

# 2013 Annual Attainment Report

# on Transportation System Performance

Implementing the Maryland Transportation Plan & Consolidated Transportation Program

> Martin O'Malley, Governor Anthony G. Brown, Lt. Governor Darrell B. Mobley, Acting Secretary

# Acting Secretary of Transportation



### **Darrell B. Mobley**

Maryland Acting Secretary of Transportation

On behalf of Governor Martin O'Malley, I am pleased to present Maryland's 2013 Annual Attainment Report on Transportation System Performance. Every year, the Maryland Department of Transportation (MDOT) publishes the Annual Attainment Report to assess our progress and to identify future strategies necessary to improve the transportation services we deliver to Marylanders. Under Governor O'Malley's leadership, we continue to place a high priority on preserving and improving the State's transportation system, while supporting Maryland's economic competitiveness, environmental stewardship and quality of life.

In recent years, limited resources for transportation investment resulting from the economic downturn and uncertainty in the stability of federal transportation funding has influenced how MDOT makes decisions about prioritizing investments. MDOT continues to manage our assets carefully and efficiently by controlling costs, closely monitoring revenues and expenditures, capitalizing on federal grant opportunities and partnering with local governments and the private sector in creative ways to address transportation funding challenges.

In FY2012, MDOT secured new federal grant awards that include \$40 million to replace the aging Kirk Avenue bus facility in Baltimore City and \$10 million to construct a missing link in the Anacostia Riverwalk Trail between Bladensburg and Washington, D.C. Through the Seagirt Marine Terminal public-private partnership with Ports America Chesapeake, Maryland has already saved hundreds of millions of dollars in capital improvements at Seagirt, including the completion of a new 50-foot deep berth. These improvements put Baltimore in the enviable position of being one of only two ports on the East Coast that can handle the bigger ships that will use the newly widened Panama Canal when it is completed in 2015.

There are encouraging signs that the economic picture is improving, given recent activity at two of Maryland's transportation hubs – Baltimore/ Washington International Thurgood Marshall Airport (BWI Marshall) and the Port of Baltimore. BWI Marshall is on pace to eclipse its annual passenger record after setting an all-time monthly record for passengers in July 2012,

and 2011 was the busiest year to date. The Port of Baltimore set all-time monthly cargo records in April and July of 2012, with general cargo tonnage up 11 percent over 2011. Extensive investments have been made over the past few years to expand and maintain these two critical transportation assets, and with new investments underway, including a terminal expansion at BWI Marshall, we expect they will continue to generate significant economic activity.

Careful management of our financial resources has permitted us to continue to maintain and improve our transportation system. In FY2012, the Maryland Aviation Administration (MAA), Maryland Transit Administration (MTA), and State Highway Administration (SHA), completed eleven major projects to improve the operation, capacity, and safety and security of the transportation system. In addition, MDOT and its modal agencies completed 228 system preservation projects that help to maintain Maryland's transportation system.

In addition to helping build Maryland's economy and improving the transportation system, MDOT remains focused on building a more environmentally sustainable transportation network. As part of Governor O'Malley's *Smart, Green & Growing* initiative, MDOT implements programs to facilitate walking and bicycling as low-cost, environmentally friendly and healthy transportation options. In 2012, as part of Governor O'Malley's *CycleMaryland* initiative, more than 50 grants totaling \$7.8 million were awarded to create new bikeway connections and to bring bikeshare stations to Maryland. Additionally, we invested nearly \$11.5 million in bicycle and pedestrian retrofit projects. Maryland continues to improve in the national ranking of Bicycle Friendly States, moving from number 10 to number 8, in the League of American Bicyclists 2012 review.

In the past two years, SHA, the Maryland Transportation Authority (MDTA), and the Intercounty Connector (ICC/MD200) project team have received 16 different awards as part of the successful completion and opening of the ICC/MD200 from I-370 to I-95. We are proud to announce that in 2012, for the second year in a row, MDOT received national recognition from the Association of Government Accountants for both our annual Attainment Report and performance management programs. We invite you to review our annual performance results in this 12th edition, as we continue to move forward in improving our transportation system, helping improve Maryland's economy, protecting and enhancing our environment and Maryland's quality of life.

# **Maryland Transportation Agencies**

ACRONYM	AGENCY
MDOT	Maryland Department of Transportation
MAA	Maryland Aviation Administration
MPA	Maryland Port Administration
MTA	Maryland Transit Administration
MDTA	Maryland Transportation Authority
MVA	Motor Vehicle Administration
SHA	State Highway Administration

#### The State of Maryland also supports:

<b>VMATA</b> Washington Metropolitan Area Transit Authority
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# Summary

#### Below are some of the performance results over the past year contained in this 2013 Report.

### **Goal–Quality of Service**



- Total maintenance expenditures increased back to pre-fiscal year (FY) 2010 levels, allowing SHA to address maintenance that was deferred in previous years and to place emphasis on maintenance that helps to improve water quality consistent with Chesapeake Bay restoration goals.
- On time performance of MTA services in FY2012 improved or remained on-par with FY2011 performance except local bus and light rail which both decreased by 2%. MTA has invested in Automatic Vehicle Location Systems (AVL) to obtain a more accurate picture of local bus performance and to better inform route planning.
- Average truck turn-around time at Seagirt Marine Terminal decreased to 30 minutes, its lowest time for a pick-up or drop-off since performance tracking started in 2001.
- Customer visit time at MVA branch offices decreased for the fifth year in a row to 27 minutes and customers rating service as "good" or "very good" at MVA branch offices increased to 91%.
- The MAA began construction on a major terminal enhancement project at BWI Marshall, planned for completion in the summer of 2013. The project includes a new security checkpoint and expanded gate and concourse areas with new services for airport travelers.
- The number of toll transactions increased by seven million and the percent of toll transactions collected electronically increased to 71% in FY2012 due to the opening of the ICC/MD 200 from MD 97 to I-95 and a public outreach campaign to encourage use of *E-ZPass*<sup>®</sup>.
- MDTA's Vehicle Recovery Technicians (VRT) assisted 35,000 motorists along eight toll facilities.

### **Goal–Safety & Security**

- The CY2011 fatality rate of 0.87 fatalities per 100 million miles traveled on Maryland roadways is equivalent to nine less fatalities on Maryland roads in 2011 compared to 2010. The fatality rate in Maryland is 20% lower than the estimated CY2011 national rate of 1.09.
- The number of pedestrian fatalities and injuries on all roads in Maryland is estimated to remain slightly below the 10-year annual average of 105 fatalities. In 2011, the SHA established an official pedestrian safety task force, identified 24 high-crash locations across Maryland to focus additional resources, and has adopted an official Complete Streets policy for all SHA projects, to help address this priority issue.
- Based on preliminary data for CY2012, the preventable accident rates on MTA local bus services is anticipated to decrease almost 35% compared to CY2011. The decrease is attributed to new MTA programs to increase operator accountability through re-training and corrective action.
- Annual safety inspections by the Federal Aviation Administration at BWI Marshall showed passage of inspection and compliance with all federal mandates, and annual safety inspections by the U.S. Coast Guard at all MPA-owned facilities at the Port of Baltimore showed compliance or exceeding compliance of all federal mandates.

### **Goal–System Preservation & Performance**



- SHA's traffic monitoring, traveler information, incident management and traffic management program, known as the Coordinated Highways Action Response Team (CHART), saved Marylanders approximately \$1.1 billion in vehicle travel costs in CY2011.
- As a result of an aggressive bridge rehabilitation program, the number of SHA bridges that are structurally deficient decreased from 106 bridges in April 2011 to 97 bridges in April 2012.
- Passengers per revenue vehicle mile, a measure of MTA service productivity, increased or stayed constant across all MTA modes in FY2012, including a 17% increase for local bus.
- MTA operating cost per passenger trip, a measure of MTA service efficiency, increased for all modes in FY2012 due to rising fuel costs, labor costs and contract increases, however cost growth remains in line or below historical trends.
- Use of MVA's Alternative Service Delivery (ASD) methods (e.g., services available on-line and through MVA Kiosks) increased five percentage points from FY2011 levels while average cost per transaction continued to steadily decrease, remaining below MVA's \$14 per transaction target.
- When cost per enplaned passenger (CPE) data is adjusted for inflation, the CPE passenger at BWI Marshall decreased slightly in FY2012 to \$9.29, while the average cost for comparable nearby airports continues to increase (\$15.50 in 2012).
- MPA doubled its net operating income in FY2012 to \$18.5 million due in part to savings from ongoing public-private partnerships and cargo tonnage and cruise ship passenger volumes that exceeded budgeted expectations for FY2012.



# Summary

### Goal–Environmental Stewardship

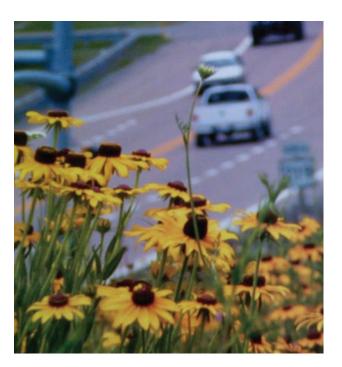


- SHA exceeded goals for miles of stream restoration (5.7 miles by end of FY2011) and met goals for acres of wetlands restoration (200 acres by end of FY2012). SHA has identified \$138.2 million in the FY2013–FY2018 CTP to focus environmental stewardship activities on helping Maryland meet new water quality standards for restoring the Chesapeake Bay.
- The MPA supported attainment of air quality standards and Maryland's Greenhouse Gas Reduction Act by investing in four container cranes, which can lift 187,300 pounds of cargo and are fully electric, emitting no diesel emissions.
- SHA has evolved its fleet over the last seven years resulting in a 21% decline in fuel consumption. A 3% increase in FY2012 is representative of SHA reaching a plateau in achieving maximum fleet efficiency. SHA is continuing to enforce anti-idling policies, and in FY2012 purchased three hybrid and 15 flex-fuel vehicles.
- The number of vehicles tested at MVA Vehicle Emissions Inspection Program (VEIP) stations increased to over 1.7 million in FY2012, with 91% of vehicles in compliance.
- MTA added 57 new diesel-hybrid buses to its fleet in FY2012, increasing the number of hybrid buses in MTA's fleet to 268 buses, or 40% of the entire fleet. In tests comparing hybrid buses to diesel buses, hybrids use 20% less fuel and are up to 50% quieter.

### Goal–Connectivity for Daily Life

- In CY2011, congestion on Maryland's freeways and arterials remained at levels consistent with the last 10 years of performance. SHA has improved operations on arterials through the retiming of 298 signals in CY2011. In addition, MDTA and SHA are continuing critical capacity expansion projects, including the I-95 express lane project.
- Average weekday ridership across MTA services (all modes) increased by 2% in FY2012 and has increased by 18% since 2006.
- BWI Marshall increased the number of nonstop markets served, up from 75 in FY2011 to 76 in FY2012.
- Total general cargo at the MPA's public terminals reached nearly nine million tons in 2011, which is second only to volumes in 2008; foreign cargo tonnage for the whole Port of Baltimore increased to 37.8 million tons, its third highest level on record.
- MVA continues to meet the needs of partner government and nongovernmental agencies by maintaining system availability above 99% and continuing improvements to system security and access.
- MDTA discontinued the Hatem Bridge Automatic Vehicle Identification (AVI) decal toll collection process and added two new *E-ZPass*<sup>®</sup> only lanes at the Hatem Bridge (US 40) Toll Plaza expanding use of the *E-ZPass*<sup>®</sup> in Maryland.

Please visit MDOT's transportation highlights at: http://www.mdot.maryland.gov/ Office%20of%20Planning%20and%20Capital%20Programming/Dashboard/Final/Introduction



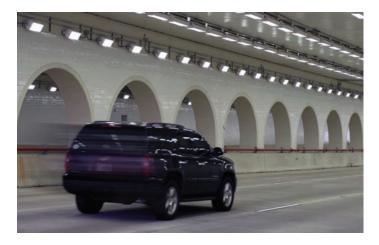


# Introduction & Overview

# **Transportation System Highlights**

### **Travel by Land**

- Maryland Transit Administration (MTA) ridership reached 153 million in FY2012, including 40.9 million on Locally Operated Transit Systems (LOTS). In addition, Maryland ridership on the Washington Metropolitan Area Transit Authority (WMATA) system is comparable from last year, at nearly 124.5 million riders in Maryland in 2012.
- In FY2012, the Coordinated Highways Action Response Team (CHART) incident management program responded to and cleared more than 17,000 incidents and assisted more than 27,000 stranded motorists.
- SHA completed seven major bridge and highway projects in FY2012 including widening of the Baltimore-Washington Parkway (from I-695 to I-195) in Anne Arundel County, upgrades to MD 404 (Shore Highway) in Caroline County and improvements to MD 5 (Branch Avenue) in Prince George's County. In addition, SHA completed rehabilitation projects on 42 highway segments and 44 bridges in FY2012, totaling over \$100 million invested in the preservation of Maryland's highway system.
- The SHA and the MDTA continue to place special emphasis on improving the condition of bridges, a special area of primary focus for the State. Major MDTA bridges including the Chesapeake Bay Bridge (US 50), the Francis Scott Key Bridge (I-695), the Millard E. Tydings Bridge (I-95) and the Governor Harry W. Nice Bridge (US 301) are planned to undergo major preservation and maintenance activities in the FY2013–FY2018 CTP. SHA is planning for numerous bridge over I-495, the replacements of the Middletown Rd. bridge over I-83 and the MD 4 bridge over MD 223, as well as multiple ongoing bridge replacements on I-695, including at MD 144 and MD 372.
- Recent multimodal planning efforts have focused on implementing Transit-Oriented Development (TOD) projects at 15 designated locations across Maryland.
- Over 12.1 million Motor Vehicle Administration (MVA) transactions were processed in FY2012, including eMVA and walk-in transactions at MVA's branch office locations.



Each year, the Maryland Department of Transportation (MDOT) provides a transparent evaluation of the performance of the Maryland transportation system in the form of the Annual Attainment Report on Transportation System Performance. The Annual Attainment Report reviews performance trends for all modes of transportation within the state, indicating the progress towards achieving the goals and objectives in the Maryland Transportation Plan (MTP) and through the Consolidated Transportation Program (CTP).

MDOT has published the Attainment Report annually since 2002, presenting performance results for Maryland's multimodal transportation system, focusing on – the user's experience, safety and security, system condition, protection of Maryland's natural environment, balanced growth and development and support of economic growth.

The 2013 Attainment Report provides a discussion of how MDOT and its agencies are working together to achieve the goals of the MTP. Each chapter provides a clear accounting of the progress that has been made, as well as future strategies where additional emphasis might be required for success. The five chapters, consistent with the five goals of the MTP, include:

**Quality of Service:** Enhance users' access to, and positive experience with, all MDOT transportation services;

**Safety & Security:** Provide transportation assets that maximize personal safety and security in all situations;

**System Preservation & Performance:** Protect Maryland's investment in its transportation system to preserve existing assets and maximize the efficient use of resources and infrastructure;

**Environmental Stewardship:** Develop transportation policies and initiatives that protect the natural, community and historic resources of the State and that encourage development in areas best able to support growth; and

**Connectivity for Daily Life:** Support continued economic growth in the state through strategic investments.

### **Travel by Air**

- More than 22 million passengers flew through Baltimore/Washington International Thurgood Marshall Airport (BWI Marshall) to U.S. and international destinations in CY2011.
- On average, 680 commercial flights arrive or depart from BWI Marshall each day.
- There are 18 publicly-owned airports and 18 privately-owned airports with public use available to Marylanders.
- The BWI Marshall Fire and Rescue Department dispatched equipment for local emergencies 1,306 times in FY2012.

### **Travel by Water**

- Port foreign cargo tonnage increased to 37.8 million tons in CY2011, which was the third highest tonnage for the whole Port. Maryland Port Administration's (MPA) general cargo tonnage increased to a record high of 9.3 million in FY2012.
- In CY2012, 100 international cruises embarked and debarked at the MPA Cruise Maryland terminal.

### Transportation Priorities, Policy and Investment

### **Integrating Multimodal Transportation**

MDOT is unique among state departments of transportation in that it has direct coordination and oversight of multiple modes of transportation in the state. This structure allows MDOT to facilitate the strategic development of Maryland's intermodal transportation network across the following five transportation agencies:

- Maryland Aviation Administration (MAA) operates BWI Marshall and Martin State Airport, a general aviation/reliever airport northeast of Baltimore;
- Maryland Port Administration (MPA) promotes the Port of Baltimore as a leading hub for cargo and for cruise activity;
- Maryland Transit Administration (MTA) provides local and regional public transit services on bus and rail, as well as grant funding and technical assistance to LOTS across Maryland;
- Motor Vehicle Administration (MVA) is the gateway to Maryland transportation infrastructure providing a host of services for vehicles and drivers, including registration and licensing; and
- State Highway Administration (SHA) manages the State's highway system, which includes 17,042 lane miles of roads and 2,578 bridges.

In addition, the MDOT Secretary serves as Chairman of the:

- Maryland Transportation Authority (MDTA), which owns, operates and maintains the State's eight toll facilities; and
- Supports the **Washington Metropolitan Area Transit Authority (WMATA)** which operates Metrorail and Metrobus services that connect Washington, Maryland and Virginia.

### **Guiding Maryland's Transportation System**

Every year MDOT publishes the State Report on Transportation (SRT) that includes the MTP, the CTP and the Attainment Report. These three documents present the full range of MDOT's transportation activities, including: setting long range goals for transportation in Maryland; prioritizing, funding, and implementing a six-year capital program; and, tracking accomplishments and overall performance of the transportation system.

The MTP provides a 20-year vision for transportation in Maryland. It provides goals and objectives to guide how transportation enhances Maryland's economy, the environment, and how it supports quality of life for Marylanders. The update of the MTP is currently being developed. Over the coming year the development process will include extensive outreach to citizens, stakeholders groups and other State agencies to gather input on Maryland's transportation vision and goals for the next 20 years.

The CTP is the six-year capital budget outlook for all transportation projects for MDOT's Modal Administrations and the Authority. This year's CTP (FY2013–FY2018) responds to the goals of the 2009 MTP, reflects the priorities of the O'Malley/Brown Administration, is influenced by the concerns of the public and local governments, and addresses all Federal and State mandates related to transportation.



### **Ensuring Strategic Transportation Investments**

To ensure that every dollar available for transportation in Maryland is efficiently spent, MDOT employs a strategic decision making process, using specific criteria to prioritize programs and projects under consideration for inclusion in the CTP. This process is used to ensure transparency and accountability, and to clarify how each major capital project is responsive to the goals of the MTP and is linked to local and regional Metropolitan Planning Organization (MPO) plans. The process also ensures that MDOT supports existing project commitments, meets all Federal and other legal mandates, and optimizes the State's ability to maximize Federal revenue opportunities.

MDOT works together with residents, local jurisdictions and local and State elected officials to include projects in the CTP that address critical safety issues, preserve existing investments, support local and/or statewide economic development, protect the environment, enhance multimodal transportation services and improve accessibility throughout the state. For each major project in the CTP, there is a Project Information Form that describes the project objective, current status, justification, consistency with MTP and Smart Growth goals, and funding by project phase over the six-year program cycle. This information provides Marylanders with a transparent view of all components of MDOT's transportation investments.

### **Promoting Sustainable Transportation**

MDOT recognizes the importance of Maryland's sensitive ecological system through a proactive approach for integrating environmental protection, compliance, and sustainability into the policies, planning, and day-to-day operations of all the Modal Administrations and the Authority. In addition to agency-specific environmental initiatives, MDOT coordinates with State, local and Federal partners to ensure that transportation investments minimize negative impacts to our environment. MDOT achieves this by using the State's Green Infrastructure Plan and Chesapeake Bay restoration priorities as a guide for project mitigation activities, such as wetland restoration and tree planting, and for reducing the impact of existing infrastructure and services with new storm water management technologies and energy efficient and low emissions technologies. Together these approaches help to reduce the impacts of our activities on human health, the natural environment and the global climate. A selection of this year's new and ongoing initiatives includes:

- Implementation of *Smart, Green & Growing* initiatives, designed to create a more sustainable future for Maryland, including adopting Smart Growth policies, improving transit and supporting community revitalization.
- Management of storm water runoff from multimodal transportation infrastructure to promote healthier, cleaner habitats and reduce pollution in the Chesapeake Bay.
- Identification and tracking of transportation infrastructure vulnerable to the impacts of climate change and developing strategies to address these impacts in cooperation with the development of Maryland's Climate Action Plan.
- Promotion of lower emission travel modes, technologies, and practices, including Travel Demand Management (TDM), walking, bicycling, hybrid and electric transit and fleet vehicles, and the expansion of alternative fueling infrastructure, including electricity, at locations such as MDOT headquarters, BWI Marshall and parkand-ride lots across the state.
- Participation in the Electric Vehicle Infrastructure Council, created through State legislation in 2011 to develop strategies to facilitate the successful widespread integration of electric vehicles and electric vehicle infrastructure into the transportation system.

### **Maryland's Investment in Transportation**

A primary component of developing the CTP is establishing funding levels for multimodal transportation investments across the full scope of transportation system development and preservation activities in Maryland. MDOT applies fiscal resources from the Transportation Trust Fund (TTF), a dedicated account generated through taxes, fees, bond proceeds and federal funds, towards projects and programs across all MDOT offices and the modal agencies. This integrated fund enables the direct linkage between multimodal transportation planning and transportation solutions, supporting priority operating and capital needs across the state. MDOT works with the available and forecasted resources of the TTF, which are heavily influenced by the state and national economic conditions, projections of State transportation revenue and the availability of federal funding.

On June 6, 2012, the President signed into law the *Moving Ahead for Progress in the 21st Century* (MAP-21) P.L. 112-141 - new legislation that establishes federal funding for highway and transit programs and sets national, statewide and metropolitan transportation planning and policy direction for the next two years. Since MAP-21 did not increase funding levels, and did not address the long-term solvency of the Federal Highway Trust Fund, MDOT expects its federal receipts (approximately \$580.0 million for highways and \$170.0 million for transit) to be used for committed capital program projects and for continued system preservation.

### **Generating Jobs for Maryland**

Demand for transportation services, including modernization and expansion projects that enhance Maryland's highways, public transportation, and freight facilities, and more, continue to generate jobs for Maryland residents.

As of June 2012, Maryland had designated 15 TOD sites. These projects, which create livable communities that support transit, by locating residences and business adjacent to transit stations, also generate job opportunities. For example, at the White Flint TOD site, in Montgomery County, the new Pike & Rose project will transform 24 acres of asphalt parking lots and an auto-oriented strip retail commercial center into a vibrant, walkable community with housing, retail, office and public spaces. This development is projected to generate 550 permanent jobs on-site and bring in \$3.7 million in tax revenue.

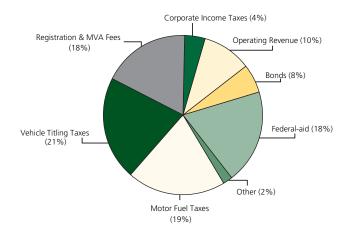
Construction projects of all sizes also put Maryland residents to work, including a new \$8.1 million dollar project to continue moving forward with access improvements at the Branch Avenue Metro Station in Prince George's County. This investment puts people to work, relocating utilities required to eventually build a new four-lane access roadway to the Metro station.

The Port of Baltimore alone generates about 14,630 direct jobs to handle the millions of tons of waterborne cargo that comes across the Port's docks every year, while in total, 108,000 jobs in Maryland are linked to Port activities.

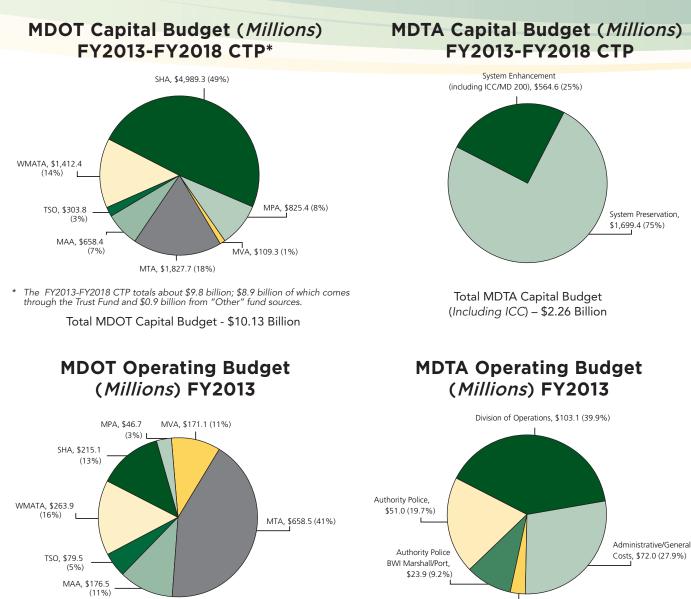
Pursuing and winning federal grants for large-scale transportation improvements has also produced economic benefits for Maryland residents. MDOT was awarded \$40.0 million to replace Baltimore's 65-year-old Kirk Division Bus Facility with two sustainable "green" buildings. This project will put Marylanders to work modernizing and replacing the aging transit facility, and will house more than 350 MTA employees when completed. MDOT carefully manages and applies all available funds to ensure the most efficient expenditure of dollars to serve Maryland's transportation needs, and to support economic success in the state. For example, in the FY2013–FY2018 CTP, \$921.8 million is programmed in FY2013 towards system preservation to fund maintenance of current assets, which protects and ensures safe operation of Maryland transportation agencies' investments. MDOT and its modes also track the "percentage of budgeted dollars expended" as a way to compare the budget with borrowing levels and to avoid unnecessary borrowing. In FY2012, for example, MDOT expended 95% of its budgeted dollars, meeting its goal of 90%, and MTA spent 99% of its estimated FY2012 budget.

MDOT's capital and operating budget allocations, CTP funding levels over the last decade, the FY2013–FY2018 CTP funding sources, capital and operating budgets by Modal Administration and WMATA are shown in the following pie charts. As MDTA is independently funded through separate sources, its capital and operating budget are shown separately.

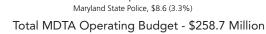
### Transportation Trust Fund Sources FY2013-FY2018 CTP

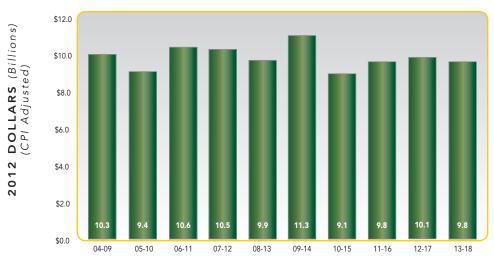






Total MDOT Operating Budget: \$1.61 Billion





# MDOT Total Capital Program Levels (Billions)

CONSOLIDATED TRANSPORTATION PROGRAM

4

# Transportation Mobility and Accessibility

### **Accommodating Travel Demand**

In 2011, Marylanders, visitors and freight drivers drove a total of 56.1 billion vehicle miles, approximately 100 million less miles than were travelled in 2010. Total transit ridership in Maryland in FY2012 (July 2011 to June 2012) eclipsed FY2011 by over 2.3 million transit trips (a 2% increase), hitting its highest level ever.

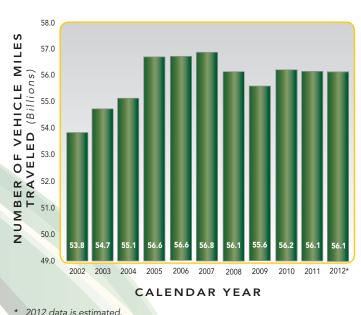
The economic downturn has resulted in driving levels from 2008 through the present holding steadily below the 2007 record of nearly 57 billion vehicle miles traveled. Over this same period, transit ridership in Maryland has continued to grow, from 96.7 million trips in FY2007 to over 112.1 million trips in FY2012. The combination of higher and more variable gas prices and MDOT programs to expand transit services and rider support programs are partially responsible for these trends.

Growing traveler and freight demand are forecast to increase the number of licensed drivers and registered vehicles in Maryland by 23% and 40% respectively by 2026. Many of these will be new users who will interact with the MVA to obtain their licenses and permits and to register their vehicles. To manage resources effectively to accommodate this demand, the MVA now employs Alternative Delivery Services (ADS), such as online registration.

Looking forward, MDOT expects that continued population and economic growth in Maryland will lead to significant growth in travel demand across all modes over the next 30 years. Maryland's population in 2011, according to the American Community Survey, was 5,828,289, representing a 1%

increase from 2010. Evidence supporting the conclusion for long-term growth in travel demand is substantiated by projections developed by the Maryland Department of Planning, which show that by 2040, Maryland's population will be over 6.8 million, an increase of 19% from 5.8 million today. This population growth is attributed in part to projected strong growth in jobs in Maryland, by over 22% from 2010 to 2040.

Where this population and employment growth occurs in Maryland will shape the types of demand on Maryland's future transportation system, and the requirements to address that demand. The high cost of adding new capacity means that Maryland cannot simply build more highway lane miles or transit corridors to address vehicle miles of travel (VMT) growth, but must rather find ways to get the most out of the existing network. While this includes strategic capacity additions, SHA, MDTA, and MTA are also finding ways to increase the effectiveness of the existing roadway and transit network by operations strategies such as improved signal timing and coordination, faster incident response time, improved traveler information systems, priority transit systems and variable pricing on toll facilities, among others. Addressing travel demand also means encouraging land use and development design in a manner that supports transit use, walking, and bicycling and providing options for travelers as an alternative to driving. A balanced multimodal approach and thoughtful land use can provide forward thinking solutions to growing demand.



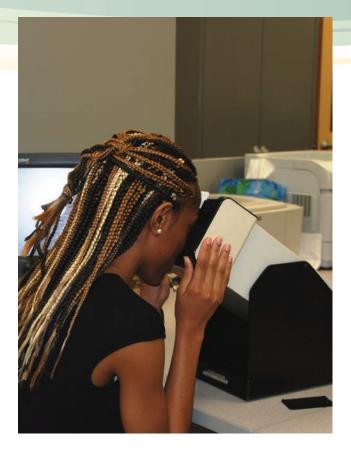
Annual Number of Vehicle Miles Traveled





Governor O'Malley and Lieutenant Governor Brown announcing the opening of the Intercounty Connector (MD 200)





MVA Transactions (Thousands)

	2005	2006	2007	2008	2009	2010	2011	2012
Registered Vehicles	4,604	4,690	4,752	4,774	4,736	4,816	4,809	4,822
Driver's Licenses Issued	3,846	3,895	3,937	3,995	4,049	4,082	4,083	4,102
Motorcycle Licenses	221	230	237	244	252	257	217	224
Commercial Driver's Licenses	153	160	164	167	168	170	173	177
MVA Transactions Per Year	11,991	12,562	12,542	12,388	12,263	11,011	11,917	12,139

### **Induced Travel**

When transportation conditions are improved to help accommodate growing travel demand and reduce congestion, one result that can occur is an additional increase in trips or travel distance – known as induced travel. While induced travel can be an indication of economic growth and increase in new travel options, it also may lead to increased air pollution, energy consumption and noise. It also means that the expected benefits of capacity improvements, as measured by congestion relief and travel time savings, may not be sustainable. Because of these potential negative impacts, MDOT and its partners are proactively managing induced travel through a number of approaches.

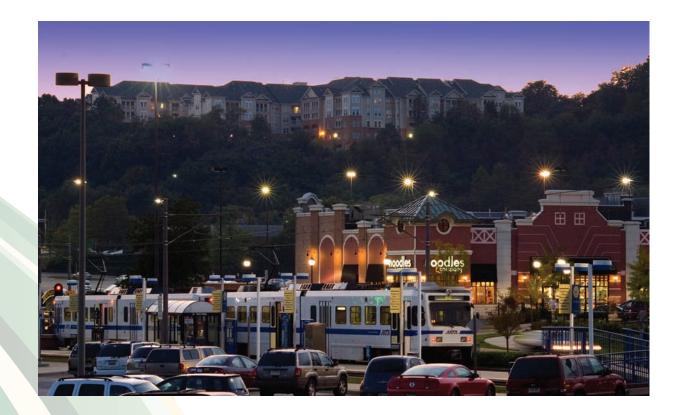
For example, MDOT works with other State and local partners to promote Smart Growth policies aimed at focusing growth in existing developed areas, or in targeted new growth areas (such as TOD). This approach manages induced travel by helping to build communities that are naturally more supportive of residents and employees completing trips using alternative modes. MDOT is an active partner with other State and local agencies in TOD, including ongoing construction at the Twinbrook TOD in Montgomery County (Phase II), Reisterstown Plaza TOD in Baltimore City and Owings Mills Town Center TOD in Baltimore County; completion of a TOD Master Plan for Aberdeen in Harford County; and continuing coordination with development teams who have initiated design work and the permitting process across multiple other sites in Maryland.

### **Balancing the Multimodal Approach**

Effective management of Maryland's transportation system requires a balanced multimodal and multidisciplinary approach to expand mobility and improve transportation safety for all Marylanders. MDOT promotes the collaboration of professionals across many disciplines and reaches out to Marylanders from all areas of the state to identify the greatest transportation challenges and develop cost effective solutions to address them.

MDOT continues to direct funding to programs that encourage walking and bicycling and includes accommodation for pedestrians and bicyclists in roadway and transit projects whenever possible. While non-motorized travel currently accounts for a small fraction of total trips, that amount is growing and is an important component of the transportation system. Well-designed and safe pedestrian and bicycle facilities are relatively inexpensive, have minimal environmental impact and support public health. The \$151.0 million programmed for bicycle and pedestrian projects in the FY2013–FY2018 CTP and the introduction of the new Maryland Bikeshare and Bikeways programs highlight Maryland's ongoing commitment to improving bicycle and pedestrian mobility.

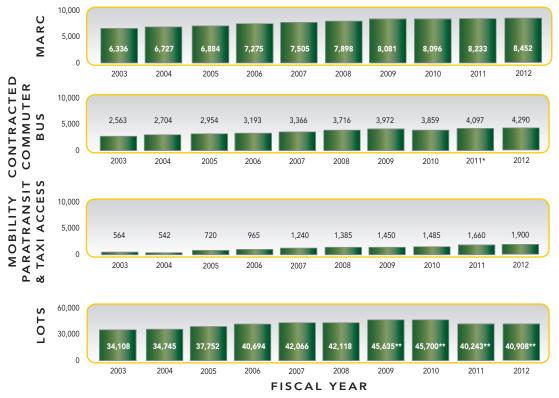
MDOT, through its support of multiple transit modes, helps expand mobility for all Marylanders. The MTA operates Local and Commuter Buses, Light Rail, Baltimore Metro Subway, MARC Train Service and a comprehensive Paratransit (Mobility) system. MTA also manages the Taxi Access system, and directs funding and statewide assistance to LOTS in each of Maryland's 23 counties, Baltimore City, Annapolis and Ocean City, providing approximately \$69.6 million in Federal and State grants in 2012. Through a regional compact, MDOT also supports WMATA, which provides transit service for Marylanders living and working in the Washington, DC region. MDOT applies a balanced, multimodal approach to the multiyear implementation of the State's Base Realignment and Closure (BRAC) Action Plan. In FY2012, approximately \$20 million was expended and in FY2013, approximately \$98 million is expected to be spent on directlyrelated BRAC projects. Elements programmed in the FY2013-FY2018 CTP that specifically address BRAC activities include intersection improvements, transit improvements, park-and-ride lot expansions, operations and maintenance efforts and system preservation projects. Under the BRAC Intersection Improvement Program, SHA analyzed projected near-term traffic impacts at 117 heavily impacted intersections and identified 19 intersections for improvement. MDOT and MTA are also collaborating with the U.S. Department of Defense and local officials to advance and expand successful TDM programs to support the growth of military installations due to BRAC. MDOT's BRAC strategy works in concert with its commitment to TOD and Smart Growth. For example, the City of Aberdeen's TOD Master Plan, developed with the assistance of MDOT, MTA and SHA, provides the opportunity to leverage the value of the land and redevelopment opportunities around the MARC/Amtrak station to address growth and change as a result of BRAC activities relocating to Aberdeen Proving Grounds.



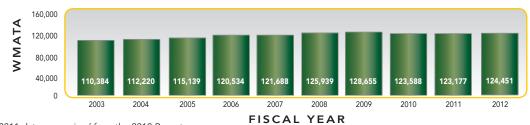


### Transit Ridership-MTA Direct-Operated Services (Thousands)

# Transit Ridership-Contracted Services and LOTS (Thousands)



# WMATA-Maryland-Only Transit Ridership\*\*\* (*Rail, Bus, MetroAccess*) (*Thousands*)



\* 2011 data was revised from the 2012 Report.

\*\* Data is estimated.

\*\*\* Maryland-only WMATA Ridership is an estimate: Maryland Metrorail ridership is calculated based on the 2007 rail passenger survey; Maryland Metrobus ridership is derived from ridership counts by line as of September, 2011; and Maryland MetroAccess ridership is from fiscal year 2011 actual ridership counts.

8

# **Providing Commuting Choices**

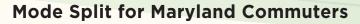
Commuters consider many criteria when choosing their travel mode to work, time and cost being the major factors. In 2011, based on data from the U.S. Census Bureau's American Community Survey, Marylanders experienced an average commute time of 32.2 minutes, representing the longest average commute to work time in the nation. Many Marylanders continue to commute by driving alone due to personal needs, business requirements, or lack of other convenient travel options. In 2011, 73.3% of Maryland commuters drove alone. This share is well below the national average and places Maryland in the top 10 states with the lowest average drive alone to work mode share.

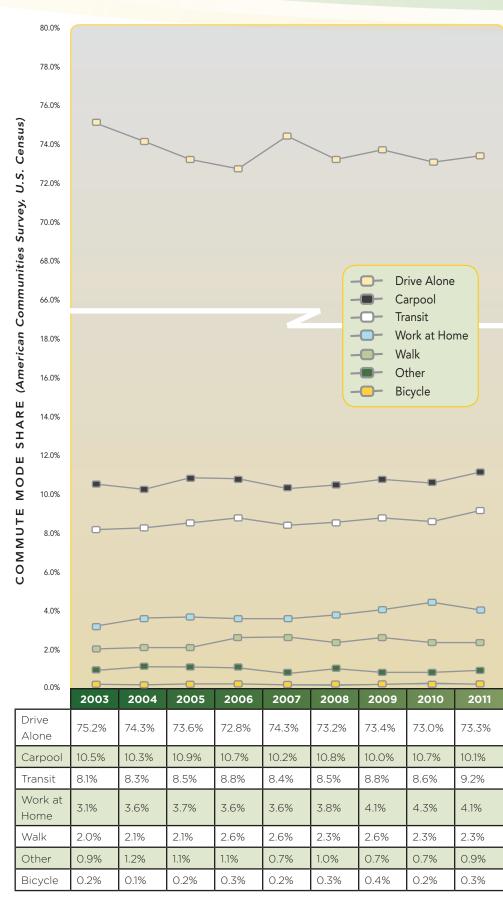
Maryland commuters shift commute preferences towards options other than driving alone as new opportunities are made available and as the cost of commuting by vehicle continues to be highly variable. MDOT works with MPOs, local governments, and other private and not-for-profit partners to deploy a variety of TDM strategies that support alternatives to driving alone such as traveler information, ridesharing, teleworking and variable pricing infrastructure programs. These activities are paying dividends – in 2011, Maryland commuters chose transit more frequently than commuters in any other state, with an average 9.2% transit commute to work share.

As part of Governor O'Malley's *Cycle Maryland* initiative, in FY2012, MDOT kicked off the Maryland Bikeways Program and Maryland Bikeshare Program. The Bikeways Program supports planning, design and construction of projects that create and improve bicycle connections in Maryland to key destinations like work, school and shopping. The Bikeshare Program provides grants to help Maryland communities plan, establish or expand Bikeshare programs. Grants from these two programs in FY2012 totaled over \$7.8 million, providing funding for over 50 Bikeways and Bikeshare grant recipients.

MDOT is supporting planning and engineering on high-priority transit projects including the Red Line in Baltimore, and the Purple Line in Montgomery and Prince George's Counties, and implementation of the MARC Growth and Investment Plan. MDOT continues to work with State, local, and private partners to support TOD planning and joint-development projects across 15 designated TOD sites in the Baltimore and Washington D.C. regions.











### **Key Activities & Accomplishments**

2001 to 2005	Frederick MARC Extension, Commuter Choice Maryland, Bicycle & Pedestrian Access Master Plan
2006	MTA Light Rail Doubletrack
2007	MARC Growth & Investment Plan, SHA Bike & Pedestrian Design Guidelines
2008	Southern Maryland Commuter Bus Initiative, BRAC Action Plan
2009	ARRA - LOTS, MTA, & WMATA Projects, Ongoing Park-and-Ride Lot Expansion
2010	Guaranteed Ride Home Expansion, Maryland TOD Designation, MTA Charm Card
2011	ICC Commuter Bus, MARC Penn Line Service, MARC Rail Car and Locomotive Replacement
2012	Maryland Bikeways and Bikeshare

programs

#### **Air Travel in Maryland**

Since its opening in 1950, BWI Marshall has provided Marylanders access to locations throughout the U.S. as well as the rest of the world. The MAA, the operator of BWI Marshall, works hard to create and maintain its "easy-come, easy-go" reputation. On an average day, airlines serving BWI Marshall provide Marylanders with access to 67 domestic non-stop destinations and nine international non-stop destinations. In 2012, several new airlines started or announced new air service for BWI Marshall, including Condor Airlines to Frankfurt, Germany, and Spirit Airlines to Dallas/Fort Worth and Fort Lauderdale.

BWI Marshall served more than 22 million passengers in 2011, a growth rate of more than 2% from 2010, ranking it the 22nd busiest airport in the United States. In 2012, BWI Marshall is on track to break its annual passenger record, after setting an all-time monthly record for passengers in July. July 2012 was the busiest month in the history of BWI Marshall, and 2011 was the busiest year.

BWI Marshall supports the Maryland economy through passenger and freight services – moving more than 22 million people and 118,788 tons in 2011. Based on 2010 data, BWI Marshall's economic impacts for Maryland include nearly 94,000 jobs, \$3.6 billion in personal income, \$5.6 billion in business revenue, and over \$2.0 billion in local purchases.

Across Maryland, the MAA fosters the vitality of aviation and promotes safe and efficient operations, opportunities for economic growth and environmental stewardship. MAA owns and operates Martin State Airport, a general aviation reliever facility and a support facility for the Maryland Air National Guard and Maryland State Police. The MAA also develops and regulates aviation activities at the 36 public airports throughout the state, which are supported by State funds totaling approximately \$34.8 million since 2002 (excluding federal funds and local airport funds).

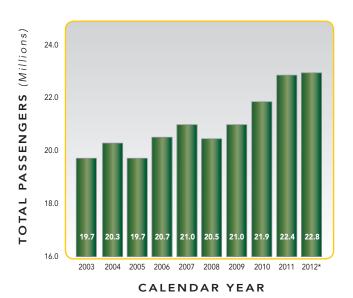
#### Waterborne Travel in Maryland

For more than 300 years, the Port of Baltimore has been a vital economic activity center in Maryland. The Port continues to generate revenue through traditional streams including passenger cruises and cargo movement, and through recent innovations, such as the Seagirt Marine Terminal Public – Private Partnership (P3) with Ports America. This P3 will save the State of Maryland hundreds of millions of dollars it otherwise would have had to invest in capital improvements and other necessary infrastructure at Seagirt.

The Port of Baltimore's contributions to the economy of Maryland, the Mid-Atlantic, and nation, are significant. A 2011 study found that approximately 40,040 jobs in Maryland are generated by Port activity; of those, 14,630 are direct jobs. There are another 25,410 induced and indirect jobs generated by Port activity. There are over 68,000 jobs related, but not completely dependent on Port activity; they are with companies that chose to import or export cargo through the Port, but have other options if the Port was not available to them. In total, there are over 108,000 jobs linked to the Port. The Port is responsible for \$3.0 billion in annual personal wages and salary, and \$304.0 million in state and local tax revenues.

The Port of Baltimore has competitive advantage over other east coast ports – it is the closest port to Chicago and other Midwest markets; has direct access to both CSX and Norfolk Southern rail corridors and the I-95, I-81, and I-70 interstate corridors; and now includes one of only two 50-foot deep berths on the east coast at the Seagirt Marine Terminal, allowing it to accommodate Post-Panamax container ships once the Panama Canal expansion is complete in 2015.

### Total Annual Commercial Passengers at BWI Marshall Airport





In 2011, the Port of Baltimore saw a 15% increase in cargo from 2010, which marked the greatest increase of growth by any major U.S. port. The Port's public and private marine terminals saw 37.8 million tons of foreign cargo cross their docks in 2011, up from 32.8 million tons in 2010. The total dollar value amount of that cargo was more than \$51.4 billion, the Port's highest dollar value ever and a 24% increase from 2010. Other records the Port established in 2011 include exporting 24 million tons of cargo, including 19.2 million tons of coal. The Port also shipped 551,000 auto units (highest in the U.S.).

More record-breaking performance continued in 2011, as 251,889 people sailed on 105 cruises from Baltimore, both of which are all-time records for the Port. Baltimore is ranked fifth among East Coast ports and 11th in the U.S. for most cruise passengers. Cruising from the Port of Baltimore contributes an estimated \$90.0 million to Maryland's economy, and approximately 220 direct jobs in Maryland are generated by cruise activity.



# Improving the Movement of Goods— Maryland Freight Activity

MDOT is aggressively working to implement multimodal freight solutions, improve freight logistics and expand multimodal transportation options throughout the state. Chokepoints and aging transportation infrastructure impede goods movement within Maryland and along the entire eastern seaboard. With freight activity projected to double by 2030, the multimodal transportation system will come under increasing pressure. The 2009 Maryland Statewide Freight Plan outlines policies and investments critical to addressing current and projected goods movement challenges. MDOT and its modes/authority are committed to implementing key elements of this plan. Within the Attainment Report, there are seven measures that are related directly to the State's freight goals established in the Plan that address the quality and efficiency of freight movement in Maryland.

### **Performance Measures**

MTP GOAL	2012 AR FREIGHT RELATED MEASURES	PAGE
Quality of	(MPA)-Average truck turn-around time at Seagirt Marine Terminal	17
Quality of Service	(SHA)-Percentage of the Maryland SHA network in overall preferred maintenance condition	14
Safety & Security	(MVA/SHA/MDTA)-Annual number of traffic fatalities and personal injuries on all roads in Maryland	20
System	(SHA & MDTA)-Number of bridges and percent that are structurally deficient	26
Preservation & Performance	(SHA & MDTA)-Percent of roadway miles with acceptable ride quality	26
Coppositivity	(MPA)-Port of Baltimore foreign cargo and MPA general cargo tonnage	49
Connectivity for Daily Life	(SHA & MDTA)-Percent of freeway lane- miles and arterial lane-miles with average annual volumes at or above congested levels	44

# Originating and Terminating Freight in Maryland\*

METHOD FOR MOVING FREIGHT	TOTAL VALUE ( <i>Millions</i> )	TOTAL TONNAGE (Thousands)
Air**	\$3,206	118,788
Other***	\$47,933	12,826
Rail	\$6,923	24,139
Truck	\$259,822	305,148
Water	\$51,391****	foreign: 37,844**** domestic: 13,500*****
All Freight	\$369,275	512,245

\* Source: U.S. Department of Transportation Freight Analysis Framework (FAF3) Version 3. Other, Rail, and Truck value and tonnage data is estimated based on FAF3 data. The data is adjusted yearly to account for previous year actual data and a 2% annual growth rate consistent with the Federal Highway Administration's Freight Summary 2008. The 2% growth rate reflects a conservative estimate of domestic and international freight growth given current economic conditions.

\*\* Source: BWI Marshall report to Airports Council International (2011).

\*\*\* Freight consists largely of postal and courier shipments weighing less than 100 pounds and other intermodal combinations.

\*\*\*\* Value of international cargo only.

\*\*\*\*\* Source is MPA-compiled data for 2011.

\*\*\*\*\*\* Source: MPA and U.S. Army Corps of Engineers (2010).

### **Collaboration with Freight Public and Private Partners**

MDOT is leading efforts to improve the efficiency and effectiveness of freight movement throughout the state. For example, MPA's private partner's installed four supersized cranes at Seagirt Marine Terminal, ensuring that the Port of Baltimore can service the Post Panamax container ships of the future. Due to Maryland's prominent location at the crossroads of several major freight corridors, eliminating freight transportation bottlenecks in Maryland can provide significant transportation and economic benefits to the Mid-Atlantic region. Through partnerships with neighboring states, freight stakeholders, and nonprofits, and through leadership in groups such as the I-95 Corridor Coalition, MDOT is participating in the development of multistate solutions to these issues. Additionally, MDOT recognizes the shared infrastructure nature of passenger and freight operations. MDOT remains diligent in its coordination of passenger and freight efforts for all modes.

### Key Freight Initiatives Improving Maryland's Economic Competitiveness

MDOT is actively working with CSX to plan and develop a new freight rail-to-truck transfer facility, the Baltimore Rail Intermodal Facility. MDOT is also a partner in CSX's National Gateway initiative, a partnership between the Federal government, six states, the District of Columbia and the railroad to create a double-stack rail network. These projects will improve freight rail connectivity and capacity through the Mid-Atlantic region.

- MDOT and MTA are undertaking a large-scale short line rail project to sustain rail movement along the Eastern Shore agricultural corridor. The stabilization effort will support soybean and grain exports.
- MDOT chairs the Freight Subcommittee on the Amtrak Northeast Corridor Commission, helping to ensure both Norfolk Southern and CSX have access to the corridor to accommodate the growth in freight rail.
- Maryland will continue to implement the truck safety programs and enforcement initiatives that have produced improved truck safety. Maryland consistently ranks in the top 10 states for commercial vehicle inspections. State officials will continue to reach out to the trucking community and the traveling public to educate about truck safety.
- Maryland will continue to advance truck parking capacity expansion throughout the state. Maryland recently received a \$2.6 million federal grant to construct 40 new truck parking spaces at the southbound welcome center on I-95 in Howard County to address a severe shortage of commercial vehicle parking along this portion of the I-95 corridor.
- The MDTA Police Commercial Vehicle Safety Unit (CVSU) will continue its aggressive commercial vehicle inspection and enforcement program. During FY2012, 25,904 commercial vehicle inspections were performed resulting in 3,839 commercial vehicle operators and 4,684 overweight vehicles being placed out of service. This enforcement helps to safeguard the general public, as well as prevent damage to roadways from excessive vehicle weights or unsecured cargo.
- MDTA Police CVSU continued to partner with Federal, State and local agencies to perform joint inspection and enforcement operations. The unit's efforts continued to address concerns regarding commercial vehicles using local roadways to avoid inspection and weight enforcement.
- Virtual weigh stations will be installed at key locations statewide, such as one recently completed on I-83. Virtual weigh stations are real-time automated tools capable of capturing the speed, identity and weight of a commercial vehicle moving at highway speeds. This increases the State's ability to monitor for safety and ensure properly weighted vehicles on Maryland's road network.

# GOAL: () Quality of Service

# **Objectives**

- Enhance customer experience and service
- Provide reliable and predictable travel time across modal options for people and goods
- Facilitate coordination and collaboration with agency partners and stakeholders

For people living in, traveling through, and doing business in Maryland, quality of service means access to transportation infrastructure and services that help them reach their travel destinations conveniently, comfortably and on time. Quality of service is important to Marylanders, as a reliable, well-maintained and efficiently-operated transportation system contributes to a strong economy and a high quality of life by reducing delay, offering diverse transportation system.

To deliver the quality of service that Marylanders expect, MDOT and its modal agencies keep pace with the age of instant information and information technologies by offering many real-time information services to assist travelers in planning where and when to travel and by what mode. These essential information services include initiatives such as the Maryland 511 traveler information system that encourages travelers to "Know Before You Go." The system provides travel information via the web or phone on State-maintained roadways, including travel time, incident or work zone lane closures weather reports, and connections to transit, airport, and tourism information. SHA also provides motorist information signs along highways to alert drivers to real-time travel conditions. The MTA works to improve the timeliness of transit service as well as transit information - several of MTA's transit rider services and tools have been adapted to work seamlessly with mobile devices, including the MTA Trip Planner, Service Status, Service Alerts and Elevator/Escalator Outages. This year, MTA will test and implement its real time passenger information system. The MVA offers an ever-increasing number of online MVA services, including online State Identification (ID) card renewal.

Quality of service also means providing the best value for each transportation investment. To achieve this end, MDOT applies a strategic decision making process and carefully selects transportation projects and invests in programs to ensure that public dollars are invested in an efficient and cost effective manner.



# **Key Initiatives**

- **MDOT:** Continue coordination with other State agencies through the Governor's FastTrack Program to expedite mixed-use, Transit-Oriented Development (TOD) projects, such as the Pike and Rose TOD at White Flint Metrorail Station in Montgomery County.
- **MAA:** Deliver a major terminal enhancement project at Baltimore/Washington International Thurgood Marshall Airport (BWI Marshall) to improve and modernize the BWI Marshall passenger terminal facility.
- **MPA:** Expand cruise offerings at the Port of Baltimore, such as the newly renovated Royal Caribbean Grandeur of the Seas which will return back to the Port of Baltimore in 2013. The ship is currently undergoing a \$48 million revitalization that will include many of the company's most innovative features that are available on its two largest class ships.
- **MTA:** Continue expanding the use of Automatic Vehicle Locator (AVL) technology to provide MTA's customers with real time arrival information and assist MTA in better monitoring on time performance.
- **MDTA:** Through an innovative Public Private Partnership (P3) agreement, reconstruction and improvements have begun to the two aging travel plazas (the Maryland and Chesapeake Houses) along I-95 in northeast Maryland. Project estimated completion, summer 2014.
- **MVA:** Continue to improve online services, such as MVA's FastTrack Licensing, that allows Marylanders to quickly and easily conduct a number of motor vehicle services for all vehicles that are associated with a driver's license number.
- **SHA:** Continue to enhance the accuracy and timeliness of traveler information through "My 511 Direct" traveler services and the Coordinated Highways Action Response Team (CHART) website.

# **Performance Measures**

MONITORING AGENCY	PERFORMANCE MEASURE	PAGE
МАА	Percent of BWI Marshall customers rating the airport "good" or "excellent" on key services	17
MPA	Average truck turn-around time at Seagirt Marine Terminal	17
MTA	Percent of service provided on time	15
MTA	Customer satisfaction rating	16
MDTA	Overall customer satisfaction of E-ZPass® customers	18
MDTA	Percent of toll transactions collected electronically	18
MVA	Branch office customer visit time versus customer satisfaction rating	16
SHA	Maryland driver satisfaction rating	14
SHA	Percentage of the Maryland SHA network in overall preferred maintenance condition	14

# SHA: Maryland Driver Satisfaction Rating

Customer Satisfaction Surveys help determine if SHA services are better than average in the eyes of its customers. SHA strives to achieve a "B" grade, which is equivalent to a four out of five rating.

CALENDAR YEAR*	2006	2008	2010	2012
Rating	3.93	3.90	3.94	3.92

TARGET: 4 out of 5

\* Survey administered biennially.



### Why Did Performance Change?

- Launched "My 511 Direct" 511 traveler services which sends personalized information via text and email regarding both travel time estimates and incident report alerts
- Focused customer communication on extensive road closures and traffic impacts using the CHART webpage, highway message signs and press releases
- Added live traffic feeds from partner agencies for public viewing on the CHART website
- Partnered with State Farm Insurance to increase patrols on highways and enhance roadside assistance
- Streamlined Customer Care Management System online form and web links to support customer feedback
- Created a Design Council to enhance communications among engineering and construction areas, resulting in better internal SHA communications

### What Are Future Performance Strategies?

- Implement the Customer "Bill of Rights" as an internal customer service standard
- Develop tools and mechanisms to follow up with SHA customers, including an online customer care management system survey
- Enhance website and use of social media to communicate with customers

# SHA: Percentage of the Maryland SHA Network in Overall Preferred Maintenance Condition

The overall condition of the network reflects how well asset management strategies, improved operations and technology have sustained the quality and safety of existing highways.





### Why Did Performance Change?

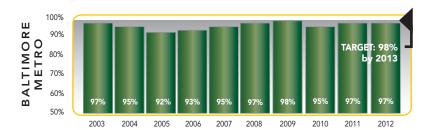
- Total maintenance expenditures are closer to the average historical amounts after two consecutive years of expenditures approximately \$9 million below average
- Additional money became available in FY2012, providing an opportunity to address previously deferred maintenance activities using a combination of contract forces and SHA personnel
- Emphasis was placed on maintenance activities that help improve water quality, such as ditching, cleaning drainage facilities and shoulder edge repair
- SHA received approval for federal funding for Federal FY2013 for the line striping asset management program

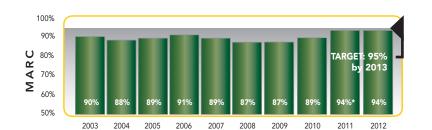
- Continue to maintain the statewide overall level of service while working on individual assets that fall below the desired maintenance condition in specific areas
- Perform maintenance on safety-related activities such as signs, line striping, pavement markings and guardrail repair as a top priority
- Seek federal funding for additional maintenance activities
- Continue efforts with Federal Highway Administration (FHWA) funding of the line striping asset management program by advertising and awarding contracts
- Continue to focus attention on maintenance activities that improve water quality as part of the Clean Water Act

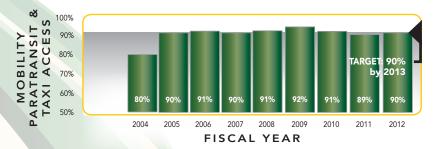
# **MTA: Percent of Service Provided On Time**

On time performance is an important indicator of service quality and efficiency, and correlates highly with system usage and customer satisfaction.









2011 data for Light Rail and MARC was revised from the 2012 Report.

### Why Did Performance Change?

- All MTA modes (except Local Bus and Light Rail) either improved or maintained on time performance (OTP) within 0.5% of FY2011 values
- Invested in Local Bus AVL system to obtain a more accurate picture of Local Bus performance, allowing for better decision making and service monitoring
- Mobility Paratransit OTP increased by 1% due to ongoing efforts to improve service efficiency and effectiveness while still meeting a rapidly increasing service demand
- Light Rail experienced several challenges including service interruption from severe storms and major construction projects

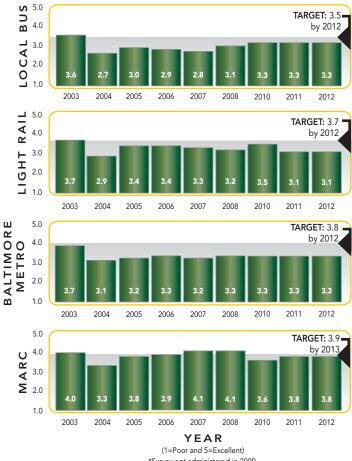
- Use better data systems to find and troubleshoot performance issues to enable the MTA to target and resolve OTP issues for the Local Bus system
- Enhance the use of AVL and Automatic Passenger Counter (APC) technologies to improve OTP through better schedule design and better operational supervision
- Continue to schedule major track maintenance activities during periods of low ridership, minimizing the effect of this work on riders
- Address absenteeism and operator unavailability issues to improve OTP as well as service efficiency
- Continue aggressive monitoring of MARC-contracted operations and pursue infrastructure and schedule improvements that will benefit MARC riders
- MTA has programmed \$113 million in funding from joint capital improvement agreements between MTA, Amtrak and CSX in the FY2013–FY2018 Consolidated Transportation Plan (CTP) to upgrade signal systems and passenger amenities on the MARC Camden, Brunswick and Penn lines
- MTA is overhauling its Light Rail cars to improve fleet reliability and service efficiency (the FY2013–FY2018 CTP includes \$187.9 million to perform a mid-life overhaul of the Light Rail fleet)



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# MTA: Customer Satisfaction Rating\*

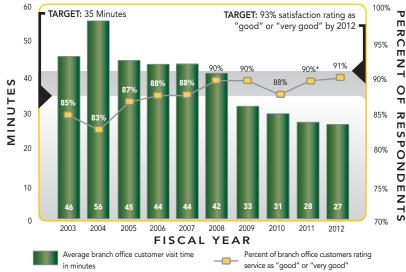
Reliable, safe and convenient service are key factors in attracting ridership. Customer satisfaction reflects whether MTA is meeting its customer service standards and signals which modes require improvement.



\*Survey not administered in 2009.

# MVA: Branch Office Customer Visit Time Versus Customer Satisfaction Rating

Average customer visit time is a key indicator of the quality and efficiency of service delivery to customers and is directly related to customer satisfaction (i.e., as MVA branch customer visit time decreases, customer satisfaction increases).



### Why Did Performance Change?

- 2012 survey results are estimates, and will be published in 2013
- Used bus ridership data to better balance capacity and demand
- Made improvements to Local Bus service
- Deployed AVL technology on buses and real-time arrival information
- Conducted field observations of service (covert and overt) to identify performance issues
- Improved communications with customers in the event of service disruptions through the use of electronic media

### What Are Future Performance Strategies?

- Explore venues to obtain real-time customer satisfaction from customers' mobile devices to help increase MTA's ability to track customers' perceptions throughout the year
- Utilize bus ridership data to better balance capacity and demand
- Continue Local Bus service improvements (e.g., scheduling), deployment of AVL technology on buses and real-time arrival information, and fleet replacements
- Provide additional park-and-ride facilities at transit stations
- Continue field observations of service (covert and overt) to identify performance issues
- Improve communications with customers in the event of service disruptions through the use of electronic media (e.g., emails, Twitter, website updates) as well as on-site and on-board announcements, including system-wide enhancements to the Public Announcement – Light-Emitting Diode (PA-LED) audio/visual systems on MARC, Baltimore Metro and Light Rail

### Why Did Performance Change?

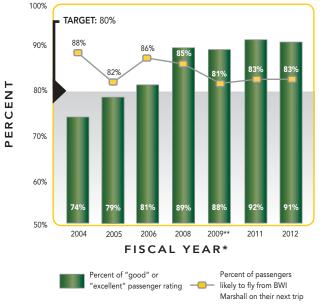
- Reduced customer wait times by implementing initiatives and technological enhancements aimed at lowering the number of walk-in branch transactions including alternative service delivery (ASD) methods, online ID card renewal and online driver's license renewal (every other renewal cycle)
- Provided real-time branch wait times online so customers had clear expectations of service times prior to arrival or could choose a different branch location and/or date and time

- Utilize inter- and intra-agency partnerships and collaboration to enhance external service and product delivery to associated government agencies
- Plan, design and implement an enhanced technical platform that will integrate core business services and processes, providing customers with more efficient access to driver and vehicle services and products
- Continue to actively enhance policies and practices to effectively coordinate dealer investigations and exchange of information between Business Licensing and Investigations Division
- Maintain a standard for Customer Service Representatives and Driver License Examiners, using enhanced training programs to increase service efficiency
- Continue to implement policies, technologies and strategies in the ASD Plan (\$6.7 million programmed in the FY2013–FY2018 CTP for this purpose) to reduce customer wait time at branch offices and inspection stations



# MAA: Percent of BWI Marshall Customers Rating the Airport "Good" or "Excellent" on Key Services\*

Customer surveys provide valuable feedback to agencies regarding service delivery, enabling them to continuously respond to customer needs.

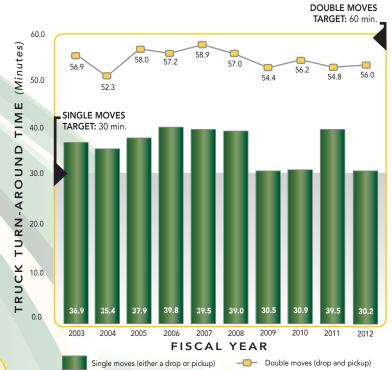


\* Surveys not administered in 2007 and 2010.

\*\*The 2009 rating only reflects first quarter 2009 data, not the full fiscal year.

# MPA: Average Truck Turn-Around Time at Seagirt Marine Terminal

Truck turn-around time is a gross measure of the efficiency and operations of the Seagirt Marine Terminal. Reductions in turn-around times improve throughput capacity and result in incremental environmental benefits.



### Why Did Performance Change?

- BWI Marshall continues to far exceed its customer satisfaction goals
- Continued to ensure that the airport's cleanliness is maintained in a cost effective manner
- Continued to provide directional signage to make navigating the BWI Marshall easy
- Maintained BWI Marshall's excellent parking product

#### What Are Future Performance Strategies?

- Continue to manage the BWI Marshall cleaning contracts to ensure that the cleanliness of the terminal building, restrooms and other facilities meet the expectations of passengers at BWI Marshall
- Supplement current retail with recognized local and national chains in the terminal



### Why Did Performance Change?

- Equipment and technology enhancements were implemented, thereby improving gate velocity and processing efficiencies
- Change in chassis pool usage allows drivers to use their chassis multiple times in lieu of dropping and picking a chassis every time they enter the terminal
- More drivers are making dual moves versus single moves, which provides better overall efficiencies
- Fully implemented the Transportation Worker Identification Credential (TWIC) program to balance security and commerce

#### What Are Future Performance Strategies?

- 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



**Quality of Service** 

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# MDTA: Overall Customer Satisfaction of *E-ZPass*<sup>®</sup> Customers

This measure tracks the satisfaction of *E-ZPass®* private account holders.

FISCAL YEAR*	2007	2010	2012
Percent Satisfied	87%	86%	83%

### TARGET: 87% (Baseline year = 2007)

\* Survey not implemented in 2008, 2009 and 2011.



### Why Did Performance Change?

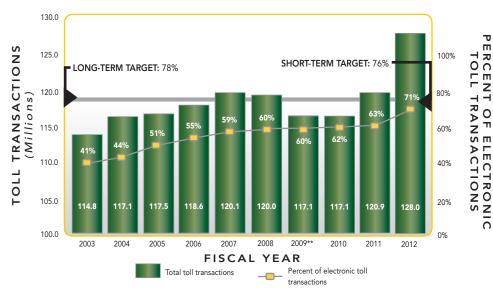
- Implemented comprehensive customer survey program to allow for continual customer feedback and enhance MDTA's ability to respond to identified issues
- Implemented a program to close accounts that remained inactive for 18 months or greater closing approximately 65,000 inactive accounts
- The MDTA approved and implemented the largest toll increase in its history in 2011, with additional increases approved for July 1, 2013

### What Are Future Performance Strategies?

- Expand retail sales of *E-ZPass*® and "On-The-Go" opening new retail outlets
- Maintain a vacancy rate of 7.0% or below to ensure employees are present to meet the needs of customers
- Begin to use in-house resources in 2013 for online customer satisfaction surveys
- Expand surveys to all agency customers not just *E-ZPass*® private account holders using web and social media
- Continue to use email, statement messages, web and social media to communicate with *E-ZPass*<sup>®</sup> account holders on *E-ZPass*<sup>®</sup> matters, construction projects, traffic management, etc
- Continue large employer and community visits/events with *E-ZPass*® Outreach Team for the Intercounty Connector (ICC)/MD 200 and I-95 Express Toll Lanes (ETLs)
- Consider customers' suggestions for improvements as fiscal constraints allow

# MDTA: Percent of Toll Transactions Collected Electronically\*

Electronic toll collection systems expedite the toll collection process, reduce delays at toll plazas, decrease emissions, and are available at all eight toll facilities across the state.



<sup>\*</sup> Toll collections are paid as cash, ticket, or electronic transaction.

\*\* The methodology for toll transactions collected electronically was modified; data beginning in 2009 has been revised to reflect the new methodology.

### Why Did Performance Change?

- Opened the ICC/MD 200 Section B & C (MD 97 to I-95)
- Conducted a public outreach campaigns to encourage use of *E-ZPass*<sup>®</sup>
- Electronic toll transactions, including *E-ZPass*<sup>®</sup> transactions, continued to increase in volume and in the percentage of total transactions
- Initiated conversion of the Hatem Bridge Automatic Vehicle Identification (AVI) decal program to *E-ZPass®* programs

- Expand retail sales of *E-ZPass*<sup>®</sup> "On-The-Go" through new retail outlets
- Complete conversion of the Hatem Bridge AVI decal program to *E-ZPass*®

# GOAL: 🛞 Safety & Security

# Objectives

- Reduce the number and rate of transportation-related fatalities and injuries
- Secure transportation assets for the movement of people and goods
- Coordinate and refine emergency response plans and activities

The safe travel of Maryland residents and visitors, by all modes of transportation, is a top priority for MDOT. To lower fatalities on the roadways, law enforcement, highway safety officials, emergency medical responders and champions in the community joined together to support the Towards Zero Deaths campaign. This effort is intended to change drivers' perception of safety, spreading the message that even one death on Maryland roadways is too many. Maryland has also been recognized by the League of American Bicyclists for their bicycle safety efforts, ranking number eight in the nation and number three in the Northeast as a Bicycle Friendly State. The passage and enforcement of bicycle-friendly laws, making it safe and comfortable for people of all ages to ride in Maryland, has helped the State earn this distinction. Pedestrian safety is also a key priority. For example, MDOT will use results from a three-year pilot program using newly designed sidewalk markings to safely guide pedestrians along the Coastal Highway in Ocean City to further enhance safety. This city becomes the second most populated in the state during the summer months. A number of Transit-Oriented Development (TOD) projects are also underway in the state, creating communities that have the potential to ensure personal security and safety with amenities such as lighting, wider sidewalks and bicycle lanes.

Maryland's transportation facilities, such as the Port of Baltimore, State highways, public transportation systems and BWI Marshall are critical to the secure movement of people and goods in the state. For the fourth consecutive year, the Port of Baltimore has received an excellent security assessment from the Coast Guard review, mainly due to more effective security risk mitigation strategies and the dedication of the operations and port security departments. BWI Marshall has taken steps to accommodate passenger growth without compromising safety and security, initiating a major terminal enhancement project, which includes a new, expanded security checkpoint, with the latest screening equipment, and a secure connector between Concourses B and C. The MDTA Police were honored with the Commission on Accreditation for Law Enforcement Agencies (CALEA) TRI-ARC Excellence Award, recognizing, amongst other accomplishments, their ability to strengthen crime prevention and control capabilities on Maryland's highways.



# **Key Initiatives**

- **MDOT:** Increase attention on bicycle safety by partnering with Bike Maryland to update, publish, and distribute "Bike Baltimore" maps, host workshops on bicycle safety, and organize outreach events by law enforcement.
- **MAA:** Continue replacement of all integrated life-safety and security systems at BWI Marshall ensuring the use of new technologies meeting federal regulations that integrate all emergency, monitoring and security systems.
- **MPA:** Continue to provide excellent security services on all MPA terminals, enhance security awareness through information analysis and dissemination with public and private institutions, and deploy new cost-effective risk management methodologies for the protection of facility assets.
- **MTA:** Annually participate in and host emergency preparedness exercises with Federal, State and local officials to improve intelligence sharing, prevention, response and/or recovery from emergency situations.
- **MDTA:** MDTA Police will continue to develop new safety programs and actively lead and participate in organized safety events including Child Safety Seat Checks, Smooth Operator, Click It or Ticket and the Maryland SafeZones Automated Speed Enforcement program.
- **MVA:** The Maryland Highway Safety Office (MHSO) migrated to the MVA and has been joined with Driver Safety Services to more effectively collaborate in on-going highway safety programs for high risk users such as older and younger drivers and motorcycle operators. Continued collaboration with the SHA will include combined pedestrian and bicycle safety initiatives as well as the coordination of local highway safety programs through the MHSO's Regional Traffic Safety Programs housed in local SHA District Offices.
- **SHA:** Continue to enhance driver, cyclist, and pedestrian safety through projects that improve roadways, enhance lighting, increase pedestrian comfort and safety, and provide better access to transit through ongoing implementation of the Community Safety and Enhancement Program, Sidewalk Program and Pedestrian Access to Transit Program.

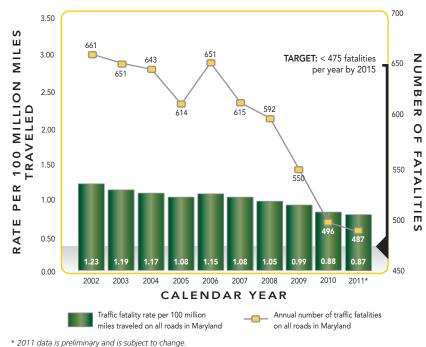
# **Performance Measures**

MONITORING AGENCY	PERFORMANCE MEASURE	PAGE
МАА	BWI Marshall crime rate	23
МАА	Number of repeat discrepancies in the annual Federal Aviation Administration's Federal Aviation Regulation inspection	24
МАА	Rate of airfield ramp incidents and accidents per 1,000 operations	23
MPA	MPA compliance with the Maritime Transportation Security Act of 2002	24
МТА	Customer perceptions of safety on the MTA system	22
МТА	Preventable accidents per 100,000 vehicle miles	22
MVA	Percent of Homeland Security REAL ID Act benchmarks achieved	24
MVA/SHA	Number of bicycle and pedestrian fatalities and injuries on all Maryland roads	21
MVA/SHA & MDTA	Annual number of traffic fatalities and personal injuries on all roads in Maryland	20

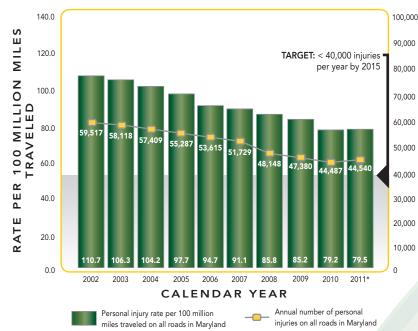
### MVA/SHA/MDTA: Annual Number of Traffic Fatalities and Personal Injuries on All Roads in Maryland

In line with international trends, Maryland uses reductions in the actual numbers of traffic fatalities and injuries as desired safety outcomes. Injury and fatality data help to assess the effectiveness of the Maryland Strategic Highway Safety Plan (SHSP) and to identify tendencies and trends that assist in implementing a wide variety of countermeasures.

### Annual Number of Traffic Fatalities on All Roads in Maryland



### Annual Number of Personal Injuries on All Roads in Maryland



<sup>\* 2011</sup> data is preliminary and is subject to change.



### Why Did Performance Change?

- Implemented new guidelines for installation of rumble strips to reduce roadway departure and head-on crashes
- Implemented pedestrian roadway safety audits to improve a datadriven approach to the selection, prioritization and programming of pedestrian safety enhancement projects
- Enhanced preventative measures through appropriate, targeted, systematic interventions based on detailed, root-cause analysis
- Implemented Facility Inspection Program Strategic Plan, integrated facility management software, and completion of a comprehensive inspection manual specific to MDTA
- The MVA's MHSO collaborated in sophisticated strategic planning with local partners and stakeholders, for example, coordinated enforcement and educational outreach efforts in critical aspects of highway safety such as occupant protection, impaired driving, aggressive driving and speed management
- MHSO engagement of law enforcement to be more active in highway safety included collaboration with top law enforcement executives across the state as well as training in effective traffic enforcement for officers at all organizational levels
- SafeZones automated speed enforcement program resulted in fewer aggressive drivers/speeders in work zones and contributed to the lowest number of work zone crash fatalities and injuries in more than 10 years

### What Are Future Performance Strategies?

- Implement the new SHSP for the years 2011 to 2015 that involves a multi-agency, multi-jurisdictional approach to continue to reduce fatalities and injuries along Maryland's highways
- Focus on six critical safety areas including: pedestrian safety, distracted driving, occupant protection, impaired driving, infrastructure, and aggressive driving; also focus on geographic locations where crashes are most prevalent

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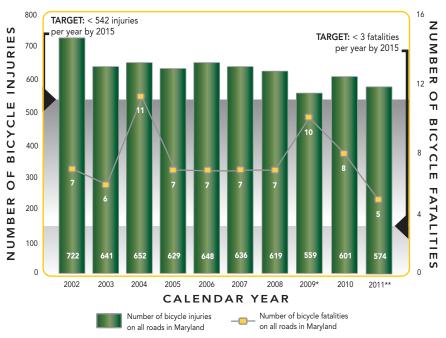
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- Conduct 10 road safety audits annually with preference at high-priority crash areas and continue to identify deficiencies and needed safety enhancements
- Continue to have all District Offices review fatal crash assessment and other safety reports and annually set performance targets to reduce numbers of crashes in over-represented categories
- Develop action plans in each District to address wet weather related crash locations
- Develop and implement a comprehensive communications and marketing plan that addresses high-priority traffic safety issues
- Pilot test projects to implement Safety Edge technology to reduce road-departure incidents
- Increase the number of virtual weigh stations in order to increase compliance with Federal Motor Carrier Safety Regulations and Maryland size and weight laws

20

# MVA/SHA: Number of Bicycle and Pedestrian Fatalities and Injuries on All Maryland Roads

Maryland uses reductions in the actual numbers of bicycle and pedestrian fatalities and injuries as desired safety outcomes. Injury and fatality data help to assess the effectiveness of the Maryland SHSP and to identify tendencies and trends that assist in implementing a wide variety of countermeasures.



#### Number of Bicycle Fatalities and Injuries on All Maryland Roads

\* 2009 injuries data revised from 2012 Report.

\*\* 2011 data are preliminary.

### Number of Pedestrian Fatalities and Injuries on All Maryland Roads



\* 2009 and 2010 injuries data revised from 2012 Report. \*\* 2011 data are preliminary.

### Why Did Performance Change?

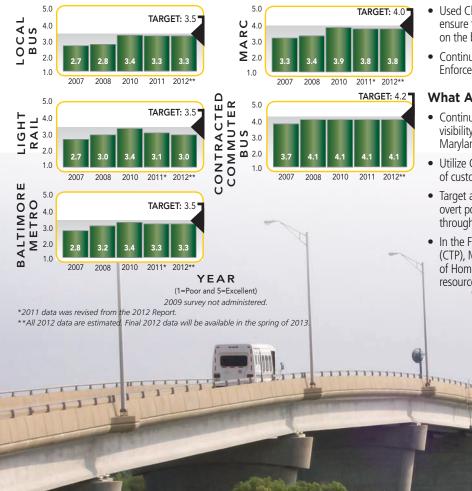
- Established an official pedestrian safety committee/ task force within SHA to develop a strategic approach to improve pedestrian safety around the state
- Implemented two StreetSmart pedestrian safety campaigns, which use marketing techniques to raise awareness of pedestrian safety
- Identified 24 high-crash locations across the state to focus additional engineering, enforcement and education efforts to improve pedestrian safety
- Implemented innovative engineering techniques to improve pedestrian safety in Ocean City and in various locations in Montgomery County
- Adopted an official Complete Streets policy for all SHA projects and issued a new bicycle policy that mandates resurfacing projects to construct bicycle lanes, whenever possible, and for all projects to mark bicycle lanes if the space is available
- Established an official SHA bicycle committee to improve bicycle guidance and policies that pertain to SHA roadways

- Work with the local county public works departments to determine high pedestrian risk areas around the state to proactively address potential pedestrian safety issues
- Conduct a pedestrian roadway safety audit on the top eight high pedestrian crash locations and work to fund the resulting audit recommendations
- Utilize social media to establish a more progressive form of communication between the bicycling community and SHA
- Coordinate education and enforcement efforts with engineering efforts to more effectively improve pedestrian and vehicular behaviors in high crash locations
- Investigate innovative funding strategies for the implementation of pedestrian safety and implement strategies from the SHSP to enhance pedestrian safety



# MTA: Customer Perceptions of Safety on the MTA System

A positive perception of personal safety is correlated with higher ridership and stronger commitment to transit as a mode of travel.



### Why Did Performance Change?

- As MTA's crime rate continues to fall, customers continue to feel safe
- Utilized the Police Cadet program to improve the visibility of MTA's Police Forces
- Used Closed Circuit TV (CCTV) and other security measures to ensure the safety of customers at Baltimore Metro stations and on the bus fleet
- Continued safety and security programs, such as the Zone Enforced Uniform Sweeps (ZEUS) and CompStat

### What Are Future Performance Strategies?

- Continue to utilize the Police Cadet program to improve the visibility of MTA's Police Forces, make traveling safer and give Maryland youth a point of entry into transit law enforcement
- Utilize CCTV and other security measures to ensure the safety of customers
- Target and prevent criminal activity through both covert and overt police operations, efficiently and effectively launched through the CompStat process
- In the FY2013–FY2018 Consolidated Transportation Plan (CTP), MTA has programmed over \$41 million in Department of Homeland Security grants to enhance law enforcement resources on the MTA system

### MTA: Preventable Accidents Per 100,000 Vehicle Miles

MTA has developed a baseline from which to reduce preventable accidents, increase efficiency and provide a safer ride to customers.

CALENDAR YEAR	2007	2008	2009	2010	2011	2012*	TARGET
		Accident Rate					
Local Bus	2.50	2.50	2.93	2.86	3.10	2.12	2.0 by CY2013
Light Rail	n/a	n/a	0.06	0.31	0.16	0.19	0.15 by CY2013
Baltimore Metro	n/a	n/a	0.20	0.17	0.05	0.03	0.03 by CY2013
Paratransit/ Taxi Access	n/a	n/a	1.14	0.00	2.31	2.07	2.0 by CY2013

(Baseline year = 2008)

\* 2012 data are estimated and will be finalized in next year's Report.

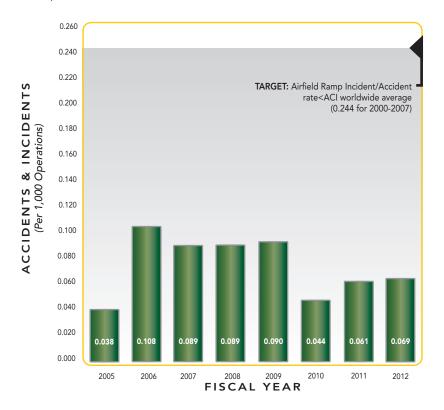
### Why Did Performance Change?

- All MTA modes except Light Rail have experienced a decrease in preventable accident rates (based on estimated 2012 data)
- Significant decreases in the Local Bus accident rate are due to ongoing efforts to increase operator accountability through re-training and corrective action
- Paratransit accidents are slightly higher over the past four years due to a change in how accidents are captured (including accidents from contracted service providers)

- Continue accountability efforts to ensure that operators with multiple preventable accidents receive appropriate re-training and corrective action
- Utilize efficient and effective training methodologies, including the bus simulator, operator re-certification programs, and safe operation awards, to give operators the skills they need to perform their duties safely
- Review accidents with the aid of geographic information systems (GIS) to determine patterns (i.e. operators, times of day, locations) and develop corrective action to further reduce accident risks

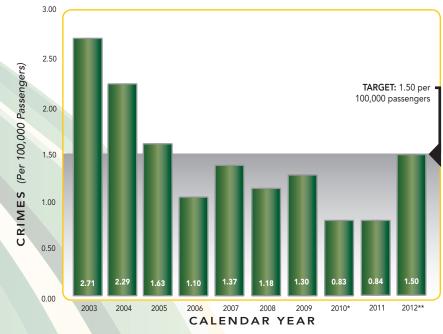
# MAA: Rate of Airfield Ramp Incidents and Accidents Per 1,000 Operations

This measure provides an indication of the safety and security of operations-related activity at BWI Marshall.



# MAA: BWI Marshall Crime Rate

This measure provides an indication of the relative safety passengers experience when traveling through BWI Marshall. Poor performance in this area could result in a decline in passenger numbers.



#### \* 2010 Crime rate data point was revised from the 2012 Report due to submission of additional data. \*\* 2012 data is estimated.

### Why Did Performance Change?

- Rate of airfield incidents and accidents is consistently well below the average rate, as reported by Airports Council International (ACI)
- Held a monthly ramp safety meeting with the tenants at BWI Marshall to discuss safety on the ramp
- Monitored ramp incidents to determine if trends exist and make recommendations for improvements when needed
- Conducted training for employees with access to the ramp and taxiways, including driver training and movement area training

### What Are Future Performance Strategies?

- The Federal Aviation Administration (FAA) continues to work on a Notice to Proceed for Rulemaking for a Safety Management System (SMS) policy for airports. The final rule will be issued after receiving comments from U.S. airports regarding the SMS process
- Review every airfield incident to determine if changes need to be implemented to increase safety



### Why Did Performance Change?

- BWI Marshall's actual number of crimes committed continues to be well below targets
- Utilized new technologies and integrated Consolidated Dispatch Center (CDC) systems with CCTV and Controlled Access Security (CASS) systems to monitor, record, and respond to security and safety incidents
- Conducted security inspections (e.g., random inspections of airfield vehicles and employees by MDTA law enforcement personnel)

### What Are Future Performance Strategies?

- Continue to utilize new technologies and integrate CDC systems with CCTV and CASS systems to better monitor, record and respond to security and safety incidents
- Continue conducting security inspections (e.g., random inspections of airfield vehicles and employees by MDTA law enforcement personnel)



Goal: Safety & Security

### MAA: Number of Repeat Discrepancies in the Annual Federal Aviation Administration's Federal Aviation Regulation Inspection

The passing of Federal Acquisition Regulation (FAR) Part 139, which governs the certification and operation of U.S. commercial airports, is requisite for the airport to remain open and operational.

Each year, MAA works closely with the FAA to ensure that BWI Marshall remains in compliance with the provisions of FAR Part 139 and maintains its FAA-issued operating certificate. Compliance is determined by annual inspections conducted by the FAA. Work orders are generated when Letters of Correction are issued and are given high priority with urgent resolution. BWI Marshall successfully completed the 2012 FAA safety and certification inspection with zero repeat discrepancies. MAA will continue to address all discrepancies in accordance with the federally prescribed timeline.

### MPA: MPA Compliance with the Maritime Transportation Security Act of 2002

The MPA is required to maintain and execute a Facility Security Assessment and Plan. MPA terminals can be closed by the U.S. Coast Guard if found not in compliance with the Maritime Transportation Security Act (MTSA) of 2002.

As required by the MTSA of 2002, all MPA terminals' Facility Security Assessment and Facility Security Plans currently meet MTSA requirements and have been approved by the U.S. Coast Guard. The U.S. Coast Guard will issue an order to cease operations if an MPA facility is not in compliance. Closure of a public terminal has never occurred at MPA. In MPA's most recent U.S. Coast Guard annual inspection, MPA met or exceeded all aspects of the inspection. MPA will continue to assess its security plans and make adjustments or additions where appropriate to assets, personnel, equipment and technology in order to maintain security at all State-owned facilities.

# MVA: Percent of Homeland Security REAL ID Act Benchmarks Achieved

The Federal REAL Identity Act provisions for secure licensing and IDs (REAL ID) of 2005 sets new standards for issuing driver licenses and identification cards, and is intended to improve the integrity and security of State-issued driver licenses and identification cards. On January 15, 2008, Governor Martin O'Malley directed MDOT to create a State driver's license that fully complies with the Federal REAL ID regulations released by the Department of Homeland Security. The REAL ID compliant license in Maryland requires an individual to provide proof of lawful presence in the United States, as legislatively required by Congress under the REAL ID Act of 2005. The REAL ID process has been phased in over time to enable states to achieve the required 39 Federal benchmarks in order to be in Full Compliance with REAL ID. As of August 2012, the MVA has achieved an 85% Full Compliance rate, meaning 33 of the 39 benchmarks have been successfully accomplished. The MVA continues to implement technical and program enhancements as they become available by the Federal government, in partnership with American Association of Motor Vehicle Administrators (AAMVA), in an effort to achieve full compliance in 2013.

### What Are Future Performance Strategies?

- Staff and support the REAL ID Executive Committee to provide direction and enact policies to ensure Maryland's compliance with the Federal REAL ID Act
- Proactively develop and implement policies, procedures and technologies to achieve completion of the 39 Federal REAL ID benchmarks
- Administer and support legislation and regulations that require individuals to provide proof of lawful presence in the U.S.
- Execute Federal and State funds to enhance the integrity and security of State-issued driver licenses and identification cards
- Continue to implement technical and program enhancements as they become available by the Federal government, in partnership with the AAMVA

# What Are Future Performance Strategies?

- Work closely with FAA to ensure that BWI Marshall passes its annual safety and certification inspection
- Focus activities on achieving a 100% compliance with safety and certification requirements
- Comply with FAA Runway Safety Area standards by December 2015 (\$301.1 million programmed in the FY2013–FY2018 CTP for Runway Safety Area / Pavement Management Program improvements)

- Continue the Roll on Roll off Cargo (RoRo) Quality Cargo Handling Action Team (QCHAT) to make improvements for all parties
- Develop new Dundalk gate procedures to increase volumes of privately-owned vehicles (POVs) as it relates to Transportation Worker Identification Credential (TWIC) escorts
- Construct new cargo gate using proven technologies for South Locust Point to improve security, capacity and processing times
- Complete construction of capital projects to improve security at State-owned terminals to include Security Emergency Operations Center, Access Control Center, Vehicle Inspection Stations and Security Booths (\$12.4 million for the Terminal Security Program in the FY2013– FY2018 CTP)



# GOAL: 😢

# System Preservation & Performance

# Objectives

- Preserve and maintain the existing transportation network
- Maximize operational performance and efficiency of existing systems

Maryland's existing transportation infrastructure was developed through the cumulative investments of generations of taxpayers. The transportation network provides for the mobility of people and goods and is indispensable to the state's economy. Maryland prioritizes investments that extend the useful life of existing transportation system facilities. Preserving and maintaining the multimodal transportation network is one of the State's highest priorities as evidenced by the \$928 million MDOT will provide for system preservation projects and programs in FY2013.

The SHA and the MDTA continue to place special emphasis on improving the condition of bridges, a special area of focus for the State. Both agencies manage aggressive programs to keep bridges safe and are rehabilitating and/or replacing structurally deficient bridges throughout Maryland. Major bridges as well as many other smaller, yet critically important bridges across the state are planned to undergo preservation and maintenance activities in the FY2013–FY2018 Consolidated Transportation Program (CTP).

With growth in traffic volumes outpacing the ability to expand capacity through construction of new highway lanes, Maryland is continuing to find ways to get more out of the existing transportation system. MDOT's transportation agencies continue to implement operations strategies and deploy Intelligent Transportation System (ITS) technologies to improve system efficiency. For example, SHA's Coordinated Highways Action Response Team (CHART) is investing \$98.5 million in the FY2013–FY2018 CTP to improve the provision of real-time traffic and incident information to travelers and to reduce incident response times. MTA is aggressively rehabilitating both Baltimore Metro and Light Rail vehicles to improve performance reliability and enhance customer comfort.



# **Key Initiatives**

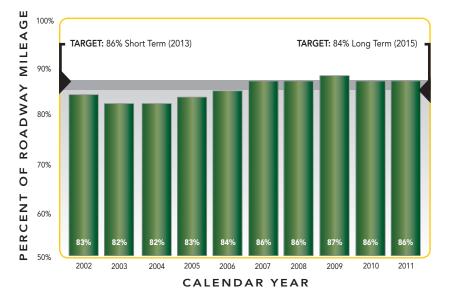
- **MDOT:** Continue to facilitate the award and implementation tracking of federal and state grant funding allocations to improve and maintain various multimodal transportation assets throughout the state.
- **MAA:** Continue to undertake a major airfield improvement program to preserve existing airfield capacity at BWI Marshall by addressing pavement rehabilitation needs and new Federal Aviation Administration (FAA) runway safety area standards.
- **MPA:** Continue to position the Port of Baltimore as the preferred destination on the Mid-Atlantic Coast for the largest container ships in this market, including the recent completion of the 50-foot deep berth at Seagirt Marine Terminal and addition of four Super-Post Panamax cranes.
- **MDTA:** Continue to fund and schedule completion of high-priority system preservation projects and expand the current system preservation program to include preventative maintenance activities which will prolong the life of the existing infrastructure.
- **MTA:** Continue system maintenance of Light Rail grade crossings and Baltimore Metro track infrastructure repairs to maintain safe, reliable operation.
- **MVA:** Continue to invest in information technology, including the Project Core enterprise system which will modernize, standardize and integrate core MVA business systems, and the Alternative Service Delivery (ASD) systems, to maintain cost-efficiencies.
- **SHA:** Continue programs to reduce the number of SHA-owned bridges that are structurally deficient through intensive maintenance, repair and rehabilitation efforts, and maintain the percent of bridges on the SHA portion of the National Highway System (NHS) that will allow all legally loaded vehicles to safely traverse. By April 2012, SHA had reduced the total number of SHA-owned structurally deficient bridges to 97 total, 42 of those on the NHS, out of 2,578 statewide (1,182 along the NHS).

# **Performance Measures**

MONITORING AGENCY	PERFORMANCE MEASURE	PAGE
МАА	Airline cost per enplaned passenger (CPE)	32
МАА	Non-airline revenue per enplaned passenger (RPE)	32
MPA	Adequate dredge material placement capacity remaining for Harbor and Bay maintenance and new work dredging	33
MPA	Revenue versus operating expense	34
МТА	Operating cost per passenger trip	29
MTA	Operating cost per revenue vehicle mile	30
MTA	Passengers per revenue vehicle mile	28
MVA	Cost per transaction	31
MVA	Alternative service delivery transactions as percent of total transactions	31
SHA	User cost savings for the traveling public due to incident management	27
SHA & MDTA	Percent of roadway miles with acceptable ride quality	26
SHA & MDTA	Number of bridges and percent that are structurally deficient	26

# SHA & MDTA: Percent of Roadway Miles with Acceptable Ride Quality

The traveling public has identified acceptable ride quality (i.e., the smoothness or roughness of the pavement) as a priority. Ride quality facilitates mobility, efficiency and safe movement of people and goods within Maryland.



# SHA & MDTA: Number of Bridges and Percent That Are Structurally Deficient

The structurally deficient rating is an early warning sign for engineers to initiate the rehabilitation or replacement process and to use when prioritizing and recommending system preservation funding. The rating applies to three main elements of a bridge: 1) deck (riding surface); 2) superstructure (main supporting element of the deck); and 3) substructure (supports to hold up the superstructure and deck). These elements are rated on a scale from zero (closed to traffic) to nine (relatively new). If any of the three elements is rated as a four or less, the bridge is categorized as structurally deficient by Federal standards. This does not mean that the bridge is unsafe; if a bridge becomes unsafe, it is closed.

CALENDAR YEAR	2006	2007	2008	2009	2010	2011	2012
Number deficient	145	132	133	117	111	110	101
Percent deficient	5.2%	4.7%	4.7%	4.1%	3.9%	3.9%	3.5%

### TARGET: 105 total bridges by 2013



### Why Did Performance Change?

- Overhauled and enhanced the MDTA inspection program to better identify, report and address inspection findings and continued implementation of the comprehensive Facility Inspection Program Strategic Plan
- Implemented integrated facility management software and a comprehensive inspection manual specific to MDTA
- Significantly increased the use of pavement preservation treatments compared to previous years
- Continued identification of cost-effective projects on high-demand highways

### What Are Future Performance Strategies?

- Expand the current system preservation program to include preventative maintenance activities which will prolong the life of the existing infrastructure
- Continue to fund and schedule completion of highpriority system preservation projects
- Target low-friction locations
- Continue to expand use of recycled materials such as concrete and asphalt in roadway projects in a responsible manner and increase the use of more durable materials in high demand highways
- Continue to implement FHWA and SHA pavement preservation programs that will strategically utilize system preservation activities

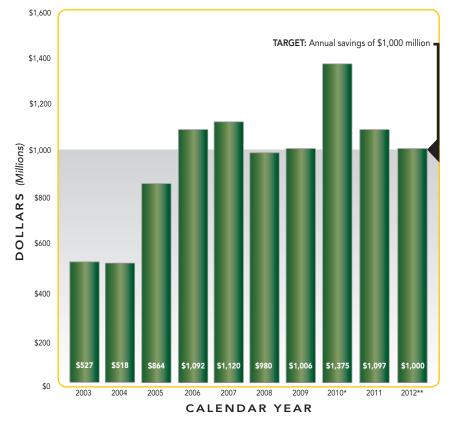
### Why Did Performance Change?

- SHA continued an aggressive bridge maintenance and rehabilitation program which keeps up to 12 construction crews working full time, year-round
- Addressed bridges that were deficient and minimized the number of bridges that may become deficient
- Created plans to replace deficient structures that cannot be corrected by remedial work
- Efficiently utilized all bridge funding received in a timely manner
- MDTA implemented an aggressive system preservation and maintenance inspection program

- Commence engineering activities on structurally deficient bridges or potential structurally deficient candidates, to build an inventory of contract documents for shovel-ready projects, which can take advantage of additional funding
- Perform immediate inspections and structural evaluations on water crossings after significant storm events
- Program over \$228 million in funding (FY2013–FY2018 CTP) to maintain and repair bridges on MDTA- operated facilities throughout Maryland
- Expand the current system preservation program to include preventative maintenance activities
- Continue to fund and schedule completion of high-priority system preservation projects, such as underwater repairs at Hatem and Tydings Bridges, multi-facility structural steel painting projects and cable rewrapping and dehumidification on the Bay Bridge
- Continue to fund, design and perform high-priority structural repairs based on annual inspection report findings

# SHA: User Cost Savings for the Traveling Public Due to Incident Management

The total user cost savings to motorists and commercial traffic (from reduced delay) reflects the tangible benefits of the CHART incident management program.



### TARGET: \$1,000 million for 2013.

\* 2010 data point was revised from the 2012 Report.

\*\* 2012 data is estimated.

### Why Did Performance Change?

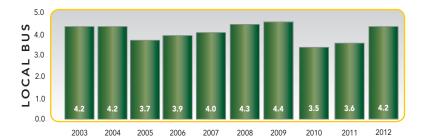
- Helped reduce delay by an estimated 33.56 million vehicle-hours
- Deployed 12 new Closed Circuit TV (CCTV) cameras, bringing the statewide total to 155
- Responded to and cleared more than 17,000 incidents and assisted more than 27,000 stranded motorists
- Increased camera video feed interoperability with other regional agencies to allow for access to more than 600 camera sites in Maryland
- Completed several enhancements to the Maryland 511 traveler information system, including drive time calculations, email/text alerts and arterial traffic flow reports for the Eastern Shore
- Added four new patrols on highways as a result of CHART's partnership with State Farm Insurance Company

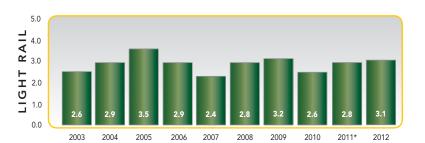
- Expand the CHART patrol coverage to reduce roadway delays and achieve additional user cost savings
- Explore cost-effective uses of limited resources through local, regional and State incident management coordination and collaboration
- Continue to explore agency partnerships for the sharing of camera information
- Provide dynamic message boards to aid in the reduction of travel time, reduce congestion and provide critical information for the traveling public (\$8.0 million programmed through FY2013 in the FY2013–FY2018 CTP)

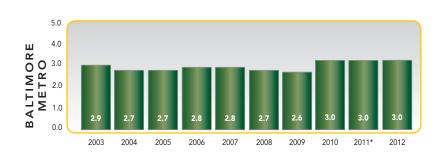


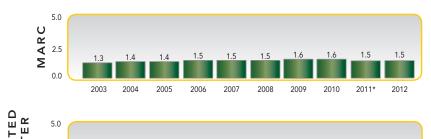
# **MTA: Passengers Per Revenue Vehicle Mile**

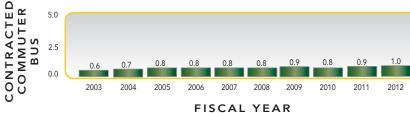
Passengers per revenue vehicle mile, or service productivity, is a function of the frequency of service and total ridership, which are typically related. Growth in service productivity may be restricted on certain modes by existing and planned service levels and capacity. Revenue vehicle miles are the miles traveled by transit vehicles while carrying paying passengers. Miles traveled to the first pick-up point, for example, are not considered to be in revenue service.









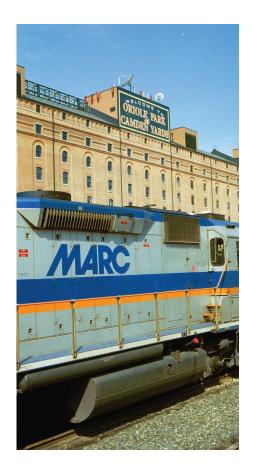


\*2011 data points were revised from the 2012 Report for Light Rail, Baltimore Metro and MARC.

### Why Did Performance Change?

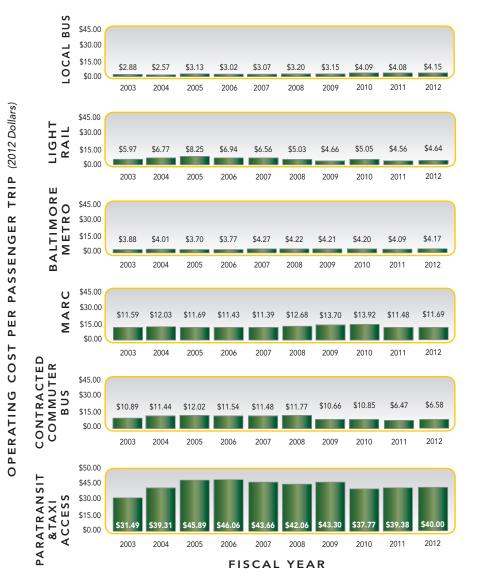
- More passengers are utilizing available transit services as ridership continues to increase, thereby increasing the number of riders served for every mile of bus service
- Modified scheduled transit service to increase capacity in high-demand areas
- Purchased higher-capacity vehicles, including articulated buses and bi-level MARC cars
- Continued efforts of the Bus Service Allocation Taskforce to determine patterns in Local Bus ridership and re-allocated or increased service to meet those demands
- Passengers per mile has increased on Local Bus by 17% in FY2012 and ridership growth on Commuter Bus made significant progress with close to 200,000 additional passenger trips

- Continue to modify scheduled transit service to increase capacity in high-demand areas
- Continue purchases of higher-capacity vehicles, including articulated buses and bi-level MARC cars
- Continue efforts of the Bus Service Allocation Taskforce to determine patterns in Local Bus ridership and re-allocate or increase service to meet those demands
- Expand capacity on the MARC system through the procurement of new rail cars (\$153 million programmed in FY2013—FY2018 CTP to procure new rail cars and rehab existing rail cars)



# MTA: Operating Cost Per Passenger Trip

Together, the operating cost per passenger trip and operating cost per revenue vehicle mile are key industry performance measures and show MTA's ability to effectively and efficiently provide service to passengers on various modes of travel.



### Why Did Performance Change?

- Cost per trip increased by 1.8% (or \$0.10 per trip) due to rising fuel costs, contract increases, general inflation and labor agreements
- Local Bus continues to be MTA's most efficient way to move passengers, with cost growth well in line or below historical trends
- Light Rail's cost per trip this year was higher than last, the costs are still well within or below historical trends
- Controlled system costs while maintaining high levels of service quality
- Aggressively managed and audited of contracted service providers to ensure 100% accuracy in invoices and claims
- MARC and Commuter Bus cost per trip increased this year, but increasing ridership and better contractual management have minimized cost growth, which stayed below historical levels

#### What Are Future Performance Strategies?

- Continue efforts to control system costs while maintaining high levels of service quality
- Continue aggressive management and auditing of contracted service providers to ensure 100% accuracy in invoices and claims
- Provide maximum transit capacity possible in areas with the highest demand potential to provide increased passenger trips without major system expansions

TARGET: Cost per passenger for Local Bus, Baltimore Metro and Light Rail to increase at a rate no higher than the Consumer Price Index (CPI)\*

\* The CPI provides information about price changes in the national economy.



#### \$30.00 LOCAL BUS \$20.00 \$10.00 \$14.74 14.12 \$12.27 \$0.00 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 \$30.00 LIGHT RAIL \$20.00 \$10.00 \$12.82 \$0.00 2003 2004 2005 2006 2010 2011 2012 2007 2008 2009 ш \$30.00 BALTIMOR METRO \$20.00 \$10.00 \$10.1: \$11 \$0.00 2003 2004 2005 2007 2008 2009 2010 2011 2012 2006 \$30.00 MARC \$20.00 \$10.00 \$15.3 \$17.8 \$19.5 \$0.00 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 CONTRACTED COMMUTER BUS \$30.00 \$20.00 \$10.00 \$0.00 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 **PARATRANSIT** \$30.00 &TAXI ACCESS \$20.00

### **MTA: Operating Cost Per Revenue Vehicle Mile**

TARGET: Cost per passenger for Local Bus, Baltimore Metro and Light Rail to increase at a rate no higher than the Consumer Price Index (CPI)\* CPI provides information about price changes in the national economy

2006

\$6.20

2005

\$5.83

2004

\$4 48

2003

\$10.00

\$0.00

\$5.38

2009

\$5.15

2008

FISCAL YEAR

\$5.10

2007

\$5.39

2010

\$5.98

2011

\$6.08

2012

ALL NEW JUNES TK

### Why Did Performance Change?

- Cost per mile increased by 1.8% (about \$0.21) compared to FY2011
- Operating cost increases were mainly driven by fuel, contract increases, general inflation and labor agreements
- This rate of growth matches historical trends

### What Are Future Performance Strategies?

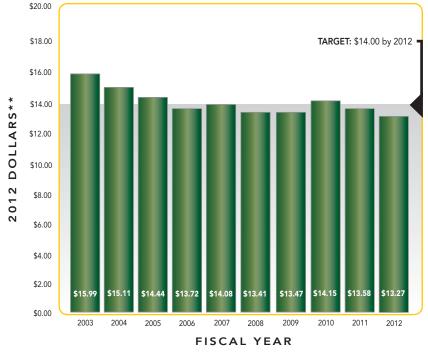
- Continue efforts to control system costs while maintaining high levels of service quality
- Continue aggressive management and auditing of contracted service providers to ensure 100% accuracy in invoices and claims
- Provide maximum transit capacity possible in areas • of highest demand potential in order to provide increased passenger trips without major system expansions



30

# **MVA: MVA Cost Per Transaction\***

Cost per transaction is an indication of whether MVA business practices and programs are increasingly cost-effective through the employment of better technology and operational practices.

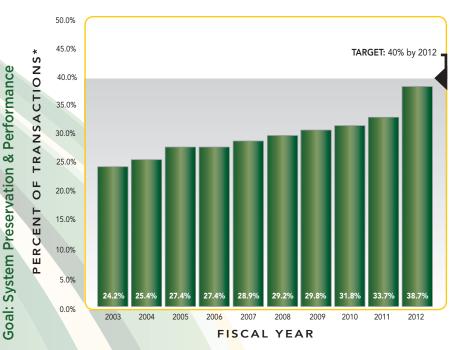


\*Includes all transactions (e.g. licensing, registration, titling).

\*\* The historical cost per transaction data are adjusted for inflation

# MVA: Alternative Service Delivery (ASD) Transactions as Percent of Total Transactions

Alternative services offer the ability to provide fast and convenient service delivery to the MVA customer. These transactions do not involve a walk-in interaction and require development of new information technology systems and changes in customer behavior, which may be offset by new legislation and programs that require a walk-in transaction.



### • MVA provides services for other agencies (e.g., central

collection unit, *E-ZPass*<sup>®</sup> sales, organ donor program, child support enforcement, insurance enforcement, voter registration, warrants and flags)

Why Did Performance Change?

- Increase in information technology investments and facility infrastructure
- Vehicle Emissions Inspection Program (VEIP) is now fully operational with the cost per transaction reduced to just over \$13
- Number of transactions is growing slowly while budgets remain relatively unchanged, leading to a small decrease in cost per transaction

### What Are Future Performance Strategies?

- Continue to implement a new Strategic Business Plan, which highlights measures for attaining process efficiencies and managing costs
- Revise the Long Range Plan that highlights visions and goals for a future MVA that is more customer-oriented, efficient and technically advanced to meet the needs of MVA customers

### Why Did Performance Change?

 Continued to identify and offer new ASD options, including self-service kiosks, central scheduling, email collection, website re-design, and creative marketing, increasing customer usage from 33.7% in FY2011 to 38.7% in FY2012

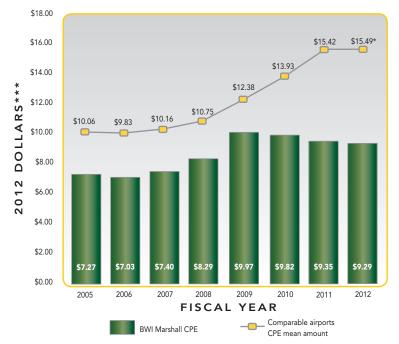
- Send vehicle registration renewal notices to customers by email to reduce mailing costs, improve efficiency and enhance customer convenience
- Continue to promote and implement ASD services, encouraging Identification (ID) card and driver's license renewals (for individuals less than 40 years of age) by mail, kiosks and web
- Continue redesigning the MVA website to improve customer service



System Preservation & Performance

#### MAA: Airline Cost Per Enplaned Passenger (CPE)

Airline cost and non-airline revenue measures allow BWI Marshall to remain competitive in a region that is unique because it has four proximate airports.



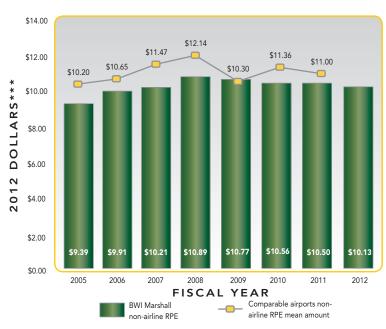
# TARGET: BWI Marshall CPE below the mean CPE of comparable airports\*\*

\*2012 comparable airports CPE mean amount is preliminary.

\*\* Comparable airports are defined as Washington Reagan National, Washington Dulles International and Philadelphia International.

\*\*\* The cost per passenger data are adjusted for inflation.

#### MAA: Non-Airline Revenue Per Enplaned Passenger (RPE)\*



TARGET: BWI Marshall non-airline RPE to be at or above the mean of comparable airports\*\*

\* RPE is based on non-airline revenue (e.g., parking, concessions and ground transportation). \*\* Comparable airports are defined as Washington Reagan National, Washington Dulles International and Philadelphia International. 2012 data is not available for Comparable airports. \*\*\* The cost per passenger data are adjusted for inflation.

#### Why Did Performance Change?

- The CPE at BWI Marshall continues to be the lowest in the mid-Atlantic region and be well below the mean of comparable airports
- BWI Marshall continues to compare favorably with its peer airports on non-airline revenue per enplaned passenger (RPE)

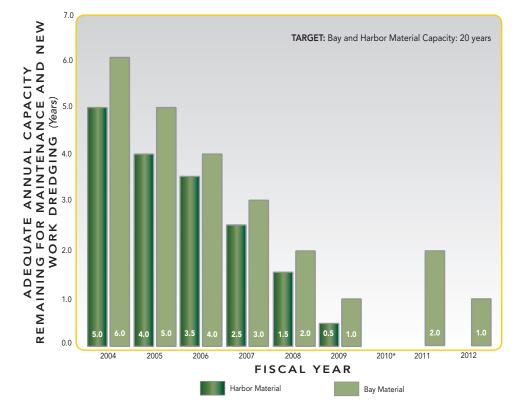
- Continue strategies to increase parking revenues
- Continue to closely monitor all airport costs to keep BWI Marshall rates competitive with other regional airports
- Continue to review the cost effectiveness of capital projects before moving forward with design and construction
- Enhance the existing retail, food and beverage concession in terminals by adding recognized local and new national concepts





#### MPA: Adequate Dredge Material Placement Capacity Remaining for Harbor and Bay Maintenance and New Work Dredging

MPA is responsible for obtaining dredged material placement sites.



\*Adequate capacity did not exist for both maintenance and new projects without overloading placement in FY2010.



#### Why Did Performance Change?

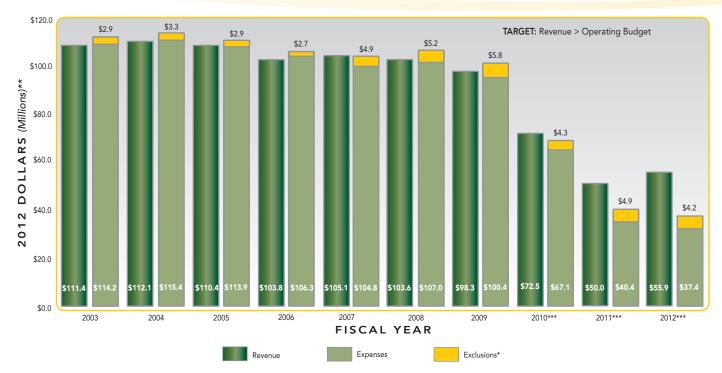
- Capacity at placement sites is being consumed faster than new capacity can be brought online. In 2012, only maintenance dredging of Harbor channels can be accommodated without overloading existing placement sites. New dredging work for channel improvement in the Harbor is not being considered at this time
- On average, there is 1.0 million cubic yards (mcy)/year of Harbor maintenance dredging and 0.5 mcy/year of new work dredging in the Harbor to make improvements to the channel system
- Supported Maryland's Dredged Material Management Program and the U.S. Army Corps of Engineers' Mid-Chesapeake Bay Island feasibility studies
- Maintained efforts to ensure deep channel access to the Port

- Continue to develop and package appropriate communications materials (e.g. hand-outs, fact sheets, talking points) for public dissemination to help illustrate the prioritization process and ultimate recommendations for placement sites and options
- Work with the U.S. Army Corps of Engineers and elected officials to ensure the Chesapeake & Delaware (C&D) Canal is properly maintained to the authorized depth
- Continue with a strategic communication plan for the dredge material placement process
- Assist, where possible, to reactivate placement sites at Courthouse Point and Peace Creek to provide additional capacity
- Continue to evaluate innovative reuse of dredge material
- The FY2013-2018 CTP includes \$427 million to implement the Governor's Strategic Plan for Dredge Material Management, which will help maintain shipping channels
- Continue process to resolve scheduling, legal and community enhancement issues for potential Harbor placement option, i.e. Coke Point Dredged Material Containment Facility (DMCF)

Dredging took place in the Inner Harbor to prepare for the War of 1812 Bicentennial celebration

#### **MPA: Revenue Versus Operating Expense**

Revenues are an important measure of business activity at the MPA terminals. MPA's operating expenses are recovered by revenues generated.



\* Exclusions include: MDTA lease payments for Masonville terminal, Certificate of Participation (COPs) for M-real facility and MPA operating costs for new/replacement equipment.

\*\* The revenue and operating data is adjusted for inflation.

\*\*\*Revenues and Expenses dropped in FY2010 and later due to the public-private partnership agreement with Ports America Chesapeake, in which the MPA no longer operates Seagirt Marine Terminal.

#### Why Did Performance Change?

- The MPA nearly doubled its net operating income of \$18.5 million for FY2012 which included a one-time payment of \$5.7 million from a customer whose lease ended without fulfilling their minimum guarantee
- MPA's billable cargo tonnage exceeded prior fiscal year volumes by 10%, as well as FY2012's budgeted expectations
- Cruise ship passenger volumes exceeded projected expectations for FY2012 with 484,750 passengers sailing on 106 cruises
- The MPA won an advertising award in the American Association of Port Authorities (AAPA) Communications Awards Program for an ad that highlighted the construction of a new 50-foot deep container berth and the installation of four super post panama cranes
- MPA successfully controlled operating expenditures and maximized revenues throughout FY2012

- Attract and retain sufficient cargo volumes to provide future revenue growth
- Continue to improve MPA financial systems and reporting techniques
- Maintain efficient and effective contract management and internal project delivery
- Continue efforts to increase World Trade Center occupancy
- Continue to develop business synergies with public-private partner, Ports America Chesapeake, to maximize container volumes through Seagirt Marine Terminal
- Continue promoting the Port as a convenient location for year-round cruising
- Continue the partnership with existing cruise lines and develop new opportunities for additional cruise lines to come to Baltimore



# GOAL: () Environmental Stewardship

#### **Objectives**

- Coordinate land use and transportation planning to better promote Smart Growth
- Preserve and enhance Maryland's natural, community and historic resources
- Support initiatives that further our commitments to environmental quality

Maryland's transportation agencies organize internal operation through environmental and energy management systems and prioritize investments to promote good stewardship of Maryland's environment while keeping our people and our economy moving. Approaches include using recycled materials in construction, actively managing stormwater from transportation facilities, and offering incentives for truck fleet owners to replace older, more polluting vehicles.

MDOT is a critical partner with all State agencies in implementing strategies that will reduce pollutant loads in all waters that drain to the Chesapeake Bay. MDOT is working with SHA and MDTA to implement planning processes, develop design criteria, and construct stormwater controls and alternative water quality improvement strategies in order to meet the U.S. Environmental Protection Agency's (U.S. EPA) Chesapeake Bay Total Maximum Daily Load (TMDL) requirements by the year 2025.

MDOT is an implementation partner in Governor O'Malley's *Smart, Green & Growing* initiative. MDOT plays an important role in shaping and implementing many key *Smart, Green & Growing* initiatives, from promoting more compact development including Transit-Oriented Development (TOD), to enhancing transit and bike and pedestrian facilities, and providing improved opportunities for ridesharing, teleworking, and other commuter options. MDOT also plays a key role in the State's mitigation of greenhouse gas (GHG) emissions and response to the threats of global climate change in developing the Maryland Climate Action Plan.

MTA is continuing to replace its bus fleet with diesel-hybrid vehicles that will reduce overall fuel consumption and emissions. MPA and MAA both have environmental management systems in place to help achieve full compliance with environmental regulations. MDOT is working with multiple State agencies and private stakeholders through the Electric Vehicle Infrastructure Council to develop a plan to place Maryland in an ideal position to become a strong market for electric vehicles. MVA's Vehicle Emissions Inspection Program (VEIP), conducts regular vehicle emissions inspections and educates Marylanders on maintaining our vehicles for clean air, public health and improved water quality in the Chesapeake Bay.

#### **Performance Measures**

MONITORING AGENCY	PERFORMANCE MEASURE	PAGE
MDOT	Transportation-related emissions by region	38
MDOT	Transportation-related greenhouse gas emissions	39
MDOT & MTA	Transportation Emission Reduction Measures (TERMs)	42
МРА	Acres of wetlands or wildlife habitat created, restored, or improved since 2000	37
MVA	Compliance rate and number of vehicles tested for Vehicle Emissions Inspection Program (VEIP) versus customer wait time	38
SHA	Acres of wetlands restored and miles of streams restored	37
SHA	Total fuel usage of the light fleet	40
SHA & MTA	Travel Demand Management	40-41



#### **Key Initiatives**

- **MDOT:** *Smart, Green & Growing.* Implement the Bikeways Program and Bikeshare Program to facilitate bicycling as a transportation option in support of *Cycle Maryland* and the *Smart, Green & Growing* initiative.
  - Chesapeake Bay Restoration: Facilitate MDOT Modal Administration and Authority information sharing on processes and strategies for managing stormwater runoff from all MDOT infrastructure to help meet the Chesapeake Bay pollution budget.
  - Improve Air Quality: Participate in multi-state discussions on developing a regional network of electric vehicle charging stations and continue to work with the Maryland Energy Administration and the Electric Vehicle Infrastructure Council to plan for and fund the deployment of charging stations.
- MAA: The Maryland Environmental Noise Act: Provides for the protection of citizens from the impact of transportation-related noise. The aviation portion of the Act requires the MAA to adopt an Airport Noise Zone (ANZ) and Noise Abatement Plan to identify and try to reduce impacted land use areas around the airport. This is achieved by MAA controlling the development of property inside the ANZ and prohibiting incompatible land uses such as homes, schools nursing homes, etc. The Noise Abatement Plan establishes arrival and departure procedures aimed to reduce impacted land use areas around the airport.
  - The Voluntary Residential Property Acquisition Program which facilitates the purchase of noise impacted residential properties, and the Homeowner Assistance Programs, which funds noise mitigation projects for residents, are both part of the Federal Aviation Regulation Part 150 Program and are 80% federally-funded.
  - Stormwater Best Management Practices (BMPs): MAA continues to focus on stormwater management through the implementation of the Maryland Department of the Environment's Stormwater Regulations of 2009 (Maryland Stormwater Act of 2007) for both airport and tenant projects at BWI Marshall.
- MPA: Air Quality: Enhanced the Mid-Atlantic Dray Truck Replacement Program, providing \$20,000 each toward the cost of a newer dray truck that meets or exceeds the 2007 U.S. EPA certified engine emission standard.
  - Air Quality: Installed four container cranes, which can lift 187,300 pounds of cargo and are fully electric, emitting no diesel emissions.
- MTA: Air Quality: Increased the number of hybrid diesel electric buses in the MTA fleet with the purchase of 57 new buses. Once purchased, 40% of the bus fleet will be hybrid diesel electric buses. In the FY2013-FY2018 Consolidated Transportation Plan (CTP), 63 new hybrid buses are planned for purchase in FY2013.
  - Air Quality: Created three new commuter bus routes to offer a total of five routes along the Intercounty Connector (ICC) corridor, providing Maryland residents with an alternative to driving. The commuter buses provide access to jobs while reducing gasoline consumption and negative impacts on the environment.
  - Energy Consumption: In 2011 a massive project to replace electric fixtures and bulbs with greener, more energy-efficient components was undertaken in 54 different MTA locations. MTA continues to upgrade lighting throughout the system, resulting in anticipated energy savings of over \$434,000 per year.

- **MDTA:** Manage Stormwater BMPs by inventorying all practices, such as early coordination on inventory of BMPs from mega projects like the ICC and I-95 Section 100 Express Toll Lanes (ETLs) as well as upcoming Chesapeake Bay restoration retrofits.
  - Maintain Recycling Programs: The combined efforts of MDTA office staff and maintenance/automotive personnel have resulted in the recycling of 1,212.03 tons of materials in CY2011.
  - Chesapeake Bay Restoration: To address EPA's Bay Restoration goals, MDTA is completing and refining an inventory of impervious areas, investigating innovative approaches to implement stormwater retrofits, and designing and constructing stormwater retrofits along MDTA highways.
  - Environmental Management: MDTA continues the development of environmental Standard Operating Procedures for the Division of Operations to ensure that environmental issues are managed in a consistent and cost effective manner throughout the MDTA.
  - Energy Management: MVA participated in an independent energy audit that established a baseline of energy consumption at MVA facilities and identified new innovative ideas for energy management.
  - Environmental Management: MVA is implementing a Compliance Focused Environmental Management System (CFEMS) to better incorporate environmental considerations into business practices (by 2016).
  - Improve Air Quality: MVA is continuing to enhance the provision of Internet-based services to avoid unnecessary vehicle trips. MVA is also developing new technologies and services to facilitate vehicle emissions testing as well as new regulations to ensure compliance with State emissions testing mandates.
  - MVA Facilities Maintenance and Engineering (FME) has taken an aggressive approach of reducing its energy, fuel and water consumption while simultaneously reducing MVA's carbon footprint by utilizing various devices such as T5 light fixtures, low water flush toilets, solar light pole, installation of sensor flush values, sensor / motion wall and ceiling mounted occupancy sensors, Variable Frequency Drives (VFD'S), high efficiency motors, fans, and pumps, installation of compact florescent lights (CFL's), and installation of LED exit signs, light and bulbs fixtures.
  - Chesapeake Bay Restoration: SHA made significant progress towards the 2013 milestone established in the Watershed Implementation Plan by meeting all interim pollutant reduction goals established for FY2012. SHA continues to develop effective strategies and seek implementation project opportunities that extend the resources required to meet the 2013 milestone goals.
  - Recycled Materials: SHA continues to partner with industry and environmental agencies to maintain quality and safety while increasing the use of recycled materials in highway construction. In CY2011, 30,109 tons of reclaimed concrete aggregate were used to replace virgin aggregate, and 13% of all hot mix pavement placed on State roadways was recycled asphalt pavement.
  - Tree Planting: SHA continues to be a key partner in Maryland's tree planting initiative and is involved in the American Chestnut Tree Restoration project, located in Carroll County, and the Partnership Planting Program where SHA helps volunteers find safe locations along roadways to plant trees. Each year, SHA undertakes tree planting programs along highway medians, grassy areas, or interchanges throughout the state.

#### SHA: Acres of Wetlands Restored and Miles of Streams Restored

SHA's wetland and stream restoration activities have exceeded regulatory requirements. These wetland and stream restoration activities help compensate for prior damage to these sensitive ecosystems, caused in part by roadway construction. Wetland and stream restoration is also a key stormwater runoff management strategy, helping to improve the water quality of our rivers, lakes and bays without the installation of costly treatment infrastructure. SHA's ongoing wetland and stream restoration efforts will now focus on Chesapeake Bay water quality needs.

#### Why Did Performance Change?

- Completed the final 34.6 acres of stewardship wetlands creation by the close of FY2012, thereby meeting SHA's 200 acres goal
- A total of 5.7 miles of stream restoration was completed by the close of FY2011 to exceed SHA's environmental stewardship goal of five miles
- New regulations for the restoration of Chesapeake Bay ensure all resources are being devoted to compliance goals for TMDL standards

#### What Are Future Performance Strategies?

- Support restoration of the Chesapeake Bay and compliance with TMDL standards (\$138.2 million in the FY2013–FY2018 CTP for planning, design, and construction of stormwater controls and alternative water quality improvement strategies)
- As resources allow, SHA will continue to look for opportunities to enhance the environment through cost-effective solutions
- Continue to provide environmental stewardship by supporting communitybased landscape enhancement projects and tree planting through its Partnership Planting Program

#### MPA: Acres of Wetlands or Wildlife Habitat Created, Restored, or Improved Since 2000\*

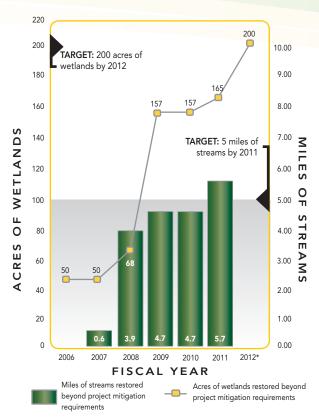
MPA is in compliance with the various permits that are granted to construct projects needed for MPA customers (e.g., landside tenants or steamship lines).

#### Why Did Performance Change?

• Mitigation activities in FY2012 were directed toward schoolyard greening instead of undertaking new wildlife habitat improvements

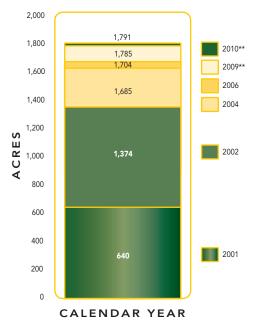
#### What Are Future Performance Strategies?

- Create and improve wildlife habitat to conform to permit requirements for construction projects requiring mitigation
- Continue Masonville eastern and peninsula uplands environmental improvement projects, which are noteworthy examples of coordinating with neighboring communities' needs which allows MPA to maintain its social license to operate
- Continue efforts to restore the Hart-Miller Island North Cell and develop Poplar Island Expansion



\* Streams goal achieved in 2011.





**TARGET:** Mitigate projects as required by Federal, State and local statutes

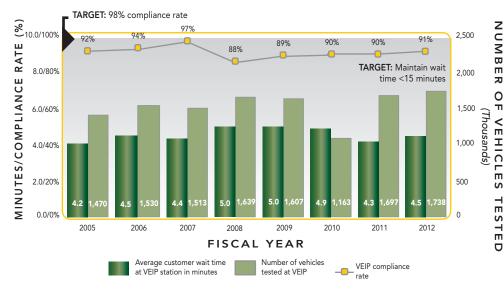
\* Represents cumulative mitigation efforts by MPA. New data not available for this chart in FY2011 or FY2012 per the performance bullet.

\*\* Data were revised from 2012 Report.

# Goal: Environmental Stewardship

#### MVA: Compliance Rate and Number of Vehicles Tested for Vehicle Emissions Inspection Program (VEIP) Versus Customer Wait Time\*

Monitoring the VEIP testing compliance rate ensures system effectiveness and identifies vehicles exceeding allowable standards. Tracking the average wait time at VEIP stations ensures that the 15-minute average wait time requirement is met. Timely and efficient customer service helps the State meet Federal clean air standards by identifying polluting vehicles and encouraging regular vehicle maintenance.



\* 14 counties offer VEIP tests: Anne Arundel, Baltimore, Baltimore City, Carroll, Harford, Howard, Queen Anne's, Cecil, Washington, Calvert, Charles, Frederick, Montgomery and Prince George's.

# MDOT: Transportation-Related Emissions by Region\*

Reducing vehicle emissions improves air quality in compliance with Federal regulations and provides health benefits for Maryland residents.

PERFORMANCE	REGION	CALEND	% CHANGE		
MEASURE	REGION	2002	2008	2011***	2002-2011
Volatile Organic	Baltimore	78.2	50.1	45.3	-42%
Compound (VOC) Tons per Day	Washington**	73.4	42.8	40.0	-46%
Nitrogen Oxide (NOx) Tons per Day	Baltimore	209.4	125.7	116.7	-44%
	Washington**	175.1	102.2	103.0	-41%
Carbon Monoxide	Baltimore	1,243.5	844.3	699.9	-44%
(CO) Tons per Day	Washington**	1,085.4	666.0	575.1	-47%
Particulate Matter	Baltimore	8.1	5.8	5.6	-31%
(PM) Tons per Day	Washington**	6.3	4.4	4.7	-25%

\* Emissions calculated using EPAs MOVES2010a model.

\*\* All Washington data represents Maryland's share of emissions in the Washington region non-attainment area, including Charles, Frederick, Montgomery and Prince Georges counties.

\*\*\* CY2011 emissions data is preliminary. Final data will be published by EPA in mid-2013.

#### Why Did Performance Change?

- In FY2012, customers waited an average of only 4.5 minutes, well below MVA's target threshold of 15 minutes
- Vehicle inspections increased by 41,550 in FY2012 (2.4% above FY2011)
- The VEIP compliance rate for FY2012 increased slightly to 91% compared to the FY2011 rate of 90%

# What Are Future Performance Strategies?

- Actively research new technologies and services to facilitate vehicle emissions testing
- In partnership with the MD Department of the Environment (MDE), continue to develop strategies, policies, and regulations to ensure compliance with State emissions testing mandates and Federal clean air standards
- Progressively monitor registered vehicles in eligible (non-attainment) counties to ensure testing compliance
- Continue to monitor wait times and implement process/procedure changes where necessary to maintain current wait time levels
- Plan, design and implement an enhanced technical platform that will allow for the full integration of Local Business services and processes thus providing the customer with more efficient access to MVA driver and vehicle services and products

- Promote mobile source emission reduction efforts including support of Transportation Emission Reduction Measures (MDOT supports the reduction of emissions through congestion mitigation, ridesharing and commuter incentive programs in the FY2013–FY2018 CTP with \$26 million in dedicated funding)
- Implement the Baltimore Regional Transportation Board (BRTB) and the Metropolitan Washington Council of Governments (MWCOG) Transportation Planning Board (TPB) 25-year long-range transportation plans, which meet Clean Air Act requirements confirming that the plan does not worsen the region's air quality or delay the attainment of Federal air quality standards
- Continue to replace older diesel buses in the MTA bus fleet, with the goal of ensuring that 100% of the MTA fleet are hybrid buses
- Continue overhauls and replacements of MARC locomotives ensuring that all locomotives meet EPA air quality emissions standards

#### MDOT: Transportation-Related Greenhouse Gas Emissions

A reduction in the growth of overall Vehicle Miles of Travel (VMT) is one of several strategies that MDOT is pursuing to address climate change through mitigation of GHG emissions. Reducing VMT through providing transportation alternatives has other potential benefits to Marylanders, such as reduced congestion, reduced travel costs and improved travel time reliability. Other strategies include providing alternatives to SOV travel and transitioning to a less carbon intensive vehicle fleet and lower carbon fuels.

#### **MDOT Climate Change Planning**

MDOT and its modal agencies are continuing to refine GHG reduction strategies through development of the Maryland Climate Action Plan, as required by the Greenhouse Gas Reduction Act (GGRA) of 2009. These strategies are documented in the MDOT 2012 Implementation Plan, released in April 2011, and the 2011 GGRA Plan, released in June 2012.

MDOT's planning activities for the transportation sector have resulted in the following findings:

- In 2006, the transportation sector, including emissions from all on-road and offroad sources represents 33% of GHG emissions in Maryland (equaling 35.5 million metric tons (mmt))\*
- MDOT programs included in the CTP and in MPO long-range transportation plans will achieve a 7% reduction in GHG emissions in 2020. Approximately 50% of the expenditures planned in the CTP provide GHG emission benefits
- The combination of GHG-reduction strategies focusing on clean fuels and Federal fuel economy standards, including the 2017-2025 Fuel Efficiency standard finalized by the Obama Administration in August 2012, will result in a 21% reduction in GHG emissions in 2020
- MDOT programs plus the GHG reduction from clean fuels and Federal fuel economy standards in total reduce emissions by 11.7 mmt, a reduction of 8% from 2006 emissions by 2020
- The most effective GHG reduction strategies are those implemented at a regional or national level such as Federal fuel economy standards and clean fuel standards

\* All GHG emissions are calculated using EPA's MOVES2010a emissions model.

MDOT has also identified other feasible but unfunded GHG-reductions strategies that could help the transportation sector account for up to 33% of the state's GHG reductions by 2020. These total reductions would significantly assist Maryland in achieving the 2020 target of 25% below 2006 emissions.

In addition, SHA has established goals to identify vulnerable infrastructure and develop risk assessments for short- and long-term investments to protect coastal communities, environmental assets, and infrastructure from the potential impacts of climate change-induced storm surges and sea-level rise.



- Continue to develop processes to include climate change mitigation and adaptation considerations into project selection, design, maintenance, operations, construction and emergency response
- The SHA Climate Adaptation Team plans to complete a detailed sea level rise vulnerability assessment of Maryland's highway system and supporting infrastructure followed by initiating pilot studies
- Encourage continued growth in transit ridership through ongoing system enhancements, expansion, and outreach combined with continued support and implementation of TOD projects
- Continue to work with the Transportation and Climate Initiative (TCI) to work with neighboring states to install a regional network of electric vehicle charging stations across the Mid-Atlantic as well as other GHG mitigation strategies
- Continue to reduce GHG emissions from SHA's vehicle fleet by increasing usage of alternative fuels
- Continue MTA's green bus fleet expansion with the recent addition of 57 new hybrid buses in FY2012 and the planned purchase of 63 more hybrid buses in FY2013 (the FY2013–FY2018 CTP identifies \$224.8 million in diesel/hybrid bus replacements over the next six years)
- MDOT is the Chair of the Maryland Electric Vehicle Infrastructure Council (EVIC) formed in 2011 to formulate an action plan to successfully integrate electric vehicles into the State's transportation network. The EVIC's recommended goal is to have 60 thousand plug in electric vehicles registered in Maryland by 2020. The EVIC submitted its final report to the Governor in December 2012 that outlined the challenges and key steps to developing an electric vehicle market and supporting infrastructure in Maryland. MDOT will continue to work with multiple State agencies and private partners to implement recommendations of EVIC
- As part of the Annual Attainment Report, MDOT will conduct an annual analysis of on-road GHG emissions in Maryland in order to inform the public on progress



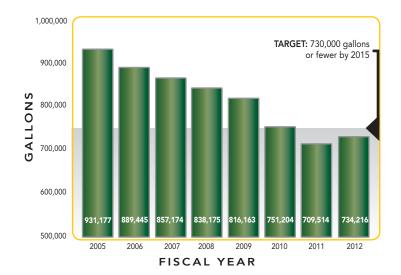
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Environmental Stewardship

#### SHA: Total Fuel Usage of the Light Fleet

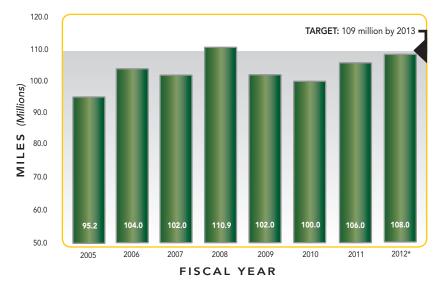
This measure is tracked statewide to monitor success in reducing consumption of gasoline through conservation strategies, including use of higher fuel efficiency vehicles for scheduled fleet replacements.





#### SHA: Reduction in Vehicle Miles Traveled Through Park-and-Ride Usage

By offering park-and-ride facilities, SHA provides commuters with an alternative to driving to their destinations and helps increase public transit ridership.



#### Why Did Performance Change?

- Continued to enforce automobile engine-idling policy for all employees and consultants, and encouraged employees to save fuel through carpooling and videoconferencing for State business trips
- Constructed an E-85 distribution facility at the SHA Hanover Complex and employee outreach is being conducted to encourage use of other existing and planned E-85 fueling stations at Maryland State Police (MSP) facilities
- Purchased three new hybrid SUVs to replace conventional gasoline SUVs
- Replaced 15 three-quarter ton pickup trucks utilizing diesel fuel with flex-fuel vehicles with the same hauling and towing capacity
- SHA fuel usage has continued to decrease over the last seven years; SHA has evolved its fleet to maximize efficiencies as allowable and has reached a plateau in use reduction and fuel efficiency

#### What Are Future Performance Strategies?

- Investigate opportunities to expand fueling locations for E-85 fuel and encourage drivers of flex-fueled SHA vehicles to fuel up with E-85 gas when practical
- Continue to look for opportunities to institute fleet reductions to cut overall fuel consumption
- Continue to replace older diesel pickup trucks with flex-fueled pickup trucks of similar hauling and towing capacity, and reduce the SUV fleet by replacing some with smaller mid-size pickups in future budgets

#### Why Did Performance Change?

- Statewide, park-and-ride lots are at an estimated 57% capacity, which is slightly below the historical average (parkand-ride usage fluctuates in response to changes in gas prices)
- An additional 490 spaces were funded for construction

- By 2013, SHA will complete 490 additional spaces, and will complete design of 500 additional park-and-ride spaces for FY2013-FY2014
- Investigate how to bolster capacity at single deck parking structures at over-capacity park-and-ride facilities, without increasing stormwater runoff
- Continue to deploy Electric Vehicle (EV) charging posts at park-and-ride lots
- Continue to look for opportunities to construct park-andride lots while planning major highway projects along interstates and principal arterials
- Continue to explore the adaptation of park-and-ride lots along freight corridors to allow long-haul trucks to park overnight

#### **Travel Demand Management**

Maryland's transportation agencies promote Travel Demand Management (TDM) strategies as a way to combat congestion by offering incentives for Marylanders to choose to use public transit, carpool, ride a bike or walk instead of driving alone. Other strategies to reduce demand for roadways include promotion of telecommuting and flexible work hours as a way to reduce or shift trips to times when roadway capacity is less constrained. Maryland supports a wide variety of programs and projects to promote TDM, including Commuter Choice Maryland, Commuter Connections, the Telework Partnership, TOD and statewide park-and-ride facilities. Park-and-ride facilities provide connections to transit, carpooling and other shared modes, helping to lower single-occupancy driving. By cutting down on single-occupant vehicle trips and reducing peak period congestion, TDM contributes to reduced emissions and improved air quality.



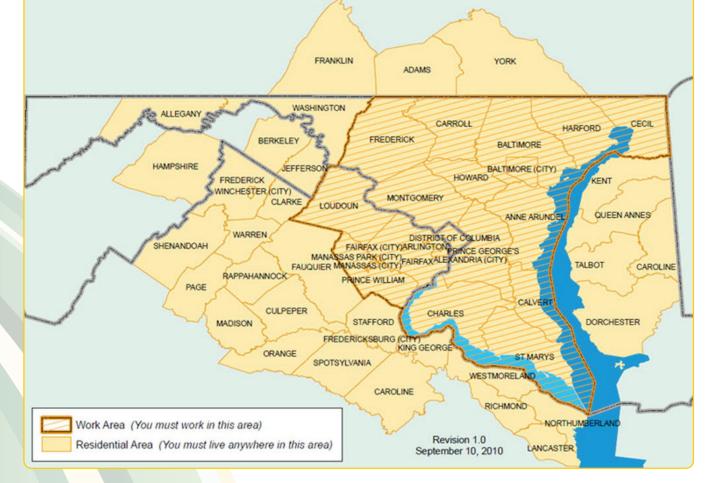
#### **Statewide Park-and-Ride Facilities**

AGENCY	TOTAL SPACES	AVERAGE WEEKDAY UTILIZATION*
SHA (2012)* (Estimated)	12,524	7,185
MTA Operated (2012)	29,542	18,507
Transit Multipurpose** (2012) (Estimated)	19,959	9,616

\* Facility usage fluctuates due to the economy; weather conditions; special events; emergencies; delays or shutdowns of parallel lines or modes; maintenance and repair; storage of plowed snow; increases in frequency, service, and capacity; and other factors.

\*\* Includes facilities operated by MTA, Amtrak, WMATA, Penn Station in Baltimore and Union Station in Washington, D.C.

# Washington and Baltimore Guaranteed Ride Home Program



2009-2010 MDOT & MTA TRANSPORTATION EMISSION REDUCTION MEASURES (TERMS)				
PROGRAM	PROGRAM DESCRIPTION	DAILY REDUCTION	DAILY REDUCTION IN VEHICLE MILES OF TRAVEL*	
Guaranteed Ride Home	Provides transit users or carpoolers up to four rides home per year in a taxi or rental car in the event of an unexpected personal or family emergency	7,983	208,346	
Employer Outreach (Including Employer Outreach for Bicycles)	Supports marketing efforts to increase employee awareness and use of alternatives to driving alone to work every day	90,350	1,657,809	
Integrated Rideshare	Promotes other alternative transportation services to employers and to the general public. Commuter information system documentation is provided with comprehensive commute information, to include regional TDM software updates, transit, telework, park-and-ride and interactive mapping	1,717	51,569	
Commuter Operations and Ridesharing Center	Updates and maintains the Commuter Connections database for ride-matching services and provides information on carpooling, transit, Guaranteed Ride Home services and alternative mode choices for the Washington-Baltimore metropolitan region	6,190	180,409	
Telework Resource Center	Provides information to employers on the benefits of telecommuting and assists in setting up new or expanded telework programs for employers	12,499	241,834	
Mass Marketing	Promotes and communicates the benefits of alternative commute methods to single-occupant vehicle commuters through the media and other wide-reach communications	6,922	78,297	
MTA College Pass	Offers a subsidized monthly transit pass to full- or part-time students enrolled in greater Baltimore metropolitan area colleges or universities	4,494	35,000	
MTA Commuter Choice Maryland Pass	Baltimore region program that allows employers to purchase transit passes and vouchers for their employees. Employers can subsidize these for their employees or allow employees to purchase passes or vouchers with pre-tax income	9,220	155,541	
Transit Store in Baltimore	Provides customer access to transit information and for purchases of transit passes. Some 15-20% of total transit pass sales occur through this outlet	3,308	55,808	

\* The impacts shown reflect the current definitions and most recent data available for each of the measures.



GOAL:

# Connectivity for Daily Life

#### **Objectives**

- Provide balanced, seamless and accessible multimodal transportation options for people and goods
- Facilitate linkages within and beyond Maryland to support a healthy economy
- Strategically expand network capacity to manage growth

Maryland's integrated, multimodal transportation system provides efficient and seamless connectivity for people and goods between local, regional, national and international economies. Much effort has been put into planning and/or constructing infrastructure that allows visitors and residents to travel by bicycle, on foot, or by transit. A number of the Bikeways Program Grants awarded this year fund projects that help riders connect to activity centers. For example, the City of Brunswick's bike route will connect the Chesapeake & Ohio (C&O) Canal Trail, the MARC train station and Main Street. Funding has also been secured to construct a new trail segment, linking a 60 mile-network of bicycle and pedestrian trails between the District of Columbia and Maryland. Progress is being made across the 15 designated Transit-Oriented Development (TOD) sites in Maryland including completion of Phase I at the Twinbrook Metrorail Station, and ongoing construction at Owings Mills, Westport, Reisterstown Plaza, and White Flint.

Efficiently connecting visitors and residents to different parts of the state by automobile is also a top priority. Construction projects on heavily traveled routes, to ease congestion and delay, are underway. For example, to alleviate the congestion from the Branch Avenue Metro Station, which increased traffic volumes on MD 5 and the Capital Beltway in the vicinity of the station during peak periods, the State is constructing improvements to the access road, pedestrian bridge and the county roads. Pedestrian/bicycle facilities will be included where appropriate.

At the national and international level, the Port of Baltimore continues to support and provide transportation linkages and encourage economic growth. During the first six months of 2012, the MPA terminals handled a record 4.83 million tons of general cargo. For the Port public and private terminals, 2012 is expected to be a near-record year for foreign waterborne cargo, at about 38 million tons, supporting over 40,000 jobs. BWI Marshall also continues to provide national and international access to Maryland, flying approximately 22.8 million commercial passengers through the airport in 2012.



#### **Key Initiatives**

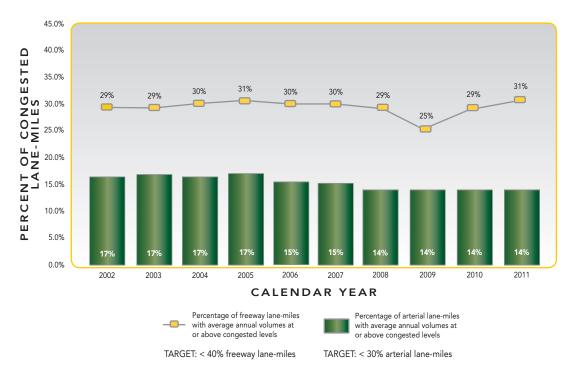
- **MDOT:** Continue to administer the Bikeways Program Grants, which provide local jurisdictions funds to initiate planning activities and/or the design and construction of projects that create and improve bicycle connections in Maryland to key destinations.
- **MAA:** Support passenger traffic growth and new nonstop flights at BWI Marshall with the ongoing major terminal enhancement program, continued excellent customer service, and continued marketing of BWI Marshall as a convenient gateway for travelers to and from the Washington-Baltimore region.
- **MPA:** Execute \$12 million in capital funds (state and federal) to improve security infrastructure on MPA terminals.
- **MTA:** Construct neighborhood-friendly improvements in West Baltimore, including the reconnection of Payson Street, which will enhance pedestrian and vehicle access between surrounding communities.
- **MDTA:** Construction of the I-95 Express Toll Lanes (ETLs) project is continuing with completion of the I-95/I-695 interchange, and the MD 43 interchange project anticipated in 2013, with the ETLs planned to open to traffic in 2014.
- MVA: Increase the availability and convenience of services with a new online and self-serve kiosk application, which allows Marylanders to renew their State Identification (ID) card via the internet or at an MVA self-serve kiosk.
- **SHA:** Continue to relieve congestion and improve safety for motorists with construction improvements on the most heavily traveled routes in Maryland, including the MD 140 intersection with Painters Mill Road in Owings Mills.

#### **Performance Measures**

MONITORING AGENCY	PERFORMANCE MEASURE	PAGE
МАА	Number of nonstop airline markets served	48
MPA	International cruises using the Port of Baltimore	50
MPA	Port of Baltimore foreign cargo and MPA general cargo tonnage	49
МТА	Annual revenue vehicle miles of service provided	46
МТА	Average weekday transit ridership	45
MVA	Percent of information system availability compared to total number of records maintained	48
SHA	Percentage of State-owned roadway directional miles within urban areas that have sidewalks and percent of sidewalks that meet Americans with Disabilities Act (ADA) compliance	47
SHA	Percentage of State-owned roadway centerline miles with a bicycle level of comfort (BLOC) grade "D" or better and directional mileage of SHA-owned highways with marked bike lanes	47
SHA & MDTA	Percent of freeway lane-miles and arterial lane-miles with average annual volumes at or above congested levels	44

#### SHA & MDTA: Percent of Freeway Lane-Miles and Arterial Lane-Miles with Average Annual Volumes at or Above Congested Levels

Vehicles per lane per day volumes provide insight into whether congestion is improving or worsening across the state. Given Maryland's growing economic vitality, the anticipated increase in vehicle miles traveled and the growing size of the driving population, MDOT is focusing its efforts where it can be most effective, which is to slow the pace of congestion growth and set targets accordingly.



#### Why Did Performance Change?

- SHA, in partnership with the University of Maryland, implemented a state-of-the-art method for measuring congestion that accounts for actual traffic speeds and volumes as experienced by drivers during the most congested time of day
- Retimed 298 signals that resulted in approximately \$21 million in annual user cost savings
- Added capacity to Maryland roads by widening MD 237 from MD 235 to Pegg Road in St. Mary's County, reconstructing the I-95/MD 24 interchange; and constructing a new interchange at MD 24/MD 924
- Began construction of projects to add capacity include widening of I-70 from MD 85 to MD 144 in Frederick County, widening of MD 404 and US 113 on the Eastern Shore, reconstructing I-695/ MD 26 and I-695/MD 139 interchanges, and construction of the I-95 ETL project

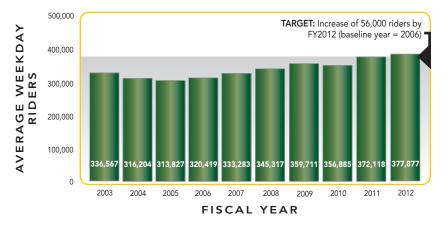
#### What Are Future Performance Strategies?

- Continue the Coordinated Highways Action Response Team (CHART) program for incident management, traffic management and traveler information systems
- Continue to focus resources on optimizing traffic signals and signal systems
- Continue to focus on improving reliability on highway systems, enhancing accessibility and connectivity of the system
- Identify and implement short-term geometric improvements for congestion hot spots
- Enhance transit and non-motorized travel options, as well as Travel Demand Management (TDM) programs
- Complete and open for travel ETLs along I-95 from north of MD 43 to the I-95 and I-895 split, complete construction of I-95 ETL access ramps at the I-95/695 interchange, and complete the MD 43/I-95 interchange



#### MTA: Average Weekday Transit Ridership

Weekday transit usage demonstrates progress toward better mobility for our customers and contributes to statewide goals.



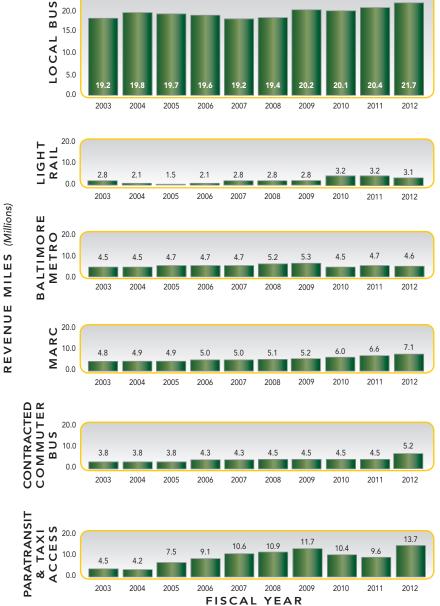


- Average weekday ridership in FY2012 was 2% higher than FY2011 and has increased by 18% since 2006
- Investigated and implemented more parking options for commuters to alleviate over-crowded lots
- Increased capacity on the Local Bus network by investing in articulated coaches currently 42 are in service (6% of the fleet)
- FY2012 is the eighth consecutive year the MTA has seen an increase in ridership and is the highest ridership recorded since tracking this measure started in the Attainment Report
- Compared to ridership in 2003, MTA is providing over 41,000 more transit trips every weekday. Compared to 2006, MTA is providing an additional 57,000 transit trips every day

#### What Are Future Performance Strategies?

- Aggressively seek solutions to maximize Local Bus system capacity while controlling costs through efficient scheduling and system design
- Increase system reliability through reductions in mechanical failures and improving on time performance
- Continue to investigate and implement more parking options for commuters to alleviate over-crowded lots
- Continue to increase capacity on the Local Bus network by investing in articulated coaches currently 42 are in service (6% of the fleet)
- Implement real-time passenger information on MTA's transit services
- Continue to implement additional park and ride options for Commuter Bus operations (in the FY2013–FY2018 Consolidated Transportation Plan (CTP), \$24.4 million in funding is programmed to expand parking in Charlotte Hall, Dunkirk, New Market and Waldorf as part of the Southern Maryland Commuter Bus Initiative)



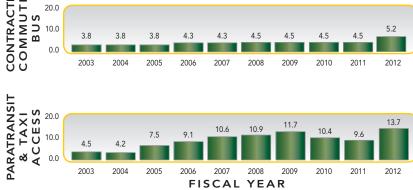


#### MTA: Annual Revenue Vehicle Miles of Service Provided\*

Revenue vehicle miles, or each mile for which a transit vehicle is in service and accepting customers, indicates the level of transit service available to, and in use by, the general public.

MTAS





\* Excludes Locally Operated Transit Systems (LOTS) and Washington Metropolitan Area Transit Administration (WMATA).

#### Why Did Performance Change?

25.0

20.0

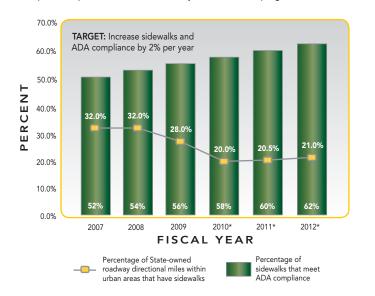
- Increased availability of transit service on MARC by adding trains on the Penn Line and extending termini on some train lines
- Provided an efficient alternative to driving with Commuter Bus service enhancements, including adding Intercounty Connector (ICC) routes 201, 202, 203, 204 and 205
- Paratransit & Taxi Access mileage experienced a large increase due to the increase in the number of trips provided

#### What Are Future Performance Strategies?

• Increase or reallocate service miles, where needed, to maximize transit availability

#### SHA: Percentage of State-Owned Roadway Directional Miles Within Urban Areas That Have Sidewalks and Percent of Sidewalks That Meet Americans with Disabilities Act (ADA) Compliance

Available sidewalk facilities provide mobility for pedestrians. Tracking the percent that are ADA compliant helps ascertain whether Maryland's sidewalk program meets federal benchmarks.



\* 2010-2012 data are based on a new data collection method that cannot be accurately compared to previous years' data .

#### Why Did Performance Change?

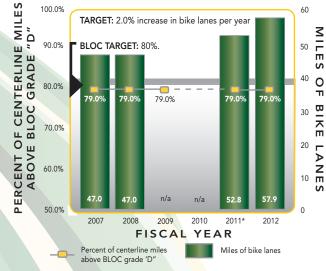
- Invested \$19.8 million in FY2012 to improve sidewalks and to address ADA issues, including \$6.5 million to support the new Pedestrian Access to Transit Program
- Installed more than 731 accessible pedestrian signals since the program began in FY2006
- Continued to fund and manage for the Maryland Safe Routes to School (SRTS) program to provide a safer environment for walking or biking to over 290 schools
- Takoma Park SRTS was awarded a 2012 James L. Oberstar Safe Routes to School Honorable Mention Award
- SHA provided funding for a partnership between Baltimore City and Johns Hopkins School of Public Health to develop a pilot walking school bus program as part of a SRTS program

#### What Are Future Performance Strategies?

- Support safe pedestrian access along State highways (\$10.0 million for the Sidewalk Retrofit Program and \$61.6 million for the ADA Compliance Program in the FY2013–FY2018 CTP)
- Target funds towards areas in which there is a history of high pedestrian injuries and fatalities, as well as a significant impediment to pedestrian access
- Construct numerous sidewalk improvement projects in FY2013, including MD 150 in Essex, MD 528 in Ocean City, MD 373 in Berlin and MD 414 in Oxon Hill
- Continue to upgrade intersections with pedestrian countdown signals and ADA features such as pedestrian curb ramps and median cut-throughs

# SHA: Percentage of State-Owned Roadway Centerline Miles with a Bicycle Level of Comfort (BLOC) Grade "D" or Better and Directional Mileage of SHA-Owned Highways with Marked Bike Lanes\*

BLOC (scale "A" to "F") is a measure for assessing the quality of the statewide roadway system for its comfort and compatibility with bicycle users. It accounts for multiple characteristics of the roadway through a formula which produces a single BLOC grade for any section of roadway. Shoulder width is the most influential roadway characteristic for improving BLOC. Marked bike lanes are space on the roadway designated by pavement markings for the preferential or exclusive use of bicyclists. The amount of bike lanes in a jurisdiction is typically a good measure of the level of bike friendliness of that jurisdiction; however, their presence is not captured in the BLOC formula; thus, both must be taken into account when evaluating the quality of the bicycling environment.



<sup>\*</sup> FY2011 marked bike lane mileage is the revised baseline data. The BLOC measure has consistently shown 79-80% of facilities meeting a grade of "D" of better in previous years.

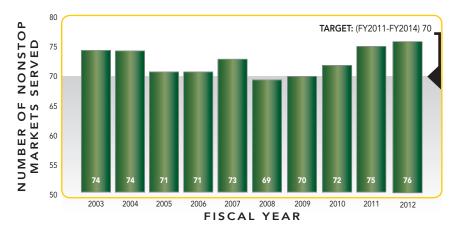
#### Why Did Performance Change?

- Increased the directional miles of bicycle facilities along existing SHA roadways by 9%
- Established a SHA Bicycle Design Team responsible for the development of bicycle-related projects at SHA
- Issued a new policy on marked bicycle lanes that provides guidance on the marking and signing of bicycle facilities
- Improved 19 miles of roadway from a BLOC grade "D" or worse to a BLOC grade "C" or better in FY2012; to gain a one percentage point increase in this measure, about 46 miles of roadway need to be improved from a BLOC grade "D" or worse to a BLOC grade "C" or better

- Revise the SHA bicycle guidelines to reflect changes made under the new bicycle policy and provide better design guidance in developing bikeway facilities
- Support bikeway projects along State highways (\$9.6 million for the Bicycle Retrofit Program in the FY2013– FY2018 CTP)
- Adopt new bicycle guidelines that provide improved guidance for the design of bicycle facilities, consistent with the newly issued 2012 bicycle guidelines from the American Association of State Highway and Transportation Officials (AASHTO)
- Implement statewide, multi-jurisdictional bicycling routes to serve regionally significant points of interest, beginning with the Fort Meade to Columbia route

#### MAA: Number of Nonstop Airline Markets Served

Growth in the number of nonstop destinations served provides enhanced mobility options to passengers traveling to cities in the U.S. and around the world; increases the attractiveness of BWI Marshall as the airport of choice in the region; and reflects the success of MAA's marketing efforts to increase the competitiveness of BWI Marshall for business and leisure travel.



#### Why Did Performance Change?

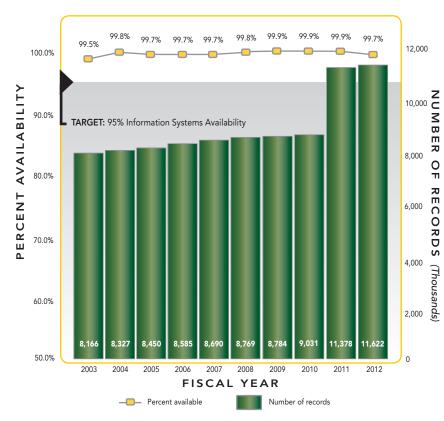
- New nonstop service was added from BWI Marshall to Aruba in FY2012
- Condor initiated new nonstop service to Frankfurt in July 2012
- AirTran discontinued nonstop service to Huntsville and Sarasota in August 2012 as a result of its merger with Southwest
- Spirit began nonstop service from BWI Marshall to Dallas/Ft Worth and Ft. Lauderdale in September 2012

#### What Are Future Performance Strategies?

- Focus marketing and awareness campaigns on the advantages of using BWI Marshall, (e.g., ease of access, parking, attractive concessions and accessible ground transportation options)
- Continue to promote BWI Marshall as a convenient gateway to Washington, D.C.
- Meet with new entrant and current carriers to promote potential new air service opportunities to BWI Marshall

#### MVA: Percent of Information System Availability Compared to Total Number of Records Maintained

This measures progress in maintaining the availability, integrity, and security of MVA data because access to driver and vehicle data is critical to law enforcement and government agencies, 24 hours a day, 7 days a week.



#### Why Did Performance Change?

- In FY2012 the percent of system availability slightly decreased to 99.7% but still remains above the target of 95%
- Mainframe record capacity is driven by the demographic nature of Maryland (number of drivers and vehicles) as opposed to the specific business nature of the MVA
- The number of mainframe records for licensed drivers, identification card holders and registered motor vehicles increased from 11,377,890 in FY2011 to 11,621,504 in FY2012

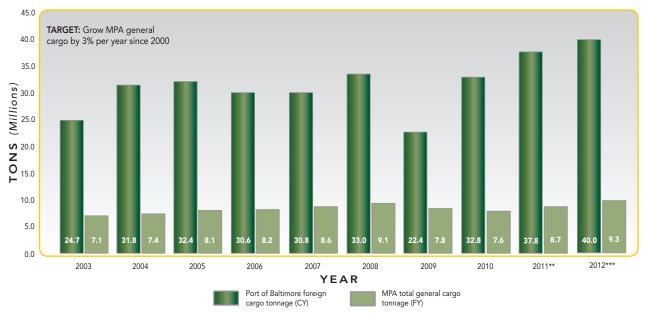
#### What Are Future Performance Strategies?

- Continue employing the latest technologies and security protocols to ensure full-time access with minimal business disruptions
- Continue to provide data for Law Enforcement, Child Support Enforcement, Arrest Warrants, Courts Point System, Board of Elections, Organ Donor, and Chesapeake Bay and Agriculture Programs



#### MPA: Port of Baltimore Foreign Cargo & MPA General Cargo Tonnage\*

There are many factors outside MPA's influence that impact the movement of freight, such as national and world economic trends, labor costs (in Maryland and at competing ports), value of the U.S. dollar, rail and highway service and rates, prolonged weather conditions and changes in vessel sizes. Tracking cargo trends supports MPA's management decisions and helps to assess the economic impact of freight activity occurring at the Port of Baltimore and MPA terminals.



\*MPA general cargo includes both foreign and domestic waterborne cargo

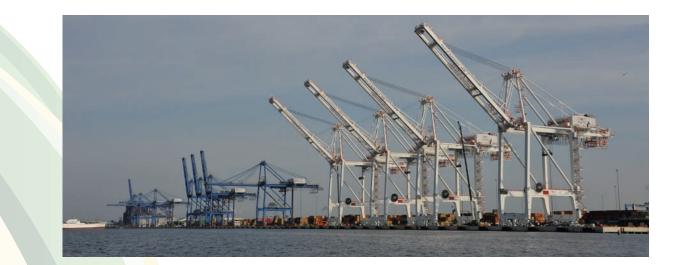
\*\* 2011 data point was revised from last the 2012 Report.

\*\*\*2012 data for POB is an estimate.

#### Why Did Performance Change?

- General cargo tonnage at MPA terminals has recovered from the global recession of 2009 and increased 7.4% in fiscal year 2012, to a total of 9.3 million tons – a new record high
- The Port of Baltimore's public marine terminals topped previous records by handling a record 4.83 million tons of general cargo during the first six months of 2012
- The MPA terminals experienced the greatest gains in import roll-on/roll-off (RoRo) equipment and exported autos
- Chrysler exported 101,000 vehicles through the Port of Baltimore
- The largest RoRo ship in the world, the Wallenius-Wilhelmsen Logistics ship Tonsberg, with 4.87 million cubic feet of available space cargo visited the Port of Baltimore
- RoRo agricultural equipment is in demand for both food and bio-fuel production and RoRo mining equipment is in demand due to the increase in commodity prices

- Continue the Quality Cargo Handling Action Team (QCHAT) to make improvements for all parties
- Continue with rail and terminal improvements to facilitate Wallenius-Wilhelmsen Logistics expanding cargo at their Mid-Atlantic Terminal
- Continue to coordinate roadway permit issues with the City of Baltimore to facilitate cargo movement and positive community relations
- Meet potential Forest Products' future covered storage requirements by conducting site stabilization at Dundalk Lot 500 for possible future private investment in shed construction
- Construct new cargo gate for South Locust Point
- Target auto and machinery manufacturers to provide long-term commitments and encourage existing auto processors to increase cargo volumes, efficiency and throughputs (The FY2013–FY2018 CTP identifies \$21.7 million to construct a new Masonville Vessel Berth to accommodate continued growth in automobile imports and exports)



#### MPA: International Cruises Using the Port of Baltimore

Measures cruise business activity departing from the Port of Baltimore to foreign destinations.

CALENDAR YEAR	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012*
Number of international cruises using MPA's terminal	35	59	28	28	29	27	81	90	105	100

TARGET: 100 cruises in 2012, 98 cruises in 2013 \*Data is estimated for CY2012.

#### Why Did Performance Change?

- Carnival Cruise Lines and Royal Caribbean International reports that their ships are sailing at over 100% capacity (more than two people per cabin)
- 505,000 cruise passengers embarked and debarked from the Port of Baltimore's Cruise Maryland Terminal on 105 cruises, breaking an all time record, and there were seven port-calls in CY2011
- Installed a new flexible temperature controlled boarding bridge that will accommodate a variety of vessel sizes
- Carnival Cruise Lines and Royal Caribbean International continued to offer year-round service from the Port of Baltimore
- In addition to 2012's 100 home-port cruises, there were six port-calls by other cruise ships

#### What Are Future Performance Strategies?

- Continue promoting the Port as a convenient location for year-round cruising
- Improve the year-round comfort and convenience of cruise line passengers, for example expand Wi-Fi capabilities, terminal system preservation projects and VIP customer facilities
- Enhance parking options by providing online prepayment options
- Continue the partnership with existing cruise lines and develop new opportunities for additional cruise lines to come to Baltimore
- Make water and landside adjustments as necessary, such as expanding facilities to handle two cruise ships per day, to continue increasing the number of cruise ships and passengers using the Port



#### MDOT would like to offer special thanks and recognition for provision of photos:

Page 10, Jay Baker - Governor's Office; Pages 11 and 50, Jeff Sauers; Page 14, Jessica Puchala - Maryland State Highway Administration; Pages 34 and 49, Bill McAllen; Page 35 and 37, Maryland Environmental Service.

# Glossary

GLOSSARY TERM	DEFINITION
Annual Attainment Report on Transportation System Performance	Pursuant to Transportation Article Section 2-103.1 of the Annotated Code of Maryland, the State is required to develop or update an annual performance report on the attainment of transportation goals and benchmarks in the Maryland Transportation Plan (MTP) & Consolidated Transportation Program (CTP). The Attainment Report must be presented annually to the Governor and General Assembly before they may consider the MTP and CTP.
Base Realignment and Closure (BRAC)	BRAC is a Congressionally authorized process the Department of Defense has previously used to reorganize its base structure to more efficiently and effectively support U.S. forces, increase operational readiness and facilitate new ways of doing business.
Calendar Year (CY)	The period of 12 months beginning January 1 and ending December 31 of each reporting year.
Coordinated Highways Action Response Team (CHART)	CHART is an incident management system aimed at improving real-time travel conditions on Maryland's highway system. CHART is a joint effort of the State Highway Administration, Maryland Transportation Authority, and the Maryland State Police, in cooperation with other Federal, State and local agencies.
Consolidated Transportation Program (CTP)	A six-year program of capital projects, which is updated annually to add new projects and reflect changes in financial commitments.
E-ZPass®	An electronic toll collection system utilized to provide a more efficient flow of traffic through MDTA toll facilities. <i>E-ZPass</i> ® toll collection is available at all eight MDTA toll facilities. The benefits of <i>E-ZPass</i> ® membership allow travel from Virginia to Maine and as far west as Illinois, with tolls paid from a Maryland <i>E-ZPass</i> ® account.
Fiscal Year (FY)	A yearly accounting period covering the time frame between July 1 and June 30 of each reporting year.
Intercounty Connector (ICC)/MD 200	New all electronic toll-road between I-270 in Montgomery County to I-95 in Prince George's County.
Locally Operated Transit Systems (LOTS)	Transit systems that provide primarily bus service and demand response within the local areas in which they operate. They are funded through a combination of Federal, State and local money. MDOT provides financial, technical and operating support for these services.
Maryland Transportation Plan (MTP)	The MTP is MDOT's long-range transportation policy plan and includes the vision, goals and objectives that provide the policy framework and context for Maryland's transportation programs and investments. The MTP sets Department policy for the 20-year period and is updated every five years.
MPA General Cargo	Foreign and domestic waterborne general cargo handled at the public (MPA) terminals.
Port of Baltimore Foreign Cargo	International (Foreign) cargo handled at public and private terminals within the Baltimore Port District. This includes bulk cargo (e.g., coal, sugar, petroleum, ore, etc. shipped in bulk) and all general cargo (e.g., miscellaneous goods shipped in various packaging).
MAP-21	On June 6, 2012, the President signed into law the Moving Ahead for Progress in the 21st Century (MAP-21) P.L. 112-141 - new legislation that will stabilize funding for highway and transit programs for two years and will set national, statewide and metropolitan transportation planning and policy direction. The Federal bill did not increase funding levels and also did not address the long-term solvency of the Federal Highway Trust Fund.
Mode	Form of transportation used to move people or cargo (e.g., truck, rail, air).
REAL ID	The Federal REAL ID Act of 2005 sets new standards designed to improve the integrity and security of State- issued driver's licenses and identification cards. The legislation contains 39 benchmarks for states to meet the requirements of the REAL ID Act. The full text of the REAL ID Act (including benchmarks) is available on the Department of Homeland Security's website at www.dhs.gov. General information about Maryland's involvement with the REAL ID Act is available on MVA's website at www.marylandmva.com.
Smart Green & Growing	<i>Smart Green &amp; Growing</i> is a long-range, statewide multi-agency initiative to help Maryland achieve a more sustainable future by linking community revitalization, transportation improvements, Smart Growth and environmental restoration efforts.
State Report on Transportation (SRT)	The SRT is prepared annually and distributed to the General Assembly, local elected officials and interested citizens. It consists of two documents, the Maryland Transportation Plan (MTP) and the Consolidated Transportation Program (CTP).
Transit-Oriented Development (TOD)	TOD creates places around high-quality transit service that permit lifestyles and employment options where walking, bicycling and transit travel is convenient and safe. Designed for pedestrian comfort, mixes of uses, and higher densities are combined to create comfortable walking environments. Close proximity to the transit (bus or train) station and the quality of the TOD helps to promote use of transit and less reliance on the automobile.
Travel Demand Management (TDM)	TDM strategies support the use of alternatives to the traditional single-occupant vehicle through a variety of programs and incentives (e.g., carpooling, car sharing, transit, park-and-ride facilities, teleworking and flexible work hours).
Vehicle Miles of Travel (VMT)	A measurement of the total miles traveled by all vehicles.

# **Appendix: List of Performance Measures**

MTP GOAL	PERFORMANCE MEASURE	DEFINITION
	Maryland Department of Transportation (MD	OT)
Environmental Stewardship	Transportation Emissions Reduction Measures (TERMs) • Commuter Operations and Ridesharing Center • Employer Outreach (including Employer Outreach for Bicycles) • Guaranteed Ride Home	TERMs and Travel Demand Management (TDM) strategies support the use of alternatives to the traditional single-occupant vehicle
Environmental Stewardship	Transportation-related emissions by region	Tons of Volatile Organic Compound (VOCs) and Nitrogen Oxide (NOx), precursors of Ozone, emitted per day for an average weekday from transportation sources in the Baltimore and Washington regions
Environmental Stewardship	Transportation-related greenhouse gas (GHG) emissions	GHG emissions primarily include carbon dioxide, methane, nitrous oxide, carbon monoxide, oxides of nitrogen and non-methane volatile organic compounds
	Maryland Aviation Administration (MAA)	
Quality of Service	Percent of BWI Marshall customers rating the airport "good" or "excellent" on key services	Percent of customers giving a score of 4 or 5 (on a 5 point scale) for "Overall Satisfaction" and "How likely to fly from BWI Marshall on their next trip"
Safety & Security	BWI Marshall crime rate	Crimes include all crimes against persons or property at BWI Marshall facilities
Safety & Security	Number of repeat discrepancies in the annual Federal Aviation Administration's Federal Aviation Regulation inspection	Annual FAA Part 139 Federal Aviation Regulation (FAR) assessment conducted by the Federal Aviation Administration
Safety & Security	Rate of airfield ramp incidents and accidents per 1,000 operations	Incident reports collected by MAA / 1,000 operations (take offs and landings)
System Preservation & Performance	Airline cost per enplaned passenger (CPE)	Total airline-related fees / Total enplaned passengers at BWI Marshall
System Preservation & Performance	Non-airline revenue per enplaned passenger (RPE)	Total non-airline revenue (ground transportation, parking, concessions, etc.) / Total enplaned passengers at BWI Marshall
Connectivity for Daily Life	Number of nonstop airline markets served	Nonstop flights are direct to destination without connections
	Maryland Port Administration (MPA)	·
Quality of Service	Average truck turn-around time at Seagirt Marine Terminal	Amount of time for a truck to enter the Terminal gate, drop off and/or receive a container, and exit the gate
Safety & Security	MPA compliance with the Maritime Transportation Security Act of 2002	MPA activities in support of a compliance (Pass / Fail) rating from the U.S. Coast Guard
System Preservation & Performance	Adequate dredge material placement capacity remaining for Harbor and Bay maintenance and new work dredging	Monitors existing capacity remaining at Harbor and Bay dredged material placement sites
System Preservation & Performance	Revenue versus operating expense	Total revenues compared to operating expense of MPA, but excluding some exclusions
Environmental Stewardship	Acres of wetlands or wildlife habitat created, restored, or improved since 2000	Cumulative tally of acreage created, restored, or improved for wildlife habitat
Connectivity for Daily Life	International cruises using the Port of Baltimore	Number of international cruises using the Port of Baltimore as a home port
Connectivity for Daily Life	Port of Baltimore foreign cargo and MPA general cargo tonnage	MPA general cargo includes foreign and domestic waterborne cargo; Port of Baltimore foreign cargo includes bulk and general cargoes within the Port District, but does not include domestic cargo

MTP GOAL	PERFORMANCE MEASURE	DEFINITION		
	Maryland Transit Administration (MTA)			
Quality of Service	Customer satisfaction rating	Average score for: Overall satisfaction of each MTA service (Local Bus, Light Rail, Baltimore Metro and MARC)		
Quality of Service	Percent of service provided on time	Baltimore Metro and Marc: Number of trips arriving on schedule. Local Bus: Calculated from data-transmitting buses tracking the number of time points arrived at on time divided by the total number of scheduled time points		
Safety & Security	Customer perceptions of safety on the MTA system	Average score for: Feeling safe while riding, while waiting at stops and stations, and for my vehicle left in an MTA parking lot		
Safety & Security	Preventable accidents per 100,000 vehicle miles	Preventable accidents are accidents in which drivers did not do everything they could to avoid an accident / 100,000 vehicle miles		
System Preservation & Performance	Operating cost per passenger trip	Total operating expenses / Number of unlinked passenger trips		
System Preservation & Performance	Operating cost per revenue vehicle mile	Operating cost for each mode / Total miles when vehicle is in service (not deadheading or down time)		
System Preservation & Performance	Passengers per revenue vehicle mile	Passenger trips by mode / Total revenue miles by mode		
Environmental Stewardship	Travel Demand Management • Number of park-and-ride spaces—MTA Operated • Transit Multipurpose	Transit lots are MTA owned; multipurpose lots are not MTA owned		
Environmental Stewardship	Transportation Emissions Reduction Measures • MTA College Pass • MTA Commuter Choice Maryland Pass • Transit Store in Baltimore	TERMs and Travel Demand Management strategies support the use of alternatives to the traditional single-occupant vehicle		
Connectivity for Daily Life	Annual revenue vehicle miles of MTA service provided	Revenue vehicle miles are defined as each mile for which a transit vehicle is in service and accepting customers		
Connectivity for Daily Life	Average weekday transit ridership	Ridership for Local Bus, Light Rail, Baltimore Metro, MARC, Contracted Commuter Bus, and Paratransit & Taxi Access		
	Maryland Transportation Authority (MDTA	.)		
Quality of Service	Overall customer satisfaction of <i>E-ZPass</i> ® customers	Customer satisfaction based on customer satisfaction survey		
Quality of Service	Percentage of tolls collected electronically	Toll collections by <i>E-ZPass</i> ® and Automatic Vehicle Identification / Total number of toll collections		
	Motor Vehicle Administration (MVA)			
Quality of Service	Branch office customer visit time versus customer satisfaction rating	Average visit time plotted against percentage of customers rating their MVA experience as "good" or "very good" (based on quarterly survey of customers)		
Safety & Security	Percent of Homeland Security REAL ID Act benchmarks achieved	Federal legislation contains 39 benchmarks for states to meet requirements of the Federal REAL ID Act		
System Preservation & Performance	Alternative service delivery transactions as percent of total transactions	Transactions by alternative services (using a means other than a visit to an MVA branch) / Total transactions		
System Preservation & Performance	Cost per transaction	Operating costs and capitalized costs / Number of transactions		

MTP GOAL	PERFORMANCE MEASURE	DEFINITION	
	Motor Vehicle Administration (MVA)	•	
Environmental Stewardship	Compliance rate and number of vehicles tested for Vehicle Emissions Inspection Program (VEIP) versus customer wait time	Registered vehicles in non-attainment counties are scheduled for VEIP testing even two years. Compliance rate is the number of vehicles registered in non-attainment counti scheduled for testing / Number of registered vehicles in non-attainment counties tested	
Connectivity for Daily Life	Percent of information system availability compared to total number of records maintained	Includes availability of data records by type and systems up time	
	State Highway Administration (SHA)		
Quality of Service	Maryland driver satisfaction rating	Satisfaction rating based on weighted average score for 26 questions	
Quality of Service	Percentage of the Maryland SHA network in overall preferred maintenance condition	Internal peer review assessment of roadway features of the total SHA lane-miles	
System Preservation & Performance	User cost savings for the traveling public due to incident management	Cost saving calculated using Coordinated Highways Action Response Team (CHART) incident response data	
Environmental Stewardship	Acres of wetlands restored and miles of streams restored	SHA mitigation efforts for past impacts to wetlands and streams due to highway construction projects	
Environmental Stewardship	Total fuel usage of the SHA light fleet	Fuel used by fleet of State-owned cars, dispensed at SHA facilities that contains ethanol (SHA light fleet consists of sedans, SUVs, half-ton pickup trucks and vans that use gasoline or gasoline/ethanol blends)	
Environmental Stewardship	Travel Demand Management • Number of SHA park-and-ride spaces • Reduction in vehicle miles traveled through park- and-ride usage	SHA operates a number of park-and-ride facilities to support TDM	
Connectivity for Daily Life	Percentage of State-owned roadway directional miles within urban areas that have sidewalks and percent of sidewalks that meet American's with Disabilities Act (ADA) compliance	On SHA roads where pedestrian access is allowed and within urban areas as defined by the U.S. Census Bureau	
Connectivity for Daily Life	Percentage of State-owned roadway centerline miles with a bicycle level of comfort (BLOC) grade "D" or better and directional mileage of SHA-owned highways with marked bike lanes	BLOC is an A to F scale, a formula based on many factors, including outside lane width, the presence of on-street parking, roadway speed and shoulder width and truck percentage, with the greatest driving factors being shoulder width, speed and truck percentage.	
	MEASURES SHARED BY ADMINISTRATIONS		
State	Highway Administration (SHA) and Maryland Transportat	ion Authority (MDTA)	
System Preservation & Performance	Percent of roadway miles with acceptable ride quality	Percent of road with acceptable International Roughness Index (IRI) score	
System Preservation & Performance	Number of bridges and percent that are structurally deficient	Number of bridges where at least one major structural element has a condition rating of 4 or less (out of 10)	
Connectivity for Daily Life	Percent of freeway lane-miles and arterial lane-miles with average annual volumes at or above congested levels	Annual average daily traffic / Number of through lanes	
Sta	ate Highway Administration (SHA) and Motor Vehicle Adm	ninistration (MVA)	
Safety & Security	Number of bicycle and pedestrian fatalities and injuries on all Maryland roads	Number of bicyclists and pedestrians killed / injured in traffic-related crashes in a calendar year	
State Highway Administr	ration (SHA), Motor Vehicle Administration (MVA) and Ma	ryland Transportation Authority (MDTA)	
Safety & Security	Annual number of traffic fatalities and personal injuries on all roads in Maryland	The annual number of traffic fatalities and personal injuries on all Maryland roads including MDTA and locally owned facilities (the fatality and personal injury rate is calculated as fatalities and personal injuries per 100 million vehicle miles of travel)	



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This document is prepared pursuant to Transportation Article Section 2–103.1 of the Annotated Code of Maryland. Additional copies are available by calling (410) 865-1277; Toll Free (888) 713-1414; or from the Internet at www.marylandtransportation.com.

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