



2015

FREIGHT SYSTEM
PERFORMANCE
ANNUAL REPORT



*Maryland Department
of Transportation*

Maryland Freight System Performance Annual Report

2015

Maryland Department of Transportation

Reporting timeframes: calendar year 2014 and fiscal year 2014

Published October 2015

The staff of the Maryland Department of Transportation Office of Freight and Multimodalism prepared this 2015 update. The information and data provided herein are courtesy of the business units: State Highway Administration (SHA), Motor Vehicle Administration (MVA), Maryland Port Administration (MPA), Maryland Aviation Administration (MAA), Maryland Transit Administration (MTA), and the Maryland Transportation Authority (MDTA).

Table of Contents

<i>Introduction</i>	4
<i>Freight Transportation Vision</i>	4
<i>Maryland Freight-Reliant Industry Statistics</i>	5
<i>Freight System Performance</i>	6
GOAL: QUALITY OF SERVICE	7
GOAL: SAFETY & SECURITY	10
GOAL: SYSTEM PRESERVATION	16
GOAL: ECONOMIC PROSPERITY	22
GOAL: ENVIRONMENTAL STEWARDSHIP	29
GOAL: COMMUNITY VITALITY.....	31
FREIGHT MEASURES INDEX.....	32

Freight Transportation Vision

Freight travels freely and safely through an interconnected network contributing to economic viability and growth for Maryland business.

Introduction

The Maryland Department of Transportation (MDOT) benchmarks and tracks progress in attaining its vision and mission to provide a well-maintained, sustainable and multimodal transportation system that facilitates the safe, convenient, affordable, and efficient movement of people, goods, and services within and between population and business centers. The 2015 Strategic Goods Movement Plan outlines six key goals for MDOT's strategic framework in making future transportation decisions and investments: safety and security, system preservation and performance, quality of service, community vitality, environmental stewardship, and economic prosperity. The Plan guides MDOT's planning, policy, and operational disciplines, along with public and private stakeholders, on improving the state's freight transportation system to grow and maintain a healthy and vital economy.

The 2015 Maryland Freight System Performance Annual Report highlights leading indicators corresponding to the freight system performance within the six goal areas identified in the Strategic Goods Movement Plan. This Report identifies freight performance measures throughout MDOT, although it does not inventory all freight activity and initiatives.

Overall, the Report shows that MDOT is achieving some of the freight goals. There are continuing opportunities for growth and improvement for freight transportation – making highways safer, utilizing rail options, and increasing marine and port landside and seaside capacity to name a few. Goods movement on a reliable, safe, and efficient transportation system is essential to Maryland's economy, as demonstrated by the below statistics.

Maryland Freight-Reliant Industry Statistics

Freight-reliant industry is defined as an industry that is involved in the production or transport of goods. Freight-reliant industries include Transportation, Warehousing/Distribution, Manufacturing, Wholesale Trade, Retail Trade, Construction, Agriculture, Mining, Forestry, Fishing, Energy, Food Services, and Health Care. Businesses NOT included as freight-reliant industries are telecom, internet, banking, real estate, arts, administrative services, consultants.



Freight-Reliant Industry Maryland Employees: 1,511,995

45% of 3,394,859 total Maryland employees



Freight-Reliant Industry Maryland Businesses: 82,639

49% of 168,948 total Maryland businesses



Annual Maryland Freight-Reliant GDP: \$123.4 Billion

Annual Maryland Freight-Reliant Industry wages: \$70.9 billion

Annual State Revenues from the Maryland Freight Industry: \$4 billion

Freight System Performance

The following sections identify what we are measuring, why the performance change, and what we are doing to impact performance as we move toward meeting the six goals outlined in the Strategic Goods Movement Plan.



Quality of service: maintain and enhance the service experience for users of Maryland's multimodal freight system

Measured by the reliability of the freight system and the cost of congestion to truckers



Safety & security: improve the safety and security of goods movers, the public at large, transportation assets, and cargo

Measured by the effectiveness of regulations and enforcement programs to ensure safety



System preservation: maintain and improve the performance of Maryland's multimodal freight system

Measured by the freight infrastructure condition and capacity



Economic prosperity: maintain and improve Maryland's economic competitiveness

Measured by the tonnage and value of freight moving in, out, and through Maryland



Environmental stewardship: support and enhance Maryland's natural, historical, and cultural resources

Measured by the connection between freight and clean air and water



Community vitality: support Maryland's communities and quality of life

Measured by the number of intermodal containers moved by rail through the Port of Baltimore

LEGEND: PERFORMANCE TRENDS YEAR OVER YEAR



Improved



Declined



Steady

GOAL: QUALITY OF SERVICE

Maintain and enhance the service experience for users of Maryland's multimodal freight system



HIGHWAYS

Percentage of the Maryland SHA network in overall preferred maintenance condition



2014	2013	2012	2011
83.4%	83.4%	85.1%	82.2%

Why did performance remain steady?

- Extended winter season did not afford as much opportunity for typical springtime maintenance activities in FY 2014.
- Progress has been made toward improving the level of service for drop-off/build-up on the shoulder and brush and tree maintenance; an additional 250 linear miles of roadside was addressed for drop-off or build-up and attention was given to signs obstructed by tree limbs.
- Total maintenance expenditures have been closer to the average historical amounts.

What are future performance strategies?

- Continue to maintain the statewide overall level of service while working on the specific areas of individual assets that fall below the desired maintenance condition.
- Seek federal funding for additional maintenance activities as part of an asset management program approach to performing work.

GOAL: QUALITY OF SERVICE

Maintain and enhance the service experience for users of Maryland's multimodal freight system



HIGHWAYS

Truck Congestion Cost (in \$ millions) on freeways/expressways



2014	2013	2012	2011
\$116.66	\$147.5	\$167	(not reported)

Amount of delay in '000 hours for trucks due to congestion on freeways/expressways



2014	2013	2012	2011
1,526	1,947	2,248	(not reported)

Wasted fuel for trucks in '000 gallons on freeways/expressways



2014	2013	2012	2011
3,656	4,664	5,329	(not reported)

Truck user cost savings in (\$ millions) due to Coordinated Highways Action Response Team (CHART) incident management efforts on state highways in Maryland



2014	2013	2012	2011
\$104.56	\$149.54	\$108.59	(not reported)

Why did performance improve?

- Drop of fuel prices in the last few years and relatively flat average truck driver wages contributed towards lower congestion costs.
- New supply side investments such I-695 improvement projects and completion of MD200 (ICC) positively impacted truck.
- CHART incident management program with 24x7 operations on the freeways appears to have a positive impact on truck speeds.
- Supply chains and truck logistics industry continue to focus on streamlining operations to reduce miles and avoid congestion.

What are future performance strategies?

- Combination of supply and demand side adjustments should continue to result in better operations and lower truck congestion costs.

GOAL: QUALITY OF SERVICE

Maintain and enhance the service experience for users of Maryland's multimodal freight system



MARINE

Average truck turn-around time at Seagirt Marine Terminal



2014	2013	2012	2011
Single - 28.9 / Double - 54.3	Single - 29.5 / Double - 54.9	Single - 30.2 / Double - 56	Single - 39.5 / Double - 54.8

Why did performance improve?

- Continued the Quality Cargo Handling Team (Q-CHAT) to further improve containerized cargo handling.
- Conducted cost/benefit based evaluation and possible implementation of additional process enhancing technologies to further improve gate and terminal performance.
- Evaluated business processes to ensure gate and terminal processes are not adversely impacted by existing and proposed commercial improvements.
- Transportation Worker Identification Credential (TWIC) program balances security and commerce.

What are future performance strategies?

- Continue the Q-CHAT to further improve containerized cargo handling.
- Continue cost/benefit based evaluation and possible implementation of additional process enhancing technologies to further improve gate and terminal performance.
- Evaluate business processes to ensure gate and terminal processes are not adversely impacted by existing and proposed commercial improvements.
- Work with State and regional economic development offices to locate sites to attract new distribution centers to Maryland.

GOAL: SAFETY & SECURITY

Improve the safety and security of goods movers, the public at large, transportation assets, and cargo



HIGHWAYS

Number of fatalities in traffic crashes involving heavy trucks on all roads in Maryland



2014	2013	2012	2011
50	58	70	54

Number of persons injured in traffic crashes involving heavy trucks on all roads in Maryland



2014	2013	2012	2011
2569	2203	2465	2742

Annual number of commercial vehicle safety inspections performed



2014	2013	2012	2011
112,326	121,924	111,723	108,863

The percentage of vehicle out of service violations per commercial vehicle inspected



2014	2013	2012	2011
19.22%	17.39%	17.45%	18.34%

The percentage of driver out of service violations per commercial vehicle inspected



2014	2013	2012	2011
6.41%	5.76%	5.29%	5.83%

Why did performance change?

- The measures are reflecting changes in the program and not necessarily changes in the violating truck /driver population.
- It is challenging to substantiate why many of the outcome measures (crashes, fatalities, injuries, out-of-service) go up or down from year to year. We maintain a comprehensive commercial vehicle safety program that has been recognized by the American Trucking Research Institute as the best in the nation. We do not deviate from that plan. Across a longer time line, we have seen a downward trend in crashes and out-of-service vehicles. On a year-to-year basis, there are many external elements that can affect these measurements.

What are future performance strategies?

- Continue to work towards maintaining our multiyear Commercial Vehicle Safety Plan goal of 64 fatalities or less.
- Continue to maintain aggressive enforcement across the state.
- Continue to fund special initiatives in those areas of greatest concern in an effort to reduce the number of fatalities involving commercial vehicles.
- Expand the use of virtual weigh stations to provide increased surveillance capabilities.
- Encourage participation in the federally funded Motor Carrier Safety Assistance Program by county and local enforcement agencies.
- Develop additional training for commercial vehicle officers and inspectors.
- Provide education and outreach to the commercial vehicle industry and the general motor public.

GOAL: SAFETY & SECURITY

Improve the safety and security of goods movers, the public at large, transportation assets, and cargo



HIGHWAYS

Peak Overnight Truck Parking Volume



2014	2013	2012	2011
3865	3216	3503	(Not reported)

Number of available truck parking spaces



2014	2013	2012	2011
2504	2292	2292	2292

Why did performance change?

- Increase in trucks parking on shoulders and ramps and in Welcome Centers, rest areas, and park and ride lots statement is due to many factors, including, but not limited to, increase in trucking demand, hours of service regulations, scheduling, traffic impediments, or not enough safe truck parking areas in the State.
- Number of truck parking spaces increased in part due to the construction of 21 additional truck parking spaces at the I-95 Welcome Center Northbound and completion of renovations at the Chesapeake House.
- Increase in truck parking spaces at private truck parking facilities.

What are future performance strategies?

- Develop additional truck parking capacity throughout the State in public facilities, particularly along heavily traveled freight corridors.
- Collaborate with private travel services providers to seek innovative project delivery solutions to expand truck parking capacity and availability.
- Evaluate current state-of-the-practice in truck parking availability technology systems and potential for implementation in Maryland.

GOAL: SAFETY & SECURITY

Improve the safety and security of goods movers, the public at large, transportation assets, and cargo



RAIL

Number of highway-rail incidents at public crossings involving Class I freight railroads



2014	2013	2012	2011
11	8	12	15

Number of highway-rail incidents at public crossings involving Switching and Terminal railroads



2014	2013	2012	2011
0	0	0	0

Number of highway-rail incident deaths involving Class I freight railroads



2014	2013	2012	2011
0	0	0	3

Number of highway-rail incident deaths involving Switching and Terminal railroads



2014	2013	2012	2011
4	12	6	9

GOAL: SAFETY & SECURITY

Improve the safety and security of goods movers, the public at large, transportation assets, and cargo



RAIL

Total accidents / incidents involving Class I freight railroads



2014	2013	2012	2011
46	54	51	76

Total accidents / incidents involving Switching and Terminal railroads



2014	2013	2012	2011
8	4	1	1

GOAL: SAFETY & SECURITY

Improve the safety and security of goods movers, the public at large, transportation assets, and cargo



MARINE

MPA compliance with the Maritime

Transportation Security Act of 2002



2014	2013	2012	2011
In compliance	In compliance	In compliance	In compliance

Why did performance remain steady?

- All of MPA terminals' Facility Security Assessment and Facility Security Plans currently meet Maritime Transportation Security Act requirements and for the past six years have received excellent ratings following the U.S. Coast Guard's annual inspection.

What are future performance strategies?

- Installation and/or enhancement of the CCTV system and engage in the statewide CCTV Interoperability System.
- Introduce Fixed Transportation Worker Identification Credential (TWIC) Readers at terminal access points.
- Participate in maritime and homeland security initiatives with federal, State and local Port partners.
- Coordinate joint enforcement initiatives with federal, State and local law enforcement partners.

GOAL: SYSTEM PRESERVATION

Maintain and improve the performance of Maryland's multimodal freight system



HIGHWAYS

Number or percent of bridges that are structurally deficient



2014	2013	2012	2011
82 / 2.8%	86 / 3%	101 / 3.5%	111 / 3.9%

Why did performance change?

- Continued an aggressive bridge rehabilitation program.
- Efficiently utilized all funding received; addressed bridges that were deficient and minimized the number of bridges that may become deficient and created plans to replace deficient structures that cannot be corrected by remedial work.
- MDTA conducted yearly inspections and defect repairs, and assigned defects a rating based on severity.
- MDTA implemented an aggressive system preservation program to support identification of projects in various stages of engineering, contract procurement and construction.
- MDTA developed and implemented a comprehensive Facility Inspection Program Strategic Plan, integrated facility management software, and completed a comprehensive inspection manual specific to MDTA.

What are future performance strategies?

- Continue to fund, design and perform high priority structural repairs based on annual inspection report findings; evaluate and monitor those bridges with at least one main element rated a five.
- Implement the INVESTING IN MARYLAND'S HIGHWAYS AND BRIDGES program.
- Perform immediate structural evaluations on water crossings after local storm events.
- Prioritize projects to reduce the number of weight postings and the number of bridges with existing weight restrictions that must have their weight restriction lowered further.
- Complete the I-95 improvements.
- Expand the current system preservation program to include preventative maintenance activities to prolong the life of the existing infrastructure.

GOAL: SYSTEM PRESERVATION

Maintain and improve the performance of Maryland's multimodal freight system



HIGHWAYS

Percent of roadway miles with acceptable ride quality



2014	2013	2012	2011
86%	86%	86%	86%

Why did performance remain steady?

- Continued an aggressive bridge rehabilitation program.
- Continued focusing on improvement in roadways with deficient ride quality while beginning to focus attention on tracking other performance measures in anticipation of MAP-21 rulemakings on nationwide performance measures.
- Continued implementation of operations and business plan strategies designed to effectively maintain ride quality with limited resources.
- Continued identification of cost-effective projects in high demand SHA roadways.
- Enhanced the MDTA inspection program to include Facility Inspection Program Strategic Plan, implementation of additional performance indicators such as cracking, rutting and friction to measure the condition of the highway network, and completion of a comprehensive maintenance and rehabilitation plan.

What are future performance strategies?

- Increase the use of more durable materials in high demand SHA roadways and continue to expand the use of recycled materials (e.g., concrete, asphalt) in SHA roadway projects in a responsible manner.
- Continue to implement the Federal Highway Administration (FHWA) and SHA Pavement Preservation Program that will strategically utilize system preservation activities.
- Target low surface friction locations on SHA roadways.
- MDTA will expand the current system preservation program to include preventative maintenance activities.
- Develop standardized MDTA design and repair details and written documentation of procedures.
- Continue to fund and schedule completion of high-priority MDTA system preservation projects.

GOAL: SYSTEM PRESERVATION

Maintain and improve the performance of Maryland's multimodal freight system



HIGHWAYS

Ratio of overweight vehicles to number of vehicles weighed



2014	2013	2012	2011
1.1%	1.0%	1.1%	1.1%

The truck size and weight monitoring program is comprehensive, emphasizing national program elements. There are 13 permanent Truck Weigh and Inspection Stations (TWIS) that are in operation 8-16 hours weekdays and varying hours at night and on weekends. There are eight bases of operation for roving enforcement crews. There are seven virtual weigh stations (VWS) that are capable of capturing the image speed, height and weight of commercial vehicles at highway speeds. It is anticipated that four VWS will be installed within the next year. All of these sites provide a blanket of coverage for Maryland and its major cities.

GOAL: SYSTEM PRESERVATION

Maintain and improve the performance of Maryland's multimodal freight system



RAIL

State-owned Short Lines Capital Improvements

Program Management

The following reflects freight projects currently in the Short Lines Capital Improvement program, for FY 2016 through FY2020. The projects include track rehabilitation and upgrades to accommodate larger 286,000 lb. freight cars, interim track stabilization projects to support continued safe operations, grade crossing replacements, upgrade and replacement of operating facilities as required, and routine inspection of bridges and grade crossings. This timeline is subject to funding availability and further refinement of design, procurement, and construction schedules.

Fiscal Year 2016 (Year 1)

- Initiate Design for Massey – Chestertown Line Rehabilitation Project
- Initiate and complete Design for Replacement of Four Grade Crossings on the Centreville Line in Delaware
- Conduct grade crossing inspection
- Conduct annual bridge inspection
- Initiate Construction for Replacement of Four Grade Crossing on the Centreville Line in Delaware
- Complete Design and Right of Way acquisition for Centreville Inactive Track Washout Repair, initiate Construction
- Complete Design and initiate Procurement for Construction of Eight Grade Crossings on the Centreville and Seaford Lines
- Complete Design and initiate Construction for Federalsburg Enginehouse Safety Improvements
- Complete Construction for Massey Tool Shed Rehabilitation

Fiscal Year 2017 (Year 2)

- Conduct annual bridge inspection
- Complete Construction for Replacement of Four Grade Crossings on the Centreville Line in Delaware
- Complete Construction for Federalsburg Enginehouse Safety Improvements
- Complete Construction for Centreville Line Inactive Track Washout Repair
- Initiate Construction for Replacement of Eight Grade Crossings on the Centreville and Seaford Lines

Fiscal Year 2018 (Year 3)

- Conduct annual bridge inspection
- Initiate Design for Seaford Line Rehabilitation Project
- Complete Design for Massey – Chestertown Line Rehabilitation, initiate Procurement for Construction
- Complete Construction for Centreville Line Inactive Track Washout Repair
- Complete Construction for Replacement of Eight Grade Crossings on the Centreville and Seaford Lines

Fiscal Year 2019 (Year 4)

- Conduct annual bridge inspection
- Initiate Construction for Massey – Chestertown Line Rehabilitation Project

Fiscal Year 2020 (Year 5)

- Conduct annual bridge inspection
- Conduct grade crossing inspection
- Initiate Design for Centreville Line Rehabilitation Project
- Continue Construction for Massey – Chestertown Line Rehabilitation Project
- Complete Design for Seaford Line Rehabilitation Project, initiate Procurement for Construction

GOAL: SYSTEM PRESERVATION

Maintain and improve the performance of Maryland's multimodal freight system



MARINE

Dredge material placement capacity remaining for Harbor and Bay sections



2014	2013	2012	2011
Harbor - 17.5% / Poplar - 15.3%	Harbor - 18.1 / Poplar - 15	Harbor - 17.8 / Poplar - 16.2	not reported

Why did performance change?

- Passage of the Water Resources Reform and Development Act of 2014 authorized cost increases for Poplar Island and its expansion and authorized the Mid-Chesapeake Bay Islands project for construction (90 million cubic yards (mcy) capacity). Expansion of Poplar Island (28 mcy capacity) is expected to begin in FY 2016.
- Initiated a feasibility study of expanding the Cox Creek Dredged Material Containment Facility (DMCF) onto adjacent MPA property (12.5 mcy capacity) and began exploring acquisition of the adjacent Cristal USA property for additional expansion.
- Revamped strategy for innovative and beneficial use of dredged material with stakeholder input.

What are future performance strategies?

- Manage an effective dredging program to maintain and improve the shipping channels for safe, unimpeded access to the Port by ensuring adequate placement capacity is available to meet dredging demand, removing access channel restrictions and improving the navigation system; and ensure that the program is cost-effective, environmentally sensitive and community-supported.
- Maintain outreach program to communities, local jurisdictions, regulatory agencies, maritime and other harbor interests in order to facilitate the Dredge Material Management Program and development of new placement sites.
- Continue to pursue expansion of the Cox Creek DMCF onto adjoining MPA owned and Cristal USA properties. The Cristal property can be acquired short-term as it is currently for sale.
- Conduct pilot test of Confined Aquatic Disposal at Masonville in 2015.
- Develop a regulatory framework for innovative and beneficial use projects, and within two to five years implement several small to medium projects.
- Work with all levels of the Corps of Engineers, the Office of Management and Budget and the Maryland Congressional delegation to ensure availability of Corps of Engineers construction funding for expansion of Poplar Island in federal FY (FFY) 2016 and 2017 in order to begin inflow of dredged material in FFY 2019.
- Receive regulatory approval to start Pearce Creek operations in early 2015 and initiate construction of the community water system to be completed no later than FY 2018.

GOAL: ECONOMIC PROSPERITY

Maintain and improve Maryland's economic competitiveness



HIGHWAY

Number of Commercial Driver's Licenses issued



2014	2013	2012	2011
29,572	29,871	34,299	29,223

Why did performance remain steady?

- As a result of the economy recovering and increases in truck driver and owner-operator hiring.

What are future performance strategies?

- Continue to support coordination between the trucking industry, CDL Driving Schools and drivers.
- Coordinate with the Freight Management Plan to develop initiatives that support CDL drivers.

GOAL: ECONOMIC PROSPERITY

Maintain and improve Maryland's economic competitiveness



HIGHWAY

Number of veterans who have taken advantage of the CDL Skills Waiver



2014	2013	2012	2011
47	12	(Program started 2013)	(Program started 2013)

Why did performance change?

- The program has gained momentum since it started in 2013.
- Increased awareness via a public campaign initiative to veterans.

What are future performance strategies?

- Enhanced advocacy and awareness through communication with veterans and military professionals.

GOAL: ECONOMIC PROSPERITY

Maintain and improve Maryland's economic competitiveness



HIGHWAY

Number of heavy truck registrations



2014	2013	2012	2011
26,301	26,101	25,832	25,701

Why did performance remain steady?

- The recent decrease in fuel prices have made it possible for the truckers to earn more profit, therefore putting more trucks on the road.
- Safety requirements for the driver and vehicles are enhanced through new legislation and regulations.

What are future performance strategies?

- Continue no-cost education to the truckers on crash avoidance and vehicle maintenance.
- The Performance Registration Information System Management (PRISM) project includes two major processes: the Commercial Vehicle Registration Process and Enforcement, which work in parallel to identify motor carriers and hold them responsible for the safety of their operation. Unsafe carriers are identified and risk fleet registration suspension.
- Safety is improved through a comprehensive system of identification, education, awareness, data gathering, safety monitoring and treatment.

GOAL: ECONOMIC PROSPERITY

Maintain and improve Maryland's economic competitiveness



RAIL

Number of short line carloads on Maryland owned rail



2014	2013	2012	2011
1,897	2,187	961	(not reported)

Why did performance change?

- Reduced traffic from two major shippers on all three of the state-owned rail lines. The decline is a reflection of a nationwide trend where increases in crude oil transport by Class I railroads lessened the available capacity for transport of agriculture and bulk products.
- Decrease in carloads was offset by increase in other traffic.

What are future performance strategies?

- While a dependable rise in traffic is affected by supply chain trends that MDOT reacts to and does not necessarily influence, we will continue to work with the short line operator to improve marketing to leverage current customers' needs and garner new customers.
- Improving the condition of the infrastructure will help realize cost benefit that will improve service reliability and timeliness.

GOAL: ECONOMIC PROSPERITY

Maintain and improve Maryland's economic competitiveness



MARINE

Port of Baltimore Foreign Cargo



2014	2013	2012	2011
29.5 million	30.3 million	36.7 million	37.8 million

MPA General Cargo Tonnage



2014	2013	2012	2011
9.6 million	9.6 million	9.3 million	8.7 million

Why did performance remain steady:

- Increases in automobiles (+10.6%) and containers (1.4%); decreases in Roll on/Roll off (Ro/Ro) by 7.4%.
- Overall tonnage drop because coal exports continued to decline as demand worldwide fell.
- The Port's 2104 national rankings include #13 in foreign cargo tonnage (29.5 million tons), #9 in foreign cargo value (\$52.5 billion), #1 port for automobiles and Ro/Ro equipment, #1 for Import: Sugar, Gypsum, Alumina and Forest Products.

What are future performance strategies?

- Continue the Quality Cargo Handling Action Team (Q-CHAT) and encourage existing auto processors and RoRo customers to increase cargo volumes, efficiency and throughputs by working with them to identify new opportunities and promote the Port of Baltimore.
- Work with P3 partner, Ports America Chesapeake, to attract additional containerized cargo to the Port of Baltimore.
- Attract a new container ocean carrier, and a new service to the Port from an existing container carrier. Work with State and regional economic development offices to locate sites to attract new distribution centers to Maryland. Continue to work with all stakeholders to develop the Duke property as a Distribution Center adjacent to the Port.
- Continue with rail and terminal improvements to facilitate heavy lift cargo and expansion of project cargo.
- Continue to target auto and machinery manufacturers to provide long-term contracts.
- Construct an Over-Dimensional cargo gate at Dundalk to reroute cargo out of neighborhoods.
- Facilitate efforts to maintain market share and volumes during current global economic downturn. Try to find new tenants/customers to use available shed space, and consider providing incentives to attract cargo as appropriate.
- To grow cargo volumes, purchase parcel(s) of land adjacent to or in the vicinity of existing marine terminals at the Port of Baltimore.

GOAL: ECONOMIC PROSPERITY

Maintain and improve Maryland's economic competitiveness



AIR

Total air tonnage at BWI Marshall Airport



2014	2013	2012	2011
105,153	108,978	112,939	108,644

What are future performance strategies?

- Continue to meet with air cargo carriers to identify potential for enhanced service from BWI Marshall.
- Continue to meet with passenger carriers to identify potential for cargo to be carried in the belly of passenger aircraft.

GOAL: ECONOMIC PROSPERITY

Maintain and improve Maryland's economic competitiveness



AIR

Number of nonstop airline markets served by BWI Marshall Airport



2014	2013	2012	2011
74	73	76	75

Why did performance change?

- In FY 2014, Southwest began new season service from BWI Marshall to Oakland, CA, and Portland, OR; both cities are new markets for the airport.
- Spirit added service to Chicago/O'Hare and Minneapolis Saint Paul.
- Met with both potential new entrant and current carriers to promote potential new air service opportunities to BWI Marshall.
- Southwest Airlines launched its first-ever scheduled international flights.
- Alaska Airlines, a new carrier for the Airport, began service in September 2014; Alaska Airlines now offers year-round nonstop service between BWI Marshall and Seattle.

What are future performance strategies?

- Continue to meet with both potential new entrant and current carriers to promote potential new air service opportunities to BWI Marshall.
- Focus BWI Marshall advertising and awareness campaigns to passengers on the advantages and air service options, parking, ease of access and ground transportation options that the airport offers.
- Continue to highlight BWI Marshall as the "easy come, easy go" gateway to Washington D.C.

GOAL: ENVIRONMENTAL STEWARDSHIP

Support and enhance Maryland's natural, historical, and cultural resources



HIGHWAY

Alternative fuel grants

MDOT organizes internal operations to promote good stewardship of the environment. Through partnerships with the Maryland Energy Administration and the Maryland Department of the Environment, MDOT supports programs that promote energy savings and clean air.

- *Maryland Freedom Fleet Voucher - The Freedom Fleet Voucher (FFV) Program expanded on the success of the Hybrid Truck Program, Maryland Electric Truck Voucher Program and the Natural Gas Vehicle Voucher Program. FFV Program provides vouchers and is technology neutral by including incentives for: All Electric, CNG, LNG, Propane, Hybrid Electric, Hydraulic Hybrid and Hydrogen vehicles. **As of July 2015, 139 awards granted for \$1,480,570 displacing 943,000 gallons of fuel annually***
- *Maryland Idle Reduction Grant Program -- financial assistance for the purchase and installation of idle reduction technology on trucks. **150 awards granted saving more than 2.4 million gallons of diesel.***
- *Maryland Electric Truck Voucher Program -- financial assistance for the purchase of new, all electric trucks registered in the state of Maryland. **14 grants awarded for \$280,000 displacing 220,000 diesel gallons.***
- *Maryland Natural Gas Voucher Program -- financial assistance for the purchase of new and converted natural gas vehicles registered in the state of Maryland. **13 awards granted for \$203,000 displacing 1,031,261 gallons of fuel.***

GOAL: ENVIRONMENTAL STEWARDSHIP

Support and enhance Maryland's natural, historical, and cultural resources



MARINE

Mid-Atlantic Dray Truck Replacement Program

The Maryland Port Administration has supported dray truck replacements since 2009. The goal of the program is to reduce air pollution and greenhouse gases associated with the transport of goods to and from the Port of Baltimore. The program requires older trucks to be scrapped and provides applicants funding toward the purchase of a newer vehicle with an engine that meets newer emissions standards. The program provides \$30,000 toward the purchase of a 2010 or newer engine with a trade in of an older truck with fewer than one million miles.



2014	2013	2012	2011
11	67	24	(Not reported)

Why did performance change?

- Reduced funding in grants limited the amount of trucks that could be replaced.

What are future performance strategies?

- Continue to seek more grant money for the truck drayage program.

GOAL: COMMUNITY VITALITY

Support Maryland's communities and quality of life



MARINE

Intermodal containers moved by rail through the Port of Baltimore



2014	2013	2012	2011
19,400	19,100	17,500	16,700

Why did performance change?

- Class I railroads service arrangements and customer base. For example, Norfolk Southern provides a service called “Bal Piers” that includes a dray to their Bay View facility that is transparent to the customer as well as being efficient and well run.

What are future performance strategies?

- Work with the steamship lines to try to get a first-port-of call with a new container service to the Port.
- Enhance cargo handling and rail access through the USDOT \$10 million TIGER grant to complete the Fairfield Marine Terminal rail access project to increase rail intermodal flexibility for Roll-on/Roll-off (RoRo) cargo.
- Ports America is working with CSX to develop a new operating arrangement that will bring new efficiencies to the railroad's intermodal container transfer facility.

FREIGHT MEASURES INDEX

Goal - Mode	Performance Measure
Quality of Service - Highway	Percentage of the Maryland SHA network in overall preferred maintenance condition (AR)
	Truck Congestion Cost (in \$ millions) on freeways/expressways in the Baltimore/Washington region
	Amount of delay in '000 hours for trucks due to congestion on freeways/expressways
	Wasted fuel for trucks in '000 gallons on freeways/expressways
	Truck user cost savings in (\$ millions) due to Coordinated Highways Action Response Team (CHART) incident management efforts on state highways in Maryland
Quality of Service – Marine	Average truck turn-around time at Seagirt Marine Terminal (AR)
Safety and Security – Highway	Number of fatalities in traffic crashes involving heavy trucks on all roads in Maryland
	Number of persons injured in traffic crashes involving heavy trucks on all roads in Maryland
	Annual number of commercial vehicle safety inspections performed
	The percentage of out of service violations per commercial vehicle inspected
	The percentage of driver out of service violations per commercial vehicle inspected
	Peak Overnight Truck Parking volume
	Number of available truck parking spaces
Safety and Security – Rail	Number of highway-rail incidents at public crossings involving Class I freight railroads
	Number of highway-rail incidents at public crossings involving Switching and Terminal railroads
	Number of highway-rail incidents deaths involving Class I freight railroads
	Number of highway-rail incident deaths involving Switching and Terminal railroads
	Total accidents/incidents involving Class I freight railroads
	Total accidents/incidents involving Switching and Terminal railroads
Safety and Security – Marine	MPA compliance with the Maritime Transportation Security Act of 2002
System Preservation and Performance – Highway	Number or percent of bridges that are structurally deficient (AR)
	Percent of roadway miles with acceptable ride quality (AR)
	Ratio of overweight vehicles to number of vehicles weighed
System Preservation and Performance – Marine	Dredge material placement capacity remaining for Harbor and Bay sections
Economic Prosperity –	Number of Commercial Driver's Licenses issued

Highway	Number of veterans who have taken advantage of the CDL Skills Waiver
	Number of heavy truck registrations
Economic Prosperity – Rail	Number of short line carloads on Maryland owned rail
Economic Prosperity – Marine	Port of Baltimore Foreign Cargo (AR)
Economic Prosperity – Marine	MPA General Cargo Tonnage (AR)
Economic Prosperity – Air	Total air tonnage at BWI Marshall Airport
	Number of nonstop airline markets served by BWI Marshall Airport
Environmental Stewardship – Highway	Alternative fuel grants
Environmental Stewardship – Marine	Mid-Atlantic Dray Truck Replacement Program
Community Vitality	Intermodal containers moved by rail through the Port of Baltimore (AR)