



2011 Annual Attainment Report

on Transportation System Performance

Implementing the Maryland Transportation Plan &
Consolidated Transportation Program

*Martin O'Malley, Governor
Anthony G. Brown, Lt. Governor
Beverley K. Swaim-Staley, Secretary*



*Beverley K.
Swaim-Staley*

Maryland Secretary of
Transportation

Message from the Secretary of Transportation

On behalf of Governor Martin O'Malley, I am pleased to present Maryland's 2011 Annual Attainment Report on Transportation System Performance. Under Governor O'Malley's leadership, we have continued to make progress in preserving and improving the State's transportation system, along with Maryland's economic competitiveness and quality of life. Despite a challenging economy during the past year, improvements to our transportation system were accomplished through effectively managing our resources, maximizing our efficiency, deploying innovative solutions, and making judicious and complete use of the federal dollars provided through the American Recovery and Reinvestment Act (ARRA). We have advanced projects for all transportation modes and have applied ARRA funding throughout Maryland to move forward projects that otherwise would have stalled.

We have been busy with many new efforts over the past year. The O'Malley/Brown Administration has given new energy and focus to Maryland's Smart Growth legacy by launching the *Smart, Green & Growing* initiative and by supporting the Sustainable Communities Act, passed by the Maryland General Assembly in 2010. These statewide initiatives provide a framework for addressing transportation challenges and for coordinating with other stakeholders toward smarter and more sustainable patterns of future growth. Governor O'Malley officially designated 14 transit stations as priority sites for Transit-Oriented Development (TOD), promoting opportunities to revitalize our communities and better utilize our existing infrastructure investments. Consistent with new law (Chapter 725), our FY2011-FY2016 Consolidated Transportation Program (CTP) includes additional details about the major capital construction projects and how these projects contribute to the State's long-term comprehensive transportation goals. We understand that providing transparency is part of being good stewards of our transportation system.

As shown by our transportation system performance, Maryland has been successful in maintaining critical system preservation projects despite the nationwide economic downturn. Examining how we move forward, last year we held a Symposium with various stakeholders to discuss transportation, the environment and the economy and how they relate to the complexities of performance measurement. In 2010, Governor O'Malley created and made appointments to the Blue Ribbon Commission on Transportation Funding, as authorized in Chapter 526. We look forward to working with the Blue Ribbon Commission over the next year to evaluate sustainable long-term transportation financing solutions in order to meet our future needs. We are also optimistic that a boost to federal transportation funding will come via the authorization of the next federal surface transportation legislation that is on the horizon.

Each year, we develop our Attainment Report to measure and demonstrate how Maryland's transportation agencies are working together to meet our shared transportation goals. We use these results to determine how effectively we have managed and funded our transportation system so that we can continue to provide our customers with a world-class multimodal system. We invite you to review our performance results in this tenth edition, as we move forward in shaping transportation for future generations, creating jobs, and enhancing Maryland's quality of life.

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Summary

Maryland's Transportation Agencies

ACRONYM	AGENCY
MDOT	Maryland Department of Transportation
MAA	Maryland Aviation Administration
MPA	Maryland Port Administration
MTA	Maryland Transit Administration

ACRONYM	AGENCY
MDTA	Maryland Transportation Authority
MVA	Motor Vehicle Administration
SHA	State Highway Administration

Below are some of the performance results over the past year contained in this 2011 Report.

Goal – Quality of Service

- The condition of SHA's roadway and roadside remained higher than 84% acceptable, in spite of cost containment due to efficiencies in performing maintenance activities (e.g., line striping, drainage, signs).
- Customer visit time at MVA branch offices decreased by an average of two minutes, and the customer satisfaction rating decreased by two percentage points to 88%.
- Across all MTA transit services, customer satisfaction was rated above 3 on a 5-point scale in FY2010.
- The rate for preventable accidents decreased by more than 8% for MTA Local Buses and rose slightly for Light Rail and Baltimore Metro in 2010.
- *E-ZPass*® customer satisfaction remains high at 86%, and the share of toll transactions collected electronically increased by 3% in FY2010.

Goal – Safety & Security

- The CY2009 fatality rate on Maryland roadways is nearly 7% lower than CY2008, and is about 13% lower than the national fatality rate of 1.13 fatalities for CY2009, which is the all-time national low.
- On a 5-point scale, the customer rating for feeling safe on MTA's system improved from 3.1 in FY2008 to 3.5 in FY2010.
- MVA achieved a 69% compliance rate with the Federal REAL ID Program, completing 27 of the 39 benchmarks and making progress toward implementing new standards for issuing driver licenses and identification cards.
- BWI Marshall continues to maintain a very low crime rate.

Goal – Environmental Stewardship

- Gasoline consumption by SHA's light vehicle fleet decreased by nearly 65,000 gallons.
- Wait times at MVA Vehicle Emissions Inspection Program (VEIP) stations decreased slightly while the VEIP compliance rate for inspected automobiles increased by one percentage point to 90%.
- MPA continued its environmental mitigation efforts by improving six acres of wetlands and wildlife habitat.

Goal – System Preservation & Performance

- SHA's traffic monitoring, traveler information, incident management, and traffic management program known as CHART responded to and cleared incidents from Maryland roadways, saving Marylanders approximately \$1.006 billion dollars in CY2009.
- Ridership on MTA services decreased by 1.3% in FY2010 due to significant snowstorms in December 2009 and February 2010.
- Use of MVA's alternative service delivery methods (e.g., services available on-line and through MVA Kiosks) increased by nearly 7% from FY2009 levels.
- The cost per enplaned passenger at BWI Marshall decreased slightly relative to comparable nearby airports.
- The condition of Maryland's roadway pavements improved by 1 percentage point in CY2009, providing a smooth riding surface for SHA customers.

Goal – Connectivity for Daily Life

- Congestion on Maryland's freeways decreased nearly 14% in CY2009, while congestion on arterials remained the same as CY2008 levels.
- Average weekday ridership across MTA services declined by less than 1% in FY2010.
- MVA's information systems supported over nine million records, nearly 250,000 more than FY2009.
- Two new nonstop destinations were added in FY2010, totaling 72 nonstop markets offered to passengers traveling through BWI Marshall.
- Cruise business at the MPA terminal grew by over 12% in CY2010 to 91 international cruises.



Introduction

Transportation Network Highlights

Surface Travel

- Transit ridership reached 150 million in FY2010, including Locally Operated Transit Systems (LOTS), in addition to nearly 124 million riders who used the Washington Metropolitan Area Transit Authority (WMATA) system in Maryland in FY2010.
- The Prince George's County Trail will soon connect 24 miles of existing Maryland trails to the 16-mile Anacostia River Trail Network in Washington, DC. The trail is one of eight missing trail links identified by the Maryland Trails: A Greener Way to Go initiative.
- In CY2009, the Coordinated Highways Action Team (CHART) incident management program responded to and cleared more than 17,000 incidents and assisted more than 18,000 stranded motorists.
- SHA completed 14 major bridge and highway projects in FY2010 totaling \$446 million. Notable projects include \$107 million in upgrades at the I-70/MD 355 interchange in Frederick, a new bypass of MD 30 around Hampstead in Carroll County, grade-separated crossing of MD 450 at the CSX railroad near the Peace Cross in Prince George's County, streetscape improvements along MD 147 in Parkville and MD 7 in Rosedale in Baltimore County, interchange improvements at Arena Drive on the Capital Beltway in Prince George's County and the opening of a new South Mountain Welcome Center on I-70 in Frederick County.
- In FY2010, over 117 million toll transactions were conducted in Maryland, with *E-ZPass*® transactions growing by almost 4% to over 72 million.
- Nearly 11.2 million MVA transactions were processed in FY2010, including eMVA and walk-in transactions at MVA's branch office locations.

Air Travel

- More than 21 million passengers flew through BWI Marshall in CY2010 to U.S. and international destinations.
- On average 10 cargo flights arrive or depart from BWI Marshall each day.
- 18 publicly-owned airports and 18 privately-owned airports with public use are available to Marylanders.

Waterborne Travel

- Port auto tonnage increased by 20% to 924,000 tons in FY2010. In CY2010, auto tonnage at MPA terminals increased by 60%.
- In CY2010, 91 international cruises and approximately 365,000 passengers embarked and debarked at MPA's Cruise Maryland terminal.

The Annual Attainment Report on Transportation System Performance offers Maryland residents an assessment of the performance of their transportation system. Performance measurement is a critical tool in the State's ongoing efforts to promote accountability, deliver high quality services for individuals and businesses, grow more sustainably, and wisely invest our limited financial resources. This 2011 Report provides transparent measurement of our performance and helps to inform Marylanders of both our successes and areas for improvement.

Performance results, published each year since 2002 by the Maryland Department of Transportation (MDOT), are grouped under five fundamental goals for the State's multimodal transportation system including highways, transit, bicycle and pedestrian travel, rail, airports, seaports and motor vehicle services:

- **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;
- **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 in a balanced, multimodal transportation system.

Integrating Multimodal Transportation

MDOT is unique compared to other state departments of transportation because it integrates all modes of transportation into a single Department, ensuring a high level of integration between modal choices. MDOT oversees five transportation agencies, each of which is responsible for managing key facets of the transportation system:

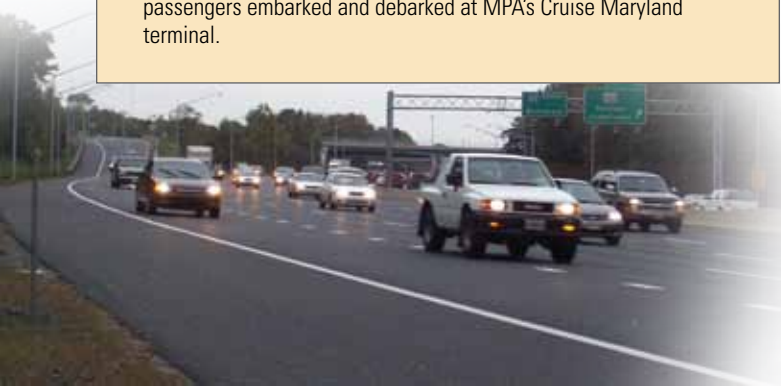
- **Maryland Aviation Administration (MAA)** operates Baltimore/Washington International Thurgood Marshall Airport (BWI Marshall) and Martin State Airport, a general aviation airport/reliever airport northeast of Baltimore;
- **Maryland Port Administration (MPA)** promotes the entire Port of Baltimore 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;
- **Motor Vehicle Administration (MVA)** provides a host of services for vehicles and drivers, including registration and licensing; and
- **State Highway Administration (SHA)** manages the State's network of roadways and bridges.

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

- **Maryland Transportation Authority (MDTA)**, which manages the State's seven toll facilities.

Guiding Maryland's Transportation Network

Each year MDOT issues the State Report on Transportation, which is comprised of the current Attainment Report, Maryland Transportation Plan (MTP), and Consolidated Transportation Program (CTP). The MTP embodies MDOT's vision for transportation over a 20-year horizon and establishes long-term goals for multimodal transportation throughout the State. The MTP outlines policies and priorities that help guide Statewide transportation investment decisions. Each Plan update is informed by a broad program of public outreach to incorporate the input of citizens, sister State agencies, and stakeholder groups, to ensure that the MTP's long-range vision, goals, and objectives are responsive to a host of diverse interests.



The MTP also provides a framework for developing the CTP, which is annually updated to identify all anticipated transportation investments over the next six years. This year's CTP (FY2011-FY2016) emphasizes the fundamentals of system preservation and transportation safety—with significant investments in bridges, pavements, transit vehicles, transportation facilities, and system operations—while also addressing emerging issues like global climate change and freight activity.

Ensuring Strategic Transportation Investments

Given the pace of the national economic recovery and modest transportation revenues expected in the near-term, it is critical that transportation investments be strategic. In 2010, Maryland State Law Chapter 725 went into effect. The law seeks to increase transparency and accountability by providing more information about the Department's process for evaluating projects and by clarifying the role of Statewide transportation goals in the CTP project selection process.

Understanding that providing transparency is part of being good stewards of our transportation system, MDOT has included an explanation of need for each major capital project (new, expanded or significantly improved facility or service) listed in the CTP. MDOT also conducted a rigorous evaluation of each major capital project based on its purpose, need, and relationship to the MTP goals. Throughout this process particular attention was paid to impacts on the environment, on existing communities, and on economic development. MDOT's comprehensive evaluation process also considered the differences between urban and rural transportation needs. Because rural settlement patterns are more widely dispersed, rural transportation tends to focus on automobile travel or demand-responsive transit. On the other hand, urban areas generally have higher population densities and shorter distances between residential and commercial areas, which is more supportive of fixed-route transit services (e.g., buses, subways, light rail, and commuter rail) and often present more viable opportunities for non-motorized (bicycle and pedestrian) travel. Moving forward, the State's Smart Growth Subcabinet will conduct a yearly review of the methods used in the major capital project selection process and an advisory committee will be established to provide input on performance measures, including measures that address the difference between urban and rural transportation needs.

Promoting Sustainable Transportation

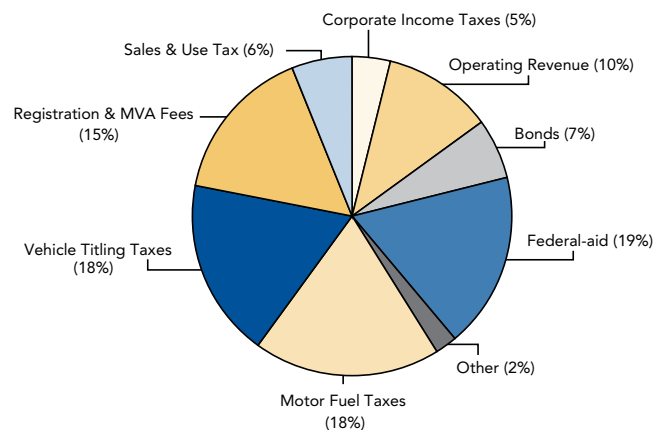
Environmental sustainability has long been a priority of the Department. MDOT is committed to supporting Smart Growth through Maryland's *Smart, Green & Growing* initiative, which is designed to create a more sustainable future for Maryland. Maryland's transportation agencies are actively involved with the *Smart, Green & Growing* initiative, with notable recent achievements and initiatives that include:

- Managing stormwater runoff to limit pollutants and to meet the U.S. Environmental Protection Agency's newly established "pollution budget" for the Chesapeake Bay;
- Launching an effort to identify State roadways assets vulnerable to flooding as a result of global climate change;
- Promoting the "Mowing for Meadows" program, which has established about 8,500 acres of wild meadows along State roadways and reduced mowing costs by over \$1 million each year;
- Using dredged material from the Port of Baltimore to restore wildlife habitat and provide for new recreational areas, and a nature center;
- Continuing to expand the State's extensive public transit offerings and bicycle and pedestrian facilities to help Marylanders and visitors reach their destinations without driving; and
- Designating 14 transit station areas as priority sites for Transit-Oriented Development (TOD), which encourages compact, less automobile dependent land use in close proximity to rail transit stations.

Investing in Transportation

The Transportation Trust Fund (TTF) is a dedicated account used to support the operating and capital needs of MDOT and its Modal Administrations (including a contribution to the Washington Metropolitan Area Transit Authority (WMATA), which provides Metrobus and Metrorail transit service in the metropolitan Washington region). The TTF provides exceptional flexibility to address infrastructure investment and operating needs across all transportation modes. The TTF does not fund the MDTA, which, as an independent authority, is self-supported through tolls, concessions, revenue bonds, and other sources.

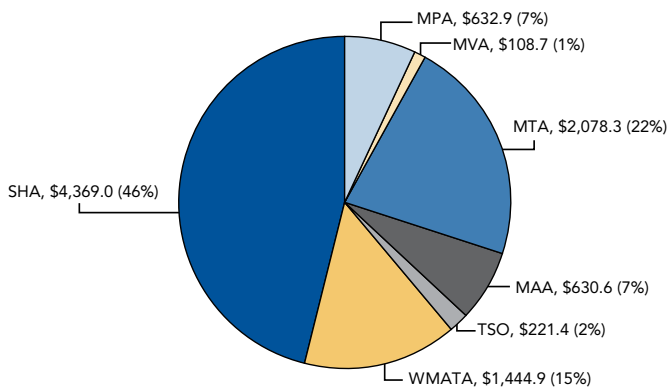
**Transportation Trust Fund Sources
FY2011-FY2016 CTP**



The national economic downturn and continuing economic uncertainties have affected revenue projections for the TTF. In 2007, Governor O'Malley secured increases to several transportation revenue sources, and while these proceeds have been applied toward critical capital projects and to continue essential safety and preservation projects, several important TTF revenue sources remain diminished. Motor vehicle fuel taxes and driver and vehicle taxes and fees are significant revenue sources that are vulnerable to decreasing vehicle miles traveled (VMT), greater fuel efficiencies, and fluctuating automobile sales. Smaller, but nonetheless important contributions come from corporate income taxes, sales and use taxes, and transportation operating revenues, all of which depend to varying degrees on the health of regional and national economic conditions. Bonds are another TTF source, with MDOT and MDTA maintaining one of the nation's highest long-term credit ratings. The TTF also relies on Federal funding for surface transportation out of the Federal Highway Trust Fund. MDOT remains engaged in the national discussion on the future of the Federal funding authorization and tracks the extensions as the current SAFETEA-LU expired September 30, 2009. Until Federal reauthorization occurs, MDOT's expectations concerning future Federal-aid contributions will be conservative, as will corresponding spending projections.

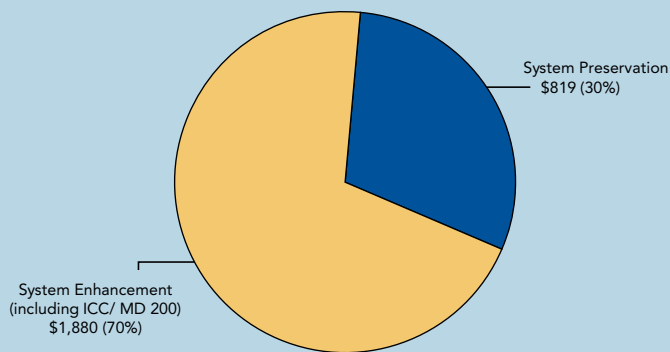
Maryland's transportation agencies continue to provide responsible stewardship of transportation assets. Even with limited resources and the high-cost of the State's roadway, bridge, and transit preservation and maintenance needs, \$843.8 million is programmed in the current CTP for FY2011 toward system preservation. To address the State's long-term transportation infrastructure preservation and maintenance needs as well as the long-term sustainability of the TTF, the Blue Ribbon Commission for Maryland Transportation Funding was established in 2010 to review, evaluate, and make recommendations on financing the State's future transportation needs. The Commission is composed of members representing a wide variety of interests. MDOT monitors the "percentage of budgeted dollars expended" as a way to compare the budget with borrowing levels in order to avoid unnecessary borrowing in the future. In FY2010, MDOT strived to attain its 90% expenditure goal, but spent only approximately 79% of its estimated budget due to the extraordinary winter snow and the continued sluggish economy, two combining factors which slowed down MDOT's expenditure rates. MDOT's capital budget and operating budget appropriation for all of Maryland's transportation agencies and WMATA are shown in the pie charts on page 3, as are the State's CTP funding commitments over the last decade. Since MDTA is an independently funded entity, its capital and operating budget are shown separately.

**MDOT Capital Budget (Millions)
FY2011-FY2016 CTP**



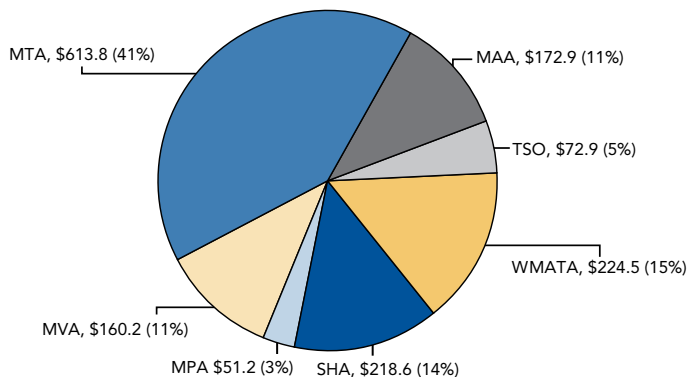
Total Capital Budget: \$9.5 Billion

**MDTA Capital Budget (Millions)
FY2011-FY2016 CTP**



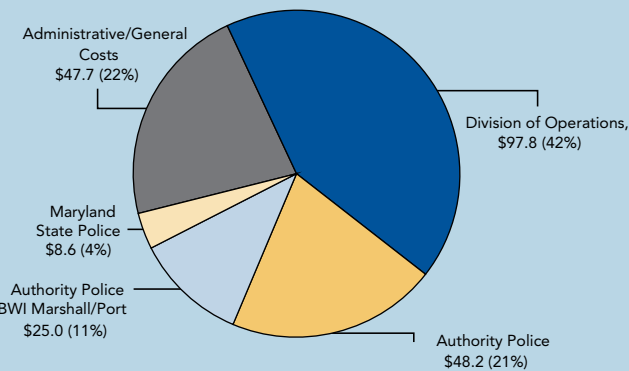
Total Capital Budget - \$2.7 Billion

**MDOT Operating Budget Appropriation (Millions)
FY2011**



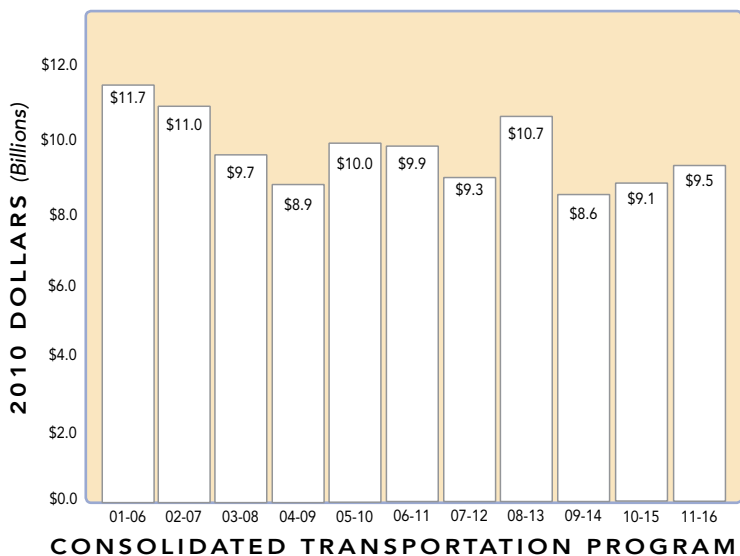
Total Operating Budget: \$1.5 Billion

**MDTA Operating Budget (Millions)
FY2011**



Total Operating Budget- \$227.3 Million

MDOT Total Capital Program Levels (Billions)



Generating Jobs for Maryland

In 2009 Congress passed the American Recovery and Reinvestment Act (ARRA), which was designed to stimulate economic activity through the creation of new jobs and the preservation of existing ones. These funds are targeted toward infrastructure development and enhancement and are expected to contribute to long-term national economic growth. Maryland received \$566 million in ARRA formula funds for transportation improvements, including \$414 million for highways, \$152 million for MTA transit services. Approximately \$141 million of this funding has been provided to local jurisdictions for local highway and transit projects. Maryland also received \$111 million in competitively-awarded discretionary funds for key aviation, port, bus and rail transit projects. Maryland's transportation agencies have moved quickly to allocate and expend ARRA funds, which have helped to support over a thousand jobs in the State. Several major ARRA-funded capital projects kicked-off in 2010, including the \$22 million replacement of a 44-year old bridge at the interchange of I-695 and MD 26, the \$2.3 million expansion of the Falls Road Light Rail Station Park-and-Ride, and \$15 million for the reconstruction of the apron around the C/D Concourses at BWI Marshall.

Accommodating Growing Passenger & Freight Transportation Demand

Since World War II, each year VMT in Maryland have increased, though economic conditions have contributed to slightly reduced VMT over the past several years. As estimated by the Maryland Department of Planning in the development of the State Growth Plan, PlanMaryland, over the next 20 years it is projected that Maryland will be home to one million more people than it has today and will have over 400,000 additional households and more than 600,000 new jobs. While these factors will have many positive impacts for Marylanders, they also contribute to growing congestion in the State. To manage the future demand for transportation, Maryland's transportation agencies are focusing on the next generation of transportation infrastructure, by committing funding to projects, such as the Purple Line light rail line and Corridor Cities Transitway in the Washington region and the Red Line Transitway in the Baltimore region.

MDOT has developed a comprehensive strategy designed to accommodate future transportation demand as a result of the Base Realignment and Closure (BRAC) process. As a result of BRAC and other Department of Defense location decisions, five military installations in Maryland are expected to have

significant increases in military and civilian personnel. Over the next decade, the State will gain between 40,000 to 60,000 direct, indirect and induced jobs as a result of BRAC. MDOT has assisted local governments in planning for long-term BRAC needs and MDOT continues to advance priority projects related to the BRAC expansion, programming \$198 million in FY2010 for BRAC-related transportation projects (e.g., transit enhancements, intersection improvements, and road widening projects to address capacity constraints).

For many roadway users, the Motor Vehicle Administration is their main transportation customer service contact in Maryland, providing licensing and permitting for drivers, motorcyclists, and commercial vehicle operators as well as vehicle registrations and other essential services. MVA transactions are important sources of revenue for the TTF. MVA transactions decreased significantly in 2010 because of a one-time decrease of Vehicle Emissions Inspection Program (VEIP) branch transactions.

MVA Transactions

	2004	2005	2006	2007	2008	2009	2010
	<i>(Thousands)</i>						
Registered Vehicles	4,538	4,604	4,690	4,752	4,774	4,736	4,816
Driver's Licenses Issued	3,789	3,846	3,895	3,937	3,995	4,049	4,082
Commercial Driver's Licenses	151	153	160	164	167	168	257
Motorcycle Licenses	213	221	230	237	244	252	170
MVA Transactions Per Year	11,993	11,991	12,562	12,542	12,388	12,141	11,011



Originating and Terminating Freight In Maryland*

METHOD FOR MOVING FREIGHT	TOTAL VALUE <i>(Millions)</i>	TOTAL TONNAGE <i>(Thousands)</i>
Air	\$4,516	111**
Other***	\$50,714	10,447
Rail	\$9,130	24,299
Truck	\$319,868	273,512
Water****	\$30,200*****	38,800
All Freight	\$384,228	343,309

Source: U.S. Department of Transportation Freight Analysis Framework (FAF) Version 3, which is based on the 2007 Commodity Flow Survey.

* FAF³ data is adjusted yearly by 2% according to the Federal Highway Administration's Freight Summary 2008 and assumes a conservative domestic freight growth rate of 2% including international freight. The 2% growth rate reflects a conservative estimate of freight growth given the economic downturn.

** Source: BWI Marshall report to Airports Council International (2009).

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

**** Source: MPA and U.S. Army Corps of Engineers (Corps data is from 2008).

***** Value of international cargo only.

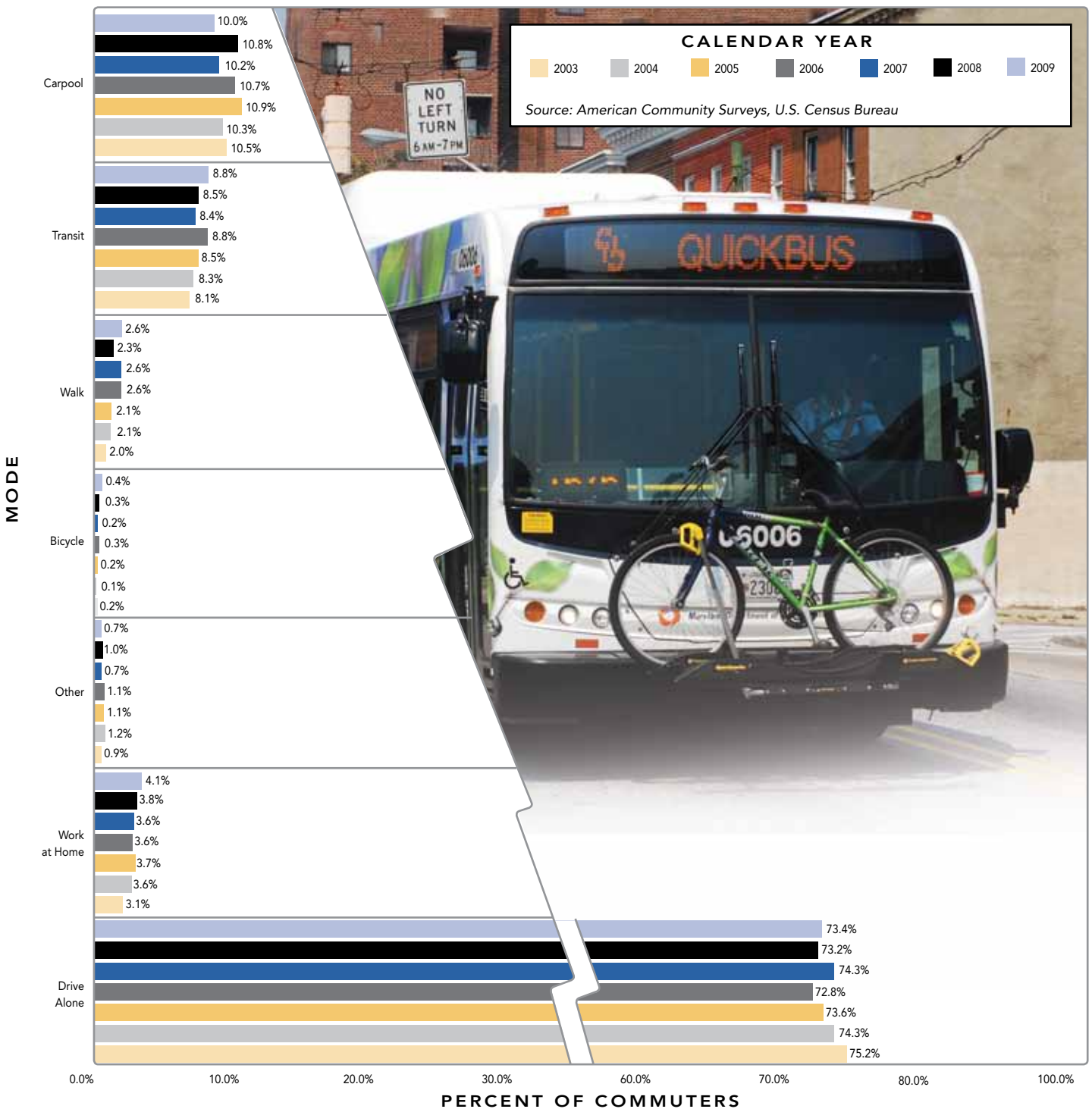
Projections of freight activity are expected to more than double by 2030, placing additional demand on roadways and railways that already compete for capacity with passenger modes. States across the country, including Maryland, are working with railroad partners to address key infrastructure concerns, such as aging assets, landside capacity issues, and choke points. To address critical freight needs, MDOT developed the *Statewide Freight Plan*, which provides a blueprint for the policies and investments expected to best position the State to provide for the efficient, cost-effective, and sustainable movement of goods. MDOT is also currently in the process of determining rail issues and opportunities through the *State Rail Plan*. To address freight needs in, out, and through Maryland, MDOT restructured its Office of Freight Logistics to create the Office of Freight and Multimodalism (OFM), a configuration that integrates freight and passenger mobility needs. OFM emphasizes the continuing development of a balanced, multimodal freight transportation system, and coordinates planning with other states, freight stakeholders, and the I-95 Corridor Coalition.



Mode Split for Maryland Commuters

MDOT strives to provide our customers compelling alternatives to single occupancy vehicle (SOV) commuting. MDOT engages a host of Travel Demand Management (TDM) strategies to reduce driving alone by providing incentives to commuters who ride public transit, carpool, vanpool, bike, walk, or telecommute. By decreasing the number of single occupant vehicle trips, TDM contributes to reducing emissions, congestion, and commuting costs. A key TDM program in the State is Commuter Choice Maryland, which encourages employers to offer discounted monthly passes for public transit services or offer van pool programs. Maryland's transportation agencies are also expanding the network of bicycle and pedestrian facilities and closing gaps in and between these facilities to create better connectivity so that commuters can seamlessly travel in a healthy and environmentally friendly fashion.

Maryland is committed to providing viable commuter options, but despite the implementation of innovative TDM programs, changing entrenched commuting behaviors is difficult. Moreover, because the majority of trips are personal (e.g., social, recreational), more long-term, broader-reaching strategies are required. MDOT will remain an active partner in the development of PlanMaryland, Maryland's Statewide comprehensive plan for sustainable growth and development. PlanMaryland is intended to provide the long-range planning necessary to provide residents with more transportation choices, based on the Transportation Vision (one of twelve Maryland Planning Visions): "a well-maintained, multimodal transportation system facilitates the safe, convenient, affordable, and efficient movement of people, goods, and services within and between population and business centers."



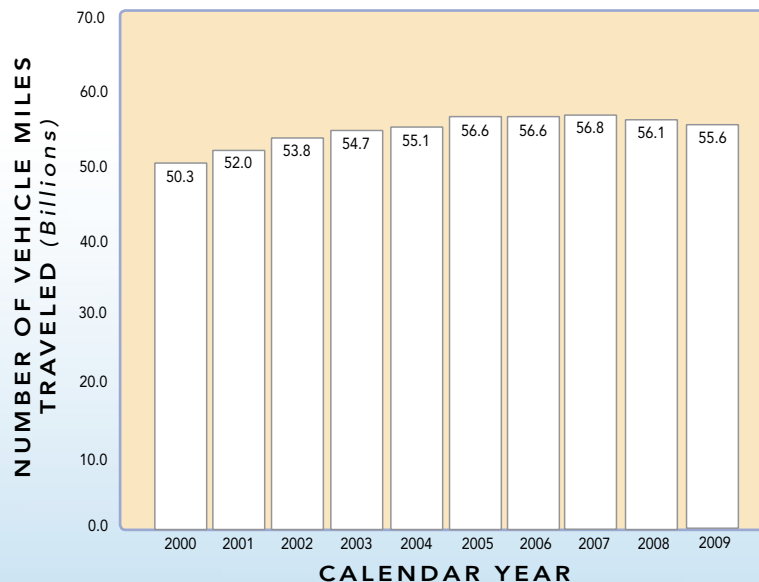
Surface Travel in Maryland

VMT in Maryland has steadily increased each year since the 1940's, though economic conditions have reversed this trend over the past several years. For over two decades, Maryland's VMT has outpaced the rate at which new lane-miles have been added to the roadway network, indicating that more travel is occurring across a limited amount of roadway and causing congestion. The roadway network also includes bridges, which need regular preservation and maintenance in order to remain safe for our customers. A key priority for the State is reducing the number of bridges categorized as structurally deficient. The structurally deficient rating is a Federal standard that alerts a transportation agency of the need to prioritize funding to initiate repairs or to begin the process of replacement and does not mean that a bridge is unsafe for travel.

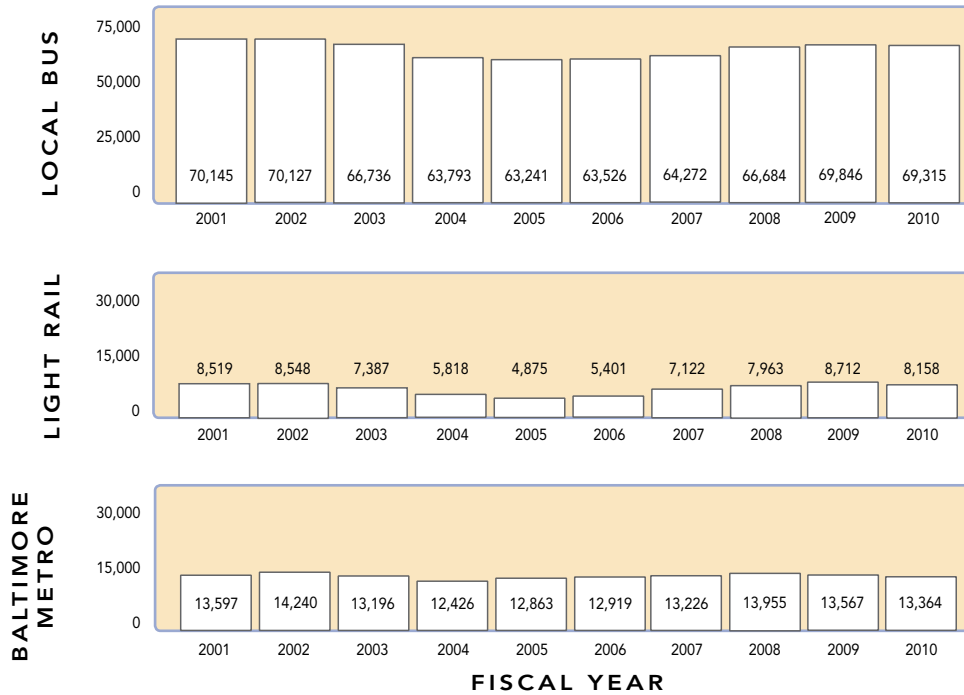
A balanced surface transportation system is critical to promoting mobility for all Marylanders and reducing the environmental effects of SOV driving. MTA offers transit service on Local Bus, Commuter Bus, Light Rail, Baltimore Metro, and MARC Train, in addition to MDOT's contribution to WMATA, which serves the District of Columbia and many Maryland and Virginia communities. MTA also supports 25 Locally Operated Transit Systems (LOTS), providing approximately \$86.7 million in Federal and State grants in FY2010.

Non-motorized travel represents a small share of trips, but is an important element of the transportation network, providing a low-cost, healthy alternative for local trips and facilitating longer distance recreational trips. The FY2011-FY2016 CTP illustrates Maryland's ongoing commitment toward bicycle and pedestrian mobility, with \$72.8 million programmed for bicycle and pedestrian projects to be implemented across the State. Maryland also continues to advance its Maryland Trails: A Greener Way to Go initiative, promoting trails as an environmental friendly travel option. Another way to manage surface travel is through land use. The O'Malley Administration emphasizes TOD—pedestrian friendly, mixed uses with higher density development situated around transit (rail and bus) stations—as a critical land use strategy to reduce congestion and better utilize public transportation station areas. TOD offers a much more sustainable pattern of development that exemplifies the Governor's *Smart, Green & Growing* initiative. In 2010, 14 transit stations were designated as primary sites for TOD investment, promoting opportunities to revitalize our communities and better utilize our existing infrastructure investments.

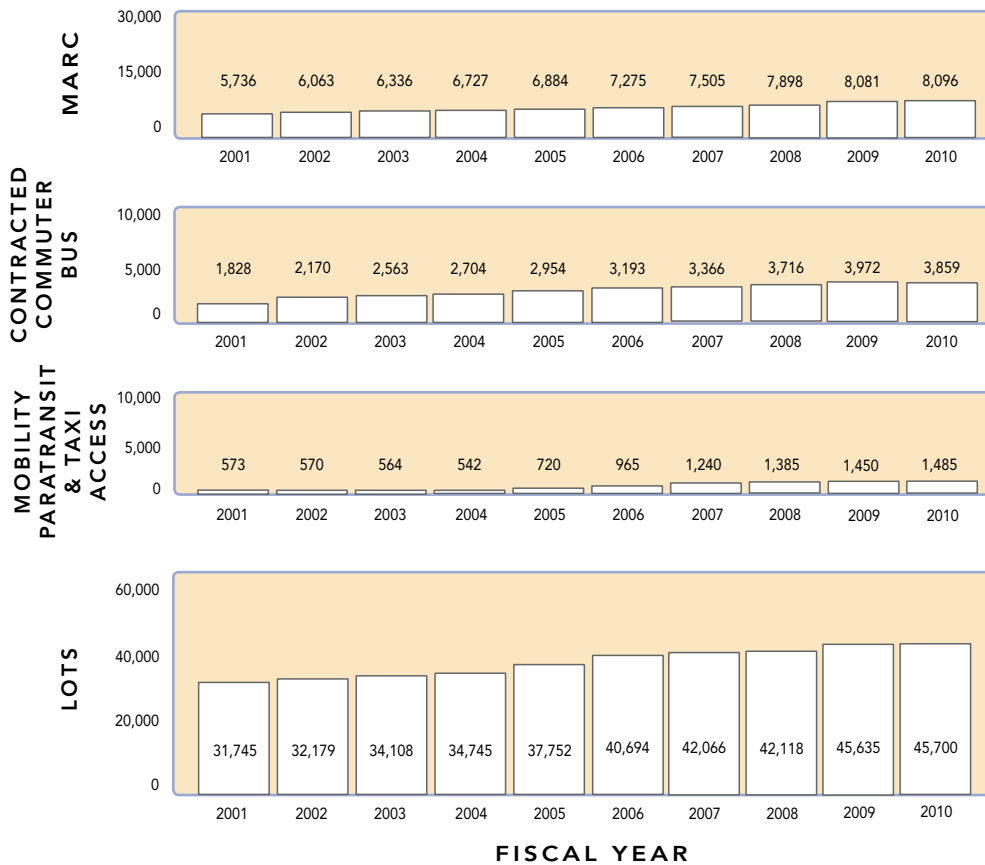
Annual Number of Vehicle Miles Driven



Transit Ridership—MTA Direct-Operated Services (Thousands)



Transit Ridership—Contracted Services and LOTS (Thousands)





Air Travel in Maryland

Baltimore/Washington International Thurgood Marshall Airport (BWI Marshall) offers travelers and cargo a convenient “Easy Come, Easy Go” gateway to domestic and international destinations. BWI Marshall is the State’s largest and most heavily utilized airport, making it an important economic generator for the State. In CY2009, nearly 21 million passengers traveled through BWI Marshall, an increase of 2.3% compared to CY2008. At the same time, air travel in the United States was down 6%, making BWI Marshall’s growth that much more significant. The number of nonstop destinations from BWI Marshall also grew, as Southwest and AirTran continue to initiate service to new markets. Southwest’s proposed acquisition of AirTran is expected to provide benefits to Marylanders, such as more travel destination options, including service to smaller domestic cities and access to international markets in the Caribbean and Mexico. Growth in passenger volumes and destinations at BWI Marshall were matched by quality service. Results from the Airports Council International 2009 Airport Service Quality survey ranked BWI Marshall as the world’s best airport (serving 15-25 million passengers) for passenger satisfaction.

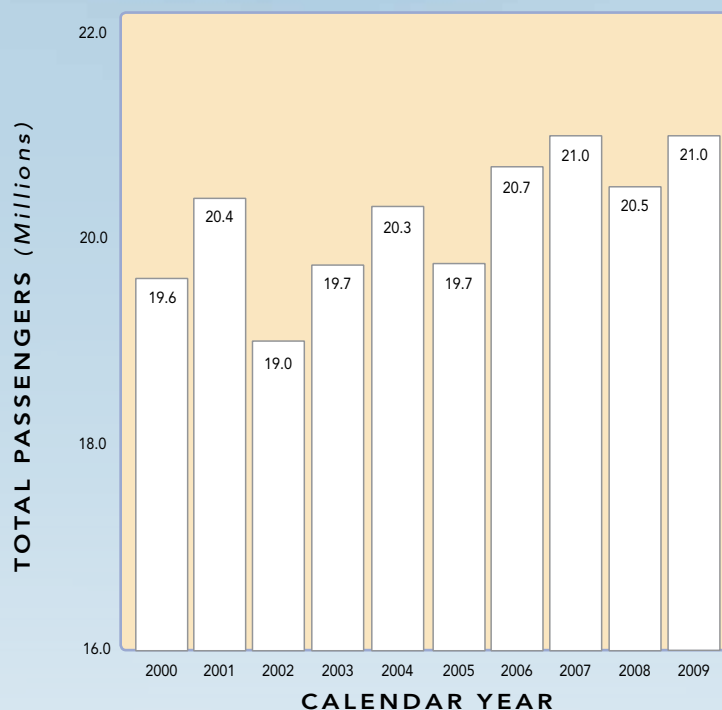
In addition to BWI Marshall, MAA also owns and operates Martin State Airport, a general aviation reliever facility and a support facility for the Maryland Air National Guard and Maryland State Police. The State’s complete general aviation system includes 36 public-use airports where the MAA is also responsible for developing and regulating aviation activities. Excluding BWI Marshall and Martin State, these general aviation airports received approximately \$33.5 million in State funding assistance between 2001 and 2010 (excluding Federal funds and local airport funds).

Waterborne Travel in Maryland

The Port of Baltimore remains vital to the economic health of Maryland. For over 300 years, the Port has been a critical cargo gateway. It was ranked 15th in the United States for total foreign cargo tonnage (22.4 million tons) and 12th for total cargo value (\$30.2 billion) in 2009. A study of the Port of Baltimore’s economic impact determined that nearly 120,000 jobs are connected with the Port, with 50,000 jobs dependent on the cargo and vessel activity at the Port, and another 68,300 jobs are related to, but not considered dependent upon Port activity. Port activity accounts for \$3.7 billion in personal wage and salary income, \$1.9 billion in business revenues, \$1.3 billion in local purchases and \$392 million in State and local tax revenues each year.

Although overall cargo has been sluggish since the economic downturn, automobile imports have increased significantly from FY2009 levels. Out of 360 ports, the Port of Baltimore ranks first in the nation in imported roll on/roll off (farm and construction equipment), imported forest products, imported gypsum, and imported sugar. The Port of Baltimore also has favorable logistics for moving goods, with rail connections and near proximity to major Interstate highways that facilitate direct transport to overnight and national marketplaces. Recently, the U.S. Maritime Administration selected the Port of Baltimore, in conjunction with two other ports for its America’s Marine Highway program. The purpose of the program is to identify ocean or river

Total Annual Commercial Passengers at BWI Marshall



routes where waterborne goods movement could relieve surface transportation networks and also reduce emissions.

In 2010, construction began on a 50-foot deep berth at the Port of Baltimore’s Seagirt Marine Terminal. When complete, the Port will be one of only two U.S. East Coast ports with both a 50-foot deep access channel and a 50-foot deep container berth, allowing larger ships and more cargo access to the Port following the Panama Canal expansion in 2014. In FY2010, the U.S. Army Corps of Engineers dredged 3.5 million cubic yards of material to maintain safe and unimpeded access to these channels. MPA provides placement facilities for dredged materials and continues to pursue opportunities for beneficial use of these materials (e.g., restoring eroding islands and wetland habitats in the Chesapeake Bay).

Cruise ship activity has continued to be a growing market for the State. In CY2010 Royal Caribbean commenced year-round service from South Locust Point, a dedicated cruise terminal in Baltimore. It is expected that in CY2010 91 international cruises will utilize the Port and 190,000 passengers are expected to depart from Baltimore which constitutes a significant increase in cruise activity over the past decade. On average, each trip generates about \$1 million in economic impact, and the industry supports approximately 500 jobs.



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

Performance Measures

MONITORING AGENCY	PERFORMANCE MEASURE	PAGE
MAA	Percent of BWI Marshall customers rating the airport "good" or "excellent" on key services	13
MPA	Average truck turn-around time at Seagirt Marine Terminal	13
MTA	Percent of service provided on time	11
MTA	Customer satisfaction rating	12
MDTA	Overall customer satisfaction of <i>E-ZPass</i> ® customers	14
MDTA	Percent of toll transactions collected electronically	14
MVA	Branch office customer visit time versus customer satisfaction rating	12
SHA	Maryland driver satisfaction rating	10
SHA	Percentage of the Maryland SHA network in overall preferred maintenance condition	10



Maryland's transportation network is more than the roadways, rails, runways, and ports that facilitate the movement of people and goods between origins and destinations. For Maryland's transportation agencies, movement alone does not determine the quality of transportation service—the network must function reliably, efficiently, equitably, and comfortably. To do this, Maryland's transportation agencies leverage limited financial and human resources to maintain and enhance the functionality of existing transportation assets, provide fast and responsive service through innovative technologies, and prioritize and fulfill the needs of our customers. For example, the recently debuted CharmCard, a rechargeable, swipe-less fare card, provides more convenient access across many MTA transit services in addition to other transit service providers across the region.

Maryland's transportation agencies are actively engaged with partner agencies and stakeholders on a variety of planning studies and initiatives to improve transportation services and enhance Maryland's quality of life. This includes exploring existing transportation network improvements while strategically providing for capacity, service, and programs. For example, MDOT is working with the Washington Metropolitan Area Transit Administration (WMATA) on implementing regional priority bus corridors to influence how the transportation system grows and operates in the future.

Key Initiatives

- MDOT:** Continue to coordinate with partner State agencies on shared interests in system preservation, economic opportunity, mobility enhancement, and healthier lifestyle choices.
- MAA:** Continue to develop the business relations program, aimed at building business partnerships and enhancing BWI Marshall's image and presence in the business community.
- MPA:** Construct a new cargo gate for South Locust Point to improve security, capacity, and processing times.
- MTA:** Implement real-time bus tracking for passengers to improve customer service and efficiency.

- MDTA:** Improve the utility of *E-ZPass*® accounts by expanding capabilities to include fee collection at parking lots and special events.
- MVA:** Develop new technical resources to enable a wide variety of web-based transactions.
- SHA:** Improve rest areas, such as reconstructing the South Mountain rest areas along eastbound and westbound I-70, creating access to additional parking and updated restroom facilities for travelers.

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 4 out of 5 rating.

CALENDAR YEAR*	2006	2008	2010
Rating	3.93	3.90	3.94

TARGET: 4 out of 5

* Survey administered biennially.

Why Did Performance Change?

- Reviewed customer needs and preferences and prioritized roadway maintenance and safety, and bridge condition activities accordingly
- Maintained access to SHA roadways during record-breaking blizzards
- Disseminated real-time traffic information through variable message signs on roadways and via the SHA website
- Upgraded the Customer Care Management System to improve tracking of customer requests
- Increased customer responsiveness through an on-line form that directly routes inquiries
- Changed internal support functions and some standards and services due to budget constraints

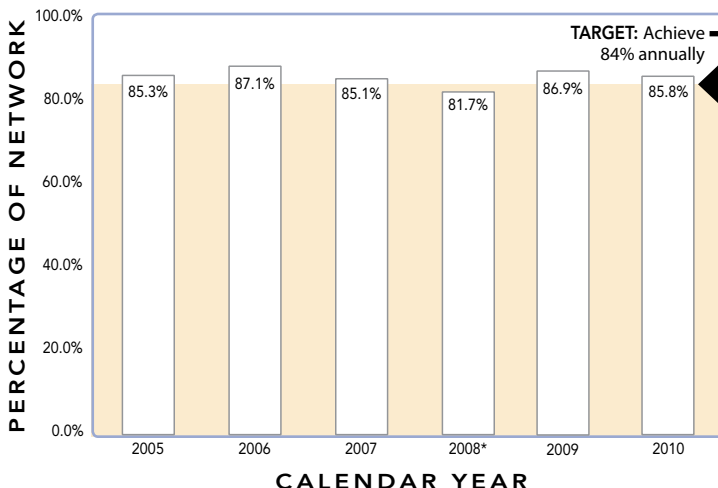
What Are Future Performance Strategies?

- Implement a 511 Traveler Information System for the State
- Investigate ways to meet customer quality and responsiveness standards with reduced staff levels
- Sustain an agency culture where good customer service is the responsibility of every employee



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 roadways.



*Reflects updated data point.

Why Did Performance Change?

- Budget growth for routine maintenance slowed in FY2008 and FY2009
- Significant budget cuts in FY2010 eliminated over 34 positions from operations
- Costs of equipment and contracted services have increased
- SHA implemented many changes in maintenance activities over the past two years, such as revising the mowing policy to allow for reduced mowing, allowing critical work to be completed with reduced budgets and resulting in environmental benefits; these types of changes produced visible results that may not be able to be sustained in years to come

What Are Future Performance Strategies?

- Allocate maintenance funds to critical traffic safety activities (e.g., line-striping on roadways)
- Decrease funding for aesthetic activities that do not serve a critical functional role
- Due to funding reductions, future performance is expected to drop to 84%

MTA: Percent of Service Provided on Time

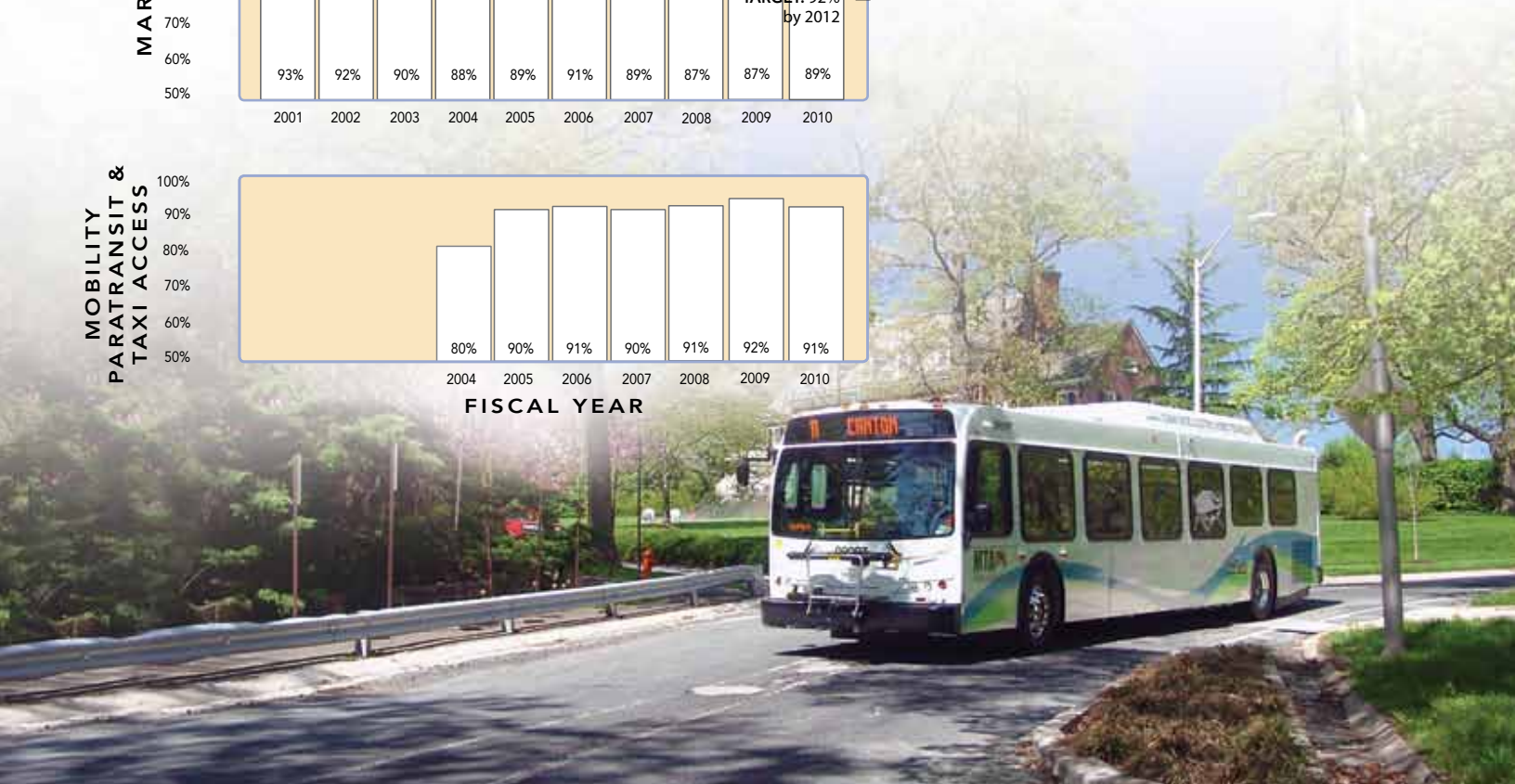
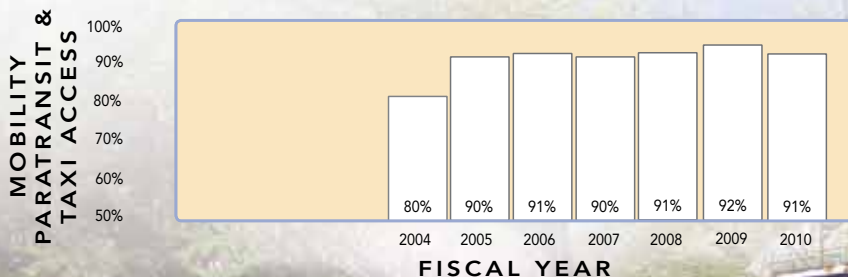
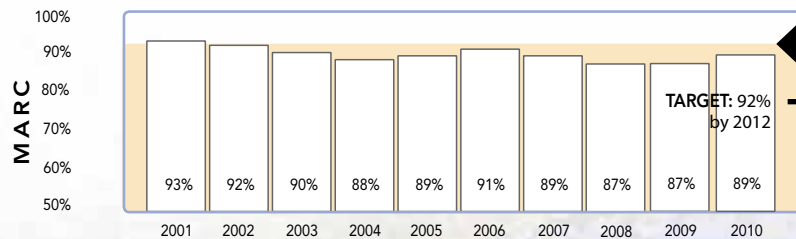
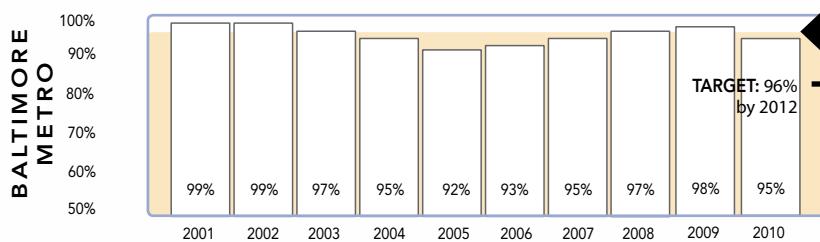
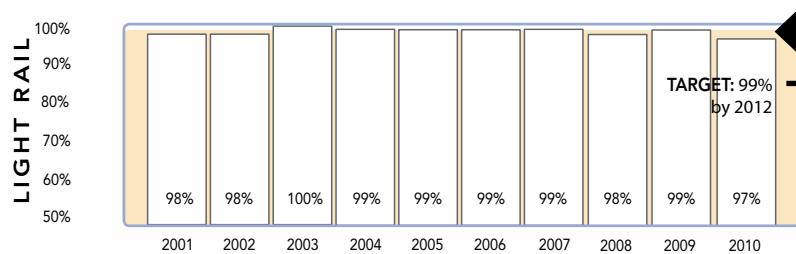
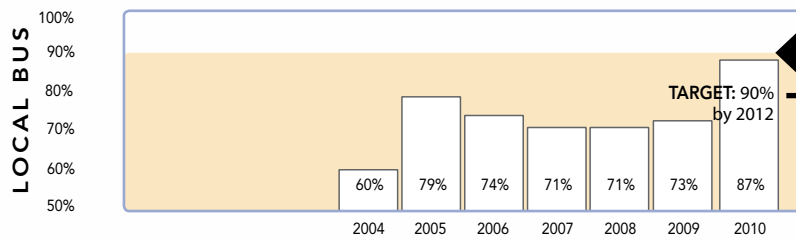
On time performance is an important indicator of service quality and efficiency, and correlates highly with system usage and customer satisfaction.

Why Did Performance Change?

- Continued monitoring bus schedules and routes to look for efficiencies
- Began using Automatic Vehicle Locator (AVL) technology for bus on time performance in July 2009
- Increased routine maintenance and track work resulted in more delays on Baltimore Metro
- Continued to aggressively monitor on time performance on Mobility Paratransit services

What Are Future Performance Strategies?

- Expand QuickBus limited-stop service on the Local Bus system
- Overhaul light rail cars to improve fleet reliability and service efficiency
- Continue adding to the MARC locomotive fleet to decrease overcrowding
- Continue to monitor schedules and routes to maximize efficiencies
- Implement Centralized Control and Communication Center



MTA: Customer Satisfaction Rating

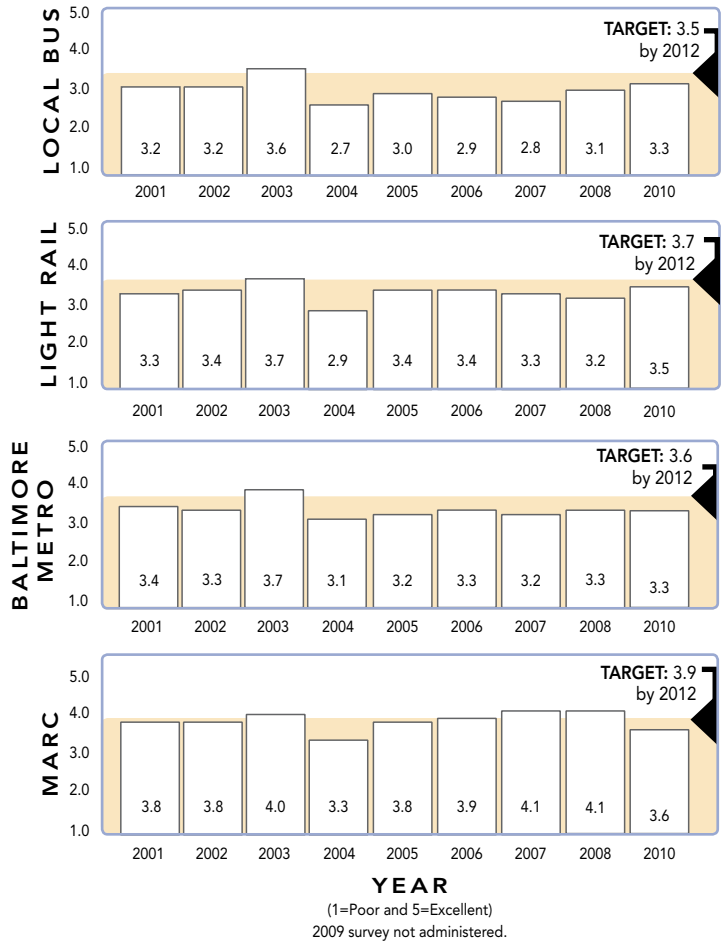
Reliable, safe, and convenient service are key factors in attracting ridership. Customer satisfaction reflects whether MTA is meeting its customer service standards and signals which modes require improvement.

Why Did Performance Change?

- There were data issues with the 2009 survey; a new survey was issued in 2010
- Overcrowded conditions on MARC led to a decrease in the customer satisfaction rating
- Last year Light Rail operated on a reduced schedule; a return to the normal schedule this year resulted in a higher customer satisfaction rating

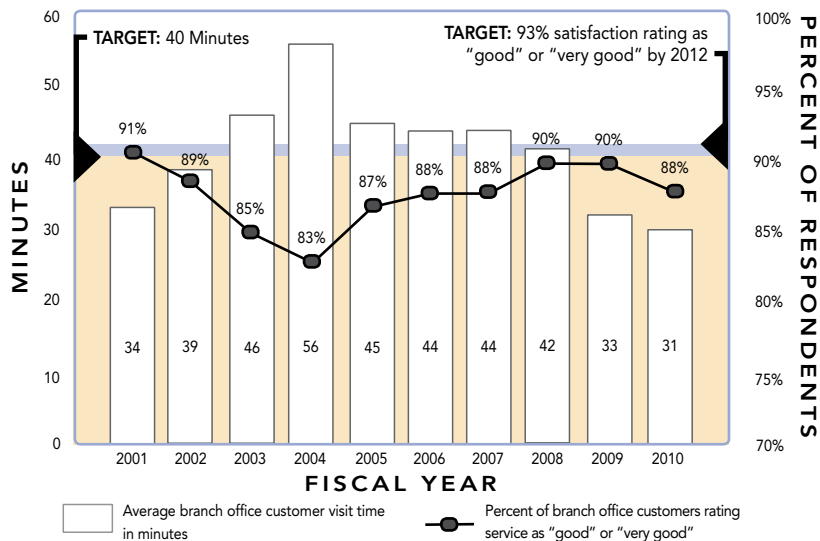
What Are Future Performance Strategies?

- Continue Local Bus service improvements (e.g., scheduling) and fleet replacements
- Provide additional park-and-ride facilities at transit stations
- Implement the CharmCard rechargeable fare card to provide faster, easier access and payment to many transit services
- Implement mystery rider program to ensure quality service delivery
- Develop a quality control department to remotely monitor real time service delivery to ensure performance standards



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?

- Implemented a Customer Traffic Management System (CTM2) to improve the accuracy of customer service data
- Customer demand on specific days and times of the week is higher than others, resulting in inconsistent visit times

What Are Future Performance Strategies?

- Analyze customer service data from the CTM2 and make appropriate adjustments to services
- Continue to develop new technical and personnel strategies to further drive down customer visit time
- Continue staff training to increase service efficiency and effectiveness

MAA: Percent of BWI Marshall Customers Rating the Airport “Good” or “Excellent” on Key Services

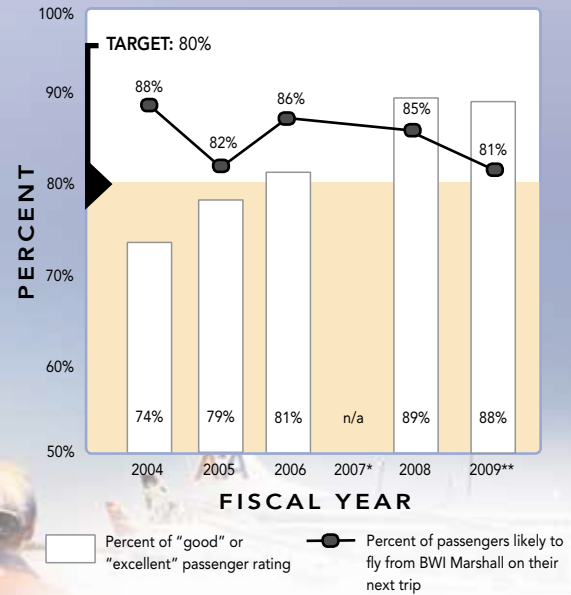
Customer surveys provide valuable feedback to agencies regarding service delivery, enabling them to continuously respond to customer needs.

Why Did Performance Change?

- The BWI Marshall Survey Program is currently suspended due to budgetary constraints; however, results from the Airports Council International 2009 Airport Service Quality survey ranked BWI Marshall as the world’s best airport (serving 15-25 million passengers) for passenger satisfaction

What Are Future Performance Strategies?

- Customer feedback is important to the MAA, the BWI Marshall Survey Program will resume in future years when budget constraints are lifted



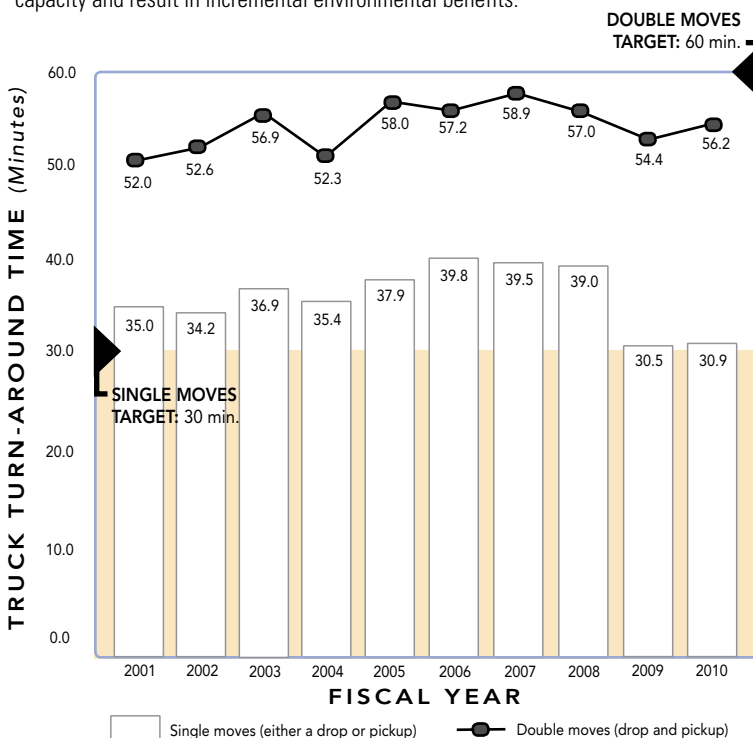
* Survey not completed in FY2007.

**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?

- Recession induced decreases in gate volume contributed to less gate and terminal congestion in FY2009; however, container volumes increased slightly in FY2010 along with a slight increase in turn times
- Implemented technology improvements to enhance processing efficiencies
- Instituted the Transportation Worker Identification Card (TWIC) program to increase security without impacting commerce

What Are Future Performance Strategies?

- Administer the Seagirt Marine Terminal public-private partnership to build a new 50-foot deep container berth and install four super post-Panamax cranes to handle larger cargo vessels once the Panama Canal is expanded in 2014
- Continue the Quality Cargo Handling Team (Q-CHAT) program for improved container handling
- Strive to implement additional process improvements for greater gate and terminal performance
- Ensure that gate and terminal efficiencies do not adversely impact commercial businesses
- Attract a new container ocean carrier, and a new service to the Port from an existing container carrier
- Work with economic development partners to locate sites to attract new distribution centers to the State

MDTA: Overall Customer Satisfaction of *E-ZPass*® Customers

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

FISCAL YEAR	2007	2009*	2010
Percent Satisfied	87%	n/a	86%

TARGET: 87%

(Baseline year = 2007)

* Survey not implemented in 2009.

Why Did Performance Change?

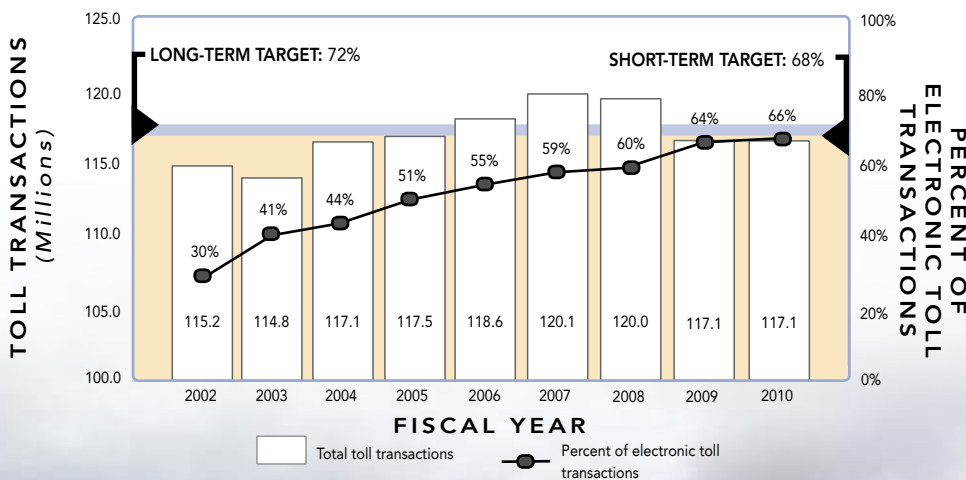
- MDTA responded to customers' suggestions made during the previous survey regarding adding *E-ZPass*® dedicated lanes to facility toll plazas
- MDTA continues to respond to customers' suggested improvements throughout the system where fiscally possible

What Are Future Performance Strategies?

- Analyze performance trends in relation to the performance baseline
- Develop comprehensive strategies to address issues identified through customer surveys
- Continue programs and services receiving high ratings
- Forward customer satisfaction survey results to appropriate Divisions to encourage improvements
- MDTA will continue to distribute satisfaction surveys as economic and staff constraints allow
- Continue to respond to customer suggestions for improvements, as fiscally possible

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 seven toll facilities across the State.



* Toll collections are paid as cash, ticket or electronic transaction.

Why Did Performance Change?

- *E-ZPass*® transactions continued to increase in volume and in the percentage of total transactions
- Assessed a monthly account management fee, which limited growth in the overall number of pass holders as infrequent users discontinued their participation

What Are Future Performance Strategies?

- Expand retail sales of *E-ZPass*® "On-The-Go" through new retail outlets
- *E-ZPass*® usage is anticipated to increase further with the opening of the Intercounty Connector (ICC)/MD 200
- Improve the utility of an *E-ZPass*® account by expanding its capabilities to include fee collection at parking lots and special events





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

Performance Measures

MONITORING AGENCY	PERFORMANCE MEASURE	PAGE
MAA	BWI Marshall crime rate	19
MAA	Number of repeat discrepancies in the annual Federal Aviation Administration's Federal Aviation Regulation inspection	20
MAA	Rate of airfield ramp incidents and accidents per 1,000 operations	19
MPA	MPA compliance with the Maritime Transportation Security Act of 2002	20
MTA	Customer perceptions of safety on the MTA system	18
MTA	Preventable accidents per 100,000 vehicle miles	18
MVA	Percent of Homeland Security REAL ID Act benchmarks achieved	18
SHA	Number and rate of bicycle and pedestrian fatalities and injuries on all Maryland roads	17
SHA & MDTA	Annual number and rate of traffic fatalities and personal injuries on all roads in Maryland	16



Maryland's transportation agencies strive to provide a transportation system that serves all Marylanders and balances safety and security with efficiency, mobility, and environmental considerations. Roadway safety is a top priority. Resources are directed toward safety-related campaigns, programs and projects to improve safety outcomes. Examples include: targeted education and outreach to high-risk groups like young drivers; investments in technologies and staff to provide monitoring and enforcement (e.g., seat-belt usage); and critical maintenance and capital projects like signage, striping, and rumble strips. The State will be updating its Strategic Highway Safety Plan (SHSP) to evaluate key safety areas and to further reduce traffic-related fatalities and injuries. So far, Maryland's comprehensive approach to safety has contributed to a 12% decline in traffic fatalities and a 25% decline in personal injuries since CY2000.

Safety and security is an important goal across Maryland's multimodal system. Maryland's transportation agencies recognize that both the actual and perceived safety and security of transportation facilities, such as BWI Marshall and transit stations, is important to attracting and retaining customers and to realizing the economic and environmental benefits provided by key transportation assets. Advanced technologies, such as the tamper-resistant biometric credential used by workers at MPA terminals and safeguards to protect MVA customer data, help to expand the State's security and counterterrorism capabilities. Transportation safety and security also extends to emergency response during natural and man-made disasters. To prepare for, respond to, and recover from these potential events, Maryland's transportation agencies routinely coordinate with law enforcement, emergency responders, and incident response teams and also develop emergency response plans and conduct regular table-top exercises.

Key Initiatives

MDOT: Maintain leadership in the Maryland Bicycle and Pedestrian Advisory Committee, which provides guidance on issues directly related to bicycle and pedestrian activity including funding, public awareness, safety and education.

MAA: The BWI Marshall Fire and Rescue Department will continue to provide mutual aid service to nearby communities. The Department responded 1,016 times for mutual aid in FY2010.

MPA: Continue to expand the use of advanced technologies, such as Radiation Portal Monitors, at terminal gates and other access control points.

MTA: Create a central facility for monitoring Closed Circuit TVs (CCTV) on Local Buses, Baltimore Metro, Light Rail, and MARC, and continue adding CCTV facilities at Baltimore Metro and Light Rail stations (\$2.7 million for CCTV Improvements in the FY2011-FY2016 CTP).

MDTA: Enhance toll plaza operations and safety by improving signs and signals on approach roads and toll canopies, and by reducing vehicle speeds in toll plaza approaches.

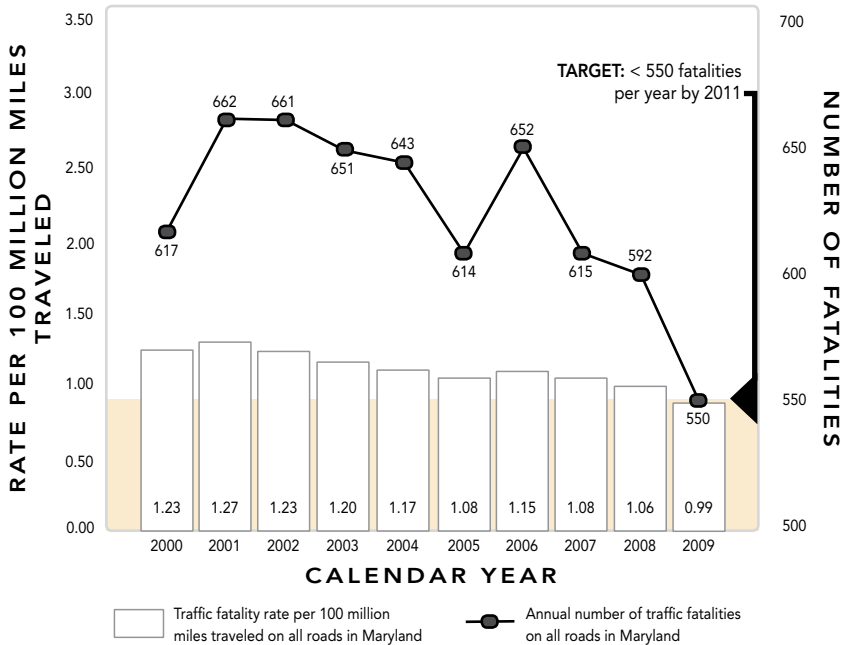
MVA: Maryland began issuing REAL ID compliant licenses and ID cards on January 1, 2010. MVA will deploy system enhancements and explore new technologies to complete compliance with identification requirements stipulated by the REAL ID Act (\$2.8 million for REAL ID Act Projects in the FY2011-FY2016 CTP).

SHA: Improve the highway access permit process to ensure that commercial and residential development along State roadways is coordinated in order to limit conflicts between vehicles.

SHA & MDTA: Annual Number and Rate 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 and to identify tendencies and trends that assist in implementing a wide variety of countermeasures.

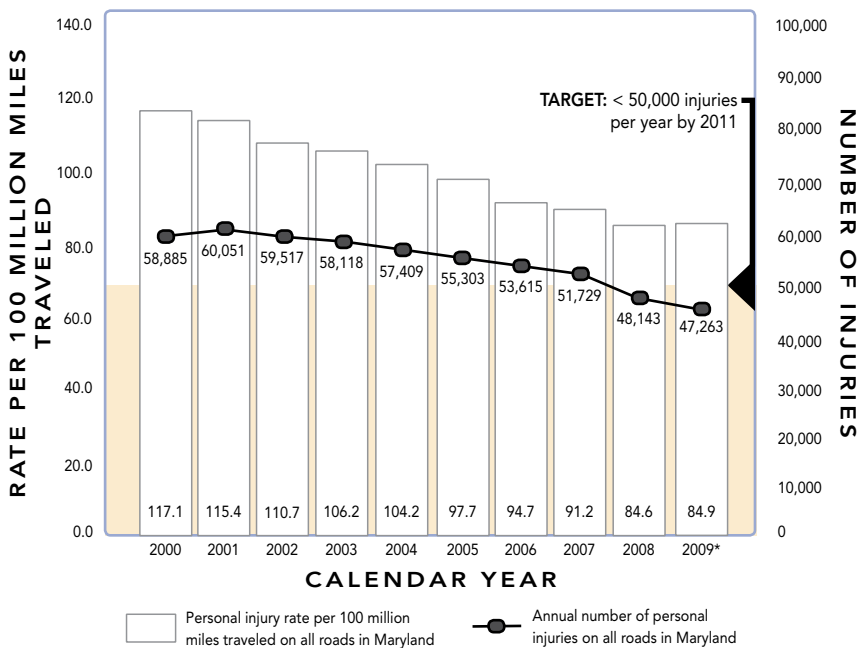
Annual Number and Rate of Traffic Fatalities on All Roads in Maryland



Why Did Performance Change?

- Maryland's fatality rate of 0.99 is about 13% lower than the national rate (1.13 for 2009), which is the all-time national low
- More prevalent seat belt usage (94.7% in the summer of 2010)
- Enhanced highway engineering and operations, vehicle safety design and equipment, safety education, law enforcement, driver monitoring and control, and commercial vehicle inspections and enforcement
- Expanded the use of speed cameras in work zones, along high-speed expressways, and at weigh station construction sites
- Continued to conduct Road Safety Audits to identify needed safety improvements
- Increased use of highway rumble strips and stripes, with approximately 2,500 miles of edgeline strips/ stripes and 400 miles of centerline strips added since the program began
- Completed about 2,850 projects over the past four years to enhance safety
- The economic downturn has led to a decline in Vehicle Miles of Travel (VMT) resulting in fewer injuries and fatalities

Annual Number and Rate of Personal Injuries on All Roads in Maryland



What Are Future Performance Strategies?

- Lead the development of a new Statewide Strategic Highway Safety Plan for the years 2011 to 2015 that will involve a multi-agency, multi-jurisdictional approach to continue to reduce fatalities and injuries along Maryland's highways
- Focus on five critical safety areas including: reducing impaired, inattentive or, aggressive driving, and improving occupant protection and safety infrastructure
- Inform the public about new laws enacted in October, 2010, including restrictions on the use of handheld cell phones while driving, requirements for sharing the road with bicycles, limitations on drivers' ability to view video displays and precautions when passing emergency vehicles on the side of the road

* 2009 data is preliminary and is subject to change.

SHA: Number and Rate 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 Strategic Highway Safety Plan and to identify tendencies and trends that assist in implementing a wide variety of countermeasures.

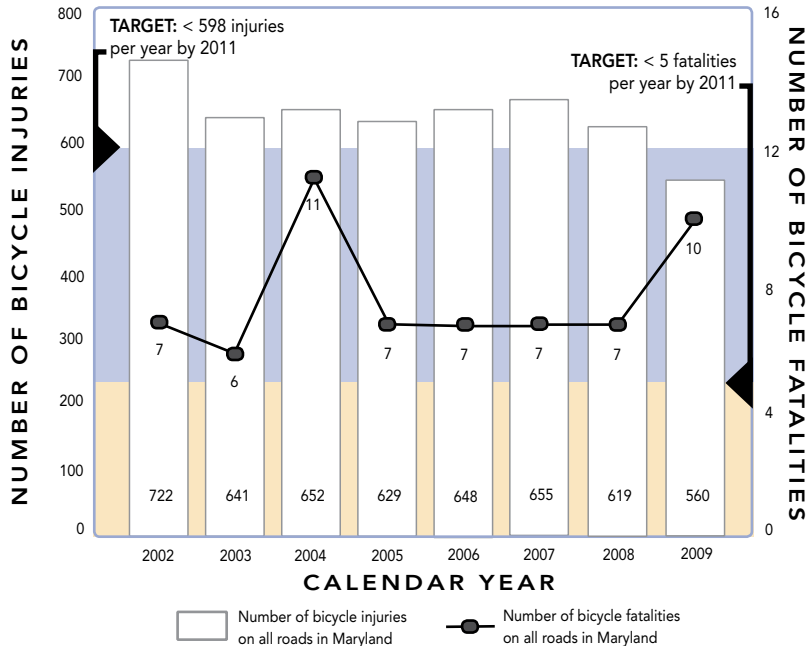
Why Did Performance Change?

- Continued the StreetSmart pedestrian safety program in both the Baltimore and Washington metropolitan regions
- Targeted enforcement and education funds for areas with a history of high pedestrian injuries and fatalities, such as in Prince George's County where SHA conducted direct outreach in partnership with local partners to support the broader StreetSmart regional pedestrian and bicycle safety program
- Supported the Vests for Visibility program which allowed trick-or-treaters to borrow reflective safety vests free of charge during Halloween
- The Maryland Safe Routes to School program received \$3 million in funds to continue improving the safety of children who walk or bike to school
- Developed and distributed pedestrian safety law cards to support local pedestrian safety law enforcement

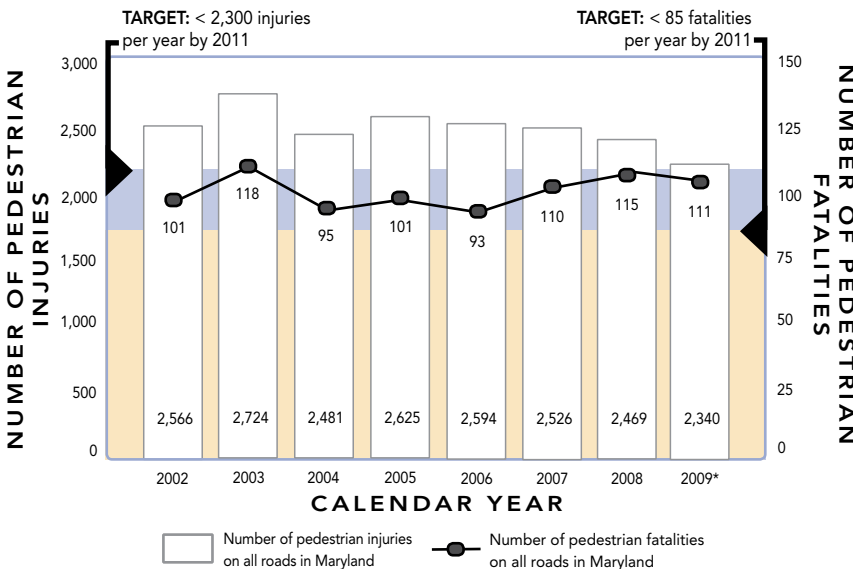
What Are Future Performance Strategies?

- Support safe pedestrian access along State highways (\$5.7 million for the Sidewalk Program and \$56.7 million for the ADA Compliance Program in the FY2011-FY2016 CTP)
- Revise the SHA Bicycle Guidelines to reflect current bicycle facilities available to users
- Develop a new law enforcement training video and law card on bicycle laws and bicycle safety
- Develop policies, such as the complete streets and the bicycle and pedestrian priority areas, that promote greater emphasis on bicycle and pedestrian accommodations beyond SHA projects
- Develop a new public education concept for sharing the road that incorporates both bicycle and pedestrian awareness and promotes the new "3 feet for bikes" legislation
- Increase the involvement of enforcement agencies in pedestrian enforcement during the critical times of Tuesday-Friday 3 p.m. to 8 p.m.
- Conduct pedestrian and bicycle safety law enforcement training in coordination with the StreetSmart regional campaigns
- Coordinate new marketing efforts with the StreetSmart regional pedestrian safety campaigns in the Washington, D.C. and Baltimore metropolitan regions, working jointly with key partners, such as the City of Baltimore, the Baltimore Metropolitan Council and OneLess Car, Inc

Number of Bicycle Fatalities and Injuries on All Maryland Roads



Number of Pedestrian Fatalities and Injuries on All Maryland Roads



* 2009 data is preliminary and subject to change.

MTA: Customer Perceptions of Safety on the MTA System

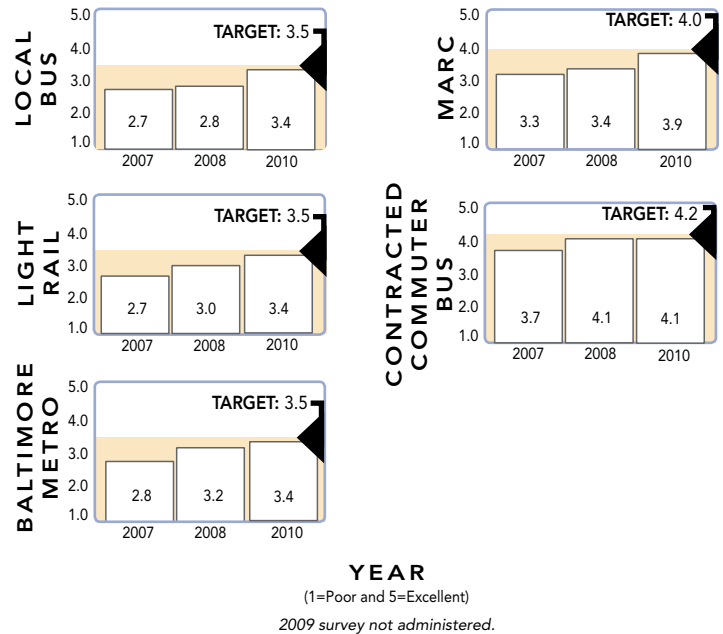
A positive perception of personal safety is correlated with higher ridership and stronger commitment to transit as a mode of travel.

Why Did Performance Change?

- Continued CCTV at Johns Hopkins Medical Center Metro Station
- Continued safety and security programs, such as the Zone Enforced Uniform Sweeps (ZEUS) and CompStat
- Obtained a Command Communications Vehicle, enhancing communications with State and Federal agencies
- Increased lighting at Baltimore Metro Stations
- The crime rate decreased by 10%

What Are Future Performance Strategies?

- Continue ZEUS and MTA Police CompStat initiatives
- Install additional CCTV facilities at Baltimore Metro stations and Light Rail stations
- Retrofit MTA's existing bus fleet to offer enhanced safety and security (\$10.2 million for Bus On-Board CCTV Retrofit in the FY2011-FY2016 CTP)
- Institute a Police Cadet Program to increase the presence of security patrols



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**	TARGET
Accident Rate					
Local Bus	2.50	2.50	2.87*	2.65	Reduce by 7%
Light Rail	n/a	n/a	0.06	0.17	Reduce by 1%
Baltimore Metro	n/a	n/a	0.06	0.12	Reduce by 1%
Paratransit/ Taxi Access	n/a	n/a	1.14	0.00	Reduce by 2%

(Baseline year = 2008)

* 2009 was revised to adjust for final data.

** 2010 data is preliminary since the year was not complete at the time this Report was published.

Why Did Performance Change?

- Although the Baltimore Metro and Light Rail preventable accident rate increased slightly, there were only three preventable accidents on Baltimore Metro and four on Light Rail
- The Local Bus preventable accident rate continues to decline and is expected to be lower than last year
- MTA initiated new safety training to increase accountability efforts for operators involved in preventable accidents

What Are Future Performance Strategies?

- Continue to review accidents to determine trends in operators, time of day, accident location, and intersections, and utilize geographic information system (GIS) data
- Continue to regularly re-certify operators, including extensive safety training
- Increase accountability of operators who have multiple preventable accidents
- Implement immediate retraining for operators with a preventable accident and utilize bus simulators for more efficiency in training

MVA: Percent Of Homeland Security REAL ID Act Benchmarks Achieved

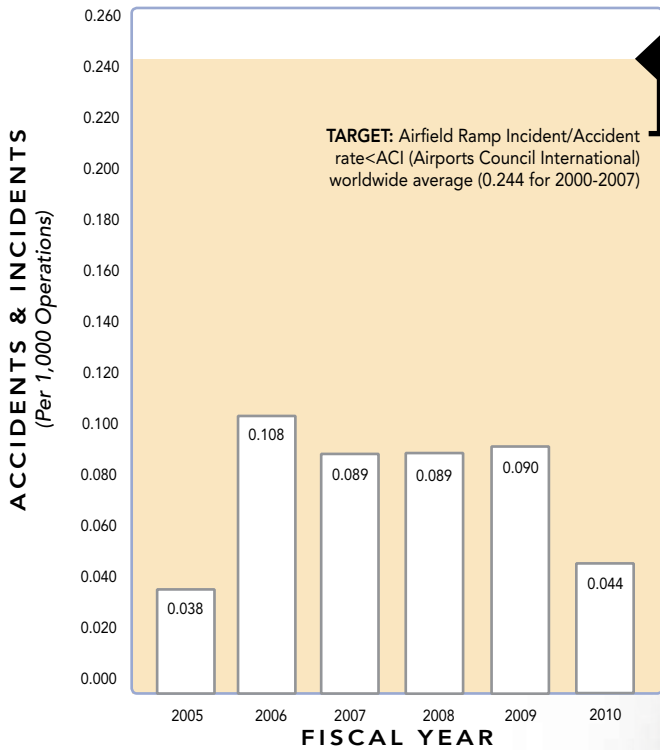
The Federal REAL ID Act of 2005 sets new standards for issuing driver licenses and identification cards and is intended to improve the integrity and security of State-issued driver licenses and identification cards. On January 15, 2008, Governor Martin O'Malley directed MDOT to create a State driver's 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. MVA's Full Compliance is anticipated prior to May 10, 2011. As of August 2010, the MVA has achieved a 69% compliance rate, with 27 of the 39 benchmarks successfully completed.

What Are Future Performance Strategies?

- Maintain the REAL ID Executive Committee to ensure Maryland's compliance with the Federal REAL ID Act
- Monitor the potential impact of REAL ID legislation on MVA services
- Continue to proactively implement and strictly monitor for progress toward completion of the Federal benchmarks

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.



Why Did Performance Change?

- Rate of airfield incidents and accidents is well below the average rate as reported by Airports Council International (ACI)

What Are Future Performance Strategies?

- Develop a Safety Management System (SMS) to address safety issues before they lead to incidents
- The Federal Aviation Administration (FAA) is expected to issue a Notice to Proceed for Rulemaking for an SMS policy in mid-2011



MAA: BWI Marshall Crime Rate

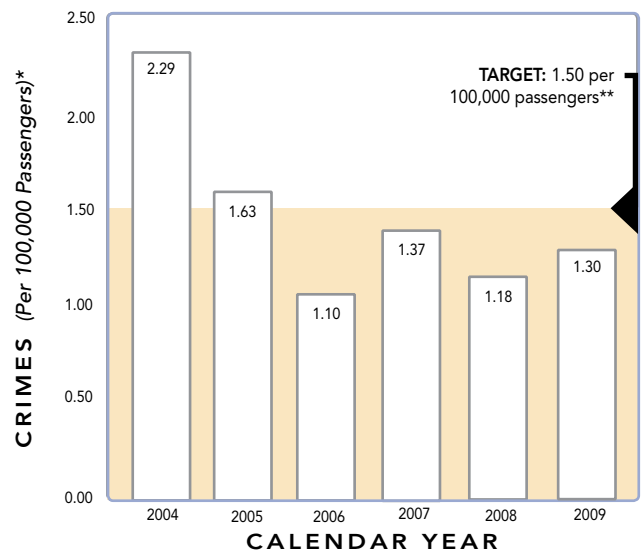
This measure provides an indication of the relative safety passengers experience when traveling through BWI Marshall. Poor performance in this area could result in a decline in passenger numbers.

Why Did Performance Change?

- BWI Marshall's actual number of crimes committed continues to be very low
- Began conducting inspections of airport facilities with MDTA law enforcement personnel instead of contract security guards

What Are Future Performance Strategies?

- Continue to expand CCTV coverage to better monitor, record and respond to security and safety incidents (\$43.0 million for Integrated Life-Safety and Security Systems in the FY2011-FY2016 CTP)
- Continue security inspections (e.g., random inspections of airfield vehicles and employees by MDTA law enforcement personnel)



* Implemented new methodology in 2010 and added additional types of crime to calculations. Updated all historical data to reflect the new methodology.

**Revised target from 1.30 to 1.50 to reflect changes in methodology.



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 US 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 2010 FAA safety and certification inspection with zero repeat discrepancies. MAA will continue to address all discrepancies in accordance with the Federally prescribed timeline.



What Are Future Performance Strategies?

- Work closely with FAA to ensure that BWI Marshall passes its annual safety and certification inspection
- Continue working with FAA to implement a pilot SMS program
- Focus work activities on achieving a 100% compliance with safety and certification requirements
- Update security monitoring and response alert systems
- Comply with FAA Runway Safety Area standards by December 2015 (\$314.5 million for Runway Safety Area / Pavement Management Program Improvements in the FY2011-FY2016 CTP)

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 Maritime Transportation Security Act of 2002.

As required by the Maritime Transportation Security Act (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 and closure is required, which 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 MPA.

What Are Future Performance Strategies?

- Implement \$1.27 million in American Recovery and Reinvestment Act (ARRA) funding from the Port Security Grant program to protect critical infrastructure in the Port of Baltimore area
- Continue to expand use of advanced devices (e.g., Radiation Portal Monitors) at terminal gates
- Coordinate maritime and homeland security with Federal, State and local Port partners
- Increase the frequency of enforcement initiatives as budget permits
- Expand CCTV capabilities to include video-sharing within MDOT and integration with access control systems
- Submit applications for security projects for the next round of Port Security Grants
- Complete construction of capital projects to improve security at State-owned terminals and continue to employ state-of-the-art technologies (\$9.5 million for Terminal Security Program in the FY2011-FY2016 CTP)



Goal: System Preservation & Performance

Objectives

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

Performance Measures

MONITORING AGENCY	PERFORMANCE MEASURE	PAGE
MAA	Airline cost per enplaned passenger (CPE)	28
MAA	Non-airline revenue per enplaned passenger (RPE)	28
MPA	Adequate dredge material placement capacity remaining for Harbor and Bay maintenance and new work dredging	29
MPA	Revenue versus operating expense	30
MTA	Operating cost per passenger trip	25
MTA	Operating cost per revenue vehicle mile	26
MTA	Passengers per revenue vehicle mile	24
MVA	Cost per transaction	27
MVA	Alternative service delivery transactions as percent of total transactions	27
SHA	User cost savings for the traveling public due to incident management	23
SHA & MDTA	Percent of roadway miles with acceptable ride condition	22
SHA & MDTA	Number of bridges and percent that are structurally deficient	22



Poorly preserved infrastructure or equipment can lead to heavy delays, declining customer satisfaction, and create serious safety and security issues. Maryland's transportation assets—roadways, transit systems, railways, airports, building facilities, and seaports—represent a major investment that has been progressively built up over a long period of time. With aging assets and limited resources, Maryland's transportation agencies utilize innovative techniques to maintain existing facilities and avoid major rehabilitation or infrastructure replacement, such as using spray patching instead of conventional cold mix asphalt for pothole repair. One critical tool to optimizing the lifespan of transportation facilities is asset management, which quantifies current and future performance of critical assets, such as roadways and bridges, to help Maryland's transportation agencies meet a required level of service in the most cost-effective manner.

Maryland's transportation agencies also employ operational strategies as a way to realize the greatest value from existing investments. Operational strategies can take many forms, from incident response to intersection and interchange improvements to traffic signing, lighting, and signalization. For example, Maryland's Coordinated Highways Action Response Team (CHART) is critical to the performance of Maryland's roadways because it provides quick response to traffic incidents through emergency response, road/debris clearing, and real-time communication of information. MDOT strives to optimize transportation operations and processes through technologies that capture efficiencies, such as *E-ZPass*® for toll roads, Automatic Vehicle Locator technology for transit buses, and the Internet for MVA driver and vehicle services.

Key Initiatives

MDOT: Provide technical and administrative support to the Blue Ribbon Commission, which is authorized to review, evaluate, and make recommendations on financing the State's future transportation needs.

MAA: Continue to redevelop the terminal concessions program to enhance restaurant and retail offerings.

MPA: Attract additional cruise line commitments and expand facilities and capabilities to handle two cruise ships per day.

MTA: Continue to modernize MTA fleets, including Light Rail vehicle overhauls and purchases of hybrid buses, to reduce the cost of service delivery and evaluate performance efficiency through Opstat and MTastat programs

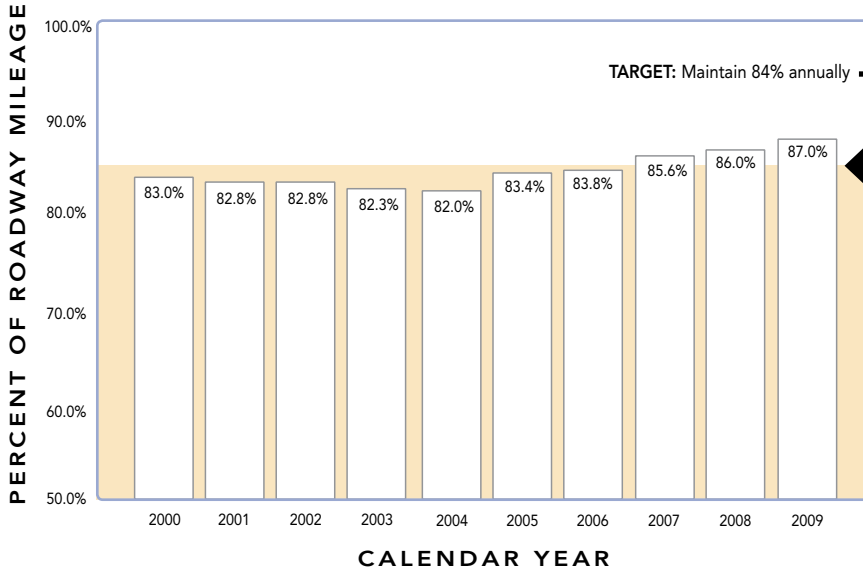
MDTA: Complete the Bay Bridge deck rehabilitation and continue roadway enhancements on I-95.

MVA: Implement new Strategic and Business Plans, which highlight key measures for attaining process efficiencies and managing costs.

SHA: Continue to aggressively pursue the bridge maintenance program, employing as many as 12 construction crews working continuously throughout the year.

SHA & MDTA: Percent of Roadway Miles with Acceptable Ride Condition

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.



Why Did Performance Change?

- Funded additional projects using American Recovery and Reinvestment Act (ARRA) funds
- Employed thinner, smaller overlays of pavement on roads to keep projects within budget
- Identified cost-effective projects using benefit-cost analysis

What Are Future Performance Strategies?

- Revise specifications to improve pavement quality
- Expand the use of recycled materials (e.g., concrete, asphalt) in roadway projects
- Develop a Statewide investment program to maximize pavement performance
- Create an electronic inventory process for roadway assets
- Update optimization and project selection tools

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

The structurally deficient rating is an early warning sign to prioritize funding and to initiate repairs or to begin the bridge replacement process. 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.

Why Did Performance Change?

- Implemented an aggressive bridge maintenance program
- Applied ARRA funds to address major bridge projects

What Are Future Performance Strategies?

- Monitor the ride quality of bridge approaches and bridge decks
- Prioritize projects in order to reduce the number of weight postings and the number of bridges with existing weight restrictions that must be lowered further
- Commence engineering activities on structurally deficient bridges to build an inventory of shovel-ready projects should additional funding be identified
- Perform immediate structural evaluations on water crossings after local storm event

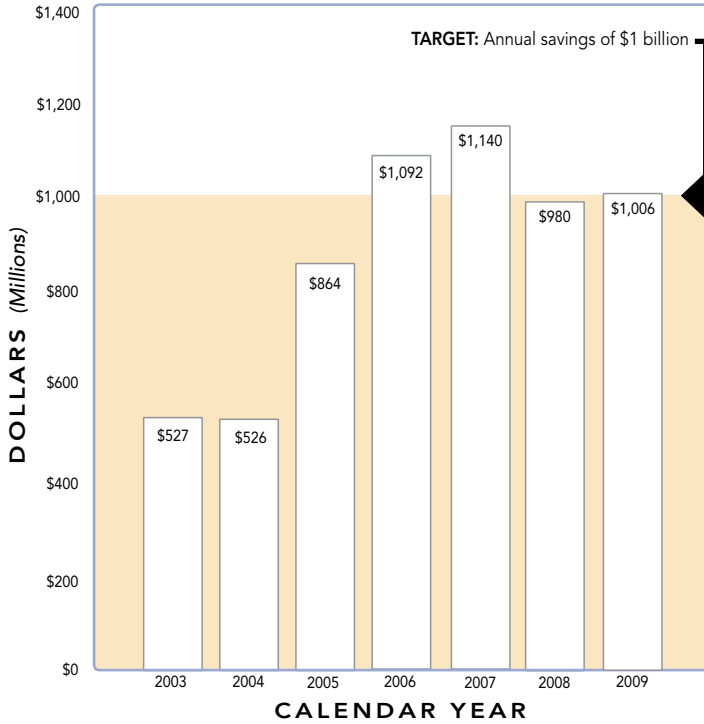
CALENDAR YEAR	2006	2007	2008	2009	2010
Number deficient	145	132	133	117	119
Percent deficient	5.2%	4.7%	4.7%	4.0%	4.2%

TARGET: 122 total bridges by 2012



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.



Why Did Performance Change?

- Responded to and cleared more than 17,000 incidents and assisted more than 18,000 stranded motorists
- CHART helped reduce delay by an estimated 32.4 million vehicle-hours
- Deployed 30 new Closed Circuit TV (CCTV) cameras, bringing the Statewide total to 140
- Continued to host inter-agency training sessions and promote CHART awareness at fire stations
- Began using dynamic message signs to post travel time information

What Are Future Performance Strategies?

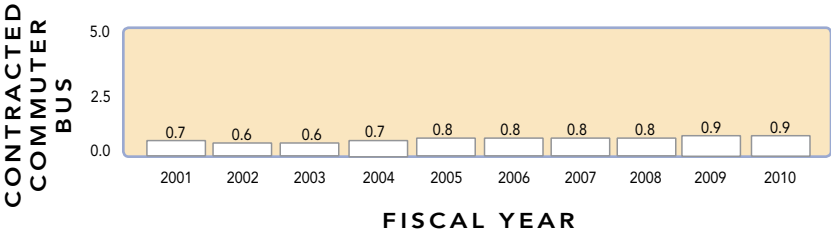
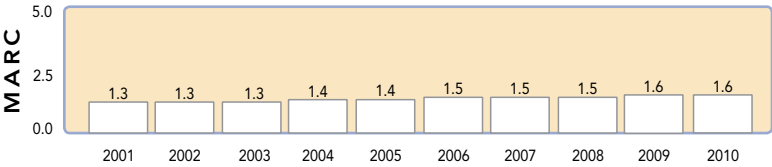
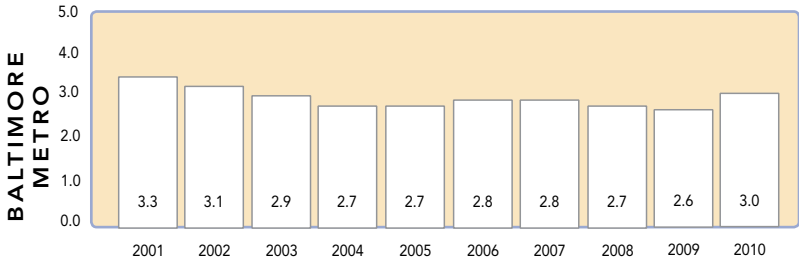
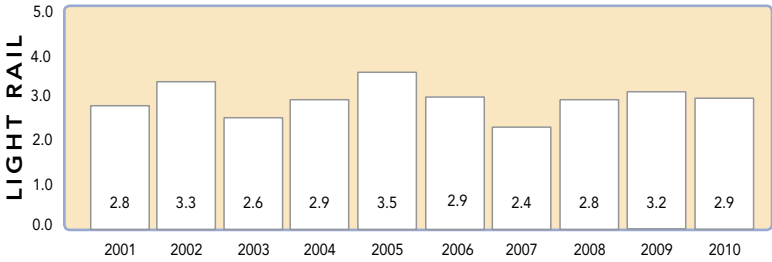
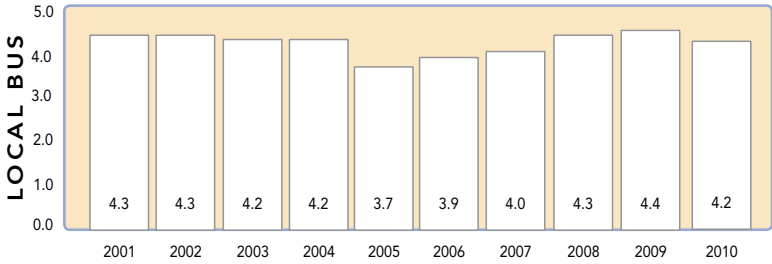
- Implement a 511 traveler information system in Maryland in FY2011
- Expand the CHART patrol coverage area to achieve additional cost savings
- Explore cost-effective uses of limited resources through local, regional, and State incident management coordination and collaboration



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.

PASSENGERS PER REVENUE VEHICLE MILE



FISCAL YEAR

Why Did Performance Change?

- Ridership decreased on most modes due to a decrease in fuel prices, the economy and exceptional snow events in December 2009 and in February 2010
- Despite two blizzards and a challenging economy, service levels remained roughly the same in FY2010
- Baltimore Metro reduced train sizes to improve energy costs

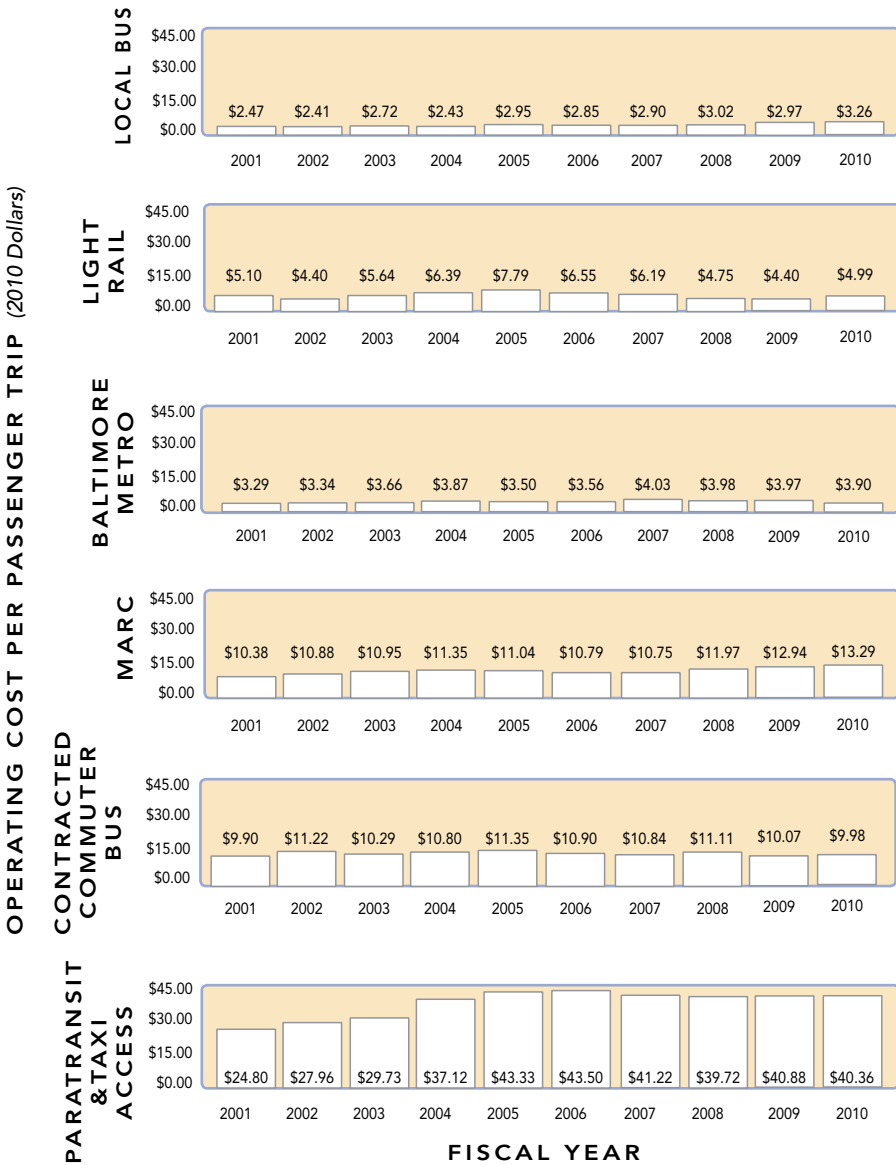
What Are Future Performance Strategies?

- Expand QuickBus express service on the Local Bus system to improve service productivity
- Manage service offerings to ensure that existing demand is met effectively, increasing passenger density on all transit services



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?

- Ridership decreased slightly due to the blizzards, a poor economy and lower fuel prices
- New MTA union agreement increased wage and pension costs, including retroactive wage payments
- Major snow events in December 2009 and February 2010 contributed to overall cost increases

What Are Future Performance Strategies?

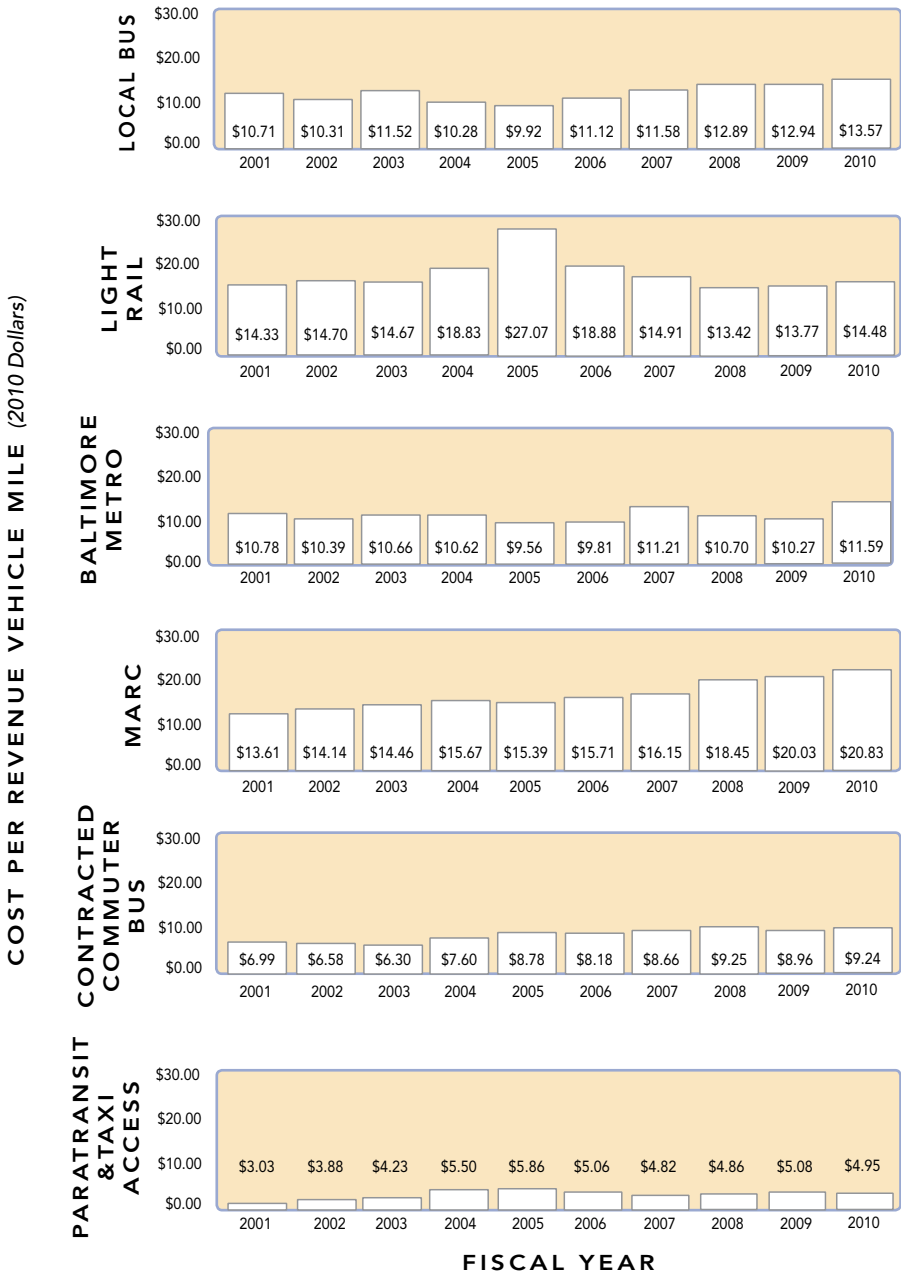
- Optimize preventative maintenance practices to reduce road calls and repairs
- Manage overtime and contracted transit costs to reduce per passenger spending
- Increase ridership through Commuter Choice Maryland, MTA College Pass, Maryland Transit Pass, and the Guaranteed Ride Home Program
- Build or lease additional park-and-ride spaces where parking is at capacity

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 over time. MTA uses the CPI to better understand general prices relative to the cost of providing certain MTA goods and services.



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)*

* The CPI provides information about price changes in the national economy over time. MTA uses the CPI to better understand general prices relative to the cost of providing certain MTA goods and services.

Why Did Performance Change?

- Service levels were maintained despite two blizzards and a poor economy
- A new union agreement caused wage increases, along with increased diesel fuel costs and MARC costs
- Better management of Mobility Paratransit and Taxi Access contributed to cost per mile decreases
- Service reductions on Commuter Bus reduced costs, but mileage decreased at a greater rate

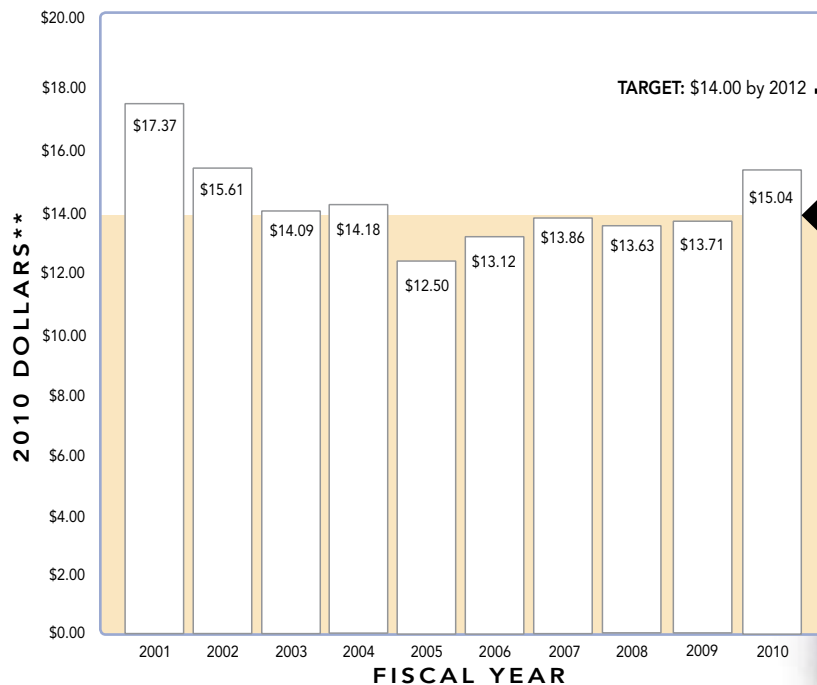
What Are Future Performance Strategies?

- Manage overtime spending and continue to invest in more efficient rail and bus fleets
- Continue to purchase fuel and other commodities on contract at the lowest available prices
- Renegotiate service contracts, as applicable, to help deliver excellent service in a cost-effective manner



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 cost per transaction data is adjusted for inflation.

Why Did Performance Change?

- Investments in information technology and facility infrastructure have increased over the past several years
- The number of branch transactions declined, in part due to Vehicle Emissions Inspection Program (VEIP) changes

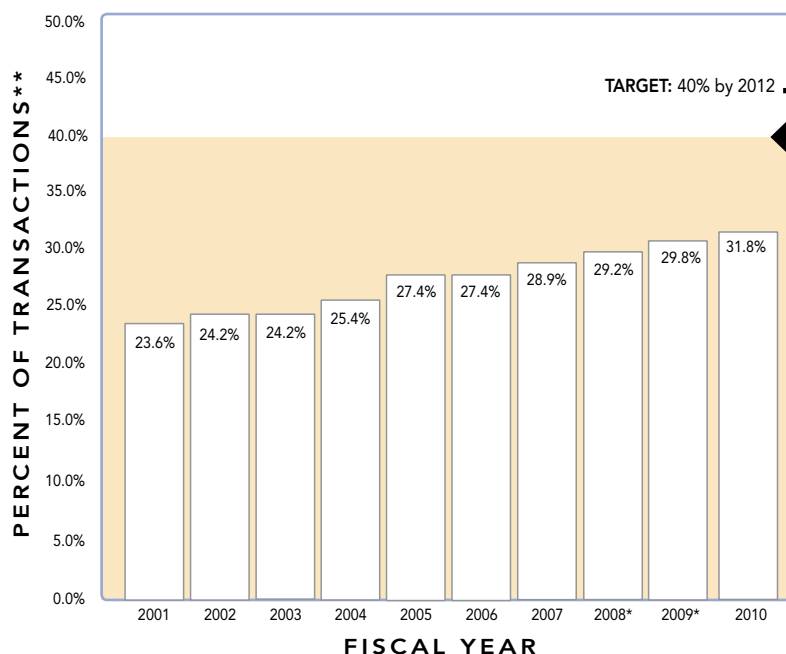
What Are Future Performance Strategies?

- Publish a 20-year 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
- Implement new Strategic Business Plan, which highlights strategic measure for attaining process efficiencies and managing costs



MVA: Alternative Service Delivery 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.



*The year-end total number of transactions for FY2008 and FY2009 were modified after the publishing of the 2010 AR, therefore these data points for ASD percentage are adjusted slightly from the last Report.

**The number of transactions includes the number of vehicles tested at Vehicle Emissions Inspection Program (VEIP) stations, and excludes driver and vehicle Direct Access Records (DARS).

Why Did Performance Change?

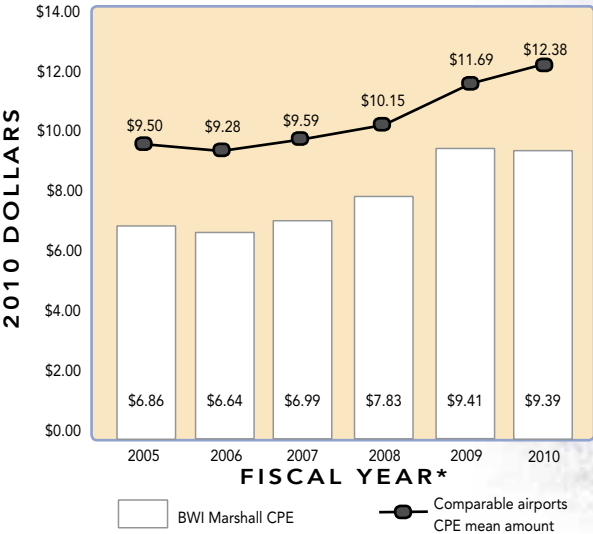
- Continued public awareness campaigns to increase the usage of alternative service options
- Increased the number of service kiosks, providing an alternative method of conducting MVA business

What Are Future Performance Strategies?

- Develop a web-enabling plan to progressively add services over the Internet
- Continue to promote alternative service delivery options through public awareness campaigns
- Design and implement electronic delivery of MVA services through the Internet, kiosks and telephone Interactive Voice Response systems (\$10.6 million for e-MVA Service Delivery Systems in the FY2011-FY2016 CTP)

MAA: Airline Cost Per Enplaned Passenger (CPE)

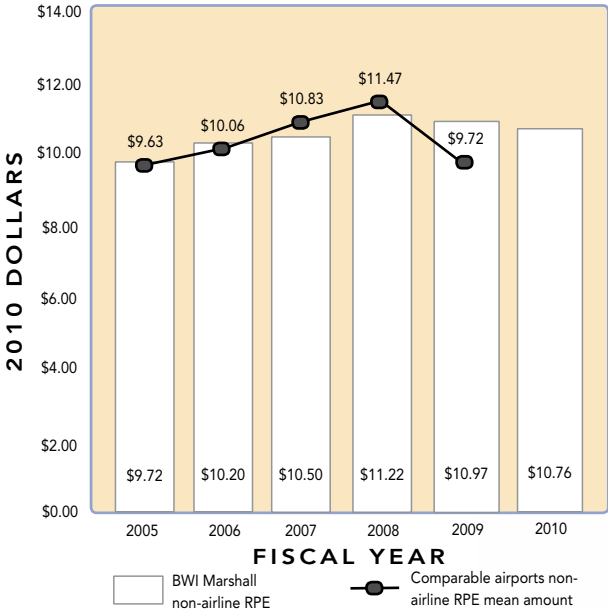
Airline cost and non-airline revenue measures allow BWI Marshall to remain competitive in a region that is unique because it has four proximate airports.



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

*2010 comparable airports CPE mean amount is preliminary.
 **Comparable airports are defined as Washington Reagan National, Washington Dulles International, and Philadelphia International.

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



Why Did Performance Change?

- BWI Marshall’s CPE continues to compare favorably with peer airports, despite rate increases to recover higher operating costs
- BWI Marshall’s non-airline revenue per enplaned passenger compares favorably with peer airports

What Are Future Performance Strategies?

- Continue to implement cost containment initiatives to remain competitive with peer airports
- Review the cost-effectiveness of capital projects commencing design and construction
- Investigate opportunities to increase revenues from concessions
- Continue strategies to increase parking revenues
- Enhance current terminal concessions with recognized local and national concepts

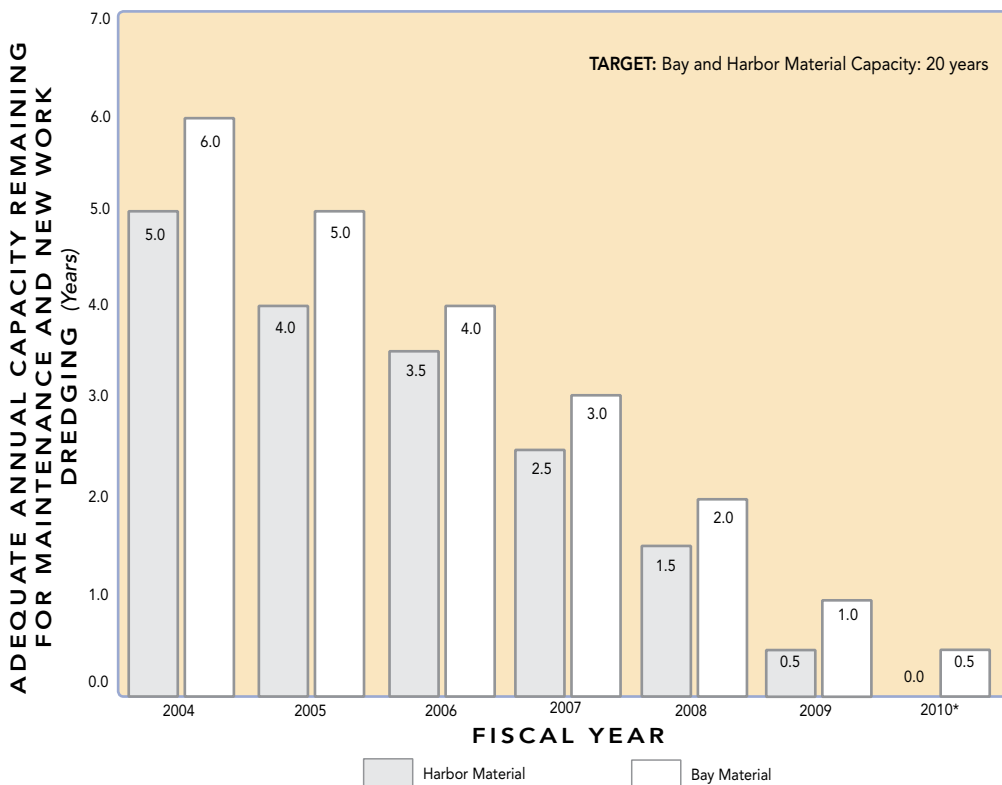
TARGET: BWI Marshall non-airline RPE to be at or above the mean of large comparable airports**

* RPE is based on non-airline revenue (e.g., parking, concessions, ground transportation).
 **Comparable airports are defined as Washington Reagan National, Washington Dulles International and Philadelphia International.



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 does not exist for routine maintenance and new projects without overloading placement.

Why Did Performance Change?

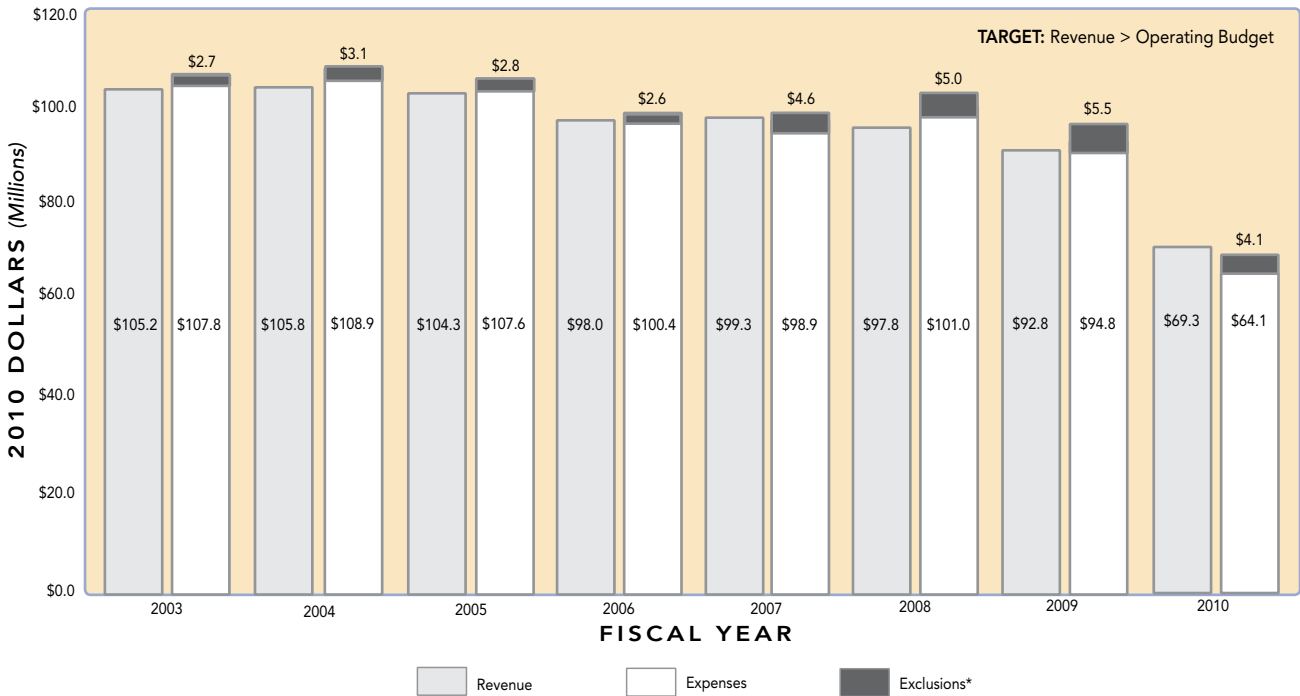
- On average there is 1.0 million cubic yards (mcy)/year of Harbor maintenance dredging and 0.5mcy/year of new work dredging in the Harbor to make improvements to the channel system
- Starting in 2010, only maintenance dredging of Harbor channels can be accommodated without overloading placement sites
- 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
- The Corps has long term placement capacity for the Chesapeake & Delaware (C&D) Canal and the Bay channels in Virginia waters. The MPA is responsible for providing capacity for the C&D Canal Approach Channels and the Bay channels in Maryland waters. On average the maintenance dredging of C&D Canal Approach Channels is 1.2mcy and the Bay channels in Maryland waters is 2.0mcy. In 2011 maintenance dredging of Bay channels can only be accommodated by overloading existing placement sites. Capacity at placement sites is being consumed faster than new capacity can be brought online

What Are Future Performance Strategies?

- Finalize an agreement between the Army and the State to establish user fees for use of the Cox Creek Dredged Material Containment Facility (DMCF)
- Continue the process to resolve scheduling, legal, and community enhancement issues for the Sparrows Point DMCF, a potential Harbor placement option
- Complete construction of the Masonville DMCF
- Starting in 2011, two years of Bay capacity will exist for C&D Canal Approach Channels assuming permits are obtained to reactivate Courthouse Point (After 2013, long term placement may exist, but only if permits can be obtained to reactivate Pearce Creek)
- Long term capacity for maintenance of channels in Maryland waters exists at Poplar Island and Poplar Island Expansion assuming they are not overloaded with material from the C&D Canal Approach Channels
- Continue to explore innovative reuse options of dredged material, including placements in mines, agricultural use, and possible restoration of the Blackwater wetlands (\$65.4 million for Dredge Material Management Program in the FY2011-FY2016 CTP)

MPA: Revenue Versus Operating Expense

Revenues are an important measure of business activity at the MPA terminals. Most of 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.

Why Did Performance Change?

- Realized a net operating profit of \$5.2 million for FY2010, including corresponding decreases in revenue and operating expenses
- Finalized the Seagirt Marine Terminal public-private partnership, resulting in decreasing MPA expenditures and revenues
- Royal Caribbean began year-round cruise service from Baltimore in CY2010
- Cruise ship embarkations from the Port of Baltimore continued to increase

What Are Future Performance Strategies?

- Attract and retain sufficient cargo volumes to provide future revenue growth
- Improve MPA financial systems and reporting techniques
- Enhance the efficiency and effectiveness of contract management and internal project delivery
- Increase World Trade Center occupancy with the assistance of a commercial property manager
- Grow the cruise business from 91 sailings in CY2010 to 112 sailings in CY2011



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

Performance Measures

MONITORING AGENCY	PERFORMANCE MEASURE	PAGE
MDOT	Transportation-related emissions by region	34
MDOT	Transportation-related greenhouse gas emissions	34
MDOT & MTA	Transportation Emission Reduction Measures (TERMs)	36
MPA	Acres of wetlands or wildlife habitat created, restored, or improved since 2000	35
MVA	Compliance rate and number of vehicles tested for Vehicle Emissions Inspection Program (VEIP) versus customer wait time	33
SHA	Acres of wetlands restored and miles of streams restored	32
SHA	Total fuel usage of the light fleet	33
SHA & MTA	Travel Demand Management	35-36



Maryland's transportation agencies strive to be good stewards of the environment by minimizing environmental impacts where they cannot be avoided and by restoring and improving environmental conditions where possible. For example, Maryland's transportation agencies have supported planting of over 500,000 new trees through the "One Million Trees" planting initiative. Minimizing and mitigating stormwater runoff is another way that Maryland's transportation agencies safeguard aquatic ecosystems and contribute to the Chesapeake Bay restoration effort.

The *Smart, Green & Growing* initiative serves as a guiding force for developing and managing the State's multimodal transportation network in a manner that complements the State's broader goals for sustainability and livability. For example, MDOT developed the Maryland Trails: Greener Way to Go initiative to promote trails as a healthy, environmentally-friendly travel option. MDOT is involved in ongoing dialogue about key environmental issues, including climate change, air quality, and energy, and how they will impact Maryland's future. MDOT is working toward implementing the Maryland Climate Action Plan, to achieve greenhouse gas (GHG) reductions through strategic actions and policies affecting transportation modes. MDOT is also involved in the Energy Outlook Task Force, which addresses options to increase transportation energy independence among others.

Key Initiatives

MDOT

- *Smart, Green & Growing*: Ensure that MDOT programs are sensitive to the environment and improve Marylanders' quality of life.
- Climate Change: Assist in evaluating adaptation and mitigation policy options for reducing Maryland's vulnerability to sea level change and GHG footprint.
- Transit-Oriented Development: Support the development of 14 designated TOD projects through technical assistance for planning and implementation, coordination with other state agencies and programs, infrastructure design and capital support, and facilitation and coordination of public-private partnerships.

MAA

- Energy Efficiency: Implement energy conservation measures resulting from the energy audit of BWI Marshall and Martin State facilities.
- Recycle Materials: Continue to recycle at least 20% of solid waste generated at both airports.
- Stormwater Management: Continue stormwater management procedures to limit the impact of stormwater from MAA property to the environment (e.g., inspect stormwater facilities and monitor water quality).

MPA

- Management Tool: Implement an Environmental Management System to support compliance with regulatory requirements.
- Recycle Materials: Continue to evaluate innovative reuse of dredged material (e.g., light weight aggregate, landfill cover). Also, continue the beneficial use of dredged material to restore wildlife habitat and create new recreational areas (\$260.9 million for Dredge Material Placement and Monitoring in the FY2011-FY2016 CTP).
- Air Quality: Implement \$3.5 million in American Recovery and Reinvestment Act (ARRA) funding from the Diesel Emissions Reductions program to clean air in and around the Port.

MTA

- Transit-Oriented Development: Support TOD opportunities at transit stations including MARC, Baltimore Metro, and Light Rail.
- Expand Service Offerings: Expand transit mobility by implementing the Corridor Cities Transit Way, the Purple Line, and the Red Line.
- Air Quality: Continue equipping all new buses with particulate traps on exhaust systems to catch up to 90% of all soot and particles.

MDTA

- Coordination: Utilize the newly established Environmental and Sustainability Oversight Committee (ESOC) to facilitate coordination of environmental efforts and initiatives across MDTA.
- Energy Efficiency: Explore the potential use of solar power for warning signs and bridge lighting.
- Recycle Materials: Utilizing Department of General Services contracts, developed and introduced an Authority-wide recycling program.

MVA

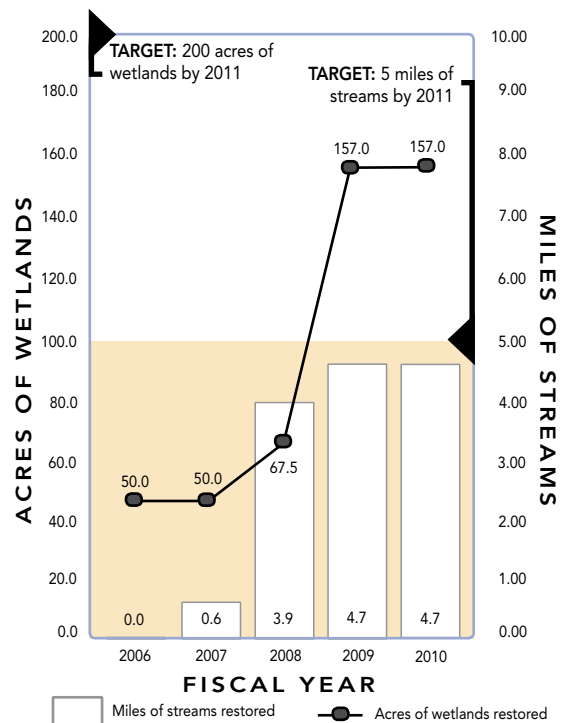
- Energy Efficiency: Launch initiatives to reduce energy consumption by 10% (e.g., install more efficient climate control systems).
- Air Quality: Continue the expansion of Internet services, which reduces trips to MVA offices.
- Air Quality: Continue the Vehicle Emissions Inspection Program to help the State meet national air quality standards.

SHA

- Sustainable Materials: Increase the use of recyclable materials in construction and promote the sustainable material specification to encourage environmental practices in construction.
- Fuel Consumption: Retrofit 100 dump trucks to further reduce fuel usage by the SHA fleet.
- Climate Change: Implement a Climate Change Program to identify roadway infrastructure that is vulnerable to flooding.

SHA: Acres of Wetlands Restored and Miles of Streams Restored

SHA wetland and stream restoration efforts exceed specific project environmental requirements. These efforts are intended to mitigate for past impacts to wetlands and streams due to highway construction projects. Providing wetlands are also among the most effective of SHA's water quality best management practices. SHA's efforts contribute to the Statewide goals of the Chesapeake 2000 Agreement and Maryland's Tributary Strategy Plan for the restoration of Chesapeake Bay. Through FY2010, 157 acres of wetlands have been restored towards SHA's overall goal of 200 acres by the close of FY2011. Due to a combination of budgetary constraints and inability to successfully negotiate agreements on easements or monetary compensation with private property owners, no stewardship wetland acreage was constructed in FY2010. However, a number of new projects totaling 31 acres are scheduled for construction in FY2011. SHA restored 300 linear feet (0.056 mile) of streams in FY2010, bringing the cumulative total to 4.72 miles toward the FY2011 goal of five miles.



Why Did Performance Change?

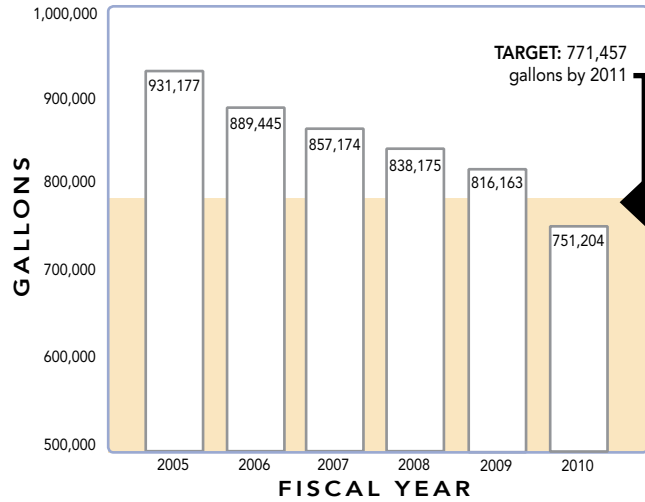
- No wetland acreage was added to prior year totals due to budgetary constraints and a lack of agreement on easements or compensation with private property owners
- Continued to focus on providing environmental enhancements above and beyond requirements
- 157 acres of wetlands have been created and 4.72 miles of streams restored
- 300 linear feet of streams were restored in FY2010

What Are Future Performance Strategies?

- Identify funding and wetland construction opportunities
- Continue to partner with sister State agencies to provide value-added enhancements to the natural environment through creative and cost-effective solutions
- Explore new alternatives and partnering opportunities
- Almost one linear mile of streams will be restored in FY2011, achieving the stream restoration program's five mile goal
- More than 3.5 miles of stream restoration will be accomplished as part of the Intercounty Connector (ICC)/MD 200
- 31 additional acres of wetlands creation projects are currently under design

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 scheduled fleet replacements by higher efficiency vehicles.



Why Did Performance Change?

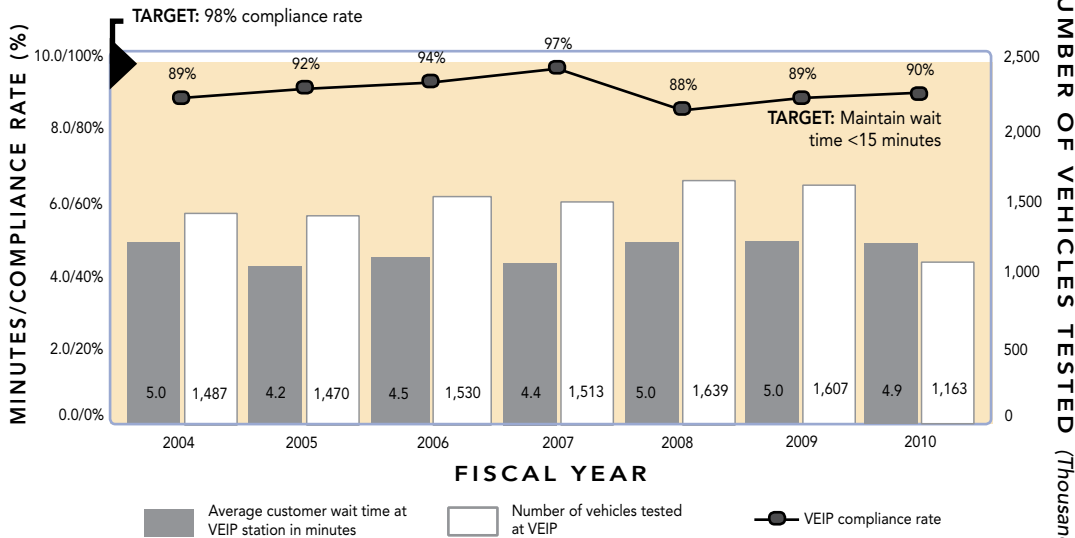
- Maintained the practice of using video conferencing to link central and regional offices to reduce auto trips for meetings
- Continued to enforce an automobile idling policy for all employees and consultants
- Purchased 12 mid-size pickup trucks to replace less efficient full-size pickups
- Instituted use of a new diesel additive, which enhances the quality of the fuel and leads to improved fuel economy
- Employees continue to take proactive measures to save fuel (e.g., carpooling)

What Are Future Performance Strategies?

- Continue to analyze historical trends to inform future fuel usage reduction initiatives
- Convert additional diesel engines to gasoline when appropriate
- Support actions to lower the cost-per-gallon of E85 fuel to reduce overall fuel costs
- Explore opportunities with the Department of Energy to expand and install more E85 fueling stations throughout the State
- Continue to acquire smaller, more fuel-efficient vehicles and hybrids as older vehicles qualify for replacement

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.



Why Did Performance Change?

- Transactions declined due partly to a one-time reduction in VEIP transactions
- REAL ID license requirements compel individuals to provide proof of lawful presence in the United States
- The average wait time for customers at a VEIP station was 4.9 minutes in FY2010, well within the goal of an average wait time of less than 15 minutes

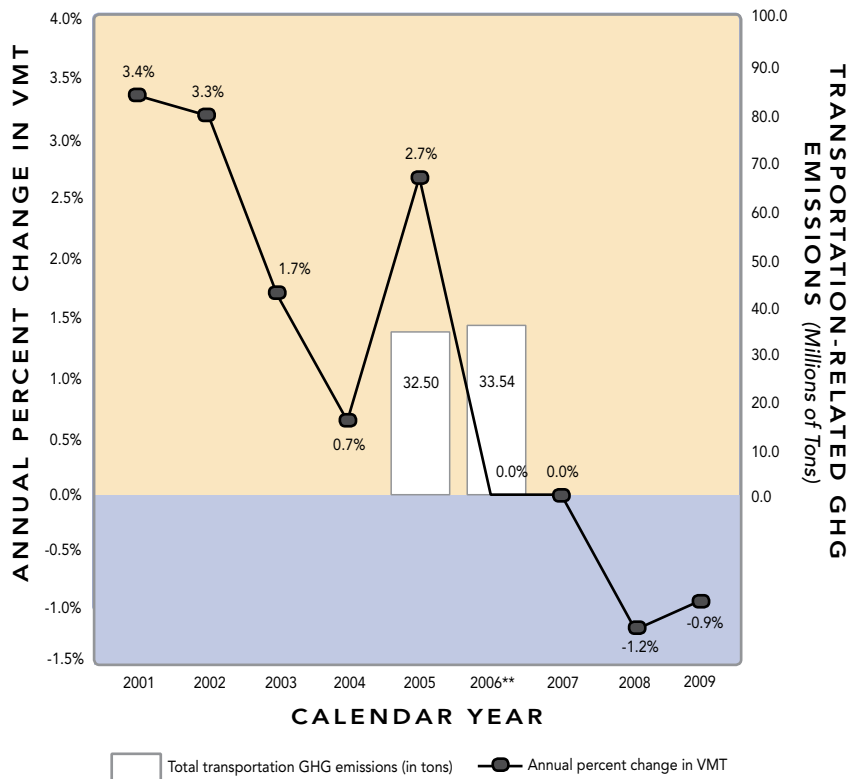
What Are Future Performance Strategies?

- Continue to monitor customer wait time to ensure minimal wait time
- Continue to explore new technologies and initiatives and consistently limit customer time at the VEIP stations
- Continue to monitor the number of registered vehicles in non-attainment counties to ensure VEIP testing compliance

* 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 Greenhouse Gas Emissions*

A reduction in overall Vehicle Miles of Travel (VMT) is one of several strategies that MDOT is pursuing to address climate change. Reducing VMT has other potential benefits to Marylanders, such as reduced congestion and improved travel time reliability. GHG emissions affect the temperature and climate of the earth's surface. GHG emissions primarily include carbon dioxide, methane, nitrous oxide, carbon monoxide, oxides of nitrogen, and non-methane volatile organic compounds.



Why Did Performance Change?

- Increased financial support for alternative modes of transportation at the State and local levels
- Implemented emission-reduction strategies in nonattainment areas to foster transportation alternatives to single occupancy vehicles
- Vehicle emissions decreased nationwide due to improved vehicle technologies and reductions in VMT caused in part by business and personal economic conditions

What Are Future Performance Strategies?

- Encourage growth in transit ridership through system enhancements and outreach
- Support GHG reduction strategies recommended by the Maryland Commission on Climate Change
- Promote mobile source emission reduction efforts and invest in clean transportation alternatives
- Pursue strategies to meet the GHG emission reduction goals of the Greenhouse Gas Reduction Act of 2009
- Implement the Clean Car Bill requirements and standards passed by the 2007 General Assembly
- Execute regional emission reduction strategies recommended by the Ozone Transport Commission
- Focus growth around transit stations to both increase transit ridership and reduce congestion, sprawl and GHG emissions through TOD
- Actively participate in the recently formed Transportation and Climate Initiative in the Northeast Corridor of the United States to reduce mobile source GHG

MDOT: Transportation-Related Emissions by Region*

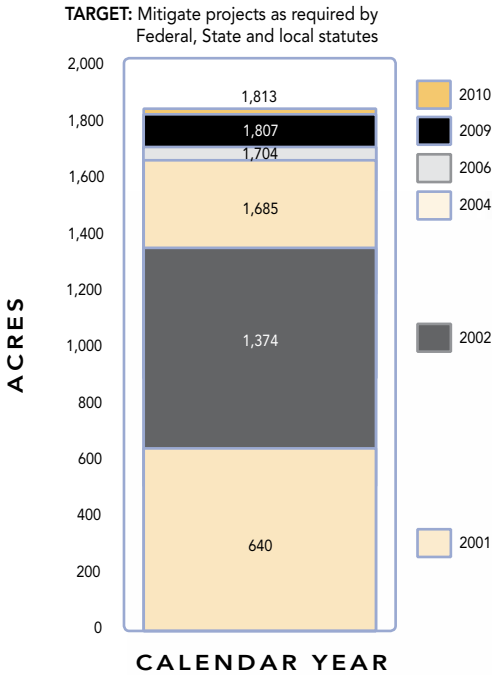
Reducing vehicle emissions improves air quality in compliance with Federal regulations and provides health benefits for Maryland residents.

PERFORMANCE MEASURE	REGION	CALENDAR YEAR			% CHANGE 2002-2008
		2002	2005	2008	
Volatile Organic Compound (VOC) Tons per Day	Baltimore	73.8	52.2	44.5	-40%
	Washington	66.6	47.8	40.5	-39%
Nitrogen Oxide (NOx) Tons per Day	Baltimore	185.3	145.3	97.1	-48%
	Washington	114.6	106.6	78.5	-32%
Carbon Monoxide (CO) Tons per Day	Baltimore	970.0	699.2	514.7	-47%
	Washington	845.2	628.1	454.2	-46%
Particulate Matter (PM) Tons per Day	Baltimore	1,061.9	936.3	623.4	-41%
	Washington	791.4	699.2	503.6	-36%

* Emissions calculated using MOBILE 6.2 and HPMS data.

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., vessel or landside tenants).



* Represents cumulative mitigation efforts by MPA.

Why Did Performance Change?

- Over 1,600 trees and 1,900 shrubs were planted and invasive species eradicated to improve about six acres at Hawkins Point as mitigation for paving for additional cruise parking
- Worked with local communities to develop mitigation for the Masonville Dredged Material Containment Facility (DMCF), which will include wetlands and upland habitat and a nature center

What Are Future Performance Strategies?

- MPA will create and improve wildlife habitat wherever appropriate and in conformance with permit requirements for construction projects requiring mitigation
- Continue environmental enhancements at Masonville, specifically the eastern and peninsula uplands
- Commence investigating long-term plans for Hart-Miller Island North Cell restoration and Poplar Island Expansion



Travel Demand Management

Maryland's transportation agencies promote Travel Demand Management (TDM) strategies as a way to provide an incentive to single-occupancy drivers to use public transit, carpool, ride a bike, walk, or telecommute instead of driving alone. Other strategies involve flexible work hours as a way to shift trips to times when roadway capacity is less constrained, helping to avoid further exacerbating capacity shortfalls during rush hours. By cutting down on single-occupant vehicle trips and reducing peak period congestion, TDM contributes to reduced emissions and improved air quality. 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. As shown in the map below, the Commuter Connections' Guaranteed Ride Home program was expanded in the summer of 2010 to include the Baltimore metropolitan region and St. Mary's County, Maryland. This expansion will provide program enrollment opportunities for residents who work in this region—as well as for the thousands of new workers at Fort Meade due to the BRAC process.



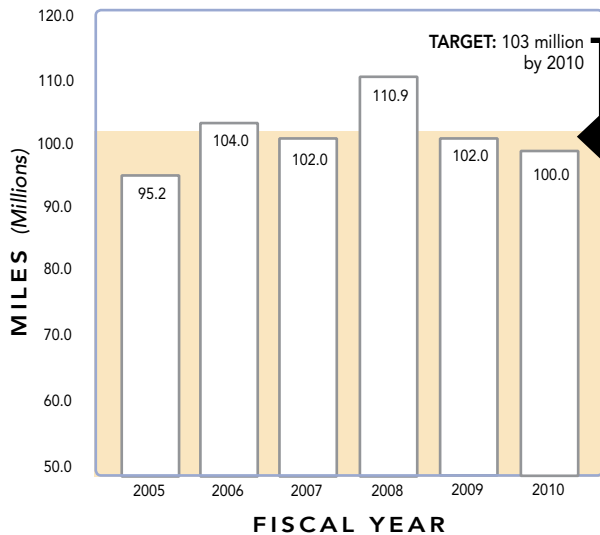
STATEWIDE PARK-AND-RIDE FACILITIES (ESTIMATED)		
Agency	Total Spaces	Average Weekday Utilization*
SHA (2009)	11,955	7,060
MTA Operated (2010)	32,214	19,691
Transit Multipurpose** (2010)	7,704	5,541

* 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.

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?

- 321 additional spots were completed or are currently under construction around the State
- Park-and-ride usage declined with a drop in gas prices over the past two years
- Park-and-ride lots are at about 58% of capacity which is the normal long-term average usage rate

What Are Future Performance Strategies?

- For 2011, an additional 30 spots are already scheduled and several others are under design
- In coordination with freight planning initiatives, efforts are being made to adapt new or existing park-and-ride lots to allow overnight parking for long-haul trucking
- The I-68 lot at Christie Road will expand from 13 spaces to 30 spaces

2009-2010 MDOT & MTA TRANSPORTATION EMISSION REDUCTION MEASURES (TERMs)			
Program	Program Description	Daily Reduction in Vehicle Trips*	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	8,680	227,428
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	59,351	970,301
Integrated Rideshare	Promotes traveler information and 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	7,363	199,079
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 Baltimore/Washington metropolitan region	17,950	575,237
Telework Resource Center	Provides information to employers on the benefits of telecommuting and assists in setting up new or expanded telework programs for employers	21,866	413,703
Mass Marketing	Promotes and communicates the benefits of alternative commute methods to single-occupant vehicle commuters through the media and other wide-reach communications	2,577	69,274
MTA College Pass	Offers a subsidized monthly transit pass to full- or part-time students enrolled in greater Baltimore metropolitan area colleges or universities	3,535	27,925
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	8,950	150,991
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	2,151	36,295

* The impacts shown reflect the latest data available for each of the measures. New data will be available when the TERM Evaluation Project is completed in 2011.



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



Performance Measures

MONITORING AGENCY	PERFORMANCE MEASURE	PAGE
MAA	Number of nonstop airline markets served	41
MPA	International cruises using the Port of Baltimore	42
MPA	Port of Baltimore foreign cargo and MPA general cargo tonnage	42
MTA	Annual revenue vehicle miles of service provided	40
MTA	Average weekday transit ridership	40
MVA	Percent of information system availability compared to total number of records maintained	41
SHA	Percentage of State-owned roadway centerline miles within urban areas that have sidewalks and percent of sidewalks that meet Americans with Disabilities Act (ADA) compliance	39
SHA	Percentage of State-owned roadway centerline miles with a bicycle level of comfort (BLOC) grade "D" or better and mileage of SHA-owned highways with marked bike lanes	39
SHA & MDTA	Percent of freeway lane-miles and arterial lane-miles with average annual volumes at or above congested levels	38

Maryland's integrated, multimodal system provides exceptional local, regional, national, and international connectivity for people and goods. Maryland's transportation agencies offer customers a variety of transportation options based on their trip needs. For example, for short trips, sidewalks and bicycle lanes supplement bus and rail transit services and roadways; regional trips are served by highways, tollways, and commuter bus and rail; and national and international destinations are accessible from over 300 nonstop flights that typically occur each day from BWI Marshall. The Port of Baltimore serves dual functions that directly contribute to Maryland's economy: tourism and goods movement.

Enhanced connectivity can support other important State goals including environmental sustainability, public health, economic development, and safety. For example, better transit connectivity with the military installations associated with the Base Realignment and Closure (BRAC) is a key component of Maryland's strategy to accommodate BRAC-related growth. Roadway enhancements, such as intersection and interchange improvements and road widening projects, address capacity issues that would be exacerbated by BRAC. Also, more efficient signalization and more extensive *E-ZPass*® deployment on roadways not only impact travel times, but can reduce idling emissions. Together these efforts result in a more balanced and seamless multimodal transportation system and achieve a number of shared goals in the State.

Smooth transportation linkages support a healthy economy by providing access to regional, national, and global markets. One way that MDOT supports connectivity is through the I-95 Corridor Coalition, an alliance of transportation stakeholders from Florida to Maine that work together to improve transportation system performance along I-95 by addressing transportation management and operational issues. Beyond surface transportation, BWI Marshall connects passengers and high value air freight from the region with the entire world—and vice versa—creating economic opportunities for businesses and jobs for individuals. A variety of terminals for waterborne vessels give shippers expanded options for moving cargo directly to the mid-Atlantic consumer market. Moreover, the recently revitalized cruise business in Baltimore gives passengers a local option for embarkation, providing direct access to vacation locales and generating about \$1 million in economic impact every trip.

Key Initiatives

MDOT: Advance the State Center Transit-Oriented Development (TOD) project in Baltimore City to encourage redevelopment in mid-town Baltimore.

MAA: Continue to provide convenient access to ground transportation options for customers, such as taxi service, Light Rail, MARC and Amtrak.

MPA: Construct a 50-foot deep container berth at Seagirt Martine Terminal and make other capacity improvements to accommodate future cargo anticipated to come to the U.S. East Coast upon the completion of the Panama Canal expansion project in 2014. Make improvements to the Cruise Maryland Terminal to efficiently accommodate passengers and a larger variety of cruise ships.

MTA: Promote the expanded Guaranteed Ride Home Program and the new CharmCard, a rechargeable fare card that works on many MTA transit services in addition to other transit service providers across the region.

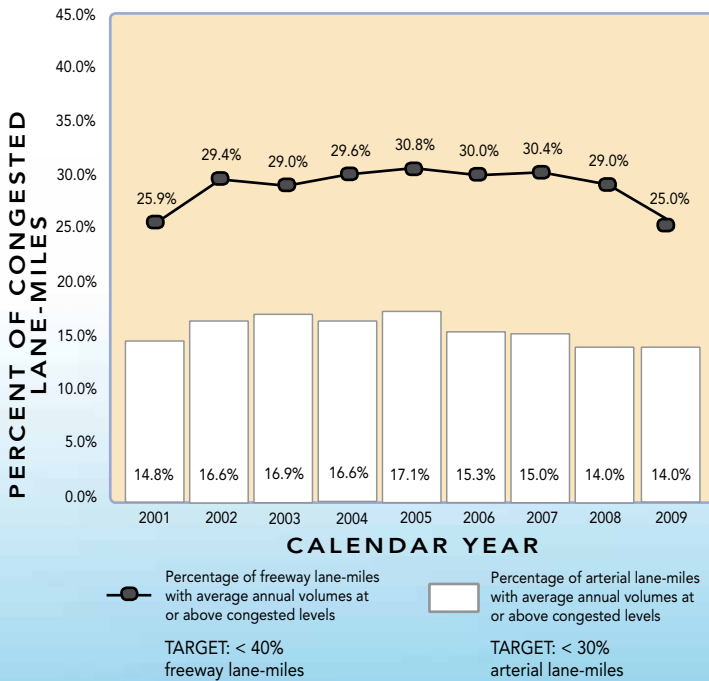
MDTA: Continue to make business preparations for operating and maintaining the Intercounty Connector (ICC)/MD 200, Maryland's first all-electronic, variably priced toll facility.

MVA: Provide data to support the work of critical State agencies, including Child Support Enforcement, Arrest Warrants, Courts Point System, Board of Elections, Organ Donor, and Chesapeake Bay and Agriculture Programs.

SHA: Continue to participate in the I-95 Corridor Coalition, an alliance of transportation agencies, toll authorities, and related organizations aimed at coordinated strategies to improve network performance throughout the I-95 Corridor.

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 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?

- The Coordinated Action Response Team (CHART) helped reduce delay by an estimated 37.6 million vehicle-hours in 2009
- Retimed 154 signals resulting in 970,000 hours of time saved
- Added capacity by widening MD 295 from I-695 to I-195 in Baltimore and Anne Arundel counties
- Constructed improvements along MD 355 in Montgomery County
- Vehicle Miles of Travel (VMT) went down in 2009, especially for long-distance trips which contributed to reduced congestion on freeways but not on arterial roads

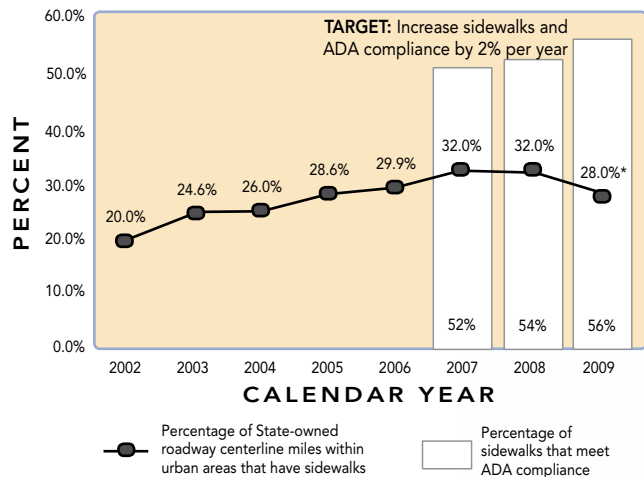
What Are Future Performance Strategies?

- Focus resources on optimizing traffic signals
- Continue the CHART program to reduce delay
- Capacity improvements will be limited due to budget constraints



SHA: Percentage of State-Owned Roadway Centerline 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.



*2009 data is based on a new data collection method that cannot be accurately compared to previous years' data.

Why Did Performance Change?

- Invested \$9.6 million in FY2010 to improve sidewalks and to address ADA issues
- More than 500 accessible pedestrian signals have been installed since the program began in FY2006

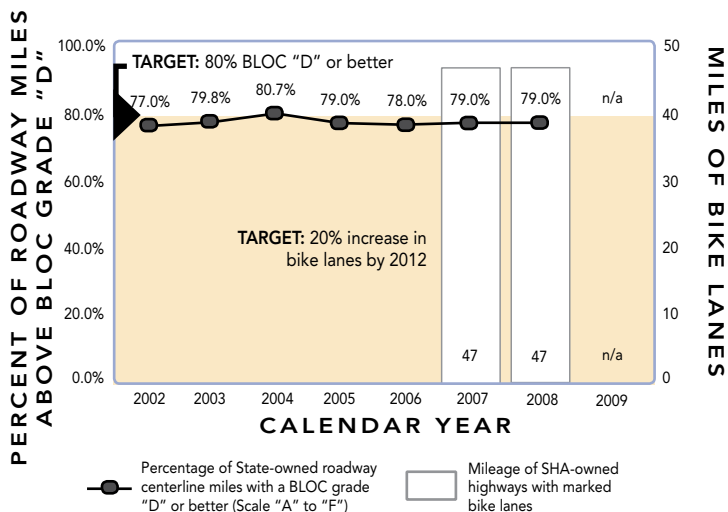
What Are Future Performance Strategies?

- Support safe pedestrian access along State highways (\$5.7 million for the Sidewalk Program and \$56.7 million for the ADA Compliance Program in the FY2011-FY2016 CTP)
- Continue to implement pedestrian and bicycle improvements through specialized programs
- Target funds toward areas with a history of high pedestrian injuries and fatalities
- Continue upgrading intersections with pedestrian countdown signals and ADA features (e.g., wheelchair access and textured curbs)



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

BLOC (scale "A" to "F") is a useful measure for assessing the Statewide roadway system for its comfort and compatibility with bicycle users. Marked bike lanes are designated by pavement markings for the preferential or exclusive use of bicyclists and may be supplemented with signage. Shoulder width is a key element for improving BLOC, even more than a marked bicycle lane.



Why Did Performance Change?

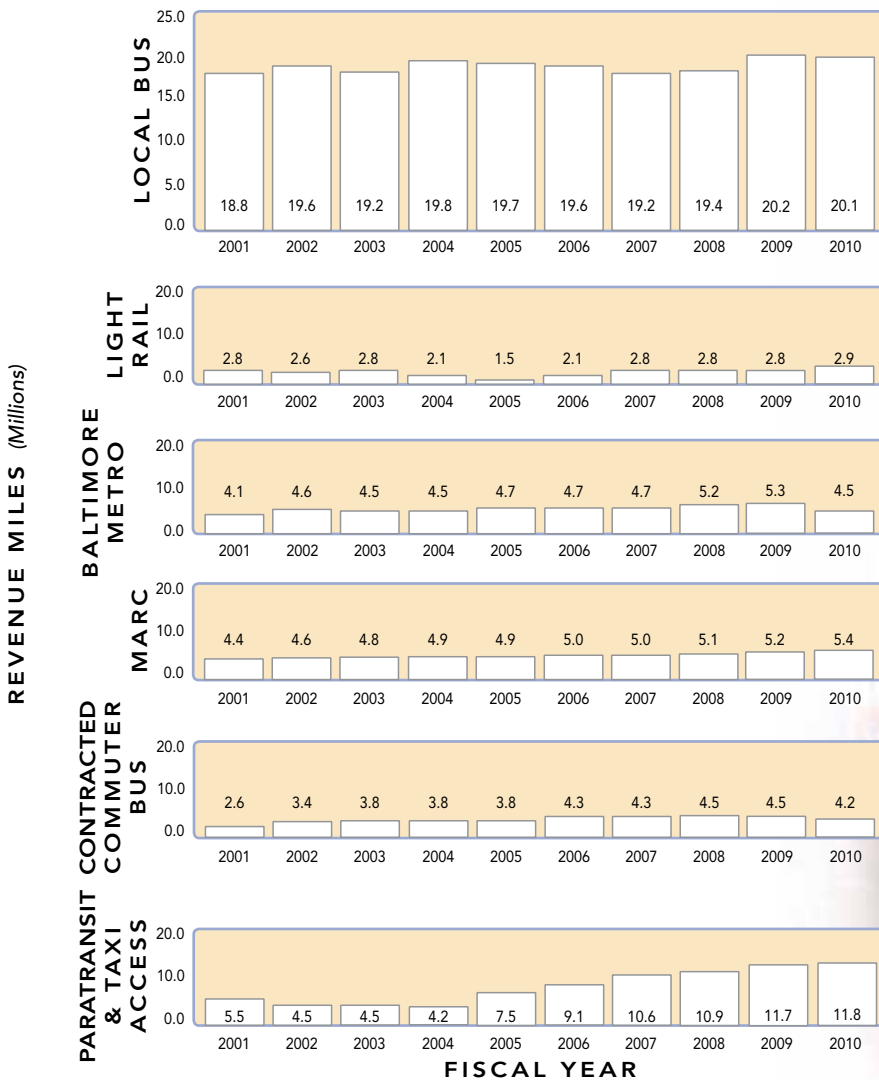
- SHA is currently developing a comprehensive inventory of bike facilities that includes a new methodology for calculating these measures, which will not be completed until 2011; therefore, 2009 data is not available for inclusion in the 2011 Attainment Report, but will be for future reports

What Are Future Performance Strategies?

- Complete a bicycle network inventory using a geographic information system (GIS)-driven database containing bicycle data along State roadways
- Revise the SHA Bicycle Guidelines to reflect current bicycle facilities available to users
- Develop policies, such as the complete streets and the bicycle and pedestrian priority areas, that promote greater emphasis on bicycle and pedestrian accommodations in future SHA projects

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.



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

Why Did Performance Change?

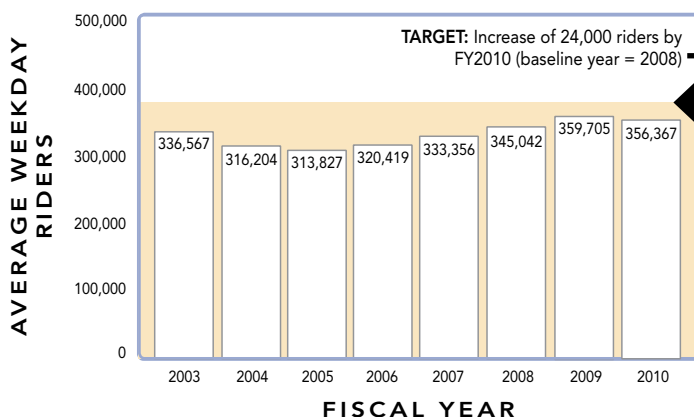
- Smaller 4-car train sets were used for daily service on Baltimore Metro to reduce energy consumption which reduced overall service mileage
- MTA reduced Commuter Bus service in January 2009; FY2010 was the first full year of reduced service
- Exceptional snow events in December 2009 and February 2010 reduced total service for the year

What Are Future Performance Strategies?

- Add or adjust Commuter Bus trips to accommodate demand
- Continue to seek scheduling efficiencies for Local Bus service

MTA: Average Weekday Transit Ridership

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



Why Did Performance Change?

- Average weekday ridership remained relatively constant, decreasing slightly from FY2009, even though FY2009 ridership was extremely high and FY2010 brought many challenges, including two blizzards and a poor economy
- Fewer weekday commuters used MTA services due to the economic downturn and lower gas prices
- Significant snowstorms in FY2010 impacted ridership levels

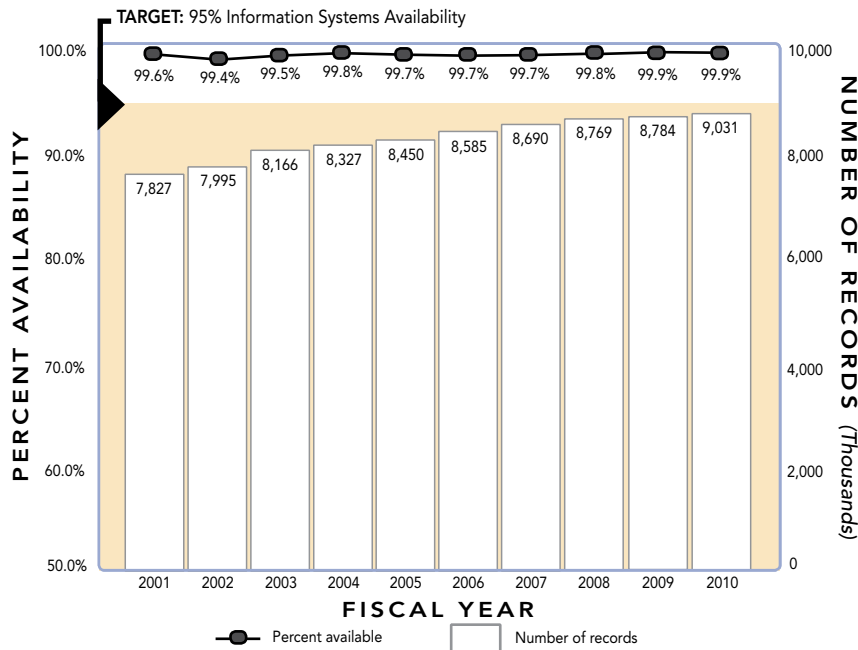
What Are Future Performance Strategies?

- Continue to seek scheduling efficiencies for Local Bus services
- Increase capacity on MARC by adding cars and locomotives and overhauling current fleets
- Investigate more parking options for Commuter Bus
- Reduce system failures and improve reliability (\$23.4 million for Baltimore Metro Railcar Overhauls in the FY2011-FY2016 CTP)
- Implement a real time passenger information system



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?

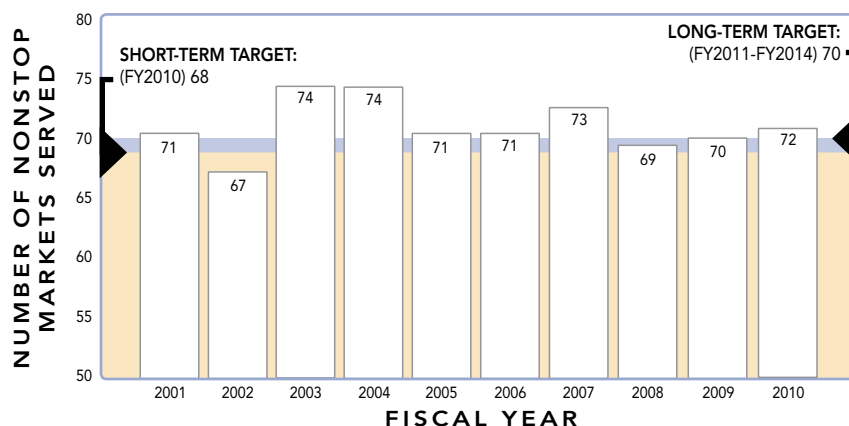
- The amount of system availability remained at 99.9% in FY2010
- Continued to minimize both planned and unplanned outages through management of, and investment in, information technology systems
- The number of licensed drivers and registered motor vehicle records increased slightly in FY2010
- Mainframe record capacity is driven by demographic changes, e.g., growing population

What Are Future Performance Strategies?

- Continue employing the latest technologies and security protocols
- 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

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?

- Southwest and AirTran initiated service in new markets
- Southwest resumed service to Los Angeles, CA in FY2010 and added new nonstop service to Panama City, FL
- AirTran began providing service to Grand Rapids, MI, Huntsville, AL, and Jacksonville, FL and added seasonal nonstop service to San Antonio, TX
- Delta increased frequencies to Detroit, MI, Memphis, TN, and Minneapolis, MN
- More than 21 million passengers traveled through BWI Marshall in FY2010, an increase of 6% over FY2009

What Are Future Performance Strategies?

- Focus marketing campaigns on the advantages of using BWI Marshall, (e.g., easy parking, attractive concessions, and accessible ground transportation options)
- Meet with targeted airlines to promote air service opportunities to BWI Marshall
- Continue to promote BWI Marshall as a convenient gateway to Washington, D.C.

MPA: International Cruises Using the Port of Baltimore

Measures cruise business activity and the breadth of options provided to passengers departing from the Port of Baltimore to foreign destinations.

CALENDAR YEAR	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Number of international cruises using MPA's terminal	10	32	35	59	28	28	29	27	81	91

TARGET: 112 cruises in 2011; 95 cruises in 2012

Why Did Performance Change?

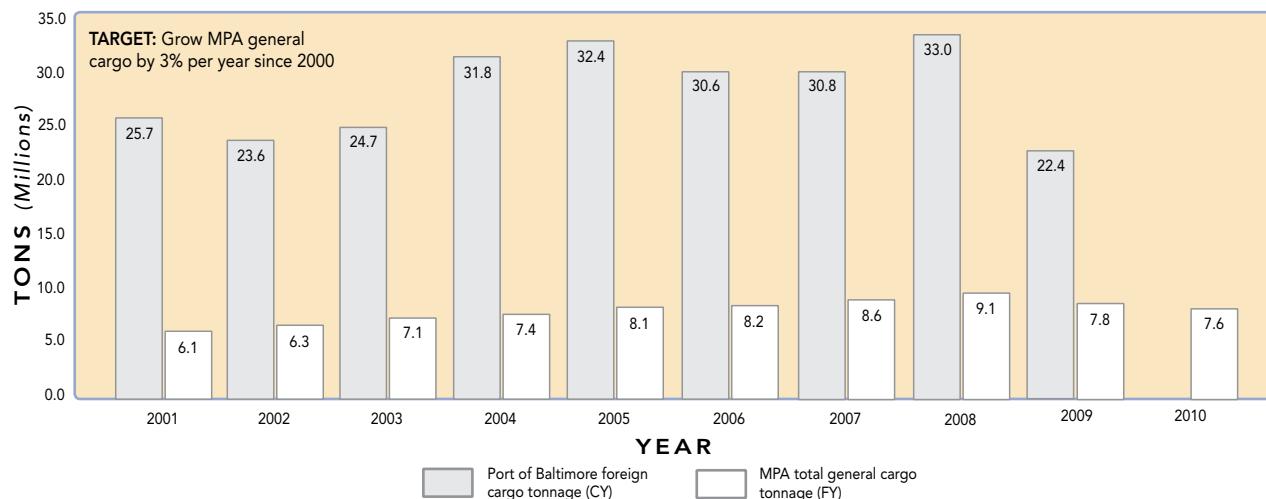
- Royal Caribbean International launched year-round cruise service from Baltimore in 2010 with the deployment of a larger vessel, the Enchantment of the Seas, in Baltimore in 2010
- MPA will embark an estimated 190,000 cruise passengers from the Port of Baltimore's Cruise Maryland Terminal in 2010, breaking another all time record
- Carnival Cruise Lines was the first cruise carrier to offer year-round service from the Port of Baltimore and is building upon its core base in the mid-Atlantic with Baltimore as one of its flagship ports

What Are Future Performance Strategies?

- Continue promoting the Port as a convenient location for year-round cruising and improve the year-round comfort and convenience of cruise line passengers, for example, by constructing a covered breezeway from the terminal to the vessel (\$5.9 million for South Locust Point Cruise Terminal in the FY2011-FY2016 CTP)
- Strengthen existing relationships and build new ones with cruise lines and tourism organizations
- Attract additional cruise line commitments by highlighting the Port as a cruising alternative
- 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
- Obtain an articulated gangway, which will adjust to a variety of vessel types

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.

Why Did Performance Change?

- Many cargo types experienced volume decreases in FY2010 due to the current global economic downturn
- Cargo at MPA terminals dropped 2.4% overall in FY2010 due to economic conditions, but increased 8.4% for the first half of CY2010
- Containerized cargo grew slightly in FY2010, and a 50-year public-private partnership lease agreement was signed with Ports America Chesapeake for the operation of Seagirt Marine Terminal
- Auto cargo increased 26%, due in part to additional imports from BMW and Ford
- A new lease was executed at the Dundalk Marine Terminal to handle new roll-on/roll-off and breakbulk (non-containerized, non-bulk) cargo

What Are Future Performance Strategies?

- Construction is underway to build a new 50' deep container berth to accommodate larger vessels expected to arrive on the U.S. East Coast when the Panama Canal is expanded in 2014
- Continue the Quality Cargo Handling Team (Q-CHAT) to further improve containerized cargo handling
- Employ benefit-cost analysis of process enhancing technologies to improve gate and terminal performance
- Attract a new container carrier and add a new service from an existing container carrier
- Work with State and regional economic development offices to locate sites for new distribution centers

Induced Travel

What is Induced Travel?

Induced travel is generally defined as any increase in daily travel (measured as passenger trips or Vehicle Miles of Travel (VMT)) resulting from improved transportation conditions. Induced travel is commonly associated with capacity increases (roadway and/or transit expansion), but it can be caused by other improvements that:

- Reduce travel times and/or costs (e.g., signal coordination, transit service frequency); or
- Create beneficial transportation conditions (e.g., safety, comfort, reliability).

Induced travel can result in longer trips, more frequent trips, and changes in modes (e.g., from transit to driving). Longer trips may result from changes in land use patterns, changes in activity patterns, or travel routes given existing land uses. Induced travel can occur for freight movement as well, if cheaper transportation leads to more goods being shipped, or changes in logistics patterns that move the same goods over longer distances.

Induced travel is more likely to occur in congested urban areas, such as the Washington, D.C. or Baltimore metropolitan areas, where new facilities or increased capacity on existing ones have the potential to substantially reduce travel times. As a result, individuals often take more or longer trips. The amount of induced travel depends on a variety of factors, such as existing congestion levels, the travel time benefits of an improvement, the economic climate, and land use policies that affect the potential for development in a corridor.

Induced travel may increase over time. A limited amount generally occurs in the first few years after a roadway expansion, as people make short-term adjustments (e.g., longer or more frequent trips). Greater amounts occur over a 10-to-15-year time frame as new development in the corridor occurs or people change their home and work locations. Induced travel can be worse if land use policies allow new “sprawl” development in or near the highway corridor. Land use policies aimed at focusing growth in existing developed areas, or in targeted new growth centers (e.g., around transit stations), can help manage induced travel and preserve future capacity by keeping development in areas where destinations are closer together and alternative travel options are available.

How is Induced Travel Calculated?

It is difficult to determine the magnitude of induced travel, although recent studies have measured the effect of transportation improvements on total travel. What is sometimes perceived as induced travel may actually be the result of shifts from adjacent roadways and other modes versus an overall increase in system trips,

or of more global economic factors, such as increased income levels or reduced fuel costs, that would have raised travel demand regardless of transportation investments. Metropolitan travel demand models that forecast future travel capture some, but not all, components of induced travel and therefore may not fully account for the impacts of a transportation improvement. The amount of induced travel will vary depending upon the context.

Some studies have evaluated the relationship between capacity increases (or travel time decreases) and induced travel. These studies typically measure induced travel as an “elasticity,” or a percent change in travel resulting from a percent change in capacity or travel time. For example, an elasticity of VMT with respect to lane-miles of 0.3 means that a 10% increase in highway lane-miles (supply) results in a 3% increase in VMT (demand). This research has typically found short-term capacity elasticities in the range of 0.1 to 0.7, with most clustering in the range of 0.2 to 0.5. Long-term estimates have ranged from about 0.3 to 1.1, with most clustering in the range of 0.4 to 0.9. Only a handful of studies have examined elasticities of VMT with respect to travel time or speed, but the results tend to fall in the same absolute range.

Why is Induced Travel Important?

Induced demand is not necessarily bad. For example, it can indicate economic success or that people are taking advantage of other travel options. However, induced travel does come with potential negative side effects, such as 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 actually materialize. Induced travel can also occur as a result of transit investments. For example, adding a new rail line often attracts new development that clusters within walking or a short driving distance of stations. Induced travel may also occur as a result of service improvements or capacity expansions on a capacity-constrained system. Generally, transit-induced travel is viewed as less of a concern than highway-induced travel, since it may result in reduced automobile VMT and added environmental benefits.

There is currently no definitive research as to how the environmental benefits of congestion relief (reduced air pollution, greenhouse gas emissions, and energy consumption) compare against the increase in emissions and energy use from any induced travel that may result.



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.
American Recovery and Reinvestment Act (ARRA)	The ARRA of 2009 is an economic recovery package with three immediate goals: <ul style="list-style-type: none"> • Create new jobs and save existing ones; • Spur economic activity and invest in long-term growth; and • Foster unprecedented levels of accountability and transparency in government spending. More information is available at: www.recovery.gov .
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 of 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. E-ZPass® toll collection is available at all seven MDTA toll facilities. The benefits of E-ZPass® membership allow travel from Virginia to Maine and as far west as Illinois, with tolls paid from a Maryland E-ZPass® account.
Fiscal Year (FY)	A yearly accounting period covering the time frame between July 1 and June 30 of each reporting year.
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).
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 & 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)	Transit-Oriented Development creates compact, walkable neighborhoods around transit stations.
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 (MDOT)		
Environmental Stewardship	Transportation Emissions Reduction Measures (TERMs) <ul style="list-style-type: none"> – Commuter Operations and Ridesharing Center – Employer Outreach (including Employer Outreach for Bicycles) – Guaranteed Ride Home – Integrated Rideshare – Mass Marketing – Telework Resource Center 	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

MTP GOAL	PERFORMANCE MEASURE	DEFINITION
Maryland Port Administration (MPA) (Continued)		
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
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	Number of trips arriving on schedule / Number of trips scheduled
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

MTP GOAL	PERFORMANCE MEASURE	DEFINITION
Maryland Transit Administration (MTA) (continued)		
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
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
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
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 every two years. Compliance rate is the number of vehicles registered in non-attainment counties 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 22 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

MTP GOAL	PERFORMANCE MEASURE	DEFINITION
State Highway Administration (SHA) (continued)		
Safety & Security	Number and rate 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
System Preservation & Performance	User cost savings for the traveling public due to incident management	Cost saving calculated using 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 <ul style="list-style-type: none"> • 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 centerline 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 locally-designated urban areas of 5,000 or more
Connectivity for Daily Life	Percentage of State-owned roadway centerline miles with a bicycle level of comfort (BLOC) grade "D" or better and mileage of SHA-owned highways with marked bike lanes	BLOC is an A to F scale based primarily on the width of bicycle travel-way and the speed and volume of adjacent vehicular traffic; marked bike lanes are designated by pavement markings for the preferential or exclusive use of bicyclists and may be supplemented with signage
State Highway Administration (SHA) and Maryland Transportation Authority (MDTA)		
Safety & Security	Annual number and rate 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)
System Preservation & Performance	Percent of roadway miles with acceptable ride condition	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



Martin O'Malley, Governor
Anthony G. Brown, Lt. Governor
Beverley K. Swaim-Staley, Secretary



7201 Corporate Center Drive
Hanover, Maryland 21076

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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