

Report to the Maryland General Assembly

Senate Budget and Taxation Committee, and
House Appropriations Committee



Maryland Port Commission
Annual Report for Fiscal Year 2019
(Transportation Article, §6-201.2 (c))

October 2020

Purpose

The Maryland Port Commission Annual Report for Fiscal Year 2019 was prepared in response to Transportation Article, §6-201.2 (c), which requires:

- “(c)(1) Subject to § 2-1246 of the State Government Article, the Commission shall report by January 15 of each year to the General Assembly on the activities of the Port Commission during the previous year.*
- (2) The report shall include a review of the port’s competitive position during the previous year and any recommendations of the Commission for future changes in legislation, capital funding, or operational flexibility for consideration by the General Assembly.*
- (3) The report shall also include any substantive changes in its regulations for procurement and personnel.”*

Maryland Port Commission (MPC)

Pete K. Rahn, Secretary

Maryland Department of Transportation
Chair of the Maryland Port Commission



Brenda Dandy



Christian Dean



Robert Huber



John A. Lunn Sr.



David Richardson



Walter Tilley, Jr.



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Executive Summary

The Helen Delich Bentley Port of Baltimore (the Port) is the economic heart of the Greater Baltimore region, and an economic driver for the State of Maryland. In FY19, the public terminals of the Maryland Department of Transportation's (MDOT) Port Administration (MPA) handled 11 million tons of general cargo, beating the previous record set in FY18, and marking the ninth consecutive record setting fiscal year for the State-owned cargo terminals.

In CY18¹, the public and private terminals of the Port handled a combined 43.0 million tons of foreign cargo with a total value of \$59.7 billion. This represents a new Port record, eclipsing the previous record of 41.0 million tons set in 1974.

Overall, the Port continues to be ranked number one in the nation for automobiles, roll-on/roll-off (RoRo) equipment, and imported gypsum and sugar. The Port also continues to hold a number 2 ranking for exported coal. The total number of ships visiting the Port ticked upward in CY18, with 2,058 arrivals.

With volumes rising, the Port continues to be highly competitive and is taking advantage of continuing shifts in global trade patterns. Baltimore was "big-ship ready" before the opening of the Panama Canal expansion, and remains one of the few ports on the East Coast with a fully functional 50-foot berth, 50-foot navigation channels, and super-post-Panama cranes capable of handling the growing global fleet of larger container ships.

Baltimore also remains well-positioned to attract new business. As global trade and logistics patterns continue to evolve, and congestion continues to increase at many of the nation's larger container ports, the MDOT MPA is ready to take advantage of the ever-changing dynamics and is aggressively marketing the Port of Baltimore's strategic advantages.

The MDOT MPA continues to coordinate with public sector partners and stakeholders at the federal, state and local levels on a variety of topics, including dredged material management, harbor safety, transportation policies, and maritime land uses. Community outreach activities have also been increasing, with presentations to community organizations, port tours, investments in trash interceptors, and professional development opportunities for educators. Through ongoing efforts to engage the public and other Port stakeholders, the MDOT MPA is working hard to grow popular support for the Port by increasing local knowledge about its economic impacts and ongoing environmental initiatives.

¹ MPA information is provided by fiscal year, but POB information is reported using the latest full calendar year because POB statistics combine data for public and private marine terminals that use different reporting timeframes.

While the Port's strategic advantages are many, the Maryland Port Commission (MPC) acknowledges several challenges on the horizon that could impact the long-term health of the Port. These issues include:

- Maintaining the Port's competitiveness in the face of dramatic changes in technology, the consumer marketplace, the global economy, and increasing competition from other ports;
- Making facilities resilient in the face of climate change and severe weather events, while maintaining adequate capital funding for investments in system preservation and capacity enhancement projects that are necessary for the Port's long-term growth, competitiveness and sustainability;
- Ensuring the availability of funding and placement options for the Port's dredged material management program;
- Addressing the competitive disadvantages caused by a lack of high-cube double-stack rail capability;
- Preparing the Port for macroeconomic and geopolitical tensions outside of its control, including the rising uncertainty surrounding global trade relations between the United States and its international trading partners, as well as a possible economic recession; and
- Operating MDOT MPA terminals and facilities in an environmentally responsible manner while not undermining the Port's ability to meet the needs of its customers, as well as the Port's critical importance to the regional economy and jobs.

To maintain our competitiveness, the MDOT MPA continues to work diligently with all of its partners and stakeholders to address and overcome these challenges, many of which are tied directly to the competitiveness of the Port within a rapidly changing global environment.



MPA Staff (and families) team up with the Baltimore Port Alliance to volunteer at Filbert Street Community Garden in Curtis Bay, Spring 2019.

Major Accomplishments in FY 2019

- **Record Year For Cargo** – A record 43 million tons of international cargo was handled in 2018 by the combined state-owned public and the privately-owned marine terminals at the Helen Delich Bentley Port of Baltimore, breaking the previous high mark of 40.9 million tons that stood for 44 years. The value of the cargo passing through the Port in 2018 was also a new benchmark: \$59.7 billion, surpassing the previous \$53.9 billion set in 2017. The 2018 figures for public and private terminals combined follow an earlier announcement that the Port’s state-owned public terminals alone handled 10.9 million tons of general cargo last year, more than ever before and the third consecutive year exceeding the 10 million-ton mark.
- **Record Fiscal Year** – More than 11 million tons of cargo passed through the state-owned public marine terminals of the Helen Delich Bentley Port of Baltimore in fiscal year 2019, setting a new record as the Port expands its regional economic impact. The second quarter of 2019, from April to June, also proved to be record setting, with the Port handling 2,873,392 tons of cargo over those three months. That amount beat the previous quarterly high mark of 2,790,745 tons, set during the second quarter of 2018.
- **CSX Agrees to Commit Funding Toward Howard Street Tunnel** – CSX agreed to commit \$91 million toward the cost of making infrastructure improvements to the 123-year old Howard Street Tunnel. The improvements will transform the Tunnel to allow double-stacked container trains to travel to and from the Helen Delich Bentley Port of Baltimore, allowing the Port to further capitalize on its booming container business. The project would also alleviate a freight logistics bottleneck and create a more efficient rail network with more intermodal opportunities and support additional jobs.
- **Port Receives Federal Funding For Second Deep Berth** – The MDOT MPA will receive \$6.6 million in U.S. Department of Transportation grant funding to contribute to a project that will deepen a second container berth to 50 feet at the Seagirt Marine Terminal. The State of Maryland will contribute \$7.8 million and Ports America Chesapeake, which operates the Seagirt Marine Terminal for the MDOT MPA, will add \$18.4 million for a total project cost of \$32.7 million. A second deep berth will allow the Port to handle two supersized ships simultaneously.
- **Visit from Largest Ship Ever** – The largest container ship to ever visit the Port of Baltimore, the 14,424-TEU Evergreen Triton, made its first visit to Maryland in May. Thanks to a public-private partnership between the Maryland Department of Transportation Maryland Port Administration (MDOT MPA) and Ports America Chesapeake, the Port of Baltimore is one of the few ports on the East Coast to have a 50-foot deep channel and a 50-foot deep berth necessary to accommodate the mega-ships traveling through the recently expanded Panama Canal. Ports America Chesapeake operates Seagirt Marine Terminal, the Port’s container terminal.

- **Funding Granted to Begin Design of the Mid-Chesapeake Bay Island Project** – Two islands in the Chesapeake Bay that have long suffered erosion will be restored with clean sediment through a joint effort between the MDOT MPA and the U.S. Army Corps of Engineers, Baltimore District. James Island will accept dredged sediment from Chesapeake Bay channels leading to the Helen Delich Bentley Port of Baltimore, while Barren Island will accept sediment from nearby shallow-draft channels. A total of 2,144 acres of remote island habitat will be restored as part of the Mid-Chesapeake Bay Island Ecosystem Restoration Project. A four-year, \$9 million engineering and design phase of the project will utilize 65 percent federal funding and 35 percent state funding. This will provide an additional 90 to 95 million cubic yards of desperately needed dredged material placement capacity for Chesapeake Bay channel sediment in channels leading to the Port of Baltimore.
- **Top Security Rating by U.S. Coast Guard For 10th Consecutive Year** —The Port of Baltimore’s state-owned marine terminals received a top grade for the tenth consecutive year from an annual Coast Guard security assessment. Each year, Coast Guard Sector Maryland conducts a comprehensive inspection of the Port’s state-owned marine terminals to ensure they are within compliance of federal security regulations. The visual inspection includes a review of access control procedures and makes certain that physical security fixtures, such as high-mast lighting and fencing, are up to federal security standards. The MDOT MPA, which oversees the Port of Baltimore’s public marine terminals, has moved forward in recent years with many new security initiatives and enhancements, including closed circuit television, cyber security, and stronger access control technologies.
- **Record Month for Cars** – The Port of Baltimore’s state-owned marine terminals handled 65,281 cars and light trucks in August 2019, the highest monthly amount ever recorded. Cars and light trucks are key targeted commodities for the MDOT MPA. In 2018, the Port of Baltimore’s public and private marine terminals handled a record 850,147 cars and light trucks. It was the eighth consecutive year that the Port of Baltimore finished first among all U.S. ports for that cargo.
- **Governor Hogan, BPW Approve Contract To Add Land For Port’s Surging Cargo**— Governor Hogan and the Board of Public Works approved a contract in 2018 that completed the fill-in of a wet basin at the Port’s Fairfield Marine Terminal, creating seven acres of land to help handle the Port’s surging auto and roll on/roll off cargo business. The Port of Baltimore handles more autos and light trucks, as well as high and heavy farm and construction machinery, than any other U.S. port.

- **Port Awarded \$2.4 Million From EPA** – The Port of Baltimore was awarded \$2.4 million from the U.S. Environmental Protection Agency to repower marine engines and upgrade diesel dray trucks and equipment used to move cargo, reducing emissions at the Port and in surrounding residential neighborhoods. Funding will allow for the replacement of approximately 35 dray trucks, 30 pieces of cargo-handling equipment such as forklifts and yard tractors, and the repowering of four marine engines. These replacements will result in a lifetime emission reduction of approximately 37 tons of particulate matter, 398 tons of nitrogen oxides, 165 tons of carbon monoxide, and 724 tons of carbon dioxide. It will also save more than 64,000 tons of fuel.
- **Port Security Funding** – The MDOT MPA was awarded \$703,116 in the most recent round of funding through the Federal Emergency Management Agency’s (FEMA) Port Security Grant Program. The funding will help strengthen access control points and cybersecurity efforts at the Helen Delich Bentley Port of Baltimore’s state-owned public marine terminals. The new FEMA allocation will be used for three specific projects to help make the Port’s security even stronger: an upgrade and additional new security features to access control software that prevents unauthorized access to the public marine terminals, three additional access control booths on the terminals, and additional mechanisms and upgrades to the MDOT MPA’s cybersecurity platforms.
- **Masonville Cove Celebrates 10-year Mark** – MDOT MPA celebrated ten years of partnership at Masonville Cove, the nation’s first Urban Wildlife Refuge Partnership, and hosted a series of “A Decade of Dedication” events with the National Aquarium, Living Classrooms Foundation, and the U.S. Fish & Wildlife Foundation.
- **Innovative Reuse Advances** – Multiple demonstration projects which innovatively reuse Harbor dredged material as a valuable resource continued various phases of planning, design, or construction in FY19.

Port of Baltimore - Economic Impacts

The Port of Baltimore remains the economic heart of the greater Baltimore region and the State of Maryland by providing jobs, business activity and tax revenues throughout. In addition, the Port provides Maryland’s manufacturers, shippers, wholesalers, and retailers a competitive means of exporting and importing goods within the global marketplace, efficiently and cost effectively.

In 1956, when the Maryland General Assembly created the Maryland Port Authority (later renamed the Maryland Port Administration), it placed state-wide economic benefits at the core of the Port’s mission to “increase the flow of waterborne commerce through the State of Maryland in a manner that provides benefits to the citizens of the State.”

The MDOT MPA has been successful in achieving this mission by generating substantial economic impact by generating 37,300 jobs in Maryland²:

- **15,330 Direct Jobs in Maryland**
- **21,970 Induced and Indirect Jobs in Maryland**
- **\$ 3.3 Billion in Personal Wage and Salary Income**
- **\$ 2.6 Billion in Business Revenues**
- **\$ 395 Million in State and Local Tax Revenues**
- **101,880 Related Jobs³, and**
- **Over 139,170 Total Jobs Linked to Port Activity**

The Port, with over 300 years of longevity, provides employment opportunities for people with a wide range of skill levels and provides an average annual salary of \$62,700 for each direct job generated – an average annual wage which is 9.5 percent higher than the average annual wage for every job in the State of Maryland, which is just under \$57,270.

² From the most recent data available: “The Economic Impacts of the Port of Baltimore” October 15, 2018, prepared by Martin Associates.

³ Related jobs are those jobs with companies importing and exporting cargo through Maryland’s Port of Baltimore, that have the option of shipping their products or supplies (for example, containerized items or steel products for construction) through a number of other ports. These companies benefit from having a healthy port nearby in Baltimore to assist their logistics. If the Port of Baltimore was not available to them, these employers might suffer an economic penalty, but would likely survive by shipping through another port.

Port of Baltimore - Competitive Position

The Port of Baltimore is a diverse port that consists of seven MDOT MPA cargo terminals along with over 25 private terminals and other maritime facilities, such as shipyards, lay vessel berths, tug/lightering operations, military Ready Reserve ships, and cable vessels. Together, the Port's public and private marine terminals experienced a 12 percent increase in foreign cargo with a record 43 million tons in CY18. This surpassed the previous record of 41 million tons set in 1974. The primary drivers in the overall cargo tonnage increase were the start of LNG exports at Dominion Energy's Lusby facility and an increase in coal exports. There were 2,058 ship calls at the Port in CY18, which were 86 more than the previous year.

Among all U.S. ports, Baltimore ranked eleventh in the nation for total foreign cargo tonnage in CY18. Baltimore ranked ninth overall in terms of total foreign trade value with \$59.7 billion of trade activity. Baltimore is ranked number one amongst all U.S. ports for total automobile tonnage, total roll-on/roll-off tonnage, imported gypsum, and imported sugar. Baltimore is ranked second in the nation for exported coal.

The Port is one of four ports on the U.S. East Coast with a 50-foot channel, along with New York, Norfolk and Miami. However, several ports along the East Coast are currently deepening their channels, including Philadelphia, Charleston and Savannah, to enable them to handle the larger class of ships.

Ports America Chesapeake (PAC) continues to make investments at the Seagirt Marine Terminal (SMT) ensuring that the MDOT MPA can handle the large container ships. Plans are underway to deepen Berth Three to allow the Port to simultaneously handle two Ultra Large Container Vessels at SMT.

The Port still faces a competitive disadvantage with containerized cargo because of a lack of high-cube double-stack rail clearance. Neither CSX nor Norfolk Southern can offer this type of service in Baltimore due to clearance issues. In 2019, however, MDOT applied for and secured a federal INFRA grant for \$125 million to address the clearance issues associated with CSX's Howard Street Tunnel.

The Cruise Maryland Terminal continues to support an active cruise business. In FY 2019, the Port welcomed 94 home port cruise ships that carried more than 424,114 embarking and debarking passengers. The location of the Cruise Maryland terminal, at the center of nation's fourth largest population base, continues to attract passengers with easy access to the terminal from I-95.

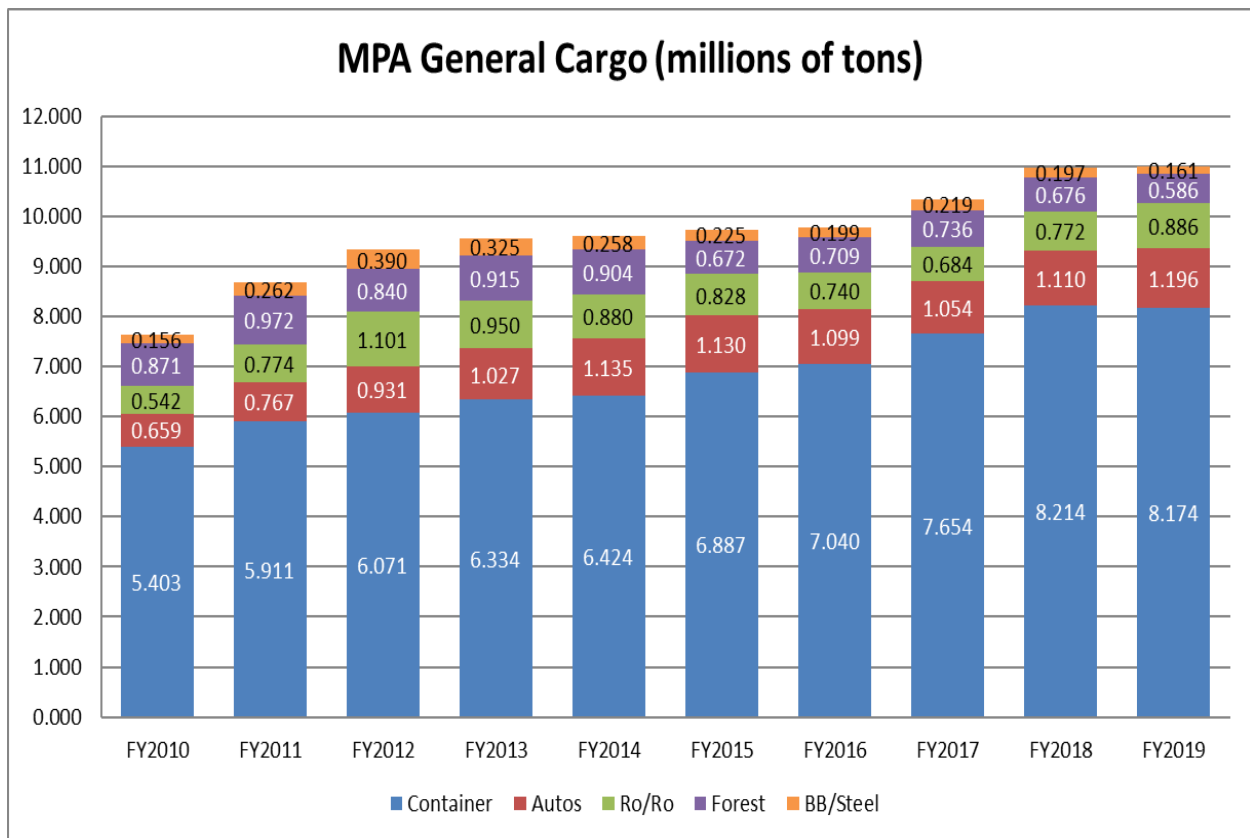
MDOT MPA Cargo Activity FY 2019

For the 9th consecutive fiscal year, general cargo tons at the MDOT MPA terminals set a record with 11,001,234 tons passing through the public terminals. This was a 0.3 percent increase over last year's record total; general cargo includes containers, autos, roll on/roll off (farm, mining and construction machinery), and breakbulk cargo (such as forest products and project cargo).

In addition to setting a record for overall general cargo tons, the MDOT MPA set several other records throughout the past fiscal year, including:

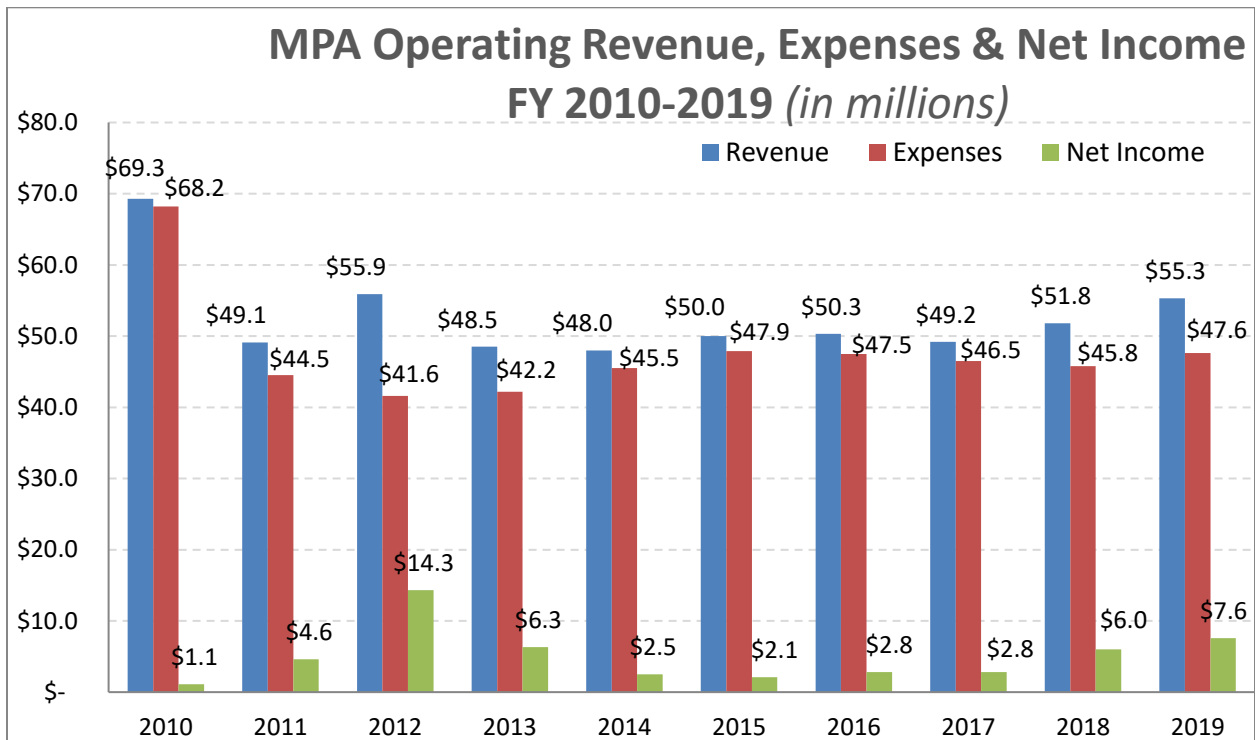
- **Number of TEUs in a single fiscal year (1,053,230 TEUs)**
- **Number of TEUs in a single month (95,962 in March 2019)**
- **Number of auto units in a fiscal year (654,638 units)**
- **Most auto units in a single month (65,281 units in August 2018)**

Roll on/roll off tons continued to improve with a 14.7 percent increase over FY 2018 and autos units at MDOT MPA terminals were up 9 percent.



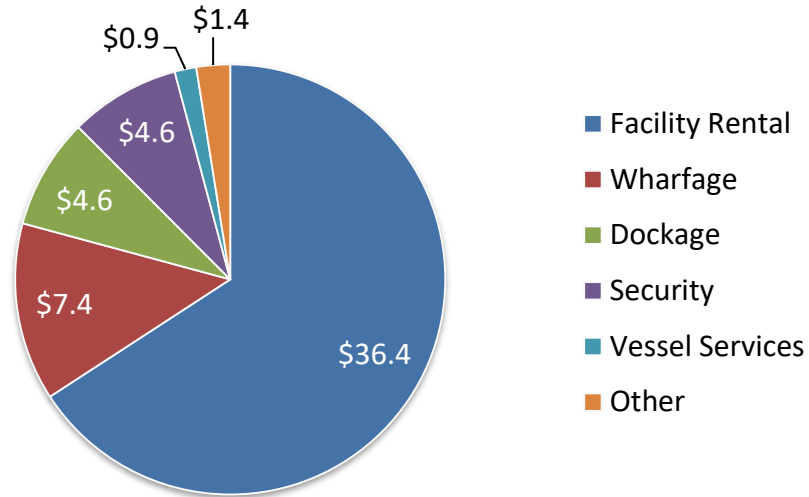
Operating Results for FY 2019

The MDOT MPA generates significant economic benefits for the City, State, and region, including operating revenues. MDOT MPA’s terminals continue to generate positive net operating income that can be reinvested into future Port enhancements. This is attributed to the implementation of the public-private partnership agreement with Ports America Chesapeake. In addition, several long-term agreements have been negotiated, providing the MDOT MPA with predictability and sustainability in future years.



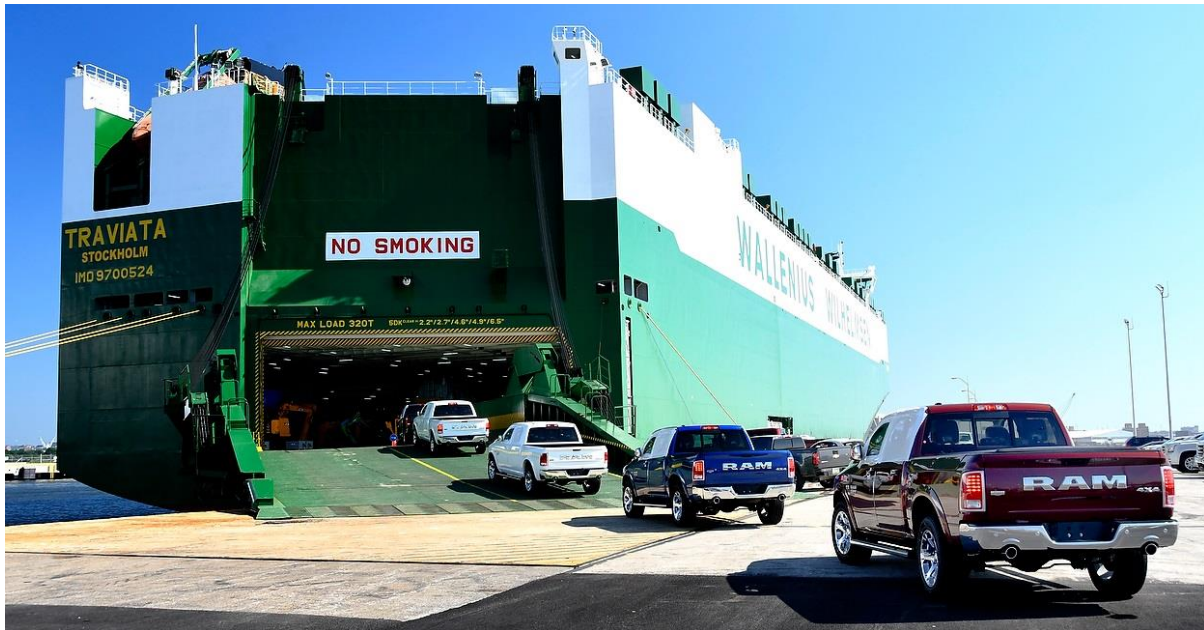
Total operating revenues for FY19 were \$55.3 million. Net income in FY19 from the MDOT MPA terminal operations is \$7.6 million after debt payments.

FY 2019 Revenues by Source (in millions)



Net income and revenues were higher in FY19 due to increased cargo crossing MDOT MPA terminals and increased container activity at Seagirt Marine Terminal.

MDOT MPA continues to experience some increases in utility costs, security, and ongoing maintenance and investments necessary to keep the MDOT MPA's terminals operating safely and efficiently.



Loading light trucks for export at Dundalk Marine Terminal, 2019.

Environmental Initiatives and Compliance Activities

The MDOT MPA is committed to doing its part to protect the environment, particularly as it relates to the health of Maryland's citizens and the Chesapeake Bay. Our stewardship of our natural resources is an essential element of the agency's mission. To do its part, the MDOT MPA has implemented a variety of environmental initiatives aimed at improving air and water quality, conserving energy, increasing climate resilience, and ensuring environmental regulatory monitoring and compliance.

MDOT MPA's Environmental Management System, certified under the International Organization for Standardization's (ISO) 14001:2015, guides the environmental activities of the organization including compliance, leadership, voluntary environmental initiatives, and expanded communication with Port stakeholders and nearby communities.

Working with the Maryland Department of the Environment (MDE), the MDOT MPA develops emission reduction strategies as part of an ongoing air quality program. This includes seeking federal grant funding to support the diesel emission reduction programs; evaluating innovative and emerging technologies; and informing, engaging with, and investing in neighboring communities.

MDOT MPA accomplishments include the following:

- The latest emissions inventory, when compared to the 2012 inventory, showed an average reduction in emissions of 19 percent, during a time when cargo throughput increased by 10 percent. This significant decrease was due to modernization of cargo handling equipment, replacement of older dray trucks with newer trucks, and operational changes to improve efficiency.
- With the assistance of federal Diesel Emissions Reduction Act (DERA) grants, more than 192 dray trucks that routinely call at the Seagirt Marine Terminal have been replaced, and the MDOT MPA is also in the process of replacing 26 pieces of cargo handling equipment.
- MDOT MPA has continued its implementation of stormwater management and total maximum daily load (TMDL) improvements to reduce pollution entering local waterways and ultimately the Chesapeake Bay.
- At the Dundalk Marine Terminal, an above-ground sand filter was installed to improve the quality of stormwater that flows into the Patapsco River.
- As part of an effort to reduce energy consumption, MDOT MPA installed energy-efficient LED high mast lighting at several marine terminals.

- MDOT MPA invested in a third trash wheel (Captain Trash Wheel) at Masonville Cove to collect trash and debris before it enters the middle branch of the Patapsco River.
- MDOT MPA partnered with Blue Water Baltimore to plant 1,000 trees in Baltimore City and received credits for TMDL reduction/restoration.
- In partnership with the Maryland Zoo, MDOT MPA began installing a stormwater treatment and riparian restoration project at the Zoo in Baltimore.
- As part of its commitment to being a good neighbor, MDOT MPA continued its ongoing community engagement. This includes attending several community association meetings in Anne Arundel and Baltimore Counties and Baltimore City to discuss the Port, its role in communities, and how community members can become and remain engaged.
- The MDOT MPA continued to provide tours of Port facilities to interested citizens from several communities, regulatory agencies, and non-profits.



Campers at Arlington Echo Outdoor Education Center help plant native grasses as part of an MPA sponsored shoreline restoration project, July 2019.

Dredged Material Management Program (DMMP)

Each year, between four and five million cubic yards (mcy) of sediment accumulate and must be removed from Maryland's shipping channels to maintain the Port's continued viability. The State's DMMP operates under a 20-year plan for developing, operating, and maintaining placement options or alternative solutions for the management of the dredged sediment from both normal maintenance and new dredging projects. As a matter of policy, citizen and stakeholder involvement is emphasized throughout the process.

In FY19, the MDOT MPA was responsible for operating three DMMP sites, including Masonville Dredged Material Containment Facility (DMCF), Cox Creek DMCF, and the Poplar Island Environmental Restoration Project. Key steps are being taken to develop solutions for adding capacity for both bay and harbor channel material.

MDOT MPA continues to pursue traditional placement options, such as the vertical and upland expansions of the Cox Creek DMCF, as well as alternative solutions, such as the Poplar Island aquatic ecosystem restoration project and other innovative reuse and beneficial use projects.



Juvenile Bald Eagles soaring over Masonville Cove,
Photo by Craig Koppie, U.S. Fish and Wildlife Service

Cox Creek Expansion enters a new phase in early FY20 as construction of the base dike continues and remediation of the upland property is completed. The next step in the expansion after base dike widening is raising the dikes to +60 ft. in elevation; design for this phase remains underway and construction is anticipated to begin in FY21. Construction of the new Cox Creek operations and maintenance complex, which will house lab space, a conference room, and maintenance garage, will be completed in early FY20.

MDOT MPA continued raising the dikes on the Masonville DMCF to elevation +18 ft. in FY 2019 and construction is anticipated to be completed in January 2020. The next phase of design for raising the dikes to an elevation of +30 ft. began in FY 2019.

In partnership with the U.S. Army Corps of Engineers (USACE), construction of the Poplar Island expansion footprint is nearly complete. The Poplar Island expansion will provide an additional 28 mcy of dredged material capacity.

The next bay channel placement option is an aquatic ecosystem restoration at Mid-Chesapeake Bay Island (James Island and Barren Island), which received federal funding in FFY18 and FFY19 to initiate project design. It will move into the Pre-Construction Engineering (PED) phase upon execution of the Design Agreement between MDOT MPA and USACE Baltimore District in early FY20. In FY19, the Assistant Secretary of the Army for Civil Works signed the Record of Decision (ROD) for the Mid-Bay project, officially closing out the feasibility phase and allowing the final design efforts to commence. When complete, the Mid-Chesapeake Bay Island project will provide an additional 90 to 95 mcg of dredged material capacity.



Expansion work underway at Poplar Island

Several demonstration projects which innovatively reuse Harbor dredged material as a valuable resource continue to advance through planning, design or construction in FY19. MDOT MPA continues property acquisition negotiations with Tronox, the owners of the Hawkins Point (formerly Cristal) property, adjacent to the Cox Creek DMCF to use for expanded innovative reuse operations.

The Pearce Creek placement site is key to providing sufficient future placement capacity for bay channels serving the C&D Canal channel system. Installation of a public water supply by the MDOT MPA is complete and all eligible homes adjacent to the DMCF have been connected.

MDOT MPA's active outreach, education, and partnership programs continued to grow in FY19. These programs offered numerous opportunities for the public to become even more engaged and knowledgeable about MDOT MPA's various projects, partnerships and environmental initiatives. Specific activities included: presentations to community, business, and civic organizations; several local and national conferences; engagement of DMMP advisory committees; professional development opportunities for teachers; and participation in the Baltimore Port Alliance's education and outreach program. Numerous site visits and tours, environmental education, and community activities were conducted at Cox Creek DMCF and the adjoining Swan Creek wetlands, Masonville DMCF and the Environmental Education Center at Masonville Cove through the Decade of Dedication programs, Poplar Island, and Hart Miller Island.

MDOT and MDOT MPA are also monitoring several national developments impacting the DMMP, and are working on strategies to maintain the competitive position of the Port. Key national issues include climate change and coastal resiliency, the adequacy of USACE funding for maintenance dredging, and tipping fees for the use of Harbor DMCFs.



Dredging in the Baltimore Harbor Channel

Seaport Security

The MDOT MPA's security program continues to be recognized as one of the top maritime security programs in the nation. For nine consecutive years, the MDOT MPA has received perfect U.S. Coast Guard annual security inspection ratings.

To maximize available resources, the MDOT MPA continues to leverage partnerships with local, State, and federal agencies to ensure the security of MDOT MPA terminals. These agencies include the Maryland Transportation Authority Police, Baltimore City Police, Baltimore County Police, U.S. Coast Guard, Federal Bureau of Investigation, Customs and Border Protection, and U.S. Department of Homeland Security.

The MDOT MPA continues to engage in a dynamic assessment process to enhance the security of its terminals. To address necessary security improvements the MDOT MPA has utilized the Federal Emergency Management Agency's Port Security Grant Program, wherein \$21 million has been awarded over the past ten years. These funds have been used to develop a sophisticated CCTV system, incorporate a CCTV Video Analytics program, integrate security systems within the CCTV monitoring center, conduct a cyber assessment of physical security technology, and open an off-terminal Access Control Center.



CBP on-dock scanner in action.

Cruise Maryland

In FY19, the Port welcomed 94 home port cruises that carried more than 424,114 embarking and debarking passengers, and another 5 port calls. Relative to FY18, the number of home port cruises remained the same.

The Port's location at the heart of the Baltimore-Washington-Northern Virginia Combined Statistical Area means the Cruise Maryland terminal serves the nation's third most affluent consumer market and its fourth most populous region.

The Cruise Maryland Terminal is also a primary contributor to the success of the MDOT MPA's cruise business. The terminal's sole use as a cruise ship terminal and its location directly adjacent to I-95 are extremely marketable and provide marquee visibility for cruise ships while in port. While ships are docked at the terminal, they are visible from various points around Baltimore's Inner Harbor and to over 120,000 vehicles passing by on I-95 daily.



Royal Caribbean's *Grandeur of the Seas*.

Both cruise lines report that ships sailing from Baltimore are above “full capacity,” meaning total passengers equal more than two people per cabin. The MDOT MPA is actively pursuing opportunities to bring additional cruise lines to sail regularly from the Port. The area's convenient location also makes Baltimore an ideal “drive-to” port for the Mid-Atlantic and Midwestern markets.

The most recent study of the economic impacts of the Port,^[1] estimates that MDOT MPA cruise activity generates a total of 378 local jobs, approximately 209 of which are direct jobs. This represents about \$17 million in local wages and salaries, nearly \$62.6 million in local business revenue, and approximately \$2.8 million in state and local taxes.

^[1] Economic data for cruise activity has traditionally been reported by calendar year, given the strength of the historic summer cruise season which would be split between two fiscal years.

Rail Operations

Railroads handle coal, containers, project cargo, military cargo, forest products, autos, roll-on/roll-off machinery, grain, cement, and liquid bulk cargo moving through the Port of Baltimore. The MDOT MPA facilities are serviced by both Class I railroads operating in the eastern United States. Norfolk Southern handles freight at the Dundalk Marine Terminal, and CSX operates in North Locust Point, South Locust Point and Fairfield/Masonville.

The Seagirt Marine Terminal is the Port's only dedicated container terminal with track rights belonging to the Canton Railroad, a short-line rail carrier owned by the Maryland Transportation Authority. Ports America Chesapeake has direct operational control of the Intermodal Container Transfer Facility (ICTF) at Seagirt which allows neutral rail access for both Class I railroads. CSX currently has an agreement with the Canton Railroad for access to the Intermodal Container Transfer Facility (ICTF) at Seagirt and provides daily international and domestic service. The MDOT MPA has continued to engage in dialogue with Norfolk Southern to transition their Baltimore service from an off-dock rail yard with supporting dray operation to an on-dock one at the ICTF and are hopeful this shift will be finalized soon.

The MDOT MPA continues to face challenges when it comes to rail service to and from the Port. First, CSX utilizes its own assets, including the aging Howard Street Tunnel with limited clearances that restrict the size and type of cargo it can carry. Second, Norfolk Southern services the Port from the Northeast Corridor, the same rail lines that accommodate Amtrak's busiest passenger routes in the nation. As a result, freight windows are constrained to nighttime only operations, and the height of the electric catenary lines that power Amtrak's locomotives restrict the size and types of cargo carried by Norfolk Southern.

Without the necessary rail clearances to offer double-stack container service, the Port continues to be at a strategic disadvantage in attracting additional international container volume. A strong effort to create options for high-cube double-stack capability through the Port would allow the MDOT MPA to take full advantage of the investments made in new cranes, the turning basin, and heavy lift berths.

Specific to this effort in March of 2019, MDOT and CSX applied to USDOT for an INFRA Grant (previously the FASTLANE Grant program). This offers the potential of bridging the necessary gap between MDOT & CSX funding commitments of \$238 million and the overall cost of the project at \$466 million. In July of 2019, USDOT awarded the Howard Street Tunnel \$125 million, the largest award in this round of funding and the 6th largest since this Grant program started in 2016. While this does not completely close the gap, both sides are working together and engaging 3rd party stakeholders that may also benefit from increased tunnel clearances. Deadlines for accept of federal funds is Q4 2019.

Internally, additional investments will be needed to upgrade existing rail infrastructure and related activities at the MDOT MPA terminals. These enhancements will create safer operating environments and increase both rail and marine efficiencies in confined terminal areas. Also, Maryland's short-line railroads are a resource that could be better utilized to attract more freight and business into new areas as well as reviving old ones.



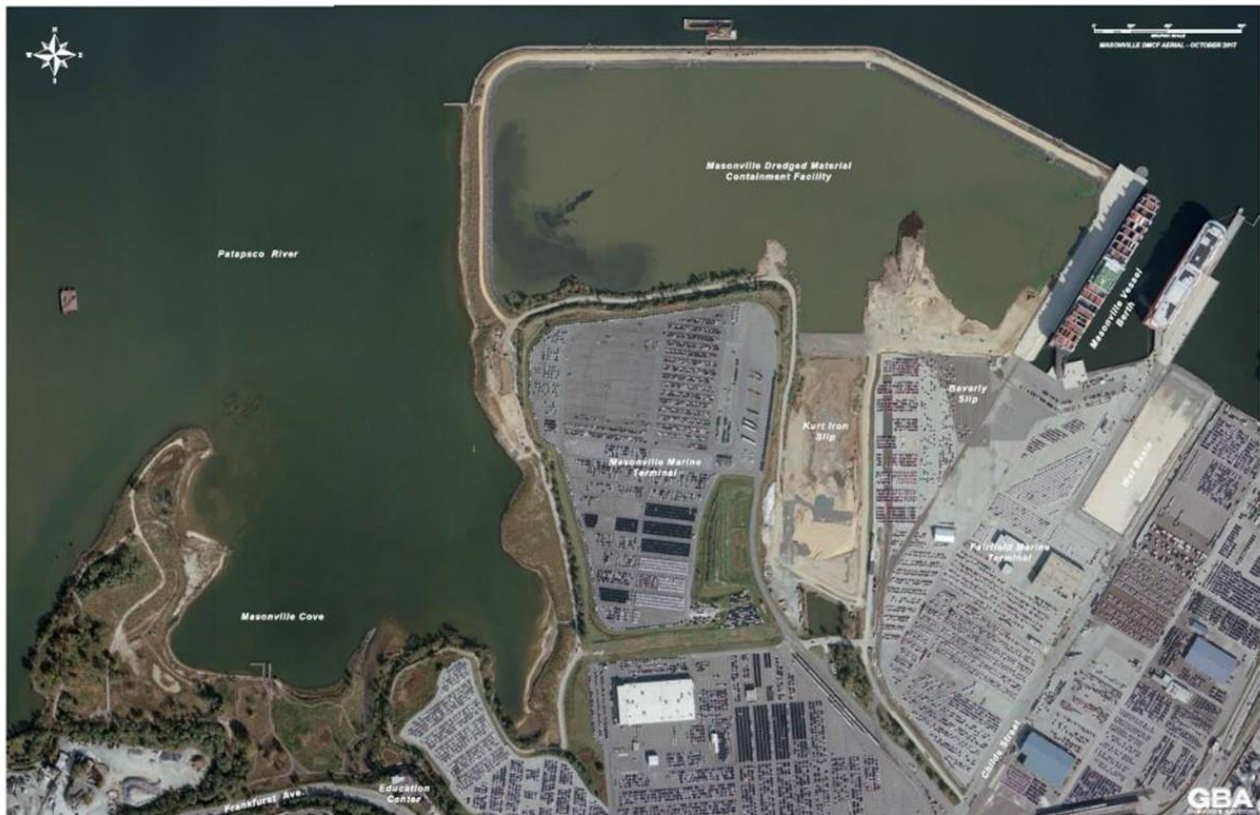
ICTF at Seagirt Marine Terminal.

TIGER Project

MDOT MPA secured a \$10 million Transportation Investment Generating Economic Recovery (TIGER) grant from the USDOT, for improvements at the Seagirt and Fairfield marine terminals. The TIGER grant's current total project cost is \$47.1 million and includes three major components:

- Filling and developing the Wet Basin at Fairfield to provide seven acres of additional cargo storage at a premium location near the berth.
- Widening the Seagirt access channel to allow larger vessels to safely navigate to Seagirt, while reusing some of the dredged material to fill the Wet Basin at Fairfield.
- Extending rail capacity into Fairfield to better serve customers and accommodate shipments of auto and RoRo cargo.

Additional work (similar in nature to the TIGER projects above) was conducted via these construction contracts to achieve efficiencies and economies of scale. The additional work included: dredging Dundalk Berth 1, paving the Beverley Slip, stabilizing buried barges, filling the South Locust Point Fruit Slip and removing derelict pilings, and demolishing Fairfield Pier 5.



Aerial of progress being made to fill Kurt Iron Slip and Wet Basin at Fairfield Marine Terminal.

As of the end of FY19, the project is substantially completed: dredging at Seagirt, Fairfield rail extension, and the filling of the Wet Basin are complete; the contract to redevelop the Wet Basin area for cargo storage has been accepted and that contract will be closed out when the final punch list items are completed. MARAD's engineers will perform a site inspection in FY20.



Fairfield Marine Terminal Wet Basin, September 2015.



Fairfield Marine Terminal Wet Basin, Underground Storm Water Management System, January 2019.



Fairfield Marine Terminal Wet Basin, Nearly Complete, July 2019.

Status of Operations at Seagirt Marine Terminal

Ports America Chesapeake (PAC) has successfully managed Seagirt Marine Terminal since the landmark 50-year, public-private partnership (P3) was finalized in January of 2010. Since then the partnership continues to be a benefit to the Port community, and PAC continues to deliver on its promises. Seagirt's key performance indicators – cargo growth, operational efficiency, job creation, etc. – have all been positive and container volumes are increasing.

Since taking control of Seagirt, PAC has invested millions of dollars in capital improvements. Those improvements include yard cranes, cargo handling equipment, paving, grain trans-load system, implementation of RFID technology, a new back gate, and 6 new RTG cranes for more efficient cargo movement on the terminal.

The following projects were completed in FY19:

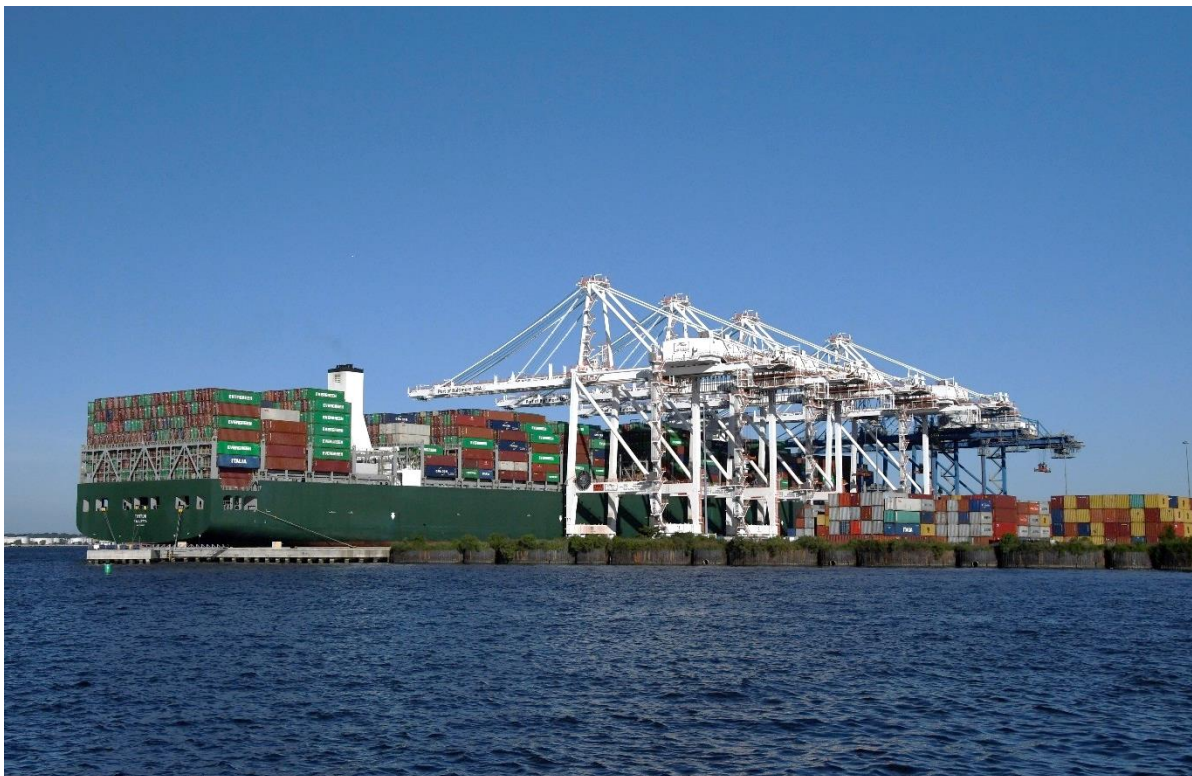
- In response to growing container volumes at Seagirt Marine Terminal, the chassis depot was relocated to an off-dock alternate location at 2001 Broening Highway; this will relieve congestion and improve efficiency. The Depot hours are coordinated with the terminal's hours and the needs of the trucking community.
- An off-dock empty container yard went live in the Spring of 2019. This will reduce gate transactions at Seagirt and will provide additional space to better manage increased import container volumes, which is key to reducing truck turn-times.
- Five new inbound gates are now open at the Vail St. back gate. Additional Radiation Portal monitors will be added for the Customs and Border Protection outbound scanning process. This will enable the Vail St. gate to become full service and increase gate handling capacity.
- New terminal operating system (TOS) went live in the fourth quarter of CY19.
- The Quality Cargo Handling Team (Q-CHAT) continues to improve containerized cargo handling.

To accommodate the ever-increasing number of Ultra-Large Container Vessels calling on the Port, PAC and MDOT MPA will be undertaking the Seagirt Berth 3 Modernization P3 project to add a second fifty-foot deep berth to the Seagirt Marine Terminal. This will include adding 4 new neo-Panamax container cranes, additional yard equipment, and dredging to widen the entrance channel and turning basin. Upgrades to the terminal infrastructure, hardware, and cargo handling equipment are also planned to service the larger vessels. In December 2018, MDOT MPA received word that \$6.6 million in federal funding was awarded from the USDOT BUILD Grant program to contribute to the project.

To provide operating efficiencies and lower costs for routing container cargo by rail to the heartland, PAC began operating the Intermodal Container Transfer Facility at Seagirt in 2016.

Other future projects in the works for the Seagirt Marine Terminal include:

- the redevelopment of the 37-acre Point Breeze Business Center property to allow for expanded capacity;
- radiation monitors for the second phase of development of Seagirt's back gate to allow loaded containers inbound and outbound access;
- weigh in motion scales and additional optical character recognition portals to increase the speed of truck processing;
- additional inbound lanes to address volume increases;
- reconfigured outbound lanes to add capacity, increase safety, and add speed; and
- new more efficient container handling equipment to replace older units.



Six Cranes working a ship at Seagirt Marine Terminal.

Planning for Climate Resilience

To fulfill its mission, the MDOT MPA must operate along the water's edge, making it susceptible to the impacts of climate change. Marine terminals, due to their location, may be subject to flooding and tidal inundation from projected sea level rise and severe weather events. Since Port activities require direct access to water as an integral part of their function, marine terminals cannot be relocated and must adapt in place. As a water-dependent use, the MDOT MPA is continuously working to make sure its engineering, facility and operations personnel, as well as those of our private-sector partners, are aware of potential climate change impacts, and are working to become more resilient.

Recognizing that Port operations may be threatened by changing climate conditions, the MDOT MPA has adopted a three-pronged "MEM" model to assess future actions, as follows:

MIGRATE:

Move terminal functions out of the flood plain, when feasible. Many terminal functions must be in proximity to the water, making this difficult to execute. The MDOT MPA may, however, move activities out of the flood plain if they are not directly related to cargo operations, including administrative activities.

ELEVATE:

All new MDOT MPA facilities or structures sensitive to damage that must remain on the terminals will be designed to be 2 feet above the 100-year flood elevation if operationally feasible.

MITIGATE:

Those facilities or structures that cannot be migrated or elevated, will be reinforced or strengthened with non-corrosive materials that can handle inundation or limit potential weather damage, whenever significant maintenance is required or capital investments are being made.

The MDOT MPA is committed to making every effort to become as resilient in the face of changing climate conditions as possible, given the Port's status as a highly water-dependent use. As such, the MDOT MPA will continue to work with local, state and federal partners to research, plan for, and where possible to implement, sound climate resilience, and adaptation policies and projects in the future.

Challenges: FY 2018 and Beyond

There are a variety of challenges on the horizon for the MDOT MPA and the Port of Baltimore. In addition to aggressive competition for port business and a possibly slowing global economy, the challenges being faced include:

- **An increasingly competitive environment requires new investments** – The competitive environment among East Coast ports has increased in recent years. Several East Coast ports are increasing capital investment in their terminals and transportation infrastructure, while offering reduced rates and cargo incentives – some of which have been aided by large government subsidies from their respective states and localities – to divert the Port’s existing cargo their way. In addition, global logistics patterns have been shifting in response to changing trade patterns and increased options for the global movement of freight. In addition to new investments, ongoing system preservation efforts are needed to adequately maintain vital waterfront facilities. The MDOT MPA must remain competitive in the future through strategic partnerships, capital investments, aggressive rates, outstanding quality programs, and exceptional customer relationships and services.
- **Cost of dredging and dredged material placement solutions** – Constraints on dredged material management solutions, the cost of dredging, and future uncertainty about federal funding for dredging and dredged material management remain serious concerns. Current capacity is inadequate to perform both maintenance dredging and new private sector dredging projects without overloading the harbor or bay dredged material placement sites. The need remains to activate additional dredged material management solutions for the safe and environmentally appropriate management of dredged material. Maintaining a cost-effective, environmentally sensitive, and community-supported dredging program will be a considerable long-term challenge.
- **Double-stack capability is essential to remaining competitive** – The Port is well-situated to serve the regional market with easy access to the interstate highway system. Unfortunately, Baltimore is at a disadvantage in its efforts to expand into the Midwest and other discretionary markets because of the lack of high-cube double-stack rail capabilities for containers to and from the Port. Double-stack capability is critical to the Port’s long-term competitiveness, but is constrained by inadequate rail clearances along CSX’s Howard Street Tunnel route to Seagirt, as well as along the Northeast Corridor which is shared by Amtrak with Norfolk Southern.

In FY19, CSX agreed to commit \$91 million toward the cost of making infrastructure improvements to the 123-year old Howard Street Tunnel. The improvements will transform the Tunnel into one that will allow double-stacked container trains to travel to and from the Helen Delich Bentley Port of Baltimore, allowing the Port to further capitalize on its booming container business. The project would also alleviate a freight logistics bottleneck and create a more efficient rail network with more intermodal opportunities and supporting additional jobs.

- **Growing cargo volumes with aging facilities** – Ongoing system preservation efforts are needed to maintain vital waterfront facilities in an increasingly harsh marine environment. MDOT MPA will continue to compete for limited capital funds for capital improvement projects at MDOT MPA terminals in order to maintain its competitive position relative to other mid-Atlantic ports.
- **Growing international trade tensions** – As the federal government imposes and considers additional tariffs on certain imports into the U.S., Ports throughout the country are experiencing a prolonged period of uncertainty. Any possible “Protectionism,” or simply a widespread assessment of new tariffs on certain countries or products, could have significant impacts on import and/or export volumes at ports throughout the United States. Ambiguity among products moving globally, through specific ports that rely on those products, places greater risk to business. These international trade disputes are outside of the MDOT MPA’s control or influence. Moving forward, MDOT MPA will constantly monitor the decisions made by the US and overseas governments. These decisions could lead to changes in cargo volumes at the Port of Baltimore as the full effect of new tariffs take hold.
- **Continuing “Green Port” and community initiatives** – The MDOT MPA has been an active partner in the protection and enhancement of the Chesapeake Bay and the health of Maryland’s citizens by helping to improve air and water quality. The MDOT MPA views community engagement as essential to its long-term sustainability and growth. The need for broad coordination with local communities will continue to increase in the future as the Port grows and cargo volumes increase.

To ensure future growth at the terminals, the MDOT MPA must seek innovative solutions to air emission issues, particularly reductions in the use of diesel fuel. Diesel exhaust emissions remain the most significant source of emissions for the Port. Future solutions could include electrification or the increased use of alternate fuels for cargo handling equipment.

In terms of water quality, to meet the Chesapeake Bay TMDL goal of restoring or treating 20 percent of impervious surfaces, the MDOT MPA will need to identify offsite opportunities for installation of acceptable methods of treating stormwater.

Appendix

Contracts and Leases Approved by the Maryland Port Commission for FY 2019 (July 1, 2018 – June 30, 2019)

July 2018

1. Contract #518009, Demolition of Crane #10 and 300,000 Gallon Water Sphere at Dundalk Marine Terminal, McLean Contracting Company, Inc., Glen Burnie, Maryland; \$898,095; Term: August 23, 2018* – March 5, 2019 (*or earlier after BPW approval).
2. Contract #518506, Wet Basin Infrastructure at Fairfield Marine Terminal, Urban N. Zink Contractor, Inc., Chase, Maryland; \$6,350,489; Term: August 23, 2018* – April 5, 2019 (*or earlier after BPW approval).

August 2018

No meeting was held in the month of August.

September 2018

1. Contract #518214, Cruise Terminal Breezeway Roof Replacement & HVAC Upgrades at South Locust Point Cruise Terminal, Oakmont Contracting, LLC, Columbia, Maryland; \$951,877; Term: September 28, 2018* – June 27, 2019 (*or earlier after BPW approval).
2. Contract #218013-S, Hazardous and Nonhazardous Waste Management at MDOT MPA Terminals, Allstate Power Vac Inc. dba ACV Enviro APV, Rahway, New Jersey; \$4,506,434; Term: October 17, 2018* – October 16, 2021 (*or earlier after BPW approval) (Three Years with Two (2) Two-Year Renewal Options).

October 2018

1. Contract #518818, Stormwater Management Improvements, P. Flanagan & Sons, Inc., Baltimore, Maryland; \$1,415,000; Term: November 1, 2018 – July 1, 2019.

November 2018

1. Contract #519807, Design and Cost-sharing Agreement for the Mid-Chesapeake Bay Island Ecosystem Restoration Project, Department of the Army, U.S. Army Corps of Engineers, Baltimore District; \$3,124,000 (MDOT MPA's Share) + \$5,801,000 (U.S. Army Corps of Engineers' Share) = \$8,925,000 Total Project; Term: November 15, 2018 – December 31, 2023.
2. Contract #218029-S, *Port of Baltimore Magazine*, Media Two, LLC dba Today Media Custom Communications, Baltimore, Maryland; \$600,000; Term: January 1, 2019 – December 31, 2021 (Three Years with One (1) Two-Year Renewal Option).
3. Contract #219005-IT, Maintenance and Support for Underwater Intrusion Detection System (UIDS) at South Locust Point Cruise Terminal, Northern Defense Industries, LLC, Alexandria, Virginia; \$244,095; Term: December 6, 2018 – December 5, 2021 (Three Years).

December 2018

1. Modification #1, Contract #215018A2-IT, Information Technology (IT) Service Desk and Desktop Field Support, Gantech, Inc., Columbia, Maryland; \$155,444; Term: January 2, 2019 – August 31, 2020.
2. Contract #218035-IT, Information Technology (IT) Database Management Support, Client Network Services, LLC, Rockville, Maryland; \$897,907; Term: January 1, 2019 – December 31, 2023 (Five Years).
3. Contract #517807, Agency Wide Substructure Repairs (at all MDOT MPA marine terminals and facilities), Marine Technologies, Inc., Baltimore, Maryland; \$10,000,000; Term: February 5, 2019 – February 4, 2023 (*or earlier after BPW approval).
4. Revision to Item #1 from the November 7, 2018, Maryland Port Commission: Contract #519807, Design and Cost-sharing Agreement for the Mid-Chesapeake Bay Island Ecosystem Restoration Project with the Department of the Army, U.S. Army Corps of Engineers, Baltimore District – increase of \$41,000 to the State's share (MDOT MPA) of design costs to \$3,165,000.

January 2019

1. Contract #518023R, Dunmar Building HVAC Upgrades and Renovations at Dundalk Marine Terminal, Fresh Air Concepts, LLC, Linthicum, Maryland; \$1,125,714; Term: February 7, 2019 – October 6, 2019 (*or earlier after BPW approval).
2. Contract #518825R, Agency Wide Building Repair 2 (at MDOT MPA marine terminals and facilities), Denver-Elek, Inc., Essex, Maryland; \$10,216,034; Term: February 21, 2019* – February 20, 2024 (*or earlier after BPW approval).

February 2019

There were no contracts requiring Maryland Port Commission approval.

March 2019

1. Modification #1, Contract #513003, Reconstruction of Berths 1-6; Phase 2, Berth 4 at Dundalk Marine Terminal, Corman Marine Construction, Inc., Annapolis Junction, Maryland; \$191,751; Term: September 13, 2016 – September 16, 2016. Modification #1 settles a claim of the contractor for alleged differing site conditions encountered during dredging.
2. Contract #219009-S, Broker Services at the World Trade Center Baltimore, MacKenzie Commercial Real Estate Services, LLC, Baltimore, Maryland; \$300,000; April 4, 2019 – March 31, 2022.

April 2019

1. Modification #9, Contract #270030-S, Building Operations, Maintenance, and Leasing at the World Trade Center Baltimore, Meridian Management Corporation, Ponte Vedra Beach, Florida; \$1,323,000; Term: June 10, 2019 – October 31, 2019.

May 2019

1. Contract #219012-M, Janitorial Services at Dundalk Marine Terminal and Seagirt Marine Terminal, P2 Cleaning Services, LLC, Baltimore, Maryland; \$729,980; Term: June 1, 2019 – May 31, 2024 (Five Years with One (1) One-Year Renewal Option).
2. Contract #219013-M, Janitorial Services at South Locust Point Cruise Terminal, Frontline Enterprises, LLC, Silver Spring, Maryland; \$350,000; August 1, 2019 – July 31, 2024 (Five Years).

3. Contract #218034-S, Shuttle Bus Service at South Locust Point Cruise Terminal, D.T.S. Worldwide Transportation, LLC, Spencerville, Maryland; \$200,000; Term: July 1, 2019 – June 30, 2022 (Three Years with Two (2) One-Year Renewal Options).
4. Contract #518219, Fruit Pier Slip Infrastructure at South Locust Point Marine Terminal, Cianbro Corporation, Baltimore, Maryland; \$4,634,041; Term: June 7, 2019* – January 1, 2020 (*or earlier upon BPW approval).
5. Modification #1, Contract #516003B, Lot 402 Drainage Improvements at Dundalk Marine Terminal, Marine Technologies, Inc., Baltimore, Maryland; \$880,995.15; Term: August 12, 2017 – February 18, 2019. Modification #1 settles claims of the contractor for alleged differing site conditions and other changed conditions of performance.

June 2019

1. Contract #518815A and Contract #518815B, Construction Management and Inspection Services; Award Amount Total – \$7,000,000; Term: July 7, 2019* – July 6, 2024 (*or earlier upon BPW approval). This is a request to award two (2) open-ended task order contracts to provide construction management and inspection services for the Maryland Department of Transportation Maryland Port Administration (MDOT MPA).

The award amounts for the two contracts are as follows:

- Contract #518815A, O’Connell & Lawrence, Inc., Olney, Maryland; \$3,500,000.
- Contract #518815B, iCivil, Inc., Woodstock, Maryland; \$3,500,000.