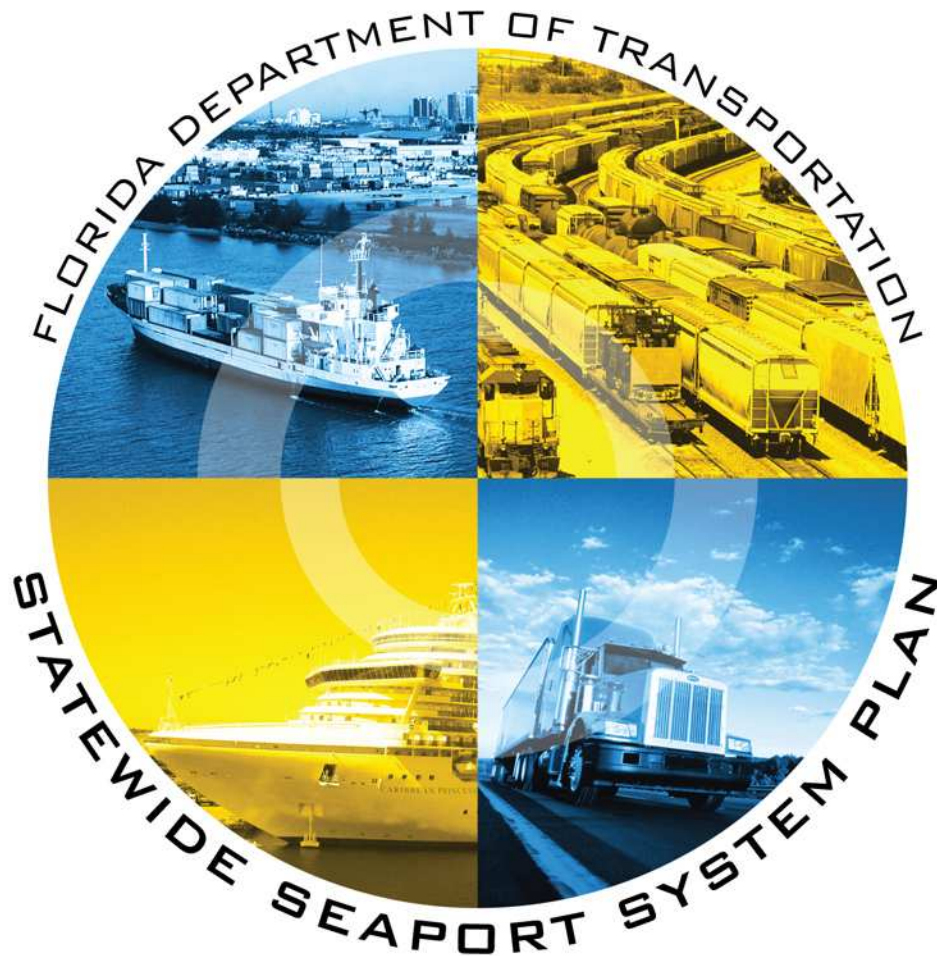

FLORIDA STATEWIDE SEAPORT SYSTEM PLAN



DRAFT FINAL REPORT

OCTOBER 13, 2010

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1.0 Background

1.1 Florida's Ports Provide Critical Economic and Transportation Benefits

Florida is served by fourteen publicly-owned deepwater seaports. Over 98 percent of Florida's population is within 50 miles of a seaport. Florida's lifestyle flows through its seaports as almost everything Floridians wear, eat, or use in their daily lives flows through a seaport. Collectively, they move a variety of cargo such as apparel, automobiles, cement, computer parts, fertilizer, fresh and frozen foods, lumber, and petroleum.

Some ports specialize in specific commodities while others serve a diverse market. In addition to cargo movement, half of the ports also provide service to passengers with single- and multi-day cruises. This ready access to water transportation has afforded many communities the opportunity to develop industry (cargo) and tourist (passenger) operations that otherwise would not exist.

This extensive and diversified seaport system is a major driver for the state's economy, as well as an irreplaceable component of its transportation system.

Economic Benefits

Research completed by FDOT in 2006 found that every \$1 in state funds spent for seaports results in \$6.90 in economic benefits to the state.¹ Subsequent analyses performed using the FDOT Seaport System Planning Framework tool confirmed this level of benefit for new capacity projects. Maintenance projects and bottleneck elimination projects, which allow existing facilities and assets to function at their maximum capacity, tend to generate even higher economic benefits per dollar invested. This clearly demonstrates an important premise, which is at the heart of this Seaport System Plan: namely, that investments in Florida's seaports - whether by the ports themselves, or by private sector partners, or by other public agencies -- represent a good business decision for the state of Florida.

Further research completed by the Florida Ports Council in 2009 found that Florida's seaport system cargo activity provides 550,000 direct and indirect jobs throughout Florida, including 100,000 port-related jobs and 450,000 user-related jobs, amounting to \$66 billion

¹ Evaluate Florida's 14 Deepwater Seaports' Economic Performance and the Return on Investment of State Funds, Cambridge Systematics, Inc., 2006.

in business output and \$24 billion in personal income.² Cruise operations generated an additional 127,000 jobs³.

Some of the economic benefit of Florida's seaports is in direct employment related to the actual operations of marine terminals and directly-related off-port activities. But much of the benefit is because Florida's ports provide efficient waterborne transportation access to and from international and domestic U.S. markets, creating value for Florida's producers and consumers, which is reflected in greater business activity, employment, wages, and taxes. By providing a high level of access to national and global markets, Florida's ports increase the state's ability to retain, grow, and attract businesses and industries dependent on efficient waterborne transportation.

Transportation Benefits

Florida's ports function as part of a larger multi-modal transportation network, in which the functions of waterborne transportation are closely integrated with highway transportation, rail transportation, and (in the case of cruise passengers) air transportation. A multi-modal transportation system allows for the most effective and efficient movement of passengers and freight.

Because of its seaports, many commodities produced and consumed in Florida can be moved by water instead of by surface transportation modes. That is, materials and products that would otherwise be moved to and from Florida via highway or rail can instead move via water. For example, fuel products can be barged via the Gulf of Mexico, rather than via land modes, at far lower cost.

While ports can produce local concentrations of truck and rail activity, these effects are offset by the system-wide benefits they provide, in the form of reduced surface transportation miles of travel and associated impacts – congestion, system maintenance, safety, and air quality. Without Florida seaports, goods destined for Florida consumers, as well as goods Florida exports, would be moved greater distances on the highway and rail network in order to get to market, resulting in greater highway congestion than we have today.

1.2 Seaport System Planning and Funding

Historically, each of Florida's ports created their own unique governance and operating structure. Each port was developed over time, in accordance with the needs of their local area. This has resulted in differing operating structures, relationships to each other, and relationships to local, regional and state governments in different areas of the state. Examples of this include:

² Martin & Associates, Inc. for Florida Ports Council, 2009.

³ Martin & Associates, Inc. for Florida Ports Council, 2009.

- 1 • Each of Florida's ports prepares its own individual master plan. Each port has its own
2 adopted mission, and is accountable to its own Board. Each port collects revenues and
3 makes investment decisions according to its own business strategies and requirements.
- 4 • To some extent, the ports function independently of each other, serving local/regional
5 needs, or unique gateway markets, or specialized niche markets and customers. In
6 some markets, they also compete with each other for the same business, particularly for
7 high-value cruise and container markets.
- 8 • Florida's ports and the state cooperate on matters of mutual interest, and this
9 cooperation is codified in Chapter 311 of the Florida Statutes, which established the
10 duties of the Florida Seaport Transportation and Economic Development Council
11 (FSTED) Program. The FSTED Council is made up of the Directors of the 14 deepwater
12 seaports, the Secretary of Transportation, the Secretary of the Department of
13 Community Affairs and the Executive Director of the Governor's Office of Trade,
14 Tourism and Economic Development. The Council develops and maintains through
15 annual updates "A Five Year Mission for Florida's Seaports" providing a profile of
16 Florida's deepwater seaports and presenting five year forecasts for each seaport.
17 FSTED also allocates seaport system funding provided by the state, though a
18 cooperative negotiated process.⁴ In addition, the Florida Ports Council (FPC) staffs the
19 FSTED Council and supports ongoing visioning exercises and research for Florida's
20 seaports.
- 21 • Each port works with its host communities, local governments, and regional, state and
22 federal governments to further its objectives. While each port seeks to fund its
23 operating and development costs from operating revenues, some level of federal, state,
24 and/or local support is necessary. Primarily this support is required for access
25 infrastructure outside of port boundaries – navigation channels, highway connections
26 and improvements, rail connections and facilities – but support may also be needed for
27 on-terminal improvements such as structures or equipment, in response to specific
28 conditions or market opportunities.
- 29 • The state of Florida provides direct funding for seaport improvements and also funds
30 local and regional surface transportation improvement projects, through the FSTED
31 process, Strategic Intermodal System (SIS) funding, and other means⁵. The state's
32 support for its seaports is typically responsive in nature when addressing on-port
33 projects – that is, seaports identify needs and the state tries to address these needs based
34 on available revenues and other competing priorities. FDOT has a more pro-active role
35 in working with the seaports to define and plan for landside transportation
36 improvements, such as highways that connect the ports to their markets. Examples of
37 successful highway improvements include the Crosstown Connector for the Port of
38 Tampa, Eller Drive for Port Everglades, and the new Tunnel for the Port of Miami.

⁴ The FSTED process is described in Section 1.4.

⁵ State funding for seaports is described in Section 1.4.

In the past, these independent responsibilities and complex relationships have been adequate to address seaport needs and the needs of Florida businesses, residents and visitors. But the benefits provided by Florida's seaports are dynamic, and there are contradictory forces at work. Today, several factors are changing this dynamic:

- Anticipated shifts in global trade patterns are creating unique opportunities that must be seized, or else foregone. Expansion of the Panama Canal, increased use of the all-water route from Asia to the East Coast, the potential for opening of trade with Cuba, increased use of the Suez Canal, shifts in global manufacturing centers, and growth in North/South trade all represent significant opportunities for Florida's seaports.
- At the same time, port benefits are continually at risk. Florida's seaports face competition from both domestic and international ports. Domestically, they compete for traffic with Gulf and South Atlantic ports. Internationally, they compete with major facilities in the Caribbean and Central America. In order for Florida's ports to be competitive, they need to have modern facilities, adequate capacity, and efficient landside access (rail and highway) to markets and major trade corridors. Constant improvement and innovation is necessary for Florida's ports to protect and grow their market shares.
- Responding to these opportunities, and effectively confronting competitive challenges, requires a more systemwide approach to seaport planning, one addressing economic and transportation issues in a comprehensive, statewide manner. While FSTED and the individual ports bear responsibility for on-going port operations and development, the state has responsibility to ensure the multimodal transportation system as a whole can respond to changing needs and dynamics, and that state investments in the transportation system are made in a way that provides the most benefits to the state.
- Over the past two decades, there have been tremendous changes with respect to global and intermodal freight logistics, trading partners and services, trade volumes and cargo handling types, vessel design and deployment, marine infrastructure development and ownership, and inland transportation systems. While the recent economic downturn has led to reduced port volumes and a yet undefined recovery period, the long-term prospect for growth is still strong.
- Florida's ports are losing cargo market share to key competitors. Partly this is due to geographic and market factors beyond their control, and partly this is due to more aggressive investment by competitors. Both Georgia and Alabama have state port authorities and a limited number of facilities, which makes it easier for them to focus their investments for maximum effect. In Florida, the investments are not part of a higher-level strategy, but are dispersed among many different competing facilities.
- To compete effectively with out-of-state ports, Florida must develop state-of-the-art improvements and services. Concentrating these improvements and services in a strategic fashion could potentially reduce the costs of needed infrastructure at the system-wide level.
- Despite the current economic conditions, Florida's ports have identified over \$2.77 billion for capital improvement projects for the period of FY 2009/10 to FY 2013/14 for cargo, cruise, and intermodal facilities; this represents a \$109 million increase over the

previous year's estimate. The four largest seaports (Everglades, Jacksonville, Miami, and Tampa) represent nearly 85 percent of the total capital improvement program.

- Finally, state resources to help meet port needs are increasingly constrained. While overall state funding for ports has increased over the last twenty years, overall revenue for the state's transportation program has decreased resulting in an almost \$10 billion reduction in commitments to Florida's work program over the last five years (see Table 1.1). With the majority of its funding going to maintain and preserve the existing system, capacity projects face more and more competition.

Table 1.1 Cash vs. Commitment Impacts on Florida's Work Program

Timeframe	Cash Impact	Commitment Impact
November 2006 REC	(\$140) M	(\$164) M
March 2007 REC	(\$232) M	(\$400) M
November 2007 REC	(\$847) M	(\$1,409) M
March 2008 REC	(\$339) M	(\$563) M
June 2008*	(\$931) M	(\$1,312) M
August 2008 (GM) REC	(\$390) M	(\$533) M
November 2008 REC	(\$1,303) M	(\$2,131) M
November 2008 (GM) REC	(\$539) M	(\$721) M
March 2009 REC	(\$817) M	(\$1,112) M
March 2009 (GM) REC	(\$702) M	(\$960) M
June 2009* (Sweep)	(\$120) M	(\$171) M
August 2009 (GM) REC	\$197 M	\$215 M
November 2009 **	\$380 M	\$329 M
December 2009 (GM) REC**	(\$72) M	(\$118) M
February 2010 REC	(\$488) M	(\$829) M
March 2010 (GM) REC	(\$42) M	(\$102) M
Total	(\$6,385) M	(\$9,980) M

Notes:

REC: Revenue Estimating Conference; GM: Growth Management

*Due to Legislative Session

** Includes impact of 2009 Special Legislative Session

In order preserve our current system and maximize future growth opportunities, significant investment is needed. Increasing the overall amount of funding that can be provided to Florida's ports, through whatever local, regional, state, and federal resources may be available, is *highly desirable*; using whatever funding is available in a strategic, focused manner to maximize benefits to the state of Florida as a whole, is *essential*. This *Seaport System Plan* will guide the state's involvement and investment in the statewide seaport system.

1.3 Florida's Seaports within the Larger State Transportation Program

Figure 1.1 illustrates where seaports fall within the state's overall transportation program. Florida's waterways and marine terminals are addressed through two separate plans; the Waterway System Plan, which covers all of Florida's navigable waterways (including harbors); and the Seaport System Plan, which covers Florida's 14 deepwater seaports (landside and water side). Figure 1.2 shows how the Seaport System Plan builds on, and is coordinated with, other established planning and funding processes and programs. While there is overlap among the various plans, they are developed by different agencies at different times and for different purposes. The Seaport System Plan serves as a coordinated "clearinghouse" for various identified seaport-related needs, and as a means of establishing priorities for state-level investments.

Figure 1.1 Florida's Transportation Program: Where Do Seaports Fit In?

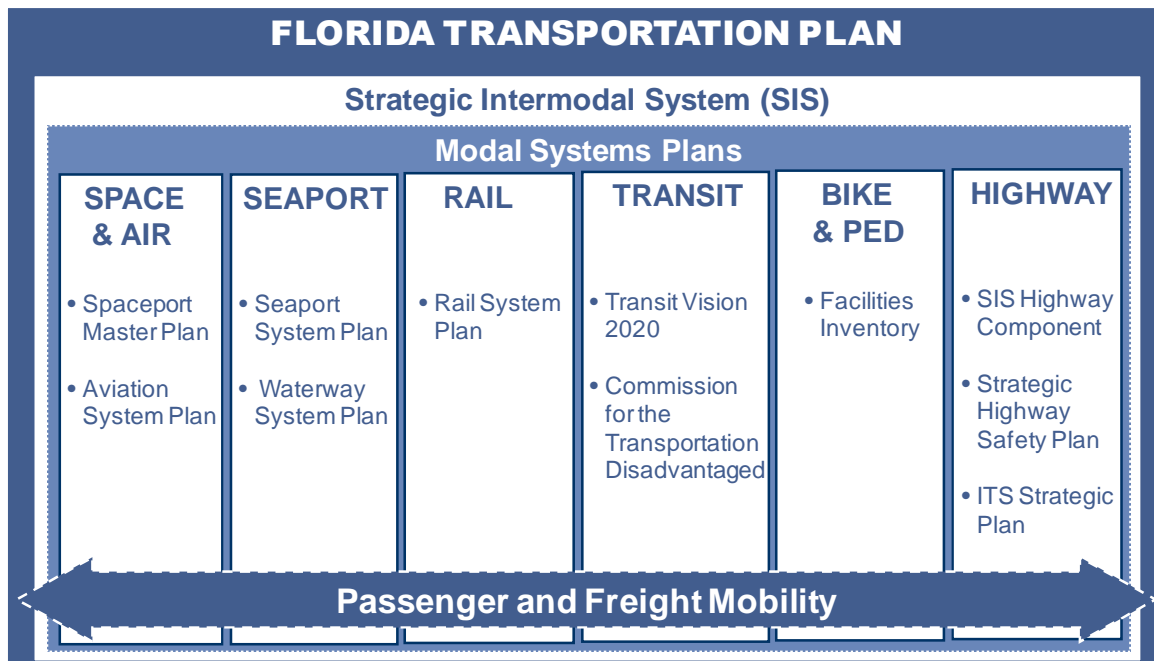
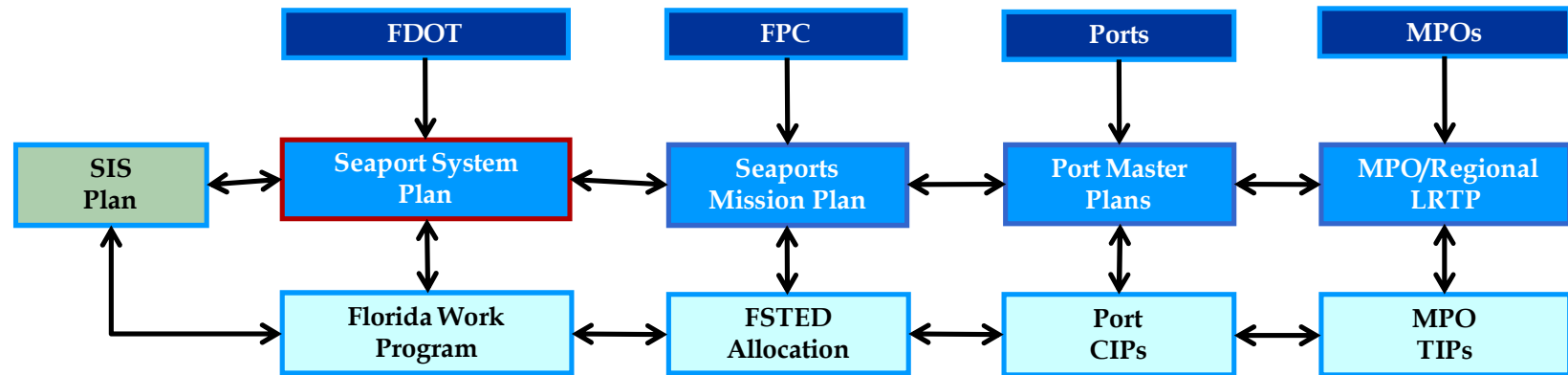


Figure 1.2 Relationship of the Seaport System Plan and Other Plans



1.4 Elements of the Seaport System Plan

This *Seaport System Plan* includes the following:

- Components that are shared and generally agreed upon by the State, the individual ports, and other stakeholders and partners. These include:
 - A vision for Florida’s Seaport System
 - A description of current system conditions
 - A general set of future performance objectives for the system by region
- Components that directly reflect the planning of individual ports. These include: market projections; on-port needs; and off-port needs.
- Components that reflect the roles, responsibilities, objectives, and actions of the State of Florida with respect to seaports. These focus on the Florida Department of Transportation, but also address other state agencies and local/regional governments.

In this form, the *Seaport System Plan* recognizes that while Florida’s ports will continue to be operated as individual businesses, there is the need for continued and increased partnership between the state and the ports to ensure that the system as a whole functions at the highest possible level – increasing benefits to the state through increased jobs and tax base; increasing benefits to the transportation system and Florida residents and visitors by ensuring the best possible multimodal system is planned and constructed; increasing benefits to residents and visitors by access to needed goods and to markets; increasing benefits to visitors through recreational opportunities and increasing revenues to the ports themselves. The articulation of a shared vision and future performance targets for the system as a whole provides the ports with useful guideposts as they fulfill their mission, as well as helping them better align with larger statewide strategic system objectives.

The *Seaport System Plan* ensures that the State of Florida’s actions with respect to its seaports are guided by strategic, system-wide thinking. The state as a whole will benefit from a strategic statewide approach to investments in on-port and off-port infrastructure and facilities. This includes, but is not limited to, active participation in master planning activities, establishing investment priorities for state funds, planning for a multimodal transportation system by developing the Strategic Intermodal System (which includes 11 of the 14 seaports) and helping to promote the importance of Florida’s seaports.

Finally, the *Seaport System Plan* clearly demonstrates that the State’s seaport resources will be used wisely and to maximum effect and benefit. This will be critical as responsible decision-makers consider how to prioritize limited State funds, and as they seek to maximize the availability of funding from any and all potentially available sources.

The *Seaport System Plan* was developed by the Florida Department of Transportation in the following manner:

- Existing seaport and FDOT planning documents were compiled and reviewed.
- FDOT established a formal Seaport System Plan Working Group. The group included a diverse mix of stakeholders including: Florida's seaports, FDOT, DCA, OTTED, DEP, USACE, Enterprise Florida, MPOAC, railroads, shippers, elected officials, and more.
The group specifically was charged with developing policy recommendations for consideration and use by FDOT during preparation of the Seaport System Plan. The Working Group met five times in open public meetings to develop policy recommendations to guide the Plan, to develop recommendations for the 2009 SIS Update, and to review and discuss technical material to be used as input to the Plan.
- Analyses and updates from the recent Strategic Intermodal System Plan update, the on-going Florida Transportation Plan update and the Florida Trade Flow and Logistics Study were incorporated as appropriate.
- This Draft Plan was developed and is being circulated for review and comment.

2.0 The Vision for Florida's Seaport System

Existing state-level planning documents provide guidance on Florida's goals for its transportation system, and for its economic development. Existing port plans and the Seaport Mission Plan provide guidance on the individual and collective goals of the ports. What has been missing is a clearly articulated vision statement that reflects the shared views of the state of Florida, its ports, and its port stakeholders, that can serve as an overarching framework for port planning and development.

2.1 A Vision for Florida's Seaports

Florida's seaport system is driven by two overarching themes: *freight and passenger transportation* and *trade and economic development*. As described in Section 1.0, these two themes represent the reason Florida's seaports exist: to stimulate economic development through the efficient movement of waterborne trade and passengers.

- **Freight and Passenger Transportation.** The trade and economic development impacts generated by Florida's seaports rely on the efficient movement of people and goods throughout the state. The FTP, SIS, and the FSTED Mission Plan emphasize freight and passenger movement. The FTP focuses on the key areas of safety, quality of life, and maintenance and preservation of Florida's transportation assets to provide guidance on how FDOT will view the movement of people and goods. The SIS focuses on mobility and economic competitiveness, including the efficient movement of cargo and passengers. The FSTED Mission Plan calls out the importance of freight and passenger transportation by striving for efficient and cost-effective facilities to accommodate the growing travels needs for both cargo and passengers.
- **Trade and Economic Development.** The international commerce and cruise tourism made possible by our seaports ultimately result in statewide economic development. The FTP, SIS, and the FSTED Mission Plan address the importance of trade and economic development solidifying the importance of this theme. The FTP calls out the need for a stronger economy through enhanced mobility for people and freight. It also calls out the need for sustainable transportation investments for the future. The SIS contributes to the FTP goals by making economic competitiveness a priority in implementing this system. The SIS specifically prioritizes the need to facilitate anticipated growth in domestic and international freight and visitor flows to and from Florida to contribute to the desire for strong trade and economic development in

Florida. The FSTED Mission Plan also recognizes international trade is dependent on Florida's transportation system. Additionally, FDOT and the Florida Ports Council partnered with the Florida Chamber of Commerce to develop a Florida Trade Flow Study, which developed further guidance on critical trade and economic goals.

These overarching themes have been used to guide development of the Seaport System Plan vision statement. The vision statement illustrates the significant level of integration of Florida's seaports into the foundation of Florida's business community and transportation system. The vision statement is as follows:

Florida's seaports will provide world-class facilities and services to meet the waterborne trade and transportation needs of freight shippers and receivers, trade-dependent businesses, residents, and tourists. Florida's ports will continue to serve as vital economic engines for their host communities and the State as a whole, and will compete successfully for both historic markets and emerging opportunities. Florida's ports will invest to meet their respective planning requirements, and the state of Florida will partner in these investments in a manner that provides the highest levels of demonstrable transportation and economic benefits to the state of Florida. Florida and its ports will seek to increase the level of strategic investment in Florida's ports by making the best use of available funds and by exploring opportunities for additional funding sources at the local, regional, state, and federal levels.

2.2 Relationship to Other Plans

Florida's transportation program consists of an integrated multimodal and intermodal system of hubs and corridors guided by state-level transportation policies. The Seaport System Plan provides specific policy guidance for development, enhancement, and preservation of Florida's Seaport System. It builds on established transportation goals and objectives as laid out in the Florida Transportation Plan (FTP) and Strategic Intermodal System (SIS). In addition, it recognizes and incorporates the adopted policy language from the Seaports' Mission Plan, including the seaport visioning exercise completed in 2006, which identified eight critical seaport vision elements. Tables 2.1 and 2.2 highlight these existing goals, objectives, and missions. Existing policy language from the FDOT and the seaport community complement each other with each providing a comprehensive listing of what is needed to ensure Florida's transportation system meets the needs of residents and businesses.

1 **Table 2.1 Policy Guidance for Seaports – FDOT Plans**

Florida Department of Transportation Mission¹	
<i>The Department will 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</i>	
2060 FTP Long Range Goals	2010 SIS Strategic Plan Objectives²
<ul style="list-style-type: none"> • Provide a safe and secure transportation system for all users • Maintain and operate Florida’s transportation system proactively • Improve mobility and connectivity for people and freight • Make transportation decisions to support and enhance livable communities • Make transportation decisions to promote responsible environmental stewardship • Invest in transportation systems to support a prosperous, globally competitive economy 	<p>Interregional connectivity</p> <ul style="list-style-type: none"> • Enhance connectivity between Florida’s economic regions and between Florida and other states and nations for both people and freight. <p>Efficiency</p> <ul style="list-style-type: none"> • Reduce delay on and improve the reliability of travel and transport using SIS facilities. <p>Choices</p> <ul style="list-style-type: none"> • Expand modal alternatives to SIS highways for travel and transport between regions, states, and nations. <p>Intermodal connectivity</p> <ul style="list-style-type: none"> • Provide for safe and efficient transfers for both people and freight between all transportation modes. <p>Economic competitiveness</p> <ul style="list-style-type: none"> • Provide transportation systems to support statewide goals related to economic diversification and development. <p>Energy, air quality, and climate</p> <ul style="list-style-type: none"> • Reduce growth rate in vehicle-miles traveled and associated energy consumption and emissions of air pollutants and greenhouse gases. <p>Emergency management</p> <ul style="list-style-type: none"> • Help ensure Florida’s transportation system can meet national defense and emergency response and evacuation needs.

¹ <http://www.dot.state.fl.us/publicinformationoffice/moredot/mvv.shtm>

² <http://www.dot.state.fl.us/planning/sis/strategicplan/2010sisplan.pdf>

Table 2.2 Policy Guidance for Seaports – Florida’s Ports

2009/2010 Seaport Mission ³	2009/2010 Mission Plan Goals
<p><i>Enhance the economic vitality and quality of life in the State of Florida by fostering the growth of domestic and foreign waterborne commerce.</i></p> <p>2016 Vision of Success – Key Elements⁴</p> <ol style="list-style-type: none"> 1. Strategic port planning – locally, regionally, and statewide 2. Deepwater access 3. Efficient landside access 4. Capacity for port growth – locally and regionally 5. Balance between user needs and the cost of maritime operations 6. Ability to build and sustain key partnerships 7. Value of investing in Florida seaports and serving Florida’s population 8. Enhanced public understanding and support for Florida’s seaports 	<ol style="list-style-type: none"> 1. Provide efficient and cost-effective facilities for cargo and passengers 2. Build the intermodal facilities needed by Florida’s seaports to move their goods and passengers more efficiently than competing out-of-state and off-shore seaports 3. Maintain and expand existing trade markets and patterns, increasing cargo flow 4. Develop funding alternatives that will enable Florida’s seaports to implement required improvements in a timely manner and meet revenue projections 5. Implement security measures that balance compliance with federal and state minimum security standards and the need for an efficient flow of commerce through our seaports 6. Develop a state policy on economic development recognizing that international trade is dependent on Florida’s transportation system

2.3 Relationship to Florida Trade and Logistics Study

The *Florida Trade and Logistics Study* was undertaken by the Florida Chamber Foundation, in partnership with the Florida DOT and other private sector stakeholders. The purpose of this study was to identify key opportunities for the state in international trade and logistics; develop a set of strategies or actions; and equip local, regional, and state partners with data and materials to implement the strategies. The study built off of and was consistent with the established economic development (e.g., Florida Chamber Foundation’s Six Pillars) and transportation (e.g., Florida’s Transportation Plan) programs. Two key components of Florida’s future trade and logistics system have been defined, along with transportation and economic development requirements (see Table 2.3).

³ <http://www.flaports.org/mission.asp>

⁴ [http://www.flaports.org/docs/seaportsvisioning10506jdsrevision%20power%20point%20to%20ports\(1\).pdf](http://www.flaports.org/docs/seaportsvisioning10506jdsrevision%20power%20point%20to%20ports(1).pdf)

Table 2.3 Overview of Seaport-Related Requirements by Component
Florida Trade and Logistics Study

Component	Seaport-Related Requirements
Maximize Current System <i>Maximize the existing trade and logistics system; implement significant investments to maintain current position; create greater self sufficiency for imports/ exports and improved supply chain efficiency.</i>	<ul style="list-style-type: none"> • Maintain pivotal role serving Latin American/ Caribbean and grow role serving Asia, Europe, Africa • Have at least one seaport with 50-feet of water • Maintain and expand capacity at seaports and improve on dock rail service • Maintain and enhance highway and rail corridors to move goods from seaports to Florida markets • Expand international (import/export) distribution center infrastructure • Adopt land use plans to support freight intensive activities • Provide competitive incentive programs to expand export related industries and encourage shippers to use Florida gateways • Provide trained and adequate workforce
Emergence as a Global Hub <i>Redefine Florida as a global trading hub; become a primary gateway to/from the eastern U.S. and a major global trade integrator.</i>	<ul style="list-style-type: none"> • Serve as a first port of call for all water service to/from Asia • Maintain pivotal role serving Latin America/Caribbean and grow role serving Europe/ Africa • Have at least one seaport with 50-feet of water and on dock rail • Develop and maintain high speed/high capacity corridors (rail or truck) to move goods from seaports to other states • Expand intermodal rail terminals and develop integrated logistics centers in key markets • Expand international (import/export) distribution centers • Adopt land use plans to support freight intensive activities • Provide competitive incentive programs to expand export related industries • Provide trained and adequate workforce

These two components are related and integrated; one focuses on serving Florida markets; one focuses on serving as a global hub. Recommended strategies address both components as one comprehensive international trade and logistics industry initiative for Florida. These strategies are organized around three opportunities:

- **Maximize ability to serve Florida imports/exports through Florida gateways.** Currently, some portion of Florida's imports and exports are handled by non-Florida gateways; that is, they move through seaports and airports outside of Florida. Strengthening Florida's gateways to capture a larger share of this traffic is a key opportunity, specifically as it relates to maximizing the existing system.
- **Grow Florida origin exports.** Florida's economy has long been dominated by tourism and services, as well as population growth driven industries, such as construction. As growth has slowed, Florida must reposition itself through diversification. State leaders have called for a doubling of exports as one priority. While Florida has been successful as an exporter of non-Florida goods and services – primarily to the Caribbean Basin – future growth in exports should focus on Florida-origin exports. This translates into the need for growth in Florida's manufacturing base. This will create a strong job base as well as help balance trade flows.
- **Expand Florida's ability to serve non-Florida markets and provide value added to "through trade".** Florida's international gateways have historically served primarily regional and state markets. With the major shifts occurring in international trade routes and patterns, along with significant investments planned in at Florida gateways, Florida has the opportunity to compete for a greater share of discretionary cargo – that is, cargo generated or consumed by non-Florida markets. For example, a Florida port with 50-feet of water can compete for the new generation of mega container ships; as steamship lines define vessel routings, Florida could capture cargo for its regional and state markets as well as larger interstate, hinterland markets.

Given the dominant role Florida's seaports play in Florida's international trade, the defined strategies must be integrated in Florida's Seaport System Plan. These strategies have been reviewed and included, as appropriate in Section 6.0.

2.4 Seaport System Goals

Specific seaport system objectives have been developed to facilitate the achievement of Florida's seaport vision. These objectives are consistent with and organized by the 2060 FTP goals and key Plan elements. Keeping in mind the two overarching themes (*freight and passenger transportation* and *trade and economic development*), Table 2.3 presents the seaport objectives organized by FTP goals and key Plan elements. Key plan elements represent key functionalities that drive seaport operations and capacities. They are defined as follows:

- **Markets and Services** – system capacity, competitiveness with other seaports, preservation and expansion of key emerging and dominant markets, and ability to provide innovative state of the art services.

- 1 • **Terminal Facilities and Capacities** – preservation and expansion of existing terminal
2 capacity, increase in the efficiencies of existing terminals, and creation of new port-
3 related lands; also includes promotion of standardized security inspections to
4 streamline port efficiencies.
- 5 • **Vessel Navigation** – need for preservation and expansion of water resources,
6 including channels, turning basins, and berths; this includes discussion of deepwater
7 capacity.
- 8 • **Landside Access** – direct connections to highway and rail networks, appropriate level
9 of intermodal facility development, and restriction of non-complementary
10 development along key access corridors
- 11 • **Land Use and Environment** – protection of existing industrial lands and the
12 acquisition of additional lands to prevent rezoning for non-industrial use; also includes
13 promotion of the positive environmental contributions of seaports, the need for
14 streamlined permitting processes, and investments in green technologies, such as shore
15 power.
- 16 • **Planning and Governance** – capital improvement plans, master plans and long range
17 visions developed by individual seaports; systemwide planning and investment
18 strategies at state level.
- 19 • **Funding and Prioritization** – self funding, private sector investments, state and
20 federal investments; establishing priorities within a given port as well as across the
21 entire system.

22 The Seaport System Plan Working Group, over the course of five meetings, developed
23 many recommendations. Almost all of them addressed things that FDOT and its state
24 partners should do, or do differently. The Working Group findings are documented and
25 summarized in Appendix A. These recommendations were used to support the
26 development of goals presented in Table 2.4 as well as the strategies and actions presented
27 in Section 6.0.

1 **Table 2.4 Summary of Seaport System Plan Goals and Objectives**

FTP Goals	Key Plan Elements	Seaport System Plan Objectives
Provide a safe and secure transportation system for all users	<ul style="list-style-type: none"> • Terminal Facilities and Capacities • Funding and Prioritization 	<ul style="list-style-type: none"> • Promote safe and secure seaport operations • Promote fair and equitable regulatory program requirements for seaport access • Promote fair and equitable cargo inspection and immigration activities • Accommodate current and anticipated future levels of trade and transportation demand in a manner that emphasizes safety and security
Maintain and operate Florida's transportation system proactively	<ul style="list-style-type: none"> • Terminal Facilities and Capacities • Vessel Navigation • Landside Access • Funding and Prioritization 	<ul style="list-style-type: none"> • Expand and maintain channels and berths to meet master plan investments • Preserve and increase existing terminal capacities and operations • Focus investments on advanced operating practices to increase efficient use of existing terminal space • Preserve and increase landside access and/or connectivity including on-dock or near dock rail facilities

FTP Goals	Key Plan Elements	Seaport System Plan Objectives
Improve mobility and connectivity for people and freight	<ul style="list-style-type: none"> • Terminal Facilities and Capacities • Vessel Navigation • Landside Access • Land Use and Environment • Planning and Governance 	<ul style="list-style-type: none"> • Provide direct connections to major highway and rail networks • Consider the total integrated landside network by providing connections to serve inland Florida and the hinterlands • Promote complementary developments along key access routes • Increase bulk capacity to serve key niche markets as well as commodities of statewide significance
Make transportation decisions to support and enhance livable communities	<ul style="list-style-type: none"> • Land Use and Environment • Planning and Governance 	<ul style="list-style-type: none"> • Preserve and expand industrial lands available for port related or port dependent business • Support land acquisition/preservation initiatives designed to protect lands adjacent in close proximity to seaports
Make transportation decisions to promote responsible environmental stewardship	<ul style="list-style-type: none"> • Land Use and Environment • Funding and Prioritization 	<ul style="list-style-type: none"> • Promote environmental contributions of seaport investments • Support seaport initiatives to streamline environmental permitting requirements • Collaborate with seaports on salt water mitigation strategies and programs

FTP Goals	Key Plan Elements	Seaport System Plan Objectives
Invest in transportation systems to support a prosperous, globally competitive economy	<ul style="list-style-type: none"> • Markets and Services • Landside Access • Land Use and Environment • Planning and Governance • Funding and Prioritization 	<ul style="list-style-type: none"> • Increase seaport system capacity to meet projected demand • Provide seaport services competitive with neighboring states and countries • Maintain dominant position in key markets, position seaports to compete for emerging markets, and take advantage of shifts in global trade lanes • Expand market capture through investments in innovative service strategies and infrastructure • Position Florida, as appropriate, to capture new generation of mega-ship vessels through creation of deepwater capacity • Support acquisition, redevelopment, and creation (via landfill) of new waterfront land for port operations, as appropriate • Promote deepwater investments to serve Florida origin/ destination markets and minimize impacts of out-of-state discretionary traffic • Provide key seaport system capacities (bulk, break bulk, container, cruise) in key regions to serve niche, state, and national markets

3.0 Florida's Seaport System – Trends and Conditions

This section provides an overview of Florida's seaport system, building off of the work undertaken annually by the FSTED Council. Data available from "A Five Year Plan to Achieve the Mission of Florida's Seaports, 2009/2010 – 2013/2014" have been reviewed and incorporated, as appropriate, to support development of a high level description of Florida's seaport system.¹

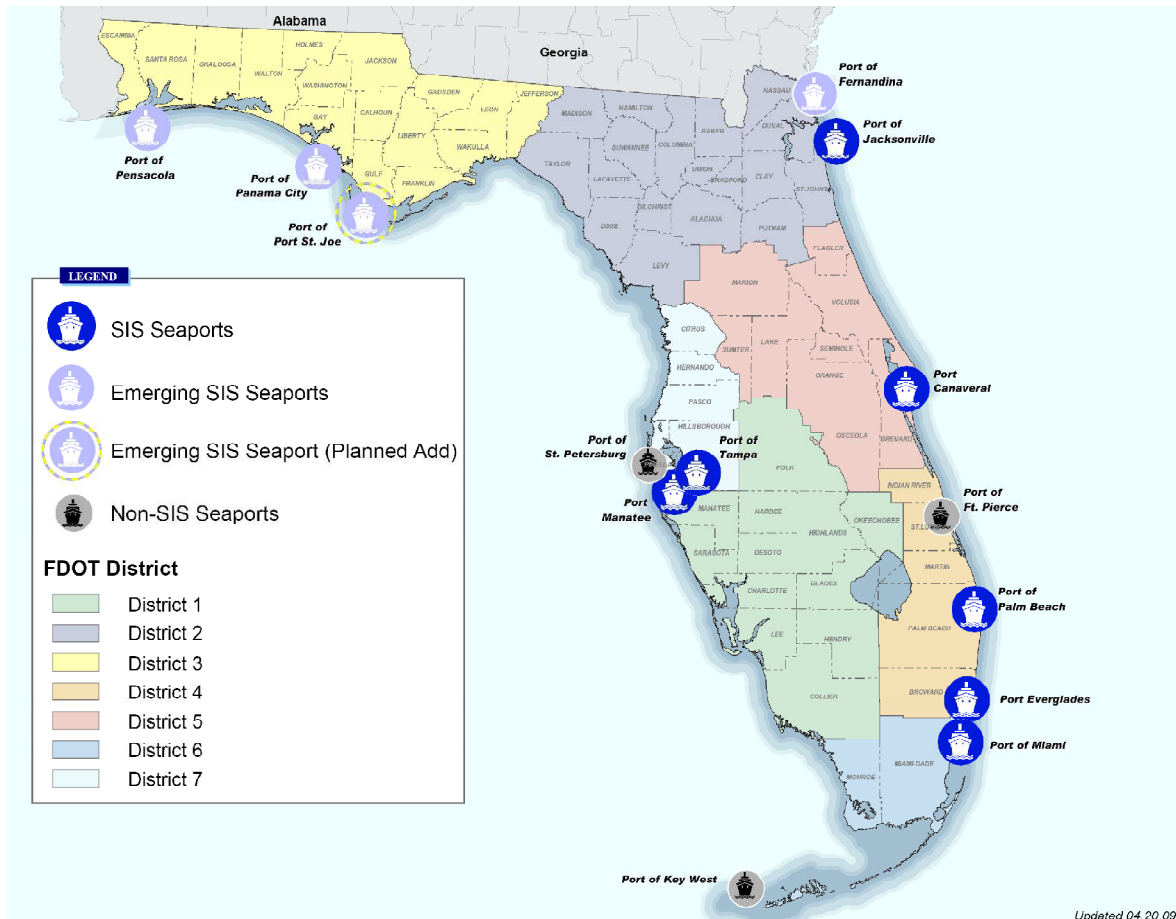
3.1 System Overview and Performance

Florida's fourteen deepwater seaports (see Figure 3.1) represent a critical component of Florida's multi-modal transportation system, functioning as domestic and international trade gateways, regional economic engines, and major transportation hubs.

Florida's seaports carry a variety of traffic including containers and non-containerized cargo as well cruise passengers. In recent years, a shift in business operations of the industry has resulted in many commodities being shipped in containers, more than ever before. In most cases, any cargo able to be put into containers has been shifted to this type of transport. In addition, the majority (as high as 75 percent in some markets) of cargo shipped to Florida through a Florida port is consumed within the state. A typical container is often measured in a twenty-foot equivalent (TEU) unit. Non-containerized cargo representing key bulk and breakbulk commodities are measured in short tons. Passenger movement is measured by the number of revenue passengers cruising from Florida's ports. All but one cruise port in Florida are home-based ports, meaning the passengers embark and disembark at the same location. Port of Key West operates as a port-of-call meaning it provides a stop for many cruise ships but is not a home port.

¹ The FSTED Council produces "A Five Year Plan to Achieve the Mission of Florida's Seaports". This document is updated annually and provides a profile for each port, highlighting international trade trends; cargo and cruise operations at Florida's seaports; and seaport capital improvement and access needs.

Figure 3.1 Florida's Seaport System



Source: Florida SIS

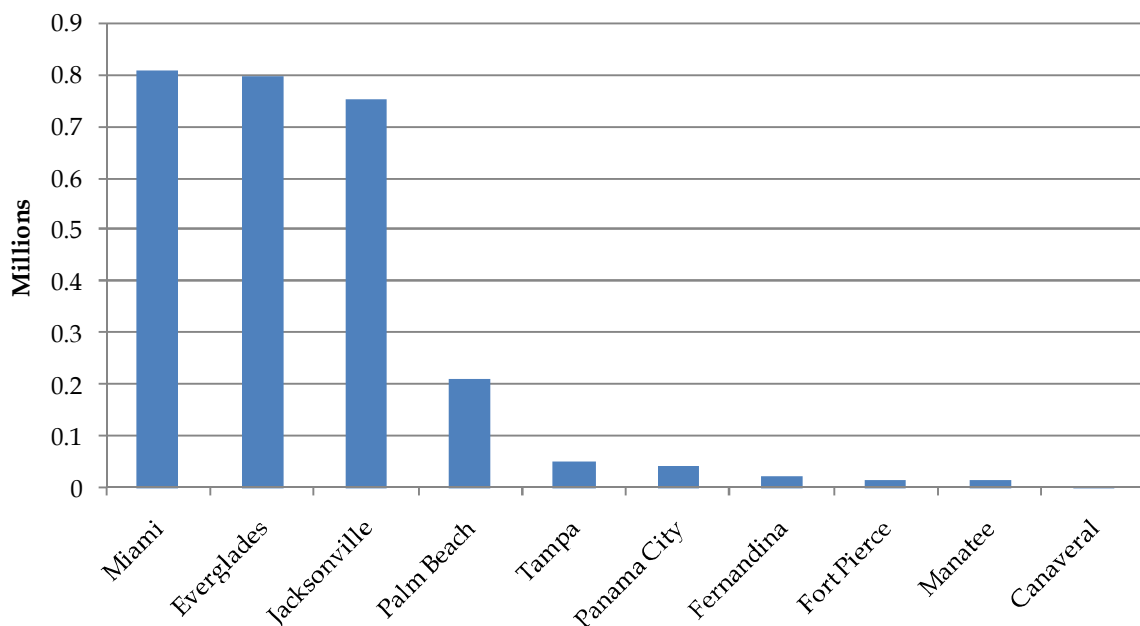
Containers

Figure 3.2 highlights the waterborne container movement by port. During Fiscal Year 2008/2009, ten Florida seaports handled container traffic, totaling over 2.7 million TEUs. Currently, Port of Miami is the largest container port handling around 30 percent of all containers bound for Florida. Port of Miami is followed by Port Everglades and Port of Jacksonville for number of containers moved. These top three container ports make up nearly 87 percent of all container movement. These three ports all have major investments underway to stimulate and support continued growth. For example, the Port of Jacksonville recently developed a state of the art container terminal to serve new Asian service; Port of Miami is moving forward with development of a highway tunnel and advancing its 50-foot dredging program; and Port Everglades is developing a near-dock intermodal container transfer facility (ICTF) and advancing its dredging program. In addition, the Port of Tampa, which historically focused on bulk and break bulk cargo, has developed a container terminal (currently under expansion). Tampa has shown significant growth over the last few years and will likely be one of the top four container

ports in Florida over the next decade. Other ports including Palm Beach, Panama City, Tampa, Fernandina, Ft. Pierce, Manatee, and Canaveral handle the remaining containers moving in Florida.

The great majority of Florida's container traffic is international. However, for Jacksonville, container trade with Puerto Rico (which is considered a domestic trade lane) is a significant share of business. Other Florida ports are seeking to grow their domestic container trade lanes to relieve surface transportation network pressures, consistent with the US Department of Transportation's "Marine Highways" initiative.

Figure 3.2 Container Movement by Port in FY08/09 (millions of TEUs)



Source: A Five Year Plan to Achieve the Mission of Florida's Seaports, 2009/2010 - 2013/2014

Total Tonnage

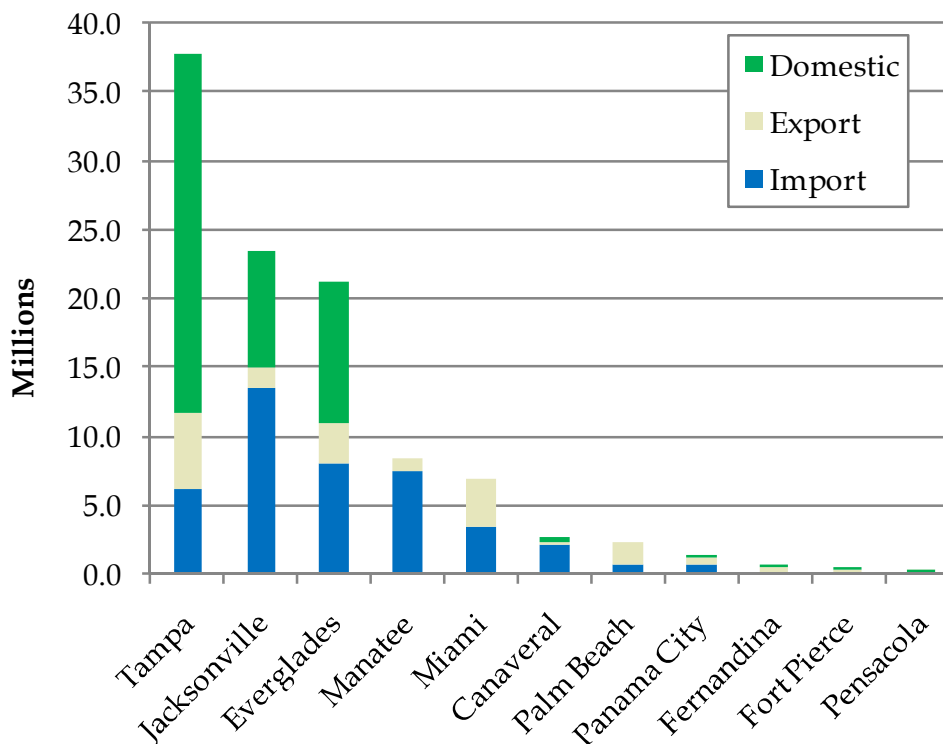
Figure 3.3 details the total waterborne cargo tonnage by port. This data includes tonnage associated with all handling types: containers, break-bulk (packaged, palletized, and smaller unit cargo handled with conventional stevedoring equipment), neo-bulk and project cargo (typically very large or very heavy units requiring special handling), dry bulk (dry cargo shipped without packaging in vessel holds), liquid bulk (liquid cargo shipped without packaging in vessel holds), and roll-on/roll-off cargo (automobiles, construction equipment, boats on trailers, containers on trailers, etc. which are physically rolled on and off vessels). It also includes import and export cargo moving between the US and foreign countries, as well as domestic cargo moving between US states and territories (including Puerto Rico). Additionally, Port Manatee's reported tonnage

includes approximately 4 million tons of natural gas, which is moving through the Port via pipeline, but is not transferred to or from waterborne vessels at the port.

Eleven of Florida's fourteen ports handled some combination of domestic, import, and export cargo in Fiscal Year 2008/2009. During this time period, Florida's ports moved over 45 million tons of domestic cargo, imported over 42 million tons, and exported 17 million tons for a total of over 105 million tons.

The Port of Tampa is by far the largest cargo port handling over 36 percent of the state's tonnage. Tampa is followed by Port of Jacksonville and Port Everglades in tonnage handled and the three together represent over 78 percent of all tonnage moving through Florida ports. In addition, these three ports are the only ones to handle a significant amount of domestic cargo – mostly petroleum, phosphate, and Puerto Rican trade. The Port of Tampa has historically focused on domestic cargo while Port of Jacksonville and Port Everglades are fairly balanced between domestic and international traffic. Other ports including Manatee, Miami, Palm Beach, Canaveral, Panama City, Ft. Pierce, Fernandina, and Pensacola handle the remaining tonnage moving in Florida.

Figure 3.3 Water Tonnage by Port in FY 08/09²

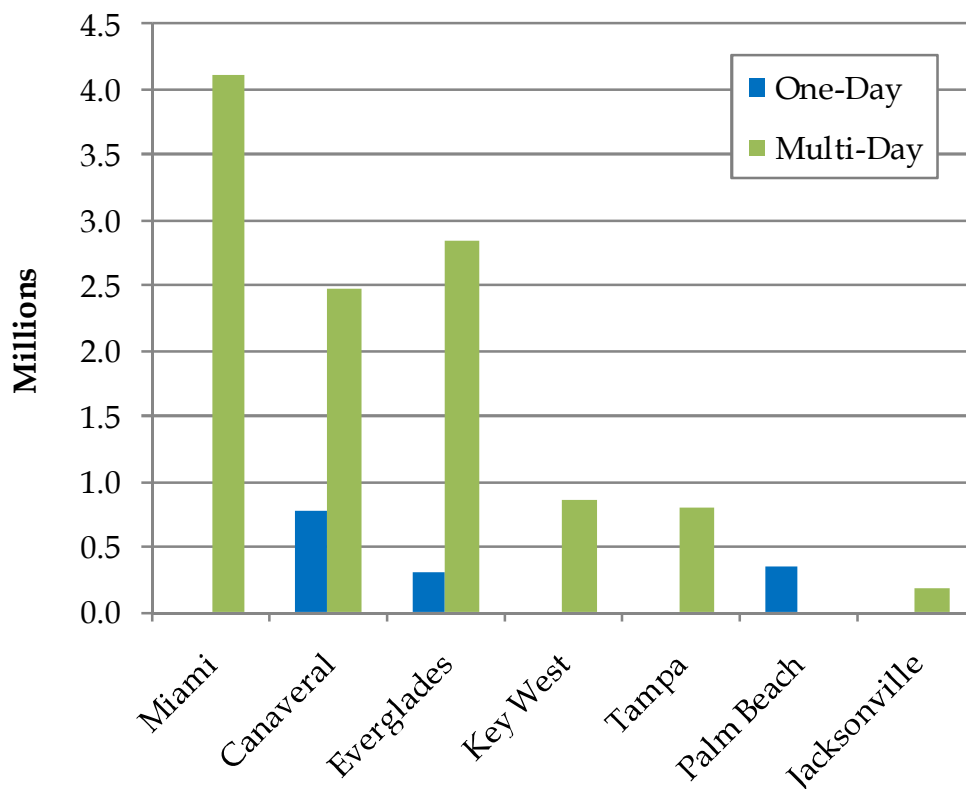


Source: A Five Year Plan to Achieve the Mission of Florida's Seaports, 2009/2010 – 2013/2014

Passengers

Along with freight movement, seven of Florida's seaports offer passenger service for single- and multi-day cruises. In Fiscal Year 2008/2009, Florida's cruise ports handled over 12.7 million passengers. Figure 3.4 presents passenger traffic by port. Port of Miami is the largest home-based cruise port handling nearly a third of all cruise passenger in Florida. Port Canaveral and Port Everglades follow at a close second and third, respectively, with the three together comprising nearly 83 percent of all cruise passengers. Florida's top three cruise ports dominate the national and international cruise industry. This is illustrated by ongoing investments in infrastructure and industry commitments. For example, Royal Caribbean's "Oasis of the Seas" - the largest cruise ship in the world, selected Port Everglades as it home port. Service began in December 2009. The addition of this single vessel is anticipated to make Port Everglades the largest cruise operation in the world. Other ports including Key West, Tampa, Palm Beach, and Jacksonville handle the remaining passenger movement in Florida.

Figure 3.4 Cruise Passenger Boardings and Alightings by Port in FY 08/09



Source: A Five Year Plan to Achieve the Mission of Florida's Seaports, 2009/2010 - 2013/2014

3.2 Functional Characteristics

While part of a system, Florida's seaports are very diverse in nature. Some are located inside urban population centers mainly serving their regional population while others are outside the urban core. Some of the 'rural' ports serve markets outside their local area. Some control all on-port activities while others are surrounded by private marine terminals. Some function as 'landlord' or 'tenant' ports leasing land to private tenants to operate, while others are managed as 'operating' ports. Six operate under a port authority, one as a special district, and seven are part of a county or city government.

Despite their diverse nature, Florida's seaports as a system share a common goal: economic competitiveness in a global market. Each has a different market and commodity focus diversifying in containers – serving both Florida and U.S. markets; and non-containerized general cargo, liquid bulk, and dry bulk – serving mostly Florida markets. They also have different trade lane focuses. Some center on traditional routes such as Puerto Rico, Caribbean, and Central/South America. Others are aligned with domestic services in the Gulf and Atlantic. Still others are pursuing emerging markets with Asia and other short sea/transshipment routes.

Florida's geographic location, as well as its extensive coastline, has resulted in the development of a system of regional ports – that is, ports that primarily serve Florida's businesses and residents. The largest population centers (South Florida, Central Florida, Tampa Bay, and Jacksonville) generally coincide with the location of the large ports. Florida's seaports have been arranged into four geographical groups to help illustrate how the system functions today. Each group of ports represents key consumption markets in Florida. While there may be some coordination and cooperation, each port within a group operates independently within a competitive environment. The significance of these groups consists primarily of the markets served – both consumption and business or industry. Maintaining a competitive seaport system within each geographic region is important for the state's transportation and overall economic sustainability. The groups are:

- South Atlantic (Ports of Miami, Everglades, Palm Beach, Fort Pierce, and Key West)
- North Atlantic (Ports of Jacksonville, Canaveral, and Fernandina)
- Central Gulf (Ports of Tampa, Manatee, and St. Petersburg)
- Panhandle (Ports of Panama City, Pensacola, and Port St. Joe).

These subregions are illustrated in Figure 3.5 following. Container, tonnage, and passenger activity by subregion is summarized in Figure 3.6 following.

Figure 3.5 Geographical Grouping of Florida's Seaports

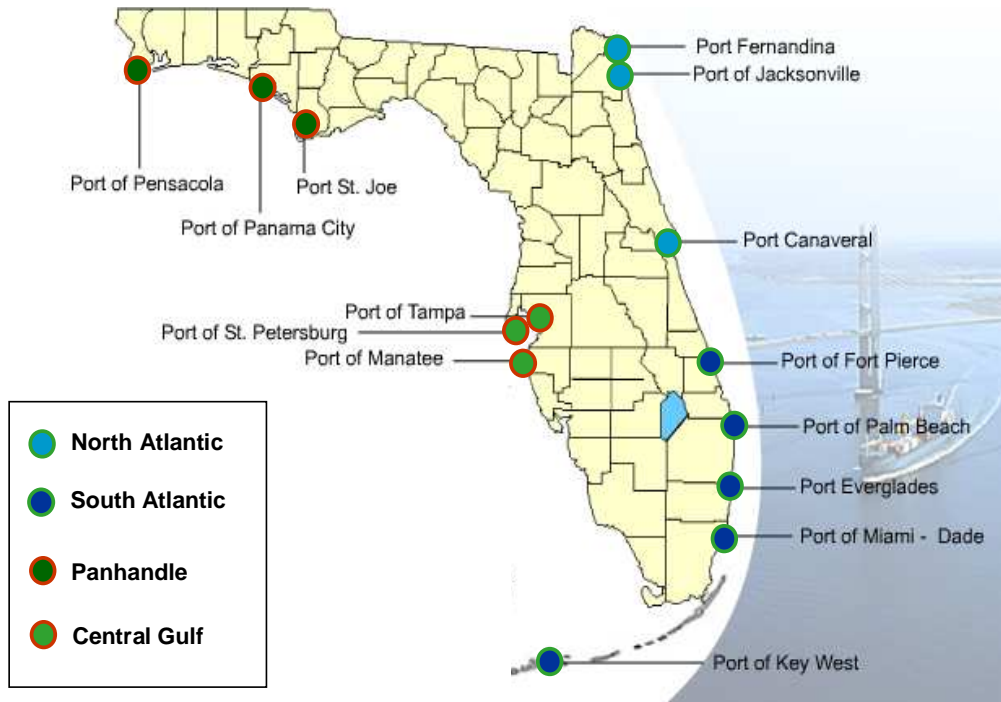
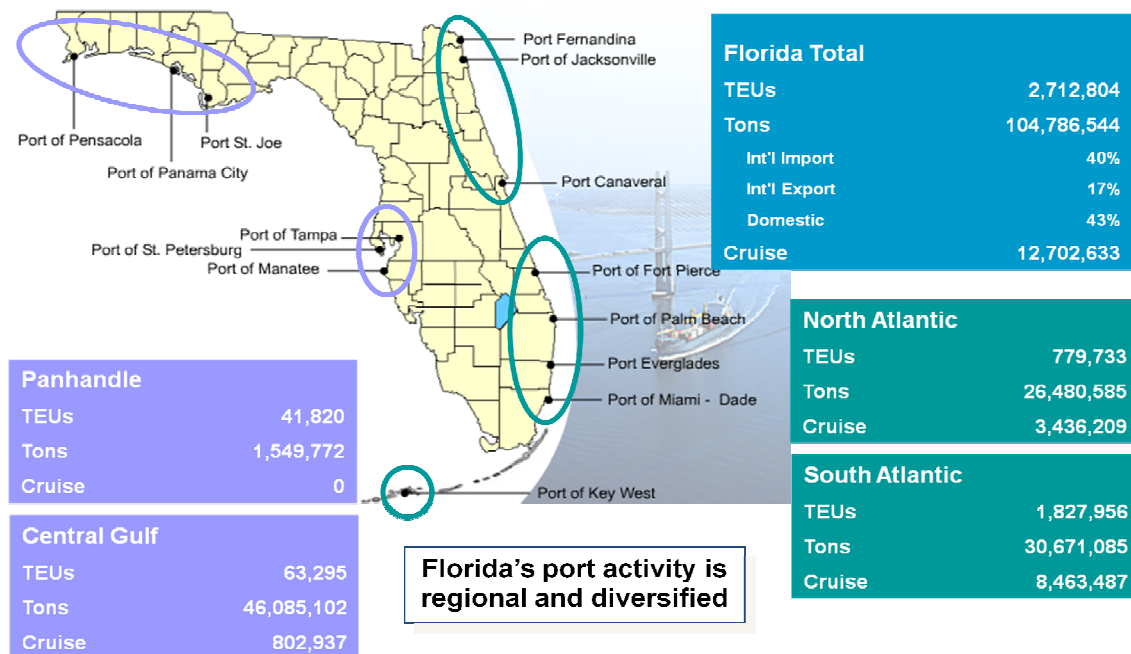


Figure 3.6 Florida's Port Throughput, FY 08/09



Each group of ports serves national, statewide, and regional needs; handles key commodities and passenger services; and has similar trade partners, and external competitors.

- The South Atlantic, Central Gulf, and Panhandle ports mostly serve statewide and regional needs, however the South Atlantic ports do serve national needs for some Latin American and Caribbean cargo.

- The North Atlantic region, which houses Port of Jacksonville, provides a larger portion of its service to national markets due to its geographic location and network of transportation facilities (Interstates and Class I railroads). While they serve statewide and regional needs, a significant percent is trucked or railed out of the state to the hinterlands.

- The South and North Atlantic regions are home to the cruise industry's leading facilities and function as national and global attractions. The Central Gulf region primarily supports a statewide and regional cruise market. The Panhandle is the only region not providing cruise service; it is also a fairly rural part of the state with much smaller population centers.

- Each region provides some level of container service; not surprising given the growth in this mode of transport and Florida's reliance on consumer goods. Each region also provides bulk cargo service although in many cases to a lesser degree than containers. Port Everglades (South Atlantic) and Port of Tampa (Central Gulf) provide the majority of fuel for their region as well as the state.

- Both Atlantic and Gulf seaports have a wide range of trade partners. These are based in part on the ability of steamship lines to hit multiple facilities. For example, Tampa will be competitive in attracting service from lines that call Mobile and Houston. Shifts in the future will be dependent on the ports' abilities to handle the vessels in service, as well as provide market connectivity/accessibility.

- Florida's system of seaports faces domestic and international competition. Domestic competition comes from neighboring states; international competition comes from existing and new transshipment facilities in the Caribbean and Central America. Domestic competition is driven by proximity to hinterland markets, development of distribution center, warehousing, and landside transportation infrastructure and service. In addition, the location of light to heavy industry can also be a factor. International competition has the same considerations, but often also includes labor costs and regulatory requirements.

Each region has its own character regarding markets and services; however, Gulf and Atlantic ports have similar trading partners and competitors. Table 3.1 provides a summary of markets, services, and competitors for each region in Florida.

1 **Table 3.1 Markets, Services, and Competitors**

	<i>South Atlantic</i>	<i>North Atlantic</i>	<i>Central Gulf</i>	<i>Panhandle</i>
Serving national, statewide, or regional needs	Cargo: Primarily statewide and regional, but serving as national gateway for certain Latin American and Caribbean trades Cruise: National, statewide and regional	Cargo: National, statewide, and regional Cruise: National, statewide and regional	Cargo: Primarily statewide and regional Cruise: Primarily statewide and regional	Cargo: Primarily statewide and regional, with multistate markets for certain commodities Cruise: None
Key commodities and passenger services	Containers, fuel, bulk Multi-day and day cruises	Containers, autos, break bulk, bulk Multi-day and day cruises	Fuel, bulk, break-bulk, containers Multi-day cruises	Break bulk, bulk, containers
Trade partners	Current: Puerto Rico, Japan, Germany, Venezuela, Dominican Republic, Honduras, China, Brazil, Colombia, Costa Rica, Guatemala, United Arab Emirates, Netherlands, Saudi Arabia, El Salvador, Bahamas, Chile, Argentina, United Kingdom, France Peru Future: maintain leadership in Caribbean; increase competitiveness with Europe; significantly expand all-water trade with China and East Asia		Current: India, Chile, Mexico, Peru, Trinidad and Tobago, Japan, Brazil, Australia, China, Netherlands, Russia, Colombia, Algeria, Costa Rica, Spain, Ukraine, United Kingdom, Argentina, Thailand, Turkey Future: expand competitiveness in diverse markets, especially Asia, Mexico, Caribbean and South America	
Competitors	Cargo: Georgia (Savannah, Brunswick), South Carolina (Charleston, Georgetown) Cruise: none		Cargo: Alabama (Mobile), Mississippi (Gulfport, Pascagoula)	

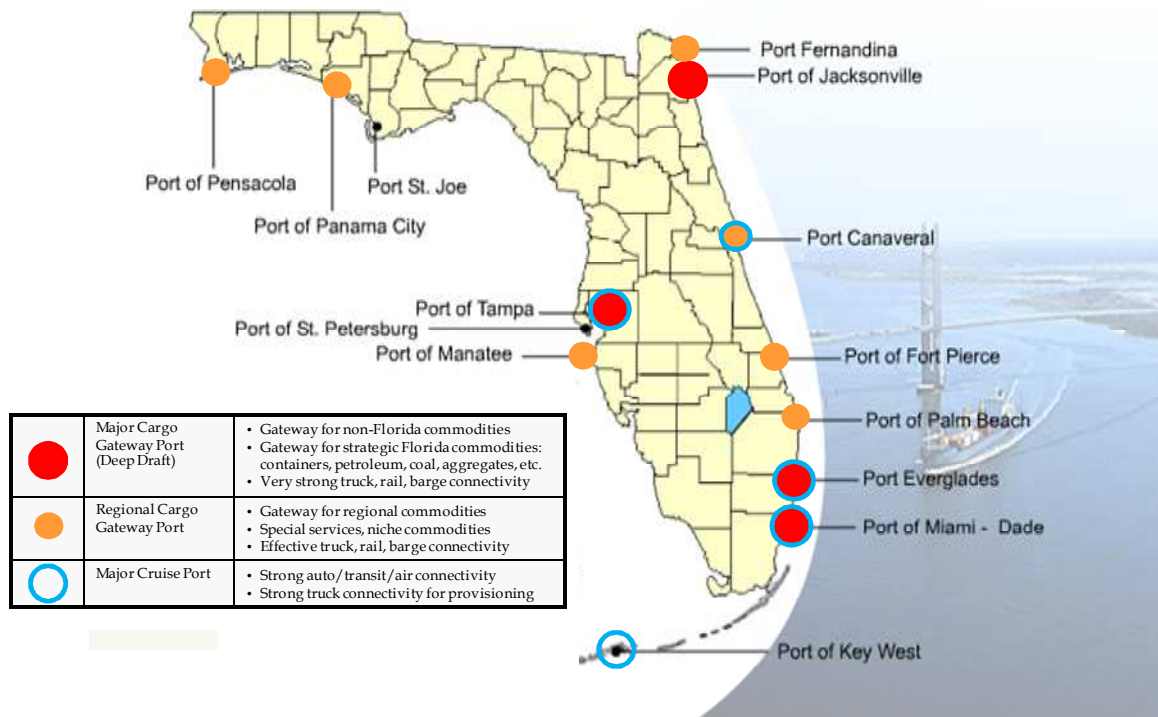
3.3 Categorization of Florida's Seaports

As with other modal systems, it is important to characterize or categorize the types of seaports in Florida. Florida's seaports vary by size and type of operations. Some are specialized in one type of operation while others handle a variety of cargo types. For example, the Port of Miami exclusively handles international containers; the Port of Tampa handles a mix of bulk, break bulk, and containerized cargo. Some seaports function as major trade gateways, while others handle local traffic or niche movements. Port Everglades provides petroleum products that serve all of South Florida; the Port of Panama City is one of the U.S. leaders in the importers of copper. The location of a port also dictates where it fits in the overall transportation system. For example, cargo off loaded at a southern port bound for the mid-west would have to be trucked or put on rail through Florida to reach its destination, adding cost to the shipment and congestion to highways and rail lines in Florida. Understanding the impact on the transportation system as a whole is crucial to making the system function smoothly.

Florida's seaports have been categorized as national/Florida cargo hubs, regional/niche cargo hubs, and/or major cruise hubs (see Figure 3.7). This categorization begins to outline how each seaport with its individual focus works in concert with the others to function as a system within Florida.

- Major cargo gateway ports represent Florida's major seaport facilities. They serve as major trade gateways for domestic and international cargo, handling a mix of commodities that serve regional, state, and national markets. This includes commodities that are strategic to Florida such as petroleum and aggregate. These seaports rely on deep water access and strong landside intermodal connections. There are four seaports in Florida that meet these characteristics: Port of Miami and Port Everglades in South Florida; Port of Tampa in West Central Florida; and Port of Jacksonville in Northeast Florida. Note that the Port of Mobile is also shown as a national/Florida cargo hub; while Florida is served by multiple competing ports, Mobile is the one geographically positioned to naturally serve the Panhandle.
- Regional cargo gateway ports represent small to medium sized seaports handling key cargo moves. Eight of Florida's seaports are categorized as regional/niche, ranging in size and operation. They typically serve local or regional markets; in some instances they serve niche national markets. Intermodal connectors are critical to these hubs to ensure market connectivity. Examples include: Port of Palm Beach, which handles an export market of consumer products as well as agricultural products; and Port of Panama City, which handles a niche copper market as well as a local consumer market.
- Five of Florida's seaports are major cruise hubs. These facilities are defined as those that carry more than 800,000 passengers annually. They require strong road, transit, and air connections for passenger traffic. The Port of Miami, Port Everglades, and Port Canaveral are leaders in the global cruise industry, each carrying over 3 million passengers per year; Key West and Tampa each carry more than 800,000 passengers.

Figure 3.7 Categorization of Florida's Seaports

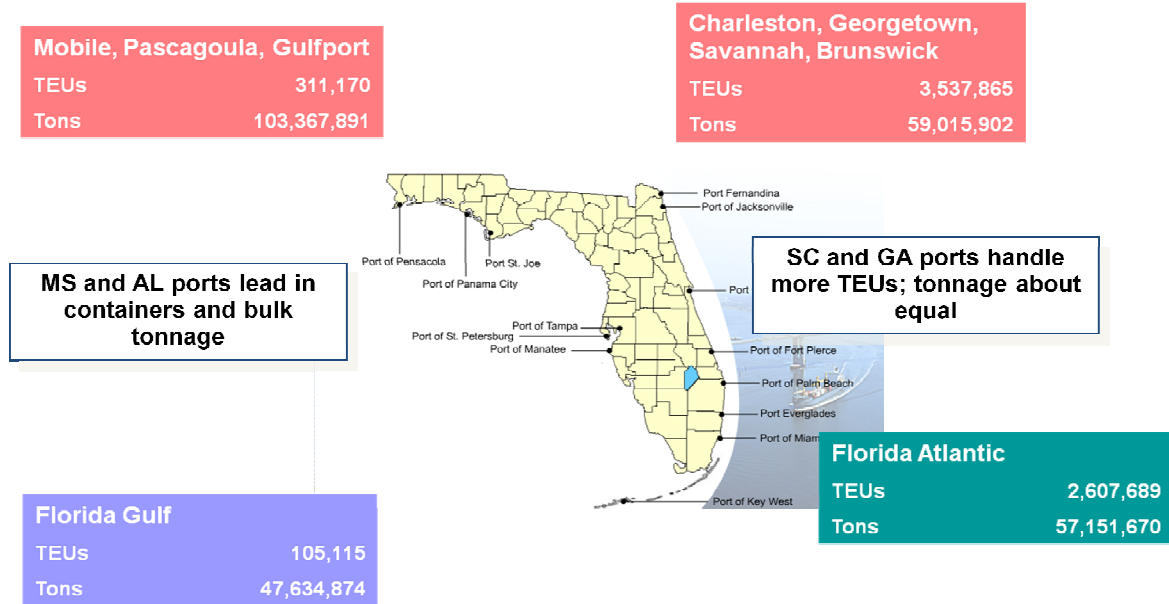


3.4 Competitive Position of Florida's Seaports

In general, Florida's seaports are highly competitive with other seaports throughout the U.S. At the state level, Florida is in the top five states for total waterborne tonnage and containers handled. This is due to its large consuming population and the presence of a well established and competitive system of seaports.

As a state, Florida competes with other coastal trading states in the South Atlantic and Gulf, from Virginia to Texas. However, many vessels call at multiple ports within these ranges – Houston and Tampa, or Hampton Roads and Miami, for example. Florida's ports compete most directly with ports between South Carolina and Alabama, a range within which most vessels will make only a single call. Figure 3.8 compares Florida port throughput with 'direct competitor' port throughput.

**Figure 3.8 Florida Port Throughput (FY08/09) vs. Direct Competitors (CY 08 Tonnage, CY 09 TEUs)
TEUS and Tonnage**



Florida's Atlantic coast ports are dominant with respect to cruise markets; competitive with respect to overall tonnage; and competitive but lagging with respect to containers. The Port of Savannah alone handles nearly as many containers as Florida's ports combined.

Florida's Gulf coast ports are dominant with respect to cruise markets, but handle around one-half the tonnage and one-third the TEUs of their competitors. The tonnage numbers are skewed by the fact that competitors include several huge coal and petroleum centers; and the TEU numbers should not be a concern because the absolute numbers are fairly small and this is a rapidly growing market for all Gulf ports.

Looking at competitiveness by trade lane on the basis of value (see Figure 3.9), Florida's Atlantic ports capture high market shares of Caribbean and South American trade, but lower market shares of European and Asian trade. Florida's Gulf ports have strong market shares of trade with key countries such as India, Chile, and China, but are weaker with respect to trade with Mexico and Venezuela, which are major trade partners for fuels moving through non-Florida ports.

Figure 3.9 Florida Port Throughput (FY07/08) vs. Competing Regions (CY 07)
International Trading Partners

ATLANTIC PARTNERS -- VALUE (\$) -- TOP 15 = 61%			
	Total Atlantic	FL Share	Competitor Share
Federal Republic of Germany	\$ 27,144,529,113	19%	81%
China	\$ 22,920,481,873	16%	84%
Japan	\$ 13,234,636,807	48%	52%
United Kingdom	\$ 7,746,846,245	16%	84%
Brazil	\$ 7,235,711,545	49%	51%
Venezuela	\$ 6,005,859,278	79%	21%
France	\$ 5,389,872,506	22%	78%
Italy	\$ 4,761,335,633	24%	76%
Netherlands	\$ 4,478,053,243	37%	63%
Dominican Republic	\$ 4,142,347,848	96%	4%
Honduras	\$ 4,105,417,654	90%	10%
Korea, South	\$ 4,087,730,899	9%	91%
India	\$ 4,010,113,895	1%	99%
Australia	\$ 3,600,180,571	4%	96%
Belgium	\$ 3,425,802,739	10%	90%
GULF PARTNERS -- VALUE (\$) -- TOP 15 = 73%			
	Total Gulf	FL Share	Competitor Share
Mexico	\$ 8,092,545,881	19%	81%
India	\$ 2,333,167,560	91%	9%
Chile	\$ 2,278,466,074	86%	14%
Colombia	\$ 2,030,618,014	11%	89%
Algeria	\$ 2,006,814,578	10%	90%
Russia	\$ 1,588,974,883	17%	83%
Honduras	\$ 1,364,385,791	3%	97%
Korea, South	\$ 1,299,693,880	6%	94%
Venezuela	\$ 1,185,711,409	5%	95%
Trinidad and Tobago	\$ 1,150,591,442	42%	58%
Brazil	\$ 1,125,867,157	36%	64%
Angola	\$ 903,846,559	0%	100%
China	\$ 822,128,074	48%	52%
Nigeria	\$ 793,486,276	1%	99%
Japan	\$ 743,195,798	55%	45%

Florida's Atlantic ports are strongest with Latin and South American partners, less so with Europe and Asia

Florida's Gulf ports are stronger (by percentage share) with India and Asia, weak with Mexico

For import commodity value (see Figure 3.10), Florida has strong market shares of import vehicles, fuels, and apparel in the Atlantic, and very high shares of copper and chemicals imports in the Gulf. It is weaker with respect to imports of high-value machinery, pharmaceuticals, and furniture in the Atlantic, and imports of fuels, iron and steel, apparel, vehicles, and machinery in the Gulf.

Figure 3.10 Florida Port Throughput (FY07/08) vs. Competing Regions (CY 07)
Import Commodity Value

ATLANTIC IMPORTS -- VALUE (\$) -- TOP 10 = 66%		Total Atlantic	FL Share	Competitor Share
87 Vehicles, Except Railway Or Tramway, And Parts Etc	\$	20,432,171,707	40%	60%
84 Nuclear Reactors, Boilers, Machinery Etc.; Parts	\$	15,836,036,131	12%	88%
27 Mineral Fuel, Oil Etc.; Bitumin Subst; Mineral Wax	\$	10,777,652,329	59%	41%
61 Apparel Articles And Accessories, Knit Or Crochet	\$	6,451,218,379	56%	44%
85 Electric Machinery Etc; Sound Equip; Tv Equip; Pts	\$	5,805,221,199	26%	74%
30 Pharmaceutical Products	\$	4,467,339,528	3%	97%
94 Furniture; Bedding Etc; Lamps Nesoi Etc; Prefab Bd	\$	3,932,914,449	16%	84%
62 Apparel Articles And Accessories, Not Knit Etc.	\$	3,382,493,118	39%	61%
40 Rubber And Articles Thereof	\$	3,130,202,253	8%	92%
39 Plastics And Articles Thereof	\$	2,564,070,668	18%	82%

GULF IMPORTS -- VALUE (\$) -- TOP 10 = 89%		Total Gulf	FL Share	Competitor Share
27 Mineral Fuel, Oil Etc.; Bitumin Subst; Mineral Wax	\$	14,885,172,299.00	4%	96%
74 Copper And Articles Thereof	\$	2,213,404,319.00	99%	1%
28 Inorg Chem; Prec & Rare-earth Met & Radioact Compd	\$	1,128,404,067.00	78%	22%
72 Iron And Steel	\$	1,062,396,788.00	9%	91%
61 Apparel Articles And Accessories, Knit Or Crochet	\$	980,301,062.00	20%	80%
87 Vehicles, Except Railway Or Tramway, And Parts Etc	\$	731,725,319.00	19%	81%
62 Apparel Articles And Accessories, Not Knit Etc.	\$	689,016,475.00	38%	62%
76 Aluminum And Articles Thereof	\$	544,106,168.00	2%	98%
84 Nuclear Reactors, Boilers, Machinery Etc.; Parts	\$	483,112,331.00	18%	82%
85 Electric Machinery Etc; Sound Equip; Tv Equip; Pts	\$	409,103,486.00	65%	35%

In the Atlantic, Florida has a strong share of vehicles, fuels, and apparel; in the Gulf, Florida is strongest in copper and chemicals – for imports.

In terms of export commodity value (see Figure 3.11), Florida's Atlantic ports have very high market shares of manufactured goods export trade, and its Gulf ports have a dominant share of fertilizer export trade in the Gulf. Florida is weaker with respect to export of wood products and chemicals in the Atlantic, and with respect to export of wood products, chemicals, and fuels in the Gulf.

Figure 3.11 Florida Port Throughput (FY07/08) vs. Competing Regions (CY 07)
Export Commodity Value

ATLANTIC EXPORTS -- VALUE (\$) -- TOP 10 = 68%		Total Atlantic	FL Share	Competitor Share
87 Vehicles, Except Railway Or Tramway, And Parts Etc	\$ 20,319,064,298		52%	48%
84 Nuclear Reactors, Boilers, Machinery Etc.; Parts	\$ 14,403,058,592		52%	48%
85 Electric Machinery Etc; Sound Equip; Tv Equip; Pts	\$ 4,922,040,327		63%	37%
39 Plastics And Articles Thereof	\$ 4,465,916,713		24%	76%
47 Wood Pulp Etc; Recovd (waste & Scrap) ppr & pprbd	\$ 2,488,103,863		4%	96%
48 Paper & Paperboard & Articles (inc Papr Pulp Artl)	\$ 2,332,944,009		19%	81%
29 Organic Chemicals	\$ 1,984,259,224		14%	86%
38 Miscellaneous Chemical Products	\$ 1,839,722,179		18%	82%
52 Cotton, Including Yarn And Woven Fabric Thereof	\$ 1,745,994,535		47%	53%
90 Optic, Photo Etc, Medic Or Surgical Instrmnts Etc	\$ 1,660,603,060		60%	40%

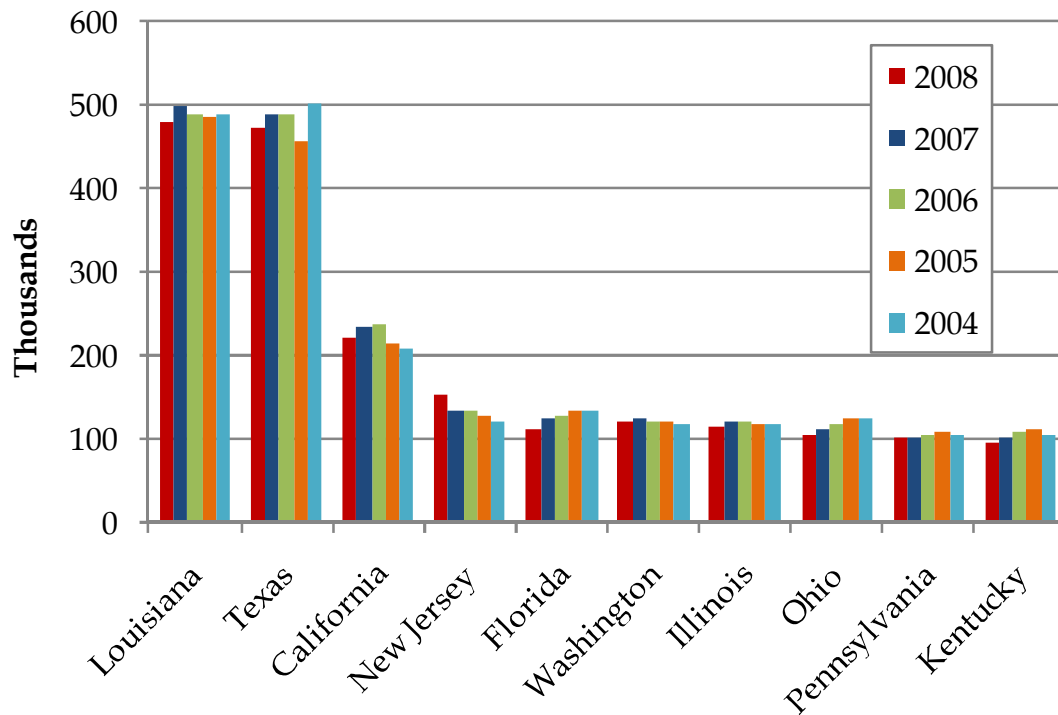
GULF EXPORTS -- VALUE (\$) -- TOP 10 = 81%		Total Gulf	FL Share	Competitor Share
31 Fertilizers	\$ 4,155,947,240		93%	7%
27 Mineral Fuel, Oil Etc.; Bitumin Subst; Mineral Wax	\$ 1,770,113,409		1%	99%
02 Meat And Edible Meat Offal	\$ 861,914,593		3%	97%
47 Wood Pulp Etc; Recovd (waste & Scrap) ppr & pprbd	\$ 659,075,033		8%	92%
48 Paper & Paperboard & Articles (inc Papr Pulp Artl)	\$ 617,315,951		20%	80%
72 Iron And Steel	\$ 537,397,129		41%	59%
84 Nuclear Reactors, Boilers, Machinery Etc.; Parts	\$ 424,644,631		32%	68%
44 Wood And Articles Of Wood; Wood Charcoal	\$ 302,100,434		5%	95%
52 Cotton, Including Yarn And Woven Fabric Thereof	\$ 283,772,112		16%	84%
29 Organic Chemicals	\$ 261,247,473		0%	100%

In the Atlantic, Florida has a strong share of high value manufactured goods; in the Gulf, Florida's share is mostly in fertilizers – for exports.

3.5 Trend Analysis – Florida and its Competitors

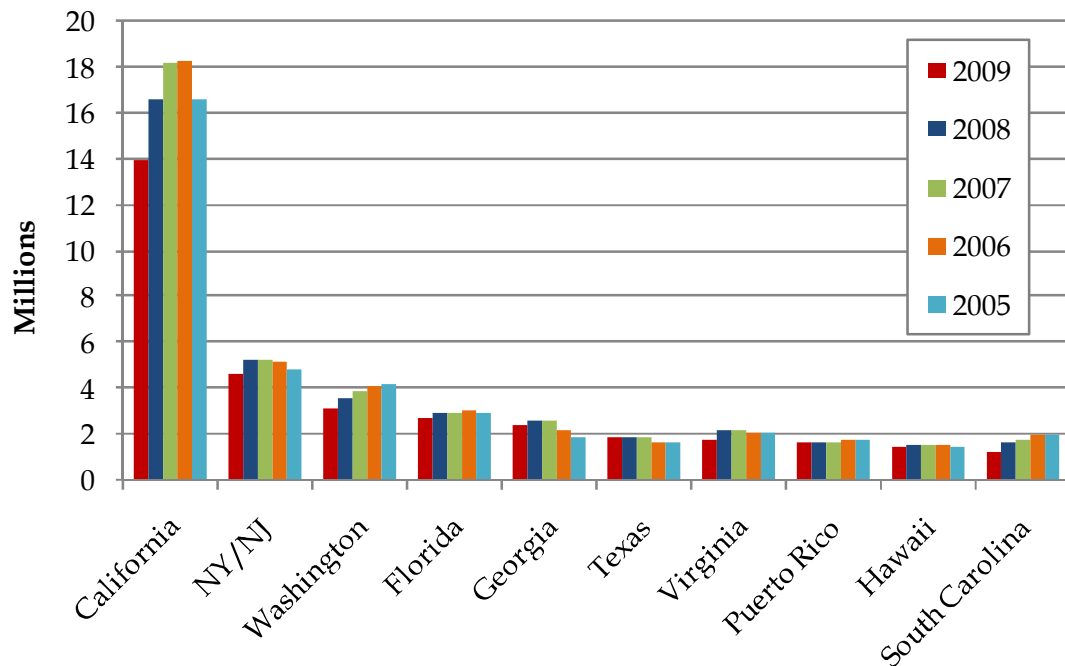
Between 2004 and 2008/2009, most states saw relatively little growth in waterborne tonnage, and some even saw substantial losses, due to the effects of the recession. Florida has maintained its fifth place rank in total tons handled by its seaports with over 110 million tons in 2008. This tonnage represents almost 5 percent of the national total in 2008 (see Figure 3.12). Between 2005 and 2009, Florida has maintained its fourth place rank in total TEUs handled by its seaports, with over 2.7 million TEUs in 2009. This represents over 7 percent of the national market in 2009 (see Figure 3.13).

Figure 3.12 Total Tonnage by State for 2004-2008



Source: U.S. Army Corps of Engineers

Figure 3.13 Total Containers by State for 2005-2009



Source: American Association of Port Authorities

1 Florida's competitive position is in large part due to its continued growth in seaport
2 capacity and rapid growth in population. Over the last 20 years, Florida's ports have
3 experienced strong growth (See Table 3.2). For containerized cargo, among South Atlantic
4 and Gulf States, Florida ranked first in TEUs in 1990 and 2009; Florida ranked second only
5 to Georgia in TEUs added during the period 1990-2009. Annual growth percentages have
6 been faster in Georgia and Texas due to significant development of new terminal facilities,
7 access to growing "hinterland" markets, accommodation of large port-related
8 manufacturing and warehouse/distribution centers, and growing Asia-direct maritime
9 trade. Mississippi and Alabama also experienced higher growth rates, but only represent
10 about 3 percent of the market share combined in the South Atlantic and Gulf states.

1 **Table 3.2 Total Containers among South Atlantic and Gulf States 1990-2009**

State	1990 TEUs	1990 Share	2009 TEUs	2009 Share	TEUs Added	CAGR*	Change in Market Share
Florida	956,120	24.7%	2,708,765	25.6%	1,752,645	5.34%	0.9%
Georgia	419,079	10.8%	2,356,512	22.2%	1,937,433	9.02%	11.4%
Texas	553,202	14.3%	1,813,572	17.1%	1,260,370	6.12%	2.8%
Virginia	825,132	21.3%	1,769,608	16.7%	944,476	3.89%	-4.6%
South Carolina	801,105	20.7%	1,181,353	11.1%	380,248	1.96%	-9.5%
Louisiana	157,037	4.0%	232,634	2.2%	75,597	1.98%	-1.9%
North Carolina	92,720	2.4%	225,176	2.1%	132,456	4.54%	-0.3%
Mississippi	55,929	1.4%	198,900	1.9%	142,971	6.55%	0.4%
Alabama	18,401	0.5%	112,270	1.1%	93,869	9.46%	0.6%

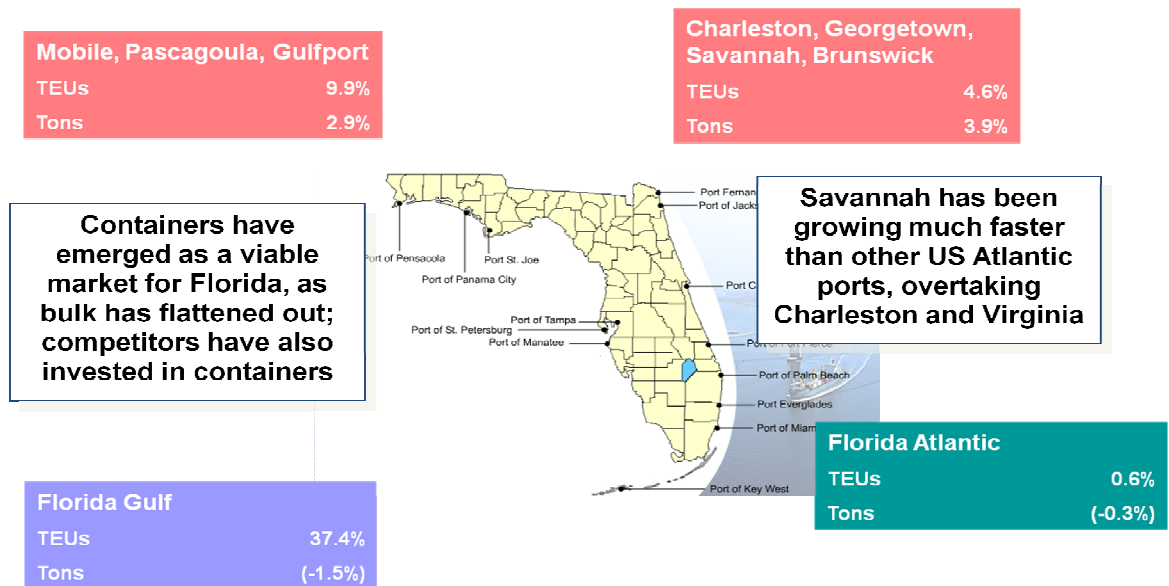
2 Source: American Association of Port Authorities

3 * Compound Annual Growth Rate (CAGR)

4

While the growth story has been very positive over the past 20 years, the past seven years has seen relatively little change in Florida's Atlantic coast TEUs and tonnage, due in large part to the effects of the recession. Growth rates for Atlantic coast competitors were higher, mostly on the strength of growth at Savannah prior to the recession. In the Gulf, Florida's TEU growth has been very rapid, even with the recession, due to the introduction of new facilities and services, but its traditional strength in bulk tonnage has declined (See Figure 3.11).

Figure 3.11 Florida Port Annual Growth vs. Direct Competitors
From CY 97 to FY 08/09 for Florida, from CY 97 to CY 07 for Others



What happens next? Do Florida's ports resume their 20-year growth trajectory, or do they remain for the most part in a slow growth pattern? What infrastructure or policy variables will influence the extent and nature of growth? Will Florida's ports be more or less competitive in the future, and why? These key issues are discussed in Section 4.

4.0 Future Performance of Florida's Seaport System

4.1 Expectations From Each of Florida's Ports

Each of Florida's ports has a particular set of market-driven and condition-driven expectations and targets for growth and performance. This information is documented in the Seaport Mission Plan, in individual port master plans and studies, and in FDOT studies. FDOT previously worked with Florida's seaports to develop a comprehensive inventory and assessment of current conditions and anticipated future performance at Florida's seaports.¹ The current conditions information is summarized below for the ports that responded to the survey. Throughput and anticipated growth data from the most current Seaport Mission Plan is also summarized below.²

Port Canaveral

- Throughput. 2.6 million tons; 799 TEUs; and 3.3 million passengers.
- Anticipated Growth. For Fiscal Year 2013/2014, Port Canaveral anticipates handling 9.0 million tons, 5,000 TEUs, and 3.7 million passengers.
- Strengths to Build On. Port Canaveral is Florida's leading cruise port by volume and has a diversified cargo mix. It reports good connections to its key markets, and a limited number of critical constraints.
- Constraints. Channel dimensions; turning basin dimensions; non-container berths; non-container truck access and queuing; and connectivity with container warehouse/distribution clusters.
- Moving Forward: Port Canaveral reports a variety of planned improvements which will produce mostly acceptable conditions. These include channel, berth, and dredging projects (partially funded, under study by the Army Corps of Engineers); on-

¹ Florida's Seaports: Conditions, Competitiveness, and Statewide Policies, Cambridge Systematics, Inc., 2006.

² Florida Ports Council, "A Five-Year Plan to Achieve the Mission of Florida's Seaports: 2009/2010-2013-2014", March 2010

terminal improvements (some under construction, some partially funded, some unfunded); and access road and parking improvements.

Port Everglades

- Throughput. 21.2 million tons; 796,159 TEUs; and 3.1 million passengers.
- Anticipated Growth. For Fiscal Year 2013/2014, Port Everglades anticipates handling 28.3 million tons, 1.2 million TEUs, and 4.3 million passengers.
- Strengths to Build On. Port Everglades is one of the largest container ports in the South Atlantic and the second largest in Florida. It is Florida's third largest bulk port, and is particularly important in supplying Florida's east coast with petroleum and related products. It is also Florida's third largest cruise port by volume. Port Everglades reports good access to its key markets, good compatibility with adjoining land uses, and good on-dock rail potential – all of which are important strengths.
- Current Constraints. Under current conditions, significant constraints are fairly limited, relating only to passenger access and parking and the ability to fund needed improvements.
- Moving Forward. Future conditions will create additional pressures, related to air draft requirements of next generation container vessels, additional terminal structure and storage needs, increased landside access congestion, and increased regional growth (making it more difficult to reach critical markets). Planned improvements (pending authorization of the Army Corps dredging program) will significantly upgrade channel, turning basin, and berth depths, resulting in acceptable conditions. The development of an on-dock intermodal container transfer facility at Southport and the proposed development of a passenger people mover would improve highway and rail access conditions. The remaining unaddressed constraints appear to be: 1) availability of funding for needed improvements; and 2) impacts of overall metropolitan and regional growth on port access and market connectivity.

Port Fernandina

- Throughput. .507 million tons; and 24,582 TEUs.
- Anticipated Growth. For Fiscal Year 2013/2014, Port Fernandina anticipates handling 1.1 million tons, and 60,000 TEUs.
- Strengths to Build On. Condition and performance of waterside and landside facilities is generally reported as good or fair, as is access to markets.
- Constraints. Port Fernandina reports its most significant limitation as being its ability to expand its limited terminal area; local truck impacts are also an issue and the Port anticipates improvements will be needed. Overall, its limited developable area, combined with its limited channel depth and distance from the nearest interstate, will

serve as practical limitations on container traffic growth, but these constraints may be less applicable to bulk markets.

- Moving Forward. Port Fernandina can be expected to continue its role as an important regional niche or reliever port within the Jacksonville region.

Port of Jacksonville

- Throughput. 23.4 million tons; 754,352 TEUs; and 185,434 passengers.
- Anticipated Growth. For Fiscal Year 2013/2014, the Port of Jacksonville anticipates handling 33.3 million tons, 1.3 million TEUs, and 350,000 passengers.
- Strengths to Build On. The Port of Jacksonville is one of the largest container ports in the South Atlantic and the third largest in Florida, just behind Everglades. It is also the leading automobile-handling ports in the South Atlantic and Gulf regions. The Port of Jacksonville is Florida's third largest bulk handling port. It reports relatively good conditions currently for each of its facilities in the areas of waterside capacity and performance, terminals, landside access, and market connections.
- Constraints. Current constraints are relatively limited. For Blount Island, the most critical factors are financing of future navigation improvements, in-terminal cargo processing ("turn time"), and availability of land for expansion. For Dames Point, the most critical issues are air draft for passenger vessels, near-dock rail for container operations, and land availability for future expansion. For Talleyrand, the most critical issues are truck access and queuing and land availability for future expansion.
- Moving Forward. In anticipation of very strong future growth, the Port of Jacksonville identifies a number of emerging concerns and conditions that could become critical unless they are adequately addressed. At all three facilities, the likelihood of larger cargo and passenger vessels will generate the need for marine improvements and related berth and crane improvements. Gate congestion, truck and rail access needs, and local congestion and impacts could become more significant. Land availability and the financing of needed improvements will continue to be important issues.

Port of Manatee

- Throughput. 8.3 million tons; and 14,507 TEUs.
- Anticipated Growth. For Fiscal Year 2013/2014, the Port of Manatee anticipates handling 19.7 million tons, and 58,028 TEUs.
- Strengths to Build On. The Port of Manatee is a growing port serving important niche markets. It reports good capabilities across the board, in terms of waterside performance, terminal capacity and performance, landside access, and market connectivity, with a limited number of critical constraints. It offers good access to the

Tampa and Orlando metropolitan areas, with the potential to expand its handling of containerized traffic serving these markets.

- Constraints. Terminal facilities for container handling (cranes and yard equipment, open storage, and structures) and ability to finance needed improvements were identified as current constraints.
- Moving Forward: The Port of Manatee anticipates that the ability to finance needed improvements will remain an issue, and with anticipated improvements to container operations, land availability for container and non-container cargo will be an emerging constraint. Anticipated improvements will also address a number of concerns, including berth depths, navigational restrictions, terminal facilities, truck and rail access.

Port of Miami

- Throughput. 6.8 million tons; 807,069 TEUs; and 4.1 million passengers.
- Anticipated Growth. For Fiscal Year 2013/2014, the Port of Miami anticipates handling 9.1 million tons, 1.1 million TEUs, and 4.3 million passengers.
- Strengths to Build On. The Port of Miami is Florida's leading container port and one of the largest in the South Atlantic, and is also Florida's second largest cruise port by volume. It is positioned near the center of South Florida's consumer market and represents a vital transportation and economic asset. Particular strengths include navigation access for passenger vessels and performance of the port's labor force.
- Constraints. Currently, the Port of Miami identifies a number of constraints. This is largely a reflection of its past success at attracting and serving high volumes of cargo and passenger traffic. As a result, many of the problems that other ports anticipate facing in 2015 are confronting the Port of Miami in the near-term. These include: container storage areas; passenger structures; passenger safety and security; interterminal "turn time"; shortage of land and landfill potential; compatibility with surrounding land uses (particularly due to the rapid redevelopment of Overtown); truck congestion and rail service; access to key markets; and overall ability to finance needed improvements.
- Moving Forward. The Port of Miami has a significant program of investments in on-port infrastructure, waterside improvements, intermodal access, and SIS projects. It expects that its navigation access and market reach and competitiveness will improve; terminal constraints will remain a significant issue; landside access is anticipated to be addressed through the Port of Miami Tunnel and intentions by the Port to replace the on-port rail infrastructure.

Port of Palm Beach

- Throughput. 2.3 million tons; 209,928 TEUs; and 349,800 passengers.

- 1 • Anticipated Growth. For Fiscal Year 2013/2014, the Port of Palm Beach anticipates
2 handling 2.6 million tons, 236,276 TEUs, and 590,000 passengers.
- 3 • Strengths to Build On. The Port of Palm Beach is a unique asset. It is the most efficient
4 container terminal in the United States, on a TEU per acre basis. Most US ports handle
5 3,000 to 5,000 TEUs per acre per year, but Tropical Shipping moves over 14,000 TEUs
6 per acre per year – a world-class figure, far more typical of Asian than U.S. ports. It is
7 similarly efficient with respect to non-containerized cargo, handling a diverse mix of
8 commodities despite limited berthing, limited land, and navigation constraints. It
9 offers good on-dock and near-dock rail connectivity, and is well-connected to its key
10 markets.
- 11 • Constraints. Like the Port of Miami, the Port of Palm Beach reports constraints that
12 largely reflect its past success. These include: channel, berth, navigation and marine
13 environmental constraints; terminal berthing and storage; limited land availability and
14 landfill potential; compatibility with adjoining land uses (both existing and planned);
15 connectivity to warehouse/distribution clusters; automobile access and parking; and
16 ability to finance needed improvements.
- 17 • Moving Forward. The Port of Palm Beach's last Master Plan Update includes a variety
18 of planned projects. Implementation of these projects will address many existing
19 constraints. Remaining concerns include: marine environmental issues; sufficiency of
20 berths and passenger-serving structures; truck and rail turn times; landfill potential
21 and land availability; compatibility with adjoining uses; auto access and parking; local
22 congestion and potential impacts; and ability to fund improvements.

23 *Port of Panama City*

- 24 • Throughput. 1.3 million tons; and 41,820 TEUs.
- 25 • Anticipated Growth. For Fiscal Year 2013/2014, the Port of Panama City anticipates
26 handling 2.3 million tons, and 100,000 TEUs.
- 27 • Strengths to Build On. The Port of Panama City is a diversified facility that handles
28 important bulk and break-bulk commodities, and serves a fast-growing geographic
29 region of Florida that is not easily reached from other ports. It offers good waterside
30 conditions and accessibility to local markets and generally good terminal operating
31 conditions.
- 32 • Constraints. Some of the Port of Panama City's near-term constraints are related to
33 growth in its core commodities, while others are due to the new influx of container
34 traffic. Panama City reports constrained conditions with respect to open storage,
35 landfill potential and land availability, compatibility with adjoining land uses, truck
36 access, near-dock rail, local congestion and impacts, and overall ability to finance
37 needed improvements.

- Moving Forward. The Port of Panama City does not anticipate needing waterside improvements, but sees the possible emergence of pressures from increased activity. Planned terminal improvements will address a number of constraints, but berthing for passenger vessels, open storage for non-container cargo, and lack of land and landfill potential will remain as issues. Local congestion resulting from port growth and rapid growth in the surrounding community will remain as an issue, as will overall ability to fund needed improvements.

Port of Pensacola

- Throughput. .248 million tons.
- Anticipated Growth. For Fiscal Year 2013/2014, the Port of Pensacola anticipates handling .316 million tons.
- Strengths to Build On. The Port of Pensacola is a modestly-sized facility primarily handling a diverse mix of non-containerized cargos. It serves a geographic region of Florida that is not easily reached from other Florida ports, although the region is relatively close to the Port of Mobile. It reports acceptable to good performance in almost all respects.
- Constraints. The key constraints reported are channel dimensions, turning basin dimensions, berth depths, and ability to fund needed improvements.
- Moving Forward. The Port of Pensacola anticipates deepening to 36', but this is not yet funded.

Port St. Joe

- Throughput. No cargo or passenger activity.
- Anticipated Growth. For Fiscal Year 2013/2014, Port St. Joe anticipates handling 2.3 million tons.
- Strengths to Build On. Port St. Joe identifies the lack of marine environmental constraints, labor sufficiency, and lack of local congestion as strengths.
- Constraints. Significant constraints reported include: channel dimensions, turning basin dimensions, and berth depths; terminal capacity and performance (in almost every area); and auto, truck, and rail access.
- Moving Forward. Development of throughput capability at Port St. Joe will require a series of improvements including channel deepening, a new turning basin, new berths, new terminal construction, and new access improvements.

Port of Tampa

- Throughput. 37.8 million tons; 48,788 TEUs; and 802,937 passengers.
- Anticipated Growth. For Fiscal Year 2013/2014, the Port of Tampa anticipates handling 45.1 million tons, 125,000 TEUs, and 1.0 million passengers.
- Strengths to Build On. The Port of Tampa is Florida's largest bulk port, handling a variety of import and export commodities including petroleum and petrochemicals, phosphate and fertilizer, cement and aggregate, and other material vital to Florida's economy. It is strategically positioned in one of Florida's fastest-growing regions and offers excellent access to the Tampa and Orlando metropolitan areas, with the capability to significantly expand its handling of containerized traffic serving these markets. Most of its conditions factors are acceptable. Areas of particular strength include turning basins, berths, lack of conflict with other vessels, terminal equipment and facilities, rail service, and overall access to markets.
- Constraints. Current constraints are limited to channel dimensions and truck access and queuing related to cruise terminal activity.
- Moving Forward. Channel improvements and a variety of highway and rail improvements are planned for the Port of Tampa. Implementation of these improvements should address current concerns and limit the emergence of future constraints. For 2015, the port anticipates the key concerns will be related to marine environmental issues and trucks serving the cruise facilities.

For the seaports not included above, the following summarizes their current traffic and anticipated growth.

Port of Fort Pierce

- Throughput. .358 million tons; and 14,800 TEUs.
- Anticipated Growth. For Fiscal Year 2013/2014, the Port of Fort Pierce anticipates handling .923 million tons, and 27,500 TEUs.

Port of Key West

- Throughput. .864 million passengers.
- Anticipated Growth. For Fiscal Year 2013/2014, the Port of Key West anticipates handling .775 million passengers.

Port of St. Petersburg

- Throughput. No cargo or passenger activity.

- Anticipated Growth. None reported or anticipated.

Common Themes

Taking these findings as a whole, we can identify some common themes:

- Collectively, Florida's ports have significant "strengths to build on," provided that key constraints are addressed. Most (although not all) ports report a common set of constraints: navigation channel/turning basin/berth improvements, terminal space, compatibility with adjoining land uses, truck/rail access, and connectivity with key inland markets. Assisting the ports in addressing these constraints, as a funding and implementation partner, has been and should continue to be an FDOT priority.
- Individually, some of Florida's ports are several years from facing significant "red" conditions (congested or constrained), while others face these conditions today. In part this reflects differences in physical and operational factors, but for the most part it reflects differences in timing. Ports tend to grow in a step-wise fashion – they develop to meet an initial market need, then expand to serve market growth. The first phases of capacity expansion tend to be the least expensive and easiest to accomplish; the later phases tend to become increasingly more expensive and/or difficult, but the benefits of achieving them tend to be greater because there is more throughput at stake.
- Different ports are at different stages in this life-cycle, and FDOT must consider the needs of "built-out" ports (to manage immediate and near-term pressures) as well as the needs of growing ports (to support healthy expansion), in the context of a larger statewide strategy.
- Many of Florida's ports have reached or are approaching the end of the life span of core infrastructure elements (e.g., bulkheads, berths, wharfs, slips). These structural deficiencies represent significant challenges to seaports; they are expensive to reconstruct and a failure results in an inability to service vessels. Categorizing these as maintenance vs. capacity projects can further limit funding options. The reconstruction of core infrastructure will need to be addressed.

4.2 Regional and Statewide Waterborne Activity Forecasts

As part of the development of the Plan, activity data for all ports in Florida were reviewed to determine a reasonable long-range state-level forecast for Florida's seaports, consistent with Florida's forecast information for other modes.

In developing a state-level forecast, the key challenge is that each port prepares its own individual forecasts, according to its own methods and using its own timelines. The only

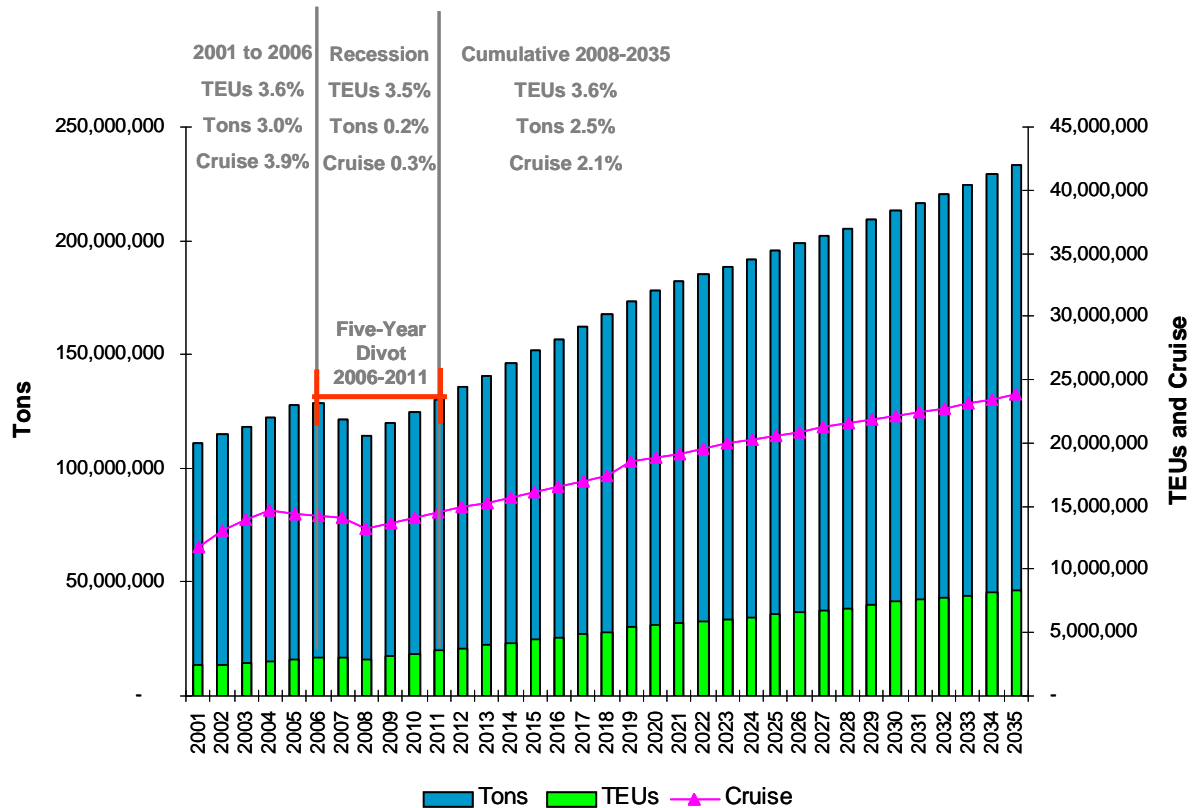
forecast that is developed in common by the ports is the six-year projection in the Seaport Mission Plan. Therefore, the forecasting methodology required several steps and sources:

- For the first six years, the Seaport Mission Plan projections through 2012/2013 were used.
- For subsequent years, each port's individual Master Plan and/or traffic forecast was utilized. Each port was contacted for this information and had the opportunity to review how the information was applied in developing the forecast.
- For any years through 2035 where information was not provided directly by the ports, historic and forecast growth rates were translated into trendline projections and applied through all forecast years. In cases where trendline projections were negative, or exceeded statewide averages for the last seven years, the projections were limited to this range.
- Because the Seaport Mission Plan projections and many of the port's Master Plans and individual forecasts were developed prior to the recession, they do not reflect the current economic downturn, in which national and statewide freight movement volumes have regressed somewhat. Adjustments for the recession were therefore applied.
- The Seaport Mission Plan projections and the port's Master Plans and individual forecasts reflect generally foreseeable opportunities, such as the expansion of the Panama Canal and growth in Asia all-water container trade. No adjustments were required for these effects.
- Finally, each port was contacted to review the final forecast product.

The regional and statewide projections were developed for use as a planning tool, similar to other statewide modal system forecasts. Generally, ports plan on a 5 to 10 year horizon. The waterborne industry is very dynamic and because so much can change in a period of 30 years, these forecasts are used as order of magnitude estimates of what the future could look like over the next 25 years. Understanding potential cargo and passenger volumes is a critical factor driving major investment decisions, like dredging to 50-feet or constructing major Interstate connections.

Forecasts show container growth continues at a historic rate with tonnage and cruise growth resuming after the recession at slightly lower rates. Figure 2.9 details 'recession adjusted' projections for Florida's ports. Based on available data and port input, these projections appear reasonable. The cumulative growth rate for 2008-2035 is shown at 3.6 percent for containers, 2.5 percent for tonnage, and 2.1 percent for cruise passengers.

Figure 4.1 “Recession Adjusted” Florida Port Projections



Source: Cambridge Systematics analysis of USACE, AAPA, and port data.

Table 4.1 following provides a detailed breakdown of the 2035 forecasts by cargo type and region. The state as a whole is expected to reach as many as 8.3 million containers by 2035, a near tripling of containers handled in 2008. It is anticipated the South Atlantic region (mainly Port Everglades and Port of Miami) will continue to lead the state in number of containers with over 4.4 million TEUs by 2035. This is almost one and half times more than the state total in 2007/2008. The North Atlantic region (mainly Port of Jacksonville) is forecasted to be a little over half of the South Atlantic region with nearly 2.4 million TEUs. All Atlantic coast ports combined will reach over 6.8 million TEUs.

The amount of tonnage is also expected to increase. A forecast of more than 233 million tons by 2035 represents a little over twice the amount shipped to Florida’s ports in 2008. The Central Gulf region (mainly Port of Tampa) leads the way with almost half of the tonnage moved at over 100 million in 2035. The Atlantic region ports (North and South) are forecasted to carry an almost even amount but together reach over 124 million tons.

As the cruise capital of the world, it is no surprise an increase in cruise passengers is expected. The South Atlantic region (mainly Port of Miami and Port Everglades) is expected to service over 16 million passengers in 2035 – more than all seven cruise ports served in 2008. All cruise ports combined are expected to reach over 23 million passengers by the same year.

Table 4.1 2035 Forecasts by Region and Commodity Type

<i>South Atlantic</i>	<i>North Atlantic</i>	<i>Central Gulf</i>	<i>Panhandle</i>
Containers (TEUs) 4,468,462	Containers (TEUs) 2,390,979	Containers (TEUs) 1,378,236	Containers (TEUs) 112,000
General Cargo (Tons) 30,566,609	General Cargo (Tons) 23,100,935	General Cargo (Tons) 8,399,942	General Cargo (Tons) 707,979
Dry Bulk (Tons) 9,175,417	Dry Bulk (Tons) 11,430,719	Dry Bulk (Tons) 23,586,499	Dry Bulk (Tons) 5,026,989
Liquid Bulk (Tons) 24,086,115	Liquid Bulk (Tons) 22,339,666	Liquid Bulk (Tons) 22,304,003	Liquid Bulk (Tons) 106,189
Neo/Break (Tons) 931,904	Neo/Break (Tons) 3,106,129	Neo/Break (Tons) 5,547,473	Neo/Break (Tons) 946,651
Other (Tons) 0	Other (Tons) 9,644	Other (Tons) 42,104,177	Other (Tons) 0
Total Tons 64,760,045	Total Tons 59,987,094	Total Tons 101,942,092	Total Tons 6,787,808
Day Cruise Pax 2,983,265	Day Cruise Pax 1,647,822	Day Cruise Pax 0	Day Cruise Pax 0
Multi-Day Cruise Pax 13,828,872	Multi-Day Cruise Pax 4,107,858	Multi-Day Cruise Pax 1,249,102	Multi-Day Cruise Pax 0

Finally, it is important to note that the forecasts above are independent of both constraints and opportunities. They are free of constraints, in that they assume that ports, channels, and landside transportation systems would provide the capacity needed to accommodate these levels of activity. They are free from consideration of opportunities, in that they represent what might happen if Florida's ports continue on their historic and planned trajectories – but not what might happen if Florida acts more aggressively to grow its traffic and improve its competitive market position for waterborne freight and passengers.

How Florida and its ports deal with constraints and opportunities is, of course, a critical policy question. To better address this question, the Florida Chamber Foundation, Florida DOT, the Florida Ports Council, and other stakeholders partnered in a comprehensive Trade Flow Study of all transportation modes serving Florida. As part of that study, a set of detailed international cargo forecasts were developed.

The Trade Flow Study base case forecast actually envisions slightly lower growth rates than the recession-adjusted projections from Figure 4.1 – 2.5% annual growth through 2035 for containers (vs. 3.6% in the projection), and 1.9% for total tonnage (vs. 2.5% in the projection). One reason for the difference is that the Trade Flow Study does not include domestic tonnage. The other reason is that the Trade Flow Study base case forecast assumes no significant improvements to Florida's capacity that would lead it to increase

its share of key international trades, particularly all-water Asian trades. The projections in Figure 4.1 are derived from port forecasts, and to the extent that the port forecasts have made those assumptions, it reflects those assumptions.

Table 4.2 Trade Flow Study International Forecasts, Base Case

Direction	Handling Type	Tons			CAGR
		2010	2020	2035	
Import	Container	5,120,602	6,947,917	9,727,340	
	All Types	27,885,264	32,615,065	36,985,262	
Export	Container	11,013,881	13,362,281	19,216,355	
	All Types	17,438,450	22,873,627	34,303,975	
Total	Container	16,134,483	20,310,198	28,943,695	2.5%
	All Types	45,323,714	55,488,692	71,289,237	1.9%

The Trade Flow Study base case forecast is therefore an excellent benchmark for a “do nothing” scenario for international waterborne trade, in which Florida maintains its seaport system but does not invest aggressively to improve its competitiveness with respect to other ports.

The Trade Flow Study also looked at two other scenarios – one in which Florida invested at a level necessary to capture 25% of potential additional Asian container imports, and one where it invests to capture 50%. The result would be near-term attraction of significant blocks of new demand, with stepwise “jumps” in Florida TEUs over the next ten years, followed by resumption of stable year-over-year compound growth. In the base case, import containers grow at 3.1% over the next ten years; in the “25% capture” scenario, they grow at 7.4% over the next ten years; and in the “50% capture” scenario, they grow at 10.5% over the next ten years. Export containers are not impacted, and continue to grow but at a slower rate than import containers.

Interestingly, under the “25% capture” scenario, the total container growth rate (imports plus exports) is 3.7% through 2020, which is nearly identical to the 3.6% container growth rate from the recession-adjusted Florida port projections. This suggests that the projections, which again were derived from the ports, already included an assumption that some additional Asian trade would be captured. This makes sense, as recent and planned improvements at Jacksonville, Miami, Tampa, and other ports are explicitly targeting this cargo opportunity.

There are many other scenarios to consider. On the upside, Florida might be successful in achieving a “50% capture” rather than a “25% capture” of import Asian containers. It might be successful in growing its export container trade, with existing trading partners and/or possibly with new trading partners such as Cuba. It might be successful in developing domestic “Marine Highway” container trade routes. These are important

possibilities to consider, but on balance, the recession-adjusted Florida port projection is seen as representing a reasonable “most likely” scenario for planning purposes.

The Trade Flow Study also developed highly interesting projections of changes in tonnage by trade lane and by commodity type. These are presented in Appendix B.

4.3 Regional and Statewide Performance Goals

Based on trends and conditions at each of Florida’s ports, the anticipated future levels of freight demand, and the overall vision for Florida’s seaport system, the Seaport System Plan Working Group developed the following performance targets for each of Florida’s seaport planning regions (see Table 4.3).

Table 4.3 2035 Seaport Regional Activity Goals

	<i>South Atlantic</i>	<i>North Atlantic</i>	<i>Central Gulf</i>	<i>Panhandle</i>
Serving national, statewide, or regional needs	Cargo: National, statewide and regional; national hub for Asia deep draft container trade; transload hub for Caribbean trade Cruise: National, statewide and regional	Cargo: National, statewide, and regional Cruise: National, statewide and regional	Cargo: Primarily statewide and regional Cruise: Primarily statewide and regional	Primarily statewide and regional, with multistate markets for certain commodities
Key commodities and passenger services	Containers, fuel, bulk Multi-day and day cruises	Containers, autos, break bulk, bulk Multi-day and day cruises	Fuel, bulk, break-bulk, containers Multi-day cruises	Break bulk, bulk, containers Regional container lines
Trade partners	Current: Puerto Rico, Japan, Germany, Venezuela, Dominican Republic, Honduras, China, Brazil, Colombia, Costa Rica, Guatemala, United Arab Emirates, Netherlands, Saudi Arabia, El Salvador, Bahamas, Chile, Argentina, United Kingdom, France Peru Future: maintain leadership in Caribbean; increase competitiveness with Europe; significantly expand all-water trade with China and East Asia		India, Chile, Mexico, Peru, Trinidad and Tobago, Japan, Brazil, Australia, China, Netherlands, Russia, Colombia, Algeria, Costa Rica, Spain, Ukraine, United Kingdom, Argentina, Thailand, Turkey Future: expand competitiveness in diverse markets, especially Asia, Mexico, Caribbean and South America	
Competitors	Cargo: Georgia (Savannah, Brunswick), South Carolina (Charleston, Georgetown) Cruise: none		Cargo: Alabama (Mobile), Mississippi (Gulfport, Pascagoula)	

4.4 Critical Issues, Opportunities, and Challenges

Looking ahead from where we stand today, it is generally agreed that Florida's ports face a series of critical issues, opportunities, and challenges. Critical issues are summarized in Table 4.4 below.

Over the next few years there will be significant developments in the state, national, and international environments that will create opportunities and challenges for Florida's seaports. At the state level, the transportation system must re-evaluate its needs and priorities across all modes as the economic recovery begins. Reduced volumes have created excess capacity and given seaports the opportunity to regroup and strategize on medium to long term investment needs. At the national level, the next federal transportation bill is anticipated to have a more robust freight program – that is, the potential for a freight funding element to support state freight programs. Florida needs to position itself to be eligible for this potential new program. At the international level, there are several developments that will impact Florida's ports.

- **Panama Canal expansion.** The expansion of the Panama Canal, with completion anticipated in 2014, will open new doors for trading with Asia with increased use of the “all water route”. Florida will be competing with Gulf and Atlantic seaports in other states for this increase in traffic. Deep water, terminal capacity, and landside intermodal connectivity will be critical.
- **Opening of trade with Cuba.** The much anticipated opening of trade with Cuba will create significant trade opportunities for Florida that no other state has due to Florida's close proximity and cultural ties to this country.
- **Increased use of Suez Canal.** The Suez Canal provides another gateway for waterborne trade to reach Florida. The Suez does not have any size restrictions on for existing or planned mega vessels. The use of this canal will continue to expand as global trade patterns shift.
- **Shifts in global manufacturing centers.** Global trade is driven by the location of manufacturing centers. This centers shift over time based on cost, resources, and labor. Shifts will impact the competitiveness of Pacific vs. Atlantic trade routes which will create new competitive opportunities for U.S. ports.
- **Growth in North/South trade.** Florida is dominant in North/South trade with the Caribbean, Central and South America. Over the next decade, this market, particularly that of South America, is anticipated to grow significantly, offering continued opportunities for growth at Florida ports.

Table 4.4 Critical Issues and Choices Facing Florida's Seaports

Issue	Choices
Markets	<p>How to accommodate existing markets – domestic/international, container/non-container</p> <p>How to attract new markets – China, transshipment, short-sea, cargo diversification, better integration with warehouse/distribution (the “Savannah Strategy”) through freight villages, etc.</p> <p>How to compete effectively with other South Atlantic and Gulf ports</p>
Capacity	<p>How to provide physical expansion where needed</p> <p>How to improve efficiency and productivity through technology and operations</p>
Environment	<p>How to mitigate marine and landside impacts</p> <p>How to implement needed improvements in timely manner</p>
Land Use	<p>How to protect seaports from non-port developments on adjacent properties</p> <p>How to obtain or preserve land for terminals and port-related industries</p>
Access	<p>How to provide needed improvements to channels, turning basins, berths</p> <p>How to provide needed improvements to highways and railroads</p>
Security	<p>How to recover substantially increased costs of equipment and day-to-day operations</p> <p>How to improve customs inspection procedures and reduce impacts</p>
Risk and Change	<p>How to provide adequate and flexible capacity to deal with service disruptions</p> <p>How to provide adequate and flexible funding for “quick response” to challenges, opportunities</p>
Internal Competition	<p>How to compete effectively with other Florida ports while furthering the economic goals of the state as a whole.</p>
Funding	<p>How to ensure adequate, flexible funding for on-port and off-port infrastructure requirements</p>

In conjunction with these opportunities come risks. As Florida prepares for the changes in trade patterns, they will have to assume a certain amount of risk. In order to secure future business relationships, a port has to provide evidence they have the capacity and facilities to accommodate the business. In some cases, this may mean deepening their shipping channels or updating their waterside infrastructure. In addition, as Florida ports discuss the right strategy, ports in other states are working on their own strategy that will provide serious competition to the amount of trade Florida ports can secure for the state. Some of the key factors are summarized in Table 4.5 following.

Table 4.5 Global Trends Impacting Florida's Seaports

Trend	Issue	Opportunity	Challenge
Global Economy	• Rapid growth of China as producer and consumer	X	
	• China's disruption of established trade and manufacturing		X
	• Continued growth of Florida's traditional trading partners	X	X
Global Logistics	• Continued globalization of production and consumption	X	
	• Shippers spreading cargo to three coasts (Pacific, Atlantic, Gulf) to minimize risk of service disruption – containerized and non-containerized cargo -- more China-direct service	X	
	• More global transshipment of containers	X	
	• Short-sea opportunities for Atlantic and Gulf markets	X	
	• More cargo controlled by fewer shippers and carriers who integrate with land-intensive warehouse/distribution systems		X
Technology	• Better equipment, information systems, and utilization of land and labor have made terminals more efficient	X	
	• Containerships getting larger; deeper channels at some ports		X
Policy	• Trade agreements (CAFTA, NAFTA, et al)	X	X
	• Security requirements (cost and delay)		X

The Seaport System Plan Working Group discussed a variety of options and strategies to directly respond to these issues, opportunities, and challenges. These options and strategies are taken up in Section 6 of this Plan.

5.0 Seaport System Needs, Strategies, and Funding

5.1 Overview

Florida's seaports are responsible for the identification of short and long term facility improvement needs. These needs typically are identified annually as part of five-year capital improvement plans (CIPs) and as part of longer term, comprehensive master plan updates. As part of the development of this Plan, current CIPs and master plans have been reviewed and summarized to document a comprehensive list of on-port seaport needs. This section provides a summary of the needs by year, by port, and by type of improvement.

On and off-port roadway and rail connector projects also have been identified. These projects typically are identified collaboratively by FDOT and seaport staff. On- and off-port projects that receive state funding are included in the FDOT's work program. Summaries of these projects are provided below. Finally, there are several possible funding sources for seaport and seaport-related projects. A description of these sources also is provided below.

5.2 Summary of On-Port Seaport Needs

Existing on-port capital improvement needs presented in this section reflect the current five year period (FY2009/2010 through FY 2013/2014). The capital improvement needs were obtained from existing documents, including existing Master Plans, CIPs, Funded Projects Transportation Lists, Cost Estimates of Port Development Worksheets, Capital Budget Worksheets, and phone interviews. A list of needs for each seaport is provided in Appendix C. All seaports were contacted to confirm the most updated information was included.

While the statewide-compiled seaport capital improvement plan is generally accepted as the best publicly available data source for seaport needs by the FPC, it should be noted there are some limitations in how this information should be used and interpreted. The ports have different methodologies for reporting their short term capital needs. The information used as part of the Plan represents a good faith effort to ascertain the most current data available. The needs should be reviewed and updated annually to maintain as accurate a list as possible. SeaCIP 4.0¹ will become an active data management tool to ensure up-to-date project information is available.

¹ SeaCIP 4.0 is the next generation of the application management program for FSTED projects. This version has been expanded to capture all state funded seaport projects and operate a needs database in addition to the application management function.

Summary of Five-Year Cumulative On-Port Needs

Florida's seaports update their CIPs regularly to identify and assess future improvements necessary to meet potential market demands. Despite the current economic conditions, the five-year CIPs for Florida's seaports have increased. The projected five-year program for fiscal years 2009-2010 through 2013-2014 is over \$2.85 billion, representing a \$117 million increase over last year's estimate. This slight increase is largely due to identified needs from the Port of Jacksonville, which offsets cutbacks from other ports, as well as the reallocation of funds to later years.

Table 5.1 presents the seaports' cumulative five-year CIP for fiscal years 2009/2010 through 2013/2014. The four largest ports (Everglades, Jacksonville, Miami, and Tampa) represent nearly 86 percent of the total capital improvement program. The Port of Jacksonville stands out from its peers given the large amount of identified capital needs in fiscal year 2013/2014.

Table 5.1 Statewide Capital Improvement Program FY 09/10 - 13/14

Seaports	FY 09-10	FY 10-11	FY 11-12	FY 12-13	FY 13-14	Total CIP
Canaveral	\$58,588,000	\$38,982,000	\$33,321,000	\$20,457,000	\$10,937,000	\$162,285,000
Everglades	\$58,727,000	\$157,218,000	\$212,647,000	\$166,008,000	\$126,643,000	\$721,243,000
Fernandina	\$1,000,000	\$1,805,000	\$4,700,000	\$5,910,000	\$3,360,000	\$16,775,000
Fort Pierce	\$3,699,251	\$3,500,000	\$0	\$0	\$0	\$7,199,251
Jacksonville	\$66,818,869	\$146,896,958	\$193,514,275	\$18,709,275	\$492,000,000	\$917,939,377
Key West	\$0	\$0	\$2,600,000	\$1,600,000	\$0	\$4,200,000
Manatee	\$32,150,000	\$18,650,000	\$28,400,000	\$26,400,000	\$18,400,000	\$124,000,000
Miami	\$42,599,000	\$140,114,000	\$79,815,000	\$64,655,000	\$98,957,000	\$426,140,000
Palm Beach	\$1,150,000	\$1,800,000	\$1,000,000	\$0	\$0	\$3,950,000
Panama City	\$6,375,000	\$12,425,000	\$4,850,000	\$4,300,000	\$6,200,000	\$34,150,000
Pensacola	\$1,305,000	\$3,115,000	\$3,075,000	\$6,400,000	\$0	\$13,895,000
Port St. Joe	\$1,322,000	\$1,482,000	\$11,280,000	\$27,960,000	\$0	\$42,044,000
St. Petersburg	\$0	\$1,664,600	\$1,015,000	\$1,015,000	\$0	\$3,694,600
Tampa	\$76,535,000	\$76,911,670	\$69,995,000	\$77,240,000	\$77,170,000	\$377,851,670
Total	\$305,269,120	\$604,564,228	\$646,212,275	\$420,654,275	\$833,667,000	\$2,855,366,898

Figure 5.1 illustrates the on-port seaport capital improvement program by year. Over 12 percent of the capital improvement program is allocated for fiscal year 2009/2010. There is a modest increase in needs for fiscal year 2010/2011 of 21 percent that is increased slightly in fiscal year 2011/2012 to just under 23 percent. This sharply decreases in FY 2012/13 to around 15 percent and rises rapidly in 2013/14 to over 29 percent. Typically, a five-year program has the largest allocation of needs in the first year, reflecting top priorities, which is not shown here. Most of the larger ports deferred their needs to later years.

Figure 5.1 Five-Year Cumulative Seaport CIP by Year, FY 09/10 – FY 13/14

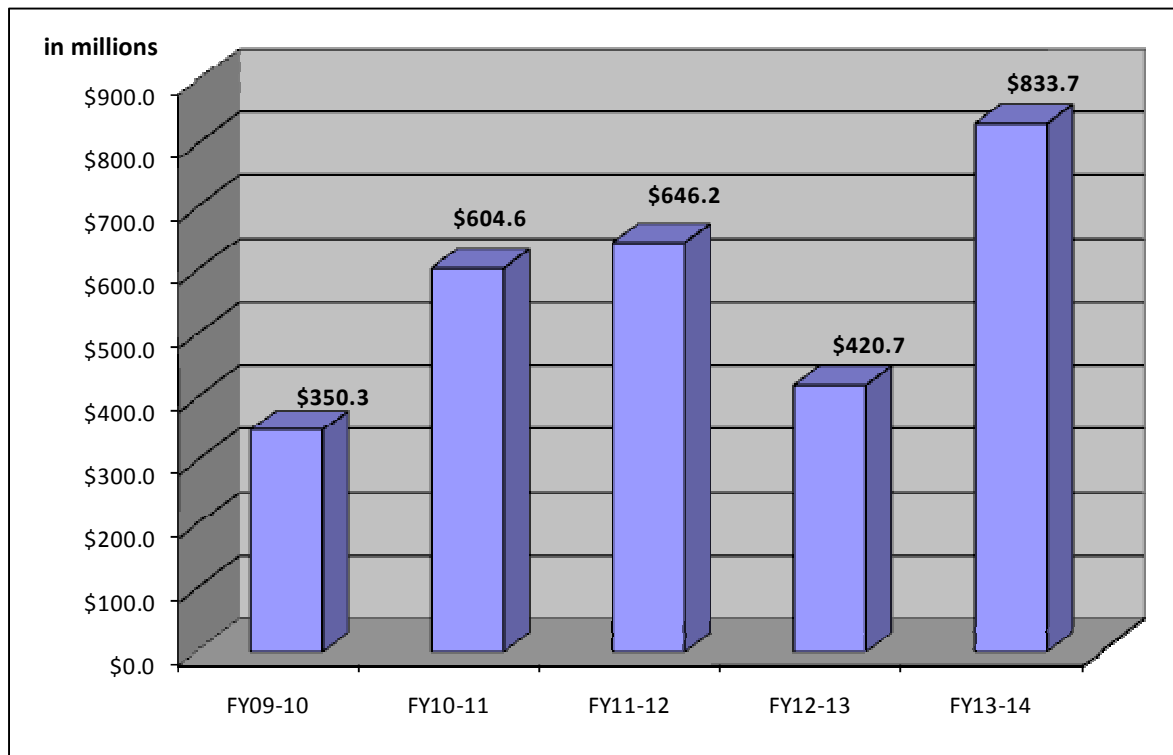
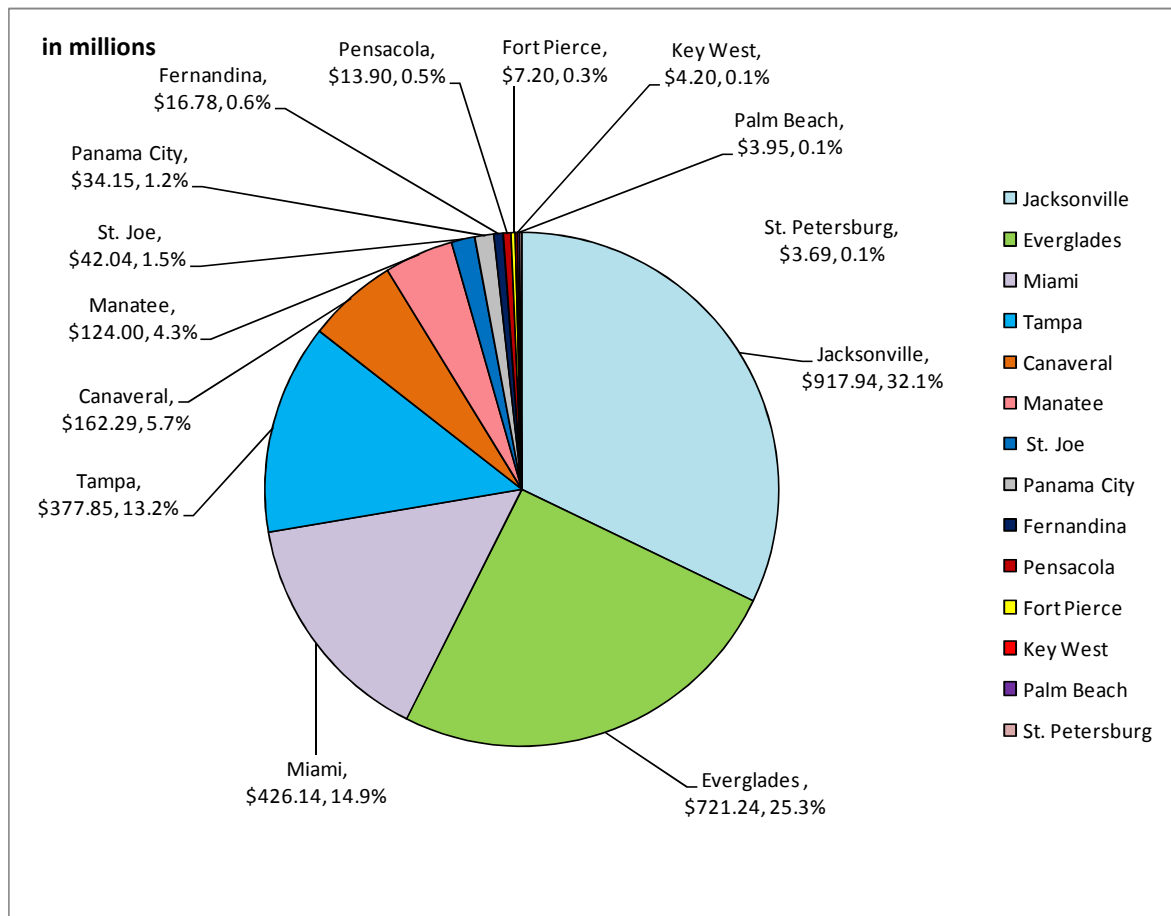


Figure 5.2 illustrates the cumulative on-port needs by port. Over 32 percent of the total capital improvement program represents needs at the Port of Jacksonville. Figure 5.2 also visually demonstrates the significant differences among the larger seaports (Everglades, Jacksonville, Miami, and Tampa), medium sized ports (Canaveral, Manatee, and Palm Beach²) and the smaller seaports (Fernandina, Fort Pierce, Key West, Pensacola, Panama City, Port St. Joe, and St. Petersburg). The largest seaports have larger needs to meet and maintain the growing demands of the container industry, major bulk and break bulk operations, cruise operations – including dredging, terminal, and land side connections.

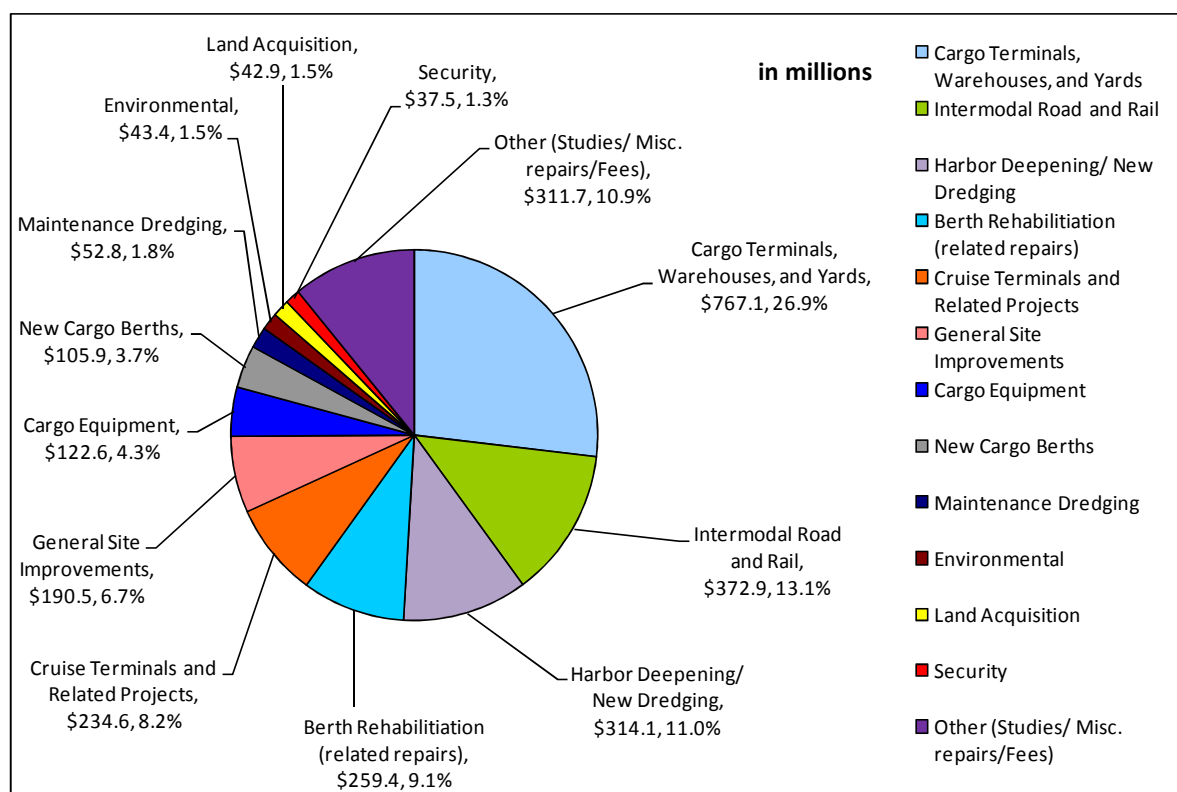
Figure 5.2 Five-Year Cumulative Seaport CIP by Port, FY 08/09 – FY 12/13



² Although the Port of Palm Beach's current CIP is small compared to its current output in tonnage and TEUs, the Port remains one of Florida's key medium-sized niche ports.

Figure 5.3 illustrates the cumulative seaport needs by project category. The top four project categories (cargo terminals, warehouse, and yards; intermodal road and rail; harbor dredging/new dredging; and berth rehabilitation) represent over 60 percent of the total projects for the capital improvement program. The project categories related to cargo operations (cargo terminals, warehouses and yards; cargo equipment; and cargo berths) represent nearly 35 percent of the total capital improvement program. Projects related to cruise operations only represent 8.2 percent of the total capital improvement program, even though Florida has three of the top cruise ports in the world (Canaveral, Everglades, and Miami) and one of the busiest ports-of-call in the nation (Key West).

Figure 5.3 Five-Year Collective Seaport CIP by Category (in millions)



Long-Term Seaport Needs

In addition to the immediate five-year needs documented in the CIPs, several seaports have identified longer term project needs to support their visions and goals. As part of the Plan development, Florida's seaports were asked to identify long term needs. Four seaports have documented future needs for inclusion in this Plan. Table 5.2 illustrates the long term needs beyond 20 years for Port Everglades. Table 5.3 details Port of Jacksonville's projected needs to 2040. Table 5.4 highlights Port of Miami's SIS Unfunded Needs Plan. Similarly, Table 5.5 illustrates the long term needs identified by the Port of Palm Beach given available funding. Table 5.6 outlines Port Canaveral's project needs to 2035. These needs represent a mix of projects that illustrate significant planned investments over the next several decades to help position individual ports for new and expanding markets.

Table 5.2 Port Everglades 10-Year, 20-Year, and Long-Term Needs

Project Name	Estimated Cost
10-Year Vision Plan: Years 2015-2019	
Northport	
Replace Berth 1, 2, 3 bulkheads	\$40,000,000
CT#4 Parking Garage	\$32,000,000
Midport	
Replace Berth 16, 17, 18 bulkheads	\$40,000,000
Multimodal Facility- Phase 1	\$40,000,000
Southport	
Turning Notch Expansion- Contract 2	\$28,810,000
Crushed Rock Facility	\$55,000,000
FTZ Relocation	\$40,000,000
Super Post Panamax Cranes (2)	\$24,000,000
Container Yard Improvements	\$30,000,000
Port-wide	
ACOE Dredging/Widening	\$255,000,000
TOTAL	\$584,810,000

Project Name	Estimated Cost
20-Year Vision Plan: Years 2020-2029	
Northport	
Replace Berth 4 bulkhead	\$22,500,000
Replace Berth 5, 5A bulkheads	\$48,880,000
Replace Berth 6 bulkhead	\$14,280,000
Replace Berth 7, 8, 8A bulkheads	\$50,000,000
Replace Berth 11, 12, 13, 13A bulkheads	\$87,770,000
Replace Berth 14, 15	\$28,360,000
Midport	
Replace Berth 19, 20 bulkheads	\$31,360,000
Replace Berth 21, 22 bulkheads	\$35,930,000
Replace Berth 23 bulkhead	\$10,850,000
Replace Berth 24, 25 bulkheads	\$33,380,000
Multimodal Facility	\$140,000,000
Southport	
Super Post Panamax Cranes (2)	\$24,000,000
Demolish RORO Berths and Lengthen Berth 33	\$24,520,000
TOTAL	\$551,830,000

Project Name	Future Needs
Outside 20-Year Timeframe	
Automated People Mover/ Intermodal Center (APM/IMC)	\$1,377,000,000
TOTAL	\$1,377,000,000

1 **Table 5.3 Port of Jacksonville Projected Needs to 2040**

PROJECT	2020	2025	2030	2035	2040
Development of Perm. Cruise Terminal	\$0	\$10,000,000	\$0	\$0	\$0
Harbor Deepening, Maintenance & Improvements	\$150,000,000	\$50,000,000	\$25,000,000	\$25,000,000	\$25,000,000
Acquisition of Land to Support Marine Growth	\$10,000,000	\$50,000,000	\$10,000,000	\$10,000,000	\$10,000,000
Mayport Ferry Project	\$10,000,000	\$5,000,000	\$5,000,000	\$10,000,000	\$5,000,000
Blount Island - Improvements/Expansion	\$150,000,000	\$150,000,000	\$10,000,000	\$10,000,000	\$10,000,000
Talleyrand - Improvements/Expansion	\$25,000,000	\$35,000,000	\$50,000,000	\$5,000,000	\$5,000,000
Berth Rebuilds BIMT	\$40,000,000	\$5,000,000	\$20,000,000	\$20,000,000	\$20,000,000
Asphalt Repairs BIMT	\$20,000,000	\$50,000,000	\$10,000,000	\$7,000,000	\$20,000,000
Berth Rebuilds TMT	\$20,000,000	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000
Asphalt Repair TMT	\$0	\$10,000,000	\$0	\$5,000,000	\$10,000,000
Intermodal Yard at Dames Point	\$20,000,000	\$0	\$0	\$0	\$0
Bartram Island Dredge Expansion	\$20,000,000	\$0	\$10,000,000	\$0	\$10,000,000
PCOB New	\$10,000,000	\$0	\$0	\$0	\$0
New Terminal Development		\$150,000,000	\$150,000,000		
TOTAL	\$475,000,000	\$525,000,000	\$300,000,000	\$102,000,000	\$125,000,000

1 **Table 5.4 Port of Miami SIS Unfunded Needs Plan**

FROM	TO	HORIZON	IMPROVEMENT TYPE	COST ESTIMATE
Port of Miami Bascule Bridge	Cargo Yards	Short-Term	On-Port Rail Yard	\$20,084,000
Biscayne Boulevard	Cargo Yards	Short-Term	Surface Rail and Bascule Bridge Reactivation	\$4,298,000
Port of Miami	Downtown Miami	Short-Term	Pedestrian Bridge / Repair to Vehicular Bascule Bridge	\$7,566,795
Cruise Boulevard	Cruise Boulevard	Short-Term	Redevelopment of Cruise Boulevard	\$2,500,000
Wharves	Wharves	Mid-Term	Additional Post-Panamax Gantry Cranes	\$44,000,000
Cruise Terminals	Cruise Terminals	Mid-Term	Cruise Terminal 7	\$52,000,000
Wharves	Wharves	Mid-Term	Cruise Berth 6	\$11,600,000
Wharves	Wharves	Mid-Term	Cruise Berth 7	\$2,660,000
Cruise Terminals	Cruise Terminals	Mid-Term	Improvements to CT D&E	\$52,000,000
Cargo Gate	Cargo Yards	Mid-Term	New Cargo Road	\$5,400,000
Cargo Yards	Cargo Yards	Mid-Term	Cargo Yard Improvements	\$12,000,000
South West Corner	South West Corner	Long-term	Fill South West Corner (Transshipment Yard)	\$27,000,000
South West Corner	South West Corner	Long-term	New Berth SW Corner 1	\$15,100,000
South West Corner	South West Corner	Long-term	New Berth SW Corner 2	\$11,300,000
Cruise Terminals	Cruise Terminals	Long-term	Cruise Terminal 8	\$52,000,000
Wharves	Wharves	Long-term	Cruise Berth 8	\$27,800,000
Cargo Yards	Cargo Yards	Long-term	Yard Stacker Cranes	\$22,000,000
Wharves	Wharves	Long-term	Cargo Berth 5	\$18,000,000
Wharves	Wharves	Long-term	Cargo Berth 6	\$19,400,000
Wharves	Wharves	Long-term	Cargo Berth 7	\$19,800,000
Off-Port	Off-Port	Long-term	Off-Port ICTF (Intermodal Container Transfer Facility)	\$25,000,000
Cruise Boulevard	Cruise Boulevard	Long-term	Multi-Modal Terminal	\$1,000,000,000
TOTAL				\$1,451,508,795

2 **Table 5.5 Port of Palm Beach Long-Term Needs**

Project Name	Future Needs
Port of Palm Beach Railroad Switching Project	\$3,700,000
TOTAL	\$3,700,000

1 **Table 5.6 Port Canaveral 2035 Needs Plan Projects**

FACILITY	PROJECT	Approximate Costs
Port Canaveral	Harbor expansion/deepening to support cargo development	\$30,000,000-40,000,000
Port Canaveral	Rail connection between existing heavy rail facilities on KSC/USAF to the Port	\$15,000,000-30,000,000
Port Canaveral	Multimodal Transport Center	\$10,000,000
Port Canaveral	Additional Passenger Terminals	\$40,000,000-60,000,000
Port Canaveral	Cargo Facilities/Terminals	\$60,000,000
Port Canaveral	Offshore mooring stations for bulk (liquid/gas/dry) cargo	\$30,000,000
Port Canaveral	Widening of SR 528 from Port to I-95	\$911,809,000 ³
TOTAL		\$1,096,809,000-1,141,809,000

³ FDOT estimate.

5.3 Current FDOT Work Program Related to Seaports

FDOT makes funding available for port and port-serving transportation improvements through a variety of programs. This funding falls short of the stated investment needs of Florida's ports. However, every dollar that the Department invests in ports is a dollar that is not invested in other critical state transportation priorities. It is essential that the Department be as efficient as possible with respect to its investments in Florida's seaports. The Department will base these decisions on: (1) consistent, transparent, and fairly-applied decision criteria; (2) the sound evaluation of benefits and costs, similar to the level of analysis it applies to its investments in other modes of transportation; and (3) achievement of adopted FDOT goals. To this last point, it is recognized that FDOT does not build or operate ports, nor does it dictate their development or operation. However, by strategic and targeted application of its support, it may act to encourage port improvements and strategies that are most consistent with the Seaport Vision and Florida Transportation Plan goals.

The seaports are responsible, as described in Section 5.0, for identifying and programming on-port improvements. However, they also rely on landside connectors, both rail and roadway, to provide access to their markets. FDOT, with support from local agencies (e.g., MPOs), leads the identification and programming of these projects. These off-port projects/needs are in addition to the \$2.85 billion in capital improvement needs identified above. These projects are essential for efficient passenger and freight movements throughout the state's multi-modal transportation network. These projects are generally coordinated through the FDOT Seaport Office and FDOT Districts along with various interagency partners including local governments, MPOs, and the FSTED Council. The rail and highway connector projects benefiting seaports typically are summarized in FDOT's work program under rail and highway categories.

Table 5.7 presents the seaport specific projects currently reflected in FDOT's work program by port. Over the next five years, FDOT anticipates spending over \$363 million on seaport projects; this reflects all existing state funding sources. Projects include on-port terminal improvements, on-port intermodal improvements, and to a lesser degree on-port connectors (water, rail, roadway).

In addition to these "seaport projects", FDOT also funds roadway and rail projects that promote access to/from Florida's seaports. Table 5.8 provides a summary of roadway connector projects by port. Over the next five years, FDOT anticipates spending over \$1 billion on roadway connector projects. Over the longer term (5 to 20 years out) FDOT has preliminary programming in excess of \$1.6 billion. These include mega projects like the Port of Miami Tunnel, as well as numerous improvements such as adding lanes to existing connectors.

Table 5.9 provides a port level summary of needed investments in railroads that will specifically benefit seaports. This list exceeds \$375 million and is partially funded. These include connector, bridge, and terminal improvements.

1 The dollar values presented in Tables 5.7 through 5.9 cannot simply be summed to
2 determine the state's overall investment in seaports. Closer scrutiny of the detailed
3 project lists reveals that some key port projects have been duplicated across modal needs
4 lists. While this may seem like a conflict, it in fact is actually an illustration of the
5 recognition that seaports rely on other modes of transportation. In addition, some of these
6 projects are not duplicates, but rather on- and off-port components that meet up at the
7 port boundary. As such, the tables suggest a significant level of direct and indirect
8 investment in our seaports over the next five years.

**Table 5.7 Summary of Current Seaport Work Program for All Funding Types
(Anticipated as of October 7, 2010)**

PORT	2011	2012	2013	2014	2015	Total 5 Yrs
PORT MANATEE	\$5,620,000	\$4,186,195	\$2,737,929	\$2,597,250	\$3,400,000	\$18,541,374
PORT OF FERNANDINA	\$150,000	\$200,000	\$0	\$0	\$0	\$350,000
PORT OF JACKSONVILLE	\$1,900,000	\$2,337,500	\$25,765,400	\$2,633,400	\$12,725,000	\$45,361,300
PORT OF PANAMA CITY	\$1,175,000	\$1,700,000	\$1,097,250	\$1,097,250	\$1,100,000	\$6,169,500
PORT OF PENSACOLA	\$ 75,000	\$0	\$0	\$0	\$0	\$75,000
PORT OF PORT ST JOE	\$0	\$0	\$0	\$0	\$5,382	\$5,382
PORT EVERGLADES	\$ 2,026,166	\$18,535,500	\$28,465,063	\$3,218,600	\$7,843,000	\$60,088,329
PORT OF PALM BEACH	\$0	\$9,460,000	\$0	\$0	\$2,001,000	\$11,461,000
PORT OF FT. PIERCE	\$ 0	\$0	\$0	\$0	\$0	\$0
PORT CANAVERAL	\$9,025,166	\$5,983,000	\$1,170,400	\$1,170,400	\$11,080,000	\$28,428,966
PORT OF MIAMI	\$3,293,685	\$3,062,013	\$3,937,000	\$2,926,000	\$10,225,000	\$23,443,698
PORT OF TAMPA	\$4,985,950	\$12,034,768	\$4,488,738	\$4,487,102	\$14,502,969	\$40,499,527
PORT OF ST. PETE	\$ 600,000	\$363,793	\$0	\$0	\$0	\$963,793
DATA AND PLANNING	\$ 630,050	\$669,999	\$669,999	\$670,000	\$670,000	\$3,310,048
TOTAL SEAPORT AND INTERMODAL FUNDING	—\$29,481,017	\$58,532,768	\$68,331,779	\$18,800,002	\$63,552,351	\$238,697,917
BOND DEBT REPAYMENTS	\$25,000,000	\$25,000,000	\$25,000,000	\$25,000,000	\$25,000,000	\$125,000,000
GRAND TOTAL OF SEAPORT INVESTMENTS	\$54,481,017	\$83,532,768	\$93,331,779	\$43,800,002	\$88,552,351	\$363,697,917

Source: FDOT Aug. 10

1 **Table 5.8 Summary of FDOT Work Program for Port Highway-Connector Projects**

Port	2011	2012	2013	2014	2015	Current Work Program Total	Second 5 Years	Cost Feasible Plan	Long Range Total
Port Everglades	\$2,170,263	\$61,245,755	\$0	\$0	\$0	\$63,416,018	\$0	\$21,000,000	\$21,000,000
Port of Fernandina	\$7,435,049	\$12,135,287	\$7,000,000	\$7,698,280	\$0	\$34,268,616	\$0	\$0	\$0
Port of Jacksonville	\$82,640	\$2,413,400	\$0	\$0	\$1,673,647	\$4,169,687	\$0	\$13,500,000	\$13,500,000
Port of Miami	\$160,538,412	\$100,330,000	\$32,105,001	\$358,886,776	\$39,791,606	\$691,651,795	\$318,775,000	\$1,279,162,000	\$1,597,937,000
Port Manatee	\$0	\$3,800,000	\$0	\$0	\$0	\$3,800,000	\$0	\$62,912,000	\$62,912,000
Port of Palm Beach	\$18,297,104	\$1,023,000	\$13,777,141	\$2,516,483	\$225,000	\$35,838,728	\$0	\$0	\$0
Port of Panama City	\$1,248,533	\$0	\$0	\$9,006,502	\$0	\$10,255,035	\$0	\$0	\$0
Port of Pensacola	\$1,914,767	\$0	\$0	\$7,920,753	\$0	\$9,835,520	\$0	\$0	\$0
Port of Tampa	\$987,434	\$6,456,000	\$81,815,911	\$146,374,812	\$0	\$235,634,157	\$0	\$0	\$0
Total	\$192,674,202	\$187,403,442	\$134,698,053	\$532,403,606	\$41,690,253	\$1,088,869,556	\$318,775,000	\$1,376,574,000	\$1,695,349,000

2 Source: FDOT.

3

Table 5.9 Summary of FDOT Work Program for Port Rail-Connector Projects *(Thousands of 2009 Dollars)*

Airport or Seaport	Freight Rail				Total
	Capacity Upgrade	Grade Separation	New Line	Rehabilitation and Maintenance	
Port Canaveral			\$50,000		\$50,000
Port Everglades	\$60,500	\$87,000			\$147,500
Port of Jacksonville	\$17,000			\$9,000	\$26,000
Port of Miami				\$36,900	\$36,900
Port of Palm Beach	\$3,700		\$100,000		\$103,700
Port of Tampa	\$11,450				\$11,450
Total	\$92,650	\$87,000	\$150,000	\$45,900	\$375,550

Source: Cambridge Systematics.

Note: Identified project costs impact goods and passenger movement to and from key seaport and airport model hubs. A blank cell does not necessarily indicate an absence of projects in this category. Project cost may not have been identified by the source(s).

5.4 Available Funding Programs

A multi-faceted funding program is a key element to achieving the objectives of Florida's seaport system. While seaports are largely self funding through their revenue streams, they look for funding partners, typically on a match basis, to expand and accelerate their programs. There are a variety of funding sources available to Florida's seaports. Different sources have different requirements regarding the types of projects that are eligible and typically have defined requirements for applying. In addition, the ability to expand or grow these sources varies. Examples of several key funding partner programs are listed below.

- **FSTED.** FSTED is the primary state seaport funding program for on-port investments. The program was created by statute and provides funding on an annual basis to Florida's 14 deep water seaports. Projects must be consistent with a Port's Master Plan the Florida Transportation Plan and the state's economic and land use goals. The FSTED program helps finance port projects on a 50/50 or 75/25 matching basis.
- **SIS.** With the adoption of the SIS in 2003, Florida has focused on the development of an investment in a statewide network of high-priority transportation facilities vital to Florida's economy and quality of life. Eleven of 14 deepwater seaports are designated as SIS facilities, Emerging SIS, or planned Emerging SIS facilities. Funding from the SIS is programmed over a five-year period and is used for capital improvement projects enhancing multi-modal connectivity and accessibility through highway, rail,

and aviation connections as well as for on port capacity projects. Match requirements vary by project type (50/50 or 75/25).

- **State Infrastructure Bank (SIB).** The SIB is a revolving loan and credit enhancement program consisting of two separate accounts. The federally-funded SIB account is capitalized by federal money matched with state money as required by law; the state-funded SIB account is capitalized by bond proceeds and state money only. SIB participation from the state-funded SIB account is limited to a transportation facility project that is on the State Highway System or that provides for increased mobility on the state's transportation system in accordance with Section 339.55, Florida Statutes, or provides for intermodal connectivity with airports, seaports, rail facilities, transportation terminals, and other intermodal options for increased accessibility and movement of people, cargo, and freight.⁴ To date, the Port of Jacksonville is the only seaport to use this program.
- **FDOT District Intermodal Funds.** District discretionary intermodal funds are eligible for port related initiatives. Districts have used intermodal funds primarily to support intermodal connectivity projects. These funds can also be used, at the district's discretion, to match port-related planning studies. A 50/50 match is usually required.
- **Private Funds.** Seaports finance projects and other initiatives through public-private partnerships (PPP). Many if not all of Florida's seaports form partnerships with their terminal operators and steamship lines to share the costs associated with major improvements. More formalized PPPs are also becoming more common. The Port of Miami Seaport Tunnel was one of the first public projects in the state to be financed largely through private funds through a competitive bidding process.
- **United State Army Corps of Engineers (USACE)** - The USACE is a federal agency that provides funding for locks, dams, dredging, and environmental preservation. The seaports are authorized to apply for funding from the USACE South Atlantic Region. USACE is responsible for maintenance and deepening projects for all federal channels. Extensive economic justifications for the expenditure are required.
- **America's Marine Highway Program.** The Marine Highway Program was fully implemented in April 2010. In August 2010, the US DOT Secretary identified 18 marine corridors, 8 projects, and 6 initiatives for further development. \$7 million was made available at the same time by the Maritime Administration; grants were made through a competitive process. While funding remains limited, Florida should continue to position itself for future funding. Currently Florida is part of two marine highway corridors (M-95 and M-10), two projects (Gulf Atlantic Marine Highway Project and Cross Gulf Container Expansion Project), and one initiative (East Coast Marine Highway Initiative).⁵
- **Federal Stimulus.** Since early 2009, the federal government has undertaken several stimulus programs to help the country recover from the current recession. These

⁴ <http://www.dot.state.fl.us/financialplanning/finance/sibshort.shtm>

⁵ http://www.marad.dot.gov/ships_shipping_landing_page/mhi_home/mhi_home.htm

programs have been used to fund projects designed to drive economic development and recovery. In addition, in lieu of re-authorization, these programs have been instrumental in advancing key infrastructure projects in a timely manner. As the recovery continues, Florida must remain active in pursuing funds through these types programs as they become available. The following summarizes several of the programs in existence today:

- **American Recovery and Reinvestment Act of 2009 (ARRA)** - This stimulus funding program was signed into law in February 2009. This program provided funding for transportation projects in Florida. Primarily, only “ready to go” capital projects supported by the MPOs and addressing access needs were eligible for ARRA funds. Two projects were approved for ARRA funds; improvements to Alta Road in Jacksonville and the Crosstown Connector in Tampa.
 - **Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grants Program** - This stimulus funding program was financed through the United States Department of Transportation (USDOT). This program established \$1.5 billion for funding freight mobility. Several of Florida’s seaports applied for funding from this program to accelerate key infrastructure projects. The Department applied for a major access improvement, Eller Drive, with the support of Port Everglades. No projects were awarded in Florida.
 - **Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grants Program II** - TIGER II is a \$600 million competitive grant program focused more on longer term outcomes; that is, projects do not necessarily need to be “shovel ready”. Overall criteria remain similar to its predecessor, the TIGER program. As of this writing, several of Florida’s seaports are considering and/or preparing grant applications.
 - **New federal transportation bill.** The Safe, Accountable, Flexible, Efficient Transportation Equity Act—A Legacy for Users (SAFETEA-LU) is the current legislation that authorizes the Federal transportation program. It was passed in 2005 and focuses on: improving safety; reducing traffic congestion; improving efficiency in freight movement; increasing intermodal connectivity; and protecting the environment. Funding under SAFETEA-LU was heavily earmarked and/or designated for regions with specific issues (e.g., rural, non attainment). SAFETEA-LU was scheduled to expire on September 30, 2009. Congress has passed numerous extensions to SAFETEA-LU and legislation is now scheduled to expire on December 31, 2010. There is no clear schedule for reauthorization at this time. The U.S. House of Representatives has been/remains prepared to act on reauthorization, while the U.S. Senate and White House prefer to take up legislation in 2011.
- Key issues anticipated to drive the next authorization include: congestion; safety; infrastructure preservation; livability; sustainability; and funding mechanisms. Key themes are likely to include: increased funding; freight and economic development; performance measurement; consolidation of Federal programs; and high-speed rail. While the current authorization process is on hold, bipartisan leadership of the House Transportation and Infrastructure Committee has released a proposed framework for reauthorization. With no better information available, this proposal provides insight into the types of programs that may be included in the future legislation. It contains

1 numerous freight elements, including a Freight Improvement Program and a Projects
2 of National Significance Program.

3 While the future authorization is unknown at this time, it is clear that congressional
4 leadership will likely consider a significant expansion of freight-specific programs.
5 Florida must ensure that its transportation program is prepared and positioned to
6 maximize the opportunities this new authorization may provide. The Seaport System
7 Plan, along with the other modal plans, the Strategic Intermodal System Plan, and
8 Florida's Transportation Plan should provide Florida with the necessary planning and
9 programmatic infrastructure to qualify for any new freight funding program. In
10 addition, FDOT has an established pattern of effectively engaging stakeholders in
11 advisory committees to guide development of these plans and programs. To address
12 possible discretionary programs for project of national significance, FDOT will need to
13 continue working with its private sector and regional partners to identify and build
14 support for eligible projects. FDOT will need to monitor and participate as
15 appropriate in new authorization activities.

16 It is imperative that FDOT, the seaports, and other key partners work together to
17 maximize the use of these funding programs. Collaboration and coordination help ensure
18 success for competitive programs like TIGER/TIGER II and discretionary programs
19 within the federal transportation bill. Decision makers like to see joint applications and
20 public sector endorsements of projects. For established state programs, like the SIS, it is
21 important that the seaports and FDOT establish appropriate priorities and justifications
22 help promote allocation of funds. Over the next decade, as the state, and nation as a
23 whole, work to refine how to pay for transportation investments, the seaport partnerships
24 and priorities must continue to be elevated. In addition, as Florida revisits its
25 opportunities to grow the trade and logistics industry, economic development resources
26 should be reviewed and used as appropriate to support ongoing direct and indirect
27 seaport investments.

6.0 Seaport System Plan Implementation

6.1 Overview

The mission of 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. To further these goals, the Department establishes specific goals for, and makes substantial investments in, all modes of transportation affecting Florida residents, businesses, and visitors. This section describes strategies and actions that should be undertaken by FDOT and its partners to help ensure Florida's seaports continue to prosper and support the state's economy.

6.2 Implementation Strategies and Actions

Implementation strategies and actions that drive FDOT's seaport program cover a variety of areas. These areas address state transportation policies, seaport and seaport-related infrastructure, ongoing program evaluation activities, integration with the state's overall freight system, and outreach and education initiatives.

At the policy level, it is important the seaport strategies and actions address the goals laid out in Florida's Transportation Plan (FTP). As described in Section 2.0, the objectives of the Plan have been organized around the FTP goals. Building off of that, the following identifies key implementation strategies, which should be addressed by the seaport community, followed by specific implementation actions that should be led by FDOT – organized by the FTP goals. In addition, FDOT-specific programmatic strategies are provided to help guide program activities.

FTP Goal: Provide a safe and secure transportation system for all users
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Key Implementation Strategies

- Ensure Florida's seaports are safe; port workers and visitors must be provided a safe environment that prevents or minimizes unintentional injury.
- Ensure Florida's seaports are secure; port property, port workers, and host communities must be protected from intentional harm.

- Promote efficient federal and state security protocols at Florida seaports to meet security needs without impeding mobility; this includes elimination of duplicate requirements.

FDOT Implementation Actions

- Participate in ongoing master and capital planning activities which include provisions for a safe and secure seaport.
- Support testing and deployment of technologies to streamline traffic flow and automate security clearance activities at main gate complexes.

FTP Goal: Maintain and operate Florida's transportation system proactively

Key Implementation Strategies

- Ensure Florida's seaport infrastructure (on and off port) is maintained at an adequate level to support current and future business opportunities and to serve strategic state interests.
 - Expand seaport operational capacity through densification, longer work hours and/or use of technology.
 - Expand seaport capacity through maintenance and construction of new infrastructure to match individual seaport build-out plans and niche markets.

FDOT Implementation Actions

- Implement Florida's seaport system planning program through two principal components; FSTED primarily focuses on on-port infrastructure; other state seaport investments primarily focus on capacity improvements and intermodal and connector infrastructure.

FTP Goal: Improve mobility and connectivity for people and freight

Key Implementation Strategies

- Participate in individual seaport planning activities to promote coordination between seaport and state investment decisions.
- Consider impacts on the complete supply chain as part of seaport project evaluations to enhance seaport investment decisions.
- Ensure the seaport system has efficient and reliable access to SIS corridors and hubs to facilitate competition and provide public benefits.

- Explore and develop marine highway corridors to improve cargo flows to/from and through Florida.

FDOT Implementation Actions

- Prioritize state seaport investments based on clear strategies and criteria within an established multimodal transportation system.
- Provide regional freight forums as part of modal system plan updates and other freight mobility initiatives to support ongoing freight system enhancements and improvements.

FTP Goal: Make transportation decisions to support and enhance livable communities

Key Implementation Strategies

- Ensure ability for passenger and freight traffic to coexist on key corridors
- Work with local governments to develop industrial land preservation program to protect port access and expansion plans.
- Reduce encroachment of incompatible land uses around major trade gateways.
- Identify/develop industrial sites with good access to seaports.
- Develop integrated logistics centers at key urban and rural locations as markets dictate.
- Foster closer working relationships among economic development organizations, chambers, seaports, airports, and other freight partners.

FDOT Implementation Actions

- Support industrial land use preservation program through review of development plans and partnership with local municipalities and counties.
- Ensure airports, seaports, and the freight industry are active in MPO planning/regional visioning processes, particularly around major gateways.
- Expand regional collaboration among seaports, airports, rail, and other modal providers/partners.

FTP Goal: Make transportation decisions to promote responsible environmental stewardship

Key Implementation Strategies

- Identify lands and water resources that host port-related or port-supporting uses, or may be important for hosting future port and port-related uses; and identify a designated buffer zone around key facilities and operating areas, within which sensitive uses should be discouraged; and include this information in Port Master Plans. Ensure that, to the extent feasible, such lands and water resources and buffer zones are appropriately reflected in local, regional and state land use and transportation plans.
- Provide needed capacity in a way that minimizes marine impacts: first by avoiding or minimizing new landfills and channel widening/extension where possible, second by managing marine operations within sensitive habitats, third by mitigating unavoidable impacts.
- Explore, with appropriate state and federal partners, the development of a streamlined process for environmental review and implementation of dredging projects.
- Explore, with appropriate state and federal partners, the development of mitigation banking programs.
- Provide air quality benefits by reducing the reliance of Florida freight shippers, receivers, and customers on goods trucked to and from out-of-state ports.
- Explore, and implement as feasible, emerging best practices to minimize vessel emissions (via shore-side electrification and other strategies), to minimize on-terminal operations (via low-emission equipment), and to minimize truck related emissions (via advanced gate systems, off peak operations where feasible, chassis pools, off-site equipment management, and use of rail and barge).
- Explore additional regulatory and funding strategies necessary to support Port air quality efforts, and to identify next-generation transportation logistics strategies that could be used to improve the movement of goods.
- Encourage seaport investments in green technologies – particularly those that complement state and national environmental programs and address climate change initiatives.

FDOT Implementation Actions

- Work in partnership with Florida seaports and other stakeholders to support environmental protection – including facilitation of saltwater mitigation opportunities, as well as development of shore power infrastructure, reductions in truck idling queues, and maximized use of rail.

**FTP Goal: Invest in transportation systems to support a prosperous,
globally competitive economy**

Key Implementation Strategies

- Provide capacity and operational improvements that ensure long term sustainability of key markets for Florida's seaports – this includes providing improvements that serve existing needs without precluding the ability to develop new and expanded services in the future.
- Preserve and expand Florida's share of trade and transportation activity with respect to competing ports in other states and countries.
- Develop at least one first port of call with 50-feet of water; this should be accomplished to correspond with completion of the Panama Canal expansion.
- Develop longer term statewide deepening program that identifies regional and statewide capacity needs; this should address market penetration, competitiveness, and funding.
- Provide on-dock or on-port rail at Florida's major seaports; this should be coordinated with the deepening program.
- Build partnerships for other seaports (Florida and non-Florida) to serve as feeders to Florida's major deep water hub seaports; this should include development of a marine highways network (short sea shipping) to serve trans-shipments market.
- Expand and enhance key niche/specialized gateways along inland waterways.
- Develop international warehouse/ distribution centers close to major seaports to facilitate/support growth in international trade.
- Encourage development of high capacity, efficient interstate rail and highway corridors to provide improved access to hinterland markets for discretionary cargo.
- Provide a flexible funding program that ensures Florida's seaports are responsive to economic development opportunities.
- Tie local/ regional initiatives with state programs and goals and position major regional projects to compete for discretionary federal funding programs.
- Develop new or enhance existing processes for freight planning at trade corridor/ mega-region level.

FDOT Implementation Actions

- Support implementation of Florida Trade and Logistics Study strategies to promote the ability of Florida's seaports to compete for and serve Florida and non-Florida markets.
- Implement Florida's seaport system planning program through two principal components; FSTED primarily focuses on on-port improvements at individual seaports on a collective basis; other state seaport investments primarily focus on capacity improvements and intermodal and connector improvements at a statewide system level.
- Coordinate state work program and port master plan/capital improvement plan development activities.
- Prioritize state investments and support seaport improvement programs that provide compatible and long term economic development opportunities.
- Promote flexibility in existing and new seaport-related funding programs to help ports effectively and competitively respond to economic development opportunities.
- Develop and maintain statewide and regional cargo and passenger forecasts to support state-level seaport planning activities.

FDOT-Specific Programmatic Strategies and Actions

In addition to, and in support of the above implementation strategies, additional recommendations are provided at the programmatic level to help facilitate FDOT's implementation activities.

- **Actively participate in the FSTED program, providing a comprehensive review of on-port project applications.** FDOT is a member of the FSTED Council and has a defined consistency review process through which it ensures the projects meet FDOT statutory requirements.
 - **Develop and maintain database of seaport needs.** SeaCIP 4.0 (as described in Section 5) has been transitioned from an application tool to a more robust data management tool. FDOT will work with the seaports to assist and encourage the use of this program as a comprehensive needs database. This will allow for project planning and tracking.
 - **Collect project information to support consistency review.** Through use of SeaCIP 4.0, FDOT collects the data necessary to evaluate the state benefits of each seaport project. These data become part of the project record as the project moves through the process.
 - **Conduct consistency review.** FDOT will use in-house analytical tools to evaluate each project application. The consistency review process contains qualitative and

quantitative elements. Calculation of a benefit/cost ratio for each proposed project supports the quantitative piece. A check list that reviews key considerations relating to community support, project need, etc. balances out the review.

- **Engage in port allocation discussions.** FDOT is a member of the FSTED Council and is an active participant. This involves joining in discussions related to distribution of funds across the seaports, identification and discussion of the impact of regional and statewide system needs and priorities, and coordination with off-port investment needs.

- **Participate in port planning activities.** Seaports engage in master and capital planning activities to define their planned improvements. FDOT District offices will actively engage in these activities as a stakeholder. This could include attending public meetings, reviewing seaport generated plans, and at a minimum meeting with seaport planning staff to discuss key developments and needs.

- **Continue to work to increase funding flexibility over time.** As the primary program for on-port investments in seaports, the current program should be flexible enough to support seaport needs from year to year. This flexibility should be accomplished through working closely with port staff. FDOT will continue to work to accommodate the ports need for flexibility in the programming of seaport projects.

- **Identify, prioritize, and recommend seaport-related off-port and intermodal projects.** FDOT is responsible for working with the seaports to identify, evaluate and prioritize off-port and intermodal investments. These projects consist of roadway, rail, and water connectors as defined by the SIS. These projects represent FDOT's primary responsibility and often represent significant investments that challenge the seaports and the FSTED funding level.

- **Develop and maintain database of seaport connector and intermodal needs.** FDOT develops and maintains an unfunded needs list that feeds the development of its cost feasible work program. The FDOT Seaport Office, working with Systems Planning and district staff will identify the port connector projects and enter them into SeaCIP 4.0; this will ensure that a comprehensive list of seaport needs can be generated from this new data management tool.

- **Collect project information to support evaluation and prioritization processes.** FDOT utilizes in-house analytical tools to support the evaluation of connector projects. While the Department maintains tools for highway and rail project evaluations, it is important that all seaport-related projects be evaluated consistently. FDOT works with the seaports to provide the project specific impact data for the evaluation.

- **Apply analytical tools.** Available tools will be used to calculate benefits and costs for each proposed project; the results are used by FDOT to establish project priorities for seaport connector and on-port intermodal projects.

- **Engage in internal funding allocation discussions.** The FDOT will engage in and lead discussions with all involved staff related to seaport connector and

- intermodal projects. Based on a review of the seaport-related projects, FDOT will ensure coordination takes place to recommend funding allocations and priorities as part of the work program development process.
- **Participate in port planning activities.** Seaports engage in master and capital planning activities to define their planned improvements. FDOT District offices actively engage in these activities as a stakeholder. This can include attending public meetings, reviewing seaport generated plans, and meeting with seaport planning staff to discuss key developments and needs.
 - **Develop and implement a program evaluation methodology.** In many cases, programs are considered successful if they identify, fund, and construct documented priorities within established schedules and budgets. However, it also is important to evaluate impacts the completed projects have on a seaport’s operation. This tool can be used to help justify state funding to seaports.
 - **Develop performance measures for seaport program elements.** FDOT, in cooperation with its seaport partners, will define a set of performance measures to be used as part of the seaport system program to evaluate the level of success associated with specific improvement projects. There will be a distinction between on- and off-port capacity projects. Projects will be evaluated based on key factors such as schedule, budget, and increased throughput. Anticipated impacts will be measured to determine if anticipated results were realized.
 - **Define protocols for implementing use of performance measures.** FDOT, in cooperation with its seaport partners, will establish protocols for how the performance measures program will be implemented as well as how the results will be used to impact future funding decisions. The data management element of SeaCIP will be considered in tracking information related to project performance. This would provide a historic trend of the impact of state investments in seaports.
 - **Coordinate with seaport partners to build consensus of the program.** As mentioned in the above steps, coordination with seaport partners will be critical to ensure there is agreement on the approach. This agreement is important because the seaports in many cases will be the ones providing the data.
 - **Evaluate performance of specific projects.** Once the measures are defined and the protocols are agreed upon, FDOT will evaluate past projects on an annual basis. This will be a quality assurance program that focuses on a sample of projects to spot check the program elements. Projects of most interest to the state will be selected. For example, a new berth that allows more or larger vessels to serve a port could be reviewed while repaving of a container terminal most likely would not be.
 - **Integrate seaport planning activities with a larger state freight planning program.** Florida’s seaports represent a critical element in Florida’s freight transportation system. This Plan represents Florida’s seaports and their connections to the highway and rail networks. Seaports are dependent on these networks to move their product to market. As such, the overall condition of the freight system is of critical importance to the seaports, particularly as they compete in a global economy.

- **Develop description of the integration of Florida’s seaports in the overall freight system.** FDOT has a very strong multimodal system planning process through the SIS, including the SIS Plan, the Multimodal Needs Plan, the Cost-Feasible Plan and interactions with MPOs and regional planning efforts. Seaports are part of this process. With the completion of the Seaport System Plan, the Department will have a modal plan in place to provide both policy direction and project priorities to the Department’s transportation planning processes. This plan is an opportunity to further illustrate the role of Florida’s seaports in the overall freight program.
- **Identify next steps in freight planning process and refinements.** The ongoing Florida Transportation Plan update and federal legislation will be monitored and appropriate steps will be implemented to ensure modal planning continues to be integrated into the overall multimodal systems planning process.
- **Develop and implement an effective seaport-specific outreach program.** One of the key benefits of the seaport system plan should be to help elevate and promote Florida’s seaports to create new opportunities.
- **Develop public information material.** Highlights from the Plan will be used to develop a brochure and presentation material. This material will be available on the Seaport Office website. A variety of venues for dissemination will be identified. This will include seaport partners, internal FDOT leadership meetings, the project web site, presentations at key meetings, such as MPO Advisory Council or the Florida Transportation Commission.
- **Conduct outreach.** Using the public information material, FDOT will conduct ongoing outreach on the Plan as opportunities arise. Over the first year there should be a concerted effort to reach a diverse audience. Over time, outreach would be based on new developments or updates to the Plan.
- **Provide ongoing support to the statewide seaport system.** The Plan provides FDOT with the documentation to support Florida’s seaports on an ongoing basis. The existence of this Plan will raise awareness and questions and provide opportunities for continued education and outreach activities.

6.3 Integration of Plan with Other Planning Efforts

The successful development and implementation of the Seaport System Plan is dependent upon effective integration with other key planning and programming initiatives within FDOT as well as by its seaport partners and local and regional planning partners. The Plan lays out the key objectives and strategies to guide FDOT’s seaport planning activities, which feed data and analysis into the state’s overall transportation program. The integration requirements are predicated upon the roles and responsibilities of the involved stakeholders, as well as the existing and adopted transportation policies and plans that guide the various elements of Florida’s transportation system. The key factors include:

- Roles and responsibilities;
- Adoption and incorporation into the FTP;
- Reflection in the SIS;
- Reflection in port plans;
- Reflection in local and regional planning;
- Reflection in other state planning; and
- Coordination of funding efforts.

Each of these is described in detail below.

- **Roles and Responsibilities.** There are many key partners involved in maintaining, growing, and promoting Florida's seaport system. As the Plan is implemented, it is important to understand the roles and responsibilities of these partners. Table 6.1 describes the roles of the key partners. The effective use and engagement of these partners is critical to ensure a robust and successful seaport system. The following subsections define the key actions and programs that are driven by these roles and responsibilities.
- **Adoption and Incorporation into FTP.** The FTP guides the overall direction of Florida's transportation program. The FTP is updated regularly and incorporates input from a diverse set of stakeholders. Currently, the 2060 FTP is under development; this will look out 50 years. Within this document, the overriding themes or goals have been defined that guide the development and preservation of Florida's transportation system. The Seaport System Plan has adopted these guidelines by associating specific seaport system objectives with the established goals. As each of these plans goes through regular updates, it will be critical that they remain integrated.

1 **Table 6.1 Partner Roles and Responsibilities**

Agency/Organization	Roles and Responsibilities
FDOT Office of the Secretary	<ul style="list-style-type: none"> Responsible for a balanced, multi-modal transportation system that serves Florida's residents, businesses, and visitors Voting member of FSTED Council responsible for consistency review of seaport projects related to transportation/traffic impacts
FDOT Seaport Office	<ul style="list-style-type: none"> Lead on- and off-port project evaluations Responsible for Seaport System Plan and integration into Department plans Responsible for programming and monitoring state funded seaport projects
FDOT Systems Planning	<ul style="list-style-type: none"> FDOT lead for port connector projects
FDOT Districts	<ul style="list-style-type: none"> FDOT lead for consistency reviews of FSTED projects Responsible for allocating discretionary intermodal funds Responsible for local participation in seaport planning and programming activities SIS coordinators are responsible for working with modal staff to identify needs and work with the Seaport Office and the ports to prioritize SIS projects needs
Florida Ports Council (FPC)	<ul style="list-style-type: none"> Function as staff to FSTED Council Support 14 deep water seaports through legislative lobbying (state and federal) Responsible for coordination with FDOT Lead industry research designed to promote Florida's seaports Responsible for statewide seaport advocacy
FSTED Council	<ul style="list-style-type: none"> Legislatively created to administer the Chapter 311 seaport funding program Responsible for allocation of 311 funds to 14 deepwater seaports Provide direction to FPC staff regarding research and legislative priorities Develop 5-year mission plan on an annual basis
Individual seaports	<ul style="list-style-type: none"> Voting members of FSTED Council Responsible for port-specific master planning, capital improvements, operations, and maintenance of Florida's seaports

Agency/Organization	Roles and Responsibilities
Department of Community Affairs (DCA)	<ul style="list-style-type: none"> Voting member of FSTED Council responsible for consistency review of seaport projects related to community development
Office of Tourism, Trade, and Economic Development (OTTED)	<ul style="list-style-type: none"> Voting member of FSTED Council responsible for consistency review of seaport projects related to economic development
Private Partners (steamship lines, cruise lines, terminal operators, shippers, distributors, investors, etc.)	<ul style="list-style-type: none"> Provide demands for seaport capacity Generate economic impacts Provide private funding
Metropolitan Planning Organizations (MPOs)	<ul style="list-style-type: none"> Responsible for metropolitan planning and development of long range transportation plans Responsible for development of transportation improvement programs – which identify all approved and funded transportation investments Responsible for regional freight and goods planning activities
Counties and Municipalities	<ul style="list-style-type: none"> Host communities for Florida’s seaports Responsible for preserving access and operations through land use and zoning decisions

- Reflection in SIS.** The SIS, created in 2003 by Florida’s legislature, identifies those elements of Florida’s transportation system that are strategic for the interregional, interstate, and international movements of passengers and freight. As international gateways, Florida’s ports are reflected in the SIS with eleven of the 14 deepwater seaports designated. This inclusion is critical to future investments in seaports given the goal of FDOT to program up to 75 percent of new capacity funding to SIS facilities. In addition, the maintenance and preservation of state-owned SIS facilities will remain a focus of FDOT; this specifically relates to roadway connectors serving seaports. The SIS goes through regular updates to accommodate shifts in the system, including growth and development of new facilities. The Seaport System Plan helps ensure that changes in Florida’s seaport system are included in and accommodated by the SIS. It is critical that updates to each of these programs remain coordinated and integrated. In recognition of the importance of seaports, eleven of the fourteen were designated by FDOT as part of the SIS. Port funding provided through SIS is focused on eligible projects, defined in 2010 as follows:¹

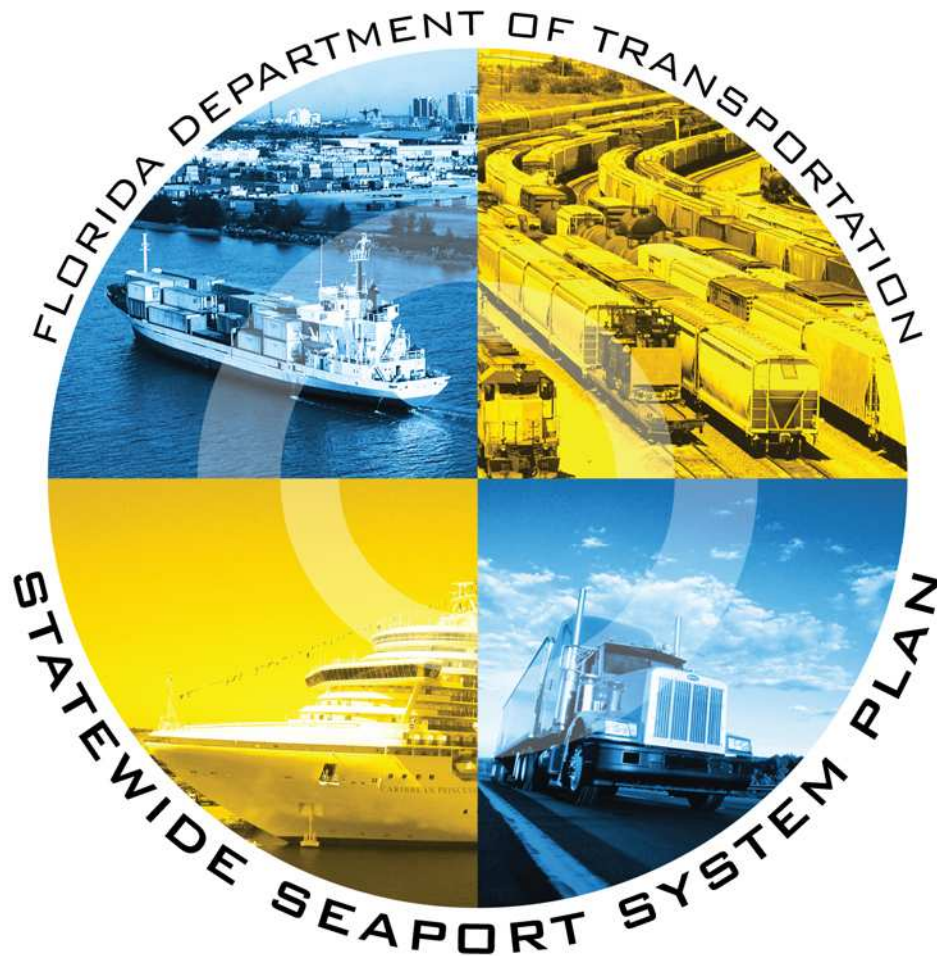
¹ Capacity Funding Eligibility Matrix for Strategic Intermodal System (SIS) Facilities, FDOT Systems Planning Office, April 2010.

- 1 – **Capacity Projects (Ground Transportation).** On-site roadways and railways that
2 directly link passenger and freight terminals to SIS connectors or hubs; on-dock
3 and near-dock railways and connecting sidings (e.g. track used for staging the
4 loading and offloading of container cargo).
- 5 – **Capacity Projects (Landside Connections).** Transfer cranes and conveyor belts;
6 short-term container storage, warehouses, bulk storage facilities; and intermodal,
7 on-site connections with other transportation systems (e.g. container on flat car
8 infrastructure, roll-on/roll-off (RO/RO) ramps; container staging areas that
9 enhance transfer to truck or rail.)
- 10 – **Capacity Projects (Waterside Connections).** Dredging of links to SIS waterway
11 connectors that add capacity to the seaport; and new construction or major
12 rehabilitation/reconstruction of berths, docks, quays, and wharves (including
13 bulkheads) that add capacity to the seaport.
- 14 • **Reflection in Port plans.** Each of Florida’s seaports develops and updates longer term
15 master plans as well as shorter term capital improvement plans. These plans identify
16 the needs and investment plans and strategies for each facility. In addition, they
17 establish forecasts for anticipated growth in traffic. It is through coordination with
18 these plans that FDOT builds an understanding of what ports need from the state –
19 need from the perspective of funding requirements and need from the perspective of
20 supporting infrastructure (waterway, rail, and roadway connectors). It also provides
21 the state with an understanding of anticipated growth on regional and statewide
22 transportation corridors resulting from port investments. Effective and ongoing
23 coordination among seaports and FDOT is critical as port plans evolve and change.
- 24 • **Reflection in Local and Regional Planning.** While FDOT and its seaport partners
25 work together to identify key infrastructure improvements, local and regional planning
26 organizations are responsible for documenting comprehensive transportation
27 programs through the development of LRTPs and TIPs; it is through these mechanisms
28 that state and federal funding flow to local projects. In addition, these organizations
29 are involved with local development initiatives and lead community outreach
30 programs to help establish public priorities as well as educate the public on key
31 development opportunities. As such, seaport needs and investment strategies should
32 be coordinated and included within these programs and documents. This requires
33 both FDOT and seaports to work with these local and regional partners.
- 34 • **Reflection in Other State Planning.** As illustrated above, significant state planning
35 occurs outside of or in addition to the Seaport Office and the Seaport System Plan.
36 While the FTP establishes the overall goals, and the SIS addresses investments in key
37 strategic infrastructure elements, a series of modal plans ensure that the entire
38 transportation system is covered. Modal system plans for each mode are maintained to
39 establish policies, identify needs, and advise investment priorities. The development,
40 update, and implementation activities of the modal plans are led by modal offices, with
41 key support from District staff. Modal plans provide an opportunity to engage private
42 partners in the planning process. It is important that these plans identify and
43 acknowledge intermodal connectivity with their counterparts. For example, the Rail
44 System Plan has identified rail needs specific to connections with seaports. At a more

disaggregated level, FDOT's districts undertake regional planning initiatives that also feed into state modal system plans. For example, some districts have conducted feasibility studies for the development of new freight hubs like intermodal logistics centers. In order to ensure a comprehensive and integrated transportation system, all of these initiatives must be coordinated.

- **Coordination of Funding Efforts.** Funding transportation improvements has become a more significant challenge in recent years, as needs increase and revenues decrease. As a result, the ability to leverage both public and private funds had become critical. Florida's seaport system has long been financed through public/private partnerships, with state matches varying by type of project. Seaports themselves engage in additional partnerships with tenants and steamship lines to expand terminal capacities. In addition, partnerships with federal agencies, like the USACE, drive major programs like maintenance and deepening dredging projects. Recently, federal stimulus funding has provided additional opportunities. In all of these instances, coordination is critical as various funding programs are brought together to pay for major improvements. This coordination helps ensure needs are addressed in their entirety – that is, a particular bottleneck is not partially addressed due to funding shortfalls. Seaport partners must remain coordinated to ensure available funds are brought to the most strategic of projects.

FLORIDA STATEWIDE SEAPORT SYSTEM PLAN



DRAFT APPENDICES

OCTOBER 13, 2010

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Appendix A

Florida Seaport System Plan

*Working Group Recommendations to the
Department of Transportation*

final report

prepared for

Florida Department of Transportation

prepared by

Seaport System Plan Working Group

October 2009

1.0 Introduction and Background

1.1 Overview

Florida is home to fourteen deep water seaports. These facilities represent a critical component of Florida's multi-modal transportation system, functioning as domestic and international trade gateways and regional economic engines. With ten of the fourteen seaports designated as part of Florida's Strategic Intermodal System (SIS), and an eleventh designated as a planned emerging SIS hub, Florida recognizes the critical contributions these transportation hubs provide in helping achieve the goals defined in Florida's Transportation Plan (FTP).

Over the last five years, the Florida Department of Transportation (FDOT) has laid the groundwork for a comprehensive statewide seaport planning program. Work has focused on documenting current seaport conditions, measuring state benefits in seaport investments, developing an investment framework to support state investment decisions, and exploring the implications of changing trends in global trade. These initiatives are described in the following reports and are available on the FDOT Seaport Office's website:

- Florida's Seaports: Conditions, Competitiveness, and Statewide Policies;
- Evaluate Florida's 14 Deepwater Seaports' Economic Performance and the Return on Investment of State Funds;
- Strategic Seaport Investment Framework; and
- Global Trade Trends: Challenges and Opportunities for Florida's Ports.

The next logical step has been to develop the first FDOT-sponsored Seaport System Plan (the Plan). Creation of the Plan will build on previous efforts, fill critical data gaps and provide FDOT with a framework, consistent with information available for Florida's other transportation modes, to support multi-modal transportation planning activities and make informed investment decisions. The Plan will build off of and coordinate with the comprehensive master planning activities completed by each of the seaports.

Each of Florida's public seaports is independently owned, operated, managed, and planned, with collective efforts coordinated through the Florida Seaport Transportation and Economic Development Council (FSTED) (of which FDOT is a member) and the Florida Ports Council (FPC). FSTED has allocated state funds to seaports since 1991. It has successfully allocated investments consistent with the priorities of the seaports as outlined in the individual seaport master plans. These allocations require a 50 percent seaport match. Each seaport establishes priorities within a pool of projects that have been found consistent with FDOT transportation impact requirements, consistent with Florida Department of

Community Affairs (DCA) land use impact requirements, and consistent with Office of Trade, Tourism and Economic Development (OTTED) economic impact requirements. Once funding allocations are approved by FSTED, each port allocates its funding to its priority project(s). The FSTED program is focused primarily on on-port projects.

State programs, other than FSTED, provide additional funding to Florida's seaports and seaport connectors. FDOT Seaport Office/District staff, in partnership with their seaports, identify eligible projects by specific funding program. Seaport funding matches vary by project type and program. The other state programs (including SIS) focus primarily on off-port connector or intermodal projects.

As described above, the elements of the state's seaport program work together to support a statewide seaport system. Blending these elements into a comprehensive system-wide approach helps ensure the necessary capacity is in place throughout Florida to handle the anticipated growth – growth both from Florida's increasing population and from the ability of its seaports to compete for discretionary cargo. Over the past two decades, there have been tremendous changes with respect to global and intermodal freight logistics, trading partners and services, trade volumes and cargo handling types, vessel design and deployment, marine infrastructure development and ownership, and inland transportation systems. While the recent economic downturn has led to reduced port volumes and a yet undefined recovery period, the long-term prospect for growth is still strong. As one of the seaports' funding partners, FDOT is responsible for ensuring available state transportation dollars are allocated to seaport projects that maximize regional and statewide public benefits.

1.2 Plan Development

The Plan will provide a blueprint that identifies potential demands, necessary investments, and possible funding scenarios; and formulates recommendations for future state transportation investments in our seaports. This blueprint will incorporate input from each of Florida's seaports and other stakeholders. The Seaport System Plan Working Group, described in more detail below, was formed specifically to engage these key stakeholders in the Plan, including the formulation of policy recommendations that reflect their input on a variety of technical issues.

The Plan will consider and integrate, as appropriate, the related work undertaken by FDOT, the FPC, and individual seaports. The Plan will be designed to build on the success of the FSTED program, as well as the other state programs. While the majority of on-port seaport infrastructure investments come from the seaports themselves, the state plays a critical role in cost sharing to promote passenger and freight mobility and economic prosperity throughout Florida, particularly through its significant investments in rail and highway connectors to the seaports. The development of the Plan provides an opportunity to further enhance the seaport system by growing the elements that work well and modifying and expanding those that can be improved. The Plan also provides an additional opportunity to promote the importance of Florida's seaports by providing a system-wide

program that allocates state transportation funds to seaport projects in a manner comparable to other modes of transportation.

Preparation of the Plan will include the following activities:

- Develop outreach and consensus-building;
- Develop state seaport system goals and objectives;
- Identify critical issues;
- Develop an overview of current seaport infrastructure and operations;
- Emphasize impact of seaport activity on Florida's economy;
- Compile/develop cargo and passenger capacities by port;
- Develop passenger and cargo forecasts for seaports by region, and evaluate various potential demand scenarios and investment strategies; and
- Develop recommendations for state transportation investment priorities for Florida's seaport system.

1.3 Seaport System Plan Working Group

The Seaport System Plan Working Group was formed to engage a wide range of stakeholders in the plan development process. Members are listed in Table 1. The group specifically was charged with developing policy recommendations for consideration and use by FDOT during its preparation of the Plan. The use of working groups has been an established practice of FDOT for other key initiatives, including the development of transportation policy and modal plans. It has proven an effective mechanism to engage public and private partners in a dialog about FDOT's role in identifying and addressing transportation system needs.

The Working Group met several times in person and via teleconference to develop policy recommendations to guide the Plan, to develop recommendations for the SIS Leadership Committee regarding the SIS update currently underway, and to review and discuss technical material to be used as input to the Plan. The Working Group has agreed to remain involved in Plan development through review of draft documents. Members further agreed to remain available to FDOT on an as-needed basis for the foreseeable future to advise on key issues that may arise.

This document describes the Seaport System Plan Working Group's policy recommendations presented to FDOT for consideration and use, as appropriate, during the development of the Plan. It also summarizes input provided to the SIS Leadership Committee and areas of technical discussion. It concludes with a description of next steps in development of the Plan.

Table 1 Seaport System Plan Working Group Members

Debbie Hunt, Chair Florida DOT	John Koch CSX Transportation
Richard Wainio, Vice Chair Port of Tampa	Lisa Wheldon FEC Railway
Meredith Dahlgroser, Project Manager Florida DOT	Robert Martinez Norfolk Southern Railway
Keisha Rice Office of Tourism, Trade, and Economic Development	Candida Bronson U.S. Army Corps of Engineers
Mark Reichert Florida Transportation Commission	Allison DeFoor 1000 Friends of Florida
Tom Pelham Florida DCA	John Adams Enterprise Florida
Sally Mann Florida DEP	Dennis Kelly TraPac
David Anderton Port Everglades	Greg Hazle CEMEXUSA
Bill Johnson Port of Miami	Mary Lou Rajchel Florida Trucking Association
David Kaufman JAXPORT	Jim Wolfe FDOT District 4, Secretary
Wayne Stubbs Port of Panama City	Tommy Barfield FDOT District 3
Stan Payne Port Canaveral	Christie Holland FDOT Office of Financial Development
David McDonald Port Manatee	Terry Kraft FDOT Office of Policy Planning
Ray Sharkey MPO Advisory Council	Ed Hutchinson FDOT Systems Planning Office
Michael Howe MPO Advisory Council	
David Roach Florida Inland Navigation District	

2.0 Policy Recommendations

The policy recommendations presented below are organized into five key areas, based upon Working Group input. These areas include:

- Capacity and Funding;
- Competitiveness and Business Opportunities;
- Permitting and Environment;
- Implications of Other Modal Plans and Connectivity; and
- Planning.

Recommendations for each area were developed by the Working Group through a consensus-building process. All members had equal opportunity to provide input and to participate in ranking discussions designed to revise policy statements until they captured the overall concurrence of the Working Group. The material presented in this section provides the final version of those statements, with a short narrative designed to further illustrate the purpose of each statement.

Capacity and Funding

Florida's seaport system planning program should continue to include two principal components, each of which should be grown over time: 1) the FSTED process should continue to be the primary focus for state investments in on-port improvements; and 2) other state investments in seaports (including SIS) should be focused principally on seaport intermodal and connector improvements.

Florida's seaports receive state funds from several programs, primarily consisting of FSTED and SIS and Intermodal. Each of these programs has been developed to meet defined objectives, and as such operates most efficiently when meeting those objectives. The FSTED program was created by the Florida Legislature to provide Florida's fourteen deepwater seaports with a matching program to support a full range of on-port improvements (maintenance, capacity, operations, intermodal, etc). This program allows the seaports to identify and prioritize their eligible projects. FDOT participates in the review and evaluation of projects to help determine the eligible pool of projects. The SIS was created to prioritize state investments in inter-regional, interstate, and international movements of passengers and freight. SIS seaport investments focus on connectors (water, roadway, rail) and on-port intermodal projects. It is important these two elements remain distinct yet complementary moving forward.

FDOT should provide an investment framework that prioritizes state seaport investments based on clear strategies and criteria, while ensuring equitable consideration of needs and priorities across all modes.

FDOT is responsible for investing public dollars in transportation systems throughout Florida, across all modes of transportation. It is critical these investments be focused on projects that provide the greatest public benefits. This applies both within and across modes. To ensure the dollars FDOT invests in Florida's seaports represent the greatest public benefit, identified needs must be prioritized based on clear strategies and criteria that quantify economic, transportation, and environmental impacts. Application of FDOT's framework should be modified to reflect each of the two elements defined above. Within the FSTED program, FDOT should use the framework to help confirm the public benefit of projects, with each port continuing to prioritize its own projects. For all other state funding, the framework should be used to help prioritize improvements. In addition, a framework should be developed for each mode.

FDOT should participate in individual seaport master plan development processes as a stakeholder to facilitate an understanding of and coordination with seaport investment decisions, particularly as they pertain to state investments in transportation infrastructure.

Florida's seaports engage in a detailed master planning process that defines needs, improvement plans, and in some instances, a longer-term vision. These master plans are used to develop capital improvement programs (CIPs), which are updated annually. FDOT should be engaged in these activities as a stakeholder to ensure awareness of seaport and seaport connector needs, and to ensure an understanding of seaport growth plans. This coordination will enhance FDOT's ability to plan for Florida's seaport system, streamline its consistency review of 311 applications, and make more informed decisions about other seaport and seaport supportive investments of state transportation infrastructure dollars. There should be consistent participation across FDOT Districts; no new or expanded authority is suggested.

FDOT should consider impacts on the supply chain when evaluating and prioritizing state seaport investments to improve efficiency and connectivity of seaport-related transportation movements.

Seaports are transportation hubs connecting markets and modes. To evaluate the specific needs of a seaport, it is necessary to understand the patterns of the cargo passing through the seaport gateway. Our global economy is driven by the effective use of supply chains – which is, the combination of suppliers, processes, and modes used to move products to market. Logisticians develop supply chains based upon availability, cost, and reliability of services. Seaports, and their connection to landside transportation networks, are a critical component in a supply chain. It is important for FDOT to work with the seaports to determine the impact specific projects would have on key supply chains as part of its evaluation process. This will help prioritize specific projects, as well as the phasing of multiple projects to alleviate bottlenecks.

FDOT should promote flexibility in existing and new seaport-related funding programs to help ports effectively and competitively respond to economic development opportunities.

Seaports are economic development engines that require an ability to respond quickly to new business opportunities. While seaports develop a five-year capital improvement program, priorities are subject to change quickly as new opportunities arise. FDOT's funding program, based on the work program, is designed to allocate five years of funding. While there are mechanisms in place to allow for changes to the work program, FDOT strives to minimize the number of changes, particularly in the first few years. As a result, FDOT funding allocated to seaports is less flexible in some cases than the seaports would prefer. Increased flexibility of state funding sources and strategic planning will enhance the ability of seaports to achieve their missions, providing economic growth opportunities for Florida in response to changing market needs. This is particularly true for the FSTED program, which deals with on-port improvements in real-time to support new business opportunities. The FSTED program element should receive the greatest amount of flexibility; other state funding programs are better suited for incorporation into the state's work program.

The Plan should provide statewide and regional cargo and passenger projections, in coordination with seaport master plans, demographic trends, and shifts in global trade patterns, to help guide state investment priorities.

Each of Florida's seaports develops volume forecasts for cargo and passengers, as appropriate. These forecasts vary by base and forecast years across the seaports, and reflect projections based on "point-in-time" conditions and market capture. The purpose of developing statewide and regional projections is to provide the state with an understanding of capacity and need by type of cargo for Florida's seaport system. Key assumptions will be reviewed and evaluated to determine realistic regional and statewide totals. Seaports will be given the opportunity to review and comment on the forecasts and the assumptions used. FDOT will incorporate port-specific data, as appropriate, into the regional and state estimates to help guide state investment decisions. These forecasts will be updated as part of each Plan update. Seaports will be encouraged to review and use the regional and state forecasts as appropriate in their planning activities.

FDOT should work with Florida's seaports to expand existing and pursue new funding sources to improve the competitiveness of Florida's diverse seaport system.

Florida's seaports have developed a list of unfunded needs that exceeds current funding program capacity. As with all other transportation modes, needs outweigh available resources. The FPC, on behalf of the seaports, works through legislative initiatives (federal and state) to identify new funding opportunities. Many seaport and seaport connector projects have been funded through the SIS and are programmed for future funding as well. Currently, several seaports are pursuing grants through various federal economic stimulus programs. FDOT, with the seaports, should ensure existing programs are maximized and explore and support pursuit of new funding sources. Both elements of the existing seaport program (FSTED and other state investments) should be "grown" by the state over time to support on and off port improvements.

Competitiveness and Business Opportunities

FDOT should strive to ensure the seaport system has efficient and reliable access to SIS transportation corridors and hubs to facilitate competition for new business opportunities that provide public benefits.

The SIS represents the foundation or backbone of Florida's transportation system. It focuses on providing interregional, interstate, and international mobility to Florida residents and businesses. Florida's seaports rely on the SIS for the movement of cargo and passengers to and from their facilities – whether it be through waterway, rail, or roadway connectors. As access to the SIS is a critical factor in a seaport's ability to provide competitive service to both domestic and international customers, it is important for FDOT to facilitate efficient and reliable access.

Permitting and Environment

FDOT should work in partnership with Florida seaports and other stakeholders to support facilitation of saltwater mitigation opportunities.

Saltwater mitigation represents a significant challenge to seaports, both due to the cost and the limited options available. FDOT experiences the same challenges for its highway and bridge projects involving saltwater. While no mitigation banks exist today for saltwater mitigation activities, FDOT and the seaports should work together to share experiences and approaches, as relevant, to facilitate each others' initiatives. The Florida Department of Environmental Protection (FDEP) is the lead agency for mitigation in Florida. FDOT and the seaports should continue to work with FDEP to promote acceptable solutions to mitigation requirements.

FDOT should encourage seaport investments in green technologies – particularly those that complement state and national environmental programs and address climate change initiatives.

Green technologies across all industries will continue to expand over the coming decades. Florida has begun to define a strategy to address climate change issues and the national energy policy continues to move towards one of sustainability. Opportunities exist at seaports to further the cause with programs like shore-side power, which significantly reduces vessel emissions by eliminating idling while at port. FDOT should encourage and support, as practical, seaport investments in green technologies and programs. This will contribute to both seaport and state goals of sustainability and quality of life.

Implications for Other Modal Plans and Connectivity

FDOT should use comparable methodologies and criteria to assess project impacts and establish priorities for state investments across modes.

FDOT is responsible for selecting and prioritizing the state's transportation system investments. While each mode has its own characteristics, necessitating a customized methodology to measure the benefits of a particular project, it is important each state investment be evaluated with the same level (comparable) of vigor. This will ensure the state's resources are allocated to the best set of projects across modes.

FDOT should establish and implement a multi-modal systems approach that strengthens modal connectivity and promotes the most effective use of the system.

Florida's seaports function as transportation gateways and rely on other modes for the distribution of cargo. As a result, efficient intermodal connections are critical for seaports. With the creation of the SIS, the Florida Legislature acknowledged the importance of each mode and how each fits into the overall transportation system. SIS Connectors have been defined and designated to ensure these connections are a priority within the state's investment program. As FDOT continues to refine its transportation program, there should be a continued, and perhaps expanded, focus on multi-/inter-modalism. This would include ongoing coordination among the SIS and the modal plans, all of which are updated regularly.

FDOT should support the development of a comprehensive freight program – with local, regional, and state components – that provides seaports with competitive access to markets.

The global supply chain relies on an integrated, efficient, reliable freight transportation system that minimizes the impact of modal transfers and provides access to suppliers and consumers. Seaports rely on this system for the marketing of their services and the movement of their cargo. FDOT developed a Freight and Goods Mobility Plan that provided a profile of the state's freight transportation system in 2008 and now maintains current modal plans for each mode. The SIS includes corridors, connectors and hubs for all modes and guides state capacity investments. FDOT should use these resources, along with local and regional freight initiatives, to develop a comprehensive freight system.

FDOT should work with seaports to coordinate state work program and port master plan development activities.

FDOT updates its five-year work program annually. This involves creating a new "5th year" and making any required modifications to years one through four. There is an established schedule for this process. Understanding the schedule and opportunity for changes within the process is critical for FDOT partners. Florida's seaports update their master plans periodically and their CIPs annually. Projects identified for potential state match are submitted for consideration through the SeaCIP application process. While the work program and SeaCIP application processes overlap, there could be better coordination to ensure existing flexibility is used to the fullest extent possible.

Planning

FDOT should provide regional freight forums, in coordination with its partners, as part of modal system plan updates and other freight mobility initiatives, to support ongoing enhancements and improvements to Florida's freight transportation system.

Outreach is an important element in statewide freight planning. It provides modal and community partners with the opportunity to identify key needs and opportunities. Freight transportation typically involves more than one mode. Regional forums bring all freight stakeholders together and provide opportunities for intermodal and multi-modal solutions to transportation issues. FDOT should use such forums to support modal system plan updates and an overall freight transportation program.

FDOT should support and participate in the Florida Chamber's planned trade flow analysis to identify key opportunities and needs driving Florida's competitiveness and to support on-going investments in Florida's seaport system.

The Florida Chamber currently is working to develop a scope of work for a statewide trade flow analysis. This analysis is anticipated to cover domestic and international trade flows across all modes. It will identify key trading partners and key commodity flow patterns, which will be used to help identify opportunities for the state and help determine investment priorities.

FDOT should integrate seaport system planning activities into a state-wide multimodal freight mobility planning program that addresses overall freight mobility needs, with an emphasis on connectivity between modes.

Each modal office currently develops and maintains its own system plan. These plans identify system characteristics and current conditions and identify and evaluate needs at the regional and state level in partnership with their system providers and stakeholders. In 2008, the Seaport Office developed a Freight and Goods Mobility Plan, which integrated system characteristics from each mode to develop a comprehensive description of the freight transportation system as a resource to be used in SIS planning, as well as for updates of the FTP. While it provided a one-stop shop for a system description at one point in time, individual modes have their own modal planning requirements and operate independently in the development of needs and priorities. In addition, seaports, airports, railroads, and some local/regional transportation agencies (MPOs, FDOT Districts, etc.) have developed lists of freight needs through completion of freight plans, capital improvement programs, and master plans. FDOT should consider integrating seaport system planning activities (along with freight planning components from other modes) into a comprehensive freight mobility planning program that recognizes and builds off the significant volume of work completed at the regional level by its transportation partners.

3.0 SIS Update Recommendations

In 2009, the FDOT began its first major update to the SIS. Annual minor updates have been used to evaluate hubs and corridors as they relate to established thresholds. This major update is the first time since creation of the SIS in 2003 that the thresholds themselves are being reviewed. The SIS Leadership Committee was formed to help guide this process. As part of their outreach activities, the Seaport System Plan Working Group was asked to provide recommendations relating to Florida's seaport system. The Working Group developed the following recommendations, which have been presented to the SIS Leadership Committee for review and consideration.

Designation Issues

Should changes be made to the number of ports designated as SIS or Emerging SIS?

Florida's seaports represent strategic infrastructure for freight and passenger movements in Florida. To many Working Group members, all seaports currently designated are strategic and should be included in the SIS, while others suggested a reduction in the number of seaports should be considered to meet the original intent of the SIS.

Ultimately, the Working Group believes the SIS should include those ports playing a strategic role today as well as those which have the potential to do so in the future. Ports unable to meet criteria and thresholds over the long term should not be included.

Should SIS and Emerging SIS remain separate designations?

The Working Group questioned the origin of the Emerging SIS, as well as the need for two categories. Most felt there was no practical need for two categories from a designation perspective, but specified if they were merged into one category it would require new thresholds which ensured emerging facilities with long term viability remained designated.

The Working Group recommends retaining SIS and Emerging SIS components and recommends consideration of thresholds which change over time to ensure a strategic focus; in addition, the Working Group recommends funding be prioritized and allocated across designated ports based on criteria which measure strategic value.

Hubs

Should new freight facilities be designated?

New types of freight facilities are being proposed and/or developed at various locations in Florida. These include freight villages, inland ports, and intermodal logistics centers (ILCs). There are no existing criteria for these types of facilities, although there are for specific elements of them (rail intermodal terminals). In some cases these facilities are linked to or associated with existing SIS hubs. Flexibility will be required to evaluate relevance to the SIS.

The Working Group recommends the department adopt SIS criteria and thresholds during this SIS Update to be used to evaluate new facility types in the future; designation should focus on needed connectors or on-facility transportation components (rail intermodal terminal). The criteria should be consistent with other modal thresholds. For example, an intermodal container transfer facility (ICTF) developed at an ILC should be evaluated the same as other ICTFs (rail intermodal terminals).

Are the cruise thresholds now established in SIS adequate?

Cruise passenger thresholds are based upon a percentage of the total number of cruise passengers in the U.S. Florida's seaports dominate the cruise industry nationally and internationally. As such, it is not difficult for many Florida seaports to meet the current cruise passenger thresholds for SIS (> 250,000 passenger per year) and/or Emerging SIS (> 50,000 passengers per year).

The Working Group recommends the thresholds SIS and Emerging SIS designation be revised. A higher threshold of 500,000 for SIS and 250,000 for Emerging SIS is suggested to better represent the amount of cruise passengers frequenting Florida's main cruise ports annually. SIS ports would be represented by the national/international leaders; Emerging SIS would capture the second tier of cruise operations, focused on ports showing a viable cruise operation over the long term.

Should designation criteria be developed for ports which do not have home-ported cruise ships?

Currently there are no criteria specifically for ports-of-call. Most Working Group members questioned the need to change the current process. However, if criteria were developed, landside connectors should not be eligible for funding. Waterside connectors (channels, turning basins, berths) should be considered.

The Working Group recommends port-of-call cruise facilities remain ineligible for SIS designation.

Should SIS eligibility continue to include both private and public facilities at a SIS port?

Ports consist of a mix of public and private facilities. Private companies often develop the terminals, sometimes leasing the land, and sometimes owning the land. The port authorities focus on the transportation infrastructure, including channels, turning basins, berths, bulkheads, rail yards, internal roadways, and security. Deepwater seaports are defined as the fourteen ports identified by Chapter 311 in Florida Statutes. Each port has a defined jurisdictional area consisting of a mix of public and private components.

The Working Group recommends SIS eligibility continue to be limited to terminals and connectors meeting specific thresholds which fall within a defined port jurisdictional area, as defined in port master plans.

Connectors

Should designation criteria for highway connectors to ports be adjusted?

Florida ports have a range of highway connector requirements. Some have separate passenger and freight terminals, others have multiple freight terminals. Currently, ports can have multiple connectors if they have separate cargo and cruise operations and/or one way street pairs providing terminal access. Concern exists about the lack of eligibility for additional connectors within a port's jurisdictional area. On one hand, there are concerns about diluting the SIS by designating additional connector facilities; from the other perspective, connectors should be provided to any terminal or complex meeting designation criteria.

The Working Group recommends the impact of adding additional connectors be evaluated. Few ports have a need for additional connectors; those representing major ports anticipate significant growth in the coming years. This would require the development of additional criteria to identify terminal thresholds or truck traffic thresholds which justify SIS connector designation.

Should drayage routes be designated as SIS connectors?

Connectors currently provide hubs with connections to corridors. For seaports, direct roadway connections to other SIS hubs (rail intermodal terminals) can represent a significant movement – a movement which should be supported by public policy makers.

The Working Group recommends connectors between a SIS seaport hub and a SIS rail hub acting as a drayage route be designated as SIS connectors. The criteria and thresholds for this type of connector should be determined during this SIS Update.

Are there any other new connectors which should be considered?

Connectors currently provide hubs with connections to corridors. For seaports, direct roadway connections to other SIS hubs (international airports, rail passenger stations) can represent a significant movement in support of cruise operations, such as the proposed

People Mover between Fort Lauderdale-Hollywood International Airport and Port Everglades.

The Working Group recommends hub to hub connectors for seaport/air/rail movements be considered; this would include transit oriented projects which focus on moving international, interstate, or interregional passengers; new designation criteria would need to be developed.

Waterways

Should changes be made to current designation criteria for waterways?

Some of Florida's waterways currently designated as part of the SIS were not designated for meeting passenger or freight volume thresholds, but because they were a coastal shipping lane and/or intracoastal waterway. Other inland waterways were evaluated based upon specific volume thresholds. Continued inclusion of low volume waterways was supported, as long as investments focused on measurable public benefits.

The Working Group recommends the existing thresholds and criteria be maintained as is; funding allocation criteria should focus investments on high priority public benefit projects.

Funding and Eligibility Issues

How should funding for SIS connectors be reviewed and prioritized?

Seaports are hubs connected to their markets by water, rail, and highway connectors. These connector types should be evaluated on a level playing field to ensure the best overall project is prioritized. Connector projects currently are funded out of modal allocations (within the SIS); for example, roadway connectors are funded by the highway program; dredging projects are funded out of the seaport program; rail projects are funded out of the rail program. Within each of these programs, different priorities will be established based upon district-wide and statewide needs. For a particular port with multiple connector needs (across modes), one may be more of a priority (bottleneck) than another.

The Working Group recommends the SIS evaluate individual port connector projects (water, rail, and highway) as a group to ensure the greatest need is prioritized for a particular port. This will allow the highest priority (bottleneck) be addressed first.

Should funding eligibility for SIS-designated seaports be changed?

Florida's seaports meet specific criteria to be designated as part of the SIS. Once designated as "strategic facilities" there are restrictions on the types of projects which are eligible for funding. Questions arose as to why there was a need for limiting projects if the

facility was designated as strategic. The primary responsibility of the SIS program is to fund capacity expansion projects. Ownership and maintenance responsibility was discussed; FDOT's primary responsibility is to maintain the infrastructure it owns; other facilities' owners are responsible for maintenance of their facilities.

The Working Group recommends SIS project eligibility be expanded to include on- and off-port transportation facilities which expand capacity at a SIS port. This would include all currently-eligible projects such as on-port roadway and rail improvements as well as dredging, and would expand the eligibility to include bulkhead projects which expand capacity.

4.0 Other Working Group Input and Next Steps

4.1 Other Working Group Input

While the reason for the creation of the Seaport System Plan Working Group was to provide policy recommendations to FDOT to help guide the development of the Plan, the Working Group has been asked to provide input and expertise on a variety of more technical topics. The input provided during these discussions is not summarized in this report, but will be used by FDOT to support the Plan development. In addition, the Working Group will be engaged, on an as-needed basis, in the process as the Plan is developed. Key areas of input, received to date, include:

- **Regional and statewide forecasts.** Regional and statewide forecasts were developed and presented to the Working Group. The forecasts were based on the latest data available from master plans and CIPs. Seaports were engaged in a review process to ensure consistency with port specific numbers as well as review possible futures for Florida. This included discussion about the length of the current downturn and the subsequent recovery period.
- **Competitive niches for Florida's ports.** Similar growth data were prepared for domestic competitors in the Gulf and South Atlantic regions; these numbers were compared to Florida's numbers. Working Group members provided (and still are providing) input on the potential opportunities for Florida ports based upon shifts in global trends and the developments planned and underway by competing states.
- **Funding program alternatives.** Funding program alternatives were identified as a key area of concern by the Working Group. Four key areas identified include: flexibility of the program as it relates to work program development and modification; eligibility of improvements by funding source (on/off-port, capacity/maintenance); responsibility for project prioritization based upon funding program in question (confirm positive benefit to state for 311/FSTED vs. developing a prioritized list of projects for other state funding sources); and funding level by program (ability to grow individual funding programs impacts all other considerations).
- **Evaluation criteria for state seaport investments.** Ports are known to be strong economic development entities, often representing one of the largest economic generators within their respective communities. They also play a critical role in international and domestic trade, serving as gateways to Florida's multimodal transportation system. The Working Group provided input and discussion on the

types of criteria which should be used to evaluate the impacts of seaport improvements to help document the public benefits and prioritize state investments.

4.2 Next Steps

The Working Group's scheduled meetings are complete with the adoption of the Policy Recommendations report on September 29, 2009. However, the Working Group has agreed to remain available to comment on the draft Plan, as well as be available to FDOT for the foreseeable future to provide advice and input on seaport-related issues which may arise. Foreseeable activities include:

- Submit Final Policy Recommendations report to FDOT Secretary for consideration during development of the Seaport System Plan;
- Stakeholder review of draft Seaport System Plan (policy and implementation elements) in late 2009;
- Stakeholders' continued input on key technical issues through end of 2009;
- Review results of Trade Flow Study in Spring 2010;
- Remain available on-call to FDOT for future consultation and Plan updates.

Appendix B

TO BE PROVIDED

Appendix C

Project Name	FY10	FY11	FY12	FY13	FY14	Totals
Harbor Deepening/New Dredging						
WTB Deepening/widen/cutoff (Feasibility Study)	\$157,000					\$157,000
WTB- Dredging	\$3,692,000	\$4,000,000	\$3,500,000			\$11,192,000
CT#6/7 Waterside & Dredging	\$500,000	\$8,000,000	\$12,000,000			\$20,500,000
subtotal	\$4,349,000	\$12,000,000	\$15,500,000	\$0	\$0	\$31,849,000
Maintenance Dredging						
Maintenance Dredging	\$608,000	\$2,500,000	\$1,500,000	\$1,500,000	\$1,500,000	\$7,608,000
subtotal	\$608,000	\$2,500,000	\$1,500,000	\$1,500,000	\$1,500,000	\$7,608,000
New Cargo Berths						
Southside Petroleum Berth	\$496,000					\$496,000
subtotal	\$496,000	\$0	\$0	\$0	\$0	\$496,000
Cargo Terminals, Warehouses, and Yards						
SCP 4 East Extension/Widening	\$49,000					\$49,000
South Warehouses-Sprinklers		\$100,000	\$200,000			\$300,000
North Cargo Pier 8	\$550,000	\$1,000,000	\$3,000,000	\$11,500,000	\$7,500,000	\$23,550,000
subtotal	\$599,000	\$1,100,000	\$3,200,000	\$11,500,000	\$7,500,000	\$23,899,000
Cargo Equipment						
						\$0
subtotal	\$0	\$0	\$0	\$0	\$0	\$0
Cruise Terminals and Related Projects						
Toll Booth Upgrades	\$500,000					\$500,000
CT#5 Terminal Improvements	\$881,000					\$881,000
CT #5 Renovations	\$441,000					\$441,000
CT#8 Terminal Improvements	\$10,588,000	\$1,000,000				\$11,588,000
CT#8 Waterside Improvements	\$4,468,000					\$4,468,000
CT#8 Parking Garage	\$4,111,000					\$4,111,000
CT#8 Renovations	\$415,000					\$415,000
CT#10 Garage Artwork Upgrade	\$163,000					\$163,000
CT#10 Renovations	\$540,000					\$540,000
Cruise Terminal Generators	\$500,000					\$500,000
Cruise Terminal Furniture	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000
CT Parking Lot Upgrades	\$3,315,000					\$3,315,000
subtotal	\$25,972,000	\$1,050,000	\$50,000	\$50,000	\$50,000	\$27,172,000
Land Acquisition						
						\$0
subtotal	\$0	\$0	\$0	\$0	\$0	\$0
Berth/Infrastructure Rehabilitation (related repairs)						
						\$0
subtotal	\$0	\$0	\$0	\$0	\$0	\$0
Intermodal Road and Rail						
G. King Blvd. Improvements	\$4,696,000	\$500,000	\$1,000,000	\$1,500,000		\$7,696,000
Road Improvements	\$200,000	\$100,000	\$100,000	\$100,000	\$100,000	\$600,000
Scallop Drive Paving	\$760,000					\$760,000
subtotal	\$5,656,000	\$600,000	\$1,100,000	\$1,600,000	\$100,000	\$9,056,000
Environmental						
Northside Stormwater Improvements	\$1,454,000	\$500,000	\$2,000,000	\$3,000,000		\$6,954,000
G. King Aquifer Storage	\$1,000,000	\$245,000				\$1,245,000
Stormwater Improvement NPDES	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000
subtotal	\$2,554,000	\$845,000	\$2,100,000	\$3,100,000	\$100,000	\$8,699,000
Security						
Security Fencing/Lighting	\$250,000	\$50,000	\$50,000	\$50,000	\$50,000	\$450,000
Police Department	\$248,000					\$248,000
Port Security Projects-ARRA-Police Dept	\$554,000					\$554,000
Port Security Projects-AMSC-Microwave and Sonde	\$1,500,000	\$5,000,000				\$6,500,000
Port Security Projects-AMSC-Fire Boat	\$750,000					\$750,000
Fire Fighting Equipment	\$37,000	\$281,000	\$131,000	\$67,000	\$47,000	\$563,000
Badging Area Upgrades/Access Control	\$279,000					\$279,000
CCTV Portwide Upgrade	\$251,000					\$251,000
subtotal	\$3,869,000	\$5,331,000	\$181,000	\$117,000	\$97,000	\$9,595,000
General Site Improvements						
Improve Piers, Bldgs, Structures	\$1,328,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,328,000
Maritime Center Tenant Improvements	\$790,000					\$790,000
Maritime Center HVAC & Solar Energy System	\$150,000					\$150,000
Cove Area Renovations	\$80,000					\$80,000
Cove Wall Phase 2			\$100,000			\$100,000
Landscape and Rec. Improvements	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000
Park - Upgrades	\$670,000	\$600,000	\$100,000	\$100,000	\$100,000	\$1,570,000
Portwide Signage	\$522,000	\$5,000	\$5,000	\$5,000	\$5,000	\$542,000
Utilities and Improvements	\$150,000	\$50,000	\$50,000	\$50,000	\$50,000	\$350,000
Banana River Site Development	\$550,000					\$550,000
Northside Land Improvements	\$5,634,000	\$8,866,000	\$4,000,000	\$1,000,000		\$19,500,000
subtotal	\$9,974,000	\$10,621,000	\$5,355,000	\$2,255,000	\$1,255,000	\$29,460,000
Other (Studies/ Miscellaneous repairs/Fees)						
Other Computer Equipment	\$95,000	\$30,000	\$30,000	\$30,000	\$30,000	\$215,000
Office and Minor Equipment	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000
Webcasting System	\$27,000					\$27,000
Communications Equipment	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$25,000
Interoperable Communications System	\$1,697,000					\$1,697,000
Joint Port Intelligence & Ops Center	\$2,330,000	\$600,000				\$2,930,000
New/Replacement Vehicles	\$74,000	\$150,000	\$150,000	\$150,000	\$150,000	\$674,000
Equipment	\$61,000	\$100,000	\$100,000	\$100,000	\$100,000	\$461,000
Maritime Museum	\$78,000	\$4,000,000	\$4,000,000			\$8,078,000
Rec/Tourist Development Projects	\$94,000					\$94,000
subtotal	\$4,511,000	\$4,935,000	\$4,335,000	\$335,000	\$335,000	\$14,451,000
TOTAL	\$58,588,000	\$38,982,000	\$33,321,000	\$20,457,000	\$10,937,000	\$162,285,000

Totals includes 5 YR (FY09-FY13) only. It excludes PRIOR total project costs.

CT = Cruise Terminal

WTB = West Turning Basin

NCP = North Cargo Pier (Cargo Terminal)

SCP = South Cargo Pier (Cargo Terminal)

Port Everglades

Information obtained from Five Year Capital Plan-Final, Fiscal Years 2009-2013 and Five Year Capital Plan -Final, Fiscal Years 2011-2015

Project Name	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15	Total (000s)
Harbor Deepening/New Dredging							
ACOE Dredging Project 03	\$6,794,000						\$6,794,000
Design			\$500,000	\$500,000			\$1,000,000
Construction					\$55,000,000	\$55,000,000	\$55,000,000
subtotal	\$6,794,000	\$0	\$500,000	\$500,000	\$55,000,000	\$0	\$62,794,000
Maintenance Dredging							
Berths 31-32 Maintenance Dredging		\$1,200,000					\$1,200,000
Federal Channel Maintenance Dredging		\$3,000,000					\$3,000,000
subtotal	\$0	\$4,200,000	\$0	\$0	\$0	\$0	\$4,200,000
New Cargo Berths							
Southport Turning Notch Expansion - Phase I							
Design			\$1,700,000				\$1,700,000
Bulkhead Construction				\$67,080,000			\$67,080,000
subtotal	\$0	\$0	\$1,700,000	\$67,080,000	\$0	\$0	\$68,780,000
Cargo Terminals, Warehouses, and Yards							
Northport Petroleum Terminal (former Molasses Tanks)		\$37,500,000	\$37,500,000				\$75,000,000
subtotal	\$0	\$37,500,000	\$37,500,000	\$0	\$0	\$0	\$75,000,000
Cargo Equipment							
Annual Southport Crane Painting	\$1,000,000	\$700,000	\$700,000	\$700,000	\$700,000	\$700,000	\$3,800,000
Panzer Belt Replacement		\$200,000	\$170,000				\$370,000
Replace Personnel Elevator- SP1		\$300,000					\$300,000
Storm Brakes- SP5 & SP6		\$200,000					\$200,000
Structural Upgrades to Southport Cranes		\$2,100,000					\$2,100,000
Twin Pick Container Spreader (replacement)		\$175,000					\$175,000
Container Crane		\$4,500,000					\$4,500,000
Renew/Replacement Equipment- Crane- Portable		\$10,000					\$10,000
Annual Crane Parts & Support	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$2,500,000
Annual Spare Parts for FMT Loading Bridges	\$140,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$540,000
Relocate Loading Bridges (from Terminal 18)			\$250,000				\$250,000
Terminal 4 Second Loading Bridge	\$1,400,000				\$1,400,000		\$2,800,000
Terminal 21 Loading Bridge (replacement)			\$1,400,000				\$1,400,000
subtotal	\$3,040,000	\$8,785,000	\$3,120,000	\$1,300,000	\$2,700,000	\$1,300,000	\$18,945,000
Cruise Terminals and Related Projects							
Cruise Terminal Nos. 21/22 Expansion							
Design	\$2,000,000						\$2,000,000
Midport Cruise/Cargo Programming & Plan Development						\$1,000,000	\$0
Midport Parking Garage							
Construction			\$32,000,000				\$32,000,000
Cruise Terminal No. 2 Renovations	\$1,500,000	\$3,643,000					\$5,143,000
Cruise Terminal No. 4 Parking Garage				\$1,000,000			\$1,000,000
Design					\$1,000,000		\$1,000,000
Construction						\$37,000,000	\$0
Cruise Terminal No. 4 Redevelopment/ Expansion	\$13,000,000		\$13,000,000				\$26,000,000
Slip 2 Expansion							\$0
Design			\$1,500,000				\$1,500,000
Construction				\$30,000,000			\$30,000,000
Terminal No. 19 Improvements							
Construction			\$9,929,000				\$9,929,000
Terminal No. 21 Improvements			\$4,378,000				\$4,378,000
Terminal No. 26 Improvements			\$11,553,000				\$11,553,000
Terminal No. 29 Upgrades				\$1,500,000			\$1,500,000
Portable Booth for Limo Dispatch		\$9,000					\$9,000
subtotal	\$16,500,000	\$3,652,000	\$72,360,000	\$32,500,000	\$1,000,000	\$38,000,000	\$126,012,000
Land Acquisition							
							\$0
subtotal	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Berth Rehabilitation (Related repairs)							
Bulkhead Retrofit & Replacement		\$2,500,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$17,500,000
Fire Suppression System for Piers 1 & 2		\$1,500,000					\$1,500,000
Replace Berths 9 & 10			\$51,000,000				\$51,000,000
Replace Water Mains at Berths 5-16	\$1,000,000		\$1,000,000				\$2,000,000
subtotal	\$1,000,000	\$4,000,000	\$57,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$72,000,000
Intermodal Road and Rail Infrastructure							
Splanger Boulevard Bypass Road		\$10,950,000					\$10,950,000
Initial Southport Rail Spur	\$5,466,000						\$5,466,000
Design		\$1,350,000					\$1,350,000
Construction			\$10,496,000				\$10,496,000
McIntosh Loop Road		\$4,500,000					\$4,500,000
Aggregate Terminal & Rail Yard					\$55,000,000		\$55,000,000
Construct ICTF Track and Storage Yard				\$50,000,000			\$50,000,000
subtotal	\$5,466,000	\$16,800,000	\$10,496,000	\$50,000,000	\$55,000,000	\$0	\$137,762,000
Environmental							
Mitigation for Westlake Improvements			\$12,000,000				\$12,000,000
On-Port Upland Enhancement			\$2,739,000				\$2,739,000
Inlet Management Plan			\$3,420,000				\$3,420,000
subtotal	\$0	\$0	\$18,159,000	\$0	\$0	\$0	\$18,159,000
Security							
Port Information Technology Systems	\$300,000						\$300,000
Annual Replacement of Electronic Security Equipment at Security Operations Center	\$200,000	\$1,200,000	\$700,000	\$700,000	\$700,000	\$700,000	\$3,500,000
Security Enclosure for Northport Garage	\$2,000,000	\$200,000					\$2,200,000
subtotal	\$2,500,000	\$1,400,000	\$700,000	\$700,000	\$700,000	\$700,000	\$6,000,000

General Site Improvements							
Annual Utility Infrastructure Improvements	\$550,000	\$550,000	\$550,000	\$550,000	\$550,000	\$550,000	\$2,750,000
Annual Fender & Mooring Improvements	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$2,500,000
Annual Capital Maintenance	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,000,000
Foreign Trade Zone/Warehouse (FTZ) RFP	\$10,300,000						\$10,300,000
Building No. 6 Renovation	\$617,000						\$617,000
Custom's House Repairs	\$500,000		\$500,000				\$1,000,000
Replace 14 Roll-up Bay Doors at Public Safety Building		\$100,000					\$100,000
Replace Exhaust Dampers for Smoke Evac System at Port Administration Building		\$22,000					\$22,000
Fire-Rescue Equipment		\$550,000					\$550,000
Operations Equipment Public (Vehicles)		\$347,000					\$347,000
Public Works		\$72,000,000					\$72,000,000
Underwater Roving Video Camera		\$16,000					\$16,000
subtotal	\$13,467,000	\$75,085,000	\$2,550,000	\$2,050,000	\$2,050,000	\$2,050,000	\$95,202,000
Other (Studies/ Miscellaneous repairs/Fees)							
Capitalized Interest	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$1,500,000
General Architectural/Engineering Services	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$1,500,000
Master Plan Update	\$200,000						\$200,000
Annual Furniture, fixtures & Equipment	\$1,500,000						\$1,500,000
In-House Labor & Overhead	\$840,000	\$840,000	\$840,000	\$840,000	\$840,000	\$840,000	\$4,200,000
Inlet Management Plan	\$3,420,000						\$3,420,000
Port Information Technology Systems		\$150,000	\$300,000	\$300,000	\$300,000	\$300,000	\$1,050,000
Annual Miscellaneous Infrastructure Improvements	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$2,500,000
Annual Miscellaneous Terminal Improvements	\$2,000,000	\$2,800,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$10,800,000
Annual Miscellaneous Port Building Improvements	\$900,000	\$900,000	\$900,000	\$900,000	\$900,000	\$900,000	\$4,500,000
Enterprise Resource Planning (ERP) Participation			\$3,422,000	\$1,738,000	\$53,000	\$53,000	\$5,266,000
Install Emergency Escape Window in Battalion Chief's Quarters at Public Safety Building		\$6,000					\$6,000
subtotal	\$9,960,000	\$5,796,000	\$8,562,000	\$6,878,000	\$5,193,000	\$5,193,000	\$36,389,000
TOTAL	\$58,727,000	\$157,218,000	\$212,647,000	\$166,008,000	\$126,643,000	\$52,243,000	\$721,243,000

Port of Fernandina

Information obtained from 5 Year on Port Capital Improvement Program 2009-2010 to 2013-2014

Project Name	FY 09/10	FY 10/11	FY 11/12	FY 12/13	FY 13/14	Totals
Harbor Deepening/New Dredging						
						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Maintenance Dredging						
						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
New Cargo Berths						
Cruise/Cargo Berth		\$150,000	\$3,400,000	\$1,900,000		\$5,450,000
<i>subtotal</i>	\$0	\$150,000	\$3,400,000	\$1,900,000	\$0	\$5,450,000
Cargo Terminals, Warehouses, and Yards						
Warehouse & Warehouse Improvements	\$300,000	\$500,000			\$2,250,000	\$3,050,000
Container Yard Modifications (drainage and repairs)	\$700,000			\$200,000		\$900,000
Warehouse Repairs				\$60,000	\$60,000	\$120,000
<i>subtotal</i>	\$1,000,000	\$500,000	\$0	\$260,000	\$2,310,000	\$4,070,000
Cargo Equipment						
Equipment		\$400,000	\$400,000	\$650,000	\$650,000	\$2,100,000
<i>subtotal</i>	\$0	\$400,000	\$400,000	\$650,000	\$650,000	\$2,100,000
Cruise Terminals and Related Projects						
						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Land Acquisition						
Land Acquisition		\$680,000	\$500,000	\$3,000,000		\$4,180,000
<i>subtotal</i>	\$0	\$680,000	\$500,000	\$3,000,000	\$0	\$4,180,000
Berth/Infrastructure Rehabilitation (related repairs)						
						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Intermodal Road and Rail						
Rail Track Improvements			\$300,000		\$300,000	\$600,000
<i>subtotal</i>	\$0	\$0	\$300,000	\$0	\$300,000	\$600,000
Environmental						
						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Security						
						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
General Site Improvements						
General Repairs		\$75,000	\$100,000	\$100,000	\$100,000	\$375,000
<i>subtotal</i>	\$0	\$75,000	\$100,000	\$100,000	\$100,000	\$375,000
Other (Studies/ Miscellaneous repairs/Fees)						
						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL	\$1,000,000	\$1,805,000	\$4,700,000	\$5,910,000	\$3,360,000	\$16,775,000

Port of Fort Pierce

Information obtained from Port Capital Plan from Years FY09 (Adopted and Amended) to FY 12 (2011/2012)-revised

Project Name	FY10	FY11	FY12	FY 13	FY 14	Totals
Harbor Deepening/New Dredging						
Taylor Creek Dredging Phase 2 (75/25)	\$492,290					\$492,290
Taylor Creek Improvement Phase 2		\$3,500,000				\$3,500,000
Taylor Creek Dredging Phase 2 (50/50)	\$909,806					\$909,806
subtotal	\$1,402,096	\$3,500,000	\$0	\$0	\$0	\$4,902,096
Maintenance Dredging						
						\$0
subtotal	\$0	\$0	\$0	\$0	\$0	\$0
New Cargo Berths						
						\$0
subtotal	\$0	\$0	\$0	\$0	\$0	\$0
Cargo Terminals, Warehouses, and Yards						
						\$0
subtotal	\$0	\$0	\$0	\$0	\$0	\$0
Cargo Equipment						
						\$0
subtotal	\$0	\$0	\$0	\$0	\$0	\$0
Cruise Terminals and Related Projects						
						\$0
subtotal	\$0	\$0	\$0	\$0	\$0	\$0
Land Acquisition						
						\$0
subtotal	\$0	\$0	\$0	\$0	\$0	\$0
Berth/Infrastructure Rehabilitation (related repairs)						
						\$0
subtotal	\$0	\$0	\$0	\$0	\$0	\$0
Intermodal Road and Rail						
FDOT 2nd Street - New Entrance	\$579,411					\$579,411
subtotal	\$579,411	\$0	\$0	\$0	\$0	\$579,411
Environmental						
						\$0
subtotal	\$0	\$0	\$0	\$0	\$0	\$0
Security						
						\$0
subtotal	\$0	\$0	\$0	\$0	\$0	\$0
General Site Improvements						
						\$0
subtotal	\$0	\$0	\$0	\$0	\$0	\$0
Other (Studies/ Miscellaneous repairs/Fees)						
FDOT Spoil Site Evaluation	\$197,744					\$197,744
Taylor Creek Improvements-Spoil Site Construction	\$1,520,000					\$1,520,000
Unencumbered Projects and FSTED Money (No Project)						\$0
subtotal	\$1,717,744	\$0	\$0	\$0	\$0	\$1,717,744
TOTAL	\$3,699,251	\$3,500,000	\$0	\$0	\$0	\$7,199,251

Jacksonville Port Authority

Information obtained from 5 Year Capital Plans Budget 2010 to 2014, and Projected needs 2013-2040_FSTED 2040

Project Name	2010	2011	2012	2013	2014	Totals
Harbor Deepening/New Dredging						
Harbor Deepening Phase II	\$2,900,000					\$2,900,000
Harbor Deepening Phase I	\$95,000					\$95,000
Harbor Deepening, Maintenance & Improvements					\$20,000,000	\$20,000,000
Bartram Island Dredge Expansion					\$10,000,000	\$10,000,000
subtotal	\$2,995,000	\$0	\$0	\$0	\$30,000,000	\$32,995,000
Maintenance Dredging						
						\$0
subtotal	\$0	\$0	\$0	\$0	\$0	\$0
New Cargo Berths						
Install Additional Dolphin Berth No.18		\$740,000				\$740,000
subtotal	\$0	\$740,000	\$0	\$0	\$0	\$740,000
Cargo Terminals, Warehouses, and Yards						
Develop Terminal #5	\$10,000,000	\$80,500,000	\$80,500,000			\$171,000,000
Ferry Vessel and Terminal Improvements	\$1,142,454					\$1,142,454
Warehouse Sprinkler Upgrades	\$300,000					\$300,000
1/2 Acre Cargo Handling Pad BERTH 31		\$369,000				\$369,000
Demo Old APM Building and Upgrade Container Yard		\$870,000	\$1,930,000			\$2,800,000
West Wharf No. 3		\$9,000,000				\$9,000,000
Marine Unit Dock Facility		\$130,000				\$130,000
Construction of Rail Yard		\$2,000,000				\$2,000,000
Excavating/Leveling/Paving Container Yard Row F		\$569,000				\$569,000
Kone Crane Drive Replacement	\$500,000					\$500,000
Mill and Resurface Dock Area	\$275,000					\$275,000
Replace 3 Bollards and Refurbish 60 Existing Bollard:	\$90,000					\$90,000
Install (3) Highmast Light Poles	\$450,000					\$450,000
Replace Terminal Restrooms w/Permanent Structure	\$150,000					\$150,000
Warehouse #1 roof Replacement	\$1,040,000					\$1,040,000
Re-roof the Equipment Maintenance Building		\$75,000				\$75,000
Improvements to Ferry Slip Walls	\$371,000					\$371,000
Blout Island- Improvements/Expansion					\$10,000,000	\$10,000,000
Talleyrand- Improvements/Expansion					\$22,000,000	\$22,000,000
Development of Dames Point Marine Terminal					\$200,000,000	\$200,000,000
subtotal	\$14,318,454	\$93,513,000	\$82,430,000	\$0	\$232,000,000	\$422,261,454
Cargo Equipment						
Purchase (2) New Container Cranes	\$23,000,000					\$23,000,000
Container Crane Placement 3805 & 2253	\$250,000					\$250,000
1 Acre Concrete Equip., Yard Southside of Intermodal Dr.		\$770,000				\$770,000
Replace (2) IHI Crane w/New Cranes			\$22,000,000			\$22,000,000
Upgrade to Vessel Jean Ribault	\$141,500					\$141,500
subtotal	\$23,391,500	\$770,000	\$22,000,000	\$0	\$0	\$46,161,500
Cruise Terminals and Related Projects						
Development of Perm. Cruise Terminal					\$60,000,000	\$60,000,000
subtotal	\$0	\$0	\$0	\$0	\$60,000,000	\$60,000,000
Land Acquisition						
Acquisition of Land to Support Marine Growth					\$10,000,000	\$10,000,000
subtotal	\$0	\$0	\$0	\$0	\$10,000,000	\$10,000,000
Berth/Infrastructure Rehabilitation (related repairs)						
Repave Berth No. 31 in Front of WH.#1		\$650,000				\$650,000
Repair Dock Expansion Joints		\$250,000				\$250,000
Blount Island Site Remediation	\$3,000	\$53,000	\$53,000	\$53,000		\$162,000
Dames Point Site Remediation	\$125,000					\$125,000
Talleyrand Remediation	\$756,000	\$9,506,000	\$9,106,000	\$256,000		\$19,624,000
Berth Rebuilds BIMT					\$50,000,000	\$50,000,000
Asphalt Repairs BIMT					\$20,000,000	\$20,000,000
Berth Rebuilds TMT					\$50,000,000	\$50,000,000
Asphalt Repair TMT					\$10,000,000	\$10,000,000
subtotal	\$884,000	\$10,459,000	\$9,159,000	\$309,000	\$130,000,000	\$150,811,000
Intermodal Road and Rail Infrastructure						
Regrout/Grout Crane Rail (Blount Island)	\$1,305,000					\$1,305,000
FDOT Improvements SR9A/SR105/New Berlin Road Intersection	\$1,400,000					\$1,400,000
Rail Brakes Upgrade for PACECO No. 3805	\$140,000					\$140,000
Pave Dave Rawls Blvd	\$1,700,000					\$1,700,000
BIMT Railroad Renewal	\$9,105,000					\$9,105,000
Upgrade Railroad Switches on Dock and Tenant Yard		\$78,500				\$78,500
Replace Existing Railroad Railroad Crossing Control Box		\$116,000				\$116,000
Upgrade Railroad Crossing on BI Blvd.		\$125,000				\$125,000
Track Equipment Rail Receiving Yard on BI Blvd.		\$800,000				\$800,000
Additional Rail Track in Intermodal Yard		\$1,500,000				\$1,500,000
Relocate Dames Point Road		\$500,000				\$500,000
Heckscher Drive Frontage Delineation and Permitting		\$100,000				\$100,000
Regrout Crane Rail (Talleyrand)		\$522,000				\$522,000
Repair the IMPSA Crane Trolley Rail		\$110,000				\$110,000

Project Name	2010	2011	2012	2013	2014	Totals
Rail Road Bridge Safety Track		\$150,000				\$150,000
Intermodal Yard at Dames Point					\$30,000,000	\$30,000,000
subtotal	\$13,650,000	\$4,001,500	\$0	\$0	\$30,000,000	\$47,651,500
Environmental						
Reeds Island Wetlands Mitigation Bank		\$250,000				\$250,000
Environmental Site Assessment, Remediation, & Sustainability		\$125,000				\$125,000
subtotal	\$0	\$375,000	\$0	\$0	\$0	\$375,000
Security						
Gun Range Improvements		\$125,000				\$125,000
TWIC Enrollment Center		\$3,500,000				\$3,500,000
Security Ops (Command & Control) Build out	\$450,000					\$450,000
F&J Duffer Yard Rail Physical Security Enhancement	\$737,000					\$737,000
Maritime Facility Radio Interoperability		\$32,500				\$32,500
Mobile Command and Control		\$55,000				\$55,000
Security Inspections Cameras (BI, TMT, TRAPAC, Cruise, Ferry)		\$25,000				\$25,000
Network Redundancy		\$600,000				\$600,000
Network Management Enhancement		\$80,000				\$80,000
Server/Power Redundancy for Security Applications		\$425,000				\$425,000
Security Perimeter Hardening (BIMT, TMT, DPMT, & Ferry)		\$592,000				\$592,000
Security Operations Center/PCOB PHYSEC Enhancements		\$277,000				\$277,000
TWIC Enhanced Physical/Perimeter Security and Surveillance		\$3,948,000				\$3,948,000
subtotal	\$1,187,000	\$9,659,500	\$0	\$0	\$0	\$10,846,500
General Site Improvements						
Develop Christmas Tree Property/Construction		\$1,500,000	\$1,500,000			\$3,000,000
Dike Raising-Bartram Island	\$370,000					\$370,000
Mass Notification System (Round 7)/port-wide	\$1,922,360					\$1,922,360
Ferry Lightning Improvements	\$477,202					\$477,202
Storm Drain Structures		\$365,000				\$365,000
Shore Power Pit 3400/3500 Foot Mark		\$100,000				\$100,000
5 Acres of Pavement Upgrade		\$3,600,000				\$3,600,000
Upgrade Tenant Leased Area West of Transit Shed No. 1		\$2,400,000				\$2,400,000
Fence Replacement for Tenant's Eastern BI Blvd. Fence Line		\$290,000				\$290,000
HVAC Replacement Blount Island TWIC Building		\$120,000				\$120,000
Shelter at intermodal Dr. and Blount Island Blvd.		\$33,800				\$33,800
Water System for Fire Protection/TraPac		\$300,000				\$300,000
Core Server Exchange & Upgrade	\$80,000					\$80,000
Facility Energy Audits & Planning		\$25,000	\$25,000			\$50,000
subtotal	\$2,849,562	\$8,733,800	\$1,525,000	\$0	\$0	\$13,108,362
Other (Studies/ Miscellaneous repairs/Fees)						
Blount Island Facilities Repairs	\$3,609,603	\$10,032,383	\$9,787,500	\$9,787,500		\$33,216,986
Facilities Repairs per Facilities Inspections (Talleyrand)	\$2,893,750	\$8,162,775	\$8,162,775	\$8,162,775		\$27,382,075
In-House Engineering Const. Services	\$400,000	\$400,000	\$400,000	\$400,000		\$1,600,000
Mile Point Study/Design & Dredging			\$60,000,000			\$60,000,000
Trim List Skew 2253	\$195,000					\$195,000
Harbor Deepening Phase III Study	\$445,000					\$445,000
Transportation Study		\$50,000	\$50,000	\$50,000		\$150,000
subtotal	\$7,543,353	\$18,645,158	\$78,400,275	\$18,400,275	\$0	\$122,989,061
TOTAL	\$66,818,869	\$146,896,958	\$193,514,275	\$18,709,275	\$492,000,000	\$917,939,377

BI = Blount Island Terminal
 DP = Dames Point Terminal
 TA = Talleyrand Terminal
 MISC = Miscellaneous Projects

Port of Key West
Information obtained from Five Year Capital Plan for years 2008-2009 to 2012-2013

Project Name	FY09-10	FY10-11	FY11-12	FY12-13	FY 13/14	Totals
Harbor Deepening/New Dredging						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Maintenance Dredging						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
New Cargo Berths						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Cargo Terminals, Warehouses, and Yards						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Cargo Equipment						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Cruise Terminals and Related Projects						
Replacement of Mallory Sq T-Pier and Breasting Dolphins			\$1,000,000	\$1,000,000		\$2,000,000
<i>subtotal</i>	\$0	\$0	\$1,000,000	\$1,000,000	\$0	\$2,000,000
Land Acquisition						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Berth/Infrastructure Rehabilitation (related repairs)						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Intermodal Road and Rail						
Roadway Construction			\$600,000	\$600,000		\$1,200,000
<i>subtotal</i>	\$0	\$0	\$600,000	\$600,000	\$0	\$1,200,000
Environmental						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Security						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
General Site Improvements						
Navy/City Gatehouse			\$750,000			\$750,000
Navy/City Gatehouse Landscaping			\$250,000			\$250,000
<i>subtotal</i>	\$0	\$0	\$1,000,000	\$0	\$0	\$1,000,000
Other (Studies/ Miscellaneous repairs/Fees)						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL	\$0	\$0	\$2,600,000	\$1,600,000	\$0	\$4,200,000

Port Manatee

Information obtained from Port Manatee Five-Year Capital Improvement Program FY 09/10-FY 13/14

Project Name	FY 09/10	FY 10/11	FY 11/12	FY 12/13	FY 13/14	Totals
Harbor Deepening/New Dredging						
Construction dredging for Berth 12/Maintenance dredging elsewhere in Port	\$22,000,000					\$22,000,000
subtotal	\$22,000,000	\$0	\$0	\$0	\$0	\$22,000,000
Maintenance Dredging						
						\$0
subtotal	\$0	\$0	\$0	\$0	\$0	\$0
New Cargo Berths						
Berth 12 Extension, including Crane Rails			\$6,000,000	\$6,000,000		\$12,000,000
subtotal	\$0	\$0	\$6,000,000	\$6,000,000	\$0	\$12,000,000
Cargo Terminals, Warehouses, and Yards						
Intermodal Container and Cargo Transfer Yard (Berth 12 backlands)	\$7,000,000	\$8,000,000			\$10,000,000	\$25,000,000
Consolidated Intermodal Cold Storage Transfer Warehouse and Support Infrastructure behind Berths 8, 10 and 11			\$10,000,000	\$10,000,000		\$20,000,000
subtotal	\$7,000,000	\$8,000,000	\$10,000,000	\$10,000,000	\$10,000,000	\$45,000,000
Cargo Equipment						
Container Crane		\$4,000,000				\$4,000,000
subtotal	\$0	\$4,000,000	\$0	\$0	\$0	\$4,000,000
Cruise Terminals and Related Projects						
						\$0
subtotal	\$0	\$0	\$0	\$0	\$0	\$0
Land Acquisition						
Land Purchase Options	\$2,500,000					\$2,500,000
Voluntary Property Acquisition Program	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$2,000,000
subtotal	\$2,900,000	\$400,000	\$400,000	\$400,000	\$400,000	\$4,500,000
Berth/Infrastructure Rehabilitation (related repairs)						
Rehabilitation and Reconstruction of Berths 6, 7, 8, 9, 10 and 11		\$2,000,000	\$4,000,000	\$4,000,000	\$4,000,000	\$14,000,000
subtotal	\$0	\$2,000,000	\$4,000,000	\$4,000,000	\$4,000,000	\$14,000,000
Intermodal Road and Rail						
Portwide Road and Rail Upgrade and Rehabilitation		\$2,250,000	\$4,000,000			\$6,250,000
Locomotives-Roadway Upgrade			\$1,500,000	\$1,500,000		\$3,000,000
subtotal	\$0	\$2,250,000	\$5,500,000	\$1,500,000	\$0	\$9,250,000
Environmental						
Proactive Permitting and Environmental Program	\$250,000	\$2,000,000	\$2,000,000	\$4,000,000	\$4,000,000	\$12,250,000
subtotal	\$250,000	\$2,000,000	\$2,000,000	\$4,000,000	\$4,000,000	\$12,250,000
Security						
						\$0
subtotal	\$0	\$0	\$0	\$0	\$0	\$0
General Site Improvements						
Intermodal Storage Upgrades			\$500,000	\$500,000		\$1,000,000
subtotal	\$0	\$0	\$500,000	\$500,000	\$0	\$1,000,000
Other (Studies/ Miscellaneous repairs/Fees)						
						\$0
subtotal	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL	\$32,150,000	\$18,650,000	\$28,400,000	\$26,400,000	\$18,400,000	\$124,000,000

Port of Miami

Information obtained from Funded Projects TRANSPORTATION Lists 2008-09 to 2013-14 and 2009-10 to 2014-15

Project Name	2009-10	2010-11	2011-12	2012-13	2013-14	Total (000s)
New Dredging						
Dredging - Phase III		\$3,570,000	\$35,671,000	\$35,671,000	\$38,737,000	\$113,649,000
subtotal	\$0	\$3,570,000	\$35,671,000	\$35,671,000	\$38,737,000	\$113,649,000
Maintenance Dredging						
Dredge III Bulkhead Strengthening	\$1,800,000		\$12,100,000	\$11,940,000		\$25,840,000
subtotal	\$1,800,000	\$0	\$12,100,000	\$11,940,000	\$0	\$25,840,000
New Cargo Berths						
						\$0
subtotal	\$0	\$0	\$0	\$0	\$0	\$0
Cargo Terminals, Warehouses, and Yards						
Container Yard Improvements- A.P. Moeller-MAERSK (APM)	\$1,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$13,000,000
Container Yard Improvements- Seaboard	\$10,016,000	\$4,820,000	\$4,820,000	\$4,820,000	\$4,820,000	\$29,296,000
Container Yard Stormceptor	\$100,000					\$100,000
subtotal	\$11,116,000	\$7,820,000	\$7,820,000	\$7,820,000	\$7,820,000	\$42,396,000
Cargo Equipment						
Gantry Beth Reinforcements	\$1,000,000	\$5,000,000				\$6,000,000
Gantry Crane Electrification	\$1,324,000	\$1,324,000	\$1,324,000	\$1,324,000	\$0	\$5,296,000
Gantry Crane Refurbishment and Upgrade	\$1,000,000					\$1,000,000
Gantry Container Cranes 13 and 14	\$2,000,000	\$11,000,000	\$11,000,000			\$24,000,000
subtotal	\$5,324,000	\$17,324,000	\$12,324,000	\$1,324,000	\$0	\$36,296,000
Cruise Terminals and Related Projects						
Cruise Terminal B and C Improvements	\$1,434,000	\$0				\$1,434,000
Cruise Terminal D and E Finalization	\$100,000					\$100,000
Cruise Terminals D and E Upgrades for New Service	\$4,704,000					\$4,704,000
subtotal	\$6,238,000	\$0	\$0	\$0	\$0	\$6,238,000
Land Acquisition						
						\$0
subtotal	\$0	\$0	\$0	\$0	\$0	\$0
Berth Rehabilitation (Related repairs)						
						\$0
subtotal	\$0	\$0	\$0	\$0	\$0	\$0
Intermodal Road and Rail Infrastructure						
Seaport Tunnel		\$100,000,000			\$43,500,000	\$143,500,000
South Wharf Access Road	\$500,000					\$500,000
subtotal	\$500,000	\$100,000,000	\$0	\$0	\$43,500,000	\$144,000,000
Environmental						
Dredging - Phase II Mitigation	\$10,000					\$10,000
subtotal	\$10,000	\$0	\$0	\$0	\$0	\$10,000
Security						
Access Controls for Federal Transport Workers Identification Card (TWIC)	\$510,000					\$510,000
Communications Command and Control Center	\$3,168,000					\$3,168,000
Cruise Provisioning Inspection Facility	\$20,000					\$20,000
Portwide Access Controls at Wharf Gate	\$10,000					\$10,000
Security Upgrades for Terminals D and E	\$1,807,000					\$1,807,000
Waterside Surveillance Phase 2	\$50,000					\$50,000
Cargo Gateway Security Systems	\$500,000					\$500,000
subtotal	\$6,065,000	\$0	\$0	\$0	\$0	\$6,065,000
General Site Improvements						
Electrical Feeder System Upgrade		\$3,000,000				\$3,000,000
Fender Replacements	\$220,000					\$220,000
Infrastructure Improvements	\$2,500,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$6,500,000
Parking Garage Terminal D	\$1,538,000					\$1,538,000
Riprap Improvements to Pilot House Area	\$1,888,000					\$1,888,000
Wastewater Transmission Improvements	\$500,000	\$2,500,000	\$6,000,000	\$2,000,000	\$3,000,000	\$14,000,000
subtotal	\$6,646,000	\$6,500,000	\$7,000,000	\$3,000,000	\$4,000,000	\$27,146,000
Other (Studies/ Miscellaneous repairs/Fees)						
Construction Supervision	\$4,900,000	\$4,900,000	\$4,900,000	\$4,900,000	\$4,900,000	\$24,500,000
subtotal	\$4,900,000	\$4,900,000	\$4,900,000	\$4,900,000	\$4,900,000	\$24,500,000
TOTAL	\$42,599,000	\$140,114,000	\$79,815,000	\$64,655,000	\$98,957,000	\$426,140,000

Port of Palm Beach
Information obtained from Phone Call with Tom Lundeen on 6/4/2010

Project Name	FY 09-10	FY 10-11	FY 11-12	FY 12-13	FY 13-14	Total (000s)
New Dredging						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Maintenance Dredging						
Maintenance Dredging		\$500,000				\$500,000
<i>subtotal</i>	\$0	\$500,000	\$0	\$0	\$0	\$500,000
New Cargo Berths						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Cargo Terminals, Warehouses, and Yards						
South Port Complex	\$150,000	\$300,000				\$450,000
<i>subtotal</i>	\$150,000	\$300,000	\$0	\$0	\$0	\$450,000
Cargo Equipment						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Cruise Terminals and Related Projects						
Cruise Terminal and Garages	\$0	\$0	\$1,000,000			\$1,000,000
<i>subtotal</i>	\$0	\$0	\$1,000,000	\$0	\$0	\$1,000,000
Land Acquisition						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Berth Rehabilitation (Related repairs)						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Intermodal Road and Rail Infrastructure						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Environmental						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Security						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
General Site Improvements						
Slip 3 Sheet Pile Redevelopment	\$500,000	\$1,000,000				\$1,500,000
<i>subtotal</i>	\$500,000	\$1,000,000	\$0	\$0	\$0	\$1,500,000
Other (Studies/ Miscellaneous repairs/Fees)						\$500,000
Harbor and Channel Improvements Study	\$500,000					\$500,000
<i>subtotal</i>	\$500,000	\$0	\$0	\$0	\$0	\$500,000
TOTAL	\$1,150,000	\$1,800,000	\$1,000,000	\$0	\$0	\$3,950,000

Port of Panama City
Information obtained from Five-Year Capital Improvement Program FY2009/2010- FY 2013/14

Project Name	FY 09/10	FY 10/11	FY 11/12	FY 12/13	FY 13/14	Totals
Harbor Deepening/New Dredging						
Dredge West and South Berths		\$1,000,000				\$1,000,000
<i>subtotal</i>	\$0	\$1,000,000	\$0	\$0	\$0	\$1,000,000
Maintenance Dredging						
						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
New Cargo Berths						
						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Cargo Terminals, Warehouses, and Yards						
Expand Cargo Area (Three Phases: includes relocating loading dock and Port shop)	\$1,500,000		\$500,000	\$1,000,000		\$3,000,000
Relocate Molasses Tank					\$1,000,000	\$1,000,000
Provide New Road in Bulk Terminal (Relocate track)			\$900,000			\$900,000
Add Bulk Storage Facility		\$5,000,000				\$5,000,000
<i>subtotal</i>	\$1,500,000	\$5,000,000	\$1,400,000	\$1,000,000	\$1,000,000	\$9,900,000
Cargo Equipment						
Acquire Second Mobile Harbor Crane		\$4,000,000				\$4,000,000
Acquire New Reach Stackers	\$550,000			\$600,000		\$1,150,000
Add Cargo-Handling Equipment	\$175,000	\$175,000	\$200,000	\$200,000	\$200,000	\$950,000
<i>subtotal</i>	\$725,000	\$4,175,000	\$200,000	\$800,000	\$200,000	\$6,100,000
Cruise Terminals and Related Projects						
						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Land Acquisition						
Acquire Land	\$400,000	\$600,000	\$2,000,000			\$3,000,000
<i>subtotal</i>	\$400,000	\$600,000	\$2,000,000	\$0	\$0	\$3,000,000
Berth/Infrastructure Rehabilitation (related repairs)						
Replace Bulkheads South 1 & 2	\$1,500,000					\$1,500,000
Refurbish Bulkheads West 1 & 2	\$1,500,000					\$1,500,000
Expand South Berth 3		\$400,000				\$400,000
Refurbish West 4 Warehouse		\$250,000				\$250,000
Refurbish West 1 & 2 Warehouses			\$750,000			\$750,000
Refurbish East 3 Warehouse				\$2,000,000		\$2,000,000
<i>subtotal</i>	\$3,000,000	\$650,000	\$750,000	\$2,000,000	\$0	\$6,400,000
Intermodal Road and Rail						
						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Environmental						
						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Security						
						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
General Site Improvements						
Electrical Support for Refrigerated Containers (with racks)	\$250,000	\$500,000				\$750,000
<i>subtotal</i>	\$250,000	\$500,000	\$0	\$0	\$0	\$750,000
Other (Studies/ Miscellaneous repairs/Fees)						
Relocate Port Offices					\$5,000,000	\$5,000,000
Develop IDC	\$500,000	\$500,000	\$500,000	\$500,000		\$2,000,000
<i>subtotal</i>	\$500,000	\$500,000	\$500,000	\$500,000	\$5,000,000	\$7,000,000
TOTAL	\$6,375,000	\$12,425,000	\$4,850,000	\$4,300,000	\$6,200,000	\$34,150,000

Project Name	2010	2011	2012	2013	2014	Totals
Harbor Deepening/New Dredging						
						\$0
<i>subtotal</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
Maintenance Dredging						
Maintenance Dredging	\$640,000					\$640,000
<i>subtotal</i>	<i>\$640,000</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$640,000</i>
New Cargo Berths						
						\$0
<i>subtotal</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
Cargo Terminals, Warehouses, and Yards						
Warehouse Freezer Expansion	\$600,000					\$600,000
America's Marine Highways Terminal Development			\$3,000,000	\$3,000,000		
<i>subtotal</i>	<i>\$600,000</i>	<i>\$0</i>	<i>\$3,000,000</i>	<i>\$3,000,000</i>	<i>\$0</i>	<i>\$6,600,000</i>
Cargo Equipment						
						\$0
<i>subtotal</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
Cruise Terminals and Related Projects						
						\$0
<i>subtotal</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
Land Acquisition						
						\$0
<i>subtotal</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
Berth/Infrastructure Rehabilitation (related repairs)						
Shore Power Improvements		\$65,000				\$65,000
Dockside Sanitary Sewer Discharge/Connection			\$75,000			\$75,000
Berth 6 Rehabilitation				\$2,200,000		\$2,200,000
				\$1,200,000		\$1,200,000
<i>subtotal</i>	<i>\$0</i>	<i>\$65,000</i>	<i>\$75,000</i>	<i>\$3,400,000</i>	<i>\$0</i>	<i>\$3,540,000</i>
Intermodal Road and Rail Infrastructure						
Rail Infrastructure Improvements	\$65,000					\$65,000
Full On-Port Rail Rehabilitation		\$2,800,000				\$2,800,000
<i>subtotal</i>	<i>\$65,000</i>	<i>\$2,800,000</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$2,865,000</i>
Environmental						
						\$0
<i>subtotal</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
Security						
Gate Relocation & Improvements		\$250,000				\$250,000
<i>subtotal</i>	<i>\$0</i>	<i>\$250,000</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$250,000</i>
General Site Improvements						
						\$0
<i>subtotal</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
Other (Studies/ Miscellaneous repairs/Fees)						
						\$0
<i>subtotal</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
TOTAL	\$1,305,000	\$3,115,000	\$3,075,000	\$6,400,000	\$0	\$13,895,000

Port St. Joe

Information obtained from Port St. Joe Costs Estimate of Port Development FY 08/09- FY 12/13

Project Name	FY 09/10	FY 10/11	FY 11/12	FY 12/13	FY 13/14	Totals
Harbor Deepening/New Dredging						
Phase I (Parcel B berth to 12 foot)						\$0
Phase II (Parcel A Berth to 35 feet)			\$3,000,000	\$6,000,000		\$9,000,000
subtotal	\$0	\$0	\$3,000,000	\$6,000,000	\$0	\$9,000,000
Maintenance Dredging						
						\$0
subtotal	\$0	\$0	\$0	\$0	\$0	\$0
New Cargo Berths						
Phase I: Parcel B Bulkhead	\$400,000					\$400,000
Phase II: Parcel A Bulkhead			\$6,000,000	\$12,000,000		\$18,000,000
subtotal	\$400,000	\$0	\$6,000,000	\$12,000,000	\$0	\$18,400,000
Cargo Terminals, Warehouses, and Yards						
						\$0
subtotal	\$0	\$0	\$0	\$0	\$0	\$0
Cargo Equipment						
				\$4,000,000		\$4,000,000
subtotal	\$0	\$0	\$0	\$4,000,000	\$0	\$4,000,000
Cruise Terminals and Related Projects						
						\$0
subtotal	\$0	\$0	\$0	\$0	\$0	\$0
Land Acquisition						
						\$0
subtotal	\$0	\$0	\$0	\$0	\$0	\$0
Berth/Infrastructure Rehabilitation (related repairs)						
Phase I Berth (Parcel B Concrete Apron, Lighting, etc.)			\$400,000	\$600,000		\$1,000,000
subtotal	\$0	\$0	\$400,000	\$600,000	\$0	\$1,000,000
Intermodal Road and Rail						
Rail access to Parcel B	\$20,000	\$892,000				\$912,000
subtotal	\$20,000	\$892,000	\$0	\$0	\$0	\$912,000
Environmental						
Environmental & Permits	\$800,000	\$100,000				\$900,000
subtotal	\$800,000	\$100,000	\$0	\$0	\$0	\$900,000
Security						
				\$700,000		\$700,000
subtotal	\$0	\$0	\$0	\$700,000	\$0	\$700,000
General Site Improvements						
Port roads, site preparation, etc.	\$82,000	\$340,000				\$422,000
subtotal	\$82,000	\$340,000	\$0	\$0	\$0	\$422,000
Other (Studies/ Miscellaneous repairs/Fees)						
PD&E, Field Services	\$20,000	\$150,000	\$940,000	\$2,330,000		\$3,440,000
Contingency (10%)			\$940,000	\$2,330,000		\$3,270,000
subtotal	\$20,000	\$150,000	\$1,880,000	\$4,660,000	\$0	\$6,710,000
TOTAL	\$1,322,000	\$1,482,000	\$11,280,000	\$27,960,000	\$0	\$42,044,000

Project Name	FY10	FY11	FY12	FY13	FY 14	Totals
Harbor Deepening/New Dredging						
						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Maintenance Dredging						
						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
New Cargo Berths						
						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Cargo Terminals, Warehouses, and Yards						
						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Cargo Equipment						
						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Cruise Terminals and Related Projects						
						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Land Acquisition						
Parcel B						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Berth/Infrastructure Rehabilitation (related repairs)						
Port Wharf Renovations and Improvements	\$0	\$1,664,600	\$1,015,000	\$1,015,000		\$3,694,600
<i>subtotal</i>	\$0	\$1,664,600	\$1,015,000	\$1,015,000	\$0	\$3,694,600
Intermodal Road and Rail Improvements						
						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Environmental						
						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Security						
						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
General Site Improvements						
						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
Other (Studies/ Miscellaneous repairs/Fees)						
						\$0
<i>subtotal</i>	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL	\$0	\$1,664,600	\$1,015,000	\$1,015,000	\$0	\$3,694,600

Project Name	FY 09/10	FY 10/11	FY 11/12	FY 12/13	FY13/14	Total (000s)
Harbor Deepening/New Dredging						
Dredge Channel: <i>Big Bend Channel to 300' wide and 43' deep</i>				\$4,820,000	\$4,000,000	\$8,820,000
Dredge Channel: <i>Channel in front of Berth 302 to 34' deep</i>			\$5,000,000			\$5,000,000
Dredge Channel: <i>Channel in front of Berths 300-302 from 34' deep to 43' deep</i>				\$4,000,000	\$4,000,000	\$8,000,000
Dredge Berth: <i>Berths 300-302 to 43' deep</i>		\$9,600,000				\$9,600,000
Channel Widening (Cut A and Cut B to 600')			\$1,000,000			\$1,000,000
Dredge Berth: <i>Berth 222 (New Petroleum Berth) to 43' deep</i>	\$3,510,000					\$3,510,000
subtotal	\$3,510,000	\$9,600,000	\$6,000,000	\$8,820,000	\$8,000,000	\$35,930,000
Maintenance Dredging						
Maintenance Dredging: TPA (\$25/CY @125,000 CY)	\$1,500,000	\$3,130,000	\$3,130,000	\$3,130,000	\$3,130,000	\$14,020,000
subtotal	\$1,500,000	\$3,130,000	\$3,130,000	\$3,130,000	\$3,130,000	\$14,020,000
New Cargo Berths						
subtotal	\$0	\$0	\$0	\$0	\$0	\$0
Cargo Terminals, Warehouses, and Yards						
Phase 4: Gate Facility, Administration and Maintenance Buildings, etc.		\$7,400,000				\$7,400,000
Phase 5: Build Berth 211 Backlands			\$8,000,000			\$8,000,000
Phase 7: Expansion area Berths 212/211			\$2,100,000			\$2,100,000
Phase 8: Expansion area Berth 213			\$6,900,000			\$6,900,000
Phase 9: Expansion area Berths 211/212/213				\$4,750,000		\$4,750,000
Phase 10: Expansion area GATX Drive				\$6,000,000	\$6,000,000	\$12,000,000
Construct Berth 302- Big Bend/Port Redwing		\$1,000,000				\$1,000,000
Expansion to West: Fill East Port (Replace the Spoil capacity by borrowing material from the Island to use as fill at East Port)		\$3,000,000				\$3,000,000
Bulkhead site		\$2,500,000	\$10,000,000	\$10,000,000	\$5,000,000	\$27,500,000
Berth 222 Design & Construction (Dolphin Berth):	\$7,600,000					\$7,600,000
Bulkhead, Structural, Berthing & Mooring Work (1,225 LF)	\$9,630,000					\$9,630,000
Storm Drainage System	\$1,300,000					\$1,300,000
Fire Protection System	\$200,000					\$200,000
Lighting	\$300,000					\$300,000
Paving	\$600,000					\$600,000
Upgrade Berth 220 to include the necessary piping and manifolds.	\$6,420,000					\$6,420,000
Replace Berths 226 and 227 Permitting, Design, & Construction	\$25,000,000					\$25,000,000
Upgrade Berth 230- Pendola Point		\$2,512,500		\$5,000,000	\$5,000,000	\$12,512,500
Bulkheading and filling site		\$1,312,500				\$1,312,500
subtotal	\$51,050,000	\$17,725,000	\$27,000,000	\$25,750,000	\$16,000,000	\$137,525,000
Cargo Equipment						
Container Equipment: Mobile Harbor Crane			\$5,000,000			\$5,000,000
subtotal	\$0	\$0	\$5,000,000	\$0	\$0	\$5,000,000
Cruise Terminals and Related Projects						
Cruise Terminal & Parking Garage	\$2,200,000				\$10,000,000	\$12,200,000
subtotal	\$2,200,000	\$0	\$0	\$0	\$10,000,000	\$12,200,000
Land Acquisition						
Mitigation Sites			\$2,500,000		\$2,500,000	\$5,000,000
Port Capacity Expansion		\$2,500,000	\$2,700,000		\$2,000,000	\$7,200,000
Port Redwing Land acquisition	\$4,500,000				\$4,500,000	\$9,000,000
subtotal	\$4,500,000	\$2,500,000	\$5,200,000	\$0	\$9,000,000	\$21,200,000
Berth Rehabilitation (Related repairs)						
Cruise Terminal 6 Upgrades Berths 267 & 268		\$2,000,000				\$2,000,000
Berth 4				\$4,000,000		\$4,000,000
Berth 224			\$2,000,000			\$2,000,000
subtotal	\$0	\$2,000,000	\$2,000,000	\$4,000,000	\$0	\$8,000,000
Intermodal Road and Rail Infrastructure						
Railroad & Crossing Improvements	\$1,000,000	\$8,000,000			\$2,000,000	\$11,000,000
Upland Improvements Port Redwing: Rail	\$1,000,000					\$1,000,000
Upland Improvements Port Redwing: Access road		\$2,000,000				\$2,000,000
Roadway Improvements	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,000,000
subtotal	\$3,000,000	\$11,000,000	\$1,000,000	\$1,000,000	\$3,000,000	\$19,000,000
Environmental						
Environmental Mitigation (3:1)- East Port Aggregate	\$1,000,000		\$2,000,000			\$3,000,000
subtotal	\$1,000,000	\$0	\$2,000,000	\$0	\$0	\$3,000,000
Security						
Upland Improvements Port Redwing: Gate Security		\$4,000,000				\$4,000,000
subtotal	\$0	\$4,000,000	\$0	\$0	\$0	\$4,000,000
General Site Improvements						
Tenant Improvements	\$3,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$2,000,000	\$8,000,000
Paving & Drainage Improvements	\$800,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$4,800,000
Dredge Disposal Sites-Spoil Island 2D	\$1,250,000			\$2,000,000		\$3,250,000
Upland Improvements Port Redwing		\$2,291,670				\$2,291,670
Upland Improvements Port Redwing: Utilities	\$175,000		\$1,000,000			\$1,175,000

Upland Improvements: wicking, draining and stabilizing- East Port			\$1,000,000			\$1,000,000
subtotal	\$5,225,000	\$4,291,670	\$4,000,000	\$4,000,000	\$3,000,000	\$20,516,670
Other (Studies/ Miscellaneous repairs/Fees)						
Environmental Engineering Services	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000
Geotechnical Testing	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000
General Engineering Consultant Svc	\$1,000,000	\$750,000	\$750,000	\$750,000	\$750,000	\$4,000,000
Unit Price Marine	\$750,000	\$750,000	\$750,000	\$750,000	\$750,000	\$3,750,000
Unit Price Environmental Cleanup (export metals, shipyards)	\$550,000	\$1,040,000	\$1,040,000	\$1,040,000	\$1,040,000	\$4,710,000
Unit Price Uplands Contract	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,000,000
Studies, Designs, Applications, and Cost Estimates-Pendola Point		\$5,125,000	\$5,125,000	\$13,000,000	\$13,000,000	\$36,250,000
Studies, Designs, Applications, and Cost Estimates- East Port		\$5,000,000	\$5,000,000	\$10,000,000	\$7,500,000	\$27,500,000
Terminal		\$3,000,000		\$3,000,000		\$6,000,000
Studies, Designs, Applications, and Cost Estimates- Navigation		\$3,000,000		\$3,000,000		\$6,000,000
Studies, Designs, Applications, and Cost Estimates- East Port		\$5,000,000				\$5,000,000
Aggregate		\$5,000,000				\$5,000,000
Container Yard Engineering Svcs: Various Phases	\$750,000	\$500,000	\$500,000	\$500,000	\$500,000	\$2,750,000
subtotal	\$4,550,000	\$22,665,000	\$14,665,000	\$30,540,000	\$25,040,000	\$97,460,000
TOTAL	\$76,535,000	\$76,911,670	\$69,995,000	\$77,240,000	\$77,170,000	\$377,851,670