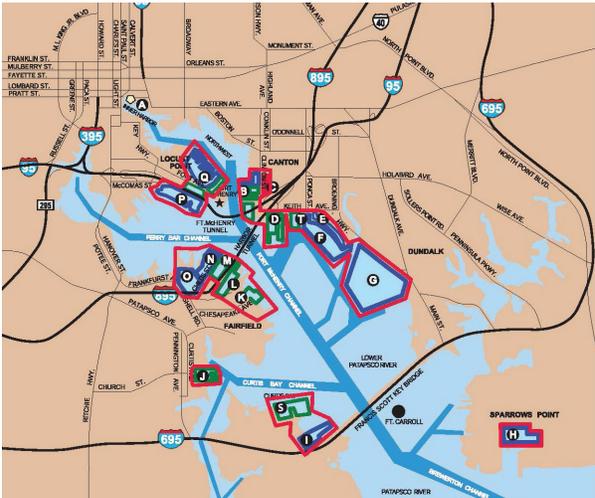
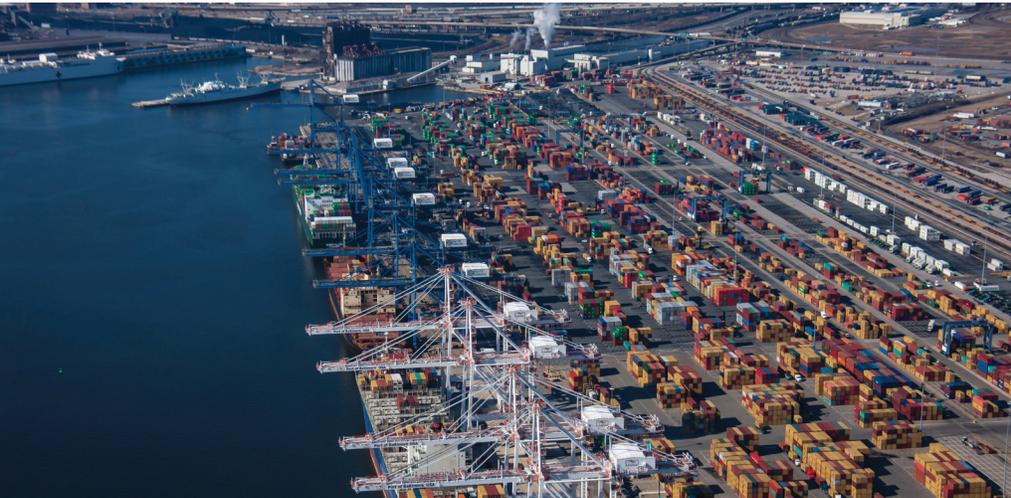


Select U.S. Ports Prepare For Panama Canal Expansion

Port of Baltimore



Grace Wang

*Associate Professor, Maritime Administration
Texas A&M University at Galveston
Galveston, Texas*

Anthony M. Pagano

*Director, Center for Supply
Chain Management and Logistics
University of Illinois at Chicago
Chicago, Illinois*

“We are one of the most efficient ports on the East Coast. [T]he opportunity for growth far exceeds the competitive barriers.”

– Joseph M. Greco Sr., director, intermodal/trade development, Maryland Port Administration¹

Port of Baltimore

The Port of Baltimore, owned by the Maryland Port Administration, is located at the top of the Chesapeake Bay, with terminals in Baltimore, Maryland. As the 10th largest port in the U.S., it handled a total of \$53.96 billion of goods in 2012.² In 2010, the port dealt with more than 40 million tons of cargo, with a particular focus on break bulk niche cargo.³ It has six public and 23 private terminals. It is also the closest East Coast seaport to the Midwest. It generates about 40,000 jobs annually. Given its number of terminals, capacity and location, the port is well positioned to increase its volume and value in the future. The harbor is 50 feet deep, with one berth that is also 50 feet deep, allowing it to already receive Post-Panamax cargo ships via the Suez Canal.⁴ With these deep waters, the port is working to position itself for the future.

Location, Size and Terminals

The Port of Baltimore is located close to the Port of Virginia’s Hampton Roads terminals, which are at the mouth of the Chesapeake Bay. However, its location farther north along the Chesapeake Bay at the beginning of the Patapsco River provides it with the unique position of being the closest East Coast seaport to the Midwest and that region’s many manufacturing centers. Thus the majority of its cargo goes to and comes from the Midwest. In 2012, the Port of Baltimore ranked 11th in the U.S. in terms of tonnage bound for foreign countries at \$53.85 billion.⁵ It currently handles the largest amount of cars and light trucks being imported to and exported from the U.S.

Located on 45 miles of shoreline and 3,405 waterfront acres, the port operates six public and 23 private terminals that can handle a variety of cargo.⁶ The public terminals are the Seagirt Marine

Terminal, Dundalk Marine Terminal, South Locust Point Marine Terminal, North Locust Point Marine Terminal, Hawkins Point and the Masonville/Fairfield Terminal area.⁷ The six main private terminals are the Curtis Bay Coal and Ore Pier, the Consolidation Coal Pier, the Chesapeake Terminal, the Atlantic Terminal, Rukert Terminals Corp. and Canton Marine Terminal.⁸

Operating Status

While the Port of Baltimore is the 10th busiest port in the U.S. in terms of tonnage, it faces stiff competition from other nearby East Coast ports. It has begun to focus on its differentiators, which are its ability to efficiently ship bulk (such as coal) and general cargo. Focusing on these two areas has allowed the value in goods that pass through the port to increase while the volume of goods has decreased. This means that there is still opportunity for growth for the port.

Figure 1 shows the past four years of operating revenue and expenses. These numbers show a port that is recovering from the 2007 recession and is modest about its growth opportunities for 2015. Its expenses are higher because of capital projects to which it has already committed, such as dredging projects and reconstruction of terminals.

Cargo

The Port of Baltimore handles a variety of cargo at its many public and private terminals. It handles autos, containers, break bulk, waste and hazardous materials (hazmat) cargo, among other general cargo. Bulk cargo such as coal, salt and sugar tend to be handled by the private terminals. In 2013, there was a 22.6 percent decrease in bulk cargo tons because a nearby coal plant closed.

Figure 1

Operating Status

Year	Operating Revenue (in thousands of dollars)	Operating Expenses (in thousands of dollars)	Operating Income (in thousands of dollars)
2015 (Forecast)	\$43,709	\$51,301	\$(7,592)
2014 (Unaudited)	47,643	50,394	(2,751)
2013	48,448	44,476	3,972
2012	55,892	44,094	11,798
2011	49,065	46,876	2,189
Average Annual Growth Rate (2011 to 2015)	-9.82%	8.496%	

Source: Maryland Department of Transportation^{9, 10}; authors' estimates

Figure 2

Cargo Summary

Year	Container Volume (in thousands of TEUs)	General Cargo Total Volume (in thousands of tons)
2013	6,369	9,569
2012	6,297	9,594
2011	5,873	8,882
2010	5,648	8,150
2009	5,248	7,326
2008	5,814	8,962
Average Annual Growth Rate (2008 to 2013)	6.87%	4.88%

Source: Maryland Port Administration¹¹; authors' estimate

The type of cargo that the port handles is outlined in Figures 3a and 3b. According to the Maryland Port Administration's 2013 Foreign Commerce Report,¹² the port currently ranks ninth among U.S. ports in terms of foreign cargo dollar value. In 2012, it ranked first in value of international cargo with \$54 billion; it was the largest automobile port on the East Coast and the largest roll-on/roll-off port on the East Coast.¹³

Figure 3a

Top Commodities by Value

(in millions of dollars)

Export Commodity	Export Value	Import Commodity	Import Value
Automobiles/light trucks	\$7,437	Automobiles/light trucks	\$10,983
Coal	1,460	Construction machinery	1,388
Tractors	1,388	Radioactive elements	1,194
Radar apparatus	811	Tractors	713
Combines/harvesters	556	Tin	645
Civilian aircrafts, engines and parts	531	Nickel	594
Construction equipment	528	Ferroalloys	581
Aircraft, spacecraft and launch vehicles	328	Aluminum plates and sheets	416
Tanks	313	Off-highway trucks	385
Off-highway trucks	291	Furniture	385

Source: Maryland Port Administration¹⁴

Figure 3b

Top Commodities by Tonnage

Export Commodity	Export Tons	Import Commodity	Import Tons
Coal	15,056,118	Salt	911,529
Waste paper	837,029	Automobiles/light trucks	738,786
Automobiles/light trucks	785,914	Sugar	621,134
Iron ore	492,762	Automobiles	648,476
Ferrous scrap	404,691	Wood pulp	601,877
Tractors	158,989	Alumina	590,574
Lumber	128,465	Gypsum	493,930
Logs	93,938	Iron/steel slag	366,761
Construction equipment	79,000	Fertilizers	323,584
Flat rolled stainless steel	60,230	Petroleum bitumen/coke	300,175

Source: Maryland Port Administration¹⁵

Facilities: Cargo Terminals

The Port of Baltimore has six public terminals and six main private terminals. The Maryland Port Administration maintains the public terminals, while the private terminals are fully operated by private firms. (Seagirt Marine Terminal became a public-private partnership with Ports America in 2010.)

Facilities: Passenger Terminals

The Port of Baltimore's Cruise Maryland Terminal handles a busy schedule of cruises from Carnival Cruise Lines, Royal Caribbean International and Crystal

Figure 4

Facilities: Terminals

Terminal	Total Acreage	Type of Cargo	Berths
Dundalk	570	Containers, break bulk, wood pulp, Ro/Ro, autos, projects cargo, farm and construction equipment	Four with 36-ft. draft, seven with 42-ft. draft, two with 50-ft. draft
Masonville/Fairfield	Total terminal area is 150 acres; 61 acres for auto terminal	Fairfield area includes four specialized terminals for handling and processing autos, light trucks and similar Ro/Ro cargo	Pier 4: 832 ft., depth 49 ft. Pier 5 and wet basin: 1,393 ft., depth 23 ft.
Seagirt	284	Containers	Berths 1-3: 3,127 ft., depth 45 ft., capable of handling up to 9,200 TEU vessels Berth 4: 1,225 ft., depth 50 ft., capable of handling up to 14,000 TEU vessels
South Locust Point	79	Forest products	Three with 36-ft. draft
Cruise Maryland	18.7	Cruise passengers	1,139 ft., depth 35 ft.
North Locust Point	90	Wood pulp, lumber, latex, steel, paper and containers	Five finger piers with 34-ft. depths; three are 1,200 ft., one is 1,235 ft. and one is 635 ft.
Intermodal Container Transfer Facility (ICTF)	84	International and domestic containers	N/A

Source: Maryland Port Administration¹⁶

Cruises.¹⁷ The port began receiving cruise lines after the Sept. 11, 2001, terrorist attacks on New York City. In 2006, the Cruise Maryland Terminal opened with indoor seating capacity for 1,000 passengers. In 2013, this terminal reached its capacity (since most cruises begin and/or end on the weekend), with two cruise ships disembarking each week.¹⁸ At capacity, the terminal can handle 100 cruises a year with 241,000 passengers.¹⁹

To ensure that the port experiences continuing passenger cruise growth, it is seeking not only to reach capacity, but also to expand passenger cruise operations by bringing additional cruises to South Locust Point.²⁰

Facilities: Cranes

The Port of Baltimore has a total of 38 cranes. The Masonville/Fairfield Terminal area does not have any cranes, as it is used almost exclusively for automobiles and light trucks. Seagirt Marine Terminal has been updated to prepare for the Panama Canal expansion with taller and wider cranes. It is one of two East Coast ports that is currently ready to handle the larger ships. (The Port of Virginia is the second.)

Figure 5
Type and Number of Cranes

Type	Number	Description
Seagirt Marine Terminal		
Sumitomo Post-Panamax Crane	7	Outreach 144 ft.
Rubber-tired Gantry Crane	12	Outreach 78 ft.
Super Post-Panamax Crane	4	Outreach 50 ft.
Dundalk Marine Terminal		
Heavy Lift Mobile Crane	2	
Container Crane	9	Outreach 126 ft.
North Locust Point Marine Terminal		
Container Crane	1	45 long tons
Gantry Mounted Whirly Crane	2	75 tons
South Locust Point Marine Terminal		
Revolving Gantry Crane	1	100 short tons
Intermodal Container Transfer Facility		
Rubber-tired Gantry Crane	2	Straddles train tracks

Source: Maryland Port Administration²¹

Foreign Trade Zones

While the state of Maryland has four foreign trade zones (FTZs), most Port of Baltimore cargo traffic occurs in Baltimore City Zone No. 74. Within this zone are 19 general purpose sites that provide 1,706 acres of storage.²² In 2009, according to the Maryland Port Administration, this FTZ “handled more than 18,000 different commodities from 24 different countries of origin.”²³ This FTZ is designated as an Alternative Site Framework that allows for “greater flexibility to FTZs by using simpler and less time-consuming procedures.”²⁴ Near the Port of Baltimore but outside the city limits are Prince George’s County FTZ No. 63, with 76 acres on two sites, and Washington County FTZ No. 255, with seven sites and 1,800 acres.

Transportation and Access

The Port of Baltimore is accessed through railways, motor carriers and airlines. It is five minutes away from Interstate Highway 95, a main East Coast thoroughfare. It also connects to multiple highways that head west.

Figure 6

Port of Baltimore Transportation and Access

Terminal	Rail Access	Highway Access
Dundalk	Norfolk Southern provides direct rail access to all berths and sheds Two rail storage yards total 9,300 ft. of track Two 2,000-ft. storage tracks and five unloading tracks, ranging from 1,500 to 1,800 ft.	2.5 miles from I-95, 1.5 miles from I-695, easy access to other major interstates
Masonville/Fairfield	CSX spur adjacent	
Intermodal Container Transfer Facility	CSX provides direct service	Less than one mile and two traffic signals from I-95
North Locust Point	Direct connection to terminal by CSX; direct rail access to all berths	2.25 miles to I-95, with connections to other major interstates
South Locust Point	Direct connection to terminal by CSX	
Seagirt	Direct connection to the adjacent ICTF by CSX	Within minutes of many major transportation arteries, including I-70

Source: Maryland Port Administration²⁵

Employment

According to a 2011 economic impact study, the Port of Baltimore generates more than 40,000 jobs.²⁶ Direct jobs accounted for 14,627 positions such as terminal operators, steamship agents and freight forwarders. Induced jobs numbered 14,474, including jobs with local grocery stores, restaurants and other nearby services. Indirect jobs numbered 10,936, including jobs supported by the business purchases of the employers who create the direct jobs. The same study says that “port activity supports 205,012 jobs within the state that are related to the Port of Baltimore.”²⁷ In total, “port activity generated \$3 billion in personal wage and salary income for Maryland residents.”²⁸

Current and Future Port Projects

According to a report on its FY2015 proposed budget, the Maryland Port Administration spent \$89.5 million on major capital projects in FY2014.²⁹ These include dredge projects, reconstructing six berths at Dundalk Marine Terminal to enable them to handle deeper and wider ships, a chrome ore residue project and an expansion project. The dredge projects include ongoing and new sites for dredged materials as well as dredging the terminal waters to deepen their capacity. This will allow the port to deepen its berths to 50 feet in preparation for the Panama Canal expansion.³⁰

The expansion project focuses on expanding rail access, improving the width and direction of the Seagirt Marine Terminal and filling in a basin for storage.³¹ The port is also negotiating with the current owners to purchase the coastal area called Sparrows Point. If purchased, it would provide land upon which to place dredged materials and another terminal.³²

Outlook

The Port of Baltimore has a bright outlook. Port officials said that while competition is steep, “the opportunity for growth far exceeds the competitive barriers.”³³ The port has expanded its harbors, a berth and cranes, making it the second East Coast port to be fully prepared for the Panama Canal expansion. Couple this with the fact that the port is one of two federally funded East Coast port projects to prepare for the Panama Canal expansion and it is clear that the port is well positioned for growth and increases in market share. Port officials are also looking to diversify their market share in multiple vertical markets, such as agricultural commodities. They also have made increasing their inland access through intermodal activities a top priority.

The port is adaptable to different kinds of cargo, carriers and business models, as demonstrated by its public-private partnership with Port America. This suggests that the Maryland Port Administration is strategic in not only how it understands the current and future maritime trade landscape but how it can best position its business outreach and infrastructure building. After Sept. 11, the port began taking a huge share of the Port of New York and New Jersey’s cruise business. It then grew this business into a stable and ongoing revenue stream with a large and tourist-friendly cruise port terminal. This suggests that the port is agile and opportunistic in responding to unexpected changes in actions that are not directly related to maritime business but have a direct impact upon it. This will become particularly useful if weather becomes increasingly dramatic and sea levels rise.

While the Port of Baltimore faces stiff competition from other nearby ports, such as the ports of Virginia and Philadelphia, it has remained competitive. Port executives feel that their efficiency gives them a competitive edge, stating “we are the most efficient on the East Coast.”³⁴ Its expansion projects will allow it to become even more efficient and to handle the increase in Asian trading partners that it hopes to attract, as well as to continue to serve the variety of vendors and ships that currently call on it daily.

Endnotes

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- ³³ Author interview with Joseph M. Greco Sr.
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