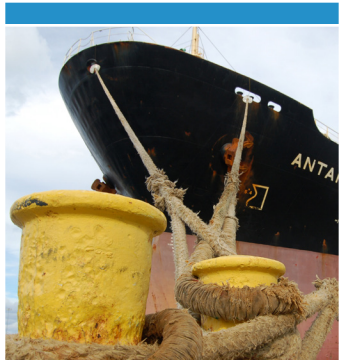


EXECUTIVE SUMMARY

FLORIDA SEAPORT & WATERWAYS SYSTEM PLANS

2015

AUGUST | 2016



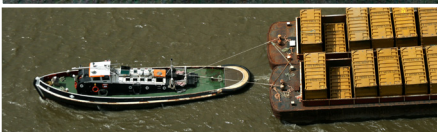


FLORIDA IS A GLOBAL GATEWAY

Florida provides world-class facilities and services to enhance domestic and international trade and tourism through partnered investments in waterways, seaport facilities, and intermodal transportation networks. These infrastructure improvements lead to public and private sector investments, new and continued partnerships, job growth, and increased efficiency, productivity, and prosperity.

This executive summary covers both the Florida Seaport System Plan and the Florida Waterways System Plan. This is the first time the Florida Department of Transportation (FDOT) has completed both plans in the same five-year planning horizon. Highlights of both plans are presented here, illustrating the seaport and waterways conditions, challenges, trends, strategies, initiatives, and areas of focus for the FDOT Seaport and Waterways Office. The plans also provide a look back at the history of the Florida seaport and waterways system and insight into the economic contribution and partnerships which have spurred the dynamic growth of seaport and waterway development, waterborne commerce, international trade, and the cruise industry in Florida.



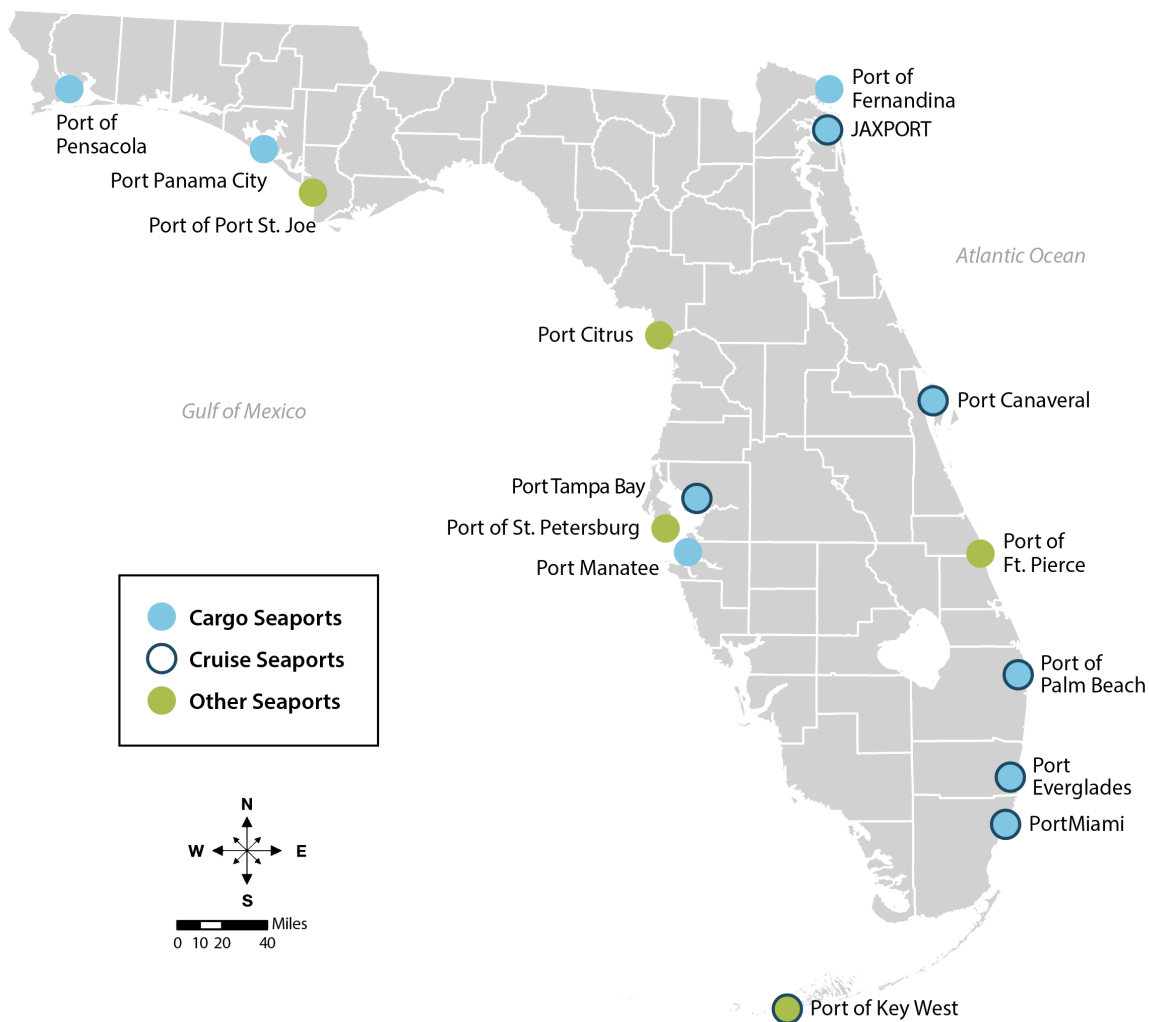


2015 FLORIDA SEAPORT SYSTEM PLAN

Florida is home to over 20 million residents and they shared the state's resources with nearly 105 million visitors in 2015. Continuing to provide the goods, services, and jobs required to sustain this population and plan for future growth presents a tremendous challenge for state leaders, businesses, and communities. Florida's 15 public seaports, shown in the map below, are recognized as significant contributors to the dynamic growth of the state's economy and facilitate the movement of goods and cruise passengers.

SEAPORT SYSTEM VISION

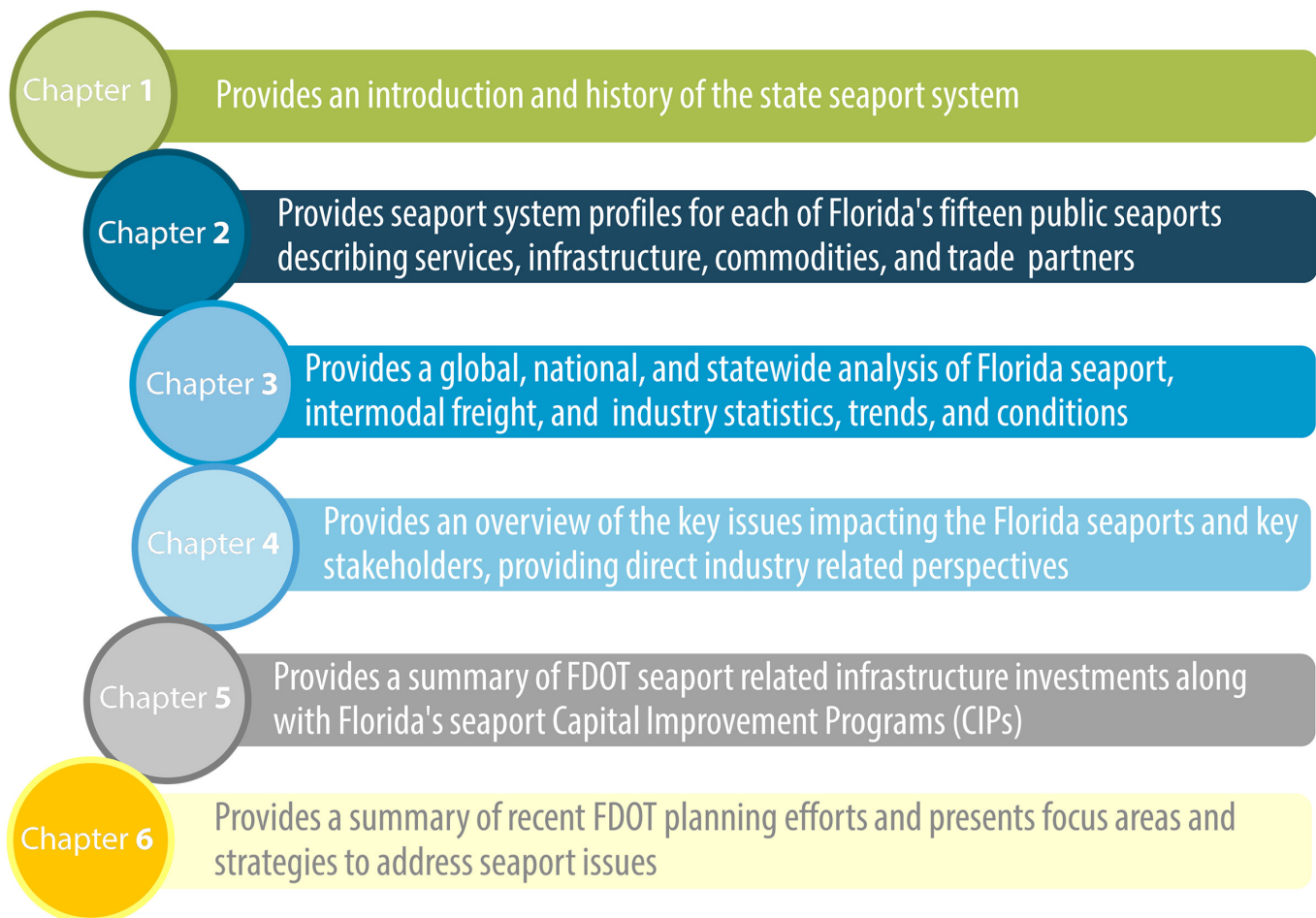
Florida's seaports continue to grow as efficient and attractive global gateways for passengers and freight. Florida's cruise ports continually strengthen and expand their leadership role as the largest passenger cruise market in the world. Florida's container ports consistently increase their share of Florida goods previously moving through competing trade routes. Furthermore, Florida's waterways, seaport system, and intermodal network continue to attract large-scale manufacturing and logistics services, as well as marine commercial and recreational activities, which further strengthen and diversify Florida's economy.



2015 FLORIDA SEAPORT SYSTEM PLAN STRUCTURE AND DEVELOPMENT

The 2015 Florida Seaport System Plan is an update of the 2010 FDOT Seaport System Plan. This plan considers the information in the 2010 plan, as well as subsequent industry developments and planning efforts. This plan incorporates FDOT's prior and current planning efforts as they pertain to seaports. The focus areas and strategies presented in this plan provide insight into how the state's seaport program seeks to implement the planning policies of the Florida Transportation Plan (FTP), the Strategic Intermodal System (SIS) Plan, and the Freight Mobility and Trade Plan (FMTP).

The development of this plan relied heavily on industry research, data analysis, and stakeholder input to determine the current condition of Florida's seaport system and the critical issues that are impacting the seaports, tenants, and direct users. Interviews held with key stakeholders were instrumental in identifying the current conditions, challenges, and opportunities affecting Florida's seaports. Many of the stakeholders that participated in plan development included seaport tenants and users who have detailed knowledge of daily operations and conditions. The focus areas and strategies in this plan are strongly based on these identified issues, trends, and conditions. The structure of the plan is outlined in the info-graphic below.



SUCCESS OF THE FLORIDA SEAPORT SYSTEM

There are many factors that contribute to the success of the Florida Seaport System. These factors include:

- Geographical location in the middle of the North-South and East-West trade lanes,
- Proximity to Caribbean and Mid-Atlantic island markets,
- A large and growing consumer and visitor population,
- Length of shoreline on both the Atlantic Ocean and Gulf of Mexico Coasts,
- The professional management of the seaports and local government boards,
- Significant state, local, and private sector transportation industry investments on-port and off- port,
- Environmental stewardship of the ports and their local communities,
- Favorable business climate,
- A year-round shipping season,
- Strategic intermodal system of highways, interstates, and Class I railroads connecting to the ports, and
- A financial infrastructure to support the system.



FLORIDA SEAPORTS BY THE NUMBERS - 2015



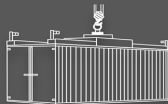
15 Public Seaports supporting cargo, cruise, and other industry sectors.



10 Container Seaports with service to Mexico, the Caribbean, Central and South America, Africa, Europe, the Middle East, Australia, and Asia.



10 of the top 12 ocean carriers call on Florida ports.



3.5 million TEUs crossed the docks of Florida's ports utilizing the state's seaport infrastructure, highway and rail networks.



15.2 million revenue cruise passengers which embarked and disembarked through 7 cruise ports.



Home to the 3 busiest cruise ports in the world and the largest passenger cruise market in the world.



Carnival, Disney, Royal Caribbean, and Norwegian Cruise Lines are all headquartered in Florida.



9 bulk cargo ports, handling 84.7 million tons of dry and liquid bulk cargos.



4 Florida ports were listed in the top 10 of fastest growing export ports by the JOC. Miami and Palm Beach tied for 2nd, Everglades was 7th, and JAXPORT 8th.



Miami is ranked by the JOC as the fastest growing large U.S. Container Port for all of 2015.



103 million tons of total cargo including dry bulk such as cement, aggregate, and fertilizers; liquid bulk such as petroleum, fuels, and oils; breakbulk such as lumber, bananas, and steel; general cargo such as motor vehicles; and, project cargo such as generators and containerized cargos.



FLORIDA SEAPORT SYSTEM SUMMARY

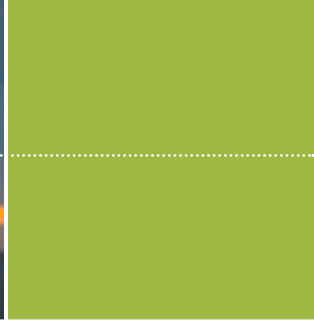
Florida's 15 public seaports are huge economic drivers for the state. As a system, Florida's seaports contribute nearly \$100 billion to the state's economy and support 700,000 jobs throughout the state. They each are unique with a wide range of cargo crossing their docks, including automobiles, steel, petroleum, copper, cement, lumber, paper, furniture, computer technology and electronics, and fresh fruit and produce products. Currently, the world's top three busiest cruise ports are in Florida. Each seaport is different, varying in size, location, and capability; however, collectively, all 15 seaports significantly enhance the state's economy by facilitating the movement of people and freight in an efficient and secure manner. They serve as a network of transportation hubs, linking Florida to the markets across the globe.



The table below summarizes the Florida seaport system, showing container (in the form of twenty-foot equivalent units, or TEUs), tonnage, trade direction, and passenger information for the period from 2010 through 2015. It provides an overview of what the 15 public seaports do, as a whole.

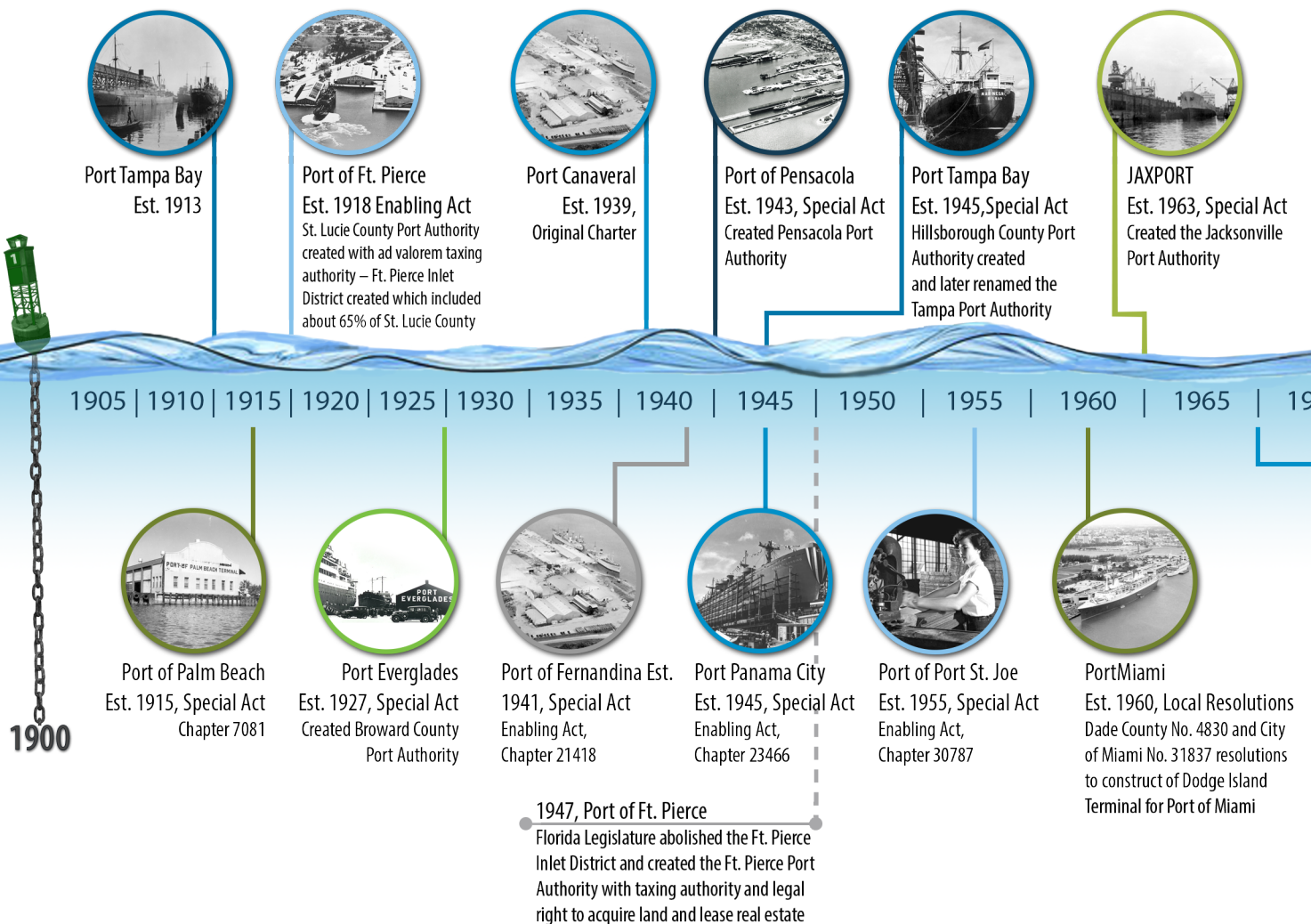


TEUs	2010	2011	2012	2013	2014	2015
Total TEU's	2,844,224	3,025,356	3,094,445	3,215,701	3,343,194	3,541,526
TONNAGE	2010	2011	2012	2013	2014	2015
Total Tons	106,361,422	100,300,718	100,637,049	99,414,541	98,741,503	103,012,059
VALUE	2010	2011	2012	2013	2014	2015
Imports	39,604,650	35,932,270	37,336,914	36,376,367	36,594,914	40,458,288
Exports	18,581,630	19,796,557	20,143,671	19,539,122	18,656,294	18,989,078
Domestic	47,817,210	44,224,029	43,156,464	43,499,053	43,498,295	43,564,694
Total	106,003,490	99,952,856	100,637,049	99,414,541	98,749,503	103,012,060
PASSENGERS	2010	2011	2012	2013	2014	2015
Multi Day	12,328,196	13,171,199	13,763,532	13,654,048	14,922,455	14,745,913
Single Day	682,281	488,030	384,706	416,348	628,884	500,406
Total	13,010,477	13,659,229	14,148,238	14,070,396	15,551,339	15,246,319



FLORIDA SEAPORT SYSTEM MILESTONES... 110 YEARS OF GROWTH AND DEVELOPMENT

The important milestones described below illustrate the development of the Florida seaport system. Yet, with all stories there must be a main theme. For the Florida seaports, this theme has been to incorporate the individual seaport visions and planning efforts into a common plan of action. Developing a one-voice consortium through the Florida Seaport Transportation and Economic Development (FSTED) Council, gaining access to funding resources, and partnering with the state of Florida have driven the history of seaport development in Florida. Recent statutory changes have institutionalized the economic importance of the state's 15 public seaports. Connecting Florida to the global marketplace and creating efficiencies and connectivity at home, through efficient transportation infrastructure and operational expertise, have and will continue to be the most important facets of Florida seaports contribution to economic prosperity.



Notes: Port of Key West was established as part of the City of Key West and dates back to 1828 when Florida's Territorial Government incorporated the City of Key West. Other key events that occurred with respect to Florida ports include growth management legislation and the expansion of international and U.S. trade. More detailed information on related topics and events listed above can be found in Appendix B of the 2015 Seaport System Plan.



1996, (SEMC) Seaport Environmental Management Committee created by FSTED

1996 Bond Program s. 320.20 (3), F.S. provides \$15M Annual Bond Debt Service Providing \$222M Matching Funds for Florida Seaports

2002, MTSA Federal Maritime Transportation Security Act

2012, Chapter 311 Revised

- Increased minimum \$8M to \$15M FSTED Program Funding
- Requires FDOT, FSTED and DEO to Coordinate on Funding Allocations
- Project applications must be consistent with FDOT Seaport System Plan
- Strategic Port Investment Initiative (SPII) of \$35M SIS Funds Annually
- Created \$5M Annual Intermodal Logistics Center (ILC) Program Funds



EPA Clean Water Acts of 1972, 1977, and 1987 focused attention on water quality in harbors and rivers and provided new requirements for water quality standards



Florida Department of Transportation (FDOT) 1995, created Seaport and Waterways Office under Public Transportation Office



2002, PSGP The Federal Department of Homeland Security started the Port Security Grant Program



2011, FDEP Florida Department of Environmental Protection Revised Conceptual Permit to 60 Days



2013, FDOT Published the FMTTP, Freight Mobility and Trade Plan Policy Element



2014, FDOT Published the FMTTP, Freight Mobility and Trade Plan Investment Element

1975 | 1980 | 1985 | 1990 | 1995 | 2000 | 2005 | 2010 | 2015



Port Manatee Est. 1967 Chapter 67-1681 Created the Manatee County Port Authority



Port Citrus Est. 1984, Enabling Act Created Citrus County Port Authority



1990, Chapter 311 (F.S.), Created FSTED program

2000, Seaport Security Advisory Committee

Created by FSTED to assist Florida Ports in Individual Security Assessments Required by 311.12 (F.S.)

1991, FSTED and FPC First 5-Year Seaport Mission Plan Published Annually Thereafter



September 11, 2001, Terrorist Attacks on United States

2007, \$50M Non-Recurring General Revenue Funds Florida Legislature Provides Seaports Funds to Reimburse for Mandated Security Infrastructure Projects

2010, FDOT Florida Seaport System Plan

2008, Florida Waterway System Plan

2013, FDOT Published, Florida's Cruise Industry: A Statewide Perspective



2014, FPC for FSTED Council, Published the Analysis of Global Opportunities and Challenges for Florida Seaports



2014, FDOT Seaport Transportation and Logistics Educational Needs Assessment



2011, DEO Florida Department of Economic Opportunity created combining DCA and OTTED

FY 2013/2014 Seaport Investment Bond Program, FDOT Section 339.0801, F.S. Provides \$10M Annual Debt Service on \$150M Bond Funds for 14 Strategic Seaport Projects



2015

FLORIDA'S POSITION

In 2015, Florida became the third most populous state in the U.S., surpassing New York. Currently, there are over 20 million residents living in Florida. This, combined with the 105 million visitors that come each year, has made the Florida gross domestic product 19th among the world's largest economies.

According to Enterprise Florida, Inc., one out of every five U.S. companies that export goods is located in Florida, exporting nearly \$60 billion in goods made in the U.S. This puts Florida at number seven among the nation's top exporting states. To compliment this, Florida has the second largest foreign-trade zone network in the nation.

These activities are supported by an outstanding multimodal network, including 19 commercial service airports, 2 spaceports, 3,000 miles of freight rail track, over 12,000 miles of highway, and 1,540 miles of waterways.

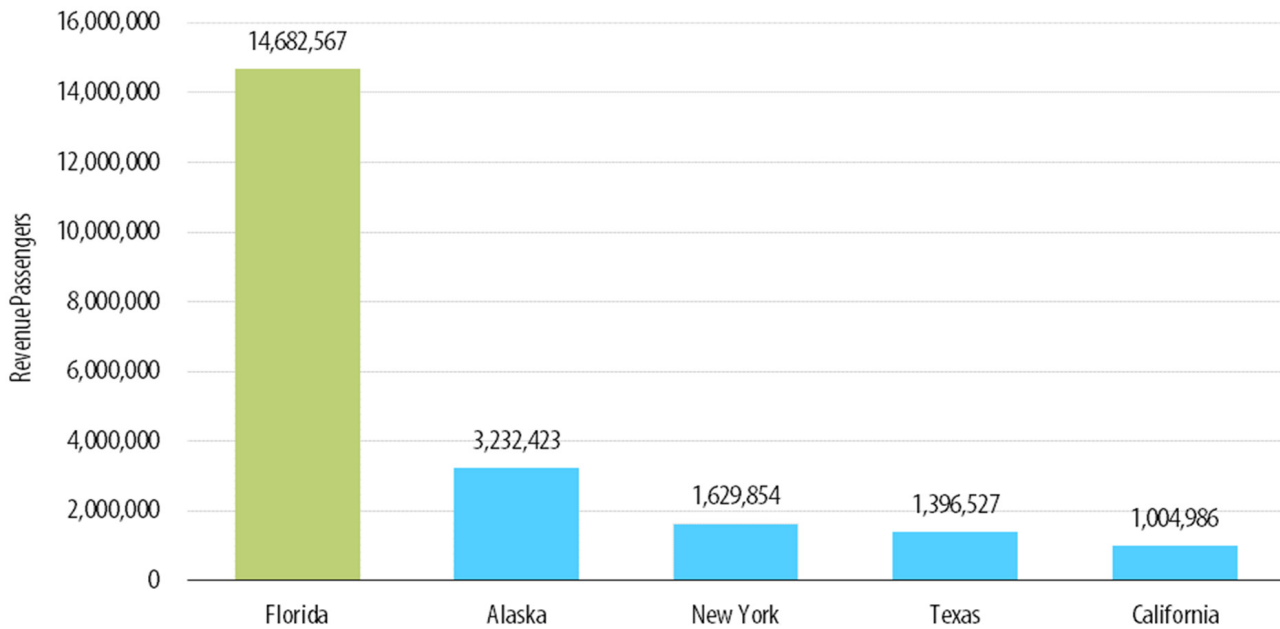
In 2014, Florida was ranked 2nd for infrastructure by the U.S. Chamber of Commerce Foundation.

The Florida seaport system boasts several impressive business metrics and rankings. In 2014, Florida was ranked as the number one state for cruise and was home to the top three cruise ports in the world. It was the state with the 5th most port container traffic, and the state with the 5th highest amount of overall tonnage going through the ports. It had the 3rd busiest port in the nation for automobile imports and exports, and is ranked 4th in tonnage for petroleum and petroleum-related products.

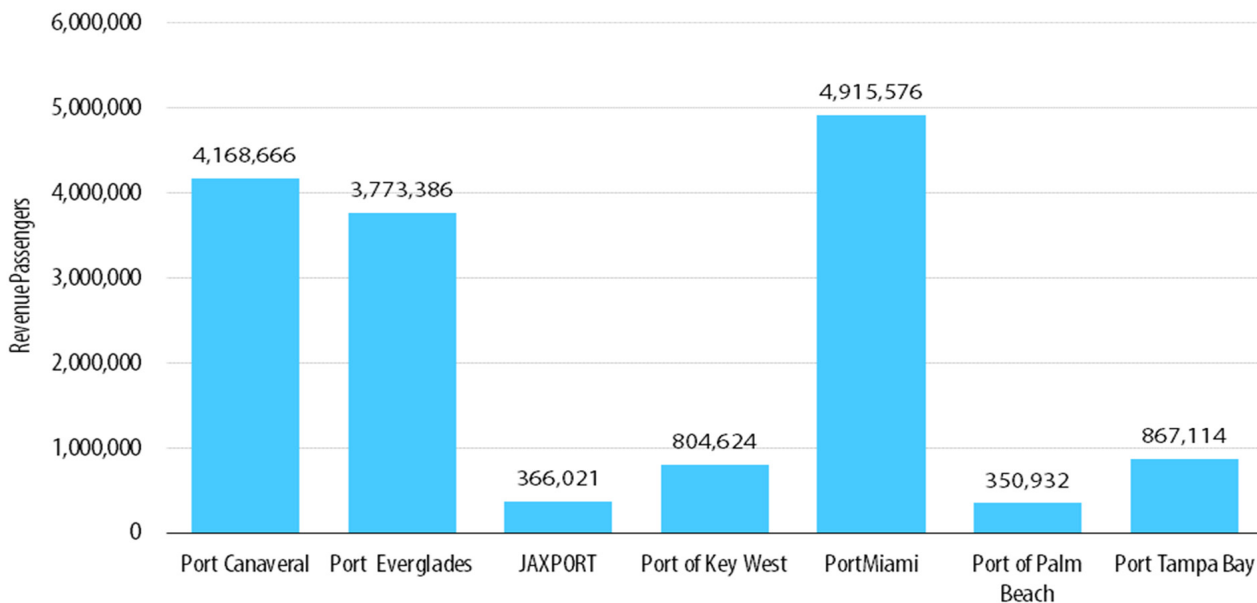


CRUISE

In 2014, Florida accounted for 62% of all U.S. cruise traffic with 15.5 million revenue passengers, which means that Florida's seaports had more revenue passengers than any other state, and in fact, any country outside of the United States. Alaska, New York, Texas, and California round out the top five states with the highest number of revenue passengers in the U.S., respectively. Though 2015 numbers are available for Florida cruise ports, 2014 numbers were used, as those are the most up-to-date numbers available for state comparisons. The figure below shows the state-by-state comparison in 2014.

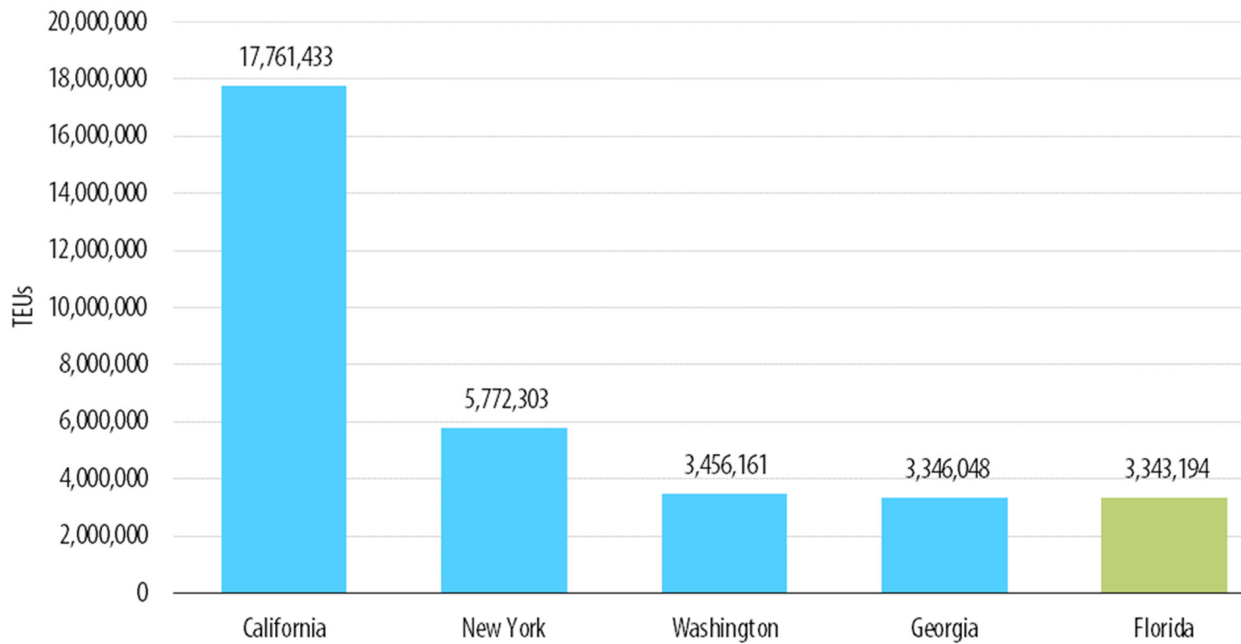


In 2015, Florida's seven cruise ports, Port Canaveral, Port Everglades, JAXPORT, the Port of Key West, PortMiami, the Port of Palm Beach, and Port Tampa Bay, served over 15.2 million passengers. These ports offer multi-day cruises with itineraries spanning the globe, as well as one-day cruises to the nearby islands of the Bahamas. The revenue passenger counts of each seaport for 2015 are shown in the figure below.

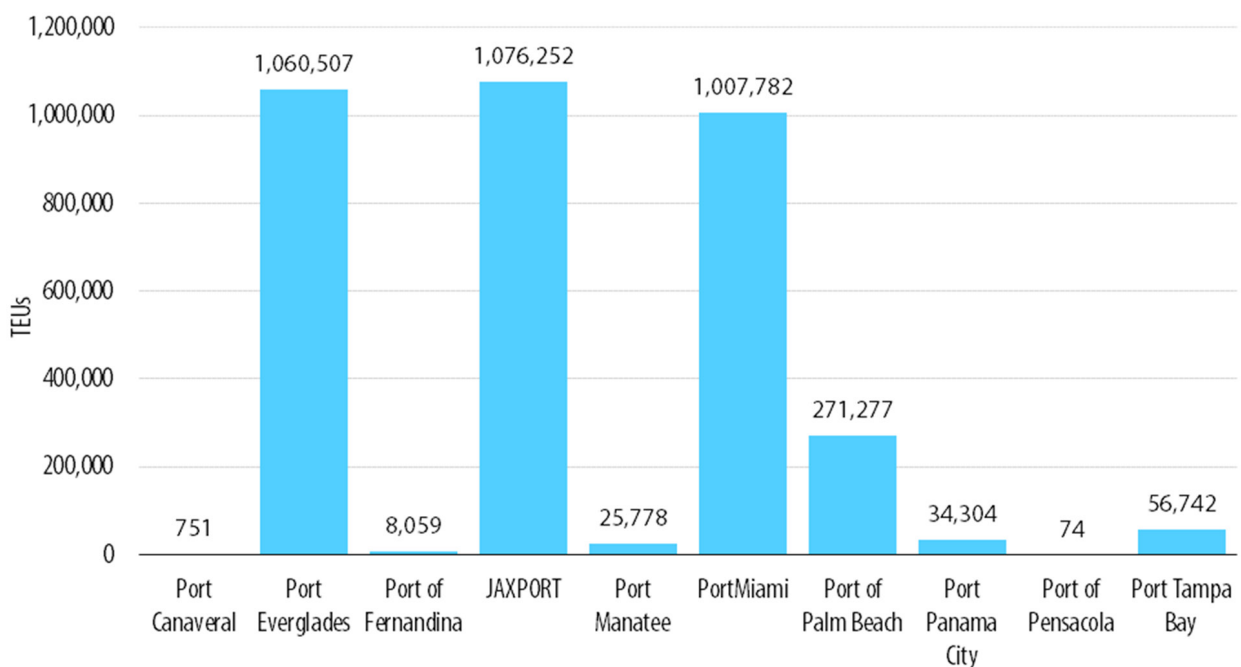


CONTAINERS

Florida's 2014 volume of more than 3.3 million TEUs puts Florida closely behind the states of Washington and Georgia. California ports combined to make it the largest container state in the nation, with 17.8 million TEUs handled, and New York had the second highest container volume, recording 5.8 million TEUs. The comparison of the top five U.S. states for TEUs can be seen below.

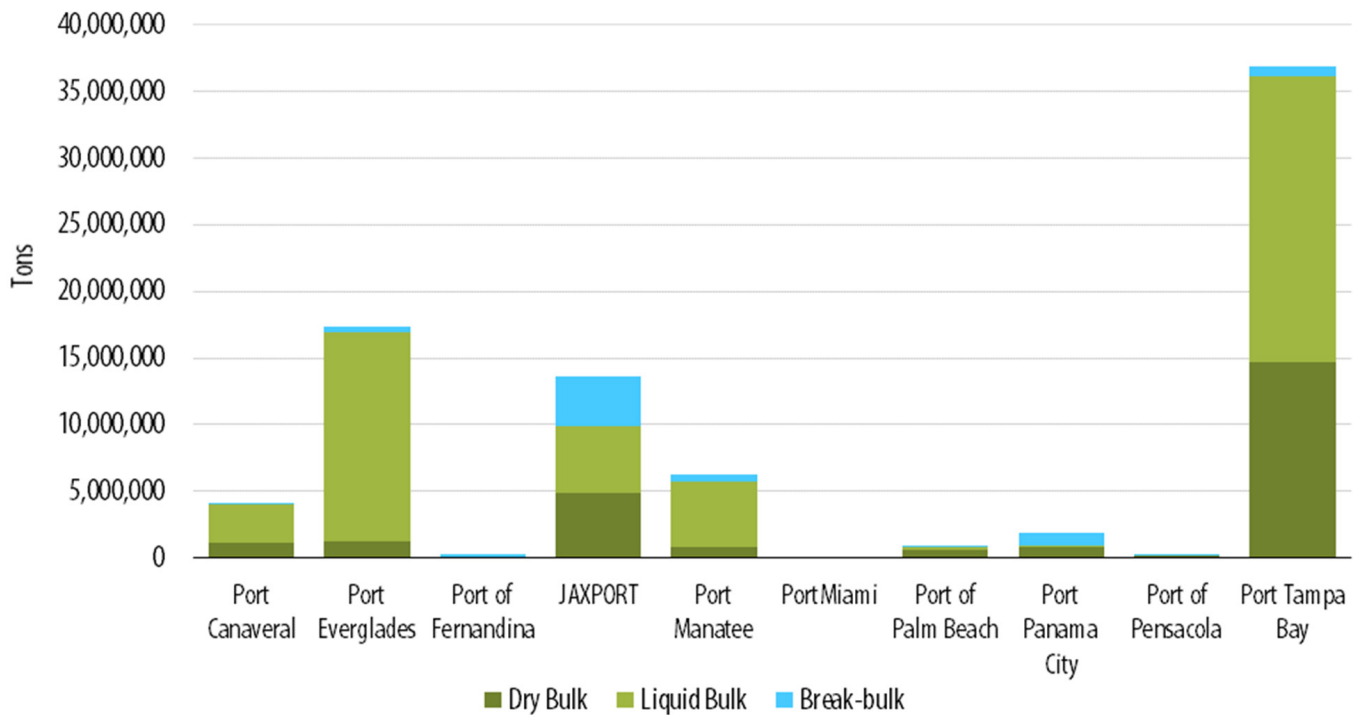


Ten Florida seaports handled containerized cargo in 2015, moving a statewide total of 3.5 million TEUs. JAXPORT, Port Everglades, PortMiami, and the Port of Palm Beach are the top 4 container ports in the state and are ranked in the top 25 container ports in the U.S. according to a 2014 American Association of Port Authorities (AAPA) report on container movements. Each of these seaport's 2015 TEU count can be seen in the figure below.



BULK CARGO

Ten of Florida's ports handle dry bulk, liquid bulk, or break-bulk cargo and in 2015, this cargo comprised more than 81.5 million tons of imported, exported, and domestic cargo, led by Port Tampa Bay, Port Everglades, and JAXPORT. For Florida, dry bulk encompasses fertilizers, cement, and aggregates; liquid bulk primarily consists of petroleum products; and break-bulk comprises all non-containerized general cargo, including vehicles. Additionally, several Florida seaports cater to cargo niches, such as Port Panama City and the Port of Pensacola. The FY 2015 breakdown of dry bulk, liquid bulk, and break-bulk cargo, by port, can be seen in the figure below.



STAKEHOLDER OUTREACH

For the 2015 Florida Seaport System Plan, the FDOT Seaport and Waterways Office developed a list of key stakeholders and contacts from each public seaport including tenants and users at the ports; federal, state and local government agencies; and related associations. A five-page Seaport questionnaire and a one page Tenants and Users questionnaire were developed for distribution to the stakeholders. Each of the key stakeholders received a personalized e-mail describing the strategic planning process and the importance of their participation.

The overall response to the stakeholder outreach effort was strong, with 100% of the Florida seaports responding, along with three governmental agencies or associations, and 15 stakeholders (port tenants and users). A total of 33 stakeholders provided feedback in the form of in-person interviews, conference calls, and/or written responses to the questionnaires. For a list of respondents, see Appendix D-2 of the 2015 Florida Seaport System Plan. Many of the stakeholders interviewed conveyed their appreciation to FDOT for undertaking the effort to reach out to them and the opportunity to discuss these key issues related to freight, logistics, and passengers at Florida's seaports. Finally, all the questionnaire responses and notes from each of the in-person and phone interviews were combined into a single stakeholder outreach summary matrix. This summary matrix is presented on the next page.



CIP Category	Issues Category	Identified Challenges, Issues and Opportunities	Total Responses	Advantages to Growth	Constraints to Growth	Issues or Needs
D	A	Deep dredge, harbor and/or channel capacity	17	1	6	10
I	A	Highway Access or Bottleneck	14	4	9	1
C	A	Access to Markets	13	12	-	1
B	A	Expansion of Mooring Areas	12	-	1	11
I	A	Rail Service (Terminal or On-dock Rail Access)	11	6	3	2
SS	A	Security Access	10	-	7	3
CT	A	Vessel Size Increase	8	1	4	3
CT	A	Cruise Parking - Passenger Access	6	-	3	3
	A	Access	91	24	33	34
B	CA	Increased Bulkhead and Berthing Infrastructure	21	-	4	17
C	CA	Cargo Handling Equipment Needs	18	-	3	15
S	CA	Site Expansion Development Needs	18	1	3	14
C	CA	On-port Warehousing Improvements Needs	12	1	2	9
C	CA	Bulk Cargo Expansion Needs	11	-	1	10
I	CA	Rail Capacity (storage yards, sidings, passing tracks)	10	4	1	5
C	CA	Reefer Cargo Needs (Warehousing or Reefer Plugs)	9	-	1	8
O	CA	Off-port Distribution, ILC or Storage	9	3	-	6
I	CA	Trucking Services Providers and Driver Shortages	8	-	5	3
C	CA	Auto Cargo Expansion Needs RO/RO	5	-	-	5
	CA	Capacity	121	9	20	92
M	EF	Changing Technology	15	8	1	6
I	EF	Rail Service	14	6	5	3
S	EF	Container Yard Densification	13	1	1	11
S	EF	Intermodal connections (i.e., Transloading)	12	2	-	10
SS	EF	Gate Operations	12	1	8	3
C	EF	Post Panamax Container Cranes	10	-	4	6
I	EF	Highway (Cruise and cargo traffic interaction)	10	-	7	3
I	EF	Truck Parking (full service rest stops near ports)	8	-	3	5
D	EF	Tidal Restrictions on Vessel Movement	7	-	5	2
SS	EF	Bridge or Air Gap Clearance	3	-	3	-
	EF	Efficiency	104	18	37	49
C	E	Alternative Fuels - LNG/CNG, Ethanol, Wind Energy	11	2	1	8
D	E	NOAA Marine Fisheries Service permit review (NMFS)	4	-	1	3
S	E	Off-site Compensatory Stormwater Treatment	2	-	-	2
	E	Environmental	17	2	2	13
D	F	Local Funding (Matching Requirements)	14	-	7	7
D	F	Federal Funding	12	-	3	9
L	F	Land Acquisition and Purchasing	11	2	3	6
B	F	Local Funding Match on Berth and Bulkheads	10	-	4	6
D	F	Harbor Maintenance Tax (HMT)	9	-	5	3
M	F	Private Sector Investments (P3)	8	2	-	6
L	F	Funding for Freight Zones	5	-	-	5
CT	F	Cruise Terminal Development	4	1	-	3
SS	F	Security Funding	3	-	1	2
I	F	Highway Trucking Tolls (Regional Movements)	2	-	2	-
	F	Funding	78	5	25	47
B	N	Bulkhead and Berthing Infrastructure	12	-	5	7
SS	N	Navigation Issues (Vessel Traffic Delays)	10	-	9	1
D	N	Maintenance Dredging	8	-	2	6
SS	N	Bridge Issues (congestion, vessel air draft clearance)	4	-	4	-
SS	N	Derelict Vessels	1	-	-	1
	N	Navigation	35	-	20	15
M	R	Educate Federal and State Lawmakers and Public	14	1	-	13
I	R	Truck Regulations (HOS, weight limits, gate appt...)	9	-	6	3
D	R	WRDA (Issue)	7	-	1	6
D	R	USACE Joint Permitting Process	7	-	6	1
SS	R	Security Regulations	5	-	4	1
C	R	Customs and Border Protection - Cargo	4	1	3	-
CT	R	Customs and Border Protection - Cruise	3	1	1	1
	R	Regulatory and Governmental	49	3	21	25
D	T	Panama Canal Expansion Project	16	13	-	3
M	T	Studies, Plans, Economic Analysis	16	1	1	14
M	T	Open Trade with Cuba (Helms-Burton Act)	14	11	-	3
M	T	Data Acquisition and Technology	10	-	1	9
M	T	Nearshoring of Manufacturing (international shift)	10	9	-	1
M	T	Proximity to Caribbean, Central and South America	10	10	-	-
M	T	Foreign Trade Zones (Manufacturing or Distribution)	9	5	-	4
M	T	West Coast to East Coast Cargo Shift	9	9	-	-
M	T	Jones Act Issues	5	-	5	-
M	T	Container Line Alliance Issue	3	1	-	2
	T	Trade¹	102	59	7	36
		Grand Total	597	120	165	311

Issues Category List

A	Access
CA	Capacity
EF	Efficiency
E	Environmental
F	Funding
N	Navigation
R	Regulatory and Governmental
T	Trade ¹

Port CIP Category List

D	Channel and Harbor Dredging and Deepening ²
C	Cargo Terminals ³
B	Berth Rehabilitation and Repairs
CT	Cruise Terminals
M	Miscellaneous Projects ⁴
O	Other Structures
I	Intermodal, Road, and Rail
L	Land Acquisition
SS	Security and Safety

Note:

- ¹ Global Shifts, National Trends, Industry Change
- ² Including Spoil Projects
- ³ Including New Berths and Equipment
- ⁴ Computer, Recreation, Environmental



ADVANTAGES, CONSTRAINTS, AND ISSUES OR NEEDS IDENTIFIED BY STAKEHOLDERS

The stakeholders identified their top advantages to growth, disadvantages to growth, and issues or needs. Those categories that were identified most often are listed below.

ADVANTAGES

The top advantages to growth identified by the stakeholder outreach included:

- Expansion of the Panama Canal
- Access to Markets
- Open Trade with Cuba
- Proximity to the Caribbean and Central and South America
- Nearshoring of Manufacturing (International Shift)
- West Coast to East Cost Cargo Shift



CONSTRAINTS

The top constraints to growth identified by the stakeholder outreach included:

- Highway Access or Bottlenecks
- Navigation Issues (Vessel Traffic Delays)
- Gate Operations
- Local Funding (Matching Requirements)
- Highway (Cruise and Cargo Traffic Interaction)
- Security Access



ISSUES OR NEEDS

The top issues or needs identified by the stakeholder outreach included:

- Increased Bulkhead and Berthing Infrastructure
- Cargo Handling Equipment Needs
- Studies, Plans, Economic Analysis
- Site Expansion Development Needs
- Education of Federal and State Law Makers and Public





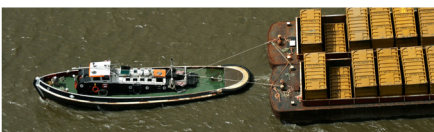
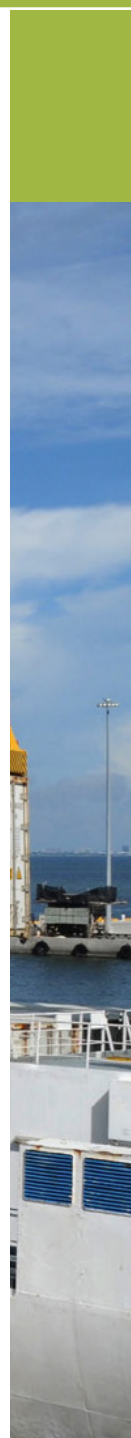
FLORIDA SEAPORT INFRASTRUCTURE FUNDING AND INVESTMENT OPPORTUNITIES

Florida's seaports have a portfolio of available infrastructure funding resources. In addition to their own cash reserves, the seaports have a variety of loan, bond, grants, or contributions options. At the state level, FDOT currently has a statutory minimum of \$100 million annually that must be allocated from the State Transportation Trust Fund (STTF) to the seaport program. This includes \$25 million for the FSTED Program; \$35 million for the Strategic Port Investment Initiative (SPII) Grant Program; \$25 million for debt service for the 1996 and 1999 bond programs; \$10 million to support the 2013/2014 bond program; and \$5 million for the Intermodal Logistics Center (ILC) Support Grant Program. In addition to statutory minimums, additional funds can be provided through discretionary programs such as the Strategic Intermodal System (SIS) for eligible ports and/or projects. Generally, FDOT seaport grant funding requires that the receiving seaport provide local matching funds. Minimum local matching requirements are 50% or 25% depending on the project, type of funds, and other eligibility requirements. Ports can also apply for debt funding through the State Infrastructure Bank (SIB) loan program administered by FDOT.

Potential federal funding can be applied for through the U.S. Army Corps of Engineers (USACE), the U.S. Department of Transportation, the Maritime Administration (MARAD), and the Department of Homeland Security (DHS). Occasionally, new federal funding programs will emerge, such as the TIFIA (Transportation Infrastructure Finance and Innovation Act) program in 1998, the TIGER (Transportation Investment Generating Economic Recovery) competitive grant program in 2009, the FAST (Fixing America's Surface Transportation) Act in 2015, which included FASTLANE (Fostering Advancements in Shipping and Transportation for the Longterm Achievement of National Efficiencies) Grants and the Nationally Significant Freight and Highway Projects Program. Private funding can be found through public private partnerships (P3s). To bring new business to Florida, Enterprise Florida, Inc. and the Department of Economic Opportunity (DEO) offer targeted industry incentives, workforce training incentives, infrastructure incentives, and special opportunity incentives.

Available seaport funding can be generally sorted into the five categories listed below.

- Seaport Revenues
- Public Private Partnerships (P3s)
- FDOT Statutorily Mandated Seaport Investment Programs
- FDOT Discretionary Programs Used for Seaport Investments
- Federal Programs



FLORIDA'S SEAPORTS' CAPITAL IMPROVEMENT PROGRAM (CIP)

Florida's seaports reflect their investment priorities in their five-year Capital Improvement Programs (CIPs). The CIPs not only include anticipated funding from their own internal sources, but also include anticipated or desired funding from external public or private sources. As outlined earlier, funding sources external to the seaports can include FDOT, public and private capital markets, federal, state, and local programs, and partnerships with port tenants, users, or other private investors.

The CIPs identify the resources needed to address some of the challenges and opportunities represented by the issues discussed during stakeholder outreach.

Annually, each of Florida's seaports compile a five-year CIP, which serves to identify both short-and longer-term needs. These CIPs are reviewed and summarized as a part of this Florida Seaport System Plan to provide an inclusive list of future seaport needs as defined by the individual seaports.

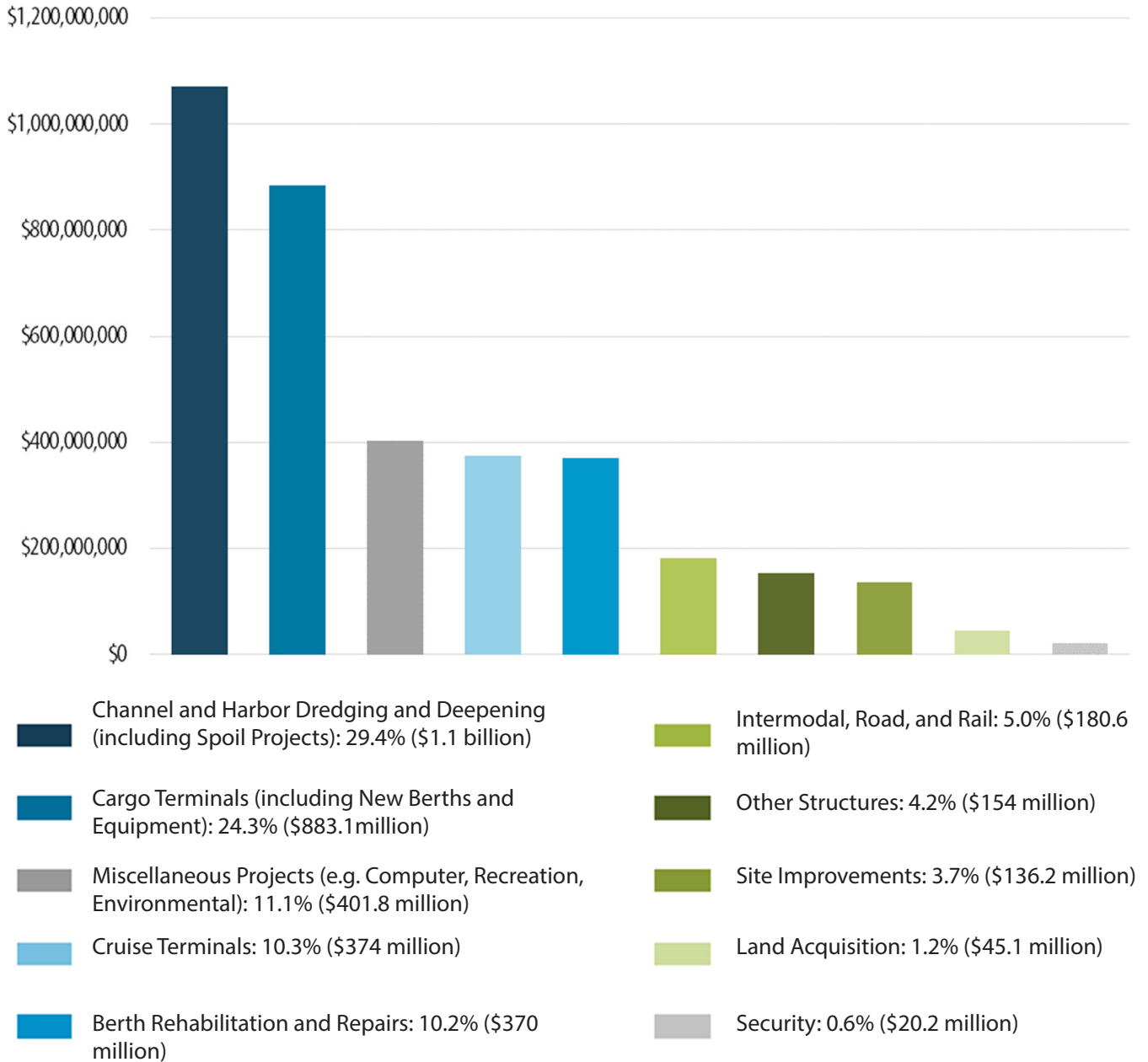
The projects in the seaport CIPs, for the five-year period beginning in FY2015/2016 and ending in FY2019/2020, total over \$3.6 billion. The breakdown of CIPs for each seaport by each year is shown below.

Port	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY 2019/2020	Total
Port Canaveral	\$136,938,000	\$70,704,000	\$142,630,000	\$152,024,000	\$142,992,000	\$645,288,000
Port Citrus	\$0	\$0	\$0	\$0	\$0	\$0
Port Everglades	\$178,516,000	\$180,798,000	\$187,477,000	\$149,246,000	\$96,515,000	\$792,552,000
Port of Fernandina	\$475,000	\$775,000	\$1,000,000	\$9,210,000	\$8,410,000	\$19,870,000
Port of Ft. Pierce	\$7,697,969	\$0	\$0	\$0	\$0	\$7,697,969
JAXPORT	\$94,618,389	\$277,859,490	\$264,339,119	\$319,446,250	\$334,065,218	\$1,290,328,466
Port of Key West	\$1,200,000	\$0	\$0	\$0	\$0	\$1,200,000
Port Manatee	\$16,782,000	\$17,477,000	\$2,588,000	\$7,990,000	\$7,500,000	\$52,337,000
PortMiami	\$88,855,000	\$102,703,000	\$55,220,000	\$28,600,000	\$15,600,000	\$290,978,000
Port of Palm Beach	\$5,249,000	\$5,736,000	\$6,906,000	\$3,200,000	\$850,000	\$21,941,000
Port Panama City	\$24,500,000	\$16,550,000	\$23,550,000	\$6,200,000	\$5,500,000	\$76,300,000
Port of Pensacola	\$1,714,000	\$4,816,145	\$3,996,000	\$6,304,000	\$5,500,000	\$22,330,145
Port of Port St. Joe	\$1,000,000	\$35,900,000	\$17,900,000	\$0	\$0	\$54,800,000
Port of St. Pete	\$100,000	\$615,000	\$0	\$0	\$0	\$715,000
Port Tampa Bay	\$47,734,000	\$88,800,000	\$66,800,000	\$65,800,000	\$89,300,000	\$358,434,000
Total	\$605,379,358	\$802,733,635	\$772,406,119	\$748,020,250	\$706,232,218	\$3,634,771,580

Source: Individual Seaport Capital Improvement Programs, provided by individual seaports and the Florida Ports Council

CIP PROJECT CATEGORY BREAKDOWN

The projects included in the CIPs span many different categories, as shown in the figure below. The top two categories, *Channel and Harbor Dredging and Deepening (including spoil projects)* and *Cargo Terminals (including new berths and equipment)* make up over 53% of the total CIP projects. *Miscellaneous Projects, Cruise Terminals, and Berth Rehabilitation and Repairs* each make up around 10%, with *Intermodal, Road, and Rail, Other Structures, Site Improvements, Land Acquisition, and Security* each making 5% or less of the total.



Source: Individual Seaport Capital Improvement Programs, provided by individual seaports and the Florida Ports Council

FDOT SEAPORT WORK PROGRAM

Through the financial support provided by FDOT's Work Program, Florida's seaports are able to capitalize on their own investments to ensure projects are funded and moving forward. FDOT's Work Program is guided by FDOT's mission statement: "The department will provide a safe transportation system that ensures the mobility of people and goods, enhances economic prosperity and preserves the quality of our environment and communities." Additionally, FDOT's long and short range goals and objectives are outlined in the Florida Transportation Plan (FTP), updated in 2016, which provides both a medium-range component that shows objectives and strategies needed over the next 25 years, and a long-term view of the future of Florida's transportation system over the next 50 years. Particular types of projects, such as the ones that are part of the Strategic Intermodal System (SIS), are FDOT's highest transportation capacity investment priority.

Florida's Governor and Legislature have remained committed to investing in Florida's seaports. Since 2011, FDOT's seaport investment totals nearly \$940 million. The Seaport Work Program for all funding types related to seaports is shown below, with a breakdown of the individual project types shown on the next page. Additionally, outside of the Seaport Work Program allocations, FDOT funds roadway and intermodal projects that provide access to or from Florida's seaports.

	FY2014/2015	FY2015/2016	FY2016/2017	FY2017/2018	FY2018/2019	FY2019/2020	FY2020/2021	Total
Port Canaveral	\$17,757,376	\$2,000,000	\$2,250,000	\$5,000,000	\$0	\$10,000,000	\$0	\$37,007,376
Port Citrus	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Port Everglades	\$19,568,000	\$12,000,000	\$36,561,620	\$6,000,000	\$15,000,000	\$52,750,000	\$1,000,000	\$142,879,620
Port of Fernandina	\$450,000	\$0	\$187,500	\$3,650,000	\$0	\$0	\$0	\$4,287,500
Port of Ft. Pierce	\$542,500	\$228,370	\$255,000	\$0	\$0	\$0	\$0	\$1,025,870
JAXPORT	\$4,100,000	\$24,537,163	\$20,900,000	\$21,552,389	\$19,943,560	\$15,943,560	\$39,943,560	\$146,920,232
Port of Key West	\$762,000	\$0	\$0	\$0	\$0	\$0	\$0	\$762,000
Port Manatee	\$4,214,432	\$0	\$0	\$2,000,000	\$0	\$0	\$0	\$6,214,432
PortMiami	\$2,750,000	\$3,563,588	\$5,564,029	\$6,000,000	\$10,000,000	\$0	\$2,600,000	\$29,799,777
Port of Palm Beach	\$5,914,005	\$1,427,046	\$750,000	\$0	\$3,000,000	\$0	\$0	\$11,091,051
Port Panama City	\$1,768,500	\$1,750,000	\$12,565,000	\$1,350,000	\$1,250,000	\$2,750,000	\$0	\$21,433,500
Port of Pensacola	\$1,008,381	\$18,636	\$840,000	\$0	\$0	\$0	\$0	\$1,867,017
Port of St. Petersburg	\$50,000	\$357,832	\$0	\$0	\$0	\$0	\$0	\$407,832
Port of Port St. Joe	\$0	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$1,000,000
Port Tampa Bay	\$25,963,486	\$14,671,648	\$3,313,843	\$6,009,064	\$11,999,908	\$0	\$0	\$61,957,949
SUBTOTAL	\$84,848,680	\$61,554,283	\$81,747,152	\$51,561,453	\$61,193,468	\$81,443,560	\$43,543,560	\$465,892,156
FSTED	N/A	N/A	N/A	\$25,000,000	\$25,000,000	\$25,000,000	\$25,000,000	\$100,000,000
Data and Planning	\$854,781	\$1,307,818	\$816,516	\$300,000	\$300,000	\$300,000	\$1,300,000	\$5,179,115
Bond Debt Payments	\$33,594,388	\$35,000,000	\$35,000,000	\$35,000,000	\$35,000,000	\$35,000,000	\$35,000,000	\$243,594,388
Potential Program Funds	\$0	\$17,764,521	\$15,729,627	\$0	\$0	\$0	\$14,302,066	\$47,796,214
ILC Program	\$900,000	\$5,000,000	\$9,100,000	\$5,000,000	\$5,000,000	\$5,000,000	\$0	\$30,000,000
Unallocated Seaport Funds	N/A	\$10	\$1,660,612	\$964,877	N/A	N/A	N/A	\$2,625,499
SIB Loans**	\$12,000,000	\$14,000,000	\$19,000,000	\$10,000,000	N/A	N/A	N/A	\$55,000,000
TOTAL	\$132,197,849	\$134,626,632	\$163,053,907	\$127,826,330	\$126,493,468	\$146,743,560	\$119,145,626	\$950,087,372

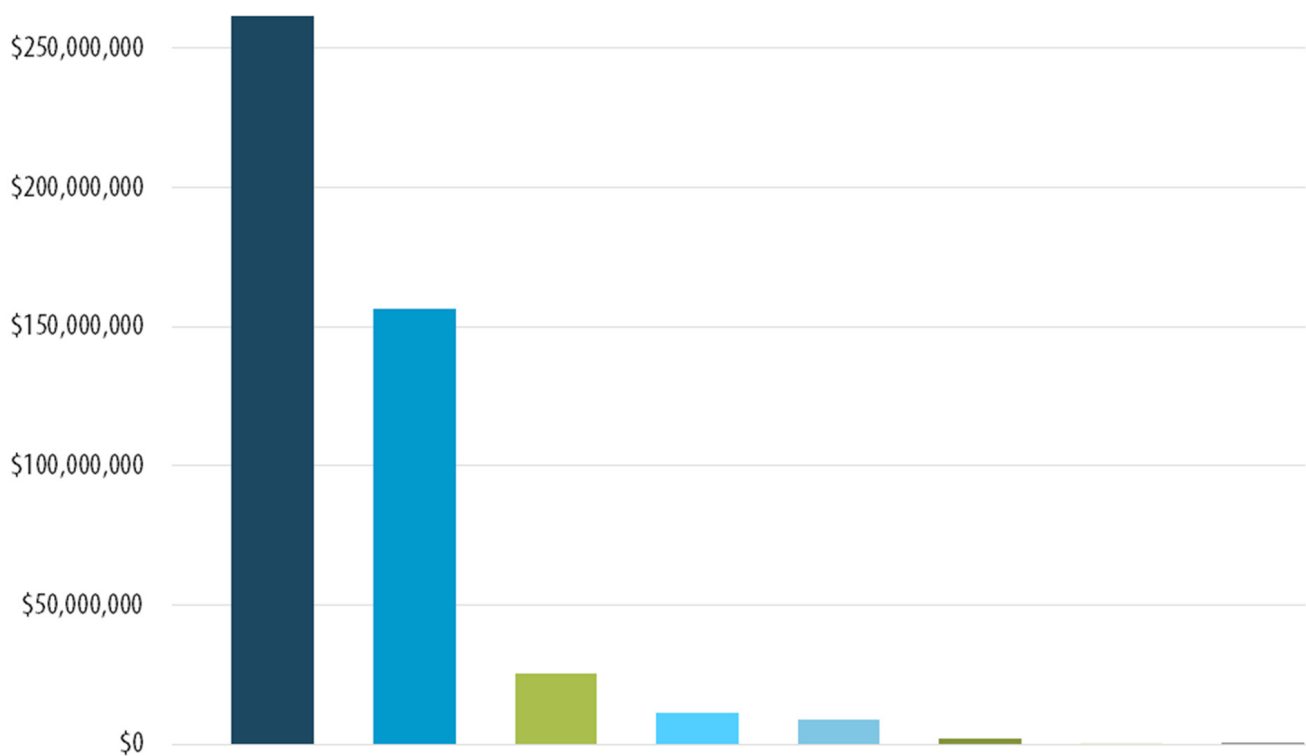
Notes: Data from Work Program June 1, 2016 Snapshot.

*FSTED funding was allocated to the individual ports for FY2014/2015-FY2016/2017. It has not yet been allocated to specific ports for FY2017/2018 through FY2020/2021.

**SIB Loans not yet applied for or allocated for FY2017/2018 through FY2020/2021.

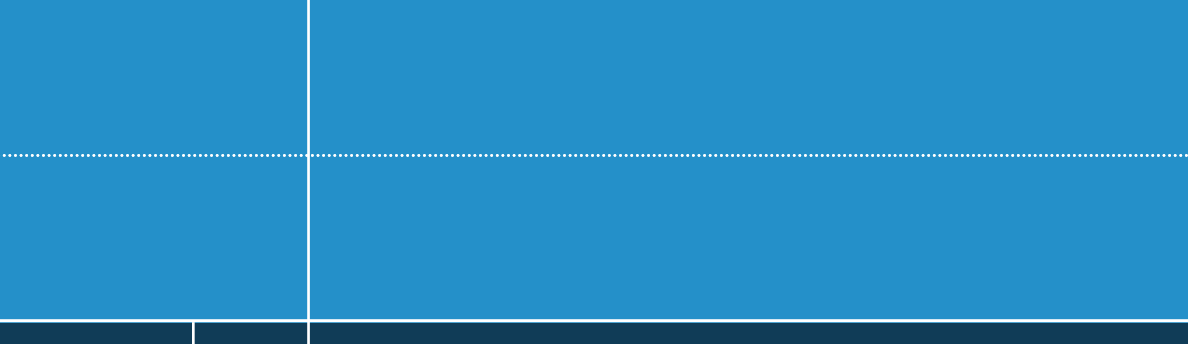
FDOT WORK PROGRAM PROJECT CATEGORY BREAKDOWN

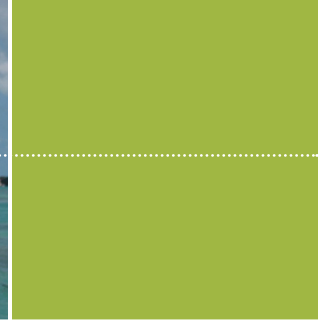
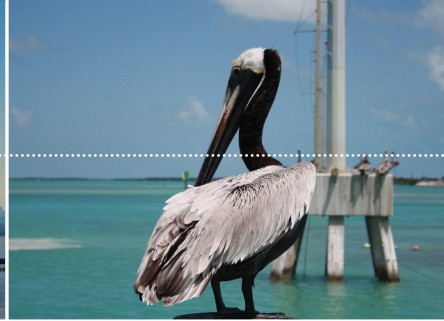
The projects included in the FDOT Seaport Work Program span many different categories, as shown in the figure below. The top two categories, *Channel and Harbor Dredging and Deepening (including spoil projects)* and *Cargo Terminals (including new berths and equipment)* make up over 90% of the total Work Program projects. This large percentage is aligned with the individual port CIPs. After the first two project categories, the categorization percentages vary from the seaports' individual CIPs, due to the fact that FDOT focuses its resources on a more limited range of projects. The seaports, on the other hand, have many different types of projects that are essential to manage operations, which also need funding. Additionally, funding for new capacity projects and intermodal projects takes precedence in the FDOT Seaport Work Program. This situation shifts financial responsibility for *Berth Rehabilitations* and *Cruise Terminal* projects to the seaports, and as such, reflects higher funding percentages in each ports' CIP than as shown in the Seaport Work Program. FDOT funding of *Land Acquisition* is also limited, currently only allowed under the FSTED Program funding, and making up 0.05% of the Seaport Work Program.



- Channel and Harbor Dredging and Deepening (including Spoil Projects): 56.2% (\$261.7 million)
- Cargo Terminals (including New Berths and Equipment): 33.6% (\$156.4 million)
- Intermodal, Road, and Rail: 5.5% (\$25.4 million)
- Berth Rehabilitation and Repairs: 2.4% (\$11.1 million)
- Cruise Terminals: 1.9% (\$8.7 million)
- Site Improvements: 0.4% (\$1.9 million)
- Miscellaneous Projects (e.g. Computer, Recreation, Environmental): 0.1% (\$425,000)
- Land Acquisition: 0.05% (\$255,000)
- Other Structures: 0.0% (\$0)
- Security: 0.0% (\$0)

Source: FDOT Seaport Work Program, 2016





PRIOR AND CURRENT PLANNING EFFORTS

The 2015 Florida Seaport System Plan is drafted to be consistent with Florida's latest planning efforts, which include the Florida Transportation Plan (FTP), FDOT's highest level policy plan, providing the long-term vision and policy direction for FDOT; the Strategic Intermodal System (SIS) Policy Plan, which provides policy objectives for the SIS on a statewide basis; and the 2013 Freight Mobility and Trade Plan (FMTP), which provides policy and implementation direction to FDOT on matters related to the movement of freight.

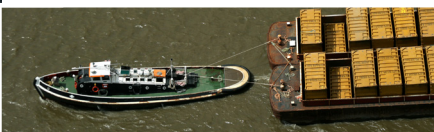
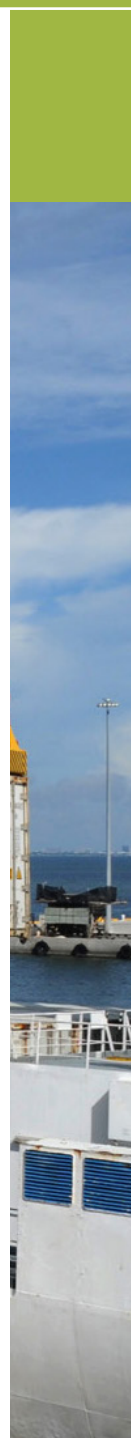
Appendix A-1, in the 2015 Seaport System Plan, provides a cross-walk table that outlines how the FDOT 2015 Florida Seaport System Plan Focus Areas, Strategies, and Initiatives (described below) relate to the FTP Goals, SIS, and FMTP Objectives.

FDOT SEAPORT STRATEGIES, FOCUS AREAS, AND INITIATIVES

The primary purpose of the FDOT Seaport Program is to allocate resources to Florida's seaports to support sustainable seaport growth and development, and to promote positive economic benefits from seaport activities throughout the state.

Seaport operations and the flow of waterborne goods and passengers throughout Florida relate directly to FDOT's seven goals as presented in the FTP. Conducting the FDOT Seaport Program serves to achieve FDOT's goals and objectives by implementing strategies, actions, and initiatives to develop and enhance Florida's seaport system.

The following seaport program focus areas and strategies are an articulation of the principles and approaches that the Seaport and Waterways Office uses to strategically guide day-to-day activities and carry-out the purpose of the Seaport Program. The Initiatives offer specific examples of how applying the strategies to the focus areas manifest in specific projects and actions to improve infrastructure and operations at Florida seaports and in the overall freight and cruise passenger logistics chains.



FDOT SEAPORT PROGRAM FOCUS AREAS

The focus areas described below categorize the major functional aspects of the infrastructure elements that are the primary investment targets of the FDOT Seaport Program.

Seaport Access Enhancement:

Near-port waterway and landside infrastructure that provides safe and sufficient access to and from seaports for vehicles, rail cars, vessels, cargo, and passengers. While landside highway, road, and rail access to seaports is a major focus of the highway and rail divisions of FDOT, the seaport programs focus on improving the state's navigable waterways, channels, and harbor basins.

Seaport Capacity Expansion:

On-port infrastructure, equipment, and systems to increase the ability of seaports to handle growing or new volumes of passengers, cargo, or maritime activities. Facilities may include wharfs, terminals, cargo handling equipment, warehouses, and rail transfer facilities.

Seaport Efficiency Improvement:

On-port infrastructure, equipment, and systems to safely improve the efficiency of vehicle, cargo, or passenger movements within port operational areas. Facilities may include gate structures and systems, cranes, and other specific terminal yard or inter-terminal circulation configurations and systems.

Waterborne Freight Supply Chain Optimization:

Off-port infrastructure and systems to increase the volumes and efficiencies of waterborne cargo as they move through inland intermodal systems. Components of the off-port intermodal systems include: rail lines, inland transfer yards, Intermodal Logistics Centers (ILCs), warehousing and distribution facilities, export-oriented manufacturing, and Foreign-Trade Zone (FTZ) facilities.

FDOT SEAPORT PROGRAM STRATEGIES

These are the methods and approaches that are used to address the focus areas described above.

- 1. Use state resources to leverage local, private and federal investments in Florida Seaports.**
- 2. Collaborate with seaports and industry stakeholders to identify and fund the areas of greatest need and opportunity.**
- 3. Monitor local, regional, statewide, national, and global industry events, issues, and trends to ensure the relevance of Florida seaport investments and initiatives.**
- 4. Collect and analyze data to track the effectiveness of investments over time, and to identify new or emerging issues or trends.**
- 5. Partner with seaports to address specific problem areas, or to explore new technologies or systems to enhance seaport efficiencies, capabilities, and capacities.**
- 6. Coordinate with intermodal industry partners and agencies to ensure multi-modal connectivity and coordination in seaport and intermodal network development.**
- 7. Facilitate local, state, and federal agency responsiveness to Florida seaport issues and opportunities, through outreach, education, coordination and collaboration.**
- 8. Work with seaport and maritime stakeholders to support and create educational and employment training opportunities for seaport, supply chain, and maritime-related businesses.**

FDOT SEAPORT PROGRAM INITIATIVES

Seaport initiatives offer examples of how applying the strategies to the focus areas manifest in specific funding allocations, projects, or actions to improve infrastructure and operations at Florida seaports and in the overall freight and cruise passenger logistics chains.

It is important to note that each initiative often involves more than one focus area or strategy. For instance, an access project can also increase capacity and improve efficiency, and the creation and implementation of that project may include the application of many data analysis, collaboration, and funding strategies.

All of the initiatives and projects listed here are components of the FDOT Seaport Work Program presented in Chapter five of the plan. These initiatives represent highlights from the capital improvement categories of the program. The initiatives include references to recent, current, and future projects contained within the FDOT Seaport Work Program.

1. Waterway deepening and widening to improve vessel access, safety, and capacity:

Major projects have been recently completed, are under way, or are planned at PortMiami, Port Canaveral, JAXPORT, and Port Everglades. FDOT is working with seaports to leverage federal authorizations and funding to improve the ability of Florida's seaports to safely and efficiently handle the larger vessels being used by the cruise and cargo shipping lines. These efforts serve to maintain and improve Florida's competitiveness and capabilities in global container trade, bulk commodities, and the cruise industry.

2. Crane Acquisitions to improve capacity, efficiency and energy usage:

New cranes have recently been acquired or are in the process of being acquired at Port Panama City, Port Canaveral, Port Tampa Bay, JAXPORT, Port Everglades, and PortMiami. The newest generation of cranes are faster and more sophisticated, enhancing both capacity and efficiency. Many Florida ports also are transitioning from diesel powered cranes to electrical or dual-powered cranes.

3. Intermodal Road and Rail Improvements to increase intermodal choices and efficiency:

On-port and near-port rail projects including Intermodal Container Transfer Facilities (ICTFs) have recently been completed at Port Tampa Bay, JAXPORT, PortMiami and Port Everglades. Other ports also have plans for rail service improvements or are exploring options for rail service. These improvements expand the service area of the port by adding the long-haul and bulk advantages for rail movements.

4. Wharf Expansion and Rehabilitation to ensure safe and efficient handling of vessels:

Wharf infrastructure provides the berthing (or parking) area for vessels. The wharf also provides the platform for cranes and other loading equipment and is a critical component in ensuring safe and efficient vessel operations. Wharf expansion and rehabilitation projects have recently been complete or are under way at Port Manatee, Port Tampa Bay, Port of St. Pete, Port of Palm Beach, Port Canaveral, Port Everglades, JAXPORT, and Port Panama City.

5. Terminal Improvements and Expansions to increase capacity, safety and efficiency:

Improving and expanding cargo and passenger facilities to enhance capacities and efficiencies at Florida ports is another important area of FDOT's Seaport Program. Ports with recently completed, underway or pending projects include Port Canaveral, Port Panama City, Port Tampa Bay, PortMiami, Port Manatee, and JAXPORT.

6. Intermodal Logistics Centers (ILCs) help optimize supply-chain operations:

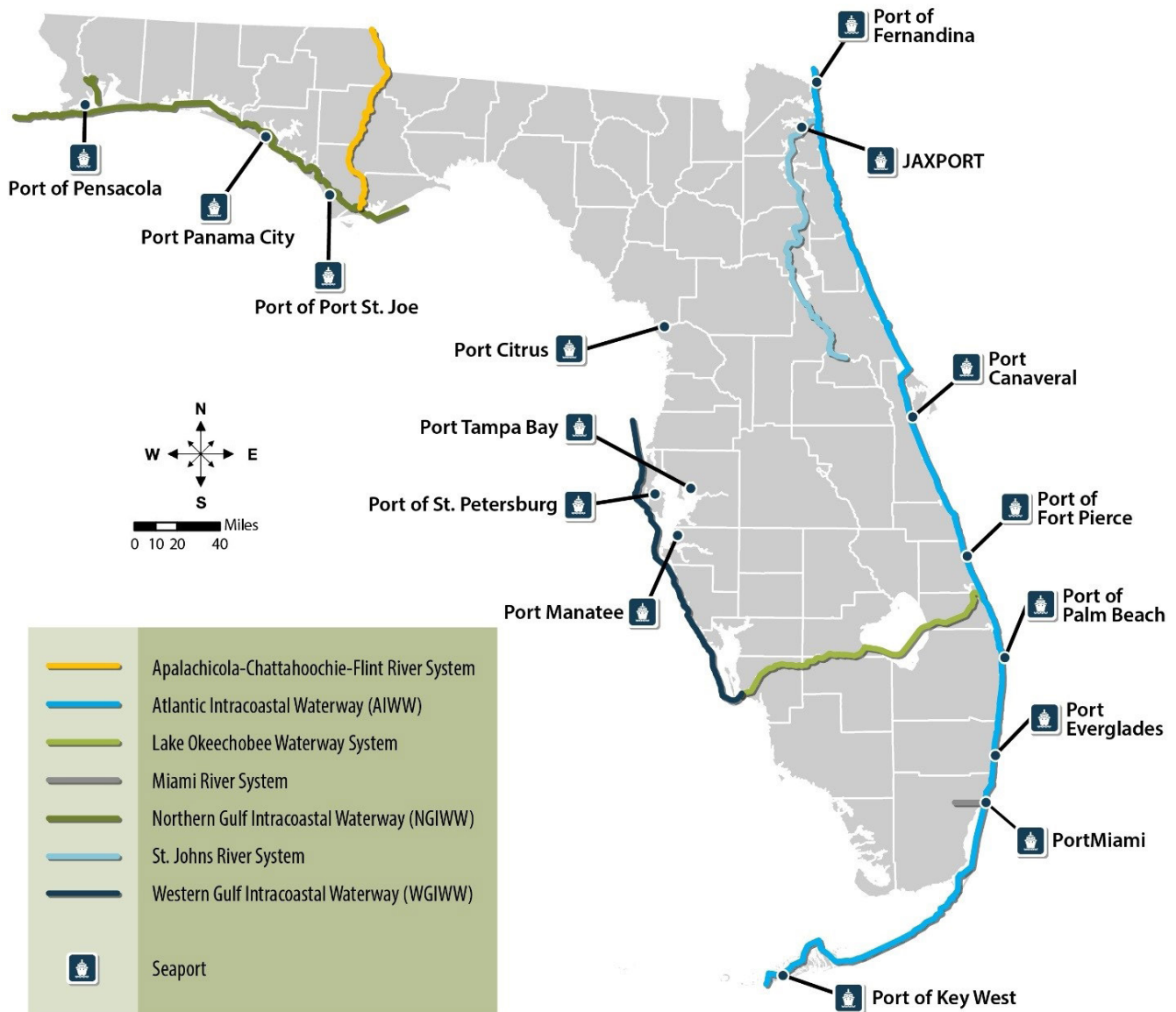
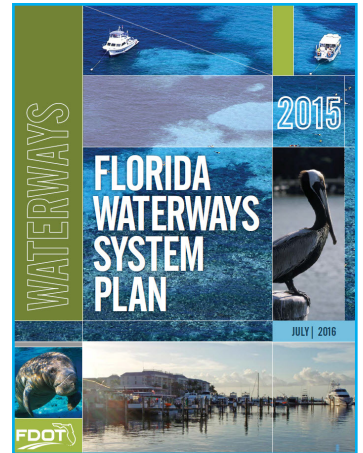
FDOT's Seaport Program includes a provision to support transportation infrastructure at off-port intermodal and distribution centers that handle cargo to/from Florida seaports. The ILC provision has been used or is currently under consideration for projects near Port Manatee, Port Panama City, PortMiami, Port Everglades, the Port of Palm Beach, JAXPORT, Port Tampa Bay, and Port Canaveral. The ILC program is recognition of the connectivity of seaports to inland logistics facilities and their complimentary roles in the freight supply chain.

Conceptually, the Initiatives may be thought of as describing the 'what' and 'where,' while the Focus Areas define the 'purpose,' and the strategies describe 'how' FDOT goes about creating and implementing the Initiatives. The 'why,' of course, is to improve the well-being and prosperity of the citizens of Florida.

2015 FLORIDA WATERWAYS SYSTEM PLAN

As a state, Florida is second only to Alaska in length of coastline with 1,350 miles of generalized coastline and 8,426 miles of detailed shoreline. Florida is the only state with coastlines on both the Gulf of Mexico and Atlantic Ocean. Florida has 1,540 navigable miles of intracoastal and inland waterways, many of which are used for commercial and recreational activity. This coastline includes 6 major waterway systems and contains 2 intracoastal waterways, 13 large harbors, bays, or bayous, 12 inlets or passes, 4 canals, and 8 major rivers that all provide access and mobility for recreational and commercial users of the state’s waterways.

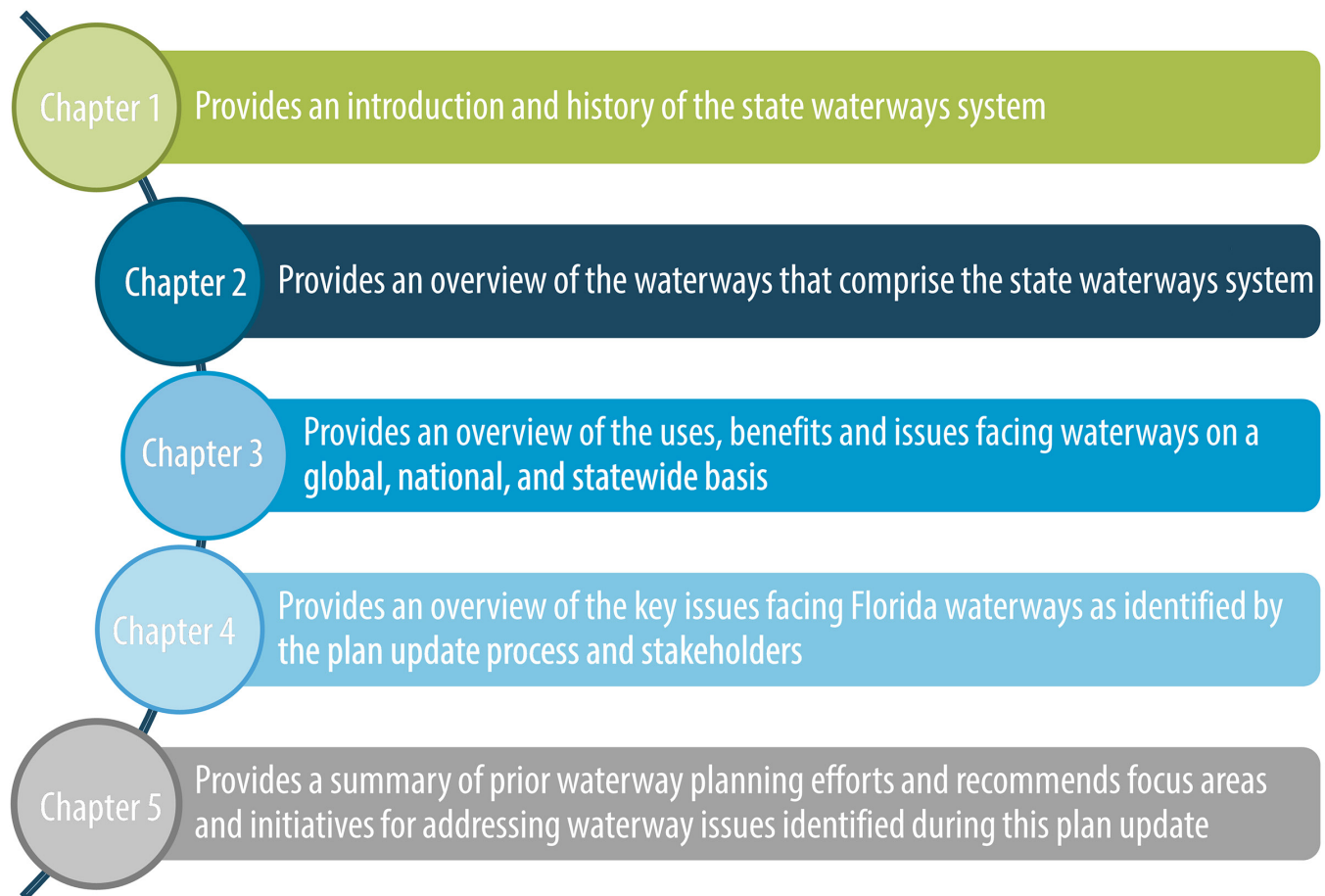
Public access is provided in these areas by 930 saltwater boat ramps and 748 saltwater marinas. Effective integration of the waterways into the state’s overall transportation system is critical to meet the goals the state has set forth in policies and plans. The map below illustrates the major waterway and river systems throughout Florida.



2015 FLORIDA WATERWAYS SYSTEM PLAN STRUCTURE AND DEVELOPMENT

The 2015 Florida Waterways System Plan serves as an update to the 2008 Waterways System Plan and provides a current look at many pertinent topics. During the update process, seven years of data was reviewed with the purpose of realigning the plan to a five-year planning horizon. This system plan builds upon the previous plan, updates the data, and provides an up to date status of the issues that waterway stakeholders feel are important to the full utilization of the waterways as a commercial and recreational system.

The development of this plan relied heavily on research, data analysis, and stakeholder input to determine the current condition of Florida's waterway systems and the critical key issues that are impacting waterway use. Stakeholders were instrumental in identifying the current conditions, challenges, and opportunities affecting the waterways. Many of the stakeholders such as the U.S. Coast Guard, Florida Fish and Wildlife Conservation Commission (FWC), and commercial shippers, use the waterways on a daily basis and have detailed knowledge of their condition.



FLORIDA'S WATERWAYS

Florida has three primary Intracoastal Waterway systems: the Northern Gulf Intracoastal Waterway (NGIWW), the Western Gulf Intracoastal Waterway (WGIWW), and the Atlantic Intracoastal Waterway (AIWW). These systems are summarized over the next few pages.

NORTHERN GULF INTRACOASTAL WATERWAY (NGIWW)

The Florida portion of the Northern Gulf Intracoastal Waterway (NGIWW) is a Strategic Intermodal System (SIS) Waterway with two active seaports and a variety of other marine transportation facilities. The Intracoastal Waterway is used to transport a significant amount of bulk cargo in the state, primarily moved by barge. The bays, bayous, rivers, inlets, and passes also serve as vital connectors providing access from the seaports to the Intracoastal Waterway and offshore shipping lanes. There is no inland navigation district to serve as the public governing body of the NGIWW, and it carries a greater amount of cargo than the AIWW and WGIWW.

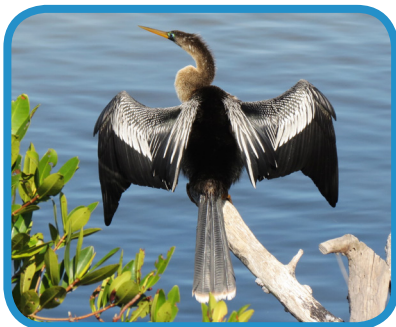
The NGIWW is home to many waterfront facilities. The U.S. Army Corps of Engineers (USACE) Master Docks Plus database lists 247 waterfront facilities and navigational points of interest. These have been categorized into six facility types based on descriptions provided in the Master Dock Plus database:

Facility Types	Quantity
Government	21
Port Tenant Facilities	11
Industrial/Commercial	79
Seafood Processing/Fishing Fleets	24
Navigation	93
Landings	19

Some of the facilities located along the NGIWW include the Ports of Pensacola, Panama City, and Port St. Joe; Naval Air Station Pensacola; Naval Activity Support Center Panama City; and Coast Guard Stations at Pensacola, Panama City, and Destin. In addition, there are a variety of industrial and commercial uses of this waterway.

WESTERN GULF INTRACOASTAL WATERWAY (WGIWW)

The Western Gulf Intracoastal Waterway (WGIWW) is SIS Waterway that is 151 miles long, beginning in the south at the mouth of the Caloosahatchee River near Cape Coral, and ending north at the mouth of the Anclote River near Tarpon Springs. While the WGIWW is not a major commercial cargo waterway when compared to the other intracoastal waterways, it is a very popular and busy waterway for recreational boating and fishing. The inlets located along the waterway are important for providing boaters with access to the open Gulf. The West Coast Inland Navigation District (WCIND), headquartered in Venice, serves as the local sponsor to the USACE for the Western Gulf Intracoastal Waterway.





The WGIWW is home to many waterfront facilities. The USACE Master Docks Plus database lists 228 waterfront facilities and navigational points of interest. These have been categorized into the same six facility types as the NGIWW:

Facility Types	Quantity
Government	11
Port Tenant Facilities	59
Industrial/Commercial	69
Seafood Processing/Fishing Fleets	6
Navigation	81
Landings	2

The WGIWW is home to the SIS Ports of Tampa Bay, Manatee, and St. Petersburg, as well as a variety of other marine transportation facilities. Some of the major facilities located along the WGIWW include the U.S. Coast Guard Sector St. Petersburg, with facilities in St. Petersburg and Tampa, and Stations St. Petersburg, Sand Key, and Fort Myers Beach. There is also an Aids to Navigation Team in St. Petersburg and a Marine Safety Detachment in Fort Myers. Tampa Bay is home to the cruise terminals at Port Tampa Bay, and MacDill AFB maintains a large security zone in the bay. In addition, there are numerous large recreational and commercial marinas. The famous Tarpon Springs sponge fleet and the fishermen in the Boca Grande Pass, known for tarpon fishing, also use and benefit from the WGIWW.

ATLANTIC INTRACOASTAL WATERWAY (AIWW)

The Atlantic Intracoastal Waterway (AIWW) is a series of rivers, sounds, creeks, bays, harbors and manmade canals that stretch some 1,200 miles from Norfolk, Virginia to Key West, Florida. This SIS Waterway is 529 miles long in Florida, beginning at the Florida/Georgia state line and ending at Key West in the Florida Keys. Along the AIWW waterway, there are eight public seaports, including the Port of Fernandina, JAXPORT, Port Canaveral, the Port of Fort Pierce, the Port of Palm Beach, Port Everglades, PortMiami, and the Port of Key West. The AIWW is both an important commercial and a recreational waterway, as the inlets located along the waterway are important for providing boaters with access to the Atlantic Ocean. The Florida Inland Navigation District (FIND), headquartered in Jupiter, serves as the local sponsor to the USACE for the AIWW.

The AIWW is home to many waterfront facilities. The USACE Master Docks Plus database lists 632 waterfront facilities and navigational points of interest. These also have been categorized into the same six facility types as the NGIWW and the WGIWW:

Facility Types	Quantity
Government	55
Port Tenant Facilities	91
Industrial/Commercial	250
Seafood Processing/Fishing Fleets	41
Navigation	192
Landings	3



FLORIDA'S COMMERCIAL WATERWAY TONNAGE

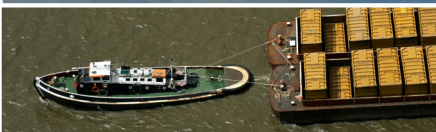
The waterway system operated and maintained by the U.S. Army Corps of Engineers is known as the Inland Marine Transportation System (IMTS) and includes over 25,000 miles of navigable waters throughout the nation, as well as 12,000 miles of inland and intracoastal waterways.

The table below provides a list of Florida's commercial waterway components in the IMTS and their tonnage from 2007 to 2013, in thousands of short tons.

Waterway	2007	2008	2009	2010	2011	2012	2013
Apalachicola, Chattahoochee, Flint River System	0	0	0	0	0	2	0
AIWW, Fernandina to Jacksonville	184	263	142	205	167	227	130
AIWW, Jacksonville to Miami	459	75	55	80	12	1	2
AIWW, Miami to Key West	439	230	206	156	20	24	36
Bayou Chico*	242	269	51	47	32	75	154
Canaveral Harbor	3,470	2,431	2,301	2,510	3,462	3,164	3,337
Charlotte Harbor	134	0	22	0	0	2	6
Cross Florida Barge Canal	0	0	0	0	0	0	0
Escambia River	3,291	2,846	1,842	2,842	2,273	1,664	1,721
Fernandina Harbor	552	459	568	734	607	516	299
Fort Pierce Harbor	121	188	154	132	114	63	6
Gulf County Canal	0	0	0	312	0	0	0
GIWW, Apalachee Bay to Panama City	975	827	814	722	661	607	717
GIWW, Caloosahatchee River to Anclote River	1	3	28	0	0	15	1
GIWW, Panama City to Pensacola Bay	3,089	2,724	2,316	2,234	1,812	1,610	1,751
GIWW, Pensacola Bay to Mobile, AL	7,187	6,257	4,838	5,752	4,733	3,962	4,172
Jacksonville Harbor	21,207	21,050	17,691	19,122	16,831	15,439	16,473
Key West Harbor	8	1	16	49	60	39	0
LaGrange Bayou	352	312	249	254	249	219	262
Miami Harbor	7,479	6,826	6,772	6,960	7,178	6,994	7,125
Miami River**	463	317	335	390	417	392	369
Okeechobee Waterway	1	2	1	0	0	1	1
Palm Beach Harbor	3,117	2,377	2,342	2,374	1,813	2,065	2,130
Panama City Harbor	2,846	2,732	2,461	2,891	2,142	2,326	2,527
Pensacola Harbor	952	831	770	848	752	879	852
Port Everglades Harbor	24,216	21,652	20,059	20,233	20,956	21,105	21,703
Port Manatee	3,480	2,728	2,898	3,288	3,724	3,397	2,736
Rice Creek	100	56	43	41	39	3	0
St. Johns River	109	65	43	41	68	64	49
St. Marks River	109	88	76	80	62	72	53
St. Petersburg Harbor	27	13	15	9	2	4	1
Tampa Harbor	46,857	39,676	34,888	34,202	31,408	31,650	32,407
Watson Bayou	14	19	9	12	2	0	51
Weedon Island	937	631	0	0	0	0	0
Florida Total	132,418	115,948	102,005	106,520	99,596	96,581	99,071

Note: *Bayou Chico volume are also included in Pensacola Harbor Totals

**Miami River volume is also included in Miami Harbor Totals



FLORIDA COMMERCIAL AND RECREATIONAL FISHING AND BOATING

Florida is one of the leading states in the country when it comes to commercial and recreational uses of its waterways. Florida leads the nation in jobs that are supported by the commercial and recreational fishing industry, with over 191,000 jobs in 2012 alone. The Florida Fish and Wildlife Conservation Commission (FWC) provides statistics related to recreational boating, fishing, and hunting, and several of these FWC Fast Facts were used throughout the plan to restate the significance of recreational waterway uses in Florida.

Florida's waterways provide significant economic benefits through recreational boating and fishing. Fishing is an obvious strength in the state's ecotourism tool box due to its natural resources, many lakes and rivers, and long intracoastal waterways and coastline. The Florida Department of Economic Opportunity (DEO) reported that statewide recreational saltwater fishing is valued at over \$5 billion and creates over 50,000 jobs. The associated impacts of the boating industry contribute an additional \$18 billion, creating over 220,000 jobs. According to a 2011 survey compiled by Southwick Associates for the U.S. Fish and Wildlife Service, Florida has the largest number of saltwater anglers (2.4 million) in the U.S. Additional information is provided by FWC and can be found in the tables below.

NUMBER OF FLORIDA REGISTERED ANGLERS (AGE 16 OR OLDER)		
Freshwater	Residents	956,000
	Nonresidents	258,000
Saltwater	Residents	1,390,000
	Nonresidents	1,007,000
Total		3,611,000
FLORIDA RECREATIONAL AND WILDLIFE INDUSTRIES		
Category	Economic Contribution	Jobs
Freshwater Fishing*	\$1.7 billion	14,000
Saltwater Fishing**	\$7.6 billion	109,300
Wildlife Viewing*	\$4.9 billion	44,600
Boating***	10.4 billion	82,800
Total	24.6 billion	250,700
FLORIDA SEAFOOD INDUSTRY**		
Category	Economic Contribution	Jobs
Commercial Harvesters	\$396 million	6,028
Seafood Processors and Dealers	\$774 million	4,819
Importers	\$12.1 billion	44,018
Seafood Wholesalers and Distributors	\$1.2 billion	10,403
Retail	\$2.1 billion	16,873
Total	\$16.6 billion	82,141

Note: The economic impacts of the commercial fishing sector and seafood industry refer to the employment (full-time and part-time jobs) and output (sales by Florida businesses) generated by the commercial harvest sector and other major components of the U.S. seafood industry, including processors and dealers, wholesalers and distributors, grocers and restaurants.

Source: *Southwick Associates 2012 report, using USFWS 5-year survey, 2011.

**National Marine Fisheries Service, 2014 report, using 2012 NOAA data.

***National Marine Manufacturers Association, 2012 study, adjusted in 2013, using 2008 data.

STAKEHOLDER OUTREACH

For the 2015 Florida Waterways System Plan, stakeholder input was obtained through surveys, in-person meetings, teleconferences, and other communication. At the conclusion of these outreach efforts, the various issues and challenges identified by the stakeholders were organized into 12 main categories. Some of the categories were identified by stakeholders multiple times for separate reasons. These categories were then summarized in a matrix, shown in the table below, illustrating the issues and the stakeholders that identified them. The numbers in each block identify the number of comments or issues identified by each stakeholder. More information can be found in Chapter four of the 2015 Florida Waterways System Plan.

The top five issues identified by stakeholders were maintenance dredging, fixed bridge clearance and drawbridges, regulations and permitting, waterway access, and availability of current collaborative data and information resources.

IDENTIFIED ISSUES	STAKEHOLDERS																Total
	USACE	FIND	WCIND	USCG	FWC	Local Govt.	MRMG	MRC	JMTX	GICA	Pilots	SFA	GSAFF	MIAF	MIASF	Marinas	
Waterway Dredging	1	3	2	2	3	2	1	1	2	1	2	1	1	3	2	3	30
Fixed Bridge Clearance/ Drawbridge Schedules	1	3			3		2		2	1				1	2	1	16
Regulations/Permitting	1	3	3		1		1		1			1		3	1		15
Waterway Access		3	1			1	1				1	1	1	1	1		11
Availability of Data and Information	2	1	1		1		2		1							1	9
Waterway Funding	2	2	1	1		1		1									8
Increasing Vessel Traffic/Conflicts	1	1	1		1	1				1				1		1	8
Navigational Aids			1	1	1	1				1						1	6
Full Waterway Utilization		2	1														3
Derelict Vessels					1											1	2
Changing Technology LNG etc.									1								1
Anchoring and mooring areas														1			1



SUMMARY OF KEY ISSUES

In summary, the key issue areas identified from the comprehensive review of previous related study efforts, as well as from extensive stakeholder participation were:

Waterway Dredging and Funding – The need for adequate funding availability through federal, state, and local sources along with regular Water Resources Development Act (WRDA) bill passage.

Bridge Clearance and Drawbridge Schedules – Specific issues include challenges to vessel transit of waterways whether by schedules or height restrictions.

Regulations and Permitting – Federal and state regulatory and environmental agencies/organizations require high-cost mitigation and lengthy application and design processes.

Waterway Access – Primary stakeholders expressed need for direct public access to the intracoastal and inland waterways with docks, piers, ramps, and mooring facilities.

Data and Information – Availability of current and comprehensive data resources. Additional need for public outreach and education materials related to waterway systems.

Other Issues Identified below –

- **Safety Concerns with Increasing Vessel Traffic/Conflicts** – Personal recreational watercraft are having increased conflicts with commercial vessels expanding regulatory requirements.
- **Maintenance of Navigational Aids** – Federal and state regulators have increased difficulties maintaining waterway Nav-Aids which often get push off station or destroyed by natural causes.
- **Unused Capacity** – Local waterway sponsors, FIND and WCIND, are advocates for greater utilization of inland and intracoastal waterways to relieve landside transportation constraints.
- **Removal of Derelict Vessels** – This was identified by state and local stakeholders as an issue to keep waterways safe and unrestricted from abandoned, lost, or stolen vessels.
- **Changing Technology** – Florida is leading the nation's waterways with state-of-the-art clean burning LNG fueled vessels like Sea Star Lines, Isla Bella, and Crowley Maritime Corp., El Coquí at JAXPORT.
- **Anchoring and Mooring Areas** – Many local waterway sponsors along with state regulatory authorities mentioned a need for better public access to inland and intracoastal waterways.
- **Statewide Waterway Resources Inventory and Economic Impact Assessment** – Overall the waterway data for privately-owned industrial, commercial, retail, and recreational waterway users is not available on a statewide uniform basis.

FDOT WATERWAY FOCUS AREAS

The 2015 Florida Waterways System Plan identifies focus areas and initiatives for the Seaport and Waterways Office to consider in monitoring and facilitating the maintenance and improvement of Florida's waterway system. These focus areas and corresponding initiatives directly relate to FTP, SIS, and FMTP goals and objectives (as shown in Appendix A-1 of the 2015 Florida Waterways System Plan) and seek to address the topics and issues identified during the stakeholder outreach and research efforts completed to update the plan.

Facilitate maintenance of the current waterway network as a safe and reliable system for all users.

- Coordinate with the USACE to ensure Florida projects are well-positioned to receive funding.
- Participate in planning for the waterway network with seaports, connectors, and other intermodal hubs.
- Identify partnerships FDOT can participate in to advance safety on the state's waterways.

Encourage appropriate uses to increase utilization of the waterway system and consider facilitating capacity improvements, if warranted.

- Participate in the SIS planning process to ensure that SIS waterway planning criteria are appropriate.
- Explore potential funding sources, programs, and partnerships to minimize bottlenecks, improve efficiency, and further develop capacity to meet user needs.
- Investigate the advantages of waterborne freight as an alternative or complement to other modes of freight transportation, including potential environmental benefits of waterborne freight movements.
- Participate in efforts to identify and resolve regulatory or permitting issues as they relate to the waterway system.

Explore the need and benefits of acquiring data to assist in better understanding the entire range of commercial and recreational users and activities and the non-freight economic impact of Florida's waterways.

- Identify existing sources of data and data gaps.
- Consider data acquisition needs.
- Explore creating an inventory of commercial and recreational waterway facility locations and types of commerce being conducted on the waterways.
- Investigate methods to better understand the true economic impact of activities occurring on the waterway network.





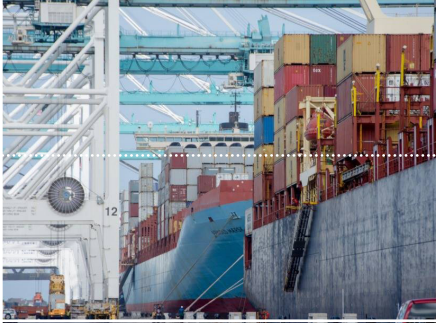
OUTLOOK FOR SEAPORT AND WATERWAY INFRASTRUCTURE INVESTMENTS

The dynamic nature of global trade and manufacturing, maritime businesses, commodity flows, fuel markets, and the cruise industry means that seaports, logistics facilities, and logistics companies are continually having to adapt and improve the way they do business. As a result, FDOT's Seaport and Waterways Program needs to be able to respond to needs and adjust to opportunities. Therefore, specific projects and the timing and amount of funds for each project may be subject to change and adjustment. By consistently applying our strategies to the Focus Areas presented in both the Seaport and Waterways System Plans, the Seaport and Waterways Office can ensure that initiatives, actions, and funding decisions are targeted to needs and opportunities that will prove effective in developing infrastructure to support long-term growth and efficiency at Florida seaports and on Florida's waterways.

Thanks to the billions of dollars of increased seaport-related infrastructure investments from state and local sources since 2011, recent growth in container volumes suggest Florida ports are already beginning to capture a greater share of cargoes. The trends in global logistics patterns, combined with Florida's continuing investments, have positioned the state's ports to gain an increasing share of the world's waterborne commerce for decades to come.

Therefore, our near- and long-range priorities are to continue to invest in facilities and processes that improve access, capacity, and efficiency at Florida's seaports and waterways. These efforts support the state's economic goals by attracting and efficiently handling increasing varieties of cruise ships and cargo vessels that carry the passengers, basic commodities, and valuable products to support the prosperity and well-being of Florida's businesses, residents, and visitors.







CARNIVAL DREAM

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