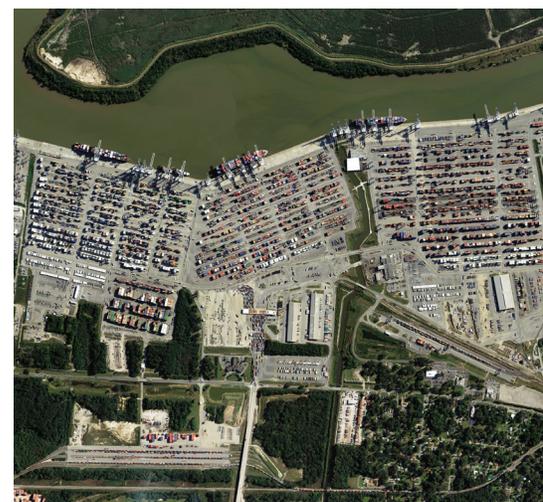


Select U.S. Ports Prepare For Panama Canal Expansion

Port of Savannah



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“We see nothing but blue skies ahead.”

– John F. Petrino, director of business, Georgia Ports Authority¹

Port of Savannah

The Port of Savannah, one of Georgia’s two deep-water seaports, is owned and operated by the Georgia Ports Authority (GPA). It is the largest single-operator facility in North America as well as the fastest-growing and the fourth-largest U.S. container port (in total volume, after the ports of New York and New Jersey, Los Angeles and Long Beach, California).² It also is the second-busiest U.S. container tonnage exporter, after the Port of Los Angeles.³ It is currently handling Post-Panamax ships. Several recently approved projects will increase the port’s capacity to handle larger ships by 2018.

Location, Size and Terminals

The Port of Savannah is located on the Savannah River, 18 miles from the Atlantic Ocean, and features two terminals, Garden City Terminal and Ocean Terminal, situated on 1,200 and 200 acres, respectively. Garden City Terminal is the fourth-busiest container port and the single largest container terminal in the U.S. It handles more than 8,000 truck transactions a day, more than any other U.S. port. Goods can be delivered from there to 44 percent of U.S. consumers within two to three days.⁴

Operating Status

The Port of Savannah continues to grow each year across numerous measures. The number of container ship calls declined from 2,169 in 2012 to 2,001 in 2013 as average vessel capacity increased by 6 percent. Both operating expenses and operating revenue have grown each year since 2009. More importantly, operating income grew from \$59.26 million in 2009 to \$78.30 million in 2013.⁵

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 millions of TEUs)	Container Ship Calls
2014 (Estimate)	\$310,600	\$227,600	\$83,000	3.12	1,873
2013	292,583	214,285	78,298	2.95	2,001
2012	283,538	205,385	78,153	2.98	2,169
2011	266,514	194,604	71,910	2.90	2,155
2010	238,321	175,898	62,423	2.60	1,947
2009	227,796	168,535	59,261	2.40	1,825
Average Growth Rate (2009 to 2013)	8%	7%	11%	16.3%	18.2%

Source: Georgia Ports Authority; authors' estimates

Cargo

In 2014, the Port of Savannah was on track to handle 3.1 million TEUs (both imports and exports), a 6.3 percent increase from 2013.

Facilities: Cargo Terminals

The Port of Savannah has access to over 500 acres of open storage, 2.5 million square feet of warehouse space, 68,000 square feet of cold storage and an additional 120 acres for roll-on/roll-off (Ro/Ro) cargo such as tractors, vehicles and other bulk cargo. The 201-acre Ocean Terminal, a dedicated break bulk and Ro/Ro facility, handles a wide range of cargo, including wood and steel products, automobiles, farm equipment and other heavy project cargo.⁶

The 1,200-acre Garden City Terminal specializes in handling containers, with nine container berths and one liquid bulk berth. It also has two intermodal container transfer facilities (ICTFs).⁷ Channels at both terminals currently are 42 feet deep. The port handles the deeper, larger Post-Panamax ships by waiting for high tide for them to enter and exit the port. The GPA plans to increase that depth to 47 feet at both terminals, which would enable these larger ships to enter and exit at any time.

Figure 2

Cargo Terminal Facilities

Type	Number	Total Size
Garden City Terminal		
Berths	9	9,693 continuous linear ft.
Warehouses	5	1,124,016 sq. ft.
Cold Storage	1	68,150 sq. ft.
Container Fields	9	506 acres
Ocean Terminal		
Berths	9	5,768 linear ft.
Transit Sheds/Warehouses	14	1,427,245 sq. ft.
Rail Sidings	14	11,100 feet
Open Storage	1	80 acres
Container Field	1	10 acres
Ro/Ro Facility	1	33 acres

Source: Georgia Ports Authority website

Facilities: Cranes

The Port of Savannah is the first U.S. port to begin making the transition to electrified rubber-tired gantry cranes, a process that is expected to result in fuel savings of up to 95 percent. (This equates to savings of over \$10 million a year, after electricity costs are taken into consideration.)⁸ Garden City Terminal currently is equipped with nine Post-Panamax cranes, which can reach across at least 16 containers, and 16 Super Post-Panamax cranes, which can reach across at least 22 containers.⁹ Ocean Terminal is equipped with two gantry cranes, a barge crane and a container crane.¹⁰

During the next 10 years, the port plans to gain an additional eight Super Post-Panamax cranes and 53 rubber-tired gantry cranes. In 2014, the port's board of directors approved the purchase of four more Super Post-Panamax cranes, which are expected to arrive by January 2016. This will increase the port's maximum capacity from a current level of about 5.8 million TEUs to over 7.5 million TEUs per year.

Vessels Accommodated

The Port of Savannah has over 9,800 linear feet of berth space. The Savannah River is 500 feet wide and 42 feet deep at low tide, with about 7.5 feet of difference between high and low tides. At Ocean Terminal, bridge clearance sinks to 185 feet at high tide. The King's Island Turning Basin enables large ships to turn around. The largest vessel to traverse the port to date, a Post-Panamax ship, was 1,095 feet long and could carry up to 9,600 TEUs. In 2013, 1,837 vessels called on Garden City Terminal and 164 vessels went to Ocean Terminal.

Foreign Trade Zone

The Port of Savannah operates in Foreign Trade Zone No. 104. The Savannah Airport Commission (SAC) owned the trade zone from the time it was created in 1984 until 2013. In mid-2013, the SAC transferred control of the trade zone to World Trade Center Savannah, the international arm of the Savannah Economic Development Authority. Both parties agreed that this move would help attract additional foreign investment and enable area businesses to expand into foreign markets.¹¹

Transportation and Access

The Port of Savannah's Garden City Terminal features two intermodal container transfer facilities (ICTFs). The 160-acre Mason ICTF is served by five working rail tracks totaling 14,000 feet and three storage rail tracks totaling 8,000 feet. The 18-acre Chatham ICTF has three working rail tracks totaling 6,300 feet and an 11,615-foot storage track. The ICTFs provide unrestricted daily double-stack service with two- and three-day delivery times for cargo going to major markets east of the Mississippi, the Gulf Coast and the Midwest, as well as overnight service to Atlanta; Charlotte, North Carolina; Jacksonville, Florida; and Charleston, South Carolina.

Both Garden City Terminal and Ocean Terminal are served by the Norfolk Southern Corp. and CSX Transportation railways. Both also feature immediate

Figure 3

Foreign Trade Zone No.104 Summary

Year	Imports (in millions of dollars)	Exports (in millions of dollars)
2010	\$34,350	\$24,271
2009	27,701	18,929
2008	36,150	22,838
2007	31,187	18,320
2006	25,968	13,703
2005	22,345	11,439
2004	16,528	9,670
2003	13,630	7,617
Average Growth Rate (2003 to 2010)	22%	31%

Source: Georgia Ports Authority website; World Port Source website; authors' estimates

Figure 4

Current and Future Projects

Project	Completion Date (Estimated)	Estimated Investment (in millions of dollars)	Description
Savannah Harbor Expansion Project	Early 2018	\$702.0	Deepening the harbor will allow larger ships to enter the port and reduce the effects of low tide.
Jimmy DeLoach Parkway Extension	May 2016	72.8	Will provide direct access to the port from I-95 and the State Route 307 overpass; also will expand the parkway to four lanes.
Additional Electrified Rubber-tired Gantry Cranes	Present to 2024	N/A	Will greatly reduce costs and emissions; expected to save more than 1.8 million gallons of diesel fuel annually; savings will be greater than the cost of the cranes.

Source: Georgia Ports Authority website

access (less than six miles) to two major interstate highways: I-95, which travels north-south, and I-16, which travels east-west. Ocean Terminal also has convenient access to I-516.¹²

Employment

In fiscal year 2011, Georgia's deep water ports (including both the Port of Savannah and the Port of Brunswick) supported over 350,000 full-time and part-time jobs across the state, just over 8 percent of Georgia's total employment, generating \$67 billion in sales. Every dollar spent by the port industry and port users generates an estimated additional 70 cents for Georgia's economy.¹³

Current and Future Projects

Figure 4 summarizes key projects underway or planned at the Port of Savannah. Among the most critical of these for accommodating Post-Panamax ships is deepening the Savannah River channel to 47 feet. The Savannah Harbor Expansion Project (SHEP) received

the last of all required federal and state regulatory approvals in July 2013 and full authorization to construct by way of the Water Resources Reform and Development Act (WRRDA), which President Obama signed into law on June 10, 2014. In October 2014, the U.S. Army Corps of Engineers, the Georgia Department of Transportation and the GPA signed a project partnership agreement allowing construction of the SHEP to begin.¹⁴ After 14 years of study and review, the project will now move to construction and is expected to be completed in early 2018. It will improve navigation by doing the following:

- Deepening the inner harbor to 47 feet and the entrance channel to 49 feet.
- Extending the entrance channel by seven miles.
- Constructing three bend wideners and two meeting areas.
- Enlarging the King's Island Turning Basin at the Garden City Terminal.¹⁵

Outlook

Post-Panamax ships are already calling on the Port of Savannah. With the recent approval of the SHEP, the capacity of the port will be increased by 2018 to accommodate the needs of Post-Panamax ships.

Port of Savannah officials see “nothing but blue skies ahead.”¹⁶ They foresee continuing growth of current vertical markets, such as automobiles and container cargo, as well as growth in areas in which the port could capture greater market share, such as Ro/Ro and break bulk cargo. In the meantime, the Georgia Ports Authority is proceeding with plans to purchase new cranes that will add to its capacity and ability to accommodate large container ships at Garden City Terminal. On May 19, 2014, the GPA board approved \$86.5 million to purchase four new ship-to-shore cranes and 20 new rubber-tired gantry cranes. The new cranes, scheduled to arrive in February 2016, will give the port a total of 20 Super Post-Panamax cranes, more than any other single, self-funded terminal in the U.S.¹⁷

Endnotes

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- ⁶ Georgia Ports Authority website, www.gaports.com/portofsavannah/OceanTerminal.aspx, retrieved May 21, 2014.
- ⁷ Georgia Ports Authority website, www.gaports.com/portofsavannah/GardenCityTerminal.aspx, retrieved May 21, 2014.
- ⁸ “GPA Unveils North America’s First ERTG,” Georgia Ports Authority press release, Dec. 14, 2012, www.gaports.com/corporate/tabid/379/xmid/1097/xmid/7804/xmview/2/default.aspx, retrieved May 21, 2014.
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- ¹⁶ Author interview with John F. Petrino and Roberto Rodriguez.
- ¹⁷ Georgia Ports Authority website, www.gaports.com/Media/PressReleases/tabid/379/xmid/1097/xmid/9516/xmview/2/Default.aspx, retrieved May 21, 2014.