$

NEW STARTS TRANSIT PROGRAM FUNDING LEVEL, FY12-FY22

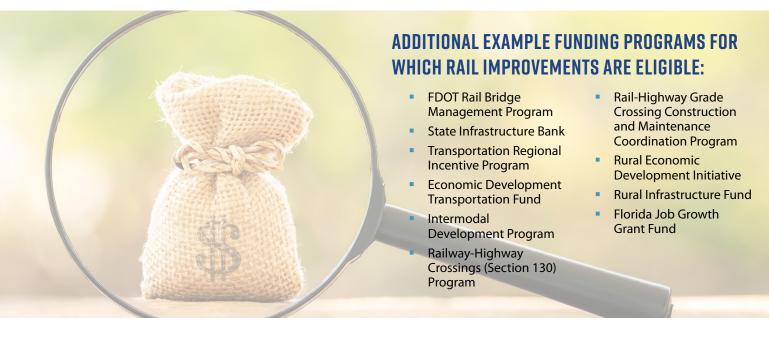
2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
\$34M	\$10.3M	\$20.6M	\$6.4M	\$70.2M	\$5M	\$5.7M	\$0.1M	\$119.8M	\$12.3M	\$20.9M	\$305.3M

Source: FDOT Work Program, 2022

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, 2022



RAIL PLANNING

HIGHWAY-RAIL GRADE CROSSING STATE Action Plan

Florida's Highway-Rail Grade Crossing State Action Plan, submitted to the Federal Railroad Administration (FRA) in January 2022, highlights data and analyses to detail where grade crossing risks are the highest.

The priority safety challenges in the state are:

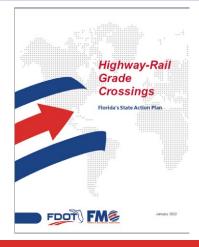
- driver and pedestrian behavior
- humped crossings
- traffic queuing on tracks
- blocked crossings

PASSENGER RAIL CORRIDOR ASSESSMENT

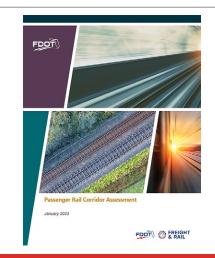
In January 2023, FDOT completed a passenger rail corridor assessment to identify and evaluate new intercity passenger rail corridors proposed for development, as well as existing intercity passenger rail corridors proposed for an expansion of service. The assessment strategically evaluated and identified passenger rail corridors where future investments should be focused.

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.



CLICK TO VIEW



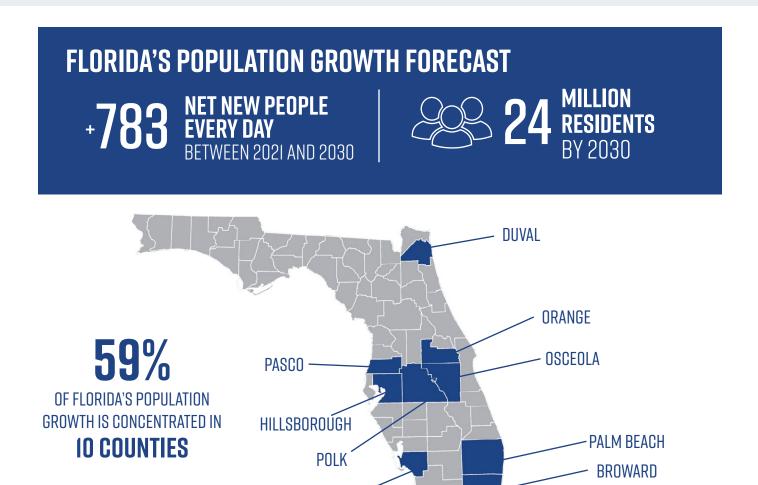
CLICK TO VIEW



CLICK TO VIEW

TRENDS AND FORECASTS

Population is a key factor that drives traffic movements including those on the state's passenger and freight rail system.



LEE

Source: Census, 2022; BEBR, 2022



As population surges in key areas of the state, congestion and delays along the highway system will worsen unless our infrastructure changes to adapt.

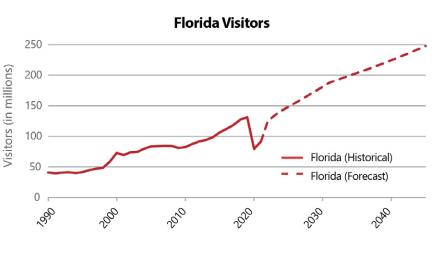
MIAMI-DADE

FDOT is committed to planning for this growth and the mobility options our residents and visitors will demand both now and in the future.

VISITORS



Vacationers and other visitors to Florida are an important travel market that the state's rail system has served for more than a century. Florida's economy has thrived on visitors. Visitor growth had been steadily increasing in the state before the pandemic and is forecast to recover and continue going up.

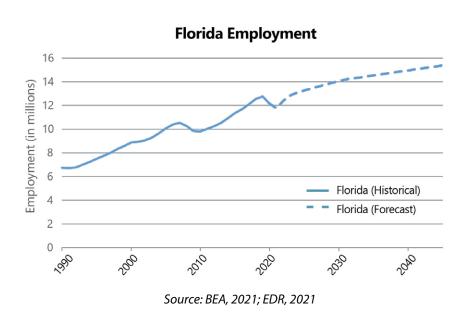


Sources: Visit Florida, 2022; BEBR, 2017; EDR, 2022

EMPLOYMENT



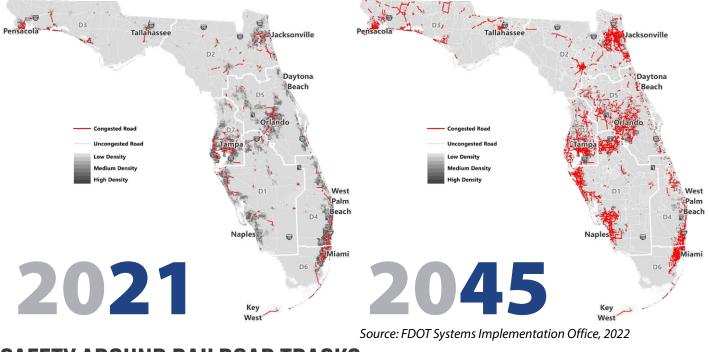
Employment is a key driver behind production and commuting flows, influencing the state's passenger and freight rail system. Florida's employment has grown robustly, at almost double the national pace over the past 30 years.



ROAD CONGESTION

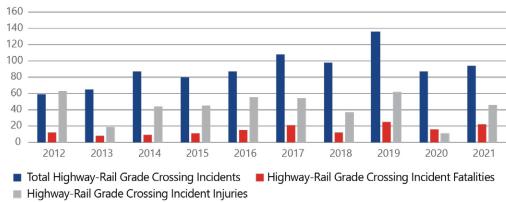
As the third most populous state in the country with a \$1 trillion economy, Florida has experienced tremendous growth in people and goods over the last few decades.

These maps show how road congestion is expected to grow through 2045 if current trends continue.



SAFETY AROUND RAILROAD TRACKS

The number of incidents occurring at highway-rail grade crossings and trespassing incidents that occur elsewhere along the tracks have both been trending upward in Florida over the past decade.



Total Highway-Rail Grade Crossing Incidents in Florida

Source: FRA Office of Safety Analysis, 2021

Trespassing Casualties

(Injuries + Fatalities)

2012 - 2021

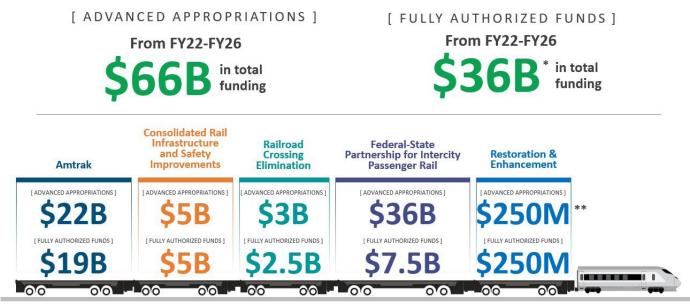
Highway-Rail Grade Crossing Incidents 2012 - 2021

OPPORTUNITIES

IIJA FUNDING

\$

The Infrastructure Investment and Jobs Act (IIJA) includes new investments totalling \$66 billion for passenger and freight rail over the next 5 years.



* \$34.5 billion for grant programs; additional \$1.5 billion is authorized for FRA operations and R&D – not included in this graphic. ** Grants for Restoration & Enhancement (advanced appropriations portion) are funded through "takedowns" from Amtrak NN account; not included in totals to avoid double-counting.

Source: FRA, 2022

FRA CORRIDOR ID PROGRAM

In addition to the grant opportunities above, the IIJA also requires the FRA to establish a Corridor Identification and Development Program that will identify new intercity passenger rail corridors, develop the necessary service planning elements, and create a project pipeline for associated capital projects.



FLORIDA'S EXISTING RAIL SYSTEM

















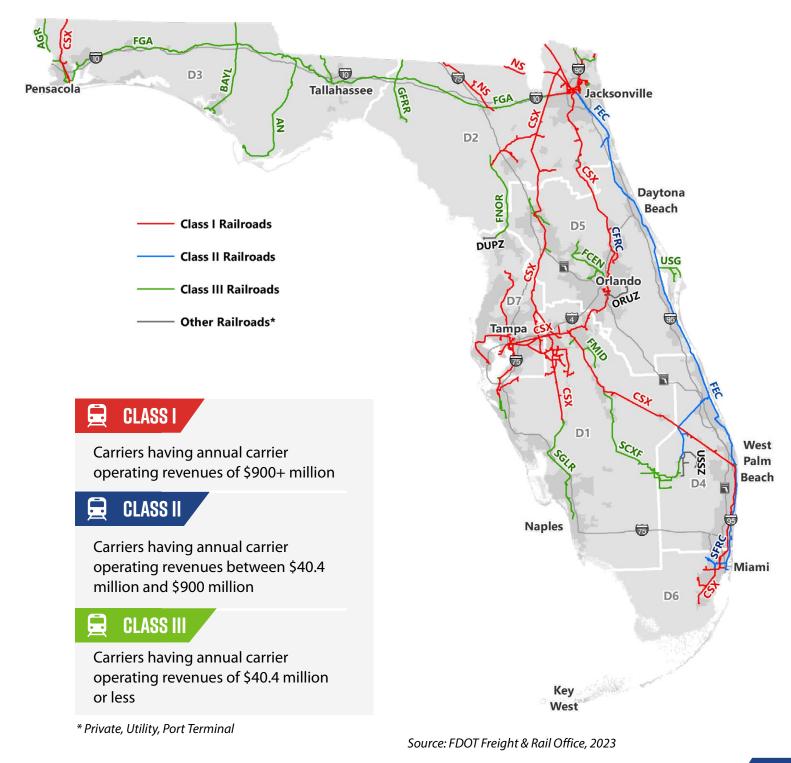
11

Railroad	Miles Owned*	Percent
CSX Transportation	1627.545	42.19%
Norfolk Southern	126.272	3.27%
Florida DOT	135.781	3.52%
Florida East Coast Railway	562.198	14.57%
Class III Rail Lines	1405.751	36.44%
Totals	3857.547	100%

*Includes mainline, siding, spur, connector, yard, and storage miles. Route miles shown elsewhere refer to aggregate length, excluding yard tracks, sidings, and parallel lines.

FREIGHT RAIL

Freight rail is a vital asset to the growing state of Florida, providing a critical link to business markets across the state, nation, and ultimately the world. The freight railroads that operate on Florida's rail network are categorized by the Surface Transportation Board under three classifications based on annual operating revenue.











CSX TRANSPORTATION

CSX is the largest railroad in Florida, providing statewide service, and has its corporate headquarters in Jacksonville. Major commodities transported by rail to and from Florida on CSX include containerized consumer goods, phosphates, coal, stone, food and agricultural products, and light trucks.

NORFOLK Southern Railway

Norfolk Southern has the least mileage of the major railroads in Florida, providing service only in the northeastern corner of the state. Major commodities moved by Norfolk Southern in Florida include containerized goods, automobiles and automotive parts, agricultural products, and metals and construction materials.





FLORIDA EAST COAST (FEC) RAILWAY

FEC is the only Class II railroad in the state. FEC is an intrastate railroad with 351 miles of mainline track running along the east coast of the state between Jacksonville and Miami. FEC is the exclusive rail provider for PortMiami, Port Everglades, and the Port of Palm Beach. FEC moves a variety of commodities including pulp, paper and allied products, chemicals, petroleum products, stone, clay and glass, primary metal products, machinery, automobiles, waste and scrap materials, and hazardous materials.





Florida's Class III railroads, also known as short line or local railroads, are shown below. Many of the short line railroads were developed to serve the paper mill industry in Florida and still carry lumber, wood products, pulp, and paper products.

Railroad	SCAC*	Parent Company	Miles Owned
Alabama & Gulf Coast Railway	AGR	Genesee & Wyoming	53.568
Apalachicola Northern Railway	AN	Genesee & Wyoming	114.82
The Bay Line Railroad	BAYL	Genesee & Wyoming	96.371
City of Pensacola (Port of Pensacola)	СРР	City of Pensacola (Port of Pensacola)	1.6365
Duke Energy	DUPZ	Duke Energy	10.325
Florida Central Railroad	FCEN	Regional Rail, LLC	80.731
First Coast Railroad	FCRD	Genesee & Wyoming	21.465
Florida Gulf & Atlantic Railroad	FGA	RailUSA, LLC	407.058
Florida Midland Railroad	FMID	Regional Rail, LLC	33.701
Florida Northern Railroad	FNOR	Regional Rail, LLC	96.641
Georgia and Florida Railway	GFRR	Georgia & Florida Railway, LLC	46.358
Georgia Pacific Railway	GPAJ	Georgia Pacific Corporation	8.358
Jacksonville Port Terminal Railroad	JXPT	Watco	6.7
Port Manatee Railroad	PMR	Regional Rail, LLC	2.266
Orlando Utilities Commission	ORUZ	Orlando Utilities Commission	25.273
Port of Palm Beach District Railway	PPBD	Port of Palm Beach	1.663
South Central Florida Express	SCXF	US Sugar Corporation	168.057
Seminole Gulf Railway	SGLR	Seminole Gulf, LP	107.506
United States Government	USGG	United States Government	34.646
US Sugar Railroad	USSZ	US Sugar Corporation	60.095
Florida Power & Light Company	XFPW	Florida Power & Light Company	21.406
Port Everglades Authority	XIPA	Port Everglades Authority	2.195
* Standard Carrier Alpha Code			



PASSENGER RAIL SYSTEMS IN FLORIDA

INTERCITY

Intercity passenger rail services connect cities and regions on routes that have long distances (typically 100 miles or more) and intermediate station stops in major population, employment, and tourist centers. Intercity trains may use dedicated tracks or tracks that are owned by other rail agencies or freight railroads.

COMMUTER

Commuter rail services operate within a large metropolitan region, serving work commuters and local travelers on routes that connect suburban locations and city centers. Commuter trains typically use tracks that are part of the existing national rail network. Commuter trains in Florida use tracks owned by FDOT.

RAIL TRANSIT

Urban rail transit systems operate within a city or urbanized area and are designed to move large volumes of people. Urban rail transit takes several forms in Florida, including heavy rail (metro), light rail (streetcar), and people mover (driverless) systems. Urban rail transit systems operate on dedicated tracks.



Intercity passenger trains primarily use tracks maintained by freight or commuter railroads to carry travelers both within Florida and north along the eastern seaboard.

Amtrak operates primarily 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 passenger rail services, operates a corridor between Miami and Orlando International Airport, serving Miami-Dade, Broward, Palm Beach, and Orange Counties. Brightline trains use FEC tracks north of Miami to Cocoa and a newly built rail track west to Orlando International Airport. Brightline has plans for further extension along I-4 to the Tampa Bay area.



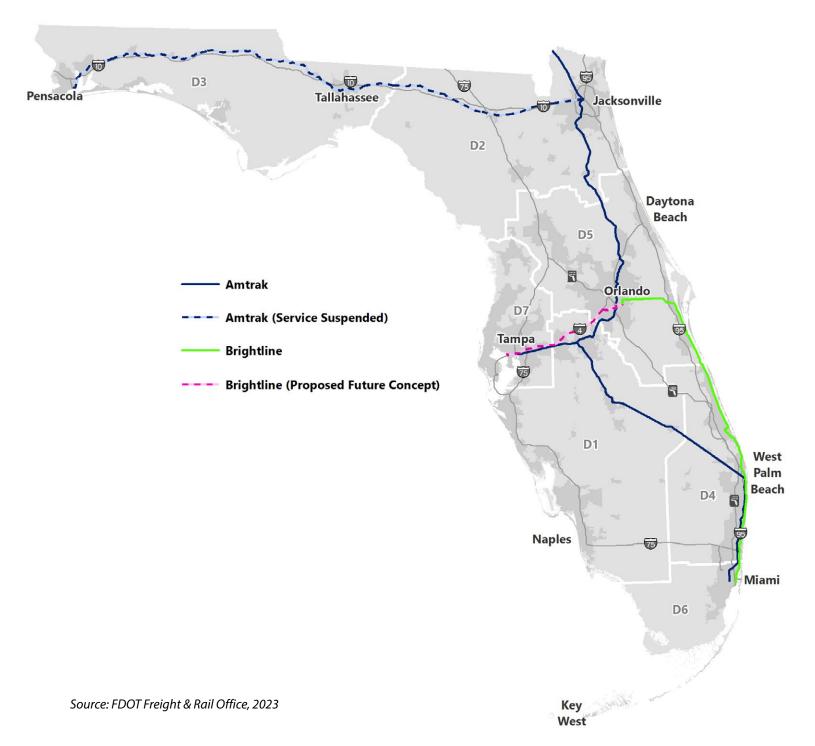
- Operates 3 daily long-distance trains linking Florida and the Northeast U.S.
- Started in 1971
- Serves 18 stations and runs on 423
 miles of track in Florida
- Two-thirds of Florida residents live within 25 miles of an Amtrak station
- Auto Train is the only one of its kind in the U.S., carrying passengers and their vehicles between Florida and Virginia
- 970,000 passengers carried in 2019
- Sunset Limited service between Orlando and Los Angeles was suspended in 2005 after Hurricane Katrina damaged rail infrastructure along the Gulf Coast



- Operates the only private passenger rail service in the U.S.
- Started in 2018
- Serves 6 stations along a 235-mile corridor linking Miami, Aventura, Fort Lauderdale, Boca Raton, West Palm Beach, and Orlando
- 15 daily round trips
- Actively planning a further extension from Orlando International Airport west to Tampa
- A new station is planned at PortMiami and two planned intermediate stops serving the Orange County Convention Center and the major theme parks in Central Florida
- 1 million passengers carried in 2019









In Orlando and Miami, 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 runs from DeBary to Poinciana via Orlando. An extension to Orlando International Airport is being studied.



Tri-Rail, operated by SFRTA, is a commuter rail service that began in 1989. Tri-Rail connects Miami, Fort Lauderdale, and West Palm Beach in south Florida.

Tri-Rail serves 18 stations along a rail corridor owned by FDOT.



 $\left[1\right]$

809

802

804

[441]

📄 Mangonia Park

Lake Worth

AIA Boynton Beach

West Palm Beach

West Palm Beach

Boynton Beach



SunRail is a commuter rail service that currently operates over 49 miles with 16 stations through Volusia, Seminole, Orange, and Osceola Counties.

SunRail began operations in May 2014. Developed and constructed by FDOT, SunRail runs from DeBary to Poinciana. The construction of SunRail's Phase 2 Northern Expansion includes approximately 12 miles of expanded commuter rail service between the DeBary Station and the DeLand Amtrak Station on the existing Central Florida Rail Corridor (CFRC). This segment is currently anticipated to open in late 2024.

100



DeLand / Amtrak

DeLand



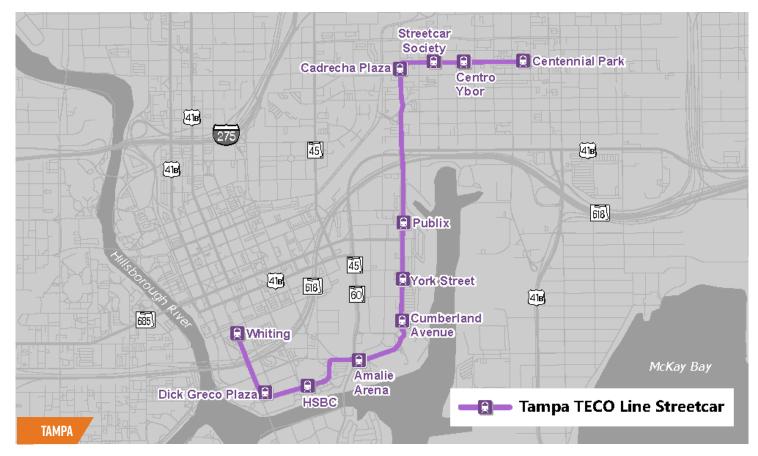


Four rail transit systems in Miami, Tampa, and Jacksonville shuttle travelers within metropolitan regions on tracks completely separated from the national rail network.

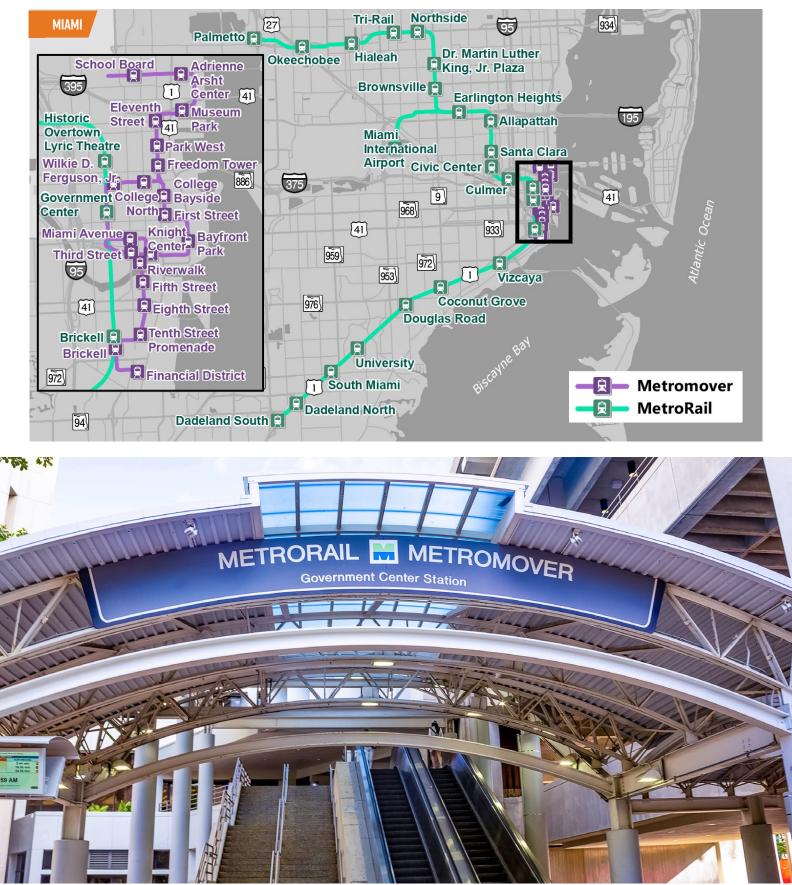
Metrorail, operated by Miami-Dade Transit, is a heavy rail rapid transit system that links Palmetto with downtown Miami, the University of Miami, Dadeland Mall, and the Miami International Airport, and connects with both Tri-Rail and Brightline. Miami also has a 4.4-mile Metromover Automated People Mover network in its downtown. In Tampa, the TECO Line Streetcar is a heritage streetcar transit line run by the Hillsborough Area Regional Transportation Authority, 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 operates the Jacksonville Skyway, an elevated, driverless monorail system that glides above the streets of downtown Jacksonville on a 2.5-mile route.

RAIL TRANSIT





RAIL TRANSIT



PROPOSED PASSENGER RAIL IMPROVEMENTS AND INVESTMENTS

Π

Π.

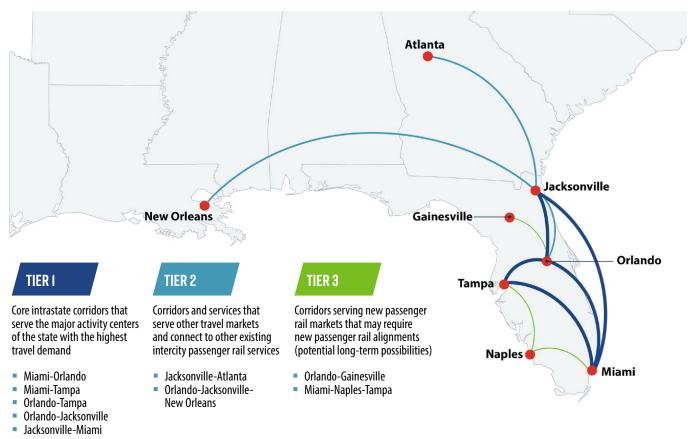
PASSENGER RAIL STRATEGIES

The following strategies will guide passenger rail improvements and investments in the state.



PASSENGER RAIL DEVELOPMENT

Based on community input and leveraging new passenger rail funding available in the IIJA, FDOT is evaluating three tiers of corridors to assess their ability to help achieve the statewide vision for passenger rail.



Lines represent conceptual corridor connections, not actual alignments. Source: FDOT Freight & Rail Office, 2023



SOUTHEAST REGIONAL RAIL PLAN

The FRA in partnership with stakeholders throughout the Southeast U.S. created a multi-state network conceptual planning study for high-performance rail across the region. The plan considers the possibility of developing an intercity passenger rail network in Florida in three incremental phases:

PHASE I

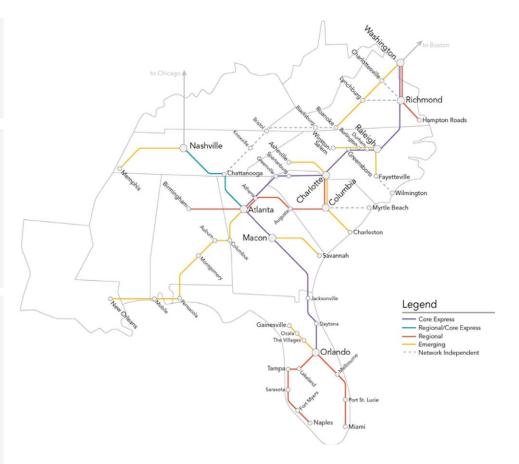
A baseline network that includes the regional Miami-Orlando corridor

PHASE II

A backbone network that includes an Atlanta to Orlando Core Express spine and the extension of the regional Miami to Orlando corridor to Tampa

PHASE III

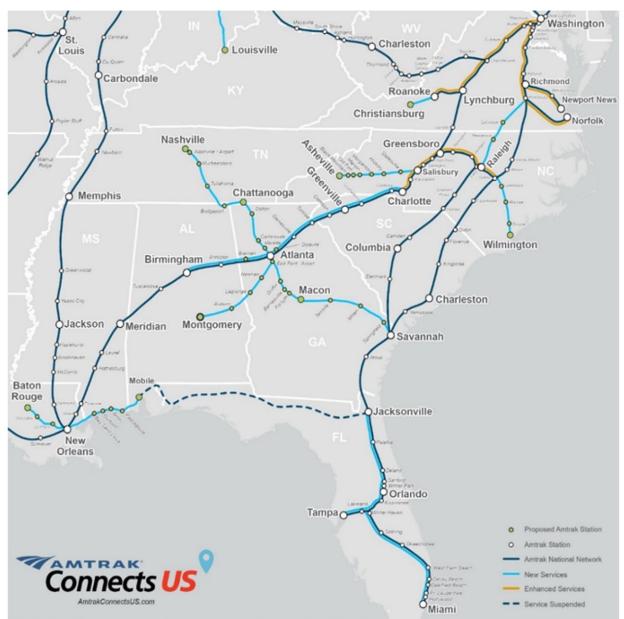
A full network that includes an extension of the regional Miami to Tampa corridor to Naples and an emerging corridor between Orlando and Gainesville



Source: Southeast Regional Rail Plan, FRA, December 2020

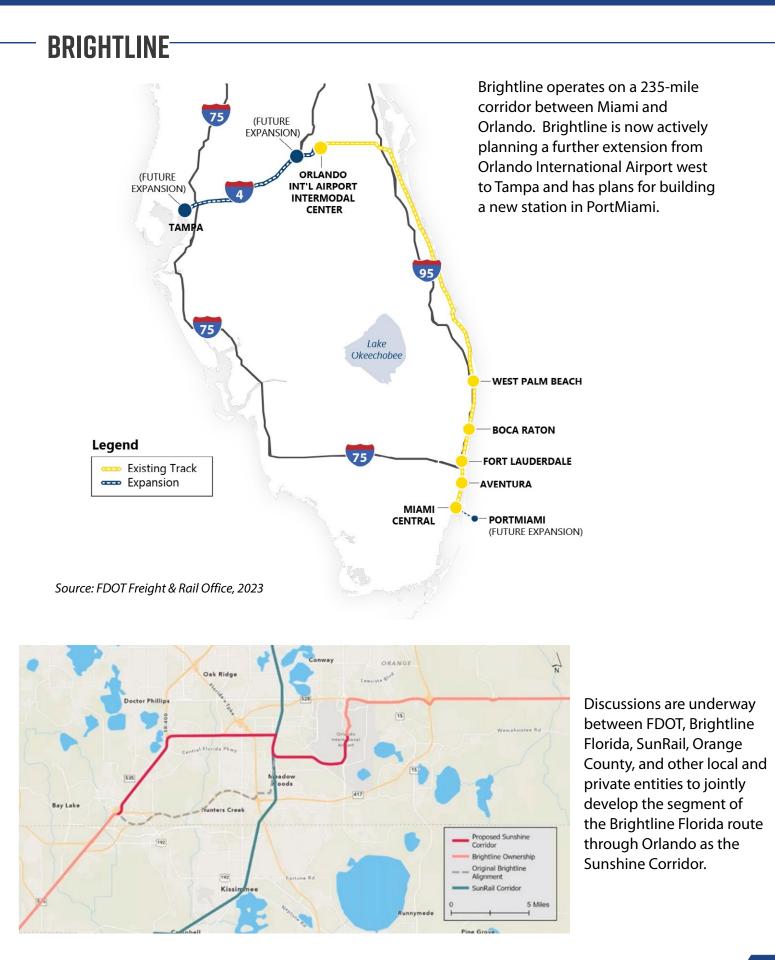
AMTRAK

In March 2021, Amtrak released a long-term vision plan for new corridors and enhanced service frequencies on existing routes that could be developed in conjunction with state partners by 2035. This vision comprises the "Amtrak Connects US" plan.



Amtrak's vision for expanding regional services includes routes in Florida. Over the next 35 years, Amtrak's plan proposes to introduce the following new routes:





COMMUTER RAIL

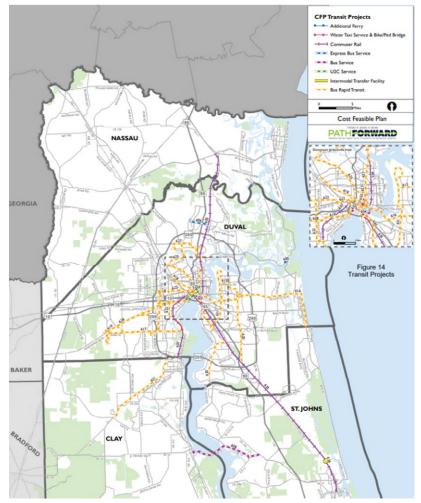
COASTAL LINK

The Coastal Link plan to add commuter rail service on 85 miles of the FEC Railway between Miami and Jupiter will be developed incrementally as separate projects.



JACKSONVILLE COMMUTER RAIL

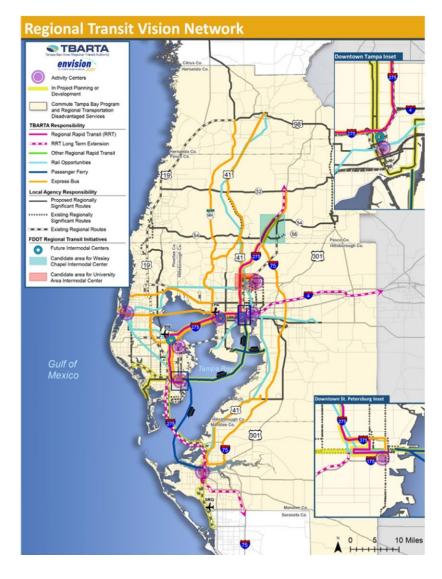
In 2022, Jacksonville Transportation Authority commissioned a study to analyze the feasibility and projected costs of establishing commuter rail service on a 38-mile route between Jacksonville and St. Augustine.



ADDITIONAL COMMUTER RAIL PROJECTS

- SunRail Extension, Phase 2 North and Phase 3 Sunshine Corridor
- Tri-Rail Facilities, Stations, and Improvements
- Northeast Corridor Rapid Transit Project
- Tampa Commuter Rail
- Broward Commuter Rail
- Palm Beach County Coastal Link
- Tri-Rail Coastal Link

RAIL TRANSIT



TAMPA BAY AREA REGIONAL TRANSIT VISION NETWORK

Tampa Bay Regional Transit Authority (TBARTA) has developed a vision for a transit network that provides regional connectivity across TBARTA's five-county service area. Passenger rail, bus rapid transit, express bus, streetcar, and passenger ferry are among the options in the proposed Regional Transit Vision Network.



TAMPA STREETCAR EXTENSION

After experiencing significant ridership gains upon waiving fares, the City of Tampa is moving forward with a plan to upgrade and extend the Tampa streetcar system with modern vehicles and a longer route.

BROWARD COUNTY LIGHT RAIL

FDOT and its project partners have continued to advance the Central Broward Transit efforts by focusing on the 3.8-mile Broward Boulevard corridor. The purpose of the current effort is to provide a premium transit service that will improve mobility, offer an alternative to single-occupant vehicles, and provide convenient access to major destinations in central Broward County.



MIAMI-DADE SMART PLAN

Miami-Dade's SMART Plan is advancing the development of six new bus and rail transit corridors in Miami-Dade County. The corridors are:

- Beach Corridor
- East-West Corridor
- Kendall Corridor
- North Corridor
- Northeast Corridor
- South Dade Transitway



ADDITIONAL RAIL TRANSIT PROJECTS - Miami Metromo

- Miami Metrorail Improvements (Downtown Intermodal Terminal)
- Miami Metromover Improvements (Metromover Guideway Superstructure Structural Retrofit)

PASSENGER RAIL INITIATIVES

The following projects that have received federal funding awards since FY 2019 will benefit passenger and commuter rail transportation in the state.

TAMPA TO ORLANDO HIGH-SPEED INTERCITY PASSENGER RAIL PROJECT

Brightline was awarded \$15,875,000 in FY 2021 Consolidated Rail Infrastructure and Safety Improvements (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.

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.

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.

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 FEC 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.

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.



PROPOSED FREIGHT RAIL IMPROVEMENTS AND INVESTMENTS

FREIGHT RAIL STRATEGIES

Florida's freight railroads are privately owned and operated, but there are areas of common interest between FDOT and its railroad partners. The following strategies will guide freight rail improvements and investments in the state.



FREIGHT RAIL PROJECTS

SEAPORT MANATEE INTERMODAL AND YARD EXPANSION

SeaPort Manatee has a \$19.2 million rail capacity project planned to improve supply chain efficiency of containerized export and import cargo movements. New intermodal container rail facilities will transfer containerized cargo between 40-foot marine containers carried by ship and 53-foot domestic containers carried by rail to and from U.S. markets in the Midwest and Northeast.



OPERATION STRIDE

To support Operation Lifesaver's message, Operation STRIDE (Statewide Traffic and Railroad Initiative using Dynamic Envelopes) was established by FDOT in December 2019. Operation STRIDE provides a comprehensive strategy to prevent fatalities and includes engineering countermeasures, education, and enforcement efforts. As a result of this strategy, by September 2021 FDOT had installed dynamic envelopes at 620 state-managed rail crossings, a roughly \$60 million investment.

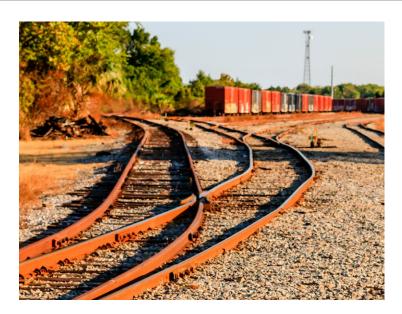


Statewide Traffic and Railroad Initiative Using Dynamic Envelopes



SHORT LINE INFRASTRUCTURE IMPROVEMENTS

Florida Gulf & Atlantic Railroad is working on the Northeast Florida Rural Rail Yard Project to construct a new rail yard in Baker County. Another short line infrastructure improvement is the Florida Panhandle Rural Capacity Expansion Project, which will replace ties, install new ties, rehabilitate sidings, and make repairs to grade crossings on Florida Gulf & Atlantic's line between Jacksonville and Pensacola.



ADDITIONAL FREIGHT RAIL PROJECTS

- PortMiami Net Zero Resiliency and Supply Chain Improvements
- Port of Palm Beach Capacity Expansion
- Tampa Bay Port Authority Berth 214
- SeaPort Manatee Track Rehabilitation
- Be Rail Smart Campaign

FREIGHT RAIL INITIATIVES

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 CRISI program funding to improve safety and reduce maintenance costs at 13 grade crossings in rural parts of St. Lucie and Palm Beach Counties.

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.

PORT OF PALM BEACH ON-DOCK RAIL FACILITY DEVELOPMENT

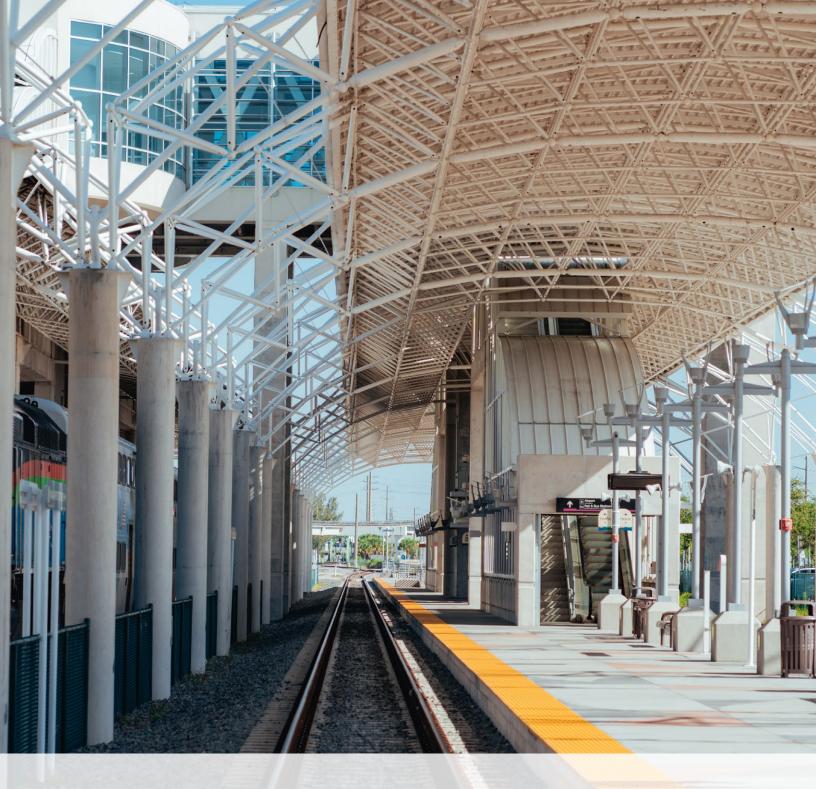
The Port of Palm Beach was awarded \$13.2 million in FY 2020 Port Infrastructure Development Program (PIDP) funding to construct an on-dock intermodal container transfer facility to improve container throughput and speed the transfer of containerized cargo between vessels and railcars.

SEAPORT 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 SeaPort Manatee in Palmetto.

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'S RAIL SERVICE AND INVESTMENT PROGRAM

PASSENGER RAIL							
# Projects	# Programmed	Amount Programmed	# Unprogrammed with Estimated Cost	Estimated Capital Cost	# Unprogrammed without Estimated Costs		
		Short-	Term (2023 - 2026)				
121	36	\$532,843,929	44	\$5,355,027,246	41		
	 Programmed Breakdown: 26 projects have estimated costs > \$500,000 13 projects have estimated costs > \$1 million 2 projects have estimated costs > \$200 million 		 Unprogrammed Breakdown: 36 projects have estimated costs > \$10 million 13 projects have estimated costs > \$100 million 2 projects have estimated costs > \$500 million 				
		Long-1	Ferm (2027 - 2042)				
148	5	\$124,962,868	94	\$15,876,885,200	49		
	 Programmed Breakdown: 4 projects have estimated costs > \$1 million 3 projects have estimated costs >\$20 million 1 project has an estimated cost > \$50 million 		 Unprogrammed Breakdown: 69 projects have estimated costs > \$10 million 24 projects have estimated costs > \$100 million 5 projects have estimated costs > \$1 billion 				

PASSENGER RAIL

FREIGHT RAIL -

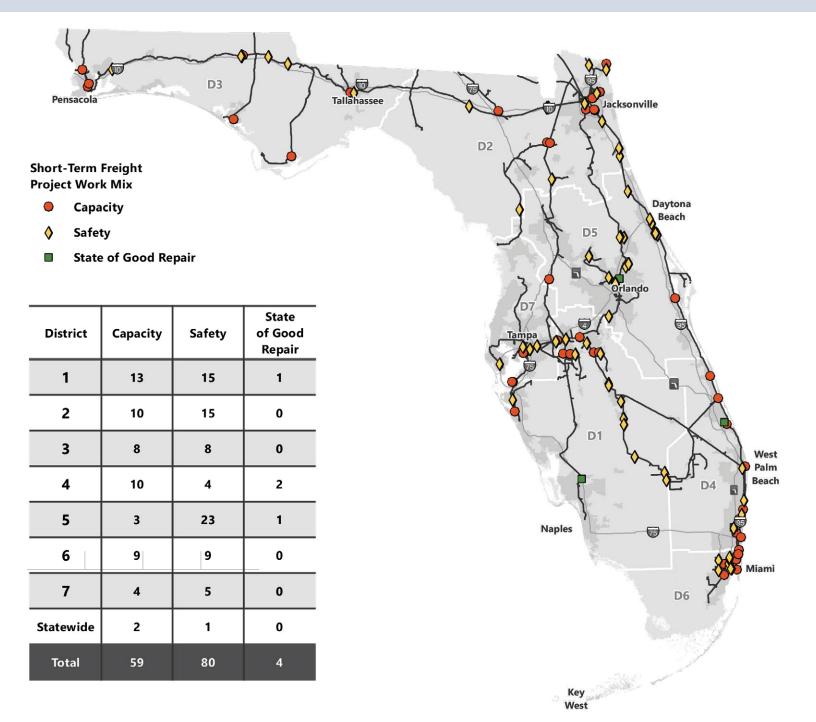
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# Projects	# Programmed	Amount Programmed	# Unprogrammed with Estimated Cost	Estimated Capital Cost	# Unprogrammed without Estimated Costs
143	29	\$213,618,088	107	\$2,104,754,858	7
	 Programmed Breakdown: 19 projects have estimate 8 projects have estimate 3 projects have estimate 	d costs >\$10 million	 26 projects have estimated costs > \$10 million 3 projects have estimated costs > \$100 million 		
		Long-T	Ferm (2027 - 2042)		
82	0	\$0	65	\$5,403,251,625	17
	 Programmed Breakdown: No programmed projects 		 Unprogrammed Breakdown: 54 projects have estimated costs > \$10 million 13 projects have estimated costs >\$100 million 1 project has an estimated cost > \$1 billion 		

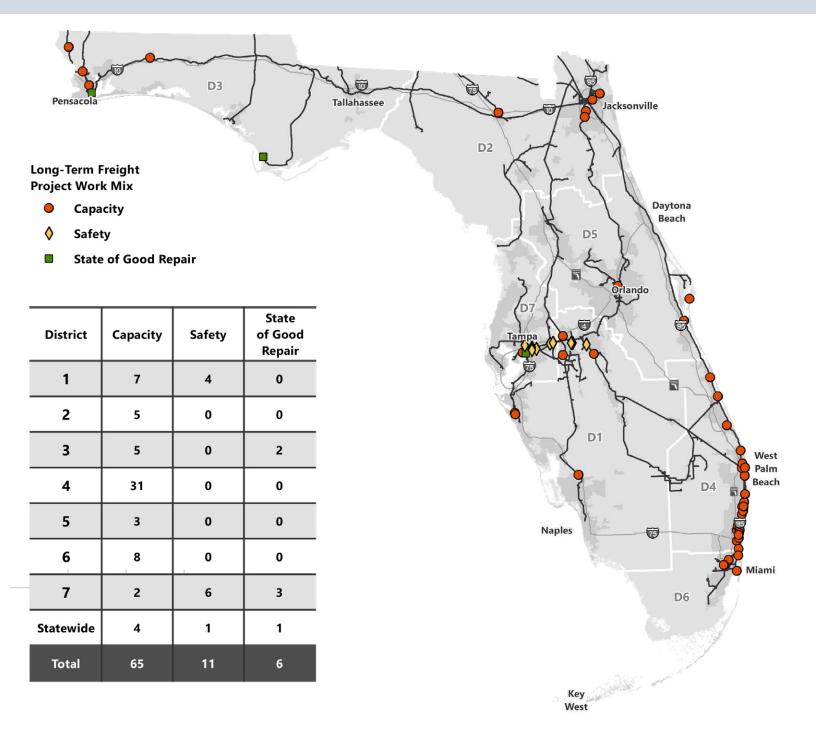
TOTAL

494	70	\$871,429,483	310	\$28,739,918,929	114
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SHORT-TERM FREIGHT RAIL PROJECTS

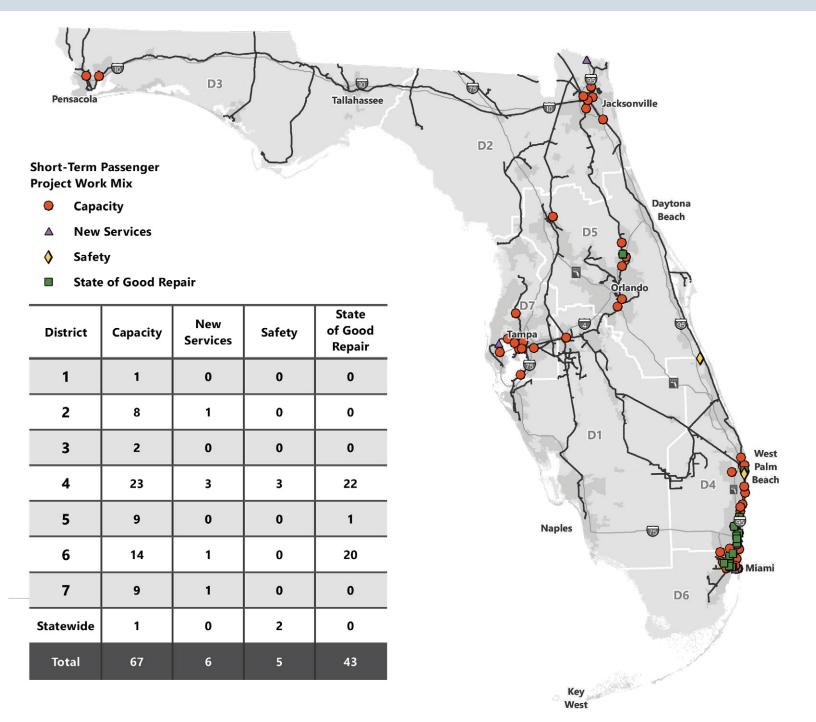


LONG-TERM FREIGHT RAIL PROJECTS

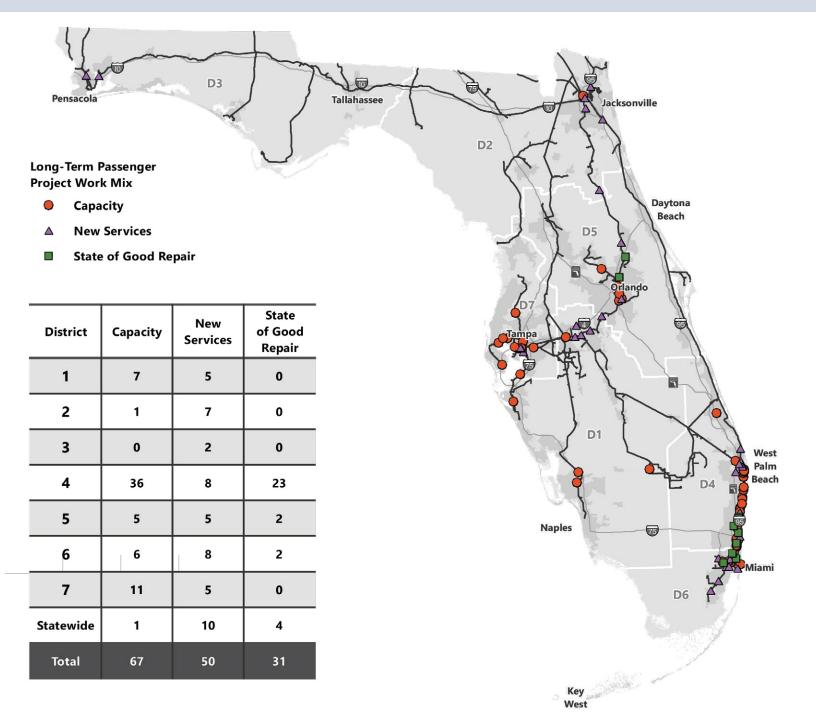


FLORIDA'S RAIL SERVICE AND INVESTMENT PROGRAM

SHORT-TERM PASSENGER RAIL PROJECTS



LONG-TERM PASSENGER RAIL PROJECTS





COORDINATION AND OUTREACH

STATE RAIL PLANNING COORDINATION



While the Freight & Rail Office has the primary responsibility for rail planning and policy within FDOT to administer various federal and state rail-related programs, some aspects of rail planning occur within other FDOT offices.

PROJECT ADVISORY COMMITTEE (PAC) MEETINGS

were held among FDOT offices to engage representatives for FDOT awareness and provide project oversight.

These meetings included members from:

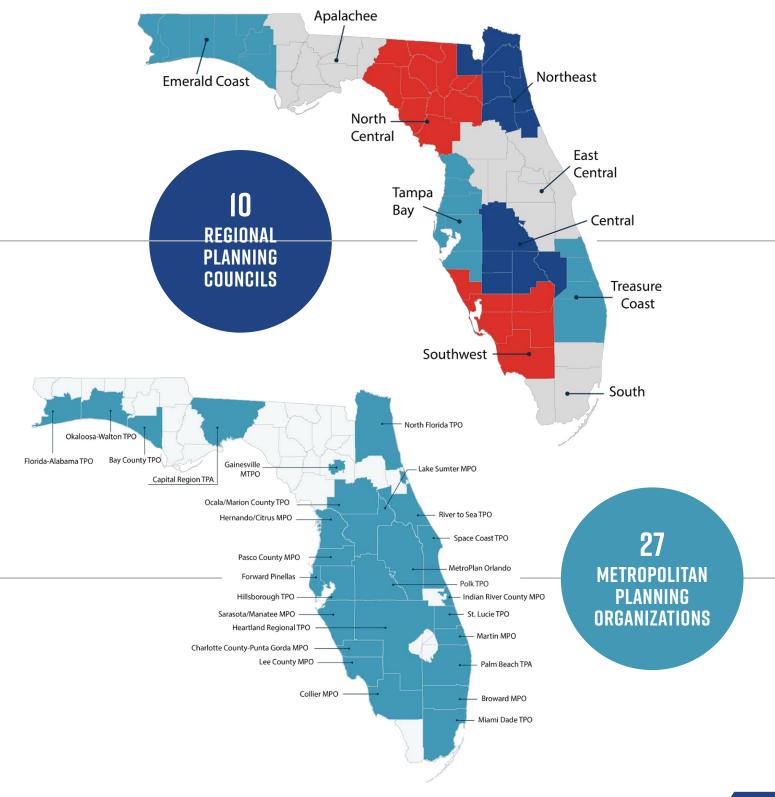
- FDOT Leadership
- Modal Offices
- Systems Implementation Office
- Transportation Data Analytics Office
- Office of Work Program
- Freight & Rail District Coordinators

The PAC helped guide plan vision, goals, and objectives, as well as rail needs and projects.



REGIONAL AND LOCAL ORGANIZATIONS

Regional and local organizations such as Regional Planning Councils and Metropolitan Planning Organizations provide input and expertise to ensure that transportation policy, programming, and funding is beneficial to Florida communities.





STAKEHOLDER ENGAGEMENT

Stakeholder engagement is pivotal in providing input on the role that rail plays in enhancing mobility in Florida – connecting residents with jobs, bringing visitors to vacation destinations, and providing equitable, safe, and sustainable travel options – as well as painting a picture of the current issues and needs.

STAKEHOLDERS INCLUDED

- City, county, and MPO planners and transportation engineers
- Railroads
- Business owners
- Community redevelopment agencies
- The public/daily transportation users

STAKEHOLDER INVOLVEMENT INCLUDED

- Identification of freight and passenger rail priorities and goals
- Agency roles and responsibility improvements
- Location-specific rail improvements
- Identification of issues, needs, and potential investments for rail in Florida



REGIONAL LISTENING SESSIONS

Between March 29 and April 26, 2022, a series of in-person **Regional Listening** Sessions were held by FDOT around the state to gather input from stakeholders and the public. **Rail and Transit MAR 21 JUN 16** Virtual Closing Virtual Kick-Off **Regional Listening Sessions** Webinar Meeting 1:00 PM - 3:00 PM 4:30 PM - 6:30 PM **APR 26 MAR 29** APR 6 APR 7 **APR 12 APR 13** Jacksonville Lakeland Fort Myers Aventura Miami Marianna Longwood FDOT District Two Magnolia Building Longwood Riverside Aventura Branch Jackson County Headquarters Community **Community Center** Agriculture Center Library 9:00 AM - 12:00 Building Training Room 9:00 AM - 12:00 1:00 PM - 4:00 PM 9:00 AM - 12:00 ΡM 1:00 PM - 4:00 PM 9:00 AM - 12:00 PM ΡM ΡM

THE PURPOSE OF THIS SERIES WAS TO

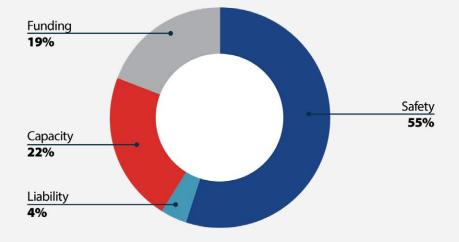
- Gather input on current rail systems and how they should function as part of a better-integrated statewide and regional transportation system in the future
- Gather input on roles and responsibilities of FDOT, its partners, and local agencies
- Strengthen collaboration to better advance cohesive rail priorities

Through live polling, interactive station activities, and a discussion on roles and responsibilities, freight and passenger rail needs were identified.

REGIONAL LISTENING SESSIONS



The top freight rail priority for the participants at the regional listening sessions was safety, followed by capacity and funding.



SUMMARIZED FREIGHT RAIL NEEDS



Capacity/ Corridors

Capacity and connections for freight rail, whether through re-imagining shared tracks or dedicated freight corridors



Modal Shift

Modal shift from truck to rail to ease highway congestion, reduce carbon footprint, and help solve the truck parking issue



Maintenance Needs

Maintenance and retention of existing corridors around the state



Intermodal Facilities

Inland ports and inland port funding opportunities



Business Needs

More Class I railroads in Florida's market



Safety Around Railroad Tracks

Elimination of rail/roadway conflicts through highway-rail grade crossing reduction/separation and encouraging safe behavior around tracks



Coordination/ Relationships

Coordination between FDOT, freight railroads, ports, intercity passenger and commuter railroads, and local jurisdictions



Expansion of FDOT's role in supporting the use and improvement of freight rail transportation

REGIONAL LISTENING SESSIONS

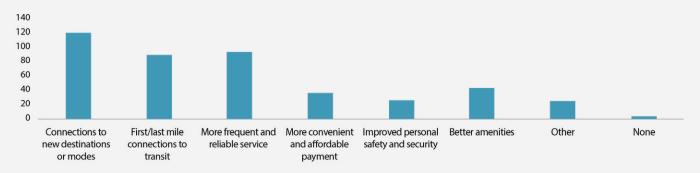
PASSENGER RAIL NEEDS SUMMARY



Participants were asked how often they use passenger rail, on a sliding scale from 1-5, with 1 being "Never" and 5 being "Daily." The average answer was 1.7, representing the use of passenger rail between never and once a year.



Participants were then asked what would encourage them to use passenger rail more. The top three selections were connections to new destinations or modes, more first/last mile options, and more frequent and reliable service.



SUMMARIZED PASSENGER RAIL NEEDS



Connectivity

New routes, regional hubs, connections to other modes, and first/last mile connections



Awareness

Civic engagement through outreach and marketing



More Service

Increased frequencies and extended service hours



Safety

Increased safety for riders and roadway users who interact with railroad tracks



Accessibility

Accessibility and convenience for all user groups, with the help of technology



Partnership

Increased coordination between FDOT, the railroads, and local jurisdictions



Corridor Preservation

Dedicated rail infrastructure within existing highway/ utility corridors



A reimagined use of transportation funds and additional funding opportunities



Freight & Rail Office Florida Department of Transportation rail@dot.state.fl.us