CAMBRIDGE SYSTEMATICS

Florida's Seaports: Conditions, Competitiveness, and Statewide Policies

draft final

report

prepared for

Florida Department of Transportation

prepared by

Cambridge Systematics, Inc.

May 19, 2006

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Executive Summary

This work addressed Florida's seaports with respect to three main issue areas: Condition and Performance; Competitiveness; and State Financing and Policy Issues. The goals were to inform discussion of seaports issues and funding opportunities, and to lay the groundwork for a more comprehensive Statewide Seaports Strategic Plan.

The main message is: Florida's ports have significant strengths to build on, and are highly competitive with other U.S. and regional ports, but require major investment in their water assets, terminals, landside access systems, and market connections to remain competitive; and while the State provides extensive funding, there is a significant shortfall. Additional State funding will help bridge the gap, but a shortfall will remain. Therefore, it is critical that new funding be applied within a rational return-on-investment framework that ensures and maximizes statewide benefits in the areas of economy, transportation, safety and security, and conformity with other adopted transportation system goals.

1. Conditions and Performance of Florida's Seaports

- Marine transportation involves a mix of different public and private stakeholders – shippers and receivers, private transportation service providers, public ports, ports councils and associations, and states -- and each defines "success" differently, according to their particular business or organizational missions.

- For public ports, success typically depends on efficient functioning of four elements -- water transportation, marine terminals, landside highway and rail access, and connectivity with key markets (warehouse/distribution centers, etc.).

- Cambridge Systematics developed a Conditions Checklist covering each of these key factors for current and anticipated (year 2015) future conditions, FDOT sent it to each of Florida's deepwater ports. Ten ports, including all major cargo and cruise ports, responded. Results were tabulated and summarized based on reported "green", "yellow", or "red" conditions for each factor.

- 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.

- Individually, some of Florida's ports are several years from facing significant "red" conditions; these tend to be developing ports, like Jacksonville and Everglades, with significant expansion potential. Others face significant "red" conditions today; these tend to be mature ports with high throughputs and limited space, like Miami and Palm Beach.

- Some ports indicated that while current conditions may be well understood, future conditions may be unpredictable, depending on global logistics and markets, competitive pressures among US ports, implementation of needed improvements, and other factors.

2. Competitiveness of Florida's Seaports

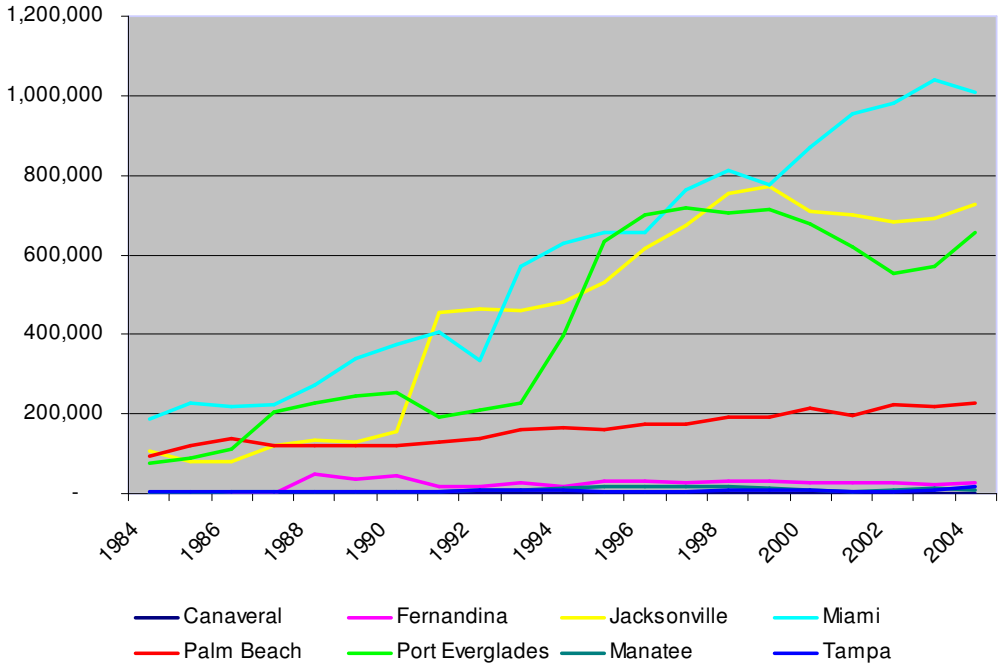
- Among all states, Florida ranked fourth in the number of TEUs handled by its seaports in year 2004, with nearly 2.7 million TEUs and 6.9% of the national market. Among South and Gulf states, Florida ranked first in the number of TEUs, with 26.2% of the market. Between 1984 and 2004, Florida's ports actually had the highest Compound Annual Growth Rate (CAGR) for containers of any state, at 9.1% annually.

- However, since 1999, Florida's container growth has been more modest, at just 156,282 TEUs, representing an annual growth rate of 1.2%. During this period, two of Florida's major container ports (Jacksonville and Everglades) lost liner services, and the economies of their major trading countries were stagnant. Both ports are poised to rebound – Jacksonville with a new Asia-direct carrier, and Everglades with a major terminal improvement program – while growth should continue at Miami and Palm Beach.

- The strong 20-year growth in Florida's container ports has been driven primarily by the expansion of its population and its economy, while the more recent – and more rapid -- growth of competing container ports has been driven primarily by their success in capturing growth in "discretionary" cargo demand created by Wal-Mart, Home Depot, Target, and other major US retailers who have "globalized" their manufacturing supply chains over the last decade. Savannah, Charleston, Virginia, and Houston offer deep water, large terminals, productive labor, efficient truck and rail connections (to varying degrees) and good connections to inland markets. The fastest growing, like Savannah, also offer extensive nearby warehouse/distribution facilities.

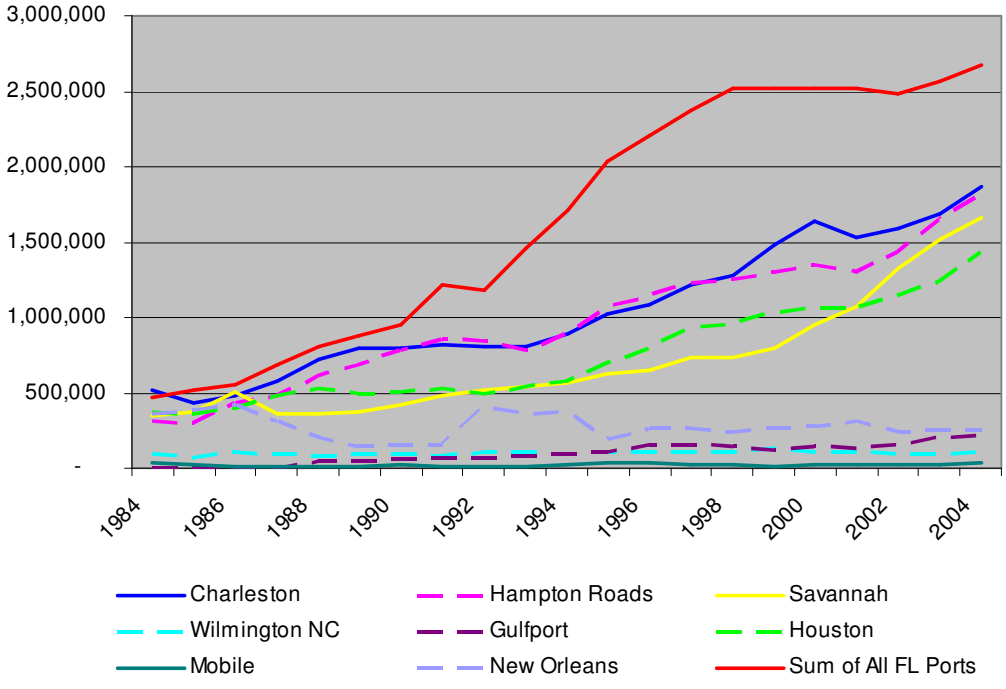
- Florida's growing in-state container demand should continue to fuel future port growth. There are also some limited opportunities to capture discretionary cargo with origins or destinations in other states. But if Florida fails to make needed improvements in its container ports, a greater share of this traffic will be lost to other states, and will have to come to Florida by rail or by truck from other ports. Monies saved by not investing in ports will probably be lost – and then some – because of additional investments needed on Florida's highways and railroads.

Figure ES-1. Florida Ports TEUs, 1984-2004



Source: American Association of Port Authorities.

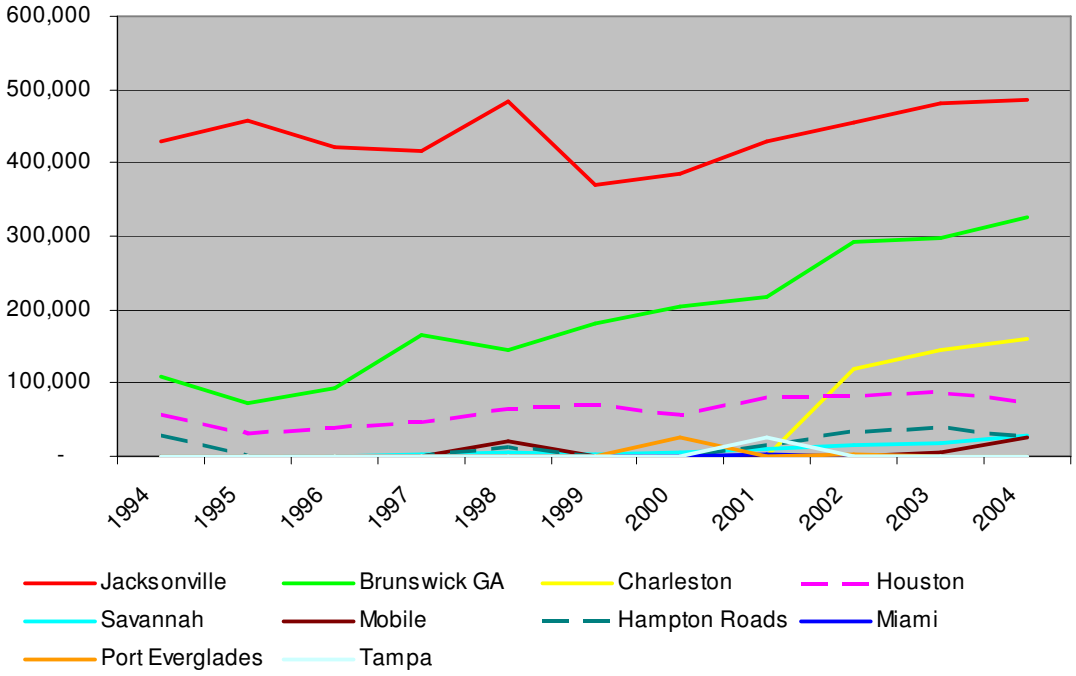
Figure ES-2. Florida and Competing Ports TEUs, 1984-2004



Source: American Association of Port Authorities.

- Among all states, Florida ranked fourth in the number of import/export autos handled by its seaports in year 2004, with over 486,000 units and 11.7% of the national market. Among South and Gulf states, Florida ranked first in the number of autos, with 43.2% of the market. Florida's market position, while very strong, has been declining since 1994 due to the significant strengthening of established centers (Southern California, NY/NJ, Baltimore, and Brunswick GA) and new operations in Charleston, SC. Between 1994 and 2004, and particularly 1999-2004, Florida trailed SC and Georgia in units added.

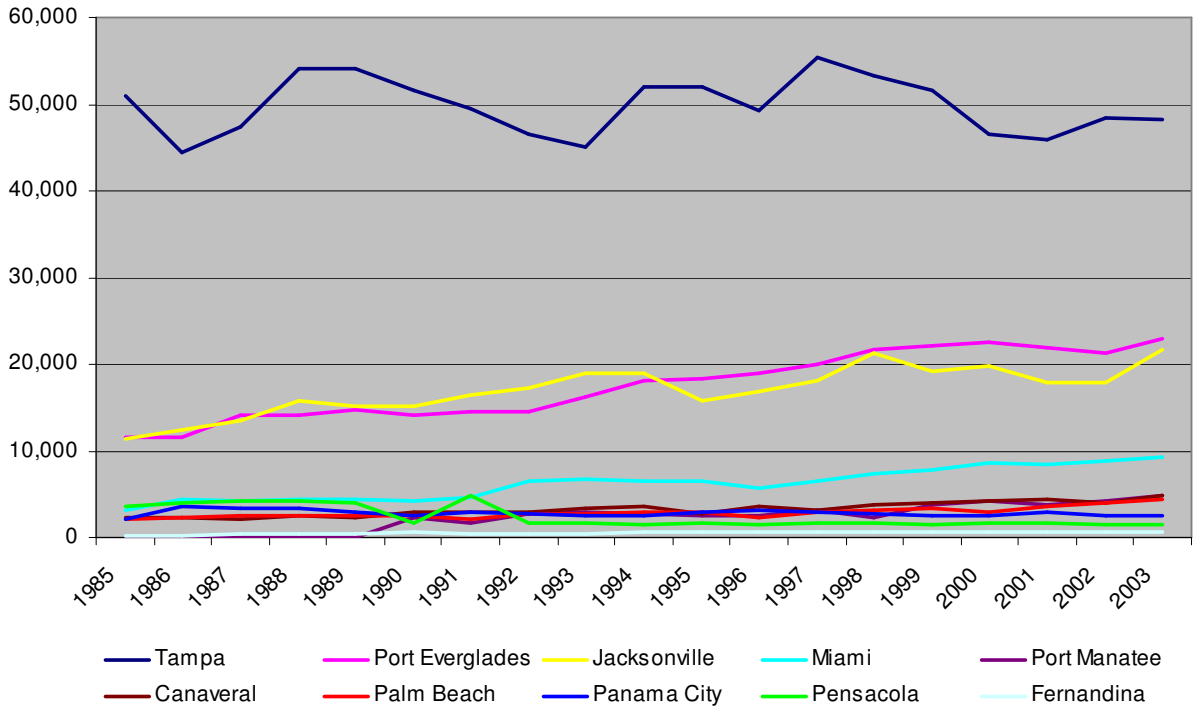
Figure ES-3. Florida and Competing Ports Auto Units, 1994-2004



Source: American Association of Port Authorities.

- Among all states, Florida ranked sixth in total tonnage handled by its seaports in year 2003, with over 120 million tons. Among southern and gulf states, Florida ranked third, behind only Texas and Louisiana. Figuring containers at around 7 tons per TEU and autos at around 1.5 tons per unit, containers and autos account for around 20 million tons. The other 100 million tons is made up primarily of liquid bulk (particularly petroleum and chemical products), dry bulk (phosphate, cement, etc.), breakbulk (lumber, plywood, etc.) and neo-bulk (copper, steel, etc.) Just over 50% of this tonnage is domestic (moving to/from other states, as opposed to other countries). Florida's market share and rank has been relatively stable. Most of the bulk cargo being handled through Florida ports is associated with local (port area) or regional in-state production and consumption.

Figure ES-4. Florida Ports Total Tonnage (thousands, short tons), 1985-2003



Source: American Association of Port Authorities.

3. State Finance and Policy Issues

- FDOT currently facilitates and funds direct on-port investments and supporting off-port infrastructure development. About 61% this funding comes from the Growth Management program; about 32% comes from the Strategic Intermodal System program; and the remainder comes from Chapter 311 and other sources.

- The planned allocation of state funding for ports through 2011 is generally consistent with the throughput activity of the port, measured in tons and/or TEUs. The ports receiving the largest amount of funding – Tampa and Miami – rank first among Florida ports in tonnage and containers, respectively. The port receiving the next highest funding, Jacksonville, ranks third in tons and second in TEUs. Next are Palm Beach (ranking fourth in containers) and Everglades (ranking second in tons and third in TEUs).

- While the amount of state funding being devoted to Florida's ports between 2006 and 2011 is substantial, it does not "turn everything green." Areas of concern – in many cases of critical concern – remain for most of Florida's ports. This is useful input for funding decisions, but does not directly address the issues of how much the State should be investing, and in what ports, and for what types of projects.

- Recent studies prepared for the Florida Ports Council estimated ports capital needs at $2.45 billion (2006-2011), versus funding from direct revenues at $622 million and funding from borrowing at $558 million. The difference is estimated at approximately $1.27 billion. The projected availability of nearly $700 million in state funds between 2006 and 2011 addresses more than half of this difference, but even so, a significant gap (around $600 million) remains. FPC also found that port security costs were $12.3 million annually pre-9/11, and grew to $46.8 million in 2005.

- Additional bonding authority for port and port-supporting projects, covering the period 2006-2011, is being contemplated. These additional funds could address a significant part of the $600 million funding gap identified by the FPC report for this period. Currently processes for allocating funds are by no means "broken." However, facing a condition where available funds do not meet identified needs, we must ask: are there ways in which project selection methodologies could be enhanced to ensure that the State derives the maximum possible value from its investments?

- Over the long term, we recommend that State funding for seaports be guided by a Seaports Strategic Plan containing both near-term (5 year) and long-range (25 year) elements, consistent with the general transportation planning process.

- Given that it will take some time to develop, review, and approve such a plan, interim guidance on the use of any additional bond funds is appropriate. Subject to review and approval by the appropriate parties, we are recommending an approach for such guidance, focusing on return-on-investment and statewide benefits in the areas of economy, transportation, safety and security, and conformity with other adopted transportation system goals.

- Other key issues facing FDOT, Florida's ports, and Florida's legislature include: the appropriate linkage between Port Master Plans and Regional/State Transportation plans; the role and involvement of private terminals operators and transportation providers; the appropriate means to achieve coordination of different ports to achieve shared statewide goals; and ensuring that investments are made on a "fair share" basis.

- The recommended immediate next step is refinement of the interim guidance for bond proceed utilization, followed by agreement on a recommended process and scope of work for developing a Statewide Seaports Strategic Plan.

1.0 About this Report

For Florida's seaports, the Florida Department of Transportation (FDOT) currently funds direct on-port investments and supporting off-port infrastructure developments. State funding is sourced from Chapter 311, the Strategic Intermodal System (SIS), SIS Growth Management, and other programs.

State funding for ports nearly doubled in year 2005 with the inclusion of SIS connectors funds. Between 2006 and 2011, state seaport expenditures are projected remain at or above this increased level. This increase in investment dollars comes at a time when the state's fourteen deepwater ports have significant investment needs. A recent study prepared for the Florida Ports Council by the First Southwest Company estimated their cumulative capital needs (2006 through 2011) at $2.45 billion. The report noted the projected availability of nearly $700 million in state funds between 2006 and 2011 which addresses many of the identified needs. However, a significant funding gap remains.

The FDOT Seaport Office currently is undertaking several initiatives that address state freight mobility issues, including the Florida Statewide Freight and Goods Mobility Plan, the Florida Seaports Global Trade Study, and the Florida Seaports Economic Impact Study. These studies provide useful baseline data for addressing these seaport issues, but do not specifically define policy guidance relating to a state investment strategy for seaports.

As a first step in developing this guidance, FDOT Secretary Denver Stutler convened a meeting of public and private port industry stakeholders on January 13, 2006 in Jacksonville. One of the "take-aways" from that meeting was agreement on the value of additional information on the status and needs of Florida's ports. To develop this information, FDOT charged Cambridge Systematics with a series of tasks:

1. Clearly define critical "success factors" for Florida's ports. Examine and document the current conditions and performance of Florida's ports.

2. Examine and document the current conditions and performance of major competitors. Summarize major competitive strengths (opportunities) and weaknesses (threats) of Florida's ports, with respect to each other and to competitors.

3. Review recent state port investments to determine which identified needs have been addressed by funding, and which have not. Suggest policies to guide future state investment in seaports, addressing both near-term opportunities (such as utilization of existing programs and expansion of bond financing) and long-term strategic approaches.

2.0 Conditions and Performance

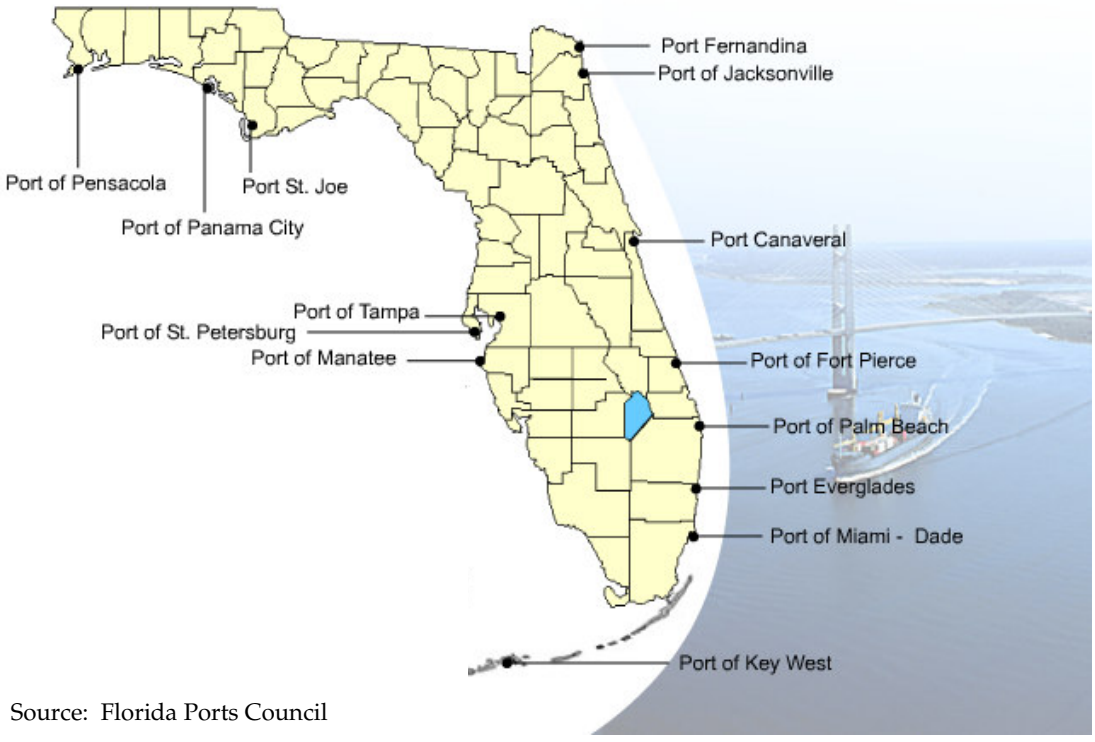
This section summarizes work to:

- Describe Florida's ports and their key throughput statistics.
- Define critical success factors for Florida's ports and understand how success factors for ports relate to success factors for other stakeholders in the overall system.
- Translate port success factors into a comprehensive inventory of key elements, develop suggested metrics for each element, and evaluate each of Florida's ports.

2.1 Florida's Ports and Key Throughput Statistics

There are fourteen deepwater ports in Florida, as shown in Figure 1 below.

Figure 1. Florida's Deepwater Ports



Source: Florida Ports Council

Florida's ports move different types of commodities in different ways. Broadly speaking, cargo can be classed as either "general cargo" or "bulk cargo," and is handled as follows:

- Containers. Containerized general cargo is any commodity moved in an intermodal shipping container. Containers come in different lengths, between 20' and 45' (for international trades) and up to 53' for US domestic trades.
- Roll On-Roll Off (Ro-ro). Ro-ro general cargo is driven onto and off of vessels, and can include automobiles, construction equipment, boats on trailers, etc.
- Breakbulk and Neobulk. Breakbulk general cargo is typically packaged in relatively small units (pallets, bags, etc.) that can be handled by conventional stevedoring equipment. Neobulk cargo consists of larger or heavier units – such as coiled steel, or large machinery – that requires special handling equipment.
- Liquid Bulk. Liquid bulk is any liquid product that is shipped without packaging into smaller units, such as petroleum in the hold of a tanker.
- Dry Bulk. Dry bulk is any dry product that is shipped without packaging into smaller units, such as coal on an open barge.

Florida's ports also provide different types of passenger services – multi-day cruises, one-day cruises, and ferry services.

Each of Florida's ports has a characteristic profile, in terms of the amount of cargo and number of passengers they handle. As shown in Table 1 and Figures 2, 3 and 4 on the following page, Florida's ports show significant diversity in terms of their traffic volumes and mixes. Three measures are shown – total tonnage, container volumes (measured in twenty-foot equivalent units, or TEUs), and passengers, all moving "across the wharf" (so that loadings and unloadings each count separately).

Florida's leading tonnage port is Tampa, followed by Everglades and Jacksonville; its leading container port is Miami, followed by Everglades, Jacksonville, and Palm Beach; and its leading cruise ports are Canaveral, Everglades, and Miami.

Collectively, these ports provided Florida with the ability to handle over 127 million tons and nearly 3 million TEUs per year. As discussed in Section 3, Florida is one of the leading states in the country on both measures, especially compared to other South Atlantic and Gulf States that rely on just one or two major ports.

Table 1. Cargo and Passenger Volumes for Florida's Ports (FY04/05)

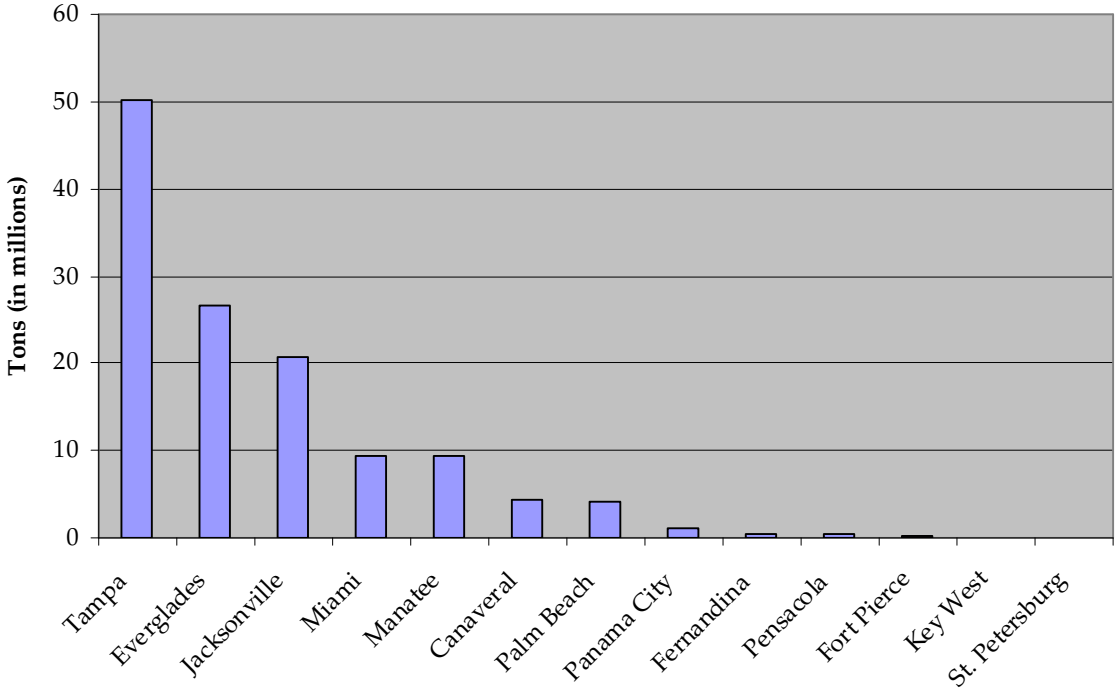
Port	Total Tonnage	TEUs	One-day Cruise	Multi-day Cruise	Total Cruise
Canaveral	4,467,088	2,086	1,859,108	2,529,743	4,388,851
Everglades	26,513,293	797,238	1,113,686	2,687,778	3,801,464
Fernandina**	509,038	28,881	0	220	220
Fort Pierce	245,500	10,570	0	0	0
Jacksonville	20,728,430	777,318	0	275,123	275,123
Key West**	0	0	0	1,012,978	1,012,978
Manatee	9,433,076	6,236	0	0	0
Miami	9,472,268	1,054,462	0	3,605,201	3,605,201
Palm Beach	4,223,545	248,206	553,692	0	553,692
Panama City	1,137,457	18,372	0	0	0
Pensacola	494,006	530	0	0	0
St. Petersburg	0	0	120,000	0	120,000
Tampa	50,194,552	26,646	0	771,227	771,227
TOTALS	127,418,253	2,970,545	3,646,486	10,882,270	14,528,756

*Cruise passengers are counted twice, once when embarking and once when disembarking.

**Port of call for passengers on multi-day cruises. The Key West figure included 83,188 ferry passengers.

Source: FDOT analysis of Draft Seaport Mission Plan.

Figure 2. Florida's Ports Ranked by Total Tonnage (FY 04/05)



Source: Draft Seaport Mission Plan.

Figure 3. Florida's Ports Ranked by TEUs (FY 04/05)

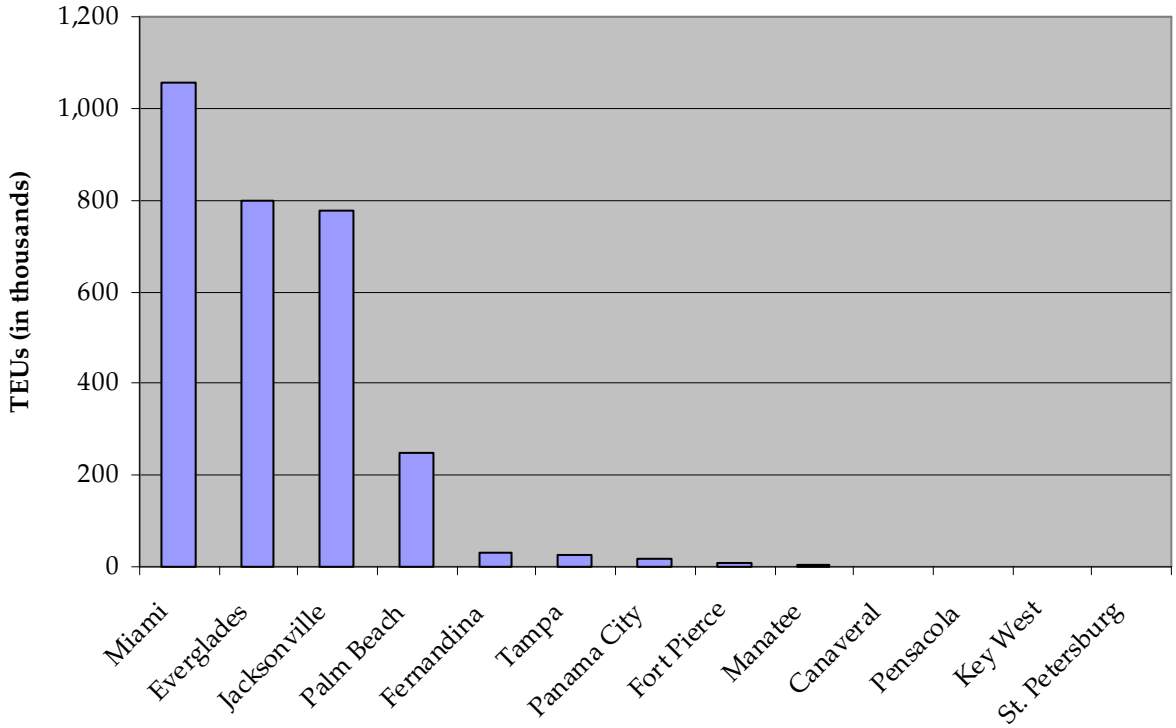
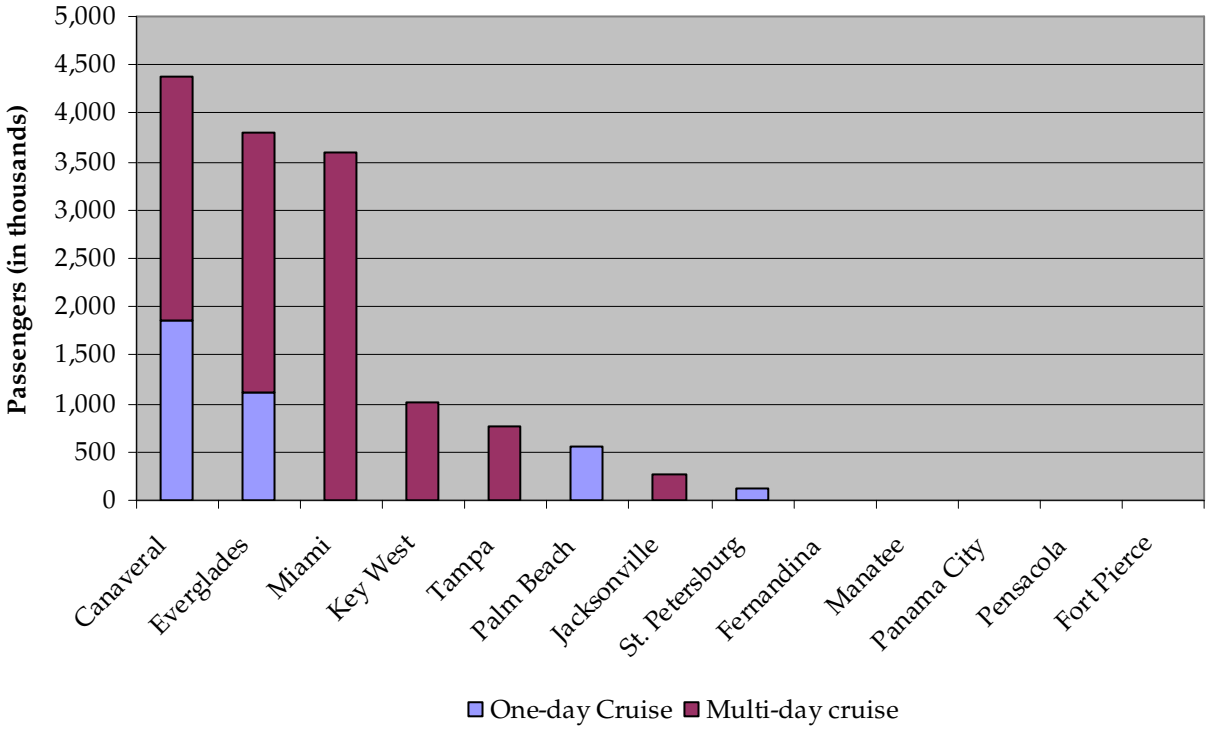


Figure 4. Florida's Ports Ranked by Passengers (FY 04/05)



2.2 Critical Success Factors for Florida's Ports

While summary statistics such as tons, TEUs, and passengers are useful in describing the general services provided by a port, they do not speak directly to the actual performance of a given port – how it "gets the numbers" -- or to a port's specific issues and needs. Generally, the overall performance of a seaport depends on a mix of different factors – physical, operational, environmental, financial, etc. – and on an intermodal transportation system linking water transportation, marine terminals, landside highway and rail access, and key markets. FDOT invests in most of these elements, so from FDOT's perspective, it is important to understand not only seaports themselves, but also their functions and needs within the overall intermodal logistics chain.

At the meeting of public and private port industry stakeholders on February 13, 2006 in Jacksonville, many participants identified what they believed to be key success factors with respect to the overall port and intermodal system, and with respect to their particular role in it. Two participating ports – Jacksonville and Tampa – provided specific input on their own ports, while industry representatives doing business throughout the state provided their perspectives on South Florida. This input is by no means representative of all ports or stakeholders, but it does offer a very useful and informative "cross section" view of success factors. Key findings from the meeting are summarized in Tables 2 through 4 on the following pages.

Table 2. Success Factors Identified for the Port of Jacksonville

Deep water channels

Ships want to be fully loaded when arriving to/departing from the port.

The port is currently working with USACE to deepen the channel to 41 feet. In addition, the port is also undertaking an accelerated feasibility study for a 45 foot draft, which will allow post-Panamax vessels to access the port. (Further comments from the Port of Tampa suggested JAXPORT really needs 50 foot draft.)

Adequate berthing capacity to ensure that vessels don't have to wait

Cooperative labor environment

Modern facilities to accommodate growth

Ability to stack containers higher.

Equipment availability.

Highway accessibility

Jacksonville is located at a confluence of Interstates including I-10, I-95, and I-75. One third of the United States can be accessed from Jacksonville within 24 hours.

Rail accessibility

The Port of Jacksonville has access to NS, FEC, and CSX.

Customers have a choice between NS, FEC, and CSX at Talleyrand.

Blount Island is served only by CSX.

Truck accessibility improvements

70 percent of TEUs and break bulk move on/off the port by truck using the I-295 drayage route to intermodal ramps across town (20 minutes each direction).

A state of the art container terminal is being built at Dames Point to serve Mitsui O.S.K. Lines, Ltd., (MOL). This terminal will generate 450 trucks per hour during peak operations (bi-directional)

Land availability

Currently the Port of Jacksonville needs additional land.

- Preservation of industrial parcels surrounding the port.

Measuring performance indicators periodically by comparing results to other U.S. ports

Providing incentives to ensure existing tenants grow their business, as well as attract new tenants

- State and local economic development agencies can provide incentives to off port operations, such as distribution centers, which dramatically impact port growth.

Table 3. Success Factors Identified for South Florida Ports

Seaport capacity expansion

Marine terminals need to improve throughput through better stacking of containers, increased availability of trucks; easy access to reliable rail service, and congestion management at port gates.

Rail and truck access improvements

Rail service into and out of south Florida has decreased in recent years.

Preservation of industrial parcels surrounding the port

Conflicting land uses, such as condo redevelopment in communities bordering seaports, clog access to ports.

Additional funding

Efficient gate operations to ensure reliable accessibility to seaports

Growth in selected markets

- Growth in south Florida ports will likely be north/south (not east/west Asian or European). The north/south market connects the U.S. to the Caribbean Basin and South American markets; it relies on smaller ships, shorter runs, and frequent fixed sailing schedules.

  South Florida's geographic position is still an advantage for these north/south markets; however landside access and overall congestion in south Florida will continue to compromise the region's competitiveness and give other ports, such as Gulf Coast ports, and advantage.

Rail service

- Shortline rail service options that serve inland ports to address capacity/throughput expansions.
- Improvements/alternative solutions to better manage the Atlantic Commerce Corridor.
- Service improvement to the Class I network.

  FEC's connection to the Class I network is a major "rubber tired" bottleneck.

- Need a balanced transportation system.

Table 4. Success Factors Identified for the Port of Tampa

Land constraints

The Port of Tampa currently has developable land; however it could always use more land that is on or within reach of deep water.

Land constraints are a major issue for railroads, especially on or in the vicinity of the seaport.

Additional funding needs

The Port of Tampa has identified its capital infrastructure improvements and has developed all the necessary lists of project.

Port efficiency

- Overall port efficiency is critical; security and federal inspection activities can dramatically impact operational efficiencies; operations and security interests must be effectively balanced.

Access bottlenecks

- Alternative solutions to at grade crossings. The crossings create major bottlenecks in Florida. Florida ranks second in the nation for total number of at grade crossings.

2.3 Performance Measurement At The System Level

An important trend in planning has been the move towards performance-based standards. This requires the identification of critical factors, quantitative and qualitative measures, and the data and resources to support the measures.

In the case of seaports, Tables 1 through 3 illustrate that there are many different factors to consider. Even a cursory analysis of these factors reveals that "one size does not fit all." For some ports, a 40' deep navigation channel may be perfectly acceptable; for others, it may represent a critical bottleneck. For some ports, on-dock/near-dock intermodal rail transfer capability would be nice to have; for others, it is vitally important. Each of Florida's ports is serving a different market mix, and has different needs. There is no single magic number, equivalent to highway level of service, that measures port conditions and performance along a numeric scale. Moreover, seaports are only one part of the larger end-to-end movement of cargo. This larger "logistics chain" involves multiple parties, each of whom typically measure success differently:

- Shippers and receivers of cargo, who are the actual buyers of transportation services, typically care most about service cost, speed, reliability, visibility, and security. Surveys and interviews usually suggest that reliability and predictability – not cost – is the most important factor for higher value shipments. Cost tends to be a bigger factor than reliability for high-weight, low-value, less time-sensitive commodities. Overall, shippers are buying end-to-end performance.

- Private sector transportation service providers include marine terminal owners and operators, terminal operators, shipping companies, railroads, truckers, railroads, warehouse/distribution center operators, transportation logistics companies, customs brokers, freight forwarders, information and data providers, and others. Although they differ with respect to their services, they share the common objective of for-profit businesses – namely, to meet business profitability and ROI targets. Generally, private transportation service providers tend to care most about their service capacity, efficiency, security, and cost, with the goal of attracting customers and keeping them satisfied. Keeping the customer happy means meeting the customer's goals, so the shipper and receiver's critical success factors – cost, speed, reliability, security, and visibility – also become concerns of the private transportation service provider.

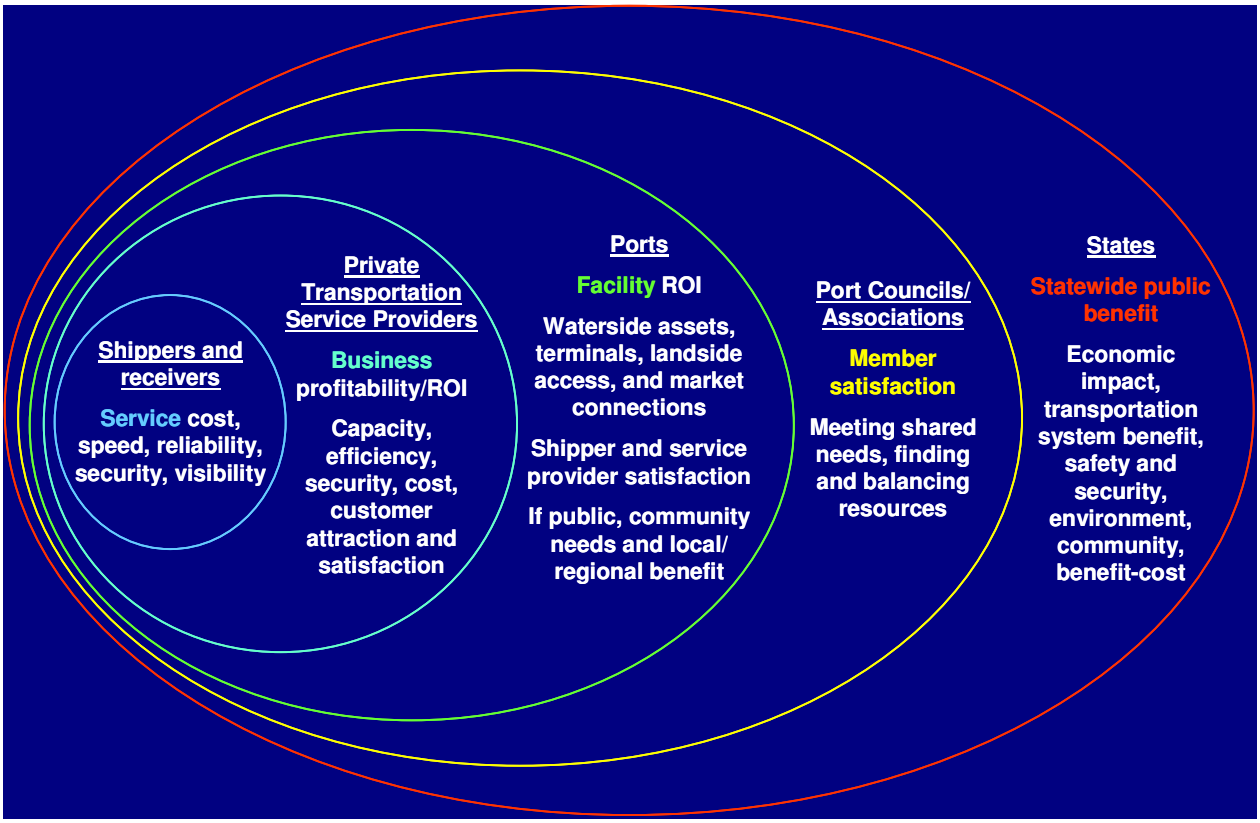
- Ports. In the United States, almost all container and auto handling ports are public and most neobulk and break-bulk ports are public; liquid and dry bulk handling facilities tend to be split between public and private sector ownership. This is also true in Florida. Florida's public ports are also typical in that most function as "landlord" ports – they lease land to a private terminal operator, who is directly responsible for conducting terminal operations, and collect revenues in the form of lease and other payments. Some US ports are "operating" ports that directly control some or all on-terminal operations, but this is the exception. Ports typically care about: the overall revenue stream and return on investment for port facilities; the condition and performance of their waterside assets, marine terminals, landside access systems, and market connections; meeting the needs and expectations of shippers and receivers and private transportation service providers. Public ports, more than private ports, are typically charged with addressing the needs of needs of their host communities and providing local and regional public benefit. Most of these elements were listed in Tables 2-4 previously.

- Ports Councils and Associations. These are service organizations primarily oriented to meeting the needs of their members for information, planning, lobbying, and coordination, with the goal of meeting collective needs and maximizing and balancing resources. These organizations must be concerned with the needs of the public ports, and by extension, the needs of the private transportation service providers that allow the ports to function, and the needs of the shippers and receivers that contract for services,

- States. States have a separate and overarching interest in statewide public benefit – generally in the form of economic impact, transportation system benefit, safety, security, environment, community, and benefit-cost from a public sector standpoint. But they also have a vital interest in the success factors for all other players in the logistics chain – unless shippers/receivers, private transportation service providers, public ports, and port organizations find success, there can be no generation of the public benefits the state is seeking. For this reason, we can think of the goals of each of these other players as being "nested" within the specific interests of the state.

Figure 5 on the following page illustrates the key success factors for each of these groups, and how their different interests nest within each other – with shippers/receivers having the narrowest range of concerns, and states having the broadest.

Figure 5. The "Success Factor Onion"



This report is primarily concerned with two layers of this onion: success factors for Florida's public ports, and success factors for the state of Florida, as represented by FDOT. However, as we illustrate in Figure 1, every layer of the onion has to take into account the issues and factors represented in the more "inside" layers. Florida's private ports are also important, but the evaluation of private transportation service providers was beyond the scope of this work.

2.4 Performance Measurement For Florida's Public Ports

With the input from Secretary Stutler's Jacksonville meeting, and in consultation with FDOT staff and selected ports, Cambridge Systematics developed a "Conditions Checklist" for Florida's seaports. The basic framework consists of factors related to:

- Waterways
- Marine terminals
- Landside access
- Connectivity and linkage to markets

Each of these elements includes a variety of different factors. Rather than oversimplify, and risk losing critical messages in the process, the Conditions Checklist tries to address the most significant elements within each category, reflecting a mix of infrastructure and non-infrastructure factors. Moreover, the Conditions Checklist recognizes that ports accommodate many different types of services – container, non-container, passenger, etc. – and that conditions assessments will vary depending on the type of service. Finally, the Conditions Checklist attempts to capture current conditions, the effects of planned improvements, and potential future (year 2015) conditions to the extent these can be reasonably estimated from available information.

The Conditions Checklist asks for numbers in a few cases, but there are very few numbers that really tell the story of a port and what it needs. In most cases, the key issue is: does a port have what it needs to capture its key opportunities and fulfill your mission, and if not, how critical is the shortfall? As a result, the Conditions Checklist relies mostly on a qualitative evaluation process, where each factor is ranked by color (Green-Yellow-Red) based on unique conditions at each port:

- Green (G) = Good conditions or performance with no immediate issues or needs; represents "a strength to build on, an opportunity for future growth"
- Yellow (Y) = Adequate conditions or performance not significantly hindering the port; represents "a condition it would be desirable to improve"
- Red (R) = Areas of deficiency that significantly hinder operations and growth potential; represents "a need that is extremely important to address."
- Blank or Not Applicable (N/A)

The Conditions Checklist is attached as Figure 6 on the following page.

In the interest of time, and to take advantage of the depth of knowledge of staffs at each of Florida's ports, FDOT staff distributed the Conditions Checklist to all fourteen of Florida's deepwater seaports, along with a cover letter explaining the purpose of the exercise and a set of written instructions (see Figure 7). Responses received back were incorporated into this report. We made no attempt to "fill in the blanks" in cases where ports did not submit responses, or submitted partial responses.

Figure 6. Florida Seaport Conditions Checklist

Florida Seaport Conditions Checklist

Name:
Date:

Type	Element (Physical, Operational, Environmental, Financial, Throughput)	Current Performance (Assessment -- Green-Yellow-Red) Container	Non-Container	Passenger	Planned Projects Through 2015 Project Description	Status (C, FF, PF, Other)	Future (2015) Performance (Assessment -- Green-Yellow-Red) Container	Non-Container	Passenger	Comments (if any)
Waterside Capacity and Performance										
P	Channel Dimensions									
P	Turning Basin Dimensions									
P	Berth Depths									
P	"Air Draft"									
O	Navigational Restrictions									
O	Conflicts With Non-Port Vessels									
O	Safety and Security									
E	Marine Environmental Constraints									
F	Ability to Finance Needed Improvements									
T	Vessel Calls/Berth/Year	#	#	#			#	#	#	
Terminal Capacity and Performance										
PO	Berths									
PO	Cranes and Yard Equipment									
PO	Open Storage Areas									
PO	Structures									
PO	Gates									
O	Labor Sufficiency									
O	Customs Inspection									
O	Safety and Security									
O	Truck/Rail Turn Time									
E	Landfill Potential									
E	Land Availability									
E	Compatibility With Adjoining Land Uses									
F	Ability to Finance Needed Improvements									
T	TEUs/Storage Acre/Year	#	#	#			#	#	#	
T	Tons/Storage Acre/Year	#	#	#			#	#	#	
T	Passengers/Year	#	#	#			#	#	#	
Landside Capacity and Performance										
PO	Auto/Bus Access and Parking									
PO	Truck Access and Queuing									
PO	On-Dock Rail Connections and Yards									
PO	Near-Dock Railyards									
O	Safety and Security									
E	Local Congestion and Impacts									
F	Ability to Finance Needed Improvements									
T	Auto/Bus Moves/Day	#	#	#			#	#	#	
T	Truck Moves/Day	#	#	#			#	#	#	
T	Railcar Moves/Day	#	#	#			#	#	#	
Market Connections and Services										
PO	Accessibility to Local Markets									
PO	Accessibility to Regional Markets									
PO	Accessibility to Hinterland Markets									
PO	Accessibility to W/D/Mfg Clusters									
E	Ability to Serve New W/D/Mfg Clusters									
E	Ability to Improve Market Access									
F	Ability to Finance Needed Improvements									
T	Serves Fast-Growing Markets									
T	Offers Unique/Critical Commodity Capacity									
T	Offers Unique/Critical Gateway Service									

Any Other Key Issues (describe)

Figure 7. Instructions for Completing the Conditions Checklist

About the Florida Seaport Conditions Checklist

The Florida Seaport Conditions Checklist is intended to provide "at a glance" measures of current and future seaport conditions. Most of the cells in the matrix can be completed with a simple Green (G) – Yellow (Y) – Red (R) response. A few of the cells are marked "#", which means we are looking for a number (if readily available), along with an associated color judgment.

- Green (G) = Good conditions with no immediate issues or needs; represents "a strength to build on, an opportunity for future growth"
- Yellow (Y) = Adequate conditions not significantly hindering the port; represents "a condition it would be desirable to improve"
- Red (R) = Areas of deficiency that significantly hinder operations and growth potential; represents "a need that is extremely important to address."
- Not Applicable (N/A)

Ports should complete these cells based on their own professional experience and judgment, which we believe will be more useful to FDOT than "objective" consultant-generated statistical measures (such as depth, throughput, acreage, etc.).

The Checklist has three main "dimensions."

- Functional areas. Each of four main functional areas of seaport activity -- waterside, terminals, landside access, and market connections – is broken down into different components, representing different factors (physical, operational, environmental, throughput, and financial). Some of Florida's ports consist of geographically separate terminals; in these cases, if there is a yellow or red condition, the terminal(s) or area(s) it applies to should be noted.
- Type of service. We ask about three types of services – container, non-container, and passenger. Factors that are red for one type of service may be green for another. In the interest of simplicity, we miss important distinctions (Asian mega-ship services versus short-sea shipping, bunker barges versus Very Large Crude Carriers, etc.), so ports should feel free to add columns if they choose.
- Timeframe. We ask about current conditions, planned improvements between now and 2015, and anticipated future conditions in 2015 after any planned improvements are made, taking into account the port's business objectives and anticipated throughput. We ask for a brief description of the particular improvement and its status (*under construction*, *fully funded* for construction, *partially funded* for construction, or *other*). We are trying to develop generally descriptive information, not capital planning-level data.

Ports should feel free to add rows, columns, or text information regarding other issues or factors, if they feel it is important to understanding current and future conditions.

Please contact Alan Meyers at Cambridge Systematics (301-347-0113) if you have any questions. We would greatly appreciate it if you would complete the attached Checklist and return it electronically to Alan at ameyers@camsys.com not later than noon on Friday, March 17th.

2.5 Tabulated Results

Results were received from ten of Florida's ports, including all major cargo and cruise ports: Canaveral; Everglades; Jacksonville; Manatee; Miami; Palm Beach; Panama City; Pensacola; St. Joe; and Tampa. Responses were not received from St. Petersburg, Key West, Fort Pierce, or Fernandina.

The responses suggest that while current conditions may be well understood, future conditions may be unpredictable, depending on global logistics and markets, competitive pressures among US ports, implementation of needed improvements, and other factors. To the extent that ports have addressed these factors as part of their internal planning, as reflected in port master plans and other implementation documents, the Checklist reflects their current thinking. However, several ports felt that it would be overly speculative to address 2015 conditions and elected to leave this section of the Checklist blank. For the ports that did look ahead, some get "greener" (anticipating that conditions will improve); others get "redder" (anticipating that pressures will intensify). The presence of future "yellow" and "red" issues should not be viewed negatively – on the contrary, this represents vital input to FDOT's planning process regarding long-range seaport needs.

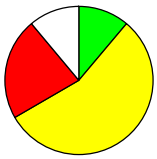
The Checklist allowed for responses in up to 276 individual cells. To display this information in a simpler way, we created eight summary measures for each port:

- Waterside Capacity and Performance, current and future
- Terminal Capacity and Performance, current and future
- Landside Capacity and Performance, current and future
- Market Connections and Services, current and future

Each measure is essentially a pie chart depicting the sum of all responses related to that particular set of factors. For example, there are 30 possible responses related to Waterside Capacity and Performance, Current Conditions. If 10 responses were green, 10 were yellow, 5 were red, and 5 were not applicable, then the resulting pie chart would be 1/3rd green, 1/3rd yellow, 1/6th red, and 1/6th blank. The idea is to provide a useful visual metric, similar to highway level of service, but without losing the important details underlying the measure. The text boxes adjoining each pie chart identify the specific conditions reported as green, yellow, or red, with (C) meaning the condition applies to container services, (NC) to non-container services, and (P) to passenger services. For reference, the full Checklist as submitted by each port -- modified only with respect to format, for purposes of consistency -- is presented in the Appendix.

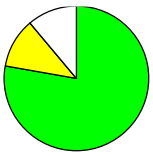
Figure 8. Conditions Results for Canaveral

Waterside (Current)



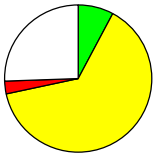
- Conflicts with Non-Port Vessels (C)(NC)(P)
- Berth Depths (C)(NC)(P), Navigational Restrictions (C)(NC)(P), Safety and Security (C)(NC)(P), Marine Environmental Constraints (C)(NC)(P), Ability to Finance Needed Improvements (C)(NC)(P)
- Channel Dimensions (C)(NC)(P), Turning Basin Dimensions (C)(NC)(P)

Waterside (Future)



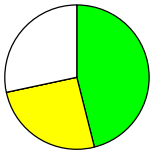
- Channel Dimensions (C)(NC)(P), Turning Basin Dimensions (C)(NC)(P), Berth Depths (C)(NC)(P), Navigational Restrictions (C)(NC)(P), Conflicts with Non-Port Vessels (C)(NC)(P), Safety and Security (C)(NC)(P), Marine Environmental Constraints (C)(NC)(P)
- Ability to Finance Needed Improvements (C)(NC)(P)
- none

Terminal (Current)



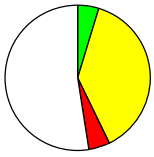
- Customs Inspection (NC)(P), Compatibility wwith Adjoining Land Uses (P)
- Berths (C)(P), Open Storage Areas (C)(NC)(P), Structures (NC)(P), Gates (NC)(P), Labor Sufficiency (NC)(P), Safety and Security (NC)(P), Truck/Rail Turn Time (NC)(P), Landfill Potential (C)(NC)(P), Land Availability (C)(NC)(P), Compatibility with Adjoining Land Uses (NC), Ability to Finance Needed Improvements (C)(NC)(P)
- Berths (NC)

Terminal (Future)



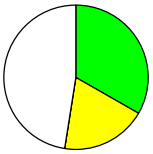
- Berths (C)(P), Open Storage Areas (P), Structures (NC)(P), Gates (NC)(P), Customs (NC)(P), Safety and Security (C)(NC)(P), Truck/Rail Turn Time (NC)(P), Land Availability (C)(NC)(P), Compatibility with Adjoining Land Uses (P)
- Berths (NC), Open Storage Areas (NC), Labor Sufficiency (NC)(P), Landfill Potential (NC)(P), Compatibility with Adjoining Land Uses (NC), Ability to Finance Needed Improvements (C)(NC)(P)
- none

Landside (Current)



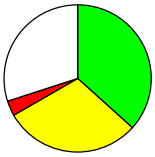
- Near-Dock Railyards (NC)
- Auto/Bus Access and Parking (P), Truck Access and Queuing (P), Safety and Security (NC)(P), Local Congestion and Impacts (NC)(P), Ability to Finance Needed Improvements (NC)(P)
- Truck Access and Queuing-(NC)

Landside (Future)



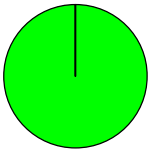
- Auto/Bus Access and Parking (NC)(P), Truck Access and Queuing (NC)(P), Near Dock Railyards (NC), Local Congestion and Impacts (NC)(P)
- Safety and Security (NC)(P), Ability to Finance Needed Improvements (NC)(P)
- none

Market (Current)



- Accessibility to Local Markets (NC)(P), Ability to Serve New W/D/Mfg Clusters (NC)(P), Serves Fast Growing Markets (C)(NC)(P), Offers Unique/Critical Commodity Capacity (NC)(P), Offers Unique/Critical Gateway Service (NC)(P)
- Accessibility to Regional Markets (NC)(P), Accessibility to Hinterland Markets (NC)(P), Accessibility to W/D/Mfg Clusters (NC)(P), Ability to Finance Needed Improvements (C)(NC)(P)
- Ability to Serve New W/D/Mfg Clusters (C)

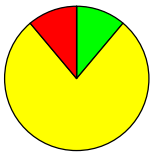
Market (Future)



- Accessibility to Local/Regional/Hinterland Markets (C)(NC)(P), Accessibility/Ability to Serve Existing/New W/D/Mfg Clusters (C)(NC)(P), Ability to Improve Market Access (C)(NC)(P), Ability to Finance Needed Improvements (C)(NC)(P), Serves Fast-Growing Markets (C)(NC)(P), Offers Unique/Critical Commodity Capacity/Gateway Service (C)(NC)(P)
- none
- none

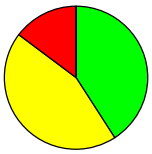
Figure 9. Conditions Results for Everglades

Waterside (Current)



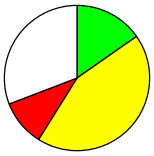
- Berth Depths (P), Air Draft (NC)(P)
- Channel Dimensions (C)(NC)(P), Turning Basin Dimensions (C)(NC)(P), Berth Depths (C)(NC), Air Draft (C), Navigational Restrictions (C)(NC)(P), Conflicts with Non-Port Vessels (C)(NC)(P), Safety and Security (C)(NC)(P), Marine Environmental Constraints (C)(NC)(P)
- Ability to Finance Needed Improvements (C)(NC)(P)

Waterside (Future)



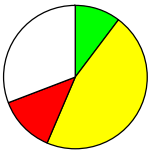
- Channel Dimensions (C)(NC)(P), Turning Basin Dimensions (C)(NC)(P), Berth Depths (C)(NC)(P), Air Draft (NC)(P)
- Navigational Restrictions (C)(NC)(P), Conflicts with Non-Port Vessels (C)(NC)(P), Safety and Security (C)(NC)(P), Marine Environmental Constraints (C)(NC)(P)
- Air Draft (C), Ability to Finance Needed Improvements (C), Ability to Finance Needed Improvements (NC), Ability to Finance Needed Improvements (P)

Terminal (Current)



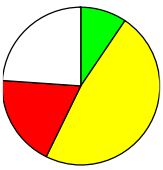
- Open Storage Areas (C)(NC), Land Availability (C), Compatibility with Adjoining Uses (C)(NC)(P)
- Berths (NC)(P), Cranes and Yard Equipment (C)(NC)(P), Open Storage Areas (P), Structures (P), Gates (C), Customs Inspection (C)(NC)(P), Safety and Security (C)(NC)(P), Truck/Rail Turn Time (C), Land Availability (NC)(P)
- Berths (C), Ability to Finance Needed Improvements (C)(NC)(P)

Terminal (Future)



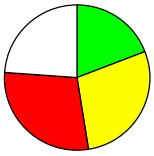
- Truck/Rail Turn Time (C), Compatibility with Adjoining Land Uses (C)(NC)(P)
- Berths (C)(NC)(P), Cranes and Yard Equipment (C)(NC)(P), Open Storage Areas (C)(NC)(P), Customs Inspection (C)(NC)(P), Safety and Security (C)(NC)(P), Land Availability (C)(NC)(P)
- Structures (P), Gates (C), Ability to Finance Needed Improvements (C)(NC)(P)

Landside (Current)



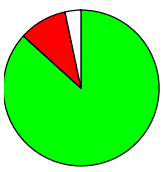
- On-Dock Rail Connections and Yards (C)(NC)
- Truck Access and Queuing (C)(NC), Near-Dock Railyards (C)(NC), Safety and Security (C)(NC)(P), Local Congestion and Impacts (C)(NC)(P)
- Auto/Bus Access and Parking (P), Ability to Finance Needed Improvements (C)(NC)(P)

Landside (Future)



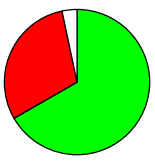
- On-Dock Rail Connections and Yards (C)(NC), Near-Dock Railyards (C)(NC)
- Auto/Bus Access and Parking (P), Truck Access and Queuing (C)(NC), Safety and Security (C)(NC)(P)
- Local Congestion and Impacts (C)(NC)(P), Ability to Finance Needed Improvements (C)(NC)(P)

Market (Current)



- Accessibility to Local/Regional/Hinterland Markets (C)(NC)(P), Accessibility/Ability to Serve Existing/New W/D/Mfg Clusters (C)(NC)(P), Ability to Improve Market Access (C)(NC)(P), Serves Fast-Growing Markets (C)(NC)(P), Offers Unique/Critical Commodity Capacity (C)(NC), Offers Unique/Critical Gateway Service (C)(NC)(P)
- none
- Ability to Finance Needed Improvements (C)(NC)(P)

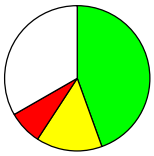
Market (Future)



- Accessibility to Local/Regional/Hinterland Markets (C)(NC)(P), Serves Fast-Growing Markets (C)(NC)(P), Ability to Improve Market Access (C)(NC)(P), Offers Unique/Critical Commodity Capacity (C)(NC), Offers Unique/Critical Gateway Service (C)(NC)(P)
- none
- Accessibility to W/D/Mfg Clusters (C)(NC)(P), Ability to Serve New W/D/Mfg Clusters (C)(NC)(P), Ability to Finance Needed Improvements (C)(NC)(P)

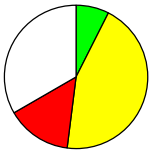
Figure 10. Conditions Results for Jacksonville (Blount Island)

Waterside (Current)



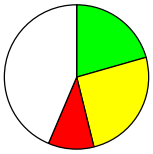
- Channel Dimensions (C)(NC), Turning Basin Dimensions (C)(NC), Berth Depths (C)(NC), Air Draft (C)(NC), Navigational Restrictions (C)(NC), Conflicts with Non-Port Vessels (C)(NC)
- Safety and Security (C)(NC), Marine Environmental Constraints (C)(NC)
- Ability to Finance Needed Improvements (C)(NC)

Waterside (Future)



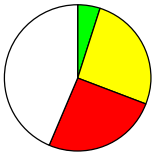
- Conflicts with Non-Port Vessels (C)(NC)
- Channel Dimensions (C)(NC), Turning Basin Dimensions (C)(NC), Air Draft (C)(NC), Navigational Restrictions (C)(NC), Safety and Security (C)(NC), Marine Environmental Constraints (C)(NC)
- Berth Depths (C)(NC), Ability to Finance Needed Improvements (C)(NC)

Terminal (Current)



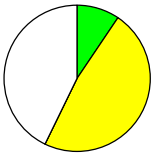
- Berths (C)(NC), Open Storage Areas (C)(NC), Structures (C)(NC), Compatibility with Adjoining Land Uses (C)(NC)
- Cranes and Yard Equipment (C)(NC), Gates (C)(NC), Customs Inspection (C)(NC), Safety and Security (C)(NC), Ability to Finance Needed Improvements (C)(NC)
- Truck/Rail Turn Time (C)(NC), Land Availability (C)(NC)

Terminal (Future)



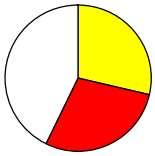
- Compatibility with Adjoining Land Uses (C)(NC)
- Open Storage Areas (C)(NC), Structures (C)(NC), Customs Inspection (C)(NC), Safety and Security (C)(NC), Ability to Finance Needed Improvements (C)(NC)
- Berths (C)(NC), Cranes and Yard Equipment (C)(NC), Gates (C)(NC), Truck/Rail Turn Time (C)(NC), Land Availability (C)(NC)

Landside (Current)



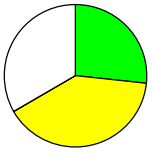
- Local Congestion and Impacts (C)(NC)
- Truck Access and Queuing (C)(NC), On-Dock Rail Connections and Yards (C)(NC), Near-Dock Railyards (C)(NC), Safety and Security (C)(NC), Ability to Finance Needed Improvements (C)(NC)
- none

Landside (Future)



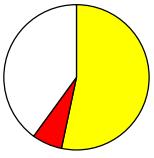
- none
- Near-Dock Railyards (C)(NC), Safety and Security (C)(NC), Ability to Finance Needed Improvements (C)(NC)
- Truck Access and Queuing (C)(NC), On-Dock Rail Connections and Yards (C)(NC), Local Congestion and Impacts(C)(NC)

Market (Current)



- Accessibility to Local Markets (C)(NC), Accessibility to Regional Markets (C)(NC), Accessibility to W/D/Mfg Clusters (C)(NC), Serves Fast Growing Markets (C)(NC)
- Accessibility to Hinterland Markets (C)(NC), Ability to Serve New W/D/Mfg Clusters (C)(NC), Ability to Improve Market Access (C)(NC), Ability to Finance Needed Improvements (C)(NC), Offers Unique/Critical Commodity Capacity (C)(NC), Offers Unique/Critical Gateway Service (C)(NC)
- none

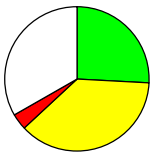
Market (Future)



- none
- Accessiblity to Local Markets (C)(NC), Accessibility to Hinterland Markets (C)(NC), Accessibility to W/D/Mfg Clusters (C)(NC), Ability to Serve New W/D/Mfg Clusters (C)(NC), Ability to Improve Market Access (C)(NC), Serves Fast-Growing Markets (C)(NC), Offers Unique/Critical Commodity Capacity (C)(NC), Offers Unique/Critical Gateway Service (C)(NC)
- Ability to Finance Needed Improvements (C)(NC)

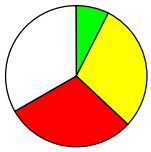
Figure 11. Conditions Results for Jacksonville (Dames Point)

Waterside (Current)



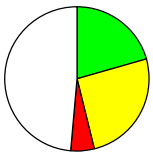
- Berth Depths (C)(P), Air Draft (C), Navigational Restrictions (C)(P), Conflicts with Non-Port Vessels (C)(P)
- Channel Dimensions (C)(P), Turning Basin Dimensions (C)(P), Safety and Security (C)(P), Marine Environmental Constraints (C)(P), Ability to Finance Needed Improvements (C)(P)
- Air Draft (P)

Waterside (Future)



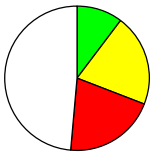
- Navigational Restrictions (C)(P)
- Channel Dimensions (C)(P), Air Draft (C), Conflicts with Non-Port Vessels (C)(P), Safety and Security (C), Marine Environmental Constraints (C)(P)
- Turning Basin Dimensions(C)(P), Berth Depths (C)(P), Air Draft (P), Safety and Security (P), Ability to Finance Needed Improvements (C)(P)

Terminal (Current)



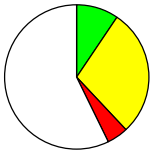
- Berths (C)(P), Cranes and Yard Equipment (C)(P), Open Storage Areas (C), Structures (C), Gates (P), Ability to Finance Needed Improvements (C)
- Structures (P), Gates (C), Customs Inspection (C)(P), Safety and Security (C)(P), Truck/Rail Turn Time (C), Compatibility with Adjoining Land Uses (C)(P), Ability to Finance Needed Improvements (P)
- Land Availability (C)(P)

Terminal (Future)



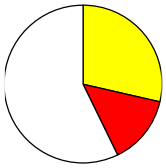
- Cranes and Yard Equipment (C), Open Storage Areas (C), Structures (C), Ability to Finance Needed Improvements (C)
- Cranes and Yard Equipment (P), Structures (P), Gates (C)(P), Customs Inspection (C)(P), Safety and Security (C)(P)
- Berths (C)(P), Truck/Rail Turn Time (C), Land Availability (C)(P), Compatibility with Adjoining Land Uses (C)(P), Ability to Finance Needed Improvements (P)

Landside (Current)



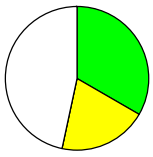
- Auto/Bus Access and Parking (P), Local Congestion and Impacts (P)
- Truck Access and Queuing (C), Safety and Security (C)(P), Local Congestion and Impacts (C), Ability to Finance Needed Improvements (C)(P)
- Near-Dock Railyards (C)

Landside (Future)



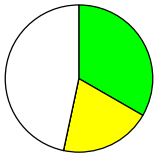
- none
- Auto/Bus Access and Parking (P), Safety and Security (C)(P), Local Congestion and Impacts (P), Ability to Finance Needed Improvements (C)(P)
- Truck Access and Queuing (C), Near-Dock Railyards (C), Local Congestion and Impacts (C)

Market (Current)



- Accessibility to Local/Regional Markets (C)(P), Accessibility/Ability to Serve Existing/New W/D/Mfg Clusters (C), Serves Fast-Growing Markets (C)(P), Offers Unique/Critical Commodity Capacity/Gateway Service (C)
- Accessibility to Hinterland Markets (C)(P), Ability to Improve Market Access (C)(P), Ability to Finance Needed Improvements (C)(P)
- none

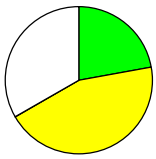
Market (Future)



- Accessibility to Local/Regional Markets (C)(P), Accessibility/Ability to Serve Existing/New W/D/Mfg Clusters (C), Serves Fast-Growing Markets (C)(P), Offers Unique/Critical Commodity Capacity/Gateway Service (C)
- Accessibility to Hinterland Markets (C)(P), Ability to Improve Market Access (C)(P), Ability to Finance Needed Improvements (C)(P)
- none

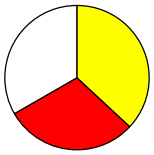
Figure 12. Conditions Results for Jacksonville (Talleyrand)

Waterside (Current)



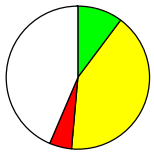
- Turning Basin Dimensions (C)(NC), Air Draft (C)(NC), Conflicts with Non-Port Vessels (C)(NC)
- Channel Dimensions (C)(NC), Berth Depths (C)(NC), Navigational Restrictions (C)(NC), Safety and Security (C)(NC), Marine Environmental Constraints (C)(NC), Ability to Finance Needed Improvements (C)(NC)
- none

Waterside (Future)



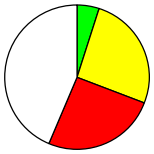
- none
- Air Draft (C)(NC), Navigational Restrictions (C)(NC), Conflicts with Non-Port Vessels (C)(NC), Safety and Security (C)(NC), Marine Environmental Constraints (C)(NC)
- Channel Dimensions (C)(NC), Turning Basin Dimensions (C)(NC), Berth Depths (C)(NC), Ability to Finance Needed Improvements (C)(NC)

Terminal (Current)



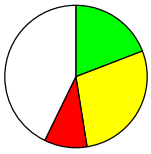
- Structures (C)(NC), Compatibility with Adjoining Land Uses (C)(NC)
- Berths (C)(NC), Cranes and Yard Equipment (C)(NC), Open Storage Areas (C)(NC), Gates (C)(NC), Customs Inspection (C)(NC), Safety and Security (C)(NC), Truck/Rail Turn Time (C)(NC), Ability to Finance Needed Improvements (C)(NC)
- Land Availability (C)(NC)

Terminal (Future)



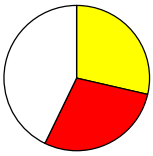
- Structures (C)(NC), Compatibility with Adjoining Land Uses (C)(NC)
- Cranes and Yard Equipment (C)(NC), Open Storage Areas (C)(NC), Structures (C)(NC), Customs Inspection (C)(NC), Safety and Security (C)(NC)
- Berths (C)(NC), Gates (C)(NC), Truck/Rail Turn Time (C)(NC), Land Availability (C)(NC), Ability to Finance Needed Improvements (C)(NC)

Landside (Current)



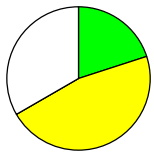
- On-Dock Rail Connections and Yards (C)(NC), Near Dock Railyards (C)(NC)
- Safety and Security (C)(NC), Local Congestion and Impacts (C)(NC), Ability to Finance Needed Improvements (C)(NC)
- Truck Access and Queuing (C)(NC)

Landside (Future)



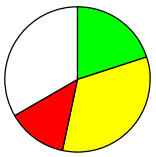
- none
- On-Dock Rail Connections and Yards (C)(NC), Near-Dock Railyards (C)(NC), Safety and Security (C)(NC)
- Truck Access and Queuing (C)(NC), Local Congestion and Impacts (C)(NC), Ability to Finance Needed Improvements (C)(NC)

Market (Current)



- Accessibility to Local/Regional Markets (C)(NC), Serves Fast-Growing Markets (C)(NC)
- Accessibility to Hinterland Markets (C)(NC), Accessibility to W/D/Mfg Clusters (C)(NC), Ability to Serve New W/D/Mfg Clusters (C)(NC), Ability to Improve Market Access (C)(NC), Ability to Finance Needed Improvements (C)(NC), Offers Unique/Critical Commodity Capacity (C)(NC), Offers Unique/Critical Gateway Service (C)(NC)
- none

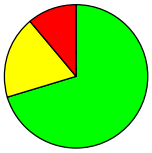
Market (Future)



- Accessibility to Local/Regional Markets (C)(NC), Serves Fast-Growing Markets (C)(NC)
- Accessibility to Hinterland Markets (C)(NC), Accessibility to W/D/Mfg Clusters (C)(NC), Ability to Serve New W/D/Mfg Clusters (C)(NC), Offers Unique/Critical Commodity Capacity (C)(NC), Offers Unique/Critical Gateway Service (C)(NC)
- Ability to Improve Market Access (C)(NC), Ability to Finance Needed Improvements (C)(NC)

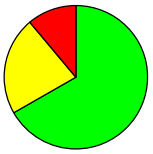
Figure 13. Conditions Results for Manatee

Waterside (Current)



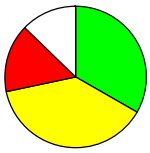
- Channel Dimensions (C)(NC)(P), Turning Basin Dimensions (C)(NC)(P), Berth Depths (P), Air Draft (C)(NC)(P), Navigational Restrictions (P), Conflicts with Non-Port Vessels (C)(NC)(P), Safety and Security (C)(NC), Marine Environmental Constraints (C)(NC)(P)
- Berth Depths (C)(NC), Navigational Restrictions (C)(NC), Safety and Security (P)
- Ability to Finance Needed Improvements (C)(NC)(P)

Waterside (Future)



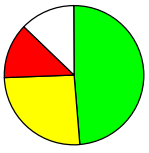
- Channel Dimensions (C)(NC)(P), Turning Basin Dimensions (C)(NC)(P), Berth Depths (C)(NC)(P), Air Draft (C)(NC)(P), Navigational Restrictions (C)(NC)(P), Conflicts with Non-Port Vessels (C)(NC)(P)
- Safety and Security (C)(NC)(P), Marine Environmental Constraints (C)(NC)(P)
- Ability to Finance Needed Improvements (C)(NC)(P)

Terminal (Current)



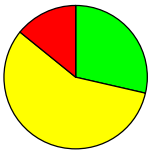
- Gates (C)(NC)(P), Customs Inspection (C)(NC)(P), Safety and Security (C)(NC), Truck/Rail Turn Time (C)(NC), Landfill Potential (C)(NC), Compatibility with Adjoining Land Uses (P)
- Berths (C)(NC)(P), Cranes and Yard Equipment (NC), Open Storage Areas (NC), Structures (NC)(P), Labor Sufficiency (C)(NC)(P), Safety and Security (P), Land Availability (C)(NC), Compatibility with Adjoining Land Uses (C)(NC)
- Cranes and Yard Equipment (C), Open Storage Areas (C), Structures (C), Ability to Finance Needed Improvements (C)(NC)(P)

Terminal (Future)



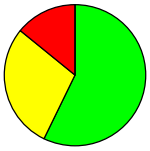
- Berths (C)(NC)(P), Cranes and Yard Equipment (C)(NC), Open Storage Areas (C)(NC), Structures (C)(NC)(P), Gates (C)(NC)(P), Customs Inspection (C)(NC)(P), Compatibility with Adjoining Land Uses (C)(NC)(P)
- Labor Sufficiency (C)(NC)(P), Safety and Security (C)(NC)(P), Truck/Rail Turn Time (C)(NC), Landfill Potential (C)(NC)
- Land Availability (C)(NC), Ability to Finance Needed Improvements (C)(NC)(P)

Landside (Current)



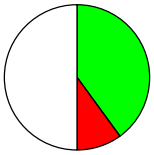
- Auto/Bus Access and Parking (C)(NC)(P), Local Congestion and Impacts (C)(NC)(P)
- Truck Access and Queuing (C)(NC)(P), On-Dock Rail Connections and Yards (C)(NC)(P), Near-Dock Railyards (C)(NC)(P), Safety and Security (C)(NC)(P)
- Ability to Finance Needed Improvements (C)(NC)(P)

Landside (Future)



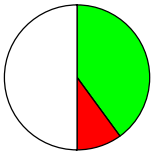
- Auto/Bus Access and Parking (C)(NC)(P), Truck Access and Queuing (C)(NC)(P), On-Dock Rail Connections and Yards (C)(NC)(P), Near-Dock Railyards (C)(NC)(P)
- Safety and Security (C)(NC)(P), Local Congestion and Impacts (C)(NC)(P)
- Ability to Finance Needed Improvements (C)(NC)(P)

Market (Current)



- Accessibility to Local Markets (C)(NC)(P), Accessibility to Regional Markets (C)(NC)(P), Accessibility to Hinterland Markets (C)(NC)(P), Accessibility to W/D/Mfg Clusters (C)(NC)(P)
- none
- Ability to Finance Needed Improvements (C)(NC)(P)

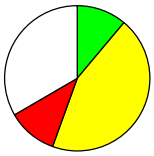
Market (Future)



- Accessibility to Local Markets (C)(NC)(P), Accessibility to Regional Markets (C)(NC)(P), Accessibility to Hinterland Markets (C)(NC)(P), Accessibility to W/D/Mfg Clusters (C)(NC)(P)
- none
- Ability to Finance Needed Improvements (C)(NC)(P)

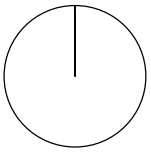
Figure 14. Conditions Results for Miami

Waterside (Current)



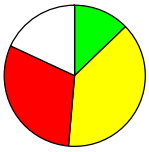
Channel Dimensions (P), Turning Basin Dimensions (P), Berth Depths (P)
Channel Dimensions (C)(NC), Turning Basin Dimensions (C)(NC), Berth Depths (C)(NC), Safety and Security (C)(NC)(P), Marine Environmental Constraints (C)(NC)(P)
Ability to Finance Needed Improvements (C)(NC)(P)

Waterside (Future)



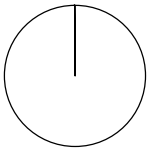
none
none
none

Terminal (Current)



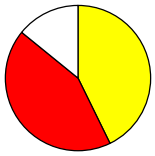
Labor Sufficiency (C)(NC)(P), Truck/Rail Turn Time (P), Landfill Potential (P)
Berths (C)(NC)(P), Cranes and Yard Equipment (C), Open Storage Areas (NC), Structures (C)(NC), Gates (C)(NC), Customs Inspection (C)(NC), Safety and Security (C)(NC)(P), Ability to Finance Needed Improvements (P)
Open Storage Areas (C), Structures (P), Customs Inspection (P), Truck/Rail Turn Time (C)(NC), Landfill Potential (C)(NC), Land Availability (C)(P), Compatibility with Adjoining Land Uses (C)(P), Ability to Finance Needed Improvements (C)

Terminal (Future)



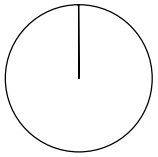
none
none
none

Landside (Current)



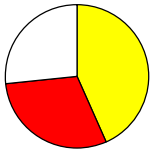
none
Auto/Bus Access and Parking (C)(NC), Truck Access and Queuing (C)(NC), On-Dock Rail Connections and Yards (C)(NC), Safety and Security (C)(NC)(P)
Auto/Bus Access and Parking (P), Near-Dock Railyards (C)(NC), Local Congestion and Impacts (C)(NC)(P), Ability to Finance Needed Improvements (C)(NC)(P)

Landside (Future)



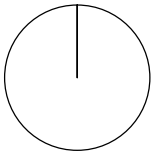
none
none
none

Market (Current)



none
Accessibility to Regional Markets (C)(NC)(P), Accessibility to Hinterland Markets (C)(NC)(P), Accessibility to W/D/Mfg Clusters (C)(NC), Ability to Serve New W/D/Mfg Clusters (C)(NC), Serves Fast-Growing Markets (C)(NC)(P)
Accessibility to Local Markets (C)(NC)(P), Ability to Improve Market Access (C)(NC)(P), Ability to Finance Needed Improvements (C)(NC)(P)

Market (Future)



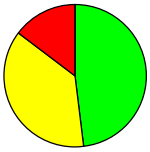
none
none
none

Figure 15. Conditions Results for Palm Beach

Waterside (Current)

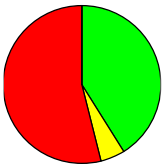
- Turning Basin Dimensions (C)(NC)(P), Berth Depths (P), Air Draft (C)(NC)(P), Conflicts with Non-Port Vessels (C)(NC)(P)
- Berth Depths (C), Safety and Security (C)(NC)(P)
- Channel Dimensions (C)(NC)(P), Berth Depths (NC), Navigational Restrictions (C)(NC)(P), Marine Environmental Constraints (C)(NC)(P), Ability to Finance Needed Improvements (C)(NC)(P)

Waterside (Future)



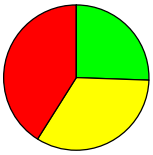
- Channel Dimensions (C)(P), Turning Basin Dimensions (C)(NC)(P), Berth Depths (C)(NC)(P), Air Draft (C)(NC)(P), Conflicts with Non-Port Vessels (C)(NC)
- Channel Dimensions (NC), Navigational Restrictions (C)(NC)(P), Conflicts with Non-Port Vessels (P), Safety and Security (C)(NC)(P), Marine Environmental Constraints (C)(P)
- Marine Environmental Constraints (NC), Ability to Finance Needed Improvements (C)(NC)(P)

Terminal (Current)



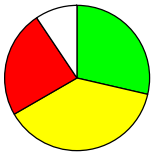
- Cranes and Yard Equipment (C)(NC)(P), Structures (C)(NC), Gates (C)(NC)(P), Customs Inspection (C)(NC), Safety and Security (C)(NC)(P), Truck/Rail Turn Time (C)(NC)(P)
- Labor Sufficiency (C), Compatibility with Adjoining Land Uses ©
- Berths (C)(NC)(P), Open Storage Areas (C)(NC)(P), Structures (P), Labor Sufficiency (NC)(P), Customs Inspection (P), Landfill Potential (C)(NC)(P), Land Availability (C)(NC)(P), Compatibility with Adjoining Land Uses (NC)(P), Ability to Finance Needed Improvements (C)(NC)(P)

Terminal (Future)



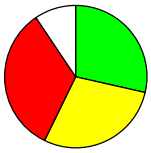
- Cranes and Yard Equipment (C)(NC)(P), Open Storage Areas (P), Structures (C)(NC), Gates (C)(NC)(P), Truck/Rail Turn Time (P)
- Berths (C), Open Storage Areas (C)(NC), Labor Sufficiency (C)(NC)(P), Customs Inspection (C)(NC)(P), Safety and Security (C)(NC)(P), Truck/Rail Turn Time (C)
- Berths (NC)(P), Structures (P), Truck/Rail Turn Time (NC), Landfill Potential (C)(NC)(P), Land Availability (C)(NC)(P), Compatibility with Adjoining Land Uses (C)(NC)(P), Ability to Finance Needed Improvements (C)(NC)(P)

Landside (Current)



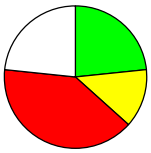
- Auto/Bus Access and Parking (NC), Truck Access and Queuing (P), On-Dock Rail Connections and Yards (C)(NC), Near Dock Railyards (C)(NC)
- Truck Access and Queuing (C)(NC), Safety and Security (C)(NC)(P), Local Congestion and Impacts (C)(NC)(P)
- Auto/Bus Access and Parking (C)(P), Ability to Finance Needed Improvements (C)(NC)(P)

Landside (Future)



- Auto/Bus Access and Parking (C)(NC), Truck Access and Queuing (C)(NC), On-Dock Rail Connections and Yards (C)(NC)
- Truck Access and Queuing (P), Near-Dock Railyards (C)(NC), Safety and Security (C)(NC)(P)
- Auto/Bus Access and Parking (P), Local Congestion and Impacts (C)(NC)(P), Ability to Finance Needed Improvements (C)(NC)(P)

Market (Current)



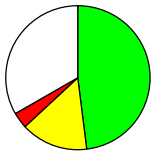
- Accessibility to Local Markets (C)(P), Accessibility to Regional Markets (C)(NC)(P), Accessibility to Hinterland Markets (C), Serves Fast Growing Markets (NC)
- Accessibility to Local Markets (NC), Accessibility to Hinterland Markets-(NC), Accessibility to W/D/Mfg Clusters (C)(NC)
- Accessibility to Hinterland Markets (P), Ability to Serve New W/D/Mfg Clusters (C)(NC)(P), Ability to Improve Market Access (C)(NC)(P), Ability to Finance Needed Improvements-(C)(NC)(P), Serves Fast-Growing Markets (C)(P)

Market (Future)

- Accessibility to Local Markets (C)(NC)(P), Accessibility to Regional Markets (C)(NC)(P), Accessibility to Hinterland Markets (C)(NC), Serves Fast Growing Markets (NC)
- Accessibility to Hinterland Markets (P)
- none

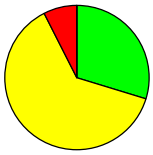
Figure 16. Conditions Results for Panama City

Waterside (Current)



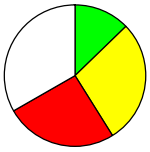
- Channel Dimensions (C), Turning Basin Dimensions (C)(NC), Berth Depths (C), Air Draft (C)(NC), Navigational Restrictions (C)(NC), Conflicts with Non-Port Vessels (C)(NC), Safety and Security (NC), Marine Environmental Constraints (C)(NC)
- Channel Dimensions (NC), Berth Depths (NC), Safety and Security (C), Ability to Finance Needed Improvements (NC)
- Ability to Finance Needed Improvements (C)

Waterside (Future)



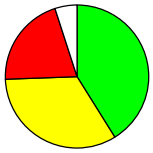
- Turning Basin Dimensions (C)(NC), Air Draft (C)(NC), Safety and Security (C)(NC), Marine Environmental Constraints (C)(NC)
- Channel Dimensions (C)(P), Turning Basin Dimensions (P), Berth Depths (C)(P), Air Draft (P), Navigational Restrictions (C)(NC)(P), Conflicts with Non-Port Vessels (C), Conflicts with Non-Port Vessels (NC)(P), Safety and Security (P), Marine Environmental Constraints (P), Ability to Finance Needed Improvements (C)(NC)(P)
- Channel Dimensions (NC), Berth Depths (NC)

Terminal (Current)



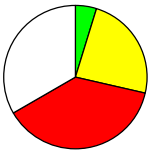
- Labor Sufficiency (C), Customs Inspection (C)(NC), Safety and Security (NC), Truck/Rail Turn Time (C)
- Berths (C)(NC), Cranes and Yard Equipment (C)(NC), Structures (C)(NC), Gates (C)(NC), Labor Sufficiency (NC), Safety and Security (C), Truck/Rail Turn Time (NC)
- Open Storage Areas (C)(NC), Landfill Potential (C)(NC), Land Availability (C)(NC), Compatibility with Adjoining Land Uses (C)(NC), Ability to Finance Needed Improvements (C)(NC)

Terminal (Future)



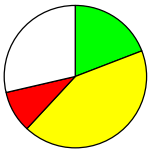
- Cranes and Yard Equipment (C)(NC)(P), Structures (P), Gates (C)(NC)(P), Labor Sufficiency (C)(NC)(P), Customs Inspection (NC), Safety and Security (C)(NC)(P), Truck./Rail Turn Time (C)(NC)
- Berths (C)(NC), Open Storage Areas (C), Structures (C)(NC), Customs Inspection (C)(P), Compatibility with Adjoining Land Uses (C)(NC)(P), Ability to Finance Needed Improvements-(C)(NC)(P)
- Berths (P), Open Storage Areas (NC), Landfill Potential (C)(NC)(P), Land Availability (C)(NC)(P)

Landside (Current)



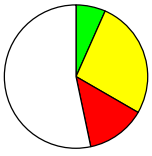
- Safety and Security (NC)
- Auto/Bus Access and Parking (C)(NC), On-Dock Rail Connections and Yards (C)(NC), Safety and Security (C)
- Truck Access and Queuing (C)(NC), Near-Dock Railyards (C)(NC), Local Congestion and Impacts (C)(NC), Ability to Finance Needed Improvements (C)(NC)

Landside (Future)



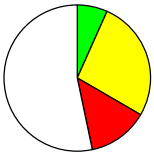
- Near-Dock Railyards (C)(NC), Safety and Security (C)(NC)
- Auto/Bus Access and Parking (C)(NC)(P), Truck Access and Queuing (C)(NC), On-Dock Rail Connections and Yards (C)(NC), Ability to Finance Needed Improvements (C)(NC)
- Local Congestion and Impacts-(C)(NC)

Market (Current)



- Accessibility to Local Markets (C)(NC)
- Accessibility to Regional Markets (C)(NC), Accessibility to Hinterland Markets (C)(NC), Accessibility to W/D/Mfg Clusters (C)(NC), Ability to Serve New W/D/Mfg Clusters (C)(NC)
- Ability to Improve Market Access (C)(NC), Ability to Finance Needed Improvements (C)(NC)

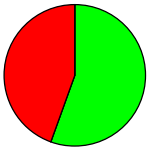
Market (Future)



- Accessibility to Local Markets (C)(NC)
- Accessibility to Regional Markets (C)(NC), Accessibility to Hinterland Markets (C)(NC), Accessibility to W/D/Mfg Clusters (C)(NC), Ability to Serve New W/D/Mfg Clusters (C)(NC)
- Ability to Improve Market Access (C)(NC), Ability to Finance Needed Improvements (C)(NC)

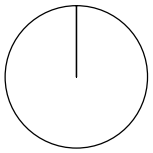
Figure 17. Conditions Results for Pensacola

Waterside (Current)



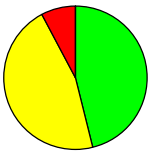
- Air Draft (C)(NC)(P), Navigational Restrictions (C)(NC)(P), Conflicts with Non-Port Vessels (C)(NC)(P), Safety and Security (C)(NC)(P), Marine Environmental Constraints (C)(NC)(P)
- none
- Channel Dimensions (C)(NC)(P), Turning Basin Dimensions (C)(NC)(P), Berth Depths (C)(NC)(P), Ability to Finance Needed Improvements (C)(NC)(P)

Waterside (Future)



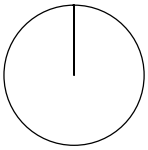
- none
- none
- none

Terminal (Current)



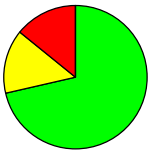
- Berths (C)(NC)(P), Labor Sufficiency (C)(NC)(P), Customs Inspection (C)(NC)(P), Safety and Security (C)(NC)(P), Truck/Rail Turn Time (C)(NC)(P), Landfill Potential (C)(NC)(P)
- Cranes and Yard Equipment (C)(NC)(P), Open Storage Areas (C)(NC)(P), Structures (C)(NC)(P), Gates (C)(NC)(P), Land Availability (C)(NC)(P), Compatibility with Adjoining Land Uses (C)(NC)(P)
- Ability to Finance Needed Improvements (C)(NC)(P)

Terminal (Future)



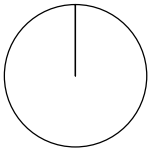
- none
- none
- none

Landside (Current)



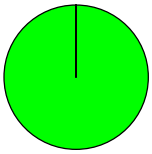
- Auto/Bus Access and Parking (C)(NC)(P), On-Dock Rail Connections and Yards (C)(NC)(P), Near Dock Railyards (C)(NC)(P), Safety and Security (C)(NC)(P), Local Congestion and Impacts (C)(NC)(P)
- Truck Access and Queuing (C)(NC)(P)
- Ability to Finance Needed Improvements (C)(NC)(P)

Landside (Future)



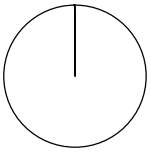
- none
- none
- none

Market (Current)



- Accessibility to Local/Regional/Hinterland Markets (C)(NC)(P), Accessibility/Ability to Serve Existing/New W/D/Mfg Clusters (C)(NC)(P), Ability to Improve Market Access (C)(NC)(P), Ability to Finance Needed Improvements (C)(NC)(P), Serves Fast-Growing Markets (C)(NC)(P), Offers Unique/Critical Commodity Capacity/Gateway Service (C)(NC)(P)
- none
- none

Market (Future)



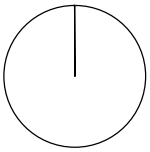
- none
- none
- none

Figure 18. Conditions Results for St. Joe

Waterside (Current)

- Marine Environmental Constraints (NC)
- Air Draft (NC), Navigational Restrictions (NC), Conflicts with Non-Port Vessels (NC), Safety and Security (NC), Ability to Finance Needed Improvements (NC)
- Channel Dimensions (NC), Turning Basin Dimensions (NC), Berth Depths (NC)

Waterside (Future)

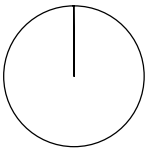


- none
- none
- none

Terminal (Current)

- Labor Sufficiency (NC)
- Ability to Finance Needed Improvements (NC)
- Berths (NC), Cranes and Yard Equipment (NC), Open Storage Areas (NC), Structures (NC), Gates (NC), Customs Inspection (NC), Safety and Security (NC), Truck/Rail Turn Time (NC), Landfill Potential (NC), Land Availability (NC), Compatibility with Adjoining Land Uses (NC)

Terminal (Future)

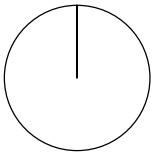


- none
- none
- none

Landside (Current)

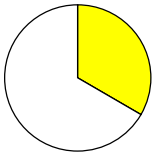
- Local Congestion and Impacts (NC)
- Near-Dock Railyards (NC), Safety and Security (NC), Ability to Finance Needed Improvements (NC)
- Auto/Bus Access and Parking (NC), Truck Access and Queuing (NC), On-Dock Rail Connections and Yards (NC)

Landside (Future)



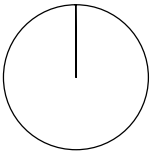
- none
- none
- none

Market (Current)



-
- Accessibility to Local/Regional/Hinterland Markets (NC), Accessibility/Ability to Serve Existing/New W/D/Mfg Clusters (NC), Ability to Improve Market Access (NC), Ability to Finance Needed Improvements (NC), Serves Fast-Growing Markets (NC), Offers Unique/Critical Commodity Capacity/Gateway Service (NC)
-

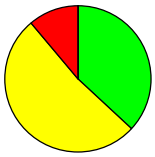
Market (Future)



- none
- none
- none

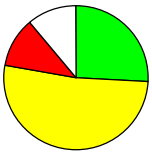
Figure 19. Conditions Results for Tampa

Waterside (Current)



- Turning Basin Dimensions (C)(NC)(P), Berth Depths (C)(P), Air Draft (C)(NC), Conflicts with Non-Port Vessels (C)(NC)(P)
- Berth Depths (NC), Air Draft (P), Navigational Restrictions (C)(NC)(P), Safety and Security (C)(NC)(P), Marine Environmental Constraints (C)(NC)(P), Ability to Finance Needed Improvements (C)(NC)(P)
- Channel Dimensions (C)(NC)(P)

Waterside (Future)

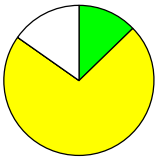


- Berth Depths (C)(P), Air Draft (C)(NC), Conflicts with Non-Port Vessels (C)(NC)(P)
- Turning Basin Dimensions (C)(NC)(P), Berth Depths (NC), Air Draft (P), Navigational Restrictions (C)(NC)(P), Safety and Security (C)(NC)(P), Ability to Finance Needed Improvements (C)(NC)(P)
- Marine Environmental Constraints (C)(NC)(P)

Terminal (Current)

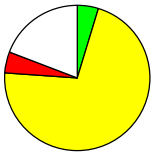
- Berths (C)(P, Cranes and Yard Equipment (C)(NC)(P), Structures (C), Gates (P), Labor Sufficiency (C)(P), Safety and Security (P), Truck/Rail Turn Time (C)(NC)(P)
- Berths (NC), Open Storage Areas (C)(NC)(P), Structures (NC)(P), Gates (C)(NC), Labor Sufficiency (NC), Customs Inspection (C)(NC)(P), Safety and Security (C)(NC), Landfill Potential (C)(NC)(P), Land Availability (C)(NC)(P), Compatibility with Adjoining Land Uses (C)(NC)(P), Ability to Finance Needed Improvements (C)(NC)(P)
- none

Terminal (Future)



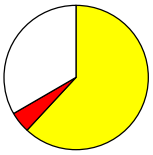
- Berths (C)(P), Cranes and Yard Equipment (C)(NC)(P)
- Berths (NC), Open Storage Areas (C)(NC)(P), Structures (C)(NC)(P), Gates (C)(NC)(P), Labor Sufficiency (C)(NC)(P), Truck/Rail Turn Time (C)(NC)(P), Landfill Potential (C)(NC)(P), Land Availability (C)(NC)(P), Compatibility with Adjoining Land Uses (C)(NC)(P), Ability to Finance Needed Improvements (C)(NC)(P)
- none

Landside (Current)



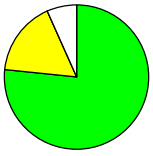
- On-Dock Rail Connections and Yards (NC)
- Auto/Bus Access and Parking (P), Truck Access and Queuing (C)(NC), On-Dock Rail Connections and Yards (C), Near-Dock Railyards (C)(NC), Safety and Security (C)(NC)(P), Local Congestion and Impacts (C)(NC)(P), Ability to Finance Needed Improvements (C)(NC)(P)
- Truck Access and Queuing (P)

Landside (Future)



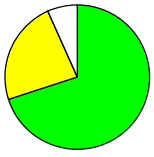
- none
- Auto/Bus Access and Parking (P), Truck Access and Queuing (C)(NC), On-Dock Rail Connections and Yards (C)(NC), Near-Dock Railyards (C)(NC), Safety and Security (C)(NC)(P), Local Congestion and Impacts (C)(NC)(P)
- Truck Access and Queuing (P)

Market (Current)



- Accessibility to Local/Regional Markets (C)(NC)(P), Accessibility to Hinterland Markets (P), Accessibility/Ability to Serve Existing/New W/D/Mfg Clusters (C)(NC)(P), Ability to Improve Market Access (C)(NC)(P), Serves Fast-Growing Markets (C)(NC)(P), Offers Unique/Critical Commodity Capacity/Gateway Service (C)(NC)
- Accessibility to Hinterland Markets (C)(NC), Ability to Finance Needed Improvements (C)(NC)(P)
- none

Market (Future)



- Accessibility to Local/Regional Markets (C)(NC)(P), Accessibility/Ability to Serve Existing/New W/D/Mfg Clusters (NC)(P), Ability to Improve Market Access (C)(NC)(P), Serves Fast-Growing Markets (C)(NC)(P), Offers Unique/Critical Commodity Capacity/Gateway Service (C)(NC)
- Accessibility to Hinterland Markets (C)(NC)(P), Accessibility to W/D/Mfg Clusters (C), Ability to Finance Needed Improvements (C)(NC)(P)
- none

Based on the responses from each port and other supporting information, we would offer the following "capsule summaries." Throughput data is FY04/05, as reported in the Draft Seaport Mission Plan.

Canaveral

- Throughput. 4,467,008 tons; 2,086 TEUs; and 4,388,851 passengers.
- Anticipated Growth. For year 2015, Port Canaveral anticipates handling 40,000 TEUs, 12,100,000 tons, and 9,800,000 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 ("red") 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 "green" conditions and eliminate all "red" conditions. These include channel, berth, and dredging projects (partially funded, under study by the Army Corps of Engineers); on-terminal improvements (some under construction, some partially funded, some unfunded); and access road and parking improvements.

Everglades

- Throughput. 26,513,293 tons; 797,238 TEUs; and 3,801,464 passengers.
- Anticipated Growth. Port Everglades anticipates significant increases in productivity -- from 2,941 TEUs/acre/year to 3,645 TEUs/acre/year, and from 132,576 tons/acre/year to 145,312 tons/acre/year. Passenger traffic is expected to grow to 5.8 million annually.
- Strengths to Build On. Port Everglades is the one of the largest container ports in the South Atlantic and the second largest in Florida. It is Florida's second largest bulk ports, and is particularly important in supplying Florida's east coast with petroleum and related products. It is also Florida's second 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 ("red") 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 mire 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 "green" 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.

Jacksonville

- Throughput. 20,728,430 tons; 777,318 TEUs; and 275,123 passengers.

- Anticipated Growth. Jacksonville is comprised of three distinct facilities – Blount Island, Dames Point, and Talleyrand. At Blount Island, 2015 volume is anticipated to grow to 768,557 TEUs. At Dames Point, 2015 volume is anticipated to grow to 800,000 TEUs and 500,000 passengers. At Talleyrand, volume is anticipated to grow to 225,000 TEUs. Overall, the port expects around 1.8 million TEUs in 2015.

- Strengths to Build On. 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. Jacksonville is Florida's third largest bulk handling port. Jacksonville 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 key "red" 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, Jacksonville identifies a number of emerging concerns and conditions that could "go to red" 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.

Manatee

- Throughput. 9,433,076 tons; 6,236 TEUs, no passengers.

- Anticipated Growth. Manatee did not report anticipated growth.

- Strengths to Build On. 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 ("red") 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 "red" conditions.

- Moving Forward: 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 "red" condition. Anticipated improvements will also address a number of "yellow" conditions, including berth depths, navigational restrictions, terminal facilities, truck and rail access.

Miami

- Throughput. 9,472,268 tons; 1,054,462 TEUs; and 3,605,201 passengers.

- Anticipated Growth. Miami expects to handle more than 1.5 million TEUs and more than 5 million passengers in 2015.

- Strengths to Build On. Miami is Florida's leading container port and one of the largest in the South Atlantic, and is also Florida's third 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, Miami identifies a number of "red" constraints. This is largely a reflection of Miami's 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 Miami in the near-term. These include: container storage areas; passenger structures; passenger safety and security; in-terminal "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. Miami has a significant program of FSTED 2006-7 investments in on-port infrastructure, waterside improvements, intermodal access, and SIS projects. Miami did not complete the 2015 portion of the Checklist, but one can reasonably infer that completion of these and related projects in future years will help address current "red" conditions, and help keep other "red" conditions from emerging as a result of continued growth.

Palm Beach

- Throughput. 4,223,545 tons; 248,206 TEUs; and 553,692 passengers.

- Anticipated Growth. Palm Beach has historically served fast-growing markets, and anticipates that container traffic could double and non-container traffic could increase as much as five times for certain commodities.

- Strengths to Build On. The Port of Palm Beach is a unique asset. It is the most efficient container terminal in the United States, on a TEU per acre basis. Most US ports handle 3,000 to 5,000 TEUs per acre per year, but Tropical moves over 14,000 TEUs per acre per year – a world-class figure, far more typical of Asian than U.S. ports. It is similarly efficient with respect to non-containerized cargo, handling a diverse mix of commodities despite limited berthing, limited land, and navigation constraints. It offers good on-dock and near-dock rail connectivity, and is well-connected to its key markets.

- Constraints. Like Miami, Palm Beach reports constraints that largely reflect its past success. These include: channel, berth, navigation and marine environmental constraints; terminal berthing and storage; limited land availability and landfill potential; compatibility with adjoining land uses (both existing and planned); connectivity to warehouse/distribution clusters; automobile access and parking; and ability to finance needed improvements.

- Moving Forward. Palm Beach's recent Master Plan Update includes a variety of planned projects. Implementation of these projects results in many "red" conditions going to "green." Remaining concerns include: marine environmental issues; sufficiency of berths and passenger-serving structures; truck and rail turn times; landfill potential and land availability; compatibility with adjoining uses; auto access and parking; local congestion and potential impacts; and ability to fund improvements.

Panama City

- Throughput. 1,137,457 tons; 18,372 TEUs; and no passengers.

- Anticipated Growth. Panama City recently began handling containers, with the diversion of traffic that occurred following Hurricane Katrina. Panama City also anticipates handling passengers within a 15-year timeframe. The Port did not provide growth estimates.

- Strengths to Build On. Panama City is a diversified facility that handles important bulk and break-bulk commodities, and serves a fast-growing geographic region of Florida that is not easily reached from other ports. It offers good waterside conditions and accessibility to local markets and generally good terminal operating conditions.

- Constraints. Some of Panama City's near-term constraints are related to growth in its core commodities, while others are due to the new influx of container traffic. Panama City reports "red" conditions with respect to open storage, landfill potential and land availability, compatibility with adjoining land uses, truck access, near-dock rail, local congestion and impacts, and overall ability to finance needed improvements.

- Moving Forward. 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 "red" and "yellow" conditions, 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.

Pensacola

- Throughput. 494,006 tons; 530 TEUs; no passengers.

- Anticipated Growth. Pensacola did not report growth estimates.

- Strengths to Build On. 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. Pensacola anticipates deepening to 36', but this is not yet funded. Pensacola did not complete the 2015 portion of the Checklist, but deepening would presumably address the identified constraints.

St. Joe

- Throughput. No cargo or passenger activity.

- Anticipated Growth. St. Joe did not provide estimates of future growth.

- Strengths to Build On. St. Joe identifies the lack of marine environmental constraints, labor sufficiency, and lack of local congestion as strengths.

- Constraints. "Red" conditions 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 St. Joe will require a series of improvements including channel deepening, a new turning basin, new berths, new terminal construction, and new access improvements.

Tampa

- Throughput. 50,194,552 tons; 26,646 TEUs; and 771,227 passengers.

- Anticipated Growth. Tampa is anticipating continued growth (approximately 20%) in non-container markets, and has positioned itself for substantial growth in container trades, with the potential for several hundred thousand TEUs annually by 2015.

- 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 "green" or "yellow." 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 "red" conditions. For 2015, the port anticipates the key concerns will be related to marine environmental issues and trucks serving the cruise facilities.

Cross-Cutting Findings

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, while others face these conditions today. In part this reflects differences in physical and operational factors, but for the most part we believe 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. In doing so, we also need to think beyond a 2015 horizon, to accommodate longer-term opportunities and pressures.

3.0 Competitive Analysis

This section describes work to:

- Examine and document the current conditions and performance of Florida's ports versus their major competitors.
- Summarize major competitive strengths (opportunities) and weaknesses (threats) of Florida's ports, with respect to each other and to competitors.

3.1 Comparative Performance

To evaluate competitive cargo-handling performance, we believe the most useful measures are:

- Containers handled (in twenty foot equivalent units, or TEUs)
- Automobiles handled (in number of units)
- Total tonnage of cargo (representing all handling types)

For this analysis, we have used throughput statistics from the American Association of Port Authorities (AAPA) and the U.S. Army Corps of Engineers (ACOE), which are available for all ports for recent and past years. These numbers are not as up-to-date as the Seaport Mission Plan numbers, and may not agree in all cases due to differences in counting (CY versus FY, etc.)

Containers

As shown in Table 5 on the following page, among all states, Florida ranked fourth in the number of TEUs handled by its seaports in year 2004, with nearly 2.7 million TEUs and 6.9% of the national market. Among South and Gulf states (shaded in gray in Table 16 below), Florida ranked first in the number of TEUs, with 26.2% of the market.

Florida has held a similar market position for the last 20 years. In 1984, Florida ranked fifth among all states; in 1989, 1994, and 1999 it ranked fourth. In 1984, Florida ranked second among South and Gulf states; in 1989, 1994, and 1999 it ranked first.

Table 5. Container Traffic (TEUs) by State, 1984-2004

State	1984	1989	1994	1999	2004
CA	3,357,006	4,838,081	6,658,838	9,958,170	15,288,756
NJ	2,235,000	1,988,318	2,033,879	2,828,878	4,478,480
WA	1,206,623	1,969,305	2,447,821	2,775,714	3,580,182
FL	**471,531**	**875,352**	**1,709,499**	**2,512,454**	**2,668,736**
SC	520,149	795,385	897,480	1,482,995	1,863,917
VA	339,860	711,296	936,555	1,348,487	1,852,494
GA	355,078	376,295	562,291	793,747	1,662,083
PR	461,616	711,006	1,586,065	2,150,461	1,629,109
TX	439,382	593,667	696,888	1,164,728	1,516,444
HI	427,921	470,166	556,948	544,873	1,355,969
AK	184,331	256,078	333,138	367,810	543,831
MD	774,200	540,771	530,643	498,108	528,899
LA	358,817	145,396	388,002	290,726	276,053
OR	125,762	186,027	317,961	293,262	274,609
MS	-	50,347	93,255	125,874	213,108
PA	142,695	123,041	141,570	216,991	178,046
MA	126,776	140,039	169,595	154,175	175,679
DE	35,908	78,284	157,416	199,168	160,914
Guam	83,223	104,495	144,154	145,191	136,164
NC	94,422	99,031	98,667	133,926	104,122
AL	30,291	15,452	23,499	16,993	37,375
NY	-	-	-	-	6,565
ME	-	-	4,200	4,601	1,000
NH	-	2,266	-	-	-
Grand Total, US	11,770,591	15,070,098	20,488,364	28,007,332	38,532,535
FL Share of US	**4.0%**	**5.8%**	**8.3%**	**9.0%**	**6.9%**
FL Rank in US	**5th**	**4th**	**4th**	**4th**	**4th**
Total, South/Gulf	2,609,530	3,662,221	5,406,136	7,869,930	10,194,332
FL Share of South/Gulf	**18.1%**	**23.9%**	**31.6%**	**31.9%**	**26.2%**
FL Rank in South/Gulf	**2nd**	**1st**	**1st**	**1st**	**1st**

Source: American Association of Port Authorities.

As shown in Table 6 on the following page, Florida ranked fourth among all states and first among South and Gulf states in the number of TEUs added between 1984 and 2004. Between 1984 and 2004, Florida's ports actually had the highest Compound Annual Growth Rate (CAGR) for containers of any state, at 9.1% annually. (This is taken from a 1984 base, which was a "down" year for Florida's ports.)

However, since 1999, Florida's container growth has been more modest, at just 156,282 TEUs, representing an annual growth rate of 1.2%. This is consistent with Table 3, which shows Florida's market share of U.S. container traffic rising steadily from 1984 to 1999, then dropping off. Between 1999 and 2004, Savannah saw record growth and other South and Gulf ports grew faster than Florida.

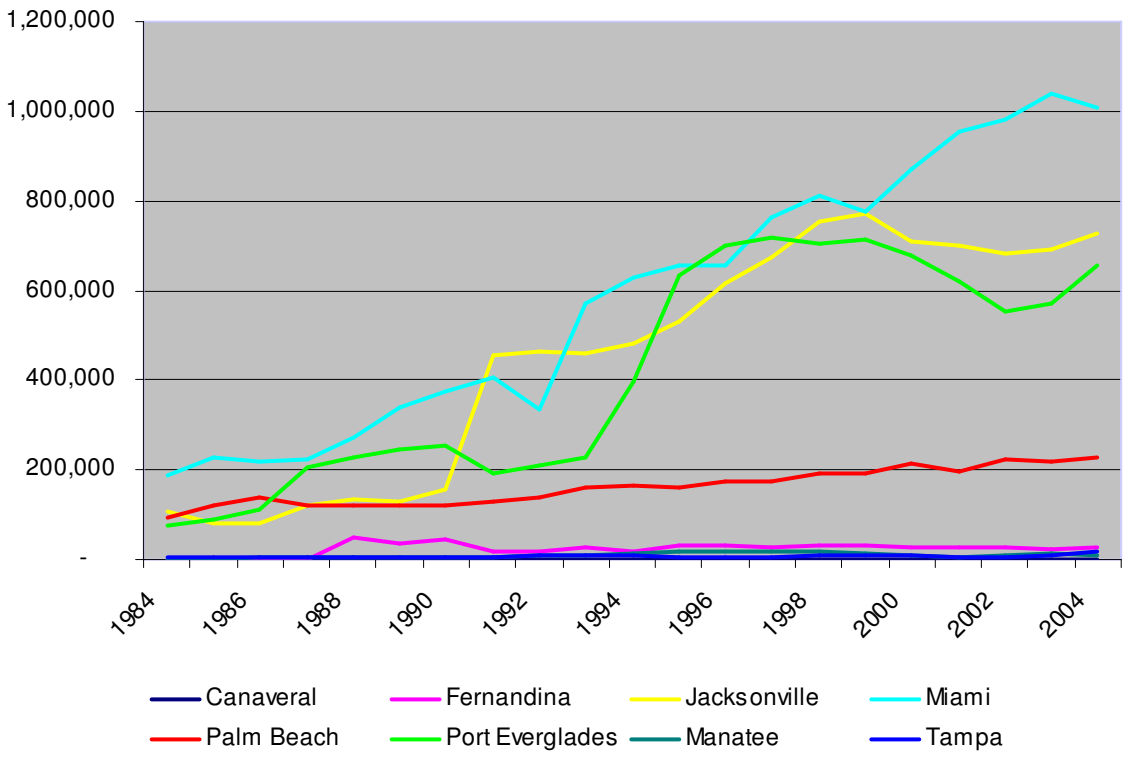
Table 6. Container Growth (TEUs) by State, 1984-2004

State	20-Year Growth (1984-2004)		5-Year Growth (1999-2004)	
	TEUs Added	CAGR	TEUs Added	CAGR
CA	11,931,750	7.9%	5,330,586	9.0%
NJ	2,243,480	3.5%	1,649,602	9.6%
WA	2,373,559	5.6%	804,468	5.2%
FL	**2,197,205**	**9.1%**	**156,282**	**1.2%**
SC	1,343,768	6.6%	380,922	4.7%
VA	1,512,634	8.8%	504,007	6.6%
GA	1,307,005	8.0%	868,336	15.9%
PR	1,167,493	6.5%	(521,352)	-5.4%
TX	1,077,062	6.4%	351,716	5.4%
HI	928,048	5.9%	811,096	20.0%
AK	359,500	5.6%	176,021	8.1%
MD	(245,301)	-1.9%	30,791	1.2%
LA	(82,764)	-1.3%	(14,673)	-1.0%
OR	148,847	4.0%	(18,653)	-1.3%
MS	213,108	-	87,234	11.1%
PA	35,351	1.1%	(38,945)	-3.9%
MA	48,903	1.6%	21,504	2.6%
DE	125,006	7.8%	(38,254)	-4.2%
Guam	52,941	2.5%	(9,027)	-1.3%
NC	9,700	0.5%	(29,804)	-4.9%
AL	7,084	1.1%	20,382	17.1%
NY	6,565	-	6,565	-
ME	1,000	-	(3,601)	-26.3%
NH	-	-	-	-
Grand Total, US	26,761,944	6.1%	10,525,203	6.6%
FL Rank in US	**4th**	**1st**	**10th**	**9th**
Total, South/Gulf	7,584,802	7.1%	2,324,402	5.3%
FL Rank in South/Gulf	**1st**	**1st**	**5th**	**7th**

Source: American Association of Port Authorities.

Overall, Florida remains one of the nation's most important container-handling states, with a history of extremely strong and sustained growth. Figure 20 on the following page illustrates that most of Florida's container traffic is handled by Miami, Everglades and Jacksonville, with Palm Beach also making a significant contribution. Canaveral, Fernandina, Manatee, and Tampa currently handle relatively few containers, although this could change significantly in the future.

Figure 20. Florida Ports TEUs, 1984-2004



Source: American Association of Port Authorities.

Figure 20 shows that port growth is not constant – it has peaks, plateaus, and in some cases valleys. One reason for the relatively slow growth in Florida's TEU volumes over the last five years is that Jacksonville and Everglades both showed slightly declining traffic over this period, which offset strong gains by Miami and continued growth at Palm Beach. Jacksonville saw the loss of a Puerto Rican carrier (which went out of business) and lackluster economic performance from key trading partners (Russia, South America). Everglades saw the loss of a major carrier (due to changes in carrier alliances and service deployments), combined with lack of growth in trading partner economies. Both ports are poised to recover from these losses – Jacksonville with the addition of a major Asia-direct service, and Everglades with ongoing redevelopment and optimization of its terminal assets. The Seaport Mission Plan quotes 2,970,545 TEUs for Florida ports in FY 04/05 – up 11.1% over 2004 – which suggests that the flat growth of the last five years may be ending, and we may see a return to higher growth rates that have been more typical for Florida's ports.

When examining these numbers, it is important to differentiate between different types of container markets. For us the most critical distinction is between non-discretionary (or "captive") cargo, and discretionary (or "contestable") cargo.

- Captive cargo shows a strong preference for a specific port. If you are bringing containers of imported beer to distributors in New York/Northern New Jersey, it's very easy to get there via the Port of New York and New Jersey, and much harder through Boston or

Baltimore. Coastal and near-coastal populations generally show a strong affinity for a specific port. Besides geography, another factor that can make cargo captive is the ability of a port to provide a specific, uniquely needed service – such as inland transportation connections, or warehouse/distribution capability, or linkage to a particular manufacturing supply chain, or provision of a special service such as transloading. (One example of transloading is cargo that is imported through Miami and subsequently exported via Palm Beach to the Caribbean on smaller vessels.)

- Discretionary traffic has the opportunity to "shop" from among different potential ports. Usually, discretionary traffic is originating or terminating somewhere inland (sometimes called the "hinterland"), rather than on the coasts. For example, you can serve Ohio about equally well (in terms of cost, speed, reliability, visibility, and security) from the Port of New York and New Jersey and Hampton Roads, Virginia. You can serve Atlanta most efficiently from Savannah, but Charleston and Jacksonville can also be competitive. You can serve Illinois and Michigan from either the west coast or the east coast. Discretionary cargo is generally routed to provide the best combination of end-to-end service for the price.

CS analyzed a PIERS (Port Import Export Reporting Service) dataset and found some container traffic moving through Florida ports to/from other states (primarily Georgia, North Carolina, and Tennessee), but the percentages were small compared to Florida traffic, indicating that the majority of Florida's container trade is serving local markets. For container moves where a billing address was available, Miami and Everglades each showed around 75% of TEUs with a Florida address; Palm Beach showed around 50% with a Florida address; and Jacksonville showed around 35% with a Florida address. (It should be noted that in some cases, the billing address is not the physical origin/destination of the container; we could not make the necessary corrections as part of this analysis.)

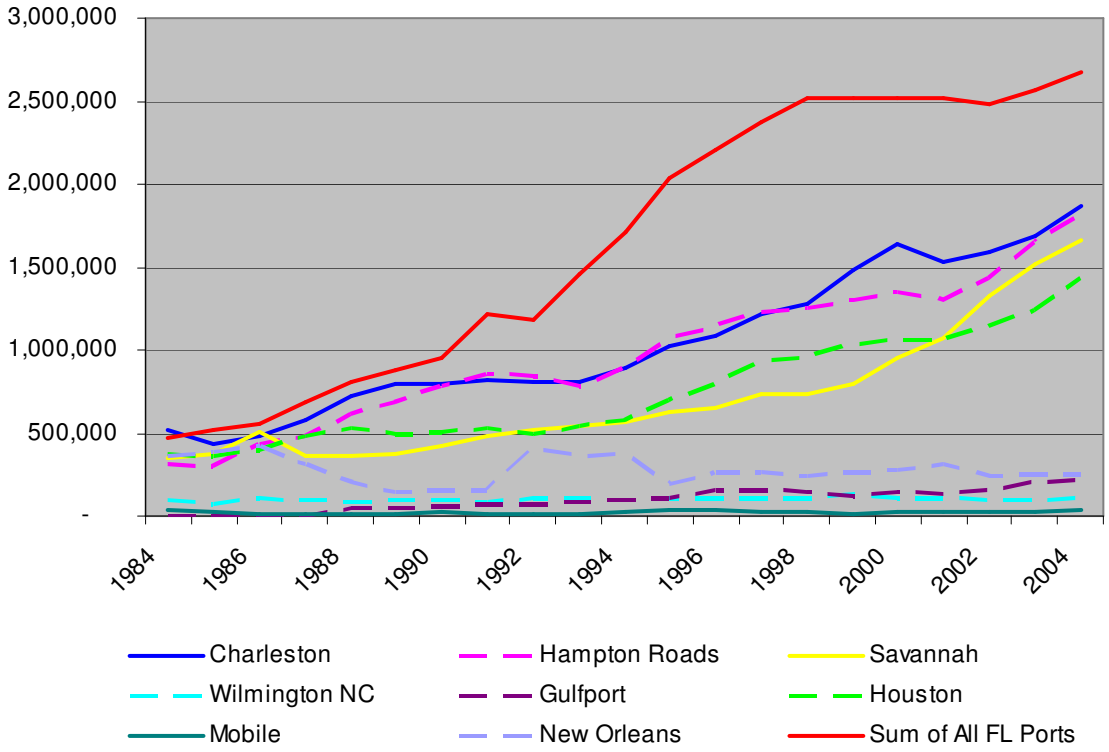
There are logical reasons why Florida does not capture a larger share of out-of-state discretionary markets. First, Florida's major container ports – except Jacksonville – are on a peninsula, and further from inland markets than major container ports in other states. Second, Florida's major container ports – again, except Jacksonville – do not enjoy particularly good connections with the national intermodal rail system, which limits their effective reach into hinterland markets. Third, while Florida's ports and their surrounding regions offer some warehouse/distribution capability to attract major importers, they pale in comparison to ports like Savannah.

We would argue that the strong 20-year growth in Florida's container ports has been driven primarily by its expanding population and its economy, while the more recent – and more rapid -- growth of competing container ports in other states has been driven primarily by their success in capturing the enormous discretionary cargo demand created by Wal-Mart, Home Depot, Target, and other major US retailers who have "globalized" their manufacturing supply chains over the last decade.

We can define Florida's immediate competitors (capable of serving captive Florida markets and preventing discretionary cargo from reaching Florida) as: Savannah, GA; Charleston, SC; and Mobile, AL. These are shown as solid lines in Figure 21 on the following page. We can also

define other competitors (capable of preventing discretionary cargo from reaching Florida ports) as: Wilmington, NC; Hampton Roads, VA; New Orleans, LA; Houston, TX; and Gulfport, MS. These are shown as dashed lines in Figure 21. The combined total for all of Florida's ports is shown as the red line.

Figure 21. Florida and Competing Ports TEUs, 1984-2004



Source: American Association of Port Authorities.

Looking at Figure 21, we can see that Florida maintained a slight lead on competing ports through the 1980s, then grew more rapidly through the 1990s, has surrendered some of that advantage in the current decade. Since 1984, Charleston and Hampton Roads have battled to the role of leading container port in the South Atlantic, and this battle continues as a near dead-heat. Houston has grown steadily, as had Gulfport prior to Katrina; New Orleans, Wilmington, and Mobile have been relatively flat. But the biggest story on Figure 18 is Savannah, which lagged its competitors through the 1980s and most of the 1990s, then started a tremendous growth surge in the late 1990s to overtake Houston and nearly overtake Charleston and Hampton Roads. Savannah's success has been based primarily on capturing discretionary cargo associated with major shippers like Wal-Mart, Home Depot and K-Mart, by providing excellent intermodal connections to hinterland markets and major on-dock and near-dock warehouse/distribution facilities.

Florida's captive cargo is a relatively safe market that has fueled high rates of port growth in the past, and should continue to do so in the future for all of Florida's ports. We would expect demand to keep pace with, or outpace, growth in Florida's population and gross state product. Just as it is harder for Florida ports to send international containers to other states, other states incur time and cost penalties in sending international containers to Florida. But this does happen, and if Florida fails to make needed improvements in its container ports, a greater share of this traffic will be lost to other states, and will have to come to Florida by rail or by truck from other ports. Monies saved by not investing in ports will probably be lost – and then some – because of additional investments needed on Florida's highways and railroads. The cost-benefit of port improvements to serve Florida's captive container market should be quite substantial.

Florida also has opportunities to attract and grow discretionary cargo that has a Florida origin/destination, but for whatever reason is using out of state ports. For example, some (unknown) share of Wal-Mart traffic bound for Florida is probably moving through distribution centers in Savannah, then being trucked to Florida. It would be highly desirable for Florida ports to capture this traffic, because it would not only generate port-related economic benefits, but also reduce truck moves on Florida's highways. Strategies to accomplish this may include: channel deepening; rail service improvements; and warehouse/distribution/inland port development. More detailed market studies of these opportunities may be warranted.

Attracting new discretionary cargo that has an origin or destination in other states is an opportunity for some of Florida's ports, such as Jacksonville which is geographically close to other states and well connected by highways and rail. It may not be as good an opportunity for South Florida ports, which are geographically disadvantaged and rail-challenged with respect to reaching out-of-state markets.

Autos

Among all states, Florida ranked fourth in the number of import/export autos handled by its seaports in year 2004, with over 486,000 units and 11.7% of the national market. Among South and Gulf states (shaded in gray in Table 7 on the following page), Florida ranked first in the number of autos, with 43.2% of the market. Florida's market position, while very strong, has been declining since 1994 due to the significant strengthening of established centers (Southern California, NY/NJ, Baltimore, and Brunswick GA) and new operations in Charleston, SC.

Table 7. Automobile Import/Export Traffic (Units) by State, 1994-2004

State	1994	1999	2004
CA	667,634	971,490	1,138,193
NJ	424,000	519,214	728,720
MD	314,265	286,114	527,531
FL	**429,137**	**369,928**	**486,167**
OR	294,145	308,813	358,682
GA	109,324	185,288	353,874
WA	167,468	219,246	209,813
SC	-	-	160,000
DE	109,398	135,261	78,369
TX	55,866	69,336	72,127
AL	-	-	26,432
VA	27,488	-	26,364
MA	33,350	80,540	-
PA	15,455	704	
RI	25,809	-	
Grand Total, US	2,673,339	3,145,934	4,166,272
FL Share of US	**16.1%**	**11.8%**	**11.7%**
FL Rank in US	**2nd**	**3rd**	**4th**
Total, South/Gulf	621,815	624,552	1,124,964
FL Share of South/Gulf	**69.0%**	**59.2%**	**43.2%**
FL Rank in South/Gulf	**1st**	**1st**	**1st**

Source: American Association of Port Authorities.

As shown in Table 8 on the following page, Florida grew its auto traffic at an average rate of just 1.3% annually between 1994 and 2004. However, 1999 saw a decline in traffic, followed by relatively strong growth (at 5.6% annually) and a rebound in business. Preliminary figures suggest growth of around 4% for 2005. Between 1994 and 2004, and particularly 1999-2004, Florida trailed South Carolina and Georgia in the number of units added.

Table 8. Automobile Import/Export Growth (Units) by State, 1994-2004

State	10-Year Growth (1994-2004)		5-Year Growth (1999-2004)	
	Units Added	CAGR	Units Added	CAGR
CA	470,559	5.5%	166,703	3.2%
NJ	304,720	5.6%	209,506	7.0%
GA	244,550	12.5%	168,586	13.8%
MD	213,266	5.3%	241,417	13.0%
SC	160,000	>>	160,000	>>
OR	64,537	2.0%	49,869	3.0%
FL	**57,030**	**1.3%**	**116,239**	**5.6%**
WA	42,345	2.3%	(9,433)	-0.9%
AL	26,432	>>	26,432	>>
TX	16,261	2.6%	2,791	0.8%
VA	(1,124)	-0.4%	26,364	>>
PA	(15,455)	-100.0%	(704)	-100.0%
RI	(25,809)	-100.0%	0	0.0%
DE	(31,029)	-3.3%	(56,892)	-10.3%
MA	(33,350)	-100.0%	(80,540)	-100.0%
Grand Total, US	1,492,933	4.5%	1,020,338	5.8%
FL Rank in US	**7th**	**8th**	**6th**	**3rd**
Total, South/Gulf	503,149	6.1%	500,412	12.5%
FL Rank in South/Gulf	**3rd**	**3rd**	**3rd**	**3rd**

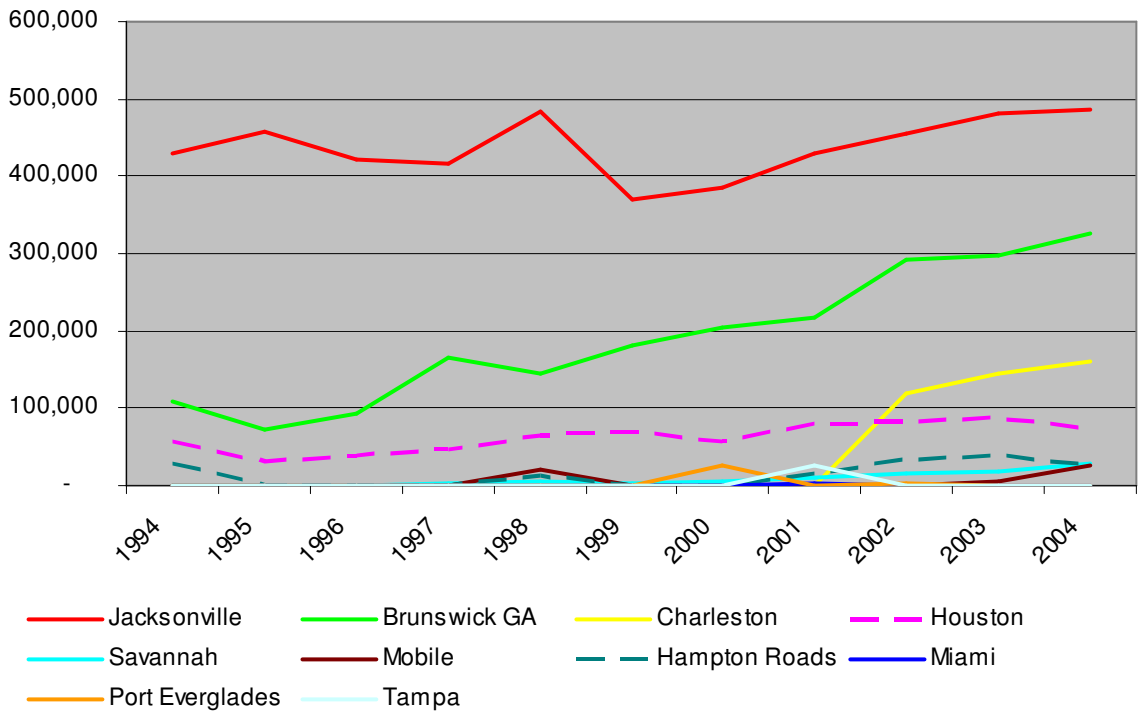
Source: American Association of Port Authorities.

Overall, Florida remains one of the nation's leading auto import/export states, with a history of consistent performance, but faces strong competitive challenges from other ports.

Autos are an attractive market in many respects – they provide significant economic benefits (jobs, taxes, and revenues) from facilities that are relatively easy to develop – but they can also come with certain downsides. One is that autos are fairly mobile – they can jump from port to port very easily, seeking the best deal. Ports are notorious for trying to steal auto business from each other, often with publicly-funded incentives. There are some auto operations that can be considered captive, such as BMW and the Port of Charleston. BMW manufactures roadsters in Greer, SC and exports them through Charleston, then brings import BMWs back to Charleston on the same ships. The port and the manufacturing facility are part of a single logistics link. Another downside is that the terminal can end up getting used for long-term parking and storage, more than import/export activities. Another downside is that import/export demand can fluctuate significantly from year to year, which – as one port director put it – is good if you are handling Toyota, and bad if you are handling Daewoo. But despite these downsides, autos are a very important business line for ports.

Figure 22 on the following page illustrates some of the volatility in the auto market. Florida auto ports (Jacksonville, Miami, Everglades, and Tampa) and their immediate competitors (Brunswick, Savannah, Charleston, and Mobile) are shown in solid lines, while other major southern and gulf auto ports (Houston, Hampton Roads) are shown in dashed lines.

Figure 22. Florida and Competing Ports Auto Units, 1994-2004



Source: American Association of Port Authorities.

Figure 22 shows that Jacksonville is the leading auto port in the south and gulf states, and is the dominant auto port in Florida. Miami, Everglades, and Tampa show very low levels of traffic. Figure 22 also shows that Jacksonville's traffic, while up and down, has seen only modest growth in the last decade. By contrast, Brunswick GA has more than tripled its business, while Charleston has built a significant new business from scratch thanks to BMW and its Greer SC manufacturing plant. Houston has done a steady business, while other competing ports are not handling significant volumes. Autos should continue to be a highly contested cargo. For Florida, one of the key factors is how much different states and ports will try to "buy" the business through manufacturing and transportation incentives.

Total Tonnage

Among all states, Florida ranked sixth in total tonnage handled by its seaports in year 2003, with over 120 million tons. Among southern and gulf states, Florida ranked third, behind only Texas and Louisiana. Figuring containers at around 7 tons per TEU and autos at around 1.5 tons per unit, containers and autos account for around 20 million tons. The other 100 million tons is made up primarily of liquid bulk (particularly petroleum and chemical products), dry bulk (phosphate, cement, etc.), breakbulk (lumber, plywood, etc.) and neo-bulk (copper, steel, etc.) Just over 50% of this tonnage is domestic (moving to/from other states, as opposed to other countries). Florida's market share and rank has been relatively stable.

Table 9. Total Port Tonnage (thousands, short tons) by State, 1985-2003

State	1985	1989	1994	1999	2003
TX	236,606	323,981	372,094	424,881	498,506
LA	198,274	232,999	457,525	478,640	453,217
NJ	156,627	152,753	131,770	166,276	179,991
CA	117,816	149,173	145,807	147,225	167,370
MI	109,813	139,881	148,861	157,974	137,598
FL	**87,204**	**100,756**	**109,267**	**116,208**	**120,840**
WA	98,153	123,633	111,940	121,513	112,070
PA	33,656	36,794	41,725	59,668	60,533
AK	105,606	104,702	92,218	60,473	55,277
OH	66,634	70,989	69,028	73,005	54,438
AL	43,704	45,642	44,997	45,439	50,214
VA	72,166	80,770	64,796	57,275	43,614
MD	36,425	44,884	41,450	37,287	40,183
IN	29,468	32,988	32,945	42,908	39,363
MS	39,425	32,437	31,891	30,083	33,535
HI	19,034	23,352	26,404	28,618	32,915
ME	9,191	10,357	16,613	22,225	30,635
MA	23,231	25,588	24,876	27,675	29,420
SC	9,474	10,800	11,536	21,186	27,745
GA	13,055	15,076	17,531	20,527	25,360
PR	12,710	15,292	17,683	20,714	19,403
CT	12,788	13,863	14,200	14,575	16,616
MN	11,623	14,747	15,397	18,715	10,990
NY	8,034	10,216	8,266	9,282	9,886
RI	6,742	7,857	6,567	8,627	9,214
NC	9,258	12,941	12,108	11,138	9,108
WI	4,786	3,926	4,929	5,864	5,086
DE	2,362	3,738	4,503	5,369	5,056
NH	2,780	3,476	3,479	4,556	4,971
OR	9,306	8,110	5,098	2,919	1,925
VI	721	1,888	2,105	565	683
IL	405	470	604	560	641
Grand Total, US	1,587,077	1,854,079	2,088,213	2,241,970	2,286,407
FL Share of US	**5.5%**	**5.4%**	**5.2%**	**5.2%**	**5.3%**
FL Rank in US	**8th**	**8th**	**7th**	**7th**	**6th**
Total, South/Gulf	709,166	855,402	1,121,745	1,205,378	1,262,140
FL Share of South/Gulf	**12.3%**	**11.8%**	**9.7%**	**9.6%**	**9.6%**
FL Rank in South/Gulf	**3rd**	**3rd**	**3rd**	**3rd**	**3rd**

Source: American Association of Port Authorities.

As shown in Table 10 below, Florida growth on a volume basis has been generally consistent with its overall market position – in other words, Florida is basically keeping pace.

Table 10. Total Port Tonnage Growth (thousands, short tons), 1985-2003

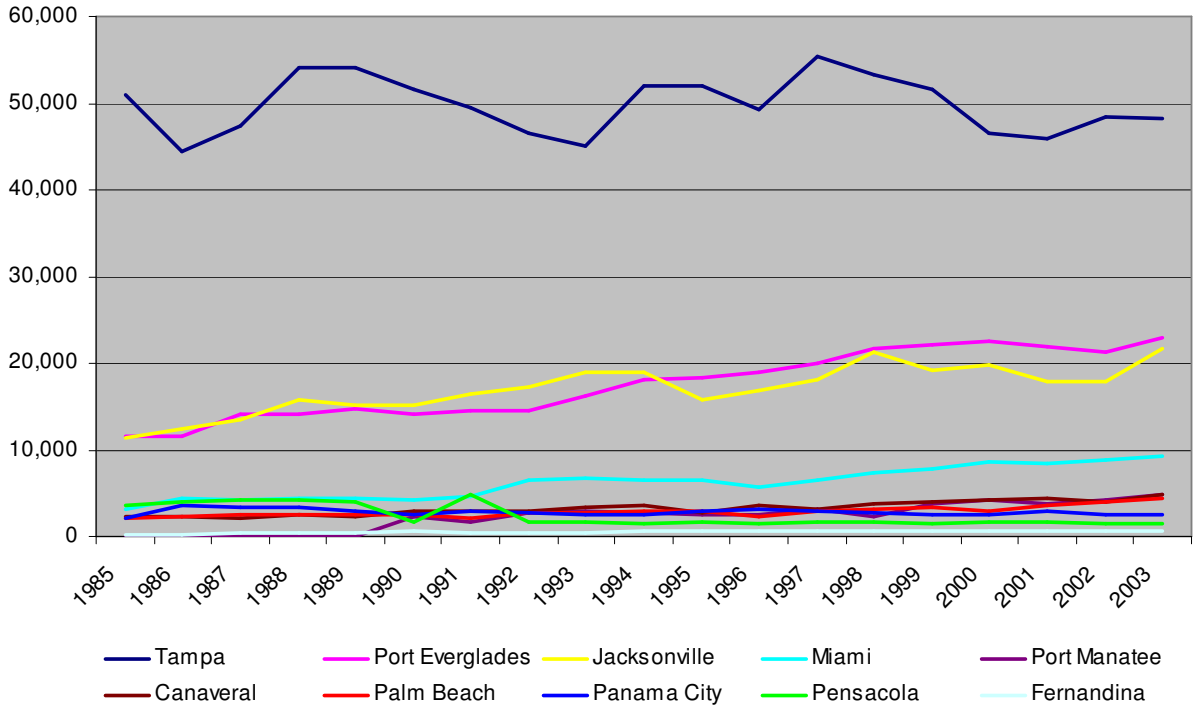
State	18-Year Growth		4-Year Growth	
	Tons Added	CAGR	Tons Added	CAGR
TX	261,900	4.2%	73,626	4.1%
LA	254,943	4.7%	(25,423)	-1.4%
CA	49,554	2.0%	20,145	3.3%
FL	**33,636**	**1.8%**	**4,632**	**1.0%**
MI	27,785	1.3%	(20,376)	-3.4%
PA	26,877	3.3%	865	0.4%
NJ	23,364	0.8%	13,716	2.0%
ME	21,444	6.9%	8,410	8.4%
SC	18,271	6.2%	6,559	7.0%
WA	13,917	0.7%	(9,443)	-2.0%
HI	13,881	3.1%	4,298	3.6%
GA	12,305	3.8%	4,833	5.4%
IN	9,895	1.6%	(3,546)	-2.1%
PR	6,693	2.4%	(1,311)	-1.6%
AL	6,510	0.8%	4,775	2.5%
MA	6,189	1.3%	1,745	1.5%
CT	3,828	1.5%	2,041	3.3%
MD	3,758	0.5%	2,896	1.9%
DE	2,694	4.3%	(313)	-1.5%
RI	2,472	1.8%	587	1.7%
NH	2,191	3.3%	416	2.2%
NY	1,852	1.2%	604	1.6%
WI	300	0.3%	(778)	-3.5%
IL	236	2.6%	81	3.4%
VI	(38)	-0.3%	118	4.9%
NC	(150)	-0.1%	(2,030)	-4.9%
MN	(633)	-0.3%	(7,725)	-12.5%
MS	(5,890)	-0.9%	3,452	2.8%
OR	(7,381)	-8.4%	(994)	-9.9%
OH	(12,196)	-1.1%	(18,566)	-7.1%
VA	(28,552)	-2.8%	(13,661)	-6.6%
AK	(50,329)	-3.5%	(5,196)	-2.2%
Grand Total, US	699,330	2.0%	44,436	0.5%
FL Rank in US	**4th**	**13th**	**8th**	**18th**
Total, South/Gulf	552,974	3.3%	56,762	1.2%
FL Rank in South/Gulf	**3rd**	**5th**	**5th**	**6th**

Source: American Association of Port Authorities.

As we did with containers, we can distinguish between captive and discretionary bulk markets. But while containers generally carry relatively light, high value, time-sensitive cargo, and pay premium prices for transportation, bulk cargo generally is heavy, low value, and less time-sensitive, and wants to pay as little for landside transportation as possible. Because water is the least expensive method of transport on a per unit basis, most bulk cargo wants to get as close to its producing or consuming areas as it can by water. For significant moves inland, barge, rail and pipeline are preferred.

Most of the bulk cargo being handled through Florida ports is associated with local (port area) or regional in-state production and consumption. This is especially true for commodities like petroleum, which rely on Tampa and Everglades as their gateways to Florida consumers. For higher value bulk cargo, such as copper, there may be more of an out-of-state market because the higher value supports a higher landside transportation cost. Similarly, we do not view surrounding states as competitors for most of Florida's bulk tonnage, except for higher-value bulk goods that may be contested with nearby ports such as Gulfport, Mobile, Brunswick GA, and/or Savannah.

Figure 23. Florida Ports Total Tonnage (thousands, short tons), 1985-2003



Source: American Association of Port Authorities.

As shown in Figure 23, Tampa is Florida's leading port in terms of tonnage, and has been a relatively consistent performer. Jacksonville and Everglades are the next leading tonnage ports, and both have been growing steadily. Miami is next, followed by Manatee, Canaveral, Palm Beach, Panama City, Pensacola, and Fernandina.

While containers and autos tend to get more of the attention in port discussions due to their high visibility and high value, it's worth mentioning that bulk cargos are incredibly important to Florida's economy and its residents. Bulk handling through Florida's ports allow for the receipt of petroleum, building materials, and other essential products, as well as the shipment of phosphate, agricultural products, and other commodities to out of state markets. Many of these commodities are vital to local industries and employment. Bulk is the reason Florida's ports were built, and bulk ports in turn helped build the state – and keep it functioning. Preserving and expanding bulk handling capacity is a critical issue, especially in the face of urban land pressures that see these functions as standing in the way of developing "higher and better" uses.

3.2 Competitive Strengths and Weaknesses

Section 3.1 identifies some of the key competitor ports for container and auto traffic. Bulk traffic was, for the most part, considered not to be contested with other ports. Generally, suitable auto handling facilities are not excessively difficult to develop – many ports that cannot get into the "container game" focus instead on autos – and factors such as pricing, incentives, and industrial linkages tend to be key competitive factors. But for containers, the physical, operational, and locational characteristics of the terminal facilities tend to be key determinants of a port's competitiveness.

Tables 11, 12 and 13 on the following pages show Florida's current and potentially emerging container ports, along with their key major and secondary competitors. For each functional area (water, terminals, landside access, and market connections), particular strengths are listed in green, weaknesses are in red, and areas in between are in gray. The key message, again, is that Florida's ports are good performers, and are most competitive for Florida origin and destination cargo (where geography works in their favor) and least competitive for hinterland discretionary cargo (where geography and the strength of other ports such as Charleston and Savannah works against them).

To overcome these disadvantages, in our view, Florida ports would have to offer a full package of significant offsets – including fast and reliable intermodal rail service corridors, efficient and direct truck connections, availability of extensive warehouse/distribution lands, the potential for significant physical expansion in the future, and deeper channels. Having one of these elements but not the others is likely to be insufficient. Today, Jacksonville appears to be the best positioned port to compete successfully for hinterland discretionary cargo.

However, as we have argued, the greatest value offered by Florida's ports is that they handle Florida cargo, minimizing the need for transportation to and from out of state ports. As Florida's economy grows, business through all of Florida's container ports should continue to expand. We will need to ensure that public investments and public policy decisions act to preserve and increase port capacity at a statewide level to keep pace with this growing demand.

Table 11. Strengths and Weaknesses – Container Ports, Major Competitors

Name and 2004 TEUs	Water	Terminals	Landside Access	Markets
Charleston, SC 1,863,917 TEUs	**45' to all terminals** 150' air draft limit to N. Charleston terminal	Three separate facilities; 194 storage acres and 3 berths at Wando Welch, 123 storage acres and 3 berths at N. Charleston; 78 storage acres and 2 berths at Columbus Street **New terminal being developed at Charleston Navy Base, 280 acres and 3 berths** **SCSPA attempting to acquire 1800 acres in Jasper Co., GA, on Savannah River Channel across from Port of Savannah**	All terminals relatively close to interstates, some conflict with local traffic No on-dock rail to Wando Welch, limited on-dock to other terminals, relies on drayage to near dock yards	**Excellent service to hinterland markets** Moderate support from regional warehouse and distribution centers Competitive to some FL markets
Savannah, GA 1,662,021 TEUs	42' channel; 48' project under study, in question	**One very large facility, 1200 contiguous acres, 9600' of berthing, untapped capacity**	Relatively close to interstates, some traffic conflicts **Very close to local warehouse and distribution centers** **New on-dock ICTF, expandable to 160 acres**	**Excellent service to hinterland markets** **14.7 million sf of warehouse and distribution space in Savannah area alone, more in Atlanta reachable by overnight rail** **Competitive to many FL markets**
Mobile, AL 37,375 TEUs	**45' to container terminal**	**Low throughput, limited capacity today** **New 800,000 TEU capacity terminal being developed as joint venture with Maersk**	**New terminal will have on-dock ICTF**	**Excellent connections to hinterland markets** **Potentially competitive to some FL markets**

Source: Ports websites and CS analysis.

Table 12. Strengths and Weaknesses – Container Ports, Secondary Competitors

Name/2004 TEUs	Water	Terminals	Landside Access	Markets
Hampton Roads, VA 1,808,933 TEUs	**50′ to major container terminals (Norfolk International Terminals, Maersk, Craney Island)** Max. 41′ to Portsmouth, Newport News Marine Terminal (lesser container terminals)	**811 acres and 6600′ berthing at NIT, mostly container; 47 container acres at Portsmouth; 43 container acres at Newport News** **Maersk developing a private 300 acre container terminal** **Craney Island is site of future 600 acre container terminal**	Generally good access to interstates **On-dock service by NS to NIT; beltline rail connections to CSX**	**Excellent connections to mid-Atlantic and hinterland markets** **Virginia Inland Port at Front Royal** **New Heartland Corridor DST to Midwest** **Limited FL access**
Houston, TX 1,437,585 TEUs	40′ channels	250 container storage acres at Barbours Cut; 45 container storage acres at PHA; two berths at Turning Basin Terminal **Bayport project will add 700 acres, 400 for containers**	**Major on-dock ICTF planned for Bayport** **Direct rail to other terminals**	**Excellent connections to Texas and West Gulf** **Limited FL access**
New Orleans, LA 258,468 TEUs	**30-35′ channels**	Around 235 acres container storage in five relatively small terminals	**Service by six Class I railroads (only port in US)** **Dedicated truckway**	**Excellent connections to Gulf/Southeast, Mississippi River** **Limited FL access**
Gulfport, MS 213,108 TEUs	**36′ channels; 42′ under study**	191 acre property, mix of containers and other uses; recovering from Katrina impacts	7 miles from interstate, access improvements planned	Good service to Gulf/Southeast **Limited FL access**
Wilmington, NC 104,122 TEUs	42′ channels	Current facilities modest **Plans for 600 acre North Carolina International Port**	**Direct access to I-95/I-40** **CSX on dock, NS near dock with, terminal RR**	**Two inland ports – Charlotte and Piedmont Triad** **Limited FL access**

Source: Ports websites and CS analysis.

Table 13. Strengths and Weaknesses – Container Ports, Florida

Name/2004 TEUs	Water	Terminals	Landside Access	Markets
Miami 1,009,500 TEUs	42′ deepening underway, 50′ project under study	Total of 518 acres, majority used for containers, 6100′ of berthing **Expansion requires landfill or inland port**	**Potential for improved on-dock rail service** Truck access is constrained, tunnel planned	**Excellent access to South Florida market** **Limited access to out of state markets**
Jacksonville 727,660 TEUs	Maximum 41′ channel; 45′ project under study	Three facilities with around 1500 acres, with containers on around 400 acres **Potential to expand container capacity on existing lands**	Close to interstates, but improvements needed **On and near-dock rail connections via FEC, CSX, NS, Terminal RR**	**Excellent access to North and Central Florida markets** **Good access to out of state markets; new Asian service with 800,000 TEUs**
Everglades 653,628 TEUs	42 channels′	Around 320 container acres **Additional capacity from 270 acre Southport expansion**	**Potential for on-dock ICTF at Southport** **Direct interstate highway connections**	**Excellent access to South Florida market** **Limited access to out of state markets**
Port of Palm Beach 226,002 TEUs	**33′ channels**	153 acre main terminal, more than half used for containers **Expansion requires landfill, FP&L property, or inland port**	**Direct service by FEC, potential for upgraded railyard** Truck access is constrained, improvements planned	**Excellent access to South Florida market, possibility to improve Central Florida service with inland port** **Limited access to out of state markets**
Port of Tampa 17,277 TEUs	40′ channels	Current facility only 22 acres **Significant expansion capability on existing lands**	Near-dock rail Truck access is constrained, improvements planned	**Excellent access to Gulf Coast and Central Florida markets** **Limited access to out of state markets**
Port Manatee 8,414 TEUs	40′ channels	Current facility only 20 acres Some expansion capability on existing lands	Near-dock rail (CSX) and on-dock (Terminal RR)	**Good access to Gulf Coast and Central Florida markets** **Limited access to out of state markets**

Source: Ports websites and CS analysis.

4.0 Steps to a Statewide Seaports Policy Framework

Section 2 of this report found that Florida's seaports experience a range of conditions – areas of strength and opportunity, areas of concern, and areas of critical need – with respect to their waterside assets, marine terminals, landside access systems, and market connectivity. Between 2006 and 2011, the state of Florida is making nearly $700 million in investments, but this will not be sufficient to provide all of Florida's ports with strength in each of these functional areas.

Section 3 of this report found that Florida's ports have been extremely strong performers with respect to all U.S. ports, and also with respect to their direct competitors in the south and gulf states. In recent years, however, there has been some erosion of Florida's market strength, particularly in container and auto markets. Preventing further erosion depends largely on making adequate port and port-serving investments. This involves not only the amounts invested in Florida's ports, but also the extent to which these investments return the desired effects and benefits at a system-wide level.

As a major investor in Florida's ports, FDOT is therefore concerned with several policy issues:

- Should the capital needs of Florida's ports be considered from the standpoint of a larger, coordinated Strategic Plan, rather than a compilation of individual port capital plans?
- Should state funding be increased over projected levels? Should new funding sources be considered? Should it be highly flexible or more strategically guided?
- Should there be standards for evaluating overall system performance and investment opportunities involving use of FDOT funds?

This section describes work to:

- Review the goals and objectives of the SIS Plan/2025 FTP to determine applicability to seaport investment strategies.
- Review state port investments to determine whether low-performing areas are being successfully addressed.
- Identify key policy issues facing FDOT, Florida's ports, and the Florida Legislature.
- Define a process for developing a Seaports Strategic Plan.

4.1 Goals and Objectives of the 2025 FTP and SIS Plan

Goals and objectives of the 2025 Florida Transportation Plan and the SIS relevant to seaports are noted in Tables 14 (below) and 15 (following).

Table 14. 2025 FTP Goals and Objectives Relevant to Florida's Seaports

2025 FTP Goal	Seaport Inclusive Objective
A safer and more secure transportation system for residents, businesses, and visitors	• Improve the safety of all modes of transportation comprising Florida's transportation system, for all users, including roadway intersections and locations where modes intersect. • Improve the security of Florida's transportation system to deter and respond to attacks on transportation facilities or domestic targets, while ensuring mobility for all users.
Enriched quality of life and responsible environmental stewardship	• Improve coordination of land use and transportation decisions among state government, local governments, and metropolitan planning organizations to ensure that future growth is sustainable. • Optimize the efficiency of Florida's transportation system by implementing operational, management, access, and land use strategies that support the intended use of each element of the system identified as part of evolving statewide, regional, or community visions.
Adequate and cost-efficient maintenance and preservation of Florida's transportation assets	• Maintain all elements of the transportation system to protect the public's investment for the future. • Maximize the use of alternative, non-roadway modes to transport overweight and oversize loads.
A stronger economy through enhanced mobility for people and freight	• Provide for smooth and efficient transfers for both people and freight between transportation modes and between the SIS and other transportation facilities. • Reduce delay on and improve the reliability of SIS facilities. • Preserve new capacity on the SIS for projected growth in trips between regions, states, and nations, especially for trips associated with economic competitiveness. • Expand the use of modal alternatives to SIS highways for travel and transport between regions, states, and nations. • Establish statewide criteria for identifying and developing new SIS facilities where such facilities are needed to connect the economic regions of the state, especially economically distressed areas, in coordination with regional and community visions. • Develop regional visions and action plans that integrate transportation, land use, economic, community, and environmental systems to guide transportation decision making and investments. Focus attention on meeting regional mobility needs that transcend traditional jurisdictional boundaries, and ensuring connectivity between SIS, regional, and local facilities. • Facilitate economic development opportunities in Florida's economically distressed areas by improving transportation access from these areas to markets in a manner that reflects regional and community visions. • Develop multimodal transportation systems that support community visions. • Expand transportation choices to enhance local mobility and to maintain the performance of the SIS and regionally significant facilities.

Table 14. (continued)

Goal	Seaport Inclusive Objective
Sustainable transportation investments for Florida's future	• Provide sufficient resources to reduce the identified backlog in transportation needs and meet growth needs at the state, regional, and local levels. • Establish transportation investment priorities recognizing that the SIS meets a strategic and essential state interest, and that regional and local systems must be adequately funded. • Reduce the cost of providing and operating transportation facilities. • Document the gap between funding resources (local, regional, state, and federal) and needs across all levels and all modes in a consistent and compatible format.

Source: http://www.dot.state.fl.us/planning/2025ftp/prepublication122705.pdf

Table 15. SIS Goals Relevant to Florida's Seaports

A ***safer*** and ***more secure*** transportation system for residents, businesses and visitors.

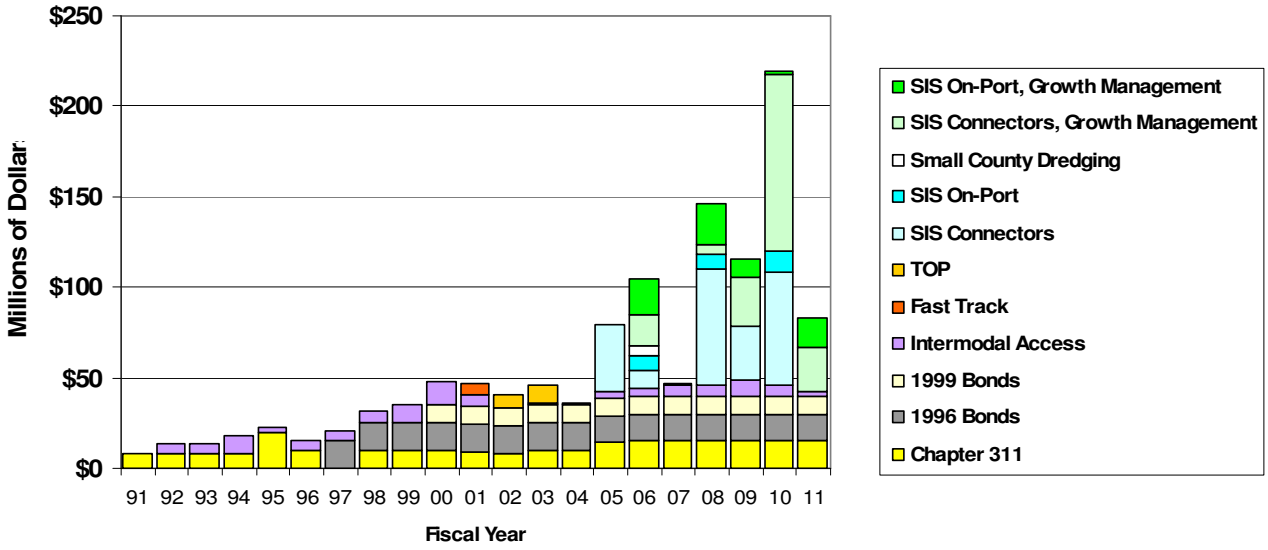
1) Effective ***preservation and management*** of Florida's transportation facilities and services.
2) Increased ***mobility*** for people and for freight and efficient ***operations*** of Florida's transportation system.
3) Enhanced economic ***competitiveness*** and economic ***diversification***.
4) Enriched ***quality of life*** and responsible ***environmental stewardship***.

Source: http://www.dot.state.fl.us/planning/SIS/strategicplan/adopted012005.pdf

4.2 State Funding for Port Improvements

To assist in achieving these goals and objectives for Florida's seaports, the Florida Department of Transportation currently facilitates and funds direct on-port investments and supporting off-port infrastructure development. State funding is sourced from Chapter 311, the SIS, and other programs. State funding for ports nearly doubled in year 2005 with the inclusion of SIS connectors funds. Between 2006 and 2011, state ports expenditures are projected to average more than $100 million per year, for a total of almost $700 million for the period.

Figure 24. Historic and Projected (2006-2011) State Funding for Florida's Seaports



Source: FDOT.

Note: Figure 24 above does not reflect the possibility of an additional $400 million for the Port of Miami truck access tunnel in year 2010, nor do Tables 16, 17 and 19 below.

About 61% this funding comes from the SIS Growth Management program; about 32% comes from the Strategic Intermodal System program; and the remaining 10% comes from other sources, as noted in Table 16 below.

Table 16. Sources and Shares of State Funding for Ports , 2006-2011

	Source	Funds	Share
GM	SIS Growth Management	$424,258,750	60.7%
SIS	Strategic Intermodal System	$224,130,857	32.0%
311	Chapter 311 Funds	$29,349,988	4.2%
District	FDOT District Funds	$13,658,470	2.0%
SIB	State Infrastructure Bank	$4,500,000	0.6%
Other		$2,672,375	0.4%
TOTAL		**$698,570,4402**	**100%**

Source: FDOT.

The planned allocation of state funding for ports through 2011 is generally consistent with the throughput activity of the port, measured in tons and/or TEUs. The ports receiving the largest amount of funding – Tampa and Miami – rank first among Florida ports in tonnage and containers, respectively. For both ports, the majority of this funding is for highway access improvements (Tampa's I-4 Crosstown Connector and Miami's Truck Tunnel) that will bring limited-access ramps to the front door of each port. The port receiving the next highest funding, Jacksonville, ranks third in tons and second in TEUs. Next are Palm Beach (ranking fourth in containers) and Everglades (ranking second in tons and third in TEUs). Other ports are programmed for a range of funding amounts.

Table 17. Allocation of State Funding by Port, 2006-2011

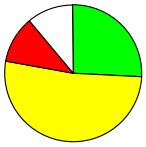
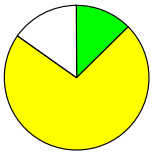
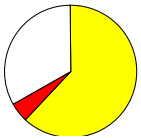
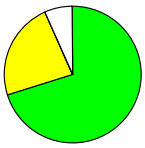
Port	Funding	Rank in Tons, 2004	Rank in TEUs. 2004
Tampa	$199,645,064	1	6
Miami	$194,534,801	4	1
Jacksonville	$89,762,175	3	2
Palm Beach	$65,225,145	7	4
Everglades	$60,037,340	2	3
Panama City	$45,476,902	8	--
Manatee	$25,229,013	5	7
Canaveral	$12,415,000	6	8
Pensacola	$4,570,000	9	--
Key West	$700,000	--	--
St. Joe	$575,000	--	--
Fernandina	$400,000	10	5

Sources: FDOT, AAPA..

The needs of Florida's ports are met through a combination of port funds, state funds, and private investments. As previously discussed, most of Florida's public ports lease land to private businesses, which operate the terminals. Private transportation service providers are responsible for operating Florida's marine terminals under leases from the ports, and depending on the specific terms of the lease, may be responsible for certain on-terminal investments. Also, private railroad companies, warehouse/distribution facility developers, and others make investments that benefit the overall system.

A full accounting of these various investments, and the benefits derived from each, is beyond the scope of the present effort. What we can illustrate is the nature of the benefits that should be derived from state investments, in combination with other investments as envisioned by the ports themselves. Tables 18 through 27 on the following pages provide, for each port, a project list developed by FDOT staff. Cambridge Systematics sorted this list by the areas that the improvements address (water, terminal, and landside access/market connectivity). Finally, for each port, we paired the listed improvements with the corresponding green-yellow-red future conditions indicators as reported to us by the ports.

Table 18. State Funding for the Port of Tampa, 2006-2011

TYPE	DESCRIPTION	SOURCE	AMOUNT	FUTURE CONDITIONS
PORT OF TAMPA TOTAL			**$199,645,064**	
Water	RAISE LEVEES ON DREDGE DISPOSAL ISLAND 2	GM	$6,750,000	
Water	DREDGE SPARKMAN CHANNEL	GM	$5,625,000	
Water	PORT REDWING DREDGE CHANNEL	GM	$5,024,250	
			$17,399,250	
Terminal	PORT REDWING CARGO HANDLING IMPROVEMENT	District	$13,742,656	
Terminal	CONTAINER YARD IMPROVEMENT PHASE I	GM	$3,828,000	
Terminal	DEVELOP/CONSTRUCT CRUISE & BULK CARGO TERMINALS	311	$4,700,000	
			$22,270,656	
Landside/Markets	CROSSTOWN CONNECTOR Z MOVEMENT	GM	$87,340,000	
Landside/Markets	I-4/SELMON EXPRESSWAY FROM SELMON EXPRESSWAY TO I-4	SIS	$62,112,000	
Landside/Markets	I-4/SELMON EXPRESSWAY FROM SELMON EXPRESSWAY TO 7TH AVE	SIS	$5,275,000	
Landside/Markets	RAIL IMPROVEMENTS PHASE II	GM	$2,084,000	
Landside/Markets	RAIL IMPROVEMENT PHASE I	GM	$1,840,000	
Landside/Markets	I-4/SELMON EXPRESSWAY FROM SELMON EXPRESSWAY TO I-4	SIS	$650,655	
Landside/Markets	RAIL EXPANSION & STORAGE TANK	Other	$477,000	
Landside/Markets	US 41 (SR 45) FROM BULLFROG CREEK TO SANTA FE RD	SIS	$194,031	
Landside/Markets	US 41 (SR 45) FROM BULLFROG CREEK TO SANTA FE RD	SIS	$2,472	
			$159,975,158	

Source: FDOT and Cambridge Systematics.

The major investment for Tampa is for the Crosstown Connector, which will bring limited access highway ramps very close to the Port's main gate, allowing traffic between the Port and I-4 to bypass congested historic and developing neighborhoods. This multi-phase project – for which partial funding is shown – is essential to keep Tampa from becoming "red" for landside access and market connectivity in the future. Other major investments help address dredging needs, terminal improvements, and rail access.

Table 19. State Funding for the Port of Miami, 2006-2011

TYPE	DESCRIPTION	SOURCE	AMOUNT	FUTURE CONDITIONS
PORT OF MIAMI TOTAL			**$194,534,801**	**Unknown**
Water	SOUTH FISHERMAN'S CHANNEL	SIS	$1,009,000	
			$1,009,000	
Terminal	CARGO GATEWAY COMPLEX	District	$4,791,801	
Terminal	CONTAINER YARD EQUIPMENT	311	$2,100,000	
Terminal	PORT OF MIAMI GATEWAY	311	$2,000,000	
Terminal	CARGO CONTAINER IMPROVEMENT	311	$500,000	
			$9,391,801	
Landside/Markets	4,000 FT TUNNEL UNDER MAIN CHANNEL	GM	$177,150,000	
Landside/Markets	TUNNEL FROM PORT OF MIAMI TO SR 836/I 395	SIS	$4,140,000	
Landside/Markets	EASTERN PORT BLVD PART II	Other	$1,550,000	
Landside/Markets	INTERMODAL CARGO TRANSFER FACILITY (ICTF)	SIS	$1,035,000	
Landside/Markets	RAILROAD BRIDGE REPAIR-FEC LINE TO PORT OF MIAMI	SIS	$259,000	
			$184,134,000	

Source: FDOT.

Miami did not provide an evaluation of future conditions with improvements, but based on their evaluation of current conditions, we know that "red" conditions include: container storage areas; passenger structures; passenger safety and security; in-terminal "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. The largest investment in Miami is for the proposed tunnel under the main channel. This multi-phase project (for which partial funding is shown) is planned to bring a limited access truck route to the Port's gate, allowing trucks to bypass congested and developing neighborhoods between the Port and the national highway system. Investments also address rail improvements, channel deepening and terminal improvements.

As shown in Table 20 on the following page, funding for Jacksonville focused primarily on highway improvements. These investments result in fairly good market connectivity, but other significant landside access issues remain to be addressed, along with waterside and terminal issues. This assessment reflects the likelihood of very substantial growth in container activity – and related pressures – over the next ten years.

Table 20. State Funding for the Port of Jacksonville, 2006-2011

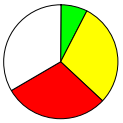
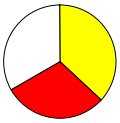
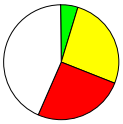
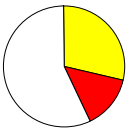
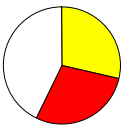
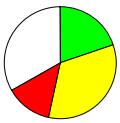
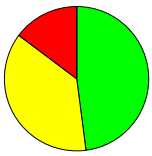
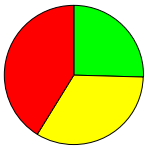
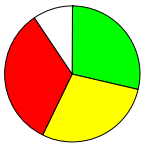
TYPE	DESCRIPTION	SOURCE	AMOUNT	FUTURE CONDITIONS Blount Isl.	Dames Point	Talleyrand
Port of Jacksonville Total			**$89,762,175**			
Water	PORTWIDE DREDGING	GM	$1,500,000			
			$1,500,000			
Terminal	TALLEYRAND MARINE TERMINAL	311	$3,350,000			
Terminal	DESIGN & CONSTRUCT BERTH #3	311	$2,100,000			
Terminal	DAMES POINT & BLOUNT ISLAND COMBINED (S) YARD	GM	$1,500,000			
			$6,950,000			
Landside/ Markets	SR 115 (MARTIN LUTHER KING JR PKWY) 21ST ST (TALLEYRAND AVENUE)	SIS	$50,332,000			
Landside/ Markets	SR-105 HECKSCHER DRIVE CONNECTS PORT DIRECTLY TO I-95	GM	$16,300,000			
Landside/ Markets	SR 115 (MARTIN LUTHER KING JR PKWY) 21ST ST (TALLEYRAND AVENUE)	SIS	$7,948,800			
Landside/ Markets	NEW BERLIN PORT ACCESS CONNECTOR	GM	$5,400,000			
Landside/ Markets	INTERMODAL CARGO TRACKING	Other	$645,375			
Landside/ Markets	TALLEYRAND TERMINAL SWITCHING YARD/LEAD TRACK	GM	$500,000			
Landside/ Markets	SR 9A/INTERCHANGE @ HECKSCHER DRIVE	SIS	$186,000			
			$81,312,175			

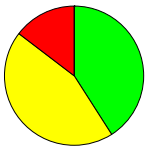
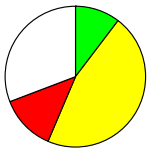
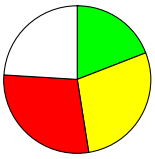
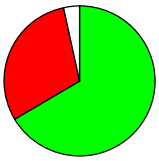
Table 21. State Funding for the Port of Palm Beach, 2006-2011

TYPE	DESCRIPTION	SOURCE	AMOUNT	FUTURE CONDITIONS
Port of Palm Beach Total			**$65,225,145**	
Water	SLIP 3, DREDGING SURVEY, CHANNEL MODIFICATION	311	$1,000,000	
Water	DREDGING STUDY	GM	$750,000	
Water	HARBOR & CHANNEL IMPROV. DREDGING STUDY	GM	$750,000	
			$2,500,000	
Terminal	RO/RO FACILITY AT SLIP 3	GM	$2,001,000	
Terminal	SOUTH PORT CONTAINER COMPLEX	GM	$1,113,000	
Terminal	SLIP#2 SHEET PILE REPLACE	311	$800,000	
			$3,914,000	
Landside/Markets	SR 710 TO PORT OF PALM BEACH	GM	$17,642,000	
Landside/Markets	COUNTY SIS CONNECTOR IMPROVEMENTS	GM	$13,629,000	
Landside/Markets	FROM SOUTH GATE ACCESS TO SR-710/US-1 CONNECTOR	SIS	$11,746,000	
Landside/Markets	SR 710/BEELINE HIGHWAY	GM	$10,795,000	
Landside/Markets	ON-PORT INTERMODAL RAIL IMPROVEMENTS	GM	$3,338,000	
Landside/Markets	SR-710/BEELINE HWY FROM W OF AUSTRALIAN AVE TO OLD DIXIE HWY	SIS	$1,661,145	
			$58,811,145	

Source: FDOT and Cambridge Systematics.

The majority of investment in the Port of Palm Beach is for highway connectors, with additional support for intermodal rail. The result is anticipated to provide excellent market access, but other landside access needs will remain. Some funding is being provided for waterside and terminal improvements, which will address some needs, but significant needs remain.

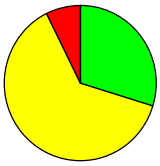
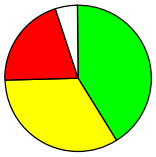
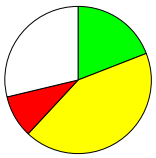
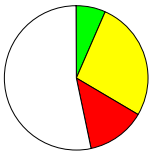
Table 22. State Funding for Port Everglades, 2006-2011

TYPE	DESCRIPTION	SOURCE	AMOUNT	FUTURE CONDITIONS
Port Everglades Total			**$60,037,340**	
Water	PORTWIDE DREDGING	GM	$15,020,500	
			$15,020,500	
Terminal	SOUTHPORT CONTAINER(VIII) PHASE 3	311	$2,100,000	
Terminal	HIGH WIND BOLLARDS	311	$1,050,000	
Terminal	NEW CRUISE TERMINAL 27 AND BERTH 27 EXTENSION	311	$1,050,000	
Terminal	STARS PROGRAM (SECURITY)	311	$49,988	
			$4,249,988	
Landside/Markets	ELLER DR/CT ICTF OVERPASS	SIS	$27,773,065	
Landside/Markets	INTERMODAL CONTAINER TRANSFER FACILITY	SIS	$2,946,000	
Landside/Markets	ELLER DR/CT ICTF OVERPASS	SIS	$2,231,936	
Landside/Markets	MCINTOSH RD ON PORT CIRCULATION	SIS	$2,000,000	
Landside/Markets	MCINTOSH RD REALIGNMENT	District	$1,265,000	
Landside/Markets	ELLER DR/CT ICTF OVERPASS	SIS	$1,212,750	
Landside/Markets	HEAVY RAIL TRACK CONNECT TO NORTHPORT/RAIL BARGE	GM	$1,125,000	
Landside/Markets	NEW BRIDGE OVER FPL CANAL	SIS	$1,035,000	
Landside/Markets	ITCF TWO RAIL COMPONENTS	GM	$675,000	
Landside/Markets	MIDPORT ROADWAY EXPANSION	GM	$500,000	
Landside/Markets	SR 84 @ ANDREWS AVE	SIS	$3,101	
			$40,766,852	

Source: FDOT and Cambridge Systematics.

Around two-thirds of funds for Port Everglades are devoted to roadway and rail improvements and grade crossing eliminations. A substantial amount is also devoted to portwide dredging, and the remainder to various terminal improvements. Unmet needs remain in each of these areas.

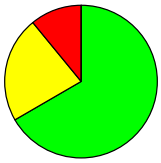
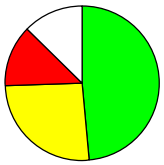
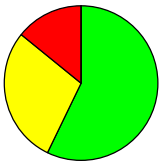
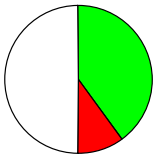
Table 23. State Funding for the Port of Panama City, 2006-2011

TYPE	DESCRIPTION	SOURCE	AMOUNT	FUTURE CONDITIONS
Port of Panama City Total			**$45,476,902**	
Water	DREDGE SOUTH & WEST BERTHS	GM	$450,000	
			$450,000	
Terminal	INTERCHANGE GATE	GM	$500,000	
Terminal	OVERHEAD CONVEYOR	GM	$400,000	
Terminal	BULK WAREHOUSE	311	$1,000,000	
Terminal	ON PORT INFRASTRUCTURE IMPROVEMENTS	311	$875,000	
			$2,775,000	
Landside/Markets	WIDENING OF 23RD ST TO SIX LANES CONNECTING	GM	$25,000,000	
Landside/Markets	SR 30 (US 98) @ COLLEGE DR/D AVENUE INTERSECTIONS	SIS	$8,157,902	
Landside/Markets	BAY LINE R/R FROM PC INTERMODAL TO PORT SHIPYARD	SIS	$5,605,000	
Landside/Markets	RAIL SERVICE TO NEW INTERMODAL DISTRIBUTION	SIS	$1,125,000	
Landside/Markets	RAIL YARD FOR MULTIBULK TERMINAL	SIS	$699,000	
Landside/Markets	BAY LINE RAILROAD MAJETTE PASSING TRACK	GM	$565,000	
Landside/Markets	ADD'L ENTRANCE ROAD	GM	$400,000	
Landside/Markets	RAILYARD EXPANSION MULTIBULK	GM	$350,000	
Landside/Markets	RAILYARD EXPANSION PHASE 1	GM	$350,000	
			$42,251,902	

Source: FDOT and Cambridge Systematics.

Nearly all of Panama City's funding is for landside access and market connection projects. After completion, these areas are anticipated to be in fair condition (mostly green and yellow), with room for further improvement. Very little funding is provided for waterside or terminal improvements; these areas are anticipated to function mostly "in the green and yellow" but unmet needs will remain.

Table 24. State Funding for Port Manatee, 2006-2011

TYPE	DESCRIPTION	SOURCE	AMOUNT	FUTURE CONDITIONS
Port Manatee Total			**$25,229,013**	
Water	SOUTH CHANNEL DREDGING	GM	$4,994,000	
Water	SOUTH CHANNEL DREDGING	SIS	$3,881,000	
			$8,875,000	
Terminal	DESIGN & CONST. OF DRY STORAGE TRANSIT WAREHOUSE	SIB	$4,500,000	
Terminal	ACQUIRE HARBOR CRANE & ASSOC. EQUIPMENT	District	$3,509,013	
Terminal	CONSTRUCT DRY STORAGE WAREHOUSE	311	$2,000,000	
Terminal	DESIGN & CONSTRUCT TRUCK QUEUING/MARSHALLING TERMINAL	District	$1,300,000	
			$11,309,013	
Landside/Markets	INTERMODAL CONTAINER AND CARGO TRANSFER YARD PH I	GM	$5,000,000	
Landside/Markets	US 41 FROM I-275 TO PORT MANATEE	SIS	$45,000	
			$5,045,000	

Source: FDOT and Cambridge Systematics.

Port Manatee's funding covers all aspects of port performance, with substantial contributions to channel dredging, terminal improvements, and rail projects. The resulting future conditions are generally adequate (50% green or more) across the board, with room for improvement in each area.

Table 25. State Funding for Port Canaveral, 2006-2011

TYPE	DESCRIPTION	SOURCE	AMOUNT	FUTURE CONDITIONS
Port Canaveral Total			**$12,415,000**	
Water	WIDEN WEST TURNING BASIN AT ENTRANCE CHANNEL	SIS	$9,915,000	
			$9,915,000	
Terminal	ON PORT INFRASTRUCTURE IMPROVEMENT	311	$1,500,000	
Terminal	ON PORT INFRASTRUCTURE IMPROVEMENT	311	$1,000,000	
			$2,500,000	

Source: FDOT and Cambridge Systematics.

State funding for Port Canaveral primarily addresses waterside conditions, with improvements expected to result in good waterside conditions.

Table 26. State Funding for Port of Pensacola, 2006-2011

AREA	DESCRIPTION	SOURCE	AMOUNT	FUTURE CONDITION
Port of Pensacola Total			**$4,570,000**	**Unknown**
Water	DREDGE CHANNEL	GM	$2,570,000	
			$2,570,000	
Landside/Market	PORT INGRESS/EGRESS IMPROVEMENTS	GM	$1,000,000	
Landside/Market	RAIL LOOP TRACK EXTENSION	GM	$500,000	
			$1,500,000	
Terminal	BARGE MOORING SYSTEM	311	$250,000	
Terminal	ON PORT INFRASTRUCTURE IMPROVEMENTS	311	$250,000	
			$500,000	

Source: FDOT.

State funding for the Port of Pensacola addresses a range of projects. Future conditions assessments were not provided by the Port.

Table 27. State Funding for Key West, St. Joe, and Fernandina, 2006-2011

AREA	DESCRIPTION	SOURCE	AMOUNT
Port of Key West Total			**$700,000**
Terminal	PASSENGER SECURE AREA TRUMAN WATERFRONT	311	$700,000
			$700,000
Port of Port St. Joe Total			**$575,000**
Terminal	ON PORT INFRASTRUCTURE IMPROVEMENTS	311	$575,000
			$575,000
Port of Fernandina Total			**$400,000**
Terminal	DRAINAGE AND REPAIR OF A DRY WAREHOUSE	311	$250,000
Terminal	ON PORT INFRASTRUCTURE IMPROVEMENTS	311	$150,000
			$400,000

Source: FDOT

Tables 18 through 27 illustrate that while the amount of state funding being devoted to Florida's ports between 2006 and 2011 is substantial, it does not "turn everything green." Areas of concern – in many cases of critical concern – remain for most of Florida's ports.

This analysis has identified port deficiencies, as reported by the ports themselves, along with where the State is planning to invest based on current programs. This analysis does not address the issue of how much the State should be investing, and in what ports, and for what types of projects. Those decisions must be informed by larger statewide goals and objectives, including but not limited to the SIS and 2025 Florida Transportation Plan.

4.3 Key Policy Issues Facing FDOT, Florida's Ports, and Florida's Legislature

Projected Funding Shortfalls for Capital and Security Costs

A recent study prepared for Florida Ports Council by the First Southwest Company estimated their cumulative capital needs of Florida's ports for the period 2006-2011 at $2.45 billion, versus funding from direct revenues at $622 million and funding from borrowing at $558 million. The difference is estimated at approximately $1.27 billion. The projected availability of nearly $700

million in state funds between 2006 and 2011 addresses more than half of this difference, but even so, a significant gap (around $600 million) remains between what the FPC report says is needed and what is available (or potentially available) from other sources. We have not had the opportunity to perform a substantive review of this report or the capital needs it identifies, but this does not seem to us an unreasonable number, based on our understanding of currently funded projects and remaining unmet needs.

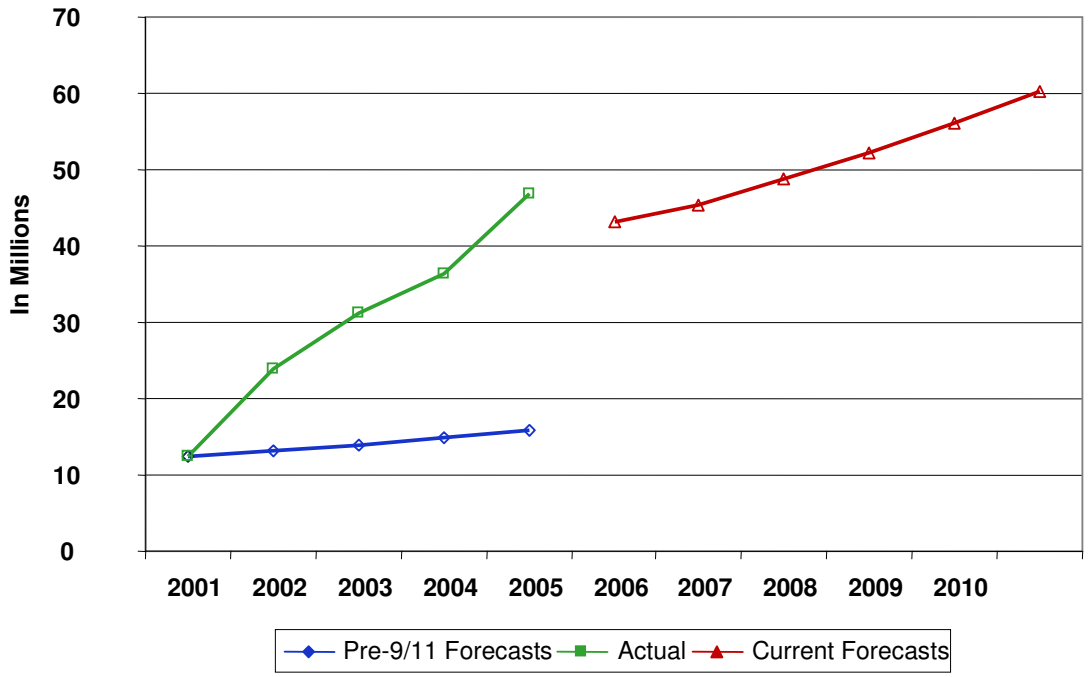
If we look beyond the 2011 horizon to the year 2025, similar to a TIP planning horizon, the shortfall number is likely to be far larger, possibly several billions. Some of the state funding provided in the 2006-2011 timeframe covers the initial phases of longer-term, multi-phase projects, so we need to consider the 2006-2011 shortfall number in the longer-term context. It's possible that out-year shortfalls will accrue at the same rate ($600 million per five year funding period), but it is also possible that they would grow faster or slower, depending on the specific project needs, changes in ports borrowing capacity and revenue streams, availability and utilization of Federal funds, etc.

Over the last several years, Florida's seaports, and their counterparts around the country, have experienced significant increases in security costs. Following September 11, 2001, seaport staff were required to develop, design, and deploy enhanced security systems to control and protect both land side and sea side access. These activities required significant expenditures that resulted in less funds available for cargo development activities and non-security capital improvements. Trucking firms also experienced increased costs from new procedures, port access credentials, driver background checks, and check point congestion.

The Florida Ports Council commissioned a study to document the increase in security spending. Between 2001 and 2005, pre-September 11th security expenditure forecasts called for a 29 percent increase from $12.3 million to $15.9 million. Following September 11th, actual increases were 280 percent growing from $12.3 million to $46.8 million. Further, from 2005 to 2010, security operational costs are anticipated to grow another 39 percent from $43.2 million to $60.1 million[1] (see Figure 25 on the following page).

[1] Current and future security costs were obtained from the "*An Analysis of the Funding Capacity of Florida's Seaports to Meet Their Five Year Capital Plans (FY 06/06 through FY 10/11)*" and "*An Assessment of the Cost of Enhanced Seaport Security After 9/11*", Final Report, First Southwest Company, November 30, 2005.

Figure 25. Rising Security Costs for Florida's Ports



Additional Bonding Authority

We understand that provision of additional bonding authority for port and port-supporting projects, covering the period 2006-2011, is being contemplated. These additional funds would presumably address some portion of the $600 million funding gap identified by the FPC report for this period.

Currently, SIS and GM project decisions are made by FDOT, using established eligibility guidelines, with input from its partners and district staff. Projects using "311" money are proposed by the ports, and reviewed and approved by the FSTED Council for conformance with the statutory eligibility requirements (FDOT has one vote as part of the Council). Districts also fund seaport projects from various funding sources that they have available to them, including intermodal access funds.

Our analysis suggests that current processes for allocating state-sourced port funding are by no means "broken." They have positioned Florida as a national leader in supporting its seaports, both in terms of absolute dollars and in terms of flexibility in the types of projects that can be funded. However, facing a condition where the additional funding is likely to be insufficient to meet the identified funding needs shortfall, we should ask: are there ways in which project selection methodologies could be enhanced to ensure that the State derives the maximum possible value and statewide benefit from its investments?

Over the long term, we recommend that State funding for seaports be guided by a Seaports Strategic Plan containing both near-term (5 year) and long-range (25 year) elements, consistent with the general transportation planning process (see Section 4.4 below).

Interim Guidance for Additional Bonding Authority

Given that it will take some time to develop, review, and approve a Seaports Strategic Plan, interim guidance on the use of additional funding is appropriate. Subject to review and approval by the appropriate parties, we are recommending the following approach for consideration:

- Eligibility. Capital investments in any of the functional areas defined in this report (waterside assets, marine terminals, landside access, and market connectivity) could be potentially eligible, subject to further guidance. Each makes a vital contribution to the overall functionality and value of a port, and different ports have different needs.

- Initial project definition and submittal. Similar to the current process, Florida's ports -- working individually and collectively -- would develop a list of initially recommended projects and submit it to FDOT. As part of the submittal, ports would identify and evaluate in quantitative or qualitative terms how the project meets evaluation criteria.

- FDOT evaluation and prioritization. FDOT would evaluate and prioritize the submitted projects for funding under the additional funding program. The appropriate analytical procedures and weightings will need to be developed by FDOT in consultation with appropriate parties. The key challenge will be to develop a streamlined set of procedures that allow for fast, fair, and consistent evaluation of different types of projects, without imposing undue analytical burdens on either the ports or FDOT. We envision this will be in the form of a punchlist and a set of spreadsheet analysis tools.

  FDOT is currently updating SeaCIP, which is the online application process for 311 projects, to accommodate all project needs. It will allow the ports to enter all their project needs in one place, and through a second stage process, the requests will be reviewed for funding eligibility and/or approved for 311 funds. This application method could potentially be expanded to address the data and evaluation factors associated with all funding programs, including proceeds from additional bonding authority.

  At this point, we can suggest a "first draft" approach for further consideration.

  1. Ports could be responsible for describing, as part of the project definition and submittal, the following:

     – Functional definition of the project and area being addressed (water, terminal, landside, market connectivity).

     – Gains (if any) in port throughput, capacity, operational efficiency, and/or port revenues. (We note that throughput and capacity are important factors, but cannot be the only evaluation factors. The main reason is that Florida's public ports are operated by private transportation service

companies. Capacity and throughput depend in part on how the operator decides to work the terminal, and on the size and nature of the market it serves. Ports cannot mandate particular levels of efficiency or throughput, although they do strongly incentivize efficiency by building minimum revenue guarantees and other provisions into their leases.)

- Economic and transportation benefits to private transportation service providers, shippers and receivers, and the locality and region.
- Whether gains and benefits are realized solely from the project ("independent utility") or only in combination with other current or future projects ("program utility") .
- Potential opportunity costs (loss of efficiency, throughput, throughput capacity, revenues, etc., or increases in unacceptable impacts or conditions) from failing to do the project
- Utilization and availability of non-State funding sources for the project.

2. FDOT could be responsible for considering each of these port-level factors, along with the following state-level factors:

   - Statewide economic benefit associated with the improvement, to the extent this is quantifiable. Economic benefits would include the standard measures for which evaluation tools already exist: employment; business output; wages; taxes; and so on.
   - Statewide transportation benefit associated with the improvement, to the extent this is quantifiable. This includes: reduction or avoided increase in truck traffic and associated impacts (congestion and delay, emissions, accidents, etc.); reduction or avoided increase in the need for State investments in other modes; and reduction or avoided increase in transportation costs for Florida's automobile and transit users.
   - Evaluation of State cost versus statewide economic and transportation benefit associated with the improvement.
   - Evaluation of consistency with SIS and FTP goals.
   - Program-level evaluation. FDOT would examine different project combinations to maximize statewide benefits.

- Fast track projects. Certain projects identified by the ports as "mission critical" and under a certain cost threshold (perhaps $2 million) could bypass the larger evaluation process, and be approved for funding on a fast-track basis.

- Flexible funding in reserve. The overall intent would be to allocate most of the additional funding under a multi-year investment program, with projects defined and approved at the outset. However, recognizing that port needs can change significantly and quickly, we recommend that some portion of the additional funding – possibly as much as 20% -- be reserved for opportunities that may emerge during future program years.

Linkage between Port Master Plans and Regional/State Transportation Plans

For purposes of appropriate inclusion of port needs and investments in short-term (five year) and long-term (20-year) State plans, it might be useful to ensure that required Port Master Plan updates are scheduled to occur at a consistent time, and that Port Master Plans address (at least to some extent) long-range funding needs. Additionally, Port Master Plans could be amended on an as-needed basis during the planning cycle. Project needs identified mid-cycle could be addressed using flexible funding in reserve.

Involvement of Private Terminal Operators and Transportation Providers

The State is investing large sums of money in its freight transportation system. Many businesses – terminal operators, ocean shipping companies, railroads, truckers, etc. – benefit directly from those investments. In return, what can (or should) they be responsible for contributing? Opportunities for greater partnership between the public and private sectors, for the identification of common goals, and for the definition of appropriate expectations on both sides, should be explored.

Coordination of Different Ports to Achieve Shared Statewide Goals

Nearby states (Georgia, South Carolina, Alabama, North Carolina, Virginia, etc.) use a centralized governance model (e.g., a State Port Authority) for their port facilities. In marked contrast, Florida's system is the responsibility of multiple local and regional entities. We are certainly not suggesting changes in the governance model for Florida's ports. However, we do see the value of a consensus based Seaports Strategic Plan to provide explicit consideration and coordination of statewide goals, objectives, benefits, and investments related to ports.

Fair Share of Investments

When dealing with freight movement, determining who "owns" the problem is almost always difficult. Freight movement involves different players, different modes, and (often) long distances that cross local, regional, state, and international boundaries. But there are certain types of problems that can be reasonably assigned to a dominant cause – terminal operator decisions, mandated port expenses, local land use decisions, etc. There could be further exploration of strategies and approaches to ensure that the costs of "fixing the problem" are equitably allocated.

4.4 Process for Developing a Seaports Strategic Plan

The development of interim guidance addressing new bond proceeds and the other issues described above are important short-term steps. Ultimately, this guidance should be refined and formalized as part of a Statewide Seaports Strategic Plan (SSSP).

The overall goals would be: 1) to ensure the greatest economic and transportation benefit to the state as a result of the state's investments in its seaports; and 2) to ensure that the process for making these determinations is stable, reliable, effective, and integrated with other FDOT and Port planning processes over both near-term and long-term planning horizons. Subject to further discussion and refinement, we envision the following basic framework:

- The SSSP would be developed and regularly updated in the years between Port Master Plans, to draw from previous PMPs and help inform future PMPs. Assuming the PMPs are updated on a regular five-year cycle, the SSSP would also be developed on a five-year cycle.

- The SSSP would be developed by FDOT, in close cooperation and consultation with the Florida Ports Council, each of Florida's ports, and other impacted state agencies. A formal process for feedback and involvement of public agency stakeholders would be developed. A parallel process soliciting feedback and involvement of private sector freight stakeholders would also be formulated.

- The SSSP would address both public and private ports, along with supporting infrastructure such as navigation systems, highways, railroads, inland ports, etc.

- The SSSP would provide updated and comprehensive information regarding: port statistics; condition and performance of Florida's ports; competitiveness with other ports; changing market conditions and critical issues; and other factors.

- The SSSP would provide updated and comprehensive information on the economic benefit and impact of Florida's ports on the state's economy.

- The SSSP would provide updated and comprehensive information on the transportation benefit and impact of Florida's ports on the state's overall intermodal transportation system.

- The SSSP would review the status and impact of state investments in ports during the previous planning cycle, along with investments made by the ports and by private sector transportation providers.

- The SSSP would inventory Port needs, not only in the near-term investment cycle, but also in the long-term 20-year planning horizon, to fully capture the total costs of multi-phase projects. Needs would be developed not only from Port requests, but also from FDOT evaluations of "linked" projects that would be needed to take full advantage of investments to meet such needs.

- The SSSP would develop benefit-cost and ROI evaluations for each potential project, focusing on transportation and economic benefits at a statewide level.

- The SSSP would compile the best-performing projects into sets of alternative packages, which would be tested on the basis of program-level transportation and economic benefits.

- The SSSP would identify planned and potentially available state expenditures on port-serving improvements for the next planning cycle, and recommend a set or sets of preferred alternatives for funding support.

- The SSSP would address emerging or unresolved policy issues and offer guidance and actionable recommendations for each stakeholder in the overall system.

4.5 Recommended Next Steps

The recommended immediate next steps are:

1. Finalize recommendations concerning bonding and other policy issues.

2. Finalize interim guidance for the utilization of additional bond proceeds and begin the process of identifying projects and evaluating applications.

3. Reach agreement on a recommended process and scope for a Statewide Seaports Strategic Plan and initiate work.

Appendix

Conditions Checklists Submitted by Florida's Ports

Appendix – Conditions Checklists Submitted by Florida's Ports

This Appendix is organized as follows:

- Table A-1. Canaveral
- Table A-2. Everglades
- Tables A-3, A-4 and A-5. Jacksonville (Blount Island, Dames Point, Talleyrand)
- Table A-6. Manatee
- Table A-7. Miami
- Table A-8. Palm Beach
- Table A-9. Panama City
- Table A-10. Pensacola
- Table A-11. St. Joe
- Table A-12. Tampa

Table A-1. Canaveral

Florida Seaport Conditions Checklist

Name: Port Canaveral
Date: 3/20/2006

Type	Element (Physical, Operational, Environmental, Financial, Throughput)	Current Conditions (Assessment -- Green-Yellow-Red) Container	Non-Container	Passenger	Planned Projects Through 2015 Project Description	Status (C, FF, PF Other)	Future (2015) Conditions (Assessment -- Green-Yellow-Red) Container	Non-Container	Passenger	Comments (if any)
Waterside Capacity and Performance										
P	Channel Dimensions				WTB,WTB CUTOFF	PF				Section 203 Feasibility being performed by CPA,
P	Turning Basin Dimensions				WTB,WTB CUTOFF	PF				construction to be done by Corps of Engineers
P	Berth Depths				WTB,MAINT DREDGING	PF,PF				
P	"Air Draft"	N/A	N/A	N/A	N/A		N/A	N/A	N/A	
O	Navigational Restrictions				S. JETTY DEPOSITION	PF				To prevent shoaling at harbor entrance
O	Conflicts With Non-Port Vessels									
O	Safety and Security				FED ROUND 4, SEC. COAST GRD REQ.,RELOCATE FENCING	PF,O				CCTV, Access Control, Truck Inspection Sheds
E	Marine Environmental Constraints				N.S. STORMWATER,NPDES,COVE STRMWTR	C				Regional Stormwater Management
F	Ability to Finance Needed Improvements									
T	Vessel Calls/Berth/Year	10	486	1947			#	#	#	
Terminal Capacity and Performance										
PO	Berths				NCP, SCP, CT12, CT 6&7, MID TB PIER, CORNER CUTOFF	PF,PF				Existing Pier Improvements, New Piers
PO	Cranes and Yard Equipment	N/A	N/A	N/A	N/A		N/A	N/A	N/A	
PO	Open Storage Areas				N. CARGO STAGING AREA	C	N/A			Open Cargo Storage
PO	Structures	N/A			CT 6&7,CT12,CT8 EMBARK., CT10 CANOPY,CT GENERATORS, BACKUP GEN.		N/A			Existing Structure Improvements, New Structures
PO	Gates	N/A			NORTH INTERMODAL GATE		N/A			Future North Cargo Entrance/Exit. Unfunded
O	Labor Sufficiency	N/A					N/A			Record Low Unemployment in Brevard County
O	Customs Inspection	N/A					N/A			
O	Safety and Security	N/A								Redundant? Unclear question
O	Truck/Rail Turn Time	N/A			TRUCK-WIDEN GKB, N INTERMODAL GATE		N/A			No Rail available. Roads- in design, no construction funding
E	Landfill Potential				N/A		Yellow			
E	Land Availability									
E	Compatibility With Adjoining Land Uses	N/A					N/A			
F	Ability to Finance Needed Improvements						Yellow			
T	TEUs/Storage Acre/Year	2,086	#	#			40,000	#	#	
T	Tons/Storage Acre/Year	#	4,467,088	#			#	12,100,000	#	
T	Passengers/Year	#	#	4,388,851			#	#	9,800,000	
Landside Capacity and Performance										
PO	Auto/Bus Access and Parking	N/A	N/A		CT PRKING UPGR, CT 6 &7 GARAGE, WIDEN GKB		N/A			
PO	Truck Access and Queuing	N/A			WIDEN GKB, ROAD IMPROVEMENTS		N/A			
PO	On-Dock Rail Connections and Yards	N/A	N/A	N/A	N/A		N/A	N/A	N/A	
PO	Near-Dock Railyards	N/A		N/A			N/A		N/A	
O	Safety and Security	N/A					N/A			
E	Local Congestion and Impacts	N/A					N/A			
F	Ability to Finance Needed Improvements	N/A					N/A			
T	Auto/Bus Moves/Day	#	#	#			#	#	#	
T	Truck Moves/Day	#	#	#			#	#	#	
T	Railcar Moves/Day	#	#	#			#	#	#	
Market Connections and Services										
PO	Accessibility to Local Markets	N/A			WIDEN GKB					
PO	Accessibility to Regional Markets	N/A								
PO	Accessibility to Hinterland Markets	N/A								
PO	Accessibility to W/D/Mfg Clusters	N/A								
E	Ability to Serve New W/D/Mfg Clusters									
E	Ability to Improve Market Access									Question is unclear
F	Ability to Finance Needed Improvements									
T	Serves Fast-Growing Markets									
T	Offers Unique/Critical Commodity Capacity	N/A								
T	Offers Unique/Critical Gateway Service	N/A								

Any Other Key Issues (describe)

WTB = West Turning Basin Corner Cut-Off, Channel Widening
NCP = North Cargo Piers SCP = South Cargo Piers
GKB = George King Boulevard, the main collector/distributor roadway on the south side

Table A-2. Everglades

Florida Seaport Conditions Checklist

Name: Broward County's Port Everglades
Date: 14-Mar-06

Type (Physical, Operational, Environmental, Financial, Throughput)	Element	Current Conditions (Assessment -- Green-Yellow-Red) Container	Current Conditions (Assessment -- Green-Yellow-Red) Non-Container	Current Conditions (Assessment -- Green-Yellow-Red) Passenger	Planned Projects Through 2015 Project Description	Planned Projects Through 2015 Status (C, FF, PF, Other)	Future (2015) Conditions (Assessment -- Green-Yellow-Red) Container	Future (2015) Conditions (Assessment -- Green-Yellow-Red) Non-Container	Future (2015) Conditions (Assessment -- Green-Yellow-Red) Passenger	Comments (if any)
	Waterside Capacity and Performance									
P	Channel Dimensions				ACOE Dredging Program	PF				Pending Federal authorization and appropriations for the ACOE Dredging Program.
P	Turning Basin Dimensions				ACOE Dredging Program	PF				Pending Federal authorization and appropriations for the ACOE Dredging Program.
P	Berth Depths				ACOE Dredging Program	PF				Pending Federal authorization and appropriations for the ACOE Dredging Program.
P	"Air Draft"									The proposed Ft. Lauderdale-Hollywood International Airport south runway expansion may impede crane capacity in Southport. There are no bridge restrictions.
O	Navigational Restrictions				ACOE Dredging Program	PF				Security restrictions
O	Conflicts With Non-Port Vessels									The Ports proximity to the Intracoastal Waterway
O	Safety and Security				New ID Center & Software	Other				
E	Marine Environmental Constraints									
F	Ability to Finance Needed Improvements									Added financial pressure on the port due to on-going capital and operational security requirements.
T	Vessel Calls/Berth/Year	1,988	1,551	2,362	5-Year CIP totaling $598.5M	PF	2,464	1,700	1,896	The numbers provided are total calls not by berth. The port is anticipating some loss of daily cruises due to competition from landside casino and Para mutual facilities.
	Terminal Capacity and Performance									
PO	Berths				ACOE Dredging Program	PF				Pending Federal authorization and appropriations for the ACOE Dredging Program.
					Midport/Southport Crane					
PO	Cranes and Yard Equipment				Upgrades/Replacement	PF				Increasing vessel sizes require crane, landside and yard equipment upgrades.
PO	Open Storage Areas				Paved container yards	PF				Additional near dock storage needed.
PO	Structures	N/A	N/A		Multiple terminal projects in CIP	PF	N/A	N/A		Larger cruise vessels will require conveyors and dual loading bridges to the cruise terminals.
PO	Gates		N/A	N/A				N/A	N/A	The addition of Berth 34 in Southport is anticipated to put additional pressure on terminal gates.
O	Labor Sufficiency	N/A	N/A	N/A			N/A	N/A	N/A	
O	Customs Inspection									Controlled by CBP. Additional Federal appropriations to CBP will be needed to address/handle the projected demand.
O	Safety and Security									
O	Truck/Rail Turn Time		N/A	N/A	ICTF	PF		N/A	N/A	
E	Landfill Potential	N/A	N/A	N/A			N/A	N/A	N/A	
E	Land Availability				Additional parking garage	PF				
E	Compatibility With Adjoining Land Uses									
F	Ability to Finance Needed Improvements									Added financial pressure on the port due to on-going capital and operational security requirements.
T	TEUs/Storage Acre/Year	2,941	N/A	N/A			3,645	N/A	N/A	
T	Tons/Storage Acre/Year	18,731	132,576	N/A			23,226	145,312	N/A	
T	Passengers/Year	N/A	N/A	3.8M			N/A	N/A	5.8M	
	Landside Capacity and Performance									
					Minor roadway improvements					
PO	Auto/Bus Access and Parking	N/A	N/A		and parking garage	PF	N/A	N/A		The proposed People Mover System could alleviate some of the congestion.
					Continued development of					
PO	Truck Access and Queuing			N/A	Southport	PF			N/A	The upcoming Master Plan Update will address future conditions.
PO	On-Dock Rail Connections and Yards			N/A					N/A	
PO	Near-Dock Rail yards			N/A	ICTF	PF			N/A	With the completion of the ICTF it is anticipated that activity on rail sites nearest the dock will be shifted to this facility.
O	Safety and Security									
E	Local Congestion and Impacts									The proposed Automated People Mover System could alleviate some of the congestion.
F	Ability to Finance Needed Improvements									Added financial pressure on the port due to on-going capital and operational security requirements.
T	Auto/Bus Moves/Day	4,000	3,000	*			5,000	3,750	*	*Peak volumes are estimated tot total approximately 30,000. Portwide direct employment totals approximately 15,000. Port Everglades is also unique in that there is an active Convention Center within the Port.
T	Truck Moves/Day	1,064	1,528	46			1,300	1,900	60	
T	Railcar Moves/Day	125	25	N/A	ICTF	PF	400	75	N/A	
	Market Connections and Services									
PO	Accessibility to Local Markets									
PO	Accessibility to Regional Markets									
PO	Accessibility to Hinterland Markets									
PO	Accessibility to W/D/Mfg Clusters									Anticipated population growth and roadway congestion
E	Ability to Serve New W/D/Mfg Clusters									Anticipated population growth and roadway congestion
E	Ability to Improve Market Access									
F	Ability to Finance Needed Improvements									Added financial pressure on the port due to on-going capital and operational security requirements.
T	Serves Fast-Growing Markets									
T	Offers Unique/Critical Commodity Capacity			N/A					N/A	
T	Offers Unique/Critical Gateway Service									

Any Other Key Issues (describe)

Table A-3. Jacksonville (Blount Island)

Florida Seaport Conditions Checklist

Name: Jacksonville Port Authority - Blout Island
Date: 3/15/2006

Type	Element (Physical, Operational, Environmental, Financial, Throughput)	Current Conditions (Assessment -- Green-Yellow-Red) Container	Non-Container	Passenger	Planned Projects Through 2015 Project Description	Status (C, FF, PF, Other)	Future (2015) Conditions (Assessment -- Green-Yellow-Red) Container	Non-Container	Passenger	Comments (if any)
Waterside Capacity and Performance										
P	Channel Dimensions			N/A					N/A	
P	Turning Basin Dimensions			N/A					N/A	Larger ships may create problems
P	Berth Depths			N/A	Deepen to 45 Feet				N/A	Working with COE
P	"Air Draft"			N/A	Potential powerline raising				N/A	
O	Navigational Restrictions			N/A					N/A	
O	Conflicts With Non-Port Vessels			N/A					N/A	
O	Safety and Security			N/A	Respond as necessary to law changes				N/A	Restrictions and costs continually increasing
E	Marine Environmental Constraints			N/A					N/A	Tougher everyday to build/rebuild
F	Ability to Finance Needed Improvements			N/A					N/A	Revenue must support capital requirements
T	Vessel Calls/Berth/Year	465	492	NA			600	600	NA	Total vessel calls
Terminal Capacity and Performance										
PO	Berths			N/A	Deepen to 45 Feet				N/A	Working with COE
PO	Cranes and Yard Equipment			N/A	May need 100 scale cranes to compete				N/A	No planned replacements
PO	Open Storage Areas			N/A					N/A	
PO	Structures			N/A					N/A	
PO	Gates			N/A	Respond as necessary to law changes				N/A	Increasing congestion
O	Labor Sufficiency	N/A	N/A	N/A			N/A	N/A	N/A	Jaxport is a landlord port
O	Customs Inspection			N/A					N/A	
O	Safety and Security			N/A	Respond as necessary to law changes				N/A	Restrictions and costs continually increasing
O	Truck/Rail Turn Time			N/A	Rail Yard improvements (SIS funding)				N/A	Beyond Jaxport control
E	Landfill Potential	N/A	N/A	N/A			N/A	N/A	N/A	
E	Land Availability			N/A					N/A	
E	Compatibility With Adjoining Land Uses			N/A					N/A	
F	Ability to Finance Needed Improvements			N/A					N/A	Revenue must support capital requirements
T	TEUs/Storage Acre/Year	591,198	NA	NA			768,557	NA	NA	Total TEU's
T	Tons/Storage Acre/Year	2,818,446	1,318,581	NA			3,663,979	1,582,297	NA	Total Tons
T	Passengers/Year	NA	NA	NA			NA	NA	NA	
Landside Capacity and Performance										
PO	Auto/Bus Access and Parking	N/A	N/A	N/A			N/A	N/A	N/A	
PO	Truck Access and Queuing			N/A	SR 9-A & SR 105 improvments (FDOT)				N/A	
PO	On-Dock Rail Connections and Yards			N/A					N/A	Available on dock but CSX service is slow
PO	Near-Dock Railyards			N/A					N/A	Available but CSX service is slow
O	Safety and Security			N/A	Respond as necessary to law changes				N/A	Restrictions and costs continually increasing
E	Local Congestion and Impacts			N/A					N/A	
F	Ability to Finance Needed Improvements			N/A					N/A	Revenue must support capital requirements
T	Auto/Bus Moves/Day	NA	NA	NA			NA	NA	NA	
T	Truck Moves/Day	800	200	NA			850	250	NA	
T	Railcar Moves/Day	NA	100	NA			NA	150	NA	
Market Connections and Services										
PO	Accessibility to Local Markets			-			Y	Y	-	
PO	Accessibility to Regional Markets			-			G	G	-	
PO	Accessibility to Hinterland Markets			-			Y	Y	-	
PO	Accessibility to W/D/Mfg Clusters			-			Y	Y	-	
E	Ability to Serve New W/D/Mfg Clusters			-			Y	Y	-	
E	Ability to Improve Market Access			-			Y	Y	-	
F	Ability to Finance Needed Improvements			-			R	R	-	
T	Serves Fast-Growing Markets			-			Y	Y	-	
T	Offers Unique/Critical Commodity Capacity			-			Y	Y	-	
T	Offers Unique/Critical Gateway Service						Y	Y	-	

Any Other Key Issues (describe)

Table A-4. Jacksonville (Dames Point)

Florida Seaport Conditions Checklist

Name: Jacksonville Port Authority - Dames Point
Date: 3/15/2006

Type	Element (Physical, Operational, Environmental, Financial, Throughput)	Current Conditions (Assessment -- Green-Yellow-Red) Container	Non-Container	Passenger	Planned Projects Through 2015 Project Description	Status (C, FF, PF, Other)	Future (2015) Conditions (Assessment -- Green-Yellow-Red) Container	Non-Container	Passenger	Comments (if any)
Waterside Capacity and Performance										
P	Channel Dimensions		N/A					N/A		
P	Turning Basin Dimensions		N/A					N/A		
P	Berth Depths		N/A		Deepen to 45 Feet			N/A		Working with COE
P	"Air Draft"		N/A		Relocate cruise terminal			N/A		Bridge and powerline restrictions
O	Navigational Restrictions		N/A					N/A		
O	Conflicts With Non-Port Vessels		N/A					N/A		
O	Safety and Security		N/A		Respond as necessary to law changes			N/A		Restrictions and costs continually increasing
E	Marine Environmental Constraints		N/A					N/A		Tougher everyday to develop
F	Ability to Finance Needed Improvements		N/A					N/A		Revenue must support capital requirements
T	Vessel Calls/Berth/Year	1,000	#	70			2,000	#	225	Total vessel calls
Terminal Capacity and Performance										
PO	Berths		N/A		Deepen to 45 Feet			N/A		Working with COE
PO	Cranes and Yard Equipment		N/A					N/A		No planned replacements, maintenance only
PO	Open Storage Areas		N/A	NA				N/A	N/A	
PO	Structures		N/A		Asian Carrier Terminal and new cruise terminal			N/A		
PO	Gates		N/A		Respond as necessary to law changes			N/A		Increasing congestion
O	Labor Sufficiency	NA	N/A	NA			N/A	N/A	N/A	Jaxport is a landlord port
O	Customs Inspection		N/A					N/A		Beyond Jaxport control
O	Safety and Security		N/A		Respond as necessary to law changes			N/A		Restrictions and costs continually increasing
O	Truck/Rail Turn Time		N/A	N/A				N/A	N/A	
E	Landfill Potential	N/A	N/A	N/A			N/A	N/A	N/A	
E	Land Availability		N/A					N/A		
E	Compatibility With Adjoining Land Uses		N/A					N/A		
F	Ability to Finance Needed Improvements		N/A					N/A		Revenue must support capital requirements
T	TEUs/Storage Acre/Year	400,000	#	#	Berths 3 and 4		800,000	#	#	Total TEU's
T	Tons/Storage Acre/Year	850,000	#	#			1,500,000	#	#	Total Tons
T	Passengers/Year	NA	#	170,000	New cruise terminal		NA	#	500,000	
Landside Capacity and Performance										
PO	Auto/Bus Access and Parking	N/A	N/A				N/A	N/A		
PO	Truck Access and Queuing		N/A	N/A	New Berlin Road widening/SR-9A (SIS Funding)			N/A	N/A	
PO	On-Dock Rail Connections and Yards	N/A	N/A	N/A			N/A	N/A	N/A	
PO	Near-Dock Railyards		N/A	N/A				N/A	N/A	
O	Safety and Security		N/A		Respond as necessary to law changes			N/A		Restrictions and costs continually increasing
E	Local Congestion and Impacts		N/A					N/A		
F	Ability to Finance Needed Improvements		N/A					N/A		Revenue must support capital requirements
T	Auto/Bus Moves/Day	NA	NA	NA			NA	NA	NA	
T	Truck Moves/Day	1,400	NA	NA			2,800	NA	NA	
T	Railcar Moves/Day	NA	NA	NA			NA	NA	NA	
Market Connections and Services										
PO	Accessibility to Local Markets		N/A					N/A		
PO	Accessibility to Regional Markets		N/A					N/A		
PO	Accessibility to Hinterland Markets		N/A					N/A		
PO	Accessibility to W/D/Mfg Clusters		N/A	N/A				N/A	N/A	
E	Ability to Serve New W/D/Mfg Clusters		N/A	N/A				N/A	N/A	
E	Ability to Improve Market Access		N/A					N/A		
F	Ability to Finance Needed Improvements		N/A					N/A		
T	Serves Fast-Growing Markets		N/A					N/A		
T	Offers Unique/Critical Commodity Capacity		N/A	N/A				N/A	N/A	
T	Offers Unique/Critical Gateway Service		N/A	N/A				N/A	N/A	

Any Other Key Issues (describe)

Table A-5. Jacksonville (Talleyrand)

Florida Seaport Conditions Checklist

Name: Jacksonville Port Authority - Talleyrand
Date: 3/15/2006

Type	Element (Physical, Operational, Environmental, Financial, Throughput)	Current Conditions (Assessment -- Green-Yellow-Red) Container	Non-Container	Passenger	Planned Projects Through 2015 Project Description	Status (C, FF, PF, Other)	Future (2015) Conditions (Assessment -- Green-Yellow-Red) Container	Non-Container	Passenger	Comments (if any)
Waterside Capacity and Performance										
P	Channel Dimensions			N/A	COE Dredging Project				N/A	
P	Turning Basin Dimensions			N/A					N/A	Larger ships will create problems
P	Berth Depths			N/A	Deepen to 40 Feet (COE & JPA funding)				N/A	Working with COE
P	"Air Draft"			N/A					N/A	Potential issue
O	Navigational Restrictions			N/A					N/A	
O	Conflicts With Non-Port Vessels			N/A					N/A	
O	Safety and Security			N/A	Respond as necessary to law changes				N/A	Restrictions and costs continually increasing
E	Marine Environmental Constraints			N/A					N/A	Tougher everyday to build/rebuild
F	Ability to Finance Needed Improvements			N/A					N/A	Revenue must support capital requirements
T	Vessel Calls/Berth/Year	375	253	NA			450	350	NA	Total vessel calls
Terminal Capacity and Performance										
PO	Berths			N/A	Deepen to 40 Feet				N/A	Working with COE
PO	Cranes and Yard Equipment			N/A	May need 100 scale cranes to compete				N/A	No planned replacements
PO	Open Storage Areas			N/A					N/A	
PO	Structures			N/A					N/A	
PO	Gates			N/A	Respond as necessary to law changes				N/A	Increasing congestion
O	Labor Sufficiency	N/A	N/A	N/A			N/A	N/A	N/A	Jaxport is a landlord port
O	Customs Inspection			N/A					N/A	
O	Safety and Security			N/A	Respond as necessary to law changes				N/A	Restrictions and costs continually increasing
O	Truck/Rail Turn Time			N/A					N/A	Beyond Jaxport control
E	Landfill Potential	N/A	N/A	N/A			N/A	N/A	N/A	
E	Land Availability			N/A					N/A	
E	Compatibility With Adjoining Land Uses			N/A					N/A	
F	Ability to Finance Needed Improvements			N/A					N/A	Revenue must support capital requirements
T	TEUs/Storage Acre/Year	186,120	NA	NA			225,000	NA	NA	Total TEU's
T	Tons/Storage Acre/Year	1,348,936	912,189	NA			1,618,732	1,094,626	NA	Total Tons
T	Passengers/Year	NA	NA	NA			NA	NA	NA	
Landside Capacity and Performance										
PO	Auto/Bus Access and Parking	N/A	N/A	N/A			N/A	N/A	N/A	
PO	Truck Access and Queuing			N/A	MLK & 21st Street Project (FDOT)				N/A	Very limited areas
PO	On-Dock Rail Connections and Yards			N/A					N/A	
PO	Near-Dock Railyards			N/A	Rail Yard improvements (SIS funding)				N/A	05/06 & 06/07 Funding
O	Safety and Security			N/A	Respond as necessary to law changes				N/A	Restrictions and costs continually increasing
E	Local Congestion and Impacts			N/A	Studying Talleyrand Avenue relocation				N/A	
F	Ability to Finance Needed Improvements			N/A					N/A	Revenue must support capital requirements
T	Auto/Bus Moves/Day	NA	NA	NA			NA	NA	NA	
T	Truck Moves/Day	300	240	NA			400	340	NA	
T	Railcar Moves/Day	88	60	NA			100	85	NA	
Market Connections and Services										
PO	Accessibility to Local Markets			N/A					N/A	
PO	Accessibility to Regional Markets			N/A					N/A	
PO	Accessibility to Hinterland Markets			N/A					N/A	
PO	Accessibility to W/D/Mfg Clusters			N/A					N/A	
E	Ability to Serve New W/D/Mfg Clusters			N/A					N/A	
E	Ability to Improve Market Access			N/A					N/A	
F	Ability to Finance Needed Improvements			N/A					N/A	
T	Serves Fast-Growing Markets			N/A					N/A	
T	Offers Unique/Critical Commodity Capacity			N/A					N/A	
T	Offers Unique/Critical Gateway Service			N/A					N/A	

Any Other Key Issues (describe)

Table A-6. Manatee

Florida Seaport Conditions Checklist

Name: Manatee
Date: 24-Mar-06

Type	Element (Physical, Operational, Environmental, Financial, Throughput)	Current Conditions (Assessment -- Green-Yellow-Red) Container	Non-Container	Passenger	Planned Projects Through 2015 Project Description	Status (C, FF, PF, Other)	Future (2015) Conditions (Assessment -- Green-Yellow-Red) Container	Non-Container	Passenger	Comments (if any)
Waterside Capacity and Performance										
P	Channel Dimensions									
P	Turning Basin Dimensions									
P	Berth Depths									
P	"Air Draft"									
O	Navigational Restrictions									
O	Conflicts With Non-Port Vessels									
O	Safety and Security									
E	Marine Environmental Constraints									
F	Ability to Finance Needed Improvements									
T	Vessel Calls/Berth/Year	150	500	n/a			#	#	#	
Terminal Capacity and Performance										
PO	Berths									
PO	Cranes and Yard Equipment			N/a					N/a	
PO	Open Storage Areas			N/a					N/a	
PO	Structures									
PO	Gates									
O	Labor Sufficiency									
O	Customs Inspection									
O	Safety and Security									
O	Truck/Rail Turn Time			N/a					N/a	
E	Landfill Potential			N/a					N/a	
E	Land Availability			N/a					N/a	
E	Compatibility With Adjoining Land Uses									
F	Ability to Finance Needed Improvements									
T	TEUs/Storage Acre/Year	#	#	N/a			#	#	N/a	
T	Tons/Storage Acre/Year	#	#	N/a			#	#	N/a	
T	Passengers/Year	#	#	n/a			#	#	n/a	
Landside Capacity and Performance										
PO	Auto/Bus Access and Parking									
PO	Truck Access and Queuing									
PO	On-Dock Rail Connections and Yards									
PO	Near-Dock Railyards									
O	Safety and Security									
E	Local Congestion and Impacts									
F	Ability to Finance Needed Improvements									
T	Auto/Bus Moves/Day	#	n/a	n/a			#	#	#	
T	Truck Moves/Day	#	2000	n/a			#	#	#	
T	Railcar Moves/Day	#	240	n/a			#	#	#	
Market Connections and Services										
PO	Accessibility to Local Markets									
PO	Accessibility to Regional Markets									
PO	Accessibility to Hinterland Markets									
PO	Accessibility to W/D/Mfg Clusters									
E	Ability to Serve New W/D/Mfg Clusters									
E	Ability to Improve Market Access									
F	Ability to Finance Needed Improvements									
T	Serves Fast-Growing Markets									
T	Offers Unique/Critical Commodity Capacity									
T	Offers Unique/Critical Gateway Service									

Any Other Key Issues (describe)

Table A-7. Miami

Florida Seaport Conditions Checklist

Name: Port of Miami
Date: 16-Mar-06

Type	Element (Physical, Operational, Environmental, Financial, Throughput)	Current Conditions (Assessment -- Green-Yellow-Red) Container	Current Conditions Non-Container	Current Conditions Passenger	Planned Projects Through 2015 Project Description	Planned Projects Through 2015 Status (C, FF, PF, Other)	Future (2015) Conditions (Assessment -- Green-Yellow-Red) Container	Future (2015) Conditions Non-Container	Future (2015) Conditions Passenger	Comments (if any)
Waterside Capacity and Performance										
P	Channel Dimensions				Please see schedule with CIP					
P	Turning Basin Dimensions									
P	Berth Depths									
P	"Air Draft"	N/A	N/A	N/A						
O	Navigational Restrictions	N/A	N/A	N/A						
O	Conflicts With Non-Port Vessels	N/A	N/A	N/A						
O	Safety and Security									
E	Marine Environmental Constraints									
F	Ability to Finance Needed Improvements									
T	Vessel Calls/Berth/Year	2147	incl in cont #	734			3500	N/A	1000	
Terminal Capacity and Performance										
PO	Berths				Port of Miami Tunnel - est cost $1.5 Billion					
PO	Cranes and Yard Equipment		N/A	N/A						
PO	Open Storage Areas			N/A						
PO	Structures									
PO	Gates			N/A						
O	Labor Sufficiency									
O	Customs Inspection									
O	Safety and Security									
O	Truck/Rail Turn Time									
E	Landfill Potential									
E	Land Availability		N/A							
E	Compatibility With Adjoining Land Uses		N/A							
F	Ability to Finance Needed Improvements		N/A							
T	TEUs/Storage Acre/Year	1054462	N/A	N/A			1522611	N/A	N/A	
T	Tons/Storage Acre/Year (non container includes trailer)	5242692	4231160	N/A			13046101	#	N/A	
T	Passengers/Year	N/A	N/A	3700000			N/A	N/A	5093000	
Landside Capacity and Performance										
PO	Auto/Bus Access and Parking									
PO	Truck Access and Queuing			N/A						
PO	On-Dock Rail Connections and Yards			N/A						
PO	Near-Dock Railyards			N/A						
O	Safety and Security									
E	Local Congestion and Impacts									
F	Ability to Finance Needed Improvements									
T	Auto/Bus Moves/Day	N/A	3652	18745			N/A	5084	26094	
T	Truck Moves/Day	3525	incl in container	N/A			4907	included	N/A	
T	Railcar Moves/Day	N/A	very few	N/A			N/A	few	N/A	
Market Connections and Services										
PO	Accessibility to Local Markets									
PO	Accessibility to Regional Markets									
PO	Accessibility to Hinterland Markets									
PO	Accessibility to W/D/Mfg Clusters			N/A						
E	Ability to Serve New W/D/Mfg Clusters			N/A						
E	Ability to Improve Market Access									
F	Ability to Finance Needed Improvements									
T	Serves Fast-Growing Markets									
T	Offers Unique/Critical Commodity Capacity	N/A	N/A	N/A						
T	Offers Unique/Critical Gateway Service	N/A	N/A	N/A						

Any Other Key Issues (describe)

Table A-8. Palm Beach

Florida Seaport Conditions Checklist

Name: Port of Palm Beach District
Date: March 20, 2006

Type	Element (Physical, Operational, Environmental, Financial, Throughput)	Current Conditions (Assessment -- Green-Yellow-Red) Container	Non-Container	Passenger	Planned Projects Through 2015 Project Description / Status (C, FF, PF, Other)	Future (2015) Conditions (Assessment -- Green-Yellow-Red) Container	Non-Container	Passenger	Comments (if any)
Waterside Capacity and Performance									
P	Channel Dimensions				Dredging survey and channel modification FF				
P	Turning Basin Dimensions				South Gate acces to SR 710/US1 connector FF				
P	Berth Depths				South Port Container Complex Phase 1&2 UF				
P	"Air Draft"				On Port intermodal rail improvements UF				
O	Navigational Restrictions				Off Port intermodal rail improvements UF				
O	Conflicts With Non-Port Vessels				Slip 3 reconstruction and modifications PF				
O	Safety and Security								
E	Marine Environmental Constraints								
F	Ability to Finance Needed Improvements								
T	Vessel Calls/Berth/Year	1100	550	1300		1700	1200	1300	
Terminal Capacity and Performance					**Conditions and projected volumes are based on completion of ALL capital improvement projects in Port Master Plan				
PO	Berths								
PO	Cranes and Yard Equipment								
PO	Open Storage Areas								
PO	Structures								
PO	Gates								
O	Labor Sufficiency								
O	Customs Inspection								
O	Safety and Security								
O	Truck/Rail Turn Time								
E	Landfill Potential								
E	Land Availability								
E	Compatibility With Adjoining Land Uses								
F	Ability to Finance Needed Improvements								
T	TEUs/Storage Acre/Year	14,606	N/A	N/A		#	#	#	*Rates per acre would remain similar with some increase in bulk and breakbulk cargo, but volumes would increase by as much as 500% in bulk and breakbulk and 200% container.
T	Tons/Storage Acre/Year	65,000	161000	N/A		#	#	#	
T	Passengers/Year	N/A	N/A	270,000		N/A	N/A	#	
Landside Capacity and Performance									
PO	Auto/Bus Access and Parking								
PO	Truck Access and Queuing								
PO	On-Dock Rail Connections and Yards			N/A				N/A	
PO	Near-Dock Railyards			N/A				N/A	
O	Safety and Security								
E	Local Congestion and Impacts								
F	Ability to Finance Needed Improvements								
T	Auto/Bus Moves/Day	N/A	300	600		N/A	N/A	N/A	
T	Truck Moves/Day	700	350	N/A		1600	800	N/A	
T	Railcar Moves/Day	55	6	N/A		90	80	N/A	This does not include the potential of trade with Cuba and other global market trading partners.
Market Connections and Services					* Reflected are market conditions only. Connections to markets are inadequate by rail and truck.				
PO	Accessibility to Local Markets								
PO	Accessibility to Regional Markets								
PO	Accessibility to Hinterland Markets								
PO	Accessibility to W/D/Mfg Clusters			N/A				N/A	
E	Ability to Serve New W/D/Mfg Clusters					N/A	N/A	N/A	
E	Ability to Improve Market Access					N/A	N/A	N/A	
F	Ability to Finance Needed Improvements					N/A	N/A	N/A	
T	Serves Fast-Growing Markets					N/A	N/A	N/A	
T	Offers Unique/Critical Commodity Capacity	N/A	N/A	N/A		N/A	N/A	N/A	
T	Offers Unique/Critical Gateway Service	N/A	N/A	N/A		N/A	N/A	N/A	
Any Other Key Issues (describe)	Inability ascertain who potential new customers are								This does not include the Inland Port Concept which is just beginning a feasiblity study. Factors for growth in bulk and breakbulk would increase volumes by six to eight times.

Table A-9. Panama City

Florida Seaport Conditions Checklist

Name: Panama City
Date: 3/21/2006

Type	Element (Physical, Operational, Environmental, Financial, Throughput)	Current Conditions (Assessment -- Green-Yellow-Red) Container	Non-Container	Passenger	Planned Projects Through 2015 Project Description	Status (C, FF, PF, Other)	Future (2015) Conditions (Assessment -- Green-Yellow-Red) Container	Non-Container	Passenger	Comments (if any)
Waterside Capacity and Performance										
P	Channel Dimensions			NA	NONE					CRUISE ACTIVITY EXPECTED WITHIN 15 YRS
P	Turning Basin Dimensions			NA	NONE					
P	Berth Depths			NA	DEEPER ADDITIONAL BERTHS					
P	"Air Draft"			NA	NA (NO BRIDGES)					
O	Navigational Restrictions			NA						
O	Conflicts With Non-Port Vessels			NA						
O	Safety and Security			NA						
E	Marine Environmental Constraints			NA						
F	Ability to Finance Needed Improvements			NA						
T	Vessel Calls/Berth/Year	125	#	#			#	#	#	
Terminal Capacity and Performance										
PO	Berths			NA	FILL IN BARGE SLIP FOR ADDITIONAL DEEP WATER ACTIVITY					
PO	Cranes and Yard Equipment			NA	ADD MOBILE HARBOR CRANE & REACH STACKERS					
PO	Open Storage Areas			NA	ADD 4 ACRES PAVED AREA				NA	
PO	Structures			NA	NONE					
PO	Gates			NA	ADD INTERCHANGE GATE					
O	Labor Sufficiency			NA						
O	Customs Inspection			NA						
O	Safety and Security			NA						
O	Truck/Rail Turn Time			NA					NA	
E	Landfill Potential			NA						
E	Land Availability			NA						
E	Compatibility With Adjoining Land Uses			NA						
F	Ability to Finance Needed Improvements			NA						
T	TEUs/Storage Acre/Year	5,000	50,000	#			#	#	#	
T	Tons/Storage Acre/Year	#	#	#			#	#	#	
T	Passengers/Year	#	#	#			#	#	#	
Landside Capacity and Performance										
PO	Auto/Bus Access and Parking			NA	EXPAND EMPLOYEE PARKING					
PO	Truck Access and Queuing			NA	ADD QUEUING LANES					
PO	On-Dock Rail Connections and Yards			NA	ADD BULK RAIL AND ENHANCE EXISTING RAIL YARD					
PO	Near-Dock Railyards			NA	EXPANSION NEEDED/NONE PLANNED					NEW RAIL YARD EXPECTED
O	Safety and Security			NA						
E	Local Congestion and Impacts			NA	TEMPORARY IMPROVEMENT TO PORT ENTRANCE PLANNED					POOR PLANNING RESULTS
F	Ability to Finance Needed Improvements			NA						PORT WILL BE BUILT-OUT
T	Auto/Bus Moves/Day	#	#	#			#	#	#	
T	Truck Moves/Day	#	#	#			#	#	#	
T	Railcar Moves/Day	#	#	#			#	#	#	
Market Connections and Services										WHILE WE EXPECT LOCAL AND REGIONAL CORRIDORS TO BE MORE CONGESTED --- WE BELIEVE, RELATIVE TO ALL OTHER PORTS, WE WILL BE IN BASICALLY THE SAME POSITION AS WE ARE IN TODAY.
PO	Accessibility to Local Markets			NA					NA	
PO	Accessibility to Regional Markets			NA					NA	
PO	Accessibility to Hinterland Markets			NA	SR 77 & 79 TO BE 4-LANED				NA	
PO	Accessibility to W/D/Mfg Clusters			NA	DC'S COMING INTO AREA				NA	
E	Ability to Serve New W/D/Mfg Clusters			NA					NA	
E	Ability to Improve Market Access			NA					NA	
F	Ability to Finance Needed Improvements			NA					NA	
T	Serves Fast-Growing Markets	YES	YES	NA			YES	YES	NA	
T	Offers Unique/Critical Commodity Capacity	YES	YES	NA			YES	YES	NA	
T	Offers Unique/Critical Gateway Service	YES	YES	NA			YES	YES	NA	

Any Other Key Issues (describe)

Table A-10. Pensacola

Florida Seaport Conditions Checklist

Name: Pensacola
Date: 3/14/2006

Type	Element (Physical, Operational, Environmental, Financial, Throughput)	Current Conditions (Assessment -- Green-Yellow-Red) Container	Non-Container	Passenger	Planned Projects Through 2015 Project Description	Status (C, FF, PF, Other)	Future (2015) Conditions (Assessment -- Green-Yellow-Red) Container	Non-Container	Passenger	Comments (if any)
Waterside Capacity and Performance										
P	Channel Dimensions				Deepen depth to 36'	Other - Not Yet Funded				
P	Turning Basin Dimensions				Deepen depth to 36'	Other - Not Yet Funded				
P	Berth Depths				Deepen depth to 36'	Other - Not Yet Funded				
P	"Air Draft"									
O	Navigational Restrictions									
O	Conflicts With Non-Port Vessels									
O	Safety and Security									
E	Marine Environmental Constraints									
F	Ability to Finance Needed Improvements									
T	Vessel Calls/Berth/Year (95 vessels per year)	90	5				#	#	#	
Terminal Capacity and Performance										
PO	Berths									
PO	Cranes and Yard Equipment									
PO	Open Storage Areas									
PO	Structures									
PO	Gates									
O	Labor Sufficiency									
O	Customs Inspection									
O	Safety and Security									
O	Truck/Rail Turn Time									
E	Landfill Potential									
E	Land Availability									
E	Compatibility With Adjoining Land Uses									
F	Ability to Finance Needed Improvements									
T	TEUs/Storage Acre/Year (530 TEUs per year)	530					#	#	#	
T	Tons/Storage Acre/Year (494,000 tons per year)	50000	454000				#	#	#	
T	Passengers/Year	0					#	#	#	
Landside Capacity and Performance										
PO	Auto/Bus Access and Parking									
PO	Truck Access and Queuing									
PO	On-Dock Rail Connections and Yards									
PO	Near-Dock Railyards									
O	Safety and Security									
E	Local Congestion and Impacts									
F	Ability to Finance Needed Improvements									
T	Auto/Bus Moves/Day						#	#	#	
T	Truck Moves/Day (28,000 per year/76 per day)		76				#	#	#	
T	Railcar Moves/Day (420 per year/35 per day)		35				#	#	#	
Market Connections and Services										
PO	Accessibility to Local Markets									
PO	Accessibility to Regional Markets									
PO	Accessibility to Hinterland Markets									
PO	Accessibility to W/D/Mfg Clusters									
E	Ability to Serve New W/D/Mfg Clusters									
E	Ability to Improve Market Access									
F	Ability to Finance Needed Improvements									
T	Serves Fast-Growing Markets									
T	Offers Unique/Critical Commodity Capacity									
T	Offers Unique/Critical Gateway Service									

Any Other Key Issues (describe)

Table A-11. St. Joe

Florida Seaport Conditions Checklist

Name: Port St. Joe, FL
Date: 17-Mar-06

COMMENTS: Port St. Joe is non-operational and is in the process of acquiring land on which to develop port operations. As such, much of what you ask is not applicable. We anticipate being a general cargo facility with limited to no opportunity for containers or cruise.

Type	Element (Physical, Operational, Environmental, Financial, Throughput)	Current Conditions (Assessment -- Green-Yellow-Red) Container	Non-Container	Passenger	Planned Projects Through 2015 Project Description	Status (C, FF, PF, Other)	Future (2015) Conditions (Assessment -- Green-Yellow-Red) Container	Non-Container	Passenger	Comments (if any)
Waterside Capacity and Performance										
P	Channel Dimensions				Deepened channel					
P	Turning Basin Dimensions				New turning basin					
P	Berth Depths				New berths					
P	"Air Draft"				New berths "outside" of bridge					
O	Navigational Restrictions									
O	Conflicts With Non-Port Vessels									
O	Safety and Security				New security plan for new facilities					
E	Marine Environmental Constraints									
F	Ability to Finance Needed Improvements				State, Fed., private funds being sought					
T	Vessel Calls/Berth/Year	#	0	#			#	#	#	
Terminal Capacity and Performance										
PO	Berths				New berths					
PO	Cranes and Yard Equipment				To be acquired as traffic demands					
PO	Open Storage Areas									
PO	Structures									
PO	Gates									
O	Labor Sufficiency									
O	Customs Inspection									
O	Safety and Security									
O	Truck/Rail Turn Time									
E	Landfill Potential									
E	Land Availability									
E	Compatibility With Adjoining Land Uses									
F	Ability to Finance Needed Improvements				State, Fed., private funds being sought					
T	TEUs/Storage Acre/Year	#	0	#			#	#	#	
T	Tons/Storage Acre/Year	#	0	#	To be determined		#	#	#	
T	Passengers/Year	#	0	#			#	#	#	
Landside Capacity and Performance										
PO	Auto/Bus Access and Parking									
PO	Truck Access and Queuing									
PO	On-Dock Rail Connections and Yards				New rail connectors to be built					
PO	Near-Dock Railyards									
O	Safety and Security									
E	Local Congestion and Impacts									
F	Ability to Finance Needed Improvements									
T	Auto/Bus Moves/Day	#	0	#			#	#	#	
T	Truck Moves/Day	#	0	#			#	#	#	
T	Railcar Moves/Day	#	0	#			#	#	#	
Market Connections and Services										
PO	Accessibility to Local Markets									
PO	Accessibility to Regional Markets									
PO	Accessibility to Hinterland Markets									
PO	Accessibility to W/D/Mfg Clusters									
E	Ability to Serve New W/D/Mfg Clusters									
E	Ability to Improve Market Access									
F	Ability to Finance Needed Improvements									
T	Serves Fast-Growing Markets									
T	Offers Unique/Critical Commodity Capacity									
T	Offers Unique/Critical Gateway Service									

Any Other Key Issues (describe)

Table A-12. Tampa

Florida Seaport Conditions Checklist

Name: Ram Kancharla, Sr. Dir. Planning & Dev.- Tampa Port Authority
Date: 16-Mar-06

Type	Element (Physical, Operational, Environmental, Financial, Throughput)	Current Conditions (Assessment -- Green-Yellow-Red) Container	Non-Container	Passenger	Planned Projects Through 2015 Project Description	Status (C, FF, PF, Other)	Future (2015) Conditions (Assessment -- Green-Yellow-Red) Container	Non-Container	Passenger	Comments (if any)
Waterside Capacity and Performance										
P	Channel Dimensions	R	R	R	Cut B: Port Sutton Channel, Big Bend; East Port	PF				Cut B - Channel
P	Turning Basin Dimensions	G	G	G	Eastport	PF	Y	Y	Y	
P	Berth Depths	G	Y	G	Pt. Sutton, Redwing, Eastport	PF	G	Y	G	Drybulk vessels - Pt. Sutton; Pt. Redwing
P	"Air Draft"	G	G	Y	Sky Bridge limit - 190 ft. airdraft		G	G	Y	Skyway Bridge
O	Navigational Restrictions	Y	Y	Y	VTS, Cut B, Anchorage Areas	PF	Y	Y	Y	Protocal vessels, safety zones
O	Conflicts With Non-Port Vessels	G	G	G	limited		G	G	G	
O	Safety and Security	Y	Y	Y	changing guidelines/increase		Y	Y	Y	inadequate assets
E	Marine Environmental Constraints	Y	Y	Y	alternative disposal sites/additional conditions		R	R	R	increasing conditions and constraints by reg. Agencies
F	Ability to Finance Needed Improvements	y	y	Y	increased construction costs		Y	Y	Y	continue leverage of port funds.
T	Vessel Calls/Berth/Year	see note			port/public berths=2200/49=44.8 per berth/per year		see note			all berths 3688/84=44 per berth/per year
Terminal Capacity and Performance										
PO	Berths	G	Y	G	REK pier	PF	G	Y	G	ship repair facilities.
PO	Cranes and Yard Equipment	G	G	G	sufficient for current projections		G	G	G	
PO	Open Storage Areas	Y	Y	Y	addl. storage	PF	Y	Y	Y	
PO	Structures	G	Y	Y	addl. facilities needed: warehouses:	PF	G	Y	Y	
PO	Gates	Y	Y	G	new cont. gate; Pt. Sutton Rd.; Redwing		G	G	G	
O	Labor Sufficiency	G	Y	G	shipyard labor	PF	G	Y	G	shipyard labor
O	Customs Inspection	Y	Y	Y	escessive facilities					excessive facilities req.
O	Safety and Security	Y	Y	G	changing guidelines/potential increases					additional assets needed
O	Truck/Rail Turn Time	G	G	G	Hookers Point; Eastport, Redwing	PF	Y	Y	Y	increased movements
E	Landfill Potential	Y	Y	Y	Eastport, Pendola Point		Y	Y	Y	Eastport, Pendola Point
E	Land Availability	Y	Y	Y	limited	PF	Y	Y	Y	continued expansion of port operations
E	Compatibility With Adjoining Land Uses	Y	Y	Y	on-compatible uses/conflicts		Y	Y	Y	proximity to res. & non-comp uses
F	Ability to Finance Needed Improvements	Y	Y	Y	need to leverage port revenues		Y	Y	Y	increased cost of construction
T	TEUs/Storage Acre/Year	1,000	N/A	N/A	approximate		2500	N/A	N/A	projected future TEU's/acre
T	Tons/Storage Acre/Year	N/A	10,000	N/A	breakbulk		N/A	12,000	N/A	breakbulk
T	Passengers/Year	NA	N/A	771,000	approximate		N/A	N/A	1,500,000	breakbulk 930,000 tons FY 05
Landside Capacity and Performance										
PO	Auto/Bus Access and Parking	N/A	N/A	Y			N/A	N/A	Y	
PO	Truck Access and Queuing	Y	Y	R	Hookers Point entrance		Y	Y	R	
PO	On-Dock Rail Connections and Yards	Y	G	N/A	Hookers Point; Eastport, Redwing		Y	Y	N/A	
PO	Near-Dock Railyards	Y	Y	N/A	at capacity		Y	Y	N/A	
O	Safety and Security	G/Y	G/Y	G/Y			G/Y	G/Y	G/Y	
E	Local Congestion and Impacts	Y	Y	Y	Crosstown Connector, Causeway Blvd., Railroad crossings		Y	Y	Y	continued expansion of port operations & adjacent non-port growth
F	Ability to Finance Needed Improvements	Y	Y	Y	increase land and construction cost					
T	Auto/Bus Moves/Day	N/A	10,300	1,000			N/A	14,000	1,500	on cruise days; projected traffic
T	Truck Moves/Day	nominal	11,200	N/A			nominal	17,000	N/A	projected traffic
T	Railcar Moves/Day	N/A	850	N/A			N/A	1,025	N/A	
Market Connections and Services										
PO	Accessibility to Local Markets	G	G	G	crosstown, Causeway		G	G	G	
PO	Accessibility to Regional Markets	G	G	G	good local roadways relative		G	G	G	major improvements underway - FDOT
PO	Accessibility to Hinterland Markets	Y	Y	G	good regional roads - ongoing improvement		Y	Y	Y	railroad
PO	Accessibility to W/D/Mfg Clusters	G	G	G	central location		Y/G	G	G	
E	Ability to Serve New W/D/Mfg Clusters	G	G	G	good location		G	G	G	
E	Ability to Improve Market Access	G	G	G	good opportunities		G	G	G	
F	Ability to Finance Needed Improvements	Y	Y	Y	creative, alternatives state/federal		Y	Y	Y	increased cost of construction
T	Serves Fast-Growing Markets	G	G	G			G	G	G	
T	Offers Unique/Critical Commodity Capacity	G	G	N/A			G	G	N/A	
T	Offers Unique/Critical Gateway Service	G	G				G	G		

Any Other Key Issues (describe)