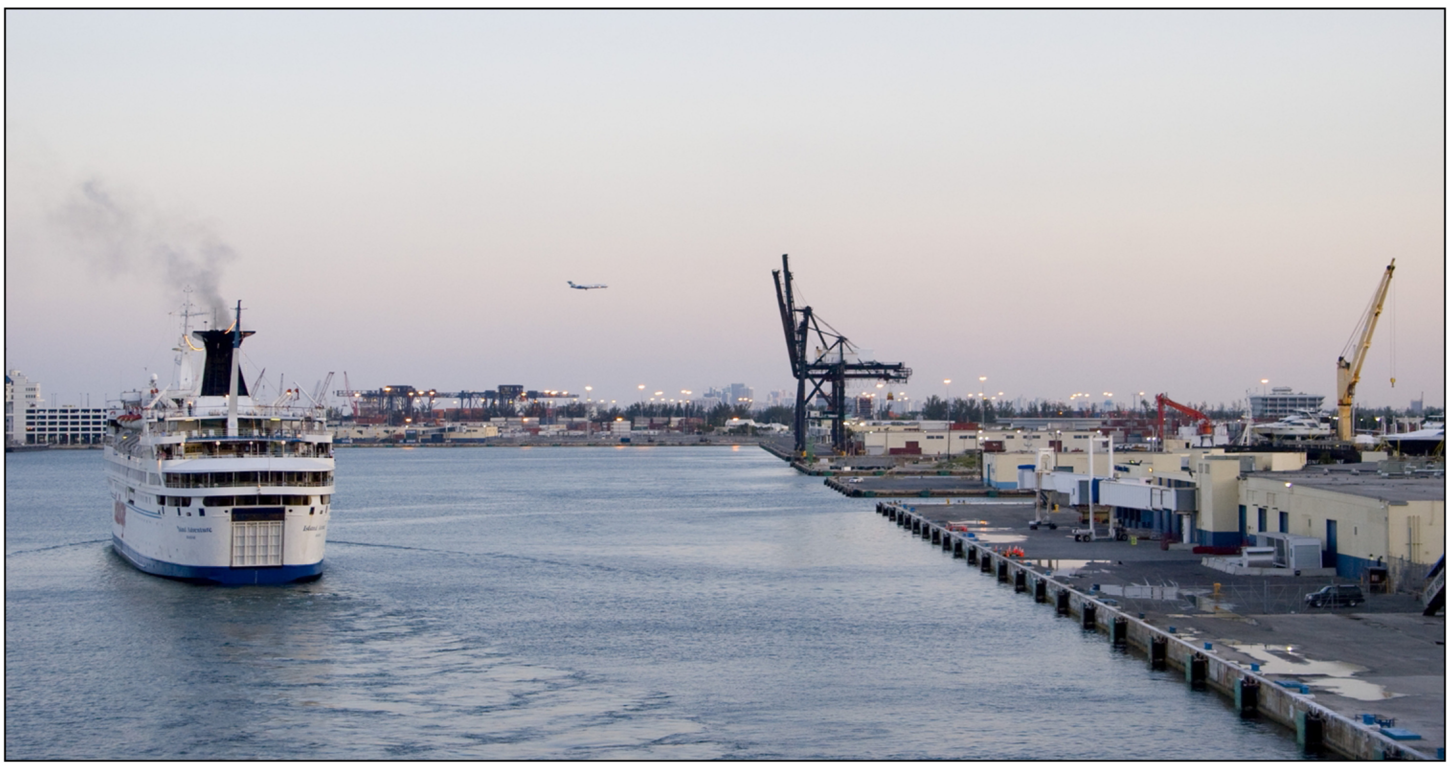
a report on

FLORIDA TRANSPORTATION TRENDS AND CONDITIONS

TRANSPORTATION SYSTEM

Seaports - Freight and Cruise Activity



FDOT

June 2013

Produced by the
Florida Department of Transportation
Office of Policy Planning

with support from the
Center for Urban Transportation Research
University of South Florida

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

Table of Contents

List of Figures

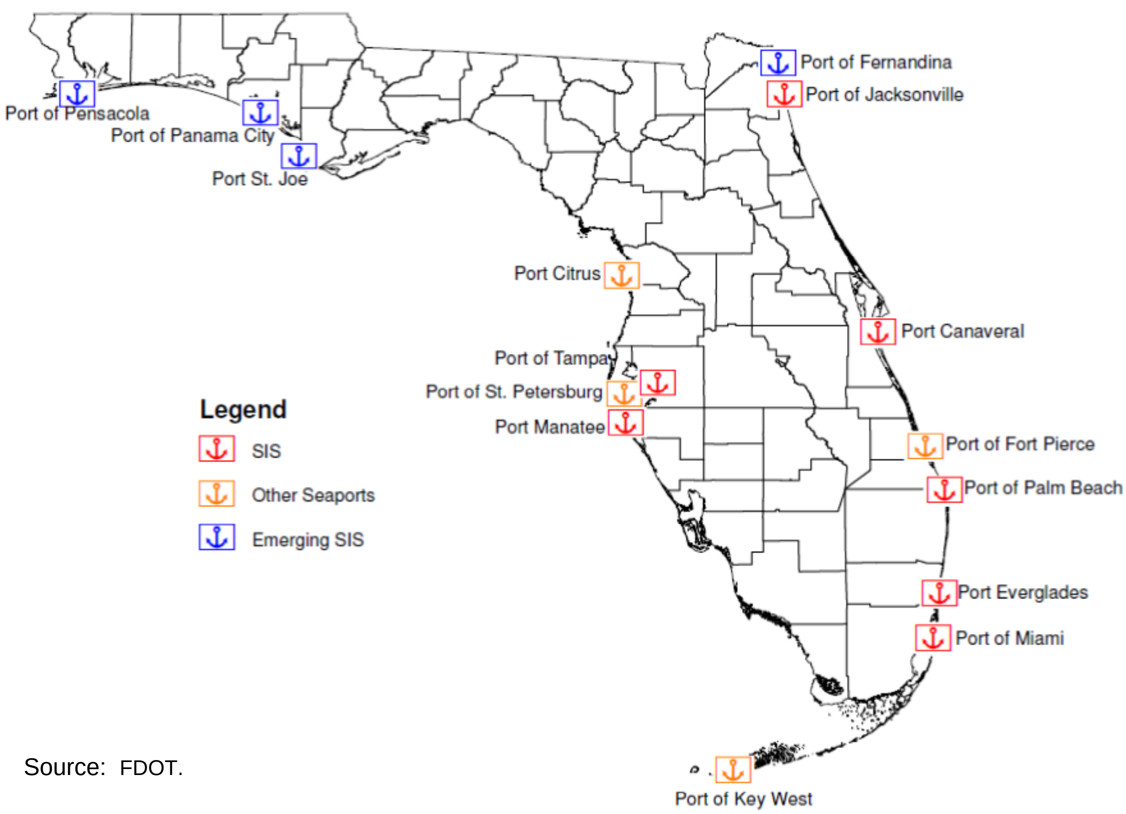
List of Tables

Transportation System: Seaports – Freight and Cruise Activity

Introduction

Florida's geography includes about 1,350 miles of coastline that underlines the importance of seaport operations on its economy. Its global location as the United States' gateway to the Caribbean as well as Central and South America positions Florida for serving as an important portal for waterborne freight and cruise activities. This creates substantial economic benefits and enables economic opportunities for areas throughout the state. Figure 1 is a map of Florida's seaports and denotes those that are part of the Strategic Intermodal System (SIS). The SIS is a statewide network of high-priority transportation facilities that includes the state's deep-water ports. Of the 15 deep-water ports, seven are currently designated as SIS facilities and four as Emerging SIS facilities. The newest of the ports is Port Citrus, which is currently preparing a feasibility study in anticipation of port development. The geographic dispersion of activities at Florida's port facilities has enabled Florida to accommodate both cruise passenger and waterborne freight growth effectively. This has provided substantial capacity for growth, direct access to several regional markets, and ground access across the transportation networks which minimizes the prospect of bottlenecks.

Figure 1 – Map of Seaports in Florida



Source: FDOT.

Transportation System: Seaports – Freight and Cruise Activity

Freight

Trade is a major activity for Florida's seaports. One measure of the seaport activity is the actual tonnage crossing seaport docks. According to the Freight Analysis Framework data, the largest tonnage of materials imported into Florida's seaports in 2011 was nonmetallic minerals, totaling 4,523.5 kilotons, valued at $725.3 million. Meanwhile, the largest export flows originating in Florida's seaports were cereal grains totaling 1,785.2 kilotons and valued at $259.06 million. In 2011, Florida seaports handled 100.6 million tons of cargo, of which 43.1 million tons were domestic. The Florida Seaport Transportation and Economic Development (FSTED) Council, in its Five-Year Mission Plan, projected that Florida's waterborne trade would grow to 136.6 million tons by FY2015/2016. In 2012, Florida's waterborne international trade was valued at $85.6 billion, an increase of almost 3.4% from 2011.

In 2012, Florida seaports handled 100.6 million tons of cargo, of which 43.1 million tons were domestic.

Table 1 – Tonnage of Florida's Total Waterborne Trade By Port FY2011/2012 with FY2010/2011 Comparison

Port	*Exports*	*Imports*	*Domestic*	*Total*
Canaveral	85,648	2,593,668	1,225,670	3,904,986
Everglades	3,780,814	7,278,533	10,809,553	21,868,900
Fernandina	375,437	9,062	-	384,499
Fort Pierce	65,166	19,457	11,000	95,623
Jacksonville	2,527,138	11,192,520	8,159,603	21,879,260
Manatee	1,044,956	5,792,855	-	6,837,811
Miami	4,222,135	3,885,935	-	8,108,070
Palm Beach	979,155	488,789	537,517	2,005,461
Panama City	840,394	525,594	54,677	1,420,665
Pensacola	62,383	98,088	63,688	224,159
Tampa	6,160,395	5,452,413	22,294,756	33,907,564
Total FY2011/2012	**20,143,621**	**37,336,914**	**43,156,464**	**100,636,999**
Total FY2010/2011	**19,796,557**	**35,932,270**	**44,224,029**	**100,300,718**

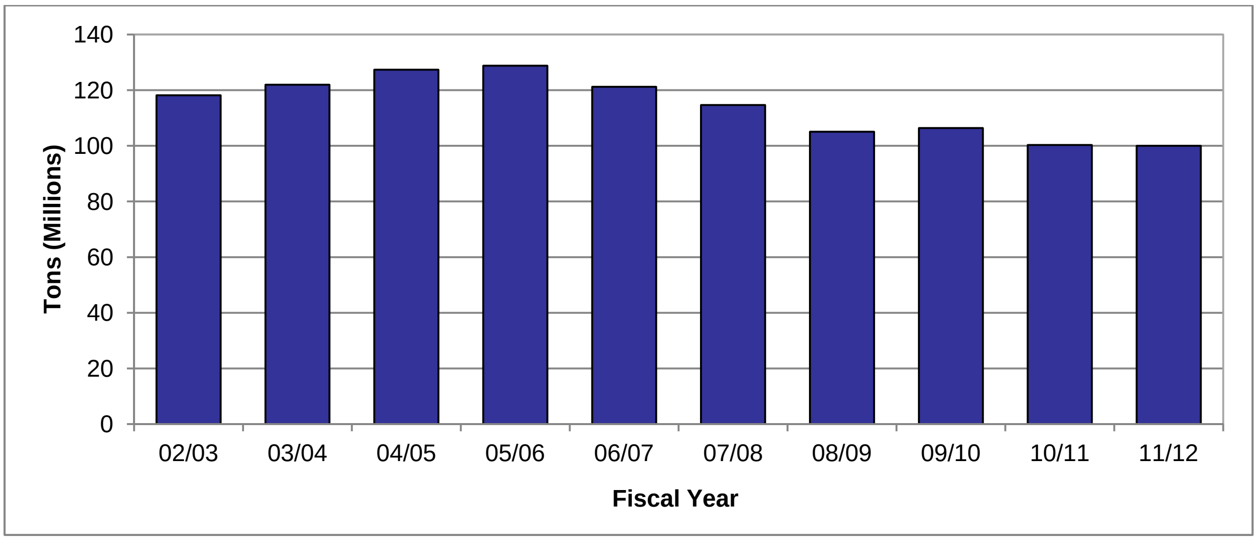
Source: FSTED Council, *Executive Summary: A Five-Year Plan to Achieve the Mission of Florida's Seaports (2012/2013–2016/2017), May 2013* (hereafter referred to as *The Five-Year Mission Plan).*

Table 1 displays the import, export, and domestic tonnage handled at each freight port in FY2011/2012. Imports through Florida's seaports comprised 37 percent of the tonnage activity, and exports comprised 20 percent. The ports of Fernandina, Fort Pierce, Miami, Palm Beach, Panama City, and Tampa handled more exports than imports. Notably, the ports of the

Everglades, Jacksonville, and Tampa handled the bulk of domestic trade. Also illustrated in Table 1 is a comparison of total waterborne trade between FY2010/2011 and FY2011/2012. Total domestic trade decreased while total exports and imports increased.

In recent years, Florida ports have experienced a noticeable decline in handling cargo tonnages (Figure 2). Primarily, this is due to a shift in cargo composition. Historically, Florida's ports handled more bulk commodities. More recently, there is a general trend in Florida toward handling less bulk and more higher-value, labor-intensive general cargo (Tables 2-3). Some of the shift away from bulk cargoes, such as the dry bulk products used in the construction trades, may be temporary. Others, such as lost exports of phosphate fertilizers due to overseas production closer to final user, may not be. This shift from bulk to general cargo produces more jobs and economic output.

Figure 2 – Tonnage at Florida Seaports



Source: FSTED Council, *The Five-Year Mission Plan (2012/2013–2016/2017).*

International trade in Florida reached $85.6 billion in 2012, an increase of 3.5 percent from 2011.

Table 2 – Florida's Top 10 Import Commodities, 2012 (value in $ million)

Rank	*Commodity*	*Trade Value (2012)*	*Percent Change from 2011*
1	Electrical Machinery	9,641.0	41.5%
2	Pearls, Precious Stones, Precious Metals, Coin	9,287.2	36.7%
3	Vehicles (Except Rail)	6,290.7	22.9%
4	Mineral Fuel, Oil	5,816.0	-10.6%
5	Industrial Machinery	4,357.5	-3.4%
6	Knit Apparel Articles and Accessories	4,345.0	-2.7%
7	Special Classification Provisions	3,227.0	57.6%
8	Copper	2,143.2	5.7%
9	Fish, Crustaceans & Aquatic Invertebrates	2,138.9	8.2%
10	Beverages, Spirits and Vinegar	2,084.5	25.5%

Source: Enterprise Florida, Inc., *Florida's Top 50 Merchandise Import Commodities (2HS), 2012*.

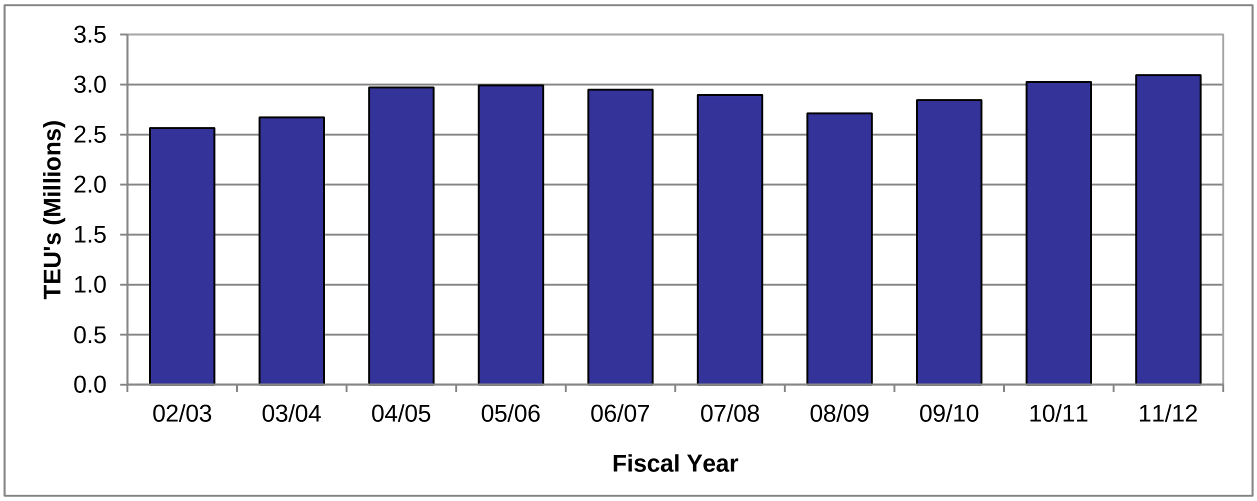
Table 3 – Florida's Top 10 Export Commodities, 2012 (value in $ million)

Rank	*Commodity*	*Trade Value (2012)*	*Percent Change from 2011*
1	Industrial Machinery	17,725.0	2.0%
2	Electrical Machinery	13,440.4	3.3%
3	Vehicles (Not Railway)	10,018.2	17.6%
4	Pearls, Precious Stones, Precious Metals, Coin	9,458.0	13.9%
5	Aircraft, Spacecraft	7,330.7	10.3%
6	Optic, Medical Instruments	5,512.5	5.8%
7	Fertilizers	2,267.0	-20.5%
8	Pharmaceutical products	1,914.9	11.6%
9	Plastics	1,636.4	-11.1%
10	Essential Oils, Perfumes	1,237.0	13.8%

Source: Enterprise Florida, Inc., *Florida's Top 50 Merchandise Export Commodities (2HS), 2012*.

Another measure of seaport activity is container traffic. The unit of measure employed is the 20-foot equivalent unit (TEU). Over the years, Florida ports have moved millions of TEUs across their docks. Figure 3 shows the container movement at Florida's seaports from FY2002/2003 to FY2011/2012. In FY 2011/2012, 3.1 million TEUs moved through Florida's seaports. The FSTED Council estimates that by FY2015/2016 approximately 4.4 million TEUs will be handled at Florida's seaports.

Figure 3 – Container Movements at Florida's Seaports



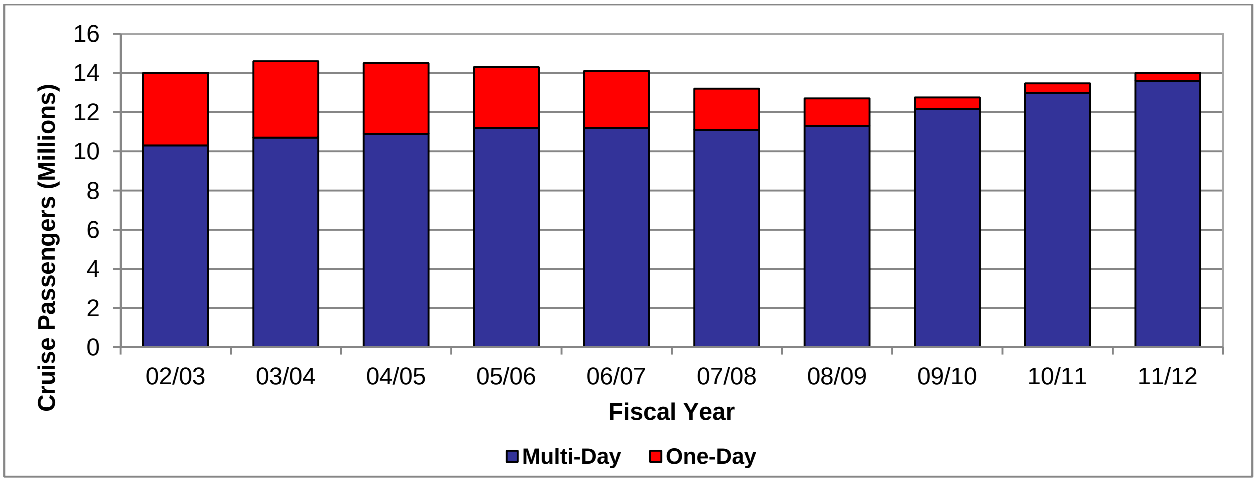
Source: FSTED Council, *The Five-Year Mission Plan (2012/2013–2016/2017).*

Container movements reached a peak in FY2011/2012, surpassing the previous peak in FY2005/2006 by 3.4%.

Cruise

Cruise ship operations contribute significantly to Florida's port activities, and Figure 4 shows the passenger totals by fiscal year. The number had decreased every year from FY 2003/2004 to FY 2008/2009. Then in FY2009/2010, it began increasing again. It is notable that one-day cruises have declined 90 percent since their peak in FY2003/2004, but multi-day cruises have increased to a record 13.6 million passengers. According to the Cruise Lines International Association (CLIA), Florida-based operations of the cruise industry account for 60 percent of all U.S. cruise embarkations. Furthermore, a total of 14 million passenger movements occurred at the seven Florida seaports with cruise operations. It is forecast that Florida's seaports will host 15.8 million passengers by FY2015/2016.

Figure 4 – Cruise Passengers at Florida's Seaports



Source: FSTED Council, *The Five-Year Mission Plan (2012/2013–2016/2017).*

Table 4 – Cruise Activities at Florida's Seaports (Embarkations and Disembarkations)

Ports	***FY 10/11***			***FY 11/12***			***Projection FY 15/16***
	One-Day Cruise	***Multi-Day Cruise***	***Total***	***One-Day Cruise***	***Multi-Day Cruise***	***Total***	
Canaveral	44,469	3,100,199	3,144,668	243,227	3,761,056	4,004,283	4,250,000
Everglades	288,740	3,644,103	3,932,843	68,298	3,689,022	3,757,320	3,926,697
Jacksonville	-	188,726	188,726	-	195,426	195,426	377,000
Key West	154,821	852,673	1,007,494	73,181	832,887	906,068	900,000
Miami	-	4,018,161	4,018,161	-	3,774,452	3,774,452	4,900,000
Palm Beach	-	303,000	303,000	-	341,004	341,004	350,000
Tampa	-	875,611	875,611	-	974,259	974,259	1,100,000
Total	**488,030**	**12,982,473**	**13,470,503**	**384,706**	**13,568,106**	**13,952,812**	**15,803,697**

Source: FSTED Council, *The Five-Year Mission Plan (2012/2013–2016/2017).*

Table 4 shows that 97 percent of the cruise activities were multi-day cruises for FY2011/2012. Compared to FY2010/2011, a total of 482,309 more passengers embarked and disembarked at the seven passenger ports in FY2011/2012. As the capital of the North America cruise industry and the corporate home or administrative office for all of the top cruise lines, Florida enjoys substantial economic benefits from cruise operations at its seven seaports. These benefits include $6.7 billion in direct expenditures, more than 130,950 jobs, and almost $5.8 billion in wages to Florida cruise industry workers in 2011.

Conclusions

With growing globalization of manufacturing and commerce, seaports will remain critical infrastructure elements for the transportation of food, fuels, materials, and manufactured products. Additionally, seaports continue to play an important role in meeting the tourism/entertainment desires of the population. Florida's geographic location enables the state to remain a significant and important player in waterborne commerce and economic activity.

To support the current seaport cargo and cruise operations, and enable them to meet evolving needs, the Florida seaports will require ongoing investment to maintain and expand the capacity necessary to meet these growing requirements. Similarly, the interconnection of the seaports with the broader passenger and freight transportation systems is a critical factor in sustaining successful and effective functioning of the overall transportation network.

Continued economic development in the Caribbean and South America, the widening of the Panama Canal, possible changing relationships with Cuba, changing energy costs impacting the economics of long distance transportation, the slowing economy and consumer expenditure levels, and evolving attitudes about globalization of manufacturing may all impact the pace of waterborne commerce going forward. Recognizing the significance these potential changes may have on Florida's economy, more and more seaports are teaming up with regional governments and private partners to build port improvements such as distribution facilities & logistics centers, overpasses & underpasses, intermodal container transfer facilities, building ramps & access roads, and rail linkages. This regional effort will ensure that Florida ports play an important role in state, national and international transportation and remain critical elements of the overall transportation system.

Bibliography

Bibliography

Enterprise Florida Inc. *Florida's Top 50 Merchandise Exports (2HS), 2010–2011.* T012. http://www.eflorida.com

Enterprise Florida Inc. *Florida's Top 50 Merchandise Imports (2HS), 2010–2011.* 2012. http://www.eflorida.com

FDOT Office of Policy Planning. *Florida Transportation Indicators: Monthly Passengers at Major Ports.* 2011. http://www.floridatransportationindicators.org/index.php?chart=12a

FDOT Seaport Office. *Florida Seaport Transportation and Economic Development Program.* 2012. http://www.dot.state.fl.us/seaport

Florida Seaport Transportation and Economic Development Council. *A Five-Year Plan to Achieve the Mission of Florida's Seaports (2011/2012–2015/2016).* 2012. http://www.flaports.org/

Cruise Lines International Association, Inc. *State Economic Fact Sheets* 2011. www.cruising.org/sites/default/.../EconStudy_State_Facts_2011.pdf