

Annual Review

2018: Banner Year for the Port of Baltimore

Governor Larry Hogan stated it best when he said, "There is no better example of Maryland being 'Open for Business' than the Helen Delich Bentley Port of Baltimore. The Port remains one of Maryland's leading economic engines."

Without a doubt, 2018 was a banner year for the Port of Baltimore (POB). The private and public sectors together set cargo records while celebrating collaborative environmental achievements. On both the international and national levels, the Port of Baltimore's operations were showcased as examples for other ports to follow.

In May, Baltimore was host to the first GreenPort Congress held in North America, drawing nearly 200 attendees from 14 countries and six continents.

Visitors toured the Port's landside and waterside facilities, the Poplar Island Restoration project, and the litter eating trash wheels.

The Liberian delegation was so impressed, they sent Alexander Noah, the manager of their Port of Greenville, to Baltimore for a two week internship. After touring the Port's operations, Noah equated his visit to nearly achieving a master's degree in port management.



In October, the Helen Delich Bentley Port of Baltimore welcomed the largest container ship to ever visit Maryland. The Gunde Maersk, which has a capacity to handle 11,000 Twenty-foot Equivalent (TEU) containers was able to call the Port of Baltimore because of the Port's 50-foot deep channel and its supersized Neo-Panamax cranes.

Also in May, Baltimore was host to Active Communications International's (ACI's) 2nd North American Dredging Summit which attracted leading experts and stakeholders from across the dredging sector and gave the Port the opportunity to showcase innovative projects that reuse dredged material.

In 2018, Maryland Department of Transportation Maryland Port

Administration (MDOT MPA) convened internal strategic thinking sessions to anticipate future challenges and identified specific actions we can take to remain a good neighbor to the residents who live nearby.

Additionally, MDOT MPA led a collaborative effort to address the regulatory challenges to reusing dredged material in innovative ways.



GreenPort 2018, published by the Maryland Department of Transportation Maryland Port Administration, describes the projects and programs that took place in 2018 to support a thriving economy, environmental stewardship, and community partnerships. We thank the many private sector businesses, government leaders, communities, and individual citizens who have helped make these achievements a reality. www.marylandports.com

Economy_

Economic Powerhouse

For the Port of Baltimore (POB), 2018 was another record-setting year, including the highest amount of general cargo ever handled by the six state-owned terminals — 10.9 million tons. This marks the third consecutive year for handling more than 10 million tons of general cargo. Examples of general cargo are autos and light trucks; containers; farm, mining and construction equipment; and forest products.

The POB's state-owned marine terminals handled 1,168,627 cargo tons of cars and light trucks — the highest annual amount on record.

Among the nation's ports, POB ranks first in tonnage for autos and light trucks, roll on/roll off heavy farm and construction machinery, and imported sugar. The Port ranks second in exported coal tonnage. Overall, the Port ranks ninth among all ports for the total dollar value of cargo and 12th in foreign cargo tonnage.

Business at the Port of Baltimore generates about 15,330 direct jobs, while about 127,600 jobs in Maryland are linked to Port activities. The Port is responsible for nearly \$3 billion in personal wages and salary and \$310 million in state and local tax revenues.



2018 was a record-setting year for cars and light trucks at POB.



Supersized Ships Welcome

Funding from the U.S. Department of Transportation through a grant of \$6.6 million will complement State of Maryland and Ports America Chesapeake funding to deepen and develop a second 50-foot berth for supersized ships such as the Gunde Maersk. Construction will begin in late 2019 and once completed, the Port will be able to accommodate two large ships simultaneously.

Creating Cargo Room

In 2018, the Board of Public Works approved a contract to complete construction of the Transportation Investment Generating Economic Recovery (TIGER) project at MDOT MPA's Fairfield Marine Terminal. This will create seven new acres of storage area for handling the Port's surging auto and roll on/roll off (farm and construction machinery) cargo business.

More Cranes for More Containers

Port of Baltimore welcomed six new Rubber-Tired Gantry (RTG) yard cranes in 2018 to help handle record container volume growth. RTG cranes are used to lift containers from ships and place them on trucks or vice versa. The cranes were purchased by Ports America Chesapeake which operates the Port's Seagirt container terminal. The six new RTG cranes will add to the 16 already in service.

We're Cruising Now

Cruises continue to be a thriving part of port business, generating approximately \$90 million in economic benefits. In 2018, 94 cruises departed from or called at the Port of Baltimore, carrying 218,849 passengers.

Significant improvements were made to the cruise terminal in 2018, including renovated bathrooms, new carpeting and ticketing kiosks, a new VIP passenger lounge, and the completion of an enclosed and temperaturecontrolled walkway for passengers between the terminal and the ship.

AT A GLANCE 2018 ECONOMIC HIGHLIGHTS

- Record year for general cargo tons: 10,934,154 tons
- Third consecutive year for handling more than 10 million tons of general cargo
- Record year for cargo tons of cars and light trucks: 1,168,627 tons

Environment

Cargo Up, Emissions Down

Our commitment to cleaner air is evident through this important fact: while cargo volumes continue to rise, the Port has reduced the amount of emitted air pollutants by more than 10,000 cumulative tons.

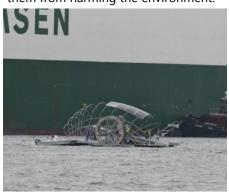
Since 2012, with the help of federal grants, MDOT MPA has replaced nearly 180 dray trucks (trucks that transport goods over a short distance) with newer, cleaner models that reduce harmful air emissions.

In late 2018, the Port was awarded an additional \$2.4 million from the U.S. Environmental Protection Agency (EPA) to repower marine engines and upgrade diesel dray trucks and equipment that are used to move cargo.

The new EPA funding will help replace approximately 35 dray trucks and 30 pieces of cargo-handling equipment such as forklifts and yard tractors, and repower four marine engines.

Keeping Trash Out of the Bay

Trash Wheels In 2018, the third trash wheel funded by MDOT MPA was added to the fleet. Captain Trash Wheel at Masonville Cove joined Mr. Trash Wheel at the Inner Harbor and Professor Trash Wheel in Canton, to scoop floating bags, bottles and other trash onto dumpster barges to keep them from harming the environment.



Captain Trash Wheel en route to Masonville

The trash wheels are powered by river current and solar energy and have attracted national and international attention.

Trash Interceptor
Trash is captured
before picking up
additional

contaminants and reaching waterways through a new interceptor system installed at the Dundalk Marine Terminal. A vacuum truck then removes the trapped debris.

Smart Cans MDOT MPA funded more than 200 Smart Cans in Baltimore City. These solar-powered cans have compactors that allow more trash to be securely stored and send electronic signals to notify workers when full.

Anti-Litter Campaign An anti-litter campaign by MDOT MPA and Wallenius-Wilhelmsen Logistics, "Throw Away, Don't Blow Away!" at the Dundalk Marine Terminal, is reducing the amount of litter that enters nearby waterways.

Oyster Reef Thriving

Monitoring data taken in 2018 is showing that most of the three million oysters on a reef created beside Fort Carroll in the Patapsco River in 2017 are thriving.

This Chesapeake Bay Foundation project to construct, seed, and monitor this 1.1-acre-reef is funded by The Abell Foundation and MDOT MPA.

Oysters remove pollutants from the water and create food and habitat for other creatures. The once tiny oyster "spat," that were barely visible are now much larger and help support the reef, which is habitat for other marine life.



Office of Harbor Development Chief of Outreach, Policy & Permits, Kristen Fidler and Environmental Analyst Kristen Keene accept the 2018 ASLA Professional Award on behalf of MDOT MPA.

Design with Dredge

In the Baltimore region, 1.15 million cubic yards of sediment must be removed each year from Baltimore Harbor to keep the Port operating. The challenge is what to do with it.

MDOT MPA's innovative reuse program considers options such as utilizing dried dredged material as daily cover on landfills, soil amendments, and engineered fill material. The American Society of Landscape Architects (ASLA) recently recognized the program with the prestigious 2018 ASLA Professional Award for design. In keeping with Governor Hogan's Waste Reduction and Resource Recovery Executive Order, MDOT MPA has set a long-term goal to recycle 500,000 cubic yards of dredged material each year.

A large scale beneficial use project is currently being developed. Mid-Bay Island, located off Dorchester County, would be similar to Poplar Island.

Removing Nutrients and Sediment

MDOT MPA is using algae to remove nutrients and sediment, which are pollutants that harm the Chesapeake Bay. Water from the Patapsco River, which enters the Chesapeake Bay, is pumped into a flow-way where algae feeds on the nutrients. The water is returned to the river, with the nutrients and sediment removed, and increased dissolved oxygen levels.

Community

Commitment to Students

MDOT MPA is committed to arming students with the tools that will help them become stewards of their environment. Our initiatives in 2018 included:

Masonville Cove Almost 2,000 students visited the MDOT MPA-owned Masonville Cove Environmental Education Center. It is located on the Middle Branch of the Patapsco River and is uniquely positioned to teach about ecosystems in urban settings.

<u>Terrapins</u> We celebrated the 10th year of this popular and successful program where students and teachers help terrapin turtles get a "head start" in classrooms. More than 2,000 baby terrapins have been nurtured since the program began.



Van Brooks and his SAFE students had a great time deploying their custom built sea-bots at Masonville Cove.

<u>Sea-Bots</u> Van Brooks, founder of a free after-school program for Baltimore middle school students, Safe Alternative for Education, had his students build underwater robots equipped with cameras and bring them to the Masonville Cove Environmental Education Center to view the aquatic environment. MDOT MPA helped Brooks obtain a grant from the Chesapeake Bay Trust that enabled the students to learn how land uses impact water quality.

MAEOE Youth Summit Nearly 3,000 students, teachers, administrators, and environmental educators gathered at Sandy Point State Park in Annapolis to honor Maryland Green Schools at the 2018 Maryland Association for Environmental and Outdoor Education (MAEOE) Youth Summit. MDOT MPA's diamondback terrapin exhibit inspired and educated attendees.

Giving Back to Our Community

MDOT MPA takes pride in being a good neighbor. From 1,000 new trees planted in Baltimore City in partnership with Blue Water Baltimore, to volunteer community projects like clearing storm debris at Madeira Street Community Garden or replacing ceiling tiles at the nearby St. Helena Community Center, we make every effort to give back to our neighbors.

Outreach and Engagement

We continue to engage and build relationships with our stakeholders by giving presentations about the port at community meetings, participating in community events, partnering with Baltimore Port Alliance to conduct tours of port facilities, and permitting access to some of our properties for birdwatching and recreation. For the third year in a row, area birders ranked Cox Creek Dredged Material Containment Facility (DMCF) and Swan Creek Wetlands as the No. 1 hotspot on the popular website, eBird. At the 5th Annual Masonville BioBlitz, more than 100 volunteers teamed up with experts to document more than 200 species of wildlife at the site. In June, the inaugural Hart-Miller Island 5 Miler hosted 50 runners, with Darren Thompson, director of operations for Ports America Chesapeake, winning first overall.

Pearce Creek Water Service Connections Complete

The new public waterline from the Town of Cecilton was completed in 2018 to address historic placement of dredged material at the DMCF deemed a contributing source, among others, of groundwater degradation in the vicinity of the site.



Poplar Island had a record number of 298 least terns in 2018.

Follow • Subscribe • Explore

Visit the MDOT MPA web site at

www.marylandports.com

where you can sign up for free subscriptions to the

GreenPort email newsletter Port of Baltimore magazine

Or follow the Port of Baltimore on social media.













