Florida's Strategic Intermodal System

THE SIS at 10

A Ten-Year Anniversary Review 2004-2014

SIS at 10

2004-2014

TABLE OF CONTENTS

Jim Boxold
Secretary, FDOT

A Message from the Secretary

In 2003, the Governor and Legislature created Florida's Strategic Intermodal System (SIS), a network of high priority transportation facilities that move people and goods efficiently throughout the state. The Florida Department of Transportation (FDOT) and its partners have collaborated during the past 10 years to identify the future transportation needs of the state on the SIS. This effort has focused attention on the importance of linking our highways, rail lines, airports, seaports, spaceports, transit systems, and waterways.

Florida's leadership as a global hub is directly linked to our ability to seamlessly move goods and people through our intermodal transportation systems. The SIS is critical to meeting that need and advancing Florida's economic competitiveness, quality of life, and quality places. Planning for future improvements to the SIS is critical for Florida's future.

Jim Boxold
Secretary of Transportation
Florida Department of Transportation

A Message from the SIS Manager

Over the past ten years the Florida Department of Transportation has made it a priority to maximize the ability to leverage funds with our partners to create a truly integrated multi-modal transportation system that will enable us to compete on a global scale. With the Strategic Intermodal System leading the effort in seamlessly integrating all the different transportation modes available to the people and businesses of Florida, we aim to truly enhance all facets of the economy and life in this state: by saving time, giving a multitude of additional options, and connecting Florida with the rest of the country and the world.

Even before my time as the Statewide SIS Manager, I have worked with SIS planning for years and have personally seen the growth of the system over time. I am proud whenever I see the positive impacts the SIS has had on the people and economy of Florida, which I see both everyday here at home and as I travel across this state.

This document highlights the importance and the accomplisments of the SIS over the last ten years. Countless people have contributed to the planning and completion of these improvements which millions of people - including you, hopefully - enjoy and benefit from across Florida.

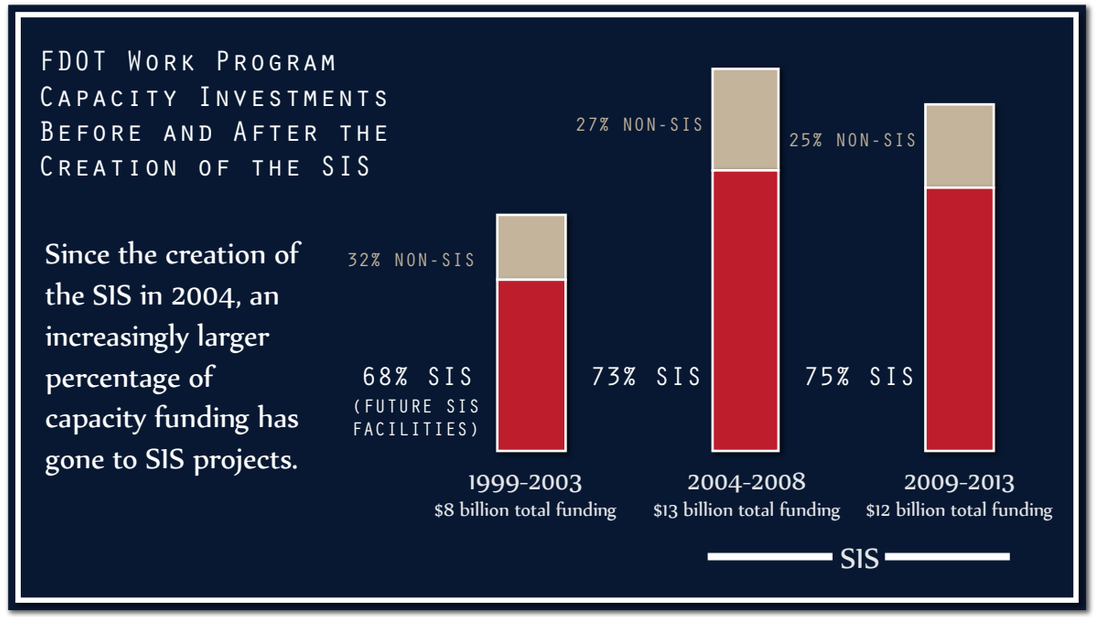
Chris Edmonston, AICP
Statewide SIS Implementation Manager
Florida Department of Transportation

Florida's Strategic Intermodal System

In 2004, the Florida Legislature and Governor began funding the Strategic Intermodal System (SIS) to enhance Florida's transportation mobility and economic competitiveness. The SIS is a statewide network of high-priority transportation facilities, including the state's largest and most significant airports, spaceports, deepwater seaports, freight rail terminals, passenger rail and intercity bus terminals, rail corridors, waterways and highways. These facilities represent the state's primary means for moving people and freight between Florida's diverse regions, as well as between Florida and other states and nations.

SIS facilities are designated through the use of objective criteria and thresholds based on quantitative measures of transportation and economic activity. These facilities meet high levels of people and goods movement and generally support major flows of interregional, interstate, and international travel and commerce. Facilities that do not yet meet the established criteria and thresholds for SIS designation, but are expected to in the future are referred to as Emerging SIS. These facilities experience lower levels of people and goods movement but demonstrate strong potential for future growth and development.

The SIS represents Florida's highest priority transportation projects.



The SIS Network

The Strategic Intermodal System touches all corners of Florida, encompasing large, globally-connected transportation hubs down to cross-town roads. The system boasts a diverse variety of hubs connected by a network of major roadways, railways and waterways, keeping people and freight moving throughout the state. By focusing on integrating every transportation mode into a seamless network, the SIS seeks to enhance the ease of doing business and the quality of life of everyone in Florida.

4,688 miles
SIS Highways

2,319 miles
SIS Railways

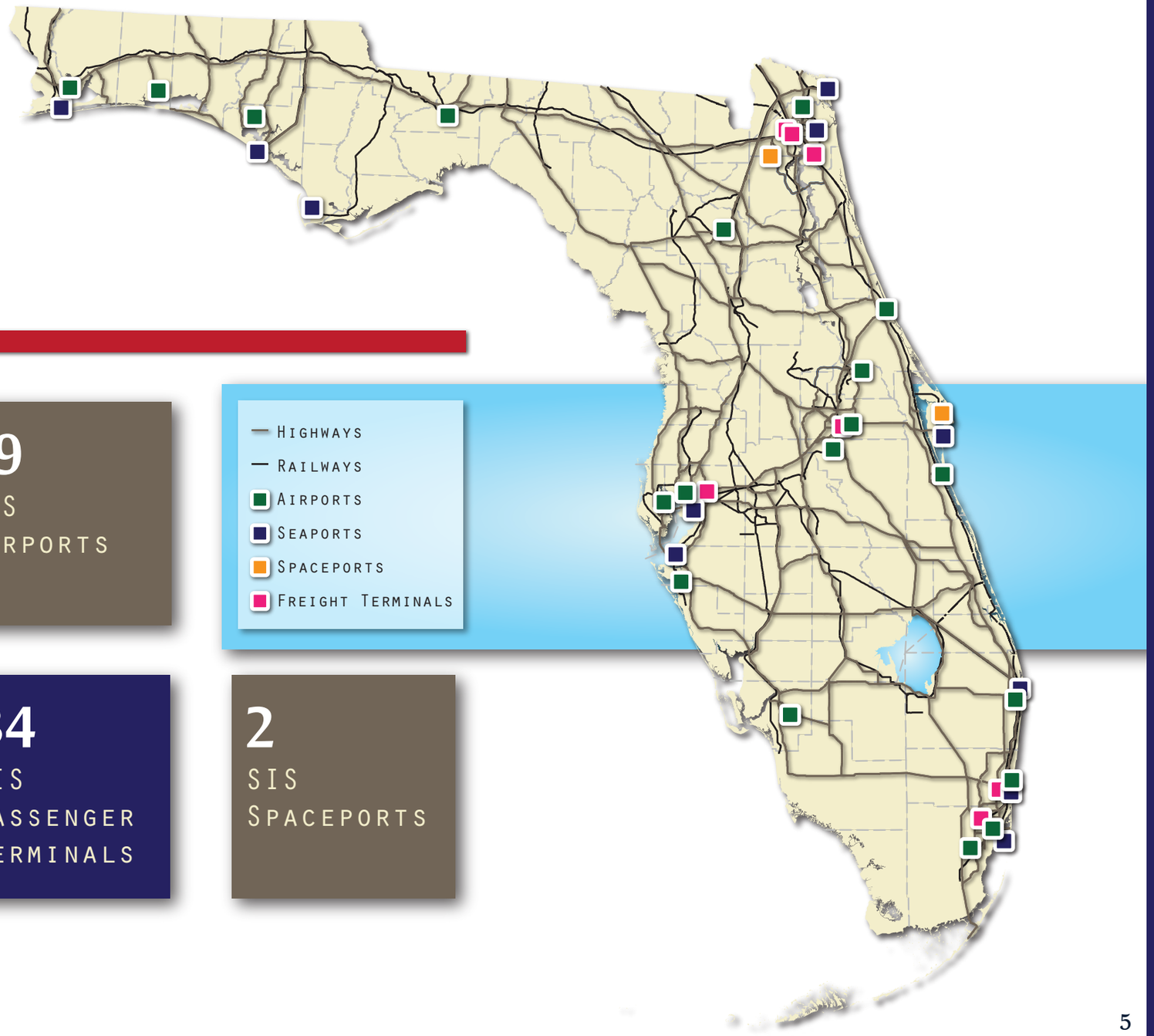
19
SIS Airports

11
SIS Seaports

7
SIS Freight Terminals

34
SIS Passenger Terminals

2
SIS Spaceports



Development of the SIS

Pre-SIS

2000- The 2020 Florida Transportation Plan was developed

2002- General development of policies and criteria

2003 – Florida Legislature creates the Strategic Intermodal System

2003 – 2025 Cost Feasible Plan completed for highway component

2004

First funding for SIS for use on Connector Projects (approx. $100M)

First SIS work program built - $2.5 billion on 85 projects and advanced 58 more projects for an additional $1 billion

Florida's Strategic Intermodal System Strategic Plan adopted

First SIS Atlas prepared

2005

SIS Highway Component 2030 Unfunded Needs Plan adopted

SIS Growth Management projects identified for funding FY 2005/06-2010/11

2006

First SIS 2030 Multi-modal Unfunded Needs Plan developed

Future Corridors Action Plan developed

2007

First revenue reductions impact SIS work program

Cost Feasible Plan update put on hold due to revenue reductions

2008

Strategic Investment Tool developed and released

SIS Strategic Plan revised

Seaport Connector Study published

2009

Investing in Florida's Future update released

SIS 2035 Cost Feasible Plan approved

2010

SIS 2010 Strategic Plan updated

Expanded system to include:
- Military Access Facilities
- Urban Fixed Guideways
- Intermodal Logistics Centers

2011

SIS 2040 Multi-Modal Unfunded Needs Plan approved

Military Access Facility Study published

2012

Prioritizing Florida's Highway Investments report produced

SIS Handbook developed

NHS and SIS Freight Connector Operational Quick Fix program began

ITE Award winning SIS Bottleneck Study published

Update to the Strategic Investment Tool

Investing in Florida's Future update released

2013

SIS Long Range 2040 Cost Feasible Plan update approved

NHS and SIS Freight Connector program updated

2014

Largest Adopted Work Program in the history of the SIS - $12 billion

SIS Atlas Updated

SIS Funding

The goal of the investment of transportation funds is to improve economic competitiveness, provide infrastructure improvements, and ensure sound stewardship of the environment for Floridians and our guests. We believe the state has received dividends well beyond the $12.5 billion spent in the ten years of the SIS. In fact, FDOT studies indicate that every $1 invested in Florida's transportation system generates approximately $5 of user and economic benefits statewide. The SIS created a fundamental shift in the way FDOT invested in Florida's transportation system, steering more investments into non-highway modes when compared to the period immediately preceding the creation of the SIS. Similarly, the SIS has focused greater attention and funding on the intermodal connectors and interregional corridors, significantly enhancing connectivity and economic development throughout Florida. Finally, the SIS has helped to foster a new culture of partnership involving FDOT and state, regional, and local transportation partners within both the public and private sectors. Florida's SIS has emerged as a model for strategic, multi-modal transportation planning and has been emulated by a number of other states.

Total SIS Funds Spent 2004-2014 **$12.5 Billion**

2004-2014 Funding by Mode

Highways $11.7 Billion	Railways $300 Million
Seaports $258 Million	Aviation $172 Million
Multimodal $11 Million	Transit $7 Million

Source: FDOT Work Program

Insider's Insight

In my tenure as the District Five SIS Coordinator, I have seen many great accomplishments of the SIS. The major significance of the impact of the SIS is the focus of the greater portion of the state's transportation capacity funding on facilities representing the "compelling state interest". Another major impact of the SIS is the funding of projects for improvements on non-public facilities which represent a "public benefit". This has led to a new era of public private partnerships which allowed the advancement of major transportation projects that are beneficial to residents and visitors to our state. To that end, I was very pleased to announce the designation of the initial phase of SunRail and its stations as part of the SIS.

SunRail will serve Central Florida commuters and help lessen the burden on Central Florida's roadways – a win for the State and citizens of Central Florida. Five of the seven stations were also designated as SIS Intermodal Hubs which will allow for additional funding to support further multimodal enhancements. Through these designations, the State has also formed partnerships that have leveraged those investments to achieve a greater regional impact.

A unique example of the use of SIS funds and the successes of these partnerships is a project to improve an existing SIS hub in Downtown Orlando. Through a partnership between the City of Orlando and the State, $4M in SIS funds were leveraged to expand the City of Orlando's Bus Rapid Transit system, LYMMO, and improve the roadway connector serving the station. Constructed in 1926, the historic Downtown Orlando Amtrak/SunRail Station will also receive $2.1M in non-SIS funds to rehab this "retro" SIS hub, making this historic station a centerpiece of the SIS.

John Zielinski
District 5
SIS Coordinator

Importance of the SIS

The SIS today handles a vast majority of passenger and freight movement to, from, and throughout Florida

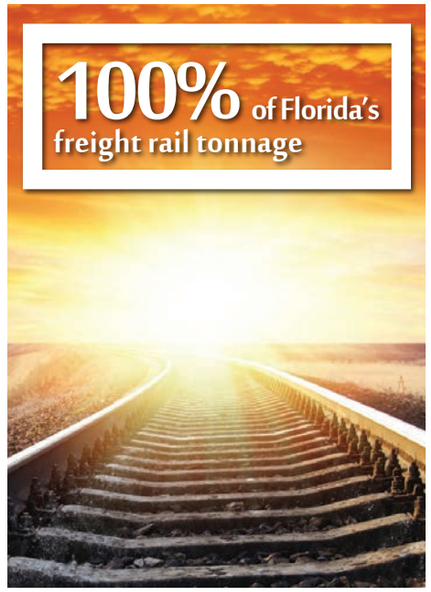
Florida's SIS Airports

Florida's SIS Deepwater Seaports

Florida's SIS Highways

Florida's SIS Rail Terminals

Florida's SIS Rail Corridors

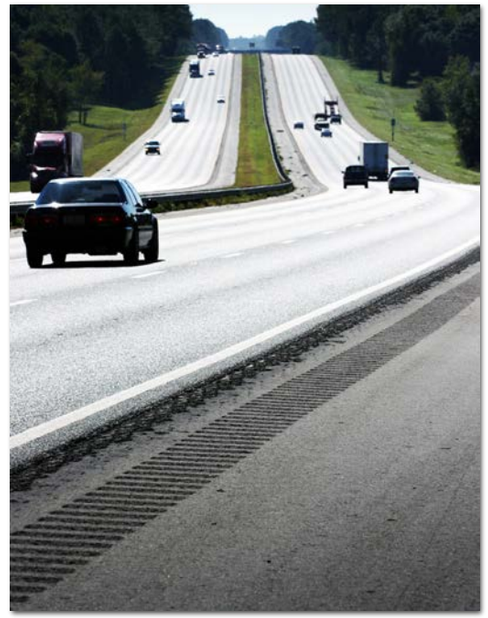


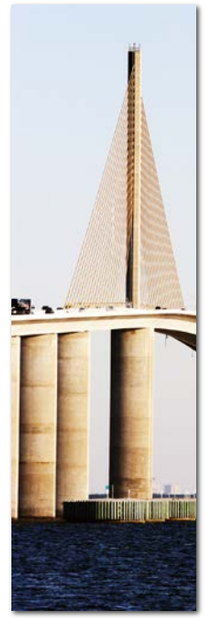
HIGHWAYS

Florida's SIS highways represent the backbone of the SIS encompassing over 4,600 miles of roadways. This represents just under four percent of total public road mileage, but is responsible for 54 percent of all traffic and 70 percent of all truck traffic on the State Highway System. These significant corridors connect all of Florida's economic regions to each other as well as to markets beyond Florida. Within the state they facilitate the movement of passengers and goods between the major airports, seaports, rail facilities, and intermodal hubs. With roughly half of the 80 million visitors to Florida arriving by automobile, the SIS highway network is an integral component to the economy of Florida as well as the livelihood of Florida residents.

Florida's SIS highway system now totals 4,688 centerline miles. This includes 4,226 miles of SIS and Emerging SIS Highways of all levels from Interstates, Turnpikes, US and State Highways.

There are 341 miles of connectors, either already built or planned to be added in the near future.





FEATURED HIGHWAY PROJECTS

I-275 in Tampa

In the fall of 2009, the Florida Department of Transportation completed capacity and safety improvements to northbound I-275 from Himes Avenue to the Hillsborough River in Tampa, Florida. The project reconstructed the northbound portion of I-275 from three to four lanes. The new four-lane northbound I-275 is located to the outside of the existing roadway and the area where the former roadway was located will eventually be a grassy median. The median area will be reserved for future transportation needs, such as passenger rail or additional highway capacity. The final cost of construction was approximately $110 Million.

Construction is now under way on the southbound lanes from Himes Avenue to the Hillsborough River, in addition to the expansion of both sides from SR 60 to Himes Ave. Work includes expansion to four lanes in each direction. The total cost is estimated at $216.7 million.

I-595 in Broward County

More than 180,000 vehicles per day use I-595, a major east-west thoroughfare in Broward County, and, by 2034, that number is projected to increase beyond 300,000. In 2009, FDOT signed a public-private partnership agreement for the design, construction, financing, operation, and maintenance of the I-595 corridor improvement project. The enhancements, including construction of reversible toll lanes, to the I-595 corridor will vastly improve driving conditions along I-595 and preserve the future vitality of the corridor. The project extends from the I-75/Sawgrass Expressway interchange to the I-595/I-95 interchange in central Broward County. The design and construction costs of the I-595 corridor improvements are approximately $1.2 billion.

Escambia Bay Bridge

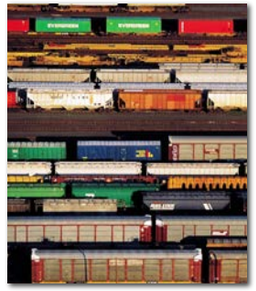
In September 2004, Hurricane Ivan struck the Gulf Coast and severely damaged the I-10 bridges over Escambia Bay. Early in 2005, FDOT awarded the contract to replace the damaged bridges. The replacement bridges are much better equipped to withstand hurricane-force wind, rain, and tidal surges. The new bridges are approximately 25 feet above the water at their lowest point as opposed to 12 feet previously. The bridge is also expanded to 3 lanes each way. The eastbound bridge opened in late 2006 with the westbound span opening in 2007. The total cost was $243 million.

RAILWAYS

Railroads are an integral part of the movement of freight and passengers to, from, and within Florida. In 2011 Florida's 2,319 miles of rail lines carried nearly 1.9 million carloads and approximately 104.6 million tons of freight. 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 foods, and agricultural products. The movement of passengers is another significant component of the SIS and Florida railroads.

Florida's SIS railway system now totals 2,319 miles. This includes SIS and Emerging SIS railways. There are 258 miles of rail connectors, either already built or planned to be added in the near future.

There are also seven rail freight terminals throughout the state, serving as hubs of freight movement.



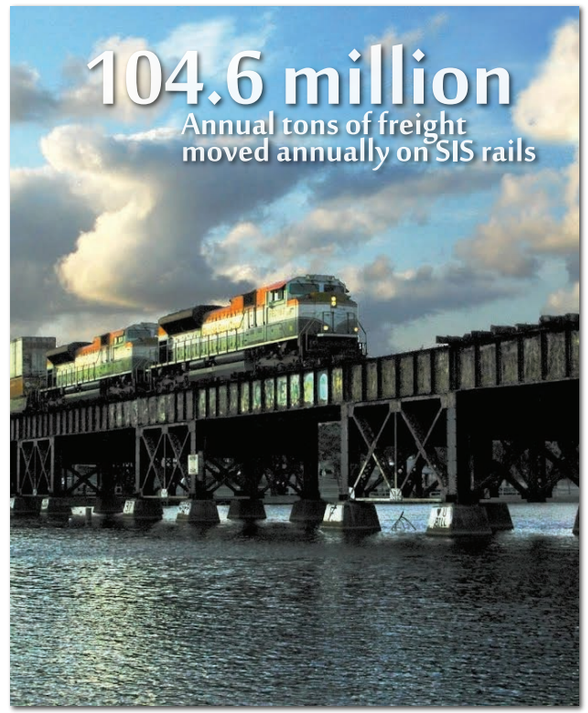
FEATURED RAILWAY PROJECTS

SunRail

In August of 2007, the state announced a $491 million agreement in principle with CSX Transportation and the FDOT that establishes a framework to invest in rail infrastructure to achieve significant transportation objectives for Florida's future. Within the Central Florida region, these objectives include commuter rail in Volusia, Seminole, Orange, and Osceola counties. It is anticipated that these investments will provide mobility options for travelers and improve the efficiency of freight movement. FDOT is advancing SunRail, a commuter rail transit project that will run along a 61-mile stretch of existing freight rail tracks in the four-county area. The 31-mile first phase of SunRail opened in 2014 and serves 12 stations, linking DeBary to Orlando. Phase II will serve 5 additional stations, extending the first phase north to DeLand and south to Poinciana.

Lacy Siding - Simpson Yard Norfolk Southern Railroad

This rail project provides an improved passing opportunity for trains at a critical bottleneck in the Norfolk Southern/Florida East Coast system. Because the existing Lacy Siding was too short for modern train standards, trains have been forced to wait for long periods in distant sidings until opposing trains pass. These delays limit the amount of rail freight moving along Florida's East Coast. The addition of this 2.7 mile long siding allows for an additional train in each direction between Miami and points north daily and the estimated shift in freight to rail may eliminate 73,000 trucks per year from Florida's highways. Norfolk Southern Railroad provided a 50% match and work was done by the railroad and their contractors. Work was completed by June of 2010 at a cost of $5 million.



AVIATION

A nexus of rapid movement - both of people and high-value freight - a modern, growing, and well-maintained aviation system is critical to the SIS. As the mode of entry of tens of millions of residents and visitors alike, Florida's airports play an essential role in our state's business and tourist economies, transporting people to and from many states and dozens of countries across the Americas and Europe. Air freight cargo also benefits from a healthy aviation system, with Florida particularly suited to serve as a transit hub of high-value and time-sensitive goods between the US and Latin America & the Caribbean. Our strategy not only includes staying ahead of capacity and techonolgy demands, but increasing the connectivity of airports to other modes, to make access and transiting as seamless and efficient as possible, for passengers and industry alike.

Florida's aviation system includes **seven SIS airports** and **ten Emerging SIS airports**, as well as **two SIS general aviation reliever airports**.

The SIS airports boast four major hub airports - Miami, Orlando, Tampa, and Fort Lauderdale-Hollywood, which rank among the busiest in the country.

FEATURED AVIATION PROJECTS

Fort Lauderdale-Hollywood International Airport Runway Extension

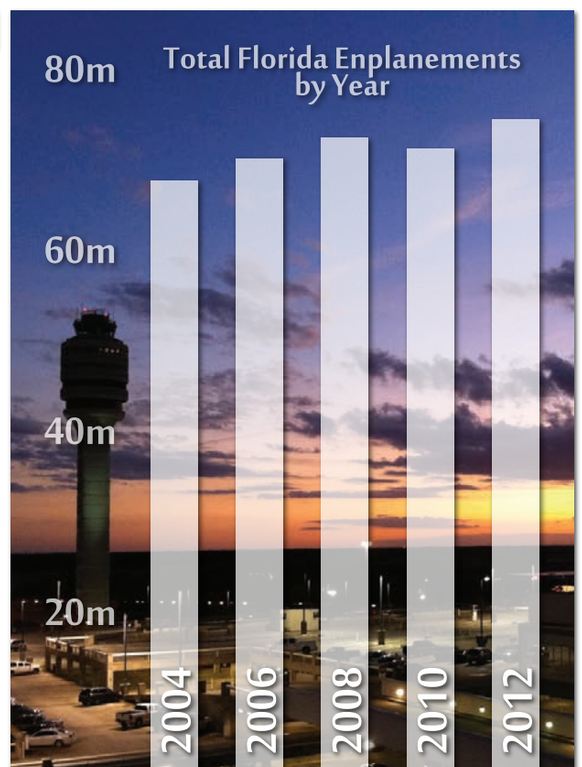
The $400 million runway expansion project at the Fort Lauderdale-Hollywood International Airport (FLL) includes the extension of the south runway (9R-27L) to the east by about 3,644 feet for a total length of 8,920 feet, and will widen it by 50 feet for a total width of 150 feet. It also involves the elevation of runway 9R-27L to a minimum of 37.5 feet above mean sea level, and construction of a bridge to provide clearance over the Florida East Coast (FEC) Railroad and US 1. The Fort Lauderdale- Hollywood International Airport is a large intermodal hub located at the intersection of I-95 and I-595. It serves a variety of general aviation needs, regional air cargo, and commercial airline demand. Nonetheless, FLL does not currently have the runway capacity required to meet the estimated number of aircraft operations for the airport without delays reaching unacceptable levels.

Northwest Florida Beaches International Airport

The new Northwest Florida Beaches International Airport opened on May 23, 2010. In its first year the passenger traffic tripled in comparison to the previous year at the Panama City Regional Airport to more than 825,000 passengers. This is an Emerging SIS facility serving a local and tourist population.

Southwest Florida International Airport

Southwest Florida International Airport in Fort Myers is one of the fastest growing airports in the nation, Since the opening of the airport's new Midfield Terminal in 2005, the average yearly emplanements have increased more than 2 million per year to 7.6 million total passengers in 2013. The I-75/Southwest Florida International Airport collector/distributor system began construction in 2012 with an estimated cost of $54 million. The collector/distributor system access improvements connect to I-75, and will provide a more direct access to the airport's Midfield Terminal complex.



SEAPORTS

Waterborne international trade moving through Florida's seaports was valued at $85.9 billion in 2012. This waterborne trade represented more than half of Florida's total in international trade. In 2012, the maritime cargo activities at Florida seaports were responsible for generating more than 680,000 direct and indirect jobs and $96 billion in total economic value. A recent FDOT study showed that every $1.00 invested into seaports yielded $6.90 to the state economy. Florida is center of the global cruise industry, with the world's three busiest cruise ports - PortMiami, Port Everglades, and Port Canaveral - each boasting more than 4 million annual passengers in 2014.

Florida's SIS seaport system includes **seven SIS seaports** and **three Emerging SIS seaports**, as well as **one seaport being planned** to add to the SIS.

Four of Florida's Seaports - PortMiami, Port Everglades, JAXPORT, and Port Tampa Bay - are among the Top 25 busiest seaports in the United States.

FEATURED SEAPORT PROJECTS

Port of Miami Tunnel

PortMiami is located on Dodge Island, a 518-acre island in Biscayne Bay just east of downtown Miami. The port contains a cruise terminal and a cargo handling facility. Previously, port highway traffic entered and exited the island via the Port Boulevard Bridge. Now the Port of Miami Tunnel (POMT) provides direct access between the seaport and highways I-395 and I-95. The POMT opened in 2014 and creates another entry to PortMiami besides the Port Bridge, and keeps PortMiami, the community's second largest economic generator, competitive. The POMT improves traffic flow in downtown Miami by reducing the number of cargo trucks and cruise related vehicles on congested downtown streets, and will aid ongoing and future development in and around downtown Miami.

The POMT is one of Florida's first Public Private Partnerships. The project costs total $1.1 billion, with FDOT funding over $350 million in construction and development funds, as well as annual payments of $32.5 million annually until 2044.

Port Everglades On-Port Rail & Intermodal Container Transfer Facility (ICTF)

In 2014 the 42.4-acre on-port rail ICTF opened and provides a significant competitive advantage for Port Everglades by facilitating the transfer of containerized cargo through the port onto the Florida East Coast (FEC) rail line via a connecting rail spur, which eliminates the need for the use of highways outside Port Everglades. The construction costs are estimated to total $53 million, including $18 million in grants through FDOT's Strategic Intermodal System program, a $30 million FDOT State Infrastructure Bank loan, and $5 million from FEC's capital plan.

Port Canaveral Cargo Improvements

Already one of the busiest cruise ports in the world, with over 4 million passengers in 2014, FDOT is dedicated to helping Port Canaveral establish its freight and cargo operations, with over $29 million in funding. In the port's northside, by better connecting a SIS corridor to the port's internal roads, a capacity project is underway to expand the container yard, improve efficiency, and increase vehicular safety while providing opportunities for new container markets. Upgrades to existing rail facilities in addition to a new rail connection to the Kennedy Space Center rail line will further enhance port rail access.

TRANSIT

Topping nationwide trends in increasing transit ridership, transit use in Florida has increased much faster from 2000 to 2010, increasing nearly 28 percent during this time. Florida's transit systems provided more than 134 million vehicle miles and its passengers traveled more than 1.3 billion passenger miles annually. By reducing household travel costs and reducing automobile trips, these services result in direct economic and community benefits. These benefits ripple through the transportation system and the economy and are felt, directly or indirectly, by all residents of the state. Transit and highway users alike save $537 million annually in travel costs, all while improving traffic safety: traffic fatalities and injuries are reduced by over 2,500 each year.

The SIS funds infrastructure projects to improve transit systems across the state.

Major transit projects include the new central Florida SunRail commmuter rail, improvements to TriRail stations in South Florida, and new intermodal centers in Miami and downtown Jacksonville.

Florida's spaceport infrastructure focuses around the well established and world-renowned Cape Canaveral Spaceport, the center of over 50 years of launch and research activity.

Cecil Spaceport in Jacksonville is in development and is planned to be fully functional in the near future.

SPACEPORTS

While commercial space transport is an industry still in it's infancy, Florida believes, unlike many other states, that spaceports are an integral piece to the Strategic Intermodal System and our transportation system as a whole. Space Florida and FDOT work closely together to provide space transportation services and infrastructure in the state. FDOT promotes and provides funding assistance for projects that improve aerospace transportation facilities; addresses intermodal requirements; assists in the development of joint-use facilities; coordinates and cooperates in the development of spaceport infrastructure and related transportation facilities contained in the Strategic Intermodal System Plan; encourages coordination between airports and spaceports; and fosters interagency efforts to improve space transportation capacity and efficiency.

FEATURED TRANSIT PROJECT

Miami Intermodal Center

Located just east of Miami International Airport, the Miami Intermodal Center (MIC) is a massive ground transportation hub being developed by the Florida Department of Transportation. The MIC Program consists of a number of phases. Major roadway improvements were completed in May 2008. The Rental Car Center opened for business in July 2010, and the Miami International Airport (MIA) people mover became operational in June 2011. The MIC Central Station is a rapid transit, commuter rail, intercity rail, and intercity bus transportation hub. Construction began in June 2011 and is scheduled for completion in early 2015. The MIC will enhance regional connectivity by connecting Metrorail, Tri-Rail, Amtrak, rental cars, local transit, and the highway system to the international airport. It is already relieving congestion on the roadways in and around the busy airport. The total construction cost for this project will be $2 billion.

FEATURED SPACEPORT PROJECT

Cape Canaveral Spaceport

With the conclusion of the Space Shuttle Program, investing in the Cape Canaveral Spaceport will go a long way in attracting commercial space operators to locate in Florida. Once established, Space Florida believes that the commercial space sector will remain in the state and foster further economic development in the aviation/aerospace sector. Improvements to the Spaceport launch complex identified in the Space Florida 2010 Master Plan include infrastructure for commercial spacecraft processing, launch vehicle storage, horizontal launch processing capabilities, booster recovery, vehicle refurbishment, and improvements to the previous Space Shuttle Landing Facility for new uses. $40 million dollars in funding has been programmed for these improvements starting in 2012 and continuing in the 2014 Adopted Work Program.

SIS Coordinators Contact Information

District 1 Sarah Catala 239-461-4316
District 2 Barney Bennette 386-961-7878
District 3 Ray Kirkland 850-415-9590
District 4 Lisa Dykstra 954-777-5460
District 5 John Zielinski 407-482-7868
District 6 Ken Jeffries 305-470-5378
District 7 Susan Finnimore 813-975-6450
Turnpike Rax Jung 407-264-3870
Central Office Policy Brian Watts 850-414-4818
Central Office Implementation Chris Edmonston 850-414-4813

Systems Planning Office

Chris Edmonston 850-414-4813

www.dot.state.fl.us/planning/sis