Select U.S. Ports Prepare For Panama Canal Expansion

Port of Jacksonville



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"We are spreading our eggs over multiple baskets and are optimistic about growth."

– Nancy Rubin, senior director, communications, Jacksonville Port Authority¹

Port of Jacksonville

The Port of Jacksonville ranks as the No. 1 vehicle export port in the U.S. and the top container port in the state of Florida. In 2013, its three cargo terminals handled a total of 8.2 million tons of cargo, including more than 926,000 TEUs — a new container record — and more than 630,000 vehicles.²

Location, Size and Terminals

The Port of Jacksonville is located along the St. Johns River in Jacksonville, Florida, and operated by the Jacksonville Port Authority (Jaxport). It includes three cargo terminals — the Blount Island Marine Terminal, the Dames Point Marine Terminal and the Talleyrand Marine Terminal — and one passenger terminal, the Jaxport Cruise Terminal, which began operating in 2004. The port covers roughly 1,500 acres of land.

Operating Status

The Port of Jacksonville generated just shy of \$52 million in operating revenue in 2012, the port's 12th consecutive year of operating revenue growth. The port's operating expenses stayed relatively flat or declined over the past four years, as shown in Figure 1. The number of container ship calls also increased, from 1,765 in 2009 to 2,083 in 2012. This upward trend is due to the constant expansion and development of the port.

Cargo

The Port of Jacksonville's expansion and development also translate into growth in the number of TEUs the port receives, which set a record in 2012 of almost 924,000. (It was estimated to set a new record in 2013 of about 927,000, a number that was expected to reach 950,000 in 2014.) Over the past decade, TEUs and total cargo tonnage grew by 23,000 and 50,000, respectively. In 2013, the port processed 8.2 billion tons of cargo in both TEU and bulk goods.

Facilities: Cargo Terminals

In 2006, Jaxport began planning to increase the depth of the St. Johns River from 38 to 40 feet along all four of the Port of Jacksonville's terminals. That effort began in 2009 and is now complete. During the past few years, Jaxport has been attempting to determine a new optimal depth for the river, one that will be deep enough to enable the port to accept larger, Post-Panamax vessels but that will not compromise budgets. The Port Authority currently believes that this optimal depth is 47 feet, a depth that would continue to be sufficient through 2035.

Blount Island Marine Terminal is the largest of the port's four terminals, with over 6,600 linear feet of berth space. Talleyrand Marine Terminal has 4,780 linear feet of berth space while Dames Point Marine Terminal consists of two berths, each of which is 1,200 linear feet.

Figure 1

Operating Status

Year	Operating Revenue (in thousands of dollars)	Operating Expenses (in thousands of dollars)	Operating Income (in thousands of dollars)	Container Volume (in TEUs)	Container Ship Calls
2013 (Estimate)	\$53,100	\$52,000	\$1,100	927,000	N/A
2012	51,825	54,069	-2,244	923,660	2,083
2011	50,871	55,116	-4,245	900,433	2,030
2010	50,636	56,438	-5,802	826,580	1,947
2009	47,344	54,804	-7,460	755,000	1,765
2008	42,363	47,099	-4,736	697,999	1,827
2007	39,905	40,927	-1,568	710,073	N/A
2006	38,492	43,839	-5,347	768,239	N/A
2005	34,098	39,600	-5,502	777,318	N/A
2004	31,014	37,981	-6,967	727,660	N/A
2003	30,293	32,207	-1,914	692,422	N/A
Average Growth Rate (2003 to 2013)	4.29%	3.8%	N/A	2.5%	N/A

Source: "Jaxport/Jacksonville Port Authority Annual Report, 2003 to 2013"; data set compiled by authors

Figure 2					
Cargo Terminals					
Terminal	Туре	Channel Depth	Planned Depth	Berth Length (in linear feet)	Size (in acres)
Blount Island	Cargo	40	47	6,600	754
Talleyrand	Cargo	40	47	4,780	173
Dames Point	Cargo	40	47	Two, 1,200 each	585

Source: Jacksonville Port Authority website

Blount Island handles 80 percent of all cargo at the port. It is situated on 754 acres on the western part of the island and is nine nautical miles from the Atlantic Ocean. The cargo it handles each day includes container, roll-on/roll-off (Ro/Ro), break bulk and general cargo. It operates one 112-ton whirly crane and eight container cranes. The terminal includes 240,000 square feet of transit shed space (where cargo waits to be transported) and a 90,000-squarefoot container station.

Talleyrand sits on 173 acres and is located about 21 nautical miles from the Atlantic Ocean. It handles

container, break bulk, liquid bulk, automobiles and some other general cargo. It operates two 50-LT (long traveling) capacity rubber-tired gantry cranes on 4,800 linear feet of total track as well as four container cranes. Talleyrand Director Doug Menefee works directly with Talleyrand Terminal Railroad Inc., which allows the on-dock rail system to directly switch to Norfolk Southern Corp. and CSX Transportation rail lines. Talleyrand also provides 160,000 square feet of warehouse space, which can accommodate 2.2 million cubic feet of cold storage space, and a 553,000-square-foot transit shed for all other cargo.

Lines Served				
Blount Island	Talleyrand	Dames Point		
832nd Transportation Battalion	Crowley Liner Services	Martin Marietta Aggregates		
AMPORTS	Global Stevedoring Inc.	Rinker Materials – CEMEX		
APM Terminals	Hamburg Süd North America	TraPac/MOL		
APS East Coast Inc.	ICS Logistics			
Ceres Marine Terminal	JAXPORT Refrigerated Services			
Coastal Maritime Stevedoring LLC	Laser International/Pioneer			
Hoegh Auto Liners	Mediterranean Shipping Co. (MSC)			
International Transport Logistics Inc.	Southeast Toyota Distributors			
Ports America	SSA/Cooper LLC			
Sea Star Line LLC	Talleyrand Terminal Rail Road			
Terminal Investment Corp. (TICO)	Westway Trading Inc.			
Trailer Bridge Inc.				
Wallenius-Wilhelmson				
WWL Vehicle Services				

Figure 3

Source: Jacksonville Port Authority website

Figure 4 Cranes		
Terminal	Type of Cranes	
Blount Island	Eight container cranes (two 40-ton, one 45-ton and five 50-ton cranes) One 112-ton gantry whirly crane	
Talleyrand	Four container cranes (one 40-ton, two 45-ton and one 50-ton crane) Two 50-ton rubber-tired gantry cranes One 100-ton multipurpose whirly crane One 40-ton container stacker	
Dames Point	Six container cranes (four 40-ton and two 50-ton cranes) Six 40-ton rubber-tired gantry cranes	

Source: Jacksonville Port Authority website

The port's third and newest cargo terminal, Dames Point, operates on a total of 585 acres. The TraPac-owned terminal occupies 158 acres and was built in 2009. It is located 10 nautical miles from the Atlantic Ocean and serves container, bulk and cruise cargo. Dames Point processes the least amount of cargo of any terminal at the port. It focuses mostly on goods traveling to and from Asian ports, specifically cargo to and from Tokyo-based ports. The equipment used to accommodate this cargo consists of six container cranes and six rubber-tired gantry cranes.

Facilities: Cranes

The Port of Jacksonville's cargo terminals feature 18 container cranes as well as eight rubber-tired gantry cranes.

Facilities: Passenger Terminals

The Jaxport Cruise Terminal opened in 2004; 85,000 passengers embarked from the terminal that year. Since then, it has grown by an average of about 10,000 passengers per year. In 2008, however, the cruise terminal hit an all-time low, accommodating just 76,000 passengers, as a result of preparations for the 2,056-passenger Carnival Fascination, which was a large success when the port reopened the following year. In 2012, a record number of passengers, 195,397, embarked from the port, a 3 percent increase from 2011. The terminal is 63,000 square feet; the cruise berth is 1,289 feet long and 40 feet deep. The cruise terminal has created many jobs and strengthened the port's economic impact.

Figure 5

Current and Planned Improvements

Project	Completion Date (Estimated)	Estimated Investment (in millions of dollars)	Description
Dames Point Intermodal Container Transfer Facility	2014	\$ 30.0	Planned to open in December 2014.
			More efficient way to transfer containers between vessels and trains.
			Will reduce trucking traffic.
Mile Point Improvement	2015 \$ 36.		Improve flow in St. Johns River at Mile Point.
			Restoration of Great Marsh Island.
			Pre-construction, design and engineering are underway.
Blount Island Repair Project	2016	\$ 30.0	Revive berths 30-35.
			Estimated to take over three years to finish.
_			Will replace all worn equipment and rails, supporting infrastructure and work platforms.
Talleyrand Marine Terminal Wharf Rehab Project	2017	\$ 9.0	Phase I is in the works and Phase II is in planning.
			Replacing old sheet pile wall with new and extending the docks' life with work underneath.
Harbor Deepening Project (planning stages)	2019	\$684.0	Plan to deepen harbor from 40 to 47 feet.
			Will accommodate much larger ships and increase revenues.
Hanjin Container Terminal	2020	\$300.0	Construction of a new 90-acre state-of-the-art container terminal.

Source: Jacksonville Port Authority website

Foreign Trade Zone

The Port of Jacksonville lies within Foreign Trade Zone No. 64, which was ranked third-best in the world in 2010, according to fDi magazine. The zone was ranked according to its economic potential, number of facilities and space, cost effectiveness and efficiency, transportation incentives and overall foreign direct investment strategy.³ The port is a nonoperating foreign trade zone grantee and therefore does not report total value for zone users.

Transportation and Access

Over 60 million customers are located within a 24hour drive of all three Port of Jacksonville cargo terminals. The port works with over 100 trucking firms. With the terminals just minutes away from Interstate 95, I-10 and I-75, trucks can take full advantage of the interstate highway system. Truck times at each terminal average 23 minutes for two moves. Each day, more than 36 trains use the Jacksonville-based CSX Transportation rail system, the Norfolk Southern Corp. system and the Florida East Coast Railway. CSX provides access to 22,000 miles of railway that reach north into 23 states and Canada. Norfolk Southern has just shy of an additional 21,000 miles of railway, which also connects to the District of Columbia. Together, these railroads provide access to a total of 43,000 miles of railway in the U.S. and Canada.

Employment

The Port of Jacksonville currently supports nearly 65,000 jobs that are directly and indirectly related to port activity, with an annual economic impact of \$19

billion. About 23,000 of the jobs are port-dependent positions, jobs that directly rely on the port. Another 43,000 positions are related to cargo activity at the port; these jobs are found within the region's retail, manufacturing, wholesale and distribution industries.⁴

Current and Future Port Projects

Continuous improvements are an important element of port operations. The U.S. Army Corps of Engineers is in the process of conducting a comprehensive, year-long economic, engineering and environmental study of expanding the depth of the Port of Jacksonville harbor from 40 to 47 feet. Many of the projects described in Figure 5 involve keeping the port safe and appealing to shipping companies. Others, including the harbor deepening project, the development of the new Hanjin Container Terminal and the construction of the new Dames Point Intermodal Container Transfer Facility, will help the port remain competitive by enabling it to accommodate more and larger ships and by increasing the efficiency of container transfer operations.

Outlook

The projects presented in Figure 5 are planned to begin in the near future or have already started. These projects are the major reason the Port of Jacksonville will be ready to accommodate Post-Panamax ships in the near future. With access to three rail lines and a variety of rail yards and intermodal terminals in close proximity, the port will have a competitive advantage over most other East Coast ports regarding access to southeastern markets. The long-term prospects for this port to develop further are quite good.

Endnotes

¹ Author interview with Nancy Rubin, senior director, communications, Jacksonville Port Authority, July 11, 2014.

² Jacksonville Port Authority website, www.jaxport.com/cargo#sthash.yUoUg3px.dpuf, retrieved May 20, 2014.

³ "Jacksonville Foreign Trade Zone Ranked Third in the World." Mark Szakonyi, Jacksonville Business Journal, June 28, 2010, www.bizjournals.com/jacksonville/stories/2010/06/28/daily4.html, retrieved May 20, 2014.

⁴ "Jaxport/Jacksonville Port Authority Annual Report, 2013," www.jaxport.com/sites/default/files/images/2014.03.13%20Annual%20 Report%200nline_1.pdf, retrieved May 20, 2014.