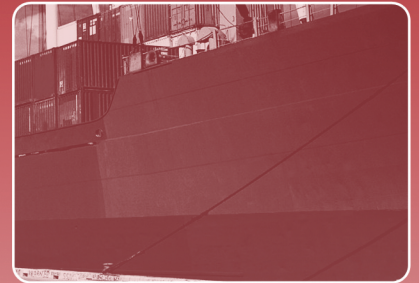


FLORIDA

Freight Mobility and Trade Plan



Investment Element

September 2014





Florida Freight Mobility and Trade Plan Investment Element

September 2014

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Chapter 1 : Introduction and Freight Goals

Florida is a freight mobility and international trade state. Freight mobility, or the movement of goods and commodities, is a significant driver in Florida’s economy. Freight mobility was a key factor in building Florida’s economy and will continue to be the driving force in maintaining and creating jobs for Floridians. Freight movement provides goods and services to not just the residents and visitors of Florida, but also to other states and countries. Freight’s impact on Florida is due to the Florida’s large population, geographic location, and existing infrastructure and industries.

According to the Florida Chamber Foundation 2013 Florida Trade and Logistics Study 2.0¹, “Florida is made for trade.” Florida has many assets for international and domestic trade including:

- Strategic location at crossroads of north/south and east/west trade lanes
- \$132 billion in two-way trade to 225 trading partners
- \$66 billion in Florida-origin goods exports
- \$31 billion in Florida services exports
- 60,000 exporting businesses, about one in five nationally
- Leading U.S. state for trade with Latin America and the Caribbean
- 19 million residents
- 90 million visitors each year, including 10 million from overseas
- 240,000 jobs at foreign-owned companies
- 15 deepwater seaports
- 19 commercial service airports, including the nation’s top hub for international air cargo
- 2 spaceports
- 3,475 miles of shipping, intra-coastal, and inland water routes
- 2,786 miles of rail
- 12,076 center line mile of state highways
- 512,000 jobs in transportation, trade, and logistics paying 30 percent more in wages than the statewide average

The mission of the Florida Department of Transportation (FDOT) is to provide a safe transportation system that ensures the mobility of people and goods, enhances economic prosperity and preserves the quality of our environment and communities. This Freight Mobility and Trade Plan seeks to define policies and investments that will enhance Florida’s position as a gateway to the Western Hemisphere and other international points for goods movement.

The Freight Mobility and Trade Plan (FMTP) was developed in two phases, each with their own purpose. The Policy Element:

- Establishes Florida’s freight policy framework
- Identifies responsibilities for implementation
- Meets all requirements of Florida 2012 House Bill 599, as codified in s. 334.044 (33), Florida Statutes

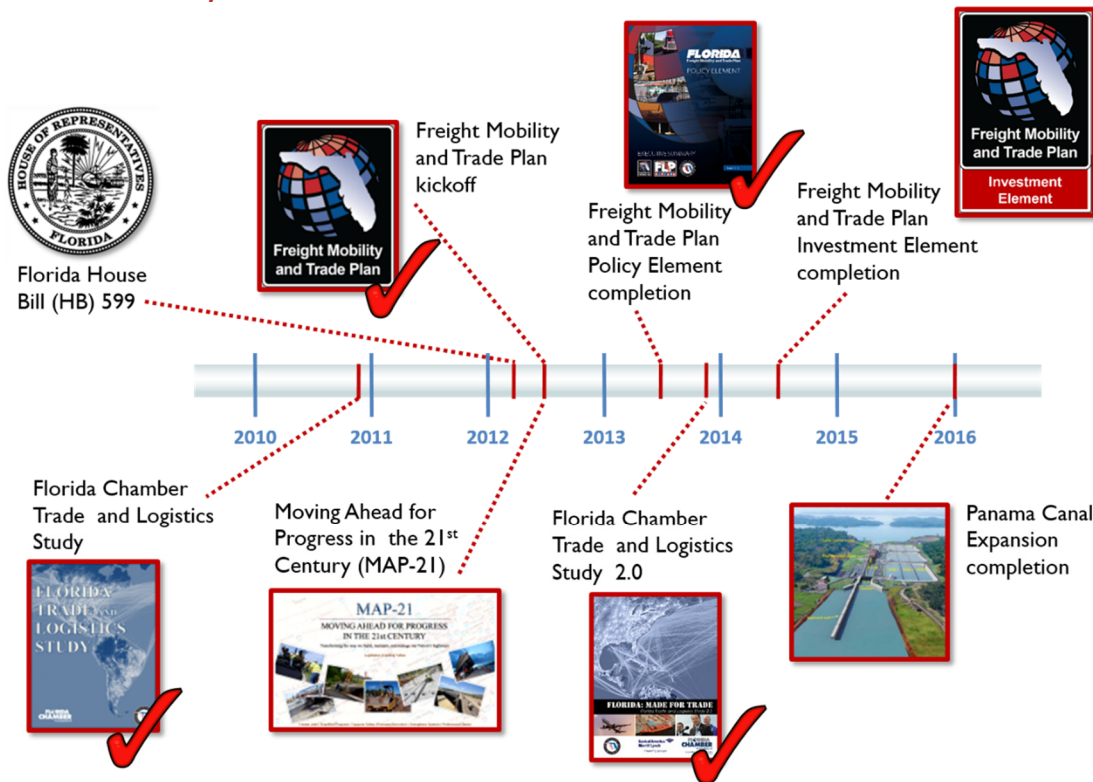
¹ Florida Trade and Logistics Study 2.0 (TL2.0), Florida Chamber Foundation; <http://www.flchamber.com/wp-content/uploads/MadeForTrade-FINAL-Single-1.pdf>, 2013

The Investment Element builds on the Policy Element and is specifically intended to:

- Identify freight needs
- Identify criteria for state investments in freight
- Prioritize freight investments across modes
- Complete meeting the requirements of the federal Moving Ahead for Progress in the 21st Century Act (MAP-21)

In an incredibly short period of time and through the tireless efforts of individuals and agencies from both the public and private sectors, Floridians have set the stage to make their state a global leader in freight mobility and trade. **Figure 1** provides a timeline of key freight focused events in Florida as well as the adoption of federal freight policy and the anticipated completion of the expansion of the Panama Canal.

Figure 1: Timeline of Key Events



Federal Freight Policy

Moving Ahead for Progress in the 21st Century Act

MAP-21, the Moving Ahead for Progress in the 21st Century Act (P.L. 112-141), was signed into law on July 6th, 2012. Funding surface transportation programs at over \$105 billion for fiscal years (FY) 2013 and 2014, MAP-21 is the first transportation authorization enacted since 2005. MAP-21 represents a milestone for the U.S. economy – it provides needed funds and, more importantly, it transforms the policy and programmatic framework for investments to guide the growth and development of the country’s vital transportation infrastructure.

MAP-21 creates a streamlined, performance-based, and multimodal program to address the many challenges facing the U.S. transportation system. These challenges include improving safety, maintaining infrastructure condition, reducing traffic congestion, improving efficiency of the system and freight movement, protecting the environment, and reducing delays in project delivery, consistent with USDOT structure. MAP-21 is primarily highway focused, but considers other modes as they benefit highway operations.

MAP-21 establishes a policy to improve the condition and performance of the national freight network to provide the foundation for the United States to compete in the global economy and achieve the following goals (§1115; 23 USC 167):

- to invest in infrastructure improvements and to implement operational improvements that:
 - strengthen the contribution of the national freight network to the economic competitiveness of the United States
 - reduce congestion
 - increase productivity, particularly for domestic industries and businesses that create high-value jobs
- to improve the safety, security, and resilience of freight transportation
- to improve the state of good repair of the national freight network
- to use advanced technology to improve the safety and efficiency of the national freight network
- to incorporate concepts of performance, innovation, competition, and accountability into the operation and maintenance of the national freight network
- to improve the economic efficiency of the national freight network
- to reduce the environmental impacts of freight movement on the national freight network

MAP-21 includes a number of provisions designed to enhance freight movement in support of national goals. MAP-21 firmly establishes national leadership in improving the condition and performance of a National Freight Network by identifying the components of the network. The proposed system will be designated by the USDOT Secretary. A draft Primary Freight Network was released November 19, 2013, and FDOT submitted comments before the February 15, 2014 deadline.

MAP-21 includes incentives in the form of increased matching ratios to prioritize projects that advance freight performance targets. USDOT, in consultation with partners and stakeholders, will develop a national freight strategic plan. States are encouraged to develop individual freight plans and establish freight advisory committees.

Looking ahead, the U.S. Senate introduced transportation bill s. 2322 on May 12, 2014. The new MAP-21 reauthorization is currently proposed as a 6-year bill that would provide a new federal freight funding program. The freight and goods movement program is formula-based and would allow enhancement of key freight corridors. In the new bill, States would have more flexibility to designate corridors in addition to the Primary Freight Network. S. 2322 also has more requirements for state freight plans and advisory committees to help identify high priority projects. Additional elements of note include:

- Increased funding in core programs
- More flexibility in project delivery and innovative finance
- New funding for projects of national or regional significance (competitive grant program)
- More transparency in how projects are reviewed and selected

Water Resources Reform and Development Act

Additional federal freight-related policy changes are proposed in the Water Resources Reform and Development Act of 2014 (WRRDA), which was passed by the U.S. Senate in May 2013 and passed by the US House of Representatives in October 2013. A conference committee was formed to work out any differences between the Senate and House versions, and they agreed on the conference report in May 2014. WRRDA was signed into law on June 10, 2014, and is expected to promote investment in the nation's critical water resources infrastructure, accelerate project delivery, and reform the implementation of U.S. Army Corps of Engineers' projects. The final version of WRRDA includes provisions to ensure all surplus funds in the Harbor Maintenance Trust Fund will be spent for port maintenance without impacting other Corps projects, as well as reforming the project delivery process by requiring feasibility studies to be completed in less than three years.

Florida Freight Policy

FDOT and its partners completed the Policy Element of the FMTP on June 19, 2013. The development of the FMTP Policy Element was guided by House Bill (HB) 599, enacted by the 2012 Florida Legislature to echo Governor Scott's freight vision for Florida. HB 599 included a number of meaningful elements for FDOT, including requiring an FDOT-led plan to "enhance the integration and connectivity of the transportation system across and between transportation modes throughout the state."

Figure 2: Florida Freight Policy Objectives

- 1** Capitalize on the Freight Transportation Advantages of Florida Through Collaboration on Economic Development, Trade, and Logistics Programs
- 2** Increase Operational Efficiency of Goods Movement
- 3** Minimize Costs in the Supply Chain
- 4** Align Public and Private Efforts for Trade and Logistics
- 5** Raise Awareness and Support for Freight Movement Investments
- 6** Develop a Balanced Transportation Planning and Investment Model That Considers and Integrates All Forms of Transportation
- 7** Transform the FDOT's Organizational Culture to Include Consideration of Supply Chain and Freight Movement Issues

Source: *Freight Mobility and Trade Plan Policy Element*, Florida Department of Transportation, 2013

The Policy Element of the FMTP addresses all requirements of the HB 599 legislation. The four specific goals from HB 599 are to:

- Increase the flow of domestic and international trade through the state’s seaports and airports, including specific policies and investments that will recapture cargo currently shipped through seaports and airports located outside the state.
- Increase the development of Intermodal Logistics Centers (ILCs) in the state, including specific strategies, policies, and investments that capitalize on the empty backhaul trucking and rail market in the state.
- Increase the development of manufacturing industries in the state, including specific policies and investments in transportation facilities that will promote the successful development and expansion of manufacturing facilities.
- Increase the implementation of compressed natural gas (CNG), liquefied natural gas (LNG), and propane energy policies that reduce transportation costs for businesses and residents located in the state.

As part of the development of the FMTP Policy Element, stakeholders helped FDOT develop a set of Objectives and Strategies to guide the state in the process of making strategic investments in freight to achieve these four goals, as illustrated in **Figure 2**. The full list of Strategies associated with each Objective is included in Chapter 4 of the FMTP Policy Element.

Consistency with National Freight Goals and Existing State Policy

As discussed above, MAP-21 includes a number of provisions designed to enhance freight movement in support of national goals. Table 20 in the FMTP Policy Element displays how the seven FMTP objectives and their related strategies correspond to the national freight policy goals of MAP 21.

The FMTP is the high-level statewide plan to prioritize and select investments to improve freight movement. Many urban and regional areas have developed detailed freight plans designed specifically for their area’s needs. The FMTP is a statewide level approach, but many regional freight plans feed into the FMTP.

The FMTP also supports the 2060 Florida Transportation Plan—the long-range transportation plan for the state, which defines Florida’s future transportation vision—and its six strategic goals to guide transportation decisions. Table 19 in the FMTP Policy Element displays the relationship between the FMTP Objectives and the 2060 Florida Transportation Plan goals by comparing them side-by-side.

Finally, the FMTP reflects the FDOT actions needed to implement the strategies outlined in the Florida Chamber Foundation 2013 Florida Trade and Logistics Study. The partnership between the FDOT and the Florida Chamber Foundation has spurred additional collaboration efforts. By working with Enterprise Florida, CareerSource Florida, the Florida Department of Economic Opportunity, the Florida Department of Agriculture and Consumer Services Energy Office, as well as various associations and local partners, FDOT can accomplish so much more than it could alone.

The FMTP provides the State with an integrated and comprehensive plan to focus on objectives and strategies to benefit the movement of goods across modes. Given the extensive overlap in National Freight Goals and the FMTP Objectives and Strategies, implementation of the FMTP will guide Florida toward meeting these goals. The FMTP is much more than just a freight plan. This effort couples commerce and energy with transportation to provide an integrated analysis to provide solutions to solve issues and needs in a cross-cutting, multi-functional approach. Freight movement is the economy in

motion. Thus, while transportation, trade, and energy are functions that exist to support citizens and businesses, these activities are inherently linked and collectively impact and support the economic well-being of Florida.

Developing the Investment Element

The Investment Element of FMTP builds upon and complements the outcomes of the Policy Element.

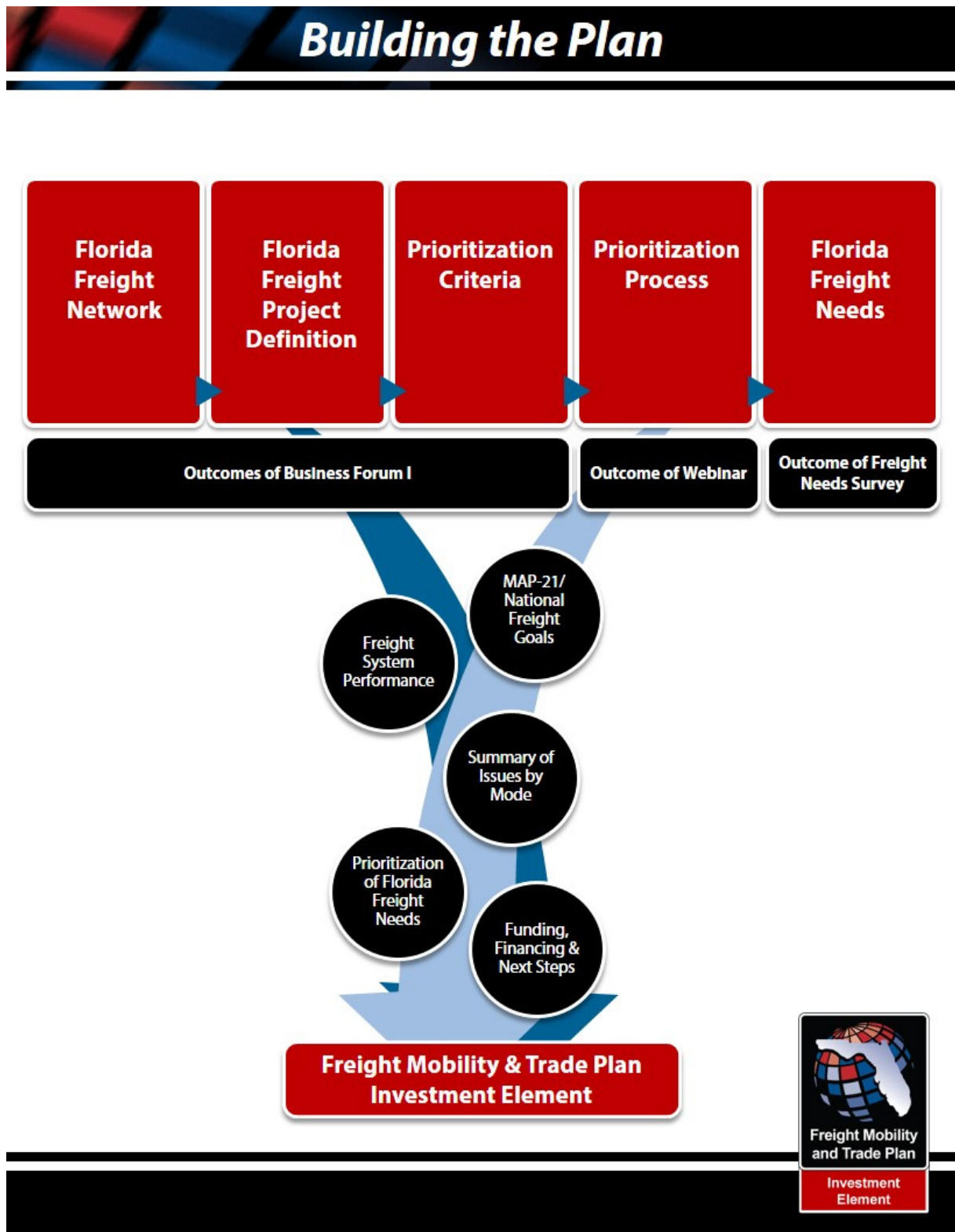
Figure 3 illustrates the Investment Element of the Freight Mobility and Trade Plan's process.

Figure 3: Freight Mobility and Trade Plan Investment Element Process with Execution Dates



One of the first steps in the Investment Element was to craft the preliminary criteria for state freight investment, based on goals, objectives and strategies developed during the Policy Element. A preliminary Florida Freight Network and Freight Project Definition were also developed. These three items were reviewed and edited by stakeholders and partners at Business Form I and subsequently finalized. A prioritization process was then developed for the criteria and reviewed by the stakeholders during a webinar and corresponding comment period. Finally, a Florida Freight Project Needs Survey or project database was developed by collecting freight projects from various existing modal and the Strategic Intermodal System (SIS) plans augmented by additional stakeholder and partner projects input into the Needs Survey. Throughout the process, involvement by stakeholders and partners was essential to developing the FMTP. Various aspects of the prioritization process were discussed at each stage of the outreach process. **Figure 4** displays a flow diagram on how the Investment Element was developed including the five foundation items, the importance of stakeholder and partner involvement during all phases of development, and the other inputs that lead into building the FMTP.

Figure 4: Building the FMTP Investment Element



Report Organization

The Investment Element of the FMTP is organized to continue where the FMTP Policy Element concluded, and discusses all of the elements FDOT and its partners used to identify freight related investments needed for Florida's economy to continue to grow.

The Investment Element of the FMTP is organized into the following chapters:

- **Chapter 1** serves as the introduction, reintroduces the purpose and directives of the Freight Mobility and Trade Plan Policy and Investment Elements, and describes how the report is organized.
- **Chapter 2** provides a summary of Florida's freight system performance, including conditions, freight drivers, commodity movements, issues, and bottlenecks.
- **Chapter 3** identifies the Florida Freight Network and Florida Freight Project Definition.
- **Chapter 4** discusses the State's decision-making process on freight transportation improvements. This includes an overview of project prioritization criteria, a discussion of how they are linked to the Objectives and Strategies identified in the FMTP Policy Element, and details on the weighting process and the method to categorize projects into priority groups.
- **Chapter 5** is the cornerstone of the Investment Element. This chapter presents how freight projects were collected and a summary of Florida Freight Needs, as well as the full project list by priority group.
- **Chapter 6** reviews current funding and financing options for freight projects, discusses the federal matching fund options in MAP-21, discusses alternative funding and financing sources, and presents the next steps after the completion of the Investment Element.
- **Appendices** provide additional information concerning MAP-21 elements and a Glossary of terms and acronyms.



Chapter 2 : Freight System Performance and Issues

In order to develop a comprehensive list of Florida freight related infrastructure needs, an analysis of Florida’s freight system is necessary. This analysis of commodity flow along with identifying freight intensive areas allows for the evaluation of the current freight system’s performance. Understanding what, where, and how efficiently freight moves through Florida leads to identifying constraints to or bottlenecks in the system. Field research and interviews were conducted to verify issues and bottlenecks and to identify additional items which constrain the movement of freight.

The goal of this dual approach of a “desktop” analysis along with field verification and augmentation by local partners and stakeholders provides a clearer picture of the overall movement of freight. This includes the identification of physical bottlenecks and operational obstacles as well as policy impediments to freight movement. This chapter includes a background on what commodities are transported in and out of Florida, documentation of where these freight intensive areas are located throughout the state, and an analysis of how the system is performing utilizing performance measures. The identification of issues and bottlenecks to the system is critical to identifying infrastructure investment needs.

Florida’s International Trade

The Florida Chamber Foundation’s Florida Trade and Logistics Study 2.0² highlights global trade and economic activity and describes how Florida may be involved and impacted. The study identifies global trends and acknowledges the changing global marketplace. It also conveys how a growing global demand for goods and services, shifting trade patterns, innovative logistics practices, and visionary policy environments all have dramatic implications for Florida.

According to the Trade and Logistics Study, Florida is in a unique position to benefit from these global trends:

- **Growing demand for consumer goods in Florida** – With 19 million residents and more than 90 million visitors each year, Florida is one of the largest consumer markets. This makes Florida a focal point for trade lanes.
- **Expanding demand for Florida goods and services** – Florida’s manufacturers can supply a growing demand for high-tech and consumer goods worldwide, while Florida’s financial, legal, tourism, and health service industries can benefit from rising global incomes.
- **Diversifying Florida export destinations** – Markets for Florida-made and distributed goods will expand as emerging economies in Africa, Latin America, and the Middle East grow.

In order to complement the existing international picture, the FMTP Investment Element analyzes freight movement on the state’s freight transportation facilities to better determine freight needs.

² Florida Trade and Logistics Study 2.0 (TL2.0), Florida Chamber Foundation; <http://www.flchamber.com/wp-content/uploads/MadeForTrade-FINAL-Single-1.pdf>, 2013

Florida's Commodity Analysis

To properly assess the needs of the state's freight transportation facilities and prioritize its investments, an understanding of the freight transportation modes and their associated commodity flows is necessary. Florida's transportation system supports a significant amount of freight. The state is not only a producer, but also a major consumer of goods. Florida serves both substantial permanent resident and tourist populations. The majority of freight movement associated with Florida serves these populations, as the amount of goods entering and circulating within the state is 4-6 times the amount of goods leaving the state by both weight and value. In general, this trend can be seen in every transportation mode. **Table 1** shows the total freight movements within, into, out of, and through Florida for 2011 by transport mode.

Truck and rail are the dominant modes of transportation with truck movements accounting for more than 70 percent of commodity movements in 2011, in regards to weight and value. Truck is the top transportation mode for outbound, inbound, internal, and through freight movements. Next is rail except for inbound movements in which ship movements exceed rail in terms of weight.

Table 1: Florida Total Freight Commodity Flows by Mode (2011)

2011 Tons						
Mode	Outbound	Within	Inbound	Through	Total	Percentage
Truck	43,455,885	193,252,665	78,057,175	2,774,467	317,540,192	70.99%
Rail	12,344,656	28,132,579	36,949,668	1,106,664	78,533,567	17.56%
Water	5,114,046	1,068,574	44,775,211	-	50,957,831	11.39%
Air	78,980	3,529	156,394	-	238,903	0.05%
Other	1,293	-	1,554	332	3,179	0.00%
Total	60,994,859	222,457,347	159,940,002	3,881,463	447,273,671	100.00%

2011 Value (Millions)						
Mode	Outbound	Within	Inbound	Through	Total	Percentage
Truck	\$79,250	\$194,255	\$188,287	\$4,749	\$466,541	72.75%
Rail	\$16,940	\$16,346	\$47,515	\$1,840	\$82,641	12.89%
Water	\$10,827	\$1,191	\$37,919	-	\$49,937	7.79%
Air	\$16,409	\$382	\$25,316	-	\$42,107	6.57%
Other	\$43	-	\$16	\$9	\$68	0.01%
Total	\$123,469	\$212,174	\$299,053	\$6,599	\$641,295	100.00%

Source: Analysis using IHS Global Insight Transearch Data, February 2014.

Commodities by Truck

Commodities traveling via truck account for 71 percent of all freight traffic flow by weight and 73 percent of all freight movement by value. Inbound commodity flows by truck are identified to be significantly higher in weight and value than outbound. This trend continues to substantiate the consumer culture of Florida's population with more freight entering than leaving the state, and this tendency is reflected in other modes of transport.

The top ten inbound commodities account for 40 percent by weight and 29 percent by value in 2011, as illustrated in **Figure 5**. In terms of characteristics, the top ten commodities by value are more diverse than those reported by weight. Overall, very few of the reported commodities appear in the top ten for both weight and value. The top inbound commodity reported, by weight and value, is warehouse and distribution centers which consist of goods moving through retail and wholesale distribution channels. In regards to weight, fuels such as petroleum, coal, and liquefied gases come in next by weight after warehouse goods; however, they are behind gold ore and electronic data procurement equipment in terms of value. Although distilled (or blended) liquors are significant in terms of weight, its costs are low leaving it at the bottom of the top ten in terms of value.

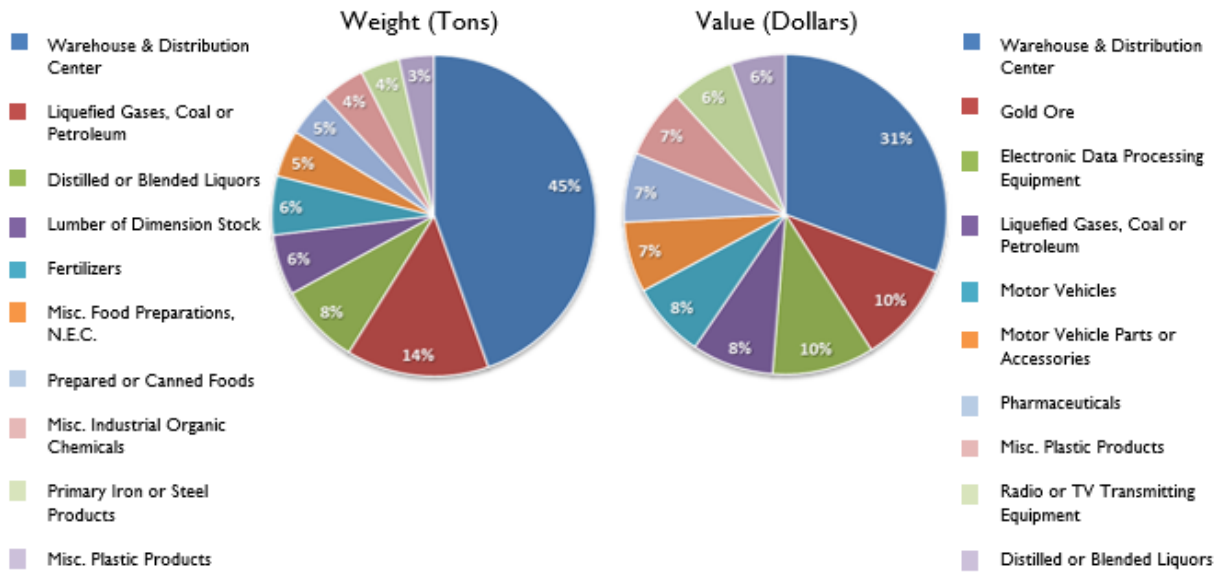
With regards to the commodities leaving the state via trucks, the top ten outbound commodities account for 62 percent by weight and 42 percent by value in 2011, as illustrated in **Figure 6**. Like inbound commodities, the top ten outbound commodities, by weight and value, are similarly diverse. Citrus fruits is the top commodity in terms of both weight and value. It is followed by warehouse and distribution centers in terms of value; however, it is behind concrete products in terms of weight.

Citrus fruits, processed milk, and miscellaneous fresh vegetables are identified among the top ten outbound commodities by truck, but are not within the top ten of inbound owing to Florida's agricultural industry and its importance within and outside of the state. When compared to other modes, this appears to be the preferred method of transport for these goods. Motor vehicle parts or accessories were identified in the inbound commodity top ten by value. Motor vehicles are second, in terms of value, for outbound commodities. Both warehouse goods and motor vehicles illustrate the significance of the manufacturing industry for the state's population and abroad. Warehouse and distribution center appears in the top ten for inbound and outbound commodities. As compared to other modes, this is the preferred mode of transport for these goods.



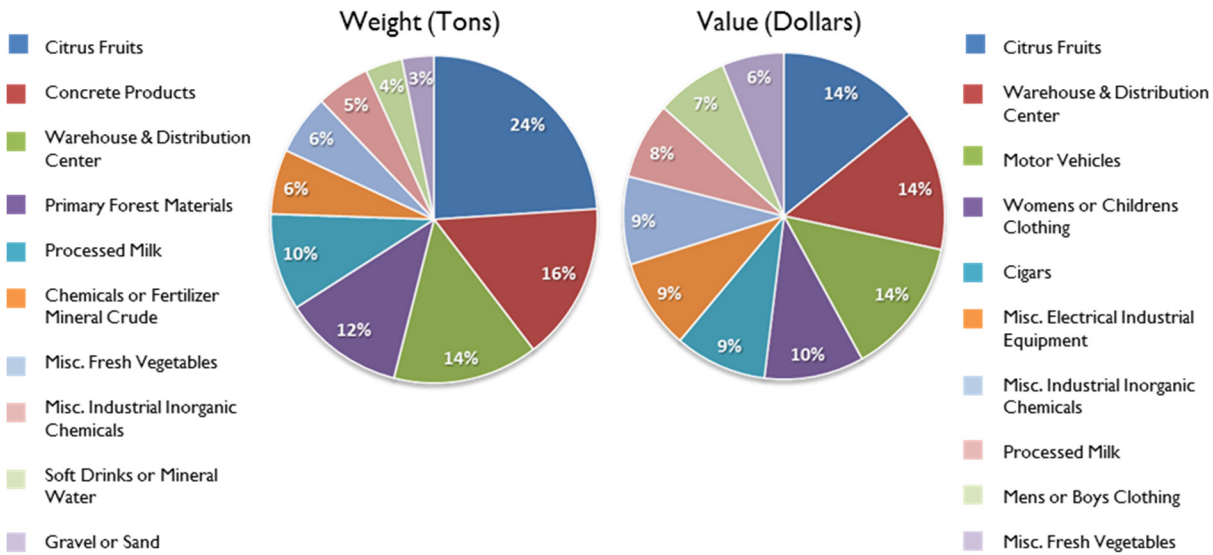
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Figure 5: Top Ten Inbound Commodities by Truck



Source: Analysis using IHS Global Insight Transearch Data, February 2014.

Figure 6: Top Ten Outbound Commodities by Truck



Source: Analysis using IHS Global Insight Transearch Data, February 2014.

Commodities by Rail

Commodities moving by rail account for 18 percent by weight and 13 percent by value of freight traffic flows. Similar to truck, inbound freight commodity flows are higher than outbound. With regards to the commodities coming into the state via rail, the top ten commodities account for 77 percent by weight and 81 percent by value of commodities, as illustrated in **Figure 7**. Bituminous coal is the top commodity, by weight, coming into the state by rail followed by broken stone or riprap. In terms of value, miscellaneous freight occupies the top spot with a third placement in the top ten in terms of weight. Motor vehicles are within both the top ten for weight and value, with fifth and second spots, respectively. This suggests that rail is the preferred modal method of inbound freight flows for motor vehicles, since outbound movements utilize truck.

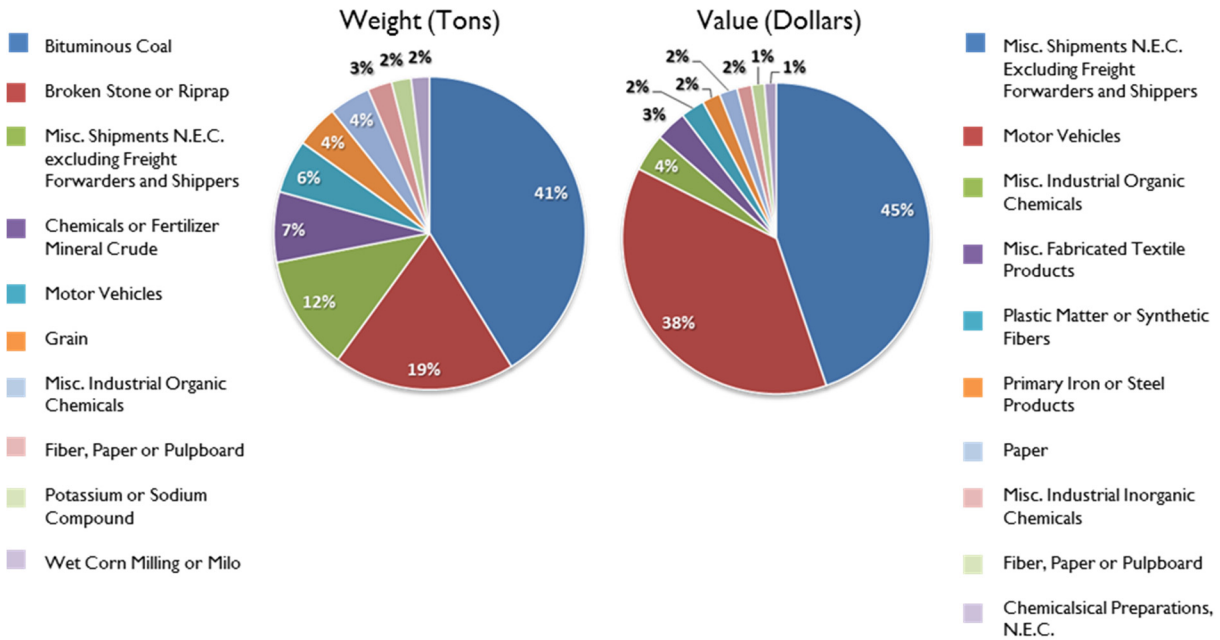
The top ten outbound commodities account for 80 percent by weight and 79 percent by value of commodities moved by rail in 2011, as illustrated in **Figure 8**. Fertilizers, miscellaneous freight, and paper are the top commodities leaving the state both by weight and value. This includes major movements of phosphate, which is mined for use in the production of agricultural fertilizer, from Bone Valley to Port Tampa Bay for export. Grain is a top commodity by weight that has not been identified with other modes such as truck, water, and air. Plastics, fibers, and paper goods are other commodities identified primarily with rail in both weight and value, inbound and outbound.

Another important note is the outbound commodity of Semi-trailers Returned Empty. This provides further evidence that empty backhaul is an issue Florida faces today. The FMTP Policy Element set goals to capitalize on the empty backhaul trucking and rail market in the state, and the Investment Element prioritization process includes rewarding projects that reduce empty backhaul movements.



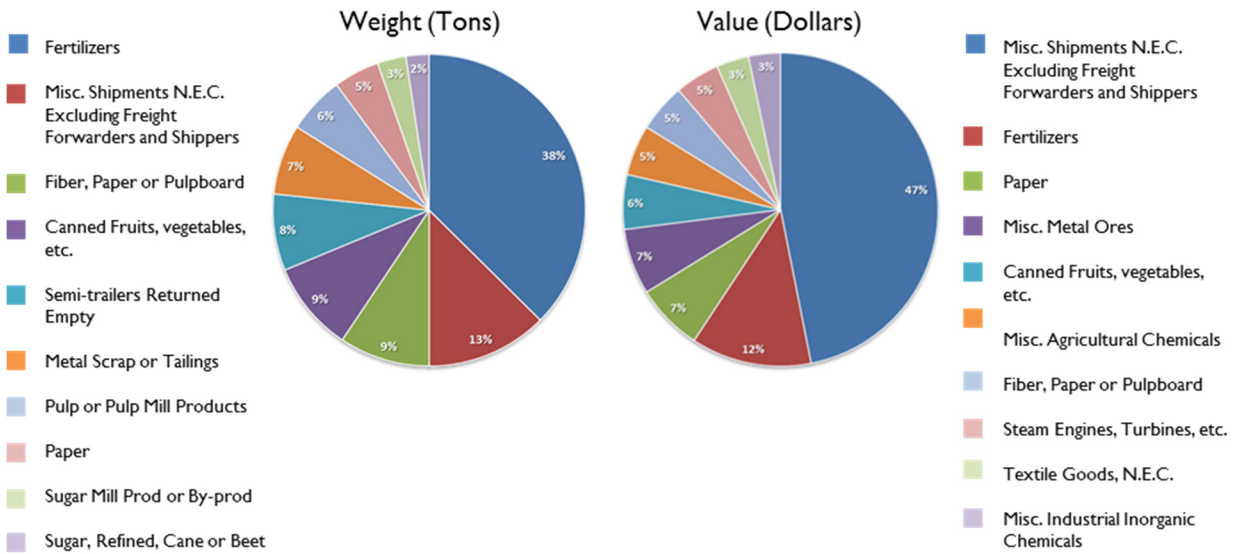
seefloridago.org

Figure 7: Top Ten Inbound Commodities by Rail



Source: Analysis using IHS Global Insight Transearch Data, February 2014.

Figure 8: Top Ten Outbound Commodities by Rail



Source: Analysis using IHS Global Insight Transearch Data, February 2014.

Commodities by Water

Waterborne inbound and outbound commodities account for 11 percent by weight and 8 percent by value of freight traffic flows. It is clear the majority of waterborne freight movements are inbound, with more than 44 million tons valued at over \$37 billion, as opposed to outbound, with more than 5 million tons valued over \$10 billion.

With regards to the commodities coming into the state via water, the top ten commodities account for more than 94 percent by weight and value in 2011, as illustrated in **Figure 9**. A significant amount of the top ten inbound commodities, both by weight and value, are related to fuel products. In 2011, petroleum refining products is the top commodity coming into the state by water in terms of both weight and value. This is followed by bituminous coal by weight and miscellaneous coal or petroleum products by value. Other inbound commodities consist of chemicals and sand/gravel. Motor vehicles are within the top ten inbound commodities by value using ship movements. However, the share of this commodity moving by rail is higher than by water. Another area for freight investments for ships is container. Container traffic is currently within the top ten inbound commodities, but it comes in last.

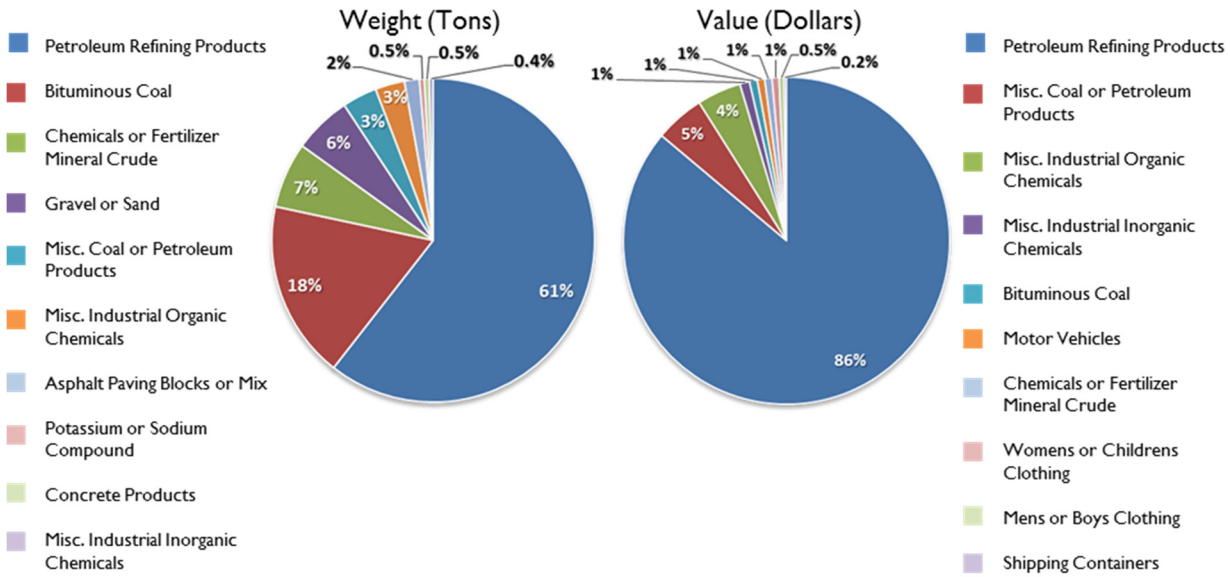
The top ten outbound commodities account for 81 percent by weight and 76 percent by value of commodities, as illustrated in **Figure 10**. This collection of outbound commodities is substantially different compared to inbound commodities. The only similarities between inbound and outbound commodity flows are the inclusion of miscellaneous coal or petroleum products. However, neither miscellaneous coal or petroleum products is in the top three outbound commodities either by weight or value, and chemicals, fertilizer, and mineral crude ranks second by weight but is not in the top ten by value.

The majority of the commodities are fertilizers (phosphate), machinery, equipment, broken stone/riprap, and refined sugars. Fertilizer is a significant commodity for both rail and waterborne freight. In terms of weight, the top commodity leaving the state in 2011 is fertilizers. In terms of value, miscellaneous service industry machinery and general industrial are the top commodities leaving the state by water. This shows the significance of manufacturing and sugar industries for areas outside of Florida and the importance of this mode for these goods.



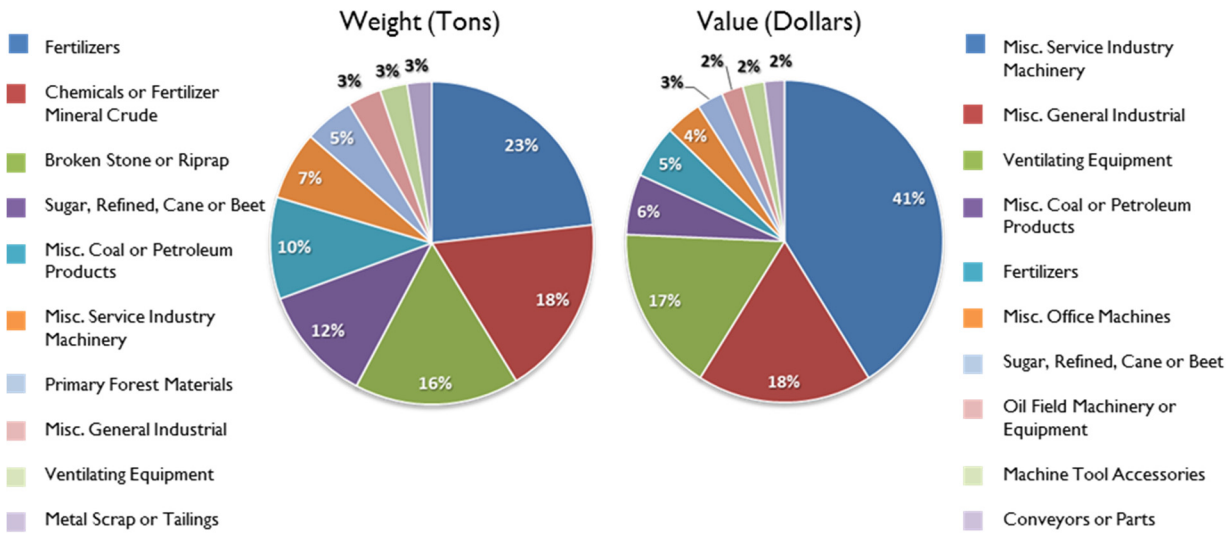
www.flgov.com

Figure 9: Top Ten Inbound Commodities by Water



Source: Analysis using IHS Global Insight Transearch Data, February 2014.

Figure 10: Top Ten Outbound Commodities by Water



Source: Analysis using IHS Global Insight Transearch Data, February 2014.

Commodities by Air

Freight commodity flows coming into and leaving the state by air account for 0.1 percent by weight and 7 percent by value in 2011. This suggests that airborne freight flows typically consist of more highly valued goods as compared to other modes. For example, inbound airborne freight accounts for only 78,980 tons of freight compared to the over 12 million tons carried by rail. However, the difference in their total values is only \$531 million less for air.

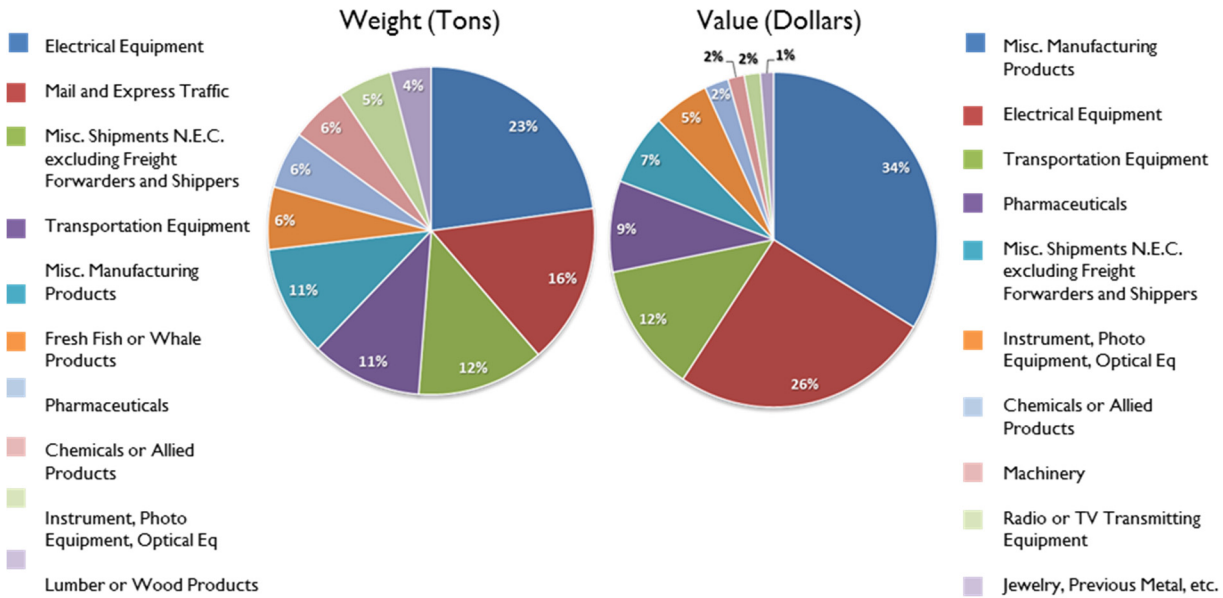
With regards to the commodities coming into the state via air, the top ten commodities account for 78 percent by weight and 96 percent by value, as illustrated in **Figure 11**. Electrical equipment was the top commodity in weight and second in value. In terms of weight, mail and associated goods come in second and miscellaneous manufacturing products come in first in terms of value. An interesting commodity flow into the state, as identified by weight, is fresh fish and related products. Several of the top ten inbound air commodity flows are not identified in the top ten commodity flows for any other mode.

The top ten outbound commodities account for 89 percent by weight and 96 percent by value, as illustrated in **Figure 12**. Upon review, the majority of the top ten inbound and outbound commodities indicate that air serves a very different market compared to the other modes. For example, pharmaceuticals are a major commodity for air as it is identified in both top ten commodity groupings in terms of weight and value. Mail and express traffic are also identified, in terms of weight, for both inbound and outbound commodities. Miscellaneous manufacturing products are in the top two commodities leaving the state by air in terms of both weight and value and identified within the top six for inbound flows³.



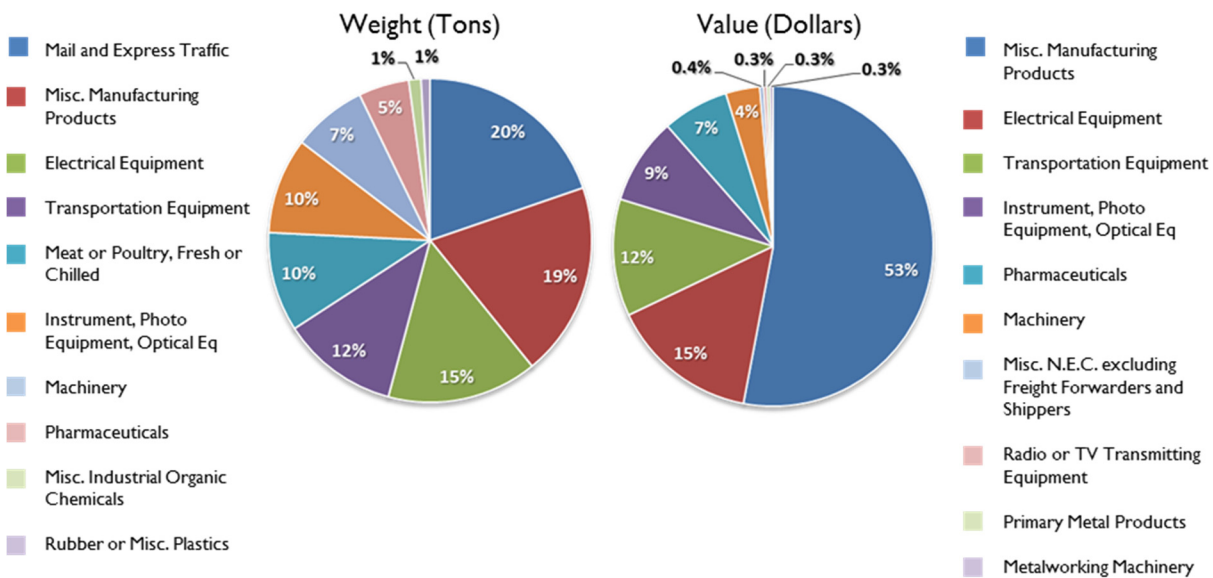
³ Note these groupings are based on Transearch data. Top commodities and groupings may vary compared to other sources commonly utilized by airports, such as U.S. Department of Commerce International Trade data.

Figure 11: Top Ten Inbound Commodities by Air



Source: Analysis using IHS Global Insight Transearch Data, February 2014.

Figure 12: Top Ten Outbound Commodities by Air



Source: Analysis using IHS Global Insight Transearch Data, February 2014⁴.

⁴ Note these groupings are based on Transearch data, and top commodities and groupings may vary compared to other common sources used by airports, such as US Department of Commerce International Trade data.

County Freight Overviews

In addition to this higher-level statewide analysis, the FDOT in coordination with the Florida Chamber of Commerce, Enterprise Florida, and CareerSource Florida produced a series of brochures for public administrators, private corporations, and the general public on freight infrastructure and commodity movements for each of Florida's 67 counties.⁵ These brochures highlight freight by each county for a more localized summary of freight capabilities and commodities.

Each brochure includes:

- Interesting facts
- Fastest growing industries
- Largest employment sectors
- Major private employers
- Key transportation facilities
- Top import and exports
- Top trading partners
- Unique local photographs
- An illustrative map
- A general discussion on Florida's trade and economic initiatives
- Political and administrative contacts



Summary of Florida's Commodity Analysis

Florida's freight transportation facilities of all modes convey a significant amount of freight both by weight and by value across all modes. Analyzing the associated commodity flows demonstrates that Florida is a producer and a significant consumer of goods. Truck is the top transportation mode for outbound, inbound, internal, and through freight movements.

The top truck inbound commodities include fuels such as petroleum, coal, and liquefied gases, as well as gold ore and electronic data procurement equipment. Citrus fruits, processed milk, and miscellaneous fresh vegetables are identified among the top ten outbound commodities by truck.

Bituminous coal is the top commodity, by weight, coming into the state by rail. Motor vehicles are within both the top ten for weight and value. Fertilizers, miscellaneous freight, and paper are the top commodities leaving the state both by weight and value.

Petroleum refining products are the top commodity coming into the state by water in terms of both weight and value. The majority of the outbound commodities are fertilizers, machinery, equipment, broken stone/riprap, and refined sugars.

Air cargo appears to serve a very different market compared to the other modes. Electrical equipment and pharmaceuticals are major commodities for air as they are identified in both top ten commodity groupings in terms of inbound weight and value. Mail and express traffic are also identified, in terms of weight, for both inbound and outbound commodities. Miscellaneous manufacturing products are in the top two commodities by weight and value leaving the state by air.

⁵ County Freight and Logistics Overviews, Florida Department of Transportation, <http://www.dot.state.fl.us/planning/systems/programs/mspi/brochures/Freight/default.shtm>, 2014

Freight Intensive Areas and Florida's Freight System

The previous section discussed what commodities are moved into, out of, within and through Florida. To further understand Florida's freight needs, this section of the FMTP is intended to demonstrate where many of those goods movement transactions take place. To properly assess the needs of the state's freight transportation facilities and prioritize its investments, it is important to understand where these goods are moving to and from by determining Florida's freight intensive areas.

Identifying where freight intensive areas are statewide can be challenging. For the purposes of this document, freight intensive areas were determined by analyzing selected statewide freight generators and comparing their location to 2013 U.S. Census Blocks⁶. Statewide freight generators can be broken into four main categories:

- Transportation Hubs
- Warehousing and Distribution Hubs
- Industrial Zones
- Commercial Zones

Transportation Hubs

Transportation hubs refer to the seaports, airports, rail yards, and intermodal facilities that impact the movement of people and goods at a statewide scale. By definition, the current designated Strategic Intermodal System (SIS) is a network of high-priority transportation facilities which:

- Includes the state's largest and most significant commercial service airports, spaceports, deepwater seaports, intermodal logistics centers (ILCs), freight rail terminals, passenger rail and intercity bus terminals, rail corridors, waterways and highways
- Carries more than 99 percent of all commercial air passengers and cargo, virtually all waterborne freight and cruise passengers, almost all rail freight, 89 percent of all interregional rail and bus passengers, 55 percent of total traffic, and more than 70 percent of all truck traffic on the State Highway System⁷

Goods movement at these facilities tends to be greater in volume and scale, such as bulk, intermodal containers, truckload, and less than truckload (LTL). All freight-related hubs on the SIS can be considered important economic engines and; therefore, appropriate statewide freight generators. Therefore, the following SIS facilities are included in this analysis as transportation hub statewide freight generators:

- SIS Freight Rail Terminals
- SIS Seaports
- SIS Spaceports
- SIS Airports with Scheduled Cargo Service
- Intermodal Logistics Centers (ILCs) that may soon be designated as SIS

In addition to SIS hubs, military bases are considered additional transportation hubs of statewide significance. There are 24 military installations, as well as many of the nation's leading defense companies and a large pool of highly skilled workers and veterans who call Florida home. Florida's military bases provide immense value and have major freight implications. While detailed freight and commodity flow

⁶ 2013 TIGER/Line® Shapefiles: Blocks, United States Census Bureau, 2014

⁷ FDOT Office of Policy Planning, FDOT, 2014

tonnage information is unavailable because of Homeland Security concerns, the number and type of military facilities does generate significant freight volumes.

Warehousing and Distribution Hubs

In addition to the major transportation hubs, warehousing, distribution, customs, and other related activities often cluster together and generate goods movement. FDOT collected a list of statewide distribution centers in 2012, representing a variety of private warehousing, small freight villages, and distribution facilities. These distribution centers represent critical pieces in their respective supply chains, and warrant inclusion as statewide freight generators. Approximate locations of all Florida Foreign Trade Zones were captured from the Office of Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce website. Foreign Trade Zones are economic engines due to their ability to attract companies to manufacture, store, or move goods through facilities within the zone. Possible relief from tariffs and/or duty exemptions allow manufacturers and distributors to reduce costs and locate in the United States. These zones create jobs and capital investment, and therefore, the following facilities were included in the analysis as warehousing and distribution hub statewide freight generators:

- Distribution Centers
- Foreign Trade Zones



Miami Free Zone

Industrial Zones

In a similar fashion, general industrial land uses often include production, distribution, construction, and repair activities related to Florida's many supply chains. Goods movement in these facilities varies based on if the product is a finished product, partially assembled, or parts for a larger product. It can also include bulk, intermodal containers, truckload and less than truckload (LTL) on a much smaller scale than transportation hubs.

To determine industrial land uses statewide, FDOT obtained a generalized land use dataset based on 2012 parcel data from the Florida Department of Revenue. The original 99 land use classes from the parcel data have been collapsed into 15 generalized classes, including one industrial land use class and one mining class. This dataset was created by and published on the Florida Geographic Data Library (FGDL). Industrial Generalized Land Use was included in the analysis to account for freight generated in industrial zones.

Commercial Zones

Of the four categories, commercial zones are the unique freight generator, as they create freight demand rather than respond to it. Florida consumes a great deal of products, and the dense urban clusters generate much of that demand. Central business districts and other commercial districts include a different type of goods movement that is mostly end-user oriented. Delivery vans, parcel services, truckload and less than truckload (LTL) are most common here.

To determine commercial land uses statewide, the same dataset as above was used. The generalized class included all retail/office land uses from the original 99 classes. Commercial Generalized Land Use was included in the analysis to account for freight generated in commercial zones.

Where Freight Intensive Areas are Located

Figure 13 illustrates that most freight intensity is concentrated in and around the urban areas of Jacksonville, Tampa Bay, and Ft. Lauderdale/Miami. These larger metropolitan areas host most of the identified statewide freight generators. Freight intensity is also high in and around Pensacola, Panama City, Tallahassee, Gainesville/Ocala, Cape Canaveral, Orlando, Fort Pierce/Port St. Lucie, and Ft. Myers.

Freight intensity is clustered along the I-4, I-10, I-75, and I-95 corridors, and along the Gulf Coast in the northwest portion of the state. The map demonstrates that the SIS highway component reaches the majority of the freight intensive areas in the state.

Often freight generators are related or clustered. For example, many distribution centers and foreign trade zones are located near transportation hubs such as a seaport, and manufacturing taking place in an industrial land use can often be found nearby. Transportation hubs are needed to serve large commercial zones, and often urban clusters were formed around historical transportation hubs.

Buffers were used to capture the estimated geographic extent served by the hub or zone. This method is similar to various analyses performed for Florida's regional freight plans, but is simplified and uniform for the FMTP Investment Element to ensure consistency statewide. For more detail on freight intensive areas as defined by the region, please refer to the four regional freight plans listed in the FMTP Policy Element.

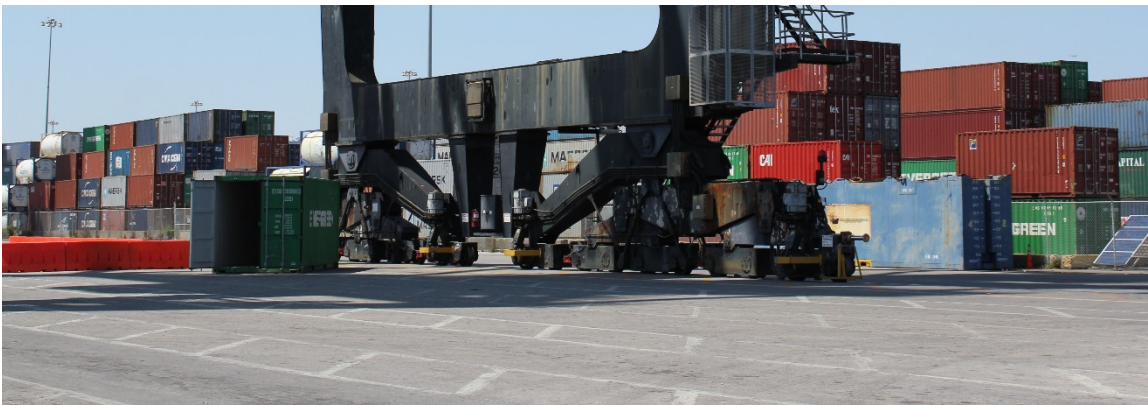
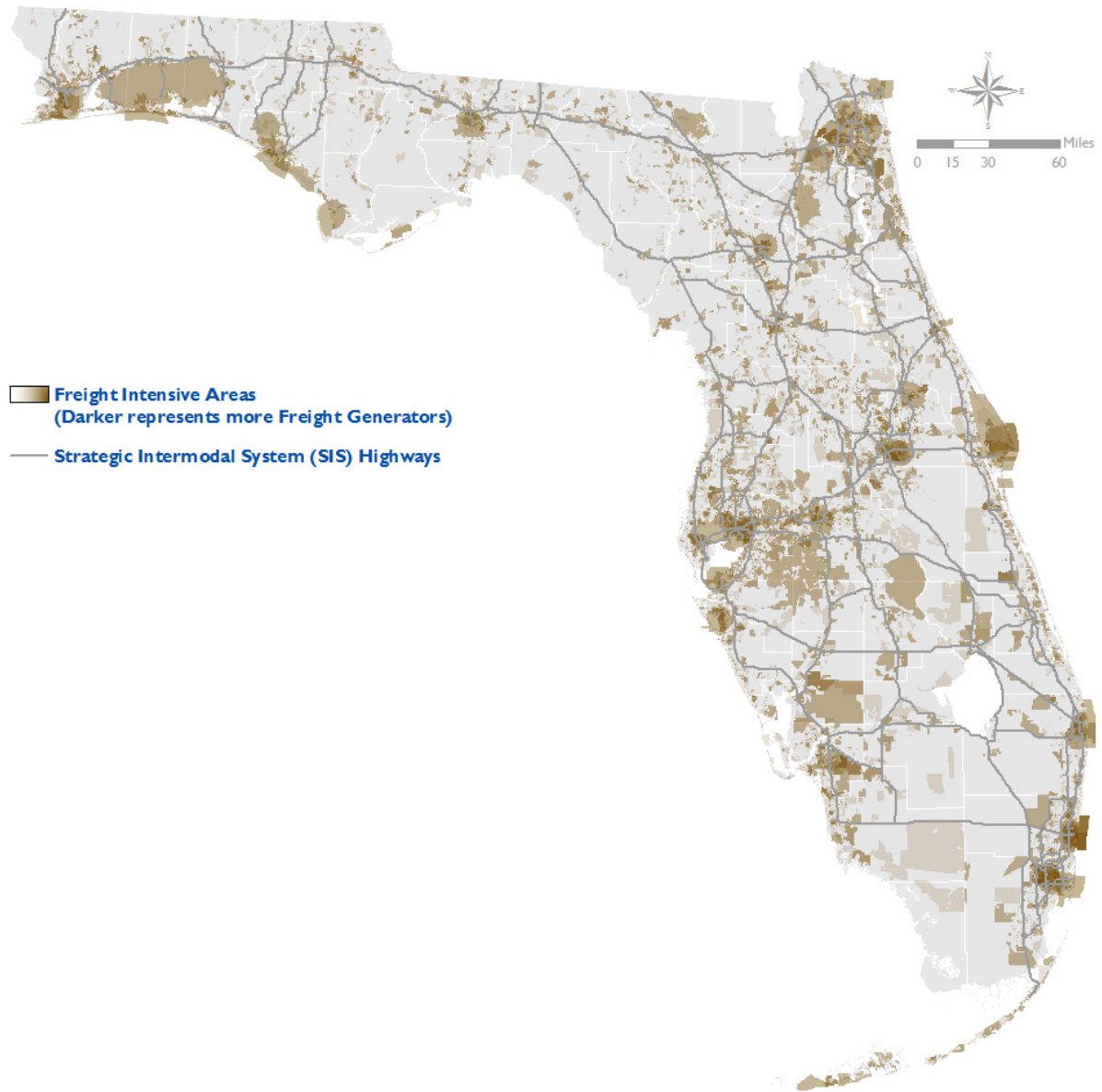


Figure 13: Florida Freight Intensive Areas



Source: Analysis using FDOT, US Census Bureau, Florida Geographic Data Library (FGDL) and US Department of Commerce Data, January 2014.

FDOT's Freight Performance Measures

With an understanding of Florida's freight intensive areas and how these areas are supported by Florida's infrastructure network, the next step is to assess how the system is currently performing by utilizing performance measures. According to FDOT, performance measures are indicators that quantify progress toward attaining a goal or objective. FDOT uses performance measures to:

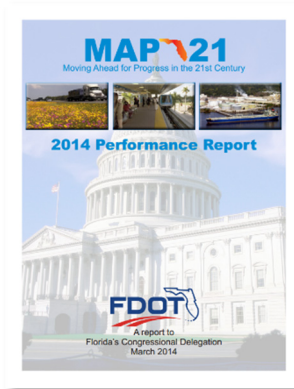
- Assess how well the freight transportation system is operating
- Provide the Department with better information to support decisions
- Assess how effectively and efficiently transportation projects and services are being delivered
- Determine how satisfied customers are
- Demonstrate transparency and accountability for results to Florida's citizens

Performance measures are an important tool the Department utilizes because improvement needs of Florida's transportation system are much greater than available funding. Resources must be used in the most strategic, effective and efficient ways possible.

FDOT Performance Measure Reporting on MAP-21

The 2014 MAP-21 Performance Report documents the Department's accomplishments toward advancing the national goals set forth in the "Moving Ahead for Progress in the 21st Century Act" (MAP-21). In March 2014, the FDOT Secretary sent the second MAP-21 Performance Report to Florida's Congressional Delegation. In 2013, FDOT sent the first report three years ahead of the statutory schedule. This was attainable because FDOT has a "...history of performance reporting that aligns closely with the MAP-21 performance management requirements⁸."

The report included summaries of the Department's performance for safety, system performance, roadways, bridges, transit, air quality and freight.



Florida Multimodal Mobility Performance Measures for Freight and State of Good Repair

The FDOT Statistics Office developed a Florida Multimodal Mobility Performance Measures Source Book which is a collection of current and historical data and analysis describing the performance of Florida's transportation system. It is intended to be the primary source of mobility performance measure results for the State of Florida. Mobility is broadly defined as the movement of people and goods and there are four dimensions related to travel:

- **Quantity** - How much freight is moved and how many people are served
- **Quality** – How good or bad the travel experience is
- **Accessibility** – Ease in engaging in activities
- **Utilization** – How much of the transportation system is used/available

Table 2 displays the Performance Measures for Freight, methodology, the dimension of mobility for the performance measure, and its reporting period. These individual performance measures are described in detail by mode in the following section.

⁸ Moving Ahead for Progress in the 21st Century (MAP-21) 2014 Performance Report, Florida Department of Transportation, 2014. <http://www.dot.state.fl.us/planning/performance/MAP-21/MAP-21PerformanceReport.pdf>

Table 2: Freight Performance Measures

Mode	Performance Measure	Mobility	Reporting Period	Methodology
Highway	Combination Truck Miles Travelled	Quantity	Daily	Determined using combination truck traffic volume and segment length. Combination truck is defined as FHWA Classification 8-13.
	Truck Miles Traveled	Quantity	Daily	Determined using truck traffic volume and segment length.
	Travel Time Reliability	Quality	Peak Period	Freight travel time reliability is defined as the percentage of travel that is greater than 45 mph on freeways.
	Travel Time Variability	Quality	Peak Period	Freight travel time variability is defined as 95th percentile travel time index (TTI ₉₅)
	Combination Truck Hours of Delay	Quality	Daily	Combination truck hours of delay is based on combination truck speed. The free flow combination truck speed is assumed to be equal to the speed limit. Similar to vehicle hours of delay, delay is calculated as the product of directional hourly volume and the difference between travel time at “threshold” speeds (at LOS B) and travel time at the average speed.
	Combination Truck Average Travel Speed	Quality	Peak Hour	The calculation of combination truck average travel speed is identical to the methodology for (passenger) vehicle’s average travel speed, except that combination trucks are assumed to have a lower free-flow speed. The free flow truck speed is assumed to be equal to the speed limit.
	% Miles Severely Congested	Utilization	Peak Hour	The freight percentage of miles severely congested is determined by summing the centerline miles of roadway operating at LOS F in the peak hour and then dividing by the total highway miles.
	Vehicles Per Lane Mile	Utilization	Peak Hour	Vehicles per lane mile (freight) is calculated as the summation of each roadway segment’s peak hour vehicle miles traveled divided by the number of lane miles.
Aviation	Tonnage	Quantity	Yearly	All air cargo landed at public airports.
Rail	Tonnage	Quantity	Yearly	Tons of freight carried by rail mode originated or terminated in Florida.
Seaport	Tonnage	Quantity	Yearly	International and domestic waterborne tons of cargo handled at both public and private terminals in port areas of Florida.
	Twenty-foot Equivalent Units	Quantity	Yearly	Includes international and domestic waterborne cargo handled at both public and private terminals in port areas of Florida.

Source: *Multimodal Mobility Performance Measures Source Book*, Florida Department of Transportation - Transportation Statistics Office, 2013. <http://www.dot.state.fl.us/planning/statistics/sourcebook/2013.pdf>

In addition to measuring mobility, Florida regularly tracks and reports on state of good repair performance measures, including maintenance ratings, pavement conditions, and bridge condition ratings. These measures are addressed in the Performance Measures on State of Good Repair section.

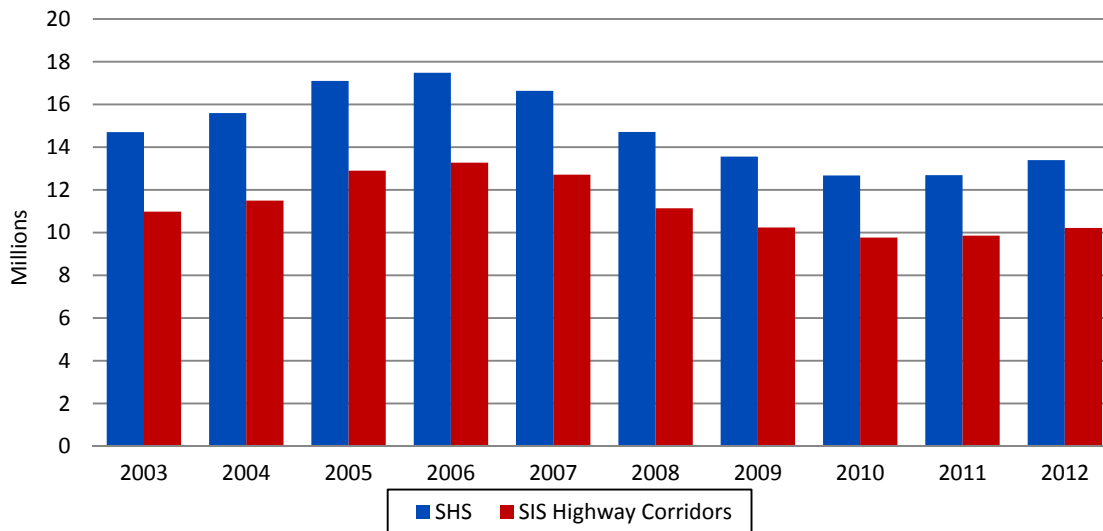
Multimodal Mobility Performance Measures for Freight

Highways

As discussed above, FDOT measures highway performance in a variety of ways. Combination Truck Miles Traveled refers to a power unit (truck tractor) and one or more trailing units (a semitrailer or trailer)⁹. The performance measure used is miles traveled daily, by year.

As shown in **Figure 14**, combination truck activity peaked in 2006 at 17.49 million miles traveled daily. Although miles traveled decreased for a few years, it has been on an upward trend since 2011. Strategic Intermodal System (SIS) highway corridors represent the majority of combination truck miles traveled, and correlate heavily with trends for the entire State Highway System (SHS). Truck Miles Traveled includes all types of trucks and shows a very similar pattern, with a peak in 2006 at 31.84 million miles traveled shown in **Figure 15**. These trends mirror the general U.S. economy that saw a recession in 2007, with recovery since that time.

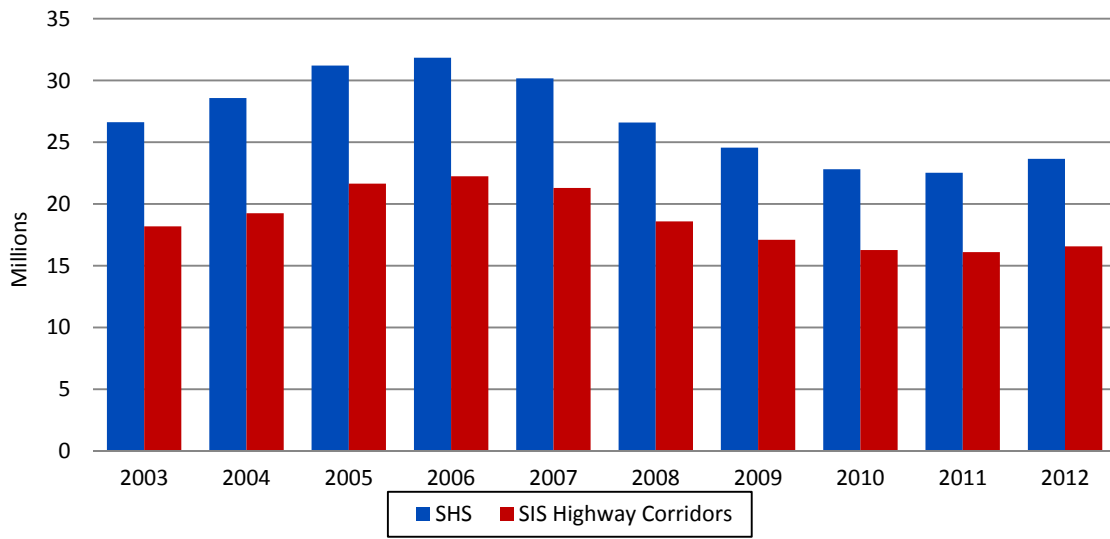
Figure 14: Combination Truck Miles Traveled by Facility



Source: *Multimodal Mobility Performance Measures Source Book, FDOT, 2013*

⁹ National Transportation Statistics, USDOT Bureau of Transportation Statistics, 2014

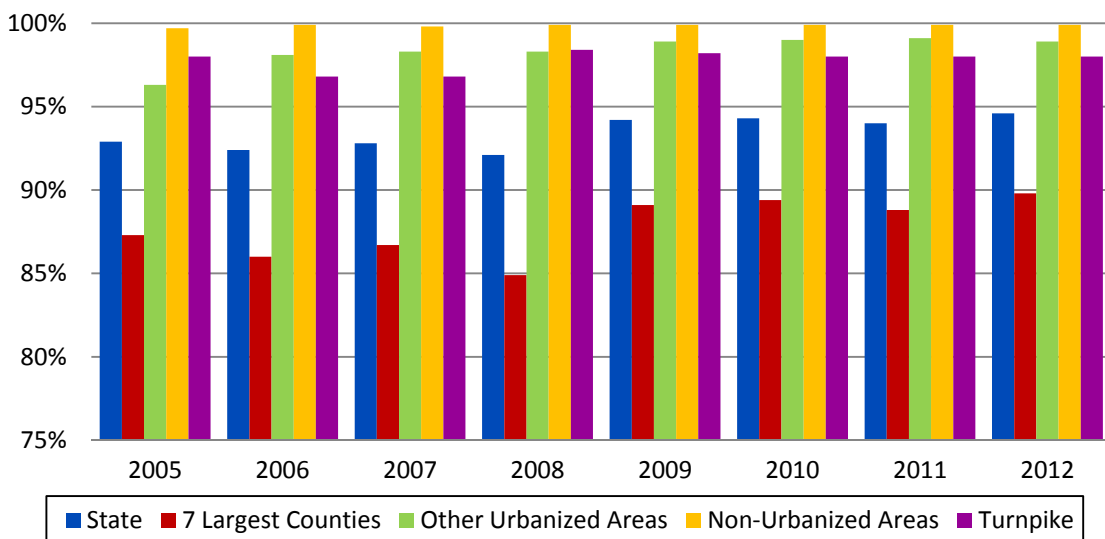
Figure 15: Truck Miles Traveled by Facility



Source: Multimodal Mobility Performance Measures Source Book, FDOT, 2013

Another performance measure identified includes Freight Travel Time Reliability on Freeways. Freight travel time reliability is defined as the percentage of combination truck travel that is greater than 45 mph on freeways. As shown in **Figure 16**, freight travel on Florida’s main highways is fairly reliable, and impacts are felt by both freight and general traffic. The highest level of inconsistency is located in the highly populated seven largest counties of Florida. This applies to state limited access highways during peak travel hours. However, it does not address freight movement to or from the point of origin/destination (the “last mile”). FDOT is beginning to work on a trip-oriented approach.

Figure 16: Freight Travel Time Reliability on Freeways (During Peak Hour/Peak Period)

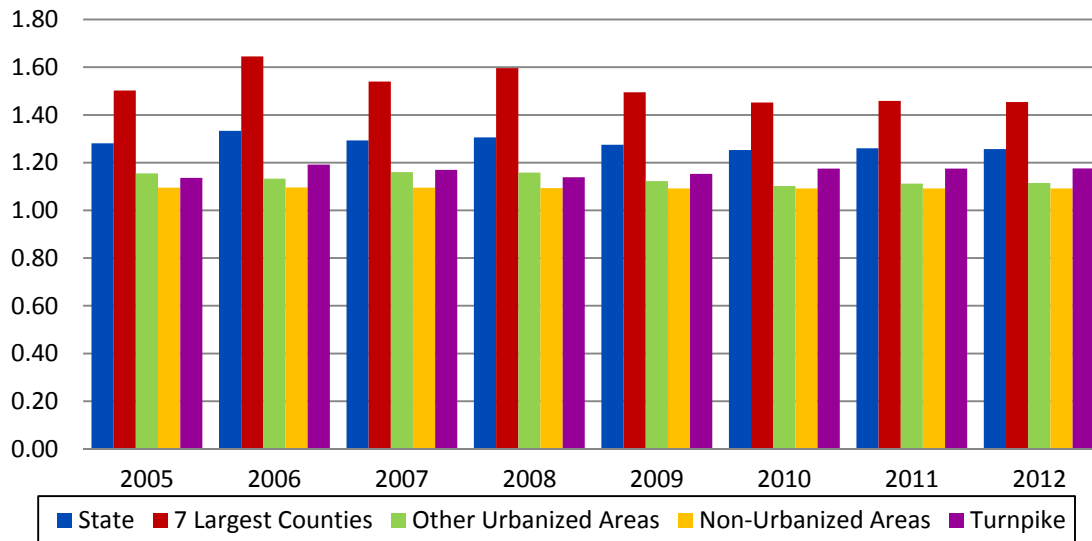


Source: Multimodal Mobility Performance Measures Source Book, FDOT, 2013

As noted in the FMTP Policy Element, the economic success of Florida is inescapably tied to freight activity. Thriving in the global economy is dependent upon efficient freight movements. Global, national, regional, and local markets are very competitive, and Florida must capitalize on its advantages and position itself to compete successfully. The ability to anticipate travel times accurately is incredibly important to achieving a competitive edge.

Travel Time Variability, shown in **Figure 17**, is another important measure for the freight community, as it measures the amount of additional time that may be needed to arrive at a destination. Freight travel time variability is defined as 95th percentile travel time index. Again, the highest level of inconsistency lies in the seven largest counties. However, the variability has gone down from 1.65 in 2006 to 1.45 in 2012. The 1.45 index value refers to a 45% variability over the estimated travel time to a destination, with the ultimate goal of reducing this to as close to 1.0 as possible.

Figure 17: Freight Travel Time Variability (95th Travel Time Index) on Freeways (During Peak Hour/Peak Period)

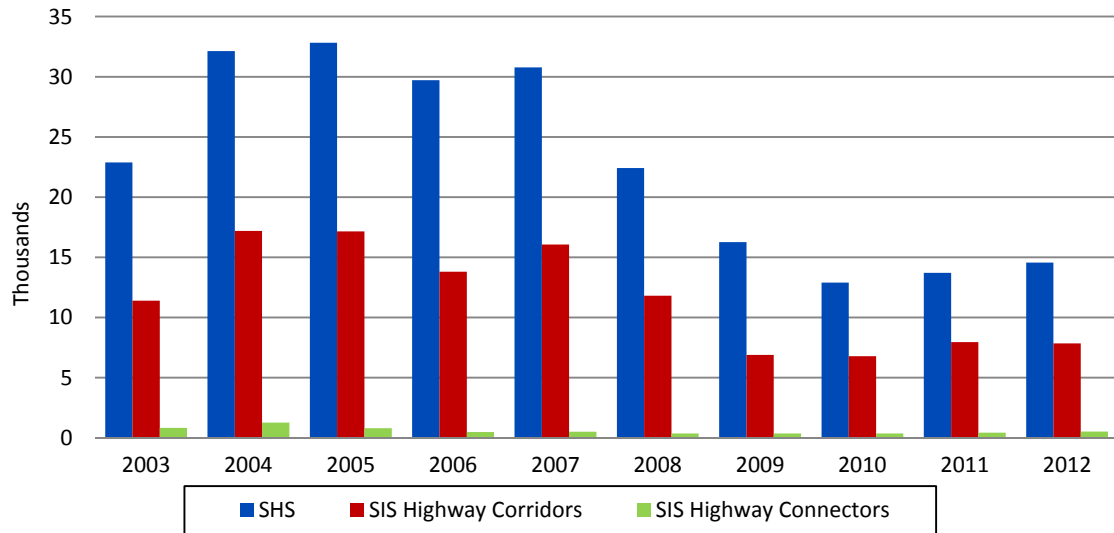


Source: *Multimodal Mobility Performance Measures Source Book, FDOT, 2013*

Delay is another important performance measure for freight, as the cost of delay can be extremely detrimental to business. The Combination Truck Hours of Delay again refers to a power unit (truck tractor) and one or more trailing units (a semitrailer or trailer), and measures how many hours a day these trucks are delayed. Delay is calculated as the product of directional hourly volume and the difference between travel time at “threshold” speeds (at LOS B) and travel time at the average speed.

Figure 18 presents the breakdown of delay by the entire State Highway System, SIS Corridors, and SIS Connectors. The parallel trends suggest delay occurs on both SIS highway corridors and the rest of the system in similar fashion, with less delay on SIS corridors due to less mileage. SIS highway connectors are also included, but represent a much smaller percentage of the system and therefore have much fewer hours of delay. The trend generally follows those shown on truck miles traveled measures, with more delay in the economic peak time around 2004-2007, dropping through 2010, and on a general upward trend currently as the economy improves.

Figure 18: Combination Truck Hours of Delay by Facility



Source: Multimodal Mobility Performance Measures Source Book, FDOT, 2013

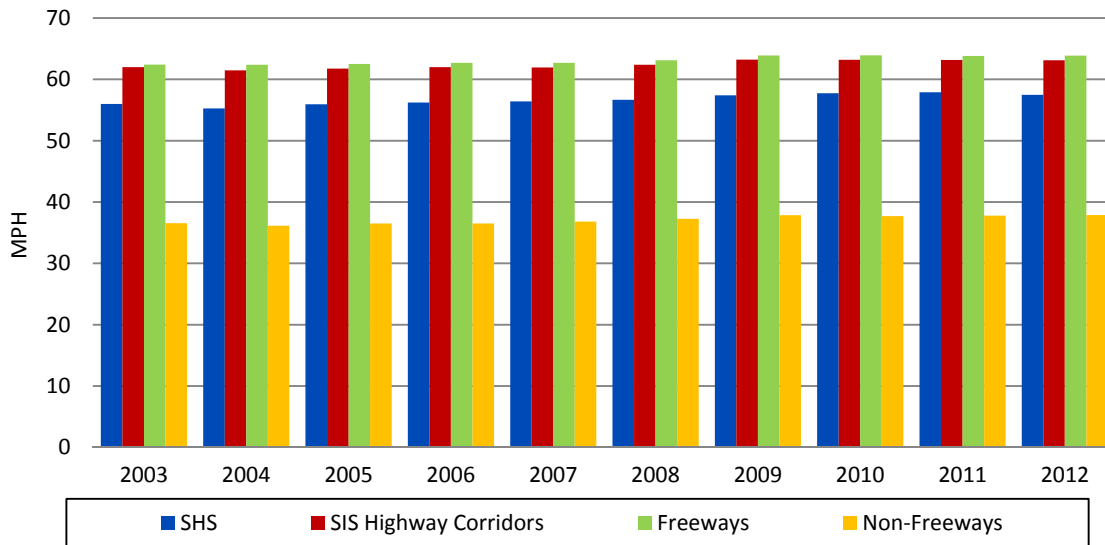
Florida's SIS is a transportation system that was established to efficiently serve the mobility needs of Florida's citizens, businesses, and visitors. **Figure 19** shows that SIS highways are successfully providing a higher average speed for combination trucks than the overall State Highway System.

The average travel speed calculations use the Transportation Research Board's (TRB) fifth edition of the Highway Capacity Manual (HCM 2010)¹⁰ methods and the latest FDOT Generalized Service Volumes Tables for roadways operating below capacity ($v/c \leq 1$)¹¹. Because the Generalized Service Volumes Tables lack speed information for over capacity conditions ($v/c > 1$), speed-volume curves were used to provide improved accuracy in congested regimes. The free flow truck speed is assumed to be equal to the speed limit.

¹⁰ Transportation Research Board Highway Capacity Manual, 2010 <http://hcm.trb.org/>

¹¹ V/c refers to the volume to capacity ratio. Capacity is the maximum number of vehicles that reasonably can be expected to traverse a point or a uniform section of roadway during a given time period under prevailing conditions.

Figure 19: Combination Truck Average Speed by Facility



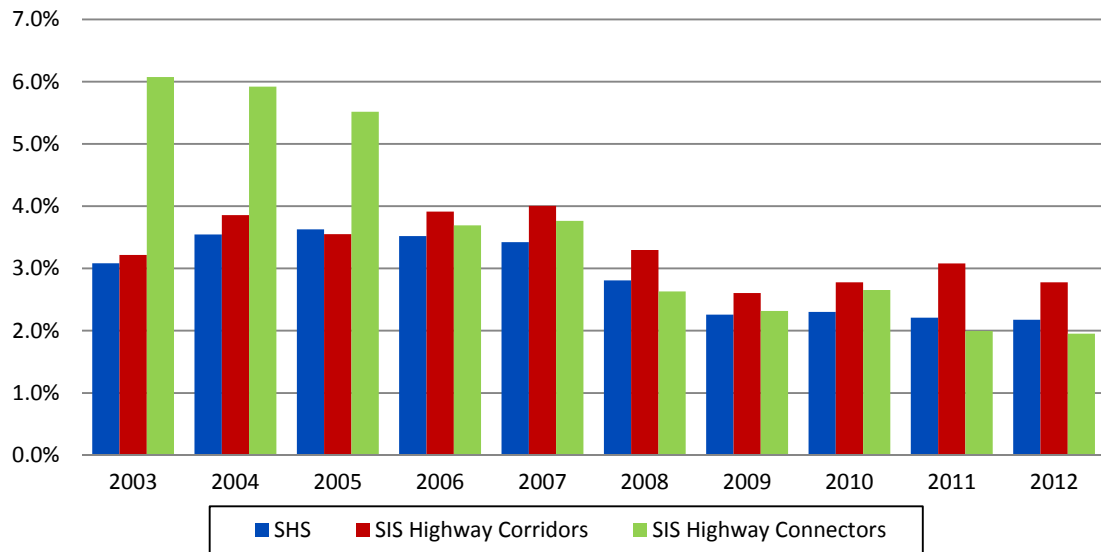
Source: Multimodal Mobility Performance Measures Source Book, FDOT, 2013

As a freeway is defined as a multilane, divided highway with at least two lanes for exclusive use of traffic in each direction and full control of ingress and egress, it naturally allows higher speeds than non-freeways. There has been slow change overall; however, there has been a trend of increased average speeds since 2004. The largest change was SHS, with an increase of 2.2 MPH from 2004 to 2012.

Percent of Miles Severely Congested for SHS and SIS follows the same general trend as Combination Truck Miles Traveled, Truck Miles Traveled, and Combination Truck Hours of Delay. The freight percentage of miles severely congested is determined by summing the centerline miles of roadway operating at LOS F in the peak hour and then dividing by the total highway miles. **Figure 20** shows SHS congestion peaked in 2005 at 3.63%, and decreased to 2.18% in 2012. SIS was similar with a peak in 2007 at 4.00% and decreased to 2.78% in 2012 with a 2.61% low in 2009.

However, congestion on SIS highway connectors has declined significantly since 2003. The total number of miles is much lower, so trends will seem more drastic. It is also possible this decrease could be due to the total number of connector miles increasing when new facilities are added, as well as the state investment in these facilities through the SIS program. This trend may continue based on the creation of the NHS and SIS Roadway Freight Connector Operational “Quick Fix” program. FDOT Systems Planning Office began funding projects on connectors in FY 2012/2013.

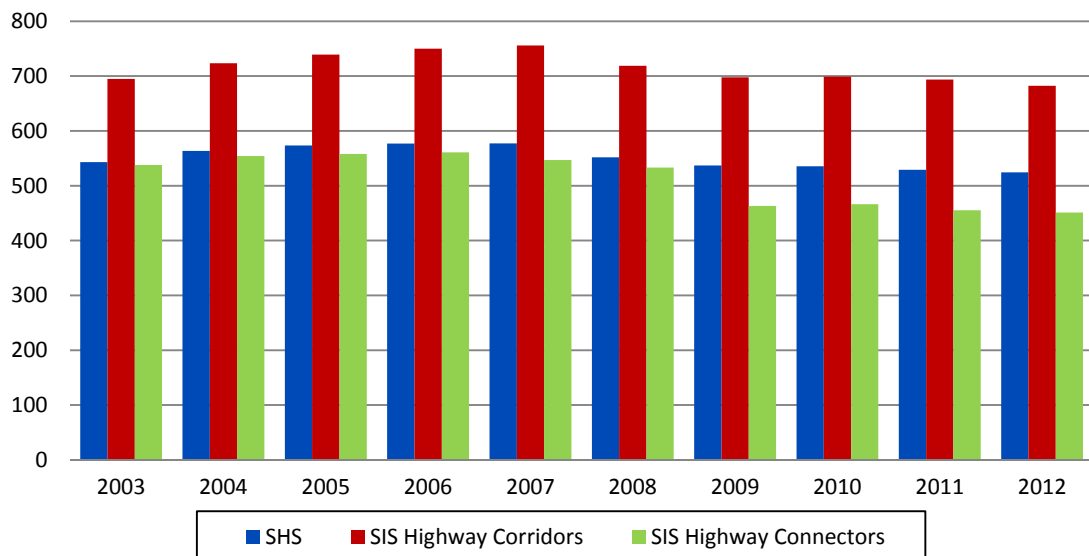
Figure 20: Percent of Miles Severely Congested (Freight) by Facility



Source: Multimodal Mobility Performance Measures Source Book, FDOT, 2013

Figure 21 shows congestion activity measured in a different way. This utilization performance measure describes how much of the transportation system is used and availability left. A lane mile refers to the number of centerline miles times the number of lanes. A four-lane road that is 10 miles long has 40 lane miles. Vehicles per lane mile (freight) is calculated as the summation of each roadway segment’s peak hour vehicle miles traveled divided by the number of lane miles.

Figure 21: Vehicles Per Lane Mile (Freight) by Facility in Peak Hour



Source: Multimodal Mobility Performance Measures Source Book, FDOT, 2013

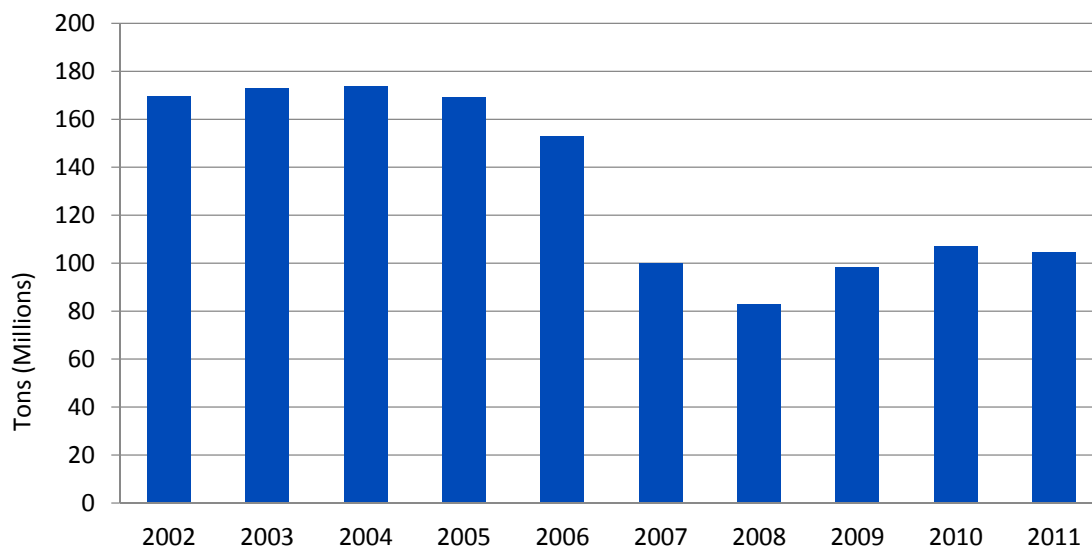
Again, SIS highways are reinforcing the fact that the network is made up of high-priority transportation facilities. The figure demonstrates that SIS highways have carried on average about 160 more vehicles per lane mile than the SHS, and 200 more vehicles than the SIS connectors between 2003 and 2012. That is only per lane mile, so the impacts are greater when you consider many SIS highways are larger multi-lane facilities.

Rail

Florida's transportation system includes roadway, air, rail, sea, spaceports, bus transit, and bicycle and pedestrian facilities. Achieving balance and compatibility of all components is a major part of FDOT's responsibility. To that end, Florida's Mobility Performance Measures (MPM) include all modes of transportation. Freight measures for Rail, Seaports, and Aviation are based on quantity only, with plans for additional measures in the future.

Rail performance is measured in tonnage, including tons of freight carried by rail mode originated and terminated in Florida as shown in **Figure 22**. The trend shows rail tonnage has decreased 38 percent since 2002, with a lowest value of 83 million tons in 2008. The source for this data is the 2011 Waybill from the Surface Transportation Board. This is an annual indicator updated with a lag time of nearly 2 years.

Figure 22: Rail Tonnage



Source: Florida Transportation Indicators, Office of Policy Planning FDOT, 2014

In 2011, Florida ranked #13 in the nation in rail tons originated and #9 in rail tons terminated¹². As shown in **Table 1** earlier in the chapter, rail tonnage inbound is triple the outbound volume and this measure demonstrates Florida's role as a consumer state. With recent focus on balancing goods movement statewide and increasing manufacturing in Florida, perhaps this trend will show changes as data is available for 2012- 2014. As discussed earlier in the chapter, coal and phosphate fertilizers are some of the top commodities moving by rail in the state. Tonnage drops in these commodities account for the reduced rail tonnage overall as compared to previous years. Phosphate tonnage has dropped due to reduced mining, and power plants continue to use less coal as they shift to natural gas. However, the trend toward containers and intermodal connections is continuing to grow, as well as double stacking.

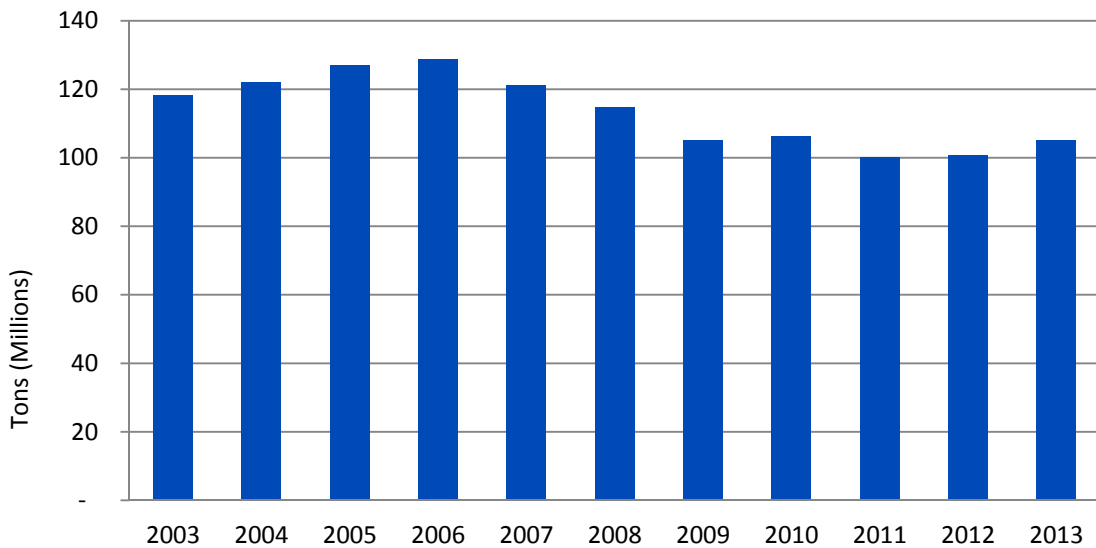
¹² 2011 STB Waybill Sample Analysis, Association of American Railroads, 2014

The Florida rail system is well suited for overhead clearance of double-stacked containers, and may continue to see tonnage increases based on more cargo traveling on the same length of train.

Seaports

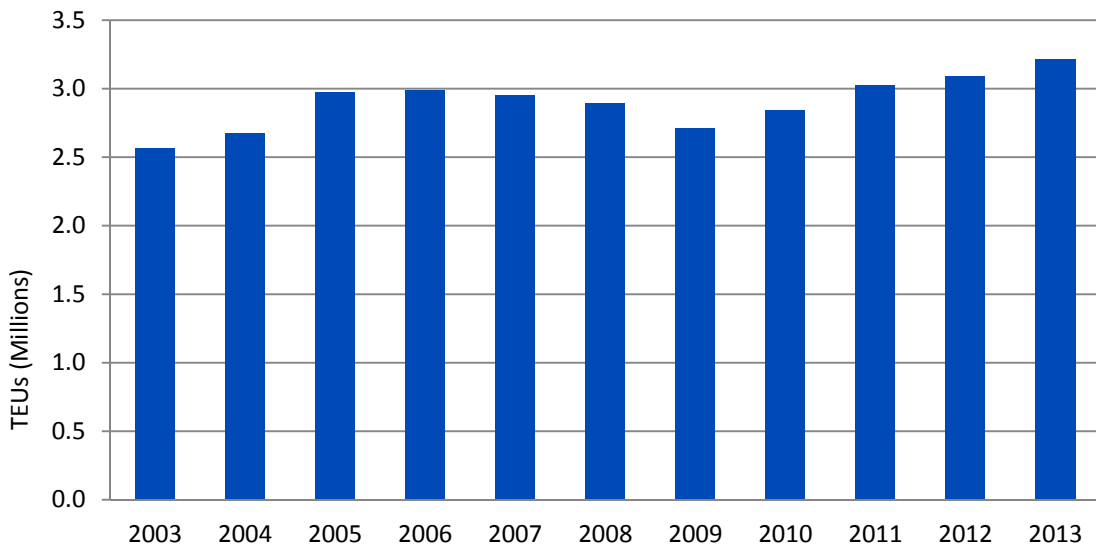
In a similar fashion, FDOT measures seaport performance- in tonnage. Tonnage includes international and domestic waterborne tons of cargo handled at both public and private terminals in port areas of Florida. As shown in **Figure 23**, the total tonnage of waterborne cargo handled by Florida seaports exceeded 105.1 million tons in fiscal year 2012/2013. This was a 3.9 percent increase over the previous year, and reflects a rebound from the general downward trend resulting from the recession, yet still lower than the peak year of 2006. The source of the data is the 2014-2018 Five-Year Seaport Mission Plan, prepared by the Florida Ports Council.

Figure 23: Seaport Tonnage



Source: 2014-2018 Five-Year Seaport Mission Plan, Florida Ports Council, 2014

Figure 24: Seaport Twenty-Foot Equivalent Units (TEUs)



Source: 2014-2018 Five-Year Seaport Mission Plan, Florida Ports Council, 2014

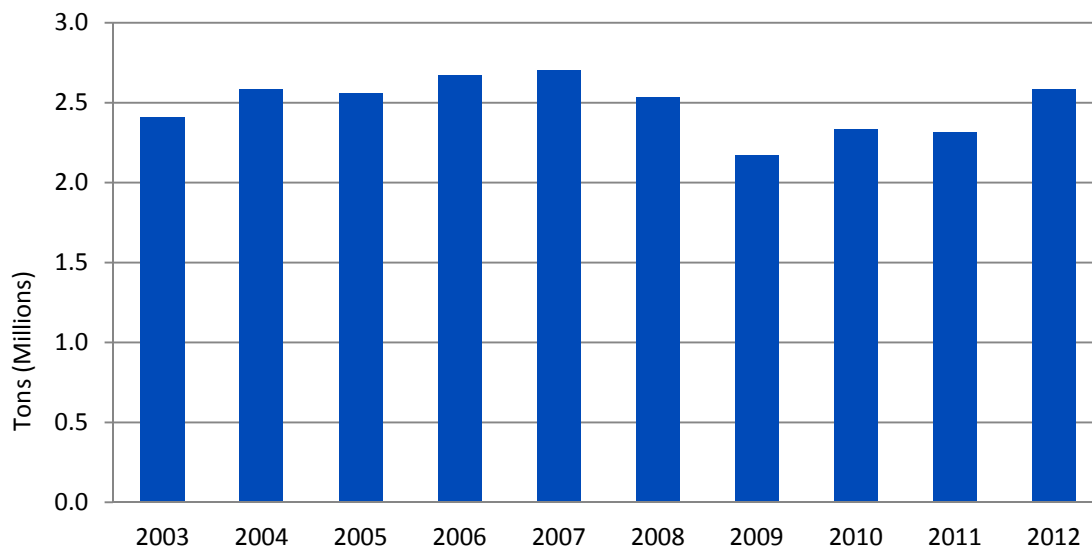
In addition, seaport performance is annually measured by the number of containers moved through a seaport. Twenty-Foot Equivalent Units (TEUs) is the standard measure and refers to the original size of a container. Containers now may be longer than twenty feet and a multiplier is used to calculate how many TEUs a larger container represents. The most frequently used container size is now forty feet. Recent years have reflected a growing trend toward containerization for efficiency and reliability of handling cargo. **Figure 24** shows the highest number of TEUs in fiscal year 2012/2013 at over 3.2 million TEUs. This trend is likely to continue with the growth in intermodal connections and the increasing size of container ships in the wake of the Panama Canal expansion. More details on seaport tonnage and containerized cargo were presented by seaport in the FMTP Policy Element.

Airports

All air cargo landed at public airports is summarized by the Federal Aviation Administration (FAA) in the Air Carrier Activity Information System (ACAIS) Database. FDOT measures performance by annual tonnage, similar to other modes. However, it is important to note that most air cargo is low weight, time sensitive, and/or high value. In the future, FDOT may choose to evaluate freight movements by value as well.

Figure 25 shows a peak in 2007, in a similar timeframe as other modes, at just over 2.7 million tons. Unlike the other modes, there was a relatively large increase in 2012 back up to just under 2.6 million tons. Again, this may represent the time sensitive and/or high value nature of air cargo and be reflected sooner in aviation than other modes as the economy improves.

Figure 25: Aviation Tonnage



Source: *Multimodal Mobility Performance Measures Source Book, FDOT, 2013*

Other Modes

FDOT does not currently have mobility performance measures for spaceports or pipelines. Unlike any other state, spaceports in Florida are part of the transportation network. Space Florida and FDOT work closely together to provide space transportation services and infrastructure in the state. However, the space mode has long been the responsibility of the federal government and is only now entering a commercial phase. FDOT has not seen a need to measure performance of the space mode yet, given the current transition to commercial market, and lack of full maturity shown in other modes.

FDOT also traditionally lacks a role in assessing pipelines performance. While it is considered a mode for the purposes of this plan, energy companies own, operate, and assess the performance of their pipeline systems.

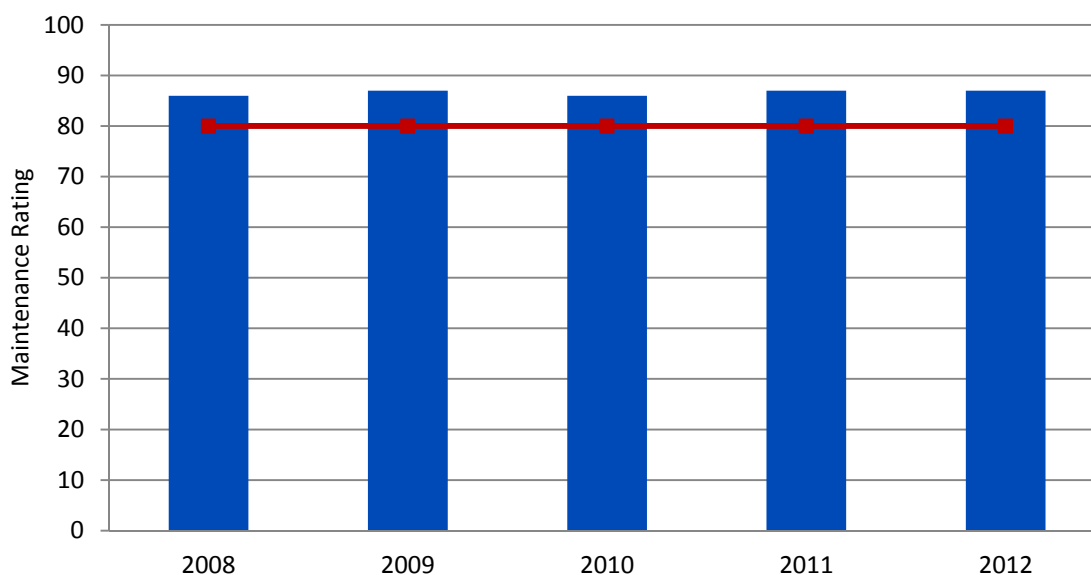
Performance Measures on State of Good Repair

In addition to mobility performance measures, FDOT regularly tracks and reports on maintenance. The measures used and associated objectives include:

- **Maintenance Rating**- Achieve a Maintenance Rating of at least 80 on the State Highway System
- **Pavement Condition**- The percentage of lane miles on the State Highway System having a Pavement Condition Rating of either excellent or good should be greater than or equal to 80
- **Bridges**- The percentage of bridge structures on the State Highway System having a condition rating of either excellent or good should be greater than or equal to 80

Currently, the state is performing well above the objectives on all three measures based on fiscal year 2012 numbers.

Figure 26: Maintenance Rating



Source: Performance Dashboard, FDOT, 2014

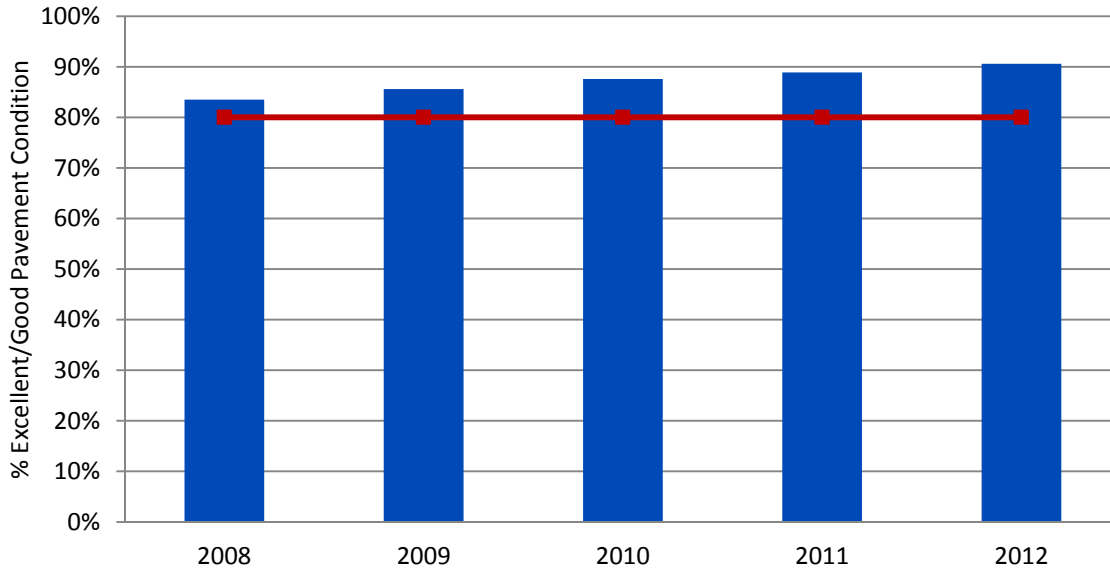
The FDOT Office of Maintenance conducts an annual visual and mechanical evaluation of routine highway maintenance conditions. Highway facilities are broken into Rural Limited Access, Rural Arterial, Urban Limited Access, and Urban Arterial classifications. The evaluation is broken into five elements:

- Roadway
- Roadside
- Traffic Services
- Drainage
- Vegetation/Aesthetics

The Maintenance Rating Program Handbook includes terminology and detailed instructions for data collectors to ensure consistency. Maintaining and operating Florida's transportation system proactively is one of the six 2060 Florida Transportation Plan goals, and FDOT prides itself on maintenance

performance. In 2012, the statewide average and all FDOT districts had a Maintenance Rating of 83 or higher.

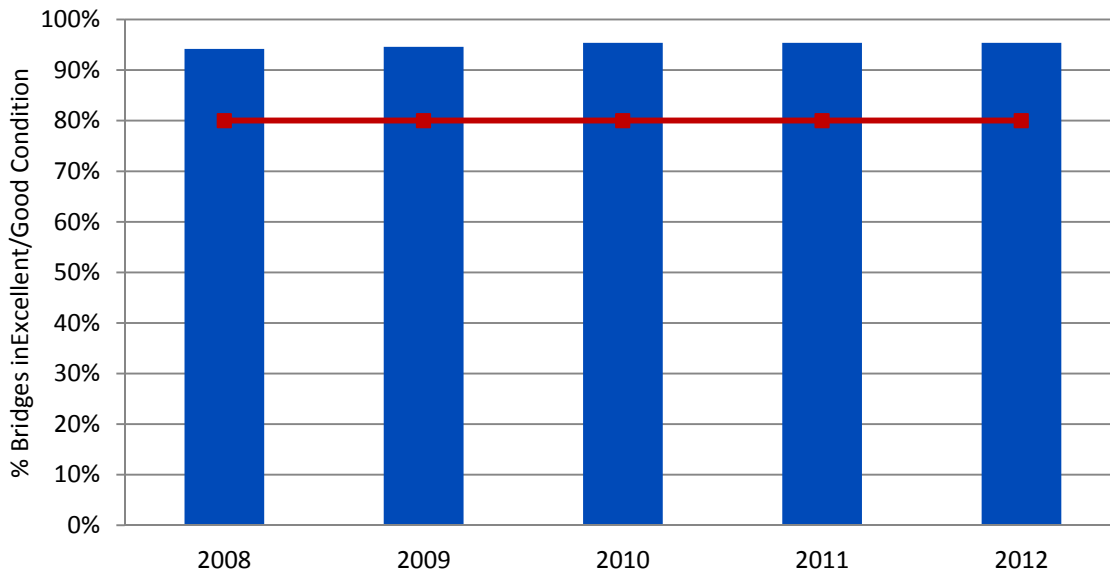
Figure 27: Pavement Condition Rating Excellent or Good



Source: Performance Dashboard, FDOT, 2014

The Pavement Condition unit of the State Materials Office conducts annual surveys of the entire State Highway System in support of the Department's Pavement Management Program. The data collected is used to assess the condition and performance of the State's roadway, as well as to predict future rehabilitation needs. For the survey released in 2013, FDOT rated 18,441 flexible miles and 361 rigid miles for a total of 18,802. Pavement conditions on the State Highway System have improved in the past few years, going from 83.5 up to 90.6 in 2012.

Figure 28: Bridge Condition Rating Excellent or Good



Source: Performance Dashboard, FDOT, 2014

The State of Florida ranks among the lowest in the nation for percent of bridges that are considered "structurally deficient." In Florida, this does not mean a bridge is unsafe. If a bridge is unsafe, we do not hesitate to close it immediately. Bridge conditions of Excellent or Good have been 95.4% since 2010.

Summary of Florida's Freight Performance

Florida has one of the most complete mobility reporting systems in the nation. Overall, the Quantity of Travel measures appear to follow trends in the economy. For example, Combination Truck Miles Traveled and Aviation, Rail, and Seaport Tonnage all peaked around 2005-2007 and experienced lower numbers between 2008 and about 2011. Individual measures achieved varying degrees of resurgence in 2012, which shows travel trends are increasing as the economy recovers.

Quality of Travel Measures are specific to the highway mode on the freight side, however quality performance impacts the entire statewide transportation system. Travel Time Reliability is lowest in the 7 seven largest counties of Florida, and Travel Time Variability is higher in these same congested urban areas. There has been some progress made, but there is room for improvement. The Combination Truck Hours of Delay measure actually followed the economic trends, as well, demonstrating quality of travel will be impacted as use increases without further investment in infrastructure. Combination Truck Average Travel Speed showed little change in the past decade, but that the speeds vary greatly depending on freeway or non-freeway travel.

As stated previously, utilization measures deal with how much of the transportation system is used and availability left. Percent Miles Severely Congested and Vehicles Per Lane Mile are again only relevant to highway. Performance on the Percent Miles Severely Congested measure shows congestion on SIS highway connectors has declined significantly since 2003. SIS highways have carried on average about 160 more Vehicles per Lane Mile than the SHS, and 200 more vehicles than the SIS connectors. The SIS is made up of high-priority transportation facilities, so it is not unexpected to have high utilization of the highway corridors.

As for state of good repair, FDOT takes a proactive maintenance approach which has proven cost-effective. In FY 2013, FDOT contracted for 74 lane miles of capacity improvements, 1,982 lane miles of State Highway System (SHS) resurfacing, and 112 bridge repairs and replacements. Condition ratings continue to exceed bridge, pavement and maintenance standards set by the Florida Legislature.¹³ Many of the top truck commodities discussed earlier in the chapter travel on SHS roads.

In Florida, Maintenance and Preservation are top priorities. Therefore resurfacing and bridge repair and replacement projects are identified and funded in a separate program rather than competing against capacity improvements. FDOT will continue to monitor deterioration and take action as needed to preserve the system.

While Florida has been reporting system performance for over 10 years, there are additional performance measures that would help tell the freight story. Appropriate measures may include dwell times, empty miles, number of landings and takeoffs, number of containers per mile, average length of haul, etc. Many of these measures are not reported due to lack of consistent statewide data or the proprietary nature of private freight data.

¹³ Pocket Guide to Florida Transportation Trends and Conditions, FDOT, 2013
<http://www.dot.state.fl.us/planning/trends/pg13.pdf>

However, FDOT is looking to expand the Multimodal Mobility Performance Measures to include the following in the near future:

- Combination truck tonnage (daily)
- Combination truck ton miles traveled (daily)
- Truck Level of Service (LOS) (peak hour)
- Combination truck backhaul tonnage (daily)
- Aviation Access - Highway adequacy (LOS) (peak hour/peak period)
- Rail Access - Highway adequacy (LOS) (peak hour/peak period)
- Quality Rail Access (yearly)
- Seaport Access - Highway adequacy (LOS) (peak hour/peak period)

The following section will discuss the performance of Florida's freight system in more detail, including issues and bottlenecks by mode.

Issues and Bottlenecks on Florida's Freight System

The SIS has served as Florida's freight network since 2003, because of its strategic nature and investment in high-priority multimodal transportation facilities. FDOT through the SIS program has fostered streamlining freight movement and has been funding freight projects for a long time. While FDOT has had much success with the SIS, FDOT recognizes there are issues and bottlenecks impacting freight movement.

FDOT anticipates some of the issues would eventually lead to the identification of physical bottlenecks, and by addressing these physical bottlenecks would ultimately lead to freight projects to address these bottlenecks. It was also expected there would be some issues identified by modal managers and local operators which are outside of FDOT's sphere of influence or are more of a policy impediment which could not be addressed by a specific physical freight project.

This section identifies the issues and bottlenecks on Florida's freight system. The first step was to develop a comprehensive list of modal specific plans and report statewide freight issues identified in those plans. To ensure the statewide freight issues identified by mode were still valid and relevant, interviews were conducted with the FDOT modal managers. In addition to these interviews, field research and interviews were conducted to identify issues and additional bottlenecks identified by local operators or other agency partners. The goal of this approach was to develop a statewide list of issues and bottlenecks from a statewide management perspective while augmenting and cross referencing the list from a local partner perspective.

Previous modal specific plans were reviewed to identify statewide freight issues in Florida, including the following:

- 2060 Florida Transportation Plan
- Florida's Strategic Intermodal System Strategic Plan (2010)
- SIS Adopted 5-Year Plan (2013)
- SIS Approved 2nd 5-Year Plan (2013)
- SIS 2040 Cost Feasible Plan (2013)
- Florida Aviation System Plan: 2025 (Updated in 2012)
- Florida Air Cargo System Plan Update (2012, 2010, 2006)
- Florida Spaceport System Plan (2013)

- Florida Seaport System Plan (2010)
- Five-Year Florida Seaport Mission Plan (2013)
- State of Florida Ports 2012/2013: The Seaport Effect (2013)
- Port Briefing Paper, Office of Freight, Logistics and Passenger Operations (September 2013)
- Intermodal Logistics Centers: Boosting Florida's Economy Through Freight Logistics (2013)
- Florida Rail System Plan: Policy Element (2009)
- Florida Rail System Plan: Investment Element (2010)
- Florida Freight and Passenger Rail Plan (2006)
- Freight Rail Component of the Florida Rail Plan (2004)
- Florida Trade and Logistics Study (2010)
- MetroPlan Orlando Regional Freight Study 2013: Draft Recommendations and Solutions (2013)
- Tampa Bay Regional Strategic Freight Plan (2012)
- North Florida Freight, Logistics and Intermodal Framework Plan (2012)
- South Florida Regional Freight Plan (2010)

Research was conducted as a first step in framing existing issues, and was followed by meetings with modal managers at FDOT and with industry organization leaders during October 2013. These discussions validated the identified issues and provided insight into additional issues. This input was further augmented from stakeholder feedback during the Freight Leadership Forum in November 2013. To supplement the items identified by modal managers and industry organization leaders, interviews were conducted with local stakeholders and additional agency partners. The sections below summarize the identified issues and bottlenecks organized by mode. Issues and bottlenecks are current unless otherwise mentioned.

Highway

Demand for highway travel by Floridians continues to grow as population increases, particularly in metropolitan areas. The increase of traffic congestion on Florida's streets and highways is a major issue to travelers, administrators, merchants, developers, and to the community at large. Its detrimental impacts of longer journey times, higher fuel consumption, increased emissions of air pollutants, greater transport and other affected costs, and changing investment decisions are increasingly recognized and felt across the state.

The following issues were identified by highway managers, agency partners, freight shipping companies, and motor carriers for highways:

- Need to focus investments on key bottleneck areas to lessen congestion and on interfaces with other modal facilities.
- Need to develop and prioritize funding for projects that improve connectivity and reduce congestion at intermodal hubs.
- Need to support manufacturing and assembly investments to reduce empty backhauling.
- Continue to emphasize relationships with local partners to support freight investments and operational improvements.
- Recent changes in the allowable hours of continuous service have highlighted the lack of safe and adequate rest areas for truckers.
- Increased urbanization and managed lanes throughout the state have created a major issue for commercial vehicle enforcement when attempting to stop large commercial motor vehicles for weight and safety violations.

- Growing traffic on I-75, I-95, US-19 and portions of I-10 increasing travel time, hours of service, and fuel costs.
- Weight regulatory differences for tandem trailers on the Interstate system compared to the Turnpike. Tandem trailer units can operate on the Turnpike System only with a permit when the tractor and first trailer do not exceed 80,000 lbs. and the second trailer does not exceed 67,000 lbs. for a total combined GVW of 147,000 lbs. The maximum trailer length for these units is 48 feet. Normally on the Interstate system, tandem trailer units are limited to a maximum of 28 feet each.

The following sections discuss two specific highway issues highlighted during stakeholder interviews.



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Highway Issue – Truck Parking

Truck parking is a major issue in Florida. Many carriers and other agency partners identified the lack of truck parking as a critical highway issue for supporting freight mobility. The lack of available truck parking spaces has been magnified due to the 11-hour work limit imposed by recently enacted federal hours of service safety regulations.

Many recommendations were offered on best locations for truck parking. For example, one carrier recommended adding rest areas with truck parking somewhere along South I-295 around Jacksonville and another near the southern end of I-295 on I-95 towards St. Augustine, where there are no existing facilities. The Florida Highway Patrol (FHP) recommended making parking a priority in the design of future Interstates or in any changes to existing facilities. This would allow more truck parking and reduce the need for trucks to find spots in large commercial parking lots. One of the issues cited by FHP was these private big-box owners are now calling FHP to make commercial vehicles move from their locations. In addition to impacting limited FHP and other law enforcement resources, having carriers forcibly relocated creates a safety hazard since many drivers have reached the maximum driving time and would then be required to move in violation of Federal Law. It should be noted the truckload carrier segment has the most need for parking. Private sector parking, which includes full service amenities, is more preferred than public service rest areas.

The changes to hours of service laws have put pressure on rest areas that were not designed to meet the amenity needs of overnight truck parking. The Department of Transportation's Commercial Vehicle

Information Systems and Networks (CVISN) Program¹⁴, is looking at a pilot project to count trucks entering and leaving truck stops by use of overhead cameras and then placing that information on available parking on a web portal. The Department is also working with developers of private facilities in underserved areas such as south Florida to ensure adequate truck parking is available.

Highway Issue – Permitted Truck Weight

The permitting of overweight trucks is a complex highway issue which also impacts other modes. For this reason, it is discussed in the Multimodal section.

Trucks carrying a “non-divisible” load such as a sealed container or a heavy generator may be issued an overweight permit by a state for weights above the federally mandated limit. In Florida, a truck carrying a “non-divisible” load on these federal highways may apply for a permit to carry more weight. This regulatory mandate appears to be interpreted differently by various parties. For more information, see the Multimodal section following each of the individual modes.

Highway Bottlenecks

Mitigating congestion and eliminating bottlenecks by managing traffic better, expanding transport capacity, managing travel demands, or modifying land use requires basic information on how, where, why and to what extent congestion and bottlenecks occur. **Figure 29**, displays congestion on the SIS as of 2013, and anticipated congestion for the years 2023 and 2040¹⁵.

Recognizing congestion can be the result of specific bottlenecks, FDOT conducted a study to identify highway bottlenecks on Florida’s strategic network, the SIS. Please note, the Heavily Congested Corridors and the bottleneck study use a different definition of congested. Both provide a unique outlook on the highway bottlenecks faced by Florida trucks daily.

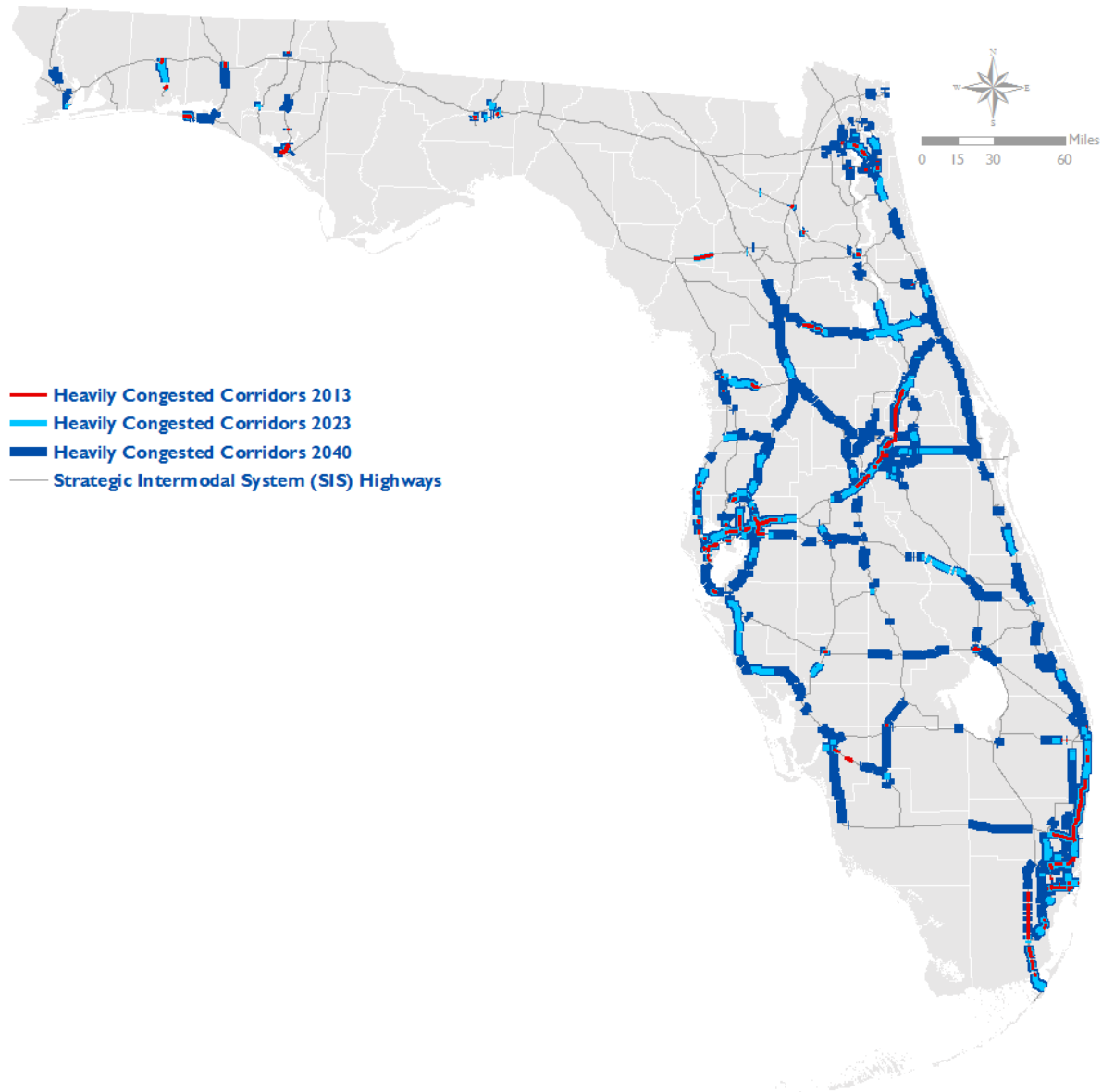


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¹⁴ The Commercial Vehicle Information Systems and Networks (CVISN) program is a key component of the Federal Motor Carrier Safety Administration's (FMCSA's) drive to improve commercial motor vehicle safety. For more information: <http://www.fmcsa.dot.gov/facts-research/cvisn/index.htm>.

¹⁵ Please see notes for details on calculation and facilities included http://www.dot.state.fl.us/planning/systems/programs/mspi/pdf/Congested_Corridors_Dec_2013.pdf

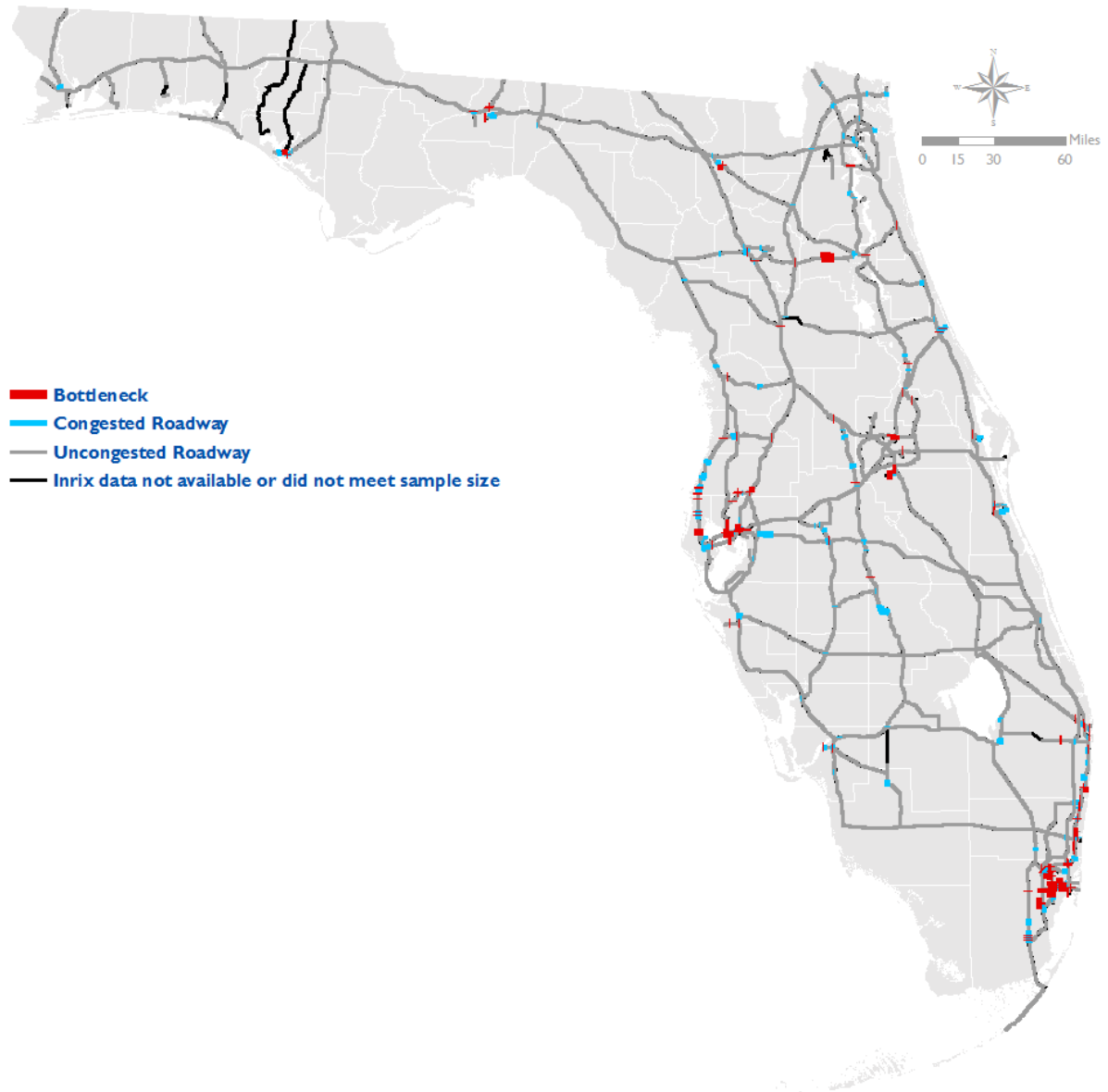
Figure 29: Current and Future Heavily Congested Corridors



Source: *Current and Future Heavily Congested Corridors, FDOT, December 2013.*

The bottleneck study used vehicle probe data and travel time reliability measures. The vehicle probe data, obtained from INRIX, provided travel speed on roadways for an entire year at five-minute interval. Travel time reliability is a measure of consistency in travel time and is being encouraged by FHWA as a measure for managing and operating transportation systems. **Figure 30** illustrates the bottlenecks and congested corridors on the SIS across Florida.

Figure 30: Highway Bottlenecks and Congested Corridors on the SIS



Source: *Bottlenecks on Florida SIS, FDOT, February 2013.*

The top bottlenecks at the statewide and districtwide level were also identified as part of the Bottlenecks on Florida SIS study. **Table 3** summarizes the Top 20 Statewide SIS Highway Bottlenecks for the year 2011. As shown in the previous figure, there are hundreds of bottlenecks identified across the state. However, it was observed that a majority of the top 20 bottlenecks are located in the heavily urbanized areas and especially in the Miami-Dade area. These conclusions are very similar to those discussed in the reliability and variability performance measures in **Figures 16 and 17**.

The study did not differentiate between freight and passenger, however all of the segments below are SIS highways and not connectors associated with passenger-only hubs. As a majority of Florida’s goods movement occurs on the SIS, these can all be labeled as bottlenecks on key freight routes.

Table 3: Top 20 Statewide SIS Highway Bottlenecks¹⁶

Florida Rank 2011	County	District	Road	Segment	Length
1	Miami-Dade	6	FL Turnpike NB	at Kendall Drive	0.86 mi
2	Hillsborough	7	I-275 NB	Floribraska Avenue to 26th Avenue	0.23 mi
3	Miami-Dade	6	FL Turnpike SB	FL 836 to Coral Way	1.86 mi
4	Miami-Dade	6	FL 826 NB	Coral Way to FL 836	2.14 mi
5	Hillsborough	7	I-4 WB	15th Street to I-275	0.86 mi
6	Miami-Dade	6	FL 826 SB	at Miami Lakes Drive	0.47 mi
7	Miami-Dade	6	FL 836 WB	at 17th Avenue	0.52 mi
8	Hillsborough	7	I-275 NB	Howard Frankland Bridge to West Shore Boulevard	2.63 mi
9	Hillsborough	7	I-275 SB	I-4 to N Tampa Street	0.55 mi
10	Orange	5	I-4 NB	Michigan Street to Robinson Street	2.61 mi
11	Miami-Dade	6	FL 826 SB	NW 58th Street to NW 25th Street	1.82 mi
12	Miami-Dade	6	FL 836 WB	I-95 to NW 12th Avenue	0.2 mi
13	Miami-Dade	6	FL 826 SB	at SW 24th Street	0.23 mi
14	Miami-Dade	6	FL Turnpike SB	at I-95	0.77 mi
15	Miami-Dade	6	Airport Expressway WB	Unity Boulevard to North River Drive	0.99 mi
16	Miami-Dade	6	I-95 SB	at FL Turnpike	0.15 mi
17	Miami-Dade	6	I-75 EB	at Palmetto Expressway	0.51 mi
18	Miami-Dade	6	FL 826 SB	at W 68th Street	0.61 mi
19	Miami-Dade	6	FL 836 EB	at NW 72nd Avenue	0.25 mi
20	Miami-Dade	6	FL 826 SB	SW 24th Street to SW 40th Street	0.88 mi

Source: *Bottlenecks on Florida SIS, Systems Planning Office, FDOT, 2013*

Phase II of the SIS Bottleneck study is currently underway to review the top bottlenecks identified in the Phase I of the study. This study is also reviewing the vehicle probe data from FHWA's National Performance Management Research Data Set (NPMRDS) to develop a methodology to identify additional freight related bottlenecks along SIS facilities.

¹⁶ These are not the only top statewide SIS highway bottlenecks, as there are other methods used to identify needs. Table is based on the study *Bottlenecks on Florida SIS, Systems Planning Office, FDOT, 2013*
<http://www.dot.state.fl.us/planning/systems/programs/mspi/brochures/default.shtm>

In addition to the bottlenecks identified in the FDOT study, the following bottlenecks were highlighted through direct contacts with operational and logistic partners:

- Roadways surrounding Port Everglades during peak business hours
- I-110 route to the Port of Pensacola because of major restrictions for overweight vehicles creating the need for more congested secondary roadway routing and some of the downtown roads are restricted due to the mix of vehicular and rail traffic
- The I-4 Westbound Interchange at I-275 North and Southbound in Tampa
- Congestion along I-95 in Dade, Broward & Palm Beach counties
- Morning peak congestion on all entrance and off ramps along I-295 in Jacksonville
- I-75 north of the Turnpike level of service is below acceptable standards

Rail

In 2011, Florida's freight railroads moved nearly 104.6 million tons of freight, and Florida originated 754,800 rail carloads and terminated 1,164,700 carloads. This represents a 1.2% increase in originated rail car loads from 2010, and a 0.8% decrease in terminated rail car loads. Florida ranked 13th and 9th among states, respectively, for originating and terminating tonnage.¹⁷

The following issues were identified by modal managers and stakeholder interviews for rail:

- Connectivity to major modal hubs across the state needs to be improved
- Investments are needed to modernize facilities to maintain market competitiveness and to meet anticipated demand, including track upgrades to accommodate 286,000-pound rail cars
- Investments are needed to expand capacity, including preservation of existing capacity, evaluation of abandoned corridors for future needs, development of new capacity in under-served areas of the state and in designated Areas of Critical Economic Concern¹⁸, expansion of capacity in key corridors through double-track, siding, and crossover projects, and protection of encroachment on rail corridors and terminals
- Investments are needed for maintenance and safety improvements, including separation of at-grade rail crossings, bridge rehabilitation, and signal upgrades
- Operational improvements are needed to improve rail yard operations, and to eliminate checkpoints and improve corridor operations, particularly where rail interacts with other modes
- Need to address the growing gap between investment needs and available funds, in part by identification of new and innovative revenue sources and financial tools, including public private partnerships (P3s) when in the public interest
- Need to promote public awareness for rail investment and operational needs
- The younger generation of rail workers is inexperienced, and additional training and public awareness of good job opportunities is needed
- New or increased use of passenger rail can cause bottlenecks for freight rail due to limited track availability

¹⁷ Association of American Railroads data, Pocket Guide to Florida Transportation Trends and Conditions, Office of Policy Planning, FDOT, 2013

¹⁸ 2014 Florida CS/HB 7023 replaced the term "rural area of critical economic concern" with "rural area of opportunity" throughout the various sections of the Florida Statutes.

- Communities wanting to reuse historic rail facilities for trails can create bottlenecks for potential or future rail served business
- Developing intermodal logistics centers (ILCs) often do not adequately communicate with rail companies on factors associated with rail connections to their properties
- Rail conversion to alternative fuels such as liquid natural gas (LNG) powered locomotives could be expedited with legislative funding
- Quiet zones pose considerable impacts for rail companies, and there are educational needs to make sure communities understand all effects

Selected rail issues are discussed in more detail below.

Rail Issue- Connectivity to Modal Hubs

With the growing popularity of containers and the expansion of the Panama Canal, it is more important than ever to have good connections between hubs on Florida's freight system. Highways connections are often the only choice, yet rail will increase the ability to handle cargo and enhance the competitive position for many hubs. Governor Scott has recently committed millions toward new Intermodal Container Transfer Facilities (ICTFs) at JAXPORT and Port Everglades. Projects such as these restore or provide new on-dock rail service to terminals and facilitate the direct transfer of containers between ships and trains, speeding up the shipment process and reducing costs. While much has been accomplished on this issue lately, there are additional needs at remaining seaports, airports, and the fast-growing market of ILCs.

Rail Issue- Modernize

In 1995, 286,000-pound cars were introduced to replace the 263,000-pound cars which had been used since 1963. Rail cars can technically remain in revenue service up to 50 years according to the Association of American Railroads (AAR) and Federal Railroad Administration (FRA), however most rail cars are retired for economic reasons long before. As the pre-1995 rail cars are replaced with new heavier freight cars, track must be upgraded to accommodate more wear and tear. If lines are not upgraded, shippers lose the benefits of larger rail cars and lines may be abandoned if the investment needs are too great. This issue significantly impacts short lines who often do not have the funding for large scale investments. In addition, continuing to maintain older facilities may mean slowdowns and bottlenecks. FDOT has made significant progress addressing this issue with SIS funding.

Rail Issue- Expand Capacity

In addition to needs around modal hubs, there are opportunities for growth in double-tracking and sidings. With recent investments in passenger rail such as SunRail and All Aboard Florida, other rail corridors often need considerable upgrades to accommodate the diverted freight traffic. Traditionally, when the state partners with rail companies to help to fund needed capacity investments, rail companies are able to use their own funding for research which improves overall safety and efficiency, as well as to determine where additional capacity may be needed in the future.

Rail Issue- Separation of At-Grade Crossings

As of March 2014, FDOT has 3,714 Public Active and Inactive at-grade crossings in the database, which presented both safety and mobility challenges. This database includes both vehicular and pedestrian crossings. Sixty-five highway-rail at-grade crossing collisions occurred in Florida in 2013; the 9th most for any state in the nation¹⁹. The Transportation Research Board researched the Comprehensive Costs of

¹⁹ Based on Preliminary 2013 Federal Railroad Administration Statistics , Operation Lifesaver, 2014

Highway-Rail At-Grade Crossing Crashes in NCHRP Report 755, and concluded that in addition to the costs associated with casualties and damage to infrastructure, there are costs associated with operating expenses and supply chain costs for delayed or diverted vehicles, as well as opportunity costs for inventory and equipment unable to earn revenue. These secondary costs can be in the range of \$100,000 for delays lasting several hours.²⁰ However, the cost associated with each crossing can be between \$40-100 million depending on the surrounding area. As it can be very expensive, when economically feasible, it could be beneficial to separate at-grade crossings to reduce safety and mobility issues. Impacts to surrounding land uses are an additional factor to consider.

Rail Issue- Quiet Zones

Incorporating quiet zones in urban areas can be desirable to reduce noise in a community, but instituting quiet zones can also contribute to increased safety impacts because it often takes more than a mile to stop a train and blowing a locomotive's horn is a safety measure. It is important to balance noise impacts with safety concerns.

Local governments often have trouble funding the capital improvements necessary to apply for quiet zones, yet agreements between rail companies and local governments generally name the city or county as responsible. The 2014 Florida Legislature identified this as a genuine need, and set aside \$10 million toward quiet zones requested by local agencies to address the use of locomotive horns at highway-rail grade crossings. See **Chapter 6** for more information on this funding source. Tri-Rail has done extensive work with quiet zones and more information can be found at <http://www.tri-railcoastallink.com/quiet-zones.html>.

Rail Bottlenecks

Of the 2,793 miles of rail lines in Florida, all but 143 miles are owned by 15 freight railroads, and the entire track is controlled by them. Unlike highways, seaports, and airports of which a majority are owned by a public entity, almost the entire rail network of Florida is privately owned. This presents a unique set of concerns, as private companies often worry about proprietary information and only share a subset of their overall needs.

Projects associated with addressing existing or potential future bottlenecks are submitted to FDOT directly. These are most often in the form of siding construction and bridge rehabilitation requests from rail companies and are maintained by the Rail and Motor Carrier Office.



seefloridago.org

²⁰ NCHRP Report 755, Transportation Research Board, 2013

Seaports

Florida has 15 public deepwater seaports with opportunities and challenges reflective of their geography, local resources, and service models. Yet, collectively, they serve as a network of transportation hubs linking global markets, national, and statewide markets; facilitating the movement of goods and passengers to final destinations. Florida's seaports line both the Gulf of Mexico and the Atlantic Ocean. According to the U.S. Census Bureau, waterborne commerce flowing through Florida's seaports was valued at \$85.9 billion in 2013, continuing its prominence as a major component of Florida's economy²¹. National and global competition continues to drive seaport expansion.

In addition, the expansion of the Panama Canal, expected to be completed by 2016, will reshape trade flows world-wide. Widening of the Panama Canal will remove a major trade bottleneck between Asia and the U.S. Atlantic Coast. Global competition and shifts in production could increase east-west trade through the Suez Canal as manufacturing shifts from China to the Indian subcontinent.²² During discussions and interviews with the Florida seaport directors and staff, they also have identified issues and physical bottlenecks that impede their growth and job creation opportunities.

Seaport Issue - Funding

Funding is essential for the viability of any seaport, and as such, there are many different facets to be considered when analyzing this topic. Infrastructure needs, maintenance dredging, and channel deepening are the three most often cited, and most critical funding issues.

Infrastructure Funding

Every seaport discussed their significant impact on the economic well-being of their local community and, collectively, on the state of Florida. The combined Five-Year Capital Improvement Programs (CIPs) for the seaports from FY2013/14 through FY2017/18 totals \$4.0 billion. The number one issue raised in the interviews was the need for additional funding for freight and cruise infrastructure investments, with the seaports citing the difficulty in amassing necessary capital for these projects.

Much attention and focus has been given to those projects with a positive return on investment (ROI) by state agency evaluators, local government boards, chambers of commerce, and seaports themselves. Upgrading old or outmoded wharf structures, replacing older equipment such as cranes, and redesigning more efficient entry gates, terminals, and traffic patterns often have taken a back seat to growth and expansion. In many cases, the need to meet market demand for new construction must be weighed against the reality and cost of rehabilitating and replacing aging or inefficient infrastructure to preserve current business capabilities. Many seaports, including the Port of Jacksonville, Port Manatee, Port of Palm Beach, and Port Canaveral currently must undergo berth rehabilitation projects. This is a critical issue not only because it comes at such a high capital cost, but because it also displaces valuable resources.

Dredging

Harbor and channel depth are vital to the viability of a seaport and present two different challenges to the business of a seaport. One is to maintain current United States Army Corps of Engineers (USACE) authorized depth and the other is to dredge to a new depth to offer larger ships the economies of scale to support a profitable and efficient movement of goods and passengers. In both circumstances, funding

²¹ 2013 State Imports and Exports, U.S. International Trade Data, U.S. Census, 2014

²² Florida Trade and Logistics Study 2.0 (TL2.0), Florida Chamber Foundation; <http://www.flchamber.com/wp-content/uploads/MadeForTrade-FINAL-Single-1.pdf>, 2013

plays a critical role. Funding remains the primary concern, but simplifying and shortening the federal, state, and local review and approval process is paramount.

Maintenance Dredging

Though the extent of maintenance dredging varies from seaport to seaport in Florida, several common issues are components of any maintenance dredging discussion.

- Federal funding levels for maintenance dredging of federal harbors and channels have been severely impacted by reduced budgets for the USACE. This also impacts the frequency of dredging.
 - Funding for maintenance dredging comes from the federal Harbor Maintenance Tax (HMT), imposed on shippers based on the value of goods being shipped through U.S. ports. The tax is placed in the Harbor Maintenance Trust Fund (HMTF) to be used for maintenance dredging of federal navigational channels. The U.S. Supreme Court declared the collection of the tax on the value of exports unconstitutional in 1998; therefore, the tax is only collected on imports.
 - HMT revenues are about \$1.6 billion per year, with expenditures averaging \$850 - \$900 million per year. This represents only a portion of collected funds expended for the intended purpose annually. This has reflected a previous Congressional determination to withhold funding to the USACE for maintenance dredging creating a tremendous backlog and affecting the frequency of maintenance projects nationwide and in Florida.
 - Addressing this issue, the Federal Water Resources and Reform Development Act (WRRDA) was signed into law on June 10, 2014, and includes provisions to ensure all surplus funds in the Harbor Maintenance Trust Fund will be spent on port maintenance.
- The USACE requires a local match for maintenance dredging. Florida seaports, regardless of size or bottom line, have issues with the availability of matching funds for maintenance dredging.
- An additional issue related to dredging is the availability/acquisition of dredged material disposal sites both offshore and upland and the costs associated with the disposal and/or beneficial use of this material.
- A related issue for approval of maintenance dredging is a metric used by the USACE to determine if a port qualifies for regular maintenance. Currently, the requirement is that a port must handle 1 million tons of cargo annually to qualify. Several Florida seaports do not reach this threshold and others are very concerned that this level will increase and prevent them from qualifying for scheduled maintenance projects. This would place the entire burden on the local seaport to fund maintenance projects.

New Construction Dredging

Shifting international trade routes have been affected by the expansion of the Panama Canal, growth in Latin America and new Asian Routes through the Suez Canal, and other global issues. These factors have spurred the competition to service the new post Panamax ships and have driven U.S. East Coast seaports to begin the arduous process to widen and deepen their harbors and channels. In addition to the new post Panamax ships, Maersk has developed the new Triple-E Class which is the world's largest container

vessel.²³ It has a record-breaking capacity of 18,000 TEU (Twenty-foot equivalent units) containers and carries 11% more cargo than the world's current largest freight ship, yet is only 400 meters long. However, the impact of the Triple-E to Florida ports is unknown. The Triple E is currently too big for any port in the United States and is unable to fit through the Panama Canal even after its \$5.25 billion expansion.²⁴ The Triple-E will connect Asia to Europe utilizing the Suez Canal, but there are currently no plans to serve US ports. However, many U.S. ports may try to expand to accommodate the new Triple-E container ship.

Many of the same issues with maintenance dredging also affect new construction dredging at a much greater magnitude such as:

- The immense challenge of the permitting and approval process and the accompanying significant cost of funding any approved Florida deepening project
- Local required matching share which often far exceeds a seaport's available capital investment revenues and financing mechanisms
- Lack of federal dredge authorization and appropriation legislation²⁵
- Availability of other state and local funding streams
- The availability and cost of acquisition of offshore/upland dredged material disposal sites

Match Requirements

For most seaports, matching requirements for both federal and state funding programs are particularly difficult, but for many smaller seaports the situation is extremely challenging. Comments included creating a process that for specific types of projects or levels of seaport annual revenues, the match could be less or the timing restructured – even on a case-by-case basis. Many of the seaports identified the cost of dredging not only harbors and channels in partnership with the federal government, but the non-federal responsibility of maintaining adequate depths for berths to match federal navigational authorizations as significant costs centers.

Public Private Partnerships – P3s

With the increasing demand for infrastructure investment, the seaports continue to explore the value of partnering with the private sector to build and operate terminal facilities. Port Manatee is focusing its efforts specifically on this type of business partnerships for all future developments. Opening in 2014, Port Miami's tunnel project was a P3 project. Efforts to develop agreements that balance the public nature of a seaport with private sector interests remain a relevant issue of interest and concern. Assistance for marketing Florida's smaller seaports with potential customers also was mentioned as an issue.



²³ <http://www.maersk.com/innovation/leadingthroughinnovation/pages/buildingtheworldsbiggestship.aspx>

²⁴ <http://edition.cnn.com/2013/10/04/business/dawn-super-port-mammoth-ships/>

²⁵ Addressing this issue, the Federal Water Resources and Reform Development Act (WRRDA) was signed into law on June 10, 2014, and includes authorization to dredge Florida seaports.

Seaport Issue - Regulatory

When discussing regulatory issues with the Florida seaports, it was not surprising that many federal and state agencies were called partners and great advocates for the industry while others were listed as hindrances. The U.S. Coast Guard (USCG) serves as the Captain of the Port and is the most vital partner with every Florida seaports. Whether updating port facility security plans, providing safe aids to navigation, coordinating joint operations training, guiding Port Security Grants Program funding applications to the Federal Emergency Management Agency, or providing waterway security for freight and cruise vessels entering and leaving the state's busy harbors; the USCG is an ever present asset. No concerns with the USCG were presented during the fifteen port interviews.

U.S. Customs and Border Protection (CBP) facilitated approximately \$2 trillion in trade in 2013, while enforcing U.S. trade laws that protect the economy, the health, and the safety of the American people. The CBP accomplishes this through close partnerships with the maritime community to facilitate the flow of legitimate trade and travel. During the interviews, some of the seaports discussed the professional and effective partnership they had with their CBP agents and team members. However, some seaports mentioned difficulties in meeting peak service hours and the ability to have adequate staff on-hand when needed, especially on weekends. The costs seaports incur to develop appropriate processing facilities, office space, and equipment for CBP has become a difficulty for seaports with constrained budgets. Smaller sized terminals are requesting scalable specifications for inspection offices and facilities based on seaport-specific, relevant passenger or freight throughput.

The Environmental Protection Agency (EPA) has worked with seaports in the past through a number of efforts, including the Diesel Emissions Reduction Act (DERA) clean diesel grants program and the SmartWay Drayage Program. Despite gains, the job is not yet done. EPA's new initiative looks at seaports as unique places with complex needs and opportunities. Through its Ports Initiative, EPA explores effectively partnering with port stakeholders to identify opportunities and find solutions that create more sustainable port systems such as:

- Encouraging environmental progress at ports and reducing climate risk
- Supporting operational and technological improvements to increase efficiency
- Improving community health and air quality
- Encouraging sustainable economic development that supports the economy and jobs

The Florida Department of Environmental Protection (FDEP) continues to work closely with seaports through the Joint Coastal Permitting initiative by implementing concurrent processing of applications for coastal construction permits, environmental resource permits and sovereign submerged lands authorizations. These permits and authorizations, which were previously issued separately, and by different state agencies, have now been consolidated into a "joint coastal permit" or JCP. The consolidation of these reviews into a single program has helped ensure that reviews are conducted in a timely manner. A copy of each permit application is forwarded to the USACE for separate processing of the federal dredge and fill permit, if necessary. Continuing a positive and efficient relationship with FDEP is critical.

National Marine Fisheries Service (NMFS) is a department of National Oceanic and Atmospheric Administration (NOAA) and is devoted to the protection and preservation of marine resources. NMFS provides a vital service to Florida's sport and commercial fishing industry and its marine habitat by ensuring marine species are not negatively impacted by existing and new development. Interviews with several seaports conveyed challenges in prudent review times on projects where NMFS was involved.

Port Canaveral has been working closely with the Department of Defense (DOD) and National Aeronautics and Space Administration (NASA) on projects in close proximity to the Port Terminal. The seaport has been planning to add a freight rail connection to the FEC mainline west of the seaport and some of the route options need access to Federal land requiring assistance from DOD and NASA. During the seaport interviews, many seaports working with the DOD expressed a challenge with change of base command at facilities that may cause difficulties in ongoing project negotiations. Projects nearing completion of the due diligence phase under one base commander may have to start the process over under a new base commander.

Port Miami and Port Everglades discussed the U.S. Department of Agriculture (USDA) pilot program for the importation of grapes and blueberries from Chile and Uruguay. With cooperation from Florida's Department of Agriculture and Consumer Services, the pilot program provides the opportunity for the fumigation and inspection of these imports for pests to take place in South Florida, rather than being shipped first to the USDA-authorized, climate-controlled fumigation facilities established in the Philadelphia area and then trucked or railed to Florida for distribution. This is a potential new line of imports and, if successful, may not only provide a fresher product to the consumer, but increase the market share as well as the types of imported fruits and vegetables.

Under the International Convention for the Prevention of Pollution from Ships (MARPOL), the designation of an Emission Control Area, or ECA, was initiated in 2012, bringing in stricter controls on emissions of sulphur oxide (SO_x), nitrogen oxide (NO_x) and particulate matter for ships trading in North America. Florida's seaports are impacted due to the amount of North South trade with the Caribbean countries and those around the Gulf of Mexico. The ECA requires fuel sulphur content for ships operating within 200 miles of the North American coastline to be no more than 1 percent, with further reductions to no more than 0.1 percent in 2015. To adhere to the ECA requirement ships will have to burn lower-sulphur fuel when entering and exiting the ECA at a much higher cost. Ship rotations will be implemented to minimize the impact of higher steaming costs and may affect the economies of scale for port calls. In addition, the use of LNG/CNG is gaining momentum as newer ships are shifting to cleaner fuels.

Seaport Issue - Security

Seaports are facing the serious competitive reality of aging infrastructure and must focus an increasing percentage of capital investment dollars on rehabilitation projects, including security projects. After nearly 15 years, seaports are reassessing state and federal security initiatives and their investments in security infrastructure. Seaports must remain vigilant in protecting the public and their users by providing safe and secure facilities. While this is still being accomplished, it is becoming more difficult with the diminishing priority and focus on funding seaport security projects. Terminals must have committed funds to maintain existing security infrastructure, update security technology, develop new security infrastructure, and continue event preparedness with training.

Effective May 25, 2011, Gov. Rick Scott signed a bill (HB283) repealing certain Florida seaport requirements that were considered to be unnecessary, costly and duplicative. Specifically, the bill repealed the requirement for two individual port access badges, state and federal, each requiring separate background checks and administrative processes. This repeal has allowed cost savings and harmonization with other states on a variety of security requirements.

In general, Florida seaports have good relationships with the U. S. Department of Homeland Security. However, the ports work minimally with the Washington, D.C.-based organization and instead frequently interact with individual agencies on specific issues. Since 2002, the Federal Port Security Grant Program (PSGP), now under the Federal Emergency Management Agency (FEMA), has provided funding for port

security mandates. National competition for PSGP funds has intensified and available funds have tapered down each funding cycle. Florida's seaports noted that the grant delivery process for all non-disaster funds, including the PSGP, is in question. Their concern is that significantly reduced federal funding may go to the states in a lump sum allocation rather than stay in a seaport-based security program specifically directed to these facilities through a competitive process. The Florida Domestic Security Oversight Council is the state entity that recommends allocation of federal security funds. The composition of this 32-member body includes representatives from all levels of government and facets of security interests such as hospitals, universities, and fire and police departments. This myriad of competing state interests presents a tremendous challenge for seaports to be recognized within a much larger pool of security funding needs. For the upcoming budget year, proposed federal legislation continues the PSGP as a seaport-based security program, but its outcome is uncertain.

Currently, state funds are not a permissible source of funding for seaport security measures. Primary funding for security projects comes from seaports and their users to meet security requirements. Seaport security projects should be eligible to receive state transportation funding because they are an integral component of the state transportation system.

Seaport Issue - Other

The seaports and stakeholders raised additional issues of concern:

- **Port Master and Strategic Plan Development and Funding-** Each seaport is required by s.163.3178(2)(k), F.S., to prepare a comprehensive Port Master Plan which addresses existing port facilities and any proposed expansions. This plan is to be included in the coastal element of the appropriate local government comprehensive plans. Section 311.14(2), F.S., requires each seaport to develop a Seaport Strategic Plan with a 10-year horizon. This plan must contain components that address economic development; infrastructure needs; intermodal transportation facilities; intergovernmental coordination; and physical, environmental, and regulatory barriers and recommended solutions; and be consistent with the appropriate local government comprehensive plans. Developing or updating these plans to support infrastructure investments is an eligible use of FSTED Program funds, if so approved by the FSTED Council. This recent funding source has been well-received and has encouraged the continued planning, analysis, and coordination of seaport endeavors. Seaports indicated that early participation in the planning processes by FDOT is essential.
- **Workforce Development and Training-** The Panhandle seaports specifically mentioned the statewide issue of an available trained workforce. The Port of Pensacola indicated that its community possesses significant talent in the marine fields and would be able to provide a skilled workforce if additional jobs were available. Port Panama City noted that electrical workers and crane operators were somewhat difficult to find, and also suggested that education about maritime careers should begin at least in high school, if not middle school. Technology driven curriculum such as that offered by the University of North Florida (UNF) Trade and Logistics Program should be expanded throughout the state.

CareerSource Florida, the statewide network of career development professionals, has also begun to address this need with programs such as the 2011 Global Trade Initiative. This program provided more than 1,800 industry workers at more than 100 seaport and air cargo companies with training using Quick Response Training (QRT) resources. In May 2013, CareerSource Florida announced the QRT Challenge Grant, representing \$2 million in trade and logistics focused training. The annual funding for the QRT program was doubled that year to \$12 million as well.

Despite the recent focus, there is still demand for training. Florida does not have a State Maritime Academy supported by the USDOT, however there are various organizations with training available, mostly in the Jacksonville and South Florida regions. A few examples include the Florida Maritime Training Academy in Ft. Pierce and the Bluewater Maritime School in Jacksonville.

- **BP RESTORE Act-** On April 20, 2010, Deepwater Horizon, an oil rig drilling in the Gulf of Mexico, exploded, spilling millions of barrels of crude oil in the Gulf waters. On July 6, 2012, the President signed the Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act of 2012 (RESTORE Act; Subtitle F of Public Law 112-141) into law. The Act establishes a new Trust Fund in the Treasury of the United States, known as the Gulf Coast Restoration Trust Fund.²⁶

Implementation of the federal response to the BP oil spill in the Gulf of Mexico continues to evolve at a slow and complicated pace. Port Manatee suggested that maybe the Florida Gulf seaports could work together to submit a collective grant application for funding.

- **Waterway Traffic-** Interaction between the maritime industry and personal leisure craft can cause traffic and bottlenecks. More separation is needed.
- **Applicability and Flexibility of Metrics-** As the Port of Pensacola continues to play a greater role in moving wind nacelles (part of a wind turbine that contains the gear box, speed shafts, generator, controller and brake) and servicing the offshore oil industry with repairs and technology, calculating return on investment (ROI) by utilizing tonnage and TEUs does not accurately depict the activity and economic development these uses provide. The seaport indicated that flexibility should be applied to capture the impact of this facet of its business model.

Seaport Bottlenecks

Although the majority of concerns related by the 15 deepwater seaports in Florida revolve around the funding of projects, dredging, and regulatory and security issues, they do experience some very important hindrances to their landside and waterway trade routes due to bottlenecks. The major bottlenecks discussed during interviews with seaport directors and key staff members included overall intermodal connectivity, railroad connections, major seaport access roads and waterway obstructions. Many of these bottleneck projects were identified by seaports as connector issues and were handled previously under various FSTED Program grants, by Strategic Intermodal Systems (SIS) funds, or through the FDOT Seaport Office funding and FDOT Districts Office projects. Also, in 2012, two new programs were created to provide additional funding:

- The Strategic Ports Investment Initiative (SPII) created by s. 311.10, F.S., authorizing a minimum of \$35 million annually from SIS for strategic seaport projects
- The Intermodal Logistics Center (ILC) Infrastructure Support Program created by s. 311.101, F.S., authorizing \$5 million annually for the development of ILCs throughout Florida

These two programs have and will continue to assist the seaports in funding intermodal-related projects and to resolve previously identified bottlenecks noted during the individual seaport interviews.

²⁶ U.S. Department of the Treasury, 2014

The major modal unsolved bottlenecks discussed during seaport interviews include:

Rail:

- On-dock rail needs
- Rail access to port terminals and major Class I rail lines
- Intermodal container transfer facilities (ICTF)

Road:

- Roadway access congestion near or at main gates
- Direct access roads to interstates and highways
- Roadway access and congestion
- Security bottlenecks

Waterway:

- Bridge height and width clearances for vessel traffic
- Channel and Harbor width for safe vessel passage
- Dredge depths for maintaining existing access
- Deeper dredge depths for future cargo

Through the FDOT Five-Year Work Program, Florida is addressing the current major bottleneck projects that cause immediate problems to seaports such as congestion, time delays, capacity limitations, intermodal connectivity and physical obstructions. As seaports update their master plans and develop and implement their strategic plans, future analysis should yield a revised set of constraints requiring consideration. A priority for seaports is to institute a larger national focus on identifying and resolving freight bottlenecks from the seaport docks, to the last mile and beyond. Seaport facilities are the hubs that send and receive international cargo. Investments in airports and highways have been a national priority, but the nation's seaports as a critical link in the movement of freight have not been an area of focused policy or funding.

Airports

Florida's air cargo system spans a wide variety of airports in the state, ranging from major international gateways such as Miami International Airport (MIA) to remote airports such as Key West International where air cargo is a critical component to the business community. On an annual basis, cargo enough to fill over sixty Boeing 747 freighters per day are accommodated at Florida's airports. This cargo is transported in and out of the state to other airports in the U.S., as well as Latin America, the Caribbean, Europe, and Asia. Through a combination of integrated express carriers such as FedEx, UPS, and DHL, all-cargo carriers such as China Airlines and AmeriJet, and commercial passenger carriers such as Delta, American, and Lufthansa, Florida's airports directly serve 41 domestic and 94 international destinations with either dedicated all-cargo or wide-body passenger aircraft. In addition to the air cargo industry's reliance on numerous supporting airports, the industry also relies on a vast roadway and highway network to transport cargo to customers and consumers in state, as well as beyond its borders.

On a daily basis, integrated express companies such as FedEx, DHL, and UPS transport packages, parcels, and pallets bound for awaiting cargo aircraft at Florida's airports. Additionally, air cargo for export arrives at MIA on trucks that originate as far away as New York, Chicago, and Los Angeles. Every morning, flowers imported from Columbia arrive at the MIA and are trucked to nearby processing warehouses

before being loaded onto specially equipped trucks bound for grocer and floral distribution centers throughout North America.

The following issues were identified by modal managers for airports:

- When commercial airports reach current capacity, there are constraints to further expansion at many key locations, which could impact freight movement.
- Need to invest in “soft infrastructure” to make sure that hard infrastructure projects are effectively followed by support industries, like freight forwarders. Without buy-in from private industry, infrastructure investments may be underutilized.
- Need to focus investments on arterial roads connecting hub airport cargo areas to major highways.
- Need to increase federal funding for air cargo security measures and availability and distribution of Customs and Border Patrol staff to improve cargo clearance times at gateway airports.
- The volume of traffic transiting the state’s major air corridors can reach levels which require extraordinary measures to de-conflict traffic. The implementation of NextGen and ADS-B technologies will facilitate more efficient handling of air traffic in these high volume air corridors.²⁷
- Need to increase investments to ease highway congestion at peak periods to alleviate unnecessary idle times for trucks and vans transporting air cargo commodities.
- Positive economic impacts of the global air cargo industry on the lives of Florida residents must be communicated effectively to ensure public support.

The following section discusses a specific airport issue highlighted during stakeholder interviews.



Airport Issue – Increasing Fuel Costs Fostering Modal Shift

By its very nature, air cargo focuses on high value, high priority or perishable goods that have a low cubic cargo weight. In addition, rising aviation fuel prices, which began in 2008, and remained high through 2012, have caused many shippers to seek alternative modes other than air for their shipments. The nature of air cargo along with rising fuel costs makes air cargo susceptible to modal shifts especially to

²⁷ For more information on the Federal Aviation Administration’s Next Generation Air Transportation System (NextGen) can be found at <http://www.faa.gov/nextgen/>

trucking. In fact, trucking continues to be air cargo's primary competitor with freight forwarder road feeder service market share increasing about 1 percent per year since 2005. In addition, air cargo is also giving way to sea shipping. Smaller regional air cargo trips from the United States to San Juan and other Caribbean destinations have become susceptible to freight shippers decisions to ship via ocean carrier. Puerto Rico's relatively close proximity equates to a four day sailing time from the Port Miami to San Juan making this mode of transport an increasing choice among cost sensitive shippers. While airports cannot directly control market adjustments, such as rising aviation fuel costs, Florida's aviation industry needs to be cognizant of their impacts.

Airport Bottlenecks

Projects which address on-site airport bottlenecks are collected, organized and maintained through the Joint Automated Capital Improvement Plan (JACIP). Although the majority of concerns related to the cargo airports on the SIS revolve around the funding of projects in JACIP, airports do experience hindrances to their landside operations due to bottlenecks from other modes, especially highway. The discussion of airside major bottlenecks focused on:

- Handling bigger and heavier aircraft. This includes extending runway length, pavement weight bearing capacity, and modifying the fillet radius to accommodate the larger carriage of group five aircraft.
- Increasing ramp space to accommodate bigger aircraft and aid with airside congestion.
- Increasing on-site processing resources for goods to streamline movement of cargo off airport quickly.
- Increasing the size or number of terminals to handle future capacity needs. As many commercial airports are located in congested urban areas, expansion opportunities can be very limited. Some air cargo travels in passenger aircraft, and this possible capacity constraint could also limit freight.

Spaceport

Space Florida is Florida's spaceport authority and aerospace economic development agency. Its mission is to advance the State's aerospace industry and ensure Florida maintains global leadership in the aerospace marketplace. According to the Florida Spaceport System Plan 2013, Florida currently has the capacity to launch any class of launch vehicle by utilizing its existing infrastructure or by modifying it through improvements. It also has the capability to launch a large number of flights per year. When discussing issues the challenge for Florida is largely not one of physical infrastructure, but one of positioning itself to stay competitive in nurturing existing industry and attracting emerging markets.

Spaceport Issue – Maintain Competiveness

To maintain its place as the heart of space transportation, Florida must be marketable. Florida's Spaceport System needs to continue to develop the emerging commercial market. This includes investments in buildings and facilities, and collaboration with local and state economic development offices to create a statewide industry brand. Florida should:

- Draw on its historical strengths to stay competitive, leveraging the best from all partners to better meet national, state, and commercial needs. These strengths include the appropriate workforce and preferred geographic location. Cape Canaveral was chosen for rocket launches to take advantage of the Earth's rotation by launching eastward in the same direction, which adds

around 1000 mph toward orbital velocity and lowers fuel requirements. It is also desirable to be adjacent to the ocean rather than a large population in case of accidents during launches.²⁸

- Provide great customer service (space-ready and space-friendly). To continue attracting new customers, Florida will need to promote its safety, low rates, and proven reliability at every opportunity. For decades the commercial market went overseas, and in the U.S. was government driven. Now federal funds are stressed, but seeing an emerging commercial market.
- Promote that it has ample infrastructure to support almost any kind of launch, but some of the buildings and facilities need to be upgraded to compete with newer spaceport facilities.

Spaceport Issue – Marketing

Florida’s Spaceport System needs to communicate and market its importance to the state and the world. The aerospace industry touches nearly every county in Florida and impacts the daily lives of millions of residents via GPS, communications and weather satellites. The positive impacts of the system must be communicated strongly and consistently to ensure public support.

Spaceport Issue – Government Partnerships

Florida’s Spaceport System needs to maintain strong governance, management and partnerships. All of the managing entities and partnerships of the Florida Spaceport System must work together to cooperatively manage system resources and serve a variety of customers. There is a need to develop a more formal interagency structure for collaboration and decision making to prioritize investments as the space market broadens from traditional civil and defense services to emerging commercial markets. As space activities transition from federal control to the private market, Space Florida needs to understand how existing federal and state regulatory processes could potentially constrain the rapidly expanding private market and engage in proactive discussions to foster future growth in Florida. Thus far, this has been more of a perceived issue rather than providing actual hardship.



Spaceport Bottlenecks

Although the majority of issues related to Florida’s Spaceport System focus on items identified in the Florida Space System Plan 2013 and by Space Florida, there are some important impediments to consider due to connections with other modes. While there are generally few waterway obstructions especially at the Cape Canaveral Spaceport (CCS) (which primarily consists of Kennedy Space Center (KSC) and the Cape Canaveral Air Force Station (CCAFS)) because of excellent water access, there are impacts to overall accessibility. Railroad connections and highway access could have impacts because of oversized payloads and bridge clearance constraints.

Through the FDOT Five-Year Work Program, Florida is addressing the current bottleneck projects that could cause immediate problems to Space Florida facilities. However, there are pressing issues which impact Space Florida. Increased competition in Russia, the Ukraine, French Guiana, and China has led to a migration of commercial launch business from the U.S. to those overseas spaceports. Considerable interest in either the development of new spaceports or the conversion of existing facilities into

²⁸ Kennedy Space Center, 2014 <http://kscvisit.com/cape-canaveral.html>

spaceports raises the potential for a spaceport “glut” in years to come. In addition, with the completion of the Shuttle Program and the maturing of the Air Force launch programs, the amount and frequency of use of existing facilities and infrastructure is dramatically reduced, so repurposing excess facilities and the multi-use of those facilities with excess capacity can be potentially challenging.

Alternative Transportation Fuels and Pipelines

The U.S. Department of Energy reports that more than a dozen alternative fuels are in production or under development for use in alternative fuel vehicles and advanced technology vehicles. The continuing growth in the use of alternatives to gasoline and diesel stems from a number of motivating factors, including reduced dependence on foreign oil, diversification of the transportation fuel supply, reduced air emissions and cost considerations. The passage of Florida HB 599 in 2012 specified that one of the goals of the FMTP is to increase the implementation of compressed natural gas (CNG) and liquefied natural gas (LNG) and propane energy policies which reduce transportation costs for businesses and residents located in the state. With the passage of Florida HB 579 in 2013, Florida has established one of the most compelling natural gas vehicle incentive programs in the nation²⁹. A key challenge going forward is to leverage these vehicle incentives with the necessary investments to facilitate the development of a strategic network of public fueling stations. Experience in other jurisdictions indicates that public/private collaboration should be an integral component of this effort. This section explores issues surrounding the deployment of these alternative transportation fuels for freight and goods movement.

According to the U.S. Energy Information Administration (EIA)³⁰, within Florida, Ethanol 85 represented 80% (36,032) of the alternative fuel vehicles, followed by propane (12% or 5,211 vehicles), CNG (6% or 2,518 vehicles) and electric (2% or 770 vehicles). While the number of alternative fuel vehicles in Florida is relatively small, it is growing. Between 2007 and 2011, the number of applicable vehicles in Florida increased by almost 49%. The EIA data indicates that the 7,729 natural gas and propane vehicles in Florida were concentrated in three vehicle categories: heavy-duty trucks, pick-up trucks and vans. Moreover, the data reflects that approximately 70% of fuel consumption for natural gas and propane vehicles was accounted for by heavy-duty trucks. In terms of ownership, private-sector firms and local governments operated more than 87% of the natural gas and propane vehicles.

While the enactment of HB 579²⁵ will provide incentive to procure additional alternative fuel vehicles, there are several continuing impediments to the expanded use of natural gas fueled vehicles. To develop this section of the FMTP, meetings were held with FDOT Modal Managers to identify issues regarding alternative fuels and to identify industry stakeholders to interview. These meetings and the FMTP Business Forum in October of 2013, yielded discussions with industry stakeholders, the Florida Natural Gas Association (FNGA), and the Florida Department of Agriculture and Consumer Services (DACCS) Energy Office. The following issues were identified during these interviews.

²⁹ 2013 Florida House Bill 579 created a natural gas fuel fleet vehicle rebate program within the Florida Department of Agriculture and Consumer Services. The program provides eligible applicants a rebate for the cost of conversion or the incremental cost incurred by an applicant in connection with the conversion, purchase, or lease for a minimum term of five years, of a natural gas fleet vehicle placed into service on or after July 1, 2013. The maximum rebate under this program is \$25,000 per purchased/leased or converted vehicle, not to exceed 50 percent of eligible costs. Each applicant may receive up to a total of \$250,000 per fiscal year on a first-come, first-serve basis. *Florida Department of Agriculture and Consumer Services, 2014*

³⁰ *Issues Affecting Adoption of Natural Gas in Light- and Heavy-Duty Vehicles, U.S. Department of Energy, 2010*

Alternative Transportation Fuels Issue - Availability of Publicly-Accessible Fueling Stations

The most formidable obstacle, especially in the context of long-haul trucking, is the limited number of publicly-accessible fueling stations. In order for trucking operators to invest in natural gas vehicles they must have confidence that the necessary fueling facilities are available along key interstate routes. A network of strategically-located, public natural gas fueling stations will ultimately be required to support wider deployment of long-distance natural gas vehicles. A complicating factor is that while the number of CNG stations across Florida is growing, there are very few LNG stations (the preferred long-distance fuel) currently in operation.

The private sector has led the transformation to natural gas fueled vehicles. Adoption has been led by companies developing fueling stations to service their own fleets, but some companies have opened their facilities to the public. A related issue is how to encourage more of the fleet fueling facilities to open to the public. In the 2014 Florida Legislative Session, Senate Bill 1070, related to Fuel Terminals passed and was signed into law. The bill declares certain fuel terminals a permitted and allowable use regardless of existing local zoning, etc., and would limit local government regulations to prohibit these fuel terminals from locating or expanding in their jurisdictions.

Alternative Transportation Fuels Issue - Added Costs

A 2010 Department of Energy (DOE) study found that a heavy-duty CNG truck costs \$63,600 more than a diesel equivalent prior to incentives.³¹ This differential increases to \$76,100 when sales taxes are included. While the rebates and tax incentives contained in HB 579 will certainly help reduce the cost differential, natural gas fueled vehicles are significantly more expensive than the equivalent gas or diesel vehicles. Finally, there are concerns about increased use of alternative fuels negatively impacting existing fuel-tax-based transportation finance systems; although, fuel costs will mitigate much of this over the life of the truck.

In terms of infrastructure, DOE reports that costs for installing a CNG fueling station can range from \$10,000 to \$2 million depending on the size and application. The cost for an LNG fueling site can range from \$1 to \$4 million. The Department reports that the cost of purchasing and installing the necessary equipment for dispensing propane typically runs from \$37,000 to \$175,000, but varies based on situation and need.

Alternative Transportation Fuels Issue - Changing Technologies

At the 2nd Annual Florida Freight Leadership Forum, stakeholders expressed concern that technologies are changing so quickly, and there has not been one identified that will best fit the trucking industry yet. Additionally, rail and shipping companies are developing technology to use alternative fuels, with similar concerns. Stakeholders are concerned about spending tax payer money to build fueling stations and they sit idle. Stakeholders want the market, or the industry collectively, to commit to a standard before funds are invested.

Alternative Transportation Fuels Issue - Bringing Natural Gas into the State

At the FDOT Modal Managers meeting in October 2013, it was noted that the two existing natural gas lines which supply Florida are almost at capacity. A new main natural gas pipeline is needed by 2017, to

³¹ *Issues Affecting Adoption of Natural Gas in Light- and Heavy-Duty Vehicles, U.S. Department of Energy, 2010*

handle future growth in offshore supplies and to support Florida’s initiative to enhance the use of natural gas for transportation and electric generation.

The DACS Office of Energy indicated that a third pipeline is coming, but there still will be a need for more compression and residential needs for natural gas are still an unknown.

At the 2nd Annual Florida Freight Leadership Forum, there was a discussion of the state role in public utilities. When utility companies are involved with station building, they operate in a regulated market and can use ratepayer funds to cross subsidize. This can make it difficult for private companies to compete. Stakeholders said that in other states, where utilities are not involved, there has been double-digit station growth. However Florida recently approved tariffs to allow the involvement of utility companies in station construction. Some stakeholders wanted to see the free market operating instead.

Discussions with the FNGA further detailed natural gas distribution issues in the state with the following:

- Need to note “last mile” issues and identify critical areas of need in that “last mile” - for example, a trucking company may want to invest but there is not a natural gas pipeline nearby.
- There is no interconnected network or infrastructure for natural gas at this time. There is currently limited coordination between seaports, ILCs, trucking, utilities, etc.

Alternative Transportation Fuels Issue - Scale:

Stakeholders at the 2nd Annual Florida Freight Leadership Forum pointed out that if the state and industry invest large amounts of dollars and resources in these stations, that will result in pressure on small- and medium- sized firms to convert their fleets. Experience in other states, suggests that mandates for small fleets to convert was effective. Though perhaps not a scenario in Florida, the State could instead provide incentives for conversion. However, industry conversations suggest a preference for the State to play the role of coordinator/facilitator for fueling stations and not provide significant funding.



Alternative Transportation Fuels Issue - Incentives

Florida Freight Leadership Forum stakeholders shared the following regarding incentives:

- Large companies can incentivize individual use of alternative fuels; however, it is more difficult for small companies to do the same. The state should provide incentives to assist smaller firms.
- Participants questioned what the State might be able to do to incentivize smaller CNG vehicles; however, conventional wisdom is that the economics are not as compelling for smaller vehicles.
- Currently, there is a limited amount of money from HB 597. If the program is successful, the legislature could readdress the issue in the future, especially for small vehicles. The natural gas

industry definitely wants this program to succeed and to lay the foundation for a long-term program.

- FDOT could incentivize purchasing alternative fueled vehicles with the expectation that operators and station builders/operators will develop based on market needs.
- Incentives for smaller users will come when the infrastructure is in place.
- Currently, natural gas-fueled vehicles cannot be repaired in the state without a full-service lease which limits availability. Also, permitting for repair facilities could be an issue. Perhaps the state could be involved in incentives for small shops, so the state can be ready to support these vehicles.
- The State may consider incentives to train technicians for alternative fuel vehicles. This would be an opportunity for CareerSource Florida.

Alternative Transportation Fuels Issue - Locations for Fueling Stations

At the 2nd Annual Florida Freight Leadership Forum, it was pointed out that freight moving through Florida's seaports may be processed at an inland port as part of the logistics chain. Stations should be built along those corridors to foster development. It was also recommended that Florida work with other states to have fueling stations along those corridors and interstate highways.

Alternative Transportation Fuels Issue - Other Freight-Related Applications

Other transportation modes are embracing new energy fuels and technologies as well. For example, new clean air regulations have forced the shipping industry to rethink their fueling options. Emission controls adopted by international maritime environmental protection committees have resulted in the designation of emission control areas in territorial waters. This will impact international shipping over the coming years. Two areas the maritime industry has been focused on are LNG and Automated Shore Power.

The freight rail industry is also considering alternative fueling options. BNSF Railway Co., one of the biggest U.S. consumers of diesel fuel, plans this year to test using natural gas to power its locomotives.³² GE has developed a natural gas retrofit kit, which allows GE Evolution series locomotives to operate with dual fuel capabilities. This allows the use of natural gas, which both reduces emissions and potentially reduces fuel costs by 50%³³. Florida railroads are currently evaluating options for new locomotives and retrofit, as well as siting fueling facilities in key locations.

Alternative Transportation Fuels Summary

In reviewing the discussions and interviews with stakeholders, the primary issue that surfaced was the need for state leadership in developing a network of alternative fueling stations. This likely would be in the form of public private partnerships and done in coordination with other states along freight corridors. This partnership would need to address government incentives for building public fueling facilities, as well as the role of utility companies which could unfairly dominate the natural gas market with ratepayer subsidies, stifling private sector efforts. Eligibility for SIS funding of projects would need to be addressed as well. Ultimately, the role of the State through its agencies would be to help lead the development of collaborative, public-private solutions for the expanded availability of natural gas.

³²Berkshire's BNSF Railway to Test Switch to Natural Gas, *The Wall Street Journal*, March 05, 2013

³³ GE Transportation Touts Engines, Fuel Technology and Web Applications at Railway Interchange 2013, GE, 2013

Multimodal Issues

In addition to the above-listed modal-specific issues, the following cross-modal issues impacting freight mobility and trade were identified:

- Need to promote additional public funding sources and develop private partnerships for P3 project delivery to address growing infrastructure needs across modes. Available funding sources will not meet needed transportation system improvements as modal demands increase and the value of the motor fuel tax erodes.
- Freight flow imbalances across modes should be addressed to improve overall system efficiency.
- Need to address trade imbalances, including developing industry incentives to create more outbound freight. A key component is to continue to develop public- and private-sector partnerships to support freight-generating economic development, including site selection and development, cross-modal connection, land use protection, and marketing.
- Need to further partnerships among educational and career training organizations (including secondary and post-secondary schools), CareerSource Florida, FDOT, and modal employers to continue to promote freight-oriented jobs, to more effectively deliver workforce training, and to develop information tools that better connect and meet the needs of employers, educators, and job seekers.
- Need continued leadership from the State in working with modal leaders and the private sector to collectively select alternative fuel technologies and locations for public investment, to help remove barriers to private-sector infrastructure investment, and to develop incentives for cross-modal conversion.
- Need continued outreach with public officials and local citizens to promote the importance of infrastructure and operational investments in freight mobility.
- Permitted truck weights and their impacts regarding trucking, seaports, and rail is unclear.

Selected multimodal issues are discussed in more detail below.

Multimodal Issue – Freight Flow Imbalances

The issue of empty backhaul has been associated mostly with Florida trucking and rail; however, it is a concern that impacts all modes. The Florida Chamber Foundation’s 2010 Trade and Logistics study identified an imbalance of trade flows as one of five challenges facing Florida. A large consumer market and comparatively small manufacturing base means containers moving by all modes return empty and add costs to the supply chain. The Florida Legislature acknowledged this issue and mandated the inclusion of empty backhaul as one of the main goals to be addressed in the FMTP. The commodity analysis earlier in the chapter confirms empty containers are prevalent enough to be a top commodity in Rail.

The FDOT and partners have begun to address the issue by developing strategies specifically targeted to reduce empty backhaul. The FMTP Investment Element continues the effort by prioritizing statewide freight investments based on how well each project implements strategies identified in the Policy Element, including empty backhaul. With the right investments and increases in manufacturing, Florida has an opportunity to reduce supply chain costs significantly.

Multimodal Issue – Permitted Truck Weight

The permitting of overweight trucks is a complex highway issue which also impacts other modes. Trucks carrying a “non-divisible” load such as a sealed container or a heavy generator may be issued an overweight permit by a state for weights above the federally mandated minimum/maximum 80,000-pound gross vehicle weight (GVW) limit for travel on the National System of Interstate and Defense

Highways and for those roads providing reasonable access to the system. In Florida, a truck carrying a “non-divisible” load on these federal highways may apply for a permit to carry up to 100,000 pounds GVW. By comparison, no “divisible” load such as aggregate may exceed 80,000 pounds GVW. This regulatory mandate differentiates between container and bulk movements. In discussions with the seaports, this particular distinction seems to be without merit or reasonable basis for the differentiation. These weight limits are “all in” weights that include both the weight of the vehicle and the load.

In discussions with seaports located in close proximity to neighboring states, the seaports specifically commented that the varied weight limits, costs of permits, and penalties for permit violations in Alabama and Georgia, as compared to Florida create a competitive disadvantage for moving freight to and from a Florida seaport. A preliminary review of Alabama and Georgia laws was inconclusive, but additional research is needed. The stakeholders indicated that this is a complicated issue needing further discussion and analysis, and they highlighted that this particular highway transportation regulatory issue materially affects the movement of goods through a Florida seaport. The seaports also noted that consolidating more cargo on fewer trucks could reduce traffic, improve commuter travel, reduce transport costs, boost fuel efficiency, and improve air quality.

Rail is also greatly impacted by permitted truck weights. Oversized/overweight vehicles must handle additional hazards associated with railroad crossings, such as potential need to raise the height of the trailer before traversing the tracks. Low clearance, damage concerns at crossings, and other obstacles may require notifying the railroads.

In addition to railroad crossings, a potential impact of moving heavier trucks includes more damage to highways and bridges. Should FDOT adjust design standards to accommodate them, state of good repair likely could be maintained; however, the cost of retrofitting infrastructure statewide would be substantial. Increasing truck weights also has the potential to shift rail traffic onto already crowded roadways and increase highway maintenance costs.

Safety is also a major concern, and often there is not enough data to adequately establish the relationship between truck weight/size and crash causation. Various reports found higher crash rates with 6 or more axles compared to 5; however, just as many dispute the claims. The perception of large trucks and impacts on drivers in other vehicles is also a potential factor. Careful route selection could potentially reduce some safety concerns and other local impacts to communities.

To complicate matters, states and local governments also may set truck weight limits for those roads under their specific jurisdictions. In 2010, Florida increased the maximum weight for trucks carrying divisible loads such as break-bulk and bulk cargoes on non-interstate roads including the Florida Turnpike from the legal limit of 80,000 pounds GVW to a permitted limit of 88,000 pounds GVW. The permitted limit for non-divisible truckloads, or containers, remains the same on state highways at the 100,000-pound GVW maximum. As noted, neighboring states may have different weight limits, costs of permits, and penalties for permit violations than Florida. Compounding the issue, Florida also has different standards for bulk and containers on state roads, Florida needs to assess all impacts these elements to be competitive to these other states. A complete analysis should assess impacts of all modes and sizes of companies, including short line railroads, private terminal operators, and independent truckers.

In addition to the potential competitive benefits of carrying more cargo with overweight trucks, the American Transportation Research Institute (ATRI) has found higher productivity vehicles demonstrate

fuel efficiency and emissions benefits.³⁴ The Truck Safety Coalition argues that bigger and heavier trucks will consume more fuel and will be less efficient.³⁵ More information is needed to understand the energy impacts of overweight trucks.

The study of truck size and weight limits is also of importance at the federal level. In fact, MAP-21 requires two key items regarding this issue:

- USDOT, in consultation with States and other relevant Federal agencies, is to report to Congress within two years of enactment on a comprehensive study of truck size and weight limits [§32801]
- USDOT is required to report to Congress within two years of enactment on a compilation of State limitations on the size and weight of trucks that may travel on the National Highway System [§32802]

Currently, FDOT does not raise weight limits for the following reasons:

- Roadways and bridges are not designed for the heavier loads
- Potential loss of federal funding as the reason for disparities is often due to grandfathered limits in place prior to federal restrictions

As the FMTP moves further from the needs designation process and identification of regulatory issues to recommendations, the issue of overweight trucks and permitting needs to be further studied to ensure that Florida infrastructure is protected and stays competitive in a global marketplace.

Summary of Freight System Performance and Issues

This chapter consisted of the first effort to examine the entire SIS from a freight perspective for all modes. It included a background on what commodities are transported in and out of Florida and demonstrated that the SIS provides access to freight intensive areas throughout the state because it includes the highest priority transportation facilities for all modes. FDOT's current performance measures showed how the SIS with its multimodal components can address freight movement needs for the state but does have room for improvement through the identified issues and bottlenecks. Additional performance, issues, and bottlenecks may be discussed in regional freight plans and other local plans and studies. Discussion on various opportunities for Florida to consider are included in the Florida Chamber Foundation 2013 Florida Trade and Logistics Study 2.0³⁶.

The following chapter will analyze the SIS to assess if it is the best fit to serve as Florida's official Freight Network, determine if there are additional recommendations to augment the SIS for freight movement, and establish the definition of a freight project moving towards collecting Florida Freight Investment Needs.

³⁴ ATRI Research <http://www.atri-online.org/research/results/One-Pager%20HPV2.pdf>

³⁵ Truck Safety Coalition <http://trucksafety.org/wp-content/uploads/2014/04/press-040914-environmental-factsheet.pdf>

³⁶ Florida Trade and Logistics Study 2.0 (TL2.0), Florida Chamber Foundation; <http://www.flchamber.com/wp-content/uploads/MadeForTrade-FINAL-Single-1.pdf>, 2013

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Chapter 3 : Florida Freight Network and Florida Freight Project Definition

Prior to developing a list of Florida freight related infrastructure needs, it was important to develop a consensus among FDOT, its agency partners, and freight stakeholders on what the Florida Freight Network would include and what infrastructure projects would be considered freight projects. The FDOT was also cognizant of the work being performed at the national level by the USDOT and the Federal Highway Administration (FHWA). The FDOT strived to ensure the Florida Freight Network was compatible and complimentary with the National Freight Network being developed by USDOT. FDOT was also mindful of crafting a freight project definition that not only allowed for multimodal projects, but also paralleled the definition of a freight project in MAP-21. This chapter includes a description of Florida's Freight Network and Florida's definition of a freight project.

Freight Network

Florida's Freight Network includes all freight modes, recognizing the important contributions of each mode on the movement of goods and commodities throughout the State. Florida's Freight Network will include Florida's portion of the National Freight Network, as well as additional facilities critical to the efficient movement of goods and commodities needed to keep Florida's economy growing.

National Freight Network

MAP-21 requires the USDOT to establish a national freight network to assist states in strategically directing resources toward improved movement of freight on highways. The FHWA published the Primary Freight Network (PFN) on November 19, 2013, see **Figure 31**. Based on initial comments, the FHWA extended the comment period to February 15, 2014.

While the National Freight Network has yet to be finalized by USDOT, MAP-21 identifies various items for the USDOT to consider in establishing the national freight network. The national freight network will consist of three components:

- A primary freight network (PFN), as designated by the USDOT Secretary, limited to 27,000 miles
- Any portions of the Interstate System not designated as part of the PFN
- Critical rural freight corridors

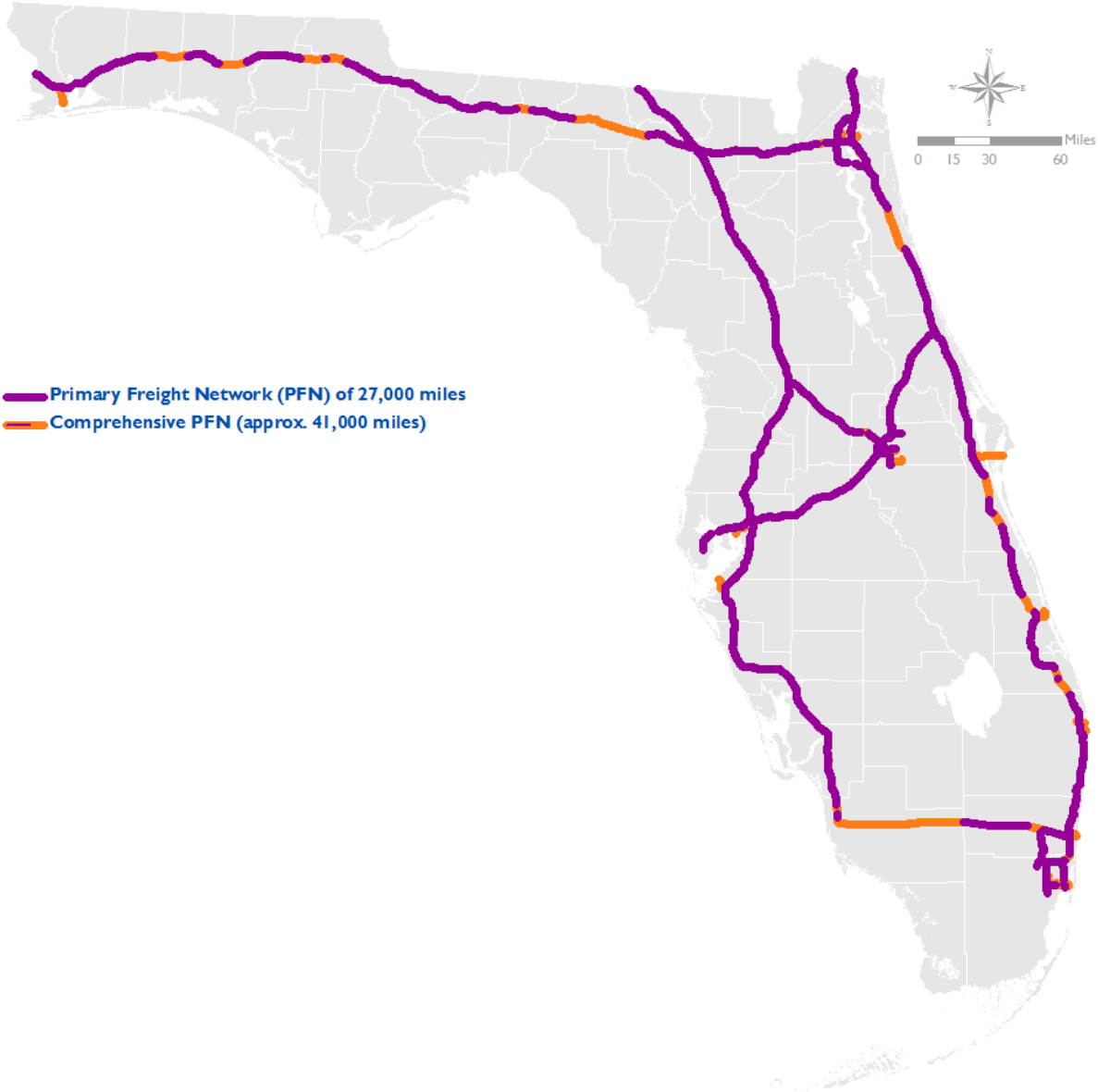
In issuing the draft PFN for comment, USDOT also designated a comprehensive PFN of 41,000 miles, which includes other critical freight network components that did not fit within the 27,000 mile cap imposed by Congress.

Primary Freight Network (PFN)

In designating the PFN, the USDOT Secretary was instructed in MAP-21 to consider:

- The origins and destinations of freight movement in the United States
- The total freight tonnage and value of freight moved by highways
- The percentage of annual average daily truck traffic in the annual average daily traffic on principal arterials
- The annual average daily truck traffic on principal arterials
- Land and maritime ports of entry
- Access to energy exploration, development, installation, or production areas
- Population centers and Network connectivity

Figure 31: Draft USDOT Primary Freight Network - Florida



Source: US Department of Transportation, Federal Highway Administration - Office of Freight Management and Operations, November 2013.

Critical Rural Freight Corridors

A state may designate a road within the borders of the State as a critical rural freight corridor if the road:

- Is a rural principal arterial roadway and has a minimum of 25 percent of the annual average daily traffic of the road measured in passenger vehicle equivalent units from trucks (FHWA vehicle class 8 to 13)
- Provides access to energy exploration, development, installation, or production areas
- Connects the primary freight network, a roadway described above, or interstate system to facilities that handle more than:
 - 50,000 twenty-foot equivalent units (TEUs) per year
 - 500,000 tons per year of bulk commodities

Florida Freight Network

The goal of the Florida Freight Network is to develop a freight orientated system where the infrastructure promotes the efficient and reliable movement of goods through the entire supply chain. The network will streamline logistics and enhance efficiency - especially the “last mile” connection between hubs and corridors.

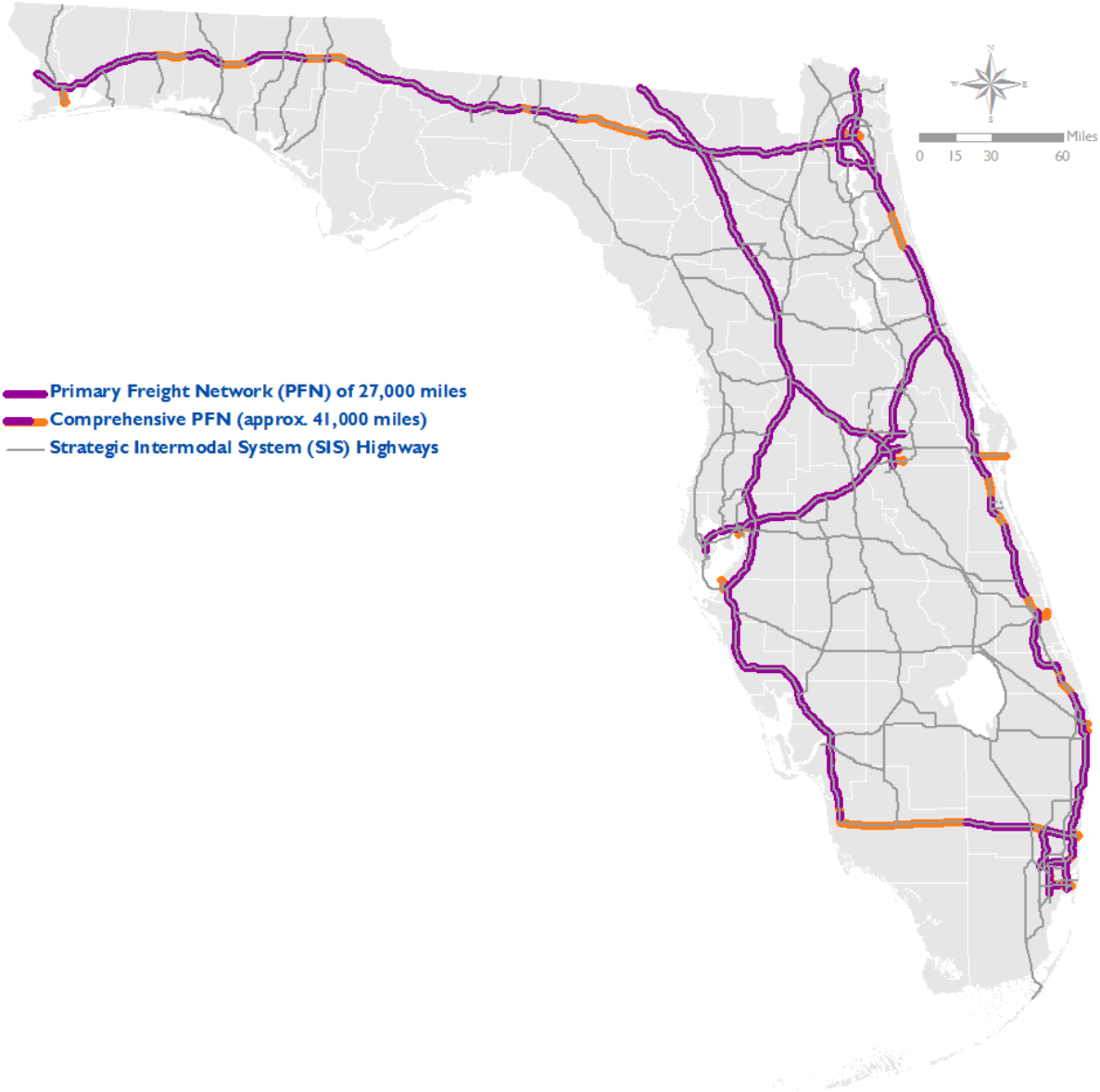
In concert with Florida’s Strategic Intermodal System (SIS), Florida’s freight network will go beyond federal MAP-21 guidelines geared toward a highway oriented freight network. **Figure 32** compares the draft federal Primary Freight Network to the highway component of Florida’s SIS. As noted above, Florida’s Freight Network will include all modes, recognizing the important contributions of each mode on the movement of goods and commodities throughout the State.

The Florida Freight Network will include:

- All Florida facilities on the National Freight Network
- All designated Strategic Intermodal System (SIS) facilities that are NOT purely passenger oriented.
- Additional connectors to facilitate freight movement through the “last mile”

Specific detail on each of these components is included in the following sections.

Figure 32: Comparison between the Federal Primary Freight Network and the SIS Highways



Source: US Department of Transportation, Federal Highway Administration - Office of Freight Management and Operations, November 2013 and FDOT Systems Planning Office, FDOT, 2014.

Florida Facilities on the National Freight Network

While the National Freight Network has not yet been finalized by USDOT, it can be assumed that all of Florida's Interstate Highways will be included either as part of the PFN or by default as one of the remaining interstate highways not included in the PFN but still included in the National Freight Network. This designation includes the four primary interstates in Florida (I-75, I-95, I-10, and I-4) as well as the various interstate loops and spurs located in urban areas (I-295, I-275, I-110, I-395, I-595, and I-195).

In addition, the National Freight Network will include critical rural freight corridors (CRFCs) as designated by the State. FDOT is currently waiting on FHWA guidance regarding the designation process for the CRFCs and will designate CRFCs as appropriate per the MAP-21 and FHWA guidelines. CRFCs will likely include facilities already included in Florida's SIS, which is discussed in the next section.

Strategic Intermodal System (SIS) Facilities

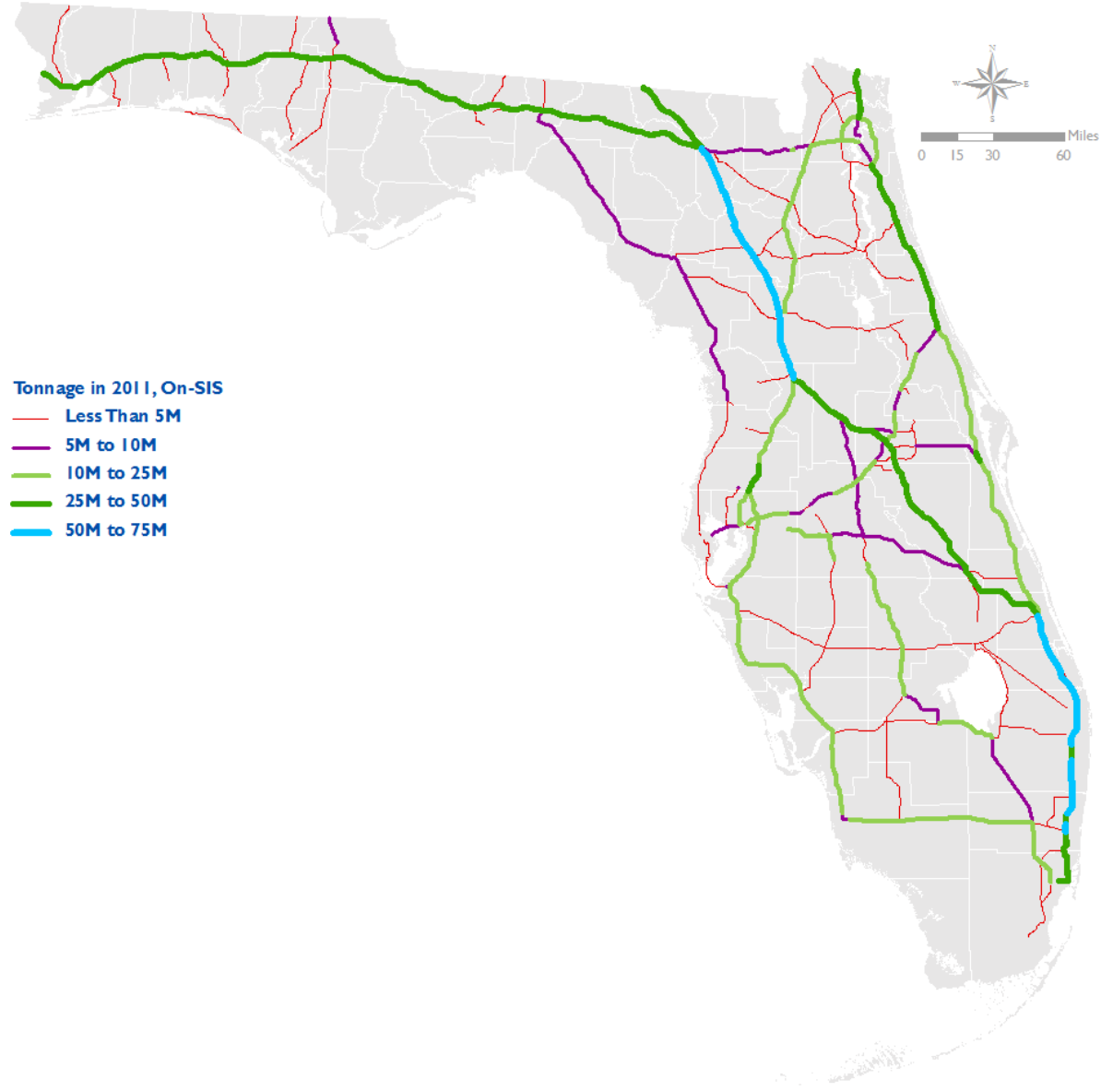
Florida's freight network goes beyond federal MAP-21 guidelines which are geared toward a highway oriented freight network and includes modal hubs, corridors, and connectors, recognizing the important contributions of these facilities to the efficient movement of freight. Florida's freight network will include freight related hubs, corridors, and connectors defined as part of Florida's SIS.

In 2003, Florida's governor and legislature created Florida's SIS, a high-priority network of transportation facilities critical to Florida's economic competitiveness and quality of life. The SIS comprises the state's largest and most strategic transportation facilities, including major air, space, water, rail, and highway facilities. The SIS facilities are the primary means for moving people and freight between Florida's diverse regions, as well as between Florida and other states and nations. The SIS is Florida's highest statewide priority for transportation capacity improvements. More information can be found at <http://www.dot.state.fl.us/planning/sis/>.

Evaluation of the Strategic Intermodal System (SIS) for Freight Movement

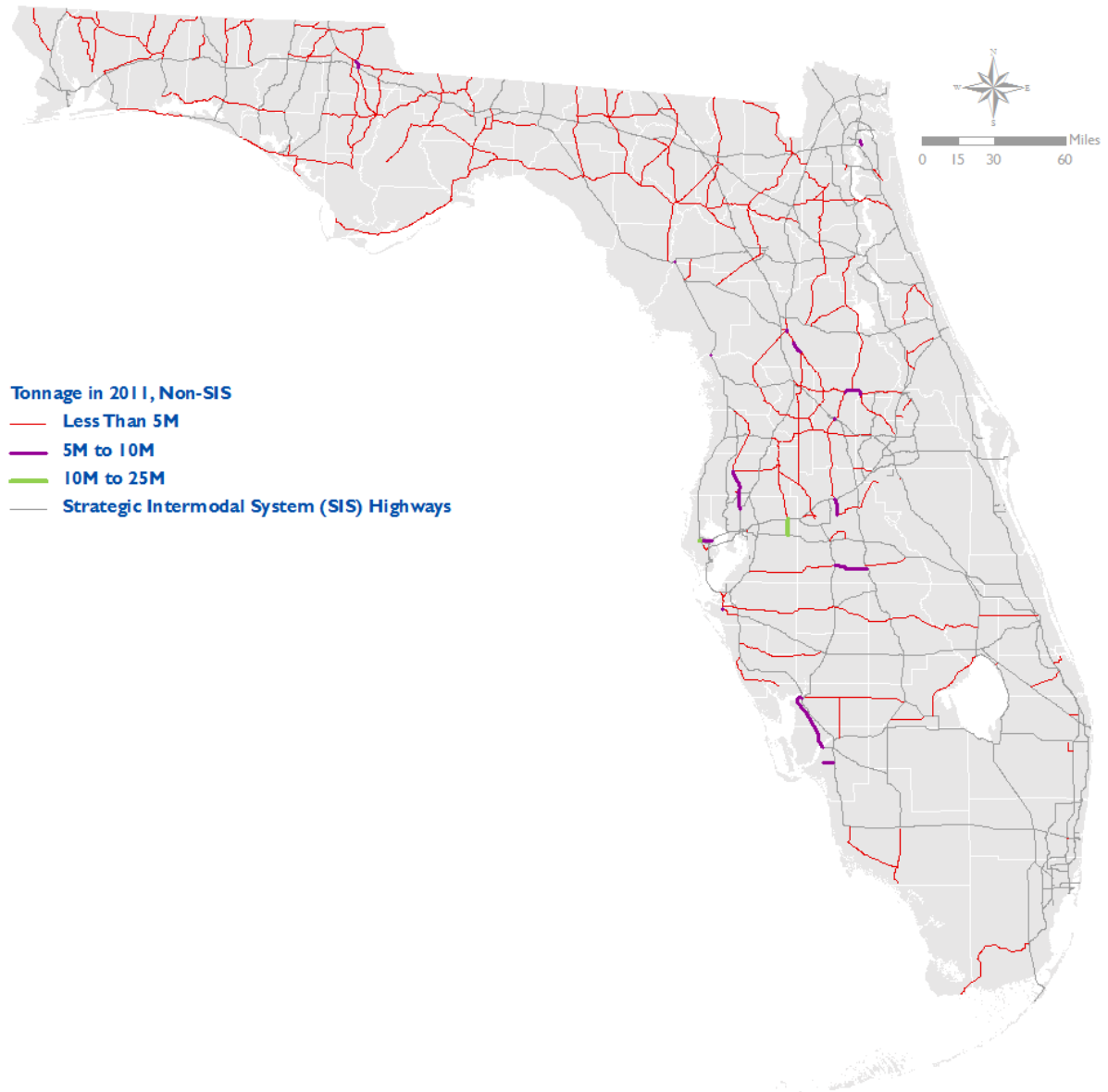
An analysis of Florida's highway system was conducted to evaluate freight movement (in total tons). Total tonnage moved along Florida's SIS highways was evaluated versus the remainder of Florida's non-SIS highways in 2011 and projected for 2040, as illustrated in **Figure 33**, **Figure 34**, **Figure 35** and **Figure 36**. The SIS carries the vast majority of freight movement in the state, with some segments carrying up to 100 million tons in 2011 and up to 150 million tons projected in 2040. The vast majority of the remaining non-SIS highways carry less than 5 million tons per year, with only a few segments carrying more than 10 million tons. In total for 2011, Florida's more than 4,300 miles of SIS highways carried approximately 93% of the total motor carrier freight movement, while the more than 7,000 miles of Florida non-SIS highways carried the remaining 7%.

Figure 33: Total Commodity Flow Tonnage on SIS Highways in 2011



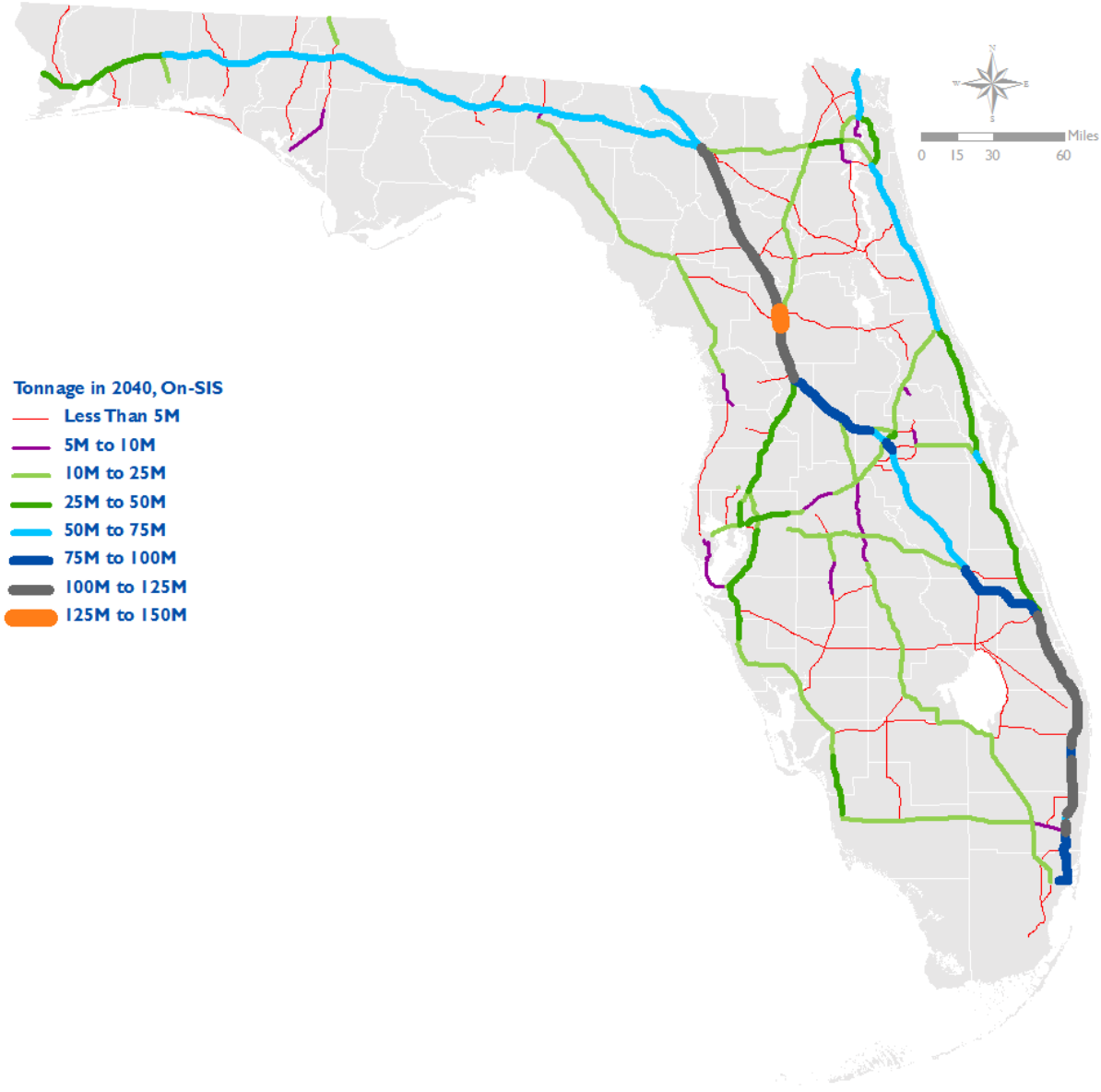
Source: Analysis using IHS Global Insight Transearch Data, November 2013.

Figure 34: Total Commodity Flow Tonnage on Non-SIS Highways in 2011



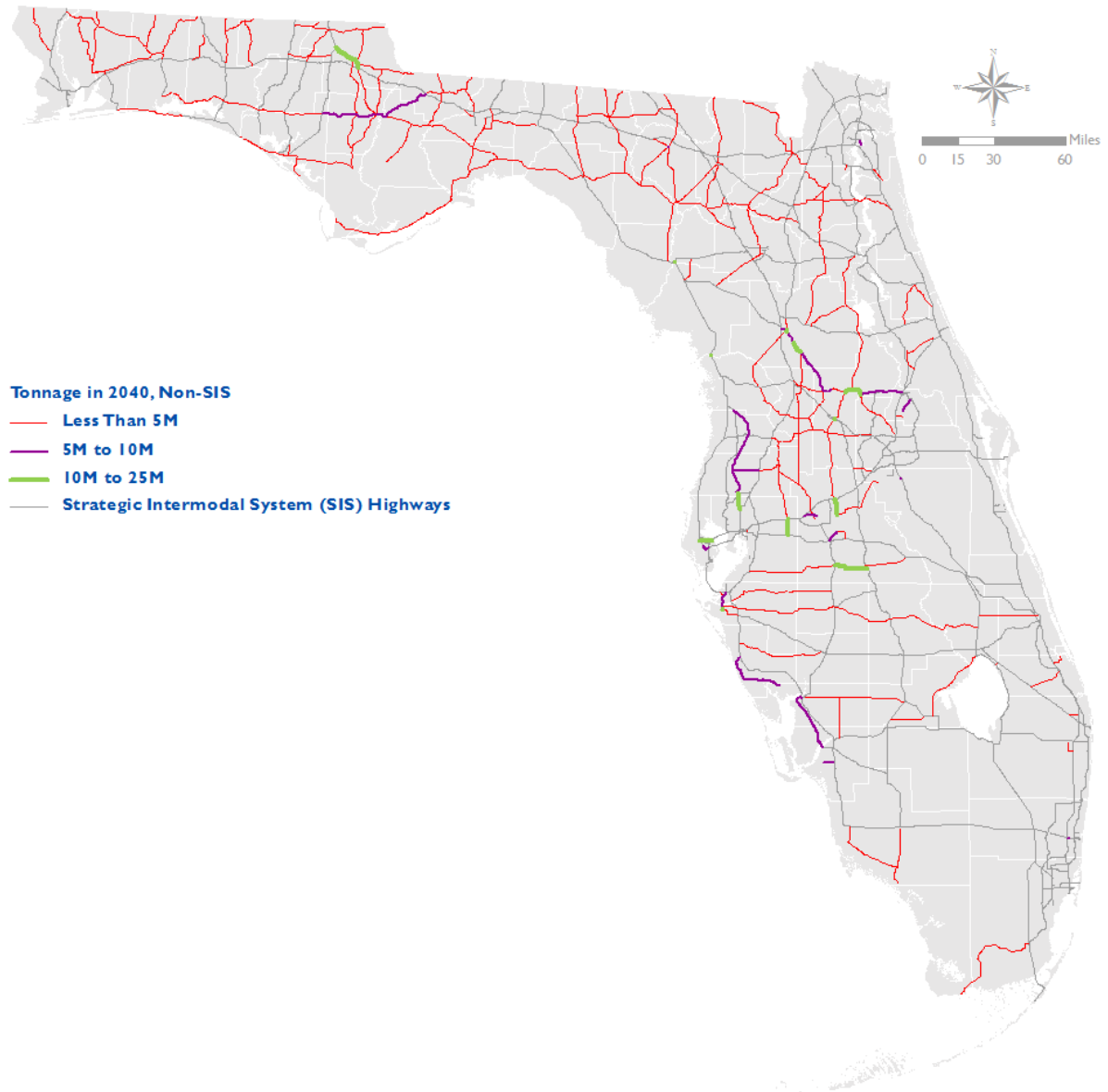
Source: Analysis using IHS Global Insight Transearch Data, November 2013.

Figure 35: Estimated Total Commodity Flow Tonnage on SIS Highway in 2040



Source: Analysis using IHS Global Insight Transearch Data, November 2013.

Figure 36: Estimated Total Commodity Flow Tonnage on Non-SIS Highways in 2040



Source: Analysis using IHS Global Insight Transearch Data, November 2013.

Florida’s Freight Network will include all portions of the SIS geared toward the movement of freight. Passenger oriented SIS facilities, while important in terms of total statewide mobility, are not critical to the movement of freight are not included as part of Florida’s Freight Network. Passenger oriented SIS facilities include passenger terminals, highway connectors to passenger terminals, urban fixed guideway corridors and airports without air cargo operations. SIS facilities geared toward freight movement include highway corridors, rail corridors, waterways, connectors, military access facilities, rail freight terminals, deepwater seaports, spaceports, airports with scheduled air cargo service, and intermodal logistics centers. SIS facilities were selected for the Florida Freight Network due to the large portion of freight they carry, as discussed in the beginning of the chapter. **Table 4** and **Figure 37** identify each of the SIS facilities included as a part of Florida’s Freight Network.

Table 4: Summary of Facilities included in Florida’s Freight Network

Facility Type and Quantity	Facility
Facilities included on the National Freight Network (NFN)	
Primary Freight Network (1,601 miles)	I-10 I-75 I-95 I-4 I-295 (portions) I-275 (portions) I-595 East-West Expressway in Orlando (SR 408 - portions) Beachline Expressway (SR 528 - portions) Homestead Extension of Florida’s Turnpike (HEFT)/SR 821 (portions) Palmetto Expressway (SR 826) East-West (Dolphin) Expressway (SR 836 - portions) Florida’s Turnpike (SR 91 - portions)
Other Florida Interstate Highways (1,495 miles)	I-110 I-175 I-195 I-275 I-295 I-375 I-395
Critical Rural Freight Corridors	TBD – will likely include existing SIS facilities included below
Additional Freight Facilities from Florida’s Strategic Intermodal System	
SIS and Emerging SIS Highway Corridors (3,283 miles) *Note: Includes planned add facilities	118th Avenue North from I-275 to US 19 Airport Expressway (SR 112) Beachline Expressway (SR 528) Central Florida Greenway (SR 417) E/W Connector (SR568, SR597, US41, SR54, SR56) East-West (Dolphin) Expressway (SR 836) First Coast Outer Beltway from I-10 to I-95 Florida’s Turnpike (SR 91) Gratigny Parkway (SR 924) frm Palmetto/SR 826 to I-95 Homestead Extension of Florida’s Turnpike (HEFT)/SR 821 Palmetto Expressway (SR 826) from US 1/SR 5 to SR 91 Polk County Parkway (SR 570) Sawgrass Expressway (SR 869) from I-75 to I-95 Seminole Exp (SR 417) from I-4 to Orange/Osceola CL South Crosstown Expressway (SR 618) South Dade (Don Shula) Expressway (SR 874)

Facility Type and Quantity	Facility
	Southern Connector Extension (SR 417) SR 100/SR 100A/US 41/US 90 from I-95 to I-10 SR 123 from SR 85 south to SR 85 north SR 26, SR 24/SR 331, and SR 20 from US 19 to I-95 SR 29 from I-75 to SR 80 SR 29 from SR 80 to US 27/SR 25 SR 326/CR 326 from I-75 to US 301/US 441 SR 326/SR 40 from US 301/SR 200 to I-95 SR 429 (Western Beltway Orlando) SR 44 from US 19 to I-75 SR 50 from US 19 to I-75 SR 60 from I-275 to the Veterans Expressway SR 60 from I-75 to I-95 SR 64 from US 17 to US 27 SR 70 from Florida’s Turnpike (SR 91) to I-95 SR 70 from I-75 to US 17 SR 70 from SR 710 to Florida’s Turnpike (SR 91) SR 70 from US 17/SR 35 to SR 710 SR 710/708 from SR 70 to I-95 SR 77 from CR 2300 to I-10 SR 79 from I-10 to the Alabama State Line SR 80 from I-75 to I-95 SR 82 from I-75 to SR 29 SR 85 from SR 123 to I-10 SR 87 from US 98 to I-10 SR 997 (Krome Avenue) from US 1 to US 27 Suncoast Parkway 1 (SR 589) US 1 from I-295 to the Georgia State Line US 1 from Key Largo to HEFT (SR 821) US 17 from I-4 to I-295 US 17 from I-75 to SR 60 US 19 from SR 44 to the Georgia State Line US 231 from E Ave in Panama City to AL State Line US 27 from SR 826 to Florida’s Turnpike US 27/US 27A from US 19 to I-75 US 29 from I-10 to the Alabama State Line US 301 from SR 40/SR 326 to I-95 US 319 from I-10 to the Georgia State Line US 331 from US 98 to the Alabama State Line US 441 from SR 80 to SR 60 US 98 from Okaloosa/Walton CL to Walton/Bay CL US 98 from SR 60 to SR 570/Polk County Parkway US 98 from US 19 to Suncoast Parkway (SR 589) Veterans Expressway/SR 589 from SR 60 to Suncoast Wekiva Parkway from SR 429 at US 441 to I-4 Western Beltway (SR 429) from I-4 to Seidel Road
SIS Highway Freight Connectors (110 miles)	Cape Canaveral Spaceport to I-95 Cape Canaveral Spaceport to SR 528 Ft. Lauderdale FEC Intermodal Terminal to I-95 Ft. Lauderdale/Hollywood Int Airport to I-95 Jacksonville CSX Intermodal Terminal to I-295 Jacksonville FEC Intermodal Terminal to I-95 Jacksonville International Airport to I-295

Facility Type and Quantity	Facility
	Jacksonville NS Intermodal Terminal to I-295 Miami Hialeah FEC Intermodal Term to SR 826 Miami International Airport to SR 826 (??) Orlando CSXI Intermodal Terminal to SR 528 Orlando International Airport to SR 528 Port Canaveral to SR 528 Port Everglades to I-95 Port Manatee to I-275 Port of Fernandina to I-95 Port of Jacksonville (Blount Island) to I-295 Port of Jacksonville (Dames Point Terminal) to I-295 Port of Jacksonville (New Berlin) to I-295 Port of Jacksonville (Talleyrand) to I-95 Port of Miami to I-395 via Tunnel Port of Palm Beach to I-95 Port of Panama City to SR 77 Port of Pensacola to I-110 Port of Tampa (Hookers Point) to SR 618 Port of Tampa (Port Redwing) to I-75 Port of Tampa (Port Sutton/Pendola Pt) to SR 618 Tallahassee Regional Airport to I-10 Tampa CSXI Uceta Intermodal Terminal to I-4 Tampa International Airport to SR 589
SIS Rail Corridors (2,381 miles)	CSX A Line CSX Agricola Tram Spur CSX AR Line CSX ARF Line CSX AY Line CSX AZA Line CSX K Line CSX S Line CSX SM Line CSX SN Line CSX SP Line CSX SV Line CSX SVC Line CSX SVH Line CSX SX Line CSX SY Line CSX SZ Line Florida Central Railroad (FCEN) Mainline Florida Central Railroad (FCEN) ST Line Florida East Coast (FEC) LR Line Florida East Coast (FEC) Mainline A Florida East Coast (FEC) Mainline B Florida East Coast (FEC) Mainline C Florida East Coast (FEC) Medley Lead Florida Northern Railroad (FNOR) AR Line Florida Northern Railroad (FNOR) ARD Line Florida Northern Railroad (FNOR) SN Line Norfolk Southern Line Progress Energy Line South Florida Rail Corridor (SFRC) SX Line

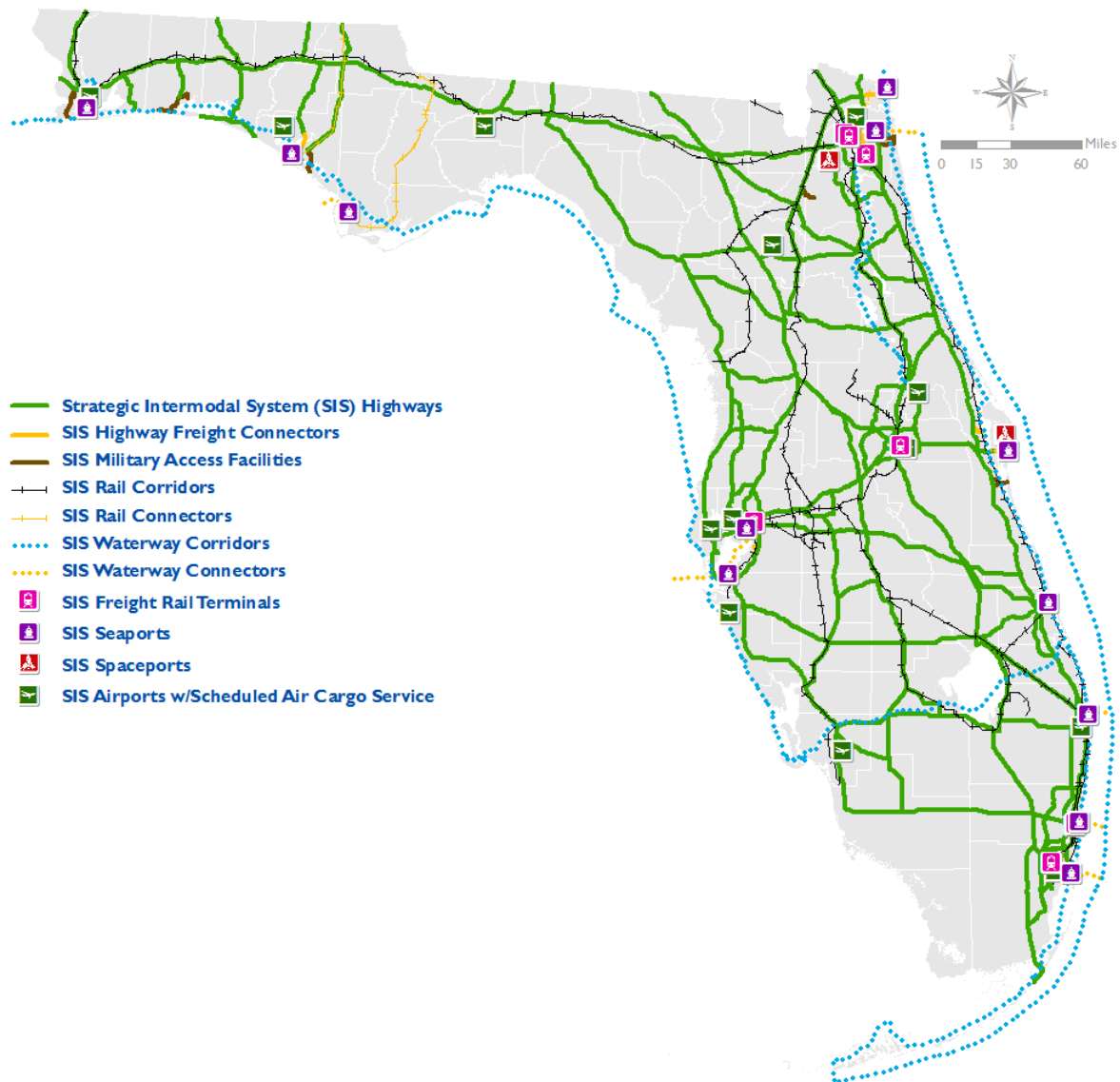
Facility Type and Quantity	Facility
	South Florida Rail Corridor (SFRC) SXH Line Seminole Gulf Railway (SGLR) AX Line South Central Florida Express (SCFER) AVD Line South Central Florida Express (SCFER) K Line US Sugar Rail Line
SIS Rail Connectors (275 miles)	Cape Canaveral Spaceport to FEC Mainline C Jacksonville CSX Intermodal Terminal to CSX A Ln Miami Hialeah FEC Intermodal Terminal to FEC LR Orlando CSXI Intermodal Terminal to CSX A Line Port Everglades to FEC Mainline C Port Manatee to CSX AZA Line Port of Fernandina to CSX A and NS Lines Port of Jacksonville (Blount Isl) to CSX A and NS Port of Jacksonville (Dames Pnt) to CSX A and NS Port of Jacksonville (Talleyrand) to CSX A and NS Port of Miami to FEC LR Line Port of Palm Beach to FEC Mainline C Port of Panama City to GA State Line (Bay Line RR) Port of Pensacola to CSX K Line Port of Port St. Joe to CSX SP Line Port of Tampa (Hookers Point) to CSX S/D Lines Port of Tampa (Port Redwing) to CSX AZA Line Port of Tampa (Sutton/Pendola Pt) to CSX AZA Ln Miami Spur to South Florida Rail Corridor
SIS and Emerging SIS Waterways (2,214 miles) *Note: Emerging SIS designation for Miami River pending community and environmental screening and adoption by the Secretary	Atlantic Intracoastal Waterway Atlantic Shipping Lane Escambia River Gulf Coastal Shipping Lane Gulf Intracoastal Waterway La Grange Bayou Miami River Okeechobee Waterway St. John's River
SIS Waterway Connectors (195 miles)	Port Everglades to Atlantic Coast Shipping Lane Port Manatee to Port of Tampa Port of Canaveral to Atlantic Intracoastal Waterway Port of Fernandina to Atlantic Intracoastal Waterway Port of Jacksonville to Atlantic Coast Shipping Lane Port of Miami to Atlantic Coast Shipping Lane Port of Palm Beach from channel and turning basins to Atlantic Coast Shipping Lane Port of Panama City to Gulf Intracoastal Waterway Port of Pensacola to Gulf Intracoastal Waterway Port of Port St Joe to Gulf Coast Shipping Lane Port of Tampa to Gulf Coast Shipping Lane
SIS Military Access Facilities (94 miles) *Note: SIS designation on facilities with as asterisk are pending application, technical review, community and environmental screening, and adoption by the Secretary	Connection between Hurlburt Field and SR 123 Connection between Eglin AFB and SR 123 Connection between NAS Jacksonville and I-295 Connection between MacDill AFB and Crosstown Expressway Connection between Cape Canaveral AFS and SR 401* Connection between NS Mayport and SR 9A Connection between NAS Pensacola and I-10* Connection between Tyndall AFB and US 231*

Facility Type and Quantity	Facility
	Connection between Camp Blanding and US 301* Connection between Patrick AFB and I-95
SIS Freight Rail Terminals (7)	Fort Lauderdale Florida East Coast (FEC) Intermodal Terminal Jacksonville CSX Intermodal Terminal Jacksonville Florida East Coast (FEC) Intermodal Terminal Jacksonville Norfolk Southern Intermodal Terminal Miami Hialeah Florida East Coast (FEC) Intermodal Terminal Orlando CSXI Intermodal Terminal Tampa CSXI Uceta Intermodal Terminal
Emerging SIS Freight Rail Terminals (15) *Note: SIS designation pending application and technical review for all 15 proposed Emerging SIS freight rail terminals. The Winter Haven CSX ILC will likely be added once opened.	BAYL Panama City CSX Agroock CSX Big Bend CSX Bostwick CSX Central CSX East Tampa CSX Garwood South CSX New Wales CSX Ridgewood CSX South Ft. Meade CSX Taft Florida East Coast (FEC) City Point Florida East Coast (FEC) Ft. Pierce Norfolk Southern Occidental Norfolk Southern West Occidental
SIS and Emerging SIS Deepwater Seaports (12) *Note: Includes planned add facilities. Emerging SIS designation for Port of Ft. Pierce pending community and environmental screening and adoption by the Secretary	Port Canaveral Port Everglades Port Manatee Port Miami Port of Fernandina Port of Ft. Pierce Port of Jacksonville Port of Palm Beach Port of Panama City Port of Pensacola Port of Port St. Joe Port of Tampa
SIS Spaceports (2) *Note: Includes planned add facilities	Cape Canaveral Spaceport Cecil Spaceport
SIS and Emerging SIS Airports with Scheduled Air Cargo Service (14)	Fort Lauderdale/Hollywood International Airport Gainesville Regional Airport Jacksonville International Airport Miami International Airport Northwest Florida Beaches International Airport Orlando International Airport Orlando Sanford International Airport Palm Beach International Airport Pensacola Gulf Coast Regional Airport Sarasota/Bradenton International Airport Southwest Florida International Airport St. Petersburg-Clearwater International Airport Tallahassee Regional Airport Tampa International Airport

Facility Type and Quantity	Facility
SIS Intermodal Logistics Centers (TBD)	TBD (criteria established and none in the designation progress, but could include CSX Winter Haven ILC, Cecil Commerce Center, Port of Panama City Intermodal Distribution Center, Keystone ILC Terminal, South Florida Logistics Center, and/or Port Manatee Commerce Center)
Facilities important to the movement of freight that are not included on Florida's SIS or the National Freight Network	
"Last Mile" Highway Connectors *Note: Not shown on map due to scale	Metro Parkway (SR 739) to I-75 Chamberlin Parkway to I-75 via Daniels Parkway

Note: Summary does not include "planned drops" from the SIS. See page 3-16 for more on "Last Mile."

Figure 37: Florida's Freight Network



Source: FDOT Systems Planning Office data, 2014

Additional “Last Mile” Connectors

Additional highway connectors may be identified and added to the Florida Freight Network to accommodate the critical “last mile” movement of goods. FMTP Policy Element Strategy 2.2.1 specifically calls for FDOT to improve hub connections to the last mile and beyond. This was recognized as an important aspect of increasing operational efficiency of goods movement by freight stakeholders involved in developing the plan.

Supporting this last mile strategy, an analysis of existing connectors between SIS corridors and hubs was completed to evaluate their appropriateness as a part of the Florida Freight Network. While the analysis of commodity flows on Florida’s State Highway System helped to validate the Strategic Intermodal System as the Florida Freight Network by corridors, connectors to freight hubs are more complex. Past research completed by the FDOT Systems Planning Office suggested freight and passenger movement occurs on a variety of routes depending on direction of travel, level of congestion, and a number of other possible factors. This has led to many SIS hubs having multiple highway connectors to address both passenger and cargo/freight entrances and/or to account for one way situations and different directions of travel.

For many freight hubs already on the SIS and the Florida Freight Network, a majority of the truck traffic moved along existing SIS Highway Freight or Passenger Connectors. Therefore the “last mile” should be accommodated for these hubs. However, for a few other SIS freight hubs there was not clearly a heavily utilized connector. This suggests goods movement occurs on a variety of routes depending on direction of travel, level of congestion, and a number of other possible factors.

In order to better address goods movement to the last mile at SIS hubs, additional connectors are recommended in **Table 5** to be considered in the next SIS Strategic Plan Update.

Table 5: Recommended Additional “Last Mile” Connectors

Facility Type and Quantity	Facility
Facilities important to the movement of freight that are not included on Florida’s SIS or the National Freight Network	
Additional Highway Freight Connectors (79.4 miles)	Port Manatee to I-75 via Buckeye Rd and US 41 (4.9 mi) Jacksonville FEC Intermodal Terminal to I-95 via University Blvd W and US 1 (1 mi) Jacksonville NS Intermodal Terminal to I-95 via US 1 (4.4 mi) Port of Port St. Joe to I-10 via SR 71 and SR 73 (69.1 mi)

Freight stakeholders may recommend additional last mile connectors to the Florida Freight Network. Examples of appropriate recommended facilities include highway, rail or waterway segments that facilitate seamless intermodal transfers, or those that connect to non-SIS freight hubs such as distribution centers or foreign trade zones (FTZs). Additional connectors should be identified in local or regional plans as a freight-oriented facility. Documentation of importance to a supply chain also may be needed to recommend an addition to the Florida Freight Network. Last mile connector additions will be considered on a case-by-case basis and evaluated by FDOT Freight, Logistics and Passenger Operations Office staff.

Florida Freight Network Integration

The Florida Freight Network is consistent with ongoing FDOT planning efforts including the Florida Transportation Plan (FTP), Strategic Intermodal System (SIS), and Future Corridors program. The FMTP incorporates many of the policies from the FTP, utilizes the SIS as a base for the strategic network of

freight facilities in the state, and will be augmented as new facilities developed from the Future Corridors program are realized.

Freight Project Definition

A Florida freight project is defined using a three tiered approach for multimodal freight improvement projects located on the Florida Freight Network. This section provides background on the federal definition of a freight project, the Florida freight project definition, and process used to prioritize freight projects for inclusion in the FMTP Investment Element.

MAP-21 Freight Project Definition

According to MAP-21, a freight project is any surface transportation project eligible for assistance under Title 23 United States Code which improves the movement of freight. Eligible projects may include, but are not limited to:

- Construction, reconstruction, rehabilitation, and operational improvements directly relating to improving freight movement
- Intelligent transportation systems and other technology to improve the flow of freight
- Efforts to reduce the environmental impacts of freight movement on the primary freight network
- Railway-highway grade separation
- Geometric improvements to interchanges and ramps
- Truck-only lanes
- Climbing and runaway truck lanes
- Truck parking facilities eligible for funding under Section 1401, “Jason’s Law”³⁷
- Real-time traffic, truck parking, roadway condition, and multimodal transportation information systems
- Improvements to freight intermodal connectors
- Improvements to truck bottlenecks

In addition, MAP-21 identifies four categories of projects that are considered “High Priority” for investment:

- Improvements to freight intermodal connectors
- Improvements to freight and truck bottlenecks
- Projects for a public freight rail facility or a private facility providing public benefits for highway users by way of direct freight interchange between highway and rail carriers
- Projects or group of projects that are integrated in function, such as along a major freight corridor.

There may be projects other than the types listed above that the USDOT Secretary may find to be eligible for increased federal share under Section 1116. For projects that do not fit within one of the types listed above, the USDOT Secretary will make a case-by-case determination as to whether the project falls under a category that should be considered eligible under MAP-21. Projects located on facilities that prohibit

³⁷ On July 6, 2012, Sec. 1401 or “Jason’s Law” was included in Public Law 112-141 relating to Highway Safety. The purpose was to address the shortage of long-term parking for commercial motor vehicles on the National Highway System and to improve safety. <http://www.gpo.gov/fdsys/pkg/PLAW-112publ141/pdf/PLAW-112publ141.pdf>

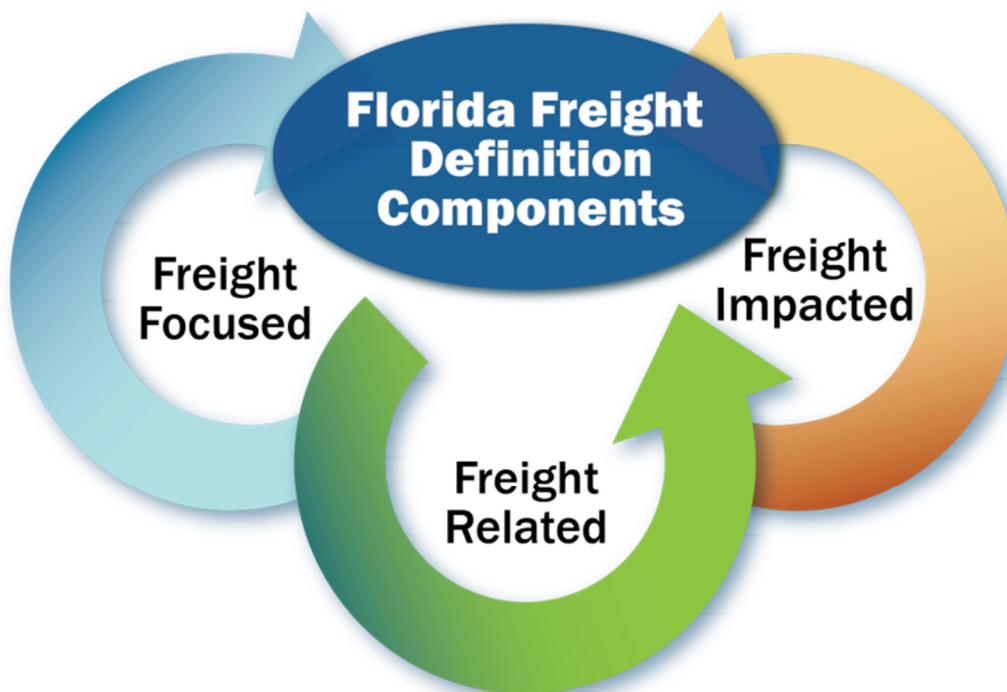
commercial vehicles would not be eligible for increased Federal share. This includes managed lanes where commercial vehicles are restricted.

It is important to note that MAP-21 is largely a highway funding bill; and, as such, the only consideration of other modes is how they facilitate highway movements. In keeping with Florida’s broader look at the overall freight system, FDOT is taking a wider approach to identifying freight projects.

Florida Freight Project Definition

A project will be considered a freight project in Florida if it is on the Florida Freight Network and satisfies one of the three components below.

- **Freight Focused** - the primary purpose of the project is to address a specific freight transportation need
- **Freight Related** - the primary purpose of the project is to address multiple transportation concerns, of which freight is one element
- **Freight Impacted** - the primary purpose of the project is to address general transportation needs, however freight mobility may be positively affected



Important Note: It does not matter which components a project qualifies by, as the prioritization process outlined in Chapter 4 will determine the priority.

Chapter 4 : Prioritization Process

The previous chapters of this plan identified the Florida Freight Network and Florida Freight Project Definition, as well as summarized performance, issues, and bottlenecks. In order to achieve state and national goals with limited resources, freight needs must be prioritized. This chapter includes a description of the freight policies, strategies, and prioritization criteria that will guide the freight-related transportation investment decisions of the State. **Figure 38** illustrates the steps FDOT used to prioritize freight projects in the FMTF Investment Element. The process was thoroughly vetted by statewide freight stakeholders, and represents a significant level of partnership.

Figure 38: Prioritization Process Steps



Key stakeholder input opportunities included:

- Prior to Business Forum I, draft prioritization criteria were presented in an online survey format for stakeholder review. Respondents were asked to rate the draft criteria for acceptability and offer comments and suggestions for revisions. The results of this survey are presented in the Draft Prioritization Criteria Summation³⁸ on www.FreightMovesFlorida.com.
- FDOT met with freight stakeholders in person on October 3, 2013 in Orlando. The draft prioritization criteria were revised based on the survey results and presented again to stakeholders at this meeting for further refinement. Again, stakeholders were asked to rate the draft criteria for acceptability and offer comments and suggestions for revisions. The results of Business Forum I are documented in the Plan Development Summation³⁹.
- FDOT held the 2nd Annual Florida Freight Leadership Forum on November 18-19, 2013 in Tampa. Attendees were asked to review the proposed prioritization criteria and provide comments for validation or additional refinement.
- Between Business Forums, FDOT held a Status Update Webinar on January 31, 2014. The purpose of the webinar was to presents the results of the prioritization criteria importance survey, provide participants with an overview of project scoring, and to go over the status of project in the Freight Project Needs Survey.
- FDOT again met with freight stakeholders in person on April 2, 2014 in Orlando. Business Forum II was an opportunity to review and provide input on the draft Investment Element and overall prioritization process.

Through these various stakeholder outreach engagements, FDOT captured the input of both public and private sector, and individual citizens up to the executive leadership of Florida.

Step 1: Development of Florida Freight Project Prioritization Criteria

The prioritization criteria are based on objectives and strategies developed during the FMTP Policy Element which can be addressed with a freight investment. A total of 26 criteria were identified for the prioritization process, as summarized in **Table 6**. The prioritization process includes a group of criteria which satisfy specific FMTP objectives and strategies as well as a second group of criteria generally regarded as best practices in project selection. Together, these criteria were used to help FDOT prioritize freight investments.

It is important to note that there are no criteria for the fifth objective of the FMTP Policy Element. This objective relates to Florida's goal of raising awareness and support for freight movement investments. The type of projects typically funded by FDOT and being evaluated for inclusion in the FMTP Investment Element (i.e. highway improvements, airport runways, seaport facilities, rail line improvements, etc.) are not the type of projects that would satisfy this objective. Thus, no criteria were developed for this section. FDOT and its partners will meet this objective by other means.

³⁸ Draft Prioritization Criteria Summation, Florida Department of Transportation, 2013
<http://www.freightmovesflorida.com/docs/default-source/fmtp-freight-information/draft-prioritization-criteria-summation.pdf?sfvrsn=0>

³⁹ Plan Development Summation, Florida Department of Transportation, 2013
<http://www.freightmovesflorida.com/docs/default-source/fmtp-freight-information/plan-development-summation.pdf?sfvrsn=0>

Table 6: Summary of Prioritization Criteria

FMTP Objectives	Criteria Name with FMTP Strategy Number*	Prioritization Criteria
FMTP Objective 1 (5 Criteria)	Targeted Industry (1.6.1)	Project addresses a specific transportation challenge for an Enterprise Florida identified targeted industry.
	Freight Hub Access (1.1.3)	Project improves access to/from an existing or developing freight hub.
	Intermodal Logistics Center (ILC) Exports (1.2.3)	Project improves Intermodal Logistics Center's (ILCs) export capability/capacity.
	Unique Niche (1.1.1)	Project supports/strengthens the unique niche of a seaport, airport, spaceport, rail freight terminal, or Intermodal Logistics Center (ILC).
	Identified Market Need (1.1.2)	Project is in response to an identified market need.
FMTP Objective 2 (7 Criteria)	Florida Freight Network (2.1)	Project is on a facility designated as the Florida Freight Network.
	Freight Bottleneck (2.5.1)	Project eliminates a freight bottleneck.
	Dedicated Freight Facility (2.5.2)	Project provides a dedicated freight facility or freight shuttle that restores capacity for freight movement.
	Intelligent Transportation Systems (ITS) (2.4)	Project uses Intelligent Transportation Systems (ITS) technology to improve system operations.
	Truck Parking (2.6.1)	Project improves a truck parking situation.
	Rest Stop Safety and Security (2.6.2)	Project improves safety and security at rest-stops/layover areas/other facilities.
	Marine Highways (2.5.3)	Project stimulates use of marine highways/short-sea shipping.
FMTP Objective 3 (3 Criteria)	Empty Backhaul (3.5)	Project reduces empty backhaul movements to cut shipping costs.
	Alternative Fuels Access (3.1)	Project improves access to Compressed Natural Gas (CNG)/Liquefied Natural Gas (LNG) or other alternative fuels.
	Supply Chain Costs (3.5)	Project minimizes costs through the entire supply chain to support manufacturing.
FMTP Objective 4 (1 Criteria)	Private Funding Amount (4.2.2; 4.2.3 and 7.3.2)	Project private funding (applicant to provide percentage of private funding proposed).
FMTP Objective 6 (2 Criteria)	Local Freight Plans (6.3)	Project is in a local freight plan (applicant must cite the local freight plan and any applicable project priority).
	Statewide Modal Plans (6.3)	Project is consistent with a statewide modal plan (applicant must cite the statewide modal plan and any applicable project priority).
FMTP Objective 7 (3 Criteria)	Emerging Freight Facilities (7.1.4)	Project supports an emerging freight facility (spaceport, marine highway, etc.)
	Benefits (7.3.3)	Project benefits to taxpayers (applicant to provide detailed list of benefits).
	Intermodal (7.3.4.1)	Project provides significant intermodal benefits (multiple freight modes).
Best Practices (5 Criteria)	Cost	Project total cost (applicant to provide detailed total project cost estimate).
	Non-FDOT Funding Status	Funding Status (applicant to provide the current status of any non-FDOT sources of revenue committed or eligible-full/partial/eligible/unfunded).
	Timing and Readiness	Project timing and readiness (applicant to provide project status).
	TIP/STIP	TIP/STIP Inclusion (applicant must cite the plan).
	Dependency	Dependency (applicant to provide list of any associated projects)

*Strategy Number refers to the specific strategy outlined in the FMTP Policy Element that the Prioritization Criteria attempts to address

Each prioritization criterion was selected based on the ability of a freight project to implement an FMTP Policy Element strategy or FDOT Best Practice. The criteria were revised with extensive input from both public and private sector stakeholders.

Step 2: Rating of Projects According to Selected Criteria

As discussed in Chapter 3, FDOT developed a Florida Freight Project Definition and a Florida Freight Network. Once a project was classified as a freight project per that definition, the project was evaluated using the prioritization criteria for inclusion in the Freight Mobility and Trade Plan Investment Element. The goal of the prioritization process was to develop a fair, consistent, replicable, and justifiable process, so projects could be universally evaluated and compared across modes. Freight projects could score up to 5 points for each of the prioritization criteria, depending on how well they satisfy that criterion. For example, if a project improves access to a hub on the Florida Freight Network, it received the full 5 points possible for the Freight Hub Access criterion. However, if a project only improves access to any other freight hub not on the Florida Freight Network, it received 3 points instead of the 5 points possible.

Table 7 summarizes the project scoring factors and includes explanations of what each of the scores mean and how they are defined. Like other aspects of the Investment Element, the scoring factors were reviewed and approved by the stakeholders. Stakeholders were able to comment on these factors during the webinar held on January 31st, 2013. Clarification on how improving access is defined as well as a completed overview of all scoring factors is presented in the Draft Project Scoring Factors Summation on www.FreightMovesFlorida.com.

Table 7: Project Scoring Factors Summary

Criteria Name	Project Scoring Factors (5 points possible)
Targeted Industry	<p>Project addresses a transportation issue, challenge, or opportunity for Cleantech, Life Sciences, Information Technology, Aviation/Aerospace, Logistics and Distribution, Defense and Homeland Security, Financial/Professional Services, Manufacturing, Corporate Headquarters, or Emerging Technologies (5 points)</p> <ul style="list-style-type: none"> ▪ Targeted industries are defined here (the Enterprise Florida site provides examples of these industries, not a list): http://www.eflorida.com/ContentSubpageFull.aspx?id=52 ▪ Applicant to identify issue(s), challenge(s), and/or opportunities, what industries are impacted, challenge(s), and/or opportunities, and how the project will solve the issue(s), challenge(s), and/or opportunities for those industries
Freight Hub Access	<p>Project improves access to hub on the Florida Freight Network (5 points) Project improves access to any other freight hub (3 points)</p> <ul style="list-style-type: none"> ▪ Improving access means to make an improvement to a roadway, railway, or waterway that directly impacts the flow of freight into/out of the hub (includes “last mile” improvements such as capacity upgrades to hub access roads, widening a channel or berth, adding rail spurs, making operational improvements that increase efficiency, etc.) ▪ For highway and rail projects, this refers to connectors only, not entire corridors ▪ Freight hubs can be all modes
Intermodal Logistics Center (ILC) Exports	<p>Project improves Intermodal Logistics Center’s (ILCs) on the Florida Freight Network export capability/capacity (5 points) Project improves any other Intermodal Logistics Center’s (ILCs) export capability/capacity (3 points)</p>

Criteria Name	Project Scoring Factors (5 points possible)
	<ul style="list-style-type: none"> ▪ Improve export capability/capacity means the project will add new or expanded hard or soft ILC or partner hub infrastructure that supports the movement of Florida exports ▪ No ILCs have been officially designated as SIS yet, so projects will receive 3 points until status changes.
Unique Niche	<p>Project supports/strengthens an identified unique niche and demonstrates statewide benefit (5 points)</p> <p>Project supports/strengthens an identified unique niche (3 points)</p> <ul style="list-style-type: none"> ▪ Niche means a specialized market, commodity or group of commodities, method of moving goods, etc. ▪ For highway and rail projects, this refers to connectors only, not entire corridors ▪ Applicants to define/identify niche, state how the project impacts that niche, and justify statewide benefit (more than local/regional benefits).
Identified Market Need	<p>Project responds to market need and demonstrates long-term benefit to the state (5 points)</p> <p>Project responds to market need (3 points)</p> <ul style="list-style-type: none"> ▪ Applicant to identify market need and source (definition can vary), how the project meets the market need, and justify the long-term benefit to the state (if market need changes, still benefit to the state). ▪ Market need should be distinct from providing freight hub access or addressing a freight bottleneck.
Florida Freight Network	<p>Project is on a facility designated as the Florida Freight Network (5 points)</p> <ul style="list-style-type: none"> ▪ Florida Freight Network facilities includes everything on the Strategic Intermodal System (SIS) EXCEPT all passenger terminals (such as TriRail and Greyhound), all passenger connectors if there is a freight connector to the same hub, connectors to passenger terminals, and transit rail corridors (such as Central Florida Rail Corridor). ▪ SIS Atlas shows all freight and passenger facilities, including maps and descriptions of connectors by district. For the purposes of the Florida Freight Network criteria, it does not matter if it is classified as SIS or Emerging SIS. The Emerging Freight Facility criteria take into account Emerging SIS and other definitions of emerging facilities. ▪ http://www.dot.state.fl.us/planning/systems/programs/mspi/pdf/Complete%20Book.pdf
Freight Bottleneck	<p>Project eliminates a freight bottleneck on the Florida Freight Network (5 points)</p> <p>Project eliminates a freight bottleneck (3 points)</p> <ul style="list-style-type: none"> ▪ A bottleneck can be defined as a localized section of hard infrastructure that experiences reduced speeds and inherent delays due to a recurring operational influence or a nonrecurring impacting event. It is a localized constriction of traffic or commodity flow. A bottleneck is distinguished from congestion because it occurs on a subordinate segment of a parent facility, and not pervasively along the entire facility. This could also include narrow channels, or other examples associated with modes. ▪ A bottleneck on soft infrastructure could be related to inspections, regulatory, etc.
Dedicated Freight Facility	<p>Project provides a dedicated freight facility or freight shuttle (5 points)</p> <ul style="list-style-type: none"> ▪ Freight shuttle/dedicated means the facility is used exclusively to transport freight and/or freight vehicles, such as a rail spur project serving a freight hub or the I-4/Selmon Expressway Connector that provided exclusive truck lanes to the Port of Tampa Bay ▪ Applicant to define/identify the dedicated freight facility or freight shuttle.

Criteria Name	Project Scoring Factors (5 points possible)
Intelligent Transportation Systems (ITS)	<p>Project uses ITS technology and demonstrates improved freight systems operations (5 points)</p> <ul style="list-style-type: none"> ▪ Applicant to identify how the project incorporates ITS, and justify improved freight systems operation ▪ Projects on corridors/connectors with existing ITS should not receive points unless the project provides an upgrade or other improvement
Truck Parking	<p>Project adds any truck parking (5 points)</p> <ul style="list-style-type: none"> ▪ Applicant to identify how the project adds net truck parking ▪ Better access to existing parking facilities should be included in the Rest Stop Safety and Security criteria
Rest Stop Safety and Security	<p>Project improves safety and security at rest-stops/ layover areas/other facilities (5 points)</p> <ul style="list-style-type: none"> ▪ Applicant to identify how the project improves safety and security at rest-stops/layover areas/other facilities ▪ Intended to address Jason's Law, and example projects include: <ul style="list-style-type: none"> – New dedicated parking areas for commercial truck drivers – Opening existing facilities to CMV parking – Parking for CMVs adjacent to truck stops and plazas – Capital improvements to public CMV facilities which are currently closed on a seasonal basis so that they can operate year-round ▪ Better access to existing parking facilities
Marine Highways	<p>Project increases use of marine highways on America's Marine Highway System (5 points) or Project increases use of short-sea shipping (5 points)</p> <ul style="list-style-type: none"> ▪ Stimulates use means the seaport is located on a marine highway and will send more goods through a marine highway. ▪ Applicant to identify how the project improves increases the use of marine highways or short-sea shipping ▪ Increases use should be distinct from providing freight hub access or addressing a freight bottleneck
Empty Backhaul	<p>Project reduces empty backhaul movements (5 points)</p> <ul style="list-style-type: none"> ▪ Applicant to define empty backhaul and prove how project reduces empty backhaul ▪ For highway and rail projects, this refers to connectors only, not entire corridors
Alternative Fuels Access	<p>Project improves access to existing or emerging alternative fuel infrastructure (5 points)</p> <ul style="list-style-type: none"> ▪ Applicant to define access and prove how improved
Supply Chain Costs	<p>Project minimizes costs for any aspect of a supply chain related to manufacturing (5 points)</p> <ul style="list-style-type: none"> ▪ Applicant to define minimizes and prove cost savings
Private Funding Amount	<p>Project private funding is over 50% (5 points) Project private funding is over 25% (3 points)</p> <ul style="list-style-type: none"> ▪ Applicant to give details of total cost including which portions are to be funded by private sector and to identify the private sector partner ▪ Discussion on other potential sources of funding should be included in the Non-FDOT Funding Status criteria

Criteria Name	Project Scoring Factors (5 points possible)
Local Freight Plans	<p>Project is in a local or regional freight plan (5 points) Project is in a local or regional plan that includes a freight component (3 points)</p> <ul style="list-style-type: none"> ▪ Applicant to cite the plan ▪ Freight plan means the primary purpose of the plan/document is to address freight issues ▪ All other plan/documents will be considered a freight component, including LRTP, etc.
Statewide Modal Plans	<p>Project is consistent with a statewide modal plan and is Very High or High priority or equivalent (5 points) Project is consistent with a statewide modal plan and is Medium priority or equivalent (4 points) Project is consistent with a statewide modal plan and is Low priority or equivalent (3 points)</p> <ul style="list-style-type: none"> ▪ Applicant to cite the plan and priority ▪ This includes the Aviation, Spaceport, Seaport, and Rail System Plans and SIS 1st 5, 2nd 5, Cost Feasible Plan, and Multimodal Unfunded Needs Plan
Emerging Freight Facilities	<p>Project supports an emerging freight facility (5 points)</p> <ul style="list-style-type: none"> ▪ Applicant to identify which definition of emerging is being used and how the project supports the facility ▪ Emerging means Emerging SIS (see SIS atlas) or other facilities that must be justified as to how they are emerging ▪ http://www.dot.state.fl.us/planning/systems/programs/mspi/pdf/Complete%20Book.pdf
Benefits	<p>Project provides anticipated benefits to taxpayers that far exceed the estimated total cost (5 points) Project provides anticipated benefits to taxpayers (3 points)</p> <ul style="list-style-type: none"> ▪ Applicant to describe anticipated benefits and explain how those anticipated benefits far exceed the estimated total cost (far exceed is intended to reward projects with the potential for very high return on investment (ROI) or benefit cost analyses) ▪ Benefits should be distinct from providing freight hub access or addressing a freight bottleneck ▪ Examples include jobs created, safety, travel time savings, vehicle operating costs savings from better pavement conditions, increasing/optimizing capacity, etc.
Intermodal	<p>Project provides significant intermodal benefits (5 points)</p> <ul style="list-style-type: none"> ▪ Intermodal means carriage by more than a single mode with a transfer(s) between modes (from Policy Glossary). For seaport projects, must state there are intermodal benefits in SeaCIP. ▪ Significant means the that there are direct benefits to more than a single freight mode or to the transfer process ▪ Applicant to define how the project is intermodal and prove how project provides significant benefits
Cost	<p>Project includes detailed total cost estimate (5 points) Project includes partial cost estimate (3 points)</p> <ul style="list-style-type: none"> ▪ Detailed total cost estimate means breakdowns by phase, or infrastructure costs vs. equipment costs, etc. (eligibility for funding/financing varies by source, and will be addressed as the project is selected to be funded) ▪ Partial cost estimate means cost amount only with no breakdown

Criteria Name	Project Scoring Factors (5 points possible)
Non-FDOT Funding Status	Project funding status full/partial (5 points) Project funding status eligible (3 points) <ul style="list-style-type: none"> ▪ <i>Committed funding information should match SeaCIP, JACIP, etc.</i>
Timing and Readiness	Project readiness statuses are mostly complete/not applicable (5 points) Project readiness statuses are mostly underway/not applicable (3 points) <ul style="list-style-type: none"> ▪ <i>Points averaged between Environmental, Design and ROW, and additional permitting</i>
TIP/STIP	Project is included in TIP/STIP (5 points) <ul style="list-style-type: none"> ▪ <i>Applicant must cite plan</i>
Dependency	Project is linked to a larger freight improvement strategy (5 points) <ul style="list-style-type: none"> ▪ <i>Applicant to cite any associated projects, including projects that impact other modes and associated projects on the same corridor</i>

Step 3: Incorporation of Criterion Importance Weighting

The next step in the prioritization process was to select an approach to criteria weighting. While each prioritization criterion was useful for selecting freight projects for state investment, some criteria are more important to that decision than others. FDOT consulted stakeholders to decide how to weight each of the prioritization criteria. At Business Forum I: Plan Development, participants were asked to review an updated set of draft criteria for prioritizing state investment in freight. The participants in the Forum discussed the criteria and suggested some further refinements.

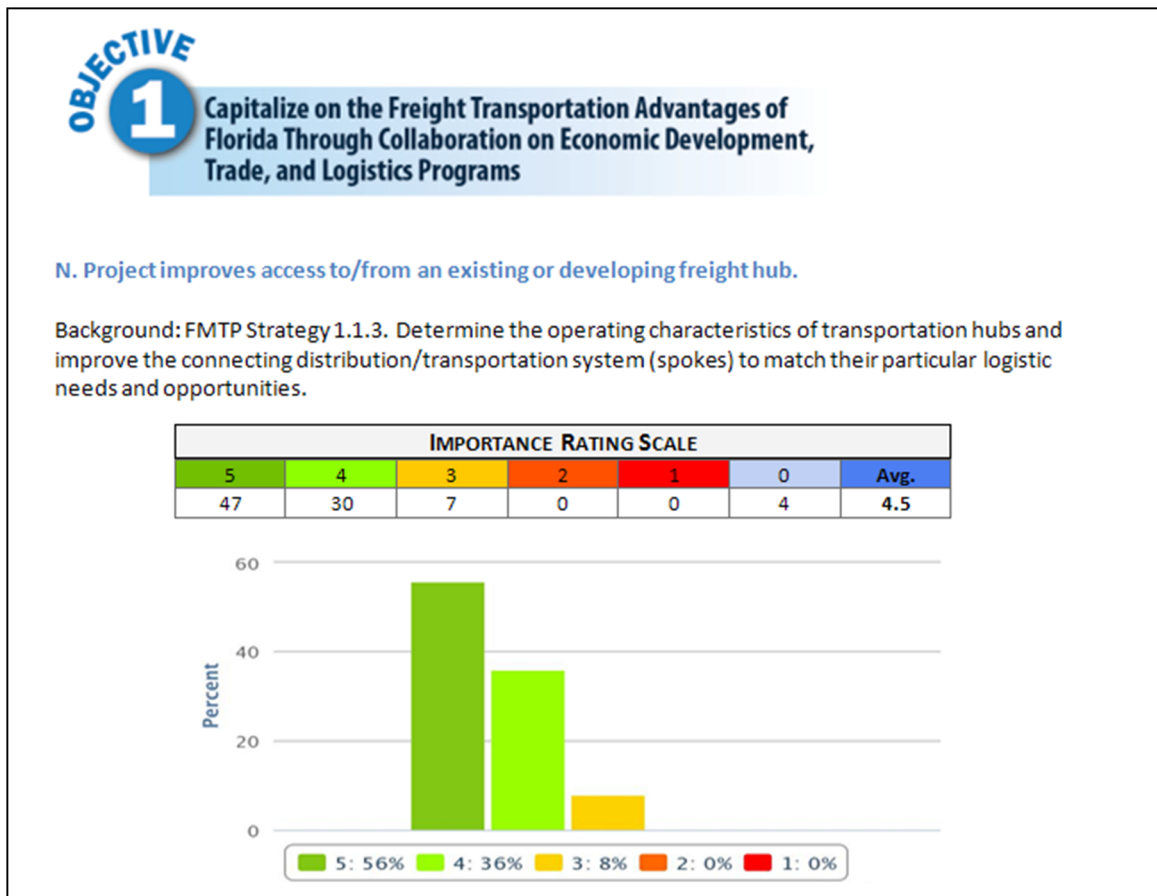
As a follow up to Business Forum I, an online importance survey with the revised criteria was conducted. Stakeholders were asked to review each of the revised criteria and indicate their perspective on its relative importance in determining if a freight project is appropriate for statewide investment. A compilation of the results was presented at the 2nd Annual Florida Freight Leadership Forum on November 18-19, 2013.

A broad range of 86 freight stakeholders from the private, public and non-profit sectors, representing diverse freight and transportation perspectives, responded to the survey reviewing and rating the relative importance of each of 26 revised criteria using a 5-point importance scale:



Stakeholders also provided comments to explain their ratings. None of the 26 draft criteria received less than a 3.3 of 5 in average overall importance rating. This is an excellent rating for importance considering the diverse group of respondents. Generally speaking, the freight stakeholders determined all the criteria were of importance. **Figure 39** provides an example of the overall importance rating for one criterion.

Figure 39: Example of Stakeholder Overall Importance Rating



The 5-point scale was used to gauge relative importance and was used as a multiplier for project scores on each criterion. Since the freight stakeholder participants represented diverse freight and transportation perspectives, the decision was made to use the freight relative average importance ratings as a weighting factor for each criterion. The results of this survey are presented in the Draft Prioritization Criteria Importance Summation⁴⁰ on FreightMovesFlorida.com, and shown in **Figure 40**.

Figure 40: Prioritization Criteria Average Importance Rating

Prioritization Criteria	Average Importance Rating
Project addresses a specific transportation challenge for an Enterprise Florida identified targeted industry.	4.0
Project improves access to/from an existing or developing freight hub.	4.5
Project improves Intermodal Logistics Center's (ILCs) export capability/capacity.	3.9
Project supports/strengthens the unique niche of a seaport, airport, spaceport, rail freight terminal, or Intermodal Logistics Center (ILC).	4.1
Project is in response to an identified market need.	4.2
Project is on a facility designated as the Florida Freight Network.	4.1
Project eliminates a freight bottleneck.	4.4
Project provides a dedicated freight facility or freight shuttle that restores capacity for freight movement.	3.6
Project uses Information Technology Systems (ITS) technology to improve system operations.	3.7
Project improves a truck parking situation.	3.4
Project improves safety and security at rest-stops/layover areas/other facilities.	3.3
Project stimulates use of marine highways/short-sea shipping.	3.4
Project reduces empty backhaul movements to cut shipping costs.	3.8
Project improves access to Compressed Natural Gas (CNG)/Liquefied Natural Gas (LNG) or other alternative fuels.	3.4
Project minimizes costs through the entire supply chain to support manufacturing.	3.9
Project private funding (applicant to provide percentage of private funding proposed).	4.1
Project is in a local freight plan (applicant must cite the local freight plan and any applicable project priority).	4.1
Project is consistent with a statewide modal plan (applicant must cite the statewide modal plan and any applicable project priority).	3.9
Project supports an emerging freight facility (spaceport, marine highway, etc.)	3.7
Project benefits to taxpayers (applicant to provide detailed list of benefits).	4.2
Project provides significant intermodal benefits (multiple freight modes).	4.1
Project total cost (applicant to provide detailed total project cost estimate).	4.2
Funding Status (applicant to provide the current status of any non-FDOT sources of revenue committed or eligible- full/partial/eligible/unfunded).	4.1
Project timing and readiness (applicant to provide project status).	4.2
TIP/STIP Inclusion (applicant must cite the plan).	3.9
Dependency (applicant to provide list of any associated projects)	4.1

Step 4: Compilation of Project Scores and Prioritization Grouping

There are 26 prioritization criteria, and a project can score up to 5 points for each. Project scores for each criterion were multiplied by the respective importance rating to produce a weighted score for each of the prioritization criterion. By adding the weighted scores among prioritization criteria for a given project, the total points for a project can be determined. Based on identified weightings, the best possible composite

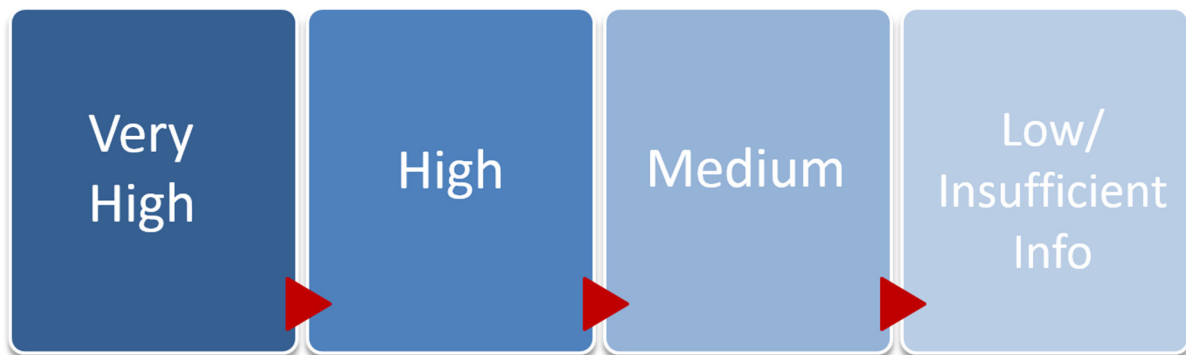
⁴⁰ Draft Prioritization Criteria Importance Summation, Florida Department of Transportation, 2013
<http://www.freightmovesflorida.com/docs/default-source/fmtp-freight-information/draft-prioritization-criteria-importance-summation.pdf?sfvrsn=0>

score for a project is 511.5. **Important Note: Given the diversity of FMTP Policy Element strategies that many of the prioritization criteria were based on, it is impossible for a project to obtain 511.5 total points.**

Once projects were scored, the results were analyzed and projects were grouped by logical breaks into prioritization categories. This method of categorization by natural breaks is good for an uneven distribution of scores, as each priority group can vary in the number of projects included.

Priority groups were used, rather than publish total scores for each project, to reduce the impacts of any possible subjectivity or nuances in scoring. The priority groups chosen for the FMTP Investment Element are: Very High, High, Medium, and Low/Insufficient Info. These groups are shown in **Figure 41**.

Figure 41: Freight Project Priority Groups



If a freight project scores highly and is assigned to the Very High priority group, the project unquestionably implements the state and national freight goals and is worth state investment in the short term. A project assigned to the High priority group likely implements many of the state and national freight goals and should be worth state investment after Very High priority projects are funded. Medium priority group projects likely implement some of the state and national freight goals and should be worth state investment in the long term.

Projects assigned the Low/Insufficient Info priority group either do not appear to implement the state and national freight goals, or simply are not fleshed out enough to allow adequate prioritization. **Important Note: If a freight project falls in the Low/Insufficient Info priority group, it does not automatically mean the project is inherently bad. FDOT developed the FMTP as a dynamic document, and project priorities can change as projects move forward and provide more information or as market needs evolve.**

FDOT intended the Freight Mobility and Trade Plan to go beyond existing prioritization efforts by defining priorities across all modes of transportation. The FMTP provides the state with an integrated and comprehensive plan to focus on implementing objectives and strategies to benefit the movement of goods across modes. Therefore, while normalization was considered if the total scores were too uneven, freight projects were assigned priority groups regardless of mode.

In the same manner, freight project prioritization was not directly affected by Interstate/Non-interstate classification or by urban/rural classification. However many individual prioritization criterion rely on the distinction between freight projects of local or statewide significance, as justified by each project applicant and reviewed by FDOT. For example, some freight projects may benefit a niche market greatly, but may not provide long-term benefits to the state. In these cases, projects did not receive full points for that prioritization criterion.

While urban and rural grouping was not a part of the prioritization process, rural freight projects were not excluded. The Florida Freight Network includes facilities on the Emerging SIS, which have lower criteria and thresholds intended to capture rural facilities⁴¹. FDOT also kept MPO stakeholders informed through the MPOAC mailing list, and encouraged representatives of regional freight plans to include their projects.

Freight projects also were rewarded for integration into a larger freight strategy by gaining points in the dependency prioritization criterion. This allows the FMTP to include multijurisdictional projects, projects on multistate corridors, and to better integrate with local and regional priorities.

Step 5: Evaluation of Return on Investment

In this time of limited resources, it is more important than ever to make strategic investments in freight. However, while it is vital to make sure a project provides enough estimated benefit to outweigh estimated costs, that level of analysis will not be needed for every project at this stage. Depending upon the type of project, appropriate return on investment (ROI) or benefit cost analyses require a significant amount of time and resources to estimate user benefits, determine long-term economic impacts, and compare alongside estimated total costs.

To begin to answer this question for each of the freight projects included in the FMTP Investment Element, FDOT included Project Benefits as one of the prioritization criteria. This allowed project applicants to discuss project benefits (i.e.: jobs created) in as much or little detail as desired, with the note that FDOT will use the answer to determine some points toward the project's total score.

Following the publication of the FMTP Investment Element, FDOT offices will begin to take the FMTP priority groups into account in their existing project prioritization and selection processes. Projects in the Very High priority group will likely need additional ROI or benefit cost analyses to satisfy modal requirements or the funding source requirements.

FDOT offices such as Policy Planning, Aviation and Spaceports, Seaports and Waterways, Rail and Motor Carrier, and Systems Planning currently have ROI tools they use to help make investment decisions. These tools represent various levels of detail, and are optimized for specific project types or modes of transportation. In addition, the Office of Policy Planning is in the early stages of researching a planning level ROI tool. If this research progresses into a successfully implemented multimodal tool, the FMTP may eventually incorporate it into the prioritization criteria as a replacement to the project benefits criterion.

⁴¹ SIS Facility Designation, Florida Department of Transportation, 2014 <http://www.dot.state.fl.us/planning/sis/esis.shtm>

Summary of Prioritization Process

This chapter focused on defining the prioritization process FDOT will use to evaluate the “universe” of freight projects. The prioritization process consists of 5 steps:

- Development of Florida Freight Project Prioritization Criteria
- Rating of Projects According to Selected Criteria
- Incorporation of Criterion Importance Weighting
- Compilation of Project Scores and Prioritization Grouping
- Evaluation of Return on Investment

Following the development, revision, and finalization of the prioritization process by freight stakeholders, FDOT focused on compiling a comprehensive list of freight related project needs. FDOT conducted an extensive data collection effort by conducting a Freight Projects Needs Survey. The Freight Projects Needs Survey was an online project portal and database used to collect data and information about proposed freight projects from FDOT’s partners. The Freight Projects Needs Survey along with the prioritized list of Florida Freight Project Needs presented by priority group is discussed in Chapter 5.

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Chapter 5 : Florida Freight Project Needs

Identifying Freight Project Needs to be Prioritized

The FMTP is much more than just a freight plan. This effort couples commerce and energy with transportation to provide an integrated analysis to provide solutions to solve issues and needs in a cross-cutting, multi-functional approach. To that end, FDOT identified and gathered capacity and operational improvement projects through a series of tasks to gain a full picture of statewide freight needs. For the purposes of the FMTP, needs include public or private projects, regardless of current or potential funding commitments. These tasks included the following:

- Review of projects identified in State, regional, Metropolitan Planning Organization (MPO), modal or agency partner plans
- Survey of freight stakeholders to add freight projects (Freight Project Needs Survey)
- Survey of agency partners

Review of Plans

Rather than start with a blank slate, FDOT made the decision to begin by examining the vast array of freight projects in existing plans. As part of the development of the FMTP Policy Element, FDOT gathered an extensive list of plans to review for freight issues. This list was updated and reviewed again for existing freight needs and projects. The list of plans reviewed includes, but is not limited to:

- 2060 Florida Transportation Plan
- Florida's Strategic Intermodal System Strategic Plan (2010)
- SIS Adopted 5-Year Plan (2013)
- SIS Approved 2nd 5-Year Plan (2013)
- SIS 2040 Cost Feasible Plan (2013)
- Florida Aviation System Plan: 2025 (Updated in 2012)
- Florida Air Cargo System Plan Update (2012, 2010, 2006)
- Florida Spaceport System Plan (2013)
- Florida Seaport System Plan (2010)
- Five-Year Florida Seaport Master Plan (2013)
- State of Florida Ports 1012/2013: The Seaport Effect (2013)
- Port Briefing Paper, Office of Freight, Logistics and Passenger Operations (September 2013)
- Intermodal Logistics Centers: Boosting Florida's Economy Through Freight Logistics (2013)
- Florida Rail System Plan: Policy Element (2009)
- Florida Rail System Plan: Investment Element (2010)
- Freight Rail Component of the Florida Rail Plan (2004)
- Florida Trade and Logistics Study (2010)
- MetroPlan Orlando Regional Freight Study 2013: Draft Recommendations and Solutions (2013)
- Tampa Bay Regional Strategic Freight Plan (2012)
- North Florida Freight, Logistics and Intermodal Framework Plan (2012)
- South Florida Regional Freight Plan (2010)

Members of the FDOT Systems Planning Office, Aviation and Spaceports Office, Seaports and Waterways Office, and Rail and Motor Carrier Office helped to choose which projects from each of their plans fit the Florida Freight Project Definition. More details on the Florida Freight Project Definition are included in Chapter 3.

Freight Project Needs Survey

In addition to gathering freight needs and projects from existing plans, FDOT developed an online survey to capture stakeholder input. The survey was located at <http://survey.freightmovesflorida.com> to further promote the logistics portal. Enterprise Florida, CareerSource Florida, the Florida Chamber of Commerce and the Florida Department of Transportation partnered on the development of the logistics portal over the last year. This was done in response to the Freight Mobility and Trade Plan Policy Element objectives and strategies, and supported by the Trade and Logistics studies done by the Florida Chamber Foundation. This tool pulls together resources and links, providing a one stop shop for logistics-related information⁴². **Figure 42** shows the sign-in page for the Freight Project Needs Survey.

Figure 42: Freight Project Needs Survey Sign-In

You are not signed-in. [Sign In](#)

Freight Projects Needs Survey

SIGN IN

Welcome to the Freight Needs Survey!

The Freight Mobility and Trade Plan (FMTP) consists of two elements, the Policy Element and the Investment Element. The Policy Element was developed with extensive stakeholder input over the past year and was adopted on June 19, 2013. The FMTP Policy Element lays out the policy teamwork and identifies responsibilities for implementation (for more information, please see the [Policy Element](#) page).

The FMTP Investment Element will develop a process to:

- Identify freight needs
- Establish criteria for state investment in freight
- Prioritize freight investments across modes
- Meet the requirements of MAP-21

In order to prioritize freight investments across modes, we need your help to make sure we are analyzing the correct projects. You may choose to either look up a project and provide needed information, or create a new project.

To request a user name and password, please email your name, agency/organization, and email address to: support@freightmovesflorida.com

Enter your user name and password.

User Name

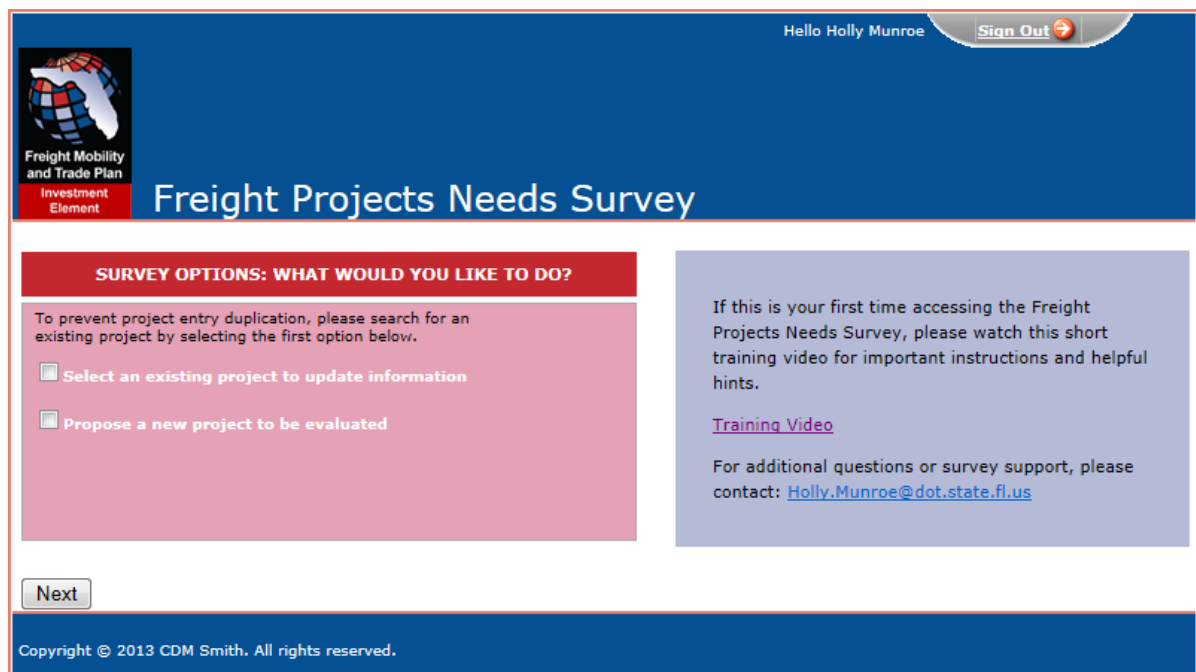
Password

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⁴² Florida Freight and Logistics Portal <http://www.freightmovesflorida.com>

The Freight Project Needs Survey format allowed FDOT to preload the list of freight projects gathered from existing plans to reduce duplication. Stakeholders were provided a username and password-protected access, so they could review the projects already available, add new projects, and update information as needed. An online survey format was chosen because it is conducive to the iterative edit process that naturally occurs when requesting information from a variety of sources and levels of familiarity with the Freight Mobility and Trade Plan. It also allowed stakeholders the freedom to input information as their time allowed, rather than through in-person meetings and conference calls only. To better prepare freight stakeholders to use the Freight Project Needs Survey format, FDOT developed a training video and made it available on the main page after users signed in. The training video was approximately 5 minutes in length, and walked users through the various screens and functionalities. **Figure 43** shows the options stakeholders could choose from upon signing in, as well as the link to the training video.

Figure 43: Freight Project Needs Survey Options and Training Video



Steps in the Freight Project Needs Survey

As noted above, all stakeholders utilized a username and password to access the existing project list and provide input. This was done to allow tracking of the last person to edit information about each of the projects. By tracking edits in this manner, staff was able to easily contact the appropriate person for clarification on project information or responses to the prioritization criteria.

For each project, users were asked to input:

- Project Name
- Type (mode of transportation)
- Applicant (organization or company)
- Cost
- Description
- Contact Information

Once basic project information was entered into the Freight Needs Survey, users were taken to a summary page listing all project prioritization criteria. Criteria were listed by shorthand name and sorted by the FMTP Policy Element Objective they were based on, or grouped into FDOT best practices. **Figure 44** shows the prioritization criteria summary page of an example project in the Freight Needs Survey.

Users could provide answers to each of the prioritization criteria by clicking the Edit button next to a chosen criterion. The full text of prioritization criteria included in the Freight Needs Survey are listed in of Chapter 4.

Figure 44: Freight Project Needs Survey Prioritization Criteria Summary

The screenshot shows the 'Freight Projects Needs Survey' interface. At the top, it says 'Hello Holly Munroe' and 'Sign Out'. The page title is 'Freight Projects Needs Survey'. Below that is a 'PROJECT SUMMARY' section for 'Southport Phase IX Container Yard' at 'Port Everglades'. There is a dropdown for 'FMTP Objective Name' set to 'All' and a 'SELECT ANOTHER PROJECT' button. Below this is a table of prioritization criteria.

FMTP Objective Name	Criteria Name	Option Choice Name	Status	
FMTP Objective 1	Targeted Industry	No	Complete	Edit
FMTP Objective 1	Freight Hub Access	No	Complete	Edit
FMTP Objective 1	Intermodal Logistics Center (ILC) Exports	Yes	Incomplete	Edit
FMTP Objective 1	Unique Niche	Yes	Incomplete	Edit
FMTP Objective 1	Identified Market Need	Yes	Complete	Edit
FMTP Objective 2	Florida Freight Network	Yes	Incomplete	Edit
FMTP Objective 2	Freight Bottleneck	No	Complete	Edit
FMTP Objective 2	Dedicated Freight Facility	No	Complete	Edit
FMTP Objective 2	Information Technology Systems (ITS)	No	Complete	Edit
FMTP Objective 2	Truck Parking	No	Complete	Edit

Engagement of Stakeholders in the Freight Project Needs Survey

Rather than identifying a list of key freight stakeholders, FDOT chose to open the Freight Project Needs Survey up to anyone that requested a username and password. Therefore access to the Freight Project Needs Survey was completed by emailing the link and instructions to the distribution list of freight stakeholders developed over the course of the Freight Mobility and Trade Plan Policy Element process. The mass email was sent to over 1200 stakeholders, who were then encouraged to forward it along as desired.

Reminders, questions and additional follow-up communications were handled by calls and emails for the first few weeks of availability. Late in January, FDOT held an Update Webinar to provide more guidance and take questions from the participants. Following the webinar, another round of follow up calls were made to selected project applicants based on perceived incompleteness or for further clarification of answers to prioritization criteria questions.

Business Forum II: Plan Review was held April 2, 2014 in Orlando. This forum allowed stakeholders to see the outcomes of the first snapshot of projects in the Freight Project Needs Survey. Based on their feedback at the in-person meeting, refinements were made to the Freight Project Needs Survey and follow-up process. In the weeks following Business Forum II, another round of follow up calls were made to selected project applicants. These applicants were again selected based on perceived incompleteness or for further clarification of answers to prioritization criteria questions.

Survey of Agency Partners

Finally, FDOT gathered additional freight needs and projects by soliciting meetings with select agency partners. These in-person meetings and calls were done to assure participation by all modes, as well as to gain feedback on performance characteristics presented in Chapter 2. Agency partners were identified during the development of the Freight Project Needs Survey, and meetings were held between December 2013 and February 2014. This outreach was concurrent to the availability of the Freight Project Needs Survey, and often led to additional participation by the agency partners in the Freight Project Needs Survey.

The objectives of the agency partner meetings included:

- Allow agency partners to review and confirm identified issues
- Review projects in the Freight Project Needs Survey and discuss any changes, additions, and/or deletions needed
- Identify bottlenecks specific to their mode

Together, this series of three tasks allowed FDOT to identify and gather capacity and operational improvement projects to then prioritize by the process described in the beginning of this chapter. By gathering such a wide range of freight needs, FDOT was able to better equip individual FDOT offices to make informed freight investment decisions in the future. By prioritizing freight needs across modes and programs, FDOT is able to address those needs in a more consistent manner.

Overview of Florida Freight Project Needs

After months of working with various freight partners and stakeholders including agencies, local governments and private industry to collect projects, FDOT refined a freight project needs list consisting of over 700 projects. The total cost of all freight needs collected is approximately \$32 billion. These projects span all freight related modes and are as varied and diverse as Florida itself. Freight projects identified in the needs survey range in complexity and cost from seaport dredging projects and major airport taxiway improvements, to minor roadway improvements such as roadway connectors. This section provides a summary of Florida's current freight project needs.

Needs by Mode

In order to obtain a general understanding of Florida's freight project needs, projects were organized by mode. The different freight modes include:

- Air Cargo;
- Highway;
- Rail;
- Seaport; and
- Spaceport.

It is important to note that for consistency, ease of data collection, and analysis, multimodal projects such as Intermodal Logistic Centers and other intermodal projects were organized by its dominant mode. The FMTP is a dynamic document, and in the future, these unique projects may be categorized differently.

Table 8 and **Figure 45** display the values and corresponding percentages from the Freight Project Needs Survey by mode.

As FDOT had never previously attempted to determine the freight project needs of all modes, there were no expectations as to modal breakdown of needs. However, the 2040 Multi-Modal Unfunded Needs Plan⁴³ is a relatively close comparison that includes both freight and passenger needs on the Strategic Intermodal System. The breakdowns of cost per mode in the Needs Plan were similar if Transit projects are excluded, with the notable difference of a higher Rail percentage of need. This is likely due to the expensive nature of passenger rail projects, which are not included in the FMTP.

Upon review, the majority of freight projects in the needs identified were highway related. Of the over 700 projects submitted, 58 percent were highway projects. This is logical due to the numerous available sources for appropriate highway projects, including the Strategic Intermodal System (SIS) First Five, Second Five, and Cost Feasible Plan, as well as due to the reality that the other modes simply do not plan 20 years out. Therefore these modes will likely have fewer project needs because the needs farther out are not yet known.

These projects were also augmented by additional projects submitted by local municipalities which led to the large number of projects along with the associated cost information. In fact, highway projects accounted for \$26 billion (83 percent) of the total cost of all freight needs. The highway mode had a higher percentage of total costs compared to number of projects due to various expensive projects such as interchange and managed lane construction improvements.

⁴³ 2040 Multi-Modal Unfunded Needs Plan, Systems Planning Office, FDOT, 2011
<http://www.dot.state.fl.us/planning/systems/programs/mspi/plans/>

Seaport projects were the second highest in total cost of freight needs (8 percent), although the total number of projects was about the same as rail and lower than air cargo. This shows seaport projects such as dredging are also often expensive as compared to other modes. Florida has invested significantly in seaports and supporting facilities in the past few years, with new funding sources such as the Strategic Port Investment Initiative. Many of the high cost projects and other major seaport freight projects such as the Port of Miami channel dredge have already been funded. Therefore it is possible that seaport project needs are lower now, and may go up in percentage in the coming years. Funding sources are discussed in detail in **Chapter 6**.

Table 8: Florida Freight Project Needs by Mode

Mode	Cost (in thousands)	Number of Projects
Air Cargo	\$1,093,074	168
Highway	\$26,257,709	447
Rail	\$1,370,529	67
Seaport	\$2,464,480	66
Spaceport	\$624,969	19
Total	\$31,810,762	767

Source: Freight Project Needs Survey, Freight, Logistics and Passenger Operations Office, FDOT, 2014

Figure 45: Florida Freight Project Needs by Mode



Source: Freight Project Needs Survey, Freight, Logistics and Passenger Operations Office, FDOT, 2014

Rail projects followed seaports in total cost of freight needs (4 percent), although the number of projects was about the same (9 percent). Many of the rail related projects consisted of lower cost improvements such as grade crossing enhancements, and does not include the often very expensive passenger rail projects. In addition, cost information for some of the rail projects was not available at this time.

As for air cargo, there were 168 air cargo freight projects which accounted of 22 percent of the total number of projects collected. These projects only accounted for 3 percent of the total cost of freight needs. This suggests that many air cargo projects are lower cost improvements as well. However, there may be more airport freight investment needs added in the future due to the new Strategic Airport Investment Initiative. This new legislation allows for the state to pay up to 100 percent of the cost for projects that meet certain state goals. Again, all freight project funding source are discussed in **Chapter 6**.

Spaceport projects represent the smallest percentage of both total cost of freight needs and number of projects. This is reasonable, given there are fewer spaceport facilities statewide and the strategic nature of this type of improvements. FDOT will continue to work with partners such as Space Florida⁴⁴ to identify needs in this era of commercial development that is new to space.

Needs by District

In addition to a breakdown of needs by mode, it is worthwhile to see where these needs are by geography. In Chapter 2, **Figure 13** illustrates that most freight intensity is clustered along the I-4, I-10, I-75, and I-95 corridors, and along the Gulf Coast in the northwest portion of the state. Each of the FDOT districts includes at least one of these key freight corridors, and therefore the Florida freight needs by district are relatively even. **Table 9** and **Figure 46** display the values and corresponding percentages from the Freight Project Needs Survey by district.

Table 9: Florida Freight Project Needs by District

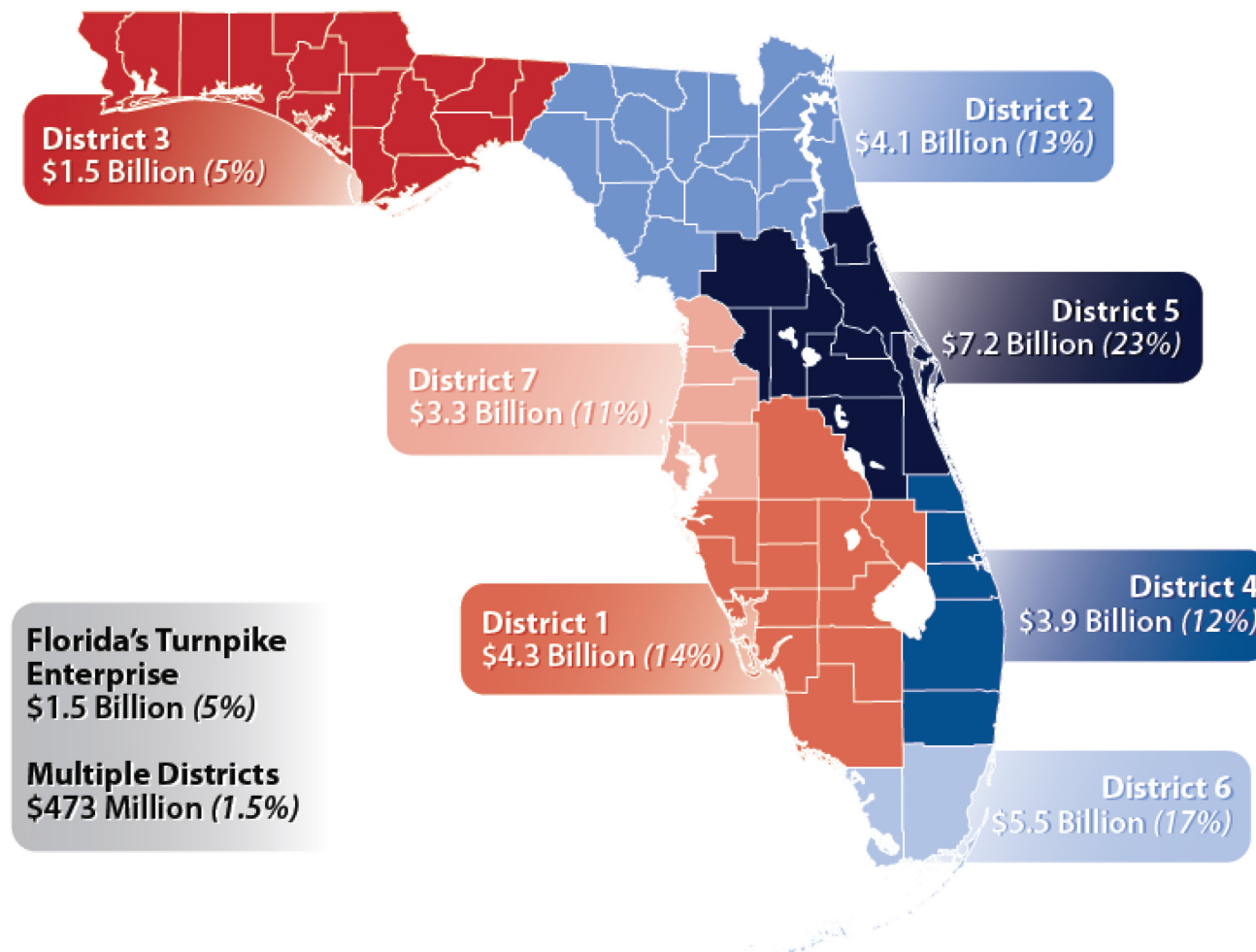
District	Cost (in thousands)	Number of Projects
1	\$4,331,878	112
2	\$4,076,023	77
3	\$1,542,715	82
4	\$3,850,670	108
5	\$7,241,298	108
6	\$5,497,721	78
7	\$3,341,796	165
Florida's Turnpike	\$1,455,166	29
Multiple Districts	\$473,494	8
Total	\$31,810,762	767

Source: Freight Project Needs Survey, Freight, Logistics and Passenger Operations Office, FDOT, 2014

⁴⁴ Space Florida is an Independent Special District of the State of Florida, created by Chapter 331, Part II, Florida Statutes, for the purposes of fostering the growth and development of a sustainable and world-leading space industry in Florida.

<http://www.spaceflorida.gov/>

Figure 46: Florida Freight Needs by District



Source: Freight Project Needs Survey, Freight, Logistics and Passenger Operations Office, FDOT, 2014

Florida Freight Project Needs by Priority Group

Once projects were analyzed and scored based on each of the 27 criteria, the projects were grouped by logical breaks into prioritization categories. This method of categorization by natural breaks is good for an uneven distribution of scores, as each priority group can vary in the number of projects included.

Rather than publish total scores for each project, priority groups were used to reduce the impacts of any possible subjectivity or nuances in scoring. As discussed previously in the chapter, the priority groups chosen for the FMTP Investment Element are: Very High, High, Medium, and Low/Insufficient Info. The number of project for each of group is shown in **Table 10**.

Table 10: Freight Project Needs by Priority Group

Priority Group	Cost (in thousands)	Number of Projects
Very High	\$9,657,032	167
High	\$9,718,230	183
Medium	\$7,820,695	209
Low/Insufficient Info	\$4,614,804	208
Total	\$31,810,762	767

Source: Freight Project Needs Survey, Freight, Logistics and Passenger Operations Office, FDOT, 2014

The breakdown of the priority groups utilizing logical breaks was kept to roughly an equal number of projects per group. The smallest number of projects by group is purposely the Very High priority group. It consists of 167 projects (22 percent) of the total projects, but accounts for 30 percent of the project costs. The Low/Insufficient Info priority project consists of 208 projects (27 percent) with 15 percent of the total project costs. However, this percentage may be skewed, as some projects did not enter a project cost.

Again, projects in this priority group may have a lower score only due to insufficient information.

A complete list of the projects collected in the Freight Project Needs Survey are located in **Tables 11-14**. Due to rounding, the total of all project costs may not match the totals in **Tables 8-10**.

Table 11: Statewide Freight Project Needs- Very High Priority

Very High Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
841		TAXIWAY C REHABILITATION-CONSTRUCTION	ORLANDO INTERNATIONAL AIRPORT	5	\$8,034	AIR CARGO
842		TAXIWAY C REHABILITATION-DESIGN	ORLANDO INTERNATIONAL AIRPORT	5	\$867	AIR CARGO
872		12TH AVENUE/FRANCIS TAYLOR TURN LANE AND CROSSWALK IMPROVEMENTS	PENSACOLA INTERNATIONAL AIRPORT	3	\$400	AIR CARGO
883		PARALLEL TAXIWAY - DESIGN/BUILD	PENSACOLA INTERNATIONAL AIRPORT	3	\$6,000	AIR CARGO
884		LOOP ROAD LIGHTING REHABILITATION	PENSACOLA INTERNATIONAL AIRPORT	3	\$700	AIR CARGO
905		EXPAND TERMINAL ENTRANCE ROAD	SOUTHWEST FLORIDA INTERNATIONAL AIRPORT	1	\$4,349	AIR CARGO
908		AIRFIELD TAXIWAY REHABILITATION - PHASE 2	ST PETE-CLEARWATER INTERNATIONAL AIRPORT	7	\$6,300	AIR CARGO
909		CONSTRUCT AIR CARGO RAMP	ST PETE-CLEARWATER INTERNATIONAL AIRPORT	7	\$9,000	AIR CARGO
912		MODIFY TERMINAL ACCESS ROAD	ST PETE-CLEARWATER INTERNATIONAL AIRPORT	7	\$5,500	AIR CARGO
913		NEW AIRPORT MAINTENANCE BUILDING	ST PETE-CLEARWATER INTERNATIONAL AIRPORT	7	\$1,500	AIR CARGO
914		TAXIWAY "T" REHABILITATION	ST PETE-CLEARWATER INTERNATIONAL AIRPORT	7	\$3,000	AIR CARGO
917		AIRPORT ACCESS AND ROADWAY REALIGNMENT	TALLAHASSEE REGIONAL AIRPORT	3	\$2,500	AIR CARGO
937		RAMP FEDEX/EMORY AND TAXIWAY K CONCRETE JOINT AND SLAB REHABILITATION (2018)	TAMPA INTERNATIONAL AIRPORT	7	\$970	AIR CARGO
1549		CONNECTOR ROADWAY DELAND MUNICIPAL AIRPORT NW INDUSTRIAL PARK TO SR 11	CITY OF DELAND	5	\$750	HIGHWAY
1210		ITS FIBER OPTIC LOCATES	FDOT DISTRICT 1	1	\$2,500	HIGHWAY
1309		I-75 AT UNIVERSITY PKWY (MANATEE COUNTY)	FDOT DISTRICT 1	1	\$58,434	HIGHWAY
1310		I-75 AT SR 70 INTERCHANGE	FDOT DISTRICT 1	1	\$109,730	HIGHWAY

Very High Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
1320		SR 710 FROM L-63 CANAL TO SHERMAN WOOD RANCHES	FDOT DISTRICT 1	8	\$3,500	HIGHWAY
1326		SR 29 FROM CR 80-A (COWBOY WAY) TO WHIDDEN RD (CR 731)	FDOT DISTRICT 1	1	\$111,800	HIGHWAY
1330		I-75 AT SR 951 (CON)	FDOT DISTRICT 1	1	\$44,000	HIGHWAY
1650		POLK RAIL STUDY/NEW FREIGHT RAIL CORRIDOR	FDOT DISTRICT 1	1	\$520,000	HIGHWAY
1714		US 17 @ BARTOW AIRBASE	FDOT DISTRICT 1	1	\$2,122	HIGHWAY
997	2107112	A1A/SR 200 FROM I-95 TO W.OF STILL QUARTERS RD	FDOT DISTRICT 2	2	\$36,794	HIGHWAY
998	2107124	A1A/SR 200 FROM WEST OF RUBIN RD TO EAST OF CR107/SCOTT RD	FDOT DISTRICT 2	2	\$37,170	HIGHWAY
999	2107123	A1A/SR 200 W.OF STILL QUARTERS ROAD TO WEST OF RUBIN LANE	FDOT DISTRICT 2	2	\$21,353	HIGHWAY
1227		SR 390 ST ANDREWS FROM SR 368 23RD ST TO E OF CR 2312 BALDWIN	FDOT DISTRICT 3	3	\$35,881	HIGHWAY
1372		SR 390 FROM SR 368/23RD ST TO E OF CR 2312 BALDWIN	FDOT DISTRICT 3	3	\$26,624	HIGHWAY
1389		I-595 CAUSEWAY FROM SR-7 TO I-95	FDOT DISTRICT 4	4	\$252,279	HIGHWAY
1704		SR-710 FROM E. OF SR-76 TO PB/MARTIN C/L (2L TO 4L)	FDOT DISTRICT 4	4	\$67,000	HIGHWAY
1039	4321931	I-4 MANAGED LANES FROM KIRKMAN TO SR 434	FDOT DISTRICT 5	5	\$1,422,321	HIGHWAY
1040	2426262	I-75 FROM HERNANDO CO LINE TO CR 470	FDOT DISTRICT 5	5	\$4,157	HIGHWAY
1041	2426263	I-75 FROM CR 470 TO SR 91 (FLORIDA TURNPIKE)	FDOT DISTRICT 5	5	\$59,521	HIGHWAY
1042	4068694	I-95 FROM BREVARD CO LINE TO 0.5 MILE N OF SR 44	FDOT DISTRICT 5	5	\$170	HIGHWAY
1043	4068695	I-95 FROM 0.5 MILE N OF SR 46 TO VOLUSIA CO LINE	FDOT DISTRICT 5	5	\$118,370	HIGHWAY
1044	4068696	I-95 FROM 0.5 MILE N OF SR 44 SOUTH OF I-4	FDOT DISTRICT 5	5	\$98,993	HIGHWAY
1045	4068693	I-95/SR-9 FROM SR 406 TO SR 46	FDOT DISTRICT 5	5	\$200	HIGHWAY
1046	4269043	I-95 INT @ ST JOHNS HERITAGE PKWY/PALM BAY PK WY N OF MICCO RD	FDOT DISTRICT 5	8	\$27,848	HIGHWAY
1050	2382757	SR429/46(WEKIVA PKW) FROM W OF OLD MCDONALD RD TO E OF WEKIVA RIVER RD	FDOT DISTRICT 5	5	\$251,000	HIGHWAY
1051	2402002	SR429/46(WEKIVA PKW) FROM E OF WEKIVA RIVER RD TO ORANGE BOULEVARD	FDOT DISTRICT 5	5	\$199,000	HIGHWAY

Very High Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
1262		SR 46 (WEKIVA PKWY) FROM W OF CENTER RD TO INTERSTATE 4	FDOT DISTRICT 5	5	\$19,000	HIGHWAY
1263		SR 429 (WEKIVA PKWY) FROM ORANGE BOULEVARD TO E OF RINEHART ROAD	FDOT DISTRICT 5	5	\$299,000	HIGHWAY
1419		SR-40 FROM SR-326 (SILVER SPRINGS) TO CR-314	FDOT DISTRICT 5	5	\$92,014	HIGHWAY
1426		SR 25/US 27 FROM BOGGY MARSH RD TO LAKE LOUISA RD	FDOT DISTRICT 5	5	\$35,086	HIGHWAY
1427		SR 528 FROM SR 524 TO SR 3 W OF SR 401 BRIDGE (END SIS)	FDOT DISTRICT 5	5	\$96,795	HIGHWAY
1428		SR 528 FROM SR 3 TO PORT CANAVERAL INTERCHANGE	FDOT DISTRICT 5	5	\$427,944	HIGHWAY
1429		SR 528 FROM I-95 TO SR 524	FDOT DISTRICT 5	5	\$274,995	HIGHWAY
1612		ORLANDO INTERNATIONAL AIRPORT	FDOT DISTRICT 5	5	\$426	HIGHWAY
1615		FREIGHT CORRIDOR: I-95 - SOAR RE-EVALUATION	FDOT DISTRICT 5	8	\$250	HIGHWAY
1617		FREIGHT CORRIDOR: I-75 @ SR 200	FDOT DISTRICT 5	5	\$1,390	HIGHWAY
1618		FREIGHT CORRIDOR: I-75 @ SR 326	FDOT DISTRICT 5	5	\$868	HIGHWAY
1619		FREIGHT CORRIDOR: I-75 @ CR 318	FDOT DISTRICT 5	5	\$1,195	HIGHWAY
1053		PORT OF MIAMI TUNNEL (CONCESSION AGREEMENT PAYMENTS)	FDOT DISTRICT 6	6	\$535,234	HIGHWAY
1054	4326871	SR 826 FROM FLAGLER ST TO NW 154 ST. & I-75 FROM SR 826 TO NW 170 ST.	FDOT DISTRICT 6	6	\$326,244	HIGHWAY
1055	4283581	SR 826/PALMETTO EXPY - SR 826 EASTBOUND RAMP TO SR 9A/I-95 NORTHBOUND (PE ROW CON)	FDOT DISTRICT 6	6	\$72,978	HIGHWAY
1056	2495811	SR 826/SR 836 FROM N OF SW 8 ST TO S OF NW 25 ST & FM NW 87 TO 57 AVE"S	FDOT DISTRICT 6	6	\$123,164	HIGHWAY
1060	2496143	SR 997/KROME AVENUE FROM SR 94/KENDALL DRIVE TO 1 MI N OF SW 8TH ST	FDOT DISTRICT 6	6	\$55,214	HIGHWAY
1061	2496147	SR 997/KROME AVENUE FROM S.W. 136TH STREET TO SR 94/KENDALL DRIVE	FDOT DISTRICT 6	6	\$32,971	HIGHWAY
1062	2496152	SR 997/KROME AVENUE FROM NORTH OF SW 8 ST. TO MP 2.754	FDOT DISTRICT 6	6	\$30,592	HIGHWAY
1064	2584155	I-4/SELMON XWAY FROM S OF SELMON XWAY TO I-4 (TOLL EQUIPMENT)	FDOT DISTRICT 7	7	\$4,500	HIGHWAY
1065	2587362	I-75/SR 93 FROM NORTH OF SR/CR 54 TO NORTH OF SR 52	FDOT DISTRICT 7	7	\$36,000	HIGHWAY
1066	4110113	I-75/SR 93 FROM PASCO/HERNANDO CO/L TO S OF US98/SR50/CORTEZ	FDOT DISTRICT 7	7	\$81,692	HIGHWAY

Very High Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
1067	4110114	I-75/SR 93 FM S OF US98/SR50/CORTEZ TO N OF US98/SR50/CORTEZ	FDOT DISTRICT 7	7	\$78,433	HIGHWAY
1068	4110122	I-75/SR 93 FROM N OF SR 50 TO HERNANDO/SUMTER CO/L	FDOT DISTRICT 7	7	\$18,308	HIGHWAY
1069	4110142	I-75/SR 93 FROM N OF SR 52 TO PASCO/HERNANDO CO/L	FDOT DISTRICT 7	7	\$53,431	HIGHWAY
1070	2569953	SR 688 (ULMERTON RD) FM E OF 49TH STREET TO W OF 38TH STREET NORTH	FDOT DISTRICT 7	7	\$18,614	HIGHWAY
1071	2569943	SR 690 (SR 686) FROM EAST OF 40TH ST TO EAST OF 28TH ST	FDOT DISTRICT 7	7	\$30,826	HIGHWAY
1072	2569944	SR 690 (SR 686) FROM EAST OF 34TH ST TO WEST OF 28TH ST	FDOT DISTRICT 7	7	\$3,732	HIGHWAY
1074	4330461	US 41 NORTHBOUND AT HARTFORD ST (WB)	FDOT DISTRICT 7	7	\$57	HIGHWAY
1075	4330471	US 41 NORTHBOUND AT RALEIGH (WESTBOUND)	FDOT DISTRICT 7	7	\$37	HIGHWAY
1076	4330481	US 41 NORTHBOUND AT TOWAWAY AVE (WB)	FDOT DISTRICT 7	7	\$66	HIGHWAY
1077	4330491	US 41 NORTHBOUND AT S 34TH AVE (WESTBOUND)	FDOT DISTRICT 7	7	\$66	HIGHWAY
1078	4330451	US 41 SOUTHBOUND AT PEMBROKE RD WESTBOUND	FDOT DISTRICT 7	7	\$493	HIGHWAY
1291		SR 60 FROM VALRICO RD. TO DOVER RD.	FDOT DISTRICT 7	7	\$5,906	HIGHWAY
1292		GENERAL ENGINEERING CONSULTANT FOR ITS	FDOT DISTRICT 7	7	\$1,944	HIGHWAY
1296		I75(SR93A)NB ON-RAMP FROM EB/WB I-4 TO SOUTH OF BYPASS CANAL	FDOT DISTRICT 7	7	\$15,243	HIGHWAY
1297		I75(SR93A)SB OFF-RMP FROM S OF BYPASS CANAL TO EB/WB I-4	FDOT DISTRICT 7	7	\$8,648	HIGHWAY
1302		I-275/SR93 NB XPR LN FROM HOWARD FRANKLAND BRG TO LOIS AVENUE	FDOT DISTRICT 7	7	\$4,900	HIGHWAY
1453		I-75 (NB) FROM EXIT FROM C-D ROAD/SELMON EXPY TO N OF SR 60	FDOT DISTRICT 7	7	\$13,983	HIGHWAY
1454		I-75 (SB) FROM E FROM C-D ROAD/SELMON EXPY TO N OF SR 60	FDOT DISTRICT 7	7	\$6,100	HIGHWAY
1455		I-75 (NB) FROM SR 60 TO S OF CSX/BROADWAY AVE	FDOT DISTRICT 7	7	\$15,738	HIGHWAY
1456		I-75 (NB) FROM S OF CSX/BROADWAY TO EB/WB I-4	FDOT DISTRICT 7	7	\$41,500	HIGHWAY
1457		I-75 FROM US 301 TO I-4	FDOT DISTRICT 7	7	\$58,188	HIGHWAY
1458		I-75 FROM EB/WB I-4 TO S OF TAMPA BYPASS CANAL	FDOT DISTRICT 7	8	\$9,900	HIGHWAY

Very High Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
1459		I-4 (EB) FROM NB/SB I-75 TO E OF WILLIAMS RD	FDOT DISTRICT 7	7	\$1,087	HIGHWAY
1460		I-4 (WB) FROM TAMPA BYPASS CANAL TO E OF I-75	FDOT DISTRICT 7	8	\$10,436	HIGHWAY
1461		I-4 (WB) FROM W OF ORIENT RD TO NB/SB I-75	FDOT DISTRICT 7	8	\$36,281	HIGHWAY
1462		I-4 (EB) FROM W OF ORIENT RD TO NB/SB I-75	FDOT DISTRICT 7	7	\$14,025	HIGHWAY
1463		SR 686 FROM N OF ULMERTON RD TO E OF 40TH ST	FDOT DISTRICT 7	7	\$78,764	HIGHWAY
1464		SR 686 ROOSEVELT BLVD (STAGE 5) FROM 49TH ST TO N OF SR 688 (ULMERTON RD)	FDOT DISTRICT 7	7	\$87,305	HIGHWAY
1470		I-75 FROM SUMTER/HERNANDO C/L TO CR 476-B	FDOT DISTRICT 7	7	\$20,806	HIGHWAY
1474		US 19 FROM N OF CR 95 TO N OF NEBRASKA RD.	FDOT DISTRICT 7	7	\$105,800	HIGHWAY
1475		US 19 FROM N OF NEBRASKA RD. TO S OF TIMBERLANE RD	FDOT DISTRICT 7	7	\$7,283	HIGHWAY
1476		US 19 FROM S OF TIMBERLANE RD TO S OF LAKE ST	FDOT DISTRICT 7	7	\$9,900	HIGHWAY
1477		US 19 FROM S OF LAKE ST TO PINELLAS TRAIL	FDOT DISTRICT 7	7	\$7,950	HIGHWAY
1479		US 19 FROM WEST OF JUMP COURT TO WEST FORT ISLAND TRAIL	FDOT DISTRICT 7	7	\$32,857	HIGHWAY
1480		SR 60 FROM VALRICO RD TO HILLSBOROUGH/POLK COUNTY LINE RD	FDOT DISTRICT 7	7	\$1,200	HIGHWAY
1481		I-75 FROM S OF US 301 TO N OF FLETCHER	FDOT DISTRICT 7	7	\$170,000	HIGHWAY
1482		I-75 FROM N OF FLETCHER TO N OF I-75/I-275 APEX	FDOT DISTRICT 7	7	\$24,000	HIGHWAY
1484		I-275 NB FROM TAMPA INTERNATIONAL AIRPORT TO I-275 REO TO LOIS	FDOT DISTRICT 7	7	\$96,691	HIGHWAY
1486		SR 686 AT CR 611 (49TH ST)	FDOT DISTRICT 7	7	\$73,940	HIGHWAY
1534		BOGGY CREEK ROAD—NORTH (ORANGE COUNTY)	ORANGE COUNTY	5	\$10,890	HIGHWAY
1535		BOGGY CREEK ROAD—SOUTH (ORANGE COUNTY)	ORANGE COUNTY	5	\$15,560	HIGHWAY
1536		TAFT-VINELAND ROAD (ORANGE COUNTY)	ORANGE COUNTY	5	\$44,000	HIGHWAY
1519		PORT REDWING: ROAD	TAMPA PORT AUTHORITY	7	\$5,597	HIGHWAY
1126		BOWDEN INTERMODAL IMPROVEMENTS	FLORIDA EAST COAST RAILWAY	2	\$3,484	RAIL

Very High Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
1130		JACKSONVILLE BRIDGE REHABILITATION	FLORIDA EAST COAST RAILWAY	2	\$7,787	RAIL
1132		NEW DISPATCH SYSTEM	FLORIDA EAST COAST RAILWAY	2	\$5,362	RAIL
1134		EXPAND OR BUILD NEW COCOA INTERMODAL YARD	FLORIDA EAST COAST RAILWAY	6	\$30,000	RAIL
1135		EXPAND CAPACITY OF HIALEAH YARD	FLORIDA EAST COAST RAILWAY	6	\$80,000	RAIL
1137		TRACK AND SIGNAL IMPROVEMENTS FROM BOWDEN	FLORIDA EAST COAST RAILWAY	2	\$2,864	RAIL
1120		RAIL REHABILITATION PROJECT FROSTPROOF TO LAKE WALES P	FLORIDA MIDLAND RAILROAD	5	\$1,819	RAIL
1123		RAIL REHABILITATION PROJECT WEST COAST SUB NEWBERRY TO DUKE ENERGY AT CRYSTAL RIVER	FLORIDA NORTHERN RAILROAD	5	\$7,990	RAIL
1124		TIE AND SURFACE FNOR OCALA	FLORIDA NORTHERN RAILROAD	5	\$2,191	RAIL
1623		LEE COUNTY INTERMODAL TRANSFER TERMINAL	LEE MPO	1	\$3,150	RAIL
1624		LEE COUNTY RAIL INTERMODAL YARD	LEE MPO	1	-	RAIL
1626		SEMINOLE GULF INFRASTRUCTURE IMPROVEMENTS – PHASE 1 ⁴⁵	LEE MPO	1	\$7,300	RAIL
1627		SEMINOLE GULF INFRASTRUCTURE IMPROVEMENTS – PHASE 2 ⁴⁶	LEE MPO	1	\$53,000	RAIL
1516		HOOKERS POINT: REFRIGERATED PRODUCE - PHASE 1 - RAIL FACILITY	TAMPA PORT AUTHORITY	7	\$6,317	RAIL
1521		PORT REDWING: RAILROAD	TAMPA PORT AUTHORITY	7	\$6,121	RAIL
1532		MISC. RAIL AND RELATED IMPROVEMENTS	TAMPA PORT AUTHORITY	7	\$9,000	RAIL
1160		CARGO PIER IMPROVEMENTS (SCP 1 AND 4)	PORT CANAVERAL	5	\$11,000	SEAPORT
1161		CONTAINER AND MULTIPURPOSE BERTH & TERMINAL	PORT CANAVERAL	5	\$61,230	SEAPORT
1165		MAINTENANCE DREDGING AND SOUTH JETTY DEPOSITION	PORT CANAVERAL	5	\$6,000	SEAPORT
1168		PORT WIDE MASTER PLAN	PORT CANAVERAL	5	\$250	SEAPORT

⁴⁵ Programming of this project would require agreement by all parties

⁴⁶ Programming of this project would require agreement by all parties

Very High Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
1170		WIDEN WEST TURN BASIN AT ENTRANCE CHANNEL & OFFSHORE	PORT CANAVERAL	5	\$227,000	SEAPORT
1171		ACOE DEEPENING AND WIDENING	PORT EVERGLADES	4	\$313,000	SEAPORT
1172		SUPER POST-PANAMAX CRANES (5)	PORT EVERGLADES	4	\$75,000	SEAPORT
1173		SLIP 1 NEW BULKHEAD AT BERTHS 9 & 10	PORT EVERGLADES	4	\$55,000	SEAPORT
1175		SOUTHPORT PHASE IX-A CONTAINER YARD	PORT EVERGLADES	4	\$8,800	SEAPORT
1176		SOUTHPORT TURNING NOTCH EXTENSION	PORT EVERGLADES	4	\$95,800	SEAPORT
1177		UPLAND ENHANCEMENT (MANGROVE CREATION)	PORT EVERGLADES	4	\$20,000	SEAPORT
1178		WESTLAKE PARK MITIGATION	PORT EVERGLADES	4	\$13,800	SEAPORT
1542		NEO-BULK STORAGE YARD	PORT EVERGLADES	4	\$22,100	SEAPORT
1543		TRACOR BASIN FILL	PORT EVERGLADES	4	\$49,000	SEAPORT
1544		MCINTOSH ROAD GATE LANE ADDITION	PORT EVERGLADES	4	\$1,600	SEAPORT
1545		PHASE IX-B CONTAINER YARD	PORT EVERGLADES	4	\$50,900	SEAPORT
1590		SLIP 1 - NEW BULKHEADS AND RECONFIGURATION - PHASE 2	PORT EVERGLADES	4	\$48,000	SEAPORT
1546		FISHERMANS WHARF ROAD	PORT FORT PIERCE	4	\$1,000	SEAPORT
1181		BLOUNT ISLAND & DAMES POINT MARINE TERMINAL IMPROVEMENT & EXPANSION	PORT JACKSONVILLE	2	\$118,500	SEAPORT
1182		CARGO HANDLING EQUIPMENT (ALL TERMINALS)	PORT JACKSONVILLE	2	\$45,000	SEAPORT
1183		TALLEYRAND MARINE TERMINAL DEVELOPMENT & EXPANSION	PORT JACKSONVILLE	2	\$77,415	SEAPORT
1188		DREDGING	PORT MIAMI	6	\$242,930	SEAPORT
1189		INFRASTRUCTURE IMPROVEMENTS	PORT MIAMI	6	\$177,896	SEAPORT
1190		PORT OF PALM BEACH ON PORT INTERMODAL RAIL FACILITY	PORT OF PALM BEACH	4	\$7,735	SEAPORT
1589		LAKE WORTH INLET DREDGING PROJECT	PORT OF PALM BEACH	4	\$30,975	SEAPORT
1490		BULK STORAGE FACILITY	PORT PANAMA CITY	3	\$4,000	SEAPORT

Very High Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
1591		DREDGING EAST CHANNEL	PORT PANAMA CITY	3	\$6,000	SEAPORT
1503		ROAD & RELATED IMPROVEMENTS	TAMPA PORT AUTHORITY	7	\$18,500	SEAPORT
1504		MAINTENANCE DREDGING	TAMPA PORT AUTHORITY	7	\$17,500	SEAPORT
1505		FLY-OVER OF CSX AT SOUTH MARITIME	TAMPA PORT AUTHORITY	7	\$6,000	SEAPORT
1506		FLYOVER OF CSX AT NORTH GUY N. VERGER	TAMPA PORT AUTHORITY	7	\$6,000	SEAPORT
1507		DREDGE DISPOSAL SITES-SPOIL ISLAND 2D (SOUTH CELL-RAISE LEVEES)	TAMPA PORT AUTHORITY	7	\$6,000	SEAPORT
1508		BERTHS - MAINTENANCE & REPAIR	TAMPA PORT AUTHORITY	7	\$2,000	SEAPORT
1510		BERTH 232 IMPROVEMENTS	TAMPA PORT AUTHORITY	7	\$600	SEAPORT
1513		EASTPORT: BERTH 150 DESIGN/BUILD, 25-ACRE CARGO YARD & ROCKPORT RD. RELOCATION	TAMPA PORT AUTHORITY	7	\$18,648	SEAPORT
1514		EASTPORT: EXPANSION TO WEST - FILL EASTPORT	TAMPA PORT AUTHORITY	7	\$25,000	SEAPORT
1515		EASTPORT: PENINSULA EXPANSION (DEEP WATER BERTHS)	TAMPA PORT AUTHORITY	7	\$30,000	SEAPORT
1517		HOOKERS POINT: REFRIGERATED PRODUCE - PHASE 2 - WAREHOUSE & RELATED IMPROVEMENTS	TAMPA PORT AUTHORITY	7	\$15,770	SEAPORT
1518		HOOKERS POINT: REFRIGERATED PRODUCE -PHASE 3 - ROAD, BROWNFIELD CAP, RAIL	TAMPA PORT AUTHORITY	7	\$6,256	SEAPORT
1520		PORT REDWING: GATE & UTILITIES	TAMPA PORT AUTHORITY	7	\$3,282	SEAPORT
1522		PORT REDWING: BERTHS 300/301 & DREDGING ALONGSIDE	TAMPA PORT AUTHORITY	7	\$31,750	SEAPORT
1524		PORT REDWING BERTH 302 & DREDGING ALONGSIDE	TAMPA PORT AUTHORITY	7	\$16,000	SEAPORT
1525		DREDGE CHANNEL: BIG BEND CHANNEL TO 250" WIDE AND 43" DEEP	TAMPA PORT AUTHORITY	7	\$35,000	SEAPORT
1526		SOUTH HOOKERS POINT CONTAINER FACILITY IMPROVEMENTS	TAMPA PORT AUTHORITY	7	\$40,399	SEAPORT
1527		HOOKERS POINT: BERTH 214 & BACKLANDS	TAMPA PORT AUTHORITY	7	\$29,000	SEAPORT
1528		HOOKERS POINT: NORTH HP IMPROVEMENTS	TAMPA PORT AUTHORITY	7	\$3,208	SEAPORT
1530		ACOE COST SHARE - SPOIL ISLAND 3D IMPROVEMENTS	TAMPA PORT AUTHORITY	7	\$1,130	SEAPORT

*FM number refers to the unique identifier assigned by the FDOT Office of Work Program and Budget

Table 12: Statewide Freight Project Needs- High Priority

High Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
1613		VOLUSIA-DAY BCH INTL REALIGN AIRPORT ENTRANCE	FDOT DISTRICT 5	5	\$933	AIR CARGO
840		DOWDEN ROAD EXTENSION	ORLANDO INTERNATIONAL AIRPORT	5	\$30,000	AIR CARGO
873		AIR COMMERCE PARK PHASE 1 & 1A - INFRASTRUCTURE	PENSACOLA INTERNATIONAL AIRPORT	3	\$22,180	AIR CARGO
878		DESIGN - CORPORATE RAMP EXPANSION/TAXILANE EXTENSION	PENSACOLA INTERNATIONAL AIRPORT	3	\$166	AIR CARGO
880		GA RAMP EXPANSION - DESIGN	PENSACOLA INTERNATIONAL AIRPORT	3	\$600	AIR CARGO
888		STRENGTHEN SW RAMP - CONSTRUCTION	PENSACOLA INTERNATIONAL AIRPORT	3	\$5,000	AIR CARGO
889		STRENGTHEN SW RAMP - DESIGN	PENSACOLA INTERNATIONAL AIRPORT	3	\$200	AIR CARGO
1640		RECONSTRUCT/REHABILITATE/EXPAND CARGO APRON - DESIGN	PENSACOLA INTERNATIONAL AIRPORT	3	\$7,366	AIR CARGO
904		AIRSIDE PAVEMENT REHABILITATION	SOUTHWEST FLORIDA INTERNATIONAL AIRPORT	1	\$6,750	AIR CARGO
906		PAVEMENT REHABILITATION OF ROADS	SOUTHWEST FLORIDA INTERNATIONAL AIRPORT	1	\$9,350	AIR CARGO
907		REALIGN CHAMBERLINE PARKWAY	SOUTHWEST FLORIDA INTERNATIONAL AIRPORT	1	\$3,400	AIR CARGO
926		AIRSIDE A SORT FACILITY AIR CONDITIONING DX UNITS REPLACEMENT (2018)	TAMPA INTERNATIONAL AIRPORT	7	\$52	AIR CARGO
934		FREIGHT FORWARDING FACILITY ROOF (BLDG 432) AND STRUCTURE REHABILITATION (FY 2015)	TAMPA INTERNATIONAL AIRPORT	7	\$281	AIR CARGO
939		SOUTH DEVELOPMENT AREA ROADWAY IMPROVEMENTS (FY 2014)	TAMPA INTERNATIONAL AIRPORT	7	\$21,409	AIR CARGO
940		TAXIWAY A AND RAMPS B, C, D AND E PAVEMENT REPLACEMENT (2019)	TAMPA INTERNATIONAL AIRPORT	7	\$42,561	AIR CARGO
948		TAXIWAY J EAST OF RUNWAY 19L CONCRETE JOINT AND SLAB REHABILITATION (2018)	TAMPA INTERNATIONAL AIRPORT	7	\$409	AIR CARGO
949		TAXIWAY N EAST OF RUNWAY 18L CONCRETE JOINT AND SLAB REHABILITATION (2017)	TAMPA INTERNATIONAL AIRPORT	7	\$570	AIR CARGO

High Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
951		TAXIWAY N PAVEMENT REPLACEMENT EAST OF RUNWAY 18L (FY 2017)	TAMPA INTERNATIONAL AIRPORT	7	\$570	AIR CARGO
954		TAXIWAY T REALIGNMENT AND CORPORATE ROAD ASPHALT SERVICE ROAD REPLACEMENT (2019)	TAMPA INTERNATIONAL AIRPORT	7	\$6,427	AIR CARGO
957		TAXIWAY W FROM W-1 TO W-5 ASPHALT PAVEMENT REHABILITATION (FY 2017)	TAMPA INTERNATIONAL AIRPORT	7	\$13,707	AIR CARGO
958		TAXIWAY W FROM W-5 TO W-7 INCLUDING BRANCH TAXIWAYS W-1, W-2, W-3, W-4, W-5 CONCRETE JOINT AND SLAB REHABILITATION (2017)	TAMPA INTERNATIONAL AIRPORT	7	\$1,402	AIR CARGO
963		TAXIWAY D CONSTRUCTION AND TAXIWAY H & F REMOVAL(FY 2015/2016) AND TAXIWAY A,C,D (SOUTH OF JULIET), J,V,W SHOULDER REHAB (FY 2017)	TAMPA INTERNATIONAL AIRPORT	7	\$23,404	AIR CARGO
966		US CUSTOMS AND BORDER INTERIOR AND EXTERIOR REHABILITATION (FY 2017)	TAMPA INTERNATIONAL AIRPORT	7	\$40	AIR CARGO
970	4063134	I-75/SR 93 FROM N OF SR 951 TO N OF GOLDEN GATE	FDOT DISTRICT 1	1	\$29,265	HIGHWAY
971	4130432	I-75/SR 93 FROM S OF HARBORVIEW ROAD TO NORTH OF KINGS HWY	FDOT DISTRICT 1	1	\$30,085	HIGHWAY
972	4130443	I-75/SR 93 FROM S OF TOLEDO BLADE TO N OF SUMTER BLVD	FDOT DISTRICT 1	1	\$22,411	HIGHWAY
973	4130444	I-75/SR 93 FROM N OF SUMTER BLVD TO N OF RIVER ROAD (CR 777)	FDOT DISTRICT 1	1	\$198	HIGHWAY
976	1961143	US 41/SR 45/TAMIAMI TRAIL) AT PINEY POINT RD (PORT MANATEE)	FDOT DISTRICT 1	1	\$7,428	HIGHWAY
977	1938982	US 17 FROM CR 760A (NOCATEE) TO HEARD STREET	FDOT DISTRICT 1	1	\$23,827	HIGHWAY
1207		I-4 FROM SR 570 (POLK PKWY)TO US 27	FDOT DISTRICT 1	8	\$4,020	HIGHWAY
1208		I-75 FROM S OF N JONES LOOP TO N OF US 17	FDOT DISTRICT 1	1	\$71,972	HIGHWAY
1209		I-75 FROM CHARLOTTE/SARASOTA C/L TO S OF TOLEDO BLADE	FDOT DISTRICT 1	1	\$90,756	HIGHWAY
1211		SR 82 FROM CR 884 (LEE BLVD) TO SHAWNEE ROAD	FDOT DISTRICT 1	1	\$50,422	HIGHWAY
1213		I-75 AT SR 951 (PE ROW)	FDOT DISTRICT 1	1	\$3,113	HIGHWAY
1311		I-75 AT FRUITVILLE RD	FDOT DISTRICT 1	1	\$90,693	HIGHWAY
1312		US 17 FROM COPLEY DRIVE TO N OF CR 74 (BERMONT RD)	FDOT DISTRICT 1	1	\$2,045	HIGHWAY
1315		US 17 FROM WEST 9TH ST TO N OF WEST 3RD ST (ZOLFO SPRINGS)	FDOT DISTRICT 1	1	\$8,186	HIGHWAY
1318		SR 29 FROM SPENCER TO N OF COWBOY WAY	FDOT DISTRICT 1	1	\$37,479	HIGHWAY

High Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
1319		SR 710 FROM US 441 TO L-63 CANAL	FDOT DISTRICT 1	1	\$28,369	HIGHWAY
1321		SR 710 FROM SHERMAN WOOD RANCHES TO CR 714 (MARTIN C/L)	FDOT DISTRICT 1	1	\$6,500	HIGHWAY
1322		I-75 AT BEE RIDGE RD	FDOT DISTRICT 1	1	\$75,421	HIGHWAY
1323		I-75 AT SR 72 (CLARK RD)	FDOT DISTRICT 1	1	\$67,049	HIGHWAY
1324		SR 29 FROM I-75 TO OIL WELL RD	FDOT DISTRICT 1	1	\$11,645	HIGHWAY
1325		SR 29 FROM SR 82 TO HENDRY C/L	FDOT DISTRICT 1	1	\$3,750	HIGHWAY
1327		SR 29 FROM WHIDDEN RD (CR 731) TO BERMONT RD (CR 74)	FDOT DISTRICT 1	1	\$750	HIGHWAY
1328		SR 29 FROM BERMONT RD (CR 74) TO US 27	FDOT DISTRICT 1	1	\$5,400	HIGHWAY
1329		SR 70 FROM JEFFERSON AVE TO CR 29	FDOT DISTRICT 1	1	\$4,000	HIGHWAY
1331		I-75 AT SR 64	FDOT DISTRICT 1	1	\$46,448	HIGHWAY
1332		US 27 FROM HIGHLANDS C/L TO CR 630A	FDOT DISTRICT 1	1	\$58,037	HIGHWAY
1333		US 27 FROM CR 630A TO PRESIDENTS DR	FDOT DISTRICT 1	1	\$41,962	HIGHWAY
1334		US 27 FROM PRESIDENTS DR TO SR 60	FDOT DISTRICT 1	1	\$8,398	HIGHWAY
1335		I-4 AT CSX RAILROAD BRIDGE	FDOT DISTRICT 1	1	\$7,161	HIGHWAY
1336		I-4 FROM SR 570 (POLK PKWY) TO US 98	FDOT DISTRICT 1	1	\$317,954	HIGHWAY
1338		SR 70 FROM LORRAINE RD TO SINGLETARY RD (MYAKKA CITY)	FDOT DISTRICT 1	1	\$11,500	HIGHWAY
1339		SR 70 FROM SINGLETARY RD (MYAKKA CITY) TO AMERICAN LEGION DR (ARCADIA)	FDOT DISTRICT 1	1	\$13,500	HIGHWAY
1340		SR 70 FROM AMERICAN LEGION DR (ARCADIA) TO JEFFERSON AVE	FDOT DISTRICT 1	1	\$22,900	HIGHWAY
1341		SR 70 FROM CR 29 TO US 98 (EAGLE BAY DR)	FDOT DISTRICT 1	1	\$23,000	HIGHWAY
1342		SR 60 FROM CR 630 TO KISSIMMEE RIVER BRIDGE	FDOT DISTRICT 1	1	\$5,250	HIGHWAY
1343		I-75 AT UNIVERSITY PKWY (SARASOTA COUNTY)	FDOT DISTRICT 1	1	\$16,789	HIGHWAY
1344		I-4 FROM US 98 TO SR 570 (POLK PKWY)	FDOT DISTRICT 1	1	\$479,414	HIGHWAY

High Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
1345		I-4 FROM SR 570 (POLK PKWY) TO US 27 (SR 25)	FDOT DISTRICT 1	1	\$731,171	HIGHWAY
1641		EDISON AVENUE FROM PALM AVE TO FOWLER ST	FDOT DISTRICT 1	1	\$3,700	HIGHWAY
1643		US 27 AND I4 INTERCHANGE	FDOT DISTRICT 1	1	\$1,000	HIGHWAY
1644		US 27 AT 544	FDOT DISTRICT 1	1	\$1,000	HIGHWAY
1646		COUNTY LINE RD AND I-4 INTERCHANGE	FDOT DISTRICT 1	1	\$5,000	HIGHWAY
1652		INTERSTATE 4 AT SR 33 (EXIT 38)	FDOT DISTRICT 1	1	\$5,000	HIGHWAY
1716		SR 655, RECKER HWY, AUBURNDALE, 1 TRACK, FREIGHT MOVEMENTS - TRAIN, TRUCKS & AMTRAK (INDUSTRIAL & RESIDENTAL)	FDOT DISTRICT 1	1	\$17	HIGHWAY
1718		SR 60, W OF BARTOW (LONG SKEWED CROSSING)	FDOT DISTRICT 1	1	-	HIGHWAY
1719		SR 60, E OF BARTOW (FREIGHT/AMTRAK) LOCATED NEAR WINTER HAVEN ILC	FDOT DISTRICT 1	1	\$33	HIGHWAY
1720		COUNTY LINE RD @ US 92	FDOT DISTRICT 1	1	-	HIGHWAY
1721		W DERBY AVE, AUBURNDALE, 7 RR TRACKS	FDOT DISTRICT 1	1	\$32	HIGHWAY
980	4288651	I-10/SR 8 AT SR 200 (US 301) RAMP MODIFICATIONS	FDOT DISTRICT 2	2	\$83,683	HIGHWAY
991	4326561	I-95/SR 9 FR S OLD ST. AUG INTERCH TO N OLD ST. AUG INTERCH.	FDOT DISTRICT 2	2	\$1,112	HIGHWAY
1005	2179763	SR-263 FROM N SR 371 ORANGE AVE TO N OF SR 20 B-TOWN HWY	FDOT DISTRICT 3	3	\$1	HIGHWAY
1006	2179764	US 98/SR-30 @ SR 368 23RD STREET INTERSECTION PHASE I	FDOT DISTRICT 3	3	\$53,519	HIGHWAY
1007	2179766	US 98/SR-30 @ SR 368 23RD STREET INTERSECTION PHASE II	FDOT DISTRICT 3	3	\$38,012	HIGHWAY
1229		I-10 (SR 8) AT SR 95 (US 29) PH I IMPROVEMENTS	FDOT DISTRICT 3	8	\$4,154	HIGHWAY
1232		I-10 (SR 8) FROM ESCAMBIA BAY BRIDGE TO E SR 281 AVALON BLVD	FDOT DISTRICT 3	3	\$30,639	HIGHWAY
1373		SR 390 FROM EAST OF CR 2312 BALDWIN TO JENKS AVE	FDOT DISTRICT 3	3	\$44,932	HIGHWAY
1374		SR 390 FROM JENKS AVE TO SR 77 OHIO AVE	FDOT DISTRICT 3	3	\$76,023	HIGHWAY
1376		US 98 FROM OKALOOSA C/L TO TANG-O-MAR DR	FDOT DISTRICT 3	3	\$34,971	HIGHWAY
1379		SR 79 FROM I-10 TO ALABAMA STATE LINE	FDOT DISTRICT 3	3	\$127,593	HIGHWAY

High Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
1692		GULF TO BAY HIGHWAY	FDOT DISTRICT 3	8	\$292,687	HIGHWAY
1026	4327061	SR-710/BEELINE HWY FROM W OF AUSTRALIAN AVE TO OLD DIXIE HWY	FDOT DISTRICT 4	8	-	HIGHWAY
1031	4297861	I-95/SR-9 FROM N OF SR-848/STIRLING TO S OF SR-842/BROWARD BLVD (95 EXPRESS PHASE 2)	FDOT DISTRICT 4	4	\$100	HIGHWAY
1246		I-75/SR-93 INTERCHNG AT SR-820 PINES BLVD F N OF MIRAMAR PKWY T N OF PINES	FDOT DISTRICT 4	4	\$5,136	HIGHWAY
1247		ITS TECHNICAL SUPPORT SERVICES	FDOT DISTRICT 4	4	\$1,600	HIGHWAY
1250		BROWARD ITS FACILITY O & M JPA	FDOT DISTRICT 4	4	\$1,000	HIGHWAY
1252		D/W ITS SOFTWARE INTEGRATION AND MAINTENANCE	FDOT DISTRICT 4	4	\$1,800	HIGHWAY
1255		SR-710/BEELINE HWY FROM NORTHLAKE BLVD TO BLUE HERON BLVD	FDOT DISTRICT 4	4	\$6,090	HIGHWAY
1258		I-75/SR-93 INTRCHNG @ ROYAL PALM BLVD F S OF SW 36 ST TO N OF SW 14 ST	FDOT DISTRICT 4	4	\$12,904	HIGHWAY
1260		I-95/SR-9 FROM BROWARD/PALM BEACH CO LINE TO LINTON BLVD (95 EXPRESS PHASE 3B)	FDOT DISTRICT 4	8	\$172,389	HIGHWAY
1261		I-95/SR-9 FROM SR-848/STIRLING TO SR-842/BROWARD BLVD WITH I-595 DIRECT CONNECT RAMPS (95 EXPRESS PHASE 3C)	FDOT DISTRICT 4	4	\$177,000	HIGHWAY
1390		I-95 AT OSLO RD	FDOT DISTRICT 4	4	\$26,237	HIGHWAY
1392		I-75 AT SR-820/PINES BLVD	FDOT DISTRICT 4	8	\$44,760	HIGHWAY
1409		SR-710 FROM PRATT WHITNEY ENTRANCE TO PGA BLVD	FDOT DISTRICT 4	4	\$39,087	HIGHWAY
1047	4119592	I-95/MATANZAS WOODS INTERCHANGE	FDOT DISTRICT 5	5	\$7,500	HIGHWAY
1430		SR 40 FROM CONE RD TO SR 11	FDOT DISTRICT 5	5	\$62,540	HIGHWAY
1431		SR 40 FROM SR 11 TO SR 15	FDOT DISTRICT 5	8	\$60,950	HIGHWAY
1621		FREIGHT CORRIDOR: I-75 @ CR 484	FDOT DISTRICT 5	5	\$2,203	HIGHWAY
1057	4307633	I-75/SR 93 FROM S. OF NW 170 STREET TO MIAMI-DADE COUNTY LINE	FDOT DISTRICT 6	6	\$1,890	HIGHWAY
1058	4217072	I-75/SR 93 ML SYSTEM FROM NW 170 STREET TO S OF HEFT INTERCHANGE	FDOT DISTRICT 6	6	\$36,752	HIGHWAY
1059	4217078	I-75/SR 93 ML SYSTEM FR S. OF HEFT INTCH. TO MIAMI/DADE COUNTYLINE	FDOT DISTRICT 6	6	\$40,779	HIGHWAY

High Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
1063	2516841	I-95/SR 9A GOLDEN GLADES MULTIMODAL TERMINAL	FDOT DISTRICT 6	6	\$18,750	HIGHWAY
1276	2496155	SR 997/KROME AVENUE FROM MP 10.935 TO MP 14.184/OKEECHOBEE ROAD	FDOT DISTRICT 6	6	\$47,092	HIGHWAY
1277	2496156	SR 997/KROME AVENUE FROM MP 2.754 TO MP 5.122	FDOT DISTRICT 6	6	\$35,279	HIGHWAY
1278	2496157	SR 997/KROME AVENUE FROM MP 5.122 TO MP 8.151	FDOT DISTRICT 6	6	\$32,104	HIGHWAY
1279	2496158	SR 997/KROME AVENUE FROM MP 8.151 TO MP 10.935	FDOT DISTRICT 6	6	\$28,544	HIGHWAY
1283	4055752	SR 997/KROME AVENUE FROM SO. OF FLAGLER AVE TO SW 296TH ST. (BY-PASS)	FDOT DISTRICT 6	6	\$11,694	HIGHWAY
1284	4055753	SR 997/KROME AVENUE FROM SR 5/US-1 TO LUCY STREET	FDOT DISTRICT 6	6	\$5,122	HIGHWAY
1285	4184235	SR 826/PALMETTO EXPY FROM NW 154 STREET TO NW 17 AVENUE	FDOT DISTRICT 6	6	\$18,000	HIGHWAY
1286	4231261	SR 836/I-95 INTERCHANGE RAMPS FROM NW 12 AVE TO I-95	FDOT DISTRICT 6	6	\$136,037	HIGHWAY
1287	4273691	SR 997/KROME AVENUE FROM SW 296 STREET TO SW 232 STREET	FDOT DISTRICT 6	6	\$43,178	HIGHWAY
1288	4273692	SR 997/KROME AVENUE FROM SW 232 STREET TO SW 184TH ST/EUREKA DR.	FDOT DISTRICT 6	6	\$24,106	HIGHWAY
1289	4273693	SR 997/KROME AVENUE FROM SW 184 STREET TO SW 136 STREET	FDOT DISTRICT 6	6	\$24,071	HIGHWAY
1433		KROME AVE TRUCK BYPASS FROM SW 296TH ST TO SW 312TH ST TO SW 312TH ST TO US 1	FDOT DISTRICT 6	6	\$28,000	HIGHWAY
1434	2516881	SR-836/I-395 FROM WEST OF I-95 TO MACARTHUR CAUSEWAY BRIDGE	FDOT DISTRICT 6	6	\$600,000	HIGHWAY
1435	4184235	SR-826 FROM NW 154TH ST TO NW 17TH AVE	FDOT DISTRICT 6	6	\$494,000	HIGHWAY
1438		SR-826 FROM NW 103RD ST TO NW 154TH ST	FDOT DISTRICT 6	8	\$347,000	HIGHWAY
1439		SR 25/OKEECHOBEE RD FROM SR 826 TO KROME AVE	FDOT DISTRICT 6	6	\$284,000	HIGHWAY
1440	4326394	NW 74TH ST FROM SR 826/PALMETTO EXPY TO SR 27/OKEECHOBEE ROAD	FDOT DISTRICT 6	6	\$70,000	HIGHWAY
1441		SR 826 FROM SR 836 TO NW 103RD ST	FDOT DISTRICT 6	6	\$347,000	HIGHWAY
1447	4283583	SR 826/PALMETTO XWAY TO I-95 (NEW EXPRESS LANE RAMPS) (CON)	FDOT DISTRICT 6	6	\$206,706	HIGHWAY
1295		CR 296(FUTURE SR690) FROM US 19 (SR 55) TO E OF ROOSEVELT/CR 296	FDOT DISTRICT 7	7	\$190,375	HIGHWAY
1299		I 275/SR 93 NB FROM N OF HOWARD FRANKLAND TO S OF LOIS AVENUE	FDOT DISTRICT 7	7	\$263,669	HIGHWAY

High Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
1300		I 275/SR 93 SB FROM N OF HOWARD FRANKLAND TO S OF LOIS AVENUE	FDOT DISTRICT 7	7	\$171,985	HIGHWAY
1301		SR 60/SR 589 FROM KENNEDY BLVD TO S OF INDEPENDENCE PKWY	FDOT DISTRICT 7	7	\$192,249	HIGHWAY
1303		SR 60 EB FROM CYPRESS STREET TO I-275 NB	FDOT DISTRICT 7	7	\$64,487	HIGHWAY
1452		US 19/SR 55 FROM N OF SR 580 TO N OF CR 95	FDOT DISTRICT 7	7	\$102,327	HIGHWAY
1465		I-75 FROM N OF CR 54 TO N OF SR 52	FDOT DISTRICT 7	7	\$61,013	HIGHWAY
1466		I-75 FROM N OF SR 52 TO PASCO/HERNANDO C/L	FDOT DISTRICT 7	8	\$112,457	HIGHWAY
1467		I-75 FROM PASCO/HERNANDO C/L TO S OF SR 50	FDOT DISTRICT 7	7	\$67,445	HIGHWAY
1468		I-75 FROM S OF SR 50 TO SUMTER/HERNANDO C/L	FDOT DISTRICT 7	7	\$23,250	HIGHWAY
1469		I-275 FROM 54TH AVENUE SOUTH TO N OF 4TH STREET NORTH	FDOT DISTRICT 7	7	\$2,200	HIGHWAY
1471		I-75 AT SR 50	FDOT DISTRICT 7	7	\$40,106	HIGHWAY
1472		SR 50 FROM SUNCOAST PKWY TO CALIFORNIA ST	FDOT DISTRICT 7	7	\$1,200	HIGHWAY
1473		SR 50 FROM BROOKSVILLE BYPASS TO US 301	FDOT DISTRICT 7	7	\$1,100	HIGHWAY
1483		I-75 FROM SR 56 TO CR 54	FDOT DISTRICT 7	7	\$24,000	HIGHWAY
1485		SR 60 EB FROM I 275 E OF CYPRESS TO I-275 SR 60 TO TRASK	FDOT DISTRICT 7	7	\$43,634	HIGHWAY
1487		US 41 FROM PENDOLA POINT RD TO CAUSEWAY BLVD	FDOT DISTRICT 7	7	\$1,116	HIGHWAY
1583		SR 688 (ULMERTON RD) AT 34TH ST N	FDOT DISTRICT 7	7	\$22	HIGHWAY
1235		WIDEN TPK(SR91) FROM H.E.F.T. (SR821) TO N OF JOHNSON ST (6 TO 8 LANES)	FLORIDA'S TURNPIKE ENTERPRISE	4	\$55,485	HIGHWAY
1236		WIDEN TPK(SR91) FROM N OF JOHNSON ST TO GRIFFIN RD (SR818) (6TO8)	FLORIDA'S TURNPIKE ENTERPRISE	4	\$99,681	HIGHWAY
1238		WIDEN TPK FROM LAKE WORTH RD (SR 802) TO OKEECHOBEE BLVD (SR 704)	FLORIDA'S TURNPIKE ENTERPRISE	4	\$103,305	HIGHWAY
1239		WIDENING PGA BLVD TO INDIANTOWN RD (6 LANES)	FLORIDA'S TURNPIKE ENTERPRISE	4	\$4,035	HIGHWAY
1240		WIDEN TPK FROM ATLANTIC BLVD (SR 814) TO SAWGRASS XWAY (SR 869)	FLORIDA'S TURNPIKE ENTERPRISE	4	\$2,048	HIGHWAY
1249		WIDEN TPK(SR91) FROM SAWGRASS (SR869) TO PALM BEACH CTY LINE (MP 71-73)	FLORIDA'S TURNPIKE ENTERPRISE	4	\$47,999	HIGHWAY

High Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
1253		WIDEN TPK(SR91) FROM GLADES RD (SR808) TO N OF BOYNTON BEACH BLVD 6- 8	FLORIDA'S TURNPIKE ENTERPRISE	4	\$19,600	HIGHWAY
1254		WIDEN TPK(SR91) FROM PALM BEACH C/L - GLADES RD (6 TO 8 LANES)	FLORIDA'S TURNPIKE ENTERPRISE	4	\$102,398	HIGHWAY
1259		HEFT AUXILIARY LANES FROM NW 57 AVE TO MIRAMAR TOLL PLAZA (MP 43 - 47)	FLORIDA'S TURNPIKE ENTERPRISE	8	\$55,821	HIGHWAY
1267		TURNPIKE WIDENING OSCEOLA COUNTY LINE TO BEACHLINE, MP 249-254	FLORIDA'S TURNPIKE ENTERPRISE	8	\$6	HIGHWAY
1268		TURNPIKE WIDENING SOUTH OF OSCEOLA PARKWAY TO OSCEOLA COUNTY LINE	FLORIDA'S TURNPIKE ENTERPRISE	8	\$6	HIGHWAY
1270		WIDEN SR417(SEMINOLE XWAY)FROM ALOMA AVE TO SR 434 (4TO6 LANES)	FLORIDA'S TURNPIKE ENTERPRISE	5	\$100,110	HIGHWAY
1275		MINNEOLA PARTIAL INTERCHANGE (TPK MP 279)	FLORIDA'S TURNPIKE ENTERPRISE	5	\$61,764	HIGHWAY
1293		RIDGE RD / SUNCOAST PKWY (SR 589) INTERCHANGE (MP 24.7)	FLORIDA'S TURNPIKE ENTERPRISE	7	\$16,161	HIGHWAY
1294		RIDGE RD / SUNCOAST PKWY (SR 589) INTERCHANGE - SUNPASS ONLY LANES	FLORIDA'S TURNPIKE ENTERPRISE	7	\$2,745	HIGHWAY
1298		WIDEN VETERANS FROM S OF GUNN TO SUGARWOOD MAINLINE PLAZA (MP 9-11)	FLORIDA'S TURNPIKE ENTERPRISE	7	\$61,286	HIGHWAY
1538		SUNCOAST PARKWAY 2 / SR 589 FPN 405270-3.-4	FLORIDA'S TURNPIKE ENTERPRISE	8	\$18,400	HIGHWAY
1539		NATURE COAST PARKWAY AKA NORTHERN EXTENSION OF FLORIDAS TURNPIKE	FLORIDA'S TURNPIKE ENTERPRISE	8	-	HIGHWAY
1492		I 75 @ DANIELS PARKWAY	LEE MPO	1	\$57,960	HIGHWAY
1493		I 75 @ CORKSCREW RD	LEE MPO	1	\$57,960	HIGHWAY
1602		I 75 @ COLONIAL BLVD	LEE MPO	1	\$57,960	HIGHWAY
1603		I 75 @ LUCKETT RD	LEE MPO	1	\$57,960	HIGHWAY
1606		SR 82 FROM SHAWNEE ROAD TO ALABAMA	LEE MPO	1	\$24,644	HIGHWAY
1607		SR 82 FROM ALABAMA TO HOMESTEAD	LEE MPO	1	\$37,428	HIGHWAY
1608		SR 82 FROM HOMESTEAD RD TO HENDRY COUNTY LINE	LEE MPO	1	\$28	HIGHWAY
1587		NORTHWOOD CONNECTOR REHABILITATION AND NEW ALIGNMENT - NW TO SE CONNECTION	FDOT DISTRICT 4	4	\$0	RAIL
1592		MR MICCI-MIAMI RIVER-MIC CAPACITY IMPROVEMENT	FDOT DISTRICT 4	4	\$49,200	RAIL

High Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
1707		NORTHWOOD CONNECTOR REHABILITATION AND NEW ALIGNMENT - SW TO NE CONNECTION	FDOT DISTRICT 4	4	\$0	RAIL
1269		CENTRAL FLORIDA COMMUTER RAIL SYSTEM OPERATIONS AND MAINTENANCE	FDOT DISTRICT 5	5	\$54,307	RAIL
1127		DOUBLE TRACK GIFFORD TO INDRIO	FLORIDA EAST COAST RAILWAY	4	\$39,790	RAIL
1131		MAINLINE BRIDGE FASTENING SYSTEM	FLORIDA EAST COAST RAILWAY	2/5	\$9,090	RAIL
1133		PINEDA TURNOUT	FLORIDA EAST COAST RAILWAY	5	\$5,043	RAIL
1138		UPGRADE AND REPLACE LIGHT WEIGHT RAIL	FLORIDA EAST COAST RAILWAY	2/4/6	\$18,129	RAIL
1537		PORT CITRUS	CITRUS COUNTY PORT AUTHORITY	7	\$275	SEAPORT
1148		PORT CANAVERAL MULTIMODAL TERMINAL FOR MARINE HIGHWAY RAIL BARGE	PORT CANAVERAL	5	\$26,486	SEAPORT
1167		NORTH SIDE DEVELOPMENT	PORT CANAVERAL	5	\$42,400	SEAPORT
1169		RAIL CONNECTIVITY PHASE 1 TO FEC TO INTERMODAL	PORT CANAVERAL	5	\$65,060	SEAPORT
1630		CONTAINER YARD DENSIFICATION IMPROVEMENTS	PORT EVERGLADES	4	\$30,000	SEAPORT
1509		BUILDING IMPROVEMENTS	TAMPA PORT AUTHORITY	7	\$2,368	SEAPORT
1511		EMERGENCY, SECURITY, RADAR UPGRADES	TAMPA PORT AUTHORITY	7	\$3,837	SEAPORT
1523		PORT REDWING: RECLAIM WATER LINE TO TENANT SITE	TAMPA PORT AUTHORITY	7	\$2,400	SEAPORT
1616		KENNEDY SPACE CENTER: SR 405 @ SR 50; SR 405 @ GRISSOM PKWY; SR 405 @ BARNA AVE.; SR 405	FDOT DISTRICT 5	5	\$2,869	SPACEPORT

*FM number refers to the unique identifier assigned by the FDOT Office of Work Program and Budget

Table 13: Statewide Freight Project Needs- Medium Priority

Medium Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
1609		OCF TAXIWAY C AND APRON, PHASE 1	CITY OF OCALA	5	\$6,247	AIR CARGO
1610		EXTEND WEST SIDE ACCESS ROAD (NORTH CONNECTION)	CITY OF OCALA	5	\$550	AIR CARGO
1611		EXTEND RUNWAY 18/36	CITY OF OCALA	5	\$6,160	AIR CARGO
1497		PORT OF LAKELAND	LAKELAND LINDER REGIONAL AIRPORT	1	\$5,000	AIR CARGO
828		CONSTRUCT AIRCRAFT PARKING RAMP - PHASE 1	NORTHWEST FLORIDA-BEACHES INTERNATIONAL AIRPORT	3	\$1,822	AIR CARGO
830		CONSTRUCT CONNECTING TAXIWAY TO RW 3/21	NORTHWEST FLORIDA-BEACHES INTERNATIONAL AIRPORT	3	\$1,000	AIR CARGO
832		CONSTRUCT EAST PARALLEL TAXIWAY TO RUNWAY 16-34	NORTHWEST FLORIDA-BEACHES INTERNATIONAL AIRPORT	3	\$11,000	AIR CARGO
833		CONSTRUCT PUBLIC ACCESS ROAD & UTILITIES - PHASE 2	NORTHWEST FLORIDA-BEACHES INTERNATIONAL AIRPORT	3	\$7,300	AIR CARGO
834		EXPAND GA APRONS; EXPAND TERMINAL PARKING AREA	NORTHWEST FLORIDA-BEACHES INTERNATIONAL AIRPORT	3	\$3,990	AIR CARGO
837		EXPAND TERMINAL BUILDING (ADD 35,000 SF)	NORTHWEST FLORIDA-BEACHES INTERNATIONAL AIRPORT	3	\$2,572	AIR CARGO
838		REHABILITATE VEHICULAR ACCESS ROADS	NORTHWEST FLORIDA-BEACHES INTERNATIONAL AIRPORT	3	\$2,075	AIR CARGO
839		TERMINAL AIRCRAFT RAMP EXPANSION/ATCT AND SAFETY BUILDING SITE MODIFICATIONS	NORTHWEST FLORIDA-BEACHES INTERNATIONAL AIRPORT	3	\$1,379	AIR CARGO
860		CARGO FACILITY ACCESS IMPROVEMENTS	PALM BEACH INTERNATIONAL AIRPORT	4	\$2,270	AIR CARGO
861		CONSTRUCT APRON, TAXILANES/TAXIWAYS AND INFRASTRUCTURE GOLFVIEW - PHASE 2	PALM BEACH INTERNATIONAL AIRPORT	4	\$7,151	AIR CARGO
862		GAFIS FACILITY IMPROVEMENTS	PALM BEACH INTERNATIONAL AIRPORT	4	\$10,000	AIR CARGO
863		GOLFVIEW APRON, TAXILANES/TAXIWAYS AND INFRASTRUCTURE	PALM BEACH INTERNATIONAL AIRPORT	4	\$6,300	AIR CARGO

Medium Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
864		GOLFVIEW NORTH-SOUTH TAXIWAY/TAXILANE (DESIGN)	PALM BEACH INTERNATIONAL AIRPORT	4	\$492	AIR CARGO
874		AREA-WIDE WAYFINDING SIGNAGE	PENSACOLA INTERNATIONAL AIRPORT	3	\$400	AIR CARGO
875		COMMERCE PARK IMPROVEMENTS- PHASE II	PENSACOLA INTERNATIONAL AIRPORT	3	\$667	AIR CARGO
876		CONSTRUCT HOLD PADS	PENSACOLA INTERNATIONAL AIRPORT	3	\$1,210	AIR CARGO
877		CONSTRUCTION - CORPORATE RAMP EXPANSION	PENSACOLA INTERNATIONAL AIRPORT	3	\$500	AIR CARGO
879		GA RAMP EXPANSION - CONSTRUCTION	PENSACOLA INTERNATIONAL AIRPORT	3	\$3,000	AIR CARGO
881		INDUSTRIAL APRON - CONSTRUCTION	PENSACOLA INTERNATIONAL AIRPORT	3	\$10,000	AIR CARGO
882		INDUSTRIAL APRON - DESIGN	PENSACOLA INTERNATIONAL AIRPORT	3	\$300	AIR CARGO
885		PARALLEL TAXIWAY - CONSTRUCTION	PENSACOLA INTERNATIONAL AIRPORT	8	\$15,000	AIR CARGO
886		PARALLEL TAXIWAY - DESIGN	PENSACOLA INTERNATIONAL AIRPORT	3	\$300	AIR CARGO
887		PAVE INTERIOR PERIMETER ROAD	PENSACOLA INTERNATIONAL AIRPORT	3	\$490	AIR CARGO
890		TAXIWAY TO THE SOUTHWEST - DESIGN/CONSTRUCT	PENSACOLA INTERNATIONAL AIRPORT	3	\$851	AIR CARGO
891		TERMINAL BUILDING APRON EXPANSION	PENSACOLA INTERNATIONAL AIRPORT	3	\$3,000	AIR CARGO
1548		INFRASTRUCTURE DEVELOPMENT	SOUTHWEST FLORIDA INTERNATIONAL AIRPORT	1	\$4,700	AIR CARGO
915		AIRCRAFT MAINTENANCE AND STORAGE HANGARS AND RELATED TAXILANES	TALLAHASSEE REGIONAL AIRPORT	3	\$10,000	AIR CARGO
916		AIRCRAFT MAINTENANCE HANGAR	TALLAHASSEE REGIONAL AIRPORT	3	\$14,000	AIR CARGO
918		EXPAND AIR CARRIER APRON	TALLAHASSEE REGIONAL AIRPORT	3	\$4,500	AIR CARGO

Medium Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
919		INTERNATIONAL PORT OF ENTRY & FOREIGN TRADE ZONE (FTZ) FACILITY	TALLAHASSEE REGIONAL AIRPORT	3	\$4,000	AIR CARGO
920		REHAB TAXIWAYS	TALLAHASSEE REGIONAL AIRPORT	3	\$3,000	AIR CARGO
921		TAXIWAY IMPROVEMENTS	TALLAHASSEE REGIONAL AIRPORT	3	\$1,450	AIR CARGO
922		A SORT ROOF REHABILITATION (FY 2018)	TAMPA INTERNATIONAL AIRPORT	7	\$64	AIR CARGO
924		AIRFIELD SLAB REPLACEMENT - 2016	TAMPA INTERNATIONAL AIRPORT	7	\$2,100	AIR CARGO
930		CARGO/GSE PARKING LOT ASPHALT PAVEMENT REHABILITATION (2019)	TAMPA INTERNATIONAL AIRPORT	7	\$615	AIR CARGO
932		ENGINE RUN-UP AREA CONCRETE JOINT AND SLAB REHABILITATION (2018)	TAMPA INTERNATIONAL AIRPORT	7	\$354	AIR CARGO
933		FEDEX ROOF AND STRUCTURE REPAIR (2018)	TAMPA INTERNATIONAL AIRPORT	8	\$174	AIR CARGO
935		F-SORT ROOF REHABILITATION (2019)	TAMPA INTERNATIONAL AIRPORT	7	\$65	AIR CARGO
936		RAMP FBO (SIGNATURE) AND TAXIWAY E SOUTH OF RUNWAY 10/28 ASPHALT PAVEMENT REHABILITATION (FY 2016)	TAMPA INTERNATIONAL AIRPORT	7	\$5,090	AIR CARGO
953		TAXIWAY N REHABILITATION - TO BE DELETED	TAMPA INTERNATIONAL AIRPORT	7	\$1,337	AIR CARGO
1657		FLORIDA'S TURNPIKE OFF-RAMPS FROM GRIFFIN ROAD TO ORANGE DRIVE	BROWARD MPO	4	\$39	HIGHWAY
974	4130422	I-75/SR 93 FROM LEE C/L TO S TUCKERS GRADE	FDOT DISTRICT 1	1	\$35,530	HIGHWAY
975	4299071	I-75/SR 93 SB OFF-RAMP AT GOLDEN GATE PARKWAY	FDOT DISTRICT 1	1	\$1,532	HIGHWAY
1316		SR 29 FROM COLLIER C/L TO CR 832 (KERI RD)	FDOT DISTRICT 1	1	\$19,051	HIGHWAY
1317		SR 29 FROM CR 832 (KERI RD) TO SPENCER	FDOT DISTRICT 1	1	\$10,915	HIGHWAY
1337		I-4 AT SR 557	FDOT DISTRICT 1	1	\$40,596	HIGHWAY
1642		SR 60 AND MOSAIC RAILROAD CROSSING	FDOT DISTRICT 1	1	\$10,000	HIGHWAY
1647		SR 82 FROM HENDRY C/L TO SR 29 IN COLLIER COUNTY	FDOT DISTRICT 1	1	-	HIGHWAY
1715		SR 60 @ CR 676 (NICHOLS RD)	FDOT DISTRICT 1	1	-	HIGHWAY
1717		CR 542/AVE G AT SPIRIT LAKE RD, AUBURNDALE, 2 TRACKS EACH (TOTAL OF 4 TRACKS), FREIGHT MOVEMENTS - TRAIN, TRUCKS & AMTRAK (INDUSTRIAL & RESIDENTIAL)	FDOT DISTRICT 1	1	\$90	HIGHWAY

Medium Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
978	2096593	I-10/SR 8 INTERCHANGE AT SR 10 (US 90) AND SR 23	FDOT DISTRICT 2	2	\$50,257	HIGHWAY
982	2093013	I-295/SR 9A FROM SR202 JTB BLVD TO SR 9B (MANAGED LANES)	FDOT DISTRICT 2	2	\$51,486	HIGHWAY
983	2096584	I-295/SR 9A FROM I-95 INTERCHANGE TO DAMES POINT BRIDGE	FDOT DISTRICT 2	2	\$128,270	HIGHWAY
984	2133457	I-295/SR 9A FROM BUCKMAN BRIDGE TO I-95 MANAGED LANES	FDOT DISTRICT 2	2	\$93,806	HIGHWAY
990	2133231	I-95/SR 9 AT NORTH I-295 INTERCHANGE	FDOT DISTRICT 2	2	\$158,498	HIGHWAY
992	4326581	I-95/SR 9 FR NB I-95 TO E SR 102 OFF RAMP TO N I-95 ON RAMP	FDOT DISTRICT 2	2	\$345	HIGHWAY
1214		SR 26 CORRIDOR FROM GILCHRIST C/L TO CR 26A E OF NEWBERRY	FDOT DISTRICT 2	2	\$30,989	HIGHWAY
1215	209301-4	I-295 (SR 9A) FROM SOUTHSIDE CONNECTOR TO SR 202 JTB	FDOT DISTRICT 2	2	\$35,528	HIGHWAY
1216		US 301/SR 200 FROM SOUTH OF BALDWIN TO NO.OF BALDWIN (BYPASS)	FDOT DISTRICT 2	2	\$58,640	HIGHWAY
1217		SR 20 FROM ALACHUA C/L TO SW 56TH AVENUE	FDOT DISTRICT 2	2	\$56,342	HIGHWAY
1218		SR 20 FROM SW 56TH AVENUE TO CR 315 IN INTERLACHEN	FDOT DISTRICT 2	2	\$38,747	HIGHWAY
1219		A1A (SR 200) AT US17/CR 107/CHESTER RD.	FDOT DISTRICT 2	2	\$660	HIGHWAY
1223		I-10 (SR 8) FROM NASSAU/DUVAL C/L TO US 301 (MANAGED LANE)	FDOT DISTRICT 2	2	\$2,669	HIGHWAY
1225		FC OUTER BELTWAY FROM I-95 (SR 9) TO SR 15 (US17)	FDOT DISTRICT 2	2	\$26,449	HIGHWAY
1226		FC OUTER BELTWAY FROM SR 15 (US 17) TO SR 21	FDOT DISTRICT 2	2	\$247	HIGHWAY
1346		SR 23 FIRST COAST OUTER BELTWAY FROM SR 21 (BLANDING BLVD) TO I-95	FDOT DISTRICT 2	2	\$1,380,000	HIGHWAY
1347		SR 26 FROM GILCHRIST CR 337 TO ALACHUA CR 26A-NEWBERRY BYPASS	FDOT DISTRICT 2	2	\$50,608	HIGHWAY
1348		SR 26 FROM US 19 (FANNING SPRINGS) TO W OF TRENTON	FDOT DISTRICT 2	2	\$61,660	HIGHWAY
1349		I-10 FROM W OF CR 125 TO W OF SR 121	FDOT DISTRICT 2	2	\$41,058	HIGHWAY
1350		I-10 FROM BAKER C/L TO DUVAL C/L	FDOT DISTRICT 2	2	\$5,068	HIGHWAY
1351		I-10 FROM NASSAU C/L TO US 301	FDOT DISTRICT 2	2	\$64,209	HIGHWAY
1352		I-10 FROM US 301 TO SR 23-CECIL COMMERCE CTR PKWY	FDOT DISTRICT 2	2	\$56,744	HIGHWAY

Medium Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
1353		I-10 FROM W OF SR 121 TO NASSAU C/L	FDOT DISTRICT 2	2	\$47,247	HIGHWAY
1354		I-295 FROM SOUTHSIDE CONNECTOR TO J. TURNER BUTLER BLVD	FDOT DISTRICT 2	2	\$165,411	HIGHWAY
1355		I-95 FROM ST. JOHNS C/L TO I-295	FDOT DISTRICT 2	2	\$42,837	HIGHWAY
1357		I-95 AT SR 202 (J. TURNER BUTLER BLVD) PHASE II	FDOT DISTRICT 2	2	\$16,400	HIGHWAY
1358		I-75 AT SR 121 (WILLISTON RD)	FDOT DISTRICT 2	2	\$5,100	HIGHWAY
1359		I-95 AT SR 102 (AIRPORT RD)	FDOT DISTRICT 2	2	\$16,500	HIGHWAY
1360		I-295 FROM I-10 TO S OF US 1	FDOT DISTRICT 2	2	\$66,117	HIGHWAY
1361		I-295 FROM S OF US 1 TO N OF TROUT RIVER	FDOT DISTRICT 2	2	\$27,898	HIGHWAY
1362		I-295 FROM N OF TROUT RIVER TO I-95	FDOT DISTRICT 2	2	\$86,629	HIGHWAY
1363		SR 26 FROM W OF TRENTON TO E OF TRENTON	FDOT DISTRICT 2	2	\$40,310	HIGHWAY
1364		SR 26 FROM E OF TRENTON TO CR 337	FDOT DISTRICT 2	2	\$87,503	HIGHWAY
1365		I-295 AT US 17/WELLS RD	FDOT DISTRICT 2	2	\$33,000	HIGHWAY
1366		I-295 FROM S OF SR 134/103RD ST TO I-10	FDOT DISTRICT 2	2	\$179,814	HIGHWAY
1367		I-295 FROM SR 13 TO W OF US 17	FDOT DISTRICT 2	2	\$75,275	HIGHWAY
1368		I-95 AT US 1/SR 15/MLK	FDOT DISTRICT 2	2	\$59,500	HIGHWAY
1369		US 17 FROM N OF POMONA PARK/FEAGLE AVE TO SR 309 (SATSUMA)	FDOT DISTRICT 2	8	\$13,339	HIGHWAY
1002	4111024	I-10 FROM SR 291 DAVIS HIGHWAY TO SR 10A (US 90) SCENIC	FDOT DISTRICT 3	3	\$46,380	HIGHWAY
1003	4157827	SR 123 FROM N OF TURKEY CREEK TO SR 85 NORTH	FDOT DISTRICT 3	3	\$14,515	HIGHWAY
1004	4157828	SR 263 CAPITAL CIR. FROM N OF SR 20 TO SOUTH OF SR 10 (US 90)	FDOT DISTRICT 3	3	\$2	HIGHWAY
1009	2206637	US 331/SR 83 FROM NORTH OF SR 20 TO SR 8 (I-10)	FDOT DISTRICT 3	3	\$2,130	HIGHWAY
1010	2206642	US 331/SR 83 CHOCTAWHATCHEE BAY & RELIEF BRIDGE ADDITIONS	FDOT DISTRICT 3	3	\$57,815	HIGHWAY
1011	4276091	SR 85 @ DUKE FIELD INTERSECTION FLYOVER/OVERPASS	FDOT DISTRICT 3	3	\$0	HIGHWAY

Medium Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
1012	2186031	US 29/SR 95 FROM SR 8 (I-10) TO N OF SR 10 (US90A) 9MI	FDOT DISTRICT 3	3	\$37,540	HIGHWAY
1228		I-10 (SR 8) @ SR 95 (US 29) INTERCHANGE	FDOT DISTRICT 3	3	\$412	HIGHWAY
1230		I-10 (SR 8) INTERCHANGE STUDIES AT SR 263 & SR 61 (US319)	FDOT DISTRICT 3	3	\$2,200	HIGHWAY
1231		I-10 (SR 8) FROM E OF SR 261 CAP CIR TO E SR 10 (US 90) MAHAN	FDOT DISTRICT 3	3	\$11,742	HIGHWAY
1233		US 98 (SR 30) FROM OKALOOSA COUNTY LINE TO TANG-O-MAR DRIVE	FDOT DISTRICT 3	8	\$22,541	HIGHWAY
1234		SR 263 CAPITAL CIR FROM CR2203 SPRINGHILL RD TO SR 371 ORANGE AVENUE	FDOT DISTRICT 3	3	\$60,187	HIGHWAY
1370		I-10 FROM W OF US 90 TO OCHLOCKONEE RIVER BRIDGE	FDOT DISTRICT 3	3	\$25,488	HIGHWAY
1371		I-10 FROM GADSDEN C/L TO E OF REST AREA	FDOT DISTRICT 3	3	\$29,148	HIGHWAY
1375		US 98 FROM CR 30F AIRPORT RD TO WALTON C/L	FDOT DISTRICT 3	3	\$49,733	HIGHWAY
1377		US 98 FROM CR 457 TO CR 30A WEST	FDOT DISTRICT 3	3	\$60,141	HIGHWAY
1378		I-10 AT SR 95 (US 29) INTERCHANGE	FDOT DISTRICT 3	3	\$80,766	HIGHWAY
1380		SR 77 FROM BAY C/L TO N OF CR 279	FDOT DISTRICT 3	3	\$37,962	HIGHWAY
1381		SR 77 FROM N OF CR 279 TO N OF SUNNY HILLS ENTRANCE	FDOT DISTRICT 3	3	\$15,618	HIGHWAY
1382		SR 77 FROM N OF SUNNY HILLS ENTRANCE TO 1 MILE S OF WAUSAU CITY LIMITS	FDOT DISTRICT 3	3	\$22,697	HIGHWAY
1383		SR 77 FROM 1 MILE N OF WAUSAU CITY LIMITS TO S OF CR 276 CLAYTON RD	FDOT DISTRICT 3	3	\$22,599	HIGHWAY
1384		I-10 FROM SR 61 (US 319) TO SR 10 (US 90) EAST	FDOT DISTRICT 3	3	\$45,615	HIGHWAY
1385		SR 77 FROM 1 MILE S OF WAUSAU CITY LIMIT TO 1 MILE N OF WAUSAU CITY LIMIT	FDOT DISTRICT 3	3	\$22,130	HIGHWAY
1019	4093553	I-75/SR-93 AT SHERIDAN ST.	FDOT DISTRICT 4	4	\$62,667	HIGHWAY
1027	4193452	SR-80 FROM WEST OF LION CO SAFARI RD TO FOREST HILL/CRESTWOOD BL	FDOT DISTRICT 4	4	-	HIGHWAY
1030	4124203	I-95/SR-9 @ SR-76/KANNER HIGHWAY	FDOT DISTRICT 4	4	\$5,250	HIGHWAY
1244		I-95/SR-9 FROM N OF STIRLING RD TO BROWARD/PALM BEACH CO LINE (95 EXPRESS PHASE 3A AND 3B)	FDOT DISTRICT 4	4	\$515,625	HIGHWAY
1251		PB CO ITS FACILITY O & M JPA	FDOT DISTRICT 4	4	\$50	HIGHWAY

Medium Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
1393		I-95 AT S 6TH AVE	FDOT DISTRICT 4	4	\$49,992	HIGHWAY
1394		I-95 AT LANTANA RD	FDOT DISTRICT 4	4	\$82,920	HIGHWAY
1395		I-95 AT 10TH AVE N	FDOT DISTRICT 4	4	\$38,554	HIGHWAY
1396		I-95 AT HYPOLUXO RD	FDOT DISTRICT 4	4	\$53,699	HIGHWAY
1397		I-95 AT WOOLBRIGHT & GATEWAY	FDOT DISTRICT 4	4	\$73,951	HIGHWAY
1398		I-95 AT BOYNTON BEACH BLVD	FDOT DISTRICT 4	4	\$72,632	HIGHWAY
1399		I-95 AT PALM BEACH LAKES BLVD	FDOT DISTRICT 4	4	\$139,545	HIGHWAY
1400		I-95 AT PGA BLVD/CENTRAL BLVD	FDOT DISTRICT 4	4	\$21,259	HIGHWAY
1407		SR-710 FROM MARTIN POWERPLANT RD TO CR 609/ALLAPATTAH RD	FDOT DISTRICT 4	4	\$35,429	HIGHWAY
1408		SR-710 FROM OKEECHOBEE/MARTIN C/L TO MARTIN POWERPLANT RD	FDOT DISTRICT 4	4	\$99,038	HIGHWAY
1410		I-95 AT BROWARD BLVD	FDOT DISTRICT 4	4	\$22,652	HIGHWAY
1411		I-95 AT HOLLYWOOD BLVD	FDOT DISTRICT 4	4	\$58,456	HIGHWAY
1412		I-95 AT SUNRISE BLVD	FDOT DISTRICT 4	4	\$97,997	HIGHWAY
1413		I-95 AT STIRLING RD	FDOT DISTRICT 4	4	\$62,077	HIGHWAY
1705		SR-9/I-95 FROM S. OF GLADES RD TO N. OF YAMATO (ADD 2 AUX LANES)	FDOT DISTRICT 4	4	\$38,000	HIGHWAY
1706		SR-9/I-95 FROM N. OF GLADES RD TO S. OF CONGRESS AVE (SPANISH RIVER BLVD INTERCHANGE)	FDOT DISTRICT 4	4	\$2,000	HIGHWAY
1048	4183211	US 17-92/SR 500 2 INTERSECTIONS VINE ST AND DONEGAN AVE	FDOT DISTRICT 5	5	\$1,752	HIGHWAY
1049	4226831	US 92/SR 600 AT SR 5A (NOVA RD)	FDOT DISTRICT 5	5	\$2,491	HIGHWAY
1264		I-95 FROM 1.508 MILES S OF I-4 TO 1.6 MILES N US 92	FDOT DISTRICT 5	8	\$200,162	HIGHWAY
1432		SR 15/US 17 FROM PONCE DE LEON BLVD TO SR 40	FDOT DISTRICT 5	5	\$10,800	HIGHWAY
1290	4335111	NE 203 ST & NE 215 ST INTERSECTION IMPROVMTS BTWN US-1 & W. DIXIE HWY	FDOT DISTRICT 6	6	\$37,735	HIGHWAY
1437		I-75 FROM SR-826 TO NW 170TH ST	FDOT DISTRICT 6	6	\$250,000	HIGHWAY

Medium Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
1442		I-75 AT MIAMI GARDEN DR	FDOT DISTRICT 6	6	\$56,500	HIGHWAY
1443		GGI: SR-826/PALMETTO EXPY FROM NW 17 AVE TO GOLDEN GLADES INTERCHANGE	FDOT DISTRICT 6	6	\$138,000	HIGHWAY
1444		GOLDEN GLADES (GGI) RAMP RECONSTRUCTION	FDOT DISTRICT 6	6	\$63,000	HIGHWAY
1445		GGI FROM SB TURNPIKE TO SB I-95 @ NW 135TH ST	FDOT DISTRICT 6	6	\$141,000	HIGHWAY
1446		GGI: SR-826/PALMETTO EXPY FROM NW 17TH AVE @ SR-826 TO NB I-95 @ NW 183RD ST	FDOT DISTRICT 6	6	\$203,000	HIGHWAY
1697	4332541	SR 886/PORT BRIDGE FROM BISCAYNE BOULEVARD TO PORT OF MIAMI	FDOT DISTRICT 6	6	-	HIGHWAY
1698		SR 826/PALMETTO EXPRESSWAY FROM US 27/OKEECHOBEE ROAD TO SR 874	FDOT DISTRICT 6	6	-	HIGHWAY
1699	4232511	SR 25/OKEECHOBEE ROAD/US 27 FROM KROME AVENUE TO NW 79TH AVENUE	FDOT DISTRICT 6	6	-	HIGHWAY
1700		SR 821/HEFT FROM KENDALL DRIVE TO I-75	FDOT DISTRICT 6	6	-	HIGHWAY
1701		SR 821/HEFT FROM EUREKA DRIVE TO KENDALL DRIVE	FDOT DISTRICT 6	6	-	HIGHWAY
1702		SR 821/HEFT FROM SW 216TH STREET TO EUREKA DRIVE	FDOT DISTRICT 6	6	-	HIGHWAY
1451		SR 54 AT COLLIER PKWY	FDOT DISTRICT 7	7	\$33,871	HIGHWAY
1553		SR 43 (US 301) AT PROGRESS BLVD.	FDOT DISTRICT 7	7	\$31	HIGHWAY
1554		SR 60 (E ADAMO DR) AT N 34TH ST	FDOT DISTRICT 7	7	\$62	HIGHWAY
1555		SR 574 (DR. M.L. KING JR. BLVD) AT SR 583 (N 50TH ST)	FDOT DISTRICT 7	7	\$40	HIGHWAY
1556		SR 600 (US 41/US 92/E HILLSBOROUGH AVE) AT SR 585 (N 22ND ST)	FDOT DISTRICT 7	7	\$36	HIGHWAY
1564		SR 52 AT I-75	FDOT DISTRICT 7	7	\$38	HIGHWAY
1570		SR 44 (W GULF TO LAKE HWY) AT N ROCK CRUSHER RD	FDOT DISTRICT 7	7	\$136	HIGHWAY
1573		SR 45 (US 41/FLORIDA AVE) AT SR 44 (E GULF TO LAKE HWY)	FDOT DISTRICT 7	7	\$17	HIGHWAY
1576		SR 693 (66TH ST) AT SR 595 (US 19A/TYRONE BLVD)	FDOT DISTRICT 7	7	\$16	HIGHWAY
1577		SR 693 (66TH ST) AT 38TH AVE N	FDOT DISTRICT 7	7	\$9	HIGHWAY
1578		SR 693 (66TH ST) AT 54TH AVE N	FDOT DISTRICT 7	7	\$6	HIGHWAY

Medium Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
1579		SR 693 (66TH ST) AT SR 694 (PARK BLVD)	FDOT DISTRICT 7	7	\$12	HIGHWAY
1633		SR 580 (W HILLSBOROUGH AVE) AT ANDERSON RD	FDOT DISTRICT 7	7	\$5	HIGHWAY
1634		SR 580 (W HILLSBOROUGH AVE) AT GEORGE RD	FDOT DISTRICT 7	7	\$5	HIGHWAY
1237		HOLLYWOOD BLVD / TPK (SR820 / SR91) INTCHG MODIFICATION (MP 49)	FLORIDA'S TURNPIKE ENTERPRISE	4	\$81,962	HIGHWAY
1248		WIDEN TPK FROM OKEECHOBEE BLVD TO PGA BLVD (MP 99-109) (4TO6)	FLORIDA'S TURNPIKE ENTERPRISE	4	\$15,900	HIGHWAY
1265		SR417/TPK INTCHG (SR417 / SR91), (MP 251)	FLORIDA'S TURNPIKE ENTERPRISE	5	\$144,696	HIGHWAY
1272		WIDEN SR 417, ORANGE / SEMINOLE COUNTY LINE TO ALOMA AVE (4 TO 6 LANES)	FLORIDA'S TURNPIKE ENTERPRISE	5	\$2,516	HIGHWAY
1274		SAND LAKE ROAD (SR482) INTERCHANGE @ MP257	FLORIDA'S TURNPIKE ENTERPRISE	5	\$3,995	HIGHWAY
1282		H.E.F.T. (SR821) / I-75 INTCHG (MP 39)	FLORIDA'S TURNPIKE ENTERPRISE	6	\$4,000	HIGHWAY
1703		FLORIDA'S TURNPIKE FROM HEFT TO GRIFFIN ROAD	FLORIDA'S TURNPIKE ENTERPRISE	4	-	HIGHWAY
1491		METRO PARKWAY FROM DANIELS PARKWAY TO SOUTH OF WINKLER AVENUE	LEE MPO	1	\$97,628	HIGHWAY
1494		I 75 @ BONITA BEACH ROAD	LEE MPO	1	\$42,854	HIGHWAY
1495		I 75 @ SR 82	LEE MPO	1	\$74,330	HIGHWAY
1496		I 75 @ SR 78	LEE MPO	1	\$47,855	HIGHWAY
1671		LE JEUNE ROAD @ OKEECHOBEE ROAD	MIAMI-DADE MPO	6	\$134	HIGHWAY
1674		MILAM DAIRY ROAD @ HIALEAH EXPRESSWAY	MIAMI-DADE MPO	6	\$103	HIGHWAY
1675		MILAM DAIRY ROAD FROM NW 58TH STREET TO NW 74TH STREET	MIAMI-DADE MPO	6	\$197	HIGHWAY
1677		NW 17TH AVENUE FROM NORTH RIVER DRIVE TO DOLPHIN EXPRESSWAY	MIAMI-DADE MPO	6	\$552	HIGHWAY
1678		NW 21ST STREET & PERIMETER ROAD FROM LEJEUNE ROAD TO NW 15TH STREET	MIAMI-DADE MPO	6	\$134	HIGHWAY
1684		SR 25/OKEECHOBEE ROAD/US 27 & NW SOUTH RIVER DRIVE @ PALMETTO EXPRESSWAY	MIAMI-DADE MPO	6	\$8,024	HIGHWAY
1686		W 16TH AVENUE FROM S OKEECHOBEE ROAD TO NW SOUTH RIVER DRIVE	MIAMI-DADE MPO	6	\$460	HIGHWAY
1708		AVENUE E EXTENSION FROM US 27 CONNECTOR TO SR715	PALM BEACH MPO	4	-	HIGHWAY

Medium Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
1709		US 27 CONNECTOR FROM SR 80/US 27 TO SR 715	PALM BEACH MPO	4	-	HIGHWAY
1128		INSTALL MOTION DETECTORS AT GRADE CROSSINGS	FLORIDA EAST COAST RAILWAY	2/4/5/6	\$2,177	RAIL
1129		INSTALL SIGNAL CONTROL POINT UPGRADES	FLORIDA EAST COAST RAILWAY	2/4/5/6	\$17,688	RAIL
1136		REPAIR BOLT/FASTENING SYSTEM	FLORIDA EAST COAST RAILWAY	2/4/5/6	\$19,110	RAIL
1139		UPGRADE MEDLEY LEAD/DOUBLETRACKING	FLORIDA EAST COAST RAILWAY	6	\$32,868	RAIL
1605		SEMINOLE GULF RAILROAD ROW PURCHASE LEE AND COLLIER	LEE MPO	1	\$15,000	RAIL
1622		PURCHASE OF REMAINING SEMINOLE GULF RIGHT OF WAY NORTH OF LEE/CHARLOTTE COUNTY LINE	LEE MPO	1	-	RAIL
1710		UPGRADE LOX RIVER BRIDGE TO MITIGATE FEC FREIGHT TRAIN IMPACTS	PALM BEACH MPO	4	-	RAIL
1150		BASCULE BRIDGE/RAIL CONNECTION	PORT MIAMI	6	\$36,900	RAIL
1151		PORT OF PALM BEACH RAILROAD SWITCHING PROJECT (BLUE HERON)	PORT OF PALM BEACH	4	\$3,700	RAIL
1499		RAIL SPUR REALIGNMENT	SEBRING REGIONAL AIRPORT	1	\$2,500	RAIL
1155		286 BRIDGE UPGRADE	SOUTH CENTRAL FLORIDA EXPRESS	1	\$5,213	RAIL
1157		CANE BLOCK PROJECT	SOUTH CENTRAL FLORIDA EXPRESS	1	\$12,000	RAIL
1162		COVE PHASE 3 REWORK OF GLEN CHEEK	PORT CANAVERAL	5	\$10,000	SEAPORT
1166		NORTH CARGO AREA TANKER/MULTIPURPOSE BERTH	PORT CANAVERAL	5	\$39,000	SEAPORT
1179		PIER FENDER SYSTEM REPLACEMENT	PORT FERNANDINA	2	\$600	SEAPORT
1180		NEW NORTH ENTRANCE 2ND STREET	PORT FORT PIERCE	4	\$7,400	SEAPORT
1184		MALLORY SQUARE T-PIER & BERTHING DOLPHINS	PORT KEY WEST	6	\$1,016	SEAPORT
1185		BERTH REHABILITATION & RECONSTRUCTION	PORT MANATEE	1	\$22,000	SEAPORT
1186		CONTAINER YARD IMPROVEMENTS (3)	PORT MIAMI	6	\$67,316	SEAPORT
1191		WATERSIDE CARGO TERMINAL REDEVELOPMENT	PORT OF PALM BEACH	4	\$6,600	SEAPORT
1531		MITIGATION SITES	TAMPA PORT AUTHORITY	7	\$10,000	SEAPORT

Medium Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
1533		TENANT IMPROVEMENTS	TAMPA PORT AUTHORITY	7	\$11,000	SEAPORT

*FM number refers to the unique identifier assigned by the FDOT Office of Work Program and Budget

Table 14: Statewide Freight Project Needs- Low/Insufficient Info Priority

Low/Insufficient Info Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
1551		RAIL SPUR FEASIBILITY STUDY & SCHEMATIC DESIGN	FDOT DISTRICT 4	4	\$250	AIR CARGO
1732	4295321	MIAMI INT"L AIRPORT FUEL TANKER PARKING FACILITY	FDOT DISTRICT 6	6	\$6,000	AIR CARGO
806		TAXIWAY "M" CONSTRUCTION	FT LAUDERDALE/HOLLYWOOD INTERNATIONAL AIRPORT	4	\$11,664	AIR CARGO
1596		AIRPORT ACCESS ROADWAY SYSTEM	FT LAUDERDALE/HOLLYWOOD INTERNATIONAL AIRPORT	4	\$100,000	AIR CARGO
1597		REHABILITATION OF TAXIWAY "T"	FT LAUDERDALE/HOLLYWOOD INTERNATIONAL AIRPORT	4	\$2,500	AIR CARGO
1598		REHABILITATION OF TAXIWAY "H"	FT LAUDERDALE/HOLLYWOOD INTERNATIONAL AIRPORT	4	\$6,000	AIR CARGO
809		CARGO FACILITY- MULTI TENANT - DESIGN, CONSTRUCT	GAINESVILLE REGIONAL AIRPORT	2	\$2,000	AIR CARGO
810		DESIGN AND CONSTRUCT TAXIWAY E PAVEMENT, LIGHTING & MISC AIRFIELD IMPROVEMENTS	GAINESVILLE REGIONAL AIRPORT	2	\$3,780	AIR CARGO
811		GA TERMINAL -DESIGN AND CONSTRUCT	GAINESVILLE REGIONAL AIRPORT	2	\$250	AIR CARGO
812		GENERAL AVIATION ACCESS ROAD REHABILITATION	GAINESVILLE REGIONAL AIRPORT	2	\$735	AIR CARGO
813		TAXIWAY A REHAB PHASE 2	GAINESVILLE REGIONAL AIRPORT	2	\$983	AIR CARGO
814		TAXIWAY E PAVEMENT AND LIGHTING REHABILITATION	GAINESVILLE REGIONAL AIRPORT	2	\$5,200	AIR CARGO

Low/Insufficient Info Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
815		AIR CARGO LANDSIDE INFRASTRUCTURE IMPROVEMENTS	JACKSONVILLE INTERNATIONAL AIRPORT	2	\$1,653	AIR CARGO
816		DESIGN & CONSTRUCT HANGAR S11 MODIFICATIONS	JACKSONVILLE INTERNATIONAL AIRPORT	2	\$1,000	AIR CARGO
817		DESIGN AND CONSTRUCT CONSOLIDATED MAINTENANCE AND WAREHOUSE FACILITY	JACKSONVILLE INTERNATIONAL AIRPORT	2	\$6,340	AIR CARGO
818		DESIGN AND CONSTRUCT TAXIWAY F EXTENSION	JACKSONVILLE INTERNATIONAL AIRPORT	2	\$1,500	AIR CARGO
819		EXPAND AIR CARGO APRON	JACKSONVILLE INTERNATIONAL AIRPORT	2	\$1,305	AIR CARGO
820		RE-ALIGN COLE FLYER ROAD	JACKSONVILLE INTERNATIONAL AIRPORT	2	\$2,000	AIR CARGO
821		SOUTH AIR CARGO SURFACE STORAGE- CONTAINERS AND CRATES	JACKSONVILLE INTERNATIONAL AIRPORT	2	\$500	AIR CARGO
822		TERMINAL ACCESS ROADWAY REHAB	JACKSONVILLE INTERNATIONAL AIRPORT	2	\$2,000	AIR CARGO
1501		EXTEND RUNWAY 9/27 AND TAXIWAY A	LAKELAND LINDER REGIONAL AIRPORT	1	\$6,525	AIR CARGO
823		MIA ADDITIONAL AIR-CARGO APRON IN THE WESTSIDE CARGO AREA	MIAMI INTERNATIONAL AIRPORT	6	-	AIR CARGO
824	4312292	MIA CENTRAL BASE PAVEMENT REHABILITATION	MIAMI INTERNATIONAL AIRPORT	6	\$4,000	AIR CARGO
825	4292711	MIA PERIMETER ROAD WIDENING AND REALIGNMENT	MIAMI INTERNATIONAL AIRPORT	6	\$24,000	AIR CARGO
826	4295333	MIA TAXIWAY "S" REHABILITATION	MIAMI INTERNATIONAL AIRPORT	6	\$3,550	AIR CARGO
827	4295332	MIA TAXIWAY "T" REHABILITATION	MIAMI INTERNATIONAL AIRPORT	6	\$3,550	AIR CARGO
829		CONSTRUCT AIRFIELD PAVEMENTS	NORTHWEST FLORIDA-BEACHES INTERNATIONAL AIRPORT	3	-	AIR CARGO
831		CONSTRUCT DUAL WEST PARALLEL TAXIWAY TO RUNWAY 16-34	NORTHWEST FLORIDA-BEACHES INTERNATIONAL AIRPORT	3	\$9,860	AIR CARGO
835		EXPAND TERMINAL APRON	NORTHWEST FLORIDA-BEACHES INTERNATIONAL AIRPORT	3	\$2,600	AIR CARGO

Low/Insufficient Info Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
843		CONSTRUCT ACCESS ROAD FOR NORTHSIDE AVIATION COMPLEX (PHASE 1)	ORLANDO SANFORD INTERNATIONAL AIRPORT	5	\$700	AIR CARGO
844		CONSTRUCT APRON AND RAMP IN NORTHSIDE AVIATION COMPLEX (PHASE 2)	ORLANDO SANFORD INTERNATIONAL AIRPORT	5	\$3,194	AIR CARGO
845		CONSTRUCT TAXIWAY ALPHA (PHASE 3)	ORLANDO SANFORD INTERNATIONAL AIRPORT	5	\$7,778	AIR CARGO
846		CONSTRUCT TAXIWAY ALPHA (PHASE 4)	ORLANDO SANFORD INTERNATIONAL AIRPORT	5	\$5,500	AIR CARGO
847		CONSTRUCT TAXIWAY FOXTROT	ORLANDO SANFORD INTERNATIONAL AIRPORT	5	\$5,556	AIR CARGO
848		CONSTRUCT TAXIWAY TANGO	ORLANDO SANFORD INTERNATIONAL AIRPORT	5	\$6,111	AIR CARGO
849		DESIGN & CONSTRUCT TAXIWAY ALPHA (PHASE 2) BETWEEN EXISTING STUB TAXIWAY A3 AND RUNWAY 18-36	ORLANDO SANFORD INTERNATIONAL AIRPORT	5	\$6,500	AIR CARGO
850		DESIGN, ENGINEER, AND CONSTRUCT NEW THIRD TERMINAL BUILDING	ORLANDO SANFORD INTERNATIONAL AIRPORT	5	\$59,000	AIR CARGO
851		EXTEND TAXIWAY CHARLIE TO THE ARFF STATION	ORLANDO SANFORD INTERNATIONAL AIRPORT	5	\$1,579	AIR CARGO
852		LAND ACQUISITION FOR THE EXTENSION OF RUNWAY 18-36	ORLANDO SANFORD INTERNATIONAL AIRPORT	5	\$4,400	AIR CARGO
853		RECONSTRUCT, WIDEN, AND LIGHT TAXIWAYS ROMEO AND ECHO	ORLANDO SANFORD INTERNATIONAL AIRPORT	5	\$6,500	AIR CARGO
854		REHABILITATE SOUTHWEST APRON / RAMP - PHASE THREE	ORLANDO SANFORD INTERNATIONAL AIRPORT	5	\$7,778	AIR CARGO
855		REHABILITATION OF SOUTHWEST APRON - RAMP - PHASE TWO	ORLANDO SANFORD INTERNATIONAL AIRPORT	5	\$7,778	AIR CARGO
856		RELOCATE TAXIWAY BRAVO WEST OF 18/36 & TAXIWAY KILO	ORLANDO SANFORD INTERNATIONAL AIRPORT	5	\$7,368	AIR CARGO
857		RELOCATE TAXIWAY K	ORLANDO SANFORD INTERNATIONAL AIRPORT	5	\$3,100	AIR CARGO
858		WIDEN AIRPORT BOULEVARD FROM MELLONVILLE AVENUE TO SR 426 RONALD REGAN BOULEVARD (FORMERLY SANFORD AVENUE).	ORLANDO SANFORD INTERNATIONAL AIRPORT	5	\$3,271	AIR CARGO

Low/Insufficient Info Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
859		WIDEN AIRPORT BOULEVARD FROM RED CLEVELAND BOULEVARD TO MELLONVILLE AVENUE TO FOUR LANES WIDE	ORLANDO SANFORD INTERNATIONAL AIRPORT	5	\$5,756	AIR CARGO
867		TAXIWAY F REHABILITATION	PALM BEACH INTERNATIONAL AIRPORT	8	\$2,400	AIR CARGO
868		TAXIWAY G REHABILITATION	PALM BEACH INTERNATIONAL AIRPORT	4	\$1,210	AIR CARGO
869		TAXIWAY H REHABILITATION	PALM BEACH INTERNATIONAL AIRPORT	4	\$600	AIR CARGO
870		TAXIWAY M REHABILITATION	PALM BEACH INTERNATIONAL AIRPORT	4	\$4,500	AIR CARGO
871		TAXIWAY R REHABILITATION/RELOCATION	PALM BEACH INTERNATIONAL AIRPORT	4	\$2,700	AIR CARGO
892		DESIGN AND CONSTRUCT EASTSIDE AIRPORT ACCESS ROADWAY	SARASOTA / BRADENTON INTERNATIONAL AIRPORT	1	\$5,500	AIR CARGO
893		DESIGN AND CONSTRUCT FIS FACILITY	SARASOTA / BRADENTON INTERNATIONAL AIRPORT	1	\$2,050	AIR CARGO
894		DESIGN AND CONSTRUCT MAINT FACILITY EXP.	SARASOTA / BRADENTON INTERNATIONAL AIRPORT	1	\$7,000	AIR CARGO
895		DESIGN AND CONSTRUCT RAIL EXT TO TERMINAL, PHASE 2	SARASOTA / BRADENTON INTERNATIONAL AIRPORT	1	\$13,500	AIR CARGO
896		DESIGN RAIL ACCESS TO AIRPORT	SARASOTA / BRADENTON INTERNATIONAL AIRPORT	1	\$1,000	AIR CARGO
897		INTERMODAL RAIL EXTENSION, PHASE 1	SARASOTA / BRADENTON INTERNATIONAL AIRPORT	1	\$20,400	AIR CARGO
898		LAND ACQUISITION AVIATION DEVELOPMENT PHASE - I	SARASOTA / BRADENTON INTERNATIONAL AIRPORT	1	\$3,200	AIR CARGO
899		LAND ACQUISITION AVIATION DEVELOPMENT PHASE - II	SARASOTA / BRADENTON INTERNATIONAL AIRPORT	1	\$2,000	AIR CARGO
900		N.QUAD ACCESS RD IMPROVEMENTS (I)	SARASOTA / BRADENTON INTERNATIONAL AIRPORT	1	\$2,000	AIR CARGO
901		PHASE 1 AIR CENTER APRONS	SARASOTA / BRADENTON INTERNATIONAL AIRPORT	1	\$5,000	AIR CARGO

Low/Insufficient Info Priority

Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
902		PHASE 2 CONST AIR CENTER APRONS	SARASOTA / BRADENTON INTERNATIONAL AIRPORT	1	\$5,000	AIR CARGO
903		REHAB AIRFIELD SIGNS-P2	SARASOTA / BRADENTON INTERNATIONAL AIRPORT	1	\$500	AIR CARGO
1498		EXTENSION OF RUNWAY 1-19	SEBRING REGIONAL AIRPORT	1	\$9,000	AIR CARGO
1500		CATALYST INFRASTRUCTURE	SEBRING REGIONAL AIRPORT	1	\$30,000	AIR CARGO
1694		UTILITY INFRASTRUCTURE	TALLAHASSEE REGIONAL AIRPORT	3	\$2,500	AIR CARGO
923		AIRFIELD SUPPORT FACILITY REHABILITATION (CIP 20)	TAMPA INTERNATIONAL AIRPORT	7	\$420	AIR CARGO
925		AIRFIELD SLAB REPLACEMENT (CY 2028)	TAMPA INTERNATIONAL AIRPORT	7	\$3,466	AIR CARGO
927		AIRSIDE A SORT FACILITY INTERIOR/EXTERIOR REFURBISHMENT (FY2025)	TAMPA INTERNATIONAL AIRPORT	7	\$294	AIR CARGO
928		CARGO BUILDING #432 ROOF REFURBISHMENT (FY 2029)	TAMPA INTERNATIONAL AIRPORT	7	-	AIR CARGO
929		CARGO FACILITY CUSTOMS REFURBISHMENT (FY 2020)	TAMPA INTERNATIONAL AIRPORT	7	\$34	AIR CARGO
931		CARGO/GSE ROOF REHABILITATION (FY 2025)	TAMPA INTERNATIONAL AIRPORT	7	\$115	AIR CARGO
938		RECONSTRUCT TAXIWAY E FROM RUNWAY 10/28 TO 18L (FY 2025)	TAMPA INTERNATIONAL AIRPORT	7	\$37,457	AIR CARGO
941		TAXIWAY A EXTENSION FROM TAXIWAY J TO RUNWAY 36R (FY 2025)	TAMPA INTERNATIONAL AIRPORT	7	\$23,980	AIR CARGO
942		TAXIWAY B ASPHALT SHOULDER REHABILITATION (FY 2029)	TAMPA INTERNATIONAL AIRPORT	7	\$817	AIR CARGO
943		TAXIWAY B CONCRETE JOINT AND SLAB REHABILITATION (FY 2024)	TAMPA INTERNATIONAL AIRPORT	7	\$1,230	AIR CARGO
944		TAXIWAY B SHOULDER REHABILITATION - TO BE DELETED	TAMPA INTERNATIONAL AIRPORT	7	\$764	AIR CARGO
945		TAXIWAY C ASPHALT SHOULDERS (FY 2024)	TAMPA INTERNATIONAL AIRPORT	7	\$1,070	AIR CARGO
946		TAXIWAY C PAVEMENT REHABILITATION (FY 2023)	TAMPA INTERNATIONAL AIRPORT	7	\$40,453	AIR CARGO
947		TAXIWAY J BRIDGE CLEAN AND TOUCHUP REHABILITATION (FY 2020)	TAMPA INTERNATIONAL AIRPORT	7	\$167	AIR CARGO
950		TAXIWAY N EXTENSION OVER PARKWAY TO RUNWAY 18R/36L (FY 2029)	TAMPA INTERNATIONAL AIRPORT	7	\$64,483	AIR CARGO
952		TAXIWAY N PAVEMENT REPLACEMENT WEST OF RUNWAY 18L (FY 2029)	TAMPA INTERNATIONAL AIRPORT	7	\$6,901	AIR CARGO

Low/Insufficient Info Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
955		TAXIWAY V CONCRETE JOINT AND SLAB REHABILITATION (FY 2023)	TAMPA INTERNATIONAL AIRPORT	7	\$1,650	AIR CARGO
956		TAXIWAY W CONCRETE JOINT AND SLAB REHABILITATION FROM W-8 NORTH TO END (FY 2023)	TAMPA INTERNATIONAL AIRPORT	7	\$1,650	AIR CARGO
959		TAXIWAY W-1 TO W-5 ASPHALT PAVEMENT REPLACEMENT (FY 2027)	TAMPA INTERNATIONAL AIRPORT	7	\$3,172	AIR CARGO
962		TAXIWAYS D, E, P, Q, R & S CONCRETE PAVEMENT REPLACEMENT (FY 2027)	TAMPA INTERNATIONAL AIRPORT	7	\$17,093	AIR CARGO
964		TAXIWAYS E, F, G, H, S AND U ASPHALT PAVEMENT REHABILITATION (FY 2029)	TAMPA INTERNATIONAL AIRPORT	7	\$7,740	AIR CARGO
969		WAREHOUSE ROOF REHABILITATION (FY 2024)	TAMPA INTERNATIONAL AIRPORT	7	\$75	AIR CARGO
1655		COPANS RD FROM NW 25TH AVENUE TO I-95	BROWARD MPO	4	\$197	HIGHWAY
1656		FEDERAL HIGHWAY FROM DAVIE BOULEVARD TO SE 24TH STREET	BROWARD MPO	4	\$15	HIGHWAY
1658		GRIFFIN ROAD @ FLORIDA'S TURNPIKE RAMPS/ORANGE DRIVE	BROWARD MPO	4	\$28	HIGHWAY
1659		POWERLINE ROAD FROM SAMPLE ROAD TO MARTIN LUTHER KING BOULEVARD	BROWARD MPO	4	\$197	HIGHWAY
1660		RED ROAD FROM MIRAMAR PARKWAY TO SR 821/HEFT	BROWARD MPO	4	\$9	HIGHWAY
1661		SR 7 / US 441 @ OAKES ROAD	BROWARD MPO	4	\$66	HIGHWAY
1662		SAMPLE ROAD FROM FLORIDA'S TURNPIKE TO FESTIVAL FLEA MARKET	BROWARD MPO	4	\$56	HIGHWAY
1663		SW 10TH STREET FROM MILITARY TRAIL TO I-95	BROWARD MPO	4	\$2,975	HIGHWAY
1550		TRUCK ROUTE SIGNAGE IMPROVEMENTS AND ADDITION OF DELAND MUNICIPAL AIRPORT BUSINESS PARK IDENTIFICATION SIGNS: US 17, US 17/92 SR 15A (SIS) BYPASS, SR44 AND US17/92 AND US/CR 92, KEPLER ROAD/DR. MARTIN LUTHER KING, JR. BELTWAY.	CITY OF DELAND	5	\$35	HIGHWAY
1594		OCALA INTERMODAL LOGISTICS CENTER	CITY OF OCALA	5	\$16,000	HIGHWAY
1221		I-10 (SR 8) FROM WEST OF CR 125 TO W.OF SR 121 (6-LANING)	FDOT DISTRICT 2	2	\$5,085	HIGHWAY
1222		I-10 (SR 8) FROM WEST OF SR 121 TO NASSAU C/L (MANAGE LN)	FDOT DISTRICT 2	2	\$4,005	HIGHWAY
1224		I-10 (SR 8) FROM BAKER C/L TO DUVAL C/L (6 LANING)	FDOT DISTRICT 2	2	\$231	HIGHWAY
1356		I-95 FROM INTERNATIONAL GOLF PKWY TO DUVAL C/L	FDOT DISTRICT 2	2	\$79,258	HIGHWAY

Low/Insufficient Info Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
1008	2224771	US 98/SR-30 FROM E END OF HATHAWAY BR TO SR 368 23RD ST	FDOT DISTRICT 3	3	\$1,998	HIGHWAY
1386		US 231 FROM US 98 TO SR 20	FDOT DISTRICT 3	3	\$25,000	HIGHWAY
1387		I-10 FROM WEST OF SR 10 TO US 29	FDOT DISTRICT 3	3	\$36,244	HIGHWAY
1388		US 331 FROM US 90 TO ALABAMA STATE LINE	FDOT DISTRICT 3	3	\$165,756	HIGHWAY
1271		SR 500 (US 17-92) 2 INTERSECTIONS VINE ST AND DONEGAN AVE	FDOT DISTRICT 5	5	\$30	HIGHWAY
1421		I-4 FROM POLK/OSCEOLOA C/L TO OSCEOLA/ORANGE C/L	FDOT DISTRICT 5	5	\$339,248	HIGHWAY
1422		I-4 FROM OSCEOLA/ORANGE C/L TO W OF SR 528/BEACHLINE	FDOT DISTRICT 5	5	\$633,706	HIGHWAY
1423		I-4 FROM W OF SR 528/BEACHLINE TO W OF SR 435/KIRKMAN RD	FDOT DISTRICT 5	5	\$299,951	HIGHWAY
1424		I-4 FROM E OF SR 434 TO SEMINOLE/VOLUSIA C/L	FDOT DISTRICT 5	5	\$271,720	HIGHWAY
1425		I-4 FROM SEMINOLE/VOLUSIA C/L TO E OF SR 472	FDOT DISTRICT 5	5	\$350,556	HIGHWAY
1620		FREIGHT CORRIDOR: I-75 @ SR 40	FDOT DISTRICT 5	5	\$3,983	HIGHWAY
1734	4283582	SR 826/PALMETTO XWAY FROM NW 17 AVENUE TO GOLDEN GLADES INTERCH (CON)	FDOT DISTRICT 6	6	\$95,945	HIGHWAY
1552		SR 45 (US 41) AT OLD US 41	FDOT DISTRICT 7	7	\$48	HIGHWAY
1557		SR 580 (W HILLSBOROUGH AVE) AT N LOIS AVE	FDOT DISTRICT 7	7	\$27	HIGHWAY
1559		SR 600 (US 92/W BAKER ST) AT SR 566 (THONOTOSASSA RD)	FDOT DISTRICT 7	7	\$19	HIGHWAY
1560		CR 39B (PARK RD) AT CR 574A (E ALSOBROOK ST)	FDOT DISTRICT 7	8	\$28	HIGHWAY
1561		E ALEXANDER ST AT JIM JOHNSON RD	FDOT DISTRICT 7	7	\$126	HIGHWAY
1562		JIM JOHNSON RD AT SWEETBAY DISTRIBUTION CENTER	FDOT DISTRICT 7	7	\$44	HIGHWAY
1563		SR 35/SR 700 (US 98) AT OLD LAKELAND HWY RAMP TERMINAL	FDOT DISTRICT 7	7	\$14	HIGHWAY
1565		SR 54 AT CR 587 (GUNN HWY)	FDOT DISTRICT 7	7	\$190	HIGHWAY
1566		SR 54 AT SUCCESS DR	FDOT DISTRICT 7	7	\$14	HIGHWAY
1569		SR 50A (JEFFERSON ST) AT SR 700 (US 98/PONCE DE LEON BLVD)	FDOT DISTRICT 7	7	\$17	HIGHWAY

Low/Insufficient Info Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
1574		SR 55 (US 19/34TH ST S) AT SR 682 (54TH AVE S)	FDOT DISTRICT 7	7	\$110	HIGHWAY
1580		SR 595 (US 19A/SEMINOLE BLVD) AT CR 694 (PARK BLVD)	FDOT DISTRICT 7	7	\$25	HIGHWAY
1584		SR 55 (US 19/34TH ST N) AT 13TH AVE N	FDOT DISTRICT 7	7	\$28	HIGHWAY
1632		SR 676 (CAUSEWAY BLVD) AT SR 43 (US 301)	FDOT DISTRICT 7	7	\$5	HIGHWAY
1241		SW10TH ST/TPK (SR91) INTCHG MODIFICATION (MP 71)	FLORIDA'S TURNPIKE ENTERPRISE	4	\$1,290	HIGHWAY
1242		BROWARD BLVD / TPK INTCHG (SR842/SR91) (MP 57)	FLORIDA'S TURNPIKE ENTERPRISE	4	\$990	HIGHWAY
1243		CYPRESS CREEK RD / TPK (SR91) INTCHG (MP64)	FLORIDA'S TURNPIKE ENTERPRISE	4	\$990	HIGHWAY
1307		PD&E WIDEN MAINLINE FROM JUPITER TO FT PIERCE (MP 116-152)	FLORIDA'S TURNPIKE ENTERPRISE	9	\$3,600	HIGHWAY
1308		PD&E WIDEN TPK FROM SR 50 (CLERMONT) TO I-75, MP 272 - 309	FLORIDA'S TURNPIKE ENTERPRISE	9	\$3,700	HIGHWAY
1654		I-75/SR-326 INTERCHANGE IMPROVEMENTS	MARION COUNTY	5	\$737	HIGHWAY
1690		I-75/CR-484 INTERCHANGE IMPROVEMENTS	MARION COUNTY	5	\$4,291	HIGHWAY
1696		I-75/CR 318 INTERCHANGE IMPROVEMENTS	MARION COUNTY	5	\$1,015	HIGHWAY
1713		I-75/NW 49TH STREET INTERCHANGE	MARION COUNTY	5	\$34,110	HIGHWAY
1731		I-75/HWY 484 INTERCHANGE BYPASS HWY 42 & MARION OAKS MANOR	MARION COUNTY	5	\$30,000	HIGHWAY
1672		LE JEUNE ROAD FROM NW 28TH STREET TO NORTH OF NW 31ST STREET	MIAMI-DADE MPO	6	\$39	HIGHWAY
1673		LE JEUNE ROAD @ NW 28TH STREET	MIAMI-DADE MPO	6	\$124	HIGHWAY
1676		NW 116TH WAY FROM OKEECHOBEE ROAD TO SOUTH RIVER DRIVE	MIAMI-DADE MPO	6	\$429	HIGHWAY
1679		NW 58TH STREET FROM NW 82ND AVENUE TO NW 74TH AVENUE	MIAMI-DADE MPO	6	\$2,268	HIGHWAY
1680		NW 58TH STREET @ NW 74TH AVENUE	MIAMI-DADE MPO	8	\$460	HIGHWAY
1681		NW 74TH STREET FROM NW 84TH AVENUE TO NW 74TH AVENUE	MIAMI-DADE MPO	6	\$2,172	HIGHWAY
1682		NW 79TH AVENUE FROM NW 48TH WAY TO NW 36TH STREET	MIAMI-DADE MPO	8	\$197	HIGHWAY
1683		NW SOUTH RIVER DRIVE @ NW 36TH STREET	MIAMI-DADE MPO	6	\$594	HIGHWAY

Low/Insufficient Info Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
1685		SR 25/OKEECHOBEE ROAD/US 27 & NW SOUTH RIVER DRIVE @ W 18TH AVENUE	MIAMI-DADE MPO	6	\$5	HIGHWAY
1687		W 24TH STREET @ W 28TH AVENUE	MIAMI-DADE MPO	6	\$460	HIGHWAY
1688		W 24TH STREET @ W 23RD AVENUE	MIAMI-DADE MPO	6	\$39	HIGHWAY
1689		NW 117TH AVE FROM NW 12TH ST TO NW 58TH ST	MIAMI-DADE MPO	6	\$30,282	HIGHWAY
1664		AUSTRALIAN AVENUE @ OKEECHOBEE ROAD	PALM BEACH MPO	4	\$134	HIGHWAY
1665		BELVEDERE ROAD @ MERCER AVENUE	PALM BEACH MPO	4	\$20	HIGHWAY
1666		GLADES ROAD FROM UNIVERSITY DRIVE TO NW 15TH AVENUE	PALM BEACH MPO	4	\$34	HIGHWAY
1667		GARDEN ROAD FROM INVESTMENT LANE TO BLUE HERON BOULEVARD	PALM BEACH MPO	4	\$460	HIGHWAY
1668		MERCER AVENUE FROM BELVEDERE ROAD TO AUSTRALIAN AVENUE	PALM BEACH MPO	4	\$134	HIGHWAY
1669		NE 8TH STREET (BOCA RATON) FROM DIXIE HIGHWAY TO FEDERAL HIGHWAY	PALM BEACH MPO	4	\$28	HIGHWAY
1670		OLD OKEECHOBEE ROAD FROM MERCER AVENUE TO PARKER AVENUE	PALM BEACH MPO	4	\$233	HIGHWAY
1712		TURNPIKE CONNECT TO I-95 @ INDIANTOWN ROAD	PALM BEACH MPO	4	-	HIGHWAY
1079		FLORIDA UPGRADE-BRIDGES	ALABAMA AND GULF COAST RAILWAY	3	\$6,327	RAIL
1080		FLORIDA UPGRADE	ALABAMA AND GULF COAST RAILWAY	3	-	RAIL
1081		"A/S" LINE AMTRAK SIGNAL PROGRAM	CSX TRANSPORTATION	1	\$10,000	RAIL
1082		AGROCK WYE	CSX TRANSPORTATION	1	\$3,750	RAIL
1083		BAINBRIDGE SUB	CSX TRANSPORTATION	3	\$26,500	RAIL
1084		BEAVER ST. INTERLOCKING	CSX TRANSPORTATION	2	-	RAIL
1085		BRADLEY TACK/ SIDING	CSX TRANSPORTATION	1	\$3,500	RAIL
1090		HAVANA SIDING	CSX TRANSPORTATION	3	\$6,250	RAIL
1091	4335141	HIALEAH/IRIS CONNECTION	CSX TRANSPORTATION	6	\$3,750	RAIL

Low/Insufficient Info Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
1092		JACKSONVILLE AMTRAK CROSSOVERS	CSX TRANSPORTATION	2	\$4,250	RAIL
1095		MISSION SPUR (DYER)	CSX TRANSPORTATION	6	\$4,500	RAIL
1097		RAIL CORRIDOR PRESERVATION	CSX TRANSPORTATION	1	\$30,000	RAIL
1101		SHANDS LEAD	CSX TRANSPORTATION	7	\$7,250	RAIL
1102		SOUTH FORT MEADE	CSX TRANSPORTATION	1	\$3,750	RAIL
1115		TALLAHASSEE SPEED	CSX TRANSPORTATION	3	\$2,750	RAIL
1116		TAMPA CONNECTION	CSX TRANSPORTATION	7	\$10,500	RAIL
1730		JAXPORT/SPRINGFIELD BYPASS	CSX TRANSPORTATION	2	\$80,000	RAIL
1593		SFRC EXTENSION TO JUPITER	FDOT DISTRICT 4	4	\$30	RAIL
1121		ALTERNATIVE FUEL/ENVIRONMENTALLY IMPROVED LOCOMOTIVE UPGRADE	FLORIDA CENTRAL RAILROAD	5	\$2,500	RAIL
1729		ANDREWS AVENUE YARD IMPROVEMENTS	FLORIDA EAST COAST RAILWAY	4	\$3,268	RAIL
1141		TAYLOR COUNTY RAIL EXTENSION	GEORGIA AND FLORIDA RAILWAY	2	\$52,000	RAIL
1146		SOUTH FLORIDA US 27 RAIL LINK	NEW FREIGHT RAIL SERVICE	4/6	\$400,000	RAIL
1147		GRADE SEPARATION OF NORTHERN SOUTHERN RAILWAY NEAR SIMPSON YARD	NORFOLK SOUTHERN	2	\$13,000	RAIL
1711		NEW RAIL SIDING FROM CSX TRACKS TO NORTH COUNTY AIRPORT	PALM BEACH MPO	4	-	RAIL
1142		BLOUNT ISLAND RAIL ROAD REHABILITATION	PORT JACKSONVILLE	2	\$9,000	RAIL
1143		BLOUNT ISLAND-NORTH JAXPORT SWITCHYARD	PORT JACKSONVILLE	2	\$10,000	RAIL
1144		DAMES POINT SWITCH YARD	PORT JACKSONVILLE	2	\$5,000	RAIL
1145		TALLEYRAND TRACK ADDITION	PORT JACKSONVILLE	2	\$2,000	RAIL
1152		SR 27/INTERMODAL LOGISTICS CENTER RAIL PROJECT	PORT OF PALM BEACH	4	\$100,000	RAIL
1156		BRYANT RAIL PROJECT	SOUTH CENTRAL FLORIDA EXPRESS	1	\$13,554	RAIL
1158		RAIL INTERMODAL YARD	SOUTHWEST FLORIDA INTERNATIONAL AIRPORT	1	\$8,000	RAIL

Low/Insufficient Info Priority						
Project ID	FM Number*	Project Name	Applicant	District	Cost (thousands)	Modes
1733	4311261	PORT OF MIAMI POST PANAMAX CRANES	FDOT DISTRICT 6	6	\$34,748	SEAPORT
1200		RLV FUELING FACILITY	CECIL FIELD SPACEPORT	5	\$1,900	SPACEPORT
1201		RLV HANGAR & ASSEMBLY FACILITY	CECIL FIELD SPACEPORT	5	\$16,000	SPACEPORT
1202		RLV TAXIWAY & APRON FACILITY	CECIL FIELD SPACEPORT	5	\$500	SPACEPORT
1195		FALCON 9 BOOSTER REFURBISHMENT FACILITY	SPACE FLORIDA SPACEPORT	5	\$25,000	SPACEPORT
1196		FALCON 9 DRAGON CAPSULE PROCESSING FACILITY	SPACE FLORIDA SPACEPORT	5	\$3,300	SPACEPORT
1197		FALCON 9 ORDNANCE STORAGE	SPACE FLORIDA SPACEPORT	5	-	SPACEPORT
1198		FALCON 9 VEHICLE STORAGE SPACE	SPACE FLORIDA SPACEPORT	5	\$2,600	SPACEPORT
1199		VERTICAL INTEGRATION FACILITY AND MOBILE LAUNCH PLATFORM	SPACE FLORIDA SPACEPORT	5	\$340,000	SPACEPORT
1203		SHUTTLE LANDING FACILITIES IMPROVEMENTS	SPACE FLORIDA SPACEPORT	5	\$5,000	SPACEPORT
1204		SPACE LIFE SCIENCES EXPLORATION PARK TRANSPORTATION IMPROVEMENTS	SPACE FLORIDA SPACEPORT	5	\$5,000	SPACEPORT
1205		SPACE LAUNCH COMPLEX 36 PHASE 0 DESIGN AND CONSTRUCTION	SPACE FLORIDA SPACEPORT	5	\$55,000	SPACEPORT
1206		SPACE LAUNCH COMPLEX 46 REFURBISHMENT	SPACE FLORIDA SPACEPORT	5	\$5,000	SPACEPORT
1722		COMMERCIAL CREW/CARGO PROCESSING	SPACE FLORIDA SPACEPORT	5	\$10,000	SPACEPORT
1723		HORIZONTAL LAUNCH CARGO PROCESSING	SPACE FLORIDA SPACEPORT	5	\$20,000	SPACEPORT
1724		HORIZONTAL LAUNCH INFRASTRUCTURE	SPACE FLORIDA SPACEPORT	5	\$10,000	SPACEPORT
1725		LAUNCH COMPLEX IMPROVEMENTS	SPACE FLORIDA SPACEPORT	5	\$52,200	SPACEPORT
1727		PROCESSING AND RANGE FACILITY IMPROVEMENTS	SPACE FLORIDA SPACEPORT	5	\$30,000	SPACEPORT
1728		SHUTTLE LANDING FACILITY IMPROVEMENTS	SPACE FLORIDA SPACEPORT	5	\$40,600	SPACEPORT

*FM number refers to the unique identifier assigned by the FDOT Office of Work Program and Budget



Chapter 6 : Funding, Financing, and Next Steps

Residents, businesses, as well as the federal and other levels of government invest resources into Florida's transportation system directly and indirectly. This is important as economic competitiveness and viability depends upon providing superior transportation infrastructure and associated services for all modes including those involved in freight transport. The previous chapter provided the Florida's Freight Network's needs inventory, which contains improvements to enhance the different modes of freight transport. Investments in Florida's freight system require both the ability to finance up-front costs, as well as sources of revenue to pay for other costs such as operating and maintenance expenditures. Funding is necessary to advance projects through programming, design, and construction.

In Florida, funding for freight-related projects consists of a combination of federal, state, local, and private funding sources. For the FDOT Five-Year Work Program FY 2014-2018, funding came from the state (54 percent), federal aid (30 percent), Turnpike and associated tolls (9 percent), local and other funds (4 percent), and right-of-way (ROW) and state infrastructure bank (SIB) bonds (3 percent)⁴⁷. These amounts are shown in **Figure 47**. Currently, there are several programs already in use in Florida to support the investments necessary for the existing and future freight system. The following sections provide an overview of the available funding sources, financing mechanisms available to freight-related projects, and associated funding and financial challenges facing freight investments. In addition, this chapter provides an overview of federal matching fund options, discusses alternative funding and financing sources, and identifies the next steps after the completion of the Investment Element.

State Funding Sources

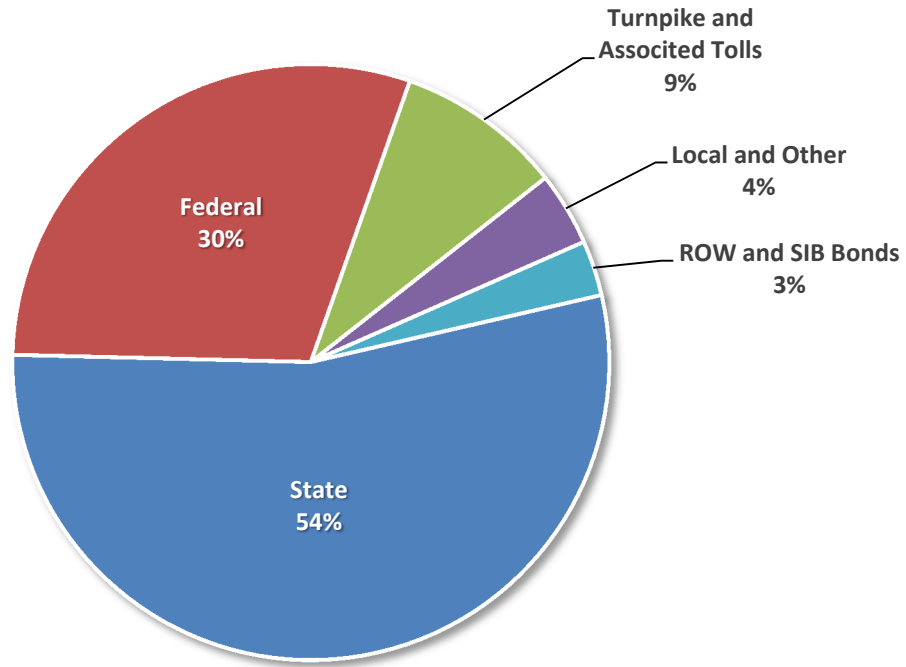
State funding for transportation projects in Florida originates from the State Transportation Trust Fund (STTF). The STTF is funded through several revenue sources that include, but are not limited to, the statewide fuel sales tax (currently 13.1¢ per gallon⁴⁸), state motor fuel excise tax (4¢ per gallon.), state comprehensive enhanced transportation tax (7.2¢ per gallon), aviation fuel tax (6.9¢ per gallon), initial vehicle registration fees (\$225 per vehicle), vehicle title fees (\$70 per vehicle), documentary stamps and rental car fees⁴⁹. An example of the receipt amount of each revenue source for the state from the 2012 FDOT Bond Financing Update Report is illustrated in **Figure 48**.

⁴⁷ "Other Funds" may refer to private funding sources depending on the project; Transportation Funding Sources, Office of Comptroller – General Accounting Office, Spring 2014

⁴⁸ This is the amount per gallon of gasoline. For diesel fuels, it is 27.3¢ per gallon.

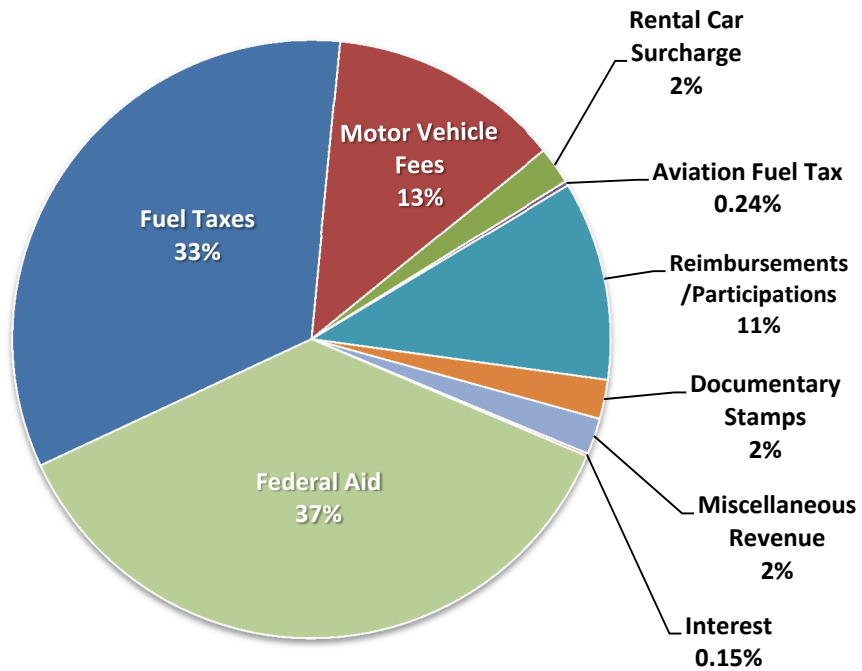
⁴⁹ Florida's Transportation Tax Sources, Office of Comptroller – General Accounting Office, January 2014

Figure 47: FDOT Five Year Work Program Funding Sources FY 2014-2018



Source: Office of Comptroller, FDOT, 2014

Figure 48: STTF Revenue Sources, 2011-2012 Receipts



Source: Bond Financing Report Update, FDOT, 2012

In **Figure 48**, “fuel taxes” refer to the statewide fuel sales tax and fuel excise tax, the state comprehensive enhanced transportation (SCETS) tax, and the fuel use tax and fee. Mirroring the federal system, the statewide fuel, or ‘gas’, sales tax has long been a primary Florida user fee mechanism for transportation infrastructure funding, generating over half the state’s (excluding the federal aid) transportation revenues. The statewide fuel sales tax is applied to highway fuels and non-highway diesel fuels⁵⁰. The tax is a user fee in that it is only users of vehicles on the highway system who pay the tax. Some of the State fuel tax revenue is allocated at the local level. The Constitutional Fuel Tax is distributed to counties by formula using population, area, and total tax collections. The County Fuel Tax is distributed by the same formula as the Constitutional Fuel Tax. The Municipal Fuel Tax revenue is transferred into the Revenue Sharing Trust Fund for municipalities and distributed to municipalities by statutory criteria.

The SCETS tax is applied in each county, and is equal to two-thirds of all local option fuel taxes. For example, in counties where 6¢ of local option fuel tax is applied, the SCETS tax will equal four cents. The proceeds of the SCETS tax must be spent in the respective FDOT District and, if possible, within the county in which tax monies were collected. Both the statewide highway fuel sales and SCETS taxes are adjusted with fluctuations in the Consumer Price Index. The fuel use tax and fee are levied by the State through the International Fuel Tax Agreement on all heavy vehicles that operate on the national Interstate Highway System. The monies collected through this tax consist of an annual decal fee (\$4.00/vehicle) and the use tax. The use tax is based on the number of gallons consumed multiplied by the statewide highway fuel sales tax rate.

Other state vehicle-related taxes and fees include the motor vehicle license tax, initial vehicle registration fee, vehicle title fee, and rental car surcharges. These taxes differ from the other revenue sources as portions of these are deposited into other non-transportation state funds such as the General Revenue Fund, Tourism Promotional Trust Fund, and the International Promotion Trust Fund, as well as distributed to local governments⁵¹. The motor vehicle license tax is collected annually from users when registering vehicle(s) for their operation of motor vehicles, mopeds, motorized bicycles, and mobile homes. These taxes are dependent upon vehicle type and weight. The initial vehicle registration fee is a one-time fee applied to the user for the first time registration of a newly-purchased vehicle. The vehicle title fee is applied to all motor vehicles during the issuance of their associated title certificate. Finally, the current rental car surcharge is a \$2.00 per day statewide surcharge on vehicle rentals.

In addition to vehicular taxes and fees, there are also aviation fuel and the State documentary stamp taxes. The aviation fuel tax is applied to fuel used for aircraft including aviation gasoline and aviation turbine fuels and kerosene. Monies collected from this tax may only be applied to aviation-related projects. Monies are first deposited to the Fuel Tax Collection Trust Fund, and then apportioned to the STTF and General Revenue Fund. The state documentary stamp tax is collected at a rate of 70¢ per every \$100 on documents related to the transfer of real property as provided under Chapter 201, F.S. The tax is

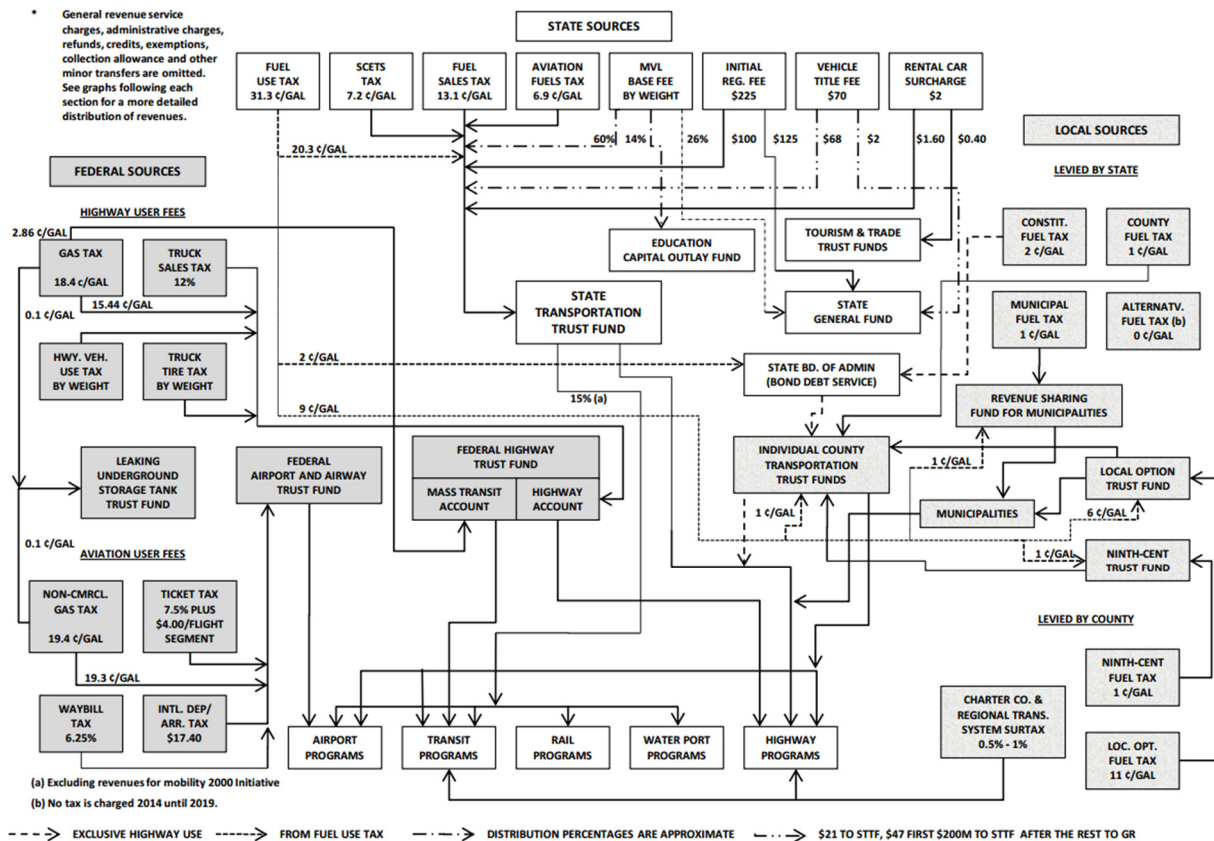
⁵⁰ Currently, tax on highway fuels does not include alternative fuels. Tax on non-highway fuels applied to intrastate railroads, commercial vessels, construction equipment, and other similar users. Effective January 1, 2019, natural gas and propane will be subject to an excise tax at the equivalent rate of 4¢ per gallon.

⁵¹ Motor vehicle license tax, initial registration fee, and vehicle title fee are deposited into the STTF with a portion deposited to General Revenue Fund. \$1 of the \$4 motor vehicle license surcharge was redirected from the STTF to the Highway Safety and Operating Trust Fund in 2013, after the Office of Commercial Vehicle Enforcement moved to the Department of Highway Safety and Motor Vehicles. A portion of the motor vehicle license tax applied to mobile homes is provided to local governments. Eighty percent of rental car surcharges are deposited into the STTF with the remainder deposited into the General Revenue Fund, Tourism Promotion Fund, and International Promotion Trust Fund. Florida’s Transportation Tax Sources: A Primer, Office of Comptroller, FDOT, 2014

applied to documents such as deeds, stocks and bonds, notes and written obligations to pay money, mortgages, liens and other evidences of indebtedness⁵². In response to growth management-based legislation in 2005, the Florida Legislature broadened the distribution of monies collected from this tax to addresses necessary infrastructure concerns in the State. The STTF may receive up to a maximum of \$541.75 million from this tax collection annually. **Figure 49** illustrates the relationship of these revenue sources to the STTF and other funds as they relate to transportation infrastructure.

Finally, a revenue stream that is applied differently compared to the aforementioned taxes and fees above are toll collections. Florida has a long history of toll finance for specific transportation facilities such as Florida’s Turnpike. The state has a Turnpike Enterprise Finance Plan, with potential for expansion of toll facilities in the future. Generally, these revenues support road and bridge improvements within the local area in which the toll monies are collected⁵³. There are 12 main toll facilities, which are located in Central and South Florida. Traditionally, tolling has been a per-use charge assessed on motorists to use a highway, fixed on a per-distance-basis that varies by vehicle type, but not by time of day. Continued innovation in tolling could include variable tolling by segment of roadway or time of day and direction of travel. Congestion pricing is currently in place on I-95 Express and the Department has plans to expand this type of tolling in the future.

Figure 49: 2014 Transportation Tax Sources – Primary Distribution and Use



Source: Florida’s Transportation Tax Sources: A Primer, Office of Comptroller, FDOT, 2014

⁵² Florida Department of Revenue, Documentary Stamp Tax. May 2012.

⁵³ Florida’s Transportation Tax Sources: A Primer, Office of Comptroller, FDOT, 2014

Potential Future State Funding Sources

There are potential new funding mechanisms available that provide innovative approaches to transportation financing. These mechanisms do not necessarily themselves generate new government revenue sources, yet they can facilitate the use of non-traditional revenue sources for transportation infrastructure finance.

Potentially, tolling can evolve into advanced road pricing, involving the imposition of fees or tolls that vary by level of demand for a facility. This is also known as congestion pricing, value pricing, variable pricing, peak-period pricing, and/or market-based pricing. All of which help manage demand, as well as generate revenue by imposing fees that vary by time of day, location, type of vehicle, number of occupants, or other factors. While pricing generates revenue, the primary strategy seeks to manage congestion, environmental impacts, and other external costs occasioned by road users.

Vehicle Miles Traveled (VMT) fees are distance-based fees levied on a vehicle user for use of the roadway system. As opposed to tolls, which are facility specific and not necessarily levied strictly on a per-mile basis, these fees are based on the distance driven on a defined network of roadways. To date, this method of revenue generation has been implemented only for trucks⁵⁴ but has been proposed for all vehicles (potentially as a replacement or supplement to the gas tax). It has been tested on a pilot basis in Oregon and 12 U.S. cities so far. In a broad sense, the application of VMT fees is envisioned through the use of an onboard vehicle device to capture the distance driven by a vehicle through GPS or other technology and relate that to a method of charging, which could range from manual cash payment to automatic deduction for a prepaid customer account. The arguments in favor of VMT fees include the ability to more closely charge vehicles for the costs they impose on the system, while opponents include those with privacy concerns. A variation of the VMT is the ton-mile charge, where freight is assessed a fee based on its weight and distance conveyed, such as the method used in Oregon.

State Financing and Funding Mechanisms

The FDOT administers several financing and funding programs, including grants and loans, from the funding available through the STTF and other trust funds and resources including federal, local, and private funds for freight transportation projects within the State. These programs have and will continue to benefit freight transportation projects within Florida. These programs are described in **Table 15**, which includes program information regarding applicable transportation modes that can benefit from the program, funding criteria and associated online resources to provide additional details. Following **Table 15** are brief summaries of each of the identified programs. Unless otherwise noted, all the programs identified below are administered through the FDOT.

⁵⁴ So far, for example, broadly in Germany and on a limited basis in the United State (i.e. Illinois).

Table 15: State Financing and Funding Programs⁵⁵

Financing/Funding Program Name	Mode	Project Eligibility Criteria	Online Resources
State Infrastructure Bank (SIB)	Highway Rail Seaport Air Intermodal	Project must be on the State Highway System or provides for intermodal connectivity with airports, seaports, rail facilities, transportation terminals, and other intermodal options for increased accessibility and movement of people, cargo, and freight ⁵⁶	http://www.dot.state.fl.us/officeofcomptroller/PFO/sib.shtm
Strategic Intermodal System (SIS) Program	Highway Rail Seaport Air Spaceport Intermodal	Projects have to be identified on facilities designated as either SIS or Emerging SIS, and be consistent with established SIS goals. Eligible projects may only include: 1) preservation, 2) maintenance, 3) safety, and 4) capacity ⁵⁷	http://www.dot.state.fl.us/planning/systems/programs/mspi/plans/default.shtm http://www.dot.state.fl.us/planning/systems/programs/mspi/brochures/default.shtm http://www.dot.state.fl.us/planning/systems/programs/mspi/pdf/SIS%20Project%20Eligibility%20Matrix_9_2012.pdf
Transportation Regional Incentive Program (TRIP)	Highway Rail Seaport Air Spaceport Intermodal	Projects must: 1) serve national, statewide, or regional functions and be part of an integrated transportation system, 2) identified in applicable, compliant local capital improvements element, 3) identified in applicable MPO LRTP, STIP, and TIP, 4) consistent with SIS program, 5) consistent with projects and local corridor management policies in local comprehensive plan, and 6) have committed local, regional, or private funds	http://www.dot.state.fl.us/planning/trip/
Economic Development Transportation Fund (EDTF)	Highway Rail Seaport Air Spaceport Intermodal	Eligible projects must facilitate economic development by alleviating location-specific transportation issues for a specific eligible company.	http://www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0300-0399/0339/Sections/0339.2821.html http://www.flgov.com/financial-incentives/
Strategic Port Investment Initiative	Seaport	Projects for seaports identified under Section 311.09, F.S. Projects must: 1) provide important access or major on-port capacity improvements, 2) provide capital improvements which maximize international trade, logistics, or the cruise industry, 3) achieve state goals for an integrated transportation system, and 4) demonstrate availability and feasibility of local or private funding matches	http://www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0300-0399/0311/Sections/0311.10.html

⁵⁵ The FDOT administers several financing and funding programs, including grants and loans, from the funding available through the STTF and other trust funds and resources including federal, local, and private funds for freight transportation projects within the State.

⁵⁶ TRIP projects are eligible under the SIB provided that there is a match by a minimum of 25 percent from funds other than SIB.

⁵⁷ The SIS program defines capacity for each transportation mode.

Financing/Funding Program Name	Mode	Project Eligibility Criteria	Online Resources
Florida Seaport Transportation and Economic Development (FSTED) Funding Program	Seaport	Projects must be identified in the applicable seaport master plan which is then adopted within the local comprehensive plan. Eligible projects include: 1) transportation facilities within the jurisdiction of the port, 2) dredging or deepening of channels, turning basins, or harbors, 3) construction or rehabilitation of port facilities necessary or useful in connection with other port facilities, 4) acquisition of vessel tracking systems, container cranes, or other mechanized equipment used in the movement of cargo or passengers in international commerce, 5) acquisition of land to be used for port purposes, 6) acquisition, improvement, enlargement, or extension of existing port facilities, 7) necessary environmental protection or mitigation projects, 8) transportation facilities as defined in Section 334.03(30), F.S., which are not otherwise part of the FDOT's adopted work program, 9) intermodal access projects, 10) construction or rehabilitation of port facilities as defined in Section 315.02, F.S. ⁵⁸ , 11) seaport master plan or strategic plan development or updates, including the purchase of data to support such plans.	http://www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0300-0399/0311/Sections/0311.07.html http://www.dot.state.fl.us/seaport/fstедdesc.shtm
Seaport Investment Program	Seaport	Projects must be identified in the adopted FDOT work program.	http://www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0300-0399/0339/Sections/0339.0801.html
Intermodal Logistics Center (ILC) Infrastructure Support Program	Intermodal Facilities	<p>Projects must: 1) serve a strategic state interest, 2) facilitate the cost-effective and efficient movement of goods, 3) demonstrate the contribution to economic activity, including job creation, increased wages, and revenues, 4) demonstrate interaction with and support of the transportation network, 5) include commitment of a funding match, 6) identify amount of investment or commitments made by the owner or developer of the existing or proposed facility, 7) identify any of the owner's commitments, including memoranda of understanding or memoranda of agreements, with private sector businesses planning to locate operations at the intermodal logistics center, and , 8) demonstrate local financial support and commitment to the project.</p> <p>ILCs must support or be supported by conveyance or shipping through one or more seaports listed in s. 311.09</p>	http://www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0300-0399/0311/Sections/0311.101.html https://www.flrules.org/gateway/ChapterHome.asp?Chapter=14-118

⁵⁸ For seaports listed in Section 311.09(1), F.S., with operating revenues of \$5 million or less provided that such projects create economic development opportunities, capital improvements, and positive financial returns to such ports. Excludes any park or recreational facilities.

Financing/Funding Program Name	Mode	Project Eligibility Criteria	Online Resources
Intermodal Development Program	Intermodal facilities Multimodal facilities Seaport ⁵⁹ Air ⁶⁰ Rail	Projects eligible include: 1) major capital investments in public rail and fixed guideway transportation facilities and systems which provide intermodal access, 2) road, rail, intercity bus service, or fixed guideway access to, from, or between seaports, airports, and other transportation terminals, 3) construction of intermodal or multimodal terminals, 4) development and construction of dedicated bus lanes, and 5) projects which otherwise facilitate the intermodal or multimodal movement of people and goods.	http://www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0300-0399/0341/Sections/0341.053.html http://www.dot.state.fl.us/seaport/intermodalpage.shtm
Highway-Rail Grade Crossing Construction and Maintenance Program	Rail	Projects must be for the construction and maintenance of highway-rail grade crossings, which may include new construction, reconstruction, widening, and/or resurfacing of a road at or near the right-of-way of a highway railroad grade crossing. Eligible projects may only include: 1) coordination of advance notification, 2) pre-design, 3) preconstruction conferences, 4) maintenance of traffic, 5) field coordination, 6) emergency surface maintenance, 7) inspection and 8) billing.	http://www.dot.state.fl.us/rail/publications/handbook.pdf
Quiet Zone Grant Program	Rail	The 2014 Florida Legislature set aside \$10 million from the rail development/grants Specific Appropriation 1890 toward quiet zones requested by local agencies. The program will provide funding of up to 50 percent of the non-federal and non-private share of the total costs of any qualifying quiet zone capital improvement project. Local agencies may apply for grant funds after its quiet zone plan is approved by the department.	
Florida Aviation Grant Program	Air	Only specific projects are eligible for airports that are part of the Florida Aviation System Plan (FASP). Projects for FASP airports must be consistent with the airport's defined role under the FASP and be consistent, to the maximum extent feasible, with applicable local comprehensive plan and state goals. Projects must also be identified in an FDOT-approved airport master plan or airport layout plan.	http://www.florida-aviation-database.com/library/filedownload.aspx?guid=f2c2156a-d0a6-400d-9223-c76fc3d39f9b http://www.dot.state.fl.us/aviation/fundinginfo.shtm
Strategic Airport Investment Initiative	Air	Eligible projects must ensure: Important access and on-airport capacity improvements are provided; Capital improvements that strategically position the state to maximize opportunities in international trade logistics, and the aviation industry are provided; Goals of an integrated intermodal transportation system for the state are achieved; and Feasibility and availability of matching funds through federal, local, or private partners are demonstrated.	

⁵⁹ Only for projects related to access to a seaport

⁶⁰ Only for projects related to access to an airport

Financing/Funding Program Name	Mode	Project Eligibility Criteria	Online Resources
Spaceport Grant Program	Spaceport	Project categories include Spaceport Planning Projects, Land Acquisition Projects, and Capital Improvement Projects. This list is not exhaustive and some potentially eligible projects may not fall precisely into these categories.	http://www.dot.state.fl.us/aviation/spaceports.shtm
Rural Economic Development Initiative (REDI)	Highway Rail Seaport Air Intermodal Facilities	Administered through Florida Department of Economic Opportunity. Counties and communities that meet certain statutory criteria may request a waiver or reduction of the match requirements for project funding.	http://www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0200-0299/0288/Sections/0288.0656.html http://www.dot.state.fl.us/planning/policy/ruralsupport/ http://www.floridajobs.org/business-growth-and-partnerships/rural-and-economic-development-initiative/redi-message-from-the-governor/we-are-redi
Freight Connector Operational Quick Fix Initiative Program (through SIS Program)	Highway	Projects must: 1) low-cost to immediately improve traffic operations, 2) enhance safety, mobility and efficiency of freight movements, 3) located outside of a freight hub property, and 4) located on a public roadway facility	http://www.dot.state.fl.us/planning/systems/programs/mspi/pdf/Freight%20Connector%20flyer2013.pdf http://www.dot.state.fl.us/Planning/systems/documents/brochures/default.shtm

State Infrastructure Bank (SIB)

Florida has a SIB, which is a revolving loan and credit enhancement program comprised of two accounts. It is intended to leverage funds to improve project feasibility. The SIB provides loans and other assistance to public or private entities carrying out projects eligible for assistance under federal and state law. This federally-funded account is capitalized by federal money matched with state money as required by Federal law. The Florida state-funded account is capitalized by state money and bond proceeds per Sections 339.55, F.S. and 215.617, F.S. All repayments are repaid to the federally-funded SIB account and revolved for future loans. Projects must meet qualifications to be eligible. Projects must be included in the adopted comprehensive plans of the applicable Metropolitan Planning Organization (MPO), and must conform to all federal and state laws, rules, and standards.

All repayments are repaid to the State Board of Administration where debt service is paid on any outstanding bonds with the remainder returned to the state-funded account and revolved for future loans. Projects must be on the State Highway System, provide increased mobility on the State's transportation system, or provide intermodal connectivity with airports, seaports, rail facilities and other transportation

terminals. Projects of the Transportation Regional Incentive Program (TRIP) are also eligible for SIB funds⁶¹. The state-funded account also allows for the lending of capital costs or to provide credit enhancements for emergency loans⁶².

Strategic Intermodal System (SIS) Program

Certain types of programs have funding requirements through the STTF. A significant portion of STTF funds goes to facilities designated under the SIS program. The SIS Program was established in 2003 to enhance Florida's economic competitiveness by focusing state resources on the transportation facilities most critical for statewide and interregional travel. The SIS is a statewide network of high priority transportation facilities, including the State's



largest and most significant commercial service airports, spaceports, deepwater seaports, freight rail terminals, passenger rail and intercity bus terminals, rail corridors, waterways and highways.

Pursuant to Section 339.65(6), F.S., a minimum annual allocation of \$450 million is provided for the SIS program projects, which is adjusted with fluctuations in the Consumer Price Index. This funding is available only to facilities designated under SIS pursuant to Section 339.61, F.S. For example, the FDOT Five-Year Work Program funded 170 SIS highway projects totaling over \$2.2 billion in 2012⁶³. Typically, funding is allocated to projects that are intended for preservation, maintenance, and safety with remaining funds made available for projects intended to improve facility capacity. However, the SIS Program has established criteria for what is defined as "capacity-related" by mode to be eligible for SIS funding. The [Capacity Funding Eligibility Matrix for SIS Facilities](#) can provide additional information per mode. Unlike other funding and financing programs administered by the state, the SIS program is a needs-based program⁶⁴ as opposed to a program that includes statutory guidance regarding appropriation of funds.

The Office of Freight, Logistics and Passenger Operations (FLP) coordinates with the Office of Policy Planning, Systems Planning, Transportation Statistics, and Environmental Management regarding funding investments for SIS facilities as they serve as the primary facilities and routes for freight in the state. The overall program is administered through the Systems Planning Office within FDOT.

Transportation Regional Incentive Program (TRIP)

The TRIP Program was established in 2005 by the Florida Legislature as part of a major initiative for growth management planning and provisioning for transportation facilities. This was accomplished through focusing funding to enhance regionally significant transportation facilities, as well as identifying eligible applicants for the program. To apply for funds under this program, eligible applicants must comprise of partnerships of either:

⁶¹ Qualifications per Section 339.2819(4), F.S. Projects must also be consistent, to the maximum extent feasible, with local MPOs and local government comprehensive plans and must conform to policies and procedures within applicable Florida Statutes and other appropriate state standards for the transportation system.

⁶² Emergency loans for damages incurred on public-use commercial deepwater seaports, public-use airports, and other public-use transit and intermodal facilities that are within an area that is part of an official state declaration of emergency per Chapter 252, F.S., and other applicable laws.

⁶³ Prioritizing Florida's Highway Investments, Systems Planning Office, 2013

⁶⁴ Prioritizing Florida's Highway Investments, Systems Planning Office, 2013

- Two or more contiguous MPOs
- One or more MPOs and one or more contiguous counties that are not members of a MPO
- A multi-county regional transportation authority created by or pursuant to law
- Two or more contiguous counties that are not members of a MPO
- MPOs comprised of three or more counties

Eligible applicants as partners are required to identify a regional transportation area through an interlocal agreement⁶⁵, and develop an associated regional transportation plan that identifies and prioritizes regionally significant facilities within the identified area. Funding from the TRIP Program also requires a local or regional fund match. Local/regional funding can include federal funds⁶⁶ and in-kind match such as right-of-way donations and private funds. TRIP funding can be provided for up to 50 percent in conjunction with the local/regional match. 100 percent of funding can be provided in areas of critical economic concern. Unlike many of the programs identified, the TRIP Program is funded through the General Revenue Fund⁶⁷.

Economic Development Transportation Fund (EDTF)

The EDTF, also known as the “Road Fund”, is a grant program intended to incentivize economic development within the state. It is administered by Enterprise Florida and the FDOT, with Enterprise Florida serving as the initial contact. This program was transferred back to the FDOT in 2012, from the Florida Department of Economic Opportunity (DEO); however, Enterprise Florida, Inc. is charged with program administration and marketing. For the Fiscal Year 2012-2013, the FDOT approved 12 transportation enhancement projects through this fund. The approved projects would aid in the location and expansion of associated business in the state with a combined commitment of 2,439 jobs. The approved funding for all 12 projects total almost \$19 million⁶⁸.

The intent of this program is accomplished by providing local governments with necessary funding for transportation projects to help businesses locate, remain, or expand within the local government’s jurisdiction by alleviating associated transportation issues. Eligible applicants for the EDTF includes local governments with jurisdiction of the transportation facility(ies) that are associated with a specific business. Eligible projects must ensure that they will either:

- Attract new employment opportunities to the state or expand or retain employment in existing companies that operate within the state
- Allow for construction or expansion of a state or federal correctional facility within a county whose population is 75,000 or less and will lead to expanding, or retaining employment opportunities within the county⁶⁹

Types of transportation projects for EDTF funds may include access roads, signalization, road widening, and other roadway-related improvements. Eligible business may include, but not limited to, manufacturing, corporate/regional headquarters, businesses within a designated enterprise zone as

⁶⁵ A sample interlocal agreement can be found here: <http://www.dot.state.fl.us/planning/trip/agreement.pdf>

⁶⁶ Federal funds attributable to urbanized areas with a population size of over 200,000 may be used as part of the local/regional match.

⁶⁷ TRIP Fact Sheet, Office of Policy Planning, 2012. <http://www.dot.state.fl.us/planning/trip/facts.pdf>

⁶⁸ 2013 Annual Incentives Report, Florida Department of Economic Opportunity, 2013

⁶⁹ Section 339.2821(3)(a), F.S.

defined under Section 290.0055, F.S., businesses within a spaceport territory as defined under Section 331.304, F.S., and certain other multi-state business services. A maximum of \$3 million per project can be awarded for eligible transportation projects. Award of funds are made to the local government with jurisdiction on behalf of a specific business for identified transportation improvements⁷⁰.

Strategic Port Investment Initiative

Established in 2012, the Strategic Port Investment Initiative was developed to provide additional funding opportunities for the deepwater seaports identified under Section 311.09, F.S. Seaports outside of those identified under state law are not eligible for this program. A minimum of \$35 million is made available annually through the STTF for this program.

For the identified seaports, eligible projects must meet the State economic development goal to enhance the seaports as hubs for trade, logistics, and export-oriented activities. Eligible projects must also achieve state goals for an integrated transportation system. In addition, applicants must demonstrate availability and feasibility of local or private funding matches for identified projects. Types of projects in which funding from this program can be used for are:

- Access or major on-port capacity improvements
- Capital improvements that maximize international trade, logistics, or the cruise industry

Florida Seaport Transportation and Economic Development (FSTED) Funding Program

The FSTED Program is Florida's oldest seaport program. In 1990, the Florida Legislature authorized the development of the FSTED Program. Sections 311.07 and 311.09, F.S., established the collaborative partnership between FDOT, other state agency partners, and the deepwater seaports. It provided for an initial minimum of \$8 million in matching grants to be made available annually from the STTF. The funding for this program has been increased to provide annually \$15 million in matching grants, and \$35 million to pay debt service on bonded state revenues invested in seaport projects, growing the provision from the STTF from \$8 million to \$50 million annually⁷¹. This funding is intended to finance projects that will improve the movement of goods and passengers for any of the deepwater seaports identified in Section 311.09(1), F.S.

Similar to the Strategic Port Investment Initiative, applicants for this program are limited to those seaports identified under Section 311.09, F.S. Generally, a 50/50 match is required from the applicant for an identified project. However, if a project is for the rehabilitation of wharves, docks, berths, bulkheads, or similar structures, then a 25 percent match is required from the applicant. Projects eligible under this program are identified under Sections 311.07(3)(a) and (b), F.S., and include:

- The construction or rehabilitation of wharves, docks, structures, jetties, piers, storage facilities, cruise terminals, automated people mover systems, or facilities necessary or useful in connection with the above
- The dredging or deepening of channels, turning basins, or harbors
- Transportation facilities within the jurisdiction of the port
- The acquisition, improvement, enlargement, or extension of existing port facilities
- The acquisition of vessel tracking systems, container cranes, or other mechanized equipment used in the movement of cargo or passengers in international commerce

⁷⁰ Why Florida? Enterprise Florida. 2014. <http://www.enterpriseflorida.com/why-florida/business-climate/incentives/>

⁷¹ FSTED Program. Seaport Office. 2014. <http://www.dot.state.fl.us/seaport/fsteddesc.shtm>

- The acquisition of land to be used for port purposes
- Environmental protection projects which are necessary because of requirements imposed by a state agency as a condition of a permit or other form of state approval including mitigation and spoil disposal site acquisition
- Transportation facilities as defined under Section 334.03(30), F.S.
- Seaport master plan or strategic plan development or updates, including the purchase of data to support such plans
- Construction or rehabilitation of port facilities as defined under Section 315.02, F.S., excluding any park or recreational facilities, for ports with operating revenues of \$5 million or less
- Intermodal access projects

Seaport Investment Program

The Seaport Investment Program is a bond program for seaports identified in Section 311.09, F.S., pursuant to Section 339.0801(1), F.S. Through this program, \$10 million is made available annually for the next 30 years from the STTF⁷². This \$10 million allocated for annual debt service from the STTF is included in the \$35 million amount referenced under the FSTED Funding Program. These funds have been pledged for debt service for bonds issues to fund seaport infrastructure investments. Currently, approximately \$150 million in bond proceeds for seaport improvements have been approved for JAXPORT, Port Everglades, Port Manatee, Port Miami, and Port Panama City. Projects eligible for the program must be identified in the FDOT Work Program.

Intermodal Logistics Center Infrastructure Support Program

The Intermodal Logistics Center Infrastructure Support Program is a recently established program to support the development of the Intermodal Logistics Centers (ILCs), as defined under Section 311.101(2), F.S. Similar to the SIS program, the Freight, Logistics and Passenger Operations Office coordinates with the identified programs regarding project funding. Until June 30, 2020, at least \$5 million will be made available annually from the STTF to assist with local government projects or projects performed by private entities that meet the public purpose of enhancing transportation facilities for the conveyance or shipment of goods through a Florida deepwater seaport to or from an ILC. ILCs must support or be supported by conveyance or shipping through one or more seaports listed in s. 311.09. For eligible ILC projects, the program may provide up to fifty percent of project costs. Criteria for evaluating the eligibility of projects are identified under Section 311.101(3), F.S., and include:



- The ability of the project to serve a strategic state interest
- The extent to which the project contributes to economic activity, including job creation, increased wages, and revenues
- The extent to which the owner has commitments, including memoranda of understanding or memoranda of agreements, with private sector businesses planning to locate operations at the intermodal logistics center
- The ability of the project to facilitate the cost-effective and efficient movement of goods
- The extent to which the project efficiently interacts with and supports the transportation network

⁷² <http://www.flgov.com/2013/09/24/governor-scott-and-florida-cabinet-approve-150-million-in-seaport-improvements/>

- A commitment of a funding match
- The amount of investment or commitments made by the owner or developer of the existing or proposed facility
- Demonstrated local financial support and commitment to the project

Intermodal Development Program

The Intermodal Development Program is intended to enhance access to intermodal or multimodal transportation facilities and terminals. In particular, this program focuses on rail and highway access to airports, seaports, and other multimodal facilities. Eligible projects must be related to this focus and be consistent with applicable local government comprehensive plans. Eligible projects may include:

- major capital investments in public rail and fixed guideway transportation facilities and systems which provide intermodal access
- road, rail, intercity bus service, or fixed guideway access to, from, or between seaports, airports, and other transportation terminals
- construction of intermodal or multimodal terminals
- development and construction of dedicated bus lanes
- projects which otherwise facilitate the intermodal or multimodal movement of people and goods

Highway-Rail Grade Crossing Construction and Maintenance Program

The Highway-Rail Grade Crossing Construction and Maintenance Program is intended for the construction and maintenance of highway-rail grade crossings. Similar to other rail improvement programs, there are no applicants for this program. FDOT Rail Office coordinates directly with the railroads regarding proposed projects. Eligible projects may include new construction, reconstruction, widening, and/or resurfacing of a road at or near the right-of-way of a highway railroad grade crossing. Eligible project types may only include:

- Coordination of advance notification
- Pre-design
- Preconstruction conferences
- Maintenance of traffic
- Field coordination
- Emergency surface maintenance
- Inspection
- Billing

Quiet Zone Grant Program

The 2014 Florida Legislature set aside \$10 million from the rail development/grants Specific Appropriation 1890 toward quiet zones requested by local agencies to address the use of locomotive horns at highway-rail grade crossings. This funding comes from the State Transportation Trust Fund and is distinct from Florida Rail Enterprise funds. It is unclear if the grant program is intended to be continued after Fiscal Year 2014-2015, and may depend on the level of response from local governments.

The program will provide funding of up to 50 percent of the non-federal and non-private share of the total costs of any qualifying quiet zone capital improvement project. Much of the recent press related to quiet zones has been in response to Florida East Coast Industries' passenger rail project All Aboard Florida, however this grant program is not specifically for that project. Local agencies may apply for grant funds after its quiet zone plan is approved by the department.

Florida Aviation Grant Program

The Florida Aviation Grant Program is intended to assist in providing efficient, safe, and cost-effective aviation operations within the state by providing funds for constructing and maintaining runways, taxiways, terminals and other facilities, as well as eliminating airport hazards, protecting airspace, acquiring necessary land, and developing plans. The program is administered by the FDOT Aviation and Spaceports Office, and funded through the STTF with the state's aviation fuel tax serving as a major contributor.

Eligible applicants for this program are limited to publicly-owned airports within the state that are open to public use, and are under public operational and developmental control. This includes both general aviation and commercial service airports. For projects from eligible airports to be considered, they must be consistent with the airport's role as defined within the Florida Aviation System Plan, as well as the local government comprehensive plan, if applicable. In addition, projects must be identified within the FDOT approved airport master plan and/or airport layout plan. Eligible projects will fall under airport planning activities, airport capital improvements, land acquisition, and/or airport economic development activities. However, operational costs such as maintenance equipment, services, and supplies are not eligible projects under this program⁷³.

Strategic Airport Investment Initiative

Established in 2014, the Strategic Airport Investment Initiative establishes Section 332.007(10), F.S., authorizing the Department to fund strategic airport investment projects at up to 100 percent of the project's cost. The initiative was included in House Bill (HB) 7175, which addressed a variety of transportation issues.

Eligible projects must ensure:

- Important access and on-airport capacity improvements are provided
- Capital improvements that strategically position the state to maximize opportunities in international trade logistics, and the aviation industry are provided
- Goals of an integrated intermodal transportation system for the state are achieved
- Feasibility and availability of matching funds through federal, local, or private partners are demonstrated

⁷³ Aviation Project Handbook. Aviation and Spaceports Office. July 2013. <http://www.florida-aviation-database.com/library/filedownload.aspx?guid=f2c2156a-d0a6-400d-9223-c76fc3d39f9b>

Florida Spaceports Grant Program

The Florida Spaceports Grant Program is funded through two separate sources: the Annual Spaceport Allocation and the Strategic Intermodal System (SIS). The background, eligibility requirements, and projects prioritization processes differ; however, the application, grant awarding, and contracting processes are the same. For simplicity, this overview addresses only the Annual Spaceport Allocation. SIS is discussed earlier in the chapter.

The Annual Spaceport Allocation is sourced through the STTF, and includes no federal contributions or aviation fuel tax funds. The FDOT Aviation and Spaceports Office collaborates closely with FDOT District Offices and Space Florida⁷⁴ to evaluate grant applications. Project categories include Spaceport Planning Projects, Land Acquisition Projects, and Capital Improvement Projects. This list is not exhaustive and some potentially eligible projects may not fall precisely into these categories. FDOT cannot fund Space Florida operations or administrative costs.

Rural Economic Development Initiative (REDI)

REDI is the only program identified in this chapter as a state funding program which is not administered through the FDOT. This program is administered through the Department of Economic Opportunity (DEO) with FDOT as one of its partners. The intent of the REDI Program is to support rural areas as defined under Section 288.0656(2)(e), F.S.



Areas designated under the REDI Program were renamed by the 2014 Florida Legislature and are now called Rural Areas of Opportunity (ROA) rather than Rural Areas of Critical Economic Concern (RACEC). ROAs are eligible to receive a waiver or reduction of the location match requirements for various transportation projects. In regards to specific transportation projects, pursuant to Section 288.0656(7)(a), F.S., criteria and requirements under the EDTF can be waived for ROAs applying for funds to help support economic development within the jurisdiction.

Freight Connector Operational Quick Fix Initiative Program

The Freight Connector Operational Quick Fix Initiative Program is administered through the SIS Program. This program is used to accelerate SIS Roadway Freight Connector projects by advancing \$7.5 million for FY 2013/14 and \$10.7 million programmed for FY 2014/15⁷⁵. Funds for this program come from the STTF. Transportation facilities benefitting from this program are impacted by the last mile issues including roadways that connect a freight hub with an intra-regional highway corridor and local streets.

⁷⁴ Space Florida is an Independent Special District of the State of Florida, created by Chapter 331, Part II, Florida Statutes, for the purposes of fostering the growth and development of a sustainable and world-leading space industry in Florida.

<http://www.spaceflorida.gov/>

⁷⁵ Systems Planning Office, FDOT, 2013

http://www.dot.state.fl.us/planning/systems/programs/mspi/pdf/NHS_SIS%20booklet%202013.pdf

Projects eligible for funds under this program must adhere to the following criteria:

- Low-cost;
- Immediately improve traffic operations;
- Located outside of the freight hub property boundary; and,
- Located on public roadways (either SIS or on the National Highway System)

Federal Financing and Funding Mechanisms

The federal government offers several opportunities for financing and funding freight transportation projects of which Florida can take advantage. The passage of MAP-21 has brought a stronger focus to freight issues and has provided additional funding and financing options concentrated on enhancing freight movements for the rest of the nation. Because a significant portion of revenue for transportation projects is from federal aid, it is essential for federal and state partners to work together to fund necessary improvements to the transportation network, specifically Florida's freight network.

Financing and funding programs that are available through the federal government are described in **Table 16** on the following page. **Table 16** includes program information regarding applicable transportation modes that can benefit from the program, funding criteria, and associated online resources to provide additional detail. Following **Table 16** are brief summaries of each of the identified programs. All of these programs are administered through the various arms of the U.S. Department of Transportation (USDOT).

It should also be noted that, as of the time of this writing, Congress is discussing reauthorization of MAP-21. Introduced on May 12, 2014, the new bill provides a Federal freight funding program. Consideration of this program will be given to eligible projects should the final reauthorization package signed by the President include it.

Table 16: Federal Financing and Funding Programs

Federal Program Name	Mode	Project Eligibility Criteria	Online Resources
Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grant Program	Highway Rail Seaport Intermodal Facilities	Eligible projects include: (1) highway or bridge projects eligible under title 23, U.S.C. (including bicycle and pedestrian related projects); (2) public transportation projects eligible under chapter 53 of title 49, United States Code; (3) passenger and freight rail transportation projects; (4) port infrastructure investments, and (5) intermodal projects. Projects that are eligible for TIGER Planning Grants include, but are not limited to: 1) planning, preparation, or design of a single surface transportation project, 2) regional transportation investment planning, including transportation planning that is coordinated with interdisciplinary factors including housing, economic development, stormwater and other infrastructure investments, and 3) addresses future risks and vulnerabilities, including extreme weather and climate change.	http://www.dot.gov/tiger http://www.fra.dot.gov/eLib/Details/L04475
Highway Safety Improvement Program (HSIP)	Highway Rail ⁷⁶	Projects must be highway safety improvement projects that can include any strategy, activity or project on a public road that is consistent with the data-driven State Strategic Highway Safety Plan (SHSP) and corrects or improves a hazardous road location or feature or addresses a highway safety problem. A list of eligible projects is found under 23 U.S.C. 148(a)(4)(B), but HSIP eligible projects are not limited to this list ⁷⁷ .	http://www.fhwa.dot.gov/map21/factsheets/hsip.cfm http://www.fhwa.dot.gov/map21/qandas/qahsip.cfm
Railroad Rehabilitation and Improvement Financing (RRIF)	Rail	Eligible projects must either: 1) acquire, improve or rehabilitate intermodal or rail equipment or facilities, including track, track components, bridges, yards, buildings and shops, 2) refinance outstanding debt incurred for the purposes listed above, or 3) develop or establish new intermodal or railroad facilities	http://www.fra.dot.gov/Page/P0128 http://www.fra.dot.gov/eLib/Details/L04476
Rail Line Relocation and Improvement Capital Grant (RLR) Program	Rail	Projects must be construction projects and improve the route and structure of a rail line. Projects may either be: 1) carried out for the purpose of mitigating the adverse effects of rail traffic on safety, motor vehicle traffic flow, community quality of life, or economic development, or 2) involve a lateral or vertical relocation of any portion of the rail line.	https://www.fra.dot.gov/Page/P0090
Railway-Highway Crossings Program	Highway Rail	Eligible projects must be railroad crossing safety improvements. If a state DOT meets all the needs for installation of protective devices at railway-highway crossings, funds from this program may also be used for other highway safety improvements pursuant 23 U.S.C. 130(e).	http://www.fhwa.dot.gov/map21/factsheets/rhc.cfm

⁷⁶ Railway-Highway crossings only⁷⁷ FHWA. 2013. Highway Safety Improvement Program (HSIP) Enhanced Eligibility Questions and Answers. <http://www.fhwa.dot.gov/map21/qandas/qahsip.cfm>

Federal Program Name	Mode	Project Eligibility Criteria	Online Resources
Construction Reserve Fund (CRF)	Seaport	Eligible projects are focused on expanding or modernizing the U.S. merchant fleet by assisting in the construction, reconstruction, reconditioning, or acquisition of merchant vessels.	http://www.marad.dot.gov/ships_shipping_landing_page/construction_reserve_fund/construction_reserve_fund.htm
Capital Construction Fund (CCF)	Seaport	Similar to the CFR Program, CCF assists owners and operators of U.S.-flag vessels in accumulating capital necessary for the modernization or expansion of the U.S. merchant vessel fleet, including assistance in funding construction, reconstruction, or acquisition of vessels through the deferment of federal income taxes on certain deposits of money or other property placed into a CCF.	http://www.marad.dot.gov/ships_shipping_landing_page/capital_construction_fund/capital_construction_fund.htm
Small Shipyards Grants Program	Seaport	Eligible projects include: 1) capital and related improvement projects that will be effective in fostering efficiency, competitive operations, and quality ship construction, repair, and reconfiguration, and 2) training projects that will be effective in fostering employee skills and enhancing productivity. For capital improvement projects, all items proposed for funding must be new and will be owned by the applicant. For both capital improvement and training projects, all project costs, including the recipient's share, must be incurred after the date of the grant agreement	http://www.marad.dot.gov/ships_shipping_landing_page/small_shipyard_grants/small_shipyard_grants.htm
Airport Improvement Program (AIP)	Air	Eligible projects include improvements for safety, capacity, security, and environmental issues at public-use airports on the National Plan of Integrated Airport Systems. This includes most airfield capital improvements or repairs as well as some specific situations, for terminals, hangars, and non-aviation development. Operations and revenue-generating improvements and costs are not eligible.	http://www.faa.gov/airports/aip/
Section 129 Loans	Highway	Similar to state SIBs. Eligible projects may either be a toll project that is eligible for federal-aid funding or a non-toll highway project that has a dedicated revenue source.	https://www.fhwa.dot.gov/ipd/finance/tools_programs/federal_credit_assistance/section_129/
Grant Anticipation Revenue Vehicles (GARVEEs)	Highway	Eligible projects must be approved as a federal-aid debt-financed (bond, certificate, note, or other debt instrument) project. Typically, GARVEE finances large as opposed to small projects.	http://www.fhwa.dot.gov/ipd/finance/tools_programs/federal_debt_financing/garvees/
Transportation Infrastructure Finance and Innovation Act (TIFIA) Credit Assistance	Highway Rail Seaport Intermodal Facilities	Eligible projects include: 1) projects eligible for assistance under title 23 or chapter 53 of title 49, 2) international bridges and tunnels, 3) intercity passenger bus or rail facilities and vehicles, 4) public freight rail projects, 5) private freight rail projects that provide public benefit for highway users by way of direct highway-rail freight interchange, 6) intermodal freight transfer facilities, 7) projects providing access to, or improving the service of, the freight rail projects and transfer facilities described above, and 8) surface transportation infrastructure modifications necessary to facilitate direct intermodal interchange, transfer and access into and out of a port.	http://www.fhwa.dot.gov/map21/factsheets/tifia.cfm

Federal Program Name	Mode	Project Eligibility Criteria	Online Resources
Congestion Mitigation and Air Quality Improvement (CMAQ) Program	Highway Rail Seaport Intermodal Facilities	Projects must: 1) contribute to the attainment or maintenance of a national ambient air quality standard, with a high level of effectiveness in reducing air pollution, 2) identified in an applicable MPO's current transportation plan and transportation improvement program (TIP) or the current state transportation improvement program (STIP) in areas without an MPO.	http://www.fhwa.dot.gov/map21/factsheets/cmaq.cfm
National Highway Performance Program (NHPP)	Highway	Projects must be on an eligible facility and support progress toward achievement of national performance goals for improving infrastructure condition, safety, mobility, or freight movement on the NHS, and be consistent with Metropolitan and Statewide planning requirements.	http://www.fhwa.dot.gov/map21/factsheets/nhpp.cfm
Surface Transportation Program (STP)	Highway	Projects must preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals. Projects may not be located on local or rural minor collectors ⁷⁸ .	http://www.fhwa.dot.gov/map21/factsheets/stp.cfm

Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grant Program

Since 2009, more than \$4.1 billion have been dedicated to eligible projects under the TIGER Program with a significant portion going to roadways, rail, and ports. Eligible applicants to receive funds from the program include state, local, and tribal governments, transit agencies, port authorities, MPOs, and other political subdivisions of state or local governments, and multi-state or multi-jurisdictional groups.

Since a broad array of transportation projects throughout the nation can be considered eligible for funding, the USDOT can only select a small percentage of applications received given the volume of applications received and funding constraints. It is a highly competitive process and projects are evaluated based on long-term benefits regarding safety, economic competitiveness, state of good repair, livability, environmental sustainability, contributions to economic recovery, innovation, and creation of new partnerships. Projects eligible for funding include:

- Highway or bridge projects eligible under Title 23 United States Code (U.S.C.) (including bicycle and pedestrian related projects)
- Public transportation projects eligible under 49 U.S.C. 53
- Passenger and freight rail transportation projects
- Port infrastructure investments
- Intermodal projects
- Transportation planning activities



⁷⁸ Exceptions include: ADHS local access roads, bridge and tunnel replacement and rehabilitation (not new construction), bridge and tunnel inspection, carpool projects, fringe/corridor parking facilities, bike/pedestrian walkways, safety infrastructure, Transportation Alternatives, recreational trails, port terminal modifications, and minor collectors in NHS corridors. States may also allocate a maximum of 15 percent of their rural sub-allocation on minor collectors only.

Highway Safety Improvement Program (HSIP)

The HSIP is administered and funded through the implementation of MAP-21. The HSIP is intended to fund projects that will alleviate traffic fatalities and serious injuries on public roadways. This focus on the safety aspect of the transportation system also includes improving the performance of public roadways. For 2014, the program has been allocated \$2.41 billion from the Highway Account of the Highway Trust Fund⁷⁹. Eligible projects must be highway safety improvement projects that are consistent with the data-driven state Strategic Highway Safety Plan, and correct or improve a hazardous road location or feature or address a highway safety problem. A list of eligible projects is found under 23 U.S.C. 148(a)(4)(B) but HSIP eligible projects are not limited to this list. Projects for workforce development, training, and educational activities are also eligible for these funds.⁸⁰

Railroad Rehabilitation and Improvement Financing (RRIF)

Administered by the Federal Rail Administration, the RRIF program provides loans and loan guarantees to acquire, improve, or rehabilitate intermodal or rail equipment or facilities. Eligible applicants for this program include:

- Railroads
- State and local governments
- Government-sponsored authorities and corporations
- Joint ventures that include at least one railroad
- Limited option freight shippers that intend to construct a new rail connection

Loans may fund up to 100% of a railroad project with repayment periods of up to 35 years and interest rates equal to the cost of borrowing to the government. A portion of the funding has been reserved for projects benefitting freight railroads other than the large Class 1 carriers, typically short line railroads. Since the beginning of the program, 33 loan agreements totaling over \$1.7 billion have been executed. This activity impacts 26 states with 72 percent of loan agreements executed with Class II and III railroads⁸¹.

Rail Line Relocation and Improvement Capital Grant (RLR) Program

In total, a little over \$90 million has been allotted to this program. The RLR Program is intended to aid in funding rail construction projects that reduce the effects of rail infrastructure on safety, vehicle and pedestrian traffic, community quality of life, or economic development. The program provides up to 90 percent of the funding for qualifying projects. Eligible applicants for this program are limited to state and local governments and the District of Columbia.

Preliminary engineering, design, and other pre-construction costs associated with project-level compliance with the National Environmental Policy Act, are considered part of the overall construction

⁷⁹ Highway Safety Improvement Program (HSIP). FHWA. 2013. <http://www.fhwa.dot.gov/map21/factsheets/hsip.cfm>

⁸⁰ FHWA. 2013. Highway Safety Improvement Program (HSIP) Enhanced Eligibility Questions and Answers. <http://www.fhwa.dot.gov/map21/qandas/qahsip.cfm>

⁸¹ Railroad Rehabilitation and Improvement Financing (RRIF) Program Fact Sheet . Federal Rail Administration. April 2013. <http://www.fra.dot.gov/eLib/Details/L04476>

project and are also eligible for funding. However, planning studies and feasibility analyses are not eligible for funding⁸².

Railway-Highway Crossings Program (Section 130)

The Railway-Highway Crossings Program is administered and funded through the implementation of MAP-21. The program is intended to fund safety improvements at public highway-rail grade crossings in order to reduce the number of injuries, fatalities, and crashes. For 2014, the program has been allotted \$220 million from the Highway Account of the Highway Trust Fund⁸³. The funds come from set-aside amounts calculated for apportionment to the HSIP. The federal share for projects approved under this program is 90 percent.

Eligible projects are identified under 23 U.S.C. 130. States may use up to two percent of their allocated funds for data and analysis for the required annual report to US DOT regarding progress of implementation of the program. Projects funded under this program are typically also eligible under HSIP and STP.

Administration of this program falls under the FDOT Rail Office and includes the identification of public highway-rail grade crossing locations that require improvements. The identification is completed through the diagnostic field review process, which is coordinated by the FDOT District Rail Coordinator. At the end of the annual process, the FDOT District Rail Coordinator submits proposed projects to the FDOT Rail Office with cost estimates for each project. The Rail Office determines maximum available funding and approves projects⁸⁴.

The annual appropriation of funds for this program is \$7.5 million, which allows approximately 35 to 45 crossings to be improved⁸⁵. The Florida Rail System Plan lists an inventory of rail needs, including grade separation projects. FDOT Rail Office review of proposed projects identified by the FDOT District Rail Coordinator includes:

- Safety index
- Project cost
- Incident history
- Corridor emphasis
- Diagnostic field review team safety observations
- Upgrading crossings from passive devices to active devices
- Input from local governments
- Input from railroad partners

Construction Reserve Fund (CRF)

The CRF is a federal financial assistance program that provides tax deferral benefits to U.S.-flag vessel operators. The program allows eligible applicants to defer the taxes on gains from the sale or loss of a vessel, provided the proceeds are used to expand or modernize the U.S. merchant vessel fleet that is

⁸² Rail Line Relocation & Improvement Capital Grant Program (RLR). Federal Railroad Administration. 2014. <https://www.fra.dot.gov/Page/P0090>

⁸³ Railway-Highway Crossings Program. FHWA. 2013. <http://www.fhwa.dot.gov/map21/factsheets/rhc.cfm>

⁸⁴ Rail Handbook. Rail Office. January 2012. <http://www.dot.state.fl.us/rail/publications/handbook.pdf>

⁸⁵ Highway-Rail Grade Crossing Safety Action Plan. Rail Office. August 26, 2011. <http://www.dot.state.fl.us/rail/FCSAP0811.pdf>

necessary for national defense and to development of U.S. commerce. This program is administered through the Maritime Administration of the USDOT.

Eligible applicants for the CRF must be U.S. citizens who own, in whole or in part, and/or operate a vessel or vessels operating in either domestic or foreign commerce for the United States or within the nation's fisheries. Eligible vessels for the CRF must be constructed or reconstructed within the United States and documented. Vessels that are constructed five years prior to acquisition are not eligible under the CRF. In addition, vessels must be suitable for use in the seas or Great Lakes. Any vessel that is less than 2,000 gross tons or has a maximum speed less than 12 knots will have to be evaluated by the Maritime Administration to be considered eligible.

Capital Construction Fund (CCF)

Similar to the CRF, CCF assists eligible applicant through deferment of federal income taxes on certain deposits of money or other property placed into a CCF. Both the CRF and the CCF have the same administration, purpose, and actions to accomplish the intent. Both programs have the same eligibility requirements. The only difference is where the CRF provides tax deferment on gains from the sale or loss of a vessel while the CCF provides tax deferment on the federal income tax.

Small Shipyards Grants Program

The Small Shipyards Grants program is administered through the Maritime Administration of USDOT and provides federal funding for 75 percent of the cost of capital and related improvements for shipyard facilities for improving efficiency, competitive operations, and ship construction, repair, and reconfiguration. The program has more than \$9 million in allotted funding for eligible projects. For each funding cycle, up to ten applications are selected with an average grant amount of about \$1 million. Federal shares for eligible projects under this program are up to 75 percent.

Eligible applicants are small shipyards with less than 1,200 production employees. However, no more than 25 percent of available funds will be awarded to shipyards that have more than 600 production employees. Eligible shipyards must also construct, repair, or reconfigure vessels 40 feet or greater in length.

Airport Improvement Program (AIP)

The AIP provides federal grants to public agencies and private owners and entities for the planning and development of public use airports that are included in the National Plan of Integrated Airport Systems (NPIAS). AIP funding is dependent on the size of the airport. For large and medium primary hub airports, grants cover 75 percent of eligible costs⁸⁶. For small primary, reliever, and general aviation airports, grants cover a range of 90-95 percent of eligible costs, based on statutory requirements. Eligible public use airports include airports that are:

- Publicly owned
- Publicly owned but designated by FAA as a reliever
- Privately owned but having scheduled service and at least 2,500 annual enplanements

⁸⁶ The AIP may cover up to 80 percent for noise implementation for qualifying airports.

Section 129 Loans

To support development of new toll and non-toll roads, the USDOT administers Section 129 loans through the Federal Highway Administration (FHWA)⁸⁷. The tool permits states to use regular federal-aid highway apportionments to fund loans to projects (both toll and non-toll), which can be paid back with dedicated revenue streams. Because loan repayments can be delayed until five years after project completion, this mechanism provides flexibility during the ramp-up period of new facilities. Federal share for Section 129 loans is up to 80 percent. Financing from this program will not fund the cost of work done prior to the loan authorization. Repayment of Section 129 loans must be completed within 30 years after the loan authorization date.

Grant Anticipation Revenue Vehicles (GARVEEs)

A GARVEE is a debt-financing tool that provides up-front capital for major highway projects. Future federal funds are used to repay the debt and related financing costs. GARVEEs can be issued by a state, a political subdivision of a state, or a public authority. States can receive federal-aid reimbursements for a variety of debt-related costs incurred in connection with an eligible debt financing instrument, such as a bond, note, certificate, mortgage, or lease. Florida has not taken advantage of this program in the past.

GARVEEs typically finance larger projects that display the following characteristics:

- Projects are large enough to merit borrowing with the costs of delay outweighing the costs of financing
- Other borrowing approaches are not feasible or are too limited for the specific project
- Projects do not have access to a revenue stream such as local taxes or tolls and other forms of repayment such as state appropriations are not feasible
- State DOTs and other applicable sponsors are willing to reserve a portion of future year federal-aid highway funds to satisfy repayment requirements

Transportation Infrastructure Finance and Innovation Act (TIFIA) Credit Assistance

The TIFIA Program is administered and funded through the implementation of MAP-21. The program provides federal credit assistance through secured loans, loan guarantees, and standby lines of credit to finance surface transportation projects of national and regional significance. Eligible projects include, but are not limited to, highway, some types of freight rail⁸⁸, and intermodal freight transfer facilities. TIFIA credit assistance provides better access to capital markets, flexible repayment terms, and potentially lower interest rates than can be obtained in private capital markets for similar instruments. TIFIA can help advance expensive projects that otherwise might be delayed or deferred because of size, complexity, or uncertainty over the timing of revenues.

For 2014, the program has been allotted \$1 billion from the Highway Account of the Highway Trust Fund. Under MAP-21, the TIFIA Program now authorizes, in addition to secured loans, loan guarantees, and lines of credit, “master credit agreements” which USDOT may make a contingent commitment of future TIFIA assistance (subject to the availability of future funding) for a program of projects secured by a common revenue pledge. Federal share under the TIFIA line of credit is up to 33



⁸⁷ Section 129 Loans https://www.fhwa.dot.gov/ipd/finance/tools_programs/federal_credit_assistance/section_129/

⁸⁸ As they relate to direct intermodal transfer. <http://www.fhwa.dot.gov/map21/factsheets/freight.cfm>

percent, TIFIA loan is 49 percent, and TIFIA loan and line of credit combined is 49 percent. Federal share is maximized at 80 percent when all federal assistance is accounted for in addition to receiving a TIFIA loan.

Congestion Mitigation and Air Quality Improvement (CMAQ) Program

The CMAQ Program has been continued through the implementation of MAP-21. The program is intended to provide funding for transportation activities and projects that will help meet the federal Clean Air Act requirements. Activities and projects funded under this program must reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter (nonattainment areas) and for former nonattainment areas that are now in compliance (maintenance areas). Eligible applicants are limited to state and local governments.

For the 2014 fiscal year, the program is allocated \$2.23 billion from the Highway Account of the Highway Trust Fund. Federal share under this program is determined pursuant to 23 U.S.C. 120 with up to 90 percent for projects on the Interstate System and up to 80 percent for all other projects.

National Highway Performance Program (NHPP)

Under MAP-21, the NHPP is intended to provide assistance regarding the condition and performance of the National Highway System (NHS) including construction of new facilities and ensuring that highway construction investments achieve state performance targets established in a state's asset management plan for the NHS. Eligible applicants are limited to state and local governments. The program has been allotted \$21.9 billion from the Highway Account of the Highway Trust Fund for 2014. Eligible projects must be located on the NHS⁸⁹.

Generally, the federal share under this program is determined pursuant to 23 U.S.C. 120 with up to 90 percent for projects on the Interstate System and up to 80 percent for all other projects. A special rate will be applied to certain safety projects. Projects incorporating Innovative Project Delivery will receive an increased federal share. For states that have not implemented their asset management plan, the maximum for federal share is 65 percent. For states that receive their appropriation of NHPP funds, two percent must be set-aside for state planning and research pursuant to 23 U.S.C. 505, and a portion for the state's Transportation Alternatives Program pursuant to 23 U.S.C. 120.

Surface Transportation Program (STP)

The STP is intended to provide funding for projects that improve conditions and performance for the transportation system. Eligible projects include enhancements on any federal-aid highway, bridge and tunnel on any public roadway, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals. Eligible applicants are limited to state and local governments. Projects eligible⁹⁰ for STP funds include:

- Construction, reconstruction, rehabilitation, resurfacing, restoration, preservation, or operational improvements for highways
- Construction of new bridges and tunnels on a Federal-aid highway
- Replacement, rehabilitation, preservation, protection, and anti-icing/deicing for bridges and tunnels on any public road, including construction or reconstruction necessary to accommodate other modes

⁸⁹ Under certain circumstances, projects on non-NHS highway or transit projects can be eligible, if they are on an NHS corridor.

⁹⁰ Surface Transportation Program (STP). FHWA. 2013. <http://www.fhwa.dot.gov/map21/factsheets/stp.cfm>

- Inspection and evaluation of bridges, tunnels and other highway assets, as well as training for bridge and tunnel inspectors
- Truck parking facilities
- Highway and transit safety infrastructure improvements and programs, installation of safety barriers and nets on bridges, hazard mitigation and eliminations, railway-highway grade crossings
- Environmental restoration and pollution abatement
- Transportation alternatives
- Transportation control measures
- Intersections with high accident rates or levels of congestion
- Control of noxious weeds and establishment of native species
- Surface transportation infrastructure modifications within port terminal boundaries
- Construction and operational improvements for a minor collector in the same corridor and in proximity to an NHS route if the improvement is more cost-effective than an NHS improvement and will enhance NHS level of service and regional traffic flow
- Capital costs for transit projects eligible for assistance under 49 U.S.C 53
- Carpool projects, fringe and corridor parking facilities and programs
- Highway and transit research, development, technology transfer
- Capital and operating costs for traffic monitoring, management and control facilities and programs
- Surface transportation planning
- Development and establishment of management systems
- Environmental mitigation efforts
- Recreational trails projects
- Congestion pricing projects and strategies
- Construction of ferry boats and terminals
- Border infrastructure projects
- Development and implementation of State asset management plan for the NHS and similar activities related to the development and implementation of a performance based management program for other public roads
- Workforce development, training, and educational activities
- Infrastructure-based ITS capital improvements

The STP is allotted \$10.1 billion for 2014 from the Highway Account of the Highway Trust Fund. The federal share under this program is determined pursuant to 23 U.S.C. 120 with up to 90 percent for projects on the Interstate System and up to 80 percent for all other projects. For states that receive their appropriation of NHPP funds, two percent must be set-aside for state planning and research pursuant to 23 U.S.C. 505, a portion for the state's Transportation Alternatives Program pursuant to 23 U.S.C. 120, and 15 percent or more for off-system bridges⁹¹. After set-asides, fifty percent of a state's STP appropriation is obligated to the following areas within the state based on population size:

- Urbanized areas with population greater than 200,000
- Areas with population greater than 5,000 but no more than 200,000
- Areas with population of 5,000 or less

The remaining 50 percent may be used in any area of the state.

⁹¹ This is based on each state's 2009 Highway Bridge Program apportionment.

MAP-21 Funding Requirements

As identified earlier, MAP-21 brings with it a stronger focus on freight and its needs in order for the nation as a whole to be more competitive internationally. Furthermore, the ability of Florida's freight transportation projects to have accessibility to a diverse pool of funding and financing programs to enhance the State's freight network is essential. This increases the likelihood for freight transportation projects to be fully funded and programmed into the FDOT Work Program. To accomplish this, the State must be able to have access to federal financing and funding programs. This access is through understanding eligibility and other critical requirements of each of these programs to ensure that Florida can efficiently compete with other states for federal funds.



Several financing and funding programs have been identified above in which Florida can take advantage to help fund the State's freight network investments. Of those identified, there are specific programs that are administered and funded through the MAP-21 legislation which include the CMAQ Program, HSIP, NHPP, Railway-Highway Crossing Program, TIFIA Program, and STP. Development of Florida's FMTP, both the Policy and Investment Elements, was to allow the State to take advantage of freight transportation funding opportunities through MAP-21.

Increased Federal Share

Florida's FMTP was developed to be consistent with the requirements of 23 U.S.C. 167 allowing the USDOT to increase the maximum federal share for freight transportation projects identified in the FMTP up to 95 percent for projects on the Interstate System, and up to 90 percent for other projects that are consistent with Section 1116(a) and (c) under 23 U.S.C. 167. Projects must be identified in a state freight plan and demonstrate improvements to freight movements including making progress to freight performance targets established by a state pursuant to 23 U.S.C. 150(d). Eligible projects for increased funding under MAP-21 are identified within Section 1116(c) under 23 U.S.C. 167 and listed below:

- construction, reconstruction, rehabilitation, and operational improvements directly relating to improving freight movement high crash location (segment or intersection)
- intelligent transportation systems and other technology to improve the flow of freight
- efforts to reduce the environmental impacts of freight movement on the primary freight network
- geometric improvements to interchanges and ramps,
- railway-highway grade separation
- truck-only lanes
- climbing and runaway truck lanes
- truck parking facilities eligible for funding within Section 1401 under 23 USC 137
- real-time traffic, truck parking, roadway condition, and multimodal transportation information systems
- improvements to freight intermodal connectors
- improvements to truck bottlenecks

Apportionment

In addition to potential increases in federal share for eligible projects, MAP-21 also changed how the distribution of funds is calculated which impacts the total amount of federal assistance a state such as Florida can receive. Previously, each program had its own distribution formula and a set amount each state may receive from that specific program. Under MAP-21, a total apportionment is calculated for each state which then divides that amount among the individual programs it impacts. The FHWA is charged with division of the total amount authorized through MAP-21 amongst the states. For FY2013, each state will continue to receive the same apportionment as in FY2012. FY2014 follows the same division except

the FHWA may adjust the apportionment amounts to ensure that each state will receive at least 95 percent on the dollar amount towards its contributions to the Highway Account of the Highway Trust Fund⁹². After this initial division, the next division of apportioned funds takes places amongst each state's individual formula programs. **Table 17** describes the formulas used for programs that provide access to funds for freight enhancements in Florida.

Table 17: MAP-21 Program Apportionment

Program Name	Citation	Funding Formula
CMAQ Program	23 U.S.C. 104(b)(4)	Funds are equal to a state's apportionment, multiplied by the ratio of: $\frac{\text{State's FY09 CMAQ } \$}{\text{State's total FY09 apportionments}}$
HSIP	23 U.S.C. 104(b)(3)	After the net apportionment for the CMAQ and Metropolitan Planning ⁹³ Programs are removed, the remainder is divided based on the following proportions: 7.0 percent to HSIP 63.7 percent to NHPP 29.3 percent to STP
NHPP	23 U.S.C. 104(b)(1)	
STP	23 U.S.C. 104(b)(2)	
Railway Highway Crossings Program	23 U.S.C. 130	Funded through the HSIP apportionment. Railway Highway Crossings Program is based on current MAP-21 distribution to ensure that the national annual funds for the program is \$220 million

Source: Apportionment. FHWA. 2012

Public Private Partnerships

Federal and state financing and funding programs may not be able to cover all the costs for freight transportation projects. Many programs require funding matches to receive funds from the applicable program. Partnerships with private entities such as railroad companies, port authorities, terminal owners, freight transfer facility owners, and others can help alleviate gaps in funding for projects. Usually in conjunction with tolling or road pricing, the government can engage in funding partnerships with private entities. These arrangements are often categorized under the name Public Private Partnerships (P3s or PPPs) that involve negotiated roles for private sector entities contributing capital in partnership with the government, in exchange for rights to share or capture future revenue generated from the facilities. Advantages of these arrangements can include earlier construction than might be otherwise possible with only public funding or the capitalization of public assets, producing immediate revenues to the public sector in exchange for the future revenues associated with the facilities.

⁹² Apportionment. FHWA. 2012. <http://www.fhwa.dot.gov/map21/factsheets/apportionment.cfm>

⁹³ Not all programs are included in Table 10. The Metropolitan Planning Program is apportioned similar to the CMAQ Program.

Typical types of P3 arrangements include:

- Design/build (DB)
- Design/build/maintain (DBM)
- Design/build/operate (DBO)
- Design/build/operate/maintain (DBOM)
- Build/operate/transfer (BOT)
- Build/own/operate (BOO)
- Buy/build/operate (BBO)
- Developer finance
- Lease/purchase
- Turnkey

Florida is one of the nation's leaders in the use of public private partnerships (P3s) for transportation project delivery. P3s have become an integral part of FDOT's plans to deliver transportation infrastructure. While there are a number of challenges to delivering P3 projects, these challenges are not significantly different from other transportation projects. The statutory authority for the FDOT to undertake P3 projects is contained within Sections 334.30 and 339.2825, F.S. Under these statutes, FDOT can both accept unsolicited proposals and initiate its own procurements for P3 projects. Either way, FDOT must conduct a competitive procurement before a P3 project can be awarded. Pursuant to Sections 334.30(1), F.S., P3 projects must be: "... programmed into the adopted 5-year work program or projects increasing transportation capacity and greater than \$500 million in the 10-year Strategic Intermodal Plan."

Since 2007, FDOT has successfully completed five P3 projects with a project cost of approximately \$1.1 billion. **Table 18** describes these five projects.

Table 18: FDOT Completed P3 Projects

Project	Location	Executed	Project Completion	Est. Project Cost
I-75	Lee and Collier Counties	May 2007	September 2010	\$458 million
Palmetto Expressway	Miami-Dade County	September 2008	March 2012	\$190 million
I-95 Widening	Brevard County	March 2008	February 2012	\$200 million
I-95 Express Lanes, Phase 1	Miami-Dade County	January 2008	April 2010	\$139 million
US 1 Improvements	Miami-Dade and Monroe Counties	February 2008	February 2011	\$114 million

Source: *Public-Private Partnerships, FDOT, September 2014*

In addition to these completed projects, FDOT has executed agreements for 10 additional P3 projects, with an approximate value of \$5.7 billion. **Table 19** provides additional detail on these projects. FDOT recently procured the largest P3 in its history, the I-4 Ultimate project in Central Florida. The I-4 Ultimate project completely reconstructs 21 miles of I-4 from west of Kirkman Road in Orange County to east of State Road 434 in Seminole County.

Table 19: P3 Projects Under Contract and Development

Project	Location	Executed	Project Completion	Est. Project Cost
I-4 Ultimate	Orange and Seminole Counties	September 2014	2020/2021	\$2.3 billion
SR 79	Washington County	January 2013	April 2017	\$99 million
I-75	Lee County	September 2012	April 2015	\$72 million
SR 9B	Duval County	September 2012	October 2015	\$95 million
I-95	Brevard and Volusia Counties	August 2012	August 2016	\$126 million
I-4 Connector	Hillsborough County	January 2010	February 2014	\$425 million
Palmetto Section 5	Miami-Dade County	November 2009	June 2015	\$566 million
US 19	Pinellas County	October 2009	Spring 2015	\$115 million
Port of Miami Tunnel	Miami-Dade County	October 2009	Summer 2014	\$663 million
I-595 Improvements	Broward County	March 2009	Summer 2014	\$1.2 billion

Source: *Public-Private Partnerships, FDOT, September 2014*

The range of P3s is limited only by the innovation of the parties potentially involved and the state and federal laws governing ownership and control of transportation infrastructure facilities. These laws are evolving to enable the public sector to take greater advantage of the potential and the opportunities to use P3s in the future.

Local Funding Initiatives

Many freight projects are also funded at the local level. Cities and counties prioritize and fund many of the local improvements that impact “last mile” freight mobility. MPOs receive allocations and they prioritize projects in a variety of ways.

Local governments have several special taxation tools at their disposal for use in funding transportation projects. For example, local taxes for gasoline and gasohol vary from 10.8 cents to 19.1 cents in addition to a 2.071 cents/gallon pollution tax⁹⁴. Potential local taxation measures could include:

- Special districts
- Tax increment financing (TIF)
- Dedicated sales or excise taxes
- Dedicated property taxes
- Transportation reinvestment zones (TRZ)

While not a means of financing the entirety of projects, local matches are helpful for leveraging State and Federal sources. The availability of specific local finance options for freight transportation projects depends on the legislative and regulatory mandates for the local communities with regards to these finance options. The nature of some local freight improvements may offer some funding potential.

⁹⁴ Federation of Tax Administrators. February 2014.

Florida's Freight Project Delivery Process

State and federal funding sources, as well as matching funds from alternative sources such as P3s and local initiatives, allow for the design, development, and implementation of the state's investments in its freight network. These investments are directed through various statewide project delivery programs. The statewide project delivery programs that feed into the FDOT Work Program are administered through the FDOT Central Office located in Tallahassee. Three key FDOT project delivery programs include the Preservation, Safety, and Capacity Programs. Funds are allocated to the FDOT Central Office and FDOT District Offices based upon current statewide priorities. The District Office programs are managed by the FDOT District Offices and the Florida Turnpike Enterprise. District Office managed funds are allocated by statutory formula, while the SIS funding is needs based as identified previously and below. Each of these programs has selection and prioritization procedures to ensure funding is available for critical projects.

Preservation Program

Preservation of transportation facilities is a top priority in Florida as the condition of bridges within the State can impact freight mobility. The FDOT monitors the conditions of State's bridges and associated roadways on a scheduled basis. This program relies on performance-based measures to determine whether the conditions of its facilities meet statutory standards. The department also evaluates and schedules routine maintenance on the State Highway System to ensure that roadway conditions meet department standards. The Preservation Program focuses then on resurfacing and bridge repair and replacement projects.

In regards to resurfacing, the condition of Florida pavements is measured annually through the Pavement Condition Survey. The FDOT Pavement Management Section uses pavement condition ratings, pavement age/thickness, surface type, location, traffic volumes and other factors throughout the resurfacing program project prioritization process to determine the percentage of pavement needing to be resurfaced each year to ensure statutory compliance, calculate district resurfacing allocations, and identify potential resurfacing projects. The FDOT also includes future considerations such as pavement life cycle estimates, condition forecasts, planned construction projects and cost analysis as part of its assessment. Local governments also prioritize and fund resurfacing projects in a variety of ways.

Each bridge on a public transportation facility is required to be inspected at least once every two years. Florida ranks among the lowest in the nation for percent of bridges that are considered "structurally deficient." In Florida, this does not mean a bridge is unsafe. If a bridge is unsafe, the FDOT does not hesitate to close it immediately. Major repairs and bridge replacements are funded through the Bridge Work Plan. The Department allocates funding "off the top" to ensure bridges maintained by FDOT and identified as structurally deficient are provided with sufficient funds to repair or replace them within six years of identifying the deficiency. Project prioritization under the Bridge Work Plan first looks at all bridges in poor condition that need to be addressed including those in which public safety is a concern, and whether any bridges that are in good condition would benefit from early repairs to head off later expensive repairs. After a list of bridges for the plan is finalized, each bridge on the list is prioritized based on condition ratings and the following characteristics:

- Width is too narrow
- Inadequate vertical clearance
- Posted for weight restrictions
- Bridge or the roadway floods frequently

- Traffic has to reduce speed to cross the bridge due to the geometry of the bridge
- The amount of traffic using the bridge
- The length of the detour if the bridge were closed

From this prioritized list, bridge project selection will be based on available funds for bridges off the state system, which should be maintained by the local government. The federal government also provides some funding as a safety net for off system bridges⁹⁵.

Safety Program

Florida's priority commitment to highway safety has resulted in a steady decline in fatalities (since 2005) and serious injuries (since 2001). Many safety improvements made to address crashes also improve freight mobility. Safety improvements on Florida's highways are funded in a variety of ways. Many preservation and capacity projects include safety improvements that are not funded through the department's safety program. FDOT's Safety Program is primarily federally funded and includes infrastructure improvements such as the Highway Safety Improvement Program (HSIP).

For the HSIP, below are the specific criteria for project selection under this program:

- Benefit-Cost ratio
- High crash location (segment or intersection)
- Transparency Report (5 percent Report)
- Skid hazard elimination
- Strategic Highway Safety Plan Emphasis Areas
- Run off road mitigation
- Roadside obstacle elimination

The Safety Office evaluates all HSIP safety projects on state maintained roads using FDOT's Crash Reduction Analysis System Hub (CRASH) program. This web-based tool uses crash reduction factors based on historical data to estimate the expected reduction in crashes resulting from implementing a proposed safety improvement project. The program evaluates projects based on benefit-cost analysis.

The FDOT Rail and Motor Carrier Office addresses additional safety issues through the Railway-Highway Crossings Program (Section 130). This program:

- identifies public highway-rail grade crossing locations needing improvements
- enhances safety through installing or upgrading public highway-rail grade crossing warning devices, circuitry, and/or surfaces
- conducts corridor reviews identifying roadway and signalization improvements to reduce hazards
- identifies redundant and unnecessary public highway-rail grade crossings for potential elimination
- evaluates effectiveness of safety improvement projects⁹⁶

⁹⁵ Prioritizing Florida's Highway Investments, Systems Planning, FDOT
<http://www.dot.state.fl.us/planning/systems/mspi/pdf/Prioritizing%20Florida's%20Highway%20Investments%202013.pdf>

⁹⁶ For more information, please see the Rail Handbook, Rail and Motors Carrier Office, FDOT.
<http://www.dot.state.fl.us/rail/publications/handbook.pdf>

Capacity Program

The focus of the FDOT's Capacity Program has two main components: facilities designated on the SIS and non-SIS facilities. SIS funding is a significant aspect of the current FDOT freight project delivery process. For SIS facilities, objective criteria and thresholds were established to designate the SIS, many of which are already based on freight considerations. For example, freight criteria for highways include connectivity to major markets/economic regions or truck volume criteria. Commercial service airports are eligible for SIS designation, if they account for 0.25 percent of US total passenger or freight activity. Other hubs and corridors have similar thresholds⁹⁷. FDOT allocates funds for SIS projects throughout the State based on need of which identification of such needs is the result of cooperative planning efforts involving coordination between FDOT Central Office, FDOT District Offices, Florida Turnpike Enterprise, MPOs, Expressway Authorities, local governments, and modal partners from around the State. Once the needs of the SIS are identified and project costs are established, FDOT has the responsibility of determining the manner in which the identified projects will be prioritized and selected for funding for all modes on the SIS.

The SIS Capacity Prioritization Analyses take into account existing freight considerations. FDOT's Strategic Investment Tool (SIT) prioritizes and scores SIS highway projects based on the 2060 Florida Transportation Plan goals⁹⁸ using quantitative measures for each goal. SIT measures with a freight consideration are highlighted in red in **Figure 50**.

While the SIT is used to help prioritize highway projects, the non-highway modes also use freight considerations in their prioritization analyses. The following are examples of freight considerations used by the modes:

- Return on Investment (ROI) (all modes)
- Increased capacity for cargo (aviation)
- Delay reduction for freight movements (rail)
- Seamless intermodal connections (intermodal)
- Impact for throughput of cargo (seaports)
- Improved access/multimodal connectivity for cargo (seaports)
- Maximize existing infrastructure/workforce (spaceports)

During project selection, several factors are reviewed for each project including funding stipulations, funding availability, project timing/phasing, and geographic location.

Beyond SIS, there are non-SIS capacity enhancements that are administered through FDOT. Project needs are identified by FDOT District Offices in conjunction with local and regional transportation partners. These project priorities serve as the basis for the district-wide prioritization process. Upon completion of the District Office project prioritization process, projects are further analyzed to determine whether priorities can be funded. The District Offices consider all circumstances and factors to include:

- Geographic distribution
- MPO/local entity priority

⁹⁷ For more information, please see the SIS Brochure, Systems Planning Office, FDOT.
<http://www.dot.state.fl.us/planning/sis/Strategicplan/brochure.pdf>

⁹⁸ For more information, please see the 2060 Florida Transportation Plan website.
<http://www.2060ftp.org/>

- Project phasing/timing
- Local participation
- Funding availability

Figure 50: SIT Measures with Freight Considerations



An example non-SIS capacity enhancements is the Freight Connector Operational Quick Fix Initiative Program which funds both SIS and non-SIS projects if the non-SIS projects are located on the NHS. Another example is the EDTF, which is an economic incentive program created to alleviate transportation problems that adversely affect the decision of a specific company to locate, expand or remain in the State of Florida which would benefit non-SIS projects.

Other example non-SIS enhancements include the Seaport Investment Program, the ILC Infrastructure Support Program, and other programs identified previously. There are also a variety of federal programs available for funding projects in each of the modes. Each program contains specific criteria for eligibility and formal application processes used to request project funding.

Summary and Funding and Financing Challenges

The projects identified in the previous chapter can benefit from the diversity of federal and state programs to finance and fund necessary enhancements. Development of freight transportation improvements is not inexpensive. During the last two years, construction costs have risen five percent with total construction employment having risen by eight percent during the same time period. These costs are influenced by automation, construction industry capacity, and costs of major inputs including labor, materials, and fuel⁹⁹.

However, with such hefty price tags, freight transportation projects are more vulnerable to lack of funding opportunities. There are some potential problems facing existing funding sources and programs that add to the importance of the availability of diverse financing and funding mechanisms for Florida's freight transportation infrastructure.

Funding source challenges originate from limitations on established revenue sources used to fund grants and loans for statewide programs. As identified, a major source of funding for statewide transportation financing and funding programs is the State Transportation Trust Fund (STTF). One of the major revenue sources for the STTF are highway fuel taxes including the statewide highway fuel sales tax, the SCETS tax, and the fuel use tax and fees. Because fuel tax revenues are tied to the volume of fuel consumed, the fuel tax as a revenue mechanism is challenged by the trend towards increases in vehicle fuel economy. With federal mandates on auto makers to increase the average fleet efficiency in the future, and expanded coverage of these standards into vehicles classified as trucks, the effectiveness of the fuel tax in generating revenues is at risk. More-efficient vehicles require less fuel and therefore pay less tax for the same distances driven. As vehicles miles traveled (VMT) increases with population growth, the increased burden on the transportation infrastructure from the increased traffic likely faces decreased fuel tax revenues to pay for improvements to the system.

Fuel tax revenue generation is also reduced by the use of alternatively fueled vehicles such as propane, liquefied natural gas (LNG), and compressed natural gas (CNG). Hybrids and purely electric plug-in vehicles generate no fuel tax revenue at all. In addition, current trends reflect the increased use of multi-modal transportation, such as transit or from freight switching to rail and maritime transportation for longer distance shipments. Other issues concern the fluctuation of tax collections in areas that can be impacted by cycles of the real estate markets and the economy as a whole such as aviation fuel and state documentary stamp taxes. Collectively, these scenarios amplify the difficulty in maintaining the current basis for generating transportation-funding revenues.

The utilization of P3s has helped the state substantially in the completion of several large transportation projects, with many more now under construction. However, P3s are not a mechanism that will solve all of Florida's transportation infrastructure finance challenges. The number of opportunities financially attractive to the private sector will be a subset of Florida's transportation system needs, and the less financially-attractive, yet important links will remain the responsibility of the public sector.

⁹⁹ Florida Transportation Trends and Conditions. FDOT. 2013.

Next Steps

Trends and recent history are excellent predictors of what can be expected in the future. Florida's freight volume increase is anticipated to be even higher than national projections. The challenge is to be prepared with a safe, efficient, multimodal freight transportation system, maintained and expanded to move the anticipated growth in freight volumes.

There are several likely scenarios which have a high probability for Florida. One, population will continue to grow. Florida has a temperate climate which is attractive.

Two, the agricultural industry and other existing industries will continue to grow. As the world population continues to increase so will the demand for food. Further, increasing logistics costs and the demand for higher skilled labor is prompting a rebounding or re-shoring of manufacturing in the U.S. Florida possesses the multimodal freight transportation infrastructure and skilled labor to support this trend. Additionally, some new industries are moving to Florida. These include advanced manufacturing and life sciences, as well as new technologies being employed in many existing industries such as logistics and distribution and agri-business.

Three, selective seaports in Florida will likely increase their volumes for several reasons. The completion of the Panama Canal expansion in 2016 and the shifting of global trade routes will continue to foster competition for the movement of freight. Florida's seaports offer access to both national and international markets, and enhances Florida's role as a gateway to the Western Hemisphere.



Source: Panama Canal Authority, 2014

Florida is being proactive in its freight future. To ensure that Florida is well-positioned to be a leader in freight mobility and trade:

- **FDOT will continue to host the Florida Freight Leadership Forum and other outreach as needed to gain public and private stakeholder input**
- **FDOT will update the list of freight projects annually to maintain a dynamic plan**
- **FDOT will continue to monitor implementation performance on the Freight Mobility and Trade Plan so we can measure our success**
- **FDOT will build upon the success of the Trade and Logistics Academy by offering additional sessions and advanced modules in the future**
- **FDOT has begun to research opportunities to better accommodate freight in Florida through design standards to proactively correct potential issues**
- **FDOT has begun to expand on freight data collection efforts to ensure better and more consistent freight planning statewide**
- **FDOT has developed full time Freight Coordinator positions to further institutionalize freight planning at the Department, and to work with agency partners to promote freight**
- **FDOT will continue to work with partner agencies to educate and show progress through FreightMovesFlorida.com**

These implementation efforts show the significant commitment FDOT has made to being a leader in freight mobility. The Office of Freight, Logistics and Passenger Operations has repeatedly been recognized for providing a multimodal, freight-centric focus on the state's infrastructure and policy needs. The completion of the FMTP Investment Element will allow further progress toward funding strategic investments in freight infrastructure based on statewide multimodal priorities. FDOT is poised to continue to meet challenges and take advantage of new opportunities in freight mobility.

FDOT is currently developing a separate report to document performance regarding the implementation of the FMTP. This includes both the duties and responsibilities established in the Policy Element, as well as the investment needs detailed in the Investment Element. This report is in addition to the MAP-21 Performance Report documenting the Department's accomplishments toward advancing national goals submitted in 2013 and 2014.

Today is yesterday's future and Florida has the freight system today that was or was not planned for yesterday. We cannot change that. We can only strive to plan better for tomorrow. The collective knowledge and wisdom of those who participated throughout this planning process gives us confidence in the direction we have planned.

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Appendix 1: MAP-21 Compliance

The freight provisions of the “Moving Ahead for Progress in the 21st Century Act” (MAP-21) underscored that Florida is a leader in freight issues through its ongoing work in developing a FMTP. Together the Policy and Investment Elements of the FMTP addresses the requirements of MAP-21 legislation. Passed by Congress on June 29, 2012, the Act encourages states to develop comprehensive freight plans to guide state investments. Freight projects must be identified in a state plan to qualify for the increased federal funding share. Under MAP-21, state freight plans must include the following required components addressed in **Table 20**. Additional recommended components are addressed in **Table 21**.

Table 20: MAP-21 Required Components and Location Addressed in the FMTP

Required	Addressed in FMTP
An identification of significant freight system trends, needs, and issues with respect to the State;	Investment Element Chapter 2
A description of the freight policies, strategies, and performance measures that will guide the freight-related transportation investment decisions of the State;	Policy Element Chapter 4
A description of how the plan will improve the ability of the State to meet the national freight goals established under section 167 of title 23, United States Code;	Investment Element Chapter 1
Evidence of consideration of innovative technologies and operational strategies, including intelligent transportation systems, that improve the safety and efficiency of freight movement;	Investment Element Chapter 4
In the case of routes on which travel by heavy vehicles (including mining, agricultural, energy cargo or equipment, and timber vehicles) is projected to substantially deteriorate the condition of roadways, a description of improvements that may be required to reduce or impede the deterioration; and	Investment Element Chapter 2
An inventory of facilities with freight mobility issues, such as truck bottlenecks, within the State, and a description of the strategies the State is employing to address those freight mobility issues.	Investment Element Chapter 2 and Chapter 5

Table 21: MAP-21 Recommended Components and Location Addressed in the FMTP

Recommended	Addressed in FMTP
A discussion of the role that freight transportation plays in the State's overall economy. This section would identify what industries are most important to the State, and what supply chains (including the transportation modes that support them) are critical to the State's industries. In particular, it would indicate what supply chains involving the State are important to exports, whether the exports of that State or of other States.	Policy Element Chapter 1
A complete inventory of the State's freight transportation assets. This would include a description of the State's transportation infrastructure in all freight-carrying modes, the warehousing and intermodal facilities located in the State, and the freight gateways and corridors that are located in or that pass through the State	Policy Element Chapter 2
An analysis of the conditions and performance of the State's freight transportation system. This analysis would include the identification of bottlenecks in the freight transportation system that cause delays and unreliability in freight movements, as well as other specific locations that are in a poor state of good repair, create safety hazards, or create other performance problems.	Investment Element Chapter 2
A 20-year forecast of freight transportation demands, broken down by mode of transportation and commodity classification, and showing demands for transportation of freight coming into the State, outbound from the State, passing through the State between outside origin and destination points, and moving intrastate between origin and destination points within the State	Policy Element Chapter 2
An analysis of the strengths of the State's freight system that it wishes to preserve and the problems that it wishes to solve	Investment Element Chapter 2
A discussion of the State's decision-making process on freight transportation improvements, including how the State conducted outreach to stakeholders and the public and how the State prioritized the various strategies, projects, and policy changes it considered	Investment Element Chapter 4
A presentation of the State's complete freight improvement strategy, with different improvements ranked in order of priority (or grouped into higher and lower priority groups)	Investment Element Chapter 5
A comprehensive implementation plan, showing both short-term and long-term strategies, and including an approximate time schedule for each proposed freight improvement	Not Addressed in the FMTP ¹⁰⁰

¹⁰⁰ FDOT prepared an Implementation Guide following the development of the FMTP Policy Element to assign responsibility for implementation of each strategy. For more information, please see <http://www.freightmovesflorida.com/docs/default-source/fmtpdocs/fdot-fmtp-implementation-guide.pdf>

Appendix 2: Glossary

Many of the terms and acronyms used in this Policy Element are not intended for a non-technical audience, and therefore require some description. Rather than taking up too much space in the document, this terminology is presented here. Also included is a list of the key acronyms used in the document for quick reference¹⁰¹.

2060 Florida Transportation Plan (FTP) - the state's long-range transportation plan and provides guidance for transportation in Florida for the next 50 years. The 2060 FTP establishes six goals, with long-range objectives associated with each of the goals. The FTP provides guidance for the SIS and the FDOT modal programs, each of which has improvement plans.

Accessibility (a dimension of mobility) – conceptually the ease in engaging in activities –mobility performance measure typically associated with this mobility dimension are

1. Time to reach a destination
2. Modal choices
3. Connectivity

American Association of State Highway and Transportation Officials (AASHTO) - a nonprofit, nonpartisan association representing highway and transportation departments in the 50 states, the District of Columbia, and Puerto Rico. It represents all five transportation modes: air, highways, public transportation, rail, and water. Its primary goal is to foster the development, operation, and maintenance of an integrated national transportation system. <http://www.transportation.org/Pages/default.aspx>

Annual Average Daily Traffic (AADT) - The total volume of traffic on a highway segment for one year, divided by the number of days in the year.

Automobile (auto) – a travel mode that includes all motor vehicle traffic using a roadway except transit buses (includes such vehicles as trucks, recreational vehicles, motor cycles and tour buses) (HCM definition)

Average Annual Daily Truck Traffic (AADTT) - The total volume of truck traffic on a highway segment for one year, divided by the number of days in the year.

Backhaul - The process of a transportation vehicle (typically a truck) returning from the original destination point to the point of origin. A backhaul can be with a full or partially loaded trailer.

Barge - The cargo-carrying vehicle that inland water carriers primarily use. Basic barges have open tops, but there are covered barges for both dry and liquid cargoes.

Bottleneck - A section of a highway or rail network that experiences operational problems such as congestion. Bottlenecks may result from factors such as reduced roadway width or steep freeway grades that can slow trucks.

¹⁰¹ Sources of definitions include the FDOT Modal Offices, FHWA, FAA, and websites of various individual companies and organizations referenced.

Breakbulk Cargo - Cargo of non-uniform sizes, often transported on pallets, sacks, drums, or bags. These cargoes require labor-intensive loading and unloading processes. Examples of breakbulk cargo include coffee beans, logs, or pulp.

Broker - A person whose business it is to prepare shipping and customs documents for international shipments. Brokers often have offices at major freight gateways, including border crossings, seaports, and airports.

Bulk Cargo - Cargo that is unbound as loaded; it is without count in a loose unpackaged form. Examples of bulk cargo include coal, grain, and petroleum products.

Capacity - The physical facilities, personnel and process available to meet the product of service needs of the customers. Capacity generally refers to the maximum output or producing ability of a machine, a person, a process, a factory, a product, or a service. The maximum number of vehicles that reasonably can be expected to traverse a point or a uniform section of roadway during a given time period under prevailing conditions

CareerSource Florida - the statewide, business-led workforce policy board. Charged with overseeing the state's workforce system, CareerSource Florida develops strategies to help Floridians enter and advance in the workforce while supporting economic development priorities and strengthening the state's business climate. For more information: <http://careersourceflorida.com/>

Carrier - A firm which transports goods or people via land, sea or air.

Centerline Miles - The length of a road, in miles.

CFS - Commodity Flow Survey

Class 1 Railroads - those that exceed a certain revenue level that is adjusted yearly by the Surface Transportation Board. For 2011, the level was \$433.2 million; Class 2, \$34.7 to \$433.2 million; and Class 3, less than \$34.7 million.

Commercial service airports - Publicly owned airports that have at least 2,500 passenger boardings each calendar year and receive scheduled passenger service

Commodity - An Item that is traded in commerce. The term usually implies an undifferentiated product competing primarily on price and availability.

Compressed Natural Gas (CNG) – a natural gas under pressure which remains clear, odorless, and non-corrosive. Although vehicles can use natural gas as either a liquid or a gas, most vehicles use the gaseous form compressed to pressures above 3,100 pounds per square inch.

Congestion (congested conditions) (auto) – a condition in which traffic demand is sufficient to cause the LOS to be at or below FDOT's LOS standard (note: congestion is not necessarily related to speed or delay)
Adjectives describing the severity of congestion are:

1. Heavy
2. Severe

Adjectives describing the types of congestion are:

1. Non-recurring
2. Recurring

Container – a large, standard sized metal box into which cargo is packed for shipment

Container on Flatcar (COFC) - Containers resting on railway flatcars without a chassis underneath.

Containerization - A shipment method in which commodities are placed in containers, and after initial loading, the commodities per se are not re-handled in shipment until they are unloaded at destination.

Containerized Cargo - Cargo that is transported in containers that can be transferred easily from one transportation mode to another.

Corridor (auto) – (1) a set of essentially interrelated, parallel transportation facilities for moving people and goods between two points; (2) a geographic area used for the movement of people and goods

Delay (auto) – (1) additional travel time beyond some norm (e.g., LOS C in urbanized areas, LOS B elsewhere) experienced by a traveler; (2) any additional travel time experienced by a traveler

Demand – the number of persons or vehicles desiring to use a mode or facility

Demand to capacity ratio – see volume to capacity ratio

Distribution Center (DC) - The warehouse facility which holds inventory from manufacturing pending distribution to the appropriate stores.

Double-stack - Railcar movement of containers stacked two high.

Drayage - Transporting of rail or ocean freight by truck to an intermediate or final destination; typically a charge for pickup/delivery of goods moving short distances (e.g., from marine terminal to warehouse).

Emerging SIS – These generally carry lower volumes of people and freight, but are located in fast growing areas or rural areas and therefore may grow in importance in the future. Emerging SIS facilities are fully eligible for FDOT SIS funding sources, but are labeled separately to encourage proactive planning.

Enplanements – passenger boardings at airports

Enterprise Florida - the official economic development organization for the State of Florida with the mission to help innovative, high-growth businesses start up, locate, or expand in Florida. For more information: <http://www.eflorida.com>

Federal Highway Administration (FHWA) - The Federal Highway Administration (FHWA) provides stewardship over the construction, maintenance and preservation of the Nation’s highways, bridges and tunnels. FHWA also conducts research and provides technical assistance to state and local agencies in an effort to improve safety, mobility, and livability, and to encourage innovation. <http://www.fhwa.dot.gov/>

Flatbed - A trailer without sides used for hauling machinery or other bulky items.

Florida Chamber of Commerce - Through research, advocacy and leadership, the Florida Chamber Foundation, the Florida Chamber of Commerce and the Florida Chamber Political Operations work together to help make our vision of Florida’s future a reality. <http://www.flchamber.com/>

Florida Chamber Six Pillars – The framework developed by the Florida Chamber Foundation to accomplish the goals of the Florida Chamber

Florida Department of Agriculture and Consumer Services- The mission of the Department of Agriculture and Consumer Services is to safeguard the public and support Florida's agricultural economy
<http://www.freshfromflorida.com/>

Florida Department of Economic Opportunity (DEO) - The Florida Department of Economic Opportunity promotes economic opportunities for all Floridians through successful workforce, community, and economic development strategies. <http://www.floridajobs.org/>

Florida Department of Economic Opportunity's Strategic Plan for Economic Development - DEO's Division of Strategic Business Development, as outlined in Florida Statutes, 20.60, is required to create a five year statewide strategic plan designed to help guide the future of Florida's economy.

Florida Department of Transportation (FDOT) - An executive agency, which means it reports directly to the Governor. FDOT's primary statutory responsibility is to coordinate the planning and development of a safe, viable, and balanced state transportation system serving all regions of the state, and to assure the compatibility of all components, including multimodal facilities. A multimodal transportation system combines two or more modes of movement of people or goods. Florida's transportation system includes roadway, air, rail, sea, spaceports, bus transit, and bicycle and pedestrian facilities.
<http://www.dot.state.fl.us/>

Florida Seaport Transportation and Economic Development (FSTED) - A public entity created by statute and charged with implementing the state's economic development mission by facilitating the implementation of seaport capital improvement projects at the local level. The Council was created within the Department of Transportation and consists of the port directors of the 15 publicly owned seaports and a representative from the Department of Transportation and the Department of Economic Opportunity. <http://www.flaports.org/>

Florida Trade and Logistics Study – Research completed by the Florida Chamber Foundation that began many of the discussions on freight in Florida (2010, technical report 2011)
http://www.flchamber.com/wp-content/uploads/FloridaTradeandLogisticsStudy_December20102.pdf

Florida Transportation Vision for the 21st Century - Florida Department of Transportation Secretary Ananth Prasad has unveiled the Florida Transportation Vision for the 21st Century. The Plan implements Governor Scott's goals to spur private sector job creation and to get our economy growing by having the best transportation and infrastructure system in the nation.
<http://www.dot.state.fl.us/planning/vision/default.shtm>

Florida's Strategic Intermodal System (SIS) - Transportation system created by the Florida Legislature in 2003 to include statewide and regionally significant facilities and services, containing all forms of transportation for moving both people and goods, including linkages that provide for smooth and efficient transfers between modes and major facilities. <http://www.dot.state.fl.us/planning/sis/>

Foreign Trade Zone (FTZ) - a geographical area where commercial merchandise, both domestic and foreign, receives the same U.S. Customs treatment it would as if it were outside the U.S.. Commodities may be held, assembled, repackaged, sorted, labeled, etc. in the FTZ without being subject to Customs duties, tariffs, or other ad valorem taxes.

For-hire Carrier - Carrier that provides transportation service to the public on a fee basis.

Federal Railroad Administration (FRA) - The Federal Railroad Administration (FRA) was created by the Department of Transportation Act of 1966. It is one of ten agencies within the U.S. Department of Transportation concerned with intermodal transportation. <http://www.fra.dot.gov/>

Freight – Any commodity being transported.

Freight Mobility and Trade Plan - Approved on April 27, 2012 by signature of Governor Richard L. Scott, Florida House Bill 599 requires the Florida Department of Transportation to develop the Freight Mobility and Trade Plan.

General Aviation (GA) airports - While not specifically defined in Title 49 USC, are commonly described as General Aviation Airports. This airport type is the largest single group of airports in the U.S. system. The category also includes privately owned, public use airports that enplane 2500 or more passengers annually and receive scheduled airline service.

GPS - Global Positioning System

Heavy congestion (auto) - a situation in which traffic demand is sufficient to cause the level of service to be below FDOT's LOS standard

Heavy vehicle (auto) – a vehicle with more than four wheels touching the pavement during normal operation

Highway – a general term for denoting a public way for purposes of vehicular and people travel, including the entire area with the right-of-way

Highway Trust Fund - The Highway Trust Fund is the source of funds for the Federal-Aid Highway Program

Hours of Service - Ruling that stipulates the amount of time a driver is allotted to work.

Hub - A common connection point for devices in a network. Referenced for a transportation network as in "hub and spoke" which is common in the airline and trucking industry.

Indicator (mobility performance measure) – a mobility performance measure which primarily shows a trend over time and is not used to achieve a goal or objective or used in a decision making process

Intermodal– Carriage by more than a single mode with a transfer(s) between modes

Intermodal Logistics Center (ILC) - “ a facility or group of facilities serving as a point of intermodal transfer of freight in a specific area physically separated from a seaport where activities relating to transport, logistics, goods distribution, consolidation, or value-added activities are carried out and whose activities and services are designed to support or be supported by conveyance or shipping through one or more seaports.” Section 311.101(2), F.S.

ITS - Intelligent Transportation System

Lane Miles - The product of centerline miles and number of lanes. A four-lane road, two miles long has eight lane miles.

Leased – A railroad may lease from another company and pay a yearly rate to have control of the railroad line

Less-Than-Containerload/Less-Than-Truckload (LCL/LTL) - A container or trailer loaded with cargo from more than one shipper; loads that do not by themselves meet the container load or truckload requirements.

Level of service (LOS) – a quantitative stratification of the quality of service to a typical traveler of a service or facility into six letter grade levels, with “A” describing the highest quality and “F” describing the lowest quality

Lift-on/Lift-off (lo/lo) Cargo - Containerized cargo that must be lifted on and off vessels and other vehicles using handling equipment.

Liquid Bulk Cargo - A type of bulk cargo that consists of liquid items, such as petroleum, water, or liquid natural gas.

Liquid Natural Gas (LNG) - Cooling natural gas to about -260°F at normal pressure results in the condensation of the gas into liquid form

Logistics - All activities involved in the management of product movement; delivering the right product from the right origin to the right destination, with the right quality and quantity, at the right schedule and price.

Metropolitan Planning Organization (MPO) - Responsible for planning, programming and coordination of federal highway and transit investments in urbanized areas.

Mobility – The degree to which the demand for the movement of people and goods can be satisfied. Mobility is measured in Florida by the quantity, quality, accessibility, and utilization of transportation facilities and services.

Mobility performance measure – (1) a metric which quantitatively tells us something about mobility; (2) a mobility metric directly tied to achieving a goal or objective or used in a decision making process

Modal Share – The percentage of freight or passengers moved by a particular type (mode) of transportation.

Mode – Any one of the following means of moving people or goods: aviation, bicycle, highway, paratransit, pedestrian, pipeline, rail (commuter, intercity passenger, and freight), transit, space, and water.

Motor carrier – A firm engaged in providing commercial motor freight or long distance trucking

Moving Ahead for Progress in the 21st Century Act (MAP-21) - On July 6, 2012, President Obama signed into law a new two year transportation reauthorization bill

Multimodal – more than one travel mode potentially including the four highway modes (auto, bicycle, bus, pedestrian), aviation, rail, seaports, and transit

National Highway System (NHS) – Established by Congress, the National Highway System consists of roadways important to the nation's economy, defense, and mobility.

National Network - The Surface Transportation Assistance Act of 1982 authorized the establishment of a national network of highways designated for use by large trucks.

Need – A demand for a mobility improvement which has been identified based on accepted and adopted standards and other assumptions (e.g., land use) and documented in a formal long-range or master plan.

NHS - Nation Highway System

Non-recurring congestion (auto) – congestion caused by unexpected disruptions or other events, particularly lane blocking incidents

Office of Freight, Logistics and Passenger Operations (FLP) - In recognition of the significant role that freight mobility plays as an economic driver for the state, an Office of Freight, Logistics, and Passenger Operations has been created at FDOT. The office will act as a tool to better connect, develop, and implement a freight planning process that will maximize the use of the existing facilities and integrate and coordinate the various modes of transportation, including the combined utilization of both government-owned and privately-owned resources.

Office of Policy Planning - The functions of the Office of Policy Planning (OPP) are to develop, document, and monitor a statewide and metropolitan planning process; develop, publish, and distribute the Florida Transportation Plan, including necessary support documents; develop transportation policy alternatives and recommendations; provide necessary coordination on transportation policy issues with other agencies and the public; and identify, analyze, and document long range trends and conditions, perform various economic and demographic analyses, and evaluate and report on transportation system performance.

Port Authority - State or local government that owns, operates, or otherwise provides wharf, dock, and other terminal investments at ports.

Private Fleet - Carrier that provides transportation service for a private company.

Quality (a dimension of mobility) - conceptually how well people or goods are being transported – mobility performance measure typically associated with this mobility dimension are

1. Average travel speed
2. Travel time reliability
3. Vehicle delay
4. Level of service

Quality of service – a user based perception of how well a service or facility is operating

Quantity (a dimension of mobility) - conceptually the number of people or goods being transported – mobility performance measures typically associated with this mobility dimension are

1. Person trips
2. Person miles traveled
3. Vehicle miles travel
4. Truck miles traveled
5. Tonnage

Rail Siding - A very short branch off a main railway line with only one point leading onto it. Sidings are used to allow faster trains to pass slower ones or to conduct maintenance.

Recurring congestion (auto) – the routine presence of large numbers of vehicles on a facility

Return on Investment (ROI) - A performance measure used to evaluate the efficiency of an investment or to compare the efficiency of a number of different investments.

Reverse Logistics - A specialized segment of logistics focusing on the movement and management of products and resources after the sale and after delivery to the customer. Includes product returns and repair for credit.

Roll-on/Roll-off (ro/ro) Cargo - Wheeled cargo, such as automobiles, or cargo carried on chassis that can be rolled on or off vehicles without using cargo handling equipment.

Severe congestion (auto) – a condition in which traffic demand exceeds the capacity

Shipper - Party that tenders goods for transportation.

Short-sea Shipping - Also known as coastal or coastwise shipping, describes marine shipping operations between ports along a single coast or involving a short sea crossing.

Soft Infrastructure (air cargo) - The basic institutions of an air cargo economy beyond the physical transportation network, including but not limited to freight forwarders, international banks and consulates, and U.S. Customs and Border Protection.

Stable flow – a flow of traffic on freeways which is not stop and go

Strategic Intermodal System (SIS) - The transportation system comprised of facilities and services of statewide and interregional significance, including appropriate components of all modes. Established in 2003 by the Florida Legislature, the SIS is a statewide network of high-priority transportation facilities, including the State's largest and most significant commercial service airports, spaceport, deepwater seaports, freight rail terminals, passenger rail and intercity bus terminals, rail corridors, waterways, and highways.

Stakeholders – Individuals and groups with an interest in the outcomes of policy decisions and actions.

State Highway System – A network of approximately 12,000 miles of highways owned and maintained by the State or state-created authorities. Major elements include the Interstate, Florida's Turnpike, and other toll facilities operated by transportation authorities and arterial highways.

Supply Chain - Starting with unprocessed raw materials and ending with final customer using the finished goods.

Systems Planning Office - The major responsibilities of the Systems Planning Office are to implement the Strategic Intermodal System (SIS) through the development of the SIS Needs, Cost Feasible and Ten Year Project Plans and Work Program; provide policies, procedures, tools, training and technical assistance for Statewide Programs in transportation systems computer modeling, growth management analyses and impact, highway interchange justification and modification analyses, highway access management, and transportation level of service analyses.

Third-party Logistics (3PL) Provider - A specialist in logistics who may provide a variety of transportation, warehousing, and logistics-related services to buyers or sellers. These tasks were previously performed in-house by the customer.

Throughput – the maximum number of people or vehicles that reasonably can be expected to traverse a point or a uniform transportation facility section during a given time period under prevailing conditions

Ton-mile - A measure of output for freight transportation; reflects weight of shipment and the distance it is hauled; a multiplication of tons hauled by the distance traveled.

Trackage Rights – A railroad that own the line rights, but allows another company to operate over certain sections of its track

Trailer on Flatcar (TOFC) - Transport of trailers with their loads on specially designed rail cars.

Transloading - Transferring bulk shipments from the vehicle/container of one mode to that of another at a terminal interchange point.

Transportation Research Board (TRB) - Transportation practitioners, researchers, public officials, and other professionals need credible, high-quality information and research results to address the transportation challenges of the 21st century.

Travel time – the total time spent from one point to another

Travel time reliability – (1) the percent of trips that succeed in accordance with a predetermined performance standard for time or speed; (2) the variability of travel times that occur on a facility or a trip over a period of time

Travel time variability – see travel time reliability

Truckload (TL) - Quantity of freight required to fill a truck, or at a minimum, the amount required to qualify for a truckload rate.

Twenty-foot Equivalent Unit (TEU) - The 8-foot by 8-foot by 20-foot intermodal container is used as a basic measure in many statistics and is the standard measure used for containerized cargo.

Utilization (a dimension of mobility) - conceptually how efficiently the system being used– mobility performance measure typically associated with this mobility dimension are

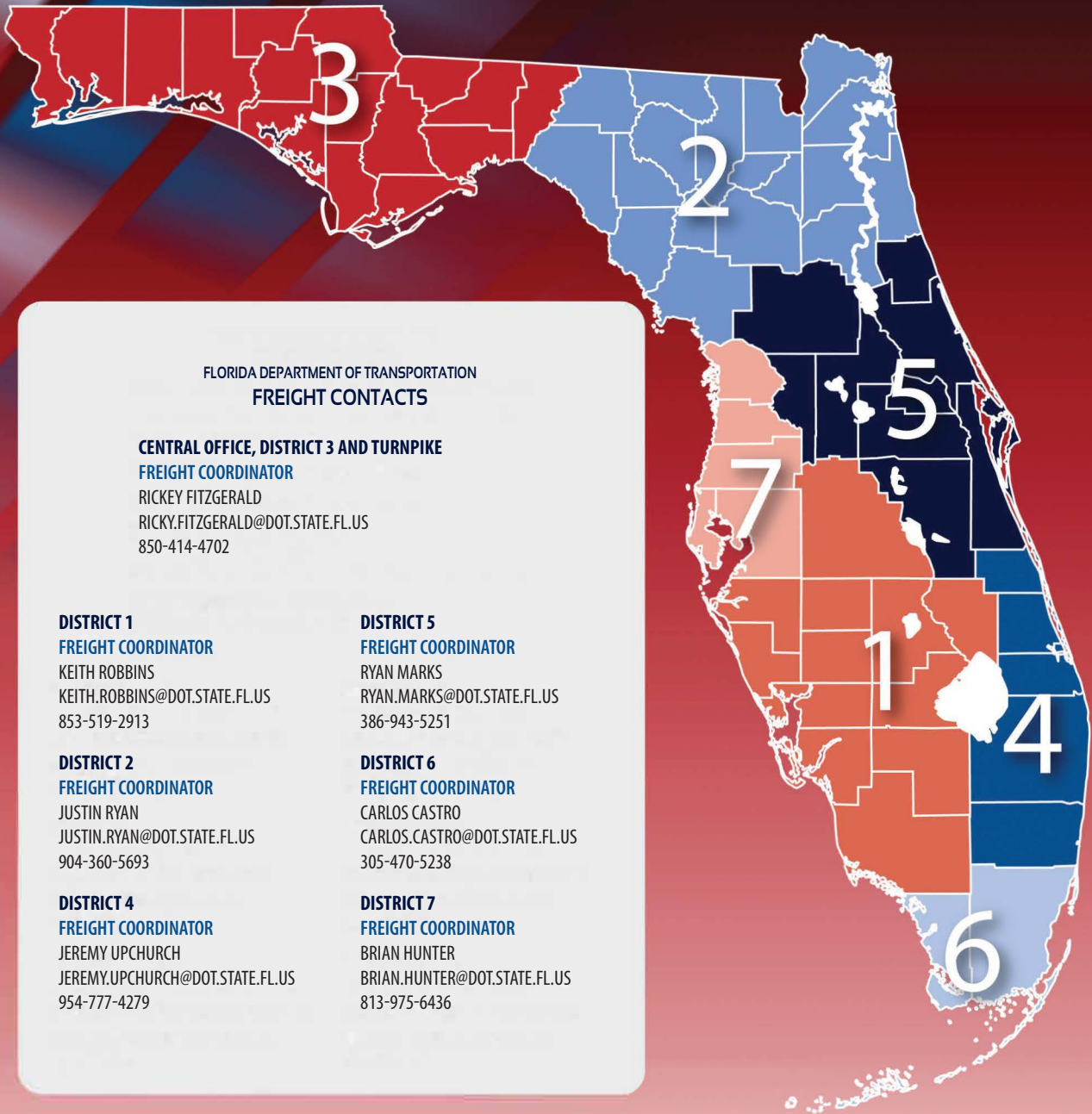
1. Volume to capacity ratios
2. Percent miles severely congested
3. Percent travel severely congested

Vehicle Miles of Travel (VMT) - A unit to measure vehicle travel made by a private vehicle, such as an automobile, van, pickup truck, or motorcycle.

Volume to capacity ratio – the ratio of demand to capacity

Work Program – The five-year listing of all transportation projects planned for each fiscal year by the Florida Department of Transportation (FDOT), as adjusted for the legislatively approved budget for the first year of the program.

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